



wwPDB EM Map/Model Validation Report ⓘ

Apr 10, 2016 – 02:39 PM BST

PDB ID : 3JA1
EMDB ID: : EMD-6316
Title : Activation of GTP Hydrolysis in mRNA-tRNA Translocation by Elongation Factor G
Authors : Li, W.; Liu, Z.; Koripella, R.K.; Langlois, R.; Sanyal, S.; Frank, J.
Deposited on : 2015-03-30
Resolution : 3.60 Å(reported)
Based on PDB ID : 3J0U

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.
For rigid body fitted models, validation errors reported here could stem from errors in the original structure(s) used in the fitting.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<http://wwpdb.org/validation/2016/EMValidationReportHelp>

MolProbity : 4.02b-467
Mogul : 1.7.1 (RC1), CSD as537be (2016)
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : trunk27241

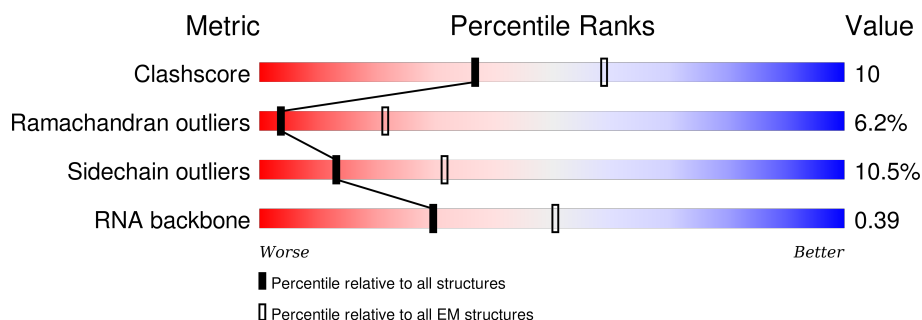
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.60 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.














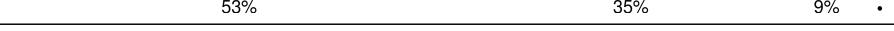







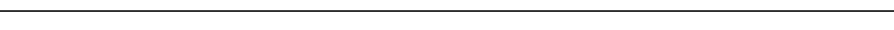

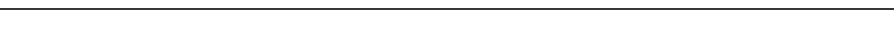
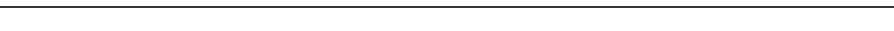


Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	114402	924
Ramachandran outliers	111179	726
Sidechain outliers	111093	686
RNA backbone	3027	244

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$.

Mol	Chain	Length	Quality of chain
1	SS	91	53% 30% 13% .
2	SA	1542	15% 40% 45%
3	S1	47	. 26% 70%
4	S2	77	14% 40% 45%
5	ST	86	67% 26% 7%
6	SU	70	51% 29% 16% .
7	SG	178	63% 27% 8% .
8	SH	129	60% 29% 9% .











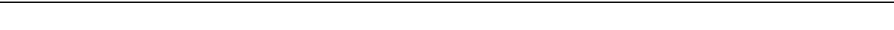

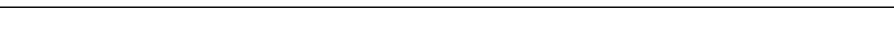
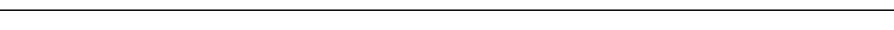











Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
9	SI	129	
10	SJ	103	
11	SK	128	
12	SL	123	
13	SM	117	
14	SN	100	
15	SO	88	
16	SP	82	
17	SQ	83	
18	SB	240	
19	SC	232	
20	SD	205	
21	SE	166	
22	SF	135	
23	SR	74	
24	S3	702	
25	LB	120	
26	LA	2904	
27	LD	272	
28	LU	110	
29	LV	100	
30	LW	103	
31	LX	94	
32	LY	84	
33	LZ	77	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
34	L0	63	 52% 41% 5% •
35	L1	58	 52% 38% 7% •
36	L2	70	 56% 31% 6% 7%
37	LC	234	 60% 29% 9% •
38	LE	209	 53% 33% 12% •
39	L3	56	 57% 25% 16% •
40	L4	54	 63% 30% • •
41	L5	46	 46% 37% 11% 7%
42	L6	64	 73% 20% 6%
43	L7	38	 63% 26% 5% 5%
44	LF	201	 62% 29% 7% •
45	LG	178	 52% 33% 12% •
46	LH	176	 59% 30% 7% 5%
47	LJ	164	 65% 26% 7% •
48	LN	144	 63% 28% 6% •
49	LK	141	 61% 30% 8% •
50	LL	142	 60% 32% 8% •
51	LI	149	 62% 32% 6% •
52	LO	136	 61% 29% 8% •
53	LP	127	 54% 34% 10% •
54	LM	123	 62% 30% 7% •
55	LQ	117	 59% 28% 9% •
56	LR	114	 53% 32% 13% •
57	LS	117	 54% 29% 14% •
58	LT	103	 64% 22% 13% •

2 Entry composition

There are 59 unique types of molecules in this entry. The entry contains 156127 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	SS	91	Total	C	N	O	S	0	0
			727	464	139	122	2		

- Molecule 2 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	SA	1542	Total	C	N	O	P	0	0
			33076	14754	6064	10717	1541		

- Molecule 3 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	S1	47	Total	C	N	O	P	0	0
			993	445	167	335	46		

- Molecule 4 is a RNA chain called P/E-tRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	S2	77	Total	C	N	O	P	0	0
			1639	732	297	534	76		

- Molecule 5 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	ST	86	Total	C	N	O	S	0	0
			670	414	138	115	3		

- Molecule 6 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	SU	70	Total	C	N	O	S	0	0
			590	366	125	98	1		

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	SG	178	Total	C	N	O	S	0	0
			1400	874	269	253	4		

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	SH	129	Total	C	N	O	S	0	0
			979	616	173	184	6		

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	SI	129	Total	C	N	O	S	0	0
			1036	642	208	183	3		

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	SJ	103	Total	C	N	O	S	0	0
			825	514	158	151	2		

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	SK	128	Total	C	N	O	S	0	0
			965	595	196	171	3		

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	SL	123	Total	C	N	O	S	0	0
			955	590	196	165	4		

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	SM	117	Total	C	N	O	S	0	0
			910	564	183	160	3		

- Molecule 14 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	SN	100	Total	C	N	O	S	0	0
			805	499	164	139	3		

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	SO	88	Total	C	N	O	S	0	0
			716	440	146	129	1		

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	SP	82	Total	C	N	O	S	0	0
			649	406	128	114	1		

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	SQ	83	Total	C	N	O	S	0	0
			672	425	124	120	3		

- Molecule 18 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	SB	240	Total	C	N	O	S	0	0
			1872	1180	332	352	8		

- Molecule 19 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	SC	232	Total	C	N	O	S	0	0
			1822	1149	346	323	4		

- Molecule 20 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	SD	205	Total	C	N	O	S	0	0
			1643	1026	315	298	4		

- Molecule 21 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	SE	166	Total	C	N	O	S	0	0
			1225	761	232	226	6		

- Molecule 22 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	SF	135	Total	C	N	O	S	0	0
			1101	677	198	219	7		

- Molecule 23 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	SR	74	Total	C	N	O	S	0	0
			626	395	123	107	1		

- Molecule 24 is a protein called Elongation factor G.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	S3	702	Total	C	N	O	S	0	0
			5431	3420	938	1048	25		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
S3	91	ALA	HIS	ENGINEERED MUTATION	UNP P0A6M8

- Molecule 25 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	LB	120	Total	C	N	O	P	0	0
			2566	1144	468	835	119		

- Molecule 26 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	LA	2904	Total	C	N	O	P	0	0
			62330	27807	11462	20158	2903		

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
LA	1618	C	A	CONFLICT	GB 33357927

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
LA	1915	C	U	CONFLICT	GB 33357927
LA	2030	U	A	CONFLICT	GB 33357927
LA	2251	U	G	CONFLICT	GB 33357927

- Molecule 27 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	LD	272	Total	C	N	O	S	0	0
			2092	1294	425	366	7		

- Molecule 28 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	LU	110	Total	C	N	O	S	0	0
			857	532	166	156	3		

- Molecule 29 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	LV	100	Total	C	N	O	S	0	0
			787	496	146	143	2		

- Molecule 30 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	LW	103	Total	C	N	O	S	0	0
			789	498	148	143			

- Molecule 31 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	LX	94	Total	C	N	O	S	0	0
			753	479	137	134	3		

- Molecule 32 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	LY	84	Total	C	N	O	S	0	0
			634	391	129	113	1		

- Molecule 33 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	LZ	77	Total	C	N	O	S	0	0
			625	388	129	106	2		

- Molecule 34 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	L0	63	Total	C	N	O	S	0	0
			509	313	99	95	2		

- Molecule 35 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	L1	58	Total	C	N	O	S	0	0
			449	281	87	79	2		

- Molecule 36 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	L2	70	Total	C	N	O	S	0	0
			549	339	104	100	6		

- Molecule 37 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	LC	234	Total	C	N	O	S	0	0
			1733	1081	315	330	7		

- Molecule 38 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	LE	209	Total	C	N	O	S	0	0
			1565	979	288	294	4		

- Molecule 39 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	L3	56	Total	C	N	O	S	0	0
			444	269	94	80	1		

- Molecule 40 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				AltConf	Trace
40	L4	54	Total	C	N	O	0	0
			441	284	81	76		

- Molecule 41 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	L5	46	Total	C	N	O	S	0	0
			377	228	90	57	2		

- Molecule 42 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	L6	64	Total	C	N	O	S	0	0
			504	323	105	74	2		

- Molecule 43 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	L7	38	Total	C	N	O	S	0	0
			302	185	65	48	4		

- Molecule 44 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	LF	201	Total	C	N	O	S	0	0
			1552	974	283	290	5		

- Molecule 45 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	LG	178	Total	C	N	O	S	0	0
			1420	905	251	258	6		

- Molecule 46 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	LH	176	Total	C	N	O	S	0	0
			1323	832	243	246	2		

- Molecule 47 is a protein called 50S ribosomal protein L10.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	LJ	164	Total	C	N	O	S	0	0
			1233	776	220	231	6		

- Molecule 48 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	LN	144	Total	C	N	O	S	0	0
			1053	654	207	190	2		

- Molecule 49 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	LK	141	Total	C	N	O	S	0	0
			1032	651	179	196	6		

- Molecule 50 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	LL	142	Total	C	N	O	S	0	0
			1129	714	212	199	4		

- Molecule 51 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	LI	149	Total	C	N	O	S	0	0
			1111	699	197	214	1		

- Molecule 52 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	LO	136	Total	C	N	O	S	0	0
			1074	686	205	177	6		

- Molecule 53 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	LP	127	Total	C	N	O	S	0	0
			1008	621	204	178	5		

- Molecule 54 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	LM	123	Total	C	N	O	S	0	0
			947	593	181	167	6		

- Molecule 55 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	LQ	117	Total	C	N	O	S	0	0
			900	557	179	163	1		

- Molecule 56 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	LR	114	Total	C	N	O	S	0	0
			917	574	179	163	1		

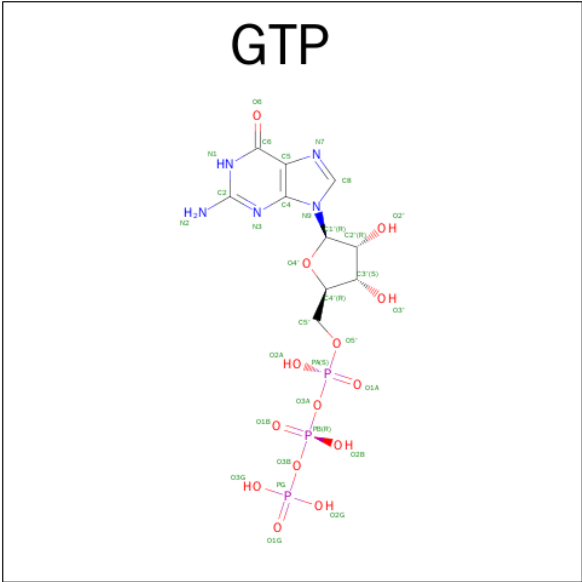
- Molecule 57 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	LS	117	Total	C	N	O	S	0	0
			947	604	192	151			

- Molecule 58 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	LT	103	Total	C	N	O	S	0	0
			816	516	153	145	2		

- Molecule 59 is GUANOSINE-5'-TRIPHOSPHATE (three-letter code: GTP) (formula: C₁₀H₁₆N₅O₁₄P₃).

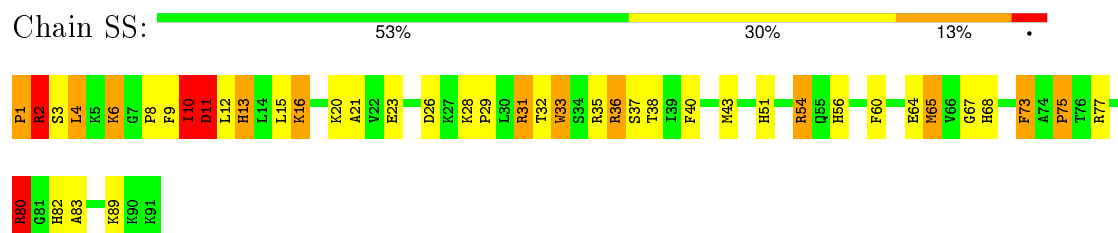


Mol	Chain	Residues	Atoms					AltConf
59	S3	1	Total	C	N	O	P	0
			32	10	5	14	3	

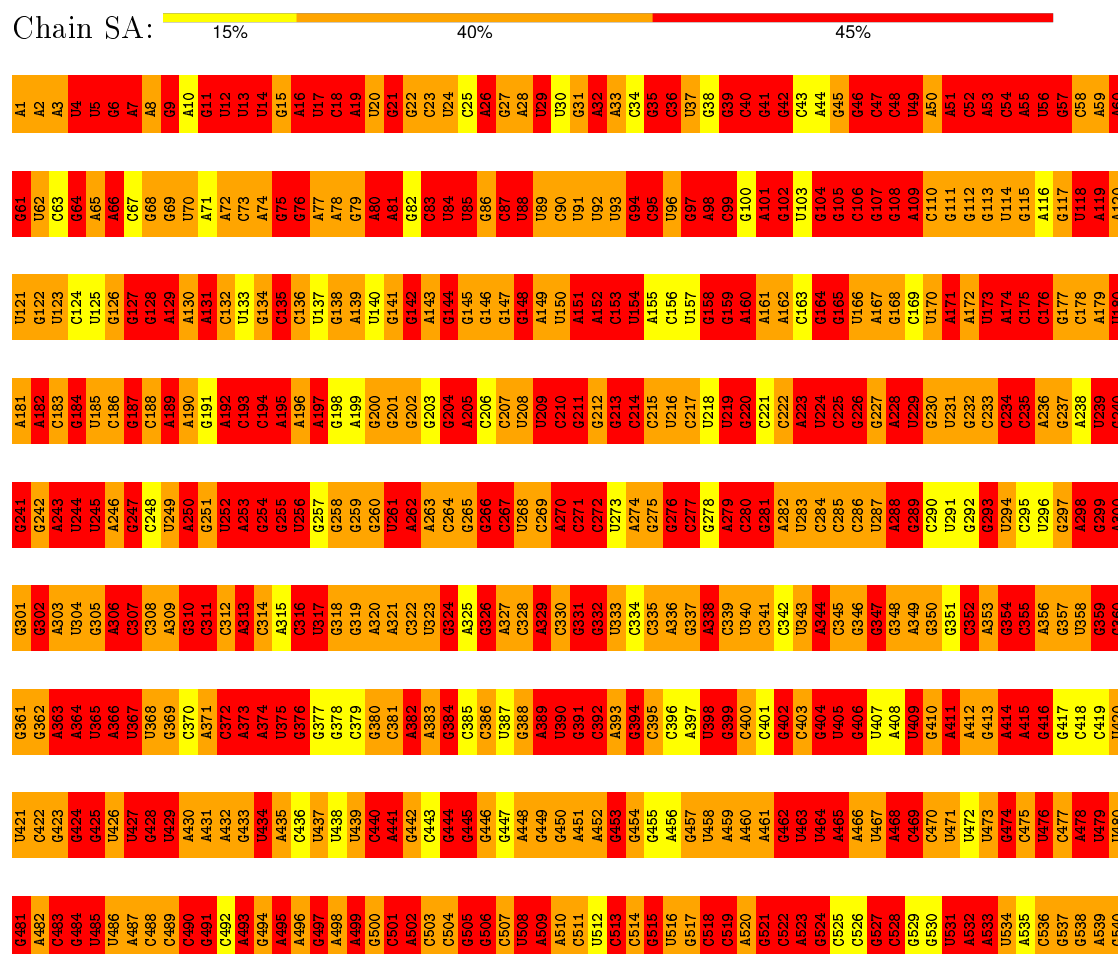
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: 30S ribosomal protein S19



- Molecule 2: 16S ribosomal RNA



G1441	U1381	U1321	A1261	A1201	G1141	A1081	A1021	U961	A901	C841	A781	G721	G661	G601	G541
G1442	C1362	C1322	C1262	U1202	G1142	A1082	A1022	C962	G902	U842	A782	G722	U662	A602	G542
G1443	C1383	C1323	U1263	C1203	G1143	U1083	U1023	C963	G903	U843	C783	U723	U663	U603	U543
G1444	C1384	A1324	U1264	A1204	G1144	G1084	G1024	A964	U904	A844	A784	G724	G664	G604	G544
G1445	G1395	C1325	C1265	U1205	A1145	U1085	U1025	U965	U905	A845	G785	G725	U665	U605	C545
G1446	G1386	G1326	G1266	G1206	A1146	U1086	G1026	G966	A906	G846	G786	G726	G666	G606	A546
G1447	G1387	C1327	G1267	G1207	C1147	G1087	C1027	C967	A907	G847	A787	G727	G667	A607	A547
G1448	C1388	C1328	G1268	C1208	U1148	G1088	U1028	A968	A908	C848	U788	A728	G668	A608	G548
G1449	A1389	A1329	A1269	C1209	C1149	G1089	U1029	A969	A909	G849	U789	A729	G669	A609	C549
G1450	U1390	G1330	G1270	C1210	A1150	U1090	U1030	C970	C910	U850	A790	G730	G670	U610	G550
G1451	U1391	G1331	A1271	U1211	A1151	U1091	C1031	G971	U911	G851	G791	G731	G671	C611	U551
G1452	G1392	A1332	G1272	U1212	A1152	A1092	G1032	C972	C912	G852	A792	G732	U672	C612	U552
G1453	U1393	A1333	C1273	A1213	G1153	A1093	G1033	G973	A913	C853	U793	G733	A673	C613	A553
G1454	A1394	G1334	A1274	C1214	G1154	G1094	G1034	A974	A914	U854	A794	G734	G674	C614	A554
G1455	C1395	U1335	A1275	G1215	A1155	U1095	A1035	A975	A915	U855	C795	G735	A675	G615	U555
G1456	A1396	C1336	G1276	A1216	G1156	A1096	A1036	G976	U916	C856	C796	G736	G676	G616	C556
G1457	C1397	G1337	C1277	C1217	A1157	C1097	C1037	A977	G917	C857	C797	G737	U677	G617	A557
G1458	A1398	G1338	G1278	C1218	C1158	C1098	G1038	A978	A918	G858	U798	G738	U678	C618	G558
G1459	C1399	G1339	G1279	A1219	U1159	G1099	G1039	C979	A919	G859	G799	C739	C679	U619	A559
G1460	C1400	A1340	A1280	G1220	G1160	C1100	U1040	C980	U920	A860	G800	U740	C680	C620	A560
G1461	G1401	G1341	C1281	G1221	C1161	A1101	G1041	C981	U921	G861	U801	G741	A681	A621	U561
G1462	C1402	C1342	C1282	G1222	A1162	A1102	A1042	C982	A922	C862	A802	G742	G682	A622	U562
G1463	C1403	G1343	U1283	C1223	C1163	C1103	G1043	A983	A923	U863	G803	A743	G683	C623	A563
G1464	C1404	C1344	C1284	U1224	G1164	G1104	A1044	C984	C924	A864	U804	C744	U684	C624	C564
G1465	A1405	U1345	A1285	A1225	U1165	A1105	G1045	C985	G925	A865	C805	G745	G685	U625	C565
C1466	U1406	A1346	U1286	C1226	G1166	G1106	A1046	U986	G926	C866	C806	A746	U686	G626	C566
G1467	C1407	G1347	A1287	A1227	A1167	C1107	G1047	G987	G927	G867	A807	A747	A687	G627	G567
G1468	A1408	U1348	C1288	C1228	U1168	G1108	G1048	C988	G928	U868	C808	G748	G688	G628	U568
G1469	A1409	A1349	A1289	C1229	A1169	C1109	U1049	C989	G929	U869	G809	A749	C689	A629	C569
U1470	A1410	A1350	G1290	C1230	A1170	A1110	G1050	C990	C930	U870	C810	C750	G690	A630	A570
U1471	C1411	U1351	U1291	G1231	A1171	A1111	C1051	U991	C931	U871	C811	U751	G691	C631	U571
C1412	C1352	U1352	G1292	U1232	C1172	C1112	U1052	U992	C932	A872	G812	G752	U692	U832	A572
A1413	C1353	G1353	C1293	G1233	U1173	C1113	G1053	G993	G933	A873	U813	A753	G693	G633	A573
U1414	G1294	C1354	G1294	C1234	G1174	C1114	A1054	A994	C934	U874	A814	C754	A694	C634	A574
G1415	U1295	U1355	U1295	U1235	G1175	U1115	A1055	C995	A935	U875	A815	G755	A695	A635	G575
G1416	C1296	A1356	C1296	A1236	A1176	U1116	U1056	A996	C936	C876	A816	C756	A696	U636	C576
G1417	G1297	A1357	G1297	C1237	G1177	A1117	G1057	U997	A937	G877	C817	U757	U697	C637	G577
A1418	U1298	U1358	U1298	A1238	G1178	U1118	G1058	C998	A938	A878	C818	C758	G698	U638	C578
G1419	A1299	C1359	A1299	A1239	A1179	C1119	C1059	C999	G939	C879	A819	A759	C699	G639	A579
A1420	G1300	U1360	G1300	U1240	A1180	C1120	U1060	C940	C940	C880	U820	G760	G700	A640	C580
G1421	U1301	G1361	U1301	G1241	G1181	U1121	G1061	C941	G941	G881	G821	U762	A702	U641	G581
G1422	A1302	C1362	C1302	G1242	G1182	U1122	U1062	G942	G942	C882	C822	U762	G702	A642	C582
A1423	C1363	A1363	C1303	C1243	U1183	U1123	C1063	U943	U943	C883	C823	G763	G703	C643	A583
U1424	U1364	U1364	G1304	G1244	G1184	G1124	G1064	G944	G944	U884	G824	C764	A704	U644	G584
U1425	G1365	C1245	G1305	C1245	G1185	U1125	U1065	A945	G945	G885	A825	G765	G705	G645	G585
G1426	C1366	A1246	A1306	A1246	G1186	U1126	C1066	A946	A946	G886	C826	A766	A706	G646	C586
G1427	U1307	U1367	U1307	U1247	G1187	G1127	A1067	G947	G947	G887	U827	A767	U707	C647	G587
A1428	U1368	U1368	U1308	A1248	A1188	C1128	G1068	C948	C948	G888	U828	A768	C708	A648	G588
G1429	C1369	G1369	G1309	C1249	U1189	C1129	C1069	A949	A949	A869	G829	G769	U709	A649	U589
A1430	G1370	G1370	G1310	A1250	G1190	A1130	U1070	U1010	U950	G890	G830	C770	G710	G650	U590
G1431	G1371	A1311	A1311	A1251	A1191	G1131	C1071	C951	G951	U891	A831	G771	G711	C651	U591
G1432	G1372	C1312	C1312	A1252	C1192	A1012	G1072	U952	U952	A892	A832	U772	A712	U652	G592
A1433	G1373	U1313	G1253	C1253	G1193	C1013	U1073	G953	G953	C893	G833	G773	G713	U653	U593
A1434	A1374	C1314	A1254	A1254	U1194	G1134	G1074	G954	G954	G894	U834	G774	G714	G654	U594
U1435	G1435	U1375	U1315	G1255	C1195	U1135	U1075	G955	U955	G895	U835	G775	A715	A655	A595
G1436	U1376	G1316	G1316	A1256	A1196	C1136	U1076	U956	U956	C896	G836	G776	A716	G656	A596
G1437	A1377	C1317	C1317	A1257	A1197	G1137	G1077	U957	U957	C897	U837	A777	U717	U657	G597
G1438	C1378	A1318	A1318	G1258	G1198	G1138	U1078	A958	A958	G898	G838	G778	A718	C658	U598
A1439	G1439	G1379	A1319	C1259	U1199	G1139	G1079	A959	A959	C899	C839	G779	C719	U659	C599
U1440	U1440	U1380	C1320	G1260	C1200	C1140	A1080	G1020	U960	A900	C840	A780	C820	C660	A600



- Molecule 3: mRNA



- Molecule 4: P/E-tRNA



- Molecule 5: 30S ribosomal protein S20



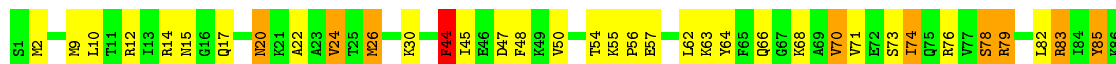
- Molecule 6: 30S ribosomal protein S21



- Molecule 7: 30S ribosomal protein S7



- Molecule 8: 30S ribosomal protein S8





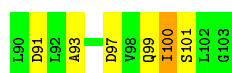
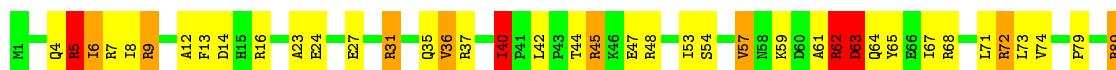
- Molecule 9: 30S ribosomal protein S9

Chain SI: 56% 32% 12%



- Molecule 10: 30S ribosomal protein S10

Chain SJ: 55% 32% 9%



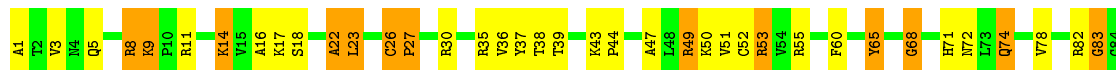
- Molecule 11: 30S ribosomal protein S11

Chain SK: 59% 28% 11%



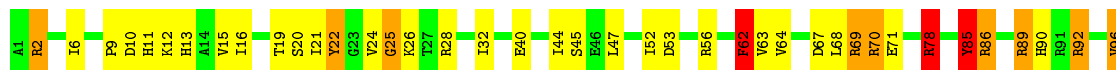
- Molecule 12: 30S ribosomal protein S12

Chain SL: 54% 32% 13%



- Molecule 13: 30S ribosomal protein S13

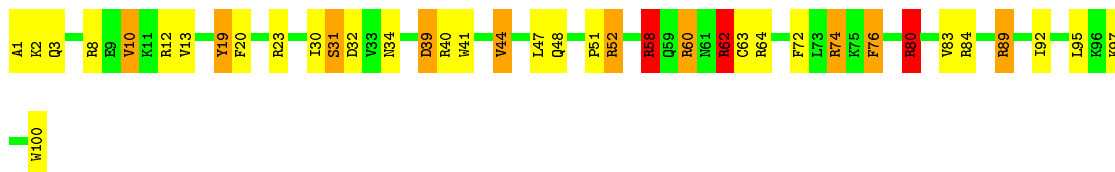
Chain SM: 53% 32% 11%





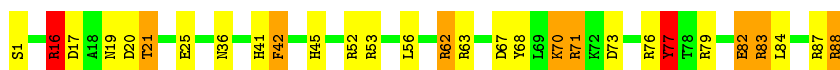
- Molecule 14: 30S ribosomal protein S14

Chain SN: 62% 25% 10%



- Molecule 15: 30S ribosomal protein S15

Chain SO: 67% 22% 9%



- Molecule 16: 30S ribosomal protein S16

Chain SP: 61% 28% 7%



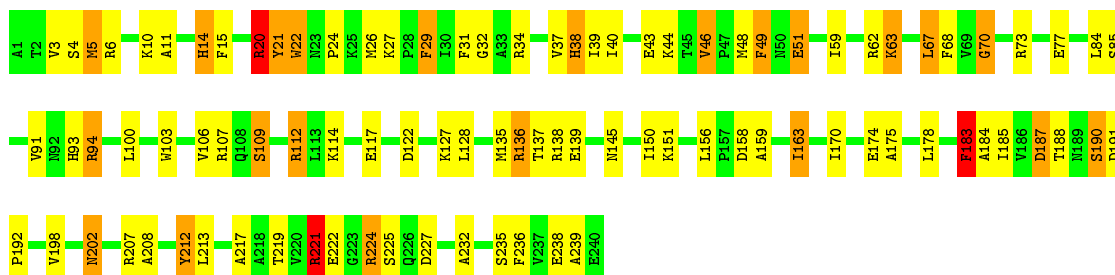
- Molecule 17: 30S ribosomal protein S17

Chain SQ: 66% 25% 7%



- Molecule 18: 30S ribosomal protein S2

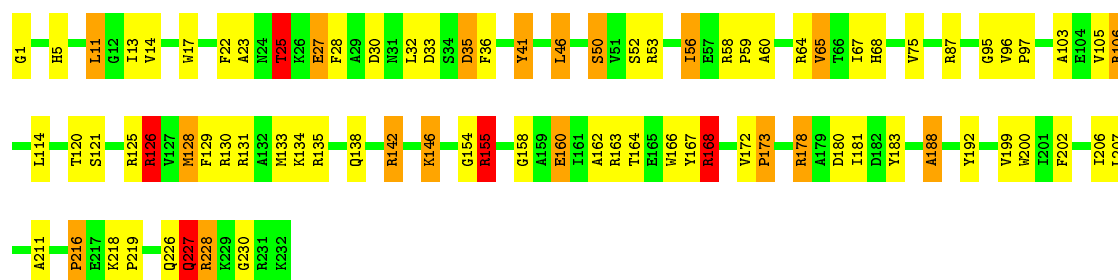
Chain SB: 61% 29% 9%



- Molecule 19: 30S ribosomal protein S3

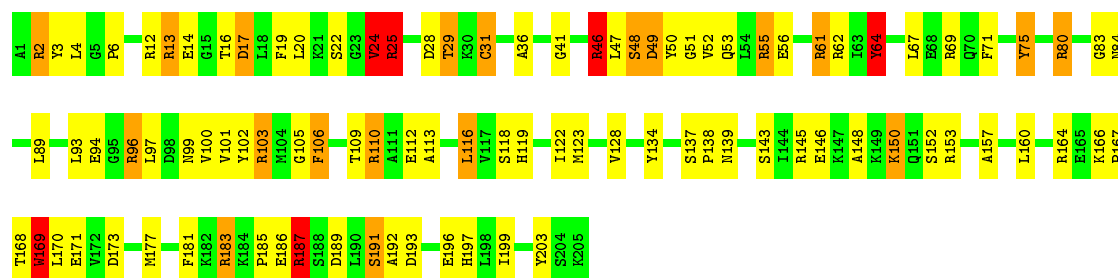
Chain SC: 64% 26% 8%





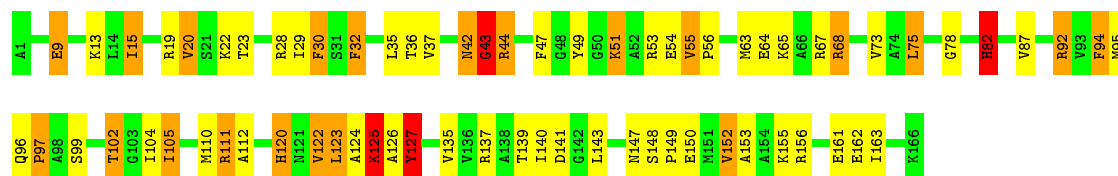
- Molecule 20: 30S ribosomal protein S4

Chain SD: 53% 35% 9% .



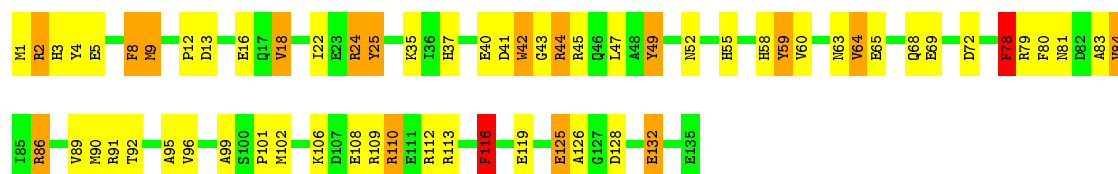
- Molecule 21: 30S ribosomal protein S5

Chain SE: 58% 27% 13% .



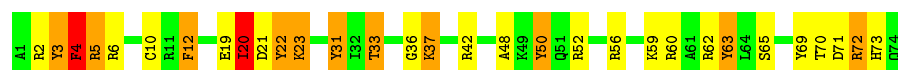
- Molecule 22: 30S ribosomal protein S6

Chain SF: 53% 33% 12% .

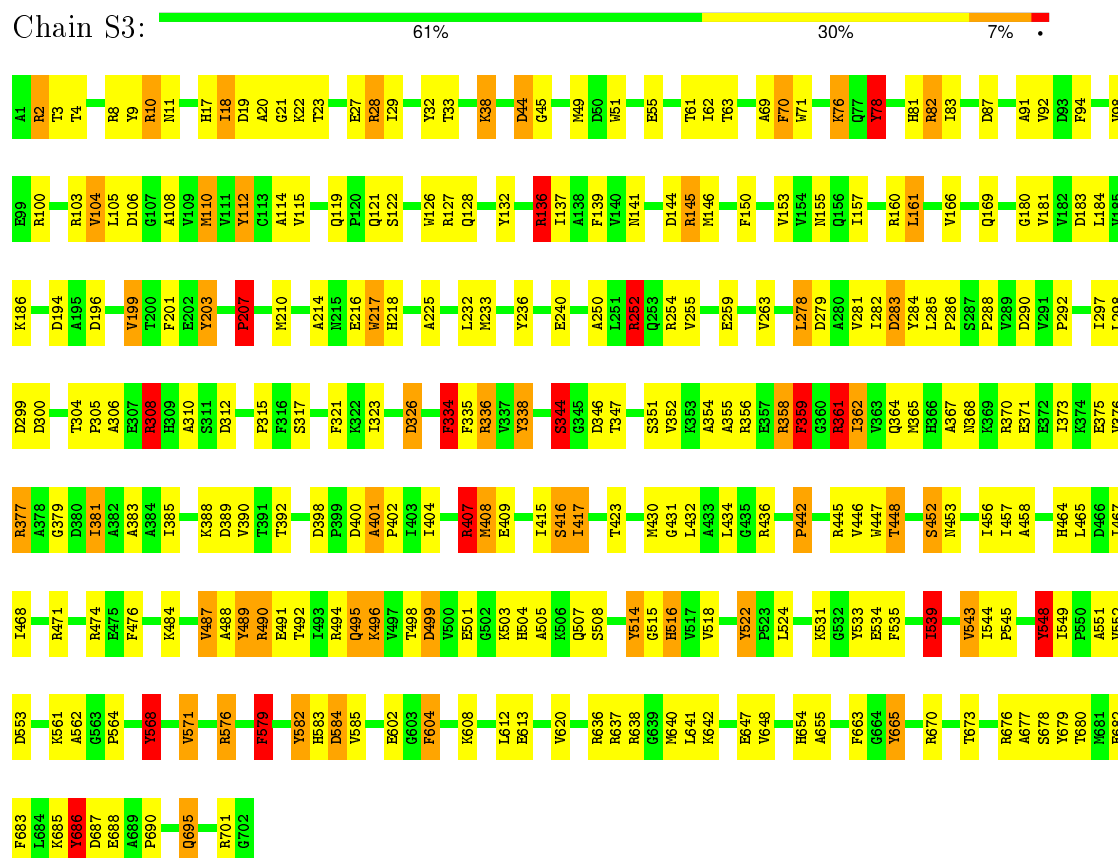


- Molecule 23: 30S ribosomal protein S18

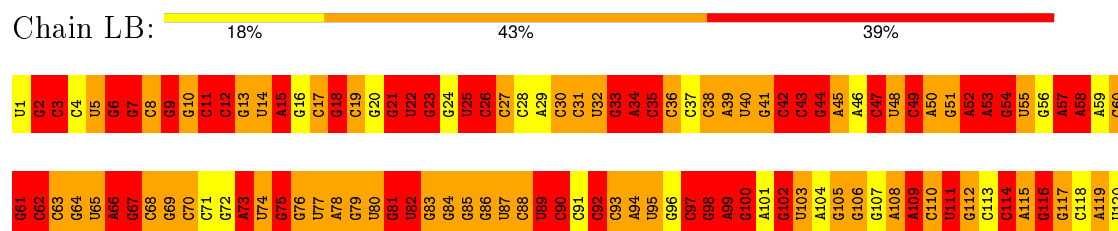
Chain SR: 58% 24% 15% .



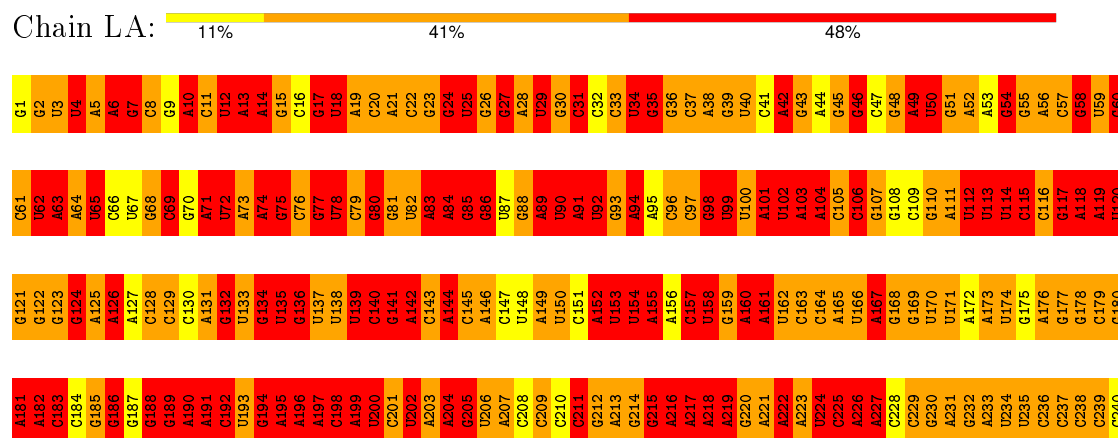
- Molecule 24: Elongation factor G



• Molecule 25: 5S ribosomal RNA



• Molecule 26: 23S ribosomal RNA



U1201	U1141	U1081	A1021	C981	C901	G941	A781	A721	C601	A541	G481	C421	G361	G301	A241
G1202	A1142	U1082	G1022	G962	C902	U942	A782	A722	A602	C542	A482	A422	A362	C302	G242
U1203	A1143	U1083	U1023	U963	G903	G943	A783	C723	A603	G543	A483	A423	G363	G303	U243
A1204	A1144	U1084	G1024	G964	G904	A944	G784	U724	G604	C544	A484	A424	C364	U304	A244
A1205	C1145	A1085	A1025	C965	A905	A945	G785	G725	G605	U545	C485	G425	U365	C305	G245
G1206	C1146	A1086	G1026	G966	U906	G946	G786	G726	U606	U546	C486	G426	C366	U306	C246
C1207	A1147	G1087	A1027	U967	G907	U947	C787	A727	U607	A547	G487	U427	G367	G307	C247
C1208	U1148	A1088	A1028	C968	C908	C948	A788	A728	A608	G548	A488	A428	G368	G308	G248
U1209	C1149	A1089	A1029	G969	A909	A949	A789	G729	A609	G549	G489	A429	U369	A309	C249
G1210	A1150	U1090	G1030	U970	A910	U950	A790	C730	C610	C550	C490	A430	A370	A310	G250
C1211	C1151	G1091	G1031	G971	A911	C951	C791	C731	G612	G552	A492	U432	A372	G312	G252
G1212	C1152	A1092	A1032	A972	C912	U952	A792	G732	G613	U553	G493	C433	U373	G313	C253
A1213	G1153	G1093	U1033	G973	U913	C953	A793	G733	G614	U554	G494	U434	A374	C314	G254
A1214	G1154	U1094	G1034	G974	G914	C954	A794	A734	A614	G555	G495	C435	A375	G315	A255
G1215	A1155	A1095	U1035	A975	C915	G955	C795	A735	U615	A556	G496	A436	G376	C316	A256
G1216	A1156	A1096	G1036	G976	G916	G956	C796	C736	A616	C557	A497	U437	G377	C317	C257
U1217	G1157	U1097	G1037	G977	A917	G957	G797	G737	G618	U558	G498	G438	C378	G318	G258
G1218	A1158	A1098	G1038	G978	A918	G958	G798	G738	G619	U559	G499	A439	G379	G319	G259
U1219	U1159	G1099	A1039	A979	U919	G959	G799	A739	G620	C560	A500	C440	G380	A320	G260
G1220	C1160	C1100	A1040	A980	A920	U960	A800	C740	G621	C561	A501	U441	G381	U321	G261
C1221	C1161	U1101	G1041	A981	C921	G961	A801	U741	G622	U562	A502	G442	A382	C322	G262
U1222	G1162	C1102	G1042	C982	C922	A962	A802	A742	C623	A563	A503	A443	A383	C323	G263
G1223	G1163	A1103	A1043	A983	G923	G963	A803	A743	C624	U564	A504	C444	A384	A324	G264
U1224	C1164	G1104	G1044	A984	G924	G964	A804	U744	G625	C565	A505	C445	A385	G325	A265
G1225	A1165	U1105	C1045	C985	A925	C965	G805	G745	G626	U566	A506	C446	G386	G326	G266
A1226	G1166	G1106	A1046	C986	G926	A966	C806	U746	A626	U567	A507	U447	U387	G327	C267
G1227	G1167	G1107	G1047	C987	A927	C967	U807	U747	G628	U568	A508	U448	C388	U328	C268
C1228	C1168	U1108	A1048	A988	G928	G968	G808	G748	G629	U569	A509	A449	G389	G329	C269
U1229	A1169	G1109	C1049	G989	U929	G969	G809	A749	G630	C570	C510	A450	U390	A330	A270
A1230	C1170	G1110	U1050	A990	G930	U970	U810	A750	G631	U571	C511	U451	A391	C331	G271
U1231	G1171	A1111	G1051	C991	U931	G971	C811	A751	A632	A572	G512	C452	U392	A332	A272
G1232	C1172	C1112	C1052	C992	U932	U972	C812	A752	A633	U573	A513	A453	U393	G333	G273
C1233	U1173	U1113	G1053	G993	A933	C973	U813	A753	C634	A574	A514	C454	C394	C334	C274
U1234	U1174	G1114	A1054	C994	U934	G974	C814	U754	C635	A575	A515	C455	U395	C335	C275
G1235	A1175	G1115	G1055	C995	C935	G975	C815	U755	G636	U576	C516	C456	G396	C336	G276
U1236	C1176	G1116	G1056	A996	A936	C976	C816	A756	G637	U577	C517	A457	U397	C337	G277
G1237	G1177	C1117	A1057	G997	C937	A977	C817	G757	C638	U578	G518	U458	C398	G338	A278
C1238	C1178	U1118	U1058	C998	G938	A978	C818	C758	U639	G579	U619	A459	U399	U339	A279
U1239	G1179	U1119	G1059	U999	G939	G979	A819	G759	U640	U580	G520	A460	G400	A340	U280
A1240	U1180	G1120	U1060	A1000	G940	G980	A820	G760	C640	C580	G520	C460	A401	C341	C281
C1241	U1181	C1121	U1061	G1001	A941	G981	A821	A761	U641	C582	A522	C462	A402	A342	A282
U1242	G1182	G1122	G1062	G1002	G942	G982	G822	U762	U642	A583	C523	G463	G403	A343	G283
G1243	U1183	G1123	G1063	G1003	A943	G983	C823	G763	A643	U584	G524	U464	G404	A344	U284
A1244	U1184	G1124	C1064	U1004	C944	U984	U824	A764	C644	U585	G525	C465	U405	A345	G285
C1245	G1185	G1125	U1065	C1005	A945	C985	A825	C765	U645	U586	A526	A466	G406	A346	U286
A1246	G1186	A1126	U1066	C1006	C946	A986	U826	U766	U646	C587	C527	G467	G407	A347	G287
U1247	G1187	A1127	A1067	C1007	A947	U987	U827	U767	G648	U588	A528	G468	G408	A348	U288
G1248	U1188	G1128	G1068	C948	C948	C988	U828	G768	G649	U589	A529	G469	G409	U349	G289
U1249	A1189	A1129	A1069	G949	G949	C889	A829	G769	C650	A590	G530	A470	G410	G350	U290
C1250	G1190	U1130	A1070	C950	G950	C990	G830	G770	G651	U591	C531	A471	G411	C351	G291
G1251	G1191	G1131	C1071	C951	C951	G991	G831	G771	G652	A592	A532	A472	A412	A352	U292
U1252	C1192	U1132	G1072	U1012	G952	A992	U832	C772	U653	U593	C533	G473	C413	C353	U293
A1253	G1193	A1133	A1073	C953	G953	C993	A833	U773	U654	U594	C534	G474	C414	A354	A294
C1254	A1194	A1134	G1074	U1014	G954	U994	G834	G774	A655	C595	G535	C475	A415	U355	G295
U1255	G1195	G1135	C1075	U1015	U955	A995	C835	G775	G656	U596	G536	G476	U416	G356	U296
G1256	C1196	G1136	C1076	G1016	G956	A996	G836	G776	U657	G597	C537	A477	C417	C357	G297
C1257	G1197	G1137	A1077	C957	C957	C997	C837	G777	U658	U598	A538	A478	C418	U358	G298
U1258	U1198	G1138	U1078	U958	U958	A998	U838	G778	G659	A599	C539	A479	U419	G359	A299
G1259	U1199	G1139	C1079	A959	A959	C999	U839	U779	C660	G600	C540	A480	C420	U360	A300

C2161	A2101	U2041	A1981	G1921	G1861	A1801	C1741	G1681	U1621	C1561	G1501	G1441	G1381	A1321	G1261
C2162	G2102	A2042	U1982	G1922	G1862	A1802	U1742	G1682	G1622	U1562	A1502	U1442	G1382	A1322	A1262
A2163	C2103	C2043	G1983	G1923	G1863	A1803	G1743	G1683	G1623	U1563	A1503	U1443	G1383	G1323	G1263
C2164	C2104	C2044	G1984	C1924	U1864	A1804	A1744	G1684	U1624	A1564	A1504	G1444	A1384	G1324	A1264
C2165	U2105	C2045	G1985	C1925	A1865	A1805	A1745	G1685	G1625	U1565	A1505	G1445	G1385	U1325	G1265
U2166	U2106	C1966	C1986	U1926	A1866	A1806	A1746	G1686	A1626	U1566	U1506	G1446	C1386	G1266	G1266
U2167	G2107	C2047	A1987	A1927	G1867	A1807	U1747	G1687	G1627	U1567	C1507	C1447	A1387	U1267	U1267
G2168	A2108	C2048	G1988	A1928	C1868	A1808	U1748	G1688	G1628	U1568	A1508	G1448	A1328	A1268	A1268
A2169	U2109	G2049	G1989	G1929	G1869	A1809	C1749	A1689	U1629	U1569	A1509	G1449	G1389	U1329	A1269
A2170	G2110	C2050	G1990	G1930	A1870	A1810	G1750	A1690	A1630	U1570	G1510	G1450	C1330	C1270	C1270
A2171	U2111	A2051	U1991	U1931	A1871	A1811	U1751	C1691	G1631	U1571	C1451	C1391	G1331	G1271	G1271
U2172	G2112	A2052	G1992	A1932	A1872	A1812	C1752	U1692	A1632	U1572	C1452	G1392	G1332	A1272	A1272
A2173	U2113	G2063	U1993	G1933	G1873	G1813	G1753	U1693	G1633	U1573	U1513	G1393	G1333	U1273	U1273
C2174	A2114	A2054	C1994	C1934	C1874	G1814	A1754	C1694	A1634	C1574	G1514	C1454	U1394	G1334	A1274
C2175	G2115	C2055	U1995	G1935	G1875	A1815	A1755	G1695	A1635	C1575	A1515	G1455	A1395	C1335	A1275
A2176	G2116	C2056	G1996	A1936	A1876	A1816	G1756	G1696	U1636	U1576	A1516	G1456	A1336	A1276	A1276
C2177	A2117	G2057	C1997	U1937	A1877	G1817	U1757	G1697	A1637	U1577	U1517	U1457	G1337	G1277	G1277
C2178	U2118	A2058	A1998	A1938	G1878	U1818	U1758	A1698	G1638	U1578	C1458	U1398	G1338	C1278	C1278
C2179	A2119	A2059	C1999	U1939	C1879	A1819	A1759	G1699	C1639	A1579	U1519	G1459	G1339	G1279	G1279
U2180	G2120	A2060	C2000	U1940	U1880	U1820	C1760	A1700	A1640	U1580	U1520	U1460	U1340	G1280	G1280
U2181	G2121	C2061	C2001	G1941	C1881	A1821	C1761	A1701	A1641	G1581	G1521	C1461	G1341	G1281	G1281
U2182	U2122	U2062	G2002	C1942	U1882	G1822	A1762	G1702	G1642	U1582	A1522	C1462	A1342	U1282	U1282
A2183	G2123	C2063	A2003	U1943	U1883	G1823	G1763	G1703	G1643	A1583	U1523	C1463	G1343	G1283	G1283
A2184	G2124	G2064	G2004	U1944	G1884	G1824	C1764	C1704	C1644	U1584	G1524	G1464	C1404	A1284	A1284
U2185	G2125	C2065	A2005	G1945	A1885	U1825	U1765	A1705	G1645	C1585	A1525	G1465	U1345	A1285	A1285
G2186	A2126	C2066	C2006	U1946	U1886	G1826	G1766	C1706	C1646	U1586	C1526	U1466	G1346	A1286	A1286
U2187	G2127	U2067	U2007	G1947	C1887	U1827	C1767	G1707	U1647	G1587	G1527	U1467	A1347	A1287	A1287
G2188	C2128	C2068	C2008	G1948	G1888	A1828	C1768	G1708	U1648	G1588	A1528	U1468	C1348	G1288	G1288
U2189	C2129	C2069	A2009	G1949	A1889	A1829	U1769	U1709	G1649	U1589	G1529	U1469	C1349	C1289	C1289
G2190	G2130	A2070	G2010	G1950	A1890	C1830	G1770	G1710	A1650	A1590	G1530	A1470	C1350	C1290	C1290
A2191	U2131	U2071	U2011	U1951	G1891	A1831	C1771	A1711	G1651	C1591	C1531	G1471	U1411	C1291	C1291
U2192	G2132	C2072	A1982	U1952	C1892	G1832	A1772	U1712	A1652	C1592	A1532	C1472	U1412	G1292	G1292
G2193	G2133	C2073	C1983	A1953	C1893	G1833	A1773	U1713	G1653	C1593	C1533	G1473	A1413	C1293	C1293
U2194	A2134	U2074	A2014	G1954	C1894	G1834	C1774	U1714	A1654	U1594	U1534	U1474	C1414	U1294	U1294
U2195	A2135	U2075	A2015	U1955	G1895	G1835	U1775	G1715	A1655	C1595	U1535	G1475	U1415	G1295	G1295
C2196	G2136	U2076	U2016	U1956	G1896	C1836	G1776	U1716	C1656	A1596	C1536	U1476	G1416	G1296	G1296
U2197	U2137	A2077	U2017	C1957	G1897	A1837	U1777	U1717	U1657	A1597	G1537	A1477	C1417	C1297	C1297
A2198	G2138	C2078	G2018	C1958	U1898	C1838	U1778	G1718	C1658	A1598	G1538	G1478	G1418	C1298	C1298
A2199	U2139	U2079	A2019	G1959	A1899	G1839	U1779	G1719	G1659	U1599	U1539	G1479	A1419	G1299	G1299
C2200	G2140	A2080	A2020	A1960	A1900	G1840	A1780	U1720	G1660	C1600	G1540	C1480	A1420	G1300	G1300
G2201	A2141	U2081	C2021	C1961	A1901	U1841	U1781	G1721	G1661	G1601	C1541	U1481	G1421	A1301	A1301
U2202	A2142	A2082	U2022	C1962	C1902	G1842	U1782	A1722	U1662	U1602	U1542	G1482	G1422	A1302	A1302
C2203	G2143	G2083	C2023	U1963	G1903	A1843	U1783	G1723	G1663	A1603	G1543	U1483	C1363	G1303	G1303
G2204	G2144	C2084	G2024	G1964	G1904	C1844	A1784	G1724	A1664	C1604	A1544	U1484	G1424	A1304	A1304
A2205	C2145	U2085	C2025	C1965	C1905	G1845	A1785	U1725	A1665	C1605	A1545	U1485	G1425	C1305	C1305
C2206	G2146	U2086	U2026	A1966	G1906	G1846	A1786	C1726	G1666	C1606	G1546	U1486	G1426	C1306	C1306
U2207	A2147	G2087	G2027	C1967	G1907	A1847	A1787	C1727	G1667	C1607	U1547	U1487	A1427	A1307	A1307
G2208	G2148	A2088	U2028	G1968	C1908	A1848	C1788	G1728	A1668	A1608	A1548	C1488	C1428	G1308	G1308
C2209	U2149	C2089	G2029	A1969	C1909	G1849	A1789	U1729	A1669	A1609	A1549	C1489	G1429	G1309	G1309
U2210	C2150	A2090	U2030	U1970	G1910	G1850	C1790	C1730	C1670	A1610	C1550	A1490	G1430	G1310	G1310
A2211	U2151	C2091	A2031	U1971	U1911	U1851	A1791	G1731	U1671	A1611	A1551	G1491	A1431	G1311	G1311
G2212	G2152	U2092	G2032	G1972	A1912	U1852	G1792	C1732	A1672	C1612	A1552	G1492	G1432	U1312	U1312
U2213	C2153	C2093	A2033	G1973	A1913	A1853	C1793	G1733	G1673	A1613	U1553	C1493	A1433	U1313	U1313
A2214	A2154	A2094	U2034	C1974	A1854	A1854	A1794	G1734	G1674	A1614	U1554	A1494	A1434	G1314	G1314
G2215	U2155	A2095	G2035	G1975	C1915	U1855	C1795	A1735	G1675	C1615	G1555	A1495	G1435	U1315	U1315
G2216	C2156	C2096	C2036	U1976	A1916	U1856	U1796	U1736	A1676	A1616	C1556	A1496	G1436	U1316	U1316
G2217	G2157	A2097	A2037	A1977	U1917	G1857	G1797	G1737	A1677	C1617	C1557	U1497	C1437	G1317	G1317
G2218	A2158	U2098	G2038	A1978	A1918	A1858	U1798	A1738	A1678	C1618	U1558	C1498	U1438	U1318	U1318
U2219	G2159	U2099	U2039	A1979	A1919	A1859	G1799	A1739	A1679	U1559	U1559	C1499	A1439	G1319	G1319
U2220	C2160	G2100	G2040	G1980	C1920	G1860	C1800	G1740	U1680	G1620	G1560	G1500	U1440	G1380	G1380

U2881	A2821	A2761	U2701	C2641	C2521	A2461	U2401	G2341	A2281	G2221
A2882	G2822	C2762	G2702	G2642	U2522	C2462	U2402	C2342	G2282	G2222
A2883	A2823	C2763	G2703	G2643	G2523	C2463	U2403	C2343	G2283	G2223
U2884	G2824	A2764	C2704	U2644	G2524	G2464	U2404	U2344	A2284	G2224
G2885	G2825	A2765	A2705	G2645	G2525	C2465	G2405	G2345	C2285	A2225
A2886	A2826	A2766	A2706	C2646	G2526	C2466	A2406	A2346	G2286	C2226
A2887	C2827	C2767	U2707	U2647	C2527	C2467	U2407	C2347	A2287	G2227
A2888	G2828	C2768	G2708	G2648	U2528	A2468	U2408	U2348	A2288	G2228
C2889	A2829	U2769	C2709	C2649	G2529	A2469	G2409	G2349	G2289	U2229
U2890	G2830	C2770	C2710	U2650	C2530	G2470	G2410	C2350	G2290	G2230
U2891	G2831	C2771	A2711	C2651	A2531	A2471	A2411	G2351	U2291	U2231
G2892	U2832	C2772	C2712	C2652	G2532	G2472	A2412	A2352	U2292	C2232
A2893	U2833	C2773	U2713	U2653	U2533	C2473	G2413	G2353	G2293	U2233
G2894	G2834	C2774	G2714	A2654	A2534	U2474	G2414	C2354	G2294	G2234
G2895	A2835	G2775	C2715	G2655	G2535	U2475	G2415	G2355	G2295	G2235
G2896	U2836	A2776	C2716	U2656	U2536	U2476	G2416	U2356	U2296	U2236
U2897	A2837	G2777	C2717	A2657	U2537	U2477	C2417	G2357	U2297	G2237
G2898	G2838	A2778	G2718	C2658	C2538	A2478	A2418	A2358	A2298	G2238
A2899	G2839	U2779	G2719	G2659	C2539	U2479	U2419	C2359	U2299	G2239
A2900	C2840	G2780	U2720	A2660	C2540	G2480	C2420	G2360	C2300	U2240
C2901	C2841	A2781	U2721	G2661	A2541	G2481	G2421	G2361	C2301	A2241
G2902	G2842	G2782	C2722	A2662	A2542	A2482	C2422	C2362	U2302	G2242
G2843	C2843	U2783	C2723	G2663	G2543	C2483	U2423	G2363	G2303	U2243
G2844	G2844	U2784	U2724	C2664	G2544	G2484	C2424	C2364	G2304	U2244
U2945	U2945	U2785	A2725	A2665	G2545	G2485	A2425	G2365	U2305	U2245
U2946	C2946	U2786	A2726	C2666	U2546	C2486	A2426	A2366	G2306	G2246
U2947	U2947	C2787	A2727	C2667	U2547	G2487	C2427	G2367	G2307	A2247
G2948	G2948	C2788	U2728	G2668	U2548	G2488	G2428	C2368	G2308	U2248
U2949	U2949	C2789	G2729	G2669	G2549	U2489	G2429	A2369	A2309	U2249
A2950	A2950	U2790	C2730	A2670	G2550	G2490	A2430	G2370	C2310	G2250
A2951	G2951	G2791	G2731	C2671	C2551	U2491	U2431	C2371	A2311	U2251
G2952	C2952	A2792	G2732	U2672	U2552	U2492	A2432	U2372	U2312	G2252
C2953	G2953	A2793	A2733	G2673	G2553	U2493	A2433	C2373	C2313	G2253
G2954	G2954	C2794	A2734	G2674	U2554	G2494	A2434	C2374	A2314	G2254
C2955	C2955	U2795	G2735	A2675	U2555	G2495	A2435	G2375	G2315	G2255
A2956	A2956	U2796	A2736	C2676	C2556	C2496	G2436	A2376	G2316	G2256
G2957	G2957	C2797	C2737	C2677	G2557	A2497	G2437	A2377	A2317	U2257
C2958	U2958	U2798	G2738	C2678	G2558	G2498	A2438	C2378	C2318	G2258
G2959	G2959	A2799	U2739	A2679	C2559	C2499	A2439	G2379	G2319	U2259
A2960	A2960	U2800	A2740	U2680	A2560	U2500	C2440	C2380	U2320	C2260
U2961	U2961	G2801	A2741	C2681	U2561	C2501	U2441	A2381	C2321	C2261
G2962	G2962	C2802	C2742	A2682	U2562	G2502	C2442	G2382	A2322	U2262
C2963	C2963	G2803	U2743	C2683	U2563	A2503	C2443	C2383	G2323	C2263
G2964	G2964	U2804	G2744	U2684	A2564	G2504	C2444	U2384	U2324	C2264
U2965	U2965	C2805	C2745	G2685	G2565	G2505	G2445	C2385	G2325	U2265
U2966	U2966	G2806	U2746	C2686	A2566	U2506	G2446	A2386	C2326	A2266
G2967	G2967	U2807	G2747	U2687	G2567	C2507	G2447	U2387	A2327	A2267
A2968	A2968	C2808	A2748	C2688	U2568	G2508	A2448	C2388	A2328	A2268
G2969	G2969	U2809	U2749	U2689	G2569	C2509	U2449	G2389	U2329	G2269
U2970	C2970	G2810	A2750	U2690	G2570	C2510	A2450	U2390	G2330	A2270
U2971	U2971	G2811	U2751	C2691	U2571	U2511	A2451	G2391	C2331	G2271
A2972	G2972	C2812	C2752	G2692	A2572	C2512	C2452	A2392	C2332	U2272
C2973	A2973	G2813	A2753	G2693	C2573	A2513	A2453	U2393	A2333	A2273
C2874	C2874	A2814	U2754	G2694	G2574	U2514	G2454	C2394	U2334	A2274
C2875	C2875	G2815	U2755	U2695	C2575	C2515	G2455	C2395	A2335	G2275
G2876	G2876	G2816	U2756	U2696	G2576	A2516	C2456	C2396	A2336	G2276
G2877	G2877	U2817	U2757	G2697	U2577	G2517	U2457	G2397	G2337	G2277
U2878	U2878	A2818	A2758	U2698	G2578	A2518	U2458	U2398	C2338	A2278
A2879	A2879	G2819	C2759	U2699	C2579	U2519	A2459	G2399	C2339	G2279
G2880	G2880	C2820	G2760	C2700	U2580	U2520	U2460	C2400	C2340	G2220

• Molecule 27: 50S ribosomal protein L2

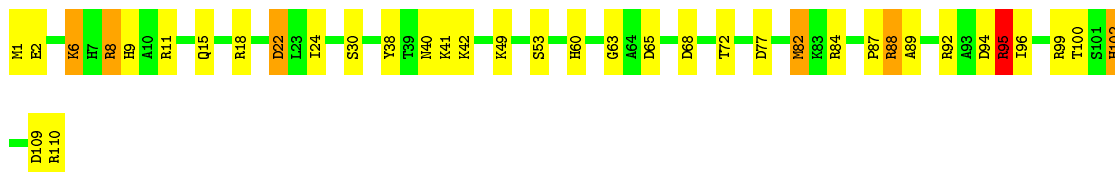
Chain LD:  57% 31% 10%

A1	A8	A89	P7	T8	S9	P10	G11	R12	H13	H14	K17	N20	E22	K25	G26	K27	P28	F29	E34	K35	R36	K37	K38	R42	M43	R47	I48	T49	T50	B51	H52	B57	K58	Q59	A60	Y61	R62	I63	V64	D65	F66	K67	R68	R79	Y82	D83	P84	M85	R176
S87	R181	K182	V183	E184	A185	R188	L191	G98	M196	H199	M200	A111	T115	W116	S117	A121	T128	V129	R132	M133	M224	N225	P226	V227	P230	E235	G236	N238	F239	G240	K241	H242	T245	P246	T251	K252	R257	S258	N259	K260	R261	T262	D263	K264	F265				



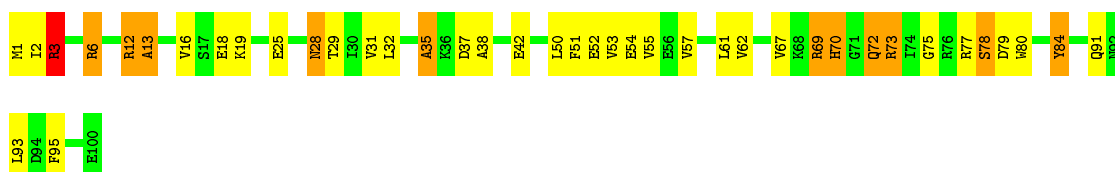
- Molecule 28: 50S ribosomal protein L22

Chain LU: 66% 27% 5% •



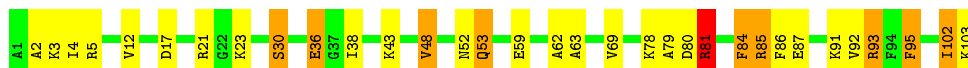
- Molecule 29: 50S ribosomal protein L23

Chain LV: 59% 29% 11% •



- Molecule 30: 50S ribosomal protein L24

Chain LW: 68% 22% 9% •



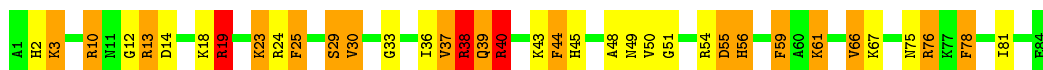
- Molecule 31: 50S ribosomal protein L25

Chain LX: 62% 31% 5% •



- Molecule 32: 50S ribosomal protein L27

Chain LY: 56% 20% 20% •



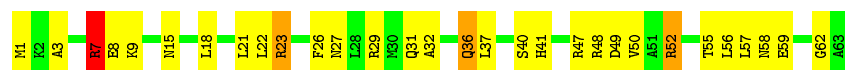
- Molecule 33: 50S ribosomal protein L28

Chain LZ: 58% 31% 6% •



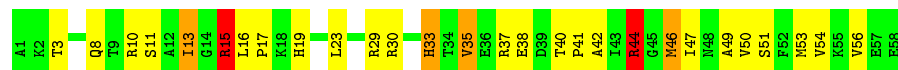
- Molecule 34: 50S ribosomal protein L29

Chain L0: 



- Molecule 35: 50S ribosomal protein L30

Chain L1: 



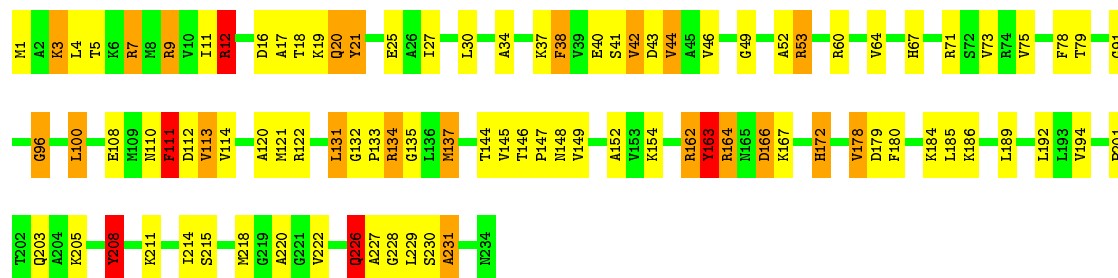
- Molecule 36: 50S ribosomal protein L31

Chain L2: 



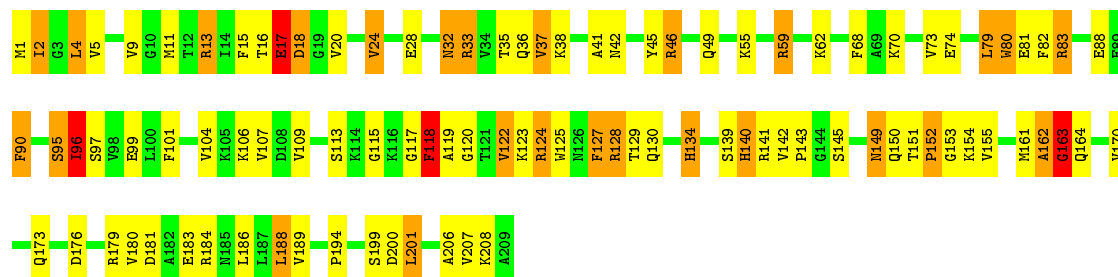
- Molecule 37: 50S ribosomal protein L1

Chain LC: 



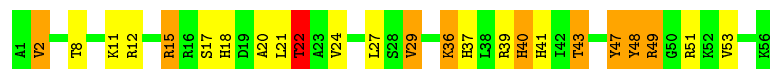
- Molecule 38: 50S ribosomal protein L3

Chain LE: 

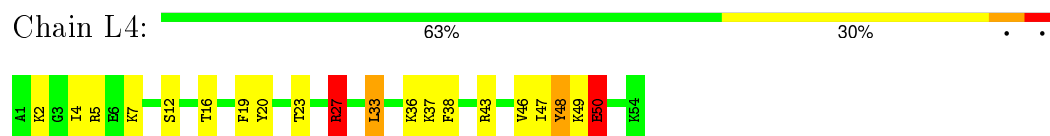


- Molecule 39: 50S ribosomal protein L32

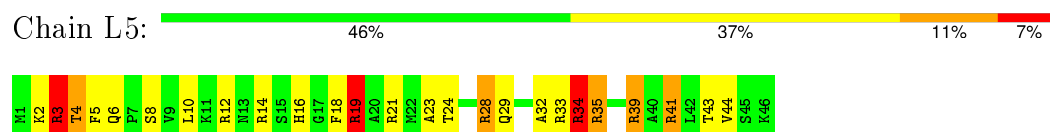
Chain L3: 



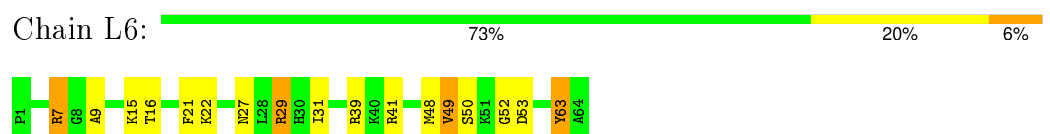
- Molecule 40: 50S ribosomal protein L33



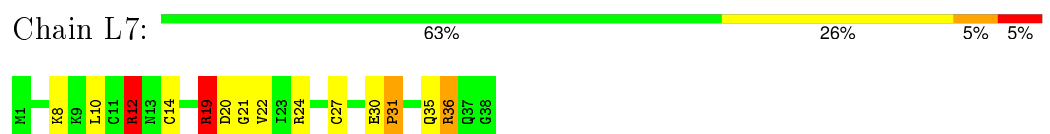
- Molecule 41: 50S ribosomal protein L34



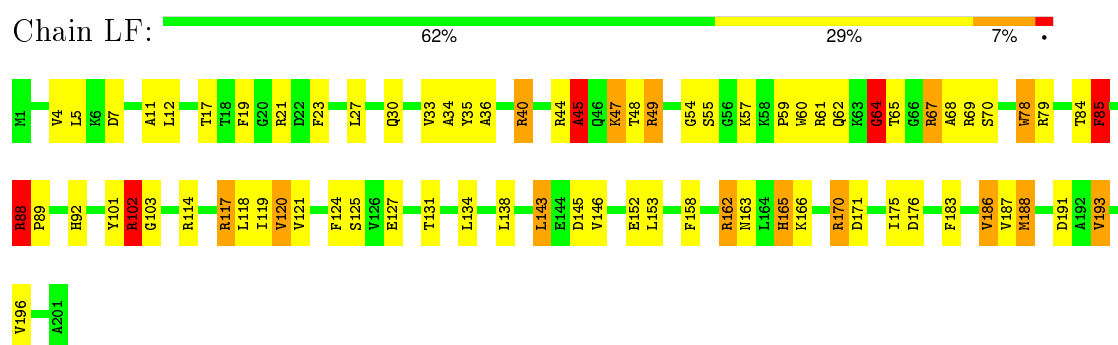
- Molecule 42: 50S ribosomal protein L35



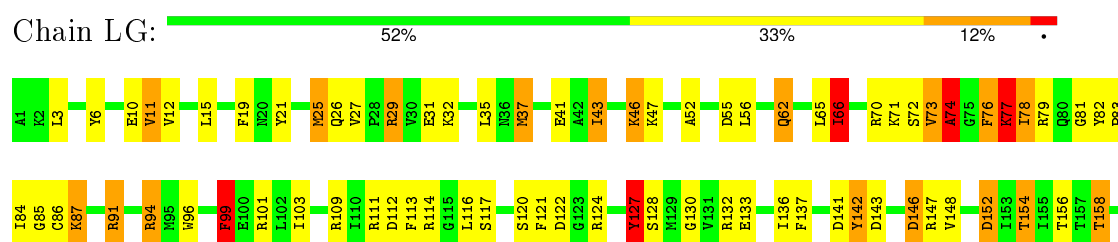
- Molecule 43: 50S ribosomal protein L36



- Molecule 44: 50S ribosomal protein L4



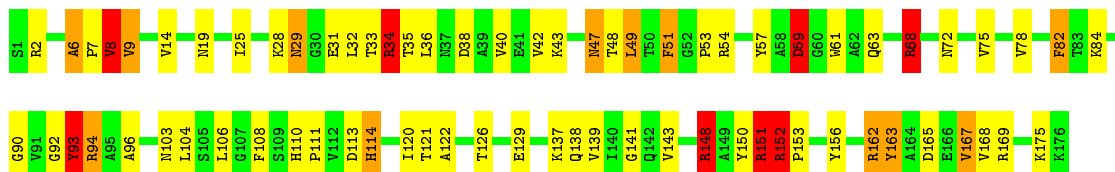
- Molecule 45: 50S ribosomal protein L5





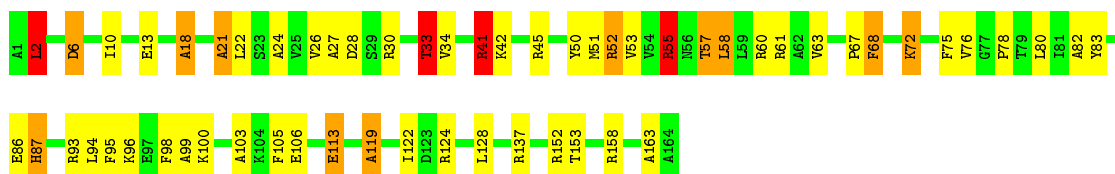
- Molecule 46: 50S ribosomal protein L6

Chain LH: 59% 30% 7% 5%



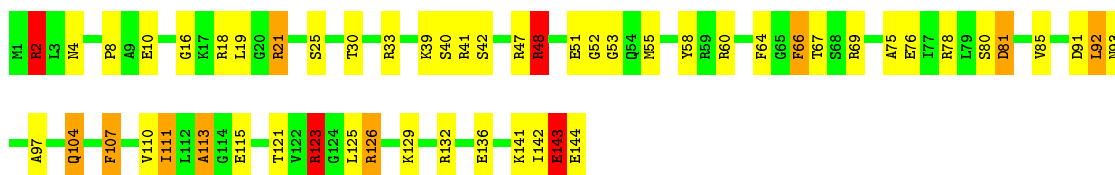
- Molecule 47: 50S ribosomal protein L10

Chain LJ: 65% 26% 7%



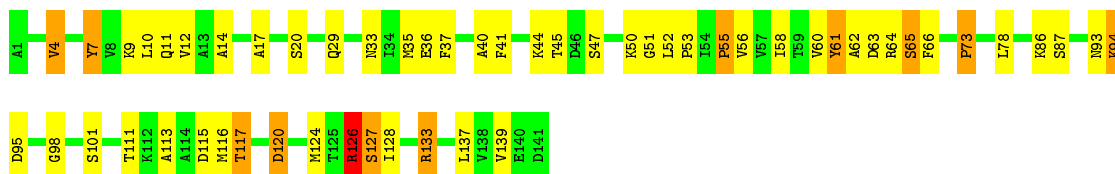
- Molecule 48: 50S ribosomal protein L15

Chain LN: 63% 28% 6%



- Molecule 49: 50S ribosomal protein L11

Chain LK: 61% 30% 8%



- Molecule 50: 50S ribosomal protein L13

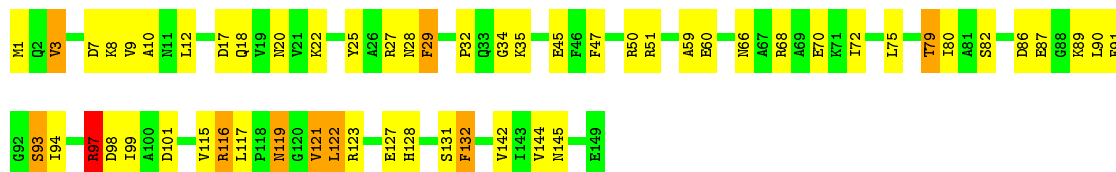
Chain LL: 60% 32% 8%





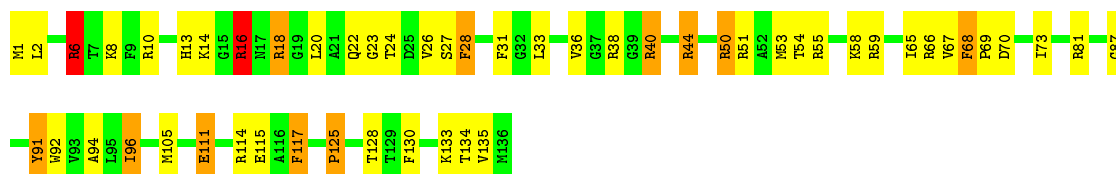
- Molecule 51: 50S ribosomal protein L9

Chain LI: 62% 32% 6% •



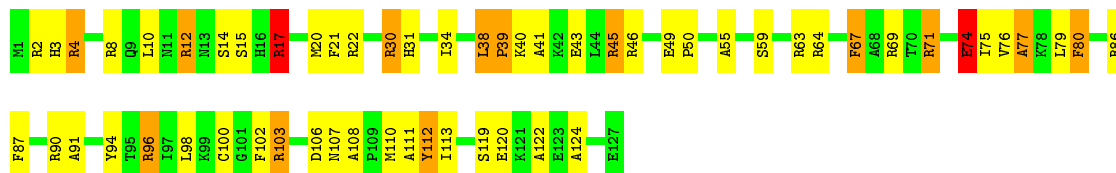
- Molecule 52: 50S ribosomal protein L16

Chain LO: 61% 29% 8% •



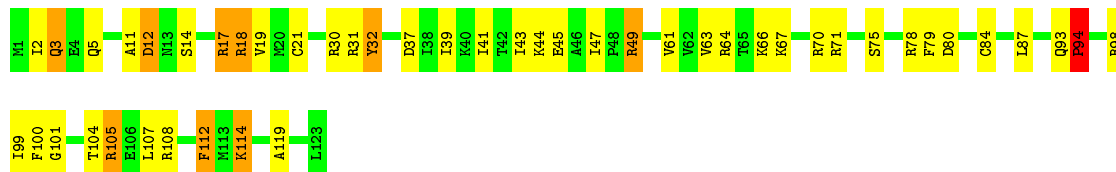
- Molecule 53: 50S ribosomal protein L17

Chain LP: 54% 34% 10% •



- Molecule 54: 50S ribosomal protein L14

Chain LM: 62% 30% 7% •



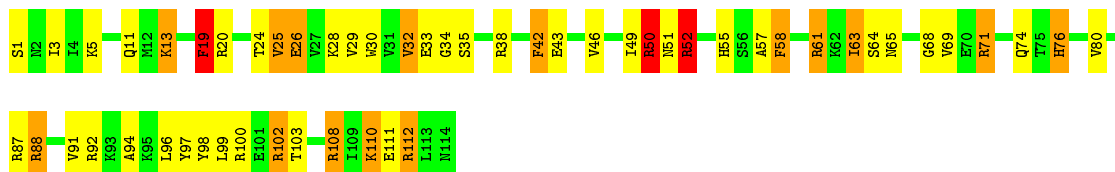
- Molecule 55: 50S ribosomal protein L18

Chain LQ: 59% 28% 9% •



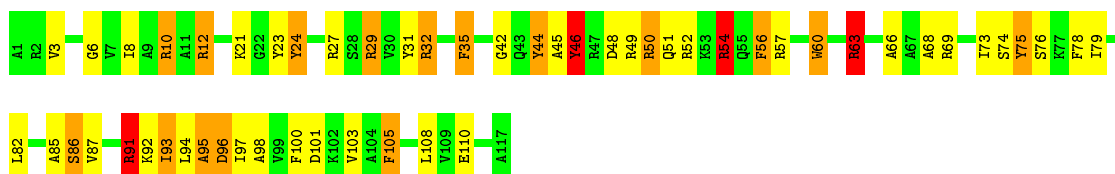
- Molecule 56: 50S ribosomal protein L19

Chain LR:  53% 32% 13% 2%



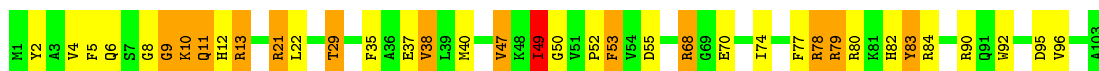
- Molecule 57: 50S ribosomal protein L20

Chain LS:  54% 29% 14% 3%



- Molecule 58: 50S ribosomal protein L21

Chain LT: 



4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of images	50000	Depositor
Resolution determination method	FSC 0.143	Depositor
CTF correction method	CTFFIND3 and CTFIT	Depositor
Microscope	FEI TITAN	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	Not provided	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	5000	Depositor
Magnification	55000	Depositor
Image detector	DIRECT ELECTRON DE-12 (4k x 3k)	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: GTP

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 2$	RMSZ	$\# Z > 2$
1	SS	1.56	2/744 (0.3%)	2.24	33/995 (3.3%)
10	SJ	1.65	8/835 (1.0%)	2.13	34/1127 (3.0%)
11	SK	1.67	8/982 (0.8%)	2.23	33/1323 (2.5%)
12	SL	1.66	6/969 (0.6%)	2.28	46/1300 (3.5%)
13	SM	1.61	3/919 (0.3%)	2.36	43/1226 (3.5%)
14	SN	1.59	6/817 (0.7%)	2.23	36/1088 (3.3%)
15	SO	1.56	5/724 (0.7%)	2.20	29/966 (3.0%)
16	SP	1.56	4/659 (0.6%)	2.17	25/884 (2.8%)
17	SQ	1.66	3/681 (0.4%)	2.07	20/913 (2.2%)
18	SB	1.61	10/1904 (0.5%)	2.05	63/2565 (2.5%)
19	SC	1.60	8/1852 (0.4%)	2.10	50/2490 (2.0%)
2	SA	3.39	5085/37035 (13.7%)	3.51	8259/57774 (14.3%)
20	SD	1.65	17/1665 (1.0%)	2.20	62/2227 (2.8%)
21	SE	1.60	8/1239 (0.6%)	2.11	38/1664 (2.3%)
22	SF	1.65	8/1121 (0.7%)	2.34	42/1509 (2.8%)
23	SR	1.71	9/637 (1.4%)	2.26	25/851 (2.9%)
24	S3	1.63	40/5532 (0.7%)	2.11	178/7485 (2.4%)
25	LB	3.37	384/2869 (13.4%)	3.42	601/4474 (13.4%)
26	LA	3.49	10162/69808 (14.6%)	3.51	15513/108905 (14.2%)
27	LD	1.64	14/2131 (0.7%)	2.20	72/2863 (2.5%)
28	LU	1.50	3/864 (0.3%)	2.05	25/1156 (2.2%)
29	LV	1.62	6/794 (0.8%)	2.08	29/1060 (2.7%)
3	S1	3.38	150/1108 (13.5%)	3.59	243/1724 (14.1%)
30	LW	1.58	4/797 (0.5%)	2.12	17/1062 (1.6%)
31	LX	1.61	4/766 (0.5%)	2.09	29/1025 (2.8%)
32	LY	1.71	4/642 (0.6%)	2.27	25/848 (2.9%)
33	LZ	1.74	6/635 (0.9%)	2.24	24/848 (2.8%)
34	L0	1.56	2/510 (0.4%)	2.31	24/677 (3.5%)
35	L1	1.56	2/453 (0.4%)	2.22	19/605 (3.1%)
36	L2	1.57	1/559 (0.2%)	2.11	15/745 (2.0%)
37	LC	1.62	11/1748 (0.6%)	2.15	59/2355 (2.5%)
38	LE	1.66	10/1586 (0.6%)	2.14	61/2134 (2.9%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >2	RMSZ	# Z >2
39	L3	1.63	2/450 (0.4%)	1.98	9/599 (1.5%)
4	S2	3.42	257/1831 (14.0%)	3.58	423/2853 (14.8%)
40	L4	1.67	4/448 (0.9%)	2.12	11/594 (1.9%)
41	L5	1.66	1/380 (0.3%)	2.65	31/498 (6.2%)
42	L6	1.53	1/513 (0.2%)	2.02	14/676 (2.1%)
43	L7	1.53	0/303	2.12	9/397 (2.3%)
44	LF	1.66	10/1571 (0.6%)	2.07	53/2113 (2.5%)
45	LG	1.60	5/1444 (0.3%)	2.28	64/1937 (3.3%)
46	LH	1.62	8/1343 (0.6%)	2.17	53/1816 (2.9%)
47	LJ	1.60	4/1247 (0.3%)	2.08	46/1679 (2.7%)
48	LN	1.56	5/1062 (0.5%)	2.24	42/1413 (3.0%)
49	LK	1.58	6/1046 (0.6%)	2.07	33/1410 (2.3%)
5	ST	1.63	4/676 (0.6%)	2.23	33/895 (3.7%)
50	LL	1.71	10/1152 (0.9%)	2.19	45/1551 (2.9%)
51	LI	1.58	4/1122 (0.4%)	2.10	30/1515 (2.0%)
52	LO	1.63	9/1093 (0.8%)	2.27	29/1460 (2.0%)
53	LP	1.69	11/1021 (1.1%)	2.21	45/1364 (3.3%)
54	LM	1.59	2/956 (0.2%)	2.32	35/1279 (2.7%)
55	LQ	1.67	6/910 (0.7%)	2.00	28/1219 (2.3%)
56	LR	1.72	8/929 (0.9%)	2.27	32/1242 (2.6%)
57	LS	1.62	6/960 (0.6%)	2.27	39/1278 (3.1%)
58	LT	1.62	2/829 (0.2%)	2.18	32/1107 (2.9%)
6	SU	1.70	5/598 (0.8%)	2.73	30/792 (3.8%)
7	SG	1.68	10/1422 (0.7%)	2.09	48/1908 (2.5%)
8	SH	1.58	5/989 (0.5%)	2.10	33/1326 (2.5%)
9	SI	1.67	6/1048 (0.6%)	2.18	43/1394 (3.1%)
All	All	2.97	16384/168928 (9.7%)	3.17	27062/251183 (10.8%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	SS	0	11
10	SJ	0	9
11	SK	0	7
12	SL	0	10
13	SM	0	8
14	SN	0	11
15	SO	0	7
16	SP	0	9

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
17	SQ	0	6
18	SB	0	13
19	SC	0	11
2	SA	0	979
20	SD	0	18
21	SE	0	11
22	SF	0	12
23	SR	0	9
24	S3	0	38
25	LB	0	68
26	LA	5	1948
27	LD	0	24
28	LU	0	8
29	LV	0	5
3	S1	0	36
30	LW	0	8
31	LX	0	5
32	LY	0	8
33	LZ	0	7
34	L0	0	2
35	L1	0	3
36	L2	0	9
37	LC	0	17
38	LE	0	15
39	L3	0	5
4	S2	0	48
40	L4	0	4
41	L5	0	7
42	L6	0	2
43	L7	0	4
44	LF	0	10
45	LG	0	15
46	LH	0	13
47	LJ	0	10
48	LN	0	12
49	LK	0	10
5	ST	0	5
50	LL	0	5
51	LI	0	7
52	LO	0	8
53	LP	0	10
54	LM	0	9

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
55	LQ	0	14
56	LR	0	11
57	LS	0	12
58	LT	0	8
6	SU	0	11
7	SG	0	19
8	SH	0	10
9	SI	0	7
All	All	5	3608

All (16384) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	199	A	N7-C5	-23.19	1.25	1.39
26	LA	727	A	N7-C5	-22.32	1.25	1.39
26	LA	1791	A	N9-C4	-20.53	1.25	1.37
2	SA	298	A	N7-C5	-20.39	1.27	1.39
26	LA	743	A	N7-C5	-19.99	1.27	1.39
2	SA	803	G	N7-C5	-19.08	1.27	1.39
26	LA	1236	G	N7-C5	-18.98	1.27	1.39
26	LA	1029	A	N9-C4	-18.65	1.26	1.37
26	LA	698	C	N1-C6	18.61	1.48	1.37
2	SA	538	G	N9-C4	-18.36	1.23	1.38
26	LA	1743	G	N7-C5	-18.35	1.28	1.39
26	LA	423	A	N9-C4	-18.26	1.26	1.37
26	LA	2358	A	N3-C4	-18.19	1.24	1.34
26	LA	2531	A	N9-C4	-18.01	1.27	1.37
26	LA	1287	A	N7-C5	-17.55	1.28	1.39
26	LA	10	A	N3-C4	-17.39	1.24	1.34
2	SA	630	A	N7-C5	-17.34	1.28	1.39
26	LA	1802	A	N9-C4	-17.18	1.27	1.37
2	SA	337	G	C8-N7	-17.18	1.20	1.30
2	SA	694	A	N9-C4	-17.12	1.27	1.37
26	LA	1628	G	N7-C5	-17.03	1.29	1.39
26	LA	743	A	N9-C4	-17.02	1.27	1.37
26	LA	1483	G	N7-C5	-17.01	1.29	1.39
26	LA	612	G	N3-C4	-16.97	1.23	1.35
26	LA	2205	A	N9-C4	-16.91	1.27	1.37
26	LA	2048	G	N7-C5	-16.84	1.29	1.39
4	S2	22	A	N9-C8	-16.80	1.24	1.37
26	LA	2757	A	N9-C4	-16.56	1.27	1.37
26	LA	788	A	N9-C4	-16.54	1.27	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1759	A	N3-C4	-16.26	1.25	1.34
26	LA	2152	G	C2-N3	16.22	1.45	1.32
26	LA	914	G	C8-N7	-16.20	1.21	1.30
2	SA	22	G	N7-C5	-16.17	1.29	1.39
2	SA	557	G	N3-C4	-16.16	1.24	1.35
26	LA	1367	A	N7-C5	-16.13	1.29	1.39
2	SA	877	G	N7-C5	-16.12	1.29	1.39
26	LA	766	U	C2-N3	-16.10	1.26	1.37
2	SA	1513	A	N7-C5	-16.07	1.29	1.39
26	LA	2287	A	N7-C5	-15.97	1.29	1.39
26	LA	320	A	N9-C4	-15.93	1.28	1.37
2	SA	1405	G	C5-C4	-15.92	1.27	1.38
2	SA	1110	A	N7-C5	-15.89	1.29	1.39
2	SA	1268	G	N7-C5	-15.87	1.29	1.39
26	LA	1241	A	N3-C4	-15.87	1.25	1.34
26	LA	1614	A	N9-C4	-15.71	1.28	1.37
26	LA	1930	G	N7-C5	-15.66	1.29	1.39
3	S1	18	A	C8-N7	-15.60	1.20	1.31
26	LA	1936	A	N9-C4	-15.50	1.28	1.37
26	LA	618	G	N7-C5	15.41	1.48	1.39
25	LB	108	A	N9-C4	-15.39	1.28	1.37
2	SA	696	A	N3-C4	-15.38	1.25	1.34
26	LA	167	A	N7-C5	-15.37	1.30	1.39
2	SA	626	G	N7-C5	-15.36	1.30	1.39
26	LA	2256	G	N7-C5	-15.25	1.30	1.39
26	LA	1827	U	C2-N3	-15.22	1.27	1.37
26	LA	984	A	N9-C4	-15.21	1.28	1.37
26	LA	1281	G	C5-C4	-15.11	1.27	1.38
26	LA	162	U	C2-N3	-15.06	1.27	1.37
26	LA	961	C	N1-C6	-14.99	1.28	1.37
26	LA	19	A	N9-C4	-14.97	1.28	1.37
26	LA	1522	A	N3-C4	-14.95	1.25	1.34
26	LA	1332	G	N7-C5	-14.93	1.30	1.39
26	LA	1265	A	N9-C4	-14.91	1.28	1.37
26	LA	2764	A	N9-C4	-14.88	1.28	1.37
2	SA	1329	A	N7-C5	-14.86	1.30	1.39
25	LB	53	A	N7-C5	-14.83	1.30	1.39
26	LA	1998	A	N3-C4	-14.80	1.25	1.34
2	SA	917	G	N7-C5	-14.75	1.30	1.39
26	LA	1785	A	C6-N1	-14.75	1.25	1.35
26	LA	2644	G	C6-N1	-14.74	1.29	1.39
2	SA	1507	A	N3-C4	-14.70	1.26	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	911	A	N9-C4	-14.70	1.29	1.37
26	LA	675	A	N9-C4	-14.68	1.29	1.37
26	LA	980	A	N7-C5	-14.64	1.30	1.39
2	SA	535	A	N7-C5	-14.62	1.30	1.39
2	SA	907	A	N7-C5	-14.52	1.30	1.39
2	SA	1021	A	N9-C4	14.49	1.46	1.37
26	LA	226	A	N7-C5	-14.46	1.30	1.39
26	LA	1839	G	N7-C5	-14.44	1.30	1.39
2	SA	1338	G	N7-C5	-14.41	1.30	1.39
2	SA	553	A	N9-C4	-14.40	1.29	1.37
2	SA	705	G	N9-C4	-14.38	1.26	1.38
2	SA	1220	G	N9-C8	-14.37	1.27	1.37
26	LA	2057	G	C5-C4	-14.37	1.28	1.38
2	SA	130	A	N9-C4	-14.37	1.29	1.37
2	SA	1299	A	N9-C4	14.35	1.46	1.37
26	LA	1256	G	N7-C5	-14.30	1.30	1.39
26	LA	2352	A	N7-C5	-14.27	1.30	1.39
2	SA	642	A	N9-C4	14.26	1.46	1.37
26	LA	1544	A	N7-C5	-14.24	1.30	1.39
2	SA	1020	G	N7-C5	14.24	1.47	1.39
26	LA	2057	G	N7-C5	-14.22	1.30	1.39
26	LA	2614	A	N9-C4	-14.21	1.29	1.37
26	LA	2799	A	N9-C4	-14.20	1.29	1.37
2	SA	447	G	N7-C5	14.18	1.47	1.39
26	LA	783	A	N9-C4	-14.17	1.29	1.37
26	LA	2532	G	N3-C4	-14.15	1.25	1.35
26	LA	1238	G	N9-C8	-14.14	1.27	1.37
26	LA	1103	A	N7-C5	-14.14	1.30	1.39
2	SA	353	A	C5-C4	-14.10	1.28	1.38
26	LA	1361	G	N9-C8	-14.08	1.27	1.37
2	SA	909	A	N9-C4	-14.06	1.29	1.37
26	LA	1324	G	N7-C5	-13.97	1.30	1.39
2	SA	1342	C	C2'-C1'	-13.96	1.38	1.53
26	LA	1125	G	N7-C5	-13.95	1.30	1.39
4	S2	4	G	N7-C5	13.91	1.47	1.39
26	LA	670	A	N7-C5	-13.86	1.30	1.39
26	LA	1449	G	N7-C5	13.86	1.47	1.39
26	LA	1888	G	N7-C5	-13.86	1.30	1.39
26	LA	1929	G	N3-C4	-13.86	1.25	1.35
2	SA	572	A	N9-C8	-13.83	1.26	1.37
26	LA	1977	A	N9-C4	-13.83	1.29	1.37
2	SA	799	G	C8-N7	-13.81	1.22	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	27	G	C8-N7	13.79	1.39	1.30
2	SA	700	G	N3-C4	-13.77	1.25	1.35
26	LA	2391	G	C2-N3	13.77	1.43	1.32
26	LA	310	A	N7-C5	-13.75	1.31	1.39
26	LA	1981	A	N9-C4	-13.75	1.29	1.37
2	SA	279	A	N7-C5	-13.74	1.31	1.39
26	LA	1288	G	N7-C5	-13.71	1.31	1.39
2	SA	859	G	C6-N1	-13.71	1.29	1.39
2	SA	538	G	N1-C2	-13.67	1.26	1.37
26	LA	2454	G	N9-C4	-13.66	1.27	1.38
26	LA	121	G	C5-C4	-13.66	1.28	1.38
26	LA	483	A	N7-C5	-13.64	1.31	1.39
2	SA	1390	U	C2-N3	-13.63	1.28	1.37
2	SA	794	A	N9-C4	-13.63	1.29	1.37
2	SA	483	C	P-O5'	-13.62	1.46	1.59
2	SA	544	G	N7-C5	-13.61	1.31	1.39
26	LA	2709	G	C2-N3	13.58	1.43	1.32
25	LB	102	G	N9-C8	-13.57	1.28	1.37
26	LA	568	U	C2-N3	-13.55	1.28	1.37
26	LA	2455	G	C6-N1	-13.54	1.30	1.39
26	LA	310	A	N9-C4	-13.53	1.29	1.37
2	SA	563	A	C6-N1	-13.52	1.26	1.35
2	SA	397	A	N9-C4	13.48	1.46	1.37
26	LA	1732	C	N1-C6	-13.45	1.29	1.37
26	LA	1456	G	N3-C4	-13.44	1.26	1.35
2	SA	1239	A	N9-C4	-13.43	1.29	1.37
26	LA	2013	A	N3-C4	-13.43	1.26	1.34
26	LA	2476	A	C5-C4	-13.43	1.29	1.38
26	LA	1710	G	N3-C4	-13.42	1.26	1.35
26	LA	2565	A	N7-C5	-13.41	1.31	1.39
2	SA	1079	G	N9-C8	-13.38	1.28	1.37
26	LA	218	A	N9-C4	-13.34	1.29	1.37
26	LA	1786	A	C2'-C1'	-13.34	1.38	1.53
26	LA	379	G	N9-C4	-13.30	1.27	1.38
26	LA	1839	G	N9-C4	-13.30	1.27	1.38
26	LA	376	G	N9-C4	-13.29	1.27	1.38
26	LA	1460	U	C2-N3	-13.29	1.28	1.37
26	LA	800	A	N9-C4	-13.28	1.29	1.37
26	LA	925	A	N7-C5	-13.27	1.31	1.39
2	SA	1304	G	N9-C4	13.22	1.48	1.38
26	LA	1969	A	P-O5'	-13.22	1.46	1.59
2	SA	1250	A	N3-C4	-13.19	1.26	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	644	A	N3-C4	-13.19	1.26	1.34
26	LA	1936	A	C5-C4	-13.17	1.29	1.38
2	SA	1077	G	N7-C5	-13.16	1.31	1.39
2	SA	410	G	C5-C4	-13.15	1.29	1.38
26	LA	1278	C	N1-C6	-13.14	1.29	1.37
26	LA	2511	U	C4-C5	-13.13	1.31	1.43
25	LB	96	G	C5'-C4'	13.12	1.67	1.51
26	LA	1645	G	N7-C5	-13.12	1.31	1.39
26	LA	2873	A	C6-N1	-13.11	1.26	1.35
26	LA	64	A	C6-N1	-13.09	1.26	1.35
26	LA	1580	A	N7-C5	-13.08	1.31	1.39
26	LA	2430	A	C6-N1	-13.08	1.26	1.35
2	SA	452	A	N3-C4	13.07	1.42	1.34
26	LA	1319	C	N1-C6	-13.07	1.29	1.37
26	LA	2322	A	N3-C4	13.07	1.42	1.34
26	LA	2821	A	N7-C5	-13.06	1.31	1.39
26	LA	2524	G	N3-C4	-13.05	1.26	1.35
26	LA	685	A	O3'-P	-13.04	1.45	1.61
26	LA	749	A	N9-C4	-13.04	1.30	1.37
26	LA	2379	G	C6-N1	13.04	1.48	1.39
2	SA	254	G	N9-C8	-13.04	1.28	1.37
2	SA	866	C	C2'-C1'	-13.03	1.39	1.53
26	LA	1983	G	N7-C5	-13.03	1.31	1.39
2	SA	885	G	C2-N2	-13.02	1.21	1.34
26	LA	2487	G	N9-C8	-13.02	1.28	1.37
25	LB	53	A	N9-C4	-12.99	1.30	1.37
26	LA	741	U	C2-N3	12.99	1.46	1.37
26	LA	1748	C	N1-C6	-12.98	1.29	1.37
26	LA	960	A	N3-C4	-12.95	1.27	1.34
26	LA	2125	G	C5'-C4'	12.95	1.66	1.51
26	LA	2391	G	C6-N1	-12.94	1.30	1.39
26	LA	941	A	N9-C4	-12.92	1.30	1.37
2	SA	851	G	N7-C5	12.92	1.47	1.39
2	SA	533	A	N7-C5	-12.91	1.31	1.39
26	LA	2044	C	N1-C6	-12.90	1.29	1.37
26	LA	1247	A	N7-C5	-12.89	1.31	1.39
26	LA	896	A	C2'-C1'	-12.89	1.39	1.53
26	LA	453	A	N3-C4	-12.88	1.27	1.34
2	SA	794	A	N7-C5	-12.87	1.31	1.39
2	SA	893	C	N3-C4	12.85	1.43	1.33
2	SA	794	A	C5-C4	-12.84	1.29	1.38
26	LA	2738	A	N9-C4	-12.82	1.30	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1828	G	N9-C8	-12.82	1.28	1.37
26	LA	2829	A	N7-C5	-12.81	1.31	1.39
2	SA	1187	G	N3-C4	-12.81	1.26	1.35
26	LA	1112	G	C2-N3	12.79	1.43	1.32
26	LA	749	A	C5-C4	-12.79	1.29	1.38
26	LA	863	A	N9-C4	-12.78	1.30	1.37
26	LA	2362	C	N1-C6	-12.78	1.29	1.37
26	LA	1981	A	N7-C5	-12.78	1.31	1.39
26	LA	2358	A	N9-C4	-12.77	1.30	1.37
2	SA	71	A	N7-C5	-12.77	1.31	1.39
26	LA	2716	C	N1-C6	-12.75	1.29	1.37
26	LA	2748	A	N9-C4	12.74	1.45	1.37
26	LA	1705	A	C6-N1	-12.73	1.26	1.35
26	LA	1642	G	C8-N7	12.72	1.38	1.30
26	LA	784	G	O4'-C1'	-12.72	1.25	1.41
26	LA	108	G	N7-C5	-12.71	1.31	1.39
26	LA	1369	G	N3-C4	-12.70	1.26	1.35
26	LA	1130	U	C2-N3	-12.69	1.28	1.37
2	SA	683	G	C6-N1	-12.69	1.30	1.39
26	LA	878	A	N3-C4	12.68	1.42	1.34
26	LA	2397	G	N3-C4	-12.67	1.26	1.35
26	LA	889	C	N1-C6	12.66	1.44	1.37
26	LA	2331	G	P-O5'	12.65	1.72	1.59
26	LA	2427	C	C2'-C1'	-12.65	1.39	1.53
26	LA	498	G	N9-C8	-12.64	1.28	1.37
26	LA	1901	A	N7-C5	-12.64	1.31	1.39
26	LA	379	G	N7-C5	-12.64	1.31	1.39
2	SA	1491	G	N7-C5	-12.64	1.31	1.39
2	SA	900	A	N9-C4	-12.63	1.30	1.37
26	LA	705	A	C5-C4	-12.63	1.29	1.38
26	LA	248	G	N7-C5	-12.61	1.31	1.39
26	LA	1269	A	N7-C5	-12.61	1.31	1.39
26	LA	2205	A	N7-C5	-12.61	1.31	1.39
2	SA	147	G	N7-C5	-12.60	1.31	1.39
26	LA	990	A	N7-C5	-12.60	1.31	1.39
26	LA	987	C	N1-C6	-12.59	1.29	1.37
26	LA	721	A	N9-C4	-12.58	1.30	1.37
26	LA	1634	A	N3-C4	-12.58	1.27	1.34
2	SA	702	A	N3-C4	-12.57	1.27	1.34
2	SA	1181	G	N9-C8	-12.57	1.29	1.37
26	LA	1146	C	N1-C6	12.57	1.44	1.37
2	SA	419	C	N1-C6	-12.56	1.29	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	261	G	C2-N3	12.55	1.42	1.32
4	S2	65	G	N9-C4	-12.54	1.27	1.38
2	SA	329	A	N9-C4	-12.53	1.30	1.37
26	LA	2543	G	N7-C5	-12.53	1.31	1.39
26	LA	2581	G	N9-C8	12.52	1.46	1.37
26	LA	2211	A	N9-C4	12.51	1.45	1.37
2	SA	663	A	C5-C4	-12.51	1.29	1.38
26	LA	669	G	N7-C5	-12.50	1.31	1.39
2	SA	298	A	C5-C4	12.50	1.47	1.38
26	LA	1280	G	N7-C5	12.50	1.46	1.39
26	LA	1960	A	N9-C4	-12.50	1.30	1.37
26	LA	1419	A	N9-C4	-12.49	1.30	1.37
26	LA	1612	C	N1-C6	-12.49	1.29	1.37
2	SA	553	A	N7-C5	-12.48	1.31	1.39
26	LA	1071	G	N3-C4	12.46	1.44	1.35
4	S2	22	A	N9-C4	-12.46	1.30	1.37
2	SA	772	U	C2-N3	-12.44	1.29	1.37
26	LA	2503	A	C8-N7	-12.43	1.22	1.31
26	LA	250	G	N3-C4	-12.42	1.26	1.35
26	LA	2058	A	C5-C4	-12.42	1.30	1.38
26	LA	1008	A	N7-C5	-12.41	1.31	1.39
2	SA	1340	A	N9-C4	-12.40	1.30	1.37
26	LA	240	C	N1-C6	-12.40	1.29	1.37
26	LA	1659	G	C6-N1	-12.40	1.30	1.39
26	LA	43	G	N3-C4	-12.40	1.26	1.35
2	SA	32	A	N3-C4	-12.39	1.27	1.34
3	S1	35	G	P-O5'	-12.39	1.47	1.59
2	SA	1392	G	N9-C8	-12.37	1.29	1.37
26	LA	2364	C	N1-C6	-12.37	1.29	1.37
26	LA	2383	G	N7-C5	-12.36	1.31	1.39
26	LA	2505	G	C2-N3	-12.36	1.22	1.32
2	SA	906	A	N9-C4	-12.36	1.30	1.37
2	SA	1367	C	N1-C6	-12.35	1.29	1.37
26	LA	1158	C	N1-C6	-12.32	1.29	1.37
26	LA	2446	G	N7-C5	-12.32	1.31	1.39
26	LA	1427	A	N9-C4	-12.31	1.30	1.37
26	LA	2005	A	N7-C5	-12.31	1.31	1.39
26	LA	2642	G	P-O5'	-12.31	1.47	1.59
26	LA	538	A	N7-C5	-12.30	1.31	1.39
2	SA	1067	A	N9-C4	-12.30	1.30	1.37
26	LA	191	A	N7-C5	-12.30	1.31	1.39
2	SA	608	A	O3'-P	-12.29	1.46	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1014	A	N3-C4	-12.28	1.27	1.34
26	LA	2500	U	O3'-P	-12.28	1.46	1.61
26	LA	1547	C	N1-C6	12.27	1.44	1.37
2	SA	878	A	N9-C4	-12.27	1.30	1.37
26	LA	1268	A	N3-C4	-12.27	1.27	1.34
26	LA	2134	A	C8-N7	-12.25	1.23	1.31
26	LA	1186	G	N7-C5	-12.25	1.31	1.39
26	LA	230	G	C6-N1	-12.25	1.30	1.39
26	LA	1823	G	N7-C5	-12.24	1.31	1.39
26	LA	1867	G	N3-C4	-12.24	1.26	1.35
26	LA	2729	G	N3-C4	-12.24	1.26	1.35
26	LA	2267	A	N9-C4	-12.23	1.30	1.37
26	LA	2387	U	P-O5'	-12.22	1.47	1.59
2	SA	267	C	N1-C6	-12.22	1.29	1.37
2	SA	743	A	N7-C5	-12.22	1.31	1.39
2	SA	569	C	N1-C6	-12.21	1.29	1.37
26	LA	1651	G	N9-C4	-12.21	1.28	1.38
26	LA	1475	G	N3-C4	12.19	1.44	1.35
26	LA	2472	G	N7-C5	-12.18	1.31	1.39
2	SA	665	A	N9-C4	-12.18	1.30	1.37
26	LA	1617	C	N1-C6	-12.18	1.29	1.37
2	SA	1151	A	N3-C4	-12.17	1.27	1.34
2	SA	439	U	C2-N3	-12.17	1.29	1.37
26	LA	2429	G	N9-C8	-12.16	1.29	1.37
26	LA	2071	A	N3-C4	-12.15	1.27	1.34
2	SA	530	G	C2-N3	12.13	1.42	1.32
26	LA	869	G	N9-C8	-12.12	1.29	1.37
26	LA	1381	G	C8-N7	-12.12	1.23	1.30
26	LA	1343	G	N3-C4	-12.11	1.26	1.35
2	SA	1468	A	C2'-C1'	-12.11	1.40	1.53
26	LA	1935	G	N3-C4	-12.11	1.26	1.35
26	LA	2017	U	N1-C6	-12.10	1.27	1.38
2	SA	892	A	N9-C4	-12.09	1.30	1.37
26	LA	2679	A	N9-C4	12.06	1.45	1.37
2	SA	454	G	N7-C5	-12.06	1.32	1.39
26	LA	12	U	N1-C6	12.06	1.48	1.38
26	LA	617	G	C6-N1	-12.06	1.31	1.39
4	S2	7	G	N3-C4	-12.03	1.27	1.35
2	SA	1442	G	N3-C4	-12.03	1.27	1.35
26	LA	2592	G	N9-C4	-12.03	1.28	1.38
26	LA	2614	A	N7-C5	-12.02	1.32	1.39
26	LA	377	G	N3-C4	-12.01	1.27	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	816	A	C2'-C1'	-12.00	1.40	1.53
2	SA	174	A	N7-C5	-12.00	1.32	1.39
26	LA	2837	A	N9-C4	-12.00	1.30	1.37
25	LB	39	A	N7-C5	-11.99	1.32	1.39
26	LA	1932	A	N7-C5	-11.99	1.32	1.39
26	LA	549	G	N3-C4	-11.98	1.27	1.35
26	LA	467	G	N9-C4	-11.97	1.28	1.38
26	LA	2655	G	C8-N7	11.97	1.38	1.30
2	SA	364	A	C5'-C4'	11.96	1.65	1.51
26	LA	1129	A	P-O5'	-11.96	1.47	1.59
26	LA	1564	C	N1-C6	-11.96	1.29	1.37
2	SA	111	G	N7-C5	-11.95	1.32	1.39
2	SA	1338	G	C8-N7	-11.95	1.23	1.30
26	LA	1323	C	P-O5'	-11.95	1.47	1.59
26	LA	579	G	N1-C2	-11.95	1.28	1.37
26	LA	1492	G	N9-C4	-11.93	1.28	1.38
26	LA	2370	G	C6-N1	-11.93	1.31	1.39
26	LA	2856	A	N7-C5	11.92	1.46	1.39
26	LA	2700	A	N3-C4	-11.92	1.27	1.34
26	LA	1821	A	N3-C4	-11.91	1.27	1.34
26	LA	271	G	C6-N1	-11.89	1.31	1.39
26	LA	1477	A	N3-C4	-11.88	1.27	1.34
26	LA	475	C	N1-C6	11.87	1.44	1.37
26	LA	2625	G	N7-C5	-11.85	1.32	1.39
4	S2	39	A	N3-C4	-11.85	1.27	1.34
25	LB	66	A	N7-C5	-11.85	1.32	1.39
26	LA	1649	G	C6-N1	-11.85	1.31	1.39
26	LA	1808	A	C5-C4	11.85	1.47	1.38
2	SA	411	A	P-O5'	-11.84	1.48	1.59
25	LB	108	A	C6-N1	11.84	1.43	1.35
2	SA	1207	G	C6-N1	-11.83	1.31	1.39
26	LA	179	C	C2-N3	11.82	1.45	1.35
26	LA	393	C	C4'-C3'	11.82	1.66	1.53
26	LA	1902	C	N1-C6	-11.82	1.30	1.37
26	LA	2048	G	C2-N2	-11.81	1.22	1.34
3	S1	41	A	C6-N6	11.81	1.43	1.33
26	LA	2333	A	C2'-C1'	-11.80	1.40	1.53
26	LA	1308	A	N7-C5	-11.80	1.32	1.39
26	LA	443	A	N7-C5	-11.79	1.32	1.39
2	SA	137	U	N1-C2	-11.79	1.27	1.38
26	LA	1783	A	N9-C4	-11.79	1.30	1.37
2	SA	1473	G	C2-N2	-11.78	1.22	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	19	A	N7-C5	-11.77	1.32	1.39
25	LB	53	A	C5'-C4'	11.76	1.65	1.51
26	LA	821	A	N3-C4	-11.76	1.27	1.34
26	LA	586	A	C6-N1	-11.76	1.27	1.35
26	LA	1004	U	P-O5'	-11.75	1.48	1.59
2	SA	378	G	N7-C5	-11.74	1.32	1.39
26	LA	1950	G	C8-N7	-11.73	1.24	1.30
26	LA	2841	C	P-O5'	-11.73	1.48	1.59
26	LA	1218	G	N3-C4	-11.72	1.27	1.35
26	LA	2053	G	N7-C5	-11.72	1.32	1.39
2	SA	566	G	N7-C5	-11.72	1.32	1.39
26	LA	2722	G	N3-C4	-11.72	1.27	1.35
2	SA	838	G	C6-N1	-11.71	1.31	1.39
26	LA	142	A	C2'-C1'	-11.71	1.40	1.53
26	LA	2027	G	C6-N1	-11.71	1.31	1.39
26	LA	251	A	N9-C4	-11.70	1.30	1.37
26	LA	1684	G	N7-C5	11.70	1.46	1.39
26	LA	2112	G	C5'-C4'	11.70	1.65	1.51
26	LA	54	G	C6-N1	-11.69	1.31	1.39
26	LA	2871	U	C5'-C4'	11.69	1.65	1.51
26	LA	2820	A	N9-C4	-11.69	1.30	1.37
26	LA	2890	G	N7-C5	-11.69	1.32	1.39
26	LA	710	U	C2-N3	11.69	1.46	1.37
26	LA	2624	G	N7-C5	-11.69	1.32	1.39
26	LA	1945	G	C5-C4	-11.68	1.30	1.38
26	LA	2427	C	N1-C6	-11.68	1.30	1.37
26	LA	1757	A	C8-N7	-11.68	1.23	1.31
26	LA	1001	A	C5-C4	-11.68	1.30	1.38
26	LA	287	G	C2-N3	11.67	1.42	1.32
2	SA	188	C	C4-C5	-11.67	1.33	1.43
26	LA	1227	G	N7-C5	-11.67	1.32	1.39
2	SA	1167	A	N9-C4	-11.67	1.30	1.37
26	LA	491	G	N9-C4	-11.66	1.28	1.38
26	LA	2204	G	O3'-P	-11.66	1.47	1.61
2	SA	255	G	C6-N1	-11.65	1.31	1.39
26	LA	751	A	N9-C4	-11.64	1.30	1.37
26	LA	192	C	C5'-C4'	11.64	1.65	1.51
26	LA	2520	C	P-O5'	-11.64	1.48	1.59
2	SA	1416	G	N9-C4	-11.64	1.28	1.38
26	LA	1972	G	N3-C4	-11.63	1.27	1.35
2	SA	1167	A	N7-C5	-11.63	1.32	1.39
26	LA	126	A	C5'-C4'	11.63	1.65	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	568	G	N7-C5	-11.62	1.32	1.39
2	SA	75	G	N7-C5	11.62	1.46	1.39
2	SA	477	C	P-O5'	-11.60	1.48	1.59
26	LA	1076	C	C2-N3	-11.60	1.26	1.35
2	SA	577	G	N7-C5	-11.60	1.32	1.39
2	SA	1131	G	N3-C4	-11.59	1.27	1.35
26	LA	606	U	C2-N3	-11.59	1.29	1.37
26	LA	1006	C	N1-C6	-11.59	1.30	1.37
26	LA	2020	A	C5-C4	-11.59	1.30	1.38
26	LA	2661	G	N7-C5	-11.58	1.32	1.39
26	LA	2163	A	N3-C4	11.57	1.41	1.34
26	LA	2589	A	N9-C4	-11.55	1.30	1.37
2	SA	1102	A	C6-N1	-11.55	1.27	1.35
26	LA	905	A	N7-C5	-11.55	1.32	1.39
26	LA	312	G	N3-C4	-11.54	1.27	1.35
2	SA	431	A	N7-C5	11.52	1.46	1.39
26	LA	794	A	N9-C8	-11.52	1.28	1.37
26	LA	980	A	N3-C4	-11.52	1.27	1.34
26	LA	2644	G	C4'-C3'	-11.52	1.40	1.53
2	SA	1251	A	O3'-P	-11.51	1.47	1.61
26	LA	2454	G	N7-C5	-11.51	1.32	1.39
2	SA	898	G	N9-C8	-11.50	1.29	1.37
26	LA	413	C	N1-C6	11.50	1.44	1.37
26	LA	186	G	C2-N2	-11.50	1.23	1.34
26	LA	36	G	N7-C5	-11.49	1.32	1.39
26	LA	1294	U	N1-C2	-11.49	1.28	1.38
26	LA	979	A	N7-C5	-11.49	1.32	1.39
26	LA	1634	A	C2'-C1'	-11.49	1.40	1.53
2	SA	765	G	N9-C4	-11.48	1.28	1.38
26	LA	1354	A	O3'-P	-11.48	1.47	1.61
26	LA	1887	C	P-O5'	-11.47	1.48	1.59
26	LA	1084	A	N7-C5	-11.46	1.32	1.39
26	LA	1132	U	C2-N3	-11.46	1.29	1.37
26	LA	68	G	N9-C8	11.46	1.45	1.37
2	SA	1207	G	N9-C8	-11.45	1.29	1.37
26	LA	1979	U	C2-N3	-11.45	1.29	1.37
2	SA	1048	G	C3'-C2'	-11.45	1.40	1.52
2	SA	304	U	N1-C6	-11.44	1.27	1.38
26	LA	928	A	C5'-C4'	11.44	1.65	1.51
2	SA	1084	G	C2-N2	-11.44	1.23	1.34
26	LA	428	A	N9-C4	-11.43	1.30	1.37
26	LA	2391	G	N7-C5	-11.43	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2544	G	P-O5'	-11.43	1.48	1.59
26	LA	2499	C	N1-C6	11.43	1.44	1.37
26	LA	2651	C	N1-C6	11.43	1.44	1.37
26	LA	2027	G	N7-C5	-11.42	1.32	1.39
26	LA	502	A	C5-C6	-11.41	1.30	1.41
26	LA	1830	C	N1-C6	-11.41	1.30	1.37
2	SA	243	A	N9-C8	-11.41	1.28	1.37
26	LA	2781	A	N7-C5	-11.41	1.32	1.39
26	LA	2009	A	O3'-P	-11.40	1.47	1.61
2	SA	1102	A	N9-C4	-11.38	1.31	1.37
26	LA	445	C	C4-C5	-11.38	1.33	1.43
26	LA	1628	G	N3-C4	-11.38	1.27	1.35
2	SA	401	C	C2'-C1'	-11.38	1.40	1.53
3	S1	16	A	N9-C4	11.38	1.44	1.37
26	LA	424	G	N7-C5	11.38	1.46	1.39
26	LA	2709	G	N7-C5	-11.37	1.32	1.39
26	LA	2120	G	N9-C4	-11.37	1.28	1.38
26	LA	299	A	N9-C4	-11.37	1.31	1.37
26	LA	1638	C	C4-C5	-11.36	1.33	1.43
26	LA	2037	A	N3-C4	-11.36	1.28	1.34
26	LA	973	A	C2'-C1'	-11.36	1.40	1.53
2	SA	1423	G	N7-C5	-11.35	1.32	1.39
26	LA	88	G	C2'-C1'	-11.35	1.40	1.53
26	LA	573	U	C3'-C2'	11.35	1.65	1.52
2	SA	1399	C	N1-C6	-11.33	1.30	1.37
26	LA	2131	U	N1-C6	-11.33	1.27	1.38
26	LA	2051	A	N7-C5	-11.31	1.32	1.39
2	SA	318	G	N7-C5	11.30	1.46	1.39
2	SA	145	G	C8-N7	11.30	1.37	1.30
2	SA	420	U	C2-N3	-11.30	1.29	1.37
26	LA	768	G	N9-C8	-11.30	1.29	1.37
2	SA	901	A	N9-C4	11.28	1.44	1.37
26	LA	2400	G	N7-C5	-11.28	1.32	1.39
2	SA	1081	A	N9-C4	11.27	1.44	1.37
2	SA	456	A	N3-C4	11.27	1.41	1.34
26	LA	608	A	N3-C4	-11.27	1.28	1.34
26	LA	1200	C	C4'-O4'	-11.26	1.30	1.45
26	LA	2385	C	C2'-C1'	-11.26	1.41	1.53
26	LA	95	A	N9-C4	-11.26	1.31	1.37
2	SA	1037	C	N3-C4	11.26	1.41	1.33
2	SA	845	A	C6-N1	11.24	1.43	1.35
2	SA	881	G	C8-N7	-11.24	1.24	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1825	U	N1-C2	-11.24	1.28	1.38
26	LA	1839	G	N3-C4	-11.24	1.27	1.35
26	LA	578	G	N7-C5	-11.23	1.32	1.39
26	LA	802	A	N9-C8	-11.23	1.28	1.37
2	SA	410	G	N7-C5	-11.22	1.32	1.39
4	S2	35	C	O3'-P	-11.22	1.47	1.61
2	SA	523	A	N7-C5	-11.22	1.32	1.39
26	LA	2666	C	N1-C6	11.21	1.43	1.37
26	LA	1864	U	P-O5'	-11.21	1.48	1.59
2	SA	1110	A	N9-C4	-11.21	1.31	1.37
4	S2	20	G	C6-N1	-11.21	1.31	1.39
2	SA	1026	G	N7-C5	11.21	1.46	1.39
26	LA	1254	A	N9-C4	-11.21	1.31	1.37
26	LA	2719	G	N9-C4	-11.21	1.28	1.38
2	SA	46	G	C2-N2	-11.20	1.23	1.34
26	LA	313	G	C2-N3	11.21	1.41	1.32
26	LA	2504	U	C3'-C2'	11.21	1.65	1.52
26	LA	662	G	C6-N1	-11.20	1.31	1.39
26	LA	1194	A	C6-N6	11.20	1.43	1.33
26	LA	1283	G	N9-C4	-11.20	1.28	1.38
26	LA	1160	G	N9-C8	-11.20	1.30	1.37
26	LA	1862	G	N1-C2	-11.19	1.28	1.37
26	LA	140	C	C5'-C4'	11.19	1.64	1.51
26	LA	1999	C	C2'-C1'	-11.19	1.41	1.53
26	LA	172	A	P-O5'	-11.18	1.48	1.59
26	LA	2750	A	N9-C4	-11.18	1.31	1.37
26	LA	2715	C	C4-C5	-11.17	1.34	1.43
2	SA	45	G	N7-C5	-11.17	1.32	1.39
2	SA	539	A	N7-C5	-11.17	1.32	1.39
2	SA	1465	A	C2'-C1'	-11.16	1.41	1.53
26	LA	2158	A	C5'-C4'	11.16	1.64	1.51
2	SA	844	G	C6-N1	11.16	1.47	1.39
26	LA	1679	A	N7-C5	-11.16	1.32	1.39
26	LA	670	A	N9-C4	-11.16	1.31	1.37
26	LA	2064	C	C3'-C2'	-11.16	1.40	1.52
25	LB	49	C	P-O5'	-11.16	1.48	1.59
2	SA	71	A	N3-C4	-11.15	1.28	1.34
2	SA	181	A	C8-N7	-11.15	1.23	1.31
2	SA	669	G	C6-N1	-11.14	1.31	1.39
26	LA	167	A	C2'-C1'	-11.14	1.41	1.53
26	LA	699	A	N9-C4	-11.14	1.31	1.37
2	SA	473	U	N1-C2	11.14	1.48	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	668	A	N3-C4	-11.14	1.28	1.34
2	SA	1253	G	O3'-P	-11.14	1.47	1.61
26	LA	185	G	C6-N1	-11.14	1.31	1.39
26	LA	1296	G	N7-C5	-11.14	1.32	1.39
2	SA	163	C	N1-C6	11.13	1.43	1.37
2	SA	837	U	N1-C2	-11.13	1.28	1.38
26	LA	195	A	N7-C5	-11.13	1.32	1.39
26	LA	538	A	C5-C4	-11.12	1.30	1.38
26	LA	1179	G	N9-C4	11.11	1.46	1.38
26	LA	792	A	N7-C5	-11.11	1.32	1.39
26	LA	773	U	N1-C2	-11.11	1.28	1.38
26	LA	818	G	N1-C2	-11.11	1.28	1.37
26	LA	1296	G	N3-C4	-11.10	1.27	1.35
26	LA	1041	G	C8-N7	11.09	1.37	1.30
2	SA	839	C	N1-C6	11.09	1.43	1.37
26	LA	495	G	C2'-C1'	-11.09	1.41	1.53
26	LA	2392	A	N7-C5	-11.09	1.32	1.39
26	LA	5	A	N9-C4	-11.09	1.31	1.37
2	SA	173	U	O3'-P	-11.08	1.47	1.61
26	LA	779	U	P-O5'	-11.07	1.48	1.59
2	SA	903	G	N7-C5	-11.07	1.32	1.39
2	SA	1012	A	N9-C4	-11.07	1.31	1.37
2	SA	1067	A	N7-C5	-11.06	1.32	1.39
26	LA	2322	A	N7-C5	-11.06	1.32	1.39
2	SA	671	G	N3-C4	-11.05	1.27	1.35
2	SA	533	A	C2'-C1'	-11.05	1.41	1.53
26	LA	1309	G	C8-N7	-11.05	1.24	1.30
26	LA	1322	A	O3'-P	-11.05	1.47	1.61
26	LA	2541	A	N9-C4	-11.05	1.31	1.37
26	LA	1422	G	N7-C5	-11.05	1.32	1.39
26	LA	493	G	C5-C4	-11.04	1.30	1.38
2	SA	1376	U	C2-N3	-11.04	1.30	1.37
26	LA	338	G	N3-C4	-11.03	1.27	1.35
2	SA	991	U	C2-N3	-11.03	1.30	1.37
26	LA	1619	G	N7-C5	-11.02	1.32	1.39
26	LA	1679	A	C5-C4	-11.02	1.31	1.38
26	LA	2252	G	C5-C4	-11.02	1.30	1.38
26	LA	962	G	N9-C4	-11.01	1.29	1.38
2	SA	655	A	N3-C4	-11.01	1.28	1.34
26	LA	830	G	N9-C8	-11.01	1.30	1.37
26	LA	1891	G	N7-C5	-11.01	1.32	1.39
26	LA	1876	A	N3-C4	-11.00	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	56	U	C2'-C1'	10.99	1.65	1.53
26	LA	1784	A	N9-C4	-10.99	1.31	1.37
26	LA	2410	G	N3-C4	-10.99	1.27	1.35
26	LA	2781	A	C2'-C1'	10.99	1.65	1.53
26	LA	1797	G	N3-C4	-10.98	1.27	1.35
26	LA	2282	G	N7-C5	10.98	1.45	1.39
26	LA	2810	A	N7-C5	-10.98	1.32	1.39
26	LA	376	G	N7-C5	-10.97	1.32	1.39
26	LA	777	G	C2'-C1'	-10.97	1.41	1.53
26	LA	2631	G	C5-C4	10.97	1.46	1.38
26	LA	2769	U	P-O5'	-10.97	1.48	1.59
26	LA	1987	A	N3-C4	10.97	1.41	1.34
26	LA	1182	G	N7-C5	10.96	1.45	1.39
2	SA	928	G	C5-C4	-10.96	1.30	1.38
26	LA	2017	U	C2-N3	-10.96	1.30	1.37
2	SA	690	G	C6-N1	-10.96	1.31	1.39
25	LB	15	A	C4'-C3'	10.95	1.65	1.53
26	LA	450	G	N9-C8	-10.94	1.30	1.37
26	LA	165	A	N3-C4	10.94	1.41	1.34
26	LA	668	A	N7-C5	-10.94	1.32	1.39
26	LA	878	A	N7-C5	-10.94	1.32	1.39
2	SA	1043	G	N9-C4	-10.94	1.29	1.38
26	LA	322	A	O3'-P	-10.93	1.48	1.61
26	LA	1077	A	C6-N1	-10.93	1.27	1.35
26	LA	2796	U	P-O5'	-10.93	1.48	1.59
26	LA	1318	U	C2-N3	-10.93	1.30	1.37
26	LA	2407	A	N3-C4	-10.93	1.28	1.34
26	LA	892	A	C5-C4	-10.92	1.31	1.38
26	LA	2345	G	C8-N7	-10.92	1.24	1.30
2	SA	814	A	N3-C4	-10.92	1.28	1.34
2	SA	1191	A	N9-C4	-10.92	1.31	1.37
26	LA	2436	G	N7-C5	-10.92	1.32	1.39
26	LA	506	G	O3'-P	-10.91	1.48	1.61
26	LA	234	U	N3-C4	-10.91	1.28	1.38
26	LA	2027	G	N9-C8	-10.91	1.30	1.37
26	LA	2312	U	N1-C6	-10.91	1.28	1.38
2	SA	842	U	P-O5'	-10.91	1.48	1.59
2	SA	524	G	O3'-P	-10.90	1.48	1.61
2	SA	752	G	N3-C4	-10.90	1.27	1.35
26	LA	555	G	P-O5'	-10.89	1.48	1.59
26	LA	1000	A	O3'-P	-10.89	1.48	1.61
26	LA	207	A	N7-C5	-10.89	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	920	U	O3'-P	-10.88	1.48	1.61
26	LA	1810	A	N3-C4	10.88	1.41	1.34
26	LA	2663	G	C8-N7	10.88	1.37	1.30
26	LA	1393	A	P-O5'	-10.87	1.48	1.59
26	LA	522	A	N7-C5	-10.87	1.32	1.39
26	LA	752	A	C6-N6	10.87	1.42	1.33
26	LA	1582	C	N1-C6	10.87	1.43	1.37
26	LA	488	G	N3-C4	-10.86	1.27	1.35
26	LA	2406	A	N7-C5	10.86	1.45	1.39
2	SA	553	A	C2'-C1'	-10.85	1.41	1.53
26	LA	1444	G	C2-N2	-10.85	1.23	1.34
25	LB	108	A	N3-C4	-10.85	1.28	1.34
2	SA	1219	A	N3-C4	-10.84	1.28	1.34
2	SA	1410	A	N9-C4	10.84	1.44	1.37
26	LA	1260	A	C2'-C1'	-10.84	1.41	1.53
26	LA	975	A	N9-C4	-10.84	1.31	1.37
26	LA	2074	U	C4'-O4'	-10.84	1.31	1.45
26	LA	1789	A	N9-C4	-10.84	1.31	1.37
26	LA	2242	G	N9-C8	-10.84	1.30	1.37
2	SA	456	A	C5-C4	-10.83	1.31	1.38
2	SA	895	G	N7-C5	-10.83	1.32	1.39
26	LA	1266	G	P-O5'	10.83	1.70	1.59
26	LA	1707	G	N9-C4	-10.83	1.29	1.38
4	S2	73	A	N7-C5	-10.83	1.32	1.39
26	LA	936	A	N3-C4	-10.82	1.28	1.34
26	LA	1430	G	N3-C4	-10.82	1.27	1.35
26	LA	1283	G	C5-C4	10.82	1.46	1.38
26	LA	2057	G	N9-C8	-10.82	1.30	1.37
2	SA	1125	U	O3'-P	-10.82	1.48	1.61
26	LA	491	G	N7-C5	-10.82	1.32	1.39
2	SA	515	G	C8-N7	-10.82	1.24	1.30
2	SA	1442	G	N9-C4	-10.82	1.29	1.38
26	LA	303	G	N7-C5	-10.81	1.32	1.39
26	LA	601	C	N1-C6	10.81	1.43	1.37
26	LA	53	A	N9-C4	-10.80	1.31	1.37
26	LA	2084	C	N3-C4	10.80	1.41	1.33
26	LA	409	G	N7-C5	-10.80	1.32	1.39
26	LA	1286	A	C6-N6	-10.80	1.25	1.33
26	LA	1607	C	N1-C6	10.79	1.43	1.37
26	LA	1948	G	C5-C4	-10.79	1.30	1.38
2	SA	64	G	N7-C5	-10.79	1.32	1.39
2	SA	857	C	P-O5'	10.79	1.70	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1103	C	N1-C6	-10.79	1.30	1.37
4	S2	77	A	N9-C4	-10.79	1.31	1.37
26	LA	443	A	C6-N6	10.78	1.42	1.33
26	LA	887	U	C5'-C4'	10.78	1.64	1.51
2	SA	184	G	C8-N7	10.77	1.37	1.30
26	LA	1361	G	N7-C5	-10.77	1.32	1.39
26	LA	350	G	C2-N3	10.77	1.41	1.32
2	SA	927	G	N3-C4	-10.76	1.27	1.35
26	LA	1607	C	C2'-C1'	-10.76	1.41	1.53
2	SA	7	A	N7-C5	10.76	1.45	1.39
26	LA	1828	G	N7-C5	-10.76	1.32	1.39
26	LA	466	A	N1-C2	-10.75	1.24	1.34
26	LA	410	G	C2'-C1'	-10.75	1.41	1.53
26	LA	705	A	N9-C8	-10.75	1.29	1.37
26	LA	1151	A	N3-C4	-10.74	1.28	1.34
2	SA	1256	A	C5-C6	-10.74	1.31	1.41
26	LA	1367	A	P-O5'	-10.74	1.49	1.59
26	LA	1511	G	C2-N3	-10.74	1.24	1.32
26	LA	2848	G	O3'-P	-10.74	1.48	1.61
26	LA	2176	A	C3'-C2'	10.73	1.64	1.52
2	SA	595	A	N9-C4	-10.73	1.31	1.37
26	LA	2297	A	N7-C5	-10.73	1.32	1.39
2	SA	536	C	C2-N3	-10.73	1.27	1.35
2	SA	405	U	N3-C4	-10.72	1.28	1.38
2	SA	999	C	C4'-C3'	10.72	1.65	1.53
26	LA	183	C	N1-C6	10.72	1.43	1.37
26	LA	2808	G	N7-C5	10.72	1.45	1.39
2	SA	475	C	C4-N4	-10.71	1.24	1.33
26	LA	362	A	N3-C4	10.71	1.41	1.34
26	LA	530	G	C6-N1	10.71	1.47	1.39
26	LA	2330	G	C5-C4	-10.71	1.30	1.38
26	LA	2225	A	N3-C4	-10.71	1.28	1.34
2	SA	977	A	N3-C4	-10.71	1.28	1.34
26	LA	1989	G	O3'-P	-10.71	1.48	1.61
26	LA	1848	A	N9-C4	-10.70	1.31	1.37
25	LB	7	G	N3-C4	-10.70	1.27	1.35
26	LA	2801	G	N9-C8	-10.70	1.30	1.37
2	SA	844	G	C8-N7	10.69	1.37	1.30
26	LA	1635	A	N7-C5	-10.69	1.32	1.39
26	LA	1471	G	C6-N1	-10.69	1.32	1.39
26	LA	1622	G	N3-C4	-10.69	1.27	1.35
2	SA	749	A	N9-C4	-10.68	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	308	G	C6-N1	-10.68	1.32	1.39
26	LA	907	G	C6-N1	-10.68	1.32	1.39
26	LA	2495	G	N7-C5	-10.68	1.32	1.39
26	LA	2624	G	C8-N7	-10.68	1.24	1.30
2	SA	160	A	N7-C5	-10.67	1.32	1.39
2	SA	891	U	C2-N3	-10.67	1.30	1.37
26	LA	536	G	N3-C4	-10.66	1.27	1.35
2	SA	373	A	C8-N7	-10.66	1.24	1.31
26	LA	2867	G	N9-C4	10.66	1.46	1.38
26	LA	1810	A	C2'-C1'	-10.66	1.41	1.53
2	SA	46	G	C6-N1	-10.65	1.32	1.39
2	SA	10	A	C2'-C1'	-10.65	1.41	1.53
2	SA	919	A	C6-N1	-10.65	1.28	1.35
26	LA	2861	U	C2-N3	10.65	1.45	1.37
2	SA	1032	G	N9-C4	10.65	1.46	1.38
26	LA	44	A	N9-C4	10.65	1.44	1.37
2	SA	1157	A	C6-N6	10.65	1.42	1.33
26	LA	2589	A	N7-C5	-10.65	1.32	1.39
26	LA	630	G	N7-C5	-10.64	1.32	1.39
26	LA	734	A	N3-C4	10.64	1.41	1.34
26	LA	760	G	C5-C4	-10.64	1.30	1.38
26	LA	2383	G	N3-C4	-10.64	1.28	1.35
26	LA	2557	G	N3-C4	-10.64	1.28	1.35
2	SA	1099	G	C8-N7	10.64	1.37	1.30
26	LA	2848	G	P-O5'	-10.64	1.49	1.59
26	LA	2009	A	C3'-C2'	-10.63	1.41	1.52
3	S1	24	A	N7-C5	10.63	1.45	1.39
26	LA	1377	G	C8-N7	10.63	1.37	1.30
26	LA	2844	G	N9-C8	-10.63	1.30	1.37
2	SA	517	G	C6-N1	-10.62	1.32	1.39
3	S1	52	U	C4'-C3'	10.62	1.64	1.53
26	LA	1266	G	C5-C4	-10.62	1.30	1.38
26	LA	505	A	N9-C8	-10.62	1.29	1.37
3	S1	30	U	C2'-C1'	-10.62	1.41	1.53
2	SA	895	G	C6-N1	-10.61	1.32	1.39
3	S1	13	A	N3-C4	10.61	1.41	1.34
3	S1	47	C	N1-C6	10.61	1.43	1.37
26	LA	1659	G	N3-C4	-10.60	1.28	1.35
26	LA	124	G	N3-C4	-10.60	1.28	1.35
26	LA	2238	G	N3-C4	-10.60	1.28	1.35
26	LA	1805	A	N7-C5	-10.59	1.32	1.39
26	LA	2198	A	N9-C4	10.59	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1182	G	C4'-C3'	10.59	1.64	1.53
2	SA	127	G	C2-N3	10.58	1.41	1.32
2	SA	420	U	N3-C4	10.58	1.48	1.38
25	LB	78	A	N7-C5	-10.58	1.32	1.39
26	LA	252	G	N9-C8	-10.58	1.30	1.37
26	LA	677	A	N3-C4	10.58	1.41	1.34
2	SA	1094	G	C6-N1	-10.57	1.32	1.39
26	LA	251	A	P-O5'	-10.57	1.49	1.59
26	LA	429	A	N9-C4	-10.57	1.31	1.37
26	LA	2020	A	N9-C4	-10.56	1.31	1.37
2	SA	364	A	N9-C4	-10.56	1.31	1.37
26	LA	1638	C	N1-C6	-10.56	1.30	1.37
26	LA	1985	C	N1-C6	10.55	1.43	1.37
26	LA	461	C	C4-C5	-10.55	1.34	1.43
26	LA	745	G	C2'-C1'	-10.55	1.41	1.53
26	LA	770	G	N7-C5	-10.55	1.32	1.39
2	SA	1091	U	P-O5'	-10.54	1.49	1.59
2	SA	66	A	N7-C5	10.54	1.45	1.39
26	LA	1862	G	N9-C8	-10.54	1.30	1.37
26	LA	1954	G	C5-C4	-10.54	1.30	1.38
26	LA	729	G	C6-N1	-10.54	1.32	1.39
26	LA	1029	A	C5-C6	-10.54	1.31	1.41
26	LA	674	G	C6-N1	-10.53	1.32	1.39
2	SA	1158	C	C4'-C3'	10.52	1.64	1.53
2	SA	1312	G	C2-N2	-10.52	1.24	1.34
26	LA	1385	A	N9-C4	10.52	1.44	1.37
26	LA	252	G	N7-C5	-10.52	1.32	1.39
26	LA	1310	G	C8-N7	10.52	1.37	1.30
26	LA	1286	A	N9-C4	-10.51	1.31	1.37
2	SA	74	A	N7-C5	-10.51	1.32	1.39
26	LA	2303	G	C6-N1	-10.50	1.32	1.39
26	LA	2496	C	N1-C6	-10.50	1.30	1.37
2	SA	1290	G	C8-N7	10.50	1.37	1.30
26	LA	2887	A	C5'-C4'	10.49	1.64	1.51
2	SA	86	G	C5-C4	10.49	1.45	1.38
2	SA	803	G	N9-C8	-10.49	1.30	1.37
26	LA	28	A	N7-C5	-10.49	1.32	1.39
2	SA	567	G	C5-C4	-10.49	1.31	1.38
26	LA	857	G	N7-C5	-10.49	1.32	1.39
26	LA	1017	G	N7-C5	-10.48	1.32	1.39
2	SA	771	G	C6-N1	-10.48	1.32	1.39
2	SA	957	U	O3'-P	-10.48	1.48	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2489	U	C2'-C1'	-10.48	1.41	1.53
2	SA	1403	C	C5-C6	-10.47	1.25	1.34
25	LB	52	A	C2'-C1'	-10.47	1.41	1.53
26	LA	1279	G	N7-C5	-10.47	1.32	1.39
26	LA	915	C	N1-C6	10.47	1.43	1.37
26	LA	1708	C	N1-C6	10.47	1.43	1.37
26	LA	2765	A	C6-N1	10.47	1.42	1.35
2	SA	246	A	N7-C5	-10.46	1.32	1.39
2	SA	703	G	N7-C5	-10.46	1.32	1.39
2	SA	941	G	N3-C4	-10.46	1.28	1.35
26	LA	2346	A	N3-C4	-10.46	1.28	1.34
2	SA	289	G	N1-C2	-10.46	1.29	1.37
2	SA	1351	U	C2'-C1'	-10.46	1.41	1.53
2	SA	1427	C	C2-N3	-10.45	1.27	1.35
2	SA	769	G	N3-C4	-10.45	1.28	1.35
4	S2	74	A	N9-C4	10.45	1.44	1.37
26	LA	1571	A	O3'-P	-10.45	1.48	1.61
26	LA	1722	A	N7-C5	-10.45	1.32	1.39
25	LB	74	U	N1-C2	-10.44	1.29	1.38
26	LA	694	U	P-O5'	-10.44	1.49	1.59
26	LA	1036	G	C6-N1	-10.43	1.32	1.39
26	LA	2243	U	N1-C2	-10.43	1.29	1.38
26	LA	54	G	C2'-C1'	-10.43	1.41	1.53
26	LA	1674	G	N3-C4	-10.43	1.28	1.35
26	LA	1376	C	N1-C6	-10.43	1.30	1.37
26	LA	2019	A	P-O5'	-10.43	1.49	1.59
26	LA	125	A	C4'-C3'	10.42	1.64	1.53
26	LA	2595	G	N3-C4	-10.42	1.28	1.35
26	LA	188	G	C5-C4	-10.41	1.31	1.38
26	LA	1834	U	N1-C2	-10.41	1.29	1.38
26	LA	350	G	C6-N1	-10.41	1.32	1.39
26	LA	1934	C	N3-C4	-10.41	1.26	1.33
26	LA	2519	U	P-O5'	-10.41	1.49	1.59
2	SA	1260	G	C2-N3	10.40	1.41	1.32
26	LA	2687	U	C2-N3	-10.40	1.30	1.37
2	SA	460	A	N3-C4	-10.40	1.28	1.34
26	LA	1705	A	N3-C4	-10.40	1.28	1.34
2	SA	711	G	C5-C4	-10.40	1.31	1.38
26	LA	971	G	C8-N7	10.40	1.37	1.30
2	SA	9	G	N9-C8	10.40	1.45	1.37
26	LA	356	G	N1-C2	-10.40	1.29	1.37
26	LA	2319	G	C6-N1	-10.40	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	978	A	C6-N1	-10.39	1.28	1.35
26	LA	2501	C	O3'-P	-10.39	1.48	1.61
2	SA	629	A	N7-C5	-10.38	1.33	1.39
26	LA	2570	G	N3-C4	-10.38	1.28	1.35
26	LA	1366	A	N7-C5	-10.38	1.33	1.39
2	SA	1222	G	N7-C5	-10.38	1.33	1.39
26	LA	611	C	C2-N3	10.38	1.44	1.35
26	LA	2222	C	N1-C6	-10.38	1.30	1.37
26	LA	2297	A	N9-C4	-10.38	1.31	1.37
2	SA	1280	A	N7-C5	-10.38	1.33	1.39
4	S2	50	G	C2-N2	-10.38	1.24	1.34
2	SA	1307	U	C2-N3	-10.37	1.30	1.37
26	LA	1347	A	N9-C4	-10.37	1.31	1.37
3	S1	25	U	C5'-C4'	10.37	1.63	1.51
26	LA	462	C	N3-C4	-10.37	1.26	1.33
26	LA	2407	A	C5'-C4'	10.37	1.63	1.51
26	LA	125	A	C2'-C1'	10.36	1.64	1.53
26	LA	132	G	N7-C5	-10.36	1.33	1.39
26	LA	988	A	N9-C4	-10.36	1.31	1.37
2	SA	635	A	N9-C4	-10.36	1.31	1.37
26	LA	1778	U	C2-N3	10.36	1.45	1.37
26	LA	2442	C	O3'-P	-10.36	1.48	1.61
26	LA	2141	G	N7-C5	10.35	1.45	1.39
2	SA	1540	U	P-O5'	-10.35	1.49	1.59
2	SA	539	A	C5-C4	10.35	1.46	1.38
26	LA	1815	A	N9-C8	-10.35	1.29	1.37
2	SA	1175	G	C2'-C1'	-10.34	1.42	1.53
26	LA	409	G	C6-N1	-10.34	1.32	1.39
26	LA	740	C	C3'-C2'	-10.34	1.41	1.52
26	LA	1954	G	C2'-C1'	-10.34	1.42	1.53
26	LA	2080	A	C5-C4	-10.34	1.31	1.38
2	SA	914	A	N7-C5	-10.33	1.33	1.39
2	SA	804	U	C2-N3	10.33	1.45	1.37
26	LA	909	A	N7-C5	-10.33	1.33	1.39
26	LA	13	A	N7-C5	-10.33	1.33	1.39
26	LA	245	G	N7-C5	-10.33	1.33	1.39
2	SA	634	C	N3-C4	10.33	1.41	1.33
26	LA	1069	A	N9-C8	-10.33	1.29	1.37
26	LA	2057	G	N9-C4	-10.33	1.29	1.38
2	SA	812	G	C2-N2	-10.32	1.24	1.34
26	LA	432	A	C5'-C4'	10.32	1.63	1.51
2	SA	1344	C	C2'-C1'	-10.32	1.42	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	809	G	C8-N7	10.32	1.37	1.30
26	LA	981	A	N9-C4	-10.32	1.31	1.37
26	LA	677	A	C5-C4	-10.32	1.31	1.38
26	LA	794	A	O3'-P	-10.32	1.48	1.61
26	LA	819	A	N9-C4	-10.32	1.31	1.37
26	LA	1210	G	C3'-C2'	10.32	1.64	1.52
26	LA	1051	G	C2-N2	-10.32	1.24	1.34
26	LA	1728	C	N1-C6	-10.32	1.30	1.37
26	LA	2821	A	N3-C4	-10.32	1.28	1.34
2	SA	1178	G	C8-N7	10.31	1.37	1.30
2	SA	1493	A	C5'-C4'	10.31	1.63	1.51
2	SA	820	U	C2-N3	-10.31	1.30	1.37
26	LA	1850	G	N9-C4	-10.31	1.29	1.38
26	LA	1549	A	N9-C4	-10.31	1.31	1.37
2	SA	939	G	C8-N7	10.31	1.37	1.30
26	LA	2281	A	O3'-P	-10.30	1.48	1.61
26	LA	756	A	N9-C8	10.30	1.46	1.37
26	LA	2313	C	C4-C5	-10.30	1.34	1.43
26	LA	606	U	O3'-P	-10.30	1.48	1.61
2	SA	346	G	C8-N7	-10.29	1.24	1.30
26	LA	510	C	N1-C6	10.29	1.43	1.37
2	SA	178	C	N1-C6	-10.29	1.30	1.37
26	LA	331	C	O3'-P	-10.29	1.48	1.61
26	LA	2641	G	C6-N1	-10.29	1.32	1.39
26	LA	1823	G	N3-C4	-10.29	1.28	1.35
2	SA	626	G	C6-N1	-10.28	1.32	1.39
26	LA	201	C	C4-N4	-10.29	1.24	1.33
2	SA	127	G	N3-C4	-10.28	1.28	1.35
26	LA	992	C	C4-C5	-10.28	1.34	1.43
26	LA	2607	G	C5-C4	-10.28	1.31	1.38
26	LA	2020	A	C6-N1	-10.28	1.28	1.35
26	LA	2386	A	N9-C4	-10.28	1.31	1.37
26	LA	959	A	P-O5'	-10.28	1.49	1.59
26	LA	1441	G	C6-N1	-10.28	1.32	1.39
26	LA	2618	G	P-O5'	-10.27	1.49	1.59
26	LA	1425	G	N9-C4	-10.27	1.29	1.38
26	LA	2708	G	C2'-C1'	-10.27	1.42	1.53
26	LA	528	A	C6-N1	-10.27	1.28	1.35
26	LA	1352	U	O3'-P	-10.27	1.48	1.61
2	SA	755	G	C6-N1	-10.26	1.32	1.39
25	LB	43	C	C4-C5	-10.26	1.34	1.43
26	LA	863	A	N7-C5	-10.26	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	724	U	C4-C5	10.26	1.52	1.43
2	SA	376	G	C5-C4	-10.26	1.31	1.38
2	SA	217	C	N1-C6	10.26	1.43	1.37
26	LA	1131	G	N9-C4	-10.25	1.29	1.38
26	LA	505	A	N7-C5	-10.25	1.33	1.39
26	LA	2024	G	N1-C2	-10.25	1.29	1.37
26	LA	1568	G	C5'-C4'	10.25	1.63	1.51
26	LA	2638	G	N9-C8	-10.25	1.30	1.37
26	LA	1397	U	N1-C2	-10.24	1.29	1.38
26	LA	1519	G	C2-N2	-10.24	1.24	1.34
2	SA	966	G	C5-C4	10.24	1.45	1.38
26	LA	1155	A	N7-C5	-10.23	1.33	1.39
26	LA	1666	G	C2-N2	-10.23	1.24	1.34
26	LA	2254	C	N1-C6	10.23	1.43	1.37
26	LA	2761	A	N7-C5	-10.23	1.33	1.39
2	SA	1122	U	P-O5'	-10.22	1.49	1.59
4	S2	42	C	O3'-P	-10.22	1.48	1.61
26	LA	24	G	N7-C5	-10.22	1.33	1.39
2	SA	548	G	N7-C5	-10.22	1.33	1.39
25	LB	10	G	C2'-C1'	-10.22	1.42	1.53
26	LA	736	C	C3'-C2'	-10.22	1.41	1.52
26	LA	1098	A	N7-C5	10.21	1.45	1.39
2	SA	596	A	N9-C4	10.21	1.44	1.37
26	LA	186	G	N1-C2	-10.21	1.29	1.37
26	LA	2706	A	N9-C4	-10.21	1.31	1.37
26	LA	194	G	N7-C5	-10.21	1.33	1.39
26	LA	2633	G	C8-N7	10.21	1.37	1.30
2	SA	601	G	O3'-P	-10.20	1.49	1.61
2	SA	927	G	C4'-C3'	10.20	1.64	1.53
26	LA	1673	G	N9-C8	-10.20	1.30	1.37
2	SA	1133	G	C6-N1	10.19	1.46	1.39
26	LA	2482	A	C5-C6	-10.19	1.31	1.41
2	SA	243	A	C5-C4	-10.19	1.31	1.38
26	LA	1224	U	C2-N3	10.19	1.44	1.37
26	LA	2860	A	N3-C4	10.18	1.41	1.34
2	SA	533	A	N9-C4	-10.18	1.31	1.37
2	SA	1058	G	C6-N1	-10.18	1.32	1.39
26	LA	2482	A	N9-C4	-10.18	1.31	1.37
2	SA	764	C	C2'-C1'	-10.17	1.42	1.53
2	SA	790	A	C6-N6	10.17	1.42	1.33
2	SA	1239	A	C2'-C1'	-10.17	1.42	1.53
26	LA	2088	A	N7-C5	10.17	1.45	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2541	A	N7-C5	-10.17	1.33	1.39
26	LA	2852	G	N7-C5	-10.17	1.33	1.39
2	SA	321	A	N1-C2	-10.17	1.25	1.34
26	LA	1123	C	C4-N4	-10.16	1.24	1.33
4	S2	43	G	N9-C8	-10.16	1.30	1.37
2	SA	1033	G	C2-N2	-10.16	1.24	1.34
2	SA	74	A	C5-C6	10.15	1.50	1.41
2	SA	1197	A	C5-C4	-10.15	1.31	1.38
26	LA	2756	U	C2'-C1'	-10.15	1.42	1.53
2	SA	254	G	C6-N1	-10.15	1.32	1.39
2	SA	564	C	O3'-P	-10.15	1.49	1.61
2	SA	951	G	N7-C5	-10.15	1.33	1.39
2	SA	1318	A	O3'-P	-10.14	1.49	1.61
26	LA	618	G	N9-C8	-10.14	1.30	1.37
26	LA	1524	G	C8-N7	10.14	1.37	1.30
26	LA	1643	G	N9-C4	-10.14	1.29	1.38
26	LA	2711	A	N9-C8	-10.14	1.29	1.37
26	LA	923	G	N9-C8	10.13	1.45	1.37
26	LA	2242	G	C6-N1	-10.13	1.32	1.39
26	LA	1282	U	N1-C6	-10.13	1.28	1.38
26	LA	2145	C	N1-C6	10.13	1.43	1.37
26	LA	150	U	C2-N3	-10.13	1.30	1.37
26	LA	1283	G	N7-C5	-10.12	1.33	1.39
26	LA	1894	C	C2'-C1'	10.12	1.64	1.53
26	LA	1953	A	N7-C5	-10.12	1.33	1.39
4	S2	59	A	C5-C4	-10.12	1.31	1.38
26	LA	2582	G	N9-C4	-10.12	1.29	1.38
26	LA	702	U	N3-C4	-10.12	1.29	1.38
26	LA	1964	G	P-O5'	-10.12	1.49	1.59
26	LA	1425	G	N7-C5	-10.11	1.33	1.39
26	LA	39	G	C2-N3	-10.11	1.24	1.32
2	SA	11	G	N9-C8	-10.10	1.30	1.37
2	SA	1166	G	O3'-P	-10.10	1.49	1.61
26	LA	463	G	C8-N7	-10.10	1.24	1.30
2	SA	97	G	C4'-C3'	-10.10	1.42	1.53
2	SA	117	G	N7-C5	-10.10	1.33	1.39
2	SA	879	C	O3'-P	-10.10	1.49	1.61
2	SA	1041	G	C8-N7	-10.10	1.24	1.30
26	LA	446	G	C5-C6	-10.10	1.32	1.42
26	LA	2019	A	O3'-P	-10.09	1.49	1.61
2	SA	1179	A	N9-C4	-10.09	1.31	1.37
26	LA	942	G	C8-N7	-10.09	1.24	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	92	C	N1-C6	-10.09	1.31	1.37
26	LA	522	A	C2'-C1'	-10.09	1.42	1.53
26	LA	1223	G	N7-C5	10.09	1.45	1.39
4	S2	2	G	C4'-C3'	10.08	1.64	1.53
26	LA	394	C	N1-C6	-10.08	1.31	1.37
26	LA	193	U	N3-C4	-10.08	1.29	1.38
2	SA	1019	A	N9-C4	10.08	1.43	1.37
2	SA	354	G	O3'-P	-10.08	1.49	1.61
26	LA	6	A	C8-N7	-10.07	1.24	1.31
26	LA	493	G	O3'-P	-10.07	1.49	1.61
26	LA	2482	A	N9-C8	-10.07	1.29	1.37
2	SA	1328	C	N3-C4	10.07	1.41	1.33
2	SA	800	G	N7-C5	-10.07	1.33	1.39
26	LA	1546	G	N7-C5	-10.07	1.33	1.39
4	S2	53	G	N3-C4	-10.06	1.28	1.35
26	LA	2332	C	P-O5'	-10.06	1.49	1.59
26	LA	582	A	N3-C4	-10.06	1.28	1.34
2	SA	186	C	C4'-C3'	10.06	1.64	1.53
26	LA	1972	G	C5-C4	-10.06	1.31	1.38
2	SA	74	A	N9-C8	-10.06	1.29	1.37
2	SA	475	C	N1-C6	-10.05	1.31	1.37
26	LA	1154	G	N3-C4	-10.05	1.28	1.35
26	LA	2199	A	C6-N6	10.05	1.42	1.33
26	LA	1240	U	C2'-C1'	-10.05	1.42	1.53
2	SA	1150	A	C2'-C1'	-10.04	1.42	1.53
26	LA	1416	G	C8-N7	10.05	1.36	1.30
26	LA	1794	A	N3-C4	-10.05	1.28	1.34
2	SA	950	U	C2-N3	-10.04	1.30	1.37
2	SA	996	A	N7-C5	-10.04	1.33	1.39
26	LA	1384	A	N7-C5	-10.04	1.33	1.39
2	SA	9	G	C2-N2	-10.04	1.24	1.34
26	LA	2440	C	C4-C5	-10.04	1.34	1.43
2	SA	810	C	C2'-C1'	-10.04	1.42	1.53
25	LB	83	G	C5-C4	-10.04	1.31	1.38
26	LA	2663	G	C5-C4	-10.03	1.31	1.38
26	LA	2299	U	P-O5'	-10.03	1.49	1.59
2	SA	21	G	N3-C4	-10.03	1.28	1.35
26	LA	778	G	O3'-P	-10.03	1.49	1.61
26	LA	1235	G	C5'-C4'	10.03	1.63	1.51
2	SA	792	A	N9-C4	-10.02	1.31	1.37
3	S1	28	U	C2-N3	10.02	1.44	1.37
26	LA	682	G	N9-C4	-10.02	1.29	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1844	C	C5-C6	-10.02	1.26	1.34
2	SA	262	A	O3'-P	-10.02	1.49	1.61
2	SA	691	G	N9-C4	-10.02	1.29	1.38
2	SA	1261	A	C2'-C1'	-10.01	1.42	1.53
4	S2	10	G	N7-C5	-10.01	1.33	1.39
26	LA	1187	G	C2-N2	-10.01	1.24	1.34
25	LB	106	G	N9-C8	-10.01	1.30	1.37
26	LA	2725	A	C5'-C4'	10.01	1.63	1.51
2	SA	469	C	C5-C6	-10.01	1.26	1.34
2	SA	1503	A	C6-N1	-10.01	1.28	1.35
2	SA	484	G	N9-C8	10.00	1.44	1.37
26	LA	2107	G	N7-C5	10.00	1.45	1.39
26	LA	2324	U	C2-N3	-10.00	1.30	1.37
26	LA	2892	G	C8-N7	10.00	1.36	1.30
26	LA	59	U	C5'-C4'	10.00	1.63	1.51
26	LA	807	U	C2-N3	-10.00	1.30	1.37
26	LA	2371	G	N3-C4	-10.00	1.28	1.35
26	LA	52	A	C6-N6	-9.99	1.25	1.33
26	LA	1368	G	C6-N1	-9.99	1.32	1.39
26	LA	1462	C	N3-C4	9.99	1.41	1.33
2	SA	101	A	N7-C5	9.99	1.45	1.39
4	S2	65	G	C8-N7	9.99	1.36	1.30
2	SA	269	C	C4'-C3'	-9.99	1.42	1.53
2	SA	642	A	C5-C4	-9.98	1.31	1.38
26	LA	2468	A	N7-C5	-9.98	1.33	1.39
2	SA	287	U	P-O5'	-9.98	1.49	1.59
26	LA	2736	A	N7-C5	9.97	1.45	1.39
2	SA	224	U	O3'-P	-9.97	1.49	1.61
26	LA	2758	A	N9-C4	-9.97	1.31	1.37
2	SA	732	C	C4-N4	-9.97	1.25	1.33
26	LA	989	G	C3'-C2'	-9.97	1.41	1.52
26	LA	2774	C	N1-C6	-9.96	1.31	1.37
2	SA	1536	C	C4-N4	-9.96	1.25	1.33
26	LA	2877	G	C8-N7	-9.96	1.25	1.30
2	SA	1285	A	C5'-C4'	9.96	1.63	1.51
2	SA	1401	G	C2-N2	-9.96	1.24	1.34
2	SA	198	G	C6-N1	-9.95	1.32	1.39
26	LA	2578	G	N7-C5	-9.95	1.33	1.39
26	LA	2046	G	N1-C2	-9.95	1.29	1.37
4	S2	53	G	N9-C8	-9.95	1.30	1.37
2	SA	1149	C	C2-N3	-9.94	1.27	1.35
26	LA	259	G	C8-N7	9.94	1.36	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1868	C	N1-C6	9.95	1.43	1.37
26	LA	1943	U	N3-C4	-9.94	1.29	1.38
26	LA	2231	U	N1-C2	-9.94	1.29	1.38
2	SA	519	C	N1-C6	-9.94	1.31	1.37
26	LA	561	G	C6-N1	-9.94	1.32	1.39
26	LA	198	C	N1-C6	-9.94	1.31	1.37
26	LA	381	G	C8-N7	9.93	1.36	1.30
26	LA	1846	G	N3-C4	-9.93	1.28	1.35
26	LA	2763	G	C6-N1	-9.93	1.32	1.39
26	LA	927	A	N9-C4	-9.93	1.31	1.37
26	LA	1570	A	N3-C4	-9.93	1.28	1.34
26	LA	873	C	N3-C4	-9.92	1.27	1.33
4	S2	20	G	O3'-P	-9.92	1.49	1.61
26	LA	2227	A	N7-C5	-9.92	1.33	1.39
26	LA	2274	A	N7-C5	-9.91	1.33	1.39
26	LA	1353	A	N7-C5	-9.91	1.33	1.39
26	LA	1535	A	N3-C4	-9.91	1.28	1.34
26	LA	1601	G	C5-C4	-9.91	1.31	1.38
2	SA	925	G	N7-C5	-9.91	1.33	1.39
26	LA	227	A	C1'-N9	-9.91	1.32	1.46
26	LA	1927	A	N9-C4	-9.91	1.31	1.37
26	LA	1987	A	C5-C4	-9.91	1.31	1.38
26	LA	2808	G	C2-N3	-9.91	1.24	1.32
26	LA	2890	G	C8-N7	-9.91	1.25	1.30
26	LA	2725	A	N3-C4	-9.90	1.28	1.34
2	SA	454	G	C5-C4	9.90	1.45	1.38
26	LA	2385	C	C4-C5	-9.90	1.35	1.43
26	LA	2225	A	N9-C8	-9.89	1.29	1.37
26	LA	2811	G	N7-C5	-9.89	1.33	1.39
26	LA	2619	C	C2'-C1'	-9.89	1.42	1.53
2	SA	100	G	C2'-C1'	-9.89	1.42	1.53
2	SA	1068	G	C2'-C1'	-9.89	1.42	1.53
26	LA	466	A	N9-C4	-9.89	1.31	1.37
2	SA	72	A	N3-C4	-9.88	1.28	1.34
26	LA	447	A	N9-C4	-9.88	1.31	1.37
26	LA	2039	U	C3'-C2'	-9.88	1.41	1.52
26	LA	1	G	C2-N3	9.88	1.40	1.32
26	LA	971	G	O3'-P	-9.88	1.49	1.61
26	LA	1787	A	N3-C4	9.88	1.40	1.34
2	SA	917	G	N1-C2	-9.87	1.29	1.37
2	SA	160	A	C4'-C3'	9.87	1.64	1.53
2	SA	912	C	O3'-P	-9.87	1.49	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2758	A	P-O5'	9.87	1.69	1.59
2	SA	431	A	N9-C4	9.87	1.43	1.37
26	LA	490	C	C5'-C4'	9.87	1.63	1.51
4	S2	68	C	N1-C6	-9.86	1.31	1.37
26	LA	1297	C	N1-C6	-9.86	1.31	1.37
26	LA	2060	A	O3'-P	-9.86	1.49	1.61
26	LA	2273	A	N9-C4	-9.86	1.31	1.37
2	SA	542	G	P-O5'	-9.86	1.49	1.59
26	LA	2569	G	C8-N7	9.86	1.36	1.30
26	LA	2843	G	O3'-P	-9.86	1.49	1.61
26	LA	283	G	N9-C4	9.85	1.45	1.38
26	LA	1127	A	C5-C4	-9.85	1.31	1.38
2	SA	813	U	O4'-C1'	-9.85	1.28	1.41
2	SA	1108	G	C1'-N9	-9.84	1.33	1.46
26	LA	1354	A	N1-C2	-9.84	1.25	1.34
26	LA	977	G	C2'-C1'	-9.84	1.42	1.53
26	LA	2608	G	N9-C4	-9.84	1.30	1.38
26	LA	2663	G	O3'-P	-9.84	1.49	1.61
2	SA	226	G	P-O5'	-9.84	1.50	1.59
26	LA	699	A	N7-C5	-9.84	1.33	1.39
2	SA	36	C	N1-C6	-9.83	1.31	1.37
2	SA	417	G	C6-N1	-9.83	1.32	1.39
26	LA	453	A	C6-N1	-9.83	1.28	1.35
2	SA	289	G	N7-C5	-9.83	1.33	1.39
2	SA	1524	C	P-O5'	-9.83	1.50	1.59
26	LA	800	A	O3'-P	-9.82	1.49	1.61
3	S1	40	G	N3-C4	-9.82	1.28	1.35
26	LA	1804	C	C2'-C1'	-9.82	1.42	1.53
26	LA	1875	G	C5-C4	9.82	1.45	1.38
26	LA	2444	G	C5-C6	-9.82	1.32	1.42
26	LA	2896	C	N3-C4	9.82	1.40	1.33
2	SA	356	A	N3-C4	-9.82	1.28	1.34
26	LA	1527	G	N7-C5	9.82	1.45	1.39
26	LA	585	G	C5-C6	-9.82	1.32	1.42
26	LA	1291	C	C4'-C3'	-9.82	1.42	1.53
26	LA	489	G	C2'-C1'	-9.81	1.42	1.53
26	LA	1929	G	C2'-C1'	-9.81	1.42	1.53
26	LA	2071	A	N9-C4	-9.81	1.31	1.37
2	SA	968	A	O3'-P	-9.81	1.49	1.61
26	LA	1310	G	N3-C4	-9.81	1.28	1.35
26	LA	1333	G	C5'-C4'	9.81	1.63	1.51
26	LA	1415	U	C2-N3	-9.81	1.30	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	990	A	C8-N7	9.80	1.38	1.31
26	LA	324	A	N9-C8	9.80	1.45	1.37
26	LA	498	G	C8-N7	9.80	1.36	1.30
26	LA	1026	G	N9-C4	-9.80	1.30	1.38
26	LA	1904	G	C3'-C2'	-9.80	1.42	1.52
26	LA	2304	G	O3'-P	-9.80	1.49	1.61
26	LA	2631	G	C2-N2	-9.80	1.24	1.34
26	LA	2611	C	N1-C6	-9.80	1.31	1.37
26	LA	297	G	N7-C5	9.79	1.45	1.39
26	LA	779	U	C2-N3	-9.79	1.30	1.37
26	LA	1543	G	C2-N2	-9.79	1.24	1.34
26	LA	2260	C	C2'-C1'	-9.79	1.42	1.53
26	LA	2350	C	N1-C6	-9.79	1.31	1.37
26	LA	2685	G	C5-C4	-9.79	1.31	1.38
4	S2	50	G	C8-N7	9.79	1.36	1.30
2	SA	485	U	N3-C4	-9.79	1.29	1.38
26	LA	862	G	N7-C5	-9.79	1.33	1.39
26	LA	1347	A	N3-C4	-9.79	1.28	1.34
26	LA	1242	U	N3-C4	-9.78	1.29	1.38
26	LA	1988	G	C2-N2	-9.78	1.24	1.34
2	SA	171	A	N7-C5	9.78	1.45	1.39
2	SA	205	A	N3-C4	9.78	1.40	1.34
2	SA	789	U	C5'-C4'	9.78	1.63	1.51
26	LA	144	A	P-O5'	-9.77	1.50	1.59
26	LA	2538	C	C4'-C3'	-9.77	1.42	1.53
2	SA	71	A	C6-N1	9.77	1.42	1.35
25	LB	7	G	P-O5'	-9.77	1.50	1.59
26	LA	2294	G	C5-C4	-9.77	1.31	1.38
2	SA	61	G	O3'-P	-9.76	1.49	1.61
26	LA	463	G	C5-C4	-9.76	1.31	1.38
2	SA	699	C	O3'-P	-9.76	1.49	1.61
26	LA	6	A	C3'-C2'	-9.76	1.42	1.52
2	SA	902	G	C2-N2	-9.76	1.24	1.34
2	SA	69	G	C2'-C1'	-9.75	1.42	1.53
2	SA	668	G	N3-C4	-9.75	1.28	1.35
2	SA	1233	G	C2-N3	-9.75	1.25	1.32
26	LA	524	G	C8-N7	9.75	1.36	1.30
26	LA	1384	A	C8-N7	9.75	1.38	1.31
26	LA	1110	G	N9-C8	-9.75	1.31	1.37
26	LA	2090	A	C6-N1	9.74	1.42	1.35
26	LA	459	U	O3'-P	-9.74	1.49	1.61
26	LA	2152	G	N3-C4	9.74	1.42	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2617	U	C2'-C1'	-9.74	1.42	1.53
2	SA	510	A	P-O5'	-9.73	1.50	1.59
26	LA	48	G	N9-C4	-9.73	1.30	1.38
26	LA	2688	G	C5-C4	-9.73	1.31	1.38
26	LA	942	G	C2-N2	-9.73	1.24	1.34
2	SA	79	G	N9-C8	-9.73	1.31	1.37
26	LA	1937	A	C2'-C1'	-9.73	1.42	1.53
26	LA	2061	G	N3-C4	-9.73	1.28	1.35
2	SA	494	G	N9-C4	-9.73	1.30	1.38
2	SA	761	G	C5-C4	-9.73	1.31	1.38
26	LA	1786	A	C8-N7	-9.72	1.24	1.31
26	LA	818	G	N3-C4	-9.72	1.28	1.35
26	LA	2475	C	C4-N4	-9.72	1.25	1.33
26	LA	900	A	C2'-C1'	-9.71	1.42	1.53
26	LA	2168	G	C8-N7	-9.71	1.25	1.30
2	SA	695	A	N9-C4	-9.71	1.32	1.37
2	SA	1114	C	C1'-N1	9.71	1.63	1.48
2	SA	175	C	N1-C6	9.71	1.43	1.37
2	SA	999	C	N1-C6	9.71	1.43	1.37
25	LB	98	G	N7-C5	-9.71	1.33	1.39
26	LA	677	A	C2'-C1'	-9.71	1.42	1.53
26	LA	1067	A	C6-N6	9.71	1.41	1.33
25	LB	61	G	N3-C4	-9.70	1.28	1.35
26	LA	108	G	C2-N2	-9.71	1.24	1.34
26	LA	342	A	N3-C4	-9.70	1.29	1.34
2	SA	360	G	C2-N2	-9.70	1.24	1.34
26	LA	1315	C	C4-N4	-9.70	1.25	1.33
2	SA	426	U	N3-C4	-9.70	1.29	1.38
2	SA	607	A	N7-C5	-9.70	1.33	1.39
2	SA	1028	C	P-O5'	-9.70	1.50	1.59
26	LA	2161	C	N3-C4	-9.70	1.27	1.33
2	SA	1476	A	C6-N1	-9.70	1.28	1.35
26	LA	1408	G	N9-C4	-9.70	1.30	1.38
26	LA	2428	G	C8-N7	9.69	1.36	1.30
2	SA	587	G	P-O5'	9.69	1.69	1.59
26	LA	845	A	N9-C4	-9.69	1.32	1.37
26	LA	1759	A	P-O5'	-9.69	1.50	1.59
2	SA	435	A	N9-C4	-9.69	1.32	1.37
26	LA	1109	C	P-O5'	-9.69	1.50	1.59
2	SA	1534	A	N3-C4	-9.69	1.29	1.34
26	LA	556	A	N9-C4	-9.68	1.32	1.37
26	LA	355	U	C2-N3	-9.68	1.30	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	374	A	C2'-C1'	-9.68	1.42	1.53
26	LA	926	G	N9-C4	-9.68	1.30	1.38
26	LA	2623	G	C2'-C1'	-9.68	1.42	1.53
26	LA	23	G	C5-C4	-9.68	1.31	1.38
26	LA	1970	A	C5-C4	9.68	1.45	1.38
2	SA	309	A	C6-N1	-9.67	1.28	1.35
26	LA	674	G	N9-C4	-9.67	1.30	1.38
2	SA	734	G	N7-C5	-9.67	1.33	1.39
26	LA	452	G	N9-C4	-9.67	1.30	1.38
26	LA	1136	G	N9-C4	-9.67	1.30	1.38
26	LA	2826	A	C5-C4	9.67	1.45	1.38
26	LA	764	A	P-O5'	9.67	1.69	1.59
2	SA	440	C	N1-C6	9.66	1.43	1.37
26	LA	1789	A	N9-C8	-9.66	1.30	1.37
2	SA	676	A	N9-C4	-9.65	1.32	1.37
2	SA	1431	A	N9-C4	-9.65	1.32	1.37
26	LA	2547	A	O3'-P	-9.65	1.49	1.61
26	LA	1686	C	P-O5'	-9.65	1.50	1.59
2	SA	453	G	N9-C8	-9.64	1.31	1.37
2	SA	749	A	N7-C5	-9.64	1.33	1.39
26	LA	1455	G	C6-N1	-9.64	1.32	1.39
26	LA	201	C	P-O5'	-9.64	1.50	1.59
26	LA	654	A	N7-C5	-9.64	1.33	1.39
26	LA	1779	U	P-O5'	-9.64	1.50	1.59
26	LA	1901	A	N1-C2	-9.64	1.25	1.34
26	LA	2569	G	N3-C4	-9.64	1.28	1.35
26	LA	1565	C	C2'-C1'	-9.64	1.42	1.53
2	SA	843	U	C5'-C4'	9.64	1.62	1.51
26	LA	1821	A	C5-C4	-9.64	1.32	1.38
26	LA	1959	G	N3-C4	-9.63	1.28	1.35
26	LA	2432	A	O3'-P	-9.63	1.49	1.61
2	SA	924	C	N1-C6	-9.63	1.31	1.37
2	SA	28	A	C2'-C1'	-9.63	1.42	1.53
26	LA	458	G	N9-C4	-9.63	1.30	1.38
26	LA	1348	C	O3'-P	-9.63	1.49	1.61
2	SA	327	A	C8-N7	-9.63	1.24	1.31
26	LA	2640	G	N7-C5	-9.63	1.33	1.39
26	LA	2728	U	C2-N3	-9.63	1.31	1.37
4	S2	38	A	C6-N1	-9.62	1.28	1.35
26	LA	295	G	N9-C8	-9.62	1.31	1.37
26	LA	495	G	P-O5'	-9.62	1.50	1.59
26	LA	1573	G	C6-N1	-9.62	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	69	G	N9-C8	9.62	1.44	1.37
2	SA	767	A	C6-N1	-9.62	1.28	1.35
2	SA	1371	G	C6-N1	-9.62	1.32	1.39
26	LA	2436	G	C5-C4	-9.62	1.31	1.38
2	SA	145	G	P-O5'	-9.62	1.50	1.59
26	LA	1901	A	C4'-C3'	-9.62	1.42	1.53
2	SA	567	G	N3-C4	-9.61	1.28	1.35
26	LA	2	G	C8-N7	9.61	1.36	1.30
26	LA	621	A	N9-C4	-9.61	1.32	1.37
26	LA	1277	G	N3-C4	-9.61	1.28	1.35
26	LA	2599	G	C1'-N9	-9.61	1.33	1.46
26	LA	2360	G	C6-N1	-9.61	1.32	1.39
26	LA	1419	A	P-O5'	-9.61	1.50	1.59
26	LA	2361	G	N7-C5	-9.61	1.33	1.39
2	SA	193	C	N1-C6	9.60	1.43	1.37
2	SA	821	G	P-O5'	-9.60	1.50	1.59
2	SA	694	A	N3-C4	-9.60	1.29	1.34
26	LA	2336	A	N7-C5	-9.60	1.33	1.39
26	LA	2522	U	N1-C2	-9.59	1.29	1.38
2	SA	1130	A	N9-C4	-9.59	1.32	1.37
2	SA	764	C	O3'-P	-9.59	1.49	1.61
26	LA	2498	C	C2'-C1'	-9.59	1.42	1.53
2	SA	836	G	N3-C4	-9.59	1.28	1.35
25	LB	60	C	C2-N3	-9.59	1.28	1.35
26	LA	91	A	C4'-C3'	9.59	1.63	1.53
26	LA	1899	A	N9-C4	-9.59	1.32	1.37
26	LA	2152	G	C2-N2	-9.59	1.25	1.34
2	SA	413	G	C5-C4	9.58	1.45	1.38
26	LA	318	C	P-O5'	-9.58	1.50	1.59
2	SA	686	U	N1-C2	-9.58	1.29	1.38
2	SA	813	U	C4-C5	-9.58	1.34	1.43
2	SA	1169	A	N9-C4	9.58	1.43	1.37
26	LA	1695	G	N3-C4	-9.58	1.28	1.35
26	LA	2106	U	N1-C2	9.58	1.47	1.38
26	LA	2455	G	N3-C4	-9.58	1.28	1.35
26	LA	2524	G	C2-N2	-9.58	1.25	1.34
26	LA	681	G	C6-N1	-9.58	1.32	1.39
26	LA	971	G	C2-N2	-9.58	1.25	1.34
26	LA	2501	C	C2'-C1'	-9.58	1.42	1.53
26	LA	2725	A	N9-C4	-9.58	1.32	1.37
26	LA	907	G	C3'-C2'	-9.57	1.42	1.52
2	SA	305	G	C5'-C4'	9.57	1.62	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	39	A	N9-C4	-9.57	1.32	1.37
26	LA	1123	C	C2'-C1'	-9.57	1.42	1.53
2	SA	1511	G	C2-N2	-9.57	1.25	1.34
26	LA	575	A	C8-N7	-9.57	1.24	1.31
26	LA	2011	U	C2'-C1'	-9.57	1.42	1.53
2	SA	223	A	P-O5'	-9.57	1.50	1.59
2	SA	900	A	N7-C5	-9.57	1.33	1.39
26	LA	1011	G	C8-N7	9.56	1.36	1.30
26	LA	933	A	C2'-C1'	-9.56	1.42	1.53
26	LA	2091	C	P-O5'	-9.56	1.50	1.59
2	SA	227	G	C6-N1	-9.56	1.32	1.39
2	SA	1465	A	C6-N1	-9.55	1.28	1.35
26	LA	1635	A	N3-C4	-9.55	1.29	1.34
26	LA	2136	G	N7-C5	-9.55	1.33	1.39
2	SA	1132	C	N1-C6	9.55	1.42	1.37
26	LA	1531	C	N3-C4	9.55	1.40	1.33
26	LA	2780	G	N7-C5	-9.55	1.33	1.39
26	LA	2219	U	N1-C2	-9.54	1.29	1.38
26	LA	2825	G	C5-C4	-9.54	1.31	1.38
2	SA	278	G	N7-C5	-9.54	1.33	1.39
25	LB	71	C	N3-C4	9.54	1.40	1.33
26	LA	1899	A	C8-N7	-9.54	1.24	1.31
26	LA	2617	U	N1-C6	-9.54	1.29	1.38
2	SA	917	G	C2-N3	9.54	1.40	1.32
25	LB	20	G	N1-C2	-9.54	1.30	1.37
26	LA	2618	G	C5-C4	-9.54	1.31	1.38
4	S2	65	G	N3-C4	-9.53	1.28	1.35
26	LA	142	A	N9-C4	9.53	1.43	1.37
26	LA	1373	A	C6-N6	-9.53	1.26	1.33
26	LA	1410	G	C5-C4	-9.53	1.31	1.38
26	LA	1743	G	C6-N1	-9.53	1.32	1.39
2	SA	332	G	N9-C8	-9.53	1.31	1.37
2	SA	270	A	N9-C4	-9.53	1.32	1.37
26	LA	1807	G	C2-N2	-9.53	1.25	1.34
26	LA	1668	A	O4'-C1'	-9.52	1.29	1.41
26	LA	2013	A	C5-C4	-9.52	1.32	1.38
26	LA	2621	G	N9-C4	-9.52	1.30	1.38
26	LA	2661	G	N9-C4	-9.52	1.30	1.38
2	SA	1492	A	C2'-C1'	9.52	1.63	1.53
26	LA	3	U	N1-C6	9.52	1.46	1.38
26	LA	2338	C	C4'-C3'	9.52	1.63	1.53
2	SA	877	G	C2-N2	-9.52	1.25	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2519	U	N1-C2	-9.52	1.29	1.38
2	SA	741	G	N7-C5	9.51	1.45	1.39
4	S2	14	A	C5-C4	-9.51	1.32	1.38
2	SA	8	A	C8-N7	-9.51	1.24	1.31
2	SA	346	G	N3-C4	-9.51	1.28	1.35
2	SA	1279	G	N9-C8	-9.51	1.31	1.37
26	LA	2134	A	N7-C5	-9.51	1.33	1.39
26	LA	1162	G	C5-C4	-9.50	1.31	1.38
2	SA	907	A	N9-C4	-9.50	1.32	1.37
26	LA	883	G	C2'-C1'	-9.50	1.42	1.53
26	LA	583	G	N3-C4	-9.50	1.28	1.35
26	LA	565	C	P-O5'	-9.50	1.50	1.59
26	LA	453	A	N7-C5	-9.50	1.33	1.39
26	LA	643	A	N9-C4	-9.50	1.32	1.37
26	LA	938	G	N9-C8	9.50	1.44	1.37
26	LA	2679	A	N3-C4	-9.49	1.29	1.34
2	SA	887	G	C2'-C1'	-9.49	1.43	1.53
2	SA	976	G	C6-N1	-9.49	1.32	1.39
26	LA	855	G	N7-C5	-9.49	1.33	1.39
26	LA	2718	G	C6-N1	-9.49	1.32	1.39
2	SA	1457	G	N1-C2	-9.49	1.30	1.37
26	LA	938	G	N3-C4	-9.49	1.28	1.35
26	LA	1455	G	N9-C8	-9.49	1.31	1.37
26	LA	2600	A	N3-C4	-9.49	1.29	1.34
26	LA	2835	A	N3-C4	-9.49	1.29	1.34
26	LA	2147	A	C5'-C4'	9.49	1.62	1.51
2	SA	450	G	N1-C2	-9.48	1.30	1.37
26	LA	1663	G	C6-N1	-9.48	1.32	1.39
26	LA	2566	A	C4'-O4'	9.48	1.57	1.45
26	LA	279	A	C6-N1	-9.48	1.28	1.35
26	LA	1148	U	O3'-P	-9.48	1.49	1.61
26	LA	2070	A	C5-C4	-9.48	1.32	1.38
26	LA	2705	A	N9-C4	-9.47	1.32	1.37
26	LA	2433	A	C6-N1	9.47	1.42	1.35
2	SA	270	A	C6-N1	-9.47	1.28	1.35
26	LA	1322	A	N9-C8	-9.47	1.30	1.37
2	SA	1255	G	C6-N1	-9.47	1.32	1.39
26	LA	118	A	N9-C4	-9.47	1.32	1.37
26	LA	177	G	P-O5'	-9.47	1.50	1.59
26	LA	818	G	C6-N1	-9.47	1.32	1.39
26	LA	1840	G	N3-C4	-9.47	1.28	1.35
26	LA	1854	A	N3-C4	-9.47	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1277	G	C2'-C1'	-9.46	1.43	1.53
26	LA	2288	A	N7-C5	-9.46	1.33	1.39
26	LA	503	A	N9-C4	-9.46	1.32	1.37
2	SA	264	C	C2'-C1'	-9.46	1.43	1.53
26	LA	2298	A	C4'-C3'	-9.46	1.42	1.53
26	LA	1799	G	N7-C5	-9.46	1.33	1.39
26	LA	773	U	C4-C5	-9.46	1.35	1.43
26	LA	2437	G	N9-C8	-9.46	1.31	1.37
2	SA	335	C	C2'-C1'	-9.46	1.43	1.53
2	SA	1117	A	N3-C4	-9.46	1.29	1.34
26	LA	2055	C	C5'-C4'	9.46	1.62	1.51
26	LA	609	A	C8-N7	-9.45	1.25	1.31
2	SA	761	G	N7-C5	-9.45	1.33	1.39
26	LA	1250	G	P-O5'	-9.45	1.50	1.59
2	SA	510	A	N9-C4	-9.45	1.32	1.37
26	LA	2701	U	N3-C4	9.45	1.47	1.38
2	SA	896	C	N1-C6	-9.45	1.31	1.37
3	S1	51	C	O3'-P	-9.45	1.49	1.61
26	LA	2566	A	C2'-C1'	-9.44	1.43	1.53
2	SA	668	G	C8-N7	9.44	1.36	1.30
26	LA	992	C	O3'-P	-9.44	1.49	1.61
26	LA	2680	U	N1-C6	-9.44	1.29	1.38
26	LA	976	G	C8-N7	9.44	1.36	1.30
26	LA	2532	G	C2-N3	9.44	1.40	1.32
2	SA	326	G	N9-C8	-9.44	1.31	1.37
26	LA	2573	C	N1-C6	9.44	1.42	1.37
2	SA	227	G	C8-N7	9.44	1.36	1.30
26	LA	1567	G	C3'-C2'	-9.43	1.42	1.52
2	SA	1518	A	N9-C4	-9.43	1.32	1.37
26	LA	1323	C	C2'-C1'	-9.43	1.43	1.53
26	LA	2289	G	C2'-C1'	-9.43	1.43	1.53
26	LA	294	A	C8-N7	-9.43	1.25	1.31
26	LA	2122	U	C1'-N1	9.43	1.62	1.48
26	LA	2566	A	N9-C4	-9.43	1.32	1.37
2	SA	1139	G	C5-C4	-9.42	1.31	1.38
26	LA	1925	C	P-O5'	-9.42	1.50	1.59
2	SA	381	C	N3-C4	9.42	1.40	1.33
2	SA	279	A	C6-N6	9.41	1.41	1.33
26	LA	1984	G	N9-C8	-9.41	1.31	1.37
26	LA	2234	G	C1'-N9	-9.41	1.33	1.46
2	SA	221	C	N1-C6	-9.41	1.31	1.37
26	LA	5	A	N7-C5	-9.41	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	579	A	P-O5'	-9.41	1.50	1.59
26	LA	1125	G	C5-C4	9.41	1.45	1.38
26	LA	1933	G	N1-C2	-9.41	1.30	1.37
26	LA	1609	A	O3'-P	-9.41	1.49	1.61
4	S2	53	G	C8-N7	-9.40	1.25	1.30
26	LA	283	G	N9-C8	-9.40	1.31	1.37
26	LA	407	G	N7-C5	-9.40	1.33	1.39
26	LA	1150	C	N1-C6	9.40	1.42	1.37
26	LA	469	G	C2-N3	-9.40	1.25	1.32
26	LA	1404	C	C5'-C4'	9.40	1.62	1.51
26	LA	1978	A	N7-C5	-9.40	1.33	1.39
26	LA	1838	C	C4-C5	-9.39	1.35	1.43
26	LA	834	G	N9-C8	9.39	1.44	1.37
26	LA	2098	U	N1-C2	-9.39	1.30	1.38
2	SA	242	G	C6-N1	-9.39	1.32	1.39
25	LB	82	U	P-O5'	-9.39	1.50	1.59
26	LA	1705	A	N7-C5	-9.39	1.33	1.39
26	LA	1771	C	N3-C4	-9.39	1.27	1.33
26	LA	1938	A	N9-C4	-9.39	1.32	1.37
2	SA	1123	U	P-O5'	-9.38	1.50	1.59
26	LA	671	C	N1-C6	9.39	1.42	1.37
26	LA	820	A	N3-C4	-9.38	1.29	1.34
26	LA	1805	A	N9-C4	-9.39	1.32	1.37
2	SA	1213	A	N3-C4	-9.38	1.29	1.34
26	LA	325	G	N3-C4	-9.38	1.28	1.35
2	SA	858	G	N9-C8	9.38	1.44	1.37
26	LA	374	A	C5-C4	-9.38	1.32	1.38
26	LA	1128	G	P-O5'	-9.38	1.50	1.59
26	LA	1256	G	C6-N1	-9.38	1.32	1.39
26	LA	1889	A	C5-C6	-9.38	1.32	1.41
26	LA	2037	A	N7-C5	-9.38	1.33	1.39
25	LB	39	A	N3-C4	-9.37	1.29	1.34
26	LA	1930	G	N9-C4	-9.38	1.30	1.38
2	SA	362	G	O3'-P	-9.37	1.50	1.61
2	SA	108	G	C5-C4	-9.37	1.31	1.38
4	S2	73	A	C6-N6	9.37	1.41	1.33
26	LA	164	C	N3-C4	-9.37	1.27	1.33
26	LA	785	G	N7-C5	-9.37	1.33	1.39
26	LA	942	G	P-O5'	-9.37	1.50	1.59
26	LA	1593	A	C2'-C1'	-9.37	1.43	1.53
26	LA	2120	G	C2-N2	-9.37	1.25	1.34
26	LA	2664	G	C5-C4	-9.37	1.31	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	595	A	N7-C5	-9.36	1.33	1.39
25	LB	11	C	N1-C6	-9.36	1.31	1.37
26	LA	891	G	C4'-C3'	9.36	1.63	1.53
26	LA	2791	G	N7-C5	-9.36	1.33	1.39
26	LA	2809	A	N9-C4	-9.36	1.32	1.37
2	SA	1041	G	O3'-P	-9.36	1.50	1.61
26	LA	1681	G	C6-N1	9.36	1.46	1.39
2	SA	318	G	C6-N1	-9.36	1.33	1.39
2	SA	1211	U	C2-N3	-9.36	1.31	1.37
2	SA	18	C	N1-C6	9.35	1.42	1.37
26	LA	804	A	N3-C4	-9.35	1.29	1.34
26	LA	2279	G	C4'-C3'	9.35	1.63	1.53
4	S2	57	C	P-O5'	-9.35	1.50	1.59
2	SA	1423	G	C8-N7	9.34	1.36	1.30
26	LA	799	G	N3-C4	-9.34	1.28	1.35
26	LA	1003	G	N7-C5	9.34	1.44	1.39
26	LA	1635	A	P-O5'	-9.34	1.50	1.59
26	LA	1870	C	C5'-C4'	9.34	1.62	1.51
26	LA	2357	G	N9-C4	-9.34	1.30	1.38
26	LA	725	G	N1-C2	-9.34	1.30	1.37
26	LA	2118	U	C3'-C2'	9.34	1.63	1.52
26	LA	2333	A	C5-C4	-9.34	1.32	1.38
26	LA	1052	C	O3'-P	-9.34	1.50	1.61
26	LA	2341	G	C2-N3	9.34	1.40	1.32
2	SA	321	A	C6-N1	-9.33	1.29	1.35
2	SA	942	G	N3-C4	-9.33	1.28	1.35
26	LA	34	U	C2-N3	-9.33	1.31	1.37
26	LA	1661	G	N3-C4	-9.33	1.28	1.35
26	LA	2469	A	C8-N7	9.33	1.38	1.31
26	LA	972	A	N9-C4	-9.33	1.32	1.37
26	LA	1393	A	N3-C4	9.33	1.40	1.34
2	SA	92	U	P-O5'	-9.32	1.50	1.59
26	LA	1209	U	N1-C2	-9.32	1.30	1.38
26	LA	2685	G	C2-N2	-9.32	1.25	1.34
26	LA	222	A	C2'-C1'	-9.32	1.43	1.53
26	LA	757	G	C6-N1	-9.32	1.33	1.39
26	LA	1544	A	C6-N1	-9.32	1.29	1.35
26	LA	1708	C	C2'-C1'	-9.32	1.43	1.53
26	LA	2549	G	N9-C4	-9.32	1.30	1.38
2	SA	1416	G	N9-C8	-9.32	1.31	1.37
26	LA	1526	C	N1-C6	-9.32	1.31	1.37
26	LA	1185	G	N9-C8	-9.31	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	254	G	N9-C4	-9.31	1.30	1.38
26	LA	389	G	C1'-N9	-9.31	1.33	1.46
26	LA	2642	G	C5'-C4'	9.31	1.62	1.51
26	LA	1942	C	N1-C6	9.31	1.42	1.37
26	LA	338	G	C5'-C4'	9.30	1.62	1.51
26	LA	505	A	P-O5'	-9.30	1.50	1.59
26	LA	1901	A	C5-C4	-9.30	1.32	1.38
26	LA	1929	G	C8-N7	-9.30	1.25	1.30
26	LA	25	U	O3'-P	-9.30	1.50	1.61
26	LA	2889	C	N1-C6	-9.30	1.31	1.37
2	SA	200	G	N7-C5	-9.29	1.33	1.39
26	LA	2582	G	C6-N1	-9.29	1.33	1.39
2	SA	247	G	C8-N7	9.29	1.36	1.30
2	SA	763	G	N7-C5	-9.29	1.33	1.39
2	SA	1142	G	N9-C8	9.29	1.44	1.37
26	LA	1268	A	N7-C5	-9.29	1.33	1.39
2	SA	712	A	C6-N1	-9.29	1.29	1.35
2	SA	456	A	N7-C5	9.29	1.44	1.39
2	SA	1033	G	N9-C8	-9.29	1.31	1.37
2	SA	1502	A	N9-C4	9.29	1.43	1.37
26	LA	2330	G	N9-C8	-9.29	1.31	1.37
26	LA	2541	A	C5'-C4'	9.28	1.62	1.51
26	LA	2127	G	P-O5'	-9.28	1.50	1.59
2	SA	154	U	P-O5'	-9.28	1.50	1.59
2	SA	981	U	N3-C4	-9.28	1.30	1.38
3	S1	33	A	P-O5'	9.28	1.69	1.59
26	LA	1785	A	N9-C8	-9.28	1.30	1.37
4	S2	10	G	C4'-C3'	9.27	1.63	1.53
26	LA	1667	G	N3-C4	-9.27	1.28	1.35
26	LA	2835	A	N1-C2	-9.27	1.26	1.34
26	LA	2582	G	C8-N7	-9.27	1.25	1.30
2	SA	587	G	C5-C4	-9.27	1.31	1.38
26	LA	227	A	N7-C5	-9.27	1.33	1.39
2	SA	1064	G	N3-C4	-9.27	1.28	1.35
26	LA	2007	U	C2-N3	-9.27	1.31	1.37
2	SA	1425	U	C2-N3	-9.26	1.31	1.37
4	S2	43	G	C5'-C4'	9.26	1.62	1.51
26	LA	574	A	C2'-C1'	-9.26	1.43	1.53
26	LA	1596	A	C5-C4	-9.26	1.32	1.38
2	SA	838	G	C5'-C4'	9.26	1.62	1.51
25	LB	99	A	N1-C2	-9.26	1.26	1.34
2	SA	82	G	C2-N2	-9.26	1.25	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2812	G	N7-C5	-9.26	1.33	1.39
2	SA	831	A	N3-C4	-9.25	1.29	1.34
2	SA	901	A	C5-C4	-9.25	1.32	1.38
25	LB	38	C	C5'-C4'	9.25	1.62	1.51
26	LA	2101	A	P-O5'	-9.25	1.50	1.59
2	SA	326	G	C6-N1	-9.25	1.33	1.39
26	LA	810	U	N1-C2	-9.25	1.30	1.38
2	SA	1149	C	N1-C6	9.25	1.42	1.37
26	LA	768	G	C8-N7	-9.25	1.25	1.30
26	LA	1199	U	C2-N3	-9.25	1.31	1.37
26	LA	1263	U	C2'-C1'	-9.25	1.43	1.53
26	LA	1704	C	C4'-C3'	9.25	1.63	1.53
26	LA	528	A	C8-N7	-9.24	1.25	1.31
26	LA	1003	G	N3-C4	-9.24	1.28	1.35
26	LA	424	G	C8-N7	-9.24	1.25	1.30
26	LA	2269	G	C6-N1	-9.24	1.33	1.39
26	LA	2681	C	C5-C6	-9.24	1.26	1.34
26	LA	2757	A	C6-N6	9.24	1.41	1.33
26	LA	1056	G	N7-C5	-9.23	1.33	1.39
26	LA	2259	U	C2-N3	-9.23	1.31	1.37
26	LA	2309	A	N7-C5	9.23	1.44	1.39
26	LA	2846	G	P-O5'	-9.23	1.50	1.59
26	LA	2531	A	N3-C4	-9.23	1.29	1.34
26	LA	494	G	C6-N1	-9.23	1.33	1.39
26	LA	1941	C	C3'-C2'	-9.23	1.42	1.52
26	LA	2447	G	N7-C5	-9.23	1.33	1.39
3	S1	13	A	N9-C4	9.23	1.43	1.37
26	LA	107	G	C5'-C4'	9.23	1.62	1.51
26	LA	662	G	C5-C4	-9.23	1.31	1.38
26	LA	1520	U	C4-C5	-9.23	1.35	1.43
2	SA	302	G	O3'-P	-9.22	1.50	1.61
26	LA	953	G	N9-C8	-9.22	1.31	1.37
26	LA	1655	A	C2'-C1'	-9.22	1.43	1.53
26	LA	2657	A	C2'-C1'	-9.22	1.43	1.53
26	LA	2812	G	N9-C4	9.22	1.45	1.38
26	LA	1815	A	N3-C4	-9.22	1.29	1.34
26	LA	2078	C	C4-C5	-9.22	1.35	1.43
2	SA	584	G	C5'-C4'	9.22	1.62	1.51
2	SA	295	C	C4-C5	-9.21	1.35	1.43
2	SA	1080	A	O3'-P	-9.21	1.50	1.61
26	LA	2221	G	C5-C4	-9.21	1.31	1.38
26	LA	2676	C	C2'-C1'	-9.21	1.43	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	399	G	C5-C4	-9.21	1.31	1.38
2	SA	1141	C	C5'-C4'	9.21	1.62	1.51
26	LA	2671	G	C5-C6	-9.21	1.33	1.42
26	LA	476	G	N3-C4	-9.21	1.29	1.35
2	SA	1306	A	N7-C5	-9.21	1.33	1.39
2	SA	1442	G	C6-N1	-9.21	1.33	1.39
26	LA	1928	A	N7-C5	-9.21	1.33	1.39
26	LA	2381	A	N9-C4	-9.21	1.32	1.37
26	LA	2614	A	C8-N7	-9.21	1.25	1.31
26	LA	2191	A	C3'-C2'	-9.20	1.42	1.52
2	SA	1405	G	N9-C8	-9.20	1.31	1.37
26	LA	373	U	N1-C2	-9.20	1.30	1.38
2	SA	581	G	C5-C6	-9.20	1.33	1.42
26	LA	1857	G	N3-C4	-9.20	1.29	1.35
26	LA	2096	C	C2'-C1'	-9.20	1.43	1.53
2	SA	187	G	C2'-C1'	9.20	1.63	1.53
26	LA	2550	G	C2'-C1'	-9.20	1.43	1.53
26	LA	350	G	N1-C2	-9.20	1.30	1.37
25	LB	101	A	N9-C8	-9.19	1.30	1.37
2	SA	17	U	P-O5'	-9.19	1.50	1.59
25	LB	19	C	N1-C6	9.19	1.42	1.37
26	LA	459	U	C2'-C1'	-9.19	1.43	1.53
26	LA	627	A	C8-N7	9.19	1.38	1.31
2	SA	627	G	N9-C8	9.19	1.44	1.37
26	LA	2504	U	C2'-C1'	9.19	1.63	1.53
2	SA	356	A	N9-C4	-9.19	1.32	1.37
2	SA	719	C	N1-C2	-9.19	1.30	1.40
26	LA	127	A	C5-C4	-9.19	1.32	1.38
26	LA	1873	G	N9-C8	-9.19	1.31	1.37
26	LA	2775	G	C2-N2	-9.19	1.25	1.34
2	SA	711	G	P-O5'	-9.18	1.50	1.59
26	LA	1899	A	N9-C8	-9.18	1.30	1.37
2	SA	949	A	N9-C4	-9.18	1.32	1.37
26	LA	624	C	N3-C4	-9.18	1.27	1.33
26	LA	1553	A	C5-C4	-9.18	1.32	1.38
26	LA	1975	G	C3'-C2'	-9.18	1.42	1.52
26	LA	2119	A	P-O5'	-9.18	1.50	1.59
26	LA	2458	G	C2'-C1'	-9.18	1.43	1.53
26	LA	2468	A	O3'-P	-9.18	1.50	1.61
26	LA	2740	A	N9-C4	-9.18	1.32	1.37
26	LA	2770	G	N7-C5	-9.18	1.33	1.39
2	SA	693	G	C8-N7	-9.18	1.25	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	916	G	C6-N1	-9.18	1.33	1.39
26	LA	16	C	C4-C5	-9.17	1.35	1.43
26	LA	2741	A	N7-C5	-9.17	1.33	1.39
26	LA	123	G	N9-C8	-9.17	1.31	1.37
26	LA	2550	G	C5-C6	-9.17	1.33	1.42
2	SA	1422	G	N7-C5	9.16	1.44	1.39
26	LA	1591	A	N9-C4	-9.16	1.32	1.37
26	LA	1316	U	O3'-P	-9.16	1.50	1.61
26	LA	2828	G	C8-N7	9.16	1.36	1.30
2	SA	588	G	C5-C4	-9.16	1.31	1.38
26	LA	643	A	N3-C4	-9.16	1.29	1.34
2	SA	1019	A	N7-C5	9.16	1.44	1.39
2	SA	1091	U	C2-N3	-9.16	1.31	1.37
26	LA	1244	A	C8-N7	9.16	1.38	1.31
26	LA	2319	G	C2-N2	-9.16	1.25	1.34
26	LA	190	A	O3'-P	-9.15	1.50	1.61
26	LA	231	A	N3-C4	-9.15	1.29	1.34
26	LA	1104	C	C4-C5	9.15	1.50	1.43
2	SA	383	A	C2'-C1'	-9.15	1.43	1.53
26	LA	399	U	C4-C5	-9.15	1.35	1.43
26	LA	525	U	N1-C2	-9.15	1.30	1.38
26	LA	737	C	C4'-C3'	-9.15	1.43	1.53
26	LA	1464	G	C6-O6	-9.15	1.16	1.24
26	LA	2243	U	O3'-P	-9.15	1.50	1.61
26	LA	917	A	C4'-O4'	-9.14	1.33	1.45
26	LA	2694	G	N7-C5	-9.14	1.33	1.39
26	LA	455	C	O3'-P	-9.13	1.50	1.61
26	LA	2331	G	O3'-P	-9.13	1.50	1.61
2	SA	572	A	N3-C4	9.13	1.40	1.34
2	SA	857	C	O3'-P	-9.13	1.50	1.61
3	S1	33	A	N7-C5	-9.13	1.33	1.39
26	LA	237	C	P-O5'	-9.13	1.50	1.59
26	LA	2127	G	N7-C5	-9.13	1.33	1.39
2	SA	182	A	N3-C4	-9.13	1.29	1.34
26	LA	398	C	C2'-C1'	-9.13	1.43	1.53
26	LA	1667	G	C6-N1	-9.12	1.33	1.39
26	LA	2154	A	C2-N3	9.13	1.41	1.33
2	SA	72	A	C6-N1	9.12	1.42	1.35
26	LA	917	A	C2-N3	9.12	1.41	1.33
2	SA	1080	A	N9-C4	-9.12	1.32	1.37
26	LA	2196	C	N1-C6	-9.12	1.31	1.37
26	LA	2407	A	C8-N7	-9.12	1.25	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2561	U	C2'-C1'	-9.12	1.43	1.53
2	SA	136	C	C4-C5	-9.12	1.35	1.43
2	SA	1508	A	C4'-O4'	-9.12	1.33	1.45
2	SA	944	G	C2-N3	9.12	1.40	1.32
26	LA	1533	C	C5'-C4'	9.12	1.62	1.51
2	SA	1174	G	C5-C4	9.12	1.44	1.38
2	SA	406	G	C2-N2	-9.11	1.25	1.34
2	SA	165	G	N9-C4	-9.11	1.30	1.38
2	SA	817	C	C5-C6	-9.11	1.27	1.34
26	LA	368	A	N9-C4	-9.11	1.32	1.37
26	LA	564	C	O3'-P	-9.11	1.50	1.61
2	SA	1173	U	P-O5'	-9.11	1.50	1.59
2	SA	1427	C	P-O5'	-9.11	1.50	1.59
26	LA	22	C	N1-C6	-9.11	1.31	1.37
26	LA	1523	U	C2-N3	-9.11	1.31	1.37
4	S2	37	U	O3'-P	-9.11	1.50	1.61
25	LB	119	A	N9-C8	9.11	1.45	1.37
26	LA	34	U	C2'-C1'	9.11	1.63	1.53
26	LA	155	A	N9-C8	-9.11	1.30	1.37
26	LA	538	A	C6-N1	-9.11	1.29	1.35
26	LA	619	G	N9-C4	-9.11	1.30	1.38
26	LA	1232	G	N3-C4	-9.11	1.29	1.35
26	LA	1933	G	N3-C4	-9.11	1.29	1.35
26	LA	2223	G	C2-N2	-9.11	1.25	1.34
26	LA	340	A	C4'-C3'	9.10	1.63	1.53
2	SA	204	G	C2-N2	-9.10	1.25	1.34
2	SA	954	G	N3-C4	-9.10	1.29	1.35
26	LA	402	A	C5-C4	-9.10	1.32	1.38
26	LA	1391	U	N3-C4	-9.10	1.30	1.38
26	LA	1698	A	C2'-C1'	-9.10	1.43	1.53
26	LA	2171	A	C3'-C2'	9.10	1.62	1.52
2	SA	1386	G	N7-C5	-9.10	1.33	1.39
26	LA	1879	C	C4-C5	-9.10	1.35	1.43
26	LA	15	G	C8-N7	9.10	1.36	1.30
26	LA	481	G	N3-C4	-9.10	1.29	1.35
2	SA	869	G	C8-N7	-9.10	1.25	1.30
26	LA	1843	C	O3'-P	-9.10	1.50	1.61
26	LA	2791	G	O4'-C1'	9.10	1.53	1.41
26	LA	1270	C	N3-C4	-9.09	1.27	1.33
26	LA	121	G	C6-N1	-9.09	1.33	1.39
26	LA	969	G	C8-N7	9.09	1.36	1.30
25	LB	86	G	C3'-C2'	9.09	1.62	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	158	U	N1-C6	9.09	1.46	1.38
26	LA	1637	A	C5'-C4'	9.09	1.62	1.51
26	LA	2698	U	N1-C6	-9.09	1.29	1.38
25	LB	84	G	N1-C2	-9.09	1.30	1.37
26	LA	1086	A	N9-C4	9.09	1.43	1.37
26	LA	2519	U	C2'-C1'	-9.09	1.43	1.53
26	LA	2362	C	P-O5'	-9.08	1.50	1.59
2	SA	279	A	N1-C2	-9.08	1.26	1.34
26	LA	950	G	N7-C5	-9.08	1.33	1.39
2	SA	351	G	C8-N7	9.08	1.36	1.30
26	LA	127	A	C2'-C1'	-9.08	1.43	1.53
2	SA	1078	U	C2-N3	-9.07	1.31	1.37
26	LA	398	C	P-O5'	-9.07	1.50	1.59
26	LA	519	U	N3-C4	-9.07	1.30	1.38
2	SA	570	G	N3-C4	-9.07	1.29	1.35
2	SA	643	C	O3'-P	-9.07	1.50	1.61
26	LA	656	G	N3-C4	-9.07	1.29	1.35
26	LA	2133	G	C3'-O3'	9.07	1.54	1.42
26	LA	1639	C	N1-C6	-9.07	1.31	1.37
26	LA	2434	A	C6-N6	9.07	1.41	1.33
26	LA	1136	G	C2'-C1'	-9.06	1.43	1.53
26	LA	2369	A	C6-N6	-9.06	1.26	1.33
26	LA	1859	U	P-O5'	-9.06	1.50	1.59
2	SA	696	A	C5'-C4'	9.06	1.62	1.51
26	LA	449	A	C2-N3	-9.06	1.25	1.33
26	LA	1613	G	N9-C4	-9.06	1.30	1.38
37	LC	164	ARG	CD-NE	9.06	1.61	1.46
2	SA	1523	G	C6-N1	-9.06	1.33	1.39
26	LA	860	U	C2-N3	-9.06	1.31	1.37
26	LA	2679	A	C4'-C3'	-9.05	1.43	1.53
26	LA	2118	U	C4-C5	9.05	1.51	1.43
26	LA	2271	G	N7-C5	-9.05	1.33	1.39
26	LA	2886	A	C2'-C1'	-9.05	1.43	1.53
26	LA	522	A	N3-C4	-9.05	1.29	1.34
26	LA	556	A	N3-C4	-9.05	1.29	1.34
26	LA	1445	G	N7-C5	-9.05	1.33	1.39
26	LA	1702	G	N9-C8	-9.05	1.31	1.37
2	SA	406	G	N7-C5	-9.05	1.33	1.39
2	SA	836	G	N9-C4	-9.05	1.30	1.38
26	LA	1965	C	C2-N3	9.04	1.43	1.35
26	LA	2627	G	C8-N7	9.04	1.36	1.30
26	LA	2691	C	P-O5'	-9.04	1.50	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1897	G	C5-C4	-9.04	1.32	1.38
26	LA	1598	A	C6-N6	-9.04	1.26	1.33
26	LA	2054	A	C8-N7	-9.04	1.25	1.31
26	LA	2657	A	C5-C4	-9.04	1.32	1.38
26	LA	1575	C	N1-C6	9.04	1.42	1.37
26	LA	2607	G	C2'-C1'	-9.04	1.43	1.53
2	SA	1220	G	N7-C5	-9.04	1.33	1.39
2	SA	563	A	C5'-C4'	9.03	1.62	1.51
26	LA	1626	A	N7-C5	-9.03	1.33	1.39
26	LA	2453	A	C5-C6	-9.03	1.32	1.41
25	LB	21	G	C2-N3	-9.03	1.25	1.32
2	SA	568	G	N3-C4	-9.03	1.29	1.35
2	SA	1219	A	O3'-P	-9.03	1.50	1.61
26	LA	148	U	N3-C4	-9.03	1.30	1.38
26	LA	1201	U	N1-C2	-9.03	1.30	1.38
26	LA	1829	A	N9-C4	-9.02	1.32	1.37
26	LA	2576	G	P-O5'	-9.02	1.50	1.59
2	SA	437	U	P-O5'	-9.02	1.50	1.59
26	LA	1803	A	N3-C4	-9.02	1.29	1.34
26	LA	1435	G	C6-N1	-9.02	1.33	1.39
26	LA	2077	A	C3'-C2'	-9.02	1.42	1.52
26	LA	277	G	N9-C8	9.01	1.44	1.37
26	LA	1304	A	N7-C5	-9.01	1.33	1.39
26	LA	1317	G	C2'-C1'	-9.01	1.43	1.53
26	LA	1620	G	C5'-C4'	9.01	1.62	1.51
26	LA	1693	U	P-O5'	-9.01	1.50	1.59
26	LA	2644	G	N3-C4	-9.01	1.29	1.35
2	SA	717	U	C2-N3	-9.01	1.31	1.37
26	LA	958	U	N3-C4	-9.01	1.30	1.38
2	SA	390	U	C2'-C1'	-9.01	1.43	1.53
2	SA	763	G	C2'-C1'	-9.01	1.43	1.53
26	LA	335	C	C4'-C3'	-9.01	1.43	1.53
2	SA	1284	C	C4-C5	9.01	1.50	1.43
26	LA	641	U	N3-C4	-9.01	1.30	1.38
2	SA	838	G	C2'-C1'	-9.00	1.43	1.53
2	SA	971	G	C5-C4	9.00	1.44	1.38
26	LA	136	G	N3-C4	-9.00	1.29	1.35
26	LA	2659	G	N1-C2	9.00	1.45	1.37
2	SA	309	A	C6-N6	9.00	1.41	1.33
2	SA	592	G	C2-N2	-9.00	1.25	1.34
2	SA	926	G	C6-N1	-9.00	1.33	1.39
26	LA	51	G	C6-N1	-9.00	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	42	A	C5'-C4'	9.00	1.62	1.51
26	LA	502	A	C6-N1	-9.00	1.29	1.35
26	LA	2670	A	C2'-C1'	-9.00	1.43	1.53
26	LA	2809	A	C5-C6	-9.00	1.32	1.41
26	LA	1956	U	P-O5'	-9.00	1.50	1.59
26	LA	555	G	O3'-P	-9.00	1.50	1.61
26	LA	1894	C	N3-C4	-8.99	1.27	1.33
26	LA	295	G	C5-C4	-8.99	1.32	1.38
2	SA	281	G	C5'-C4'	8.99	1.62	1.51
25	LB	36	C	C2'-C1'	-8.99	1.43	1.53
26	LA	794	A	C2'-C1'	-8.99	1.43	1.53
26	LA	2777	G	C2'-C1'	-8.99	1.43	1.53
26	LA	2321	U	N3-C4	-8.99	1.30	1.38
26	LA	2822	G	O3'-P	-8.99	1.50	1.61
2	SA	254	G	C8-N7	-8.98	1.25	1.30
2	SA	115	G	C5-C6	-8.98	1.33	1.42
2	SA	455	G	C3'-C2'	-8.98	1.42	1.52
2	SA	803	G	C5-C4	-8.98	1.32	1.38
2	SA	1451	U	C2-N3	8.98	1.44	1.37
26	LA	1699	G	C6-N1	8.98	1.45	1.39
26	LA	1828	G	C2'-C1'	-8.98	1.43	1.53
26	LA	2180	U	C2'-C1'	-8.98	1.43	1.53
26	LA	2495	G	C8-N7	8.98	1.36	1.30
26	LA	789	A	N9-C4	8.98	1.43	1.37
26	LA	1612	C	C4'-C3'	-8.98	1.43	1.53
26	LA	622	G	C6-N1	-8.97	1.33	1.39
26	LA	2449	U	C5'-C4'	8.97	1.62	1.51
2	SA	847	G	N9-C4	-8.97	1.30	1.38
26	LA	803	U	C4-C5	-8.97	1.35	1.43
26	LA	1500	G	C5'-C4'	8.97	1.62	1.51
26	LA	2867	G	C2-N3	8.97	1.40	1.32
2	SA	1456	A	N9-C4	-8.97	1.32	1.37
2	SA	994	A	N3-C4	-8.96	1.29	1.34
26	LA	1400	U	N1-C2	-8.96	1.30	1.38
26	LA	1743	G	N9-C4	-8.96	1.30	1.38
2	SA	1023	U	N1-C6	8.96	1.46	1.38
26	LA	2787	C	N1-C6	-8.96	1.31	1.37
2	SA	198	G	C8-N7	-8.96	1.25	1.30
26	LA	1768	C	N1-C6	-8.96	1.31	1.37
26	LA	2278	A	P-O5'	-8.96	1.50	1.59
2	SA	787	A	C4'-O4'	8.96	1.57	1.45
26	LA	742	A	N7-C5	-8.96	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2457	U	O4'-C1'	-8.96	1.30	1.41
2	SA	785	G	N7-C5	-8.95	1.33	1.39
26	LA	641	U	C5'-C4'	8.95	1.62	1.51
26	LA	1241	A	C8-N7	8.95	1.37	1.31
26	LA	2235	G	C6-N1	-8.95	1.33	1.39
26	LA	2472	G	C2-N3	8.95	1.40	1.32
26	LA	2664	G	N7-C5	-8.95	1.33	1.39
2	SA	295	C	N1-C6	-8.95	1.31	1.37
2	SA	163	C	C4'-C3'	8.95	1.62	1.53
26	LA	136	G	N9-C4	-8.95	1.30	1.38
26	LA	880	G	N7-C5	8.95	1.44	1.39
26	LA	1191	G	N9-C8	-8.95	1.31	1.37
26	LA	2241	A	C5-C6	-8.95	1.32	1.41
26	LA	2688	G	N7-C5	-8.95	1.33	1.39
2	SA	606	G	C8-N7	8.95	1.36	1.30
25	LB	83	G	P-O5'	-8.95	1.50	1.59
26	LA	2377	A	C5-C4	-8.95	1.32	1.38
26	LA	670	A	C5-C4	-8.94	1.32	1.38
26	LA	688	U	C5-C6	-8.94	1.26	1.34
26	LA	2784	U	C2-N3	-8.94	1.31	1.37
2	SA	122	G	C6-N1	-8.94	1.33	1.39
26	LA	72	U	P-O5'	-8.94	1.50	1.59
26	LA	798	G	N7-C5	-8.94	1.33	1.39
2	SA	1219	A	N9-C8	-8.94	1.30	1.37
2	SA	325	A	N9-C4	-8.94	1.32	1.37
2	SA	1500	A	N3-C4	-8.94	1.29	1.34
25	LB	47	C	O3'-P	-8.94	1.50	1.61
26	LA	21	A	N3-C4	8.94	1.40	1.34
2	SA	97	G	N3-C4	-8.94	1.29	1.35
26	LA	91	A	N7-C5	-8.94	1.33	1.39
26	LA	1976	U	O3'-P	-8.94	1.50	1.61
26	LA	2598	A	N9-C4	-8.94	1.32	1.37
26	LA	2566	A	C1'-N9	-8.93	1.34	1.46
4	S2	45	A	C2'-C1'	-8.93	1.43	1.53
26	LA	685	A	C2'-C1'	-8.93	1.43	1.53
26	LA	1155	A	N9-C8	-8.93	1.30	1.37
26	LA	2880	C	N1-C6	-8.93	1.31	1.37
2	SA	1082	A	N7-C5	-8.93	1.33	1.39
2	SA	1394	A	N9-C4	-8.93	1.32	1.37
26	LA	123	G	N7-C5	-8.93	1.33	1.39
26	LA	798	G	C4'-C3'	-8.93	1.43	1.53
26	LA	2578	G	N3-C4	-8.93	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	63	A	N9-C8	8.92	1.44	1.37
26	LA	953	G	N3-C4	-8.92	1.29	1.35
26	LA	2122	U	P-O5'	8.92	1.68	1.59
2	SA	38	G	C2'-C1'	-8.92	1.43	1.53
2	SA	381	C	C5-C6	8.92	1.41	1.34
2	SA	89	U	N1-C2	-8.92	1.30	1.38
2	SA	307	C	C5'-C4'	8.92	1.62	1.51
26	LA	1760	C	P-O5'	-8.92	1.50	1.59
2	SA	847	G	C6-N1	-8.92	1.33	1.39
26	LA	181	A	N7-C5	-8.92	1.33	1.39
26	LA	1122	G	C2-N3	-8.92	1.25	1.32
26	LA	1316	U	C2-N3	-8.92	1.31	1.37
26	LA	2663	G	C4'-C3'	8.92	1.62	1.53
26	LA	2743	U	P-O5'	-8.92	1.50	1.59
26	LA	2606	C	O3'-P	-8.92	1.50	1.61
2	SA	102	G	N1-C2	-8.91	1.30	1.37
2	SA	374	A	N7-C5	-8.91	1.33	1.39
2	SA	411	A	N7-C5	-8.91	1.33	1.39
26	LA	11	C	N1-C6	8.91	1.42	1.37
26	LA	159	G	N1-C2	-8.91	1.30	1.37
2	SA	91	U	C4-C5	8.91	1.51	1.43
2	SA	731	G	C2'-C1'	-8.91	1.43	1.53
26	LA	1016	G	O3'-P	-8.91	1.50	1.61
26	LA	275	C	C2'-C1'	-8.91	1.43	1.53
3	S1	37	G	C2-N3	8.91	1.39	1.32
26	LA	42	A	N7-C5	-8.91	1.33	1.39
26	LA	771	G	N3-C4	-8.91	1.29	1.35
2	SA	60	A	C8-N7	-8.90	1.25	1.31
2	SA	766	A	N9-C4	8.90	1.43	1.37
26	LA	1378	A	C2'-C1'	-8.90	1.43	1.53
26	LA	294	A	N9-C4	-8.90	1.32	1.37
26	LA	1311	G	C2-N2	-8.90	1.25	1.34
2	SA	120	A	C3'-C2'	8.90	1.62	1.52
26	LA	443	A	N9-C4	-8.90	1.32	1.37
2	SA	917	G	N3-C4	-8.90	1.29	1.35
2	SA	920	U	C5'-C4'	8.90	1.62	1.51
2	SA	1136	C	N1-C6	-8.90	1.31	1.37
26	LA	555	G	N9-C8	-8.90	1.31	1.37
2	SA	968	A	N1-C2	-8.89	1.26	1.34
25	LB	19	C	P-O5'	-8.89	1.50	1.59
25	LB	101	A	N1-C2	8.89	1.42	1.34
26	LA	953	G	P-O5'	-8.89	1.50	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1205	A	N9-C4	-8.89	1.32	1.37
26	LA	2333	A	O3'-P	-8.89	1.50	1.61
26	LA	2547	A	C8-N7	-8.89	1.25	1.31
26	LA	265	A	N9-C4	-8.89	1.32	1.37
26	LA	1240	U	C5'-C4'	8.89	1.62	1.51
26	LA	2138	G	C8-N7	8.89	1.36	1.30
2	SA	64	G	C2-N3	8.89	1.39	1.32
25	LB	9	G	C8-N7	8.88	1.36	1.30
26	LA	1482	G	C2'-C1'	-8.89	1.43	1.53
26	LA	1884	G	C6-N1	-8.88	1.33	1.39
26	LA	2560	A	N9-C8	-8.88	1.30	1.37
26	LA	2680	U	C4'-C3'	-8.88	1.43	1.53
26	LA	598	U	C2-N3	-8.88	1.31	1.37
2	SA	533	A	C6-N6	-8.88	1.26	1.33
26	LA	188	G	C2'-C1'	-8.88	1.43	1.53
26	LA	432	A	N9-C8	-8.88	1.30	1.37
2	SA	1063	C	C4-C5	8.88	1.50	1.43
26	LA	1291	C	O3'-P	-8.88	1.50	1.61
26	LA	1986	C	C4-C5	8.88	1.50	1.43
26	LA	2615	U	N1-C2	-8.88	1.30	1.38
2	SA	1529	G	N7-C5	-8.88	1.33	1.39
25	LB	94	A	N3-C4	-8.88	1.29	1.34
26	LA	1619	G	C4'-C3'	-8.88	1.43	1.53
26	LA	2341	G	C6-N1	-8.88	1.33	1.39
2	SA	929	G	N9-C8	8.87	1.44	1.37
2	SA	2	A	C4'-C3'	8.87	1.62	1.53
26	LA	1634	A	O3'-P	-8.87	1.50	1.61
26	LA	1888	G	N9-C8	-8.87	1.31	1.37
26	LA	2056	G	N9-C4	-8.87	1.30	1.38
26	LA	2447	G	N9-C8	-8.87	1.31	1.37
2	SA	185	U	O3'-P	-8.87	1.50	1.61
2	SA	1016	A	P-O5'	8.87	1.68	1.59
26	LA	1682	G	N3-C4	-8.87	1.29	1.35
2	SA	105	G	O3'-P	-8.87	1.50	1.61
2	SA	188	C	N3-C4	8.87	1.40	1.33
2	SA	731	G	C5-C4	-8.87	1.32	1.38
26	LA	2624	G	C6-N1	-8.87	1.33	1.39
26	LA	1842	G	O3'-P	-8.86	1.50	1.61
26	LA	2810	A	N9-C8	8.86	1.44	1.37
2	SA	785	G	N9-C8	-8.86	1.31	1.37
2	SA	1296	C	N3-C4	-8.86	1.27	1.33
26	LA	39	G	N3-C4	-8.86	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2345	G	C4'-O4'	8.86	1.57	1.45
26	LA	2875	C	C4-C5	-8.86	1.35	1.43
2	SA	331	G	C5-C6	-8.85	1.33	1.42
2	SA	438	U	P-O5'	-8.85	1.50	1.59
26	LA	364	C	N1-C6	8.85	1.42	1.37
26	LA	577	G	N7-C5	-8.85	1.33	1.39
26	LA	985	C	C4'-C3'	8.85	1.62	1.53
26	LA	1036	G	C3'-C2'	-8.85	1.43	1.52
26	LA	1646	C	C5'-C4'	8.85	1.61	1.51
2	SA	951	G	N3-C4	-8.85	1.29	1.35
26	LA	773	U	O3'-P	-8.85	1.50	1.61
26	LA	2359	C	P-O5'	-8.85	1.50	1.59
26	LA	2503	A	C5'-C4'	8.85	1.61	1.51
2	SA	1366	C	C4-C5	8.85	1.50	1.43
26	LA	311	A	N3-C4	-8.85	1.29	1.34
26	LA	1042	G	C8-N7	-8.85	1.25	1.30
26	LA	2850	A	N9-C4	-8.85	1.32	1.37
26	LA	2285	C	C2-N3	-8.85	1.28	1.35
26	LA	2746	U	C2-N3	-8.84	1.31	1.37
26	LA	870	U	C3'-C2'	-8.84	1.43	1.52
26	LA	2693	G	C2'-C1'	-8.84	1.43	1.53
2	SA	262	A	N3-C4	-8.84	1.29	1.34
2	SA	365	U	C4'-C3'	-8.84	1.43	1.53
26	LA	2817	U	N3-C4	-8.84	1.30	1.38
2	SA	1186	G	P-O5'	-8.84	1.50	1.59
4	S2	59	A	C3'-C2'	8.84	1.62	1.52
26	LA	183	C	C4-C5	-8.84	1.35	1.43
26	LA	1724	G	N9-C4	-8.84	1.30	1.38
2	SA	484	G	N7-C5	-8.83	1.33	1.39
26	LA	386	G	O3'-P	-8.83	1.50	1.61
2	SA	1102	A	C5-C4	8.83	1.45	1.38
25	LB	58	A	C8-N7	8.83	1.37	1.31
26	LA	2275	C	O3'-P	-8.83	1.50	1.61
26	LA	2407	A	C5-C4	-8.83	1.32	1.38
26	LA	163	C	N1-C6	8.83	1.42	1.37
26	LA	1286	A	C2'-C1'	-8.83	1.43	1.53
26	LA	267	C	N1-C6	8.83	1.42	1.37
26	LA	877	A	C4'-C3'	8.83	1.62	1.53
2	SA	183	C	N1-C6	8.82	1.42	1.37
26	LA	690	G	N7-C5	-8.82	1.33	1.39
26	LA	2141	G	O4'-C1'	-8.82	1.30	1.41
2	SA	1150	A	N7-C5	-8.82	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1548	A	O3'-P	-8.82	1.50	1.61
26	LA	760	G	N9-C8	-8.82	1.31	1.37
26	LA	2750	A	C2'-C1'	-8.82	1.43	1.53
26	LA	2885	G	N7-C5	-8.82	1.33	1.39
2	SA	780	A	P-O5'	-8.82	1.50	1.59
26	LA	2229	U	N3-C4	-8.82	1.30	1.38
26	LA	1122	G	C5'-C4'	8.81	1.61	1.51
2	SA	38	G	C4'-C3'	-8.81	1.43	1.53
2	SA	98	A	N9-C4	-8.81	1.32	1.37
2	SA	852	G	C5-C6	-8.81	1.33	1.42
26	LA	287	G	C2'-C1'	-8.81	1.43	1.53
2	SA	706	A	N9-C8	-8.81	1.30	1.37
26	LA	173	A	C6-N1	-8.81	1.29	1.35
2	SA	127	G	C8-N7	8.81	1.36	1.30
2	SA	1455	G	C8-N7	8.81	1.36	1.30
26	LA	1519	G	C2'-C1'	-8.81	1.43	1.53
26	LA	1842	G	C5-C4	-8.81	1.32	1.38
2	SA	419	C	O3'-P	-8.80	1.50	1.61
26	LA	186	G	N7-C5	-8.81	1.33	1.39
26	LA	215	G	P-O5'	8.81	1.68	1.59
2	SA	1315	U	O3'-P	-8.80	1.50	1.61
26	LA	1420	A	C4'-C3'	8.80	1.62	1.53
2	SA	955	U	N3-C4	-8.80	1.30	1.38
26	LA	377	G	N7-C5	-8.80	1.33	1.39
26	LA	1155	A	C5-C4	-8.80	1.32	1.38
2	SA	533	A	N3-C4	-8.80	1.29	1.34
2	SA	167	A	P-O5'	-8.80	1.50	1.59
2	SA	740	U	N1-C2	-8.80	1.30	1.38
26	LA	2191	A	C8-N7	-8.80	1.25	1.31
26	LA	2226	C	C4'-C3'	8.80	1.62	1.53
26	LA	1288	G	N9-C8	-8.80	1.31	1.37
26	LA	217	A	N7-C5	-8.79	1.33	1.39
26	LA	830	G	C1'-N9	-8.79	1.34	1.46
26	LA	997	G	N9-C4	8.79	1.45	1.38
26	LA	1546	G	C2-N3	8.79	1.39	1.32
26	LA	1427	A	N9-C8	-8.79	1.30	1.37
26	LA	934	U	N1-C2	-8.79	1.30	1.38
2	SA	876	C	C3'-C2'	8.79	1.62	1.52
26	LA	575	A	N9-C4	-8.79	1.32	1.37
26	LA	1859	U	C3'-C2'	-8.79	1.43	1.52
2	SA	1174	G	N3-C4	-8.78	1.29	1.35
25	LB	29	A	N3-C4	-8.78	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	939	G	O3'-P	-8.79	1.50	1.61
26	LA	1719	G	C2-N2	-8.78	1.25	1.34
26	LA	2883	A	O3'-P	-8.79	1.50	1.61
26	LA	422	A	O3'-P	-8.78	1.50	1.61
2	SA	1493	A	C3'-C2'	8.78	1.62	1.52
2	SA	1458	G	N9-C8	8.78	1.44	1.37
26	LA	705	A	C5'-C4'	8.78	1.61	1.51
26	LA	1211	C	C2'-C1'	-8.78	1.43	1.53
26	LA	2798	U	C4-O4	-8.78	1.16	1.23
26	LA	2667	C	P-O5'	-8.78	1.50	1.59
2	SA	1092	A	C2'-C1'	-8.78	1.43	1.53
26	LA	2401	U	C5'-C4'	8.78	1.61	1.51
26	LA	15	G	C2-N3	-8.78	1.25	1.32
26	LA	1516	G	C8-N7	8.78	1.36	1.30
26	LA	2662	A	C6-N1	8.78	1.41	1.35
25	LB	51	G	N9-C8	-8.77	1.31	1.37
26	LA	689	A	C3'-C2'	-8.77	1.43	1.52
26	LA	2348	U	C2-N3	-8.77	1.31	1.37
2	SA	861	G	C5-C4	-8.77	1.32	1.38
2	SA	953	G	C5-C4	-8.77	1.32	1.38
26	LA	406	G	N3-C4	-8.77	1.29	1.35
26	LA	1510	G	N7-C5	-8.77	1.33	1.39
26	LA	2560	A	N9-C4	-8.77	1.32	1.37
26	LA	2600	A	C5-C4	-8.77	1.32	1.38
26	LA	2719	G	P-O5'	-8.77	1.50	1.59
26	LA	2018	G	C2-N2	-8.77	1.25	1.34
26	LA	2414	G	C2'-C1'	-8.77	1.43	1.53
2	SA	1108	G	N9-C8	8.76	1.44	1.37
26	LA	361	G	C5-C4	8.76	1.44	1.38
2	SA	609	A	O3'-P	-8.76	1.50	1.61
26	LA	2090	A	N3-C4	-8.76	1.29	1.34
2	SA	1433	A	P-O5'	-8.76	1.50	1.59
26	LA	2311	A	N7-C5	-8.76	1.33	1.39
26	LA	1317	G	N3-C4	-8.76	1.29	1.35
26	LA	2246	G	N1-C2	-8.76	1.30	1.37
26	LA	1831	G	N3-C4	-8.76	1.29	1.35
26	LA	2269	G	N3-C4	8.76	1.41	1.35
2	SA	237	G	C6-N1	8.75	1.45	1.39
26	LA	393	C	C2-N3	-8.75	1.28	1.35
26	LA	1967	C	C5'-C4'	8.75	1.61	1.51
26	LA	1514	G	P-O5'	-8.75	1.50	1.59
2	SA	1006	G	N3-C4	-8.75	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1488	G	N7-C5	-8.75	1.33	1.39
26	LA	819	A	C5-C4	-8.75	1.32	1.38
26	LA	2047	C	N1-C6	-8.75	1.31	1.37
26	LA	2140	G	N7-C5	-8.75	1.33	1.39
2	SA	1079	G	C5-C4	-8.75	1.32	1.38
26	LA	146	A	C5-C4	8.75	1.44	1.38
26	LA	1803	A	N9-C8	-8.75	1.30	1.37
2	SA	74	A	P-O5'	-8.75	1.51	1.59
26	LA	2004	G	N7-C5	-8.74	1.34	1.39
26	LA	2838	G	N1-C2	-8.74	1.30	1.37
2	SA	43	C	O3'-P	-8.74	1.50	1.61
2	SA	384	G	N7-C5	-8.74	1.34	1.39
26	LA	127	A	C4'-C3'	-8.74	1.43	1.53
2	SA	85	U	C5'-C4'	8.74	1.61	1.51
2	SA	346	G	N9-C8	-8.74	1.31	1.37
2	SA	990	C	C2'-C1'	-8.74	1.43	1.53
2	SA	1188	A	N9-C4	-8.74	1.32	1.37
2	SA	1493	A	N3-C4	8.74	1.40	1.34
26	LA	1701	A	N9-C4	-8.74	1.32	1.37
2	SA	62	U	C2-N3	-8.74	1.31	1.37
2	SA	451	A	C5-C4	-8.74	1.32	1.38
2	SA	656	G	N3-C4	-8.74	1.29	1.35
26	LA	1508	A	C4'-C3'	8.74	1.62	1.53
26	LA	2181	U	C4-C5	8.74	1.51	1.43
26	LA	113	U	P-O5'	8.73	1.68	1.59
26	LA	1828	G	C6-N1	-8.73	1.33	1.39
26	LA	2456	C	C3'-C2'	-8.73	1.43	1.52
26	LA	2723	C	C3'-C2'	-8.73	1.43	1.52
3	S1	31	U	C4'-O4'	8.73	1.56	1.45
26	LA	1928	A	N9-C8	-8.73	1.30	1.37
2	SA	996	A	C6-N1	-8.73	1.29	1.35
26	LA	564	C	N1-C6	8.73	1.42	1.37
26	LA	1882	U	C5-C6	-8.73	1.26	1.34
26	LA	2279	G	N9-C4	-8.73	1.30	1.38
2	SA	433	G	P-O5'	-8.73	1.51	1.59
2	SA	568	G	C2-N2	-8.73	1.25	1.34
2	SA	622	A	C4'-C3'	-8.73	1.43	1.53
4	S2	32	G	C8-N7	8.73	1.36	1.30
26	LA	340	A	C2'-C1'	-8.73	1.43	1.53
2	SA	400	C	C5'-C4'	8.72	1.61	1.51
26	LA	70	G	N9-C4	8.72	1.45	1.38
26	LA	1735	A	N9-C4	-8.72	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2062	A	C5-C6	8.72	1.49	1.41
2	SA	1022	A	C2'-C1'	-8.72	1.43	1.53
26	LA	449	A	P-O5'	-8.72	1.51	1.59
2	SA	1448	C	N1-C6	8.72	1.42	1.37
26	LA	651	G	C2-N2	-8.72	1.25	1.34
26	LA	1627	G	C6-O6	-8.72	1.16	1.24
26	LA	1530	G	N7-C5	-8.72	1.34	1.39
3	S1	26	U	C2-N3	-8.72	1.31	1.37
26	LA	1362	C	C2-N3	-8.72	1.28	1.35
26	LA	2405	G	C3'-C2'	8.72	1.62	1.52
2	SA	1128	C	C5'-C4'	8.71	1.61	1.51
26	LA	786	C	N1-C6	-8.71	1.31	1.37
26	LA	1187	G	N3-C4	-8.72	1.29	1.35
26	LA	2634	A	N9-C8	-8.71	1.30	1.37
2	SA	1487	G	C4'-C3'	-8.71	1.43	1.53
2	SA	1504	G	N7-C5	-8.71	1.34	1.39
26	LA	1378	A	N7-C5	-8.71	1.34	1.39
26	LA	563	A	P-O5'	-8.71	1.51	1.59
26	LA	2128	G	O3'-P	-8.71	1.50	1.61
2	SA	296	U	P-O5'	-8.71	1.51	1.59
26	LA	776	G	C5-C4	-8.71	1.32	1.38
26	LA	1097	U	C3'-C2'	8.71	1.62	1.52
26	LA	2192	U	O3'-P	-8.71	1.50	1.61
4	S2	44	A	N9-C4	-8.70	1.32	1.37
2	SA	240	G	C8-N7	-8.70	1.25	1.30
2	SA	1482	G	N3-C4	-8.70	1.29	1.35
26	LA	1820	U	P-O5'	-8.70	1.51	1.59
2	SA	1343	G	C2-N3	8.70	1.39	1.32
26	LA	1838	C	C2'-C1'	-8.70	1.43	1.53
26	LA	2107	G	C5'-C4'	8.70	1.61	1.51
2	SA	108	G	C6-N1	-8.70	1.33	1.39
26	LA	1692	U	P-O5'	-8.70	1.51	1.59
26	LA	2021	C	C2-N3	8.70	1.42	1.35
26	LA	2776	A	P-O5'	-8.70	1.51	1.59
26	LA	668	A	C6-N1	8.69	1.41	1.35
26	LA	989	G	O3'-P	-8.69	1.50	1.61
26	LA	1164	C	C3'-C2'	-8.69	1.43	1.52
2	SA	17	U	N1-C2	-8.69	1.30	1.38
2	SA	1333	A	N9-C4	-8.69	1.32	1.37
26	LA	425	G	N7-C5	-8.69	1.34	1.39
26	LA	1715	G	C5'-C4'	8.69	1.61	1.51
26	LA	1717	A	C8-N7	-8.69	1.25	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2061	G	N7-C5	-8.69	1.34	1.39
26	LA	2821	A	N9-C4	-8.69	1.32	1.37
2	SA	785	G	C5'-C4'	8.69	1.61	1.51
26	LA	684	G	N7-C5	-8.69	1.34	1.39
25	LB	2	G	C4'-C3'	8.69	1.62	1.53
26	LA	784	G	P-O5'	-8.69	1.51	1.59
26	LA	795	C	O3'-P	-8.69	1.50	1.61
26	LA	1561	C	C4'-C3'	-8.69	1.43	1.53
26	LA	2587	A	C3'-C2'	-8.69	1.43	1.52
25	LB	86	G	N7-C5	-8.69	1.34	1.39
26	LA	192	C	C4-C5	-8.69	1.36	1.43
26	LA	1665	A	N7-C5	-8.69	1.34	1.39
2	SA	1019	A	N3-C4	-8.68	1.29	1.34
2	SA	675	A	C2'-C1'	-8.68	1.43	1.53
26	LA	2097	A	C2-N3	-8.68	1.25	1.33
26	LA	2815	C	C2-N3	-8.68	1.28	1.35
26	LA	2900	A	N3-C4	-8.68	1.29	1.34
26	LA	978	G	C5-C6	-8.68	1.33	1.42
2	SA	720	C	O3'-P	-8.67	1.50	1.61
26	LA	924	G	P-O5'	-8.67	1.51	1.59
26	LA	197	A	C4'-C3'	-8.67	1.43	1.53
26	LA	808	G	N9-C4	-8.67	1.31	1.38
2	SA	1312	G	C8-N7	8.67	1.36	1.30
25	LB	74	U	O3'-P	-8.67	1.50	1.61
26	LA	500	G	C8-N7	8.67	1.36	1.30
26	LA	1906	G	C6-N1	-8.67	1.33	1.39
2	SA	48	C	C4'-C3'	8.67	1.62	1.53
2	SA	368	U	O3'-P	-8.67	1.50	1.61
26	LA	664	G	O3'-P	-8.67	1.50	1.61
2	SA	938	A	C6-N6	8.67	1.40	1.33
26	LA	1186	G	C8-N7	8.67	1.36	1.30
26	LA	1839	G	C8-N7	-8.67	1.25	1.30
2	SA	1483	A	N9-C4	-8.66	1.32	1.37
26	LA	2210	U	N1-C2	-8.66	1.30	1.38
2	SA	573	A	C2'-C1'	-8.66	1.43	1.53
2	SA	1288	A	C5'-C4'	8.66	1.61	1.51
26	LA	1208	C	C2-N3	-8.66	1.28	1.35
26	LA	2614	A	C5-C4	-8.66	1.32	1.38
2	SA	227	G	N3-C4	-8.66	1.29	1.35
2	SA	1213	A	C5-C4	8.66	1.44	1.38
26	LA	275	C	N3-C4	8.66	1.40	1.33
26	LA	1970	A	N9-C4	-8.66	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	99	C	P-O5'	-8.65	1.51	1.59
26	LA	1027	A	C8-N7	8.65	1.37	1.31
26	LA	2501	C	C4-N4	-8.65	1.26	1.33
26	LA	2566	A	P-O5'	8.65	1.68	1.59
2	SA	906	A	C6-N1	8.65	1.41	1.35
2	SA	1244	G	C6-N1	-8.65	1.33	1.39
26	LA	1355	G	N7-C5	-8.65	1.34	1.39
26	LA	1109	C	N1-C6	-8.65	1.31	1.37
26	LA	521	U	C2-N3	-8.65	1.31	1.37
26	LA	1396	U	O3'-P	-8.65	1.50	1.61
26	LA	1640	A	C2'-C1'	-8.65	1.43	1.53
26	LA	2463	C	C2-N3	-8.65	1.28	1.35
2	SA	369	G	N7-C5	-8.64	1.34	1.39
26	LA	1954	G	C5'-C4'	8.64	1.61	1.51
2	SA	163	C	C5'-C4'	8.64	1.61	1.51
25	LB	56	G	C5'-C4'	8.64	1.61	1.51
26	LA	2670	A	N3-C4	-8.64	1.29	1.34
26	LA	2048	G	C3'-C2'	-8.64	1.43	1.52
2	SA	830	G	N9-C8	-8.64	1.31	1.37
2	SA	1046	A	C2'-C1'	-8.64	1.43	1.53
4	S2	31	G	C2-N2	-8.64	1.25	1.34
26	LA	593	U	P-O5'	-8.64	1.51	1.59
26	LA	1750	G	P-O5'	8.64	1.68	1.59
26	LA	1022	G	C5-C6	8.64	1.50	1.42
26	LA	1898	U	O3'-P	-8.64	1.50	1.61
26	LA	1949	G	C6-N1	-8.64	1.33	1.39
2	SA	1164	G	C5'-C4'	8.63	1.61	1.51
26	LA	912	C	N1-C6	-8.63	1.31	1.37
26	LA	2011	U	C2-N3	-8.63	1.31	1.37
2	SA	539	A	N9-C4	-8.63	1.32	1.37
26	LA	174	U	N1-C2	-8.63	1.30	1.38
26	LA	649	G	N3-C4	-8.63	1.29	1.35
26	LA	1116	G	N1-C2	-8.63	1.30	1.37
26	LA	1754	A	N3-C4	-8.63	1.29	1.34
26	LA	1776	G	N7-C5	-8.63	1.34	1.39
26	LA	2448	A	O4'-C1'	-8.63	1.30	1.41
2	SA	1030	U	P-O5'	8.63	1.68	1.59
2	SA	1247	U	N3-C4	-8.63	1.30	1.38
26	LA	731	C	C2-N3	8.63	1.42	1.35
26	LA	1227	G	C8-N7	-8.63	1.25	1.30
26	LA	1264	A	N7-C5	-8.63	1.34	1.39
26	LA	2298	A	C2'-C1'	-8.63	1.43	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2654	A	N7-C5	-8.63	1.34	1.39
26	LA	643	A	C2-N3	8.63	1.41	1.33
26	LA	1627	G	C2-N2	-8.63	1.25	1.34
2	SA	406	G	O3'-P	-8.63	1.50	1.61
26	LA	1038	G	N9-C8	-8.62	1.31	1.37
26	LA	1946	U	N1-C6	-8.62	1.30	1.38
25	LB	31	C	N1-C6	-8.62	1.31	1.37
2	SA	272	C	C2'-C1'	-8.62	1.43	1.53
2	SA	989	U	C4-C5	-8.62	1.35	1.43
26	LA	1252	G	C8-N7	-8.62	1.25	1.30
26	LA	1288	G	C2-N2	-8.62	1.25	1.34
26	LA	1831	G	C2-N2	-8.62	1.25	1.34
26	LA	2430	A	O3'-P	-8.62	1.50	1.61
2	SA	556	C	N1-C2	-8.62	1.31	1.40
2	SA	326	G	N3-C4	-8.62	1.29	1.35
2	SA	878	A	C2'-C1'	-8.62	1.43	1.53
25	LB	73	A	C4'-O4'	-8.62	1.34	1.45
2	SA	364	A	O3'-P	-8.61	1.50	1.61
26	LA	372	G	N9-C4	-8.62	1.31	1.38
26	LA	1239	G	N9-C8	-8.61	1.31	1.37
26	LA	1776	G	N1-C2	-8.61	1.30	1.37
25	LB	60	C	C5'-C4'	8.61	1.61	1.51
2	SA	22	G	C5-C4	-8.61	1.32	1.38
2	SA	1518	A	C2-N3	8.61	1.41	1.33
2	SA	218	U	C3'-C2'	-8.61	1.43	1.52
2	SA	1382	C	C3'-C2'	8.61	1.62	1.52
2	SA	1535	C	C3'-C2'	8.61	1.62	1.52
26	LA	214	G	N7-C5	-8.60	1.34	1.39
26	LA	523	C	C2-N3	-8.60	1.28	1.35
26	LA	1327	A	C6-N1	-8.60	1.29	1.35
26	LA	2331	G	N7-C5	-8.60	1.34	1.39
2	SA	880	C	P-O5'	-8.60	1.51	1.59
26	LA	429	A	O3'-P	-8.60	1.50	1.61
26	LA	2052	A	C8-N7	-8.60	1.25	1.31
26	LA	1879	C	N1-C6	-8.60	1.31	1.37
26	LA	2495	G	P-O5'	-8.60	1.51	1.59
26	LA	2523	G	O3'-P	-8.60	1.50	1.61
26	LA	2590	A	C4'-O4'	-8.60	1.34	1.45
26	LA	1410	G	C2'-C1'	8.60	1.62	1.53
26	LA	2685	G	O3'-P	-8.60	1.50	1.61
26	LA	2776	A	C5-C4	-8.60	1.32	1.38
26	LA	458	G	C2-N2	-8.59	1.25	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	777	G	N7-C5	-8.59	1.34	1.39
26	LA	1225	G	C2-N2	-8.59	1.25	1.34
26	LA	2572	A	N7-C5	-8.59	1.34	1.39
2	SA	204	G	C4'-C3'	8.59	1.62	1.53
2	SA	921	U	C3'-C2'	8.59	1.62	1.52
26	LA	976	G	N7-C5	-8.59	1.34	1.39
26	LA	1160	G	O3'-P	-8.59	1.50	1.61
26	LA	1236	G	C8-N7	8.59	1.36	1.30
26	LA	2052	A	C2'-C1'	-8.59	1.43	1.53
26	LA	2480	C	P-O5'	-8.59	1.51	1.59
26	LA	1603	A	C8-N7	8.59	1.37	1.31
3	S1	19	A	N7-C5	8.59	1.44	1.39
26	LA	263	G	P-O5'	-8.59	1.51	1.59
26	LA	936	A	N7-C5	-8.59	1.34	1.39
26	LA	1253	A	C6-N1	-8.59	1.29	1.35
26	LA	2484	G	P-O5'	-8.59	1.51	1.59
26	LA	784	G	C5'-C4'	8.59	1.61	1.51
26	LA	2854	G	C2-N2	-8.59	1.25	1.34
26	LA	1126	A	N9-C4	-8.58	1.32	1.37
26	LA	2249	U	C2'-C1'	-8.58	1.44	1.53
26	LA	60	G	C2'-C1'	-8.58	1.44	1.53
2	SA	1145	A	O3'-P	-8.58	1.50	1.61
26	LA	1937	A	N9-C4	-8.58	1.32	1.37
26	LA	2020	A	O3'-P	-8.58	1.50	1.61
2	SA	1051	C	C2'-C1'	-8.58	1.44	1.53
26	LA	500	G	N1-C2	-8.58	1.30	1.37
2	SA	538	G	C2'-C1'	-8.58	1.44	1.53
26	LA	1181	U	C5-C6	8.58	1.41	1.34
26	LA	754	U	O3'-P	-8.57	1.50	1.61
4	S2	26	C	N3-C4	-8.57	1.27	1.33
4	S2	46	G	C4'-C3'	-8.57	1.43	1.53
26	LA	1196	C	C4-N4	-8.57	1.26	1.33
26	LA	1150	C	N3-C4	-8.57	1.27	1.33
2	SA	199	A	P-O5'	-8.57	1.51	1.59
2	SA	1203	C	N1-C6	8.57	1.42	1.37
26	LA	2247	A	P-O5'	-8.57	1.51	1.59
2	SA	1347	G	C5'-C4'	8.57	1.61	1.51
2	SA	1364	U	C2'-C1'	-8.57	1.44	1.53
26	LA	2885	G	N9-C8	-8.57	1.31	1.37
26	LA	484	C	N1-C6	8.57	1.42	1.37
26	LA	1872	A	C6-N6	8.57	1.40	1.33
26	LA	2184	A	C8-N7	-8.57	1.25	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1472	U	C2'-C1'	-8.56	1.44	1.53
26	LA	2420	C	C5-C6	-8.56	1.27	1.34
2	SA	159	G	C6-N1	8.56	1.45	1.39
26	LA	625	G	C6-N1	8.56	1.45	1.39
26	LA	1984	G	N7-C5	-8.56	1.34	1.39
26	LA	1909	C	N3-C4	8.56	1.40	1.33
2	SA	191	G	N7-C5	-8.56	1.34	1.39
2	SA	820	U	C4-C5	-8.56	1.35	1.43
2	SA	964	A	C5-C4	-8.56	1.32	1.38
2	SA	1503	A	N3-C4	-8.56	1.29	1.34
26	LA	53	A	C5-C6	-8.56	1.33	1.41
26	LA	422	A	N7-C5	-8.56	1.34	1.39
26	LA	1220	G	C5-C6	-8.56	1.33	1.42
2	SA	635	A	C6-N1	-8.55	1.29	1.35
26	LA	237	C	N1-C2	-8.55	1.31	1.40
26	LA	1025	G	C6-N1	-8.55	1.33	1.39
26	LA	2837	A	O3'-P	-8.55	1.50	1.61
26	LA	1510	G	C3'-C2'	-8.55	1.43	1.52
26	LA	1647	U	C2-N3	8.55	1.43	1.37
26	LA	2717	C	C5-C6	8.55	1.41	1.34
26	LA	126	A	O4'-C1'	8.55	1.52	1.41
26	LA	2664	G	N9-C8	-8.55	1.31	1.37
2	SA	515	G	N3-C4	-8.55	1.29	1.35
26	LA	1312	U	C2-N3	-8.55	1.31	1.37
26	LA	1286	A	C4'-C3'	8.55	1.62	1.53
26	LA	1491	G	C6-N1	-8.55	1.33	1.39
26	LA	1632	A	N9-C4	-8.55	1.32	1.37
26	LA	1882	U	N1-C2	8.55	1.46	1.38
2	SA	1094	G	C5-C4	8.54	1.44	1.38
2	SA	705	G	C8-N7	-8.54	1.25	1.30
2	SA	721	G	N7-C5	-8.54	1.34	1.39
2	SA	995	C	P-O5'	-8.54	1.51	1.59
26	LA	787	C	C2-N3	8.54	1.42	1.35
26	LA	802	A	N7-C5	-8.54	1.34	1.39
26	LA	890	C	C5'-C4'	8.54	1.61	1.51
26	LA	1376	C	N3-C4	8.54	1.40	1.33
26	LA	1842	G	N9-C4	-8.54	1.31	1.38
2	SA	1332	A	N7-C5	-8.54	1.34	1.39
26	LA	2259	U	C4-C5	-8.54	1.35	1.43
2	SA	980	C	O3'-P	-8.54	1.50	1.61
26	LA	2229	U	P-O5'	-8.54	1.51	1.59
2	SA	1063	C	C2'-C1'	-8.53	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	47	A	C5'-C4'	8.54	1.61	1.51
26	LA	257	C	N1-C6	8.53	1.42	1.37
26	LA	302	C	P-O5'	-8.53	1.51	1.59
26	LA	1904	G	C5-C4	-8.54	1.32	1.38
26	LA	2326	C	C4-N4	-8.54	1.26	1.33
2	SA	557	G	C2-N2	-8.53	1.26	1.34
26	LA	1496	A	C5'-C4'	8.53	1.61	1.51
26	LA	1538	G	C6-N1	-8.53	1.33	1.39
26	LA	2831	G	C2-N3	-8.53	1.25	1.32
26	LA	2499	C	C4-N4	8.53	1.41	1.33
26	LA	176	A	N9-C4	-8.53	1.32	1.37
26	LA	280	U	C5'-C4'	8.53	1.61	1.51
26	LA	2308	G	C5'-C4'	8.53	1.61	1.51
26	LA	565	C	C2-N3	-8.53	1.28	1.35
26	LA	783	A	N7-C5	-8.53	1.34	1.39
26	LA	1420	A	N9-C8	8.53	1.44	1.37
26	LA	1574	C	C2-N3	-8.53	1.28	1.35
2	SA	266	G	N3-C4	-8.53	1.29	1.35
4	S2	42	C	C2-N3	-8.53	1.28	1.35
26	LA	856	G	N9-C8	-8.53	1.31	1.37
2	SA	630	A	N9-C4	-8.52	1.32	1.37
3	S1	31	U	N3-C4	-8.52	1.30	1.38
2	SA	778	G	N9-C8	-8.52	1.31	1.37
2	SA	1251	A	C5-C4	-8.52	1.32	1.38
26	LA	56	A	O3'-P	-8.52	1.50	1.61
26	LA	579	G	C6-N1	-8.52	1.33	1.39
2	SA	31	G	C2'-C1'	-8.52	1.44	1.53
2	SA	128	G	C8-N7	8.52	1.36	1.30
2	SA	1525	G	C8-N7	8.52	1.36	1.30
26	LA	1223	G	C2-N3	-8.52	1.25	1.32
26	LA	1614	A	C5-C4	-8.52	1.32	1.38
2	SA	824	G	C2-N3	-8.52	1.25	1.32
2	SA	1165	U	C5'-C4'	8.52	1.61	1.51
4	S2	9	G	C4'-C3'	8.52	1.62	1.53
26	LA	1397	U	C3'-C2'	-8.52	1.43	1.52
26	LA	275	C	C2-N3	-8.52	1.28	1.35
26	LA	1320	C	P-O5'	-8.51	1.51	1.59
26	LA	2385	C	C4'-C3'	8.51	1.62	1.53
26	LA	2405	G	C6-N1	-8.51	1.33	1.39
2	SA	155	A	C6-N1	8.51	1.41	1.35
2	SA	862	C	C3'-C2'	8.51	1.62	1.52
26	LA	342	A	C3'-C2'	-8.51	1.43	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	354	A	C5-C4	8.51	1.44	1.38
26	LA	1561	C	C4-C5	-8.51	1.36	1.43
2	SA	406	G	C8-N7	8.51	1.36	1.30
26	LA	2516	A	C5'-C4'	8.51	1.61	1.51
26	LA	2582	G	N1-C2	-8.51	1.30	1.37
2	SA	521	G	C8-N7	8.51	1.36	1.30
26	LA	2059	A	C2-N3	-8.51	1.25	1.33
2	SA	82	G	C5'-C4'	8.50	1.61	1.51
26	LA	2101	A	N7-C5	8.50	1.44	1.39
2	SA	911	U	C4-C5	8.50	1.51	1.43
2	SA	1340	A	N3-C4	-8.50	1.29	1.34
2	SA	641	U	C3'-C2'	-8.50	1.43	1.52
26	LA	167	A	C3'-C2'	-8.50	1.43	1.52
26	LA	956	G	C6-N1	-8.50	1.33	1.39
26	LA	1362	C	N1-C6	8.50	1.42	1.37
26	LA	2173	A	C5-C4	8.50	1.44	1.38
2	SA	230	G	C2'-C1'	-8.49	1.44	1.53
2	SA	838	G	O3'-P	-8.49	1.50	1.61
2	SA	1134	G	C2'-C1'	-8.49	1.44	1.53
2	SA	1246	A	N3-C4	-8.49	1.29	1.34
26	LA	589	U	O3'-P	-8.49	1.50	1.61
26	LA	1246	A	C2'-C1'	-8.49	1.44	1.53
26	LA	1222	U	P-O5'	-8.49	1.51	1.59
2	SA	1207	G	C5-C6	8.49	1.50	1.42
26	LA	1913	A	C5-C4	8.49	1.44	1.38
2	SA	305	G	C8-N7	-8.49	1.25	1.30
2	SA	473	U	N3-C4	-8.49	1.30	1.38
26	LA	609	A	C6-N1	8.49	1.41	1.35
26	LA	805	G	N7-C5	-8.49	1.34	1.39
2	SA	1203	C	C5'-C4'	-8.48	1.41	1.51
2	SA	1422	G	N9-C4	8.48	1.44	1.38
26	LA	647	G	N9-C4	-8.48	1.31	1.38
2	SA	1418	A	N7-C5	-8.48	1.34	1.39
4	S2	5	G	P-O5'	-8.48	1.51	1.59
26	LA	1234	U	N3-C4	8.48	1.46	1.38
26	LA	1477	A	C6-N1	-8.48	1.29	1.35
2	SA	740	U	C3'-C2'	-8.48	1.43	1.52
2	SA	1519	A	C5-C4	-8.48	1.32	1.38
26	LA	196	A	C6-N6	-8.48	1.27	1.33
26	LA	496	G	N3-C4	-8.48	1.29	1.35
26	LA	1668	A	N7-C5	-8.48	1.34	1.39
26	LA	2036	C	C4-N4	-8.48	1.26	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2393	U	C2'-C1'	-8.48	1.44	1.53
25	LB	86	G	C6-N1	-8.48	1.33	1.39
26	LA	861	A	C6-N6	-8.48	1.27	1.33
26	LA	1112	G	N3-C4	-8.48	1.29	1.35
26	LA	1854	A	C6-N1	-8.48	1.29	1.35
26	LA	2256	G	N3-C4	-8.48	1.29	1.35
26	LA	1651	G	P-O5'	-8.48	1.51	1.59
26	LA	1371	G	C6-N1	-8.47	1.33	1.39
2	SA	683	G	C5-C4	-8.47	1.32	1.38
26	LA	2011	U	P-O5'	-8.47	1.51	1.59
26	LA	453	A	C2'-C1'	-8.47	1.44	1.53
26	LA	2730	C	C4-N4	-8.47	1.26	1.33
2	SA	1416	G	N3-C4	-8.47	1.29	1.35
26	LA	245	G	N9-C8	-8.47	1.31	1.37
26	LA	1363	C	C1'-N1	-8.47	1.34	1.46
26	LA	1074	G	C1'-N9	-8.47	1.34	1.46
26	LA	1690	A	N7-C5	-8.47	1.34	1.39
2	SA	939	G	N7-C5	-8.46	1.34	1.39
26	LA	9	G	P-O5'	-8.46	1.51	1.59
26	LA	844	A	O3'-P	-8.46	1.50	1.61
26	LA	2030	U	N3-C4	-8.47	1.30	1.38
26	LA	997	G	C3'-C2'	-8.46	1.43	1.52
26	LA	2355	G	C2'-C1'	-8.46	1.44	1.53
26	LA	2867	G	N7-C5	-8.46	1.34	1.39
25	LB	58	A	C6-N6	8.46	1.40	1.33
26	LA	1202	G	C6-N1	-8.46	1.33	1.39
26	LA	1244	A	N3-C4	-8.46	1.29	1.34
26	LA	1865	U	C2-N3	-8.46	1.31	1.37
2	SA	813	U	C4'-O4'	-8.46	1.34	1.45
26	LA	1057	A	C8-N7	-8.46	1.25	1.31
26	LA	1360	G	N1-C2	-8.46	1.30	1.37
26	LA	746	U	N1-C6	-8.46	1.30	1.38
26	LA	1266	G	N3-C4	-8.46	1.29	1.35
2	SA	327	A	P-O5'	-8.46	1.51	1.59
26	LA	782	A	O3'-P	-8.46	1.51	1.61
26	LA	2174	C	C2'-C1'	-8.45	1.44	1.53
26	LA	2401	U	O3'-P	-8.46	1.51	1.61
2	SA	872	A	N9-C4	8.45	1.43	1.37
4	S2	14	A	C4'-C3'	8.45	1.62	1.53
2	SA	453	G	C5'-C4'	8.45	1.61	1.51
26	LA	367	G	C3'-O3'	8.45	1.53	1.42
26	LA	1287	A	P-O5'	-8.45	1.51	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2041	U	C5'-C4'	8.45	1.61	1.51
2	SA	393	A	N9-C4	-8.45	1.32	1.37
26	LA	1872	A	N7-C5	-8.45	1.34	1.39
26	LA	2778	A	C5-C6	8.45	1.48	1.41
2	SA	1535	C	C4-N4	-8.45	1.26	1.33
26	LA	1152	C	N1-C6	-8.45	1.32	1.37
26	LA	1801	A	N9-C4	8.45	1.43	1.37
26	LA	2662	A	N9-C4	-8.45	1.32	1.37
26	LA	113	U	C1'-N1	8.45	1.61	1.48
26	LA	987	C	O3'-P	-8.45	1.51	1.61
26	LA	1429	G	C6-N1	-8.45	1.33	1.39
26	LA	1687	G	N9-C4	-8.45	1.31	1.38
2	SA	454	G	N9-C4	8.44	1.44	1.38
26	LA	1674	G	N7-C5	-8.44	1.34	1.39
2	SA	322	C	C4-C5	-8.44	1.36	1.43
2	SA	844	G	N7-C5	-8.44	1.34	1.39
26	LA	358	U	C2'-C1'	-8.44	1.44	1.53
2	SA	219	U	N3-C4	-8.44	1.30	1.38
26	LA	974	G	N7-C5	-8.44	1.34	1.39
26	LA	284	U	P-O5'	8.44	1.68	1.59
26	LA	1354	A	N9-C4	-8.44	1.32	1.37
26	LA	1670	C	P-O5'	-8.44	1.51	1.59
26	LA	2486	C	N1-C6	-8.44	1.32	1.37
26	LA	52	A	C8-N7	-8.43	1.25	1.31
26	LA	1297	C	C4-N4	-8.43	1.26	1.33
26	LA	1475	G	N7-C5	8.43	1.44	1.39
26	LA	2536	G	C8-N7	-8.43	1.25	1.30
26	LA	2609	U	C2'-C1'	-8.43	1.44	1.53
26	LA	599	A	P-O5'	-8.43	1.51	1.59
3	S1	35	G	N3-C4	-8.43	1.29	1.35
26	LA	2488	G	C2'-C1'	-8.43	1.44	1.53
26	LA	1238	G	C2-N2	-8.43	1.26	1.34
2	SA	600	A	N7-C5	-8.43	1.34	1.39
2	SA	1408	A	C8-N7	-8.43	1.25	1.31
26	LA	1603	A	N9-C8	-8.43	1.31	1.37
2	SA	16	A	N3-C4	-8.42	1.29	1.34
2	SA	1334	G	C6-N1	-8.42	1.33	1.39
26	LA	185	G	N7-C5	-8.42	1.34	1.39
26	LA	1139	G	C6-O6	8.42	1.31	1.24
26	LA	2420	C	N1-C6	-8.42	1.32	1.37
2	SA	1266	G	N7-C5	8.42	1.44	1.39
2	SA	1285	A	C8-N7	8.42	1.37	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	26	C	N3-C4	8.42	1.39	1.33
26	LA	2331	G	C5'-C4'	8.42	1.61	1.51
26	LA	513	A	C6-N1	-8.42	1.29	1.35
26	LA	535	G	N9-C8	8.42	1.43	1.37
26	LA	2011	U	N1-C6	-8.42	1.30	1.38
2	SA	281	G	N3-C4	-8.42	1.29	1.35
26	LA	313	G	N9-C4	8.42	1.44	1.38
26	LA	465	G	C2'-C1'	-8.42	1.44	1.53
26	LA	526	A	N9-C4	-8.42	1.32	1.37
26	LA	1271	G	C8-N7	-8.42	1.25	1.30
26	LA	1401	G	N7-C5	-8.42	1.34	1.39
26	LA	2225	A	O3'-P	-8.42	1.51	1.61
26	LA	2259	U	C5'-C4'	8.42	1.61	1.51
2	SA	133	U	P-O5'	-8.41	1.51	1.59
2	SA	429	U	C4-C5	-8.41	1.35	1.43
2	SA	1461	G	N7-C5	8.41	1.44	1.39
4	S2	60	A	N9-C8	-8.41	1.31	1.37
2	SA	415	A	N9-C4	8.41	1.42	1.37
26	LA	1165	A	O3'-P	-8.41	1.51	1.61
26	LA	1562	U	N3-C4	-8.41	1.30	1.38
26	LA	2447	G	C8-N7	-8.41	1.25	1.30
26	LA	2545	G	C2'-C1'	-8.41	1.44	1.53
26	LA	1789	A	C5-C6	-8.41	1.33	1.41
2	SA	37	U	N1-C2	-8.40	1.30	1.38
2	SA	955	U	C2-N3	-8.40	1.31	1.37
2	SA	1394	A	C6-N6	8.40	1.40	1.33
3	S1	58	C	C5'-C4'	8.40	1.61	1.51
26	LA	2327	A	N9-C8	8.40	1.44	1.37
2	SA	391	G	C5-C6	-8.40	1.33	1.42
2	SA	793	U	C4'-C3'	8.40	1.62	1.53
2	SA	1193	G	C2-N2	-8.40	1.26	1.34
26	LA	212	G	O4'-C1'	-8.40	1.30	1.41
26	LA	537	G	P-O5'	-8.40	1.51	1.59
26	LA	789	A	C5-C4	-8.40	1.32	1.38
26	LA	795	C	N1-C6	-8.40	1.32	1.37
2	SA	15	G	C6-N1	-8.40	1.33	1.39
2	SA	602	A	P-O5'	8.40	1.68	1.59
2	SA	812	G	P-O5'	8.40	1.68	1.59
26	LA	1791	A	N7-C5	-8.40	1.34	1.39
2	SA	117	G	C4'-C3'	8.40	1.62	1.53
2	SA	361	G	C3'-C2'	8.40	1.62	1.52
26	LA	523	C	C3'-C2'	-8.40	1.43	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1180	U	P-O5'	-8.40	1.51	1.59
26	LA	2583	G	C2'-C1'	-8.40	1.44	1.53
26	LA	1668	A	N3-C4	-8.40	1.29	1.34
2	SA	9	G	C2'-C1'	-8.39	1.44	1.53
2	SA	428	G	C5-C4	-8.39	1.32	1.38
26	LA	334	C	P-O5'	-8.39	1.51	1.59
26	LA	904	G	N7-C5	8.39	1.44	1.39
4	S2	15	G	C8-N7	8.39	1.35	1.30
26	LA	1568	G	N7-C5	-8.39	1.34	1.39
2	SA	795	C	C5'-C4'	8.39	1.61	1.51
26	LA	1706	C	N1-C6	-8.39	1.32	1.37
26	LA	2557	G	C5-C6	-8.39	1.33	1.42
2	SA	727	G	N7-C5	8.39	1.44	1.39
4	S2	27	G	C2-N3	8.38	1.39	1.32
26	LA	1239	G	C5-C6	-8.39	1.33	1.42
26	LA	74	A	C4'-C3'	8.38	1.62	1.53
26	LA	1857	G	N7-C5	-8.38	1.34	1.39
26	LA	2711	A	N3-C4	8.38	1.39	1.34
26	LA	1080	A	C6-N6	8.38	1.40	1.33
26	LA	1369	G	P-O5'	-8.38	1.51	1.59
26	LA	1378	A	C6-N1	-8.38	1.29	1.35
26	LA	2149	U	P-O5'	8.38	1.68	1.59
26	LA	2776	A	C6-N1	8.38	1.41	1.35
26	LA	1177	G	C4'-O4'	8.38	1.56	1.45
26	LA	2831	G	N9-C4	-8.38	1.31	1.38
2	SA	1087	G	N7-C5	-8.38	1.34	1.39
26	LA	1470	A	C4'-C3'	-8.38	1.44	1.53
26	LA	1701	A	C5-C4	-8.38	1.32	1.38
26	LA	352	A	C8-N7	-8.37	1.25	1.31
26	LA	1973	G	C6-N1	-8.38	1.33	1.39
2	SA	281	G	C3'-C2'	8.37	1.62	1.52
2	SA	329	A	C2'-C1'	-8.37	1.44	1.53
2	SA	600	A	N9-C4	-8.37	1.32	1.37
2	SA	615	G	N1-C2	-8.37	1.31	1.37
26	LA	382	A	N1-C2	-8.37	1.26	1.34
2	SA	1075	U	C5'-C4'	8.37	1.61	1.51
2	SA	559	A	N3-C4	-8.37	1.29	1.34
26	LA	1651	G	N7-C5	-8.37	1.34	1.39
26	LA	1846	G	N9-C4	-8.37	1.31	1.38
26	LA	2293	G	C5-C4	-8.37	1.32	1.38
26	LA	2618	G	N9-C8	-8.37	1.31	1.37
26	LA	2430	A	C1'-N9	-8.36	1.35	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	82	G	C4'-C3'	8.36	1.62	1.53
26	LA	2464	G	C2'-C1'	-8.36	1.44	1.53
4	S2	32	G	C2-N3	-8.36	1.26	1.32
26	LA	1124	G	O3'-P	-8.36	1.51	1.61
2	SA	126	G	C1'-N9	-8.36	1.35	1.46
2	SA	456	A	C6-N6	-8.36	1.27	1.33
2	SA	1106	G	P-O5'	-8.36	1.51	1.59
26	LA	808	G	N7-C5	-8.36	1.34	1.39
26	LA	1431	A	N3-C4	-8.36	1.29	1.34
26	LA	1934	C	C4-C5	-8.36	1.36	1.43
26	LA	2823	A	N9-C4	-8.36	1.32	1.37
2	SA	391	G	C2'-C1'	-8.35	1.44	1.53
25	LB	101	A	C5'-C4'	8.35	1.61	1.51
26	LA	2255	G	O3'-P	-8.35	1.51	1.61
2	SA	1386	G	N1-C2	-8.35	1.31	1.37
26	LA	829	A	N3-C4	8.35	1.39	1.34
26	LA	2080	A	O3'-P	-8.35	1.51	1.61
26	LA	2103	C	C3'-C2'	-8.35	1.43	1.52
26	LA	2867	G	C8-N7	8.35	1.35	1.30
26	LA	248	G	C8-N7	-8.35	1.25	1.30
26	LA	924	G	C5'-C4'	8.35	1.61	1.51
26	LA	1047	G	O3'-P	-8.35	1.51	1.61
2	SA	320	A	N7-C5	8.35	1.44	1.39
2	SA	899	C	N1-C6	8.35	1.42	1.37
2	SA	1142	G	C2'-C1'	-8.35	1.44	1.53
26	LA	857	G	P-O5'	-8.35	1.51	1.59
26	LA	1204	A	N9-C4	-8.35	1.32	1.37
26	LA	1678	A	C8-N7	-8.34	1.25	1.31
2	SA	1293	C	C4'-C3'	8.34	1.62	1.53
2	SA	1324	A	C4'-C3'	-8.34	1.44	1.53
26	LA	494	G	O3'-P	-8.34	1.51	1.61
26	LA	772	C	C4'-C3'	-8.34	1.44	1.53
25	LB	106	G	N7-C5	-8.34	1.34	1.39
26	LA	346	A	P-O5'	-8.34	1.51	1.59
26	LA	12	U	C2-N3	-8.34	1.31	1.37
26	LA	1247	A	N9-C4	-8.34	1.32	1.37
26	LA	1932	A	N3-C4	-8.34	1.29	1.34
26	LA	2053	G	C6-N1	-8.34	1.33	1.39
2	SA	1257	A	O3'-P	-8.34	1.51	1.61
26	LA	568	U	C4-C5	-8.34	1.36	1.43
26	LA	1246	A	C8-N7	-8.34	1.25	1.31
26	LA	2145	C	C3'-C2'	8.34	1.62	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	995	C	C2'-C1'	-8.34	1.44	1.53
26	LA	2525	G	P-O5'	-8.34	1.51	1.59
2	SA	1221	G	N7-C5	8.33	1.44	1.39
2	SA	1429	A	C5-C6	-8.33	1.33	1.41
2	SA	305	G	C2-N3	8.33	1.39	1.32
2	SA	1051	C	C3'-C2'	8.33	1.62	1.52
2	SA	1233	G	N3-C4	-8.33	1.29	1.35
26	LA	27	G	N9-C8	-8.33	1.32	1.37
26	LA	396	G	C2-N2	-8.33	1.26	1.34
26	LA	656	G	C2-N2	-8.33	1.26	1.34
2	SA	11	G	C6-N1	-8.33	1.33	1.39
26	LA	390	U	C4-C5	8.33	1.51	1.43
26	LA	608	A	N9-C4	8.33	1.42	1.37
26	LA	685	A	N9-C8	-8.33	1.31	1.37
2	SA	1479	C	C2-N3	8.33	1.42	1.35
26	LA	767	U	P-O5'	-8.33	1.51	1.59
2	SA	266	G	C1'-N9	-8.32	1.35	1.46
2	SA	468	A	N3-C4	8.32	1.39	1.34
2	SA	687	A	C6-N6	-8.32	1.27	1.33
2	SA	991	U	P-O5'	-8.32	1.51	1.59
26	LA	2512	C	C2-N3	-8.32	1.29	1.35
26	LA	622	G	N7-C5	-8.32	1.34	1.39
25	LB	113	C	N1-C6	8.32	1.42	1.37
26	LA	340	A	C5-C4	-8.32	1.32	1.38
26	LA	2361	G	P-O5'	-8.32	1.51	1.59
26	LA	1569	A	C4'-C3'	8.32	1.62	1.53
2	SA	1391	U	C2-N3	-8.32	1.31	1.37
25	LB	111	U	C5'-C4'	8.32	1.61	1.51
26	LA	382	A	N9-C4	-8.32	1.32	1.37
26	LA	703	U	C4'-C3'	-8.32	1.44	1.53
26	LA	2379	G	N3-C4	8.32	1.41	1.35
26	LA	2526	G	N1-C2	-8.32	1.31	1.37
2	SA	439	U	C4-C5	-8.31	1.36	1.43
2	SA	1263	C	C4'-C3'	8.31	1.62	1.53
26	LA	254	G	O3'-P	-8.31	1.51	1.61
2	SA	1031	C	C4-N4	-8.31	1.26	1.33
26	LA	739	A	C5'-C4'	8.31	1.61	1.51
26	LA	796	C	C4-N4	-8.31	1.26	1.33
26	LA	2837	A	C5-C6	-8.31	1.33	1.41
2	SA	584	G	N7-C5	-8.31	1.34	1.39
2	SA	546	A	N7-C5	-8.31	1.34	1.39
26	LA	761	A	N9-C4	-8.31	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1192	G	N7-C5	-8.31	1.34	1.39
2	SA	290	C	N1-C6	-8.31	1.32	1.37
2	SA	447	G	N9-C4	8.31	1.44	1.38
26	LA	1650	A	C2-N3	-8.31	1.26	1.33
26	LA	2466	C	N1-C6	-8.31	1.32	1.37
26	LA	2477	U	P-O5'	-8.31	1.51	1.59
2	SA	155	A	N7-C5	-8.31	1.34	1.39
2	SA	158	G	C5-C4	-8.30	1.32	1.38
26	LA	469	G	N9-C4	-8.30	1.31	1.38
26	LA	52	A	P-O5'	-8.30	1.51	1.59
26	LA	904	G	N1-C2	-8.30	1.31	1.37
26	LA	1783	A	N3-C4	-8.30	1.29	1.34
2	SA	1542	A	C4'-C3'	8.30	1.62	1.53
26	LA	2202	U	C2-N3	-8.30	1.31	1.37
2	SA	338	A	O3'-P	-8.29	1.51	1.61
4	S2	68	C	C4'-O4'	8.29	1.56	1.45
25	LB	16	G	C2'-C1'	-8.29	1.44	1.53
26	LA	2536	G	N1-C2	-8.30	1.31	1.37
26	LA	248	G	C5-C4	-8.29	1.32	1.38
26	LA	1736	U	C2'-O2'	8.29	1.52	1.41
2	SA	1413	A	N9-C4	-8.29	1.32	1.37
26	LA	226	A	N9-C4	-8.29	1.32	1.37
2	SA	140	U	C4'-C3'	-8.29	1.44	1.53
2	SA	1087	G	C3'-O3'	8.29	1.53	1.42
2	SA	1143	G	N3-C4	-8.29	1.29	1.35
26	LA	588	U	C4-C5	-8.29	1.36	1.43
26	LA	1038	G	N3-C4	-8.29	1.29	1.35
26	LA	1215	G	C6-N1	-8.29	1.33	1.39
26	LA	1245	G	C5'-C4'	8.29	1.61	1.51
26	LA	1390	U	P-O5'	-8.29	1.51	1.59
26	LA	1734	G	N7-C5	-8.29	1.34	1.39
2	SA	750	C	N3-C4	8.29	1.39	1.33
26	LA	258	G	N7-C5	-8.29	1.34	1.39
26	LA	1341	G	C6-N1	-8.29	1.33	1.39
26	LA	322	A	C6-N6	8.29	1.40	1.33
26	LA	484	C	C4-C5	8.28	1.49	1.43
26	LA	841	G	N7-C5	-8.29	1.34	1.39
26	LA	1106	G	C4'-C3'	-8.28	1.44	1.53
26	LA	2454	G	C6-N1	-8.28	1.33	1.39
2	SA	1101	A	C3'-O3'	8.28	1.53	1.42
26	LA	2012	G	C2'-C1'	-8.28	1.44	1.53
26	LA	2236	U	P-O5'	-8.28	1.51	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	797	G	C2'-C1'	-8.28	1.44	1.53
26	LA	97	C	C5'-C4'	8.28	1.61	1.51
26	LA	2604	U	P-O5'	-8.28	1.51	1.59
2	SA	1522	U	N1-C6	-8.28	1.30	1.38
25	LB	101	A	C6-N1	-8.28	1.29	1.35
26	LA	449	A	C6-N1	-8.28	1.29	1.35
26	LA	1132	U	O3'-P	-8.28	1.51	1.61
26	LA	204	A	N9-C4	-8.27	1.32	1.37
26	LA	974	G	C6-N1	-8.27	1.33	1.39
26	LA	1659	G	C2-N2	-8.27	1.26	1.34
26	LA	2250	G	N9-C4	-8.27	1.31	1.38
26	LA	2608	G	N7-C5	-8.27	1.34	1.39
26	LA	781	A	N3-C4	-8.27	1.29	1.34
2	SA	397	A	C2'-C1'	-8.27	1.44	1.53
2	SA	1127	G	N7-C5	-8.27	1.34	1.39
2	SA	1534	A	C5-C6	8.27	1.48	1.41
26	LA	44	A	C1'-N9	-8.27	1.35	1.46
26	LA	814	C	N1-C6	-8.27	1.32	1.37
26	LA	1098	A	P-O5'	-8.27	1.51	1.59
26	LA	1912	A	C5'-C4'	8.27	1.61	1.51
26	LA	2251	U	C2'-C1'	-8.27	1.44	1.53
26	LA	2660	A	N9-C4	-8.27	1.32	1.37
2	SA	389	A	N7-C5	8.27	1.44	1.39
2	SA	1350	A	N9-C4	-8.27	1.32	1.37
26	LA	782	A	N9-C4	-8.27	1.32	1.37
26	LA	206	U	C4-C5	-8.27	1.36	1.43
26	LA	981	A	N7-C5	-8.27	1.34	1.39
26	LA	1837	C	C2'-C1'	-8.27	1.44	1.53
2	SA	213	G	N3-C4	-8.26	1.29	1.35
2	SA	1205	U	C2-N3	-8.26	1.31	1.37
2	SA	1489	G	C5-C6	-8.26	1.34	1.42
4	S2	47	A	C6-N6	-8.26	1.27	1.33
26	LA	783	A	C2'-C1'	-8.26	1.44	1.53
26	LA	1169	A	N9-C4	8.26	1.42	1.37
26	LA	1028	A	N3-C4	-8.26	1.29	1.34
2	SA	965	U	C4'-C3'	8.26	1.62	1.53
26	LA	2703	C	O3'-P	-8.26	1.51	1.61
26	LA	2812	G	N3-C4	-8.26	1.29	1.35
26	LA	774	G	N9-C4	-8.26	1.31	1.38
26	LA	1262	A	N1-C2	-8.26	1.26	1.34
26	LA	1667	G	N7-C5	-8.26	1.34	1.39
2	SA	408	A	N9-C4	-8.26	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	52	C	C5-C6	8.26	1.41	1.34
2	SA	555	U	C2-N3	-8.25	1.31	1.37
26	LA	2677	G	C2-N3	8.25	1.39	1.32
26	LA	1572	A	C5-C6	-8.25	1.33	1.41
26	LA	2222	C	C2'-C1'	-8.25	1.44	1.53
2	SA	499	A	C6-N1	-8.25	1.29	1.35
2	SA	746	A	O3'-P	-8.25	1.51	1.61
2	SA	1116	U	C4'-C3'	-8.25	1.44	1.53
26	LA	1331	G	N7-C5	-8.25	1.34	1.39
26	LA	1260	A	N3-C4	8.25	1.39	1.34
2	SA	219	U	P-O5'	-8.24	1.51	1.59
4	S2	6	G	P-O5'	-8.24	1.51	1.59
26	LA	975	A	C5'-C4'	8.24	1.61	1.51
26	LA	2106	U	P-O5'	-8.24	1.51	1.59
26	LA	822	G	C2'-C1'	-8.24	1.44	1.53
26	LA	2479	U	C4-C5	-8.24	1.36	1.43
2	SA	1272	G	C2-N2	-8.24	1.26	1.34
26	LA	190	A	N1-C2	-8.24	1.26	1.34
26	LA	2112	G	N7-C5	-8.24	1.34	1.39
26	LA	2766	A	C6-N6	-8.24	1.27	1.33
2	SA	124	C	C4'-C3'	8.24	1.62	1.53
2	SA	303	A	N7-C5	-8.24	1.34	1.39
2	SA	964	A	N7-C5	8.24	1.44	1.39
2	SA	682	G	N7-C5	-8.24	1.34	1.39
2	SA	922	G	P-O5'	-8.24	1.51	1.59
26	LA	180	G	P-O5'	8.24	1.68	1.59
26	LA	377	G	N9-C8	-8.24	1.32	1.37
26	LA	805	G	C4'-C3'	8.24	1.62	1.53
26	LA	2885	G	C4'-C3'	8.24	1.62	1.53
2	SA	789	U	C4-C5	-8.23	1.36	1.43
26	LA	444	C	C5-C6	-8.23	1.27	1.34
26	LA	979	A	C2-N3	-8.23	1.26	1.33
4	S2	57	C	C5'-C4'	8.23	1.61	1.51
26	LA	196	A	C8-N7	-8.23	1.25	1.31
26	LA	1134	A	C5'-C4'	8.23	1.61	1.51
26	LA	929	U	O3'-P	-8.23	1.51	1.61
26	LA	954	G	N7-C5	-8.23	1.34	1.39
26	LA	965	C	N1-C6	-8.23	1.32	1.37
26	LA	1378	A	C5-C4	-8.23	1.32	1.38
2	SA	560	A	C2'-C1'	-8.23	1.44	1.53
26	LA	1012	U	N1-C6	-8.23	1.30	1.38
2	SA	1433	A	N9-C4	-8.23	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	91	C	C2'-C1'	-8.22	1.44	1.53
2	SA	587	G	C2-N2	-8.22	1.26	1.34
25	LB	33	G	C8-N7	8.22	1.35	1.30
26	LA	2125	G	C5-C4	8.22	1.44	1.38
26	LA	2722	G	N9-C4	-8.22	1.31	1.38
2	SA	275	G	C6-N1	-8.22	1.33	1.39
26	LA	675	A	N3-C4	-8.22	1.29	1.34
26	LA	2123	G	C4'-C3'	8.22	1.62	1.53
26	LA	989	G	C2-N2	-8.21	1.26	1.34
2	SA	302	G	C2-N3	-8.21	1.26	1.32
2	SA	374	A	C6-N6	8.21	1.40	1.33
2	SA	1150	A	C8-N7	8.21	1.37	1.31
26	LA	1399	C	N3-C4	8.21	1.39	1.33
26	LA	2640	G	P-O5'	-8.21	1.51	1.59
2	SA	749	A	N3-C4	-8.21	1.29	1.34
2	SA	897	C	C5'-C4'	8.21	1.61	1.51
2	SA	1189	U	P-O5'	-8.21	1.51	1.59
26	LA	684	G	N9-C8	-8.21	1.32	1.37
26	LA	1845	G	N3-C4	-8.21	1.29	1.35
26	LA	2450	A	C4'-C3'	8.21	1.62	1.53
26	LA	2862	G	N3-C4	-8.21	1.29	1.35
2	SA	760	G	C5'-C4'	8.21	1.61	1.51
2	SA	822	U	N3-C4	-8.21	1.31	1.38
26	LA	410	G	N9-C8	-8.21	1.32	1.37
26	LA	494	G	N3-C4	-8.21	1.29	1.35
26	LA	2570	G	C6-N1	-8.21	1.33	1.39
25	LB	32	U	C5'-C4'	8.21	1.61	1.51
26	LA	233	A	C1'-N9	-8.21	1.35	1.46
26	LA	322	A	N9-C4	-8.21	1.32	1.37
26	LA	954	G	C6-N1	-8.21	1.33	1.39
26	LA	729	G	N7-C5	-8.20	1.34	1.39
26	LA	981	A	O4'-C1'	-8.21	1.30	1.41
26	LA	1620	G	C1'-N9	-8.21	1.35	1.46
26	LA	1792	G	C2'-C1'	-8.21	1.44	1.53
2	SA	1020	G	C4'-O4'	8.20	1.56	1.45
2	SA	1283	U	C2-N3	8.20	1.43	1.37
26	LA	367	G	N9-C8	8.20	1.43	1.37
25	LB	15	A	N7-C5	-8.20	1.34	1.39
26	LA	436	C	C4-N4	-8.20	1.26	1.33
26	LA	2081	U	C5'-C4'	8.20	1.61	1.51
2	SA	154	U	N1-C2	8.20	1.46	1.38
26	LA	574	A	N9-C4	-8.20	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	47	C	N3-C4	-8.20	1.28	1.33
2	SA	347	G	C2-N2	-8.20	1.26	1.34
2	SA	1349	A	N9-C4	-8.20	1.32	1.37
26	LA	46	G	N1-C2	8.20	1.44	1.37
26	LA	503	A	C4'-C3'	8.20	1.62	1.53
26	LA	2037	A	C2'-C1'	-8.20	1.44	1.53
26	LA	2487	G	C5-C6	-8.20	1.34	1.42
2	SA	337	G	N1-C2	-8.20	1.31	1.37
26	LA	743	A	P-O5'	-8.20	1.51	1.59
26	LA	1549	A	C3'-C2'	-8.20	1.43	1.52
26	LA	1669	A	C5'-C4'	8.20	1.61	1.51
26	LA	2368	C	C4'-C3'	-8.20	1.44	1.53
26	LA	2877	G	N7-C5	-8.20	1.34	1.39
2	SA	69	G	C5-C4	8.19	1.44	1.38
26	LA	1962	C	C4-N4	-8.19	1.26	1.33
26	LA	2525	G	N9-C4	-8.19	1.31	1.38
2	SA	196	A	N7-C5	-8.19	1.34	1.39
2	SA	1373	G	N9-C4	-8.19	1.31	1.38
4	S2	38	A	N7-C5	-8.19	1.34	1.39
26	LA	187	G	N7-C5	-8.19	1.34	1.39
26	LA	448	U	C4-O4	-8.19	1.17	1.23
26	LA	1295	C	C5-C6	-8.19	1.27	1.34
26	LA	1455	G	O3'-P	-8.19	1.51	1.61
26	LA	2631	G	C2'-C1'	-8.19	1.44	1.53
26	LA	95	A	N3-C4	8.19	1.39	1.34
26	LA	1577	C	C4-C5	-8.19	1.36	1.43
26	LA	1665	A	N3-C4	-8.19	1.29	1.34
26	LA	2657	A	P-O5'	-8.19	1.51	1.59
18	SB	21	TYR	CE1-CZ	8.18	1.49	1.38
2	SA	35	G	N7-C5	-8.18	1.34	1.39
2	SA	641	U	C4'-C3'	8.18	1.62	1.53
2	SA	782	A	N3-C4	8.18	1.39	1.34
26	LA	652	U	C2-N3	-8.18	1.32	1.37
26	LA	1537	G	C3'-O3'	8.18	1.53	1.42
2	SA	259	G	C5-C4	8.18	1.44	1.38
2	SA	1038	C	C5'-C4'	8.18	1.61	1.51
26	LA	48	G	C8-N7	-8.18	1.26	1.30
26	LA	2696	U	C4'-O4'	-8.18	1.34	1.45
2	SA	268	U	C2'-C1'	-8.18	1.44	1.53
2	SA	714	G	C2'-C1'	-8.18	1.44	1.53
2	SA	1193	G	C5-C4	-8.18	1.32	1.38
26	LA	635	C	N1-C6	-8.18	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2082	A	N9-C8	-8.18	1.31	1.37
26	LA	2158	A	N3-C4	-8.18	1.29	1.34
26	LA	1740	G	N9-C4	8.18	1.44	1.38
2	SA	528	C	C4'-C3'	-8.18	1.44	1.53
3	S1	29	G	N1-C2	8.18	1.44	1.37
26	LA	879	G	C5-C4	8.18	1.44	1.38
26	LA	1676	A	N7-C5	-8.18	1.34	1.39
26	LA	2644	G	C2-N3	-8.18	1.26	1.32
2	SA	972	C	C2'-C1'	-8.17	1.44	1.53
26	LA	2433	A	C5-C4	-8.17	1.33	1.38
2	SA	837	U	C2-N3	8.17	1.43	1.37
26	LA	1721	G	C1'-N9	-8.17	1.35	1.46
26	LA	2708	G	N1-C2	-8.17	1.31	1.37
2	SA	509	A	C6-N1	8.17	1.41	1.35
26	LA	417	C	O3'-P	-8.17	1.51	1.61
26	LA	951	C	C4-C5	-8.17	1.36	1.43
26	LA	1129	A	C2'-C1'	-8.17	1.44	1.53
26	LA	2283	C	C4'-O4'	8.17	1.56	1.45
26	LA	2642	G	N7-C5	-8.17	1.34	1.39
26	LA	1086	A	C6-N1	-8.17	1.29	1.35
26	LA	1328	A	N9-C4	-8.17	1.32	1.37
26	LA	2014	A	C6-N1	-8.17	1.29	1.35
26	LA	2497	A	N9-C8	8.17	1.44	1.37
2	SA	239	U	P-O5'	-8.17	1.51	1.59
2	SA	753	A	C5-C4	-8.17	1.33	1.38
2	SA	1228	C	C5'-C4'	8.17	1.61	1.51
26	LA	664	G	N3-C4	-8.17	1.29	1.35
26	LA	1347	A	N7-C5	-8.17	1.34	1.39
2	SA	499	A	N9-C4	-8.16	1.32	1.37
26	LA	1859	U	C5'-C4'	8.16	1.61	1.51
26	LA	2274	A	C5-C6	-8.16	1.33	1.41
26	LA	217	A	N9-C4	-8.16	1.32	1.37
26	LA	1407	G	O3'-P	-8.16	1.51	1.61
26	LA	1948	G	C4'-O4'	-8.16	1.34	1.45
26	LA	1998	A	C3'-C2'	-8.16	1.43	1.52
2	SA	275	G	O3'-P	-8.16	1.51	1.61
2	SA	1392	G	C5-C4	-8.16	1.32	1.38
25	LB	26	C	C4'-C3'	8.16	1.62	1.53
26	LA	1670	C	N1-C6	-8.16	1.32	1.37
26	LA	402	A	C8-N7	-8.16	1.25	1.31
2	SA	63	C	C3'-O3'	8.16	1.53	1.42
2	SA	321	A	C5-C4	-8.16	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1937	A	N7-C5	-8.16	1.34	1.39
26	LA	681	G	N7-C5	-8.15	1.34	1.39
26	LA	1095	A	C3'-C2'	-8.15	1.43	1.52
26	LA	2387	U	N3-C4	-8.15	1.31	1.38
26	LA	1664	A	N3-C4	-8.15	1.29	1.34
26	LA	139	U	C2-N3	-8.15	1.32	1.37
26	LA	1681	G	C2'-C1'	-8.15	1.44	1.53
26	LA	2245	U	C2-N3	-8.15	1.32	1.37
2	SA	1493	A	C2'-C1'	-8.15	1.44	1.53
26	LA	83	A	C5-C4	8.15	1.44	1.38
25	LB	86	G	N9-C8	-8.15	1.32	1.37
26	LA	866	A	P-O5'	-8.15	1.51	1.59
26	LA	885	C	C5'-C4'	8.15	1.61	1.51
26	LA	1403	A	C5'-C4'	8.15	1.61	1.51
26	LA	1654	A	N7-C5	-8.15	1.34	1.39
2	SA	996	A	C5'-C4'	8.14	1.61	1.51
26	LA	121	G	C3'-O3'	8.14	1.53	1.42
26	LA	376	G	N1-C2	-8.14	1.31	1.37
26	LA	2665	A	N9-C8	-8.14	1.31	1.37
26	LA	250	G	N9-C4	-8.14	1.31	1.38
26	LA	266	G	O3'-P	-8.14	1.51	1.61
26	LA	1453	A	C3'-C2'	8.14	1.61	1.52
26	LA	1842	G	C3'-C2'	-8.14	1.43	1.52
2	SA	889	A	N9-C8	-8.14	1.31	1.37
2	SA	583	A	N7-C5	8.14	1.44	1.39
2	SA	770	C	C5'-C4'	8.14	1.61	1.51
2	SA	1454	G	C2'-C1'	-8.14	1.44	1.53
25	LB	104	A	N9-C4	-8.14	1.32	1.37
26	LA	1073	A	C3'-C2'	8.14	1.61	1.52
2	SA	122	G	P-O5'	8.14	1.67	1.59
2	SA	898	G	C8-N7	-8.14	1.26	1.30
2	SA	1262	C	C2-N3	-8.14	1.29	1.35
26	LA	1394	U	O3'-P	-8.14	1.51	1.61
26	LA	1998	A	N7-C5	-8.14	1.34	1.39
26	LA	2018	G	N1-C2	-8.14	1.31	1.37
26	LA	244	A	P-O5'	-8.14	1.51	1.59
26	LA	2540	C	C2-N3	-8.14	1.29	1.35
26	LA	2048	G	O3'-P	-8.14	1.51	1.61
2	SA	1363	A	N3-C4	-8.13	1.29	1.34
26	LA	386	G	C2-N2	-8.13	1.26	1.34
26	LA	1999	C	C5-C6	-8.13	1.27	1.34
2	SA	1220	G	C6-N1	-8.13	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2653	U	N3-C4	-8.13	1.31	1.38
2	SA	32	A	C6-N1	8.13	1.41	1.35
26	LA	1139	G	C5-C6	-8.13	1.34	1.42
26	LA	1298	C	C4-C5	-8.13	1.36	1.43
26	LA	2667	C	N1-C6	-8.13	1.32	1.37
26	LA	243	U	O4'-C1'	8.13	1.52	1.41
26	LA	603	A	N3-C4	-8.13	1.29	1.34
26	LA	1690	A	C6-N6	-8.13	1.27	1.33
26	LA	1803	A	N7-C5	-8.13	1.34	1.39
2	SA	349	A	C8-N7	8.13	1.37	1.31
2	SA	503	C	O3'-P	-8.13	1.51	1.61
3	S1	56	G	C4'-O4'	8.13	1.56	1.45
2	SA	1392	G	P-O5'	-8.12	1.51	1.59
26	LA	1017	G	C6-N1	-8.12	1.33	1.39
26	LA	1552	A	N7-C5	-8.13	1.34	1.39
2	SA	576	C	C4-C5	8.12	1.49	1.43
2	SA	180	U	P-O5'	-8.12	1.51	1.59
2	SA	666	G	N9-C8	8.12	1.43	1.37
2	SA	1051	C	N1-C6	8.12	1.42	1.37
26	LA	409	G	C4'-C3'	-8.12	1.44	1.53
26	LA	38	A	P-O5'	-8.12	1.51	1.59
26	LA	2619	C	C4'-O4'	-8.12	1.34	1.45
26	LA	320	A	C4'-C3'	-8.12	1.44	1.53
26	LA	471	A	C5'-C4'	8.12	1.61	1.51
26	LA	2536	G	C2-N3	8.12	1.39	1.32
26	LA	1002	G	C8-N7	8.12	1.35	1.30
26	LA	1460	U	C4'-C3'	8.12	1.62	1.53
26	LA	1919	A	C3'-O3'	8.12	1.53	1.42
2	SA	530	G	O3'-P	-8.12	1.51	1.61
2	SA	864	A	N3-C4	8.12	1.39	1.34
2	SA	197	A	C2-N3	8.11	1.40	1.33
2	SA	1076	U	P-O5'	-8.12	1.51	1.59
2	SA	1081	A	C4'-C3'	-8.12	1.44	1.53
26	LA	1356	G	N7-C5	-8.12	1.34	1.39
2	SA	457	G	N7-C5	-8.11	1.34	1.39
2	SA	1291	U	C3'-O3'	8.11	1.53	1.42
26	LA	2018	G	C2'-C1'	-8.11	1.44	1.53
2	SA	569	C	C5'-C4'	8.11	1.61	1.51
26	LA	177	G	C6-N1	-8.11	1.33	1.39
3	S1	46	C	N1-C6	8.11	1.42	1.37
26	LA	871	U	O3'-P	-8.11	1.51	1.61
2	SA	621	A	N7-C5	-8.10	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1349	A	C6-N1	8.10	1.41	1.35
26	LA	964	C	P-O5'	-8.10	1.51	1.59
2	SA	774	G	O3'-P	-8.10	1.51	1.61
2	SA	1496	C	N1-C2	-8.10	1.32	1.40
3	S1	34	U	C2'-C1'	8.10	1.62	1.53
26	LA	1009	A	N3-C4	-8.10	1.29	1.34
26	LA	1283	G	C2'-C1'	-8.10	1.44	1.53
26	LA	113	U	C5'-C4'	8.10	1.61	1.51
26	LA	2828	G	N1-C2	-8.10	1.31	1.37
2	SA	1472	U	O3'-P	-8.10	1.51	1.61
26	LA	984	A	C1'-N9	-8.10	1.35	1.46
26	LA	1277	G	N1-C2	-8.10	1.31	1.37
26	LA	1312	U	P-O5'	-8.10	1.51	1.59
26	LA	2222	C	C2-N3	-8.10	1.29	1.35
26	LA	2275	C	C2'-C1'	-8.10	1.44	1.53
26	LA	2781	A	C2-N3	-8.10	1.26	1.33
26	LA	1032	A	C2-N3	-8.10	1.26	1.33
26	LA	2445	G	N1-C2	-8.10	1.31	1.37
26	LA	1710	G	C6-N1	-8.10	1.33	1.39
2	SA	562	U	P-O5'	-8.09	1.51	1.59
2	SA	1430	A	N3-C4	-8.09	1.29	1.34
26	LA	926	G	C2-N3	8.09	1.39	1.32
26	LA	1080	A	C2'-O2'	-8.09	1.31	1.41
26	LA	1137	G	O3'-P	-8.09	1.51	1.61
26	LA	1228	G	N9-C4	8.09	1.44	1.38
26	LA	1747	U	N3-C4	-8.09	1.31	1.38
2	SA	409	U	P-O5'	-8.09	1.51	1.59
2	SA	448	A	N9-C4	-8.09	1.32	1.37
2	SA	1129	C	C4-N4	8.09	1.41	1.33
2	SA	1438	G	C6-N1	8.09	1.45	1.39
2	SA	1497	G	P-O5'	-8.09	1.51	1.59
26	LA	213	A	N3-C4	8.09	1.39	1.34
26	LA	706	A	C3'-C2'	8.09	1.61	1.52
26	LA	706	A	N3-C4	-8.09	1.29	1.34
26	LA	948	C	C4-N4	-8.09	1.26	1.33
26	LA	1356	G	C2-N2	-8.09	1.26	1.34
2	SA	145	G	N3-C4	-8.09	1.29	1.35
2	SA	838	G	N9-C4	-8.09	1.31	1.38
26	LA	1884	G	N9-C8	8.09	1.43	1.37
4	S2	3	C	N1-C6	-8.08	1.32	1.37
26	LA	395	U	C2-N3	-8.08	1.32	1.37
26	LA	1838	C	C5-C6	-8.08	1.27	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	508	U	C4-C5	-8.08	1.36	1.43
2	SA	1029	U	C2-N3	-8.08	1.32	1.37
2	SA	1465	A	N9-C8	8.08	1.44	1.37
2	SA	868	C	C4'-C3'	-8.08	1.44	1.53
26	LA	216	A	N7-C5	8.08	1.44	1.39
26	LA	391	A	C5'-C4'	8.08	1.61	1.51
26	LA	1128	G	C2'-C1'	-8.08	1.44	1.53
26	LA	1223	G	C6-N1	-8.08	1.33	1.39
26	LA	1761	C	P-O5'	-8.08	1.51	1.59
26	LA	1086	A	C8-N7	8.07	1.37	1.31
26	LA	2801	G	C2'-C1'	-8.07	1.44	1.53
2	SA	956	U	O4'-C1'	-8.07	1.31	1.41
2	SA	1108	G	C5-C4	-8.07	1.32	1.38
2	SA	1308	U	O3'-P	-8.07	1.51	1.61
26	LA	638	G	C6-N1	-8.07	1.33	1.39
26	LA	2297	A	C5-C4	-8.07	1.33	1.38
26	LA	2008	C	C2'-C1'	8.07	1.62	1.53
2	SA	258	G	O3'-P	-8.07	1.51	1.61
26	LA	1561	C	C4-N4	-8.07	1.26	1.33
26	LA	2042	A	C6-N1	8.07	1.41	1.35
26	LA	2469	A	C5-C6	-8.07	1.33	1.41
26	LA	2571	U	C4-C5	-8.07	1.36	1.43
2	SA	566	G	N3-C4	-8.07	1.29	1.35
26	LA	113	U	O4'-C1'	8.07	1.52	1.41
26	LA	2883	A	C6-N1	-8.07	1.29	1.35
26	LA	1193	G	C6-N1	-8.07	1.33	1.39
26	LA	1886	U	C4-C5	-8.07	1.36	1.43
26	LA	320	A	C5-C4	-8.07	1.33	1.38
26	LA	1447	C	C4-C5	-8.07	1.36	1.43
2	SA	155	A	C8-N7	-8.06	1.25	1.31
11	SK	38	GLY	N-CA	8.06	1.58	1.46
26	LA	425	G	N1-C2	8.06	1.44	1.37
25	LB	64	G	N7-C5	8.06	1.44	1.39
2	SA	1111	A	C8-N7	8.06	1.37	1.31
26	LA	966	G	C6-N1	-8.06	1.33	1.39
26	LA	1589	U	O3'-P	-8.06	1.51	1.61
26	LA	2281	A	N9-C8	-8.06	1.31	1.37
26	LA	158	U	C2'-C1'	-8.06	1.44	1.53
26	LA	1877	A	N9-C8	-8.06	1.31	1.37
26	LA	2204	G	C5'-C4'	8.06	1.61	1.51
2	SA	345	C	C3'-C2'	-8.05	1.43	1.52
26	LA	1056	G	N1-C2	8.06	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1935	G	C2-N2	-8.06	1.26	1.34
2	SA	981	U	C4'-C3'	-8.05	1.44	1.53
2	SA	1000	A	C5'-C4'	8.05	1.61	1.51
26	LA	1216	G	C4'-C3'	-8.05	1.44	1.53
2	SA	244	U	N1-C2	-8.05	1.31	1.38
2	SA	1351	U	C2-N3	-8.05	1.32	1.37
26	LA	1810	A	O4'-C1'	-8.05	1.31	1.41
2	SA	702	A	C8-N7	-8.05	1.25	1.31
2	SA	6	G	C3'-O3'	8.05	1.53	1.42
2	SA	1032	G	C3'-C2'	8.05	1.61	1.52
26	LA	4	U	C4-O4	-8.05	1.17	1.23
26	LA	481	G	C2'-C1'	-8.05	1.44	1.53
26	LA	530	G	C5-C4	-8.05	1.32	1.38
26	LA	737	C	C2'-C1'	-8.05	1.44	1.53
26	LA	800	A	N3-C4	-8.05	1.30	1.34
2	SA	344	A	C3'-C2'	8.05	1.61	1.52
2	SA	495	A	N7-C5	8.05	1.44	1.39
2	SA	316	C	C2-N3	8.04	1.42	1.35
26	LA	494	G	C2'-C1'	-8.04	1.44	1.53
26	LA	999	U	C2-N3	-8.05	1.32	1.37
26	LA	1481	U	C4-C5	-8.04	1.36	1.43
26	LA	1888	G	C6-N1	-8.04	1.33	1.39
26	LA	2554	U	C4-C5	-8.04	1.36	1.43
4	S2	5	G	N3-C4	-8.04	1.29	1.35
4	S2	64	G	C6-N1	8.04	1.45	1.39
25	LB	96	G	C8-N7	8.04	1.35	1.30
26	LA	1962	C	C2-N3	-8.04	1.29	1.35
2	SA	540	G	C2-N2	-8.04	1.26	1.34
26	LA	618	G	O3'-P	-8.04	1.51	1.61
26	LA	918	A	N9-C4	-8.04	1.33	1.37
26	LA	2214	C	N1-C6	-8.04	1.32	1.37
26	LA	2314	A	C3'-O3'	8.04	1.53	1.42
26	LA	1790	C	C2-N3	-8.04	1.29	1.35
2	SA	552	U	C2-N3	-8.04	1.32	1.37
25	LB	2	G	C5-C4	-8.04	1.32	1.38
26	LA	588	U	C4-O4	-8.04	1.17	1.23
26	LA	2289	G	N7-C5	-8.04	1.34	1.39
2	SA	564	C	C4-N4	-8.03	1.26	1.33
2	SA	819	A	N3-C4	8.03	1.39	1.34
25	LB	52	A	C4'-O4'	8.03	1.55	1.45
26	LA	242	G	C2'-C1'	-8.03	1.44	1.53
26	LA	1922	G	N3-C4	8.03	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	948	C	N1-C6	-8.03	1.32	1.37
26	LA	621	A	C8-N7	-8.03	1.25	1.31
2	SA	357	G	C8-N7	-8.03	1.26	1.30
2	SA	616	G	N3-C4	-8.03	1.29	1.35
2	SA	1418	A	N9-C4	8.03	1.42	1.37
26	LA	1274	A	C5-C6	-8.03	1.33	1.41
26	LA	1801	A	N3-C4	8.03	1.39	1.34
2	SA	411	A	N9-C8	-8.03	1.31	1.37
2	SA	446	G	N3-C4	-8.03	1.29	1.35
26	LA	1331	G	C5-C4	-8.03	1.32	1.38
26	LA	1421	G	C3'-C2'	-8.03	1.44	1.52
26	LA	2255	G	N1-C2	-8.03	1.31	1.37
2	SA	1316	G	C2-N2	-8.02	1.26	1.34
2	SA	1451	U	N1-C6	8.02	1.45	1.38
2	SA	1523	G	C4'-C3'	-8.02	1.44	1.53
26	LA	1031	G	N9-C4	-8.02	1.31	1.38
2	SA	513	C	O3'-P	-8.02	1.51	1.61
2	SA	1463	U	C5-C6	-8.02	1.26	1.34
26	LA	1619	G	N9-C4	-8.02	1.31	1.38
26	LA	2697	G	C2-N2	-8.02	1.26	1.34
26	LA	2110	G	N9-C4	-8.02	1.31	1.38
26	LA	1951	U	P-O5'	-8.02	1.51	1.59
26	LA	2020	A	C1'-N9	-8.02	1.35	1.46
26	LA	1983	G	C2-N2	-8.02	1.26	1.34
2	SA	1111	A	N9-C4	-8.02	1.33	1.37
2	SA	1464	U	C4'-O4'	8.02	1.55	1.45
26	LA	1563	U	C2'-C1'	-8.02	1.44	1.53
2	SA	546	A	C5'-C4'	8.01	1.60	1.51
2	SA	1412	C	C4'-C3'	8.01	1.61	1.53
26	LA	1371	G	C5-C4	-8.01	1.32	1.38
25	LB	45	A	C8-N7	8.01	1.37	1.31
26	LA	447	A	N3-C4	-8.01	1.30	1.34
26	LA	1506	U	C5'-C4'	8.01	1.60	1.51
26	LA	2877	G	C6-N1	-8.01	1.33	1.39
2	SA	363	A	O3'-P	-8.01	1.51	1.61
2	SA	943	U	N3-C4	-8.01	1.31	1.38
2	SA	994	A	C5'-C4'	8.01	1.60	1.51
2	SA	1371	G	O3'-P	-8.01	1.51	1.61
25	LB	52	A	P-O5'	-8.01	1.51	1.59
26	LA	1744	A	N3-C4	-8.01	1.30	1.34
26	LA	2412	A	N3-C4	-8.01	1.30	1.34
2	SA	711	G	N9-C8	-8.01	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1266	G	C5'-C4'	8.01	1.60	1.51
26	LA	1766	G	C2-N2	-8.01	1.26	1.34
2	SA	103	U	N1-C2	8.01	1.45	1.38
2	SA	783	C	N1-C6	8.01	1.42	1.37
26	LA	894	U	C2-N3	-8.01	1.32	1.37
26	LA	1424	G	C4'-C3'	-8.01	1.44	1.53
26	LA	2272	U	N1-C2	-8.01	1.31	1.38
26	LA	2643	G	O3'-P	-8.01	1.51	1.61
2	SA	322	C	N1-C6	-8.00	1.32	1.37
2	SA	830	G	C2'-C1'	-8.00	1.44	1.53
2	SA	1516	G	C4'-C3'	-8.00	1.44	1.53
26	LA	841	G	C2'-C1'	-8.00	1.44	1.53
26	LA	2220	U	C4-O4	-8.00	1.17	1.23
26	LA	1291	C	N1-C6	-8.00	1.32	1.37
26	LA	1303	G	C6-N1	-8.00	1.33	1.39
2	SA	1113	C	P-O5'	-8.00	1.51	1.59
26	LA	55	G	N9-C4	8.00	1.44	1.38
26	LA	858	G	P-O5'	-8.00	1.51	1.59
26	LA	2015	A	C2'-C1'	-8.00	1.44	1.53
26	LA	2839	G	C8-N7	8.00	1.35	1.30
2	SA	404	G	O3'-P	-8.00	1.51	1.61
2	SA	1085	U	C4-C5	-8.00	1.36	1.43
26	LA	2610	C	O3'-P	-8.00	1.51	1.61
2	SA	88	U	N3-C4	-8.00	1.31	1.38
3	S1	17	U	O3'-P	-7.99	1.51	1.61
26	LA	206	U	P-O5'	-7.99	1.51	1.59
26	LA	1903	G	C2-N3	-7.99	1.26	1.32
2	SA	1164	G	C6-N1	-7.99	1.33	1.39
26	LA	1665	A	C4'-O4'	7.99	1.55	1.45
26	LA	984	A	C2-N3	-7.99	1.26	1.33
26	LA	1036	G	N7-C5	-7.99	1.34	1.39
26	LA	954	G	C5'-C4'	7.99	1.60	1.51
26	LA	984	A	C5-C6	-7.99	1.33	1.41
26	LA	2631	G	C2-N3	7.99	1.39	1.32
25	LB	116	G	N3-C4	-7.99	1.29	1.35
26	LA	1342	A	C4'-C3'	-7.99	1.44	1.53
26	LA	1477	A	C5-C4	-7.99	1.33	1.38
2	SA	1160	G	N7-C5	-7.99	1.34	1.39
26	LA	2670	A	P-O5'	7.99	1.67	1.59
26	LA	2892	G	C2-N3	7.99	1.39	1.32
26	LA	111	A	C3'-C2'	7.98	1.61	1.52
26	LA	701	G	C2'-C1'	-7.98	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1457	G	O3'-P	-7.98	1.51	1.61
26	LA	818	G	C2-N2	-7.98	1.26	1.34
26	LA	1455	G	N3-C4	-7.98	1.29	1.35
2	SA	819	A	C2'-C1'	-7.98	1.44	1.53
2	SA	1323	G	C6-N1	-7.98	1.33	1.39
26	LA	454	A	C6-N6	-7.98	1.27	1.33
26	LA	1035	U	C3'-O3'	7.98	1.53	1.42
26	LA	1767	G	C5-C4	-7.98	1.32	1.38
26	LA	1891	G	C5-C6	-7.98	1.34	1.42
26	LA	2831	G	N7-C5	-7.98	1.34	1.39
26	LA	457	A	C3'-C2'	-7.98	1.44	1.52
26	LA	1117	C	N1-C6	7.98	1.42	1.37
26	LA	2542	A	P-O5'	-7.98	1.51	1.59
26	LA	908	C	C4-N4	-7.98	1.26	1.33
26	LA	2367	G	N9-C8	-7.98	1.32	1.37
26	LA	2558	C	P-O5'	-7.98	1.51	1.59
26	LA	1179	G	C4'-C3'	-7.98	1.44	1.53
26	LA	1621	U	N1-C6	7.98	1.45	1.38
2	SA	387	U	C4-C5	-7.97	1.36	1.43
2	SA	446	G	N7-C5	-7.97	1.34	1.39
2	SA	865	A	C5-C4	-7.97	1.33	1.38
2	SA	1091	U	C4'-C3'	7.97	1.61	1.53
26	LA	717	C	N3-C4	7.97	1.39	1.33
26	LA	822	G	C5-C4	-7.97	1.32	1.38
26	LA	920	A	N7-C5	-7.97	1.34	1.39
26	LA	1382	G	N9-C8	7.97	1.43	1.37
26	LA	2123	G	N7-C5	7.97	1.44	1.39
26	LA	1848	A	C6-N1	7.97	1.41	1.35
2	SA	790	A	C5-C6	-7.97	1.33	1.41
2	SA	693	G	C5'-C4'	7.97	1.60	1.51
26	LA	1056	G	C3'-C2'	-7.97	1.44	1.52
26	LA	2691	C	C4-C5	-7.97	1.36	1.43
2	SA	706	A	N9-C4	-7.97	1.33	1.37
2	SA	735	C	C4'-C3'	-7.97	1.44	1.53
2	SA	777	A	C5-C4	-7.97	1.33	1.38
26	LA	1015	U	N1-C6	-7.97	1.30	1.38
26	LA	1479	G	C5-C4	-7.97	1.32	1.38
26	LA	1135	C	N3-C4	7.96	1.39	1.33
26	LA	1963	U	O3'-P	-7.96	1.51	1.61
26	LA	2198	A	N9-C8	-7.96	1.31	1.37
26	LA	514	A	C1'-N9	-7.96	1.35	1.46
2	SA	1357	A	C6-N1	-7.96	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	304	U	C4'-C3'	7.96	1.61	1.53
2	SA	527	G	N9-C4	-7.96	1.31	1.38
26	LA	107	G	C2-N3	7.96	1.39	1.32
2	SA	545	C	P-O5'	-7.96	1.51	1.59
26	LA	812	C	P-O5'	-7.96	1.51	1.59
26	LA	1002	G	C5-C4	-7.96	1.32	1.38
2	SA	1417	G	N3-C4	-7.95	1.29	1.35
26	LA	281	C	C4-C5	-7.95	1.36	1.43
26	LA	295	G	N1-C2	-7.95	1.31	1.37
2	SA	599	C	C4-N4	-7.95	1.26	1.33
26	LA	91	A	C6-N6	7.95	1.40	1.33
26	LA	845	A	C2'-C1'	-7.95	1.44	1.53
26	LA	2278	A	C5-C4	-7.95	1.33	1.38
26	LA	2314	A	O3'-P	-7.95	1.51	1.61
2	SA	104	G	N7-C5	-7.95	1.34	1.39
2	SA	821	G	N7-C5	-7.95	1.34	1.39
26	LA	454	A	C2'-C1'	-7.95	1.44	1.53
26	LA	780	G	N9-C8	-7.95	1.32	1.37
26	LA	831	G	O3'-P	-7.95	1.51	1.61
26	LA	849	A	N9-C4	-7.95	1.33	1.37
26	LA	1418	G	N3-C4	-7.95	1.29	1.35
26	LA	1597	A	N3-C4	7.95	1.39	1.34
26	LA	850	U	O4'-C1'	-7.95	1.31	1.41
26	LA	1334	G	C5-C4	-7.95	1.32	1.38
26	LA	1697	G	C8-N7	7.95	1.35	1.30
26	LA	2121	G	N1-C2	-7.95	1.31	1.37
26	LA	2772	C	O3'-P	-7.95	1.51	1.61
26	LA	2552	U	C5'-C4'	7.95	1.60	1.51
2	SA	780	A	C5-C6	-7.95	1.33	1.41
2	SA	1260	G	C8-N7	-7.95	1.26	1.30
26	LA	1124	G	N7-C5	-7.95	1.34	1.39
2	SA	1419	G	C2'-C1'	-7.94	1.44	1.53
26	LA	2319	G	N9-C8	-7.94	1.32	1.37
26	LA	2426	A	N9-C4	-7.94	1.33	1.37
2	SA	456	A	C5'-C4'	7.94	1.60	1.51
4	S2	71	G	C3'-O3'	7.94	1.53	1.42
25	LB	45	A	N9-C4	-7.94	1.33	1.37
26	LA	416	U	C2-N3	-7.94	1.32	1.37
26	LA	1323	C	C4-N4	-7.94	1.26	1.33
2	SA	112	G	N9-C4	-7.94	1.31	1.38
2	SA	687	A	O3'-P	-7.94	1.51	1.61
26	LA	969	G	C5'-C4'	7.94	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2610	C	C2'-C1'	-7.94	1.44	1.53
26	LA	943	A	O3'-P	-7.94	1.51	1.61
26	LA	1048	A	N9-C8	-7.94	1.31	1.37
26	LA	1248	G	N9-C4	-7.94	1.31	1.38
26	LA	1293	C	C5-C6	-7.94	1.27	1.34
25	LB	83	G	O3'-P	-7.94	1.51	1.61
26	LA	465	G	N3-C4	-7.94	1.29	1.35
26	LA	726	G	N9-C8	-7.94	1.32	1.37
25	LB	42	C	N1-C6	7.93	1.42	1.37
26	LA	2253	G	N7-C5	7.93	1.44	1.39
26	LA	2872	A	N9-C4	-7.93	1.33	1.37
2	SA	1181	G	O3'-P	-7.93	1.51	1.61
26	LA	365	U	C5'-C4'	7.93	1.60	1.51
26	LA	697	G	C2'-C1'	-7.93	1.44	1.53
26	LA	2165	C	P-O5'	-7.93	1.51	1.59
25	LB	46	A	N9-C4	-7.93	1.33	1.37
26	LA	2098	U	O3'-P	-7.93	1.51	1.61
26	LA	2862	G	C5-C4	-7.93	1.32	1.38
2	SA	306	A	O3'-P	-7.93	1.51	1.61
26	LA	1147	A	C8-N7	-7.93	1.25	1.31
26	LA	1299	G	C8-N7	-7.93	1.26	1.30
26	LA	1771	C	C2'-C1'	-7.93	1.44	1.53
26	LA	2036	C	N1-C6	-7.93	1.32	1.37
26	LA	1274	A	O3'-P	-7.93	1.51	1.61
26	LA	2410	G	C8-N7	7.93	1.35	1.30
26	LA	2	G	N9-C4	7.93	1.44	1.38
26	LA	1324	G	N1-C2	-7.93	1.31	1.37
26	LA	1952	A	N9-C4	-7.93	1.33	1.37
2	SA	839	C	C5'-C4'	-7.92	1.41	1.51
2	SA	504	C	P-O5'	7.92	1.67	1.59
2	SA	617	G	N3-C4	-7.92	1.29	1.35
2	SA	1319	A	P-O5'	-7.92	1.51	1.59
26	LA	1084	A	P-O5'	-7.92	1.51	1.59
2	SA	412	A	C8-N7	-7.92	1.26	1.31
2	SA	907	A	O3'-P	-7.92	1.51	1.61
2	SA	1094	G	N9-C8	-7.92	1.32	1.37
26	LA	773	U	P-O5'	-7.92	1.51	1.59
26	LA	774	G	C8-N7	-7.92	1.26	1.30
26	LA	1224	U	O4'-C1'	-7.92	1.31	1.41
26	LA	1251	C	C3'-C2'	-7.92	1.44	1.52
26	LA	2612	C	C4-C5	-7.92	1.36	1.43
26	LA	593	U	C2-N3	-7.92	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1952	A	N9-C8	-7.92	1.31	1.37
2	SA	1064	G	N9-C4	-7.92	1.31	1.38
3	S1	45	G	C3'-C2'	-7.92	1.44	1.52
2	SA	1287	A	C5-C4	-7.92	1.33	1.38
2	SA	1349	A	P-O5'	-7.92	1.51	1.59
2	SA	1508	A	C5'-C4'	7.92	1.60	1.51
26	LA	2355	G	C5-C6	-7.92	1.34	1.42
2	SA	397	A	C5-C4	-7.92	1.33	1.38
26	LA	1182	G	N3-C4	-7.92	1.29	1.35
2	SA	1331	G	N7-C5	-7.91	1.34	1.39
26	LA	453	A	C5-C4	-7.91	1.33	1.38
26	LA	1661	G	C5'-C4'	7.91	1.60	1.51
26	LA	1856	U	C4-C5	-7.91	1.36	1.43
26	LA	2455	G	C3'-C2'	-7.91	1.44	1.52
26	LA	2597	G	N7-C5	-7.91	1.34	1.39
26	LA	2638	G	C5-C4	-7.91	1.32	1.38
2	SA	487	A	N9-C4	-7.91	1.33	1.37
26	LA	1134	A	P-O5'	-7.91	1.51	1.59
26	LA	544	C	C3'-C2'	7.91	1.61	1.52
26	LA	972	A	P-O5'	-7.91	1.51	1.59
26	LA	1547	C	C3'-O3'	7.91	1.53	1.42
26	LA	2061	G	C5-C4	-7.91	1.32	1.38
26	LA	2376	A	N9-C4	-7.91	1.33	1.37
2	SA	164	G	C2-N3	7.91	1.39	1.32
2	SA	1068	G	C2-N2	-7.91	1.26	1.34
26	LA	251	A	N7-C5	-7.91	1.34	1.39
2	SA	484	G	P-O5'	-7.90	1.51	1.59
26	LA	1160	G	C5-C4	7.90	1.43	1.38
26	LA	1996	C	N3-C4	-7.90	1.28	1.33
26	LA	1494	A	C8-N7	-7.90	1.26	1.31
26	LA	2584	U	O3'-P	-7.90	1.51	1.61
26	LA	970	U	C2'-C1'	-7.90	1.44	1.53
26	LA	2525	G	C8-N7	-7.90	1.26	1.30
26	LA	2624	G	N9-C8	7.90	1.43	1.37
2	SA	577	G	C2-N2	-7.90	1.26	1.34
26	LA	450	G	N7-C5	-7.90	1.34	1.39
26	LA	2638	G	C6-N1	-7.90	1.34	1.39
2	SA	1227	A	C3'-C2'	-7.90	1.44	1.52
2	SA	1263	C	C5'-C4'	7.90	1.60	1.51
26	LA	1616	A	C5-C4	-7.90	1.33	1.38
26	LA	2201	G	N9-C8	-7.90	1.32	1.37
2	SA	192	A	N7-C5	-7.90	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	223	A	N3-C4	-7.90	1.30	1.34
26	LA	397	U	C4'-C3'	-7.90	1.44	1.53
26	LA	614	A	C4'-C3'	7.89	1.61	1.53
26	LA	1121	C	P-O5'	7.89	1.67	1.59
26	LA	1476	U	N1-C6	-7.89	1.30	1.38
26	LA	687	C	C4'-O4'	7.89	1.55	1.45
26	LA	690	G	N3-C4	-7.89	1.29	1.35
26	LA	721	A	C5-C4	-7.89	1.33	1.38
26	LA	2732	G	P-O5'	-7.89	1.51	1.59
2	SA	356	A	C5-C4	-7.89	1.33	1.38
2	SA	1243	C	C2-N3	-7.89	1.29	1.35
26	LA	2002	G	C2'-C1'	-7.89	1.44	1.53
26	LA	2300	C	P-O5'	-7.89	1.51	1.59
26	LA	307	G	N9-C8	-7.89	1.32	1.37
26	LA	2160	C	N1-C6	-7.89	1.32	1.37
26	LA	2256	G	N1-C2	-7.89	1.31	1.37
26	LA	753	A	C5'-C4'	7.89	1.60	1.51
2	SA	70	U	C2'-C1'	-7.89	1.44	1.53
2	SA	1300	G	N9-C8	-7.89	1.32	1.37
26	LA	21	A	C4'-C3'	-7.89	1.44	1.53
26	LA	1143	A	N1-C2	-7.89	1.27	1.34
2	SA	922	G	C6-N1	-7.88	1.34	1.39
3	S1	44	U	O4'-C1'	7.88	1.51	1.41
2	SA	690	G	O4'-C1'	-7.88	1.31	1.41
4	S2	36	A	C5'-C4'	7.88	1.60	1.51
26	LA	95	A	C6-N1	-7.88	1.30	1.35
26	LA	1301	A	N7-C5	-7.88	1.34	1.39
26	LA	1813	G	O3'-P	-7.88	1.51	1.61
26	LA	1210	G	O3'-P	-7.88	1.51	1.61
26	LA	1909	C	O3'-P	-7.88	1.51	1.61
26	LA	2272	U	P-O5'	-7.88	1.51	1.59
26	LA	2796	U	N1-C6	-7.88	1.30	1.38
2	SA	195	A	N7-C5	-7.88	1.34	1.39
2	SA	859	G	N9-C8	-7.88	1.32	1.37
26	LA	63	A	N3-C4	7.88	1.39	1.34
26	LA	969	G	C5-C4	-7.88	1.32	1.38
26	LA	1064	C	N1-C2	7.88	1.48	1.40
26	LA	1388	G	C2'-C1'	-7.88	1.44	1.53
26	LA	802	A	C5-C4	-7.88	1.33	1.38
26	LA	1084	A	N9-C4	-7.88	1.33	1.37
26	LA	2199	A	N9-C4	-7.88	1.33	1.37
26	LA	83	A	P-O5'	-7.88	1.51	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	152	A	C5-C6	-7.88	1.33	1.41
26	LA	541	A	C6-N6	7.88	1.40	1.33
26	LA	2638	G	C8-N7	-7.88	1.26	1.30
26	LA	553	G	C5-C6	-7.87	1.34	1.42
26	LA	783	A	C5-C6	-7.87	1.33	1.41
2	SA	271	C	C4-C5	-7.87	1.36	1.43
2	SA	1002	G	C5'-C4'	7.87	1.60	1.51
26	LA	434	U	C2-N3	-7.87	1.32	1.37
26	LA	1124	G	C5'-C4'	7.87	1.60	1.51
26	LA	1292	G	C5-C4	-7.87	1.32	1.38
26	LA	1617	C	C2'-C1'	-7.87	1.44	1.53
3	S1	27	A	N7-C5	7.87	1.44	1.39
26	LA	293	U	C3'-C2'	7.87	1.61	1.52
26	LA	1606	C	C1'-N1	-7.87	1.35	1.46
2	SA	552	U	O4'-C1'	-7.87	1.31	1.41
2	SA	1050	G	N1-C2	-7.87	1.31	1.37
26	LA	1454	C	N1-C6	7.87	1.41	1.37
26	LA	2010	G	C8-N7	7.87	1.35	1.30
26	LA	2186	G	C6-N1	7.87	1.45	1.39
26	LA	1127	A	N9-C4	-7.87	1.33	1.37
26	LA	1256	G	C5-C4	-7.87	1.32	1.38
2	SA	800	G	C2-N2	-7.87	1.26	1.34
2	SA	951	G	C2'-C1'	-7.87	1.44	1.53
2	SA	1132	C	C3'-C2'	7.87	1.61	1.52
2	SA	1226	C	C3'-O3'	7.87	1.53	1.42
26	LA	260	G	C5-C4	-7.87	1.32	1.38
26	LA	545	U	N3-C4	-7.87	1.31	1.38
26	LA	1696	G	N7-C5	-7.87	1.34	1.39
26	LA	1850	G	N1-C2	-7.87	1.31	1.37
2	SA	59	A	N9-C4	7.86	1.42	1.37
26	LA	283	G	C6-N1	7.86	1.45	1.39
26	LA	730	A	C8-N7	7.86	1.37	1.31
26	LA	2428	G	C2'-C1'	-7.86	1.44	1.53
2	SA	46	G	N7-C5	-7.86	1.34	1.39
2	SA	255	G	C2'-C1'	-7.86	1.44	1.53
2	SA	908	A	C4'-C3'	-7.86	1.44	1.53
25	LB	31	C	C3'-O3'	7.86	1.53	1.42
26	LA	1841	U	C2-N3	-7.86	1.32	1.37
2	SA	595	A	C8-N7	-7.86	1.26	1.31
2	SA	602	A	C3'-O3'	7.86	1.53	1.42
2	SA	221	C	C4-N4	-7.86	1.26	1.33
26	LA	971	G	N7-C5	-7.86	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1945	G	N7-C5	-7.86	1.34	1.39
26	LA	2369	A	N7-C5	-7.86	1.34	1.39
26	LA	653	U	C5'-C4'	7.86	1.60	1.51
26	LA	1659	G	C4'-C3'	7.86	1.61	1.53
26	LA	2603	G	N7-C5	-7.86	1.34	1.39
26	LA	282	A	N3-C4	-7.85	1.30	1.34
26	LA	500	G	C5'-C4'	7.85	1.60	1.51
26	LA	139	U	C4'-C3'	7.85	1.61	1.53
26	LA	197	A	N9-C4	-7.85	1.33	1.37
26	LA	717	C	P-O5'	7.85	1.67	1.59
2	SA	787	A	C6-N6	-7.85	1.27	1.33
26	LA	1565	C	O3'-P	-7.85	1.51	1.61
2	SA	1421	G	C3'-O3'	7.85	1.53	1.42
26	LA	2115	G	N9-C4	-7.85	1.31	1.38
2	SA	727	G	C8-N7	7.85	1.35	1.30
2	SA	785	G	C6-N1	-7.85	1.34	1.39
25	LB	96	G	N9-C4	7.85	1.44	1.38
26	LA	476	G	O3'-P	-7.85	1.51	1.61
26	LA	1121	C	C2-N3	-7.85	1.29	1.35
26	LA	1683	U	N1-C2	-7.85	1.31	1.38
26	LA	2416	C	O3'-P	-7.85	1.51	1.61
26	LA	2486	C	C4-N4	-7.85	1.26	1.33
2	SA	1487	G	C6-N1	-7.85	1.34	1.39
2	SA	582	C	C4-N4	-7.84	1.26	1.33
2	SA	768	A	N3-C4	-7.84	1.30	1.34
2	SA	1428	A	N9-C4	-7.84	1.33	1.37
4	S2	24	C	C5'-C4'	-7.84	1.42	1.51
25	LB	56	G	C6-N1	-7.84	1.34	1.39
26	LA	956	G	N3-C4	-7.84	1.29	1.35
26	LA	1558	C	N1-C6	-7.84	1.32	1.37
26	LA	1757	A	C5-C4	-7.84	1.33	1.38
26	LA	2329	U	N3-C4	-7.84	1.31	1.38
26	LA	2471	A	N9-C4	-7.84	1.33	1.37
2	SA	996	A	C3'-C2'	-7.84	1.44	1.52
26	LA	2827	C	P-O5'	-7.84	1.51	1.59
2	SA	195	A	C5-C4	-7.84	1.33	1.38
2	SA	359	G	C5-C4	-7.84	1.32	1.38
26	LA	212	G	C2-N3	-7.84	1.26	1.32
26	LA	686	U	N1-C2	-7.84	1.31	1.38
26	LA	1957	C	O3'-P	-7.84	1.51	1.61
26	LA	2083	G	C8-N7	-7.84	1.26	1.30
26	LA	2357	G	P-O5'	-7.84	1.51	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1435	G	N7-C5	-7.84	1.34	1.39
26	LA	704	G	O3'-P	-7.84	1.51	1.61
26	LA	1365	A	C6-N1	-7.84	1.30	1.35
26	LA	1530	G	C8-N7	7.84	1.35	1.30
26	LA	1648	U	C2-N3	-7.84	1.32	1.37
26	LA	1912	A	C8-N7	-7.84	1.26	1.31
2	SA	559	A	N9-C4	7.84	1.42	1.37
2	SA	911	U	C2-N3	7.84	1.43	1.37
26	LA	752	A	C5-C4	-7.84	1.33	1.38
26	LA	1801	A	C1'-N9	-7.84	1.35	1.46
26	LA	2827	C	N1-C6	7.84	1.41	1.37
26	LA	139	U	C5'-C4'	7.84	1.60	1.51
26	LA	1720	U	P-O5'	-7.84	1.51	1.59
26	LA	2044	C	C3'-C2'	-7.84	1.44	1.52
26	LA	2184	A	N7-C5	-7.84	1.34	1.39
26	LA	267	C	C2'-C1'	7.83	1.61	1.53
2	SA	607	A	C6-N6	-7.83	1.27	1.33
2	SA	942	G	C2-N3	-7.83	1.26	1.32
2	SA	1530	G	N1-C2	-7.83	1.31	1.37
26	LA	1614	A	C6-N6	7.83	1.40	1.33
2	SA	1033	G	C8-N7	7.83	1.35	1.30
2	SA	901	A	C8-N7	7.83	1.37	1.31
26	LA	1334	G	C6-N1	-7.83	1.34	1.39
26	LA	2065	C	N1-C6	-7.83	1.32	1.37
26	LA	2572	A	O4'-C1'	-7.83	1.31	1.41
2	SA	467	U	N1-C6	7.83	1.45	1.38
26	LA	2494	G	C2-N2	-7.83	1.26	1.34
26	LA	2709	G	C8-N7	-7.83	1.26	1.30
26	LA	730	A	N7-C5	-7.83	1.34	1.39
26	LA	1596	A	C3'-C2'	-7.83	1.44	1.52
2	SA	262	A	C1'-N9	-7.82	1.35	1.46
26	LA	2555	U	N1-C6	-7.82	1.30	1.38
2	SA	365	U	N1-C6	-7.82	1.30	1.38
26	LA	407	G	N9-C4	-7.82	1.31	1.38
26	LA	735	A	C6-N1	-7.82	1.30	1.35
26	LA	881	G	C6-N1	-7.82	1.34	1.39
26	LA	940	G	C5-C4	-7.82	1.32	1.38
26	LA	1159	U	C2'-C1'	-7.82	1.44	1.53
26	LA	2087	G	N1-C2	-7.82	1.31	1.37
2	SA	714	G	C5-C4	-7.82	1.32	1.38
2	SA	920	U	C4'-C3'	-7.82	1.44	1.53
26	LA	468	G	C5-C4	-7.82	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	523	C	C4-N4	-7.82	1.26	1.33
26	LA	830	G	C8-N7	7.82	1.35	1.30
26	LA	1424	G	C2-N2	-7.82	1.26	1.34
26	LA	2246	G	C4'-O4'	-7.82	1.35	1.45
26	LA	2334	U	C4-C5	-7.82	1.36	1.43
4	S2	20	G	C5-C4	-7.82	1.32	1.38
26	LA	187	G	N9-C4	-7.82	1.31	1.38
26	LA	368	A	C6-N1	-7.82	1.30	1.35
26	LA	996	A	C2'-C1'	-7.82	1.44	1.53
26	LA	1635	A	C6-N1	-7.82	1.30	1.35
26	LA	2337	G	O4'-C1'	-7.82	1.31	1.41
2	SA	27	G	P-O5'	-7.81	1.51	1.59
2	SA	812	G	N7-C5	-7.81	1.34	1.39
26	LA	295	G	C2'-C1'	-7.81	1.44	1.53
26	LA	844	A	N3-C4	-7.81	1.30	1.34
26	LA	1246	A	N9-C4	-7.81	1.33	1.37
26	LA	2879	A	C6-N6	7.81	1.40	1.33
2	SA	1289	A	C2'-C1'	-7.81	1.44	1.53
26	LA	1136	G	C2-N2	-7.81	1.26	1.34
26	LA	2830	C	O3'-P	-7.81	1.51	1.61
26	LA	534	U	N1-C2	-7.81	1.31	1.38
26	LA	1933	G	C8-N7	-7.81	1.26	1.30
26	LA	2441	U	C2-N3	-7.81	1.32	1.37
2	SA	399	G	O3'-P	-7.81	1.51	1.61
26	LA	2851	A	N9-C8	7.81	1.44	1.37
2	SA	890	G	C2'-C1'	-7.80	1.44	1.53
26	LA	199	A	C2'-C1'	-7.80	1.44	1.53
26	LA	1827	U	N3-C4	-7.80	1.31	1.38
26	LA	2041	U	O3'-P	-7.80	1.51	1.61
26	LA	2804	U	C2-N3	-7.80	1.32	1.37
26	LA	2335	A	P-O5'	-7.80	1.51	1.59
26	LA	2488	G	P-O5'	-7.80	1.51	1.59
2	SA	430	A	N3-C4	-7.80	1.30	1.34
4	S2	55	U	C5'-C4'	7.80	1.60	1.51
26	LA	2046	G	C2-N3	-7.80	1.26	1.32
26	LA	2531	A	C1'-N9	-7.80	1.35	1.46
26	LA	2738	A	C3'-C2'	-7.80	1.44	1.52
2	SA	3	A	N9-C4	7.80	1.42	1.37
26	LA	1012	U	C4'-O4'	-7.80	1.35	1.45
26	LA	1937	A	C6-N1	-7.80	1.30	1.35
26	LA	2386	A	N7-C5	-7.80	1.34	1.39
26	LA	691	C	O3'-P	-7.80	1.51	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	150	U	C4-O4	-7.80	1.17	1.23
26	LA	305	C	C3'-C2'	-7.80	1.44	1.52
26	LA	1632	A	C3'-C2'	-7.80	1.44	1.52
26	LA	1983	G	N9-C8	-7.80	1.32	1.37
26	LA	2590	A	P-O5'	-7.80	1.51	1.59
26	LA	144	A	N3-C4	-7.79	1.30	1.34
26	LA	668	A	N9-C4	-7.79	1.33	1.37
26	LA	1407	G	N9-C4	-7.79	1.31	1.38
2	SA	774	G	N3-C4	-7.79	1.29	1.35
2	SA	1418	A	P-O5'	-7.79	1.51	1.59
26	LA	462	C	P-O5'	-7.79	1.51	1.59
26	LA	1122	G	C2-N2	-7.79	1.26	1.34
26	LA	1810	A	N9-C4	-7.79	1.33	1.37
26	LA	2176	A	C6-N1	7.79	1.41	1.35
2	SA	507	C	P-O5'	-7.79	1.51	1.59
26	LA	1246	A	C5-C4	-7.79	1.33	1.38
26	LA	2379	G	N1-C2	-7.79	1.31	1.37
26	LA	2406	A	N9-C4	7.79	1.42	1.37
2	SA	80	A	N3-C4	7.79	1.39	1.34
2	SA	89	U	P-O5'	-7.79	1.51	1.59
2	SA	1204	A	P-O5'	-7.79	1.51	1.59
26	LA	2056	G	P-O5'	7.79	1.67	1.59
26	LA	2141	G	C8-N7	7.79	1.35	1.30
2	SA	49	U	O4'-C1'	-7.79	1.31	1.41
2	SA	629	A	C2'-C1'	-7.79	1.44	1.53
26	LA	140	C	C2'-C1'	-7.79	1.44	1.53
26	LA	1980	G	C2-N3	-7.79	1.26	1.32
26	LA	2158	A	N7-C5	-7.79	1.34	1.39
26	LA	88	G	N3-C4	-7.79	1.30	1.35
26	LA	171	U	C4'-C3'	-7.79	1.44	1.53
26	LA	529	A	C5-C6	-7.79	1.34	1.41
26	LA	1287	A	N3-C4	-7.79	1.30	1.34
26	LA	1784	A	O3'-P	-7.79	1.51	1.61
2	SA	600	A	N3-C4	-7.78	1.30	1.34
26	LA	1310	G	C6-N1	-7.78	1.34	1.39
26	LA	2631	G	C5'-C4'	7.78	1.60	1.51
26	LA	2641	G	C2-N2	-7.78	1.26	1.34
26	LA	124	G	N9-C8	-7.78	1.32	1.37
26	LA	492	A	N9-C8	-7.78	1.31	1.37
26	LA	1143	A	C6-N1	-7.78	1.30	1.35
2	SA	860	A	C8-N7	-7.78	1.26	1.31
26	LA	504	A	N7-C5	7.78	1.44	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	572	A	C1'-N9	-7.78	1.35	1.46
2	SA	785	G	C5-C4	-7.78	1.32	1.38
2	SA	1290	G	N9-C4	-7.78	1.31	1.38
2	SA	1542	A	N9-C8	7.78	1.44	1.37
26	LA	2570	G	C8-N7	7.78	1.35	1.30
26	LA	1552	A	C6-N6	-7.78	1.27	1.33
2	SA	546	A	C5-C4	7.78	1.44	1.38
2	SA	866	C	N1-C6	-7.78	1.32	1.37
26	LA	2297	A	C6-N1	-7.78	1.30	1.35
2	SA	949	A	C5'-C4'	7.77	1.60	1.51
2	SA	1046	A	O3'-P	-7.77	1.51	1.61
2	SA	1379	G	C2-N2	-7.77	1.26	1.34
26	LA	77	G	C6-O6	-7.77	1.17	1.24
26	LA	1887	C	C1'-N1	-7.77	1.35	1.46
2	SA	391	G	C2-N2	-7.77	1.26	1.34
2	SA	465	A	P-O5'	-7.77	1.51	1.59
2	SA	563	A	N9-C8	-7.77	1.31	1.37
26	LA	1196	C	N1-C6	-7.77	1.32	1.37
2	SA	599	C	O3'-P	-7.77	1.51	1.61
2	SA	716	A	C6-N6	7.77	1.40	1.33
26	LA	1906	G	N9-C4	-7.77	1.31	1.38
25	LB	84	G	P-O5'	-7.77	1.51	1.59
26	LA	1026	G	N9-C8	7.77	1.43	1.37
26	LA	1429	G	N9-C8	-7.77	1.32	1.37
26	LA	2450	A	N9-C4	-7.77	1.33	1.37
2	SA	889	A	C1'-N9	-7.76	1.35	1.46
2	SA	1178	G	N3-C4	7.76	1.40	1.35
26	LA	974	G	C4'-C3'	7.76	1.61	1.53
26	LA	1112	G	N1-C2	-7.76	1.31	1.37
26	LA	1426	G	C2-N2	-7.76	1.26	1.34
2	SA	26	A	C5-C4	-7.76	1.33	1.38
2	SA	742	G	N7-C5	-7.76	1.34	1.39
26	LA	875	G	N7-C5	7.76	1.44	1.39
26	LA	2149	U	N1-C2	7.76	1.45	1.38
2	SA	291	U	C2'-C1'	-7.76	1.44	1.53
2	SA	1428	A	C4'-C3'	-7.76	1.44	1.53
26	LA	2334	U	P-O5'	-7.76	1.51	1.59
2	SA	829	G	C2-N3	7.76	1.39	1.32
25	LB	33	G	C6-N1	7.76	1.45	1.39
26	LA	883	G	N7-C5	7.76	1.44	1.39
2	SA	257	G	C5-C6	7.76	1.50	1.42
26	LA	2758	A	C2'-C1'	-7.76	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	530	G	C1'-N9	-7.76	1.35	1.46
26	LA	743	A	N9-C8	-7.75	1.31	1.37
2	SA	591	U	N3-C4	-7.75	1.31	1.38
2	SA	690	G	N1-C2	-7.75	1.31	1.37
2	SA	1330	U	P-O5'	-7.75	1.51	1.59
3	S1	47	C	C4'-C3'	7.75	1.61	1.53
26	LA	1518	C	C2'-C1'	-7.75	1.44	1.53
2	SA	475	C	O3'-P	-7.75	1.51	1.61
26	LA	719	C	C4-C5	7.75	1.49	1.43
26	LA	856	G	C5-C4	-7.75	1.32	1.38
26	LA	1936	A	C6-N1	7.75	1.41	1.35
2	SA	627	G	C8-N7	7.75	1.35	1.30
26	LA	349	U	N1-C6	-7.75	1.30	1.38
26	LA	532	A	O3'-P	-7.75	1.51	1.61
26	LA	1143	A	C5-C6	-7.75	1.34	1.41
26	LA	1205	A	O3'-P	-7.75	1.51	1.61
26	LA	1374	G	C5-C4	-7.75	1.32	1.38
26	LA	2469	A	C4'-C3'	-7.75	1.44	1.53
2	SA	354	G	N3-C4	-7.75	1.30	1.35
3	S1	18	A	C5'-C4'	7.75	1.60	1.51
26	LA	1182	G	C6-N1	7.75	1.45	1.39
26	LA	1351	C	P-O5'	-7.75	1.52	1.59
26	LA	2089	C	C4-N4	-7.75	1.26	1.33
26	LA	2425	A	C5-C4	7.75	1.44	1.38
26	LA	2573	C	N1-C2	-7.75	1.32	1.40
2	SA	639	G	C2-N2	-7.74	1.26	1.34
26	LA	1438	U	C2-N3	-7.74	1.32	1.37
26	LA	2176	A	P-O5'	-7.74	1.52	1.59
2	SA	1101	A	N3-C4	-7.74	1.30	1.34
26	LA	953	G	C2'-C1'	-7.74	1.44	1.53
26	LA	1426	G	C5-C6	-7.74	1.34	1.42
26	LA	1791	A	N3-C4	-7.74	1.30	1.34
26	LA	1262	A	N3-C4	-7.74	1.30	1.34
26	LA	1337	G	O3'-P	-7.74	1.51	1.61
26	LA	1939	U	C2'-C1'	-7.74	1.44	1.53
2	SA	19	A	C4'-C3'	-7.74	1.44	1.53
26	LA	924	G	C4'-C3'	-7.74	1.44	1.53
26	LA	1309	G	N9-C4	-7.74	1.31	1.38
26	LA	1998	A	C5-C4	-7.74	1.33	1.38
2	SA	1053	G	C6-N1	-7.74	1.34	1.39
26	LA	1490	A	O3'-P	-7.74	1.51	1.61
26	LA	2161	C	C4-N4	-7.74	1.26	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2430	A	N9-C4	7.74	1.42	1.37
2	SA	758	C	N1-C6	-7.74	1.32	1.37
2	SA	1039	G	N7-C5	-7.74	1.34	1.39
2	SA	1198	G	C6-N1	-7.74	1.34	1.39
2	SA	1250	A	N9-C4	-7.74	1.33	1.37
25	LB	68	C	C2-N3	7.74	1.42	1.35
26	LA	1062	G	C3'-C2'	-7.74	1.44	1.52
26	LA	2331	G	N9-C8	-7.74	1.32	1.37
2	SA	1127	G	C2'-C1'	-7.73	1.44	1.53
25	LB	33	G	N7-C5	7.73	1.43	1.39
26	LA	844	A	C8-N7	7.73	1.36	1.31
26	LA	2399	G	C5-C4	-7.73	1.32	1.38
2	SA	214	C	C2'-C1'	-7.73	1.44	1.53
2	SA	466	A	C5-C6	-7.73	1.34	1.41
2	SA	542	G	C5-C4	-7.73	1.32	1.38
26	LA	737	C	N1-C6	7.73	1.41	1.37
26	LA	1466	U	C5'-C4'	7.73	1.60	1.51
26	LA	2077	A	C2'-C1'	-7.73	1.44	1.53
26	LA	2181	U	C3'-O3'	7.73	1.52	1.42
26	LA	2856	A	N3-C4	-7.73	1.30	1.34
53	LP	39	PRO	N-CD	-7.73	1.37	1.47
2	SA	366	A	N3-C4	-7.73	1.30	1.34
2	SA	840	C	O3'-P	-7.73	1.51	1.61
2	SA	1419	G	P-O5'	7.73	1.67	1.59
26	LA	549	G	C4'-C3'	7.73	1.61	1.53
26	LA	1379	U	N1-C2	-7.73	1.31	1.38
26	LA	2676	C	C4-C5	-7.73	1.36	1.43
2	SA	867	G	C4'-C3'	-7.73	1.44	1.53
26	LA	1941	C	N3-C4	-7.73	1.28	1.33
2	SA	412	A	N9-C4	7.73	1.42	1.37
26	LA	254	G	N3-C4	-7.73	1.30	1.35
26	LA	822	G	N7-C5	7.73	1.43	1.39
2	SA	1097	C	C4-C5	7.73	1.49	1.43
2	SA	1339	A	C6-N6	7.73	1.40	1.33
2	SA	1512	U	C4'-C3'	-7.73	1.44	1.53
26	LA	130	C	O4'-C1'	-7.73	1.31	1.41
26	LA	2140	G	N9-C8	7.73	1.43	1.37
2	SA	384	G	P-O5'	-7.72	1.52	1.59
2	SA	840	C	C4-C5	-7.72	1.36	1.43
2	SA	1364	U	C5'-C4'	7.72	1.60	1.51
2	SA	1373	G	N7-C5	-7.72	1.34	1.39
2	SA	1492	A	N7-C5	7.72	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1094	U	C2-N3	-7.72	1.32	1.37
26	LA	2482	A	C8-N7	-7.72	1.26	1.31
26	LA	347	A	N9-C8	-7.72	1.31	1.37
26	LA	714	U	N1-C2	-7.72	1.31	1.38
26	LA	2644	G	P-O5'	-7.72	1.52	1.59
2	SA	1004	A	O3'-P	-7.72	1.51	1.61
2	SA	1008	U	P-O5'	-7.72	1.52	1.59
2	SA	769	G	N7-C5	-7.72	1.34	1.39
2	SA	1250	A	C5-C6	-7.72	1.34	1.41
4	S2	43	G	C6-N1	-7.72	1.34	1.39
26	LA	466	A	P-O5'	-7.72	1.52	1.59
26	LA	1356	G	C2-N3	-7.72	1.26	1.32
26	LA	1702	G	N1-C2	-7.72	1.31	1.37
2	SA	852	G	C2-N3	-7.72	1.26	1.32
2	SA	1540	U	C5'-C4'	7.72	1.60	1.51
2	SA	35	G	C6-N1	-7.72	1.34	1.39
2	SA	72	A	P-O5'	-7.72	1.52	1.59
2	SA	123	U	N1-C2	-7.72	1.31	1.38
2	SA	1404	C	C3'-C2'	-7.72	1.44	1.52
26	LA	55	G	N9-C8	-7.72	1.32	1.37
26	LA	1754	A	C2'-C1'	-7.72	1.44	1.53
2	SA	564	C	N3-C4	-7.71	1.28	1.33
26	LA	45	G	N3-C4	-7.71	1.30	1.35
26	LA	791	C	P-O5'	-7.71	1.52	1.59
26	LA	1334	G	N9-C8	-7.71	1.32	1.37
26	LA	2887	A	P-O5'	-7.71	1.52	1.59
2	SA	380	G	N9-C4	-7.71	1.31	1.38
2	SA	640	A	N9-C4	-7.71	1.33	1.37
2	SA	694	A	O3'-P	-7.71	1.51	1.61
2	SA	920	U	P-O5'	-7.71	1.52	1.59
26	LA	526	A	N9-C8	-7.71	1.31	1.37
26	LA	579	G	O3'-P	-7.71	1.51	1.61
26	LA	2230	G	C2-N2	-7.71	1.26	1.34
26	LA	116	C	C2'-C1'	-7.71	1.44	1.53
26	LA	356	G	C2-N2	-7.71	1.26	1.34
26	LA	2327	A	C1'-N9	-7.71	1.36	1.46
2	SA	1248	A	C5-C6	-7.71	1.34	1.41
26	LA	2612	C	N1-C6	-7.71	1.32	1.37
2	SA	1367	C	C4'-C3'	7.71	1.61	1.53
26	LA	643	A	C5-C6	-7.71	1.34	1.41
26	LA	806	C	P-O5'	-7.70	1.52	1.59
2	SA	705	G	C6-N1	-7.70	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2050	C	N1-C6	-7.70	1.32	1.37
2	SA	26	A	N7-C5	-7.70	1.34	1.39
2	SA	188	C	C2'-C1'	-7.70	1.44	1.53
2	SA	756	C	N1-C6	7.70	1.41	1.37
25	LB	9	G	N9-C8	-7.70	1.32	1.37
26	LA	875	G	C6-O6	-7.70	1.17	1.24
26	LA	2843	G	C8-N7	7.70	1.35	1.30
2	SA	717	U	P-O5'	7.70	1.67	1.59
26	LA	462	C	N1-C2	-7.70	1.32	1.40
26	LA	2801	G	N7-C5	-7.70	1.34	1.39
26	LA	1877	A	C5-C4	-7.70	1.33	1.38
26	LA	2398	U	C2'-C1'	-7.70	1.44	1.53
2	SA	1118	U	C4'-C3'	-7.70	1.44	1.53
26	LA	1723	G	C8-N7	-7.69	1.26	1.30
26	LA	2383	G	C2-N2	-7.69	1.26	1.34
2	SA	681	A	C4'-O4'	-7.69	1.35	1.45
2	SA	801	U	C4-C5	7.69	1.50	1.43
25	LB	77	U	O3'-P	-7.69	1.51	1.61
26	LA	1570	A	C6-N1	-7.69	1.30	1.35
26	LA	2257	U	C5'-C4'	7.69	1.60	1.51
26	LA	2674	G	C2'-C1'	-7.69	1.44	1.53
2	SA	1064	G	C5-C4	-7.69	1.32	1.38
26	LA	135	U	O3'-P	-7.69	1.51	1.61
26	LA	1235	G	N9-C4	-7.69	1.31	1.38
26	LA	2844	G	C4'-O4'	7.69	1.55	1.45
2	SA	186	C	N1-C6	7.69	1.41	1.37
26	LA	292	U	C2-N3	-7.69	1.32	1.37
26	LA	1710	G	C2-N3	7.69	1.39	1.32
26	LA	1354	A	N7-C5	-7.69	1.34	1.39
2	SA	174	A	N3-C4	-7.68	1.30	1.34
2	SA	181	A	C5-C4	-7.68	1.33	1.38
2	SA	1124	G	C2'-C1'	-7.68	1.44	1.53
2	SA	1264	U	C4'-C3'	-7.68	1.44	1.53
26	LA	1296	G	N9-C4	-7.68	1.31	1.38
26	LA	1305	C	C4'-C3'	-7.68	1.44	1.53
26	LA	1672	A	C1'-N9	-7.68	1.36	1.46
2	SA	1007	U	C4'-C3'	-7.68	1.44	1.53
2	SA	1206	G	N3-C4	7.68	1.40	1.35
26	LA	561	G	C2-N3	-7.68	1.26	1.32
2	SA	1478	U	C4-C5	7.68	1.50	1.43
2	SA	486	U	C3'-C2'	7.68	1.61	1.52
2	SA	533	A	C1'-N9	-7.68	1.36	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	587	G	C2-N3	7.68	1.38	1.32
26	LA	1527	G	C1'-N9	-7.68	1.36	1.46
2	SA	721	G	N9-C4	-7.68	1.31	1.38
26	LA	174	U	C4-C5	7.68	1.50	1.43
2	SA	1055	A	N9-C8	-7.68	1.31	1.37
2	SA	1100	C	O3'-P	-7.68	1.51	1.61
26	LA	1186	G	C6-N1	-7.68	1.34	1.39
26	LA	2262	U	C2-N3	7.68	1.43	1.37
26	LA	2663	G	N7-C5	-7.68	1.34	1.39
26	LA	8	C	N1-C6	-7.67	1.32	1.37
26	LA	89	A	C5-C4	-7.67	1.33	1.38
26	LA	1252	G	N7-C5	7.67	1.43	1.39
2	SA	1401	G	N7-C5	-7.67	1.34	1.39
26	LA	191	A	C2'-C1'	-7.67	1.45	1.53
26	LA	655	A	O3'-P	-7.67	1.51	1.61
2	SA	650	G	C5-C6	-7.67	1.34	1.42
2	SA	776	G	O3'-P	-7.67	1.51	1.61
26	LA	1424	G	C8-N7	7.67	1.35	1.30
2	SA	378	G	O3'-P	-7.67	1.51	1.61
2	SA	858	G	N9-C4	-7.67	1.31	1.38
26	LA	2590	A	N7-C5	-7.67	1.34	1.39
2	SA	558	G	C4'-C3'	-7.67	1.44	1.53
2	SA	704	A	C5-C4	7.67	1.44	1.38
2	SA	763	G	C8-N7	7.67	1.35	1.30
2	SA	817	C	N1-C6	-7.67	1.32	1.37
26	LA	118	A	C5-C4	-7.67	1.33	1.38
26	LA	664	G	C6-N1	-7.67	1.34	1.39
26	LA	1493	C	N3-C4	7.67	1.39	1.33
26	LA	1700	A	C5-C4	7.67	1.44	1.38
26	LA	1879	C	O3'-P	-7.67	1.51	1.61
26	LA	2345	G	C5-C4	-7.67	1.32	1.38
26	LA	2524	G	N1-C2	-7.67	1.31	1.37
2	SA	1178	G	N7-C5	-7.67	1.34	1.39
26	LA	125	A	C5-C4	7.67	1.44	1.38
26	LA	1840	G	N1-C2	-7.67	1.31	1.37
26	LA	2608	G	C5-C6	-7.67	1.34	1.42
2	SA	441	A	C8-N7	-7.67	1.26	1.31
26	LA	1774	C	C3'-C2'	7.67	1.61	1.52
25	LB	68	C	N1-C6	-7.66	1.32	1.37
26	LA	1932	A	C6-N1	-7.66	1.30	1.35
2	SA	331	G	C2-N2	-7.66	1.26	1.34
2	SA	1508	A	N9-C4	-7.66	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	708	G	N9-C8	-7.66	1.32	1.37
26	LA	891	G	N9-C4	7.66	1.44	1.38
26	LA	2176	A	N1-C2	-7.66	1.27	1.34
26	LA	2717	C	N3-C4	7.66	1.39	1.33
26	LA	141	G	C2'-C1'	-7.66	1.45	1.53
26	LA	252	G	C5'-C4'	7.66	1.60	1.51
26	LA	878	A	N9-C4	7.66	1.42	1.37
26	LA	920	A	C5-C4	-7.66	1.33	1.38
26	LA	1570	A	N9-C4	7.66	1.42	1.37
2	SA	969	A	N7-C5	-7.66	1.34	1.39
26	LA	140	C	N1-C6	7.66	1.41	1.37
26	LA	505	A	C5-C4	-7.66	1.33	1.38
26	LA	953	G	C5-C4	-7.66	1.32	1.38
26	LA	1262	A	C2'-C1'	-7.66	1.45	1.53
26	LA	2007	U	C4-C5	-7.66	1.36	1.43
26	LA	2033	A	C2'-C1'	-7.66	1.45	1.53
26	LA	2067	G	C5-C4	-7.65	1.32	1.38
2	SA	508	U	N3-C4	-7.65	1.31	1.38
2	SA	1043	G	C2-N2	-7.65	1.26	1.34
2	SA	1455	G	C2'-C1'	-7.65	1.45	1.53
2	SA	1478	U	C2-N3	-7.65	1.32	1.37
26	LA	46	G	C5'-C4'	-7.65	1.42	1.51
26	LA	92	U	N3-C4	7.65	1.45	1.38
26	LA	1918	A	C5-C4	-7.65	1.33	1.38
26	LA	2791	G	C6-N1	7.65	1.45	1.39
2	SA	49	U	C5'-C4'	7.65	1.60	1.51
2	SA	710	G	N3-C4	-7.65	1.30	1.35
2	SA	1140	C	C5'-C4'	7.65	1.60	1.51
2	SA	1459	G	C8-N7	7.65	1.35	1.30
26	LA	2000	C	C4-N4	-7.65	1.27	1.33
26	LA	2389	G	C6-N1	-7.65	1.34	1.39
26	LA	2457	U	C3'-O3'	7.65	1.52	1.42
26	LA	230	G	C2-N2	-7.65	1.26	1.34
2	SA	497	G	N3-C4	7.65	1.40	1.35
2	SA	1051	C	C2-N3	7.65	1.41	1.35
26	LA	962	G	C3'-C2'	7.65	1.61	1.52
26	LA	1895	C	C1'-N1	-7.65	1.36	1.46
2	SA	775	G	N3-C4	-7.65	1.30	1.35
2	SA	497	G	O4'-C1'	7.64	1.51	1.41
2	SA	1354	U	C2-N3	-7.64	1.32	1.37
26	LA	2335	A	C1'-N9	-7.64	1.36	1.46
26	LA	2338	C	C4-C5	-7.64	1.36	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2513	A	N3-C4	-7.64	1.30	1.34
2	SA	529	G	N9-C8	7.64	1.43	1.37
2	SA	725	G	C5-C6	-7.64	1.34	1.42
3	S1	19	A	C6-N1	7.64	1.40	1.35
26	LA	1370	C	O3'-P	-7.64	1.51	1.61
4	S2	74	A	P-O5'	-7.64	1.52	1.59
26	LA	921	C	P-O5'	7.64	1.67	1.59
26	LA	1077	A	C8-N7	7.64	1.36	1.31
26	LA	1893	C	N3-C4	-7.64	1.28	1.33
26	LA	2563	U	N1-C2	-7.64	1.31	1.38
2	SA	30	U	C2'-C1'	-7.64	1.45	1.53
26	LA	1250	G	N9-C8	-7.64	1.32	1.37
26	LA	1513	U	C3'-C2'	-7.64	1.44	1.52
26	LA	1870	C	C4'-C3'	7.64	1.61	1.53
3	S1	23	C	C4-C5	7.64	1.49	1.43
26	LA	1076	C	P-O5'	-7.64	1.52	1.59
26	LA	2050	C	N3-C4	-7.64	1.28	1.33
2	SA	1441	A	N9-C4	-7.64	1.33	1.37
26	LA	105	C	C4'-C3'	-7.64	1.44	1.53
26	LA	315	G	C5-C6	-7.64	1.34	1.42
26	LA	725	G	C2'-C1'	-7.64	1.45	1.53
26	LA	2692	G	O3'-P	-7.64	1.51	1.61
2	SA	445	G	N9-C8	7.63	1.43	1.37
26	LA	1001	A	C2'-C1'	-7.63	1.45	1.53
26	LA	1655	A	N7-C5	-7.63	1.34	1.39
26	LA	82	U	C3'-C2'	-7.63	1.44	1.52
26	LA	2186	G	C2-N3	7.63	1.38	1.32
2	SA	517	G	O3'-P	-7.63	1.51	1.61
2	SA	575	G	O3'-P	-7.63	1.51	1.61
2	SA	1448	C	P-O5'	-7.63	1.52	1.59
26	LA	671	C	N3-C4	7.63	1.39	1.33
26	LA	1527	G	N9-C8	7.63	1.43	1.37
26	LA	2014	A	C6-N6	7.63	1.40	1.33
26	LA	2541	A	O3'-P	-7.63	1.51	1.61
26	LA	1947	C	P-O5'	-7.63	1.52	1.59
2	SA	788	U	C4'-O4'	7.63	1.55	1.45
25	LB	33	G	N9-C8	7.63	1.43	1.37
26	LA	151	C	N1-C6	7.63	1.41	1.37
26	LA	1139	G	N3-C4	-7.63	1.30	1.35
26	LA	2693	G	O3'-P	-7.63	1.51	1.61
26	LA	2270	A	N7-C5	7.63	1.43	1.39
26	LA	2510	C	P-O5'	-7.63	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1844	C	N1-C6	7.62	1.41	1.37
2	SA	1172	C	C2'-C1'	-7.62	1.45	1.53
26	LA	763	G	N7-C5	7.62	1.43	1.39
26	LA	2128	G	N9-C4	-7.62	1.31	1.38
26	LA	2530	A	N9-C4	7.62	1.42	1.37
2	SA	531	U	C4-C5	7.62	1.50	1.43
2	SA	1047	G	N3-C4	-7.62	1.30	1.35
26	LA	317	G	N7-C5	-7.62	1.34	1.39
26	LA	725	G	C5-C6	-7.62	1.34	1.42
26	LA	1004	U	C4-C5	-7.62	1.36	1.43
26	LA	1267	U	C4'-O4'	-7.62	1.35	1.45
26	LA	1311	G	C2-N3	7.62	1.38	1.32
26	LA	1451	C	N1-C6	7.62	1.41	1.37
26	LA	1633	G	C6-N1	-7.62	1.34	1.39
26	LA	1807	G	C5-C4	7.62	1.43	1.38
26	LA	2290	G	C4'-C3'	7.62	1.61	1.53
25	LB	62	C	N1-C6	-7.62	1.32	1.37
26	LA	664	G	N9-C8	-7.62	1.32	1.37
26	LA	987	C	C2'-O2'	-7.62	1.31	1.41
26	LA	1683	U	N3-C4	-7.62	1.31	1.38
26	LA	1776	G	C4'-C3'	7.62	1.61	1.53
4	S2	66	C	C4-C5	7.62	1.49	1.43
26	LA	689	A	N9-C4	-7.62	1.33	1.37
26	LA	1493	C	C2-N3	-7.62	1.29	1.35
26	LA	1085	A	C1'-N9	-7.62	1.36	1.46
26	LA	1236	G	P-O5'	-7.62	1.52	1.59
26	LA	1613	G	P-O5'	-7.62	1.52	1.59
26	LA	2583	G	P-O5'	-7.62	1.52	1.59
26	LA	2718	G	C2'-C1'	-7.62	1.45	1.53
2	SA	141	G	N9-C4	7.62	1.44	1.38
25	LB	20	G	N3-C4	-7.62	1.30	1.35
26	LA	1745	A	C5'-C4'	7.61	1.60	1.51
2	SA	90	C	N3-C4	7.61	1.39	1.33
26	LA	223	A	C5-C6	-7.61	1.34	1.41
2	SA	608	A	N9-C4	-7.61	1.33	1.37
2	SA	645	G	N7-C5	7.61	1.43	1.39
2	SA	559	A	N7-C5	-7.61	1.34	1.39
26	LA	456	C	C4'-O4'	7.61	1.55	1.45
26	LA	2726	A	C2'-C1'	-7.61	1.45	1.53
26	LA	2869	G	C5'-C4'	7.61	1.60	1.51
26	LA	1073	A	C5'-C4'	7.61	1.60	1.51
26	LA	2333	A	N3-C4	-7.61	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2456	C	C4'-C3'	7.61	1.61	1.53
2	SA	1081	A	C1'-N9	-7.61	1.36	1.46
26	LA	445	C	C3'-O3'	7.61	1.52	1.42
26	LA	1731	G	N1-C2	-7.61	1.31	1.37
26	LA	2284	A	C5'-C4'	7.61	1.60	1.51
26	LA	2349	G	C2'-C1'	-7.61	1.45	1.53
26	LA	2436	G	P-O5'	-7.61	1.52	1.59
26	LA	2547	A	N9-C8	-7.61	1.31	1.37
2	SA	893	C	C5-C6	-7.60	1.28	1.34
26	LA	223	A	C5-C4	-7.60	1.33	1.38
26	LA	411	G	C8-N7	-7.60	1.26	1.30
26	LA	2826	A	N7-C5	-7.60	1.34	1.39
2	SA	718	A	N3-C4	7.60	1.39	1.34
2	SA	810	C	C2-N3	-7.60	1.29	1.35
26	LA	1828	G	C2-N3	7.60	1.38	1.32
2	SA	398	U	C3'-O3'	7.60	1.52	1.42
2	SA	716	A	N7-C5	-7.60	1.34	1.39
26	LA	58	G	C3'-C2'	-7.60	1.44	1.52
26	LA	2249	U	C2-N3	-7.60	1.32	1.37
2	SA	1377	A	C5'-C4'	7.60	1.60	1.51
4	S2	62	C	N1-C6	7.60	1.41	1.37
26	LA	205	G	C5'-C4'	7.60	1.60	1.51
26	LA	540	C	N1-C6	7.60	1.41	1.37
26	LA	851	C	C2'-C1'	-7.60	1.45	1.53
26	LA	2673	G	C2-N2	-7.60	1.26	1.34
26	LA	2836	U	N3-C4	-7.60	1.31	1.38
2	SA	197	A	C5-C6	7.60	1.47	1.41
2	SA	1487	G	N9-C8	-7.60	1.32	1.37
26	LA	17	G	N3-C4	-7.60	1.30	1.35
26	LA	507	A	C5-C4	-7.60	1.33	1.38
26	LA	701	G	N7-C5	7.60	1.43	1.39
26	LA	1256	G	C2-N2	-7.59	1.26	1.34
26	LA	1342	A	C5'-C4'	7.59	1.60	1.51
26	LA	1964	G	C8-N7	7.59	1.35	1.30
26	LA	2467	C	N1-C6	-7.59	1.32	1.37
26	LA	2516	A	C5-C6	-7.59	1.34	1.41
2	SA	95	C	C4'-C3'	7.59	1.61	1.53
2	SA	230	G	O3'-P	-7.59	1.52	1.61
2	SA	1067	A	C6-N1	-7.59	1.30	1.35
26	LA	173	A	C8-N7	-7.59	1.26	1.31
26	LA	1674	G	N1-C2	-7.59	1.31	1.37
26	LA	1690	A	C3'-O3'	7.59	1.52	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2620	C	C2-O2	-7.59	1.17	1.24
2	SA	87	C	C5'-C4'	7.59	1.60	1.51
25	LB	88	C	N1-C6	-7.59	1.32	1.37
26	LA	529	A	N9-C4	-7.59	1.33	1.37
26	LA	881	G	N9-C8	-7.59	1.32	1.37
26	LA	923	G	N9-C4	7.59	1.44	1.38
26	LA	963	U	O3'-P	-7.59	1.52	1.61
26	LA	1733	G	O3'-P	-7.59	1.52	1.61
26	LA	2680	U	C2-N3	-7.59	1.32	1.37
2	SA	97	G	P-O5'	-7.59	1.52	1.59
2	SA	165	G	C3'-C2'	-7.59	1.44	1.52
2	SA	433	G	N1-C2	7.59	1.43	1.37
2	SA	620	C	C2'-C1'	-7.59	1.45	1.53
2	SA	874	G	C5-C6	-7.59	1.34	1.42
26	LA	1814	G	N1-C2	7.59	1.43	1.37
26	LA	1819	A	N9-C4	-7.59	1.33	1.37
26	LA	2024	G	O3'-P	-7.59	1.52	1.61
2	SA	712	A	C5-C4	-7.59	1.33	1.38
2	SA	731	G	C5'-C4'	7.59	1.60	1.51
26	LA	2389	G	C5-C4	-7.59	1.33	1.38
2	SA	496	A	P-O5'	-7.59	1.52	1.59
2	SA	762	U	C3'-C2'	-7.59	1.44	1.52
2	SA	1196	A	C5-C6	7.59	1.47	1.41
26	LA	291	G	N3-C4	-7.59	1.30	1.35
26	LA	1697	G	C2-N3	-7.59	1.26	1.32
26	LA	2019	A	N7-C5	-7.59	1.34	1.39
26	LA	2336	A	O3'-P	-7.59	1.52	1.61
26	LA	2409	G	C8-N7	7.59	1.35	1.30
2	SA	382	A	N7-C5	-7.58	1.34	1.39
26	LA	2048	G	N3-C4	-7.58	1.30	1.35
2	SA	631	C	C3'-C2'	-7.58	1.44	1.52
2	SA	713	G	C3'-C2'	-7.58	1.44	1.52
26	LA	384	A	C5-C4	-7.58	1.33	1.38
26	LA	790	U	C2-N3	-7.58	1.32	1.37
26	LA	1271	G	C6-N1	-7.58	1.34	1.39
26	LA	1913	A	N3-C4	7.58	1.39	1.34
26	LA	2705	A	N3-C4	-7.58	1.30	1.34
26	LA	2831	G	N3-C4	-7.58	1.30	1.35
4	S2	64	G	C2-N3	-7.58	1.26	1.32
26	LA	1313	U	O3'-P	-7.58	1.52	1.61
26	LA	2402	U	N3-C4	-7.58	1.31	1.38
26	LA	2800	A	N9-C4	7.58	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1362	C	C2'-C1'	-7.58	1.45	1.53
26	LA	30	G	N3-C4	7.58	1.40	1.35
26	LA	303	G	N1-C2	-7.58	1.31	1.37
26	LA	1853	A	C5-C6	7.58	1.47	1.41
26	LA	2218	G	C5'-C4'	7.58	1.60	1.51
26	LA	2859	G	P-O5'	-7.58	1.52	1.59
4	S2	70	C	C2-N3	-7.58	1.29	1.35
26	LA	1419	A	N3-C4	7.58	1.39	1.34
2	SA	1325	C	N1-C6	7.58	1.41	1.37
2	SA	1340	A	C8-N7	-7.58	1.26	1.31
26	LA	867	C	C4-C5	-7.58	1.36	1.43
26	LA	1353	A	C3'-C2'	-7.58	1.44	1.52
26	LA	1541	C	C2'-C1'	-7.58	1.45	1.53
26	LA	1630	A	N9-C4	-7.57	1.33	1.37
26	LA	1879	C	N3-C4	7.57	1.39	1.33
26	LA	1492	G	C8-N7	-7.57	1.26	1.30
2	SA	311	C	P-O5'	-7.57	1.52	1.59
2	SA	1503	A	C5-C4	7.57	1.44	1.38
26	LA	7	G	C4'-C3'	-7.57	1.44	1.53
26	LA	218	A	N7-C5	-7.57	1.34	1.39
26	LA	2573	C	C2-N3	7.57	1.41	1.35
2	SA	60	A	C4'-C3'	7.57	1.61	1.53
2	SA	106	C	P-O5'	7.57	1.67	1.59
26	LA	1630	A	N7-C5	7.57	1.43	1.39
26	LA	188	G	O3'-P	-7.57	1.52	1.61
26	LA	1738	G	C8-N7	-7.57	1.26	1.30
2	SA	807	A	C5-C4	-7.56	1.33	1.38
2	SA	1408	A	C1'-N9	-7.56	1.36	1.46
26	LA	1225	G	N9-C4	-7.56	1.31	1.38
2	SA	864	A	C2-N3	7.56	1.40	1.33
26	LA	526	A	N7-C5	-7.56	1.34	1.39
26	LA	708	G	P-O5'	-7.56	1.52	1.59
26	LA	908	C	C4-C5	-7.56	1.36	1.43
26	LA	1838	C	P-O5'	-7.56	1.52	1.59
2	SA	283	U	N1-C2	-7.56	1.31	1.38
26	LA	2262	U	O3'-P	-7.56	1.52	1.61
26	LA	2709	G	O3'-P	-7.56	1.52	1.61
26	LA	2823	A	C6-N1	-7.56	1.30	1.35
4	S2	31	G	C8-N7	7.56	1.35	1.30
25	LB	40	U	C2'-C1'	-7.56	1.45	1.53
26	LA	93	G	N7-C5	-7.56	1.34	1.39
26	LA	677	A	C3'-O3'	7.56	1.52	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1950	G	C5-C4	-7.56	1.33	1.38
26	LA	2005	A	P-O5'	-7.56	1.52	1.59
26	LA	2455	G	C5-C4	-7.56	1.33	1.38
2	SA	1079	G	C6-N1	-7.56	1.34	1.39
2	SA	1138	G	C5-C4	7.56	1.43	1.38
2	SA	1346	A	N7-C5	-7.56	1.34	1.39
26	LA	228	C	C2-N3	7.56	1.41	1.35
26	LA	604	G	C6-N1	-7.56	1.34	1.39
26	LA	1717	A	C6-N1	7.56	1.40	1.35
2	SA	956	U	P-O5'	-7.55	1.52	1.59
2	SA	1324	A	N9-C4	-7.55	1.33	1.37
26	LA	39	G	C2-N2	-7.55	1.26	1.34
26	LA	107	G	C4'-C3'	7.55	1.61	1.53
26	LA	256	A	C6-N6	7.55	1.40	1.33
26	LA	1101	U	C2'-C1'	-7.55	1.45	1.53
26	LA	2172	U	O3'-P	-7.55	1.52	1.61
2	SA	1521	C	N1-C6	-7.55	1.32	1.37
26	LA	115	C	C4-C5	-7.55	1.36	1.43
26	LA	150	U	C3'-O3'	7.55	1.52	1.42
26	LA	600	G	N9-C4	-7.55	1.31	1.38
26	LA	2369	A	C2-N3	-7.55	1.26	1.33
2	SA	290	C	O3'-P	-7.55	1.52	1.61
2	SA	594	U	C3'-C2'	7.55	1.61	1.52
26	LA	1861	G	N9-C8	-7.55	1.32	1.37
2	SA	969	A	N1-C2	7.55	1.41	1.34
26	LA	2100	G	C5-C4	-7.55	1.33	1.38
26	LA	2262	U	C4-C5	-7.55	1.36	1.43
2	SA	1056	U	C2-N3	-7.55	1.32	1.37
26	LA	1054	A	C5-C4	-7.55	1.33	1.38
26	LA	2477	U	C2'-C1'	7.55	1.61	1.53
2	SA	646	G	N9-C8	7.55	1.43	1.37
2	SA	1031	C	N1-C2	7.55	1.47	1.40
2	SA	1137	C	C4-C5	-7.55	1.36	1.43
2	SA	1373	G	C1'-N9	-7.55	1.36	1.46
2	SA	1528	U	C3'-C2'	7.55	1.61	1.52
2	SA	874	G	C4'-C3'	-7.54	1.44	1.53
26	LA	152	A	N3-C4	-7.54	1.30	1.34
26	LA	518	G	N7-C5	-7.54	1.34	1.39
26	LA	1761	C	O4'-C1'	-7.54	1.31	1.41
26	LA	2434	A	N3-C4	-7.54	1.30	1.34
2	SA	78	A	N3-C4	7.54	1.39	1.34
2	SA	807	A	N9-C4	-7.54	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1175	A	C2'-C1'	-7.54	1.45	1.53
26	LA	1371	G	C1'-N9	-7.54	1.36	1.46
26	LA	1527	G	C5-C6	-7.54	1.34	1.42
26	LA	1835	G	C3'-C2'	-7.54	1.44	1.52
26	LA	2080	A	N9-C4	-7.54	1.33	1.37
2	SA	666	G	C5-C6	-7.54	1.34	1.42
26	LA	859	G	C2-N2	-7.54	1.27	1.34
26	LA	1186	G	N9-C8	-7.54	1.32	1.37
26	LA	1517	G	N9-C4	7.54	1.44	1.38
26	LA	2257	U	C2-N3	7.54	1.43	1.37
26	LA	2314	A	N1-C2	-7.54	1.27	1.34
2	SA	368	U	C3'-C2'	-7.54	1.44	1.52
26	LA	128	C	N3-C4	-7.54	1.28	1.33
26	LA	2531	A	C8-N7	-7.54	1.26	1.31
2	SA	1127	G	C3'-C2'	-7.54	1.44	1.52
26	LA	676	A	N9-C4	-7.54	1.33	1.37
26	LA	1228	G	C6-N1	-7.54	1.34	1.39
26	LA	2825	G	C2-N2	-7.54	1.27	1.34
2	SA	216	U	C3'-O3'	7.54	1.52	1.42
2	SA	664	G	C8-N7	7.54	1.35	1.30
2	SA	771	G	N3-C4	-7.54	1.30	1.35
26	LA	507	A	C4'-C3'	-7.54	1.44	1.53
26	LA	1422	G	P-O5'	-7.54	1.52	1.59
26	LA	1568	G	O3'-P	-7.54	1.52	1.61
26	LA	1677	A	C5'-C4'	7.54	1.60	1.51
26	LA	1887	C	N1-C6	-7.54	1.32	1.37
2	SA	411	A	C5'-C4'	7.53	1.60	1.51
2	SA	1514	G	C4'-O4'	-7.53	1.35	1.45
26	LA	2038	G	N3-C4	-7.53	1.30	1.35
26	LA	2856	A	N9-C4	7.53	1.42	1.37
2	SA	1363	A	C2'-C1'	-7.53	1.45	1.53
2	SA	1437	A	N7-C5	-7.53	1.34	1.39
26	LA	1394	U	N3-C4	-7.53	1.31	1.38
26	LA	1517	G	C5'-C4'	7.53	1.60	1.51
2	SA	523	A	C5-C6	-7.53	1.34	1.41
2	SA	1202	U	P-O5'	-7.53	1.52	1.59
25	LB	73	A	N9-C4	-7.53	1.33	1.37
26	LA	425	G	C6-N1	-7.53	1.34	1.39
26	LA	2401	U	C2-N3	-7.53	1.32	1.37
26	LA	2795	C	C2-N3	-7.53	1.29	1.35
26	LA	218	A	N3-C4	-7.53	1.30	1.34
26	LA	962	G	P-O5'	-7.53	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2121	G	C4'-O4'	7.53	1.55	1.45
2	SA	714	G	N3-C4	-7.53	1.30	1.35
2	SA	925	G	C5-C4	-7.53	1.33	1.38
2	SA	1174	G	C6-N1	-7.53	1.34	1.39
3	S1	20	G	C5'-C4'	7.53	1.60	1.51
26	LA	102	U	C5'-C4'	7.53	1.60	1.51
26	LA	1741	C	C2'-C1'	-7.53	1.45	1.53
26	LA	1755	A	N7-C5	-7.53	1.34	1.39
26	LA	2358	A	C4'-O4'	-7.53	1.35	1.45
2	SA	107	G	C2-N3	-7.53	1.26	1.32
25	LB	107	G	C5-C4	-7.53	1.33	1.38
26	LA	1798	U	N3-C4	-7.53	1.31	1.38
2	SA	812	G	C6-N1	-7.52	1.34	1.39
26	LA	35	G	C5-C6	-7.52	1.34	1.42
2	SA	1157	A	C1'-N9	-7.52	1.36	1.46
26	LA	408	G	C5-C6	7.52	1.49	1.42
26	LA	853	C	P-O5'	-7.52	1.52	1.59
26	LA	1189	A	N7-C5	-7.52	1.34	1.39
26	LA	1620	G	N3-C4	-7.52	1.30	1.35
26	LA	1699	G	P-O5'	7.52	1.67	1.59
2	SA	527	G	C2'-C1'	-7.52	1.45	1.53
26	LA	104	A	N9-C4	-7.52	1.33	1.37
26	LA	346	A	C5-C4	-7.52	1.33	1.38
26	LA	676	A	C3'-O3'	7.52	1.52	1.42
26	LA	2829	A	O3'-P	-7.52	1.52	1.61
26	LA	488	G	N9-C4	-7.52	1.31	1.38
26	LA	2749	A	N7-C5	-7.52	1.34	1.39
2	SA	119	A	O3'-P	-7.51	1.52	1.61
2	SA	774	G	N7-C5	-7.51	1.34	1.39
26	LA	17	G	N1-C2	-7.51	1.31	1.37
26	LA	469	G	N3-C4	7.51	1.40	1.35
26	LA	624	C	N1-C6	7.51	1.41	1.37
26	LA	1046	A	C6-N6	7.51	1.40	1.33
26	LA	1493	C	C5'-C4'	7.51	1.60	1.51
26	LA	1675	C	N1-C2	-7.51	1.32	1.40
26	LA	409	G	C6-O6	-7.51	1.17	1.24
26	LA	814	C	C2'-C1'	-7.51	1.45	1.53
2	SA	809	G	C6-N1	-7.51	1.34	1.39
26	LA	738	G	C5'-C4'	7.51	1.60	1.51
26	LA	1263	U	O3'-P	-7.51	1.52	1.61
26	LA	2873	A	C5-C4	-7.51	1.33	1.38
2	SA	1331	G	P-O5'	-7.51	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	33	C	C2'-C1'	-7.51	1.45	1.53
25	LB	120	U	N3-C4	-7.51	1.31	1.38
26	LA	583	G	O4'-C1'	-7.51	1.31	1.41
26	LA	1025	G	C1'-N9	-7.51	1.36	1.46
26	LA	1692	U	C2'-C1'	7.51	1.61	1.53
26	LA	2004	G	C3'-C2'	-7.51	1.44	1.52
2	SA	449	G	C2-N3	-7.51	1.26	1.32
26	LA	225	C	N1-C6	7.51	1.41	1.37
4	S2	46	G	C5-C6	-7.51	1.34	1.42
26	LA	684	G	C2-N2	-7.51	1.27	1.34
26	LA	1323	C	N1-C6	-7.51	1.32	1.37
26	LA	2652	C	C2'-C1'	-7.51	1.45	1.53
2	SA	115	G	C1'-N9	-7.50	1.36	1.46
2	SA	274	A	C5-C4	7.50	1.44	1.38
2	SA	715	A	C2'-C1'	-7.50	1.45	1.53
2	SA	1142	G	C2-N3	7.50	1.38	1.32
2	SA	1328	C	C2-N3	-7.50	1.29	1.35
26	LA	2813	A	N9-C8	-7.50	1.31	1.37
2	SA	1235	U	C4-O4	7.50	1.29	1.23
26	LA	283	G	O3'-P	-7.50	1.52	1.61
26	LA	338	G	N9-C8	-7.50	1.32	1.37
26	LA	1139	G	O3'-P	-7.50	1.52	1.61
2	SA	535	A	O3'-P	-7.50	1.52	1.61
25	LB	106	G	N3-C4	-7.50	1.30	1.35
26	LA	230	G	C5-C4	-7.50	1.33	1.38
2	SA	145	G	C2'-C1'	-7.50	1.45	1.53
2	SA	1464	U	C5'-C4'	7.50	1.60	1.51
26	LA	124	G	N7-C5	-7.50	1.34	1.39
26	LA	1802	A	C5-C6	-7.50	1.34	1.41
2	SA	1000	A	N3-C4	-7.50	1.30	1.34
2	SA	1187	G	C2-N3	7.50	1.38	1.32
2	SA	1499	A	N9-C4	-7.50	1.33	1.37
25	LB	7	G	C8-N7	7.50	1.35	1.30
25	LB	76	G	C4'-O4'	-7.50	1.35	1.45
26	LA	207	A	C5-C6	-7.50	1.34	1.41
26	LA	347	A	C8-N7	-7.50	1.26	1.31
2	SA	337	G	P-O5'	-7.50	1.52	1.59
2	SA	1132	C	N3-C4	-7.50	1.28	1.33
26	LA	676	A	C2-N3	7.50	1.40	1.33
26	LA	246	C	C2'-C1'	-7.49	1.45	1.53
26	LA	584	C	C4-N4	-7.49	1.27	1.33
26	LA	749	A	C8-N7	-7.49	1.26	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1169	A	O3'-P	-7.49	1.52	1.61
26	LA	2400	G	N3-C4	-7.49	1.30	1.35
2	SA	166	U	N1-C6	-7.49	1.31	1.38
2	SA	1430	A	O3'-P	-7.49	1.52	1.61
2	SA	1365	G	N3-C4	-7.49	1.30	1.35
2	SA	1533	C	C5'-C4'	7.49	1.60	1.51
26	LA	327	G	N9-C8	-7.49	1.32	1.37
26	LA	1286	A	N1-C2	-7.49	1.27	1.34
2	SA	462	G	N9-C8	7.49	1.43	1.37
26	LA	24	G	C8-N7	-7.49	1.26	1.30
26	LA	272	A	C4'-O4'	7.49	1.55	1.45
26	LA	1248	G	P-O5'	-7.49	1.52	1.59
26	LA	1266	G	C8-N7	-7.49	1.26	1.30
26	LA	2743	U	C5-C6	7.49	1.40	1.34
2	SA	1313	U	C4'-C3'	-7.49	1.45	1.53
2	SA	1482	G	C2'-C1'	-7.49	1.45	1.53
26	LA	602	A	C5-C4	-7.49	1.33	1.38
4	S2	65	G	N1-C2	-7.48	1.31	1.37
26	LA	858	G	C6-N1	7.48	1.44	1.39
26	LA	1342	A	C2-N3	-7.48	1.26	1.33
26	LA	1441	G	C2'-C1'	-7.48	1.45	1.53
26	LA	1891	G	C4'-C3'	-7.48	1.45	1.53
2	SA	721	G	C2'-C1'	-7.48	1.45	1.53
2	SA	1237	C	N1-C6	7.48	1.41	1.37
26	LA	407	G	C2-N2	-7.48	1.27	1.34
26	LA	2325	G	C8-N7	-7.48	1.26	1.30
26	LA	2685	G	C2'-C1'	-7.48	1.45	1.53
26	LA	2700	A	C2'-C1'	-7.48	1.45	1.53
2	SA	146	G	N9-C8	7.48	1.43	1.37
26	LA	1439	A	C6-N6	-7.48	1.27	1.33
26	LA	2485	G	C5-C4	-7.48	1.33	1.38
2	SA	449	G	C2'-C1'	-7.48	1.45	1.53
2	SA	568	G	O3'-P	-7.48	1.52	1.61
3	S1	34	U	C3'-C2'	7.48	1.61	1.52
26	LA	747	U	O3'-P	-7.48	1.52	1.61
26	LA	1043	C	N3-C4	7.48	1.39	1.33
26	LA	1135	C	O3'-P	-7.48	1.52	1.61
26	LA	1609	A	C2-N3	7.48	1.40	1.33
26	LA	1824	G	C2-N2	-7.48	1.27	1.34
26	LA	2232	C	C2'-C1'	-7.48	1.45	1.53
26	LA	1327	A	N9-C4	-7.48	1.33	1.37
26	LA	1706	C	C4-C5	-7.48	1.36	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2041	U	C2-N3	7.47	1.43	1.37
2	SA	319	G	C5-C4	7.47	1.43	1.38
26	LA	115	C	N1-C6	-7.47	1.32	1.37
26	LA	745	G	C5-C6	-7.47	1.34	1.42
26	LA	1773	A	N7-C5	-7.47	1.34	1.39
26	LA	2462	C	C2-N3	7.47	1.41	1.35
26	LA	2484	G	N1-C2	-7.47	1.31	1.37
26	LA	2635	A	N3-C4	-7.47	1.30	1.34
2	SA	1438	G	C2-N2	-7.47	1.27	1.34
25	LB	110	C	C2'-C1'	-7.47	1.45	1.53
26	LA	45	G	N7-C5	-7.47	1.34	1.39
26	LA	359	G	O4'-C1'	7.47	1.51	1.41
26	LA	1131	G	C5-C6	-7.47	1.34	1.42
2	SA	162	A	C3'-O3'	7.47	1.52	1.42
2	SA	502	A	N9-C8	-7.47	1.31	1.37
26	LA	1612	C	C3'-C2'	-7.47	1.44	1.52
26	LA	1677	A	C2'-C1'	-7.47	1.45	1.53
26	LA	1761	C	C2-O2	-7.47	1.17	1.24
26	LA	2354	C	C4-C5	-7.47	1.36	1.43
2	SA	53	A	C3'-O3'	7.47	1.52	1.42
2	SA	1485	U	C4-C5	-7.47	1.36	1.43
26	LA	462	C	C4'-C3'	-7.47	1.45	1.53
26	LA	771	G	N7-C5	-7.47	1.34	1.39
26	LA	820	A	N9-C4	-7.47	1.33	1.37
26	LA	1573	G	N3-C4	7.47	1.40	1.35
26	LA	1735	A	C8-N7	-7.47	1.26	1.31
26	LA	3	U	C4-C5	7.46	1.50	1.43
26	LA	286	U	C5'-C4'	7.46	1.60	1.51
26	LA	508	A	C2-N3	7.46	1.40	1.33
26	LA	693	A	C4'-C3'	-7.46	1.45	1.53
26	LA	1028	A	C6-N6	7.46	1.40	1.33
26	LA	1110	G	C5-C6	-7.46	1.34	1.42
26	LA	1124	G	C2'-C1'	-7.46	1.45	1.53
26	LA	2838	G	O3'-P	-7.46	1.52	1.61
2	SA	484	G	C2'-C1'	-7.46	1.45	1.53
2	SA	1453	G	C2-N3	7.46	1.38	1.32
26	LA	946	C	C3'-C2'	-7.46	1.44	1.52
26	LA	1111	A	O3'-P	-7.46	1.52	1.61
26	LA	1460	U	C3'-C2'	7.46	1.61	1.52
26	LA	2206	C	C4-C5	-7.46	1.36	1.43
26	LA	2376	A	N7-C5	-7.46	1.34	1.39
2	SA	928	G	N1-C2	-7.46	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	109	A	C4'-O4'	7.46	1.55	1.45
26	LA	2041	U	C4-C5	-7.46	1.36	1.43
26	LA	119	A	C2'-C1'	-7.46	1.45	1.53
26	LA	976	G	N3-C4	-7.46	1.30	1.35
26	LA	1149	G	C2-N3	-7.46	1.26	1.32
26	LA	1660	G	N9-C8	-7.46	1.32	1.37
26	LA	1999	C	C4-C5	-7.46	1.36	1.43
26	LA	2352	A	C5-C6	-7.46	1.34	1.41
26	LA	1875	G	N1-C2	-7.46	1.31	1.37
26	LA	2104	C	C4-C5	-7.46	1.36	1.43
26	LA	128	C	C4-C5	7.46	1.49	1.43
26	LA	1134	A	N7-C5	7.46	1.43	1.39
26	LA	1459	G	N3-C4	7.46	1.40	1.35
26	LA	2121	G	N3-C4	-7.46	1.30	1.35
2	SA	77	A	C4'-C3'	-7.45	1.45	1.53
2	SA	165	G	C2'-C1'	-7.45	1.45	1.53
26	LA	361	G	C6-N1	7.45	1.44	1.39
26	LA	2623	G	P-O5'	-7.45	1.52	1.59
26	LA	2172	U	N3-C4	-7.45	1.31	1.38
26	LA	2378	A	C2'-C1'	-7.45	1.45	1.53
2	SA	70	U	P-O5'	-7.45	1.52	1.59
2	SA	229	U	P-O5'	-7.45	1.52	1.59
2	SA	687	A	N1-C2	-7.45	1.27	1.34
26	LA	120	U	C5'-C4'	7.45	1.60	1.51
26	LA	1905	C	P-O5'	-7.45	1.52	1.59
2	SA	1483	A	C5-C4	7.45	1.44	1.38
26	LA	2256	G	N9-C4	-7.45	1.31	1.38
26	LA	2385	C	N1-C6	7.45	1.41	1.37
2	SA	510	A	C2-N3	-7.45	1.26	1.33
26	LA	1475	G	P-O5'	-7.45	1.52	1.59
26	LA	2475	C	C2-N3	-7.45	1.29	1.35
2	SA	176	C	N1-C6	-7.45	1.32	1.37
20	SD	51	GLY	CA-C	-7.45	1.40	1.51
26	LA	63	A	C4'-C3'	-7.45	1.45	1.53
26	LA	620	G	C2'-C1'	-7.45	1.45	1.53
26	LA	1322	A	C2-N3	7.45	1.40	1.33
26	LA	1792	G	N3-C4	-7.45	1.30	1.35
26	LA	2149	U	C4'-C3'	7.45	1.61	1.53
26	LA	278	A	N3-C4	7.44	1.39	1.34
26	LA	697	G	C2-N2	-7.44	1.27	1.34
26	LA	2759	G	C8-N7	7.44	1.35	1.30
20	SD	112	GLU	CG-CD	7.44	1.63	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	472	A	C5-C6	-7.44	1.34	1.41
26	LA	516	C	O3'-P	-7.44	1.52	1.61
26	LA	1743	G	C2-N2	-7.44	1.27	1.34
26	LA	2276	G	C2-N2	-7.44	1.27	1.34
2	SA	750	C	C5'-C4'	7.44	1.60	1.51
26	LA	1775	U	N1-C2	-7.44	1.31	1.38
26	LA	1799	G	C2-N2	-7.44	1.27	1.34
2	SA	927	G	N1-C2	-7.44	1.31	1.37
26	LA	372	G	C2'-C1'	-7.44	1.45	1.53
26	LA	2720	U	N1-C2	-7.44	1.31	1.38
2	SA	16	A	C5-C4	-7.44	1.33	1.38
2	SA	388	G	N7-C5	7.44	1.43	1.39
2	SA	417	G	C2-N3	-7.44	1.26	1.32
2	SA	856	C	C3'-O3'	7.44	1.52	1.42
2	SA	1462	C	C4'-C3'	7.44	1.61	1.53
4	S2	34	U	C4-C5	-7.44	1.36	1.43
26	LA	159	G	C2-N2	-7.44	1.27	1.34
26	LA	1024	G	N7-C5	-7.44	1.34	1.39
26	LA	2392	A	N9-C4	-7.44	1.33	1.37
26	LA	2476	A	P-O5'	-7.44	1.52	1.59
2	SA	1324	A	C6-N1	7.44	1.40	1.35
26	LA	2620	C	C4-C5	-7.44	1.37	1.43
2	SA	232	G	C2-N3	7.43	1.38	1.32
2	SA	906	A	C8-N7	-7.43	1.26	1.31
2	SA	917	G	C6-N1	-7.43	1.34	1.39
2	SA	1459	G	C2-N2	-7.43	1.27	1.34
26	LA	1193	G	N3-C4	-7.43	1.30	1.35
26	LA	1671	U	C4-O4	-7.43	1.17	1.23
26	LA	1950	G	O3'-P	-7.43	1.52	1.61
26	LA	2434	A	N7-C5	-7.43	1.34	1.39
2	SA	1371	G	C2-N3	-7.43	1.26	1.32
26	LA	842	U	N3-C4	7.43	1.45	1.38
26	LA	1688	U	C2-N3	-7.43	1.32	1.37
26	LA	2392	A	C3'-C2'	-7.43	1.44	1.52
48	LN	53	GLY	CA-C	7.43	1.63	1.51
26	LA	2358	A	N7-C5	-7.43	1.34	1.39
2	SA	907	A	N9-C8	-7.43	1.31	1.37
2	SA	1489	G	N3-C4	7.43	1.40	1.35
2	SA	505	G	O3'-P	-7.43	1.52	1.61
26	LA	1567	G	N3-C4	-7.43	1.30	1.35
26	LA	1823	G	C5-C6	-7.43	1.34	1.42
2	SA	328	C	N1-C6	7.43	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	566	G	C6-N1	-7.43	1.34	1.39
26	LA	228	C	C2'-C1'	-7.43	1.45	1.53
26	LA	335	C	C5-C6	-7.43	1.28	1.34
26	LA	1929	G	C5-C4	7.43	1.43	1.38
2	SA	524	G	C5-C4	-7.42	1.33	1.38
2	SA	1460	C	N1-C2	-7.42	1.32	1.40
26	LA	252	G	N9-C4	-7.42	1.32	1.38
26	LA	1014	A	O3'-P	-7.42	1.52	1.61
26	LA	1325	U	C3'-C2'	7.42	1.61	1.52
26	LA	1923	U	P-O5'	-7.42	1.52	1.59
26	LA	2870	C	P-O5'	-7.42	1.52	1.59
2	SA	841	C	C2'-C1'	-7.42	1.45	1.53
2	SA	893	C	C4-C5	-7.42	1.37	1.43
26	LA	219	A	C3'-O3'	-7.42	1.31	1.42
26	LA	241	A	N1-C2	-7.42	1.27	1.34
26	LA	2310	C	N3-C4	7.42	1.39	1.33
26	LA	2594	C	N1-C6	-7.42	1.32	1.37
2	SA	1222	G	C2'-C1'	-7.42	1.45	1.53
26	LA	138	U	C4'-O4'	7.42	1.55	1.45
26	LA	1500	G	N9-C4	-7.42	1.32	1.38
26	LA	1516	G	N7-C5	-7.42	1.34	1.39
26	LA	1779	U	O3'-P	-7.42	1.52	1.61
26	LA	2187	U	N3-C4	-7.42	1.31	1.38
2	SA	148	G	C5'-C4'	7.42	1.60	1.51
2	SA	1257	A	N7-C5	-7.42	1.34	1.39
2	SA	1392	G	C8-N7	7.42	1.35	1.30
26	LA	263	G	C8-N7	-7.42	1.26	1.30
26	LA	738	G	N1-C2	-7.42	1.31	1.37
26	LA	1037	G	C5-C4	-7.42	1.33	1.38
2	SA	675	A	N3-C4	-7.42	1.30	1.34
2	SA	1295	U	O3'-P	-7.42	1.52	1.61
26	LA	69	C	C5-C6	7.42	1.40	1.34
26	LA	391	A	N7-C5	-7.42	1.34	1.39
26	LA	432	A	N9-C4	-7.42	1.33	1.37
26	LA	673	C	C5-C6	-7.42	1.28	1.34
26	LA	1077	A	C5-C6	-7.42	1.34	1.41
26	LA	1561	C	N1-C6	-7.42	1.32	1.37
26	LA	243	U	N3-C4	-7.42	1.31	1.38
26	LA	1953	A	C5-C4	-7.41	1.33	1.38
26	LA	2060	A	P-O5'	-7.41	1.52	1.59
26	LA	2693	G	C8-N7	-7.41	1.26	1.30
26	LA	2708	G	N3-C4	-7.41	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	591	U	C2'-C1'	-7.41	1.45	1.53
26	LA	756	A	C2-N3	-7.41	1.26	1.33
26	LA	2773	C	P-O5'	-7.41	1.52	1.59
26	LA	1165	A	N3-C4	-7.41	1.30	1.34
26	LA	2344	U	C2-N3	-7.41	1.32	1.37
2	SA	311	C	C5-C6	-7.41	1.28	1.34
26	LA	94	A	O3'-P	-7.41	1.52	1.61
26	LA	1394	U	C5'-C4'	7.41	1.60	1.51
26	LA	1990	C	C4-N4	-7.41	1.27	1.33
26	LA	2020	A	C2'-C1'	-7.41	1.45	1.53
26	LA	2711	A	N9-C4	-7.41	1.33	1.37
2	SA	191	G	C8-N7	-7.41	1.26	1.30
2	SA	697	U	N1-C2	-7.41	1.31	1.38
2	SA	880	C	N1-C2	-7.41	1.32	1.40
2	SA	1050	G	C5'-C4'	7.41	1.60	1.51
2	SA	1376	U	O3'-P	-7.41	1.52	1.61
4	S2	73	A	N3-C4	-7.41	1.30	1.34
25	LB	85	G	N7-C5	-7.41	1.34	1.39
26	LA	702	U	C4'-O4'	7.41	1.55	1.45
26	LA	2212	A	N7-C5	-7.41	1.34	1.39
2	SA	851	G	N9-C8	-7.40	1.32	1.37
26	LA	458	G	N3-C4	-7.40	1.30	1.35
26	LA	877	A	N7-C5	-7.40	1.34	1.39
26	LA	2627	G	N1-C2	-7.40	1.31	1.37
25	LB	21	G	C3'-C2'	-7.40	1.44	1.52
26	LA	218	A	C6-N6	-7.40	1.28	1.33
26	LA	733	G	N7-C5	-7.40	1.34	1.39
26	LA	2383	G	C6-N1	-7.40	1.34	1.39
26	LA	2795	C	N3-C4	-7.40	1.28	1.33
2	SA	385	C	C3'-O3'	7.40	1.52	1.42
2	SA	1251	A	C5'-C4'	7.40	1.60	1.51
25	LB	32	U	C2-N3	-7.40	1.32	1.37
26	LA	94	A	C5'-C4'	7.40	1.60	1.51
26	LA	811	U	C2-N3	-7.40	1.32	1.37
26	LA	1682	G	C4'-O4'	7.40	1.55	1.45
26	LA	1743	G	P-O5'	-7.40	1.52	1.59
26	LA	2415	G	C6-N1	-7.40	1.34	1.39
26	LA	2649	C	C5'-C4'	7.40	1.60	1.51
26	LA	2763	G	N7-C5	-7.40	1.34	1.39
26	LA	1060	U	O3'-P	-7.40	1.52	1.61
26	LA	2846	G	N9-C8	-7.40	1.32	1.37
2	SA	326	G	C2-N2	-7.40	1.27	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	548	G	N3-C4	-7.40	1.30	1.35
4	S2	5	G	N9-C8	-7.40	1.32	1.37
26	LA	53	A	C1'-N9	-7.40	1.36	1.46
26	LA	1478	G	C5'-C4'	7.40	1.60	1.51
26	LA	2655	G	C2'-C1'	-7.40	1.45	1.53
2	SA	989	U	N1-C6	-7.40	1.31	1.38
26	LA	2655	G	N3-C4	-7.40	1.30	1.35
2	SA	591	U	C4'-C3'	-7.39	1.45	1.53
26	LA	492	A	N3-C4	-7.39	1.30	1.34
26	LA	1980	G	P-O5'	7.39	1.67	1.59
26	LA	2056	G	O4'-C1'	-7.39	1.32	1.41
26	LA	2083	G	C2-N2	-7.39	1.27	1.34
26	LA	2095	A	C1'-N9	-7.39	1.36	1.46
26	LA	2577	A	C5'-C4'	7.39	1.60	1.51
26	LA	2627	G	C5'-C4'	7.39	1.60	1.51
2	SA	375	U	O3'-P	-7.39	1.52	1.61
2	SA	1057	G	C2-N3	-7.39	1.26	1.32
2	SA	1140	C	O3'-P	-7.39	1.52	1.61
26	LA	218	A	N1-C2	7.39	1.41	1.34
26	LA	751	A	N7-C5	7.39	1.43	1.39
26	LA	980	A	C5'-C4'	7.39	1.60	1.51
26	LA	1024	G	C1'-N9	-7.39	1.36	1.46
26	LA	1088	A	C6-N6	-7.39	1.28	1.33
26	LA	1967	C	C2'-C1'	-7.39	1.45	1.53
26	LA	2766	A	N7-C5	-7.39	1.34	1.39
4	S2	67	C	P-O5'	-7.39	1.52	1.59
2	SA	303	A	N3-C4	-7.39	1.30	1.34
2	SA	1041	G	C2'-C1'	7.39	1.61	1.53
26	LA	194	G	C5'-C4'	7.39	1.60	1.51
26	LA	838	C	N1-C6	-7.39	1.32	1.37
26	LA	1654	A	C5-C6	7.39	1.47	1.41
26	LA	2645	G	C6-N1	-7.39	1.34	1.39
2	SA	39	G	C2-N2	-7.39	1.27	1.34
26	LA	753	A	C5-C4	7.39	1.44	1.38
26	LA	2874	C	C5'-C4'	7.39	1.60	1.51
26	LA	1020	A	C6-N1	7.39	1.40	1.35
26	LA	1284	A	N7-C5	7.39	1.43	1.39
26	LA	2681	C	N1-C2	-7.39	1.32	1.40
2	SA	433	G	N9-C8	-7.38	1.32	1.37
26	LA	1156	A	C5-C4	-7.38	1.33	1.38
2	SA	64	G	C3'-O3'	7.38	1.52	1.42
2	SA	792	A	C6-N6	7.38	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1039	G	N9-C8	-7.38	1.32	1.37
2	SA	1225	A	N7-C5	-7.38	1.34	1.39
26	LA	177	G	N3-C4	-7.38	1.30	1.35
26	LA	513	A	C5-C4	-7.38	1.33	1.38
26	LA	1212	G	C2-N2	-7.38	1.27	1.34
26	LA	1303	G	C2'-C1'	-7.38	1.45	1.53
26	LA	1610	A	N9-C4	7.38	1.42	1.37
26	LA	2404	U	C4-C5	-7.38	1.36	1.43
2	SA	547	A	N1-C2	-7.38	1.27	1.34
26	LA	1522	A	C5-C4	-7.38	1.33	1.38
26	LA	2641	G	O3'-P	-7.38	1.52	1.61
2	SA	391	G	C8-N7	-7.38	1.26	1.30
2	SA	1420	U	C4'-C3'	-7.38	1.45	1.53
26	LA	475	C	N3-C4	-7.38	1.28	1.33
26	LA	1348	C	N1-C2	-7.38	1.32	1.40
26	LA	576	U	N1-C2	-7.38	1.31	1.38
26	LA	837	C	C5'-C4'	7.38	1.60	1.51
26	LA	1453	A	C6-N1	-7.38	1.30	1.35
26	LA	2056	G	C4'-C3'	-7.38	1.45	1.53
26	LA	2669	G	C5'-C4'	7.38	1.60	1.51
3	S1	42	U	N1-C2	7.38	1.45	1.38
2	SA	261	U	C5'-C4'	7.37	1.60	1.51
2	SA	1031	C	N1-C6	-7.37	1.32	1.37
4	S2	54	G	N7-C5	-7.37	1.34	1.39
10	SJ	45	ARG	NE-CZ	7.37	1.42	1.33
26	LA	401	A	C5-C4	7.37	1.44	1.38
26	LA	1991	U	N3-C4	-7.37	1.31	1.38
26	LA	2099	U	C5'-C4'	7.37	1.60	1.51
26	LA	2668	G	N9-C4	-7.37	1.32	1.38
26	LA	337	C	P-O5'	-7.37	1.52	1.59
26	LA	382	A	N7-C5	-7.37	1.34	1.39
26	LA	459	U	C2-N3	-7.37	1.32	1.37
26	LA	1823	G	C1'-N9	-7.37	1.36	1.46
2	SA	90	C	C4-N4	-7.37	1.27	1.33
2	SA	978	A	C5-C4	7.37	1.44	1.38
26	LA	850	U	C2'-C1'	-7.37	1.45	1.53
26	LA	2774	C	C3'-C2'	-7.37	1.44	1.52
26	LA	2783	U	P-O5'	-7.37	1.52	1.59
2	SA	108	G	C8-N7	7.37	1.35	1.30
2	SA	309	A	N3-C4	7.37	1.39	1.34
2	SA	729	A	N3-C4	7.37	1.39	1.34
2	SA	758	C	C2-N3	-7.37	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	180	G	C2'-C1'	-7.37	1.45	1.53
26	LA	1357	C	P-O5'	-7.37	1.52	1.59
26	LA	2464	G	N1-C2	-7.37	1.31	1.37
26	LA	2735	G	C3'-C2'	-7.37	1.44	1.52
26	LA	2844	G	C8-N7	7.37	1.35	1.30
26	LA	1327	A	C3'-C2'	7.37	1.61	1.52
26	LA	2182	U	N1-C2	-7.37	1.31	1.38
3	S1	49	U	C4'-C3'	7.37	1.61	1.53
26	LA	563	A	N3-C4	-7.37	1.30	1.34
26	LA	1753	G	C2-N2	-7.37	1.27	1.34
26	LA	2705	A	N9-C8	-7.37	1.31	1.37
2	SA	1283	U	C4-C5	7.36	1.50	1.43
26	LA	134	G	C2'-C1'	-7.36	1.45	1.53
26	LA	1431	A	N7-C5	-7.36	1.34	1.39
26	LA	1457	U	C2'-C1'	-7.36	1.45	1.53
26	LA	1783	A	O3'-P	-7.36	1.52	1.61
26	LA	1810	A	C3'-C2'	-7.36	1.44	1.52
26	LA	2587	A	N7-C5	-7.36	1.34	1.39
26	LA	2819	G	C5'-C4'	7.36	1.60	1.51
2	SA	675	A	C4'-C3'	-7.36	1.45	1.53
2	SA	788	U	C4-C5	7.36	1.50	1.43
26	LA	130	C	N1-C6	7.36	1.41	1.37
26	LA	721	A	P-O5'	-7.36	1.52	1.59
26	LA	1678	A	C5'-C4'	7.36	1.60	1.51
26	LA	2390	U	N3-C4	-7.36	1.31	1.38
2	SA	57	G	C5-C4	-7.36	1.33	1.38
26	LA	2040	G	C4'-C3'	-7.36	1.45	1.53
26	LA	2663	G	N9-C8	-7.36	1.32	1.37
2	SA	375	U	C3'-C2'	-7.36	1.44	1.52
2	SA	763	G	C2-N3	-7.36	1.26	1.32
25	LB	76	G	C3'-C2'	-7.36	1.44	1.52
26	LA	35	G	O4'-C1'	7.36	1.51	1.41
26	LA	2159	G	C4'-C3'	7.36	1.61	1.53
26	LA	2502	G	C3'-C2'	-7.36	1.44	1.52
26	LA	307	G	C5-C4	-7.35	1.33	1.38
26	LA	2458	G	C5-C6	-7.35	1.34	1.42
2	SA	72	A	C8-N7	-7.35	1.26	1.31
2	SA	744	C	C2-N3	-7.35	1.29	1.35
2	SA	925	G	P-O5'	-7.35	1.52	1.59
26	LA	355	U	C4-O4	7.35	1.29	1.23
26	LA	406	G	N9-C4	7.35	1.43	1.38
2	SA	1383	C	C2-N3	-7.35	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1485	U	C2'-C1'	-7.35	1.45	1.53
26	LA	1776	G	O3'-P	-7.35	1.52	1.61
26	LA	1809	A	N9-C8	-7.35	1.31	1.37
26	LA	168	G	N9-C8	-7.35	1.32	1.37
26	LA	691	C	C2-O2	-7.35	1.17	1.24
26	LA	1570	A	C4'-C3'	7.35	1.61	1.53
26	LA	1981	A	O4'-C1'	-7.35	1.32	1.41
26	LA	438	G	C5-C4	-7.35	1.33	1.38
26	LA	601	C	P-O5'	-7.35	1.52	1.59
26	LA	613	A	C8-N7	-7.35	1.26	1.31
26	LA	1446	C	C5'-C4'	7.35	1.60	1.51
26	LA	2049	G	N9-C8	-7.35	1.32	1.37
2	SA	1015	G	C2'-C1'	-7.35	1.45	1.53
26	LA	463	G	N7-C5	-7.35	1.34	1.39
2	SA	1244	G	C5-C4	-7.34	1.33	1.38
11	SK	82	GLU	CD-OE1	7.34	1.33	1.25
26	LA	1029	A	C5-C4	7.34	1.43	1.38
26	LA	1102	C	C4-C5	7.34	1.48	1.43
26	LA	1106	G	C5-C4	-7.34	1.33	1.38
26	LA	1824	G	C6-N1	-7.34	1.34	1.39
26	LA	388	G	C4'-C3'	7.34	1.61	1.53
26	LA	2604	U	C4-C5	-7.34	1.36	1.43
26	LA	2896	C	C4-N4	-7.34	1.27	1.33
2	SA	86	G	N3-C4	-7.34	1.30	1.35
2	SA	593	U	N1-C2	-7.34	1.31	1.38
26	LA	189	G	N3-C4	-7.34	1.30	1.35
26	LA	1377	G	O4'-C1'	-7.34	1.32	1.41
26	LA	1446	C	N3-C4	7.34	1.39	1.33
2	SA	251	G	N1-C2	-7.34	1.31	1.37
2	SA	839	C	C4'-C3'	7.34	1.61	1.53
26	LA	868	U	C4'-C3'	-7.34	1.45	1.53
26	LA	1686	C	C2-N3	7.34	1.41	1.35
26	LA	2263	C	C4-N4	-7.34	1.27	1.33
2	SA	209	U	C2-N3	-7.33	1.32	1.37
2	SA	235	C	N1-C6	7.33	1.41	1.37
2	SA	253	A	C5-C6	7.33	1.47	1.41
2	SA	1531	A	P-O5'	-7.33	1.52	1.59
26	LA	1289	C	N3-C4	7.33	1.39	1.33
26	LA	608	A	O3'-P	-7.33	1.52	1.61
26	LA	1328	A	C2'-C1'	7.33	1.61	1.53
26	LA	1834	U	O3'-P	-7.33	1.52	1.61
26	LA	2211	A	C3'-C2'	7.33	1.61	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	608	A	C8-N7	-7.33	1.26	1.31
26	LA	331	C	N1-C6	-7.33	1.32	1.37
26	LA	1959	G	N1-C2	-7.33	1.31	1.37
26	LA	2788	C	C3'-C2'	-7.33	1.44	1.52
2	SA	1102	A	C5'-C4'	7.33	1.60	1.51
26	LA	1914	C	C1'-N1	7.33	1.59	1.48
2	SA	242	G	C4'-C3'	-7.33	1.45	1.53
2	SA	422	C	C5'-C4'	7.33	1.60	1.51
2	SA	1504	G	C3'-C2'	7.33	1.61	1.52
26	LA	890	C	N1-C6	7.33	1.41	1.37
26	LA	1783	A	C1'-N9	-7.33	1.36	1.46
2	SA	1233	G	C8-N7	-7.33	1.26	1.30
2	SA	645	G	C4'-C3'	-7.33	1.45	1.53
2	SA	746	A	C5-C4	-7.33	1.33	1.38
2	SA	799	G	N9-C8	7.33	1.43	1.37
2	SA	1473	G	P-O5'	-7.33	1.52	1.59
4	S2	15	G	C2-N2	-7.33	1.27	1.34
26	LA	1349	C	C4-C5	-7.33	1.37	1.43
26	LA	1868	C	C4-C5	-7.33	1.37	1.43
26	LA	2486	C	C2'-C1'	-7.33	1.45	1.53
26	LA	2626	C	N1-C6	-7.33	1.32	1.37
26	LA	2903	U	N3-C4	-7.33	1.31	1.38
2	SA	413	G	N3-C4	-7.32	1.30	1.35
2	SA	619	U	C2'-C1'	-7.32	1.45	1.53
2	SA	1262	C	N3-C4	7.32	1.39	1.33
26	LA	48	G	P-O5'	-7.32	1.52	1.59
26	LA	426	C	N1-C2	7.32	1.47	1.40
26	LA	1286	A	C1'-N9	-7.32	1.36	1.46
26	LA	2055	C	C4-N4	-7.32	1.27	1.33
26	LA	467	G	C2-N2	-7.32	1.27	1.34
26	LA	659	G	C3'-C2'	7.32	1.61	1.52
26	LA	2647	U	C2'-C1'	-7.32	1.45	1.53
38	LE	88	GLU	CB-CG	7.32	1.66	1.52
2	SA	906	A	N3-C4	-7.32	1.30	1.34
26	LA	259	G	N3-C4	-7.32	1.30	1.35
26	LA	2387	U	N1-C6	-7.32	1.31	1.38
25	LB	1	U	C4-C5	7.32	1.50	1.43
26	LA	169	G	N7-C5	7.32	1.43	1.39
26	LA	1126	A	N7-C5	-7.32	1.34	1.39
2	SA	1056	U	C3'-O3'	7.32	1.52	1.42
26	LA	149	A	N1-C2	-7.32	1.27	1.34
26	LA	1557	C	N1-C6	-7.32	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	477	A	O3'-P	-7.31	1.52	1.61
26	LA	490	C	C4'-C3'	7.31	1.61	1.53
26	LA	1137	G	C5-C4	-7.31	1.33	1.38
2	SA	1093	A	N9-C8	7.31	1.43	1.37
2	SA	1154	G	C4'-C3'	7.31	1.61	1.53
26	LA	953	G	C6-O6	7.31	1.30	1.24
26	LA	1222	U	C2-N3	-7.31	1.32	1.37
26	LA	1389	G	N7-C5	-7.31	1.34	1.39
26	LA	1910	G	C2'-C1'	-7.31	1.45	1.53
26	LA	2892	G	O3'-P	-7.31	1.52	1.61
2	SA	113	G	C3'-C2'	-7.31	1.44	1.52
26	LA	317	G	C2-N2	-7.31	1.27	1.34
2	SA	54	C	N1-C6	-7.31	1.32	1.37
2	SA	697	U	C4'-C3'	-7.31	1.45	1.53
2	SA	1092	A	N9-C4	7.31	1.42	1.37
2	SA	1320	C	C3'-O3'	7.31	1.52	1.42
2	SA	1538	C	O3'-P	-7.31	1.52	1.61
4	S2	15	G	C2-N3	7.31	1.38	1.32
25	LB	67	G	N9-C8	-7.31	1.32	1.37
26	LA	1342	A	C8-N7	-7.31	1.26	1.31
26	LA	1487	U	O3'-P	-7.31	1.52	1.61
2	SA	1361	G	N7-C5	7.31	1.43	1.39
26	LA	243	U	C4'-O4'	-7.31	1.36	1.45
26	LA	628	G	C3'-C2'	-7.31	1.44	1.52
26	LA	1237	A	C1'-N9	-7.31	1.36	1.46
26	LA	1459	G	C8-N7	7.31	1.35	1.30
26	LA	2893	A	N7-C5	-7.31	1.34	1.39
2	SA	315	A	C2-N3	7.31	1.40	1.33
26	LA	195	A	C3'-C2'	-7.31	1.44	1.52
2	SA	51	A	P-O5'	-7.30	1.52	1.59
2	SA	1179	A	C4'-O4'	-7.30	1.36	1.45
26	LA	183	C	C5'-C4'	7.30	1.60	1.51
26	LA	1029	A	C2'-C1'	-7.30	1.45	1.53
26	LA	2318	G	C5'-C4'	7.30	1.60	1.51
26	LA	95	A	C8-N7	-7.30	1.26	1.31
26	LA	1867	G	C6-N1	7.30	1.44	1.39
26	LA	2520	C	N1-C6	-7.30	1.32	1.37
2	SA	1493	A	C5-C6	-7.30	1.34	1.41
26	LA	190	A	C4'-C3'	-7.30	1.45	1.53
26	LA	960	A	C4'-C3'	-7.30	1.45	1.53
26	LA	1162	G	C6-N1	-7.30	1.34	1.39
26	LA	1805	A	N3-C4	-7.30	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1813	G	C3'-O3'	-7.30	1.31	1.42
26	LA	2835	A	N9-C4	-7.30	1.33	1.37
2	SA	1072	G	C2-N2	-7.30	1.27	1.34
26	LA	897	C	C5'-C4'	7.30	1.60	1.51
26	LA	1653	G	C8-N7	-7.30	1.26	1.30
26	LA	2192	U	C2-N3	7.30	1.42	1.37
2	SA	840	C	C5'-C4'	7.30	1.60	1.51
26	LA	66	C	C2-N3	-7.30	1.29	1.35
2	SA	285	C	O3'-P	-7.30	1.52	1.61
2	SA	475	C	C2'-C1'	-7.30	1.45	1.53
26	LA	758	C	C5'-C4'	7.30	1.60	1.51
26	LA	827	U	C2'-C1'	-7.30	1.45	1.53
26	LA	1297	C	P-O5'	-7.30	1.52	1.59
26	LA	1952	A	N7-C5	-7.30	1.34	1.39
26	LA	2078	C	P-O5'	-7.30	1.52	1.59
26	LA	1703	G	C5'-C4'	7.29	1.60	1.51
26	LA	2193	G	N9-C4	-7.29	1.32	1.38
2	SA	1135	U	N1-C6	-7.29	1.31	1.38
25	LB	40	U	C2-N3	7.29	1.42	1.37
26	LA	380	G	C5-C4	-7.29	1.33	1.38
26	LA	795	C	C4-C5	-7.29	1.37	1.43
26	LA	1615	C	C2-N3	-7.29	1.29	1.35
2	SA	257	G	C8-N7	7.29	1.35	1.30
2	SA	587	G	N9-C8	-7.29	1.32	1.37
2	SA	977	A	O4'-C1'	7.29	1.51	1.41
2	SA	1380	U	N1-C2	-7.29	1.31	1.38
4	S2	65	G	N7-C5	-7.29	1.34	1.39
25	LB	90	C	O3'-P	-7.29	1.52	1.61
26	LA	19	A	C5-C4	-7.29	1.33	1.38
26	LA	1206	G	C5'-C4'	7.29	1.60	1.51
26	LA	1995	U	C5'-C4'	7.29	1.60	1.51
26	LA	854	C	C2'-C1'	-7.29	1.45	1.53
26	LA	1612	C	C2'-C1'	-7.29	1.45	1.53
26	LA	2068	U	C2'-C1'	-7.29	1.45	1.53
26	LA	2562	U	N1-C2	-7.29	1.31	1.38
26	LA	1777	U	C4'-O4'	-7.29	1.36	1.45
26	LA	1806	C	C3'-C2'	7.29	1.60	1.52
26	LA	2108	A	N7-C5	-7.29	1.34	1.39
26	LA	2187	U	P-O5'	-7.29	1.52	1.59
26	LA	2663	G	P-O5'	-7.29	1.52	1.59
2	SA	1294	G	C5-C4	-7.29	1.33	1.38
26	LA	1137	G	N7-C5	-7.29	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1300	G	N9-C8	7.29	1.43	1.37
26	LA	2153	C	C2'-C1'	-7.29	1.45	1.53
2	SA	233	C	C5'-C4'	7.29	1.60	1.51
2	SA	238	A	N3-C4	7.29	1.39	1.34
2	SA	589	U	N1-C2	-7.29	1.31	1.38
2	SA	720	C	C4'-C3'	-7.29	1.45	1.53
26	LA	1443	U	O3'-P	-7.29	1.52	1.61
26	LA	2119	A	N7-C5	-7.29	1.34	1.39
26	LA	2486	C	O4'-C1'	-7.29	1.32	1.41
2	SA	477	C	C5'-C4'	7.28	1.60	1.51
2	SA	652	U	C3'-C2'	-7.28	1.44	1.52
2	SA	1161	C	C3'-C2'	-7.28	1.44	1.52
26	LA	820	A	C6-N6	7.28	1.39	1.33
26	LA	1535	A	O3'-P	-7.28	1.52	1.61
26	LA	1795	C	C4-N4	-7.28	1.27	1.33
26	LA	2013	A	N7-C5	-7.28	1.34	1.39
26	LA	2229	U	N1-C2	-7.28	1.31	1.38
2	SA	539	A	C8-N7	7.28	1.36	1.31
12	SL	27	PRO	N-CD	-7.28	1.37	1.47
26	LA	1190	G	N9-C4	-7.28	1.32	1.38
26	LA	1683	U	O3'-P	-7.28	1.52	1.61
26	LA	1827	U	N1-C6	-7.28	1.31	1.38
26	LA	79	C	C4-C5	7.28	1.48	1.43
26	LA	2356	U	O3'-P	-7.28	1.52	1.61
26	LA	2897	U	C3'-C2'	-7.28	1.44	1.52
2	SA	654	G	C6-O6	-7.28	1.17	1.24
2	SA	772	U	N1-C6	-7.28	1.31	1.38
2	SA	1189	U	N1-C6	-7.28	1.31	1.38
3	S1	39	U	N1-C2	7.28	1.45	1.38
26	LA	252	G	C2-N3	7.28	1.38	1.32
26	LA	741	U	N1-C2	-7.28	1.32	1.38
2	SA	72	A	N1-C2	-7.28	1.27	1.34
2	SA	1046	A	C5-C4	7.28	1.43	1.38
3	S1	13	A	C6-N1	7.28	1.40	1.35
26	LA	699	A	C1'-N9	-7.28	1.36	1.46
2	SA	232	G	C5-C4	-7.27	1.33	1.38
2	SA	688	G	C2-N3	7.27	1.38	1.32
2	SA	1501	C	C2'-C1'	-7.27	1.45	1.53
26	LA	2588	G	C2'-C1'	-7.27	1.45	1.53
2	SA	269	C	C2'-C1'	-7.27	1.45	1.53
26	LA	834	G	C5-C4	-7.27	1.33	1.38
26	LA	1970	A	C6-N6	-7.27	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	257	G	C2-N3	-7.27	1.26	1.32
2	SA	429	U	C4-O4	-7.27	1.17	1.23
25	LB	36	C	P-O5'	7.27	1.67	1.59
26	LA	531	C	P-O5'	-7.27	1.52	1.59
26	LA	1064	C	N1-C6	-7.27	1.32	1.37
26	LA	1523	U	C5'-C4'	7.27	1.60	1.51
26	LA	1947	C	N3-C4	7.27	1.39	1.33
26	LA	2266	A	C8-N7	-7.27	1.26	1.31
26	LA	2643	G	N9-C4	-7.27	1.32	1.38
2	SA	19	A	C8-N7	7.27	1.36	1.31
2	SA	914	A	P-O5'	7.27	1.67	1.59
25	LB	99	A	C3'-C2'	-7.27	1.44	1.52
26	LA	859	G	N3-C4	-7.27	1.30	1.35
26	LA	962	G	N1-C2	-7.27	1.31	1.37
26	LA	1280	G	C6-O6	-7.27	1.17	1.24
26	LA	1980	G	C5-C4	-7.27	1.33	1.38
2	SA	826	C	N1-C6	-7.27	1.32	1.37
2	SA	210	C	C4'-O4'	7.26	1.54	1.45
26	LA	350	G	N9-C4	7.26	1.43	1.38
26	LA	566	U	C4-C5	-7.26	1.37	1.43
26	LA	596	U	N1-C6	-7.26	1.31	1.38
26	LA	1079	C	C4-N4	-7.26	1.27	1.33
26	LA	2032	G	C8-N7	-7.26	1.26	1.30
26	LA	2229	U	C2-N3	-7.26	1.32	1.37
26	LA	2478	A	P-O5'	-7.26	1.52	1.59
26	LA	2893	A	N3-C4	-7.26	1.30	1.34
26	LA	2510	C	N1-C6	7.26	1.41	1.37
2	SA	669	G	N9-C8	7.26	1.43	1.37
2	SA	1407	C	C4-N4	-7.26	1.27	1.33
26	LA	271	G	C5-C4	-7.26	1.33	1.38
26	LA	1232	G	N1-C2	-7.26	1.31	1.37
26	LA	1902	C	C2-N3	7.26	1.41	1.35
2	SA	60	A	C6-N6	-7.26	1.28	1.33
2	SA	1364	U	C4'-C3'	7.26	1.61	1.53
26	LA	1071	G	O4'-C1'	-7.26	1.32	1.41
2	SA	911	U	O3'-P	-7.26	1.52	1.61
2	SA	240	G	O3'-P	-7.26	1.52	1.61
2	SA	1090	U	C2-N3	7.26	1.42	1.37
26	LA	196	A	N9-C4	7.26	1.42	1.37
26	LA	274	C	N1-C2	-7.26	1.32	1.40
26	LA	727	A	O3'-P	-7.26	1.52	1.61
26	LA	880	G	C2-N3	7.26	1.38	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1772	A	C8-N7	-7.26	1.26	1.31
26	LA	1982	U	C2-N3	-7.26	1.32	1.37
26	LA	2066	C	C4-C5	-7.26	1.37	1.43
26	LA	2418	A	C5-C4	-7.26	1.33	1.38
2	SA	195	A	N3-C4	-7.25	1.30	1.34
2	SA	537	G	P-O5'	-7.25	1.52	1.59
2	SA	1074	G	C5-C4	-7.25	1.33	1.38
2	SA	513	C	N1-C6	-7.25	1.32	1.37
2	SA	781	A	N7-C5	-7.25	1.34	1.39
2	SA	982	U	N3-C4	-7.25	1.31	1.38
2	SA	1541	U	N3-C4	7.25	1.45	1.38
4	S2	7	G	N1-C2	-7.25	1.31	1.37
4	S2	16	C	C2-N3	7.25	1.41	1.35
25	LB	96	G	C6-N1	-7.25	1.34	1.39
26	LA	554	U	P-O5'	-7.25	1.52	1.59
26	LA	1829	A	C5-C4	-7.25	1.33	1.38
26	LA	1974	C	C4-C5	-7.25	1.37	1.43
2	SA	282	A	N7-C5	-7.25	1.34	1.39
2	SA	956	U	C4'-O4'	7.25	1.54	1.45
2	SA	1180	A	N9-C4	-7.25	1.33	1.37
2	SA	1337	G	N9-C4	7.25	1.43	1.38
26	LA	483	A	N9-C4	-7.25	1.33	1.37
26	LA	1119	U	P-O5'	-7.25	1.52	1.59
26	LA	1321	A	C6-N6	7.25	1.39	1.33
26	LA	1570	A	C5-C4	-7.25	1.33	1.38
2	SA	1055	A	O4'-C1'	-7.25	1.32	1.41
2	SA	1525	G	C3'-O3'	7.25	1.52	1.42
4	S2	14	A	N9-C4	7.25	1.42	1.37
25	LB	37	C	C2-N3	-7.25	1.29	1.35
25	LB	96	G	N1-C2	-7.25	1.31	1.37
26	LA	781	A	C3'-C2'	-7.25	1.44	1.52
26	LA	1043	C	O3'-P	-7.25	1.52	1.61
2	SA	965	U	C4-C5	-7.25	1.37	1.43
26	LA	599	A	N9-C4	-7.25	1.33	1.37
2	SA	904	U	N1-C2	-7.25	1.32	1.38
26	LA	2085	U	C4-O4	-7.25	1.17	1.23
2	SA	995	C	C4'-C3'	7.24	1.61	1.53
26	LA	1529	G	N7-C5	7.24	1.43	1.39
2	SA	766	A	P-O5'	-7.24	1.52	1.59
26	LA	142	A	N9-C8	-7.24	1.31	1.37
26	LA	537	G	C5'-C4'	7.24	1.60	1.51
26	LA	705	A	C6-N1	-7.24	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1732	C	O3'-P	7.24	1.69	1.61
26	LA	2243	U	C4-O4	-7.24	1.17	1.23
23	SR	63	TYR	CB-CG	-7.24	1.40	1.51
2	SA	765	G	C5-C4	7.24	1.43	1.38
26	LA	680	C	C5'-C4'	7.24	1.60	1.51
26	LA	829	A	N9-C4	-7.24	1.33	1.37
26	LA	1137	G	C2'-C1'	-7.24	1.45	1.53
26	LA	2364	C	O5'-C5'	7.24	1.56	1.44
3	S1	47	C	C5'-C4'	7.24	1.60	1.51
26	LA	469	G	N7-C5	-7.24	1.34	1.39
26	LA	870	U	N1-C6	-7.24	1.31	1.38
26	LA	1601	G	C2-N2	-7.23	1.27	1.34
26	LA	2296	U	P-O5'	-7.23	1.52	1.59
26	LA	2630	G	C3'-O3'	7.23	1.52	1.42
2	SA	1449	C	N1-C6	-7.23	1.32	1.37
33	LZ	1	SER	CA-CB	7.23	1.63	1.52
2	SA	116	A	N3-C4	-7.23	1.30	1.34
26	LA	39	G	N7-C5	-7.23	1.34	1.39
26	LA	444	C	C5'-C4'	7.23	1.60	1.51
26	LA	461	C	N1-C6	-7.23	1.32	1.37
26	LA	1624	U	N3-C4	-7.23	1.31	1.38
26	LA	2681	C	O3'-P	-7.23	1.52	1.61
26	LA	1768	C	C4-N4	-7.23	1.27	1.33
26	LA	1793	C	N1-C6	-7.23	1.32	1.37
26	LA	2277	G	N3-C4	7.23	1.40	1.35
2	SA	722	G	C1'-N9	-7.23	1.36	1.46
2	SA	861	G	C4'-C3'	-7.23	1.45	1.53
2	SA	1514	G	O3'-P	-7.23	1.52	1.61
26	LA	1843	C	N1-C6	-7.23	1.32	1.37
26	LA	2121	G	C2'-C1'	-7.23	1.45	1.53
21	SE	43	GLY	N-CA	-7.23	1.35	1.46
26	LA	1175	A	N3-C4	7.23	1.39	1.34
26	LA	1797	G	C2-N2	-7.23	1.27	1.34
26	LA	819	A	P-O5'	-7.22	1.52	1.59
26	LA	1137	G	C2-N2	-7.22	1.27	1.34
26	LA	2652	C	C2-N3	-7.22	1.29	1.35
2	SA	556	C	N1-C6	7.22	1.41	1.37
2	SA	778	G	N3-C4	-7.22	1.30	1.35
26	LA	336	C	C2-N3	7.22	1.41	1.35
26	LA	798	G	C2'-C1'	-7.22	1.45	1.53
2	SA	800	G	N1-C2	-7.22	1.31	1.37
25	LB	87	U	C2-N3	7.22	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2779	U	C2-N3	-7.22	1.32	1.37
26	LA	90	U	C2-N3	-7.22	1.32	1.37
26	LA	1964	G	C1'-N9	-7.22	1.36	1.46
3	S1	27	A	P-O5'	-7.22	1.52	1.59
4	S2	72	C	C2'-C1'	-7.22	1.45	1.53
26	LA	20	C	C4-C5	7.22	1.48	1.43
26	LA	30	G	C2-N2	-7.22	1.27	1.34
26	LA	861	A	C6-N1	7.22	1.40	1.35
26	LA	1311	G	C8-N7	7.22	1.35	1.30
26	LA	1535	A	C5'-C4'	7.22	1.60	1.51
2	SA	1293	C	C2-N3	-7.21	1.29	1.35
26	LA	471	A	P-O5'	-7.21	1.52	1.59
26	LA	713	G	N9-C4	-7.21	1.32	1.38
26	LA	1932	A	C2-N3	-7.21	1.27	1.33
26	LA	1211	C	P-O5'	-7.21	1.52	1.59
26	LA	2142	A	C8-N7	-7.21	1.26	1.31
2	SA	317	U	C5-C6	-7.21	1.27	1.34
2	SA	1091	U	C3'-C2'	-7.21	1.44	1.52
26	LA	1092	C	C2'-C1'	-7.21	1.45	1.53
26	LA	1230	A	N3-C4	7.21	1.39	1.34
26	LA	1639	C	C4-C5	-7.21	1.37	1.43
26	LA	2093	G	C5-C4	-7.21	1.33	1.38
26	LA	2236	U	C4'-C3'	-7.21	1.45	1.53
2	SA	577	G	C2'-C1'	-7.21	1.45	1.53
2	SA	754	C	C4-C5	-7.21	1.37	1.43
2	SA	1362	A	N1-C2	7.21	1.40	1.34
26	LA	110	G	C8-N7	-7.21	1.26	1.30
26	LA	2857	G	C8-N7	-7.21	1.26	1.30
2	SA	5	U	C5'-C4'	7.21	1.60	1.51
26	LA	46	G	C1'-N9	-7.21	1.36	1.46
26	LA	1753	G	C6-N1	-7.21	1.34	1.39
26	LA	2579	C	C2'-C1'	-7.21	1.45	1.53
2	SA	1462	C	C3'-O3'	7.21	1.52	1.42
26	LA	2642	G	C8-N7	-7.21	1.26	1.30
2	SA	1081	A	C3'-C2'	-7.21	1.44	1.52
25	LB	71	C	N1-C6	7.21	1.41	1.37
25	LB	79	G	O3'-P	-7.21	1.52	1.61
26	LA	90	U	C4'-O4'	-7.21	1.36	1.45
26	LA	2028	U	P-O5'	-7.21	1.52	1.59
26	LA	2108	A	O3'-P	-7.21	1.52	1.61
2	SA	79	G	N9-C4	7.20	1.43	1.38
2	SA	1067	A	C5'-C4'	7.20	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1206	G	C2'-C1'	-7.20	1.45	1.53
25	LB	74	U	C2-N3	7.20	1.42	1.37
26	LA	864	G	N1-C2	-7.20	1.31	1.37
26	LA	1762	A	N7-C5	-7.20	1.34	1.39
26	LA	2308	G	C3'-O3'	7.20	1.52	1.42
26	LA	2530	A	C5'-C4'	7.20	1.59	1.51
26	LA	2854	G	N1-C2	-7.20	1.31	1.37
26	LA	2890	G	C2-N2	-7.20	1.27	1.34
2	SA	1091	U	C4-C5	-7.20	1.37	1.43
26	LA	338	G	N7-C5	7.20	1.43	1.39
26	LA	2150	C	N3-C4	-7.20	1.28	1.33
26	LA	2422	C	O3'-P	-7.20	1.52	1.61
2	SA	256	U	N1-C6	-7.20	1.31	1.38
2	SA	1509	C	N3-C4	-7.20	1.28	1.33
26	LA	93	G	C4'-O4'	-7.20	1.36	1.45
26	LA	640	C	P-O5'	-7.20	1.52	1.59
26	LA	1092	C	C2-N3	-7.20	1.29	1.35
26	LA	1470	A	C2'-C1'	-7.20	1.45	1.53
2	SA	1302	C	C4-C5	-7.20	1.37	1.43
2	SA	1463	U	N3-C4	7.20	1.45	1.38
26	LA	205	G	C6-N1	-7.20	1.34	1.39
26	LA	1764	C	C2-N3	-7.20	1.29	1.35
53	LP	112	TYR	CD2-CE2	7.20	1.50	1.39
2	SA	310	G	C5-C4	7.20	1.43	1.38
2	SA	332	G	C5'-C4'	7.20	1.59	1.51
2	SA	627	G	C3'-C2'	-7.20	1.44	1.52
2	SA	795	C	P-O5'	-7.20	1.52	1.59
2	SA	943	U	N1-C2	-7.20	1.32	1.38
26	LA	1212	G	C3'-O3'	7.20	1.52	1.42
26	LA	113	U	N1-C6	7.19	1.44	1.38
26	LA	1369	G	C5-C4	-7.19	1.33	1.38
26	LA	1692	U	C2-O2	-7.19	1.15	1.22
2	SA	102	G	N9-C4	-7.19	1.32	1.38
2	SA	697	U	C5'-C4'	7.19	1.59	1.51
2	SA	1457	G	C1'-N9	-7.19	1.36	1.46
2	SA	1526	G	N7-C5	-7.19	1.34	1.39
26	LA	799	G	C5-C6	-7.19	1.35	1.42
26	LA	1903	G	C5'-C4'	7.19	1.59	1.51
2	SA	921	U	C4-O4	-7.19	1.17	1.23
2	SA	1275	A	C2-N3	7.19	1.40	1.33
2	SA	1540	U	C1'-N1	7.19	1.59	1.48
26	LA	20	C	C2-N3	-7.19	1.29	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	152	A	N9-C4	-7.19	1.33	1.37
26	LA	1372	U	C2'-C1'	-7.19	1.45	1.53
26	LA	1398	C	C4-N4	-7.19	1.27	1.33
26	LA	2284	A	C2'-C1'	-7.19	1.45	1.53
26	LA	2770	G	C2-N2	-7.19	1.27	1.34
26	LA	543	G	C2-N2	-7.19	1.27	1.34
2	SA	51	A	C6-N1	-7.19	1.30	1.35
2	SA	329	A	C4'-C3'	7.19	1.61	1.53
26	LA	671	C	O4'-C1'	-7.19	1.32	1.41
26	LA	1183	U	N1-C6	7.19	1.44	1.38
26	LA	1595	C	P-O5'	7.19	1.67	1.59
26	LA	1812	U	C2-N3	-7.19	1.32	1.37
26	LA	2118	U	C5'-C4'	7.19	1.59	1.51
2	SA	321	A	N3-C4	-7.19	1.30	1.34
2	SA	1238	A	C6-N6	-7.19	1.28	1.33
26	LA	429	A	C4'-O4'	-7.19	1.36	1.45
26	LA	2341	G	N3-C4	-7.19	1.30	1.35
26	LA	2770	G	C6-N1	-7.19	1.34	1.39
2	SA	120	A	C5-C4	-7.18	1.33	1.38
2	SA	533	A	O3'-P	-7.18	1.52	1.61
2	SA	952	U	N3-C4	-7.18	1.31	1.38
26	LA	371	A	C5-C4	-7.18	1.33	1.38
26	LA	592	A	C6-N6	7.18	1.39	1.33
26	LA	1224	U	C4'-C3'	-7.18	1.45	1.53
26	LA	2147	A	C6-N6	7.18	1.39	1.33
26	LA	2886	A	N3-C4	-7.18	1.30	1.34
2	SA	152	A	N9-C8	-7.18	1.32	1.37
26	LA	1133	A	O3'-P	-7.18	1.52	1.61
2	SA	792	A	C8-N7	-7.18	1.26	1.31
2	SA	1300	G	C2'-C1'	-7.18	1.45	1.53
3	S1	40	G	C5'-C4'	7.18	1.59	1.51
26	LA	118	A	N7-C5	7.18	1.43	1.39
26	LA	1101	U	P-O5'	-7.18	1.52	1.59
2	SA	8	A	O3'-P	-7.18	1.52	1.61
2	SA	484	G	C6-N1	-7.18	1.34	1.39
2	SA	489	C	O3'-P	-7.18	1.52	1.61
2	SA	1033	G	N3-C4	-7.18	1.30	1.35
25	LB	16	G	N3-C4	-7.18	1.30	1.35
26	LA	2706	A	C5'-C4'	7.18	1.59	1.51
2	SA	34	C	C5'-C4'	-7.18	1.42	1.51
2	SA	262	A	C4'-C3'	-7.18	1.45	1.53
2	SA	1511	G	P-O5'	-7.18	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	8	C	C2-N3	-7.18	1.30	1.35
26	LA	49	A	C4'-C3'	7.18	1.61	1.53
26	LA	467	G	C5-C6	-7.18	1.35	1.42
26	LA	1204	A	N9-C8	-7.18	1.32	1.37
26	LA	1424	G	N9-C8	-7.18	1.32	1.37
2	SA	790	A	C2-N3	-7.17	1.27	1.33
26	LA	352	A	C5-C4	-7.17	1.33	1.38
26	LA	1450	G	O3'-P	-7.17	1.52	1.61
26	LA	1490	A	N3-C4	7.17	1.39	1.34
26	LA	1853	A	C8-N7	7.17	1.36	1.31
2	SA	242	G	C2-N2	-7.17	1.27	1.34
2	SA	376	G	C5-C6	7.17	1.49	1.42
2	SA	517	G	N9-C8	7.17	1.42	1.37
2	SA	859	G	N9-C4	-7.17	1.32	1.38
2	SA	1002	G	C8-N7	7.17	1.35	1.30
26	LA	157	C	P-O5'	7.17	1.67	1.59
26	LA	234	U	C2-N3	7.17	1.42	1.37
26	LA	1776	G	C2-N2	-7.17	1.27	1.34
2	SA	681	A	C3'-C2'	-7.17	1.44	1.52
2	SA	759	A	C1'-N9	-7.17	1.36	1.46
2	SA	45	G	C5-C4	-7.17	1.33	1.38
2	SA	294	U	P-O5'	-7.17	1.52	1.59
2	SA	361	G	C5-C4	-7.17	1.33	1.38
20	SD	164	ARG	CD-NE	7.17	1.58	1.46
26	LA	953	G	C8-N7	-7.17	1.26	1.30
26	LA	1281	G	O3'-P	-7.17	1.52	1.61
26	LA	1352	U	O4'-C1'	-7.17	1.32	1.41
26	LA	2356	U	C4'-O4'	-7.17	1.36	1.45
2	SA	951	G	N1-C2	-7.17	1.32	1.37
2	SA	1363	A	C4'-O4'	7.17	1.54	1.45
4	S2	5	G	C8-N7	7.17	1.35	1.30
2	SA	71	A	C4'-C3'	7.17	1.61	1.53
3	S1	41	A	N3-C4	-7.17	1.30	1.34
26	LA	77	G	P-O5'	-7.17	1.52	1.59
26	LA	1928	A	C5-C6	7.17	1.47	1.41
2	SA	1455	G	N9-C8	7.16	1.42	1.37
3	S1	32	U	C3'-C2'	7.16	1.60	1.52
26	LA	1772	A	N3-C4	-7.16	1.30	1.34
26	LA	2445	G	N3-C4	-7.16	1.30	1.35
2	SA	5	U	C4-C5	-7.16	1.37	1.43
26	LA	1865	U	C4-C5	-7.16	1.37	1.43
25	LB	29	A	C5-C4	7.16	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	404	A	C5-C4	-7.16	1.33	1.38
26	LA	1797	G	C2-N3	-7.16	1.27	1.32
2	SA	668	G	C5'-C4'	-7.16	1.42	1.51
2	SA	1463	U	C4'-C3'	-7.16	1.45	1.53
26	LA	809	G	O3'-P	-7.16	1.52	1.61
26	LA	1046	A	N3-C4	-7.16	1.30	1.34
26	LA	1856	U	C2-N3	-7.16	1.32	1.37
26	LA	2074	U	N1-C2	-7.16	1.32	1.38
26	LA	2198	A	C2'-C1'	-7.16	1.45	1.53
26	LA	2314	A	N3-C4	7.16	1.39	1.34
2	SA	1464	U	C2-N3	7.16	1.42	1.37
26	LA	455	C	P-O5'	7.16	1.67	1.59
26	LA	491	G	C5-C6	-7.16	1.35	1.42
26	LA	2568	U	O3'-P	-7.16	1.52	1.61
26	LA	2601	C	C5'-C4'	7.16	1.59	1.51
2	SA	235	C	C4-N4	-7.15	1.27	1.33
26	LA	659	G	N1-C2	-7.15	1.32	1.37
26	LA	1003	G	O3'-P	-7.15	1.52	1.61
26	LA	1095	A	N3-C4	7.15	1.39	1.34
26	LA	1465	G	N7-C5	7.15	1.43	1.39
2	SA	525	C	C2'-C1'	-7.15	1.45	1.53
2	SA	765	G	N3-C4	-7.15	1.30	1.35
2	SA	801	U	N1-C2	-7.15	1.32	1.38
2	SA	1233	G	N9-C4	7.15	1.43	1.38
25	LB	27	C	C2-N3	-7.15	1.30	1.35
26	LA	361	G	N7-C5	-7.15	1.34	1.39
26	LA	648	G	N7-C5	-7.15	1.34	1.39
26	LA	894	U	C5'-C4'	7.15	1.59	1.51
26	LA	1060	U	C5'-C4'	7.15	1.59	1.51
2	SA	1221	G	C2'-C1'	-7.15	1.45	1.53
26	LA	452	G	O4'-C1'	-7.15	1.32	1.41
26	LA	2129	C	C2'-C1'	7.15	1.61	1.53
26	LA	2748	A	N3-C4	-7.15	1.30	1.34
26	LA	2866	U	C1'-N1	-7.15	1.36	1.46
2	SA	16	A	C2'-C1'	-7.15	1.45	1.53
2	SA	635	A	N7-C5	-7.15	1.34	1.39
26	LA	746	U	P-O5'	-7.15	1.52	1.59
26	LA	1897	G	C2-N3	-7.15	1.27	1.32
2	SA	85	U	C2-N3	7.15	1.42	1.37
2	SA	1023	U	C3'-C2'	-7.15	1.44	1.52
3	S1	37	G	N1-C2	-7.15	1.32	1.37
26	LA	6	A	N9-C4	-7.15	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	195	A	C5-C4	-7.15	1.33	1.38
26	LA	2497	A	N7-C5	-7.15	1.34	1.39
26	LA	249	C	N3-C4	-7.15	1.28	1.33
26	LA	1191	G	N7-C5	-7.15	1.34	1.39
26	LA	2347	C	N1-C6	7.15	1.41	1.37
26	LA	2723	C	C2'-C1'	-7.15	1.45	1.53
2	SA	716	A	C8-N7	7.14	1.36	1.31
2	SA	1089	G	P-O5'	-7.14	1.52	1.59
26	LA	675	A	N7-C5	-7.14	1.34	1.39
26	LA	1827	U	C4'-C3'	7.14	1.61	1.53
2	SA	882	C	N1-C2	-7.14	1.33	1.40
2	SA	1066	C	C3'-C2'	7.14	1.60	1.52
2	SA	1400	C	C2'-C1'	-7.14	1.45	1.53
26	LA	360	U	P-O5'	-7.14	1.52	1.59
26	LA	866	A	C8-N7	-7.14	1.26	1.31
26	LA	1594	U	O4'-C1'	-7.14	1.32	1.41
26	LA	2717	C	C2-N3	-7.14	1.30	1.35
26	LA	2848	G	N1-C2	-7.14	1.32	1.37
3	S1	44	U	C5'-C4'	7.14	1.59	1.51
26	LA	814	C	P-O5'	-7.14	1.52	1.59
26	LA	1703	G	C2'-C1'	-7.14	1.45	1.53
2	SA	1148	U	C5'-C4'	7.14	1.59	1.51
26	LA	1552	A	C5-C4	-7.14	1.33	1.38
26	LA	1555	G	N9-C8	-7.14	1.32	1.37
26	LA	2494	G	N7-C5	-7.14	1.34	1.39
26	LA	692	C	P-O5'	-7.14	1.52	1.59
2	SA	847	G	C8-N7	-7.14	1.26	1.30
26	LA	155	A	N3-C4	-7.14	1.30	1.34
26	LA	244	A	N7-C5	-7.14	1.34	1.39
26	LA	637	A	O4'-C1'	-7.14	1.32	1.41
26	LA	700	G	C1'-N9	-7.14	1.36	1.46
26	LA	925	A	N3-C4	-7.14	1.30	1.34
26	LA	1866	A	N9-C4	7.14	1.42	1.37
26	LA	2057	G	C5'-C4'	7.14	1.59	1.51
20	SD	50	TYR	CD1-CE1	7.13	1.50	1.39
25	LB	63	C	C2'-C1'	-7.13	1.45	1.53
2	SA	222	C	N1-C6	7.13	1.41	1.37
2	SA	740	U	C5'-C4'	7.13	1.59	1.51
26	LA	1828	G	C5-C4	-7.13	1.33	1.38
26	LA	2424	C	C2-N3	7.13	1.41	1.35
26	LA	2647	U	N3-C4	-7.13	1.32	1.38
2	SA	734	G	N9-C4	-7.13	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1099	G	C2-N2	-7.13	1.27	1.34
26	LA	206	U	C2-N3	-7.13	1.32	1.37
26	LA	750	A	C5-C6	-7.13	1.34	1.41
26	LA	1517	G	C2'-C1'	-7.13	1.45	1.53
26	LA	2688	G	P-O5'	-7.13	1.52	1.59
26	LA	180	G	O3'-P	-7.13	1.52	1.61
26	LA	736	C	C4-N4	-7.13	1.27	1.33
2	SA	34	C	C4-N4	-7.13	1.27	1.33
2	SA	594	U	P-O5'	-7.13	1.52	1.59
26	LA	554	U	N1-C6	-7.13	1.31	1.38
26	LA	645	C	C4-C5	-7.13	1.37	1.43
26	LA	904	G	C2-N2	-7.13	1.27	1.34
26	LA	1192	G	C2-N3	-7.13	1.27	1.32
26	LA	1763	G	C2'-C1'	-7.13	1.45	1.53
26	LA	2039	U	C2-N3	-7.13	1.32	1.37
2	SA	28	A	N3-C4	-7.13	1.30	1.34
2	SA	332	G	C4'-C3'	7.13	1.60	1.53
2	SA	971	G	C6-N1	-7.13	1.34	1.39
25	LB	12	C	C4-N4	-7.13	1.27	1.33
26	LA	308	G	N3-C4	-7.13	1.30	1.35
26	LA	1675	C	C3'-O3'	7.13	1.52	1.42
26	LA	2525	G	O3'-P	-7.13	1.52	1.61
26	LA	2640	G	N3-C4	-7.13	1.30	1.35
2	SA	1090	U	N1-C2	-7.12	1.32	1.38
26	LA	317	G	N3-C4	-7.12	1.30	1.35
26	LA	461	C	C3'-C2'	-7.12	1.45	1.52
26	LA	2071	A	C3'-C2'	-7.12	1.45	1.52
26	LA	2564	A	N9-C4	-7.12	1.33	1.37
2	SA	545	C	N1-C6	7.12	1.41	1.37
2	SA	1138	G	P-O5'	-7.12	1.52	1.59
26	LA	1654	A	C5'-C4'	7.12	1.59	1.51
26	LA	2131	U	C4-C5	-7.12	1.37	1.43
26	LA	2598	A	N7-C5	-7.12	1.34	1.39
26	LA	2755	C	C2'-C1'	-7.12	1.45	1.53
2	SA	581	G	C8-N7	-7.12	1.26	1.30
2	SA	941	G	O3'-P	-7.12	1.52	1.61
2	SA	952	U	O3'-P	-7.12	1.52	1.61
25	LB	13	G	N3-C4	-7.12	1.30	1.35
26	LA	188	G	N7-C5	-7.12	1.34	1.39
26	LA	192	C	O3'-P	-7.12	1.52	1.61
26	LA	221	A	N9-C4	-7.12	1.33	1.37
26	LA	447	A	C6-N1	-7.12	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2659	G	C4'-C3'	-7.12	1.45	1.53
2	SA	344	A	N3-C4	-7.12	1.30	1.34
2	SA	1197	A	C4'-C3'	7.12	1.60	1.53
26	LA	527	C	O3'-P	-7.12	1.52	1.61
26	LA	1208	C	N3-C4	7.12	1.39	1.33
26	LA	2152	G	C2'-C1'	-7.12	1.45	1.53
26	LA	2869	G	C3'-C2'	-7.12	1.45	1.52
2	SA	247	G	C6-N1	7.12	1.44	1.39
2	SA	462	G	C5'-C4'	7.12	1.59	1.51
26	LA	587	C	C4-N4	-7.12	1.27	1.33
26	LA	921	C	C4-C5	-7.12	1.37	1.43
26	LA	2315	G	N1-C2	7.12	1.43	1.37
2	SA	272	C	C4-N4	-7.12	1.27	1.33
26	LA	635	C	C2'-C1'	-7.12	1.45	1.53
26	LA	2429	G	C8-N7	-7.12	1.26	1.30
26	LA	2739	U	C3'-O3'	7.12	1.52	1.42
2	SA	383	A	N3-C4	7.12	1.39	1.34
2	SA	1385	G	C2-N2	-7.12	1.27	1.34
2	SA	1522	U	O3'-P	-7.12	1.52	1.61
25	LB	109	A	N9-C8	-7.12	1.32	1.37
26	LA	781	A	N9-C4	-7.12	1.33	1.37
26	LA	900	A	O3'-P	-7.12	1.52	1.61
26	LA	1195	G	N3-C4	-7.12	1.30	1.35
26	LA	1439	A	C5-C4	-7.12	1.33	1.38
2	SA	942	G	N9-C8	-7.11	1.32	1.37
26	LA	973	A	C8-N7	-7.11	1.26	1.31
26	LA	1009	A	C5'-C4'	7.11	1.59	1.51
26	LA	1105	U	C2-N3	-7.11	1.32	1.37
26	LA	1160	G	C8-N7	7.11	1.35	1.30
26	LA	2073	C	C2-N3	7.11	1.41	1.35
26	LA	2538	C	C2'-C1'	-7.11	1.45	1.53
26	LA	2709	G	C2-N2	-7.11	1.27	1.34
2	SA	92	U	N3-C4	7.11	1.44	1.38
2	SA	1430	A	N9-C4	-7.11	1.33	1.37
26	LA	780	G	C2-N2	-7.11	1.27	1.34
26	LA	1484	U	C4-C5	7.11	1.50	1.43
2	SA	300	A	C4'-O4'	-7.11	1.36	1.45
2	SA	648	A	C2'-C1'	-7.11	1.45	1.53
2	SA	1185	G	N7-C5	-7.11	1.34	1.39
4	S2	55	U	C2-N3	-7.11	1.32	1.37
26	LA	320	A	C6-N6	7.11	1.39	1.33
26	LA	574	A	C5'-C4'	7.11	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	916	G	C8-N7	7.11	1.35	1.30
26	LA	1193	G	C5'-C4'	7.11	1.59	1.51
2	SA	819	A	O3'-P	-7.11	1.52	1.61
2	SA	346	G	C2-N3	-7.11	1.27	1.32
2	SA	879	C	C4-C5	7.11	1.48	1.43
26	LA	361	G	N9-C8	-7.11	1.32	1.37
26	LA	370	G	N9-C8	-7.11	1.32	1.37
26	LA	709	U	C4-C5	7.11	1.50	1.43
26	LA	813	U	C3'-C2'	-7.11	1.45	1.52
26	LA	1211	C	C5'-C4'	7.11	1.59	1.51
26	LA	1439	A	C6-N1	-7.11	1.30	1.35
26	LA	1871	A	C5'-C4'	7.11	1.59	1.51
26	LA	2290	G	C8-N7	-7.11	1.26	1.30
26	LA	2685	G	N7-C5	-7.11	1.34	1.39
2	SA	251	G	C3'-C2'	7.11	1.60	1.52
2	SA	266	G	N1-C2	-7.11	1.32	1.37
26	LA	242	G	O3'-P	-7.11	1.52	1.61
26	LA	936	A	C6-N1	-7.11	1.30	1.35
26	LA	1223	G	P-O5'	-7.11	1.52	1.59
26	LA	1331	G	O3'-P	-7.11	1.52	1.61
26	LA	1978	A	C5-C4	-7.11	1.33	1.38
26	LA	2658	C	C2-N3	-7.11	1.30	1.35
26	LA	1916	A	C3'-C2'	7.10	1.60	1.52
26	LA	2877	G	N3-C4	-7.10	1.30	1.35
2	SA	502	A	C6-N1	-7.10	1.30	1.35
2	SA	637	C	P-O5'	-7.10	1.52	1.59
26	LA	503	A	N9-C8	-7.10	1.32	1.37
26	LA	941	A	C6-N6	-7.10	1.28	1.33
26	LA	2606	C	N3-C4	-7.10	1.28	1.33
26	LA	2783	U	C5'-C4'	7.10	1.59	1.51
2	SA	902	G	P-O5'	-7.10	1.52	1.59
2	SA	1315	U	C3'-O3'	7.10	1.52	1.42
2	SA	1467	C	C5'-C4'	7.10	1.59	1.51
26	LA	1373	A	C2'-C1'	-7.10	1.45	1.53
26	LA	1769	U	O4'-C1'	-7.10	1.32	1.41
26	LA	487	C	N1-C6	-7.10	1.32	1.37
2	SA	18	C	C4-N4	-7.09	1.27	1.33
2	SA	431	A	C5-C4	-7.09	1.33	1.38
2	SA	1343	G	C2-N2	-7.09	1.27	1.34
25	LB	16	G	C6-N1	-7.09	1.34	1.39
25	LB	87	U	C4-C5	-7.09	1.37	1.43
26	LA	532	A	O4'-C1'	-7.09	1.32	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1232	G	N9-C8	-7.09	1.32	1.37
26	LA	2035	G	C2-N2	-7.09	1.27	1.34
26	LA	668	A	C6-N6	-7.09	1.28	1.33
26	LA	2559	C	P-O5'	-7.09	1.52	1.59
26	LA	2796	U	C3'-C2'	7.09	1.60	1.52
2	SA	1157	A	P-O5'	-7.09	1.52	1.59
2	SA	734	G	C2-N3	7.09	1.38	1.32
2	SA	1292	G	C4'-O4'	7.09	1.54	1.45
2	SA	1451	U	N1-C2	-7.09	1.32	1.38
26	LA	699	A	N1-C2	-7.09	1.27	1.34
26	LA	740	C	C4-C5	-7.09	1.37	1.43
26	LA	886	A	N3-C4	7.09	1.39	1.34
26	LA	1683	U	P-O5'	-7.09	1.52	1.59
26	LA	2390	U	O3'-P	-7.09	1.52	1.61
2	SA	1027	C	C2'-C1'	-7.09	1.45	1.53
2	SA	1382	C	P-O5'	-7.09	1.52	1.59
26	LA	27	G	C2-N2	-7.09	1.27	1.34
26	LA	1648	U	C4-O4	-7.09	1.18	1.23
2	SA	838	G	C4'-C3'	7.09	1.60	1.53
2	SA	1483	A	N3-C4	-7.09	1.30	1.34
26	LA	606	U	N1-C6	-7.09	1.31	1.38
26	LA	959	A	C2'-C1'	-7.09	1.45	1.53
26	LA	1586	A	N9-C4	7.09	1.42	1.37
2	SA	7	A	C6-N1	7.08	1.40	1.35
26	LA	2289	G	P-O5'	-7.08	1.52	1.59
26	LA	2669	G	C5-C4	-7.08	1.33	1.38
2	SA	1518	A	P-O5'	-7.08	1.52	1.59
26	LA	690	G	N9-C4	-7.08	1.32	1.38
26	LA	1065	U	C2-N3	-7.08	1.32	1.37
26	LA	1200	C	C4-N4	-7.08	1.27	1.33
26	LA	1395	A	C2'-C1'	-7.08	1.45	1.53
2	SA	892	A	N7-C5	-7.08	1.35	1.39
3	S1	31	U	P-O5'	7.08	1.66	1.59
25	LB	10	G	N3-C4	-7.08	1.30	1.35
26	LA	584	C	C2'-C1'	-7.08	1.45	1.53
26	LA	1166	G	C5'-C4'	7.08	1.59	1.51
26	LA	1459	G	O3'-P	-7.08	1.52	1.61
26	LA	2247	A	N9-C8	-7.08	1.32	1.37
26	LA	2433	A	N9-C8	-7.08	1.32	1.37
26	LA	2490	G	N3-C4	-7.08	1.30	1.35
26	LA	2700	A	N9-C4	-7.08	1.33	1.37
2	SA	413	G	C3'-O3'	7.08	1.52	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1266	G	N7-C5	7.08	1.43	1.39
26	LA	1581	G	C6-N1	-7.08	1.34	1.39
26	LA	1724	G	C5'-C4'	7.08	1.59	1.51
26	LA	2879	A	N7-C5	7.08	1.43	1.39
2	SA	246	A	C6-N1	7.08	1.40	1.35
2	SA	327	A	O5'-C5'	7.08	1.55	1.44
2	SA	490	C	C2'-C1'	-7.08	1.45	1.53
2	SA	585	G	C2-N3	-7.08	1.27	1.32
2	SA	1139	G	N1-C2	-7.08	1.32	1.37
25	LB	89	U	C5-C6	7.08	1.40	1.34
26	LA	601	C	N1-C2	-7.08	1.33	1.40
26	LA	1408	G	N9-C8	-7.08	1.32	1.37
26	LA	2204	G	N3-C4	-7.08	1.30	1.35
2	SA	1542	A	C6-N1	-7.08	1.30	1.35
26	LA	2803	G	N9-C8	-7.08	1.32	1.37
2	SA	934	C	C5'-C4'	7.08	1.59	1.51
2	SA	1163	A	P-O5'	-7.08	1.52	1.59
26	LA	32	C	N1-C6	-7.08	1.32	1.37
26	LA	694	U	C4'-O4'	-7.08	1.36	1.45
26	LA	1670	C	C2'-C1'	7.08	1.61	1.53
26	LA	1949	G	C5'-C4'	-7.08	1.42	1.51
2	SA	359	G	O3'-P	-7.07	1.52	1.61
2	SA	609	A	C6-N6	-7.07	1.28	1.33
2	SA	1511	G	O3'-P	-7.07	1.52	1.61
25	LB	120	U	N1-C2	-7.07	1.32	1.38
26	LA	1435	G	C5-C6	-7.07	1.35	1.42
26	LA	2465	C	C5'-C4'	7.07	1.59	1.51
2	SA	1204	A	O3'-P	-7.07	1.52	1.61
2	SA	1314	C	P-O5'	-7.07	1.52	1.59
26	LA	1875	G	O3'-P	-7.07	1.52	1.61
26	LA	2285	C	C4'-C3'	-7.07	1.45	1.53
2	SA	190	A	N7-C5	-7.07	1.35	1.39
2	SA	608	A	N1-C2	-7.07	1.27	1.34
26	LA	711	G	C2'-C1'	-7.07	1.45	1.53
26	LA	886	A	C5'-C4'	7.07	1.59	1.51
26	LA	1304	A	N9-C4	-7.07	1.33	1.37
26	LA	1895	C	C2'-C1'	-7.07	1.45	1.53
26	LA	1998	A	C2'-C1'	-7.07	1.45	1.53
26	LA	2551	C	C2-N3	7.07	1.41	1.35
26	LA	2851	A	C5-C6	-7.07	1.34	1.41
2	SA	689	C	P-O5'	-7.07	1.52	1.59
2	SA	1143	G	N7-C5	-7.07	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	148	U	C5-C6	-7.07	1.27	1.34
26	LA	322	A	C1'-N9	-7.07	1.36	1.46
26	LA	400	G	C2'-C1'	-7.07	1.45	1.53
26	LA	709	U	C5'-C4'	7.07	1.59	1.51
26	LA	1296	G	C5-C4	-7.07	1.33	1.38
26	LA	2541	A	O4'-C1'	-7.07	1.32	1.41
26	LA	2715	C	N1-C6	7.07	1.41	1.37
2	SA	171	A	N3-C4	7.07	1.39	1.34
4	S2	7	G	C2-N3	7.07	1.38	1.32
26	LA	98	G	C4'-O4'	7.07	1.54	1.45
26	LA	1129	A	C6-N1	-7.07	1.30	1.35
26	LA	2661	G	C5'-C4'	7.07	1.59	1.51
2	SA	963	G	N7-C5	-7.07	1.35	1.39
26	LA	58	G	O3'-P	-7.07	1.52	1.61
26	LA	573	U	C5'-C4'	7.07	1.59	1.51
26	LA	718	A	O4'-C1'	-7.07	1.32	1.41
26	LA	2577	A	C3'-C2'	-7.07	1.45	1.52
2	SA	1496	C	C4'-C3'	-7.06	1.45	1.53
26	LA	2250	G	O4'-C1'	-7.06	1.32	1.41
2	SA	211	G	C4'-C3'	7.06	1.60	1.53
2	SA	220	G	C5'-C4'	7.06	1.59	1.51
26	LA	6	A	C5'-C4'	7.06	1.59	1.51
26	LA	472	A	C6-N6	-7.06	1.28	1.33
26	LA	514	A	O4'-C1'	-7.06	1.32	1.41
26	LA	1027	A	N9-C4	7.06	1.42	1.37
26	LA	1452	G	N9-C4	-7.06	1.32	1.38
26	LA	2690	U	P-O5'	-7.06	1.52	1.59
26	LA	1470	A	O4'-C1'	-7.06	1.32	1.41
2	SA	228	A	C8-N7	-7.06	1.26	1.31
2	SA	319	G	C5-C6	7.06	1.49	1.42
2	SA	606	G	C5'-C4'	7.06	1.59	1.51
2	SA	1159	U	C4-C5	-7.06	1.37	1.43
2	SA	1429	A	C3'-O3'	7.06	1.52	1.42
2	SA	1519	A	O3'-P	-7.06	1.52	1.61
26	LA	700	G	P-O5'	-7.06	1.52	1.59
26	LA	1024	G	N9-C8	-7.06	1.32	1.37
26	LA	1245	G	C2-N3	7.06	1.38	1.32
26	LA	2020	A	O4'-C1'	-7.06	1.32	1.41
26	LA	2738	A	C5'-C4'	7.06	1.59	1.51
2	SA	382	A	C5-C4	-7.06	1.33	1.38
2	SA	983	A	C3'-C2'	-7.06	1.45	1.52
2	SA	1421	G	C8-N7	7.06	1.35	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1166	G	C2'-C1'	-7.06	1.45	1.53
26	LA	1645	G	N9-C8	-7.06	1.32	1.37
26	LA	1836	C	C2'-C1'	-7.06	1.45	1.53
26	LA	2439	A	C6-N6	7.06	1.39	1.33
2	SA	1092	A	C6-N6	7.06	1.39	1.33
2	SA	1127	G	C5-C4	7.06	1.43	1.38
2	SA	98	A	C3'-C2'	-7.05	1.45	1.52
2	SA	872	A	C6-N6	-7.05	1.28	1.33
2	SA	1154	G	C5'-C4'	7.05	1.59	1.51
2	SA	1178	G	C3'-C2'	-7.05	1.45	1.52
2	SA	1518	A	N9-C8	-7.05	1.32	1.37
26	LA	1358	G	N7-C5	-7.05	1.35	1.39
26	LA	2133	G	C5-C4	-7.05	1.33	1.38
26	LA	2178	C	C5'-C4'	7.05	1.59	1.51
26	LA	2274	A	C2'-C1'	-7.05	1.45	1.53
26	LA	2421	G	C3'-C2'	-7.05	1.45	1.52
26	LA	2629	U	C2-N3	7.05	1.42	1.37
2	SA	1329	A	N9-C4	-7.05	1.33	1.37
2	SA	1480	A	C2'-C1'	-7.05	1.45	1.53
26	LA	211	C	C5-C6	7.05	1.40	1.34
26	LA	399	U	C2-N3	-7.05	1.32	1.37
26	LA	1366	A	O3'-P	-7.05	1.52	1.61
26	LA	1464	G	C5-C4	-7.05	1.33	1.38
26	LA	2591	C	N1-C6	-7.05	1.32	1.37
2	SA	959	A	N9-C4	-7.05	1.33	1.37
2	SA	1316	G	O3'-P	-7.05	1.52	1.61
3	S1	26	U	C4-C5	-7.05	1.37	1.43
26	LA	1385	A	P-O5'	-7.05	1.52	1.59
26	LA	1602	U	C5'-C4'	7.05	1.59	1.51
26	LA	1789	A	N3-C4	-7.05	1.30	1.34
26	LA	2654	A	C5-C4	7.05	1.43	1.38
2	SA	999	C	C2-N3	-7.05	1.30	1.35
26	LA	97	C	N1-C6	-7.05	1.32	1.37
26	LA	1252	G	O4'-C1'	-7.05	1.32	1.41
26	LA	1293	C	C5'-C4'	7.05	1.59	1.51
2	SA	992	U	C4'-C3'	7.05	1.60	1.53
26	LA	205	G	P-O5'	-7.05	1.52	1.59
2	SA	574	A	C4'-C3'	-7.05	1.45	1.53
2	SA	643	C	C2-N3	-7.05	1.30	1.35
2	SA	1012	A	C4'-C3'	-7.05	1.45	1.53
4	S2	31	G	N7-C5	7.05	1.43	1.39
25	LB	83	G	C2-N2	-7.05	1.27	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1871	A	P-O5'	-7.05	1.52	1.59
26	LA	2507	C	N3-C4	-7.05	1.29	1.33
2	SA	316	C	C5'-C4'	7.04	1.59	1.51
2	SA	506	G	O3'-P	-7.04	1.52	1.61
26	LA	24	G	C6-N1	-7.04	1.34	1.39
26	LA	397	U	C5-C6	-7.04	1.27	1.34
26	LA	858	G	N1-C2	-7.04	1.32	1.37
26	LA	1727	C	N3-C4	7.04	1.38	1.33
26	LA	2082	A	N7-C5	-7.04	1.35	1.39
2	SA	432	A	N9-C4	-7.04	1.33	1.37
2	SA	1170	A	N9-C8	-7.04	1.32	1.37
2	SA	1482	G	O3'-P	-7.04	1.52	1.61
26	LA	47	C	C2'-C1'	-7.04	1.45	1.53
26	LA	790	U	N1-C2	-7.04	1.32	1.38
26	LA	809	G	C6-N1	-7.04	1.34	1.39
26	LA	2657	A	N9-C4	-7.04	1.33	1.37
2	SA	158	G	N3-C4	-7.04	1.30	1.35
2	SA	746	A	C6-N1	-7.04	1.30	1.35
2	SA	1101	A	C6-N6	-7.04	1.28	1.33
2	SA	1421	G	C2-N2	-7.04	1.27	1.34
26	LA	272	A	N9-C4	7.04	1.42	1.37
26	LA	484	C	C4-N4	-7.04	1.27	1.33
26	LA	512	G	C2-N3	7.04	1.38	1.32
26	LA	1471	G	N7-C5	-7.04	1.35	1.39
26	LA	233	A	N7-C5	-7.04	1.35	1.39
26	LA	1799	G	C2-N3	-7.04	1.27	1.32
26	LA	2540	C	N1-C6	7.04	1.41	1.37
2	SA	496	A	O4'-C1'	-7.04	1.32	1.41
2	SA	968	A	N3-C4	-7.04	1.30	1.34
2	SA	1294	G	N3-C4	-7.04	1.30	1.35
2	SA	1386	G	C6-N1	-7.04	1.34	1.39
26	LA	102	U	C2-N3	-7.04	1.32	1.37
26	LA	731	C	O3'-P	-7.04	1.52	1.61
3	S1	34	U	P-O5'	-7.04	1.52	1.59
26	LA	2459	A	N3-C4	-7.04	1.30	1.34
2	SA	140	U	C1'-N1	7.04	1.59	1.48
2	SA	1483	A	C6-N1	-7.04	1.30	1.35
26	LA	24	G	C3'-C2'	-7.04	1.45	1.52
26	LA	823	C	C2'-C1'	-7.04	1.45	1.53
26	LA	1307	A	O3'-P	-7.04	1.52	1.61
26	LA	1677	A	N3-C4	-7.04	1.30	1.34
26	LA	2546	U	N1-C6	-7.04	1.31	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	192	A	N3-C4	7.03	1.39	1.34
26	LA	138	U	C1'-N1	7.03	1.59	1.48
26	LA	1048	A	O3'-P	-7.03	1.52	1.61
26	LA	1825	U	C3'-C2'	-7.03	1.45	1.52
2	SA	756	C	C5'-C4'	-7.03	1.43	1.51
26	LA	168	G	C6-N1	-7.03	1.34	1.39
26	LA	1225	G	N1-C2	-7.03	1.32	1.37
26	LA	1407	G	C2-N2	-7.03	1.27	1.34
26	LA	2023	C	C4-C5	7.03	1.48	1.43
26	LA	1083	U	N1-C6	-7.03	1.31	1.38
26	LA	1389	G	C4'-C3'	7.03	1.60	1.53
26	LA	1814	G	C4'-O4'	7.03	1.54	1.45
26	LA	2517	C	C2'-C1'	-7.03	1.45	1.53
2	SA	269	C	N1-C6	-7.03	1.32	1.37
2	SA	857	C	C4-C5	-7.03	1.37	1.43
26	LA	192	C	C2-N3	-7.03	1.30	1.35
26	LA	1257	C	C2-N3	-7.03	1.30	1.35
26	LA	1447	C	C4'-O4'	7.03	1.54	1.45
26	LA	1764	C	C4-N4	-7.03	1.27	1.33
26	LA	2382	G	O4'-C1'	-7.03	1.32	1.41
26	LA	2621	G	C5-C6	-7.03	1.35	1.42
26	LA	2703	C	N1-C2	-7.03	1.33	1.40
2	SA	898	G	C5-C4	-7.03	1.33	1.38
26	LA	719	C	N1-C6	-7.03	1.32	1.37
26	LA	934	U	O3'-P	-7.03	1.52	1.61
26	LA	2402	U	P-O5'	7.03	1.66	1.59
26	LA	2495	G	N9-C4	-7.03	1.32	1.38
2	SA	344	A	C8-N7	7.02	1.36	1.31
2	SA	1268	G	C4'-O4'	7.02	1.54	1.45
26	LA	751	A	C6-N1	-7.02	1.30	1.35
26	LA	1425	G	C3'-C2'	-7.02	1.45	1.52
26	LA	1803	A	C1'-N9	-7.02	1.37	1.46
26	LA	2512	C	C3'-C2'	-7.02	1.45	1.52
2	SA	983	A	C5'-C4'	7.02	1.59	1.51
26	LA	176	A	C2'-C1'	-7.02	1.45	1.53
26	LA	1111	A	P-O5'	-7.02	1.52	1.59
26	LA	1247	A	C5'-C4'	7.02	1.59	1.51
26	LA	1660	G	N3-C4	7.02	1.40	1.35
2	SA	220	G	O3'-P	-7.02	1.52	1.61
2	SA	848	C	C4-N4	7.02	1.40	1.33
2	SA	1290	G	N1-C2	-7.02	1.32	1.37
2	SA	1470	U	C4-O4	-7.02	1.18	1.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	64	G	N1-C2	-7.02	1.32	1.37
26	LA	2339	C	O3'-P	-7.02	1.52	1.61
26	LA	285	G	O3'-P	-7.02	1.52	1.61
26	LA	866	A	C5-C4	-7.02	1.33	1.38
26	LA	1875	G	C6-N1	7.02	1.44	1.39
26	LA	2175	C	C2'-C1'	-7.02	1.45	1.53
26	LA	2367	G	C5-C4	-7.02	1.33	1.38
26	LA	2742	G	N3-C4	-7.02	1.30	1.35
2	SA	1229	A	P-O5'	-7.02	1.52	1.59
26	LA	1014	A	C5'-C4'	7.02	1.59	1.51
26	LA	2063	C	O3'-P	-7.01	1.52	1.61
26	LA	2415	G	C8-N7	-7.01	1.26	1.30
26	LA	2661	G	C5-C6	-7.01	1.35	1.42
26	LA	2830	C	C3'-O3'	7.01	1.51	1.42
2	SA	564	C	N1-C6	7.01	1.41	1.37
26	LA	1003	G	C5'-C4'	7.01	1.59	1.51
26	LA	1798	U	C4'-O4'	-7.01	1.36	1.45
26	LA	2723	C	P-O5'	-7.01	1.52	1.59
2	SA	617	G	P-O5'	-7.01	1.52	1.59
25	LB	45	A	C5'-C4'	7.01	1.59	1.51
25	LB	57	A	C6-N1	-7.01	1.30	1.35
26	LA	1696	G	C5-C4	-7.01	1.33	1.38
26	LA	2599	G	C2'-C1'	-7.01	1.45	1.53
26	LA	2748	A	C3'-C2'	-7.01	1.45	1.52
26	LA	2839	G	C5-C6	-7.01	1.35	1.42
2	SA	6	G	N9-C8	7.01	1.42	1.37
2	SA	31	G	N1-C2	7.01	1.43	1.37
2	SA	628	G	C5-C6	-7.01	1.35	1.42
2	SA	886	G	N3-C4	-7.01	1.30	1.35
2	SA	1266	G	N9-C4	-7.01	1.32	1.38
26	LA	682	G	C6-N1	-7.01	1.34	1.39
26	LA	780	G	N1-C2	-7.01	1.32	1.37
26	LA	1155	A	N3-C4	7.01	1.39	1.34
26	LA	595	C	O4'-C1'	-7.01	1.32	1.41
26	LA	750	A	C5'-C4'	7.01	1.59	1.51
26	LA	1856	U	C2'-C1'	-7.01	1.45	1.53
2	SA	640	A	C6-N6	7.01	1.39	1.33
2	SA	923	A	N7-C5	-7.01	1.35	1.39
2	SA	1099	G	N9-C8	-7.01	1.32	1.37
26	LA	865	C	C3'-C2'	-7.01	1.45	1.52
26	LA	2893	A	N9-C4	-7.01	1.33	1.37
26	LA	2012	G	N9-C4	-7.00	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	283	U	O3'-P	-7.00	1.52	1.61
2	SA	929	G	C6-N1	-7.00	1.34	1.39
26	LA	1510	G	C2-N2	-7.00	1.27	1.34
2	SA	861	G	N3-C4	7.00	1.40	1.35
2	SA	1361	G	C5'-C4'	7.00	1.59	1.51
26	LA	1037	G	C2-N2	-7.00	1.27	1.34
26	LA	1097	U	C4-C5	-7.00	1.37	1.43
26	LA	1119	U	C2-N3	-7.00	1.32	1.37
26	LA	2443	C	C1'-N1	-7.00	1.37	1.46
26	LA	2590	A	O3'-P	-7.00	1.52	1.61
2	SA	771	G	C2'-C1'	-7.00	1.45	1.53
25	LB	80	U	C2-N3	-7.00	1.32	1.37
26	LA	760	G	N9-C4	-7.00	1.32	1.38
26	LA	2744	G	C2-N3	7.00	1.38	1.32
2	SA	1515	G	C4'-O4'	-7.00	1.36	1.45
26	LA	68	G	C2'-C1'	-7.00	1.45	1.53
26	LA	79	C	N3-C4	7.00	1.38	1.33
26	LA	1437	C	C2'-C1'	-7.00	1.45	1.53
26	LA	2017	U	O3'-P	-7.00	1.52	1.61
26	LA	2106	U	N1-C6	-7.00	1.31	1.38
3	S1	29	G	C8-N7	-7.00	1.26	1.30
26	LA	192	C	N3-C4	7.00	1.38	1.33
26	LA	502	A	N7-C5	7.00	1.43	1.39
26	LA	768	G	C5-C6	-7.00	1.35	1.42
26	LA	1214	A	C5-C6	-7.00	1.34	1.41
26	LA	1479	G	N1-C2	-7.00	1.32	1.37
26	LA	2072	C	N3-C4	7.00	1.38	1.33
2	SA	791	G	N9-C8	-7.00	1.32	1.37
26	LA	867	C	N1-C6	7.00	1.41	1.37
26	LA	1508	A	N9-C4	-7.00	1.33	1.37
2	SA	125	U	N3-C4	-6.99	1.32	1.38
2	SA	615	G	C5-C4	-6.99	1.33	1.38
2	SA	951	G	C2-N2	-6.99	1.27	1.34
26	LA	821	A	P-O5'	-6.99	1.52	1.59
2	SA	1327	C	C4-C5	6.99	1.48	1.43
26	LA	375	G	P-O5'	6.99	1.66	1.59
26	LA	663	G	C5-C4	-6.99	1.33	1.38
26	LA	693	A	N9-C4	-6.99	1.33	1.37
26	LA	896	A	N3-C4	6.99	1.39	1.34
26	LA	1363	C	C2'-C1'	-6.99	1.45	1.53
26	LA	1587	G	C5'-C4'	6.99	1.59	1.51
26	LA	2321	U	N1-C2	-6.99	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	100	G	C2-N2	-6.99	1.27	1.34
2	SA	425	G	N9-C8	-6.99	1.32	1.37
2	SA	775	G	N9-C8	-6.99	1.32	1.37
3	S1	38	G	C3'-O3'	6.99	1.51	1.42
4	S2	16	C	C5'-C4'	6.99	1.59	1.51
26	LA	1034	G	C2-N3	6.99	1.38	1.32
26	LA	1219	U	C4'-O4'	-6.99	1.36	1.45
26	LA	1341	G	C2'-C1'	-6.99	1.45	1.53
26	LA	2003	A	C2'-C1'	-6.99	1.45	1.53
26	LA	2888	C	C4-C5	6.99	1.48	1.43
29	LV	84	TYR	CB-CG	-6.99	1.41	1.51
2	SA	1195	C	O3'-P	-6.99	1.52	1.61
2	SA	1333	A	N1-C2	6.99	1.40	1.34
26	LA	2797	U	C3'-O3'	6.99	1.51	1.42
2	SA	128	G	C5-C4	-6.99	1.33	1.38
2	SA	968	A	N9-C8	-6.99	1.32	1.37
2	SA	1108	G	N1-C2	-6.99	1.32	1.37
2	SA	1257	A	N1-C2	-6.99	1.28	1.34
2	SA	1529	G	C8-N7	6.99	1.35	1.30
26	LA	229	C	N1-C6	-6.99	1.32	1.37
26	LA	592	A	C2'-C1'	-6.99	1.45	1.53
26	LA	1184	U	N1-C2	-6.99	1.32	1.38
26	LA	1304	A	C8-N7	6.99	1.36	1.31
26	LA	1696	G	C6-N1	-6.99	1.34	1.39
26	LA	1835	G	C6-O6	-6.99	1.17	1.24
26	LA	511	U	O4'-C1'	-6.98	1.32	1.41
26	LA	599	A	C1'-N9	-6.98	1.37	1.46
26	LA	1353	A	N9-C4	-6.98	1.33	1.37
26	LA	2741	A	N9-C4	-6.98	1.33	1.37
2	SA	960	U	C5'-C4'	6.98	1.59	1.51
2	SA	1387	G	N7-C5	6.98	1.43	1.39
2	SA	1514	G	N7-C5	6.98	1.43	1.39
25	LB	115	A	N3-C4	-6.98	1.30	1.34
26	LA	1695	G	N7-C5	6.98	1.43	1.39
26	LA	2313	C	N1-C6	-6.98	1.32	1.37
2	SA	520	A	P-O5'	-6.98	1.52	1.59
2	SA	561	U	C2'-C1'	-6.98	1.45	1.53
26	LA	477	A	C5-C4	6.98	1.43	1.38
26	LA	653	U	C4'-C3'	6.98	1.60	1.53
26	LA	658	U	C4'-C3'	6.98	1.60	1.53
26	LA	767	U	N3-C4	-6.98	1.32	1.38
26	LA	774	G	C1'-N9	-6.98	1.37	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1055	G	C4'-O4'	6.98	1.54	1.45
26	LA	1656	C	C2'-C1'	-6.98	1.45	1.53
26	LA	2549	G	C2-N2	-6.98	1.27	1.34
2	SA	275	G	C2'-C1'	-6.98	1.45	1.53
26	LA	1473	G	P-O5'	-6.98	1.52	1.59
2	SA	75	G	P-O5'	-6.98	1.52	1.59
2	SA	990	C	P-O5'	-6.98	1.52	1.59
26	LA	216	A	N9-C4	6.98	1.42	1.37
26	LA	526	A	C6-N6	6.98	1.39	1.33
26	LA	1222	U	N1-C6	-6.98	1.31	1.38
26	LA	1717	A	C5-C4	-6.98	1.33	1.38
26	LA	2211	A	C5-C4	-6.98	1.33	1.38
2	SA	886	G	C5'-C4'	6.98	1.59	1.51
2	SA	1046	A	C6-N6	-6.98	1.28	1.33
2	SA	455	G	C2'-C1'	-6.97	1.45	1.53
4	S2	74	A	C3'-C2'	6.97	1.60	1.52
25	LB	63	C	N1-C6	6.97	1.41	1.37
26	LA	64	A	C1'-N9	-6.97	1.37	1.46
26	LA	1849	G	C5-C4	-6.97	1.33	1.38
26	LA	2279	G	C2-N2	-6.97	1.27	1.34
2	SA	613	C	N1-C6	6.97	1.41	1.37
2	SA	1077	G	C2-N2	-6.97	1.27	1.34
2	SA	1252	A	C2'-C1'	-6.97	1.45	1.53
26	LA	617	G	N9-C8	-6.97	1.32	1.37
26	LA	1789	A	C2'-C1'	-6.97	1.45	1.53
24	S3	370	ARG	CD-NE	6.97	1.58	1.46
26	LA	59	U	C2-N3	-6.97	1.32	1.37
26	LA	1831	G	C6-N1	6.97	1.44	1.39
26	LA	2112	G	N3-C4	-6.97	1.30	1.35
26	LA	2113	U	N3-C4	-6.97	1.32	1.38
2	SA	1336	C	C4'-C3'	6.97	1.60	1.53
9	SI	121	ARG	CD-NE	6.97	1.58	1.46
26	LA	319	G	C3'-C2'	-6.97	1.45	1.52
26	LA	1165	A	N9-C8	-6.97	1.32	1.37
2	SA	780	A	C1'-N9	-6.96	1.37	1.46
2	SA	1100	C	P-O5'	-6.96	1.52	1.59
26	LA	400	G	O3'-P	-6.96	1.52	1.61
26	LA	409	G	N1-C2	6.96	1.43	1.37
44	LF	125	SER	CA-CB	6.96	1.63	1.52
2	SA	1156	G	C8-N7	6.96	1.35	1.30
25	LB	16	G	C5-C6	-6.96	1.35	1.42
26	LA	1673	G	N7-C5	-6.96	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1746	A	C5-C4	-6.96	1.33	1.38
26	LA	1993	U	N3-C4	-6.96	1.32	1.38
26	LA	2295	C	N1-C6	-6.96	1.32	1.37
2	SA	24	U	N1-C6	-6.96	1.31	1.38
2	SA	849	G	C2'-C1'	-6.96	1.45	1.53
4	S2	41	C	C5'-C4'	6.96	1.59	1.51
17	SQ	26	ARG	CD-NE	6.96	1.58	1.46
26	LA	111	A	C5-C4	6.96	1.43	1.38
26	LA	370	G	C4'-O4'	-6.96	1.36	1.45
26	LA	1107	G	N3-C4	-6.96	1.30	1.35
26	LA	1359	A	C6-N1	-6.96	1.30	1.35
26	LA	1794	A	N9-C4	6.96	1.42	1.37
26	LA	2384	U	N1-C2	-6.96	1.32	1.38
26	LA	2572	A	N3-C4	-6.96	1.30	1.34
26	LA	2673	G	N1-C2	-6.96	1.32	1.37
26	LA	2702	G	N9-C4	-6.96	1.32	1.38
2	SA	696	A	C8-N7	-6.96	1.26	1.31
2	SA	883	C	O4'-C1'	-6.96	1.32	1.41
2	SA	1319	A	O4'-C1'	6.96	1.50	1.41
26	LA	642	U	C2'-C1'	6.96	1.61	1.53
2	SA	32	A	C6-N6	6.96	1.39	1.33
2	SA	1082	A	C2'-C1'	-6.96	1.45	1.53
2	SA	1208	C	N3-C4	-6.96	1.29	1.33
26	LA	764	A	N9-C4	-6.96	1.33	1.37
26	LA	861	A	P-O5'	-6.96	1.52	1.59
2	SA	462	G	O3'-P	-6.96	1.52	1.61
2	SA	1248	A	C6-N6	6.96	1.39	1.33
26	LA	418	C	N3-C4	-6.96	1.29	1.33
26	LA	835	C	N3-C4	6.96	1.38	1.33
26	LA	1408	G	N3-C4	-6.96	1.30	1.35
26	LA	1620	G	N7-C5	-6.96	1.35	1.39
26	LA	1751	U	N1-C2	-6.96	1.32	1.38
26	LA	1816	C	N1-C2	-6.96	1.33	1.40
26	LA	1923	U	C5'-C4'	6.96	1.59	1.51
2	SA	646	G	C2-N2	-6.96	1.27	1.34
26	LA	51	G	C5-C4	-6.96	1.33	1.38
26	LA	1244	A	O3'-P	-6.96	1.52	1.61
26	LA	2446	G	P-O5'	-6.96	1.52	1.59
2	SA	74	A	C2-N3	-6.95	1.27	1.33
2	SA	338	A	C3'-C2'	-6.95	1.45	1.52
3	S1	48	C	C3'-O3'	6.95	1.51	1.42
26	LA	1213	A	P-O5'	-6.95	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1225	G	C2-N3	-6.95	1.27	1.32
26	LA	1981	A	C6-N1	6.95	1.40	1.35
26	LA	2020	A	C2'-O2'	6.95	1.50	1.41
26	LA	2268	A	O4'-C1'	-6.95	1.32	1.41
2	SA	893	C	O4'-C1'	-6.95	1.32	1.41
26	LA	1660	G	C3'-C2'	-6.95	1.45	1.52
2	SA	150	U	N1-C6	-6.95	1.31	1.38
2	SA	968	A	N9-C4	-6.95	1.33	1.37
2	SA	1238	A	C5'-C4'	6.95	1.59	1.51
2	SA	1304	G	C5-C4	-6.95	1.33	1.38
25	LB	24	G	P-O5'	-6.95	1.52	1.59
26	LA	1125	G	N3-C4	-6.95	1.30	1.35
26	LA	1188	U	C3'-C2'	-6.95	1.45	1.52
26	LA	2080	A	C6-N6	6.95	1.39	1.33
26	LA	2516	A	N9-C4	-6.95	1.33	1.37
26	LA	2644	G	O3'-P	-6.95	1.52	1.61
26	LA	2807	U	C5'-C4'	6.95	1.59	1.51
2	SA	599	C	N1-C6	-6.95	1.32	1.37
2	SA	1433	A	C5-C4	-6.95	1.33	1.38
26	LA	122	G	N3-C4	-6.95	1.30	1.35
26	LA	1595	C	C4-N4	6.95	1.40	1.33
2	SA	702	A	C2'-C1'	-6.95	1.45	1.53
2	SA	791	G	C2'-C1'	-6.95	1.45	1.53
2	SA	1143	G	C3'-C2'	6.95	1.60	1.52
26	LA	69	C	C2'-C1'	-6.95	1.45	1.53
26	LA	271	G	C5'-C4'	6.95	1.59	1.51
26	LA	1618	C	N1-C6	-6.95	1.32	1.37
26	LA	1717	A	P-O5'	-6.95	1.52	1.59
26	LA	2293	G	N7-C5	-6.95	1.35	1.39
2	SA	390	U	C3'-O3'	6.95	1.51	1.42
2	SA	842	U	C4-C5	-6.95	1.37	1.43
2	SA	885	G	P-O5'	-6.95	1.52	1.59
26	LA	1267	U	O3'-P	-6.95	1.52	1.61
26	LA	1949	G	N7-C5	-6.95	1.35	1.39
26	LA	2492	U	O3'-P	-6.95	1.52	1.61
2	SA	241	G	N9-C8	-6.94	1.32	1.37
26	LA	548	G	O3'-P	-6.94	1.52	1.61
26	LA	1553	A	N9-C4	-6.94	1.33	1.37
2	SA	472	U	C2'-C1'	-6.94	1.45	1.53
2	SA	1026	G	C2-N2	-6.94	1.27	1.34
26	LA	2861	U	C3'-C2'	-6.94	1.45	1.52
26	LA	2629	U	C4-O4	6.94	1.29	1.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2644	G	N7-C5	-6.94	1.35	1.39
26	LA	2661	G	C4'-C3'	6.94	1.60	1.53
2	SA	1214	C	C4'-C3'	6.94	1.60	1.53
2	SA	1512	U	O3'-P	-6.94	1.52	1.61
26	LA	578	G	P-O5'	-6.94	1.52	1.59
26	LA	861	A	O3'-P	6.94	1.69	1.61
26	LA	1080	A	N3-C4	6.94	1.39	1.34
26	LA	1324	G	C2-N3	-6.94	1.27	1.32
26	LA	1676	A	N9-C4	-6.94	1.33	1.37
26	LA	2398	U	C4-C5	-6.94	1.37	1.43
55	LQ	32	PRO	N-CD	-6.94	1.38	1.47
2	SA	33	A	N9-C4	-6.94	1.33	1.37
2	SA	674	G	C2'-C1'	-6.94	1.45	1.53
2	SA	1468	A	C4'-C3'	-6.94	1.45	1.53
26	LA	1493	C	O3'-P	-6.94	1.52	1.61
26	LA	2572	A	N1-C2	-6.94	1.28	1.34
26	LA	2787	C	C2-O2	-6.94	1.18	1.24
26	LA	1707	G	N9-C8	-6.94	1.32	1.37
26	LA	2179	C	P-O5'	-6.94	1.52	1.59
2	SA	855	U	N1-C2	-6.93	1.32	1.38
2	SA	1335	U	C3'-C2'	6.93	1.60	1.52
26	LA	517	C	C2'-C1'	-6.93	1.45	1.53
26	LA	891	G	C5'-C4'	6.93	1.59	1.51
26	LA	1229	C	C4-N4	-6.93	1.27	1.33
26	LA	1451	C	C2'-C1'	-6.93	1.45	1.53
26	LA	1680	U	C3'-C2'	6.93	1.60	1.52
26	LA	2377	A	C5-C6	6.93	1.47	1.41
26	LA	2564	A	N7-C5	-6.93	1.35	1.39
2	SA	553	A	O3'-P	-6.93	1.52	1.61
2	SA	584	G	C2'-C1'	-6.93	1.45	1.53
2	SA	588	G	C5'-C4'	6.93	1.59	1.51
2	SA	1114	C	O4'-C1'	-6.93	1.32	1.41
26	LA	100	U	C2'-C1'	-6.93	1.45	1.53
26	LA	138	U	C2'-C1'	6.93	1.60	1.53
26	LA	334	C	C4'-C3'	-6.93	1.45	1.53
26	LA	634	C	C5'-C4'	6.93	1.59	1.51
26	LA	931	U	C2-N3	6.93	1.42	1.37
26	LA	969	G	N9-C4	6.93	1.43	1.38
26	LA	1417	C	N1-C6	6.93	1.41	1.37
26	LA	1613	G	N1-C2	-6.93	1.32	1.37
26	LA	2035	G	C4'-C3'	6.93	1.60	1.53
26	LA	973	A	N3-C4	-6.93	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1944	U	N1-C6	-6.93	1.31	1.38
26	LA	2572	A	O3'-P	-6.93	1.52	1.61
3	S1	20	G	C5-C4	6.93	1.43	1.38
25	LB	90	C	N3-C4	-6.93	1.29	1.33
26	LA	45	G	C5-C4	6.93	1.43	1.38
26	LA	632	A	N7-C5	-6.93	1.35	1.39
26	LA	800	A	C3'-C2'	-6.93	1.45	1.52
26	LA	870	U	C2-N3	-6.93	1.32	1.37
26	LA	1371	G	C2-N2	-6.93	1.27	1.34
26	LA	1501	G	N9-C4	6.93	1.43	1.38
2	SA	1347	G	C2'-C1'	-6.93	1.45	1.53
3	S1	22	G	N1-C2	-6.93	1.32	1.37
26	LA	401	A	N3-C4	6.93	1.39	1.34
26	LA	1015	U	C5'-C4'	-6.93	1.43	1.51
26	LA	1963	U	C4'-C3'	6.93	1.60	1.53
26	LA	118	A	N9-C8	-6.93	1.32	1.37
26	LA	1081	U	C5'-C4'	6.93	1.59	1.51
26	LA	1652	A	N9-C4	-6.93	1.33	1.37
26	LA	1940	U	N3-C4	-6.93	1.32	1.38
2	SA	1467	C	N1-C6	-6.92	1.32	1.37
26	LA	18	U	O3'-P	-6.92	1.52	1.61
26	LA	338	G	N1-C2	-6.92	1.32	1.37
26	LA	1056	G	C6-N1	-6.92	1.34	1.39
26	LA	1078	U	C2-N3	-6.92	1.32	1.37
26	LA	1124	G	C2-N2	-6.92	1.27	1.34
26	LA	1144	A	N9-C8	-6.92	1.32	1.37
26	LA	1265	A	C2'-C1'	6.92	1.60	1.53
26	LA	1299	G	C2-N3	6.92	1.38	1.32
2	SA	689	C	N1-C6	-6.92	1.32	1.37
4	S2	46	G	N9-C4	-6.92	1.32	1.38
26	LA	867	C	C4'-C3'	6.92	1.60	1.53
26	LA	1479	G	C2-N3	6.92	1.38	1.32
26	LA	1619	G	O3'-P	-6.92	1.52	1.61
26	LA	2382	G	C8-N7	-6.92	1.26	1.30
26	LA	2869	G	O3'-P	-6.92	1.52	1.61
2	SA	226	G	N7-C5	-6.92	1.35	1.39
2	SA	607	A	C8-N7	-6.92	1.26	1.31
2	SA	1359	C	N1-C6	6.92	1.41	1.37
26	LA	629	G	N9-C4	-6.92	1.32	1.38
26	LA	1289	C	C2-N3	-6.92	1.30	1.35
26	LA	2744	G	C4'-O4'	6.92	1.54	1.45
2	SA	122	G	N9-C4	-6.92	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	338	A	P-O5'	-6.92	1.52	1.59
26	LA	2443	C	N3-C4	-6.92	1.29	1.33
26	LA	2773	C	C3'-C2'	-6.92	1.45	1.52
2	SA	53	A	C2-N3	6.92	1.39	1.33
2	SA	240	G	N3-C4	-6.92	1.30	1.35
2	SA	327	A	O3'-P	-6.92	1.52	1.61
2	SA	1200	C	C4-C5	-6.92	1.37	1.43
26	LA	307	G	C4'-C3'	6.92	1.60	1.53
26	LA	529	A	N7-C5	-6.92	1.35	1.39
26	LA	889	C	C2'-C1'	-6.92	1.45	1.53
26	LA	1078	U	O3'-P	-6.92	1.52	1.61
26	LA	1418	G	C8-N7	-6.92	1.26	1.30
26	LA	1826	G	P-O5'	-6.92	1.52	1.59
26	LA	2287	A	N9-C8	-6.92	1.32	1.37
2	SA	802	A	C5'-C4'	6.92	1.59	1.51
26	LA	278	A	C2-N3	-6.92	1.27	1.33
26	LA	590	A	C8-N7	6.92	1.36	1.31
26	LA	2575	C	C3'-C2'	6.92	1.60	1.52
2	SA	1255	G	C1'-N9	-6.91	1.37	1.46
26	LA	125	A	C1'-N9	6.91	1.59	1.48
26	LA	1241	A	C5'-C4'	6.91	1.59	1.51
26	LA	2668	G	C6-N1	-6.91	1.34	1.39
26	LA	2770	G	N9-C4	-6.91	1.32	1.38
2	SA	39	G	C3'-C2'	6.91	1.60	1.52
26	LA	1	G	C5'-C4'	6.91	1.59	1.51
26	LA	744	U	N1-C2	-6.91	1.32	1.38
2	SA	1412	C	C2'-C1'	-6.91	1.45	1.53
26	LA	33	C	C2'-C1'	-6.91	1.45	1.53
26	LA	1205	A	C2'-C1'	-6.91	1.45	1.53
26	LA	1337	G	N9-C4	-6.91	1.32	1.38
2	SA	1514	G	C4'-C3'	-6.91	1.45	1.53
26	LA	273	G	N9-C4	-6.91	1.32	1.38
26	LA	536	G	N7-C5	-6.91	1.35	1.39
26	LA	1058	U	O3'-P	-6.91	1.52	1.61
26	LA	1357	C	C1'-N1	-6.91	1.37	1.46
26	LA	2058	A	N9-C4	6.91	1.42	1.37
27	LD	28	PRO	CA-C	-6.91	1.39	1.52
2	SA	819	A	C4'-C3'	6.91	1.60	1.53
2	SA	1407	C	O3'-P	-6.91	1.52	1.61
26	LA	520	G	N9-C8	-6.91	1.33	1.37
26	LA	1020	A	C5-C4	-6.91	1.33	1.38
26	LA	1783	A	N7-C5	6.91	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2053	G	C5-C4	-6.91	1.33	1.38
2	SA	1082	A	C4'-C3'	-6.91	1.45	1.53
26	LA	772	C	O3'-P	-6.91	1.52	1.61
26	LA	863	A	N3-C4	-6.91	1.30	1.34
26	LA	1128	G	C2-N2	-6.91	1.27	1.34
26	LA	2363	G	N7-C5	-6.91	1.35	1.39
26	LA	2809	A	N9-C8	-6.91	1.32	1.37
2	SA	1494	G	C8-N7	6.90	1.35	1.30
2	SA	669	G	P-O5'	-6.90	1.52	1.59
26	LA	1559	U	O3'-P	-6.90	1.52	1.61
26	LA	2365	G	C2-N2	-6.90	1.27	1.34
2	SA	867	G	C5-C6	-6.90	1.35	1.42
2	SA	1059	C	C3'-C2'	-6.90	1.45	1.52
26	LA	430	A	C3'-C2'	-6.90	1.45	1.52
26	LA	2105	U	P-O5'	-6.90	1.52	1.59
26	LA	2176	A	C5-C4	-6.90	1.33	1.38
26	LA	2854	G	C5-C4	-6.90	1.33	1.38
2	SA	64	G	N9-C8	-6.90	1.33	1.37
2	SA	411	A	C8-N7	-6.90	1.26	1.31
2	SA	683	G	C2'-C1'	-6.90	1.45	1.53
26	LA	1585	C	C4'-C3'	6.90	1.60	1.53
26	LA	1705	A	N1-C2	-6.90	1.28	1.34
26	LA	2677	G	C2-N2	-6.90	1.27	1.34
2	SA	450	G	N7-C5	-6.90	1.35	1.39
2	SA	1335	U	O4'-C1'	-6.90	1.32	1.41
26	LA	10	A	P-O5'	-6.90	1.52	1.59
26	LA	259	G	C5-C4	-6.90	1.33	1.38
26	LA	264	C	C5-C6	-6.90	1.28	1.34
26	LA	826	U	C2'-O2'	-6.90	1.32	1.41
26	LA	1013	C	C4-N4	-6.90	1.27	1.33
26	LA	1149	G	O3'-P	-6.90	1.52	1.61
26	LA	1239	G	N9-C4	6.90	1.43	1.38
26	LA	1424	G	N3-C4	-6.90	1.30	1.35
26	LA	2529	G	N7-C5	-6.90	1.35	1.39
26	LA	773	U	C5'-C4'	6.90	1.59	1.51
26	LA	946	C	N3-C4	-6.90	1.29	1.33
26	LA	1801	A	O3'-P	-6.90	1.52	1.61
26	LA	1838	C	C2-O2	-6.90	1.18	1.24
2	SA	140	U	N1-C2	-6.89	1.32	1.38
2	SA	650	G	P-O5'	-6.89	1.52	1.59
2	SA	1489	G	C5-C4	-6.89	1.33	1.38
4	S2	17	C	N3-C4	6.89	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2003	A	C3'-C2'	-6.89	1.45	1.52
26	LA	2134	A	N9-C4	-6.89	1.33	1.37
26	LA	2485	G	N3-C4	-6.89	1.30	1.35
2	SA	101	A	C2'-C1'	-6.89	1.45	1.53
26	LA	327	G	N1-C2	-6.89	1.32	1.37
26	LA	1506	U	C4-O4	-6.89	1.18	1.23
26	LA	1750	G	N7-C5	-6.89	1.35	1.39
26	LA	2410	G	N9-C4	6.89	1.43	1.38
26	LA	2648	G	C2'-C1'	-6.89	1.45	1.53
2	SA	1385	G	C5-C6	-6.89	1.35	1.42
26	LA	1439	A	P-O5'	-6.89	1.52	1.59
26	LA	30	G	P-O5'	-6.89	1.52	1.59
26	LA	477	A	P-O5'	-6.89	1.52	1.59
26	LA	963	U	N1-C6	6.89	1.44	1.38
26	LA	1353	A	O3'-P	-6.89	1.52	1.61
26	LA	1690	A	C2'-C1'	-6.89	1.45	1.53
26	LA	1991	U	C2-N3	-6.89	1.32	1.37
2	SA	969	A	C2'-C1'	-6.89	1.45	1.53
26	LA	13	A	C5'-C4'	6.89	1.59	1.51
26	LA	1486	U	C2-N3	-6.89	1.32	1.37
26	LA	1558	C	P-O5'	-6.89	1.52	1.59
38	LE	120	GLY	CA-C	-6.89	1.40	1.51
2	SA	1260	G	C1'-N9	-6.89	1.37	1.46
26	LA	40	U	C1'-N1	6.89	1.59	1.48
26	LA	1353	A	N9-C8	-6.89	1.32	1.37
26	LA	1608	A	O4'-C1'	6.89	1.50	1.41
26	LA	2193	G	P-O5'	6.89	1.66	1.59
26	LA	2317	A	C6-N1	6.89	1.40	1.35
26	LA	619	G	C6-N1	-6.88	1.34	1.39
26	LA	890	C	C2'-C1'	6.88	1.60	1.53
2	SA	292	G	N9-C4	-6.88	1.32	1.38
2	SA	1471	U	C2'-C1'	-6.88	1.45	1.53
26	LA	191	A	P-O5'	-6.88	1.52	1.59
26	LA	574	A	C4'-O4'	6.88	1.54	1.45
26	LA	1937	A	C4'-O4'	-6.88	1.36	1.45
2	SA	1105	A	N7-C5	6.88	1.43	1.39
26	LA	318	C	N1-C6	-6.88	1.33	1.37
26	LA	572	A	P-O5'	-6.88	1.52	1.59
26	LA	1100	C	C2-N3	-6.88	1.30	1.35
26	LA	1223	G	N9-C8	6.88	1.42	1.37
26	LA	1866	A	N1-C2	-6.88	1.28	1.34
26	LA	1894	C	C4-N4	-6.88	1.27	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2465	C	N3-C4	6.88	1.38	1.33
26	LA	1034	G	C8-N7	-6.88	1.26	1.30
26	LA	1262	A	C6-N6	-6.88	1.28	1.33
26	LA	756	A	C6-N1	-6.88	1.30	1.35
26	LA	763	G	N1-C2	6.88	1.43	1.37
26	LA	2153	C	O4'-C1'	-6.88	1.32	1.41
26	LA	2237	G	N7-C5	-6.88	1.35	1.39
20	SD	137	SER	CA-CB	6.88	1.63	1.52
26	LA	7	G	P-O5'	-6.88	1.52	1.59
26	LA	1384	A	N9-C4	-6.88	1.33	1.37
26	LA	1439	A	C5'-C4'	6.88	1.59	1.51
26	LA	1991	U	O3'-P	-6.88	1.52	1.61
26	LA	1163	G	C2-N2	-6.88	1.27	1.34
2	SA	295	C	C3'-O3'	6.87	1.51	1.42
2	SA	944	G	N1-C2	-6.87	1.32	1.37
2	SA	969	A	C2-N3	-6.87	1.27	1.33
2	SA	1005	A	N9-C4	-6.87	1.33	1.37
2	SA	1275	A	N7-C5	-6.87	1.35	1.39
26	LA	395	U	N3-C4	-6.87	1.32	1.38
26	LA	785	G	C1'-N9	-6.87	1.37	1.46
26	LA	1623	G	C6-N1	-6.87	1.34	1.39
26	LA	1993	U	C5-C6	-6.87	1.27	1.34
26	LA	2308	G	N3-C4	-6.87	1.30	1.35
26	LA	2851	A	O3'-P	-6.87	1.52	1.61
2	SA	372	C	C2'-C1'	-6.87	1.45	1.53
2	SA	929	G	C5'-C4'	6.87	1.59	1.51
26	LA	370	G	O3'-P	-6.87	1.52	1.61
26	LA	1235	G	C2-N3	-6.87	1.27	1.32
26	LA	1643	G	N3-C4	-6.87	1.30	1.35
26	LA	1046	A	O3'-P	-6.87	1.52	1.61
4	S2	7	G	C8-N7	6.87	1.35	1.30
26	LA	519	U	C5'-C4'	6.87	1.59	1.51
26	LA	1190	G	N7-C5	-6.87	1.35	1.39
26	LA	1534	U	P-O5'	-6.87	1.52	1.59
26	LA	2255	G	C5-C4	-6.87	1.33	1.38
2	SA	151	A	C4'-O4'	6.87	1.54	1.45
2	SA	916	U	C2'-C1'	6.87	1.60	1.53
2	SA	376	G	N7-C5	-6.87	1.35	1.39
2	SA	536	C	O5'-C5'	6.87	1.55	1.44
26	LA	1902	C	C2'-C1'	-6.87	1.45	1.53
2	SA	318	G	N1-C2	-6.86	1.32	1.37
2	SA	1196	A	N3-C4	6.86	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	847	U	P-O5'	-6.86	1.52	1.59
26	LA	1728	C	C2'-C1'	-6.86	1.45	1.53
26	LA	1928	A	O3'-P	-6.86	1.52	1.61
26	LA	2753	A	C5'-C4'	6.86	1.59	1.51
2	SA	268	U	C2-N3	-6.86	1.32	1.37
2	SA	1399	C	C5-C6	-6.86	1.28	1.34
2	SA	1415	G	N3-C4	-6.86	1.30	1.35
4	S2	5	G	O3'-P	-6.86	1.52	1.61
26	LA	1282	U	N1-C2	6.86	1.44	1.38
26	LA	1891	G	N3-C4	-6.86	1.30	1.35
26	LA	2353	G	O3'-P	-6.86	1.52	1.61
2	SA	89	U	C2-N3	6.86	1.42	1.37
3	S1	33	A	C5-C4	-6.86	1.33	1.38
26	LA	798	G	C2-N3	6.86	1.38	1.32
26	LA	920	A	P-O5'	-6.86	1.52	1.59
26	LA	1024	G	N9-C4	-6.86	1.32	1.38
2	SA	31	G	C4'-O4'	-6.86	1.36	1.45
2	SA	147	G	C3'-C2'	6.86	1.60	1.52
2	SA	543	U	N3-C4	-6.86	1.32	1.38
2	SA	1048	G	C6-N1	-6.86	1.34	1.39
2	SA	1127	G	C6-N1	-6.86	1.34	1.39
26	LA	549	G	C3'-O3'	6.86	1.51	1.42
26	LA	2538	C	N1-C6	-6.86	1.33	1.37
2	SA	292	G	O3'-P	-6.86	1.52	1.61
2	SA	1216	A	C3'-O3'	6.86	1.51	1.42
2	SA	1527	U	C2-N3	6.86	1.42	1.37
26	LA	25	U	C5-C6	6.86	1.40	1.34
26	LA	1947	C	N1-C6	-6.86	1.33	1.37
26	LA	2014	A	N7-C5	-6.86	1.35	1.39
26	LA	85	G	C6-N1	-6.85	1.34	1.39
26	LA	1535	A	N1-C2	6.85	1.40	1.34
2	SA	270	A	C2'-C1'	-6.85	1.45	1.53
2	SA	441	A	P-O5'	-6.85	1.52	1.59
2	SA	585	G	C6-N1	-6.85	1.34	1.39
2	SA	686	U	N3-C4	-6.85	1.32	1.38
25	LB	6	G	O3'-P	-6.85	1.52	1.61
26	LA	2735	G	C2'-C1'	-6.85	1.45	1.53
2	SA	957	U	C5'-C4'	6.85	1.59	1.51
26	LA	837	C	N3-C4	-6.85	1.29	1.33
2	SA	1247	U	C5'-C4'	6.85	1.59	1.51
2	SA	1396	A	N9-C4	-6.85	1.33	1.37
25	LB	101	A	C5-C4	-6.85	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	310	A	C6-N1	6.85	1.40	1.35
26	LA	858	G	N9-C4	-6.85	1.32	1.38
26	LA	1289	C	C4-N4	-6.85	1.27	1.33
26	LA	1807	G	N3-C4	-6.85	1.30	1.35
26	LA	2422	C	C4'-O4'	-6.85	1.36	1.45
2	SA	43	C	C2'-O2'	-6.85	1.32	1.41
2	SA	623	C	C3'-C2'	-6.85	1.45	1.52
2	SA	818	G	N9-C8	-6.85	1.33	1.37
4	S2	19	G	C5-C6	6.85	1.49	1.42
26	LA	327	G	C2-N3	6.85	1.38	1.32
26	LA	739	A	N9-C4	-6.85	1.33	1.37
26	LA	1450	G	C5-C4	6.85	1.43	1.38
26	LA	2047	C	C4-C5	-6.85	1.37	1.43
26	LA	2379	G	N9-C4	6.85	1.43	1.38
2	SA	733	G	N3-C4	-6.85	1.30	1.35
2	SA	846	G	N3-C4	-6.85	1.30	1.35
26	LA	492	A	N9-C4	6.85	1.42	1.37
26	LA	2220	U	C2-N3	-6.85	1.32	1.37
2	SA	53	A	N9-C4	-6.84	1.33	1.37
2	SA	1073	U	C2-N3	-6.84	1.32	1.37
26	LA	917	A	N7-C5	6.84	1.43	1.39
26	LA	991	C	O3'-P	-6.84	1.52	1.61
26	LA	1009	A	O4'-C1'	-6.84	1.32	1.41
26	LA	1414	C	C2'-C1'	-6.84	1.45	1.53
26	LA	1540	G	N9-C8	-6.84	1.33	1.37
26	LA	1909	C	N1-C6	-6.84	1.33	1.37
26	LA	2771	C	N1-C6	6.84	1.41	1.37
2	SA	1257	A	N3-C4	6.84	1.39	1.34
2	SA	1374	A	C2'-C1'	-6.84	1.45	1.53
26	LA	2117	A	C5'-C4'	6.84	1.59	1.51
2	SA	498	A	C5'-C4'	6.84	1.59	1.51
2	SA	602	A	C6-N1	6.84	1.40	1.35
2	SA	1199	U	P-O5'	-6.84	1.52	1.59
26	LA	173	A	N9-C4	-6.84	1.33	1.37
26	LA	181	A	C6-N1	6.84	1.40	1.35
26	LA	436	C	O3'-P	-6.84	1.52	1.61
26	LA	1480	C	C4-N4	-6.84	1.27	1.33
26	LA	2772	C	C4-C5	-6.84	1.37	1.43
26	LA	2801	G	N3-C4	-6.84	1.30	1.35
2	SA	57	G	O3'-P	-6.84	1.52	1.61
2	SA	326	G	C5'-C4'	6.84	1.59	1.51
25	LB	21	G	C5-C4	-6.84	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	79	G	C2-N2	-6.84	1.27	1.34
26	LA	546	U	O3'-P	-6.84	1.52	1.61
26	LA	2016	U	C2-N3	-6.84	1.32	1.37
2	SA	622	A	N3-C4	-6.84	1.30	1.34
26	LA	2144	G	C6-N1	-6.84	1.34	1.39
26	LA	540	C	C2-N3	-6.84	1.30	1.35
26	LA	1173	U	C5'-C4'	6.84	1.59	1.51
26	LA	1548	A	N1-C2	6.84	1.40	1.34
26	LA	2260	C	C3'-O3'	6.84	1.51	1.42
2	SA	361	G	O3'-P	-6.83	1.52	1.61
2	SA	1419	G	C3'-C2'	-6.83	1.45	1.52
26	LA	988	A	C4'-C3'	-6.83	1.45	1.53
26	LA	2645	G	P-O5'	-6.83	1.52	1.59
2	SA	279	A	C5'-C4'	6.83	1.59	1.51
4	S2	70	C	P-O5'	-6.83	1.52	1.59
26	LA	449	A	C8-N7	-6.83	1.26	1.31
26	LA	2617	U	N3-C4	-6.83	1.32	1.38
26	LA	2679	A	C8-N7	-6.83	1.26	1.31
2	SA	481	G	C2-N2	-6.83	1.27	1.34
26	LA	46	G	C4'-C3'	-6.83	1.45	1.53
26	LA	418	C	P-O5'	-6.83	1.52	1.59
26	LA	1259	G	C6-N1	-6.83	1.34	1.39
26	LA	2602	A	C5-C4	6.83	1.43	1.38
26	LA	2900	A	N7-C5	6.83	1.43	1.39
2	SA	997	U	O3'-P	6.83	1.69	1.61
25	LB	102	G	N3-C4	-6.83	1.30	1.35
26	LA	610	C	C2'-C1'	-6.83	1.45	1.53
2	SA	75	G	C6-N1	6.83	1.44	1.39
2	SA	144	G	C2-N2	-6.83	1.27	1.34
2	SA	1057	G	N1-C2	-6.83	1.32	1.37
26	LA	550	C	C4-C5	-6.83	1.37	1.43
26	LA	2024	G	C6-N1	-6.83	1.34	1.39
2	SA	949	A	C5-C4	-6.83	1.33	1.38
26	LA	202	U	C3'-C2'	-6.83	1.45	1.52
26	LA	924	G	N9-C8	-6.83	1.33	1.37
26	LA	1896	G	C5-C4	6.83	1.43	1.38
26	LA	2756	U	O3'-P	-6.83	1.52	1.61
2	SA	33	A	C5-C6	6.83	1.47	1.41
2	SA	378	G	N9-C4	-6.83	1.32	1.38
2	SA	859	G	O3'-P	-6.83	1.52	1.61
25	LB	93	C	P-O5'	-6.83	1.52	1.59
26	LA	471	A	N9-C4	-6.83	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2112	G	N9-C8	-6.83	1.33	1.37
26	LA	2570	G	C1'-N9	-6.83	1.37	1.46
2	SA	211	G	N7-C5	6.82	1.43	1.39
2	SA	370	C	O4'-C1'	6.82	1.50	1.41
2	SA	468	A	N9-C8	-6.82	1.32	1.37
2	SA	675	A	N9-C4	-6.82	1.33	1.37
25	LB	119	A	C4'-C3'	6.82	1.60	1.53
26	LA	2016	U	N1-C6	6.82	1.44	1.38
26	LA	2254	C	C5'-C4'	6.82	1.59	1.51
26	LA	2465	C	P-O5'	-6.82	1.52	1.59
26	LA	2518	A	C5-C4	-6.82	1.33	1.38
26	LA	2802	G	N9-C8	-6.82	1.33	1.37
26	LA	529	A	C5-C4	-6.82	1.33	1.38
26	LA	1296	G	C2'-C1'	-6.82	1.45	1.53
26	LA	1550	C	C2'-C1'	-6.82	1.45	1.53
26	LA	2548	U	C2'-C1'	-6.82	1.45	1.53
2	SA	330	C	N1-C6	6.82	1.41	1.37
2	SA	1182	G	C2-N2	-6.82	1.27	1.34
26	LA	255	A	C2'-C1'	-6.82	1.45	1.53
26	LA	291	G	C5'-C4'	6.82	1.59	1.51
26	LA	324	A	O3'-P	-6.82	1.52	1.61
26	LA	470	A	N1-C2	-6.82	1.28	1.34
26	LA	691	C	C2'-C1'	-6.82	1.45	1.53
26	LA	856	G	C4'-C3'	-6.82	1.45	1.53
26	LA	1003	G	N9-C8	6.82	1.42	1.37
26	LA	1041	G	C6-N1	-6.82	1.34	1.39
26	LA	1332	G	N1-C2	-6.82	1.32	1.37
26	LA	1625	C	C4'-C3'	6.82	1.60	1.53
26	LA	1723	G	C1'-N9	-6.82	1.37	1.46
26	LA	2472	G	C6-N1	-6.82	1.34	1.39
26	LA	2740	A	C5-C4	-6.82	1.33	1.38
2	SA	460	A	C2'-C1'	-6.82	1.45	1.53
2	SA	1408	A	C6-N1	6.82	1.40	1.35
2	SA	301	G	C1'-N9	-6.82	1.37	1.46
2	SA	1531	A	C2'-C1'	-6.82	1.45	1.53
26	LA	1975	G	N3-C4	-6.82	1.30	1.35
26	LA	2464	G	P-O5'	6.82	1.66	1.59
2	SA	1074	G	C4'-O4'	6.81	1.54	1.45
2	SA	1460	C	C4-N4	6.81	1.40	1.33
26	LA	1169	A	C5-C6	-6.81	1.34	1.41
26	LA	1761	C	C2'-C1'	-6.81	1.45	1.53
26	LA	2697	G	N7-C5	-6.81	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	76	G	C4'-C3'	6.81	1.60	1.53
2	SA	91	U	C2'-C1'	-6.81	1.45	1.53
2	SA	928	G	C2'-C1'	-6.81	1.45	1.53
2	SA	1119	C	P-O5'	-6.81	1.52	1.59
26	LA	1030	C	C2'-C1'	-6.81	1.45	1.53
26	LA	1389	G	C2-N2	-6.81	1.27	1.34
26	LA	1740	G	P-O5'	-6.81	1.52	1.59
26	LA	1929	G	N7-C5	-6.81	1.35	1.39
26	LA	2018	G	C5-C4	-6.81	1.33	1.38
26	LA	2621	G	N3-C4	-6.81	1.30	1.35
26	LA	2049	G	C5-C4	-6.81	1.33	1.38
26	LA	2480	C	C5'-C4'	6.81	1.59	1.51
26	LA	2619	C	O3'-P	-6.81	1.52	1.61
2	SA	157	U	C4'-O4'	-6.81	1.36	1.45
2	SA	263	A	C2'-C1'	-6.81	1.45	1.53
26	LA	435	C	C5-C6	6.81	1.39	1.34
26	LA	685	A	N7-C5	-6.81	1.35	1.39
26	LA	960	A	N7-C5	-6.81	1.35	1.39
26	LA	1687	G	N9-C8	-6.81	1.33	1.37
26	LA	1784	A	P-O5'	-6.81	1.52	1.59
26	LA	2639	A	N9-C8	6.81	1.43	1.37
26	LA	2743	U	N1-C2	-6.81	1.32	1.38
2	SA	966	G	O3'-P	-6.81	1.52	1.61
2	SA	1363	A	C5-C4	6.81	1.43	1.38
26	LA	713	G	P-O5'	-6.81	1.52	1.59
26	LA	1999	C	C4'-O4'	-6.81	1.36	1.45
26	LA	2453	A	N7-C5	6.81	1.43	1.39
26	LA	2560	A	C6-N1	6.81	1.40	1.35
26	LA	852	U	O3'-P	-6.81	1.52	1.61
26	LA	928	A	C2'-C1'	-6.81	1.45	1.53
26	LA	2637	U	C2-N3	-6.81	1.32	1.37
2	SA	238	A	C5-C6	6.80	1.47	1.41
2	SA	705	G	C5-C4	-6.80	1.33	1.38
2	SA	1036	A	N9-C4	6.80	1.42	1.37
2	SA	1171	A	C5-C4	6.80	1.43	1.38
25	LB	99	A	C4'-O4'	-6.80	1.36	1.45
26	LA	242	G	N9-C8	6.80	1.42	1.37
26	LA	1721	G	C5-C6	6.80	1.49	1.42
26	LA	2066	C	N3-C4	6.80	1.38	1.33
26	LA	2256	G	P-O5'	-6.80	1.52	1.59
26	LA	2388	A	O4'-C1'	-6.80	1.32	1.41
2	SA	887	G	N9-C4	-6.80	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	434	U	C2'-C1'	6.80	1.60	1.53
2	SA	1025	U	N1-C6	6.80	1.44	1.38
2	SA	1167	A	C6-N1	-6.80	1.30	1.35
4	S2	53	G	C5-C6	-6.80	1.35	1.42
26	LA	223	A	C4'-C3'	-6.80	1.45	1.53
26	LA	587	C	O3'-P	-6.80	1.52	1.61
26	LA	801	G	C6-N1	-6.80	1.34	1.39
26	LA	805	G	C6-N1	-6.80	1.34	1.39
26	LA	912	C	C2-N3	-6.80	1.30	1.35
26	LA	1297	C	C2'-C1'	-6.80	1.45	1.53
26	LA	1309	G	N9-C8	-6.80	1.33	1.37
26	LA	1696	G	C2-N3	-6.80	1.27	1.32
2	SA	110	C	C5'-C4'	6.80	1.59	1.51
2	SA	1020	G	C2'-O2'	6.80	1.50	1.41
26	LA	905	A	N9-C4	-6.80	1.33	1.37
26	LA	2369	A	N9-C4	-6.80	1.33	1.37
26	LA	2588	G	N9-C4	6.80	1.43	1.38
2	SA	354	G	C3'-C2'	-6.80	1.45	1.52
2	SA	430	A	P-O5'	-6.80	1.52	1.59
26	LA	232	G	C8-N7	6.80	1.35	1.30
26	LA	1044	C	N1-C6	6.80	1.41	1.37
26	LA	1106	G	O4'-C1'	6.80	1.50	1.41
26	LA	1154	G	N7-C5	-6.80	1.35	1.39
2	SA	655	A	C6-N1	-6.80	1.30	1.35
2	SA	1286	U	C4'-C3'	6.80	1.60	1.53
2	SA	1520	C	O3'-P	-6.80	1.52	1.61
25	LB	36	C	C3'-O3'	6.80	1.51	1.42
26	LA	187	G	N3-C4	-6.80	1.30	1.35
26	LA	815	C	N1-C6	-6.80	1.33	1.37
26	LA	1070	A	C2'-C1'	-6.80	1.45	1.53
26	LA	1587	G	P-O5'	-6.80	1.52	1.59
26	LA	1600	C	O3'-P	-6.80	1.52	1.61
24	S3	379	GLY	CA-C	-6.79	1.41	1.51
26	LA	101	A	C6-N1	-6.79	1.30	1.35
26	LA	2488	G	O3'-P	-6.79	1.52	1.61
2	SA	383	A	C5-C4	6.79	1.43	1.38
2	SA	804	U	N1-C2	-6.79	1.32	1.38
26	LA	205	G	C2'-C1'	-6.79	1.45	1.53
26	LA	1391	U	C4'-C3'	6.79	1.60	1.53
26	LA	2838	G	C3'-O3'	6.79	1.51	1.42
2	SA	619	U	O4'-C1'	6.79	1.50	1.41
2	SA	646	G	C8-N7	-6.79	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	725	G	N7-C5	-6.79	1.35	1.39
26	LA	1544	A	C2-N3	6.79	1.39	1.33
26	LA	1976	U	N1-C2	-6.79	1.32	1.38
2	SA	317	U	C2-N3	6.79	1.42	1.37
2	SA	641	U	C2'-C1'	-6.79	1.45	1.53
25	LB	6	G	C2'-C1'	-6.79	1.45	1.53
26	LA	1185	G	P-O5'	-6.79	1.52	1.59
26	LA	1493	C	N1-C6	6.79	1.41	1.37
26	LA	1633	G	C2-N3	6.79	1.38	1.32
26	LA	578	G	C5-C4	-6.79	1.33	1.38
26	LA	894	U	O3'-P	6.79	1.69	1.61
26	LA	952	G	N9-C8	-6.79	1.33	1.37
26	LA	2323	G	C2-N2	-6.79	1.27	1.34
26	LA	1871	A	N7-C5	-6.79	1.35	1.39
26	LA	2749	A	N1-C2	-6.79	1.28	1.34
26	LA	2846	G	N9-C4	6.79	1.43	1.38
42	L6	52	GLY	CA-C	-6.79	1.41	1.51
26	LA	936	A	N9-C4	6.79	1.42	1.37
26	LA	1020	A	O3'-P	-6.79	1.53	1.61
26	LA	1297	C	C5-C6	-6.79	1.28	1.34
26	LA	2012	G	C6-N1	-6.79	1.34	1.39
26	LA	2299	U	C2-N3	-6.79	1.32	1.37
26	LA	2415	G	O3'-P	-6.79	1.53	1.61
2	SA	56	U	C2-N3	-6.78	1.33	1.37
26	LA	1065	U	N3-C4	6.78	1.44	1.38
26	LA	1599	U	C2-N3	6.78	1.42	1.37
26	LA	2081	U	C2-N3	-6.78	1.33	1.37
26	LA	2161	C	C2-O2	6.78	1.30	1.24
26	LA	2803	G	C5-C4	-6.78	1.33	1.38
26	LA	2692	G	N7-C5	-6.78	1.35	1.39
2	SA	425	G	C5-C6	-6.78	1.35	1.42
2	SA	1181	G	C5'-C4'	6.78	1.59	1.51
2	SA	1513	A	C6-N1	-6.78	1.30	1.35
26	LA	636	G	C5'-C4'	6.78	1.59	1.51
26	LA	1236	G	N1-C2	-6.78	1.32	1.37
26	LA	1433	A	O3'-P	-6.78	1.53	1.61
26	LA	1897	G	C2-N2	-6.78	1.27	1.34
26	LA	2116	G	C5-C4	-6.78	1.33	1.38
26	LA	2471	A	C2'-C1'	-6.78	1.45	1.53
2	SA	824	G	P-O5'	-6.78	1.52	1.59
2	SA	386	C	N1-C6	-6.78	1.33	1.37
26	LA	787	C	N1-C6	-6.78	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1127	A	C5'-C4'	6.78	1.59	1.51
26	LA	1819	A	C6-N6	-6.78	1.28	1.33
26	LA	1913	A	O3'-P	-6.78	1.53	1.61
26	LA	2612	C	C2'-C1'	-6.78	1.45	1.53
26	LA	2707	U	C5'-C4'	6.78	1.59	1.51
2	SA	1465	A	O3'-P	-6.78	1.53	1.61
26	LA	285	G	N7-C5	6.78	1.43	1.39
26	LA	1050	A	N7-C5	6.78	1.43	1.39
26	LA	1752	C	P-O5'	-6.78	1.52	1.59
26	LA	1982	U	C5-C6	6.78	1.40	1.34
26	LA	960	A	N9-C4	-6.77	1.33	1.37
26	LA	1938	A	C2'-O2'	-6.77	1.32	1.41
26	LA	2742	G	N9-C4	-6.77	1.32	1.38
2	SA	773	G	C5-C4	-6.77	1.33	1.38
2	SA	1066	C	N1-C2	-6.77	1.33	1.40
2	SA	1152	A	N7-C5	-6.77	1.35	1.39
2	SA	1426	G	N7-C5	-6.77	1.35	1.39
2	SA	1475	G	O4'-C1'	-6.77	1.32	1.41
26	LA	578	G	N3-C4	-6.77	1.30	1.35
26	LA	841	G	N9-C8	6.77	1.42	1.37
26	LA	1387	A	C3'-C2'	-6.77	1.45	1.52
26	LA	1570	A	C8-N7	-6.77	1.26	1.31
26	LA	2353	G	N1-C2	-6.77	1.32	1.37
26	LA	2576	G	C5-C4	6.77	1.43	1.38
2	SA	39	G	C8-N7	6.77	1.35	1.30
26	LA	1789	A	C1'-N9	-6.77	1.37	1.46
25	LB	69	G	P-O5'	-6.77	1.52	1.59
26	LA	1254	A	O3'-P	-6.77	1.53	1.61
26	LA	1265	A	C8-N7	-6.77	1.26	1.31
26	LA	2340	A	N3-C4	6.77	1.39	1.34
2	SA	307	C	N1-C6	6.77	1.41	1.37
2	SA	392	C	C3'-O3'	6.77	1.51	1.42
26	LA	589	U	C5'-C4'	6.77	1.59	1.51
26	LA	928	A	P-O5'	-6.77	1.52	1.59
26	LA	940	G	C1'-N9	-6.77	1.37	1.46
26	LA	1259	G	C5-C4	-6.77	1.33	1.38
26	LA	2141	G	N3-C4	-6.77	1.30	1.35
26	LA	2285	C	O3'-P	-6.77	1.53	1.61
26	LA	2501	C	N1-C6	-6.77	1.33	1.37
26	LA	2741	A	C3'-C2'	-6.77	1.45	1.52
2	SA	198	G	C5-C4	-6.77	1.33	1.38
2	SA	781	A	P-O5'	-6.76	1.52	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1296	C	C4'-O4'	6.76	1.54	1.45
26	LA	462	C	O3'-P	-6.76	1.53	1.61
26	LA	1790	C	C2'-C1'	-6.76	1.46	1.53
26	LA	2889	C	C4-C5	6.76	1.48	1.43
26	LA	1075	C	C2-N3	-6.76	1.30	1.35
26	LA	2886	A	C4'-C3'	-6.76	1.45	1.53
2	SA	291	U	O3'-P	-6.76	1.53	1.61
2	SA	750	C	C4-N4	-6.76	1.27	1.33
4	S2	13	C	O4'-C1'	-6.76	1.32	1.41
26	LA	391	A	C8-N7	-6.76	1.26	1.31
26	LA	1893	C	O3'-P	-6.76	1.53	1.61
26	LA	2267	A	C5'-C4'	6.76	1.59	1.51
26	LA	2273	A	C5-C6	-6.76	1.34	1.41
26	LA	2536	G	N9-C4	-6.76	1.32	1.38
26	LA	2648	G	N9-C4	-6.76	1.32	1.38
2	SA	372	C	C5'-C4'	6.76	1.59	1.51
2	SA	991	U	N1-C2	-6.76	1.32	1.38
26	LA	581	C	N1-C6	-6.76	1.33	1.37
26	LA	627	A	C2'-C1'	-6.76	1.46	1.53
26	LA	775	G	O4'-C1'	-6.76	1.32	1.41
26	LA	846	U	C4-O4	-6.76	1.18	1.23
26	LA	16	C	N3-C4	-6.76	1.29	1.33
26	LA	1271	G	C3'-O3'	6.76	1.51	1.42
2	SA	576	C	O4'-C1'	-6.76	1.32	1.41
26	LA	922	C	N1-C6	6.76	1.41	1.37
26	LA	1538	G	N3-C4	-6.76	1.30	1.35
26	LA	1552	A	C2-N3	6.76	1.39	1.33
26	LA	2236	U	C2'-C1'	-6.76	1.46	1.53
26	LA	2243	U	O4'-C1'	-6.76	1.32	1.41
26	LA	2411	A	C2'-C1'	-6.76	1.46	1.53
2	SA	80	A	N1-C2	6.75	1.40	1.34
26	LA	639	U	O3'-P	-6.75	1.53	1.61
26	LA	1306	C	C4-N4	-6.75	1.27	1.33
26	LA	1400	U	P-O5'	-6.75	1.52	1.59
2	SA	532	A	N7-C5	-6.75	1.35	1.39
2	SA	1467	C	C2-O2	-6.75	1.18	1.24
26	LA	1226	A	C6-N1	-6.75	1.30	1.35
26	LA	1537	G	C4'-C3'	-6.75	1.45	1.53
26	LA	1604	C	C4-C5	-6.75	1.37	1.43
26	LA	1974	C	C2'-C1'	-6.75	1.46	1.53
2	SA	215	C	C5'-C4'	6.75	1.59	1.51
2	SA	272	C	N3-C4	-6.75	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	55	A	C8-N7	6.75	1.36	1.31
26	LA	156	A	C4'-O4'	6.75	1.54	1.45
26	LA	456	C	P-O5'	-6.75	1.52	1.59
26	LA	888	C	C5'-C4'	6.75	1.59	1.51
26	LA	1405	U	N3-C4	-6.75	1.32	1.38
26	LA	1725	U	C4-C5	6.75	1.49	1.43
26	LA	2548	U	N3-C4	-6.75	1.32	1.38
2	SA	532	A	C5'-C4'	6.75	1.59	1.51
2	SA	887	G	N9-C8	-6.75	1.33	1.37
2	SA	1238	A	C6-N1	6.75	1.40	1.35
2	SA	1517	G	N3-C4	-6.75	1.30	1.35
2	SA	1523	G	C5-C4	6.75	1.43	1.38
2	SA	1530	G	C5-C4	-6.75	1.33	1.38
26	LA	662	G	N3-C4	-6.75	1.30	1.35
26	LA	1204	A	C6-N1	-6.75	1.30	1.35
26	LA	1637	A	N3-C4	-6.75	1.30	1.34
26	LA	1728	C	C4-N4	-6.75	1.27	1.33
26	LA	1926	U	P-O5'	-6.75	1.53	1.59
26	LA	2242	G	C6-O6	-6.75	1.18	1.24
26	LA	2370	G	N7-C5	6.75	1.43	1.39
2	SA	285	C	P-O5'	-6.75	1.53	1.59
2	SA	550	G	N7-C5	6.75	1.43	1.39
2	SA	1050	G	O4'-C1'	-6.75	1.32	1.41
2	SA	1485	U	N3-C4	-6.75	1.32	1.38
25	LB	51	G	C2'-C1'	-6.75	1.46	1.53
26	LA	308	G	N9-C8	6.75	1.42	1.37
26	LA	764	A	C6-N1	-6.75	1.30	1.35
2	SA	168	G	C3'-C2'	6.75	1.60	1.52
2	SA	1087	G	N9-C8	6.75	1.42	1.37
26	LA	55	G	N7-C5	6.75	1.43	1.39
26	LA	295	G	N3-C4	-6.75	1.30	1.35
26	LA	317	G	N9-C4	-6.75	1.32	1.38
26	LA	1728	C	C2-N3	-6.75	1.30	1.35
26	LA	2560	A	C2'-C1'	-6.75	1.46	1.53
2	SA	2	A	N9-C4	-6.74	1.33	1.37
2	SA	317	U	C2'-C1'	-6.74	1.46	1.53
2	SA	791	G	C5-C4	6.74	1.43	1.38
2	SA	1177	G	O3'-P	-6.74	1.53	1.61
2	SA	1282	C	C5'-C4'	6.74	1.59	1.51
26	LA	644	A	C2'-C1'	-6.74	1.46	1.53
26	LA	648	G	N9-C8	-6.74	1.33	1.37
26	LA	1398	C	O3'-P	-6.74	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1568	G	P-O5'	-6.74	1.53	1.59
26	LA	1625	C	C2'-C1'	6.74	1.60	1.53
26	LA	1823	G	N9-C4	-6.74	1.32	1.38
26	LA	1952	A	N3-C4	-6.74	1.30	1.34
26	LA	2114	A	N7-C5	-6.74	1.35	1.39
2	SA	1181	G	N1-C2	6.74	1.43	1.37
26	LA	788	A	N3-C4	-6.74	1.30	1.34
26	LA	899	A	P-O5'	6.74	1.66	1.59
26	LA	911	A	C5-C6	-6.74	1.34	1.41
26	LA	2306	C	C5'-C4'	6.74	1.59	1.51
2	SA	518	C	N1-C6	6.74	1.41	1.37
2	SA	632	U	C3'-C2'	6.74	1.60	1.52
2	SA	750	C	C2-N3	-6.74	1.30	1.35
2	SA	921	U	C2-N3	-6.74	1.33	1.37
2	SA	1499	A	C2'-C1'	-6.74	1.46	1.53
3	S1	13	A	C8-N7	6.74	1.36	1.31
25	LB	7	G	C6-N1	-6.74	1.34	1.39
25	LB	22	U	N1-C2	6.74	1.44	1.38
25	LB	42	C	C4-N4	6.74	1.40	1.33
26	LA	520	G	N7-C5	-6.74	1.35	1.39
26	LA	817	C	N1-C6	-6.74	1.33	1.37
26	LA	1210	G	C5-C6	-6.74	1.35	1.42
26	LA	2406	A	C6-N6	6.74	1.39	1.33
26	LA	2870	C	C4'-O4'	-6.74	1.36	1.45
2	SA	843	U	C4'-O4'	6.74	1.54	1.45
2	SA	1529	G	C5-C6	6.74	1.49	1.42
26	LA	1124	G	C3'-C2'	-6.74	1.45	1.52
26	LA	1788	C	N1-C6	6.74	1.41	1.37
26	LA	2900	A	C3'-C2'	-6.74	1.45	1.52
26	LA	808	G	C5-C6	-6.74	1.35	1.42
26	LA	1312	U	N3-C4	-6.74	1.32	1.38
2	SA	240	G	C3'-C2'	6.74	1.60	1.52
2	SA	1194	U	O3'-P	-6.74	1.53	1.61
18	SB	235	SER	CA-CB	6.74	1.63	1.52
25	LB	17	C	C2-N3	-6.74	1.30	1.35
26	LA	255	A	O3'-P	-6.74	1.53	1.61
26	LA	1542	U	N1-C6	-6.74	1.31	1.38
26	LA	1904	G	C2-N2	-6.74	1.27	1.34
26	LA	2228	G	N3-C4	-6.74	1.30	1.35
26	LA	2600	A	O4'-C1'	-6.74	1.32	1.41
26	LA	2885	G	N3-C4	-6.74	1.30	1.35
2	SA	621	A	C8-N7	-6.73	1.26	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	745	G	N9-C4	-6.73	1.32	1.38
26	LA	283	G	C4'-C3'	-6.73	1.45	1.53
26	LA	327	G	C8-N7	6.73	1.34	1.30
2	SA	814	A	C1'-N9	-6.73	1.37	1.46
26	LA	698	C	N3-C4	6.73	1.38	1.33
26	LA	780	G	C5-C4	-6.73	1.33	1.38
26	LA	1965	C	O3'-P	-6.73	1.53	1.61
26	LA	2772	C	N1-C6	-6.73	1.33	1.37
2	SA	1055	A	C4'-C3'	6.73	1.60	1.53
2	SA	1169	A	C6-N6	-6.73	1.28	1.33
2	SA	1306	A	C3'-C2'	-6.73	1.45	1.52
12	SL	68	GLY	N-CA	-6.73	1.35	1.46
26	LA	296	U	O3'-P	-6.73	1.53	1.61
26	LA	1267	U	N1-C6	-6.73	1.31	1.38
26	LA	1312	U	O4'-C1'	-6.73	1.32	1.41
26	LA	1473	G	C6-O6	-6.73	1.18	1.24
2	SA	1032	G	C5'-C4'	6.73	1.59	1.51
2	SA	49	U	P-O5'	-6.73	1.53	1.59
2	SA	752	G	O3'-P	-6.73	1.53	1.61
2	SA	1360	A	C6-N1	6.73	1.40	1.35
2	SA	1495	U	O5'-C5'	6.73	1.55	1.44
3	S1	23	C	O3'-P	-6.73	1.53	1.61
26	LA	218	A	C3'-C2'	-6.73	1.45	1.52
26	LA	1627	G	N3-C4	-6.73	1.30	1.35
2	SA	391	G	O3'-P	-6.73	1.53	1.61
2	SA	538	G	C2-N3	6.73	1.38	1.32
2	SA	944	G	N3-C4	-6.73	1.30	1.35
2	SA	1486	G	C3'-O3'	6.73	1.51	1.42
26	LA	2758	A	C5-C4	-6.73	1.34	1.38
2	SA	1492	A	C6-N1	6.72	1.40	1.35
26	LA	10	A	C4'-C3'	6.72	1.60	1.53
26	LA	1184	U	N3-C4	-6.72	1.32	1.38
26	LA	1205	A	N3-C4	6.72	1.38	1.34
26	LA	1611	C	C2'-C1'	-6.72	1.46	1.53
26	LA	1792	G	N7-C5	-6.72	1.35	1.39
26	LA	1840	G	N7-C5	-6.72	1.35	1.39
26	LA	2004	G	N1-C2	6.72	1.43	1.37
26	LA	2143	C	C4-C5	-6.72	1.37	1.43
26	LA	2567	G	C3'-C2'	-6.72	1.45	1.52
2	SA	222	C	O3'-P	-6.72	1.53	1.61
2	SA	668	G	N9-C4	6.72	1.43	1.38
26	LA	1137	G	C3'-C2'	-6.72	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2300	C	C2-N3	-6.72	1.30	1.35
26	LA	2488	G	C2-N2	-6.72	1.27	1.34
2	SA	1003	G	C5-C6	6.72	1.49	1.42
2	SA	1424	U	P-O5'	-6.72	1.53	1.59
25	LB	117	G	N3-C4	6.72	1.40	1.35
26	LA	309	A	C5-C6	-6.72	1.35	1.41
26	LA	1122	G	C6-N1	-6.72	1.34	1.39
2	SA	92	U	C2-N3	6.72	1.42	1.37
2	SA	335	C	O4'-C1'	6.72	1.50	1.41
2	SA	724	G	N7-C5	-6.72	1.35	1.39
2	SA	849	G	N9-C8	-6.72	1.33	1.37
2	SA	961	U	C5'-C4'	6.72	1.59	1.51
26	LA	1049	C	N1-C6	6.72	1.41	1.37
26	LA	1893	C	C2-N3	-6.72	1.30	1.35
26	LA	2406	A	C1'-N9	-6.72	1.37	1.46
26	LA	2779	U	N1-C6	-6.72	1.31	1.38
26	LA	1194	A	C8-N7	6.72	1.36	1.31
2	SA	1231	G	C6-N1	-6.72	1.34	1.39
2	SA	1278	G	C8-N7	6.72	1.34	1.30
25	LB	41	G	C2-N2	-6.72	1.27	1.34
26	LA	403	U	C5-C6	-6.72	1.28	1.34
26	LA	1079	C	N1-C6	6.72	1.41	1.37
26	LA	2637	U	O4'-C1'	-6.72	1.32	1.41
26	LA	381	G	P-O5'	-6.71	1.53	1.59
26	LA	1572	A	C4'-O4'	-6.71	1.36	1.45
26	LA	2373	G	C2'-C1'	6.71	1.60	1.53
26	LA	2838	G	C5-C4	-6.71	1.33	1.38
26	LA	688	U	N3-C4	6.71	1.44	1.38
2	SA	626	G	C4'-C3'	-6.71	1.45	1.53
2	SA	1354	U	P-O5'	-6.71	1.53	1.59
26	LA	716	A	C2-N3	6.71	1.39	1.33
26	LA	857	G	O3'-P	-6.71	1.53	1.61
26	LA	2388	A	N9-C8	-6.71	1.32	1.37
26	LA	2431	U	N1-C6	-6.71	1.31	1.38
2	SA	120	A	N7-C5	-6.71	1.35	1.39
2	SA	552	U	C2'-C1'	-6.71	1.46	1.53
2	SA	687	A	O4'-C1'	-6.71	1.32	1.41
2	SA	841	C	C2-N3	6.71	1.41	1.35
2	SA	1390	U	N3-C4	-6.71	1.32	1.38
26	LA	474	G	N9-C8	-6.71	1.33	1.37
26	LA	798	G	N3-C4	-6.71	1.30	1.35
26	LA	884	U	C4-C5	6.71	1.49	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	943	A	C5-C4	-6.71	1.34	1.38
26	LA	2104	C	C3'-C2'	6.71	1.60	1.52
26	LA	2386	A	C2'-O2'	-6.71	1.32	1.41
26	LA	17	G	C2-N2	-6.71	1.27	1.34
26	LA	401	A	P-O5'	-6.71	1.53	1.59
26	LA	616	A	C3'-C2'	-6.71	1.45	1.52
26	LA	788	A	C8-N7	-6.71	1.26	1.31
26	LA	1302	A	N1-C2	-6.71	1.28	1.34
26	LA	1468	U	N1-C6	-6.71	1.31	1.38
26	LA	1738	G	C4'-C3'	6.71	1.60	1.53
26	LA	2382	G	C1'-N9	-6.71	1.37	1.46
2	SA	849	G	C5'-C4'	6.71	1.59	1.51
26	LA	2233	U	C4-O4	-6.71	1.18	1.23
26	LA	2886	A	C6-N6	6.71	1.39	1.33
2	SA	454	G	N9-C8	-6.70	1.33	1.37
2	SA	476	U	N1-C6	-6.70	1.31	1.38
2	SA	535	A	N9-C8	-6.70	1.32	1.37
2	SA	1408	A	N3-C4	-6.70	1.30	1.34
25	LB	56	G	C3'-C2'	-6.70	1.45	1.52
26	LA	281	C	C5-C6	6.70	1.39	1.34
26	LA	524	G	N3-C4	6.70	1.40	1.35
26	LA	777	G	P-O5'	-6.70	1.53	1.59
26	LA	1231	U	N1-C2	-6.70	1.32	1.38
26	LA	2209	G	C6-N1	-6.70	1.34	1.39
2	SA	320	A	N9-C4	-6.70	1.33	1.37
2	SA	1105	A	P-O5'	6.70	1.66	1.59
2	SA	596	A	N7-C5	-6.70	1.35	1.39
4	S2	73	A	C8-N7	-6.70	1.26	1.31
26	LA	402	A	C2'-C1'	-6.70	1.46	1.53
26	LA	2712	C	C5-C6	6.70	1.39	1.34
2	SA	1429	A	C8-N7	6.70	1.36	1.31
26	LA	411	G	C6-O6	-6.70	1.18	1.24
26	LA	912	C	C4-N4	-6.70	1.27	1.33
26	LA	1608	A	N3-C4	-6.70	1.30	1.34
26	LA	1778	U	C5'-C4'	6.70	1.59	1.51
2	SA	319	G	O3'-P	-6.70	1.53	1.61
2	SA	436	C	C2-N3	-6.70	1.30	1.35
2	SA	856	C	C4-C5	-6.70	1.37	1.43
26	LA	23	G	O3'-P	-6.70	1.53	1.61
26	LA	701	G	C4'-C3'	6.70	1.60	1.53
2	SA	1166	G	C5-C4	6.70	1.43	1.38
2	SA	1398	A	C6-N6	-6.70	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1516	G	N1-C2	-6.70	1.32	1.37
26	LA	1483	G	C5-C6	6.70	1.49	1.42
26	LA	1522	A	N1-C2	-6.70	1.28	1.34
26	LA	2333	A	N9-C8	-6.70	1.32	1.37
26	LA	2607	G	N9-C4	6.70	1.43	1.38
25	LB	96	G	C2-N2	-6.69	1.27	1.34
26	LA	1037	G	O3'-P	-6.69	1.53	1.61
2	SA	46	G	N1-C2	-6.69	1.32	1.37
2	SA	1345	U	C4'-C3'	-6.69	1.45	1.53
26	LA	23	G	C5'-C4'	6.69	1.59	1.51
26	LA	207	A	C1'-N9	-6.69	1.37	1.46
26	LA	1103	A	C2'-O2'	6.69	1.50	1.41
26	LA	2328	A	C2'-C1'	-6.69	1.46	1.53
2	SA	369	G	C2-N3	6.69	1.38	1.32
26	LA	693	A	O3'-P	-6.69	1.53	1.61
26	LA	858	G	C2-N2	-6.69	1.27	1.34
26	LA	1474	U	O4'-C1'	-6.69	1.32	1.41
26	LA	1557	C	C4-C5	-6.69	1.37	1.43
26	LA	1884	G	C8-N7	6.69	1.34	1.30
26	LA	2150	C	N1-C6	-6.69	1.33	1.37
26	LA	2498	C	C4-N4	-6.69	1.27	1.33
2	SA	403	C	O3'-P	-6.69	1.53	1.61
2	SA	1081	A	P-O5'	-6.69	1.53	1.59
2	SA	1447	A	N9-C8	-6.69	1.32	1.37
26	LA	467	G	C5-C4	-6.69	1.33	1.38
2	SA	749	A	C2-N3	-6.69	1.27	1.33
26	LA	593	U	N1-C6	-6.69	1.31	1.38
26	LA	1770	G	O4'-C1'	-6.69	1.32	1.41
26	LA	2680	U	O3'-P	-6.69	1.53	1.61
2	SA	113	G	C5-C6	-6.69	1.35	1.42
2	SA	743	A	C5'-C4'	6.69	1.59	1.51
26	LA	2363	G	N3-C4	-6.69	1.30	1.35
2	SA	608	A	C5-C6	-6.68	1.35	1.41
2	SA	729	A	C2'-C1'	-6.68	1.46	1.53
26	LA	1958	C	O3'-P	-6.68	1.53	1.61
26	LA	2051	A	C2'-C1'	-6.68	1.46	1.53
26	LA	2357	G	C4'-C3'	6.68	1.60	1.53
26	LA	2752	C	N1-C6	-6.68	1.33	1.37
2	SA	327	A	N3-C4	-6.68	1.30	1.34
2	SA	478	A	C4'-O4'	6.68	1.54	1.45
2	SA	481	G	N3-C4	-6.68	1.30	1.35
2	SA	560	A	C8-N7	-6.68	1.26	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	98	G	C2-N2	-6.68	1.27	1.34
26	LA	469	G	C6-N1	-6.68	1.34	1.39
26	LA	834	G	C6-N1	-6.68	1.34	1.39
26	LA	1115	G	O3'-P	-6.68	1.53	1.61
26	LA	2025	C	C5-C6	-6.68	1.29	1.34
26	LA	2094	A	C4'-C3'	6.68	1.60	1.53
26	LA	2118	U	C4-O4	-6.68	1.18	1.23
26	LA	2451	A	O4'-C1'	-6.68	1.32	1.41
2	SA	546	A	O3'-P	-6.68	1.53	1.61
24	S3	338	TYR	CZ-OH	6.68	1.49	1.37
26	LA	1456	G	C2-N2	-6.68	1.27	1.34
26	LA	1903	G	N7-C5	-6.68	1.35	1.39
26	LA	2645	G	C5-C4	-6.68	1.33	1.38
2	SA	1052	U	C5'-C4'	6.68	1.59	1.51
2	SA	1361	G	O4'-C1'	-6.68	1.32	1.41
26	LA	725	G	C3'-O3'	6.68	1.51	1.42
26	LA	1213	A	N9-C4	-6.68	1.33	1.37
26	LA	1698	A	C8-N7	-6.68	1.26	1.31
26	LA	2391	G	N3-C4	-6.68	1.30	1.35
2	SA	1353	G	O3'-P	-6.68	1.53	1.61
2	SA	636	U	C2'-O2'	6.68	1.50	1.41
2	SA	747	A	N9-C4	-6.68	1.33	1.37
2	SA	1071	C	C3'-C2'	-6.68	1.45	1.52
26	LA	290	U	C4-C5	-6.68	1.37	1.43
26	LA	640	C	C2'-C1'	-6.68	1.46	1.53
26	LA	1150	C	P-O5'	-6.68	1.53	1.59
26	LA	2325	G	C5-C4	-6.68	1.33	1.38
2	SA	1506	U	C2'-O2'	-6.67	1.32	1.41
4	S2	73	A	C3'-C2'	6.67	1.60	1.52
26	LA	476	G	C2-N3	6.67	1.38	1.32
26	LA	497	A	C5-C4	-6.67	1.34	1.38
26	LA	2180	U	C5'-C4'	6.67	1.59	1.51
26	LA	2388	A	C8-N7	-6.67	1.26	1.31
26	LA	2553	G	N1-C2	-6.67	1.32	1.37
2	SA	491	G	N9-C8	-6.67	1.33	1.37
2	SA	518	C	C4-N4	6.67	1.40	1.33
3	S1	35	G	C6-N1	-6.67	1.34	1.39
26	LA	1620	G	C8-N7	-6.67	1.26	1.30
2	SA	31	G	C5-C4	6.67	1.43	1.38
2	SA	358	U	C5'-C4'	6.67	1.59	1.51
2	SA	995	C	C1'-N1	-6.67	1.37	1.46
2	SA	1065	U	N1-C6	-6.67	1.31	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1242	G	C6-N1	-6.67	1.34	1.39
2	SA	1455	G	C6-N1	-6.67	1.34	1.39
4	S2	5	G	C6-N1	6.67	1.44	1.39
12	SL	9	LYS	C-N	-6.67	1.21	1.34
2	SA	673	A	C2'-C1'	-6.67	1.46	1.53
2	SA	1466	C	O3'-P	-6.67	1.53	1.61
26	LA	240	C	C4'-C3'	-6.67	1.45	1.53
26	LA	586	A	N7-C5	-6.67	1.35	1.39
2	SA	230	G	N7-C5	-6.67	1.35	1.39
2	SA	679	C	O3'-P	-6.67	1.53	1.61
25	LB	97	C	P-O5'	-6.67	1.53	1.59
26	LA	974	G	O3'-P	-6.67	1.53	1.61
26	LA	1077	A	C2'-C1'	-6.67	1.46	1.53
26	LA	2604	U	N3-C4	-6.67	1.32	1.38
2	SA	727	G	C5-C6	-6.67	1.35	1.42
26	LA	715	A	C2'-C1'	-6.67	1.46	1.53
26	LA	1501	G	N9-C8	-6.67	1.33	1.37
26	LA	2591	C	C4-N4	-6.67	1.27	1.33
26	LA	2844	G	N9-C4	-6.67	1.32	1.38
26	LA	2780	G	C3'-O3'	6.67	1.51	1.42
2	SA	458	U	C4'-O4'	6.66	1.54	1.45
2	SA	1110	A	C8-N7	-6.66	1.26	1.31
2	SA	1486	G	C5'-C4'	6.66	1.59	1.51
26	LA	256	A	O3'-P	-6.66	1.53	1.61
26	LA	320	A	C6-N1	-6.66	1.30	1.35
2	SA	535	A	C2'-C1'	-6.66	1.46	1.53
26	LA	480	A	N3-C4	-6.66	1.30	1.34
26	LA	1179	G	C5-C6	-6.66	1.35	1.42
26	LA	1883	U	C2'-C1'	6.66	1.60	1.53
26	LA	2818	U	N3-C4	-6.66	1.32	1.38
2	SA	113	G	N1-C2	-6.66	1.32	1.37
2	SA	661	G	N9-C8	-6.66	1.33	1.37
2	SA	738	C	C5-C6	6.66	1.39	1.34
2	SA	1221	G	C2-N2	-6.66	1.27	1.34
26	LA	51	G	C8-N7	6.66	1.34	1.30
26	LA	851	C	C4'-C3'	-6.66	1.45	1.53
2	SA	119	A	C5'-C4'	6.66	1.59	1.51
4	S2	71	G	C2-N3	6.66	1.38	1.32
25	LB	62	C	O3'-P	-6.66	1.53	1.61
26	LA	55	G	C2'-C1'	-6.66	1.46	1.53
26	LA	143	C	C5-C6	-6.66	1.29	1.34
26	LA	265	A	N7-C5	-6.66	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1572	A	P-O5'	-6.66	1.53	1.59
26	LA	2040	G	N3-C4	6.66	1.40	1.35
26	LA	2662	A	C5-C6	-6.66	1.35	1.41
2	SA	233	C	N3-C4	6.66	1.38	1.33
26	LA	743	A	O3'-P	-6.66	1.53	1.61
26	LA	2173	A	N3-C4	-6.66	1.30	1.34
2	SA	121	U	C5'-C4'	6.66	1.59	1.51
2	SA	1249	C	C4-C5	-6.66	1.37	1.43
2	SA	1254	A	C2-N3	6.66	1.39	1.33
26	LA	55	G	O3'-P	-6.66	1.53	1.61
26	LA	126	A	C3'-C2'	6.66	1.60	1.52
26	LA	352	A	C3'-C2'	6.66	1.60	1.52
26	LA	386	G	C4'-O4'	-6.66	1.36	1.45
26	LA	1134	A	C4'-C3'	-6.66	1.45	1.53
26	LA	1771	C	C5'-C4'	6.66	1.59	1.51
26	LA	2250	G	C2-N3	-6.66	1.27	1.32
2	SA	988	G	C2'-C1'	-6.65	1.46	1.53
26	LA	1096	A	C6-N6	6.65	1.39	1.33
26	LA	1345	C	C2-N3	-6.65	1.30	1.35
26	LA	1853	A	N7-C5	6.65	1.43	1.39
26	LA	2255	G	C8-N7	6.65	1.34	1.30
26	LA	2553	G	C3'-C2'	-6.65	1.45	1.52
26	LA	2595	G	P-O5'	-6.65	1.53	1.59
2	SA	509	A	C1'-N9	-6.65	1.37	1.46
2	SA	1311	A	C6-N1	6.65	1.40	1.35
2	SA	1333	A	C2-N3	-6.65	1.27	1.33
26	LA	565	C	N1-C6	-6.65	1.33	1.37
26	LA	1079	C	C2'-C1'	-6.65	1.46	1.53
26	LA	1856	U	O3'-P	-6.65	1.53	1.61
4	S2	61	U	P-O5'	-6.65	1.53	1.59
2	SA	437	U	C2'-C1'	-6.65	1.46	1.53
25	LB	65	U	O4'-C1'	-6.65	1.33	1.41
26	LA	2053	G	C2'-C1'	-6.65	1.46	1.53
26	LA	2124	G	C2-N3	-6.65	1.27	1.32
2	SA	971	G	C2-N3	-6.65	1.27	1.32
26	LA	925	A	C5'-C4'	6.65	1.59	1.51
26	LA	1581	G	C4'-C3'	6.65	1.60	1.53
26	LA	2651	C	C3'-O3'	6.65	1.51	1.42
2	SA	510	A	C5'-C4'	6.64	1.59	1.51
2	SA	630	A	C5'-C4'	6.64	1.59	1.51
2	SA	770	C	O3'-P	-6.64	1.53	1.61
25	LB	118	C	C4-N4	-6.64	1.27	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	718	A	C2'-C1'	6.64	1.60	1.53
26	LA	1356	G	N1-C2	-6.64	1.32	1.37
2	SA	1386	G	C8-N7	-6.64	1.26	1.30
25	LB	92	C	C3'-C2'	6.64	1.60	1.52
26	LA	347	A	P-O5'	6.64	1.66	1.59
26	LA	1172	C	O3'-P	-6.64	1.53	1.61
26	LA	1429	G	C6-O6	6.64	1.30	1.24
26	LA	2310	C	C5-C6	6.64	1.39	1.34
26	LA	2355	G	P-O5'	-6.64	1.53	1.59
26	LA	2794	C	C2'-C1'	-6.64	1.46	1.53
26	LA	848	C	C2-N3	6.64	1.41	1.35
26	LA	2650	U	C2'-C1'	-6.64	1.46	1.53
26	LA	2750	A	N9-C8	6.64	1.43	1.37
2	SA	207	C	C5-C6	-6.64	1.29	1.34
26	LA	164	C	C2'-C1'	-6.64	1.46	1.53
26	LA	577	G	C2'-C1'	-6.64	1.46	1.53
26	LA	626	A	C5-C4	-6.64	1.34	1.38
26	LA	996	A	C5'-C4'	6.64	1.59	1.51
26	LA	1602	U	C2-N3	-6.64	1.33	1.37
26	LA	1645	G	P-O5'	6.64	1.66	1.59
2	SA	606	G	C5-C6	-6.64	1.35	1.42
26	LA	1867	G	C8-N7	-6.64	1.26	1.30
26	LA	2278	A	N9-C4	-6.64	1.33	1.37
26	LA	2337	G	C6-N1	-6.64	1.34	1.39
2	SA	167	A	C5-C4	6.64	1.43	1.38
2	SA	1131	G	N9-C4	-6.64	1.32	1.38
2	SA	1426	G	P-O5'	-6.64	1.53	1.59
26	LA	509	C	C4-N4	-6.64	1.27	1.33
26	LA	708	G	C2'-C1'	6.64	1.60	1.53
26	LA	2267	A	O3'-P	-6.64	1.53	1.61
2	SA	229	U	C5-C6	-6.63	1.28	1.34
2	SA	879	C	N1-C6	-6.63	1.33	1.37
2	SA	1339	A	N7-C5	-6.63	1.35	1.39
2	SA	1534	A	N7-C5	-6.63	1.35	1.39
26	LA	72	U	C2'-C1'	-6.63	1.46	1.53
26	LA	1983	G	C5-C6	-6.63	1.35	1.42
26	LA	2600	A	P-O5'	6.63	1.66	1.59
2	SA	687	A	C6-N1	-6.63	1.30	1.35
26	LA	1956	U	C4-O4	-6.63	1.18	1.23
2	SA	184	G	C2-N2	-6.63	1.27	1.34
2	SA	327	A	C2'-C1'	-6.63	1.46	1.53
2	SA	604	G	C8-N7	6.63	1.34	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1209	C	C4'-C3'	6.63	1.60	1.53
25	LB	23	G	C3'-C2'	-6.63	1.45	1.52
26	LA	79	C	P-O5'	-6.63	1.53	1.59
26	LA	531	C	N1-C6	-6.63	1.33	1.37
26	LA	1230	A	N9-C8	-6.63	1.32	1.37
26	LA	1384	A	N9-C8	-6.63	1.32	1.37
26	LA	1646	C	N3-C4	-6.63	1.29	1.33
26	LA	2093	G	N1-C2	-6.63	1.32	1.37
4	S2	43	G	C5-C4	-6.63	1.33	1.38
26	LA	535	G	C1'-N9	-6.63	1.37	1.46
26	LA	1259	G	C5-C6	-6.63	1.35	1.42
26	LA	1270	C	P-O5'	-6.63	1.53	1.59
26	LA	2117	A	N3-C4	-6.63	1.30	1.34
2	SA	608	A	C1'-N9	-6.63	1.37	1.46
2	SA	929	G	P-O5'	-6.63	1.53	1.59
3	S1	27	A	C4'-C3'	6.63	1.60	1.53
26	LA	291	G	N1-C2	-6.63	1.32	1.37
26	LA	512	G	C2'-C1'	-6.63	1.46	1.53
26	LA	822	G	C4'-C3'	-6.63	1.45	1.53
26	LA	1973	G	N7-C5	6.63	1.43	1.39
26	LA	2464	G	N3-C4	-6.63	1.30	1.35
2	SA	752	G	C3'-C2'	-6.63	1.45	1.52
2	SA	1224	U	C2'-C1'	-6.63	1.46	1.53
4	S2	74	A	C2'-C1'	-6.63	1.46	1.53
26	LA	180	G	C5-C4	-6.63	1.33	1.38
26	LA	194	G	N1-C2	-6.63	1.32	1.37
26	LA	1533	C	C2-N3	6.63	1.41	1.35
26	LA	1783	A	C8-N7	-6.63	1.26	1.31
26	LA	1791	A	C5-C6	-6.63	1.35	1.41
26	LA	1926	U	C5'-C4'	6.63	1.59	1.51
26	LA	2589	A	N3-C4	-6.63	1.30	1.34
2	SA	826	C	O3'-P	-6.62	1.53	1.61
26	LA	261	G	N3-C4	-6.62	1.30	1.35
26	LA	1321	A	C5'-C4'	6.62	1.59	1.51
2	SA	1312	G	N9-C4	-6.62	1.32	1.38
26	LA	8	C	O3'-P	-6.62	1.53	1.61
26	LA	44	A	C5'-C4'	6.62	1.59	1.51
26	LA	294	A	C6-N1	6.62	1.40	1.35
26	LA	1093	G	N9-C8	6.62	1.42	1.37
26	LA	1371	G	N1-C2	-6.62	1.32	1.37
26	LA	1462	C	C4-C5	-6.62	1.37	1.43
26	LA	1704	C	N1-C2	-6.62	1.33	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1726	C	C3'-C2'	-6.62	1.45	1.52
26	LA	2094	A	C4'-O4'	6.62	1.54	1.45
26	LA	2776	A	N1-C2	-6.62	1.28	1.34
2	SA	1523	G	O3'-P	-6.62	1.53	1.61
26	LA	562	U	P-O5'	-6.62	1.53	1.59
26	LA	1089	A	C5-C4	6.62	1.43	1.38
26	LA	2476	A	C6-N1	-6.62	1.30	1.35
2	SA	780	A	C2-N3	6.62	1.39	1.33
2	SA	1053	G	C8-N7	6.62	1.34	1.30
26	LA	1166	G	N7-C5	-6.62	1.35	1.39
26	LA	1374	G	C8-N7	-6.62	1.26	1.30
2	SA	516	U	C2-N3	-6.62	1.33	1.37
2	SA	1497	G	N7-C5	6.62	1.43	1.39
26	LA	99	U	O3'-P	-6.62	1.53	1.61
26	LA	921	C	C5'-C4'	6.62	1.59	1.51
26	LA	971	G	P-O5'	-6.62	1.53	1.59
26	LA	1958	C	O4'-C1'	-6.62	1.33	1.41
26	LA	1991	U	C2'-C1'	-6.62	1.46	1.53
26	LA	2654	A	C8-N7	-6.62	1.26	1.31
2	SA	1535	C	C3'-O3'	6.62	1.51	1.42
4	S2	73	A	C5-C4	6.62	1.43	1.38
26	LA	695	G	O3'-P	-6.62	1.53	1.61
26	LA	1864	U	N3-C4	-6.62	1.32	1.38
2	SA	506	G	C5-C4	-6.62	1.33	1.38
2	SA	1402	C	N3-C4	-6.62	1.29	1.33
4	S2	17	C	C5-C6	6.62	1.39	1.34
26	LA	1431	A	C4'-C3'	-6.62	1.45	1.53
26	LA	2025	C	C4'-O4'	-6.62	1.36	1.45
26	LA	2829	A	C8-N7	-6.62	1.26	1.31
39	L3	48	TYR	CB-CG	-6.62	1.41	1.51
2	SA	144	G	N7-C5	-6.61	1.35	1.39
2	SA	308	C	C4'-O4'	6.61	1.54	1.45
2	SA	840	C	C4'-C3'	-6.61	1.45	1.53
25	LB	10	G	C5-C4	-6.61	1.33	1.38
26	LA	1476	U	O3'-P	-6.61	1.53	1.61
26	LA	1873	G	C4'-C3'	6.61	1.60	1.53
26	LA	1904	G	N9-C4	6.61	1.43	1.38
26	LA	1910	G	C8-N7	-6.61	1.26	1.30
26	LA	2574	G	N7-C5	-6.61	1.35	1.39
2	SA	406	G	C6-N1	-6.61	1.34	1.39
26	LA	88	G	N7-C5	-6.61	1.35	1.39
26	LA	1182	G	N1-C2	-6.61	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	337	G	C2-N2	-6.61	1.27	1.34
2	SA	987	G	N9-C4	-6.61	1.32	1.38
26	LA	984	A	P-O5'	-6.61	1.53	1.59
26	LA	2006	C	O3'-P	-6.61	1.53	1.61
26	LA	663	G	C5'-C4'	6.61	1.59	1.51
2	SA	150	U	N1-C2	-6.61	1.32	1.38
2	SA	232	G	C6-N1	-6.61	1.34	1.39
2	SA	839	C	P-O5'	-6.61	1.53	1.59
2	SA	1147	C	N3-C4	-6.61	1.29	1.33
3	S1	34	U	N1-C2	-6.61	1.32	1.38
26	LA	1065	U	C5'-C4'	6.61	1.59	1.51
26	LA	1205	A	N7-C5	-6.61	1.35	1.39
26	LA	1377	G	C5-C4	-6.61	1.33	1.38
26	LA	1382	G	C3'-O3'	6.61	1.51	1.42
26	LA	1420	A	C6-N6	-6.61	1.28	1.33
26	LA	1521	G	N1-C2	-6.61	1.32	1.37
26	LA	2201	G	C4'-C3'	6.61	1.60	1.53
2	SA	35	G	N3-C4	6.61	1.40	1.35
2	SA	945	G	N3-C4	-6.61	1.30	1.35
2	SA	1113	C	O3'-P	-6.61	1.53	1.61
2	SA	1455	G	C4'-C3'	-6.61	1.45	1.53
26	LA	533	G	P-O5'	-6.61	1.53	1.59
26	LA	1234	U	C5'-C4'	6.61	1.59	1.51
26	LA	2375	G	P-O5'	-6.61	1.53	1.59
2	SA	705	G	N7-C5	-6.60	1.35	1.39
26	LA	1830	C	C2-N3	6.60	1.41	1.35
2	SA	49	U	N1-C2	-6.60	1.32	1.38
2	SA	859	G	C8-N7	6.60	1.34	1.30
26	LA	468	G	N3-C4	6.60	1.40	1.35
26	LA	738	G	C2'-C1'	-6.60	1.46	1.53
26	LA	1885	A	N7-C5	-6.60	1.35	1.39
26	LA	2897	U	N3-C4	-6.60	1.32	1.38
2	SA	458	U	C2-N3	-6.60	1.33	1.37
2	SA	567	G	C6-N1	-6.60	1.34	1.39
26	LA	1002	G	C2-N2	-6.60	1.27	1.34
26	LA	1417	C	C1'-N1	-6.60	1.37	1.46
26	LA	2784	U	O3'-P	-6.60	1.53	1.61
2	SA	1041	G	C4'-C3'	6.60	1.60	1.53
8	SH	44	PHE	CB-CG	-6.60	1.40	1.51
26	LA	181	A	N1-C2	-6.60	1.28	1.34
26	LA	232	G	C5-C4	6.60	1.43	1.38
26	LA	1334	G	N9-C4	-6.60	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1836	C	N1-C6	-6.60	1.33	1.37
26	LA	1900	A	P-O5'	-6.60	1.53	1.59
26	LA	2457	U	N1-C6	-6.60	1.32	1.38
2	SA	577	G	C5-C4	-6.60	1.33	1.38
25	LB	65	U	C4-C5	-6.60	1.37	1.43
26	LA	1324	G	C8-N7	6.60	1.34	1.30
26	LA	2038	G	P-O5'	6.60	1.66	1.59
26	LA	2587	A	N9-C4	6.60	1.41	1.37
26	LA	1975	G	C5-C6	-6.60	1.35	1.42
2	SA	755	G	C5-C4	-6.59	1.33	1.38
2	SA	1410	A	C4'-O4'	6.59	1.54	1.45
26	LA	440	C	C3'-C2'	-6.59	1.45	1.52
26	LA	1483	G	N3-C4	-6.59	1.30	1.35
26	LA	1616	A	P-O5'	-6.59	1.53	1.59
26	LA	2713	U	C4'-C3'	-6.59	1.45	1.53
2	SA	314	C	C3'-C2'	-6.59	1.45	1.52
2	SA	780	A	C5-C4	-6.59	1.34	1.38
26	LA	127	A	N7-C5	-6.59	1.35	1.39
26	LA	577	G	C5-C6	-6.59	1.35	1.42
26	LA	1151	A	C6-N1	-6.59	1.30	1.35
26	LA	1906	G	N7-C5	-6.59	1.35	1.39
26	LA	313	G	N1-C2	-6.59	1.32	1.37
26	LA	960	A	C1'-N9	-6.59	1.37	1.46
26	LA	1087	G	C2'-C1'	6.59	1.60	1.53
26	LA	1303	G	O3'-P	-6.59	1.53	1.61
26	LA	1465	G	C5'-C4'	6.59	1.59	1.51
26	LA	2117	A	C4'-C3'	6.59	1.60	1.53
26	LA	2664	G	N9-C4	-6.59	1.32	1.38
26	LA	119	A	N9-C4	-6.59	1.33	1.37
26	LA	1259	G	P-O5'	-6.59	1.53	1.59
26	LA	2003	A	C6-N1	-6.59	1.30	1.35
26	LA	2484	G	N7-C5	6.59	1.43	1.39
26	LA	2536	G	N7-C5	-6.59	1.35	1.39
2	SA	531	U	C3'-C2'	6.59	1.60	1.52
26	LA	526	A	C3'-O3'	6.59	1.51	1.42
25	LB	110	C	N1-C6	6.59	1.41	1.37
26	LA	458	G	C2'-C1'	-6.59	1.46	1.53
26	LA	539	G	N7-C5	-6.59	1.35	1.39
26	LA	571	U	C5'-C4'	6.59	1.59	1.51
26	LA	1361	G	C6-O6	-6.59	1.18	1.24
26	LA	1429	G	N1-C2	-6.59	1.32	1.37
26	LA	2018	G	N3-C4	-6.59	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2491	U	C4'-O4'	6.59	1.54	1.45
44	LF	117	ARG	CD-NE	6.59	1.57	1.46
2	SA	387	U	C4'-C3'	6.58	1.60	1.53
26	LA	2217	G	C2'-C1'	-6.58	1.46	1.53
2	SA	6	G	N3-C4	6.58	1.40	1.35
2	SA	474	G	C2'-C1'	-6.58	1.46	1.53
2	SA	497	G	O3'-P	-6.58	1.53	1.61
2	SA	1517	G	C2-N3	6.58	1.38	1.32
26	LA	256	A	P-O5'	-6.58	1.53	1.59
26	LA	264	C	C2-N3	6.58	1.41	1.35
26	LA	543	G	N9-C8	6.58	1.42	1.37
26	LA	1512	C	C5'-C4'	6.58	1.59	1.51
26	LA	1596	A	C3'-O3'	6.58	1.51	1.42
26	LA	1876	A	C6-N6	6.58	1.39	1.33
26	LA	2135	A	O4'-C1'	-6.58	1.33	1.41
24	S3	679	TYR	CB-CG	-6.58	1.41	1.51
26	LA	171	U	C5'-C4'	6.58	1.59	1.51
26	LA	384	A	O3'-P	-6.58	1.53	1.61
26	LA	916	G	P-O5'	-6.58	1.53	1.59
26	LA	1038	G	C5-C4	-6.58	1.33	1.38
26	LA	1225	G	C6-N1	6.58	1.44	1.39
26	LA	1385	A	C2'-C1'	-6.58	1.46	1.53
26	LA	1772	A	C3'-O3'	6.58	1.51	1.42
26	LA	2220	U	C1'-N1	-6.58	1.37	1.46
26	LA	2245	U	O3'-P	-6.58	1.53	1.61
26	LA	2268	A	C3'-O3'	6.58	1.51	1.42
26	LA	2753	A	C2'-C1'	-6.58	1.46	1.53
2	SA	328	C	C4'-O4'	6.58	1.54	1.45
3	S1	56	G	C5-C4	-6.58	1.33	1.38
26	LA	1269	A	C2'-C1'	-6.58	1.46	1.53
26	LA	1908	C	C5'-C4'	6.58	1.59	1.51
26	LA	2470	G	C5-C4	-6.58	1.33	1.38
2	SA	74	A	C3'-O3'	6.58	1.51	1.42
2	SA	898	G	C2'-C1'	-6.58	1.46	1.53
26	LA	686	U	C4-O4	-6.58	1.18	1.23
26	LA	981	A	N3-C4	-6.58	1.30	1.34
26	LA	1103	A	N3-C4	-6.58	1.30	1.34
26	LA	1798	U	C2'-C1'	-6.58	1.46	1.53
26	LA	1799	G	P-O5'	-6.58	1.53	1.59
26	LA	2043	C	N3-C4	-6.58	1.29	1.33
26	LA	2560	A	C5-C4	-6.58	1.34	1.38
26	LA	2794	C	N3-C4	6.58	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	778	G	C2-N3	-6.58	1.27	1.32
2	SA	1527	U	O4'-C1'	-6.58	1.33	1.41
26	LA	1673	G	C3'-C2'	-6.58	1.45	1.52
26	LA	2443	C	C2'-O2'	-6.58	1.33	1.41
2	SA	363	A	C5-C6	6.58	1.47	1.41
24	S3	71	TRP	NE1-CE2	6.58	1.46	1.37
26	LA	449	A	C6-N6	-6.58	1.28	1.33
26	LA	607	U	C2'-C1'	-6.58	1.46	1.53
26	LA	2239	G	C8-N7	-6.58	1.27	1.30
2	SA	1047	G	C2-N2	-6.57	1.27	1.34
2	SA	1151	A	N9-C4	6.57	1.41	1.37
26	LA	1401	G	N9-C4	-6.57	1.32	1.38
26	LA	1492	G	O3'-P	-6.57	1.53	1.61
26	LA	1611	C	C5'-C4'	6.57	1.59	1.51
26	LA	2200	C	O4'-C1'	-6.57	1.33	1.41
26	LA	2473	U	N1-C2	-6.57	1.32	1.38
26	LA	2554	U	C5'-C4'	6.57	1.59	1.51
26	LA	2893	A	C5-C4	-6.57	1.34	1.38
2	SA	1258	G	C5-C6	-6.57	1.35	1.42
2	SA	1398	A	C2'-C1'	-6.57	1.46	1.53
26	LA	1089	A	C3'-C2'	-6.57	1.45	1.52
26	LA	2038	G	O3'-P	-6.57	1.53	1.61
26	LA	2521	C	C3'-C2'	-6.57	1.45	1.52
2	SA	117	G	C8-N7	-6.57	1.27	1.30
2	SA	280	C	C2-N3	-6.57	1.30	1.35
2	SA	831	A	C5-C4	-6.57	1.34	1.38
2	SA	989	U	O3'-P	-6.57	1.53	1.61
2	SA	1018	G	P-O5'	-6.57	1.53	1.59
26	LA	137	U	C2-O2	6.57	1.28	1.22
26	LA	216	A	C1'-N9	-6.57	1.37	1.46
26	LA	618	G	C8-N7	6.57	1.34	1.30
26	LA	1437	C	C2-N3	-6.57	1.30	1.35
26	LA	2225	A	C5'-C4'	6.57	1.59	1.51
26	LA	2281	A	C5'-C4'	6.57	1.59	1.51
26	LA	2440	C	C5-C6	6.57	1.39	1.34
2	SA	353	A	N3-C4	-6.57	1.30	1.34
2	SA	731	G	N9-C8	-6.57	1.33	1.37
2	SA	916	U	P-O5'	6.57	1.66	1.59
26	LA	479	A	N9-C4	6.57	1.41	1.37
26	LA	522	A	C4'-C3'	-6.57	1.46	1.53
26	LA	2623	G	C4'-O4'	-6.57	1.37	1.45
2	SA	1007	U	C4-C5	-6.57	1.37	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	37	C	P-O5'	-6.57	1.53	1.59
26	LA	15	G	N3-C4	6.57	1.40	1.35
26	LA	102	U	C4-C5	-6.57	1.37	1.43
26	LA	265	A	P-O5'	-6.57	1.53	1.59
26	LA	1013	C	C5'-C4'	6.57	1.59	1.51
26	LA	1301	A	C2-N3	6.57	1.39	1.33
26	LA	1629	U	N1-C6	-6.57	1.32	1.38
26	LA	2156	G	N7-C5	-6.57	1.35	1.39
2	SA	108	G	C3'-C2'	-6.57	1.45	1.52
2	SA	229	U	O4'-C1'	-6.57	1.33	1.41
2	SA	673	A	C6-N1	6.57	1.40	1.35
2	SA	1025	U	C4'-O4'	6.57	1.54	1.45
26	LA	224	U	N1-C2	-6.57	1.32	1.38
26	LA	1329	U	C3'-C2'	-6.57	1.45	1.52
26	LA	1663	G	C1'-N9	-6.57	1.37	1.46
26	LA	1744	A	N9-C4	-6.57	1.33	1.37
2	SA	1217	C	C5'-C4'	6.56	1.59	1.51
19	SC	183	TYR	CB-CG	-6.56	1.41	1.51
26	LA	896	A	N7-C5	6.56	1.43	1.39
26	LA	2065	C	P-O5'	-6.56	1.53	1.59
26	LA	2825	G	C4'-C3'	-6.56	1.46	1.53
2	SA	332	G	O3'-P	-6.56	1.53	1.61
26	LA	1351	C	N1-C2	-6.56	1.33	1.40
26	LA	1583	A	C6-N1	6.56	1.40	1.35
26	LA	1643	G	O3'-P	-6.56	1.53	1.61
26	LA	2399	G	C5'-C4'	6.56	1.59	1.51
26	LA	2690	U	C5-C6	6.56	1.40	1.34
26	LA	2874	C	O3'-P	-6.56	1.53	1.61
2	SA	21	G	N9-C8	-6.56	1.33	1.37
26	LA	415	A	O3'-P	-6.56	1.53	1.61
26	LA	970	U	P-OP1	-6.56	1.37	1.49
26	LA	1595	C	N1-C6	-6.56	1.33	1.37
26	LA	1610	A	C8-N7	-6.56	1.26	1.31
26	LA	1912	A	P-O5'	-6.56	1.53	1.59
26	LA	69	C	N1-C6	6.56	1.41	1.37
26	LA	1001	A	C8-N7	-6.56	1.26	1.31
26	LA	2316	G	C6-N1	6.56	1.44	1.39
2	SA	1009	U	C2-N3	6.56	1.42	1.37
2	SA	1023	U	P-O5'	-6.56	1.53	1.59
2	SA	1100	C	C4'-C3'	6.56	1.60	1.53
3	S1	43	U	C4'-C3'	6.56	1.60	1.53
26	LA	466	A	N3-C4	-6.56	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	545	U	C4-C5	6.56	1.49	1.43
26	LA	670	A	C1'-N9	-6.56	1.37	1.46
26	LA	1111	A	C1'-N9	-6.56	1.37	1.46
26	LA	1429	G	N7-C5	-6.56	1.35	1.39
26	LA	1590	A	N3-C4	6.56	1.38	1.34
26	LA	2772	C	C2-N3	-6.56	1.30	1.35
2	SA	561	U	O3'-P	-6.56	1.53	1.61
4	S2	18	U	N1-C2	6.56	1.44	1.38
26	LA	49	A	N9-C4	-6.56	1.33	1.37
26	LA	411	G	N9-C8	-6.56	1.33	1.37
26	LA	1829	A	C4'-C3'	-6.56	1.46	1.53
26	LA	1903	G	N9-C8	6.56	1.42	1.37
2	SA	469	C	N1-C6	-6.55	1.33	1.37
2	SA	1048	G	N7-C5	6.55	1.43	1.39
2	SA	1110	A	N3-C4	6.55	1.38	1.34
3	S1	36	U	C5'-C4'	6.55	1.59	1.51
26	LA	83	A	C6-N6	6.55	1.39	1.33
26	LA	239	C	C2-N3	-6.55	1.30	1.35
26	LA	889	C	C2-N3	-6.55	1.30	1.35
46	LH	141	GLY	CA-C	-6.55	1.41	1.51
53	LP	39	PRO	CA-C	-6.55	1.39	1.52
2	SA	33	A	N9-C8	-6.55	1.32	1.37
2	SA	404	G	C5-C6	-6.55	1.35	1.42
2	SA	971	G	C8-N7	-6.55	1.27	1.30
26	LA	1791	A	N9-C8	-6.55	1.32	1.37
2	SA	555	U	P-O5'	6.55	1.66	1.59
2	SA	996	A	N9-C4	-6.55	1.33	1.37
2	SA	1124	G	N7-C5	-6.55	1.35	1.39
26	LA	86	G	C2-N3	-6.55	1.27	1.32
26	LA	851	C	C3'-C2'	-6.55	1.45	1.52
26	LA	1353	A	C4'-O4'	-6.55	1.37	1.45
26	LA	1960	A	C6-N6	6.55	1.39	1.33
26	LA	2472	G	C2-N2	-6.55	1.27	1.34
2	SA	625	U	N1-C2	-6.55	1.32	1.38
2	SA	691	G	P-O5'	-6.55	1.53	1.59
25	LB	73	A	C3'-C2'	-6.55	1.45	1.52
25	LB	108	A	C6-N6	-6.55	1.28	1.33
26	LA	69	C	C3'-O3'	6.55	1.51	1.42
26	LA	120	U	C2'-C1'	-6.55	1.46	1.53
26	LA	260	G	N1-C2	-6.55	1.32	1.37
26	LA	1062	G	C2-N3	-6.55	1.27	1.32
26	LA	1610	A	C3'-O3'	6.55	1.51	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1773	A	C5'-C4'	6.55	1.59	1.51
2	SA	284	C	O4'-C1'	6.55	1.50	1.41
3	S1	49	U	N1-C6	-6.55	1.32	1.38
26	LA	222	A	C2-N3	-6.55	1.27	1.33
26	LA	2421	G	C2-N2	-6.55	1.28	1.34
2	SA	873	A	N3-C4	-6.55	1.30	1.34
2	SA	1190	G	P-O5'	-6.55	1.53	1.59
26	LA	368	A	N9-C8	-6.55	1.32	1.37
26	LA	437	U	C2'-C1'	-6.55	1.46	1.53
26	LA	549	G	C8-N7	6.55	1.34	1.30
26	LA	902	C	C2-N3	-6.55	1.30	1.35
26	LA	1238	G	N7-C5	-6.55	1.35	1.39
26	LA	1527	G	C5'-C4'	6.55	1.59	1.51
26	LA	1756	G	C6-N1	-6.55	1.34	1.39
26	LA	122	G	C4'-O4'	6.54	1.54	1.45
26	LA	1213	A	C3'-C2'	-6.54	1.45	1.52
26	LA	1238	G	C2-N3	6.54	1.38	1.32
2	SA	180	U	C4-C5	6.54	1.49	1.43
2	SA	581	G	N3-C4	-6.54	1.30	1.35
2	SA	655	A	C3'-C2'	6.54	1.60	1.52
2	SA	1392	G	C2'-C1'	-6.54	1.46	1.53
3	S1	51	C	C2-N3	-6.54	1.30	1.35
26	LA	796	C	O3'-P	-6.54	1.53	1.61
26	LA	1476	U	C4'-O4'	6.54	1.54	1.45
26	LA	2222	C	O3'-P	-6.54	1.53	1.61
37	LC	96	GLY	CA-C	6.54	1.62	1.51
2	SA	702	A	C6-N1	6.54	1.40	1.35
2	SA	771	G	N7-C5	-6.54	1.35	1.39
2	SA	1024	G	C5-C4	-6.54	1.33	1.38
2	SA	1139	G	C3'-O3'	6.54	1.51	1.42
26	LA	693	A	N3-C4	-6.54	1.30	1.34
26	LA	1226	A	N9-C8	-6.54	1.32	1.37
26	LA	1239	G	N7-C5	-6.54	1.35	1.39
26	LA	1677	A	N9-C4	-6.54	1.33	1.37
26	LA	2551	C	N3-C4	-6.54	1.29	1.33
2	SA	909	A	N7-C5	-6.54	1.35	1.39
25	LB	24	G	N9-C4	6.54	1.43	1.38
26	LA	1099	G	C6-N1	-6.54	1.34	1.39
2	SA	218	U	N3-C4	-6.54	1.32	1.38
2	SA	908	A	N3-C4	-6.54	1.30	1.34
2	SA	1087	G	C5-C4	6.54	1.43	1.38
26	LA	298	G	C4'-C3'	6.54	1.60	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	723	C	C3'-C2'	-6.54	1.45	1.52
26	LA	2273	A	N7-C5	-6.54	1.35	1.39
26	LA	2588	G	C3'-C2'	-6.54	1.45	1.52
32	LY	78	PHE	CG-CD2	6.54	1.48	1.38
26	LA	848	C	C5'-C4'	6.54	1.59	1.51
26	LA	910	A	C5-C4	-6.54	1.34	1.38
26	LA	19	A	O3'-P	-6.54	1.53	1.61
26	LA	266	G	C4'-C3'	6.54	1.60	1.53
26	LA	1349	C	O3'-P	-6.54	1.53	1.61
26	LA	2447	G	C2'-O2'	-6.54	1.33	1.41
26	LA	2701	U	C2'-C1'	-6.54	1.46	1.53
2	SA	117	G	C2'-C1'	-6.53	1.46	1.53
2	SA	523	A	N3-C4	-6.53	1.30	1.34
2	SA	597	G	C6-N1	-6.53	1.34	1.39
25	LB	11	C	C3'-C2'	-6.53	1.45	1.52
26	LA	629	G	C5-C4	-6.53	1.33	1.38
26	LA	702	U	C2'-C1'	-6.53	1.46	1.53
26	LA	1711	A	C6-N1	-6.53	1.30	1.35
26	LA	2427	C	C5'-C4'	6.53	1.59	1.51
2	SA	84	U	C5'-C4'	6.53	1.59	1.51
2	SA	995	C	C5-C6	-6.53	1.29	1.34
26	LA	633	A	N9-C4	-6.53	1.33	1.37
2	SA	266	G	N9-C8	-6.53	1.33	1.37
2	SA	291	U	C4-O4	-6.53	1.18	1.23
25	LB	76	G	O3'-P	-6.53	1.53	1.61
26	LA	38	A	C2'-C1'	-6.53	1.46	1.53
26	LA	1171	G	N9-C8	-6.53	1.33	1.37
26	LA	1812	U	C5-C6	6.53	1.40	1.34
26	LA	1901	A	N9-C8	-6.53	1.32	1.37
26	LA	2014	A	N3-C4	-6.53	1.30	1.34
26	LA	2376	A	C8-N7	-6.53	1.26	1.31
2	SA	55	A	N9-C8	-6.53	1.32	1.37
2	SA	193	C	C3'-O3'	6.53	1.51	1.42
2	SA	112	G	N7-C5	6.53	1.43	1.39
2	SA	767	A	N9-C4	-6.53	1.33	1.37
2	SA	997	U	C4-O4	-6.53	1.18	1.23
2	SA	1525	G	N3-C4	-6.53	1.30	1.35
26	LA	899	A	N3-C4	-6.53	1.30	1.34
26	LA	1047	G	C2-N3	6.53	1.38	1.32
26	LA	2134	A	O3'-P	-6.53	1.53	1.61
26	LA	2575	C	C2'-C1'	-6.53	1.46	1.53
2	SA	541	G	C2'-C1'	-6.53	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	577	G	N1-C2	-6.53	1.32	1.37
2	SA	1095	U	N1-C6	-6.53	1.32	1.38
2	SA	1497	G	C2-N3	-6.53	1.27	1.32
26	LA	508	A	C2'-C1'	6.53	1.60	1.53
26	LA	1783	A	N9-C8	6.53	1.43	1.37
26	LA	1809	A	O3'-P	-6.53	1.53	1.61
2	SA	330	C	C2'-C1'	-6.52	1.46	1.53
2	SA	608	A	C2'-C1'	-6.52	1.46	1.53
4	S2	10	G	C2-N3	6.52	1.38	1.32
26	LA	117	G	N1-C2	-6.52	1.32	1.37
26	LA	1240	U	O3'-P	-6.52	1.53	1.61
26	LA	1665	A	C8-N7	-6.52	1.26	1.31
55	LQ	20	GLU	CB-CG	6.52	1.64	1.52
2	SA	341	C	C2-N3	-6.52	1.30	1.35
2	SA	867	G	N1-C2	-6.52	1.32	1.37
2	SA	1517	G	C6-N1	-6.52	1.34	1.39
26	LA	170	U	N1-C6	-6.52	1.32	1.38
26	LA	1080	A	O3'-P	-6.52	1.53	1.61
26	LA	1416	G	C2-N2	-6.52	1.28	1.34
26	LA	1525	A	C5-C4	-6.52	1.34	1.38
2	SA	1133	G	C2-N3	-6.52	1.27	1.32
25	LB	18	G	N7-C5	6.52	1.43	1.39
26	LA	967	U	C3'-O3'	6.52	1.51	1.42
26	LA	1807	G	C8-N7	6.52	1.34	1.30
26	LA	2209	G	C2-N2	-6.52	1.28	1.34
2	SA	45	G	O3'-P	-6.52	1.53	1.61
2	SA	480	U	C1'-N1	6.52	1.58	1.48
2	SA	1230	C	C1'-N1	6.52	1.58	1.48
2	SA	1504	G	C5-C4	-6.52	1.33	1.38
25	LB	13	G	N9-C4	-6.52	1.32	1.38
26	LA	37	C	O3'-P	-6.52	1.53	1.61
26	LA	159	G	C5-C4	-6.52	1.33	1.38
26	LA	1922	G	C2-N3	-6.52	1.27	1.32
26	LA	2313	C	C2-N3	-6.52	1.30	1.35
26	LA	2567	G	C5'-C4'	6.52	1.59	1.51
26	LA	2722	G	N9-C8	-6.52	1.33	1.37
2	SA	1130	A	N9-C8	6.52	1.43	1.37
2	SA	1455	G	C2-N3	-6.52	1.27	1.32
25	LB	95	U	P-O5'	-6.52	1.53	1.59
26	LA	168	G	C8-N7	6.52	1.34	1.30
26	LA	1241	A	C5-C6	6.52	1.47	1.41
26	LA	1394	U	N1-C6	-6.52	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1624	U	C3'-C2'	-6.52	1.45	1.52
26	LA	423	A	N1-C2	-6.52	1.28	1.34
26	LA	1169	A	C2'-C1'	-6.52	1.46	1.53
26	LA	1235	G	N7-C5	-6.52	1.35	1.39
26	LA	2123	G	C3'-O3'	6.52	1.51	1.42
26	LA	2544	G	N9-C4	-6.52	1.32	1.38
2	SA	924	C	C4-C5	-6.51	1.37	1.43
2	SA	971	G	P-O5'	-6.51	1.53	1.59
2	SA	1360	A	P-O5'	-6.51	1.53	1.59
2	SA	1490	U	C3'-O3'	6.51	1.51	1.42
26	LA	389	G	O3'-P	-6.51	1.53	1.61
26	LA	2233	U	P-O5'	-6.51	1.53	1.59
26	LA	2587	A	N9-C8	-6.51	1.32	1.37
26	LA	2804	U	C3'-C2'	-6.51	1.45	1.52
26	LA	2825	G	N9-C4	6.51	1.43	1.38
2	SA	1325	C	P-O5'	-6.51	1.53	1.59
26	LA	1215	G	N9-C4	-6.51	1.32	1.38
25	LB	79	G	P-O5'	-6.51	1.53	1.59
26	LA	60	G	C5-C4	-6.51	1.33	1.38
26	LA	1147	A	N9-C8	-6.51	1.32	1.37
26	LA	1251	C	C4-C5	-6.51	1.37	1.43
26	LA	1446	C	C2'-C1'	-6.51	1.46	1.53
26	LA	1662	U	O3'-P	-6.51	1.53	1.61
26	LA	1943	U	C5'-C4'	6.51	1.59	1.51
26	LA	2238	G	C2-N3	-6.51	1.27	1.32
26	LA	2291	U	C2-N3	-6.51	1.33	1.37
2	SA	466	A	C6-N1	6.51	1.40	1.35
2	SA	836	G	C8-N7	-6.51	1.27	1.30
2	SA	1126	U	C2'-C1'	-6.51	1.46	1.53
2	SA	1379	G	C6-N1	-6.51	1.34	1.39
2	SA	1429	A	C5-C4	-6.51	1.34	1.38
26	LA	446	G	C1'-N9	-6.51	1.37	1.46
26	LA	631	A	O4'-C1'	-6.51	1.33	1.41
26	LA	1574	C	O4'-C1'	6.51	1.50	1.41
26	LA	1702	G	N7-C5	-6.51	1.35	1.39
26	LA	2307	G	N3-C4	-6.51	1.30	1.35
26	LA	2890	G	C2'-C1'	-6.51	1.46	1.53
2	SA	128	G	P-O5'	-6.51	1.53	1.59
2	SA	225	C	P-O5'	-6.51	1.53	1.59
2	SA	974	A	C6-N1	-6.51	1.30	1.35
2	SA	1154	G	N9-C8	6.51	1.42	1.37
2	SA	1334	G	C5-C4	-6.51	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2467	C	O3'-P	-6.51	1.53	1.61
2	SA	1145	A	N9-C4	-6.51	1.33	1.37
4	S2	34	U	C5'-C4'	6.51	1.59	1.51
26	LA	1586	A	C3'-C2'	-6.51	1.45	1.52
26	LA	2242	G	N7-C5	-6.51	1.35	1.39
26	LA	2288	A	N9-C4	-6.51	1.33	1.37
26	LA	2472	G	N9-C8	-6.51	1.33	1.37
2	SA	500	G	N3-C4	-6.50	1.30	1.35
2	SA	544	G	C5'-C4'	6.50	1.59	1.51
2	SA	581	G	N9-C4	-6.50	1.32	1.38
26	LA	825	A	N1-C2	-6.50	1.28	1.34
26	LA	1359	A	C2'-C1'	-6.50	1.46	1.53
26	LA	1388	G	C8-N7	-6.50	1.27	1.30
2	SA	557	G	C2-N3	-6.50	1.27	1.32
4	S2	20	G	C2'-C1'	-6.50	1.46	1.53
26	LA	89	A	N3-C4	-6.50	1.30	1.34
26	LA	152	A	C5'-C4'	6.50	1.59	1.51
26	LA	262	A	O3'-P	-6.50	1.53	1.61
26	LA	300	A	P-O5'	-6.50	1.53	1.59
26	LA	753	A	N7-C5	-6.50	1.35	1.39
2	SA	266	G	C2-N2	-6.50	1.28	1.34
2	SA	844	G	C4'-C3'	6.50	1.60	1.53
2	SA	906	A	O3'-P	-6.50	1.53	1.61
26	LA	1066	U	C4-O4	-6.50	1.18	1.23
26	LA	1076	C	C4'-C3'	-6.50	1.46	1.53
26	LA	1148	U	C2-N3	-6.50	1.33	1.37
26	LA	1619	G	C5-C4	-6.50	1.33	1.38
26	LA	2507	C	C4-N4	-6.50	1.28	1.33
26	LA	769	U	C4'-C3'	-6.50	1.46	1.53
26	LA	914	G	N9-C4	-6.50	1.32	1.38
26	LA	2451	A	N7-C5	-6.50	1.35	1.39
2	SA	1280	A	C6-N1	6.50	1.40	1.35
26	LA	13	A	C6-N6	-6.50	1.28	1.33
26	LA	301	G	O3'-P	-6.50	1.53	1.61
26	LA	1426	G	C2'-C1'	-6.50	1.46	1.53
26	LA	1556	C	N1-C2	-6.50	1.33	1.40
26	LA	2307	G	C2-N2	-6.50	1.28	1.34
26	LA	2481	G	C4'-C3'	6.50	1.60	1.53
26	LA	2747	G	O3'-P	-6.50	1.53	1.61
26	LA	566	U	N1-C6	-6.50	1.32	1.38
26	LA	956	G	N7-C5	-6.50	1.35	1.39
26	LA	1295	C	C4-N4	-6.50	1.28	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1917	U	N1-C2	-6.50	1.32	1.38
26	LA	2290	G	C5'-C4'	6.50	1.59	1.51
26	LA	2696	U	N1-C2	-6.50	1.32	1.38
2	SA	118	U	C2-N3	6.50	1.42	1.37
26	LA	101	A	N3-C4	-6.50	1.30	1.34
26	LA	212	G	P-O5'	-6.50	1.53	1.59
26	LA	1220	G	P-O5'	-6.50	1.53	1.59
26	LA	2246	G	C6-N1	6.50	1.44	1.39
26	LA	2536	G	C2-N2	-6.50	1.28	1.34
26	LA	2782	G	N1-C2	-6.50	1.32	1.37
2	SA	1013	G	C6-N1	-6.49	1.35	1.39
10	SJ	79	PRO	CA-CB	6.49	1.66	1.53
26	LA	662	G	N9-C8	-6.49	1.33	1.37
26	LA	2077	A	C6-N6	-6.49	1.28	1.33
26	LA	2080	A	C5'-C4'	6.49	1.59	1.51
26	LA	2307	G	P-O5'	6.49	1.66	1.59
2	SA	653	U	C5'-C4'	6.49	1.59	1.51
2	SA	766	A	O3'-P	-6.49	1.53	1.61
25	LB	11	C	N3-C4	6.49	1.38	1.33
26	LA	1156	A	C5'-C4'	6.49	1.59	1.51
26	LA	1813	G	N3-C4	-6.49	1.30	1.35
26	LA	2516	A	P-O5'	-6.49	1.53	1.59
26	LA	2724	U	C4'-C3'	-6.49	1.46	1.53
2	SA	4	U	C5'-C4'	6.49	1.59	1.51
2	SA	1108	G	N7-C5	-6.49	1.35	1.39
2	SA	1363	A	C8-N7	6.49	1.36	1.31
3	S1	45	G	P-O5'	-6.49	1.53	1.59
26	LA	28	A	C3'-C2'	-6.49	1.45	1.52
26	LA	198	C	C4-N4	-6.49	1.28	1.33
26	LA	582	A	C6-N6	6.49	1.39	1.33
26	LA	658	U	C4-O4	-6.49	1.18	1.23
26	LA	1059	G	C6-N1	-6.49	1.35	1.39
26	LA	2375	G	N9-C4	-6.49	1.32	1.38
3	S1	47	C	C1'-N1	6.49	1.58	1.48
26	LA	129	C	O3'-P	-6.49	1.53	1.61
26	LA	1111	A	C4'-O4'	-6.49	1.37	1.45
26	LA	2701	U	N1-C2	-6.49	1.32	1.38
2	SA	1061	G	N1-C2	6.49	1.43	1.37
4	S2	29	C	P-O5'	-6.49	1.53	1.59
25	LB	116	G	C6-N1	-6.49	1.35	1.39
26	LA	127	A	N9-C4	-6.49	1.33	1.37
26	LA	162	U	N3-C4	6.49	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1609	A	C6-N6	6.49	1.39	1.33
2	SA	277	C	C5-C6	-6.49	1.29	1.34
2	SA	1446	A	C4'-C3'	6.49	1.60	1.53
4	S2	32	G	C4'-C3'	6.49	1.60	1.53
26	LA	328	U	O4'-C1'	6.49	1.50	1.41
26	LA	655	A	N7-C5	6.49	1.43	1.39
26	LA	991	C	N1-C6	-6.49	1.33	1.37
26	LA	1426	G	N3-C4	-6.49	1.30	1.35
26	LA	1445	G	C4'-C3'	-6.49	1.46	1.53
2	SA	975	A	C5'-C4'	6.48	1.59	1.51
26	LA	210	C	C4-N4	-6.48	1.28	1.33
26	LA	1966	A	C6-N6	6.48	1.39	1.33
26	LA	1988	G	O3'-P	-6.48	1.53	1.61
26	LA	2892	G	C5-C6	-6.48	1.35	1.42
2	SA	194	C	N1-C6	6.48	1.41	1.37
2	SA	595	A	C6-N1	6.48	1.40	1.35
2	SA	881	G	O3'-P	-6.48	1.53	1.61
3	S1	41	A	C5'-C4'	6.48	1.59	1.51
26	LA	261	G	N7-C5	-6.48	1.35	1.39
26	LA	918	A	C5-C4	-6.48	1.34	1.38
26	LA	1145	C	O3'-P	-6.48	1.53	1.61
2	SA	58	C	C4-N4	-6.48	1.28	1.33
2	SA	85	U	C2'-C1'	6.48	1.60	1.53
25	LB	102	G	C5-C4	-6.48	1.33	1.38
26	LA	891	G	C2-N2	-6.48	1.28	1.34
26	LA	1272	A	O3'-P	-6.48	1.53	1.61
26	LA	1317	G	N9-C8	-6.48	1.33	1.37
26	LA	1547	C	C2-N3	-6.48	1.30	1.35
26	LA	1876	A	C4'-C3'	6.48	1.60	1.53
26	LA	2373	G	C8-N7	-6.48	1.27	1.30
24	S3	180	GLY	CA-C	-6.48	1.41	1.51
2	SA	1034	G	C5-C6	6.48	1.48	1.42
26	LA	386	G	C1'-N9	-6.48	1.37	1.46
26	LA	543	G	N7-C5	6.48	1.43	1.39
26	LA	775	G	N7-C5	-6.48	1.35	1.39
26	LA	1969	A	N3-C4	-6.48	1.30	1.34
26	LA	1990	C	N1-C6	6.48	1.41	1.37
26	LA	2471	A	C2-N3	-6.48	1.27	1.33
26	LA	2822	G	N1-C2	6.48	1.43	1.37
2	SA	111	G	C5-C6	6.48	1.48	1.42
2	SA	1196	A	C2'-C1'	-6.48	1.46	1.53
26	LA	656	G	C2-N3	6.48	1.38	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1144	A	C5-C4	-6.48	1.34	1.38
26	LA	2077	A	N9-C4	6.48	1.41	1.37
26	LA	2474	U	C4'-C3'	6.48	1.60	1.53
2	SA	1337	G	C4'-O4'	6.47	1.53	1.45
2	SA	1473	G	O4'-C1'	-6.47	1.33	1.41
25	LB	106	G	C8-N7	6.47	1.34	1.30
26	LA	384	A	N1-C2	-6.47	1.28	1.34
26	LA	508	A	C3'-C2'	-6.47	1.45	1.52
26	LA	684	G	C1'-N9	-6.47	1.37	1.46
26	LA	757	G	N3-C4	-6.47	1.30	1.35
2	SA	1148	U	O3'-P	-6.47	1.53	1.61
2	SA	1403	C	C2-N3	6.47	1.41	1.35
25	LB	119	A	C8-N7	-6.47	1.27	1.31
26	LA	348	A	C8-N7	-6.47	1.27	1.31
26	LA	760	G	C2-N2	-6.47	1.28	1.34
26	LA	993	G	N7-C5	-6.47	1.35	1.39
26	LA	1517	G	N7-C5	-6.47	1.35	1.39
26	LA	2154	A	C5'-C4'	6.47	1.59	1.51
2	SA	359	G	N9-C8	-6.47	1.33	1.37
2	SA	1028	C	N3-C4	6.47	1.38	1.33
2	SA	1033	G	N9-C4	6.47	1.43	1.38
26	LA	1421	G	C2-N3	6.47	1.38	1.32
26	LA	1654	A	C6-N6	-6.47	1.28	1.33
2	SA	297	G	C4'-C3'	-6.47	1.46	1.53
2	SA	391	G	C5-C4	-6.47	1.33	1.38
2	SA	492	C	C4-C5	6.47	1.48	1.43
2	SA	1227	A	N7-C5	-6.47	1.35	1.39
2	SA	1407	C	N3-C4	-6.47	1.29	1.33
4	S2	40	C	O3'-P	-6.47	1.53	1.61
26	LA	315	G	N9-C4	6.47	1.43	1.38
26	LA	1088	A	O3'-P	-6.47	1.53	1.61
26	LA	2499	C	C4-C5	-6.47	1.37	1.43
26	LA	2614	A	N9-C8	-6.47	1.32	1.37
26	LA	2671	G	N7-C5	-6.47	1.35	1.39
26	LA	1766	G	C6-N1	-6.47	1.35	1.39
26	LA	1922	G	O3'-P	-6.47	1.53	1.61
26	LA	2280	G	C2-N2	-6.47	1.28	1.34
26	LA	2458	G	C8-N7	6.47	1.34	1.30
2	SA	907	A	N3-C4	-6.47	1.30	1.34
2	SA	1396	A	C2'-C1'	-6.47	1.46	1.53
26	LA	185	G	N3-C4	-6.47	1.30	1.35
26	LA	475	C	C2-O2	-6.47	1.18	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1133	A	N9-C8	6.47	1.43	1.37
26	LA	1556	C	O3'-P	-6.47	1.53	1.61
2	SA	1006	G	N9-C8	-6.46	1.33	1.37
2	SA	1362	A	N7-C5	6.46	1.43	1.39
2	SA	1456	A	O3'-P	-6.46	1.53	1.61
24	S3	252	ARG	CD-NE	6.46	1.57	1.46
26	LA	48	G	N3-C4	-6.46	1.30	1.35
26	LA	465	G	C5'-C4'	6.46	1.59	1.51
26	LA	939	G	C2-N2	-6.46	1.28	1.34
26	LA	2292	U	O3'-P	-6.46	1.53	1.61
26	LA	2520	C	C2-O2	-6.46	1.18	1.24
26	LA	2524	G	C6-N1	-6.46	1.35	1.39
26	LA	2873	A	N9-C8	-6.46	1.32	1.37
2	SA	622	A	C6-N1	-6.46	1.31	1.35
2	SA	1502	A	C3'-O3'	6.46	1.51	1.42
26	LA	41	C	N1-C6	6.46	1.41	1.37
26	LA	1923	U	N1-C6	-6.46	1.32	1.38
2	SA	679	C	C2-N3	-6.46	1.30	1.35
26	LA	251	A	C5-C4	6.46	1.43	1.38
26	LA	500	G	C4'-O4'	6.46	1.53	1.45
26	LA	575	A	O4'-C1'	-6.46	1.33	1.41
26	LA	1389	G	C3'-C2'	-6.46	1.45	1.52
26	LA	2851	A	N3-C4	6.46	1.38	1.34
26	LA	2873	A	N7-C5	-6.46	1.35	1.39
26	LA	2904	U	N1-C2	-6.46	1.32	1.38
2	SA	53	A	N7-C5	-6.46	1.35	1.39
2	SA	447	G	C5'-C4'	6.46	1.59	1.51
2	SA	510	A	N9-C8	-6.46	1.32	1.37
26	LA	1493	C	C4'-C3'	6.46	1.60	1.53
26	LA	2242	G	C5-C6	-6.46	1.35	1.42
26	LA	2496	C	C4-C5	-6.46	1.37	1.43
26	LA	2782	G	N3-C4	-6.46	1.30	1.35
2	SA	38	G	C5'-C4'	6.46	1.59	1.51
2	SA	808	C	N3-C4	6.46	1.38	1.33
4	S2	30	G	N9-C8	-6.46	1.33	1.37
26	LA	317	G	N1-C2	-6.46	1.32	1.37
26	LA	599	A	C6-N6	6.46	1.39	1.33
26	LA	646	U	P-O5'	-6.46	1.53	1.59
26	LA	722	A	N9-C4	6.46	1.41	1.37
26	LA	1167	C	C4-N4	-6.46	1.28	1.33
26	LA	1356	G	N9-C4	-6.46	1.32	1.38
26	LA	1824	G	N1-C2	-6.46	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2615	U	C2'-C1'	-6.46	1.46	1.53
26	LA	2634	A	N7-C5	-6.46	1.35	1.39
2	SA	134	G	C3'-O3'	6.46	1.51	1.42
2	SA	959	A	C5-C6	-6.46	1.35	1.41
3	S1	18	A	C3'-C2'	6.46	1.60	1.52
3	S1	48	C	P-O5'	6.46	1.66	1.59
26	LA	1726	C	N1-C6	6.46	1.41	1.37
26	LA	2159	G	C5'-C4'	6.46	1.59	1.51
26	LA	2217	G	N7-C5	-6.46	1.35	1.39
2	SA	35	G	N1-C2	-6.46	1.32	1.37
2	SA	954	G	C3'-O3'	6.46	1.51	1.42
26	LA	125	A	C2-N3	6.46	1.39	1.33
26	LA	484	C	C2-N3	6.46	1.41	1.35
26	LA	2458	G	N9-C8	-6.46	1.33	1.37
2	SA	23	C	N3-C4	6.45	1.38	1.33
2	SA	127	G	C5'-C4'	6.45	1.59	1.51
2	SA	505	G	C5-C6	-6.45	1.35	1.42
4	S2	72	C	C2-N3	-6.45	1.30	1.35
25	LB	70	C	C4-C5	-6.45	1.37	1.43
26	LA	161	A	C6-N1	6.45	1.40	1.35
26	LA	495	G	O3'-P	-6.45	1.53	1.61
26	LA	1890	A	P-O5'	-6.45	1.53	1.59
26	LA	2349	G	N7-C5	-6.45	1.35	1.39
26	LA	50	U	C2'-C1'	-6.45	1.46	1.53
26	LA	1494	A	C5-C4	-6.45	1.34	1.38
26	LA	2728	U	C2'-C1'	-6.45	1.46	1.53
2	SA	108	G	C4'-C3'	6.45	1.60	1.53
2	SA	446	G	C5-C6	-6.45	1.35	1.42
2	SA	966	G	C2-N2	-6.45	1.28	1.34
2	SA	1369	C	C2'-O2'	-6.45	1.33	1.41
26	LA	1759	A	C5'-C4'	6.45	1.59	1.51
26	LA	2153	C	C4-C5	6.45	1.48	1.43
2	SA	134	G	N1-C2	-6.45	1.32	1.37
2	SA	263	A	C5'-C4'	6.45	1.59	1.51
2	SA	474	G	C2-N2	-6.45	1.28	1.34
2	SA	491	G	N9-C4	6.45	1.43	1.38
2	SA	838	G	N1-C2	-6.45	1.32	1.37
26	LA	628	G	O3'-P	-6.45	1.53	1.61
26	LA	775	G	C2-N2	-6.45	1.28	1.34
26	LA	1574	C	C2-O2	6.45	1.30	1.24
26	LA	1589	U	C3'-O3'	6.45	1.51	1.42
26	LA	2365	G	O3'-P	-6.45	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2841	C	O3'-P	-6.45	1.53	1.61
50	LL	4	PHE	CG-CD2	6.45	1.48	1.38
26	LA	471	A	C2'-C1'	-6.45	1.46	1.53
26	LA	837	C	P-O5'	-6.45	1.53	1.59
26	LA	1254	A	N7-C5	-6.45	1.35	1.39
26	LA	1698	A	O3'-P	-6.45	1.53	1.61
2	SA	807	A	N7-C5	-6.45	1.35	1.39
2	SA	833	G	C2-N3	6.45	1.38	1.32
2	SA	1201	A	N9-C4	-6.45	1.33	1.37
25	LB	109	A	N3-C4	6.45	1.38	1.34
26	LA	1594	U	C3'-O3'	6.45	1.51	1.42
26	LA	1663	G	P-O5'	-6.45	1.53	1.59
26	LA	2084	C	C5-C6	-6.45	1.29	1.34
26	LA	2712	C	N1-C6	-6.45	1.33	1.37
2	SA	66	A	C4'-C3'	-6.44	1.46	1.53
2	SA	780	A	C6-N1	6.44	1.40	1.35
2	SA	1030	U	C5'-C4'	6.44	1.59	1.51
2	SA	1095	U	C3'-O3'	6.44	1.51	1.42
26	LA	1628	G	C3'-O3'	6.44	1.51	1.42
26	LA	2429	G	P-O5'	6.44	1.66	1.59
26	LA	2718	G	N9-C8	-6.44	1.33	1.37
46	LH	82	PHE	CB-CG	6.44	1.62	1.51
2	SA	1130	A	O4'-C1'	6.44	1.50	1.41
26	LA	1597	A	C5-C4	6.44	1.43	1.38
2	SA	443	C	O4'-C1'	6.44	1.50	1.41
2	SA	748	G	N3-C4	6.44	1.40	1.35
26	LA	287	G	O3'-P	-6.44	1.53	1.61
26	LA	1168	G	O3'-P	-6.44	1.53	1.61
26	LA	1604	C	P-O5'	-6.44	1.53	1.59
26	LA	1668	A	N9-C8	6.44	1.43	1.37
26	LA	1684	G	C8-N7	6.44	1.34	1.30
26	LA	2308	G	C4'-C3'	6.44	1.60	1.53
26	LA	2714	G	O4'-C1'	-6.44	1.33	1.41
26	LA	2812	G	N9-C8	-6.44	1.33	1.37
2	SA	498	A	N3-C4	-6.44	1.30	1.34
26	LA	488	G	N7-C5	-6.44	1.35	1.39
26	LA	1165	A	C1'-N9	-6.44	1.37	1.46
26	LA	1564	C	C2-N3	-6.44	1.30	1.35
2	SA	492	C	C5-C6	6.44	1.39	1.34
2	SA	640	A	C5'-C4'	6.44	1.59	1.51
2	SA	1011	C	C3'-C2'	-6.44	1.45	1.52
4	S2	54	G	C5-C6	6.44	1.48	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	847	U	C4-C5	-6.44	1.37	1.43
26	LA	1088	A	C3'-C2'	6.44	1.60	1.52
26	LA	1127	A	O3'-P	-6.44	1.53	1.61
26	LA	1902	C	O4'-C1'	-6.44	1.33	1.41
26	LA	2211	A	C6-N6	-6.44	1.28	1.33
26	LA	2249	U	N1-C6	6.44	1.43	1.38
26	LA	2586	U	O5'-C5'	6.44	1.54	1.44
2	SA	1311	A	N9-C8	-6.44	1.32	1.37
26	LA	2279	G	P-O5'	-6.44	1.53	1.59
2	SA	174	A	C6-N6	-6.43	1.28	1.33
2	SA	602	A	C4'-O4'	-6.43	1.37	1.45
26	LA	690	G	C2'-C1'	-6.43	1.46	1.53
26	LA	881	G	C5'-C4'	6.43	1.59	1.51
26	LA	967	U	C2-N3	-6.43	1.33	1.37
26	LA	984	A	C6-N6	6.43	1.39	1.33
26	LA	1196	C	P-O5'	-6.43	1.53	1.59
2	SA	300	A	C2-N3	-6.43	1.27	1.33
2	SA	1378	C	C2-N3	6.43	1.40	1.35
26	LA	205	G	C8-N7	6.43	1.34	1.30
26	LA	474	G	C6-N1	-6.43	1.35	1.39
26	LA	744	U	O3'-P	-6.43	1.53	1.61
26	LA	873	C	N1-C6	-6.43	1.33	1.37
26	LA	1278	C	C4'-C3'	-6.43	1.46	1.53
26	LA	1438	U	C3'-C2'	6.43	1.60	1.52
26	LA	1628	G	O4'-C1'	6.43	1.50	1.41
26	LA	2598	A	P-O5'	-6.43	1.53	1.59
26	LA	2747	G	C8-N7	6.43	1.34	1.30
2	SA	148	G	C2'-C1'	-6.43	1.46	1.53
4	S2	21	U	C2'-C1'	-6.43	1.46	1.53
26	LA	319	G	C8-N7	6.43	1.34	1.30
26	LA	683	U	C4-C5	-6.43	1.37	1.43
26	LA	1347	A	C6-N1	-6.43	1.31	1.35
2	SA	168	G	N3-C4	-6.43	1.30	1.35
2	SA	1508	A	C5-C4	-6.43	1.34	1.38
26	LA	470	A	C6-N1	6.43	1.40	1.35
26	LA	1432	G	C3'-C2'	-6.43	1.45	1.52
26	LA	1465	G	N3-C4	-6.43	1.30	1.35
26	LA	1623	G	C5-C4	-6.43	1.33	1.38
26	LA	2389	G	C4'-C3'	-6.43	1.46	1.53
2	SA	575	G	C6-N1	-6.43	1.35	1.39
3	S1	32	U	C2'-C1'	-6.43	1.46	1.53
2	SA	109	A	C8-N7	-6.43	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	289	G	C8-N7	6.43	1.34	1.30
25	LB	41	G	C6-N1	6.43	1.44	1.39
26	LA	604	G	P-O5'	-6.43	1.53	1.59
26	LA	712	G	C8-N7	-6.43	1.27	1.30
26	LA	2669	G	O3'-P	-6.43	1.53	1.61
2	SA	1190	G	C8-N7	-6.42	1.27	1.30
4	S2	57	C	N1-C6	6.42	1.41	1.37
26	LA	585	G	C3'-C2'	-6.42	1.45	1.52
26	LA	1273	U	N1-C2	-6.42	1.32	1.38
26	LA	1880	U	C5'-C4'	6.42	1.59	1.51
26	LA	2078	C	O4'-C1'	-6.42	1.33	1.41
26	LA	2856	A	N9-C8	-6.42	1.32	1.37
2	SA	1322	C	C2-N3	-6.42	1.30	1.35
26	LA	2796	U	N3-C4	-6.42	1.32	1.38
2	SA	8	A	C3'-C2'	6.42	1.60	1.52
2	SA	181	A	C5-C6	6.42	1.46	1.41
2	SA	393	A	C8-N7	-6.42	1.27	1.31
2	SA	396	C	O3'-P	-6.42	1.53	1.61
26	LA	328	U	C2-N3	-6.42	1.33	1.37
26	LA	351	C	C2'-C1'	-6.42	1.46	1.53
26	LA	358	U	P-O5'	-6.42	1.53	1.59
26	LA	1118	C	N1-C6	6.42	1.41	1.37
26	LA	1297	C	C3'-C2'	-6.42	1.45	1.52
26	LA	1448	G	O4'-C1'	6.42	1.50	1.41
26	LA	1472	C	C4-N4	-6.42	1.28	1.33
2	SA	64	G	N1-C2	-6.42	1.32	1.37
2	SA	648	A	C3'-O3'	6.42	1.51	1.42
2	SA	1417	G	O3'-P	-6.42	1.53	1.61
26	LA	225	C	C5'-C4'	6.42	1.59	1.51
26	LA	806	C	N1-C6	6.42	1.41	1.37
26	LA	1277	G	C4'-C3'	-6.42	1.46	1.53
26	LA	1574	C	N1-C2	6.42	1.46	1.40
26	LA	1630	A	N9-C8	6.42	1.42	1.37
26	LA	1687	G	C3'-C2'	-6.42	1.45	1.52
26	LA	1942	C	C4-C5	-6.42	1.37	1.43
2	SA	834	U	C4-C5	-6.42	1.37	1.43
2	SA	972	C	O3'-P	-6.42	1.53	1.61
2	SA	1333	A	C5'-C4'	6.42	1.59	1.51
2	SA	1489	G	C2'-C1'	-6.42	1.46	1.53
25	LB	3	C	C2-N3	6.42	1.40	1.35
26	LA	10	A	N1-C2	-6.42	1.28	1.34
26	LA	934	U	O4'-C1'	-6.42	1.33	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1295	C	C4-C5	6.42	1.48	1.43
26	LA	1337	G	C2'-C1'	-6.42	1.46	1.53
26	LA	1441	G	N3-C4	-6.42	1.30	1.35
26	LA	1634	A	C2-N3	6.42	1.39	1.33
26	LA	2216	G	C6-N1	6.42	1.44	1.39
26	LA	2536	G	N9-C8	-6.42	1.33	1.37
26	LA	2567	G	N7-C5	-6.42	1.35	1.39
26	LA	2832	U	N1-C2	6.42	1.44	1.38
57	LS	24	TYR	CB-CG	-6.42	1.42	1.51
2	SA	65	A	C5-C6	-6.42	1.35	1.41
2	SA	271	C	O3'-P	-6.42	1.53	1.61
2	SA	414	A	C1'-N9	-6.42	1.37	1.46
2	SA	417	G	N3-C4	-6.42	1.30	1.35
2	SA	440	C	O3'-P	-6.42	1.53	1.61
2	SA	552	U	C4-C5	6.42	1.49	1.43
25	LB	44	G	N1-C2	6.42	1.42	1.37
26	LA	373	U	C4-O4	6.42	1.28	1.23
26	LA	728	G	N1-C2	-6.42	1.32	1.37
26	LA	738	G	C2-N2	-6.42	1.28	1.34
26	LA	2062	A	C2'-C1'	-6.42	1.46	1.53
26	LA	190	A	N9-C4	-6.42	1.34	1.37
26	LA	1904	G	C1'-N9	-6.42	1.37	1.46
2	SA	1271	A	N9-C4	-6.41	1.34	1.37
2	SA	1417	G	N7-C5	-6.41	1.35	1.39
25	LB	9	G	C6-N1	-6.41	1.35	1.39
26	LA	451	U	C5-C6	6.41	1.40	1.34
26	LA	684	G	N3-C4	-6.41	1.30	1.35
26	LA	715	A	O3'-P	-6.41	1.53	1.61
26	LA	860	U	O3'-P	-6.41	1.53	1.61
26	LA	997	G	N9-C8	-6.41	1.33	1.37
26	LA	1053	C	N1-C6	6.41	1.41	1.37
26	LA	1063	G	C2-N2	-6.41	1.28	1.34
26	LA	1283	G	C3'-O3'	6.41	1.51	1.42
26	LA	1806	C	C2'-C1'	-6.41	1.46	1.53
26	LA	2037	A	O4'-C1'	6.41	1.50	1.41
26	LA	451	U	P-O5'	-6.41	1.53	1.59
26	LA	502	A	N3-C4	6.41	1.38	1.34
26	LA	972	A	C5'-C4'	6.41	1.59	1.51
26	LA	1170	C	C4'-C3'	-6.41	1.46	1.53
2	SA	436	C	C4-N4	-6.41	1.28	1.33
2	SA	798	U	O3'-P	-6.41	1.53	1.61
2	SA	939	G	C5-C4	6.41	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1001	C	C4'-O4'	6.41	1.53	1.45
2	SA	1021	A	N7-C5	-6.41	1.35	1.39
2	SA	1291	U	O3'-P	-6.41	1.53	1.61
3	S1	22	G	N7-C5	6.41	1.43	1.39
4	S2	13	C	N3-C4	6.41	1.38	1.33
25	LB	80	U	C3'-C2'	-6.41	1.45	1.52
26	LA	597	G	N1-C2	-6.41	1.32	1.37
26	LA	1567	G	N9-C8	6.41	1.42	1.37
26	LA	1814	G	C6-N1	-6.41	1.35	1.39
2	SA	110	C	P-O5'	-6.41	1.53	1.59
26	LA	1546	G	C8-N7	6.41	1.34	1.30
26	LA	1793	C	C2'-C1'	-6.41	1.46	1.53
26	LA	1916	A	C8-N7	6.41	1.36	1.31
26	LA	2147	A	N9-C4	6.41	1.41	1.37
26	LA	2195	U	N3-C4	6.41	1.44	1.38
26	LA	2454	G	C5-C6	-6.41	1.35	1.42
26	LA	2676	C	P-O5'	-6.41	1.53	1.59
2	SA	206	C	C4'-C3'	6.41	1.60	1.53
26	LA	1326	U	C3'-O3'	6.41	1.51	1.42
26	LA	2677	G	N9-C4	-6.41	1.32	1.38
2	SA	264	C	C3'-C2'	6.41	1.59	1.52
25	LB	21	G	C4'-O4'	6.41	1.53	1.45
26	LA	35	G	O3'-P	-6.41	1.53	1.61
26	LA	847	U	O3'-P	-6.41	1.53	1.61
26	LA	1334	G	C2'-C1'	-6.41	1.46	1.53
26	LA	1365	A	N7-C5	-6.41	1.35	1.39
26	LA	1661	G	C4'-C3'	-6.41	1.46	1.53
26	LA	1685	C	C4'-C3'	-6.41	1.46	1.53
2	SA	221	C	N3-C4	6.40	1.38	1.33
26	LA	245	G	O3'-P	-6.40	1.53	1.61
26	LA	701	G	C2-N2	-6.40	1.28	1.34
26	LA	837	C	C2-N3	-6.40	1.30	1.35
26	LA	1902	C	O3'-P	-6.40	1.53	1.61
2	SA	117	G	C5'-C4'	6.40	1.59	1.51
2	SA	1176	A	N7-C5	-6.40	1.35	1.39
26	LA	368	A	O3'-P	-6.40	1.53	1.61
26	LA	686	U	C2'-C1'	-6.40	1.46	1.53
26	LA	1100	C	C1'-N1	-6.40	1.37	1.46
26	LA	1531	C	C2'-C1'	-6.40	1.46	1.53
26	LA	1626	A	C1'-N9	-6.40	1.37	1.46
26	LA	2778	A	C2'-C1'	-6.40	1.46	1.53
2	SA	1462	C	P-O5'	-6.40	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	247	G	N9-C4	-6.40	1.32	1.38
26	LA	452	G	C2-N2	-6.40	1.28	1.34
26	LA	1799	G	N9-C8	-6.40	1.33	1.37
26	LA	2641	G	C4'-C3'	-6.40	1.46	1.53
2	SA	456	A	O3'-P	6.40	1.68	1.61
4	S2	60	A	N9-C4	6.40	1.41	1.37
26	LA	1288	G	N9-C4	-6.40	1.32	1.38
26	LA	2363	G	C8-N7	-6.40	1.27	1.30
2	SA	551	U	O3'-P	-6.40	1.53	1.61
2	SA	698	G	N9-C4	-6.40	1.32	1.38
2	SA	867	G	C6-N1	6.40	1.44	1.39
2	SA	1429	A	C6-N1	-6.40	1.31	1.35
26	LA	798	G	C3'-C2'	6.40	1.59	1.52
26	LA	831	G	N9-C4	-6.40	1.32	1.38
26	LA	2255	G	P-O5'	-6.40	1.53	1.59
57	LS	24	TYR	CG-CD1	6.40	1.47	1.39
2	SA	525	C	C2-N3	-6.40	1.30	1.35
2	SA	1178	G	C5-C4	6.39	1.42	1.38
25	LB	60	C	C4-C5	6.39	1.48	1.43
26	LA	748	G	P-O5'	-6.39	1.53	1.59
26	LA	1171	G	C5'-C4'	6.39	1.59	1.51
26	LA	1379	U	C4-C5	-6.39	1.37	1.43
26	LA	1930	G	C2-N3	-6.39	1.27	1.32
26	LA	2156	G	N9-C4	6.39	1.43	1.38
26	LA	2685	G	C6-N1	-6.39	1.35	1.39
2	SA	30	U	C2-N3	-6.39	1.33	1.37
26	LA	258	G	C6-N1	-6.39	1.35	1.39
26	LA	739	A	C2'-C1'	-6.39	1.46	1.53
26	LA	1393	A	C5-C6	-6.39	1.35	1.41
26	LA	1962	C	C2'-O2'	-6.39	1.33	1.41
26	LA	2000	C	O3'-P	-6.39	1.53	1.61
26	LA	2357	G	N9-C8	-6.39	1.33	1.37
2	SA	871	U	N1-C6	-6.39	1.32	1.38
46	LH	156	TYR	CB-CG	-6.39	1.42	1.51
2	SA	33	A	O4'-C1'	-6.39	1.33	1.41
2	SA	68	G	C5-C6	-6.39	1.35	1.42
2	SA	355	C	N1-C2	6.39	1.46	1.40
26	LA	768	G	N9-C4	-6.39	1.32	1.38
26	LA	840	C	C4-N4	-6.39	1.28	1.33
26	LA	926	G	C2'-C1'	-6.39	1.46	1.53
26	LA	1973	G	C5-C4	-6.39	1.33	1.38
26	LA	2631	G	N3-C4	-6.39	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	LD	242	HIS	C-N	-6.39	1.22	1.34
2	SA	1402	C	C2-N3	-6.39	1.30	1.35
26	LA	1195	G	N9-C8	6.39	1.42	1.37
26	LA	1329	U	C5-C6	-6.39	1.28	1.34
26	LA	1643	G	N9-C8	-6.39	1.33	1.37
26	LA	2206	C	C1'-N1	-6.39	1.38	1.46
26	LA	2663	G	C2-N2	-6.39	1.28	1.34
2	SA	501	C	N3-C4	-6.39	1.29	1.33
2	SA	981	U	C2'-C1'	-6.39	1.46	1.53
26	LA	205	G	C5-C4	-6.39	1.33	1.38
26	LA	500	G	C6-N1	-6.39	1.35	1.39
26	LA	630	G	N3-C4	-6.39	1.30	1.35
26	LA	801	G	C2-N2	-6.39	1.28	1.34
26	LA	807	U	N3-C4	-6.39	1.32	1.38
26	LA	987	C	C4'-C3'	-6.39	1.46	1.53
26	LA	1306	C	C2-O2	-6.39	1.18	1.24
26	LA	1342	A	C6-N1	-6.39	1.31	1.35
26	LA	2265	U	N1-C2	-6.39	1.32	1.38
2	SA	10	A	C5-C4	6.38	1.43	1.38
2	SA	143	A	C1'-N9	-6.38	1.38	1.46
2	SA	685	G	C4'-C3'	-6.38	1.46	1.53
26	LA	863	A	N9-C8	-6.38	1.32	1.37
26	LA	1120	G	C6-N1	-6.38	1.35	1.39
26	LA	1774	C	N1-C6	-6.38	1.33	1.37
26	LA	2273	A	C6-N6	6.38	1.39	1.33
27	LD	37	SER	CA-CB	6.38	1.62	1.52
2	SA	275	G	N1-C2	-6.38	1.32	1.37
26	LA	161	A	C6-N6	-6.38	1.28	1.33
26	LA	535	G	C4'-O4'	6.38	1.53	1.45
26	LA	1123	C	C5-C6	-6.38	1.29	1.34
2	SA	414	A	C5-C6	6.38	1.46	1.41
2	SA	430	A	C4'-C3'	6.38	1.60	1.53
2	SA	775	G	C5-C4	6.38	1.42	1.38
26	LA	86	G	C5'-C4'	6.38	1.59	1.51
26	LA	474	G	C5-C6	-6.38	1.35	1.42
26	LA	819	A	N9-C8	-6.38	1.32	1.37
26	LA	1107	G	N1-C2	-6.38	1.32	1.37
26	LA	1279	G	C4'-C3'	-6.38	1.46	1.53
26	LA	1785	A	C3'-C2'	-6.38	1.45	1.52
26	LA	2065	C	C2-O2	-6.38	1.18	1.24
26	LA	2415	G	N7-C5	-6.38	1.35	1.39
26	LA	2722	G	C2-N2	-6.38	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2735	G	C3'-O3'	6.38	1.51	1.42
26	LA	2816	G	C3'-C2'	-6.38	1.45	1.52
2	SA	773	G	N7-C5	-6.38	1.35	1.39
2	SA	826	C	C3'-O3'	6.38	1.51	1.42
26	LA	706	A	C3'-O3'	6.38	1.51	1.42
26	LA	836	G	C6-N1	-6.38	1.35	1.39
26	LA	1310	G	C5'-C4'	6.38	1.59	1.51
26	LA	1601	G	N9-C8	-6.38	1.33	1.37
2	SA	1230	C	C4-C5	6.38	1.48	1.43
26	LA	416	U	C3'-C2'	-6.38	1.45	1.52
26	LA	824	U	C2-N3	6.38	1.42	1.37
26	LA	1057	A	O3'-P	-6.38	1.53	1.61
26	LA	2768	U	C2-N3	-6.38	1.33	1.37
2	SA	570	G	O3'-P	-6.38	1.53	1.61
2	SA	1145	A	C2'-C1'	-6.38	1.46	1.53
2	SA	1310	G	C2'-C1'	-6.38	1.46	1.53
25	LB	18	G	N1-C2	-6.38	1.32	1.37
25	LB	40	U	N1-C6	-6.38	1.32	1.38
26	LA	637	A	N9-C4	-6.38	1.34	1.37
26	LA	898	C	P-O5'	6.38	1.66	1.59
26	LA	1091	G	N9-C4	-6.38	1.32	1.38
26	LA	2132	U	O4'-C1'	6.38	1.50	1.41
26	LA	2368	C	C4-C5	6.38	1.48	1.43
26	LA	2712	C	C3'-C2'	6.38	1.59	1.52
58	LT	29	THR	C-N	6.38	1.44	1.33
4	S2	23	G	C8-N7	6.38	1.34	1.30
25	LB	94	A	C5-C6	-6.38	1.35	1.41
26	LA	131	A	C3'-C2'	-6.38	1.45	1.52
26	LA	187	G	C5'-C4'	6.38	1.59	1.51
26	LA	952	G	N7-C5	6.38	1.43	1.39
26	LA	2492	U	C2-N3	-6.38	1.33	1.37
2	SA	26	A	C5-C6	6.37	1.46	1.41
2	SA	327	A	N7-C5	-6.37	1.35	1.39
2	SA	1491	G	C2'-C1'	-6.37	1.46	1.53
26	LA	175	G	C4'-C3'	6.37	1.60	1.53
26	LA	340	A	C8-N7	-6.37	1.27	1.31
26	LA	567	U	C4-C5	-6.37	1.37	1.43
26	LA	1666	G	P-O5'	-6.37	1.53	1.59
26	LA	2101	A	C2-N3	-6.37	1.27	1.33
2	SA	620	C	C5'-C4'	6.37	1.58	1.51
2	SA	698	G	P-O5'	-6.37	1.53	1.59
2	SA	1523	G	N9-C4	-6.37	1.32	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	15	G	C6-N1	-6.37	1.35	1.39
26	LA	985	C	N1-C6	-6.37	1.33	1.37
26	LA	1994	C	C2-O2	-6.37	1.18	1.24
26	LA	2647	U	C2-N3	-6.37	1.33	1.37
26	LA	2853	C	C4'-O4'	6.37	1.53	1.45
2	SA	1224	U	N1-C6	-6.37	1.32	1.38
2	SA	1428	A	N3-C4	-6.37	1.31	1.34
26	LA	1110	G	C2'-C1'	-6.37	1.46	1.53
26	LA	1870	C	C4'-O4'	-6.37	1.37	1.45
2	SA	271	C	C4-N4	-6.37	1.28	1.33
2	SA	1441	A	N3-C4	6.37	1.38	1.34
26	LA	624	C	C4-N4	6.37	1.39	1.33
26	LA	956	G	N9-C4	-6.37	1.32	1.38
26	LA	988	A	C6-N6	6.37	1.39	1.33
26	LA	1287	A	C5-C6	-6.37	1.35	1.41
26	LA	2202	U	N1-C2	-6.37	1.32	1.38
22	SF	132	GLU	CB-CG	6.37	1.64	1.52
26	LA	939	G	C6-N1	-6.37	1.35	1.39
26	LA	1838	C	C5'-C4'	6.37	1.58	1.51
26	LA	1982	U	C1'-N1	-6.37	1.38	1.46
26	LA	2882	A	N9-C4	6.37	1.41	1.37
2	SA	27	G	C6-N1	-6.37	1.35	1.39
2	SA	282	A	C3'-C2'	6.37	1.59	1.52
2	SA	943	U	C5-C6	6.37	1.39	1.34
2	SA	1254	A	C1'-N9	-6.37	1.38	1.46
2	SA	1420	U	N1-C2	-6.37	1.32	1.38
26	LA	1288	G	P-O5'	-6.37	1.53	1.59
26	LA	1564	C	C5'-C4'	6.37	1.58	1.51
38	LE	95	SER	CB-OG	6.37	1.50	1.42
2	SA	313	A	O3'-P	-6.36	1.53	1.61
2	SA	416	G	N9-C8	-6.36	1.33	1.37
2	SA	695	A	C2-N3	6.36	1.39	1.33
15	SO	68	TYR	CG-CD2	-6.36	1.30	1.39
26	LA	512	G	N7-C5	-6.36	1.35	1.39
26	LA	857	G	C4'-O4'	-6.36	1.37	1.45
26	LA	914	G	N9-C8	-6.36	1.33	1.37
26	LA	1795	C	O3'-P	-6.36	1.53	1.61
26	LA	2392	A	C5-C6	6.36	1.46	1.41
26	LA	2516	A	C5-C4	-6.36	1.34	1.38
26	LA	2642	G	N1-C2	-6.36	1.32	1.37
26	LA	2737	G	N7-C5	-6.36	1.35	1.39
2	SA	162	A	C4'-C3'	6.36	1.60	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	9	G	C2'-C1'	-6.36	1.46	1.53
4	S2	11	A	C6-N1	6.36	1.40	1.35
26	LA	696	G	P-O5'	-6.36	1.53	1.59
26	LA	1451	C	C5'-C4'	6.36	1.58	1.51
26	LA	2335	A	N3-C4	-6.36	1.31	1.34
2	SA	341	C	N1-C6	6.36	1.41	1.37
2	SA	530	G	N3-C4	-6.36	1.30	1.35
26	LA	386	G	C2'-C1'	-6.36	1.46	1.53
26	LA	590	A	C3'-O3'	6.36	1.51	1.42
26	LA	1504	A	N7-C5	-6.36	1.35	1.39
26	LA	1589	U	C2-N3	-6.36	1.33	1.37
26	LA	1936	A	C3'-O3'	6.36	1.51	1.42
26	LA	2306	C	C3'-C2'	6.36	1.59	1.52
26	LA	2420	C	C4'-O4'	-6.36	1.37	1.45
2	SA	345	C	O3'-P	-6.36	1.53	1.61
2	SA	1123	U	C4-C5	-6.36	1.37	1.43
26	LA	235	U	N1-C6	-6.36	1.32	1.38
26	LA	1948	G	N9-C8	-6.36	1.33	1.37
2	SA	954	G	N9-C8	-6.36	1.33	1.37
2	SA	1125	U	C4'-O4'	6.36	1.53	1.45
2	SA	1490	U	O3'-P	-6.36	1.53	1.61
26	LA	101	A	C5'-C4'	6.36	1.58	1.51
26	LA	116	C	O3'-P	-6.36	1.53	1.61
26	LA	539	G	C2-N2	-6.36	1.28	1.34
26	LA	686	U	O3'-P	-6.36	1.53	1.61
26	LA	2252	G	C2-N3	6.36	1.37	1.32
26	LA	2810	A	P-O5'	-6.36	1.53	1.59
2	SA	95	C	P-O5'	-6.36	1.53	1.59
26	LA	1574	C	C4-N4	-6.36	1.28	1.33
26	LA	2225	A	N9-C4	6.36	1.41	1.37
26	LA	2776	A	N9-C4	6.36	1.41	1.37
25	LB	47	C	C2'-C1'	-6.35	1.46	1.53
25	LB	111	U	C2-N3	6.35	1.42	1.37
26	LA	548	G	C5-C4	-6.35	1.33	1.38
26	LA	1034	G	C5-C6	6.35	1.48	1.42
26	LA	2795	C	C4-N4	6.35	1.39	1.33
2	SA	115	G	N3-C4	-6.35	1.31	1.35
2	SA	145	G	C2-N3	-6.35	1.27	1.32
2	SA	875	U	O3'-P	-6.35	1.53	1.61
2	SA	1239	A	C6-N1	-6.35	1.31	1.35
26	LA	50	U	C3'-O3'	6.35	1.51	1.42
26	LA	89	A	N9-C8	-6.35	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	718	A	O3'-P	-6.35	1.53	1.61
26	LA	749	A	C4'-C3'	-6.35	1.46	1.53
26	LA	857	G	C6-N1	-6.35	1.35	1.39
26	LA	1726	C	N3-C4	6.35	1.38	1.33
26	LA	1865	U	C4'-C3'	6.35	1.60	1.53
26	LA	2107	G	N9-C4	-6.35	1.32	1.38
26	LA	1491	G	C2-N3	-6.35	1.27	1.32
2	SA	468	A	C3'-C2'	-6.35	1.45	1.52
2	SA	506	G	C4'-O4'	-6.35	1.37	1.45
25	LB	48	U	C4'-O4'	-6.35	1.37	1.45
26	LA	422	A	N9-C4	-6.35	1.34	1.37
26	LA	1069	A	C5'-C4'	6.35	1.58	1.51
26	LA	1356	G	C3'-C2'	-6.35	1.45	1.52
26	LA	2070	A	N3-C4	-6.35	1.31	1.34
26	LA	2569	G	C5-C4	6.35	1.42	1.38
34	L0	23	ARG	CD-NE	6.35	1.57	1.46
26	LA	201	C	C2-N3	-6.35	1.30	1.35
26	LA	221	A	O4'-C1'	-6.35	1.33	1.41
26	LA	310	A	C2'-C1'	-6.35	1.46	1.53
26	LA	355	U	C2'-C1'	-6.35	1.46	1.53
26	LA	1177	G	N9-C8	-6.35	1.33	1.37
26	LA	1414	C	N1-C6	-6.35	1.33	1.37
26	LA	2384	U	C2-N3	-6.35	1.33	1.37
26	LA	2541	A	C5-C4	-6.35	1.34	1.38
2	SA	183	C	N3-C4	6.35	1.38	1.33
26	LA	86	G	N9-C8	6.35	1.42	1.37
26	LA	303	G	N9-C4	-6.35	1.32	1.38
26	LA	2547	A	N3-C4	-6.35	1.31	1.34
2	SA	84	U	C2'-C1'	6.34	1.60	1.53
2	SA	955	U	C4'-C3'	-6.34	1.46	1.53
2	SA	1456	A	N7-C5	-6.34	1.35	1.39
4	S2	30	G	C2-N2	-6.34	1.28	1.34
26	LA	139	U	O3'-P	-6.34	1.53	1.61
26	LA	298	G	C6-N1	-6.34	1.35	1.39
26	LA	539	G	C6-N1	-6.34	1.35	1.39
26	LA	570	G	N7-C5	-6.34	1.35	1.39
26	LA	929	U	C5'-C4'	6.34	1.58	1.51
26	LA	1610	A	C4'-C3'	-6.34	1.46	1.53
26	LA	2248	C	C2-N3	-6.34	1.30	1.35
26	LA	2382	G	C6-N1	-6.34	1.35	1.39
26	LA	2464	G	N9-C4	-6.34	1.32	1.38
2	SA	335	C	P-O5'	-6.34	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	44	G	N9-C4	6.34	1.43	1.38
26	LA	414	C	C4-C5	6.34	1.48	1.43
2	SA	238	A	P-O5'	-6.34	1.53	1.59
2	SA	1124	G	C2-N3	6.34	1.37	1.32
2	SA	1432	G	C5'-C4'	6.34	1.58	1.51
4	S2	15	G	N9-C8	-6.34	1.33	1.37
26	LA	469	G	N1-C2	6.34	1.42	1.37
26	LA	722	A	C3'-C2'	6.34	1.59	1.52
26	LA	732	C	N1-C6	-6.34	1.33	1.37
26	LA	980	A	N1-C2	-6.34	1.28	1.34
26	LA	1205	A	C6-N1	-6.34	1.31	1.35
26	LA	2193	G	C5-C4	-6.34	1.33	1.38
26	LA	2239	G	O3'-P	-6.34	1.53	1.61
26	LA	2635	A	C8-N7	-6.34	1.27	1.31
2	SA	714	G	O3'-P	-6.34	1.53	1.61
2	SA	743	A	O3'-P	-6.34	1.53	1.61
2	SA	743	A	N3-C4	-6.34	1.31	1.34
26	LA	181	A	C5'-C4'	6.34	1.58	1.51
26	LA	419	U	N1-C6	-6.34	1.32	1.38
26	LA	441	U	C5-C6	-6.34	1.28	1.34
26	LA	462	C	N1-C6	6.34	1.41	1.37
26	LA	1383	A	C5-C4	6.34	1.43	1.38
26	LA	1463	C	C5-C6	-6.34	1.29	1.34
26	LA	1702	G	C5-C4	-6.34	1.33	1.38
26	LA	2069	G	C2-N2	-6.34	1.28	1.34
26	LA	2811	G	N1-C2	-6.34	1.32	1.37
4	S2	70	C	C4-C5	6.34	1.48	1.43
26	LA	339	U	C2-N3	-6.34	1.33	1.37
26	LA	831	G	C1'-N9	-6.34	1.38	1.46
2	SA	452	A	N9-C4	-6.34	1.34	1.37
2	SA	781	A	C1'-N9	-6.34	1.38	1.46
25	LB	119	A	C5-C4	6.34	1.43	1.38
26	LA	143	C	C2'-C1'	-6.34	1.46	1.53
26	LA	193	U	P-O5'	-6.34	1.53	1.59
26	LA	475	C	C4-N4	-6.34	1.28	1.33
26	LA	705	A	C6-N6	-6.34	1.28	1.33
26	LA	984	A	C2'-C1'	-6.34	1.46	1.53
26	LA	1074	G	C4'-C3'	6.34	1.60	1.53
26	LA	1265	A	N3-C4	-6.34	1.31	1.34
26	LA	1882	U	N1-C6	-6.34	1.32	1.38
26	LA	1939	U	N1-C2	-6.34	1.32	1.38
26	LA	2146	C	N1-C6	-6.34	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2443	C	C4-N4	-6.34	1.28	1.33
26	LA	2640	G	C8-N7	-6.34	1.27	1.30
26	LA	2786	U	C2-N3	-6.34	1.33	1.37
19	SC	1	GLY	N-CA	6.33	1.55	1.46
2	SA	439	U	P-O5'	-6.33	1.53	1.59
2	SA	1304	G	N7-C5	-6.33	1.35	1.39
4	S2	14	A	C6-N6	-6.33	1.28	1.33
4	S2	19	G	C5-C4	-6.33	1.33	1.38
26	LA	29	U	C4-C5	-6.33	1.37	1.43
26	LA	383	C	O3'-P	-6.33	1.53	1.61
26	LA	481	G	P-O5'	-6.33	1.53	1.59
26	LA	526	A	C5-C6	6.33	1.46	1.41
26	LA	1832	C	C5'-C4'	6.33	1.58	1.51
26	LA	2281	A	C6-N1	-6.33	1.31	1.35
26	LA	2384	U	C1'-N1	-6.33	1.38	1.46
26	LA	2574	G	C5-C6	-6.33	1.36	1.42
26	LA	2587	A	O4'-C1'	-6.33	1.33	1.41
2	SA	585	G	C6-O6	-6.33	1.18	1.24
2	SA	915	A	N9-C4	-6.33	1.34	1.37
3	S1	15	G	C6-O6	-6.33	1.18	1.24
26	LA	1652	A	N7-C5	-6.33	1.35	1.39
26	LA	2735	G	O3'-P	-6.33	1.53	1.61
2	SA	624	C	N3-C4	6.33	1.38	1.33
2	SA	1496	C	O4'-C1'	-6.33	1.33	1.41
26	LA	213	A	C6-N1	6.33	1.40	1.35
26	LA	1552	A	C8-N7	-6.33	1.27	1.31
26	LA	1560	G	C6-N1	-6.33	1.35	1.39
21	SE	92	ARG	CD-NE	6.33	1.57	1.46
26	LA	56	A	N3-C4	6.33	1.38	1.34
26	LA	459	U	C5'-C4'	6.33	1.58	1.51
26	LA	697	G	N7-C5	6.33	1.43	1.39
26	LA	781	A	C6-N6	6.33	1.39	1.33
26	LA	843	G	O3'-P	-6.33	1.53	1.61
26	LA	1506	U	P-O5'	-6.33	1.53	1.59
26	LA	1888	G	C5-C4	-6.33	1.33	1.38
26	LA	1897	G	C2'-C1'	-6.33	1.46	1.53
2	SA	406	G	P-O5'	-6.33	1.53	1.59
3	S1	26	U	C3'-O3'	6.33	1.51	1.42
26	LA	536	G	C8-N7	-6.33	1.27	1.30
26	LA	928	A	C3'-C2'	-6.33	1.45	1.52
26	LA	1960	A	C4'-C3'	-6.33	1.46	1.53
26	LA	2318	G	N1-C2	-6.33	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2721	A	N7-C5	6.33	1.43	1.39
26	LA	2733	A	N7-C5	-6.33	1.35	1.39
2	SA	74	A	C1'-N9	-6.33	1.38	1.46
2	SA	1111	A	N1-C2	-6.33	1.28	1.34
25	LB	33	G	C4'-C3'	6.33	1.60	1.53
26	LA	82	U	C3'-O3'	6.33	1.51	1.42
26	LA	385	C	N1-C6	6.33	1.41	1.37
26	LA	735	A	C2-N3	6.33	1.39	1.33
26	LA	2282	G	C5-C6	-6.33	1.36	1.42
26	LA	2402	U	C2-N3	-6.33	1.33	1.37
26	LA	2680	U	C4'-O4'	-6.33	1.37	1.45
26	LA	2820	A	N3-C4	-6.33	1.31	1.34
2	SA	582	C	C3'-C2'	-6.32	1.45	1.52
2	SA	626	G	C2'-C1'	-6.32	1.46	1.53
2	SA	994	A	C5-C6	6.32	1.46	1.41
2	SA	1379	G	C5'-C4'	6.32	1.58	1.51
2	SA	1455	G	O3'-P	-6.32	1.53	1.61
3	S1	47	C	C3'-O3'	6.32	1.51	1.42
25	LB	1	U	C1'-N1	6.32	1.58	1.48
26	LA	269	C	C2-N3	-6.32	1.30	1.35
26	LA	761	A	C5-C4	-6.32	1.34	1.38
26	LA	2216	G	C8-N7	-6.32	1.27	1.30
26	LA	2778	A	O3'-P	-6.32	1.53	1.61
26	LA	2803	G	C8-N7	-6.32	1.27	1.30
2	SA	1026	G	O5'-C5'	6.32	1.54	1.44
6	SU	66	ARG	CD-NE	6.32	1.57	1.46
26	LA	456	C	C2'-C1'	-6.32	1.46	1.53
2	SA	28	A	N9-C8	-6.32	1.32	1.37
2	SA	37	U	C3'-O3'	6.32	1.50	1.42
2	SA	1189	U	N3-C4	-6.32	1.32	1.38
3	S1	49	U	N3-C4	-6.32	1.32	1.38
25	LB	8	C	O5'-C5'	6.32	1.54	1.44
25	LB	97	C	C4'-O4'	6.32	1.53	1.45
26	LA	457	A	C5-C4	-6.32	1.34	1.38
26	LA	826	U	N1-C6	-6.32	1.32	1.38
26	LA	955	U	C4'-C3'	-6.32	1.46	1.53
26	LA	1393	A	C1'-N9	-6.32	1.38	1.46
26	LA	1416	G	N7-C5	6.32	1.43	1.39
26	LA	2399	G	C4'-O4'	6.32	1.53	1.45
26	LA	71	A	C3'-C2'	-6.32	1.45	1.52
2	SA	826	C	C3'-C2'	-6.32	1.45	1.52
2	SA	938	A	N3-C4	-6.32	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	24	G	C2-N3	-6.32	1.27	1.32
26	LA	269	C	N1-C6	-6.32	1.33	1.37
26	LA	291	G	C6-N1	-6.32	1.35	1.39
26	LA	466	A	C1'-N9	-6.32	1.38	1.46
26	LA	535	G	N3-C4	-6.32	1.31	1.35
26	LA	617	G	C8-N7	-6.32	1.27	1.30
26	LA	1163	G	N7-C5	-6.32	1.35	1.39
26	LA	1367	A	N3-C4	-6.32	1.31	1.34
26	LA	2228	G	C5-C4	-6.32	1.33	1.38
56	LR	19	PHE	CB-CG	-6.32	1.40	1.51
2	SA	1122	U	N3-C4	-6.32	1.32	1.38
2	SA	1185	G	C3'-O3'	6.32	1.50	1.42
3	S1	43	U	O3'-P	6.32	1.68	1.61
26	LA	902	C	C4-C5	6.32	1.48	1.43
26	LA	1434	A	C1'-N9	-6.32	1.38	1.46
26	LA	1756	G	C2-N2	-6.32	1.28	1.34
2	SA	769	G	C2-N2	-6.31	1.28	1.34
2	SA	1303	C	C3'-O3'	6.31	1.50	1.42
2	SA	389	A	C3'-C2'	-6.31	1.45	1.52
2	SA	609	A	N1-C2	-6.31	1.28	1.34
3	S1	49	U	C3'-O3'	6.31	1.50	1.42
26	LA	321	U	C5-C6	6.31	1.39	1.34
26	LA	759	G	C3'-C2'	-6.31	1.45	1.52
26	LA	784	G	N9-C8	-6.31	1.33	1.37
26	LA	1669	A	N9-C4	6.31	1.41	1.37
26	LA	1935	G	N9-C8	6.31	1.42	1.37
26	LA	1949	G	C5-C6	-6.31	1.36	1.42
26	LA	2037	A	C5-C4	6.31	1.43	1.38
26	LA	2307	G	C4'-O4'	-6.31	1.37	1.45
26	LA	2433	A	C8-N7	-6.31	1.27	1.31
26	LA	2516	A	C8-N7	-6.31	1.27	1.31
2	SA	935	A	C1'-N9	-6.31	1.38	1.46
26	LA	2109	U	O3'-P	-6.31	1.53	1.61
26	LA	2724	U	C4-O4	-6.31	1.18	1.23
2	SA	276	G	C4'-C3'	6.31	1.60	1.53
2	SA	1476	A	C3'-C2'	-6.31	1.45	1.52
26	LA	565	C	C2'-C1'	-6.31	1.46	1.53
26	LA	774	G	N9-C8	6.31	1.42	1.37
26	LA	796	C	N3-C4	-6.31	1.29	1.33
26	LA	1566	A	C6-N1	6.31	1.40	1.35
26	LA	1873	G	C6-O6	-6.31	1.18	1.24
26	LA	1918	A	C6-N1	-6.31	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2282	G	N9-C4	-6.31	1.32	1.38
2	SA	995	C	C2-N3	-6.31	1.30	1.35
2	SA	1112	C	N1-C6	6.31	1.41	1.37
2	SA	1498	U	C4'-O4'	6.31	1.53	1.45
26	LA	329	G	C2-N2	-6.31	1.28	1.34
26	LA	2489	U	C5-C6	-6.31	1.28	1.34
26	LA	2592	G	C5-C4	-6.31	1.33	1.38
2	SA	1069	C	O3'-P	-6.31	1.53	1.61
2	SA	1313	U	N3-C4	-6.31	1.32	1.38
2	SA	1474	U	N1-C2	6.31	1.44	1.38
26	LA	1522	A	N9-C4	-6.31	1.34	1.37
26	LA	2172	U	C3'-C2'	6.31	1.59	1.52
26	LA	2250	G	C5-C4	-6.31	1.33	1.38
2	SA	753	A	N9-C8	-6.30	1.32	1.37
2	SA	1485	U	N1-C2	-6.30	1.32	1.38
26	LA	19	A	C4'-O4'	-6.30	1.37	1.45
26	LA	869	G	N7-C5	6.30	1.43	1.39
26	LA	1394	U	C5-C6	6.30	1.39	1.34
2	SA	776	G	C8-N7	-6.30	1.27	1.30
26	LA	2812	G	C1'-N9	-6.30	1.38	1.46
2	SA	514	C	N3-C4	6.30	1.38	1.33
2	SA	1216	A	C1'-N9	-6.30	1.38	1.46
25	LB	44	G	C6-N1	-6.30	1.35	1.39
26	LA	222	A	N3-C4	-6.30	1.31	1.34
26	LA	1152	C	C5'-C4'	6.30	1.58	1.51
26	LA	1395	A	N3-C4	-6.30	1.31	1.34
26	LA	1661	G	C8-N7	-6.30	1.27	1.30
26	LA	1676	A	C5'-C4'	6.30	1.58	1.51
26	LA	1832	C	P-O5'	-6.30	1.53	1.59
26	LA	2848	G	C2'-C1'	6.30	1.60	1.53
26	LA	2876	G	N9-C8	6.30	1.42	1.37
44	LF	70	SER	CA-CB	6.30	1.62	1.52
2	SA	128	G	N7-C5	6.30	1.43	1.39
2	SA	451	A	N9-C4	-6.30	1.34	1.37
26	LA	1422	G	C3'-O3'	6.30	1.50	1.42
26	LA	2038	G	C2-N3	6.30	1.37	1.32
26	LA	2055	C	C3'-O3'	6.30	1.50	1.42
26	LA	2510	C	N3-C4	6.30	1.38	1.33
3	S1	14	G	C8-N7	6.30	1.34	1.30
26	LA	43	G	C6-N1	-6.30	1.35	1.39
26	LA	1580	A	C2-N3	6.30	1.39	1.33
26	LA	2668	G	P-O5'	6.30	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	LK	127	SER	CA-CB	6.30	1.62	1.52
2	SA	559	A	C2'-C1'	-6.30	1.46	1.53
2	SA	734	G	C5-C6	-6.30	1.36	1.42
2	SA	1261	A	C2-N3	-6.30	1.27	1.33
20	SD	83	GLY	CA-C	-6.30	1.41	1.51
26	LA	2475	C	O3'-P	-6.30	1.53	1.61
26	LA	2726	A	P-O5'	-6.30	1.53	1.59
2	SA	951	G	C5-C4	6.29	1.42	1.38
26	LA	287	G	N9-C4	6.29	1.43	1.38
26	LA	1307	A	P-O5'	6.29	1.66	1.59
26	LA	2257	U	N1-C2	-6.29	1.32	1.38
2	SA	166	U	C4'-O4'	6.29	1.53	1.45
2	SA	903	G	C2-N3	6.29	1.37	1.32
24	S3	686	TYR	CZ-OH	6.29	1.48	1.37
26	LA	359	G	C6-N1	6.29	1.44	1.39
26	LA	1544	A	C8-N7	-6.29	1.27	1.31
26	LA	2753	A	C6-N6	6.29	1.39	1.33
2	SA	612	C	P-O5'	-6.29	1.53	1.59
2	SA	967	C	P-O5'	-6.29	1.53	1.59
26	LA	256	A	C2'-C1'	-6.29	1.46	1.53
26	LA	418	C	O3'-P	-6.29	1.53	1.61
26	LA	981	A	C1'-N9	-6.29	1.38	1.46
26	LA	1310	G	O4'-C1'	-6.29	1.33	1.41
26	LA	2633	G	C2-N3	-6.29	1.27	1.32
2	SA	612	C	O3'-P	-6.29	1.53	1.61
26	LA	801	G	N7-C5	-6.29	1.35	1.39
26	LA	863	A	N1-C2	6.29	1.40	1.34
26	LA	1871	A	C6-N6	6.29	1.39	1.33
2	SA	642	A	N9-C8	-6.29	1.32	1.37
2	SA	1432	G	C8-N7	-6.29	1.27	1.30
2	SA	1457	G	C3'-C2'	-6.29	1.45	1.52
2	SA	1524	C	C4-N4	6.29	1.39	1.33
26	LA	42	A	C1'-N9	-6.29	1.38	1.46
26	LA	678	C	O3'-P	-6.29	1.53	1.61
26	LA	784	G	C5-C4	-6.29	1.33	1.38
26	LA	797	G	N9-C4	-6.29	1.32	1.38
26	LA	1392	A	C5-C4	6.29	1.43	1.38
2	SA	401	C	O3'-P	-6.29	1.53	1.61
2	SA	1022	A	C6-N1	6.29	1.40	1.35
26	LA	2266	A	C1'-N9	-6.29	1.38	1.46
26	LA	2272	U	O3'-P	-6.29	1.53	1.61
2	SA	44	A	N9-C8	-6.29	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	881	G	N3-C4	-6.29	1.31	1.35
3	S1	31	U	C3'-O3'	6.29	1.50	1.42
4	S2	11	A	O3'-P	6.29	1.68	1.61
26	LA	677	A	O5'-C5'	6.29	1.54	1.44
26	LA	767	U	C3'-C2'	-6.29	1.45	1.52
26	LA	1196	C	C3'-O3'	6.29	1.50	1.42
26	LA	1750	G	C6-N1	-6.29	1.35	1.39
26	LA	2163	A	N9-C4	6.29	1.41	1.37
26	LA	2184	A	C6-N1	6.29	1.40	1.35
2	SA	666	G	N3-C4	-6.28	1.31	1.35
2	SA	1054	C	N1-C2	6.28	1.46	1.40
2	SA	1144	G	N9-C8	-6.28	1.33	1.37
2	SA	1336	C	N3-C4	6.28	1.38	1.33
26	LA	244	A	N9-C4	-6.28	1.34	1.37
26	LA	775	G	N9-C8	-6.28	1.33	1.37
26	LA	1936	A	N7-C5	6.28	1.43	1.39
26	LA	1944	U	N3-C4	-6.28	1.32	1.38
2	SA	436	C	C4'-C3'	-6.28	1.46	1.53
2	SA	480	U	C2-N3	-6.28	1.33	1.37
2	SA	1184	G	N7-C5	6.28	1.43	1.39
26	LA	520	G	C2-N3	-6.28	1.27	1.32
26	LA	563	A	N9-C4	-6.28	1.34	1.37
26	LA	1153	C	O3'-P	-6.28	1.53	1.61
26	LA	2201	G	O3'-P	-6.28	1.53	1.61
26	LA	2346	A	O3'-P	-6.28	1.53	1.61
26	LA	2432	A	C8-N7	6.28	1.35	1.31
2	SA	112	G	C3'-C2'	-6.28	1.45	1.52
2	SA	567	G	P-O5'	-6.28	1.53	1.59
2	SA	601	G	C2-N2	-6.28	1.28	1.34
2	SA	643	C	C2'-C1'	-6.28	1.46	1.53
2	SA	694	A	C4'-C3'	-6.28	1.46	1.53
26	LA	53	A	C4'-O4'	-6.28	1.37	1.45
26	LA	108	G	C3'-C2'	-6.28	1.45	1.52
26	LA	119	A	P-O5'	-6.28	1.53	1.59
26	LA	798	G	P-O5'	-6.28	1.53	1.59
26	LA	1199	U	C4'-O4'	6.28	1.53	1.45
26	LA	1709	U	N1-C6	-6.28	1.32	1.38
26	LA	1827	U	O3'-P	-6.28	1.53	1.61
26	LA	2026	U	P-O5'	-6.28	1.53	1.59
26	LA	2606	C	C5-C6	-6.28	1.29	1.34
26	LA	2855	C	N1-C6	6.28	1.41	1.37
2	SA	18	C	C5-C6	6.28	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	531	U	P-O5'	-6.28	1.53	1.59
2	SA	609	A	C4'-O4'	6.28	1.53	1.45
2	SA	1343	G	C1'-N9	-6.28	1.38	1.46
26	LA	1038	G	C5'-C4'	6.28	1.58	1.51
26	LA	1313	U	C1'-N1	-6.28	1.38	1.46
26	LA	1412	U	C2-N3	-6.28	1.33	1.37
26	LA	2055	C	C4'-C3'	-6.28	1.46	1.53
2	SA	71	A	C5'-C4'	6.28	1.58	1.51
2	SA	978	A	N9-C4	6.28	1.41	1.37
26	LA	596	U	P-O5'	-6.28	1.53	1.59
26	LA	993	G	N9-C4	-6.28	1.32	1.38
26	LA	1424	G	N9-C4	6.28	1.43	1.38
26	LA	2232	C	C5'-C4'	-6.28	1.43	1.51
2	SA	121	U	C5-C6	6.28	1.39	1.34
2	SA	904	U	O3'-P	-6.28	1.53	1.61
2	SA	1477	U	C1'-N1	6.28	1.58	1.48
26	LA	46	G	C6-N1	-6.28	1.35	1.39
26	LA	1583	A	N7-C5	6.28	1.43	1.39
26	LA	2279	G	N3-C4	-6.28	1.31	1.35
26	LA	2459	A	C6-N6	6.28	1.39	1.33
26	LA	2517	C	N3-C4	-6.28	1.29	1.33
26	LA	2522	U	C4'-C3'	-6.28	1.46	1.53
2	SA	1266	G	N1-C2	6.27	1.42	1.37
26	LA	640	C	N1-C6	-6.27	1.33	1.37
26	LA	1667	G	O3'-P	-6.27	1.53	1.61
26	LA	2163	A	C5-C4	6.27	1.43	1.38
2	SA	293	G	O4'-C1'	-6.27	1.33	1.41
2	SA	1073	U	C3'-C2'	6.27	1.59	1.52
2	SA	1507	A	N9-C8	-6.27	1.32	1.37
2	SA	1525	G	C2'-C1'	6.27	1.60	1.53
26	LA	10	A	N9-C4	-6.27	1.34	1.37
26	LA	696	G	O3'-P	-6.27	1.53	1.61
26	LA	1386	C	C4'-C3'	-6.27	1.46	1.53
26	LA	1510	G	N9-C8	6.27	1.42	1.37
26	LA	1676	A	C3'-C2'	-6.27	1.45	1.52
26	LA	2544	G	C2-N2	-6.27	1.28	1.34
26	LA	2659	G	O3'-P	-6.27	1.53	1.61
37	LC	122	ARG	CD-NE	6.27	1.57	1.46
2	SA	423	G	C2'-C1'	-6.27	1.46	1.53
2	SA	697	U	P-O5'	-6.27	1.53	1.59
25	LB	76	G	N3-C4	-6.27	1.31	1.35
26	LA	145	C	C2'-C1'	-6.27	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	154	U	C2-N3	6.27	1.42	1.37
26	LA	125	A	N9-C4	6.27	1.41	1.37
26	LA	281	C	C4-N4	-6.27	1.28	1.33
26	LA	1932	A	C8-N7	-6.27	1.27	1.31
26	LA	1979	U	C3'-O3'	6.27	1.50	1.42
14	SN	19	TYR	CD2-CE2	6.27	1.48	1.39
24	S3	491	GLU	CG-CD	-6.27	1.42	1.51
25	LB	101	A	C1'-N9	-6.27	1.38	1.46
26	LA	298	G	N9-C4	-6.27	1.32	1.38
26	LA	551	G	C5'-C4'	6.27	1.58	1.51
26	LA	1201	U	C3'-C2'	-6.27	1.45	1.52
26	LA	1279	G	C2-N2	-6.27	1.28	1.34
26	LA	1950	G	C1'-N9	-6.27	1.38	1.46
26	LA	2362	C	C4-C5	-6.27	1.38	1.43
26	LA	2405	G	C5-C4	-6.27	1.33	1.38
2	SA	384	G	C5-C4	6.27	1.42	1.38
2	SA	502	A	C4'-C3'	-6.27	1.46	1.53
26	LA	1659	G	N1-C2	6.27	1.42	1.37
2	SA	210	C	P-O5'	6.26	1.66	1.59
2	SA	854	U	C2-N3	6.26	1.42	1.37
2	SA	1064	G	O3'-P	-6.26	1.53	1.61
2	SA	1531	A	N9-C4	-6.26	1.34	1.37
26	LA	372	G	C2-N3	6.26	1.37	1.32
26	LA	1761	C	O3'-P	-6.26	1.53	1.61
2	SA	465	A	N3-C4	6.26	1.38	1.34
2	SA	804	U	P-O5'	-6.26	1.53	1.59
26	LA	212	G	C6-O6	-6.26	1.18	1.24
26	LA	316	C	N1-C6	-6.26	1.33	1.37
26	LA	507	A	C6-N6	6.26	1.39	1.33
26	LA	2801	G	C4'-C3'	-6.26	1.46	1.53
2	SA	390	U	N3-C4	-6.26	1.32	1.38
2	SA	466	A	P-O5'	6.26	1.66	1.59
2	SA	608	A	O4'-C1'	-6.26	1.33	1.41
2	SA	1157	A	C2'-C1'	-6.26	1.46	1.53
2	SA	1329	A	C1'-N9	-6.26	1.38	1.46
26	LA	285	G	N9-C4	6.26	1.43	1.38
26	LA	347	A	N9-C4	-6.26	1.34	1.37
26	LA	682	G	C2-N3	6.26	1.37	1.32
26	LA	1630	A	C6-N1	6.26	1.40	1.35
26	LA	2717	C	C2'-C1'	-6.26	1.46	1.53
26	LA	2892	G	N9-C8	-6.26	1.33	1.37
26	LA	2902	C	C5'-C4'	6.26	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	LM	31	ARG	N-CA	-6.26	1.33	1.46
2	SA	181	A	N9-C8	-6.26	1.32	1.37
2	SA	474	G	N7-C5	-6.26	1.35	1.39
4	S2	31	G	C2'-C1'	-6.26	1.46	1.53
26	LA	742	A	O4'-C1'	-6.26	1.33	1.41
26	LA	1321	A	N9-C8	-6.26	1.32	1.37
26	LA	1367	A	N9-C4	-6.26	1.34	1.37
26	LA	1667	G	O4'-C1'	-6.26	1.33	1.41
26	LA	1674	G	C2-N2	-6.26	1.28	1.34
26	LA	2869	G	C5-C4	6.26	1.42	1.38
2	SA	84	U	N1-C6	-6.26	1.32	1.38
26	LA	671	C	C4'-O4'	-6.26	1.37	1.45
26	LA	828	U	N3-C4	-6.26	1.32	1.38
26	LA	2539	C	C4-C5	-6.26	1.38	1.43
2	SA	711	G	N1-C2	-6.26	1.32	1.37
2	SA	856	C	C3'-C2'	-6.26	1.45	1.52
26	LA	212	G	C1'-N9	-6.26	1.38	1.46
26	LA	599	A	C2'-C1'	-6.26	1.46	1.53
26	LA	1432	G	C2-N3	6.26	1.37	1.32
26	LA	2051	A	C5-C4	-6.26	1.34	1.38
26	LA	2243	U	P-O5'	-6.26	1.53	1.59
26	LA	2798	U	N1-C6	-6.26	1.32	1.38
2	SA	653	U	C4'-C3'	-6.25	1.46	1.53
2	SA	1252	A	P-O5'	-6.25	1.53	1.59
26	LA	657	U	P-O5'	6.25	1.66	1.59
2	SA	423	G	C6-N1	6.25	1.44	1.39
2	SA	960	U	C4-C5	-6.25	1.38	1.43
26	LA	822	G	C3'-O3'	6.25	1.50	1.42
26	LA	1318	U	C3'-C2'	6.25	1.59	1.52
26	LA	1809	A	C4'-O4'	-6.25	1.37	1.45
26	LA	2057	G	C4'-C3'	-6.25	1.46	1.53
2	SA	179	A	N1-C2	-6.25	1.28	1.34
2	SA	305	G	C6-N1	-6.25	1.35	1.39
2	SA	911	U	C5-C6	-6.25	1.28	1.34
2	SA	1251	A	C3'-C2'	-6.25	1.45	1.52
26	LA	452	G	N9-C8	-6.25	1.33	1.37
26	LA	1587	G	N3-C4	-6.25	1.31	1.35
26	LA	2029	G	C2-N2	-6.25	1.28	1.34
47	LJ	30	ARG	CD-NE	6.25	1.57	1.46
2	SA	125	U	C4-C5	-6.25	1.38	1.43
2	SA	951	G	C1'-N9	-6.25	1.38	1.46
2	SA	1446	A	N7-C5	6.25	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2035	G	C6-N1	-6.25	1.35	1.39
26	LA	2214	C	C2-N3	-6.25	1.30	1.35
26	LA	2411	A	C8-N7	-6.25	1.27	1.31
2	SA	135	C	N3-C4	6.25	1.38	1.33
2	SA	857	C	N3-C4	6.25	1.38	1.33
2	SA	1469	C	C4-N4	-6.25	1.28	1.33
26	LA	229	C	C4'-C3'	6.25	1.60	1.53
26	LA	449	A	N9-C4	-6.25	1.34	1.37
26	LA	627	A	C3'-O3'	6.25	1.50	1.42
26	LA	930	G	C1'-N9	-6.25	1.38	1.46
26	LA	1352	U	C4-C5	6.25	1.49	1.43
26	LA	1551	A	P-O5'	-6.25	1.53	1.59
26	LA	2429	G	N3-C4	-6.25	1.31	1.35
2	SA	1359	C	C2'-C1'	-6.25	1.46	1.53
26	LA	121	G	C3'-C2'	-6.25	1.45	1.52
26	LA	770	G	C2'-C1'	-6.25	1.46	1.53
26	LA	1766	G	C5'-C4'	6.25	1.58	1.51
26	LA	2129	C	C5'-C4'	6.25	1.58	1.51
26	LA	2211	A	C4'-C3'	-6.25	1.46	1.53
26	LA	2670	A	N9-C4	6.25	1.41	1.37
2	SA	1375	A	O4'-C1'	6.25	1.49	1.41
2	SA	1521	C	O3'-P	-6.25	1.53	1.61
26	LA	18	U	N1-C2	-6.25	1.32	1.38
26	LA	401	A	C2'-C1'	-6.25	1.46	1.53
2	SA	1034	G	C6-N1	6.24	1.44	1.39
26	LA	30	G	O4'-C1'	-6.24	1.33	1.41
26	LA	248	G	N9-C4	-6.24	1.32	1.38
26	LA	854	C	O3'-P	-6.24	1.53	1.61
26	LA	1086	A	C2'-C1'	-6.24	1.46	1.53
26	LA	1100	C	C5-C6	6.24	1.39	1.34
26	LA	2505	G	C6-N1	-6.24	1.35	1.39
26	LA	2554	U	C3'-O3'	6.24	1.50	1.42
2	SA	71	A	N9-C8	-6.24	1.32	1.37
2	SA	618	C	C2-N3	-6.24	1.30	1.35
2	SA	917	G	C2-N2	-6.24	1.28	1.34
2	SA	1399	C	C5'-C4'	6.24	1.58	1.51
26	LA	29	U	N3-C4	-6.24	1.32	1.38
2	SA	141	G	O4'-C1'	-6.24	1.33	1.41
2	SA	445	G	C6-N1	-6.24	1.35	1.39
2	SA	1179	A	N9-C8	6.24	1.42	1.37
26	LA	232	G	C5'-C4'	6.24	1.58	1.51
26	LA	328	U	P-O5'	-6.24	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	597	G	C3'-O3'	6.24	1.50	1.42
26	LA	696	G	C5-C6	-6.24	1.36	1.42
26	LA	1182	G	C4'-C3'	-6.24	1.46	1.53
26	LA	2249	U	O3'-P	-6.24	1.53	1.61
26	LA	2585	U	C2-N3	-6.24	1.33	1.37
2	SA	107	G	C2'-C1'	-6.24	1.46	1.53
26	LA	627	A	C4'-C3'	6.24	1.60	1.53
26	LA	919	U	C2-N3	-6.24	1.33	1.37
26	LA	1475	G	O3'-P	-6.24	1.53	1.61
26	LA	2684	U	C4-C5	-6.24	1.38	1.43
2	SA	586	C	C5'-C4'	6.24	1.58	1.51
2	SA	1532	U	C4-C5	6.24	1.49	1.43
26	LA	2438	U	C3'-O3'	6.24	1.50	1.42
2	SA	529	G	C5-C4	6.24	1.42	1.38
2	SA	893	C	C3'-O3'	6.24	1.50	1.42
2	SA	1419	G	C5-C4	-6.24	1.33	1.38
26	LA	1005	C	C5-C6	-6.24	1.29	1.34
26	LA	1342	A	N3-C4	-6.24	1.31	1.34
26	LA	1418	G	O3'-P	-6.24	1.53	1.61
26	LA	1631	G	C2-N2	-6.24	1.28	1.34
26	LA	2144	G	C5-C4	-6.24	1.33	1.38
26	LA	2705	A	C5-C4	-6.24	1.34	1.38
2	SA	68	G	P-O5'	-6.23	1.53	1.59
26	LA	1663	G	C2-N2	-6.23	1.28	1.34
26	LA	1672	A	N9-C4	-6.23	1.34	1.37
2	SA	126	G	C2'-C1'	-6.23	1.46	1.53
2	SA	134	G	N9-C4	-6.23	1.32	1.38
2	SA	346	G	C3'-C2'	6.23	1.59	1.52
2	SA	365	U	C5'-C4'	6.23	1.58	1.51
2	SA	1016	A	C6-N6	6.23	1.39	1.33
2	SA	1178	G	N9-C4	-6.23	1.32	1.38
2	SA	1471	U	N1-C6	-6.23	1.32	1.38
26	LA	950	G	C4'-C3'	6.23	1.60	1.53
26	LA	1086	A	C5-C4	-6.23	1.34	1.38
26	LA	1231	U	O4'-C1'	-6.23	1.33	1.41
26	LA	1272	A	N7-C5	-6.23	1.35	1.39
26	LA	1452	G	C5-C4	-6.23	1.33	1.38
26	LA	1913	A	C3'-C2'	6.23	1.59	1.52
2	SA	538	G	N3-C4	6.23	1.39	1.35
2	SA	609	A	C4'-C3'	-6.23	1.46	1.53
2	SA	909	A	C8-N7	-6.23	1.27	1.31
2	SA	1329	A	C5-C4	6.23	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1116	G	N7-C5	6.23	1.43	1.39
26	LA	1456	G	C6-N1	-6.23	1.35	1.39
26	LA	1590	A	C4'-O4'	-6.23	1.37	1.45
26	LA	2329	U	O3'-P	6.23	1.68	1.61
26	LA	2450	A	C8-N7	-6.23	1.27	1.31
31	LX	88	HIS	CB-CG	-6.23	1.38	1.50
2	SA	1147	C	O3'-P	-6.23	1.53	1.61
26	LA	248	G	P-O5'	6.23	1.66	1.59
26	LA	1265	A	N9-C8	6.23	1.42	1.37
26	LA	1904	G	N9-C8	-6.23	1.33	1.37
2	SA	114	U	C2-N3	6.23	1.42	1.37
2	SA	606	G	C4'-C3'	6.23	1.59	1.53
2	SA	712	A	C2'-C1'	-6.23	1.46	1.53
2	SA	824	G	C6-N1	-6.23	1.35	1.39
2	SA	1060	U	N1-C2	6.23	1.44	1.38
25	LB	20	G	C2-N2	-6.23	1.28	1.34
26	LA	716	A	N3-C4	6.23	1.38	1.34
26	LA	1469	A	N7-C5	-6.23	1.35	1.39
26	LA	1896	G	N3-C4	-6.23	1.31	1.35
26	LA	1921	G	N9-C8	-6.23	1.33	1.37
26	LA	2280	G	P-O5'	6.23	1.66	1.59
26	LA	2791	G	C5-C4	6.23	1.42	1.38
26	LA	2832	U	O3'-P	-6.23	1.53	1.61
2	SA	712	A	C8-N7	-6.23	1.27	1.31
2	SA	1043	G	N1-C2	-6.23	1.32	1.37
26	LA	336	C	C5-C6	6.23	1.39	1.34
26	LA	375	G	C1'-N9	-6.23	1.38	1.46
26	LA	426	C	C5'-C4'	6.23	1.58	1.51
26	LA	1080	A	C8-N7	-6.23	1.27	1.31
26	LA	1259	G	N3-C4	-6.23	1.31	1.35
26	LA	1969	A	C1'-N9	-6.23	1.38	1.46
26	LA	2471	A	O4'-C1'	6.23	1.49	1.41
26	LA	2556	C	C2'-C1'	-6.23	1.46	1.53
2	SA	481	G	C2-N3	-6.22	1.27	1.32
2	SA	783	C	O3'-P	-6.22	1.53	1.61
26	LA	418	C	N1-C6	-6.22	1.33	1.37
26	LA	2026	U	C4-C5	-6.22	1.38	1.43
26	LA	2107	G	C2'-C1'	-6.22	1.46	1.53
26	LA	2752	C	C4'-O4'	-6.22	1.37	1.45
26	LA	2864	G	O3'-P	-6.22	1.53	1.61
2	SA	15	G	C3'-C2'	-6.22	1.46	1.52
2	SA	623	C	C4'-O4'	6.22	1.53	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1279	G	O4'-C1'	-6.22	1.33	1.41
2	SA	1410	A	P-O5'	-6.22	1.53	1.59
4	S2	65	G	C4'-C3'	6.22	1.59	1.53
25	LB	106	G	O3'-P	-6.22	1.53	1.61
26	LA	124	G	O3'-P	-6.22	1.53	1.61
26	LA	207	A	C4'-C3'	-6.22	1.46	1.53
26	LA	398	C	C4-C5	6.22	1.48	1.43
26	LA	748	G	C2-N2	-6.22	1.28	1.34
26	LA	799	G	N9-C4	-6.22	1.32	1.38
26	LA	1500	G	N3-C4	-6.22	1.31	1.35
26	LA	2512	C	C4'-C3'	-6.22	1.46	1.53
26	LA	2622	U	C2-N3	-6.22	1.33	1.37
2	SA	463	U	C4'-C3'	6.22	1.59	1.53
2	SA	677	U	C4'-C3'	-6.22	1.46	1.53
2	SA	1376	U	N1-C2	-6.22	1.32	1.38
25	LB	101	A	C3'-O3'	6.22	1.50	1.42
26	LA	502	A	N9-C4	-6.22	1.34	1.37
26	LA	612	G	O3'-P	-6.22	1.53	1.61
26	LA	1659	G	O4'-C1'	-6.22	1.33	1.41
26	LA	1800	C	C3'-C2'	6.22	1.59	1.52
26	LA	2320	U	O4'-C1'	-6.22	1.33	1.41
2	SA	565	U	C5-C6	6.22	1.39	1.34
2	SA	711	G	C4'-O4'	-6.22	1.37	1.45
2	SA	889	A	C2'-C1'	-6.22	1.46	1.53
2	SA	1245	C	C2'-C1'	-6.22	1.46	1.53
26	LA	200	U	C2'-C1'	6.22	1.60	1.53
26	LA	830	G	N9-C4	-6.22	1.32	1.38
26	LA	928	A	C8-N7	-6.22	1.27	1.31
26	LA	1151	A	P-O5'	6.22	1.66	1.59
26	LA	1251	C	C1'-N1	-6.22	1.38	1.46
26	LA	1372	U	C2-O2	-6.22	1.16	1.22
26	LA	1418	G	C2-N2	-6.22	1.28	1.34
26	LA	1470	A	N7-C5	-6.22	1.35	1.39
26	LA	2120	G	C5-C6	6.22	1.48	1.42
26	LA	2161	C	P-O5'	-6.22	1.53	1.59
26	LA	2368	C	P-O5'	-6.22	1.53	1.59
2	SA	829	G	C4'-C3'	6.22	1.59	1.53
2	SA	870	U	C5'-C4'	6.22	1.58	1.51
2	SA	1384	C	C4'-O4'	6.22	1.53	1.45
4	S2	55	U	C5-C6	-6.22	1.28	1.34
25	LB	52	A	C6-N1	6.22	1.40	1.35
26	LA	1080	A	N7-C5	6.22	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	35	G	C2'-C1'	-6.22	1.46	1.53
2	SA	448	A	C5'-C4'	6.22	1.58	1.51
2	SA	1384	C	C4-C5	6.22	1.48	1.43
26	LA	961	C	C3'-C2'	-6.22	1.46	1.52
26	LA	1201	U	C3'-O3'	6.22	1.50	1.42
26	LA	1337	G	C8-N7	-6.22	1.27	1.30
26	LA	1448	G	C6-N1	-6.22	1.35	1.39
26	LA	2882	A	O3'-P	-6.22	1.53	1.61
2	SA	560	A	C2-N3	6.21	1.39	1.33
2	SA	682	G	N3-C4	6.21	1.39	1.35
2	SA	759	A	N7-C5	-6.21	1.35	1.39
2	SA	939	G	N3-C4	-6.21	1.31	1.35
26	LA	1277	G	N9-C8	-6.21	1.33	1.37
26	LA	2282	G	C2'-C1'	-6.21	1.46	1.53
26	LA	2476	A	C4'-O4'	-6.21	1.37	1.45
26	LA	2830	C	N1-C6	6.21	1.40	1.37
2	SA	597	G	C4'-O4'	-6.21	1.37	1.45
2	SA	827	U	C4-C5	-6.21	1.38	1.43
2	SA	1093	A	C2-N3	6.21	1.39	1.33
2	SA	1132	C	C5-C6	-6.21	1.29	1.34
2	SA	1310	G	N9-C8	6.21	1.42	1.37
26	LA	174	U	C2-N3	-6.21	1.33	1.37
26	LA	178	G	C5-C4	-6.21	1.34	1.38
26	LA	1904	G	N1-C2	-6.21	1.32	1.37
26	LA	2357	G	C5-C6	-6.21	1.36	1.42
26	LA	2653	U	C5'-C4'	6.21	1.58	1.51
2	SA	775	G	O3'-P	-6.21	1.53	1.61
2	SA	1140	C	C2'-C1'	-6.21	1.46	1.53
24	S3	145	ARG	CD-NE	6.21	1.57	1.46
26	LA	300	A	N1-C2	-6.21	1.28	1.34
26	LA	378	C	N1-C6	-6.21	1.33	1.37
26	LA	643	A	N7-C5	-6.21	1.35	1.39
26	LA	945	A	C2'-C1'	6.21	1.60	1.53
26	LA	1164	C	N1-C6	-6.21	1.33	1.37
2	SA	842	U	C2'-C1'	-6.21	1.46	1.53
25	LB	56	G	N3-C4	-6.21	1.31	1.35
26	LA	973	A	P-O5'	-6.21	1.53	1.59
26	LA	2643	G	C2-N2	-6.21	1.28	1.34
26	LA	2828	G	C4'-C3'	-6.21	1.46	1.53
2	SA	233	C	C2-N3	6.21	1.40	1.35
2	SA	763	G	O3'-P	-6.21	1.53	1.61
2	SA	806	C	O3'-P	-6.21	1.53	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	819	A	C5-C6	6.21	1.46	1.41
2	SA	893	C	C5'-C4'	-6.21	1.44	1.51
2	SA	1014	A	C8-N7	-6.21	1.27	1.31
2	SA	1084	G	C6-N1	6.21	1.43	1.39
26	LA	1291	C	C4-C5	-6.21	1.38	1.43
26	LA	1899	A	N7-C5	-6.21	1.35	1.39
26	LA	2576	G	N9-C4	-6.21	1.32	1.38
26	LA	2591	C	O3'-P	-6.21	1.53	1.61
26	LA	2768	U	C2'-C1'	-6.21	1.46	1.53
2	SA	252	U	C5'-C4'	6.21	1.58	1.51
2	SA	629	A	C8-N7	6.21	1.35	1.31
2	SA	1199	U	O4'-C1'	6.21	1.49	1.41
26	LA	568	U	C5'-C4'	6.21	1.58	1.51
26	LA	570	G	C2'-C1'	-6.21	1.46	1.53
26	LA	777	G	C2-N2	-6.21	1.28	1.34
26	LA	848	C	C4'-C3'	-6.21	1.46	1.53
26	LA	1138	G	C2-N3	6.21	1.37	1.32
2	SA	191	G	C2-N2	-6.21	1.28	1.34
26	LA	75	G	C5-C4	-6.21	1.34	1.38
26	LA	473	G	N1-C2	-6.21	1.32	1.37
26	LA	1261	C	C3'-O3'	6.21	1.50	1.42
26	LA	1478	G	N1-C2	-6.21	1.32	1.37
26	LA	1564	C	O3'-P	-6.21	1.53	1.61
26	LA	2313	C	C3'-O3'	6.21	1.50	1.42
2	SA	449	G	N9-C4	-6.20	1.32	1.38
12	SL	26	CYS	CB-SG	-6.20	1.71	1.82
26	LA	481	G	C6-N1	-6.20	1.35	1.39
26	LA	2001	C	C5'-C4'	6.20	1.58	1.51
26	LA	2385	C	C5'-C4'	6.20	1.58	1.51
2	SA	315	A	C1'-N9	-6.20	1.38	1.46
2	SA	1158	C	N1-C6	-6.20	1.33	1.37
26	LA	624	C	O4'-C1'	-6.20	1.33	1.41
26	LA	1105	U	P-O5'	-6.20	1.53	1.59
26	LA	1891	G	C6-N1	-6.20	1.35	1.39
2	SA	145	G	N7-C5	-6.20	1.35	1.39
2	SA	491	G	C2-N2	-6.20	1.28	1.34
2	SA	601	G	C6-N1	6.20	1.43	1.39
2	SA	652	U	O3'-P	-6.20	1.53	1.61
2	SA	691	G	C2'-C1'	-6.20	1.46	1.53
2	SA	899	C	N3-C4	6.20	1.38	1.33
2	SA	1037	C	C5'-C4'	6.20	1.58	1.51
26	LA	691	C	P-O5'	-6.20	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1160	G	N1-C2	-6.20	1.32	1.37
26	LA	1194	A	C5'-C4'	6.20	1.58	1.51
26	LA	1643	G	C4'-O4'	-6.20	1.37	1.45
2	SA	374	A	C4'-C3'	-6.20	1.46	1.53
2	SA	968	A	N7-C5	-6.20	1.35	1.39
2	SA	1203	C	O3'-P	-6.20	1.53	1.61
2	SA	1438	G	P-O5'	-6.20	1.53	1.59
14	SN	64	ARG	CD-NE	6.20	1.56	1.46
26	LA	2432	A	C1'-N9	-6.20	1.38	1.46
2	SA	884	U	N1-C6	6.20	1.43	1.38
26	LA	1531	C	P-O5'	-6.20	1.53	1.59
2	SA	55	A	C3'-C2'	-6.20	1.46	1.52
2	SA	131	A	C4'-O4'	-6.20	1.37	1.45
2	SA	146	G	N3-C4	6.20	1.39	1.35
2	SA	311	C	O3'-P	-6.20	1.53	1.61
2	SA	980	C	C2-N3	6.20	1.40	1.35
2	SA	1284	C	C4'-C3'	-6.20	1.46	1.53
26	LA	103	A	N3-C4	-6.20	1.31	1.34
26	LA	572	A	C5'-C4'	6.20	1.58	1.51
26	LA	775	G	C5-C6	6.20	1.48	1.42
26	LA	2295	C	C2-N3	-6.20	1.30	1.35
26	LA	2899	A	C5-C6	6.20	1.46	1.41
2	SA	382	A	C5-C6	6.19	1.46	1.41
26	LA	645	C	N1-C6	6.19	1.40	1.37
26	LA	2522	U	C4'-O4'	-6.19	1.37	1.45
24	S3	654	HIS	CB-CG	6.19	1.61	1.50
26	LA	559	G	N3-C4	-6.19	1.31	1.35
26	LA	825	A	N3-C4	-6.19	1.31	1.34
26	LA	1313	U	P-O5'	-6.19	1.53	1.59
26	LA	1792	G	O4'-C1'	-6.19	1.33	1.41
26	LA	2508	G	N9-C4	6.19	1.43	1.38
2	SA	687	A	N3-C4	-6.19	1.31	1.34
2	SA	1297	G	N7-C5	-6.19	1.35	1.39
25	LB	91	C	O3'-P	-6.19	1.53	1.61
26	LA	107	G	C3'-C2'	-6.19	1.46	1.52
26	LA	1066	U	P-O5'	-6.19	1.53	1.59
26	LA	2379	G	C8-N7	-6.19	1.27	1.30
2	SA	865	A	N9-C8	-6.19	1.32	1.37
2	SA	1484	C	C2'-C1'	-6.19	1.46	1.53
3	S1	19	A	C5-C4	-6.19	1.34	1.38
26	LA	81	G	C6-N1	-6.19	1.35	1.39
26	LA	968	C	C4'-C3'	-6.19	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2234	G	N3-C4	-6.19	1.31	1.35
2	SA	437	U	C5-C6	6.19	1.39	1.34
26	LA	1284	A	N1-C2	-6.19	1.28	1.34
26	LA	1622	G	N9-C8	-6.19	1.33	1.37
2	SA	268	U	C5'-C4'	6.18	1.58	1.51
2	SA	778	G	N7-C5	-6.18	1.35	1.39
2	SA	822	U	C4-C5	-6.18	1.38	1.43
2	SA	850	U	C4-C5	-6.18	1.38	1.43
2	SA	1005	A	C6-N6	6.18	1.38	1.33
26	LA	292	U	N1-C2	-6.18	1.32	1.38
26	LA	306	U	C3'-O3'	-6.18	1.33	1.42
26	LA	960	A	C6-N1	-6.18	1.31	1.35
26	LA	1110	G	C5'-C4'	6.18	1.58	1.51
26	LA	1418	G	P-O5'	-6.18	1.53	1.59
26	LA	1919	A	C5-C4	6.18	1.43	1.38
26	LA	2843	G	C4'-O4'	6.18	1.53	1.45
26	LA	2871	U	N3-C4	-6.18	1.32	1.38
2	SA	584	G	N1-C2	-6.18	1.32	1.37
2	SA	1303	C	C5'-C4'	6.18	1.58	1.51
26	LA	850	U	N3-C4	-6.18	1.32	1.38
26	LA	1338	G	C3'-O3'	6.18	1.50	1.42
26	LA	1733	G	N3-C4	-6.18	1.31	1.35
26	LA	2017	U	C1'-N1	-6.18	1.38	1.46
26	LA	2900	A	C2'-C1'	6.18	1.60	1.53
2	SA	256	U	P-O5'	-6.18	1.53	1.59
2	SA	445	G	P-O5'	6.18	1.66	1.59
2	SA	472	U	P-O5'	-6.18	1.53	1.59
2	SA	563	A	C5-C4	-6.18	1.34	1.38
26	LA	87	U	C2-N3	-6.18	1.33	1.37
26	LA	836	G	N7-C5	6.18	1.43	1.39
2	SA	1416	G	C5-C4	-6.18	1.34	1.38
25	LB	18	G	C5-C6	-6.18	1.36	1.42
26	LA	276	U	O5'-C5'	6.18	1.54	1.44
26	LA	415	A	C5'-C4'	6.18	1.58	1.51
26	LA	483	A	C3'-C2'	-6.18	1.46	1.52
26	LA	681	G	C4'-C3'	-6.18	1.46	1.53
26	LA	705	A	O3'-P	-6.18	1.53	1.61
26	LA	892	A	N9-C8	-6.18	1.32	1.37
26	LA	2012	G	C8-N7	6.18	1.34	1.30
26	LA	2527	C	C2'-C1'	-6.18	1.46	1.53
2	SA	694	A	N7-C5	-6.18	1.35	1.39
26	LA	835	C	C5-C6	6.18	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2767	C	C2'-C1'	-6.18	1.46	1.53
2	SA	704	A	C5-C6	-6.18	1.35	1.41
26	LA	119	A	N3-C4	-6.18	1.31	1.34
26	LA	594	U	O3'-P	-6.18	1.53	1.61
26	LA	1096	A	C3'-C2'	-6.18	1.46	1.52
26	LA	1140	C	C2'-C1'	-6.18	1.46	1.53
26	LA	1441	G	O3'-P	-6.18	1.53	1.61
26	LA	1543	G	C3'-C2'	-6.18	1.46	1.52
26	LA	2477	U	C3'-O3'	6.18	1.50	1.42
2	SA	946	A	N7-C5	-6.17	1.35	1.39
2	SA	1161	C	C4-N4	-6.17	1.28	1.33
2	SA	1287	A	C4'-O4'	6.17	1.53	1.45
26	LA	177	G	C2'-C1'	-6.17	1.46	1.53
26	LA	454	A	C1'-N9	-6.17	1.38	1.46
26	LA	1336	A	N9-C4	-6.17	1.34	1.37
26	LA	2172	U	C2-O2	6.17	1.27	1.22
26	LA	2648	G	N7-C5	6.17	1.43	1.39
26	LA	2875	C	O4'-C1'	6.17	1.49	1.41
26	LA	637	A	C3'-O3'	6.17	1.50	1.42
2	SA	1300	G	O5'-C5'	6.17	1.54	1.44
26	LA	377	G	C6-N1	-6.17	1.35	1.39
26	LA	859	G	C6-N1	-6.17	1.35	1.39
26	LA	1918	A	C3'-C2'	-6.17	1.46	1.52
26	LA	2311	A	C4'-C3'	6.17	1.59	1.53
26	LA	2679	A	O4'-C1'	-6.17	1.33	1.41
2	SA	1148	U	C2-N3	-6.17	1.33	1.37
26	LA	396	G	N1-C2	-6.17	1.32	1.37
26	LA	818	G	C8-N7	-6.17	1.27	1.30
26	LA	1122	G	N9-C8	-6.17	1.33	1.37
2	SA	170	U	C2-N3	-6.17	1.33	1.37
2	SA	425	G	C4'-C3'	6.17	1.59	1.53
26	LA	14	A	C5-C4	-6.17	1.34	1.38
26	LA	560	C	C5'-C4'	6.17	1.58	1.51
26	LA	1310	G	C5-C4	-6.17	1.34	1.38
26	LA	1331	G	P-O5'	-6.17	1.53	1.59
26	LA	1411	U	P-O5'	6.17	1.66	1.59
26	LA	2720	U	C5-C6	-6.17	1.28	1.34
26	LA	2734	A	C2'-C1'	-6.17	1.46	1.53
2	SA	416	G	C4'-C3'	6.17	1.59	1.53
2	SA	532	A	O3'-P	-6.17	1.53	1.61
2	SA	934	C	N1-C6	-6.17	1.33	1.37
2	SA	1206	G	N9-C4	-6.17	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1305	G	C2-N2	-6.17	1.28	1.34
26	LA	666	A	P-O5'	-6.17	1.53	1.59
26	LA	938	G	C2-N2	-6.17	1.28	1.34
26	LA	2055	C	C3'-C2'	6.17	1.59	1.52
26	LA	2683	C	O4'-C1'	-6.17	1.33	1.41
2	SA	265	G	C3'-O3'	6.17	1.50	1.42
5	ST	24	ARG	CA-CB	6.17	1.67	1.53
26	LA	532	A	C4'-C3'	6.17	1.59	1.53
26	LA	1510	G	C6-N1	-6.17	1.35	1.39
2	SA	704	A	C6-N1	6.16	1.39	1.35
2	SA	1232	U	C3'-O3'	6.16	1.50	1.42
26	LA	492	A	C3'-O3'	6.16	1.50	1.42
26	LA	651	G	C5-C6	-6.16	1.36	1.42
26	LA	1881	C	P-O5'	-6.16	1.53	1.59
26	LA	2353	G	N9-C8	-6.16	1.33	1.37
2	SA	724	G	N3-C4	-6.16	1.31	1.35
2	SA	848	C	C5'-C4'	6.16	1.58	1.51
25	LB	64	G	N3-C4	-6.16	1.31	1.35
26	LA	1782	U	C2-N3	6.16	1.42	1.37
26	LA	1858	A	N1-C2	-6.16	1.28	1.34
2	SA	282	A	C8-N7	-6.16	1.27	1.31
2	SA	601	G	N1-C2	-6.16	1.32	1.37
2	SA	819	A	C6-N1	6.16	1.39	1.35
2	SA	867	G	N3-C4	6.16	1.39	1.35
26	LA	7	G	C3'-C2'	-6.16	1.46	1.52
26	LA	308	G	C2'-C1'	-6.16	1.46	1.53
26	LA	668	A	O4'-C1'	-6.16	1.33	1.41
26	LA	746	U	C4'-C3'	-6.16	1.46	1.53
26	LA	1537	G	N7-C5	6.16	1.43	1.39
26	LA	2102	G	C6-N1	-6.16	1.35	1.39
26	LA	2759	G	O4'-C1'	-6.16	1.33	1.41
2	SA	100	G	C8-N7	6.16	1.34	1.30
2	SA	908	A	O3'-P	-6.16	1.53	1.61
26	LA	466	A	C3'-C2'	6.16	1.59	1.52
26	LA	910	A	P-O5'	-6.16	1.53	1.59
26	LA	1149	G	N1-C2	-6.16	1.32	1.37
26	LA	1722	A	C1'-N9	-6.16	1.38	1.46
2	SA	276	G	C5-C6	-6.16	1.36	1.42
4	S2	75	C	P-O5'	6.16	1.66	1.59
26	LA	923	G	C4'-O4'	6.16	1.53	1.45
26	LA	1427	A	C5-C4	-6.16	1.34	1.38
26	LA	1957	C	C3'-O3'	6.16	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2677	G	C8-N7	6.16	1.34	1.30
26	LA	2768	U	P-O5'	-6.16	1.53	1.59
26	LA	2851	A	N7-C5	-6.16	1.35	1.39
2	SA	681	A	C5-C4	-6.16	1.34	1.38
2	SA	1228	C	N3-C4	-6.16	1.29	1.33
25	LB	102	G	C4'-C3'	6.16	1.59	1.53
26	LA	286	U	C4-C5	-6.16	1.38	1.43
26	LA	683	U	N1-C2	-6.16	1.33	1.38
26	LA	1497	U	C2'-C1'	-6.16	1.46	1.53
26	LA	1504	A	C3'-C2'	-6.16	1.46	1.52
26	LA	1747	U	C3'-O3'	6.16	1.50	1.42
26	LA	2423	U	C4'-C3'	-6.16	1.46	1.53
26	LA	2823	A	C6-N6	-6.16	1.29	1.33
2	SA	265	G	C4'-C3'	-6.15	1.46	1.53
3	S1	45	G	N7-C5	-6.15	1.35	1.39
26	LA	623	C	C2-N3	-6.15	1.30	1.35
26	LA	627	A	C1'-N9	-6.15	1.38	1.46
26	LA	736	C	C4-C5	-6.15	1.38	1.43
26	LA	1446	C	P-O5'	-6.15	1.53	1.59
26	LA	2125	G	C8-N7	-6.15	1.27	1.30
26	LA	2127	G	N9-C4	6.15	1.42	1.38
2	SA	128	G	N9-C8	-6.15	1.33	1.37
2	SA	537	G	C3'-O3'	6.15	1.50	1.42
26	LA	25	U	C2-N3	-6.15	1.33	1.37
26	LA	1085	A	C3'-C2'	6.15	1.59	1.52
26	LA	1740	G	N9-C8	-6.15	1.33	1.37
26	LA	1745	A	C2-N3	6.15	1.39	1.33
26	LA	1796	U	C3'-C2'	-6.15	1.46	1.52
26	LA	2064	C	N3-C4	-6.15	1.29	1.33
26	LA	2762	C	C4'-C3'	-6.15	1.46	1.53
2	SA	308	C	N1-C6	-6.15	1.33	1.37
2	SA	834	U	N1-C6	-6.15	1.32	1.38
2	SA	1263	C	N1-C2	-6.15	1.33	1.40
2	SA	1515	G	O4'-C1'	-6.15	1.33	1.41
26	LA	1182	G	C2-N3	-6.15	1.27	1.32
26	LA	1519	G	C4'-C3'	6.15	1.59	1.53
26	LA	1774	C	C2-N3	6.15	1.40	1.35
26	LA	1979	U	O4'-C1'	-6.15	1.33	1.41
26	LA	2233	U	O3'-P	-6.15	1.53	1.61
2	SA	408	A	C6-N6	-6.15	1.29	1.33
2	SA	812	G	C2'-C1'	-6.15	1.46	1.53
26	LA	2072	C	C4-C5	-6.15	1.38	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	609	A	C6-N1	6.15	1.39	1.35
2	SA	1092	A	C3'-C2'	-6.15	1.46	1.52
2	SA	1406	U	C3'-O3'	6.15	1.50	1.42
26	LA	1935	G	N7-C5	6.15	1.43	1.39
26	LA	2537	U	N1-C2	-6.15	1.33	1.38
26	LA	2548	U	O4'-C1'	-6.15	1.33	1.41
4	S2	16	C	P-O5'	6.15	1.65	1.59
25	LB	83	G	C1'-N9	-6.15	1.38	1.46
26	LA	1478	G	N9-C4	-6.15	1.33	1.38
26	LA	2493	U	C4-C5	6.15	1.49	1.43
26	LA	2600	A	O3'-P	-6.15	1.53	1.61
2	SA	748	G	N9-C8	6.14	1.42	1.37
2	SA	824	G	C5-C6	-6.14	1.36	1.42
2	SA	941	G	C2-N2	-6.14	1.28	1.34
26	LA	1690	A	C1'-N9	-6.14	1.38	1.46
26	LA	1819	A	P-O5'	-6.14	1.53	1.59
26	LA	1961	C	C2-N3	-6.14	1.30	1.35
26	LA	2679	A	N7-C5	6.14	1.43	1.39
2	SA	557	G	C5'-C4'	6.14	1.58	1.51
2	SA	1120	C	C4'-O4'	-6.14	1.37	1.45
2	SA	1206	G	O4'-C1'	-6.14	1.33	1.41
3	S1	39	U	C1'-N1	6.14	1.57	1.48
26	LA	468	G	N9-C8	-6.14	1.33	1.37
26	LA	584	C	C5'-C4'	6.14	1.58	1.51
26	LA	771	G	C2-N3	-6.14	1.27	1.32
26	LA	801	G	N3-C4	-6.14	1.31	1.35
26	LA	1145	C	N1-C6	6.14	1.40	1.37
26	LA	1660	G	C5-C4	-6.14	1.34	1.38
26	LA	1672	A	O4'-C1'	-6.14	1.33	1.41
26	LA	2223	G	N7-C5	-6.14	1.35	1.39
26	LA	2287	A	N9-C4	-6.14	1.34	1.37
26	LA	733	G	N9-C4	-6.14	1.33	1.38
26	LA	1158	C	O4'-C1'	-6.14	1.33	1.41
26	LA	1371	G	C3'-C2'	-6.14	1.46	1.52
26	LA	2446	G	C8-N7	-6.14	1.27	1.30
26	LA	2525	G	N3-C4	-6.14	1.31	1.35
26	LA	2765	A	N7-C5	-6.14	1.35	1.39
1	SS	23	GLU	CB-CG	6.14	1.63	1.52
2	SA	581	G	N7-C5	-6.14	1.35	1.39
2	SA	1111	A	C2'-C1'	-6.14	1.46	1.53
4	S2	65	G	C4'-O4'	6.14	1.53	1.45
26	LA	471	A	N3-C4	-6.14	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	571	U	N1-C2	6.14	1.44	1.38
26	LA	738	G	N7-C5	-6.14	1.35	1.39
26	LA	1364	G	C2-N2	-6.14	1.28	1.34
26	LA	1918	A	N9-C4	6.14	1.41	1.37
26	LA	2227	A	C6-N6	-6.14	1.29	1.33
26	LA	2441	U	P-O5'	-6.14	1.53	1.59
26	LA	2649	C	O3'-P	-6.14	1.53	1.61
26	LA	807	U	P-O5'	-6.14	1.53	1.59
26	LA	1433	A	C2'-C1'	-6.14	1.46	1.53
26	LA	1521	G	N9-C8	-6.14	1.33	1.37
26	LA	1809	A	N3-C4	6.14	1.38	1.34
26	LA	2874	C	N1-C6	6.14	1.40	1.37
2	SA	578	C	P-O5'	-6.14	1.53	1.59
2	SA	663	A	C6-N1	6.14	1.39	1.35
7	SG	102	TRP	N-CA	-6.14	1.34	1.46
25	LB	64	G	C5-C4	-6.14	1.34	1.38
26	LA	215	G	N3-C4	-6.14	1.31	1.35
26	LA	628	G	P-O5'	-6.14	1.53	1.59
26	LA	1441	G	C4'-C3'	-6.14	1.46	1.53
26	LA	1658	C	C4-C5	-6.14	1.38	1.43
26	LA	1671	U	C4-C5	-6.14	1.38	1.43
26	LA	1998	A	C8-N7	-6.14	1.27	1.31
26	LA	2424	C	C5'-C4'	6.14	1.58	1.51
26	LA	2825	G	C6-N1	-6.14	1.35	1.39
40	L4	50	GLU	CG-CD	6.14	1.61	1.51
26	LA	410	G	C2-N2	-6.13	1.28	1.34
26	LA	1322	A	N7-C5	-6.13	1.35	1.39
26	LA	2362	C	C4'-C3'	6.13	1.59	1.53
2	SA	286	C	C4-N4	-6.13	1.28	1.33
2	SA	455	G	C6-N1	6.13	1.43	1.39
26	LA	254	G	C3'-C2'	-6.13	1.46	1.52
26	LA	690	G	P-O5'	-6.13	1.53	1.59
26	LA	2600	A	C2-N3	6.13	1.39	1.33
2	SA	532	A	N9-C4	6.13	1.41	1.37
2	SA	662	U	C3'-O3'	6.13	1.50	1.42
2	SA	787	A	N7-C5	6.13	1.43	1.39
2	SA	898	G	O4'-C1'	-6.13	1.33	1.41
2	SA	1060	U	O3'-P	-6.13	1.53	1.61
4	S2	45	A	C1'-N9	-6.13	1.38	1.46
25	LB	94	A	C3'-O3'	6.13	1.50	1.42
26	LA	1218	G	C2'-C1'	-6.13	1.46	1.53
26	LA	1678	A	C2'-C1'	-6.13	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2100	G	N9-C4	6.13	1.42	1.38
26	LA	2191	A	C2-N3	6.13	1.39	1.33
2	SA	671	G	C4'-C3'	-6.13	1.46	1.53
26	LA	304	U	C2'-C1'	-6.13	1.46	1.53
2	SA	104	G	C5-C4	6.13	1.42	1.38
2	SA	343	U	O4'-C1'	-6.13	1.33	1.41
2	SA	411	A	C4'-C3'	6.13	1.59	1.53
2	SA	597	G	C5'-C4'	6.13	1.58	1.51
4	S2	48	U	C3'-C2'	6.13	1.59	1.52
25	LB	107	G	N9-C4	-6.13	1.33	1.38
26	LA	733	G	C2'-C1'	-6.13	1.46	1.53
26	LA	749	A	C1'-N9	-6.13	1.38	1.46
26	LA	1442	U	P-O5'	-6.13	1.53	1.59
26	LA	2157	G	N9-C4	6.13	1.42	1.38
26	LA	2432	A	N1-C2	-6.13	1.28	1.34
26	LA	2541	A	C8-N7	6.13	1.35	1.31
2	SA	116	A	P-O5'	-6.13	1.53	1.59
2	SA	457	G	C6-N1	-6.13	1.35	1.39
2	SA	583	A	O3'-P	-6.13	1.53	1.61
2	SA	1370	G	C4'-C3'	6.13	1.59	1.53
4	S2	40	C	N1-C2	-6.13	1.34	1.40
7	SG	145	GLU	CG-CD	6.13	1.61	1.51
26	LA	879	G	N1-C2	6.13	1.42	1.37
26	LA	1051	G	C2'-C1'	-6.13	1.46	1.53
26	LA	2571	U	C2'-C1'	-6.13	1.46	1.53
2	SA	511	C	O4'-C1'	6.12	1.49	1.41
2	SA	636	U	C4'-C3'	6.12	1.59	1.53
26	LA	1264	A	N9-C4	-6.12	1.34	1.37
26	LA	2049	G	C4'-C3'	-6.12	1.46	1.53
2	SA	379	C	C4'-C3'	-6.12	1.46	1.53
2	SA	631	C	C4-N4	6.12	1.39	1.33
2	SA	641	U	C5'-C4'	6.12	1.58	1.51
2	SA	704	A	C6-N6	6.12	1.38	1.33
2	SA	899	C	O3'-P	-6.12	1.53	1.61
25	LB	101	A	C3'-C2'	-6.12	1.46	1.52
26	LA	366	C	P-O5'	-6.12	1.53	1.59
26	LA	818	G	O3'-P	-6.12	1.53	1.61
26	LA	1319	C	C4-N4	-6.12	1.28	1.33
2	SA	53	A	C8-N7	-6.12	1.27	1.31
2	SA	351	G	C5'-C4'	6.12	1.58	1.51
2	SA	1088	G	N9-C8	-6.12	1.33	1.37
26	LA	501	A	C6-N6	6.12	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	668	A	N9-C8	-6.12	1.32	1.37
26	LA	1148	U	C4'-C3'	6.12	1.59	1.53
26	LA	1244	A	C2'-C1'	-6.12	1.46	1.53
26	LA	1246	A	P-O5'	-6.12	1.53	1.59
26	LA	1405	U	C2-N3	-6.12	1.33	1.37
26	LA	2037	A	C6-N1	-6.12	1.31	1.35
26	LA	2058	A	N9-C8	-6.12	1.32	1.37
26	LA	2291	U	O3'-P	-6.12	1.53	1.61
26	LA	2616	C	C5'-C4'	6.12	1.58	1.51
2	SA	1290	G	C2-N2	-6.12	1.28	1.34
2	SA	1294	G	C4'-C3'	6.12	1.59	1.53
2	SA	1348	U	C2-N3	-6.12	1.33	1.37
25	LB	63	C	C4-N4	6.12	1.39	1.33
26	LA	1128	G	N9-C4	6.12	1.42	1.38
26	LA	1168	G	N9-C4	-6.12	1.33	1.38
26	LA	2498	C	N1-C6	-6.12	1.33	1.37
26	LA	2578	G	C3'-C2'	-6.12	1.46	1.52
2	SA	310	G	C2-N3	6.12	1.37	1.32
2	SA	849	G	C3'-C2'	-6.12	1.46	1.52
2	SA	1233	G	C6-N1	-6.12	1.35	1.39
3	S1	20	G	N9-C4	6.12	1.42	1.38
19	SC	146	LYS	CA-CB	6.12	1.67	1.53
26	LA	346	A	C2-N3	-6.12	1.28	1.33
26	LA	1219	U	C3'-O3'	6.12	1.50	1.42
26	LA	1262	A	N9-C4	-6.12	1.34	1.37
26	LA	1476	U	C3'-O3'	6.12	1.50	1.42
26	LA	2380	C	O4'-C1'	6.12	1.49	1.41
26	LA	2470	G	C2-N2	-6.12	1.28	1.34
26	LA	2532	G	N1-C2	-6.12	1.32	1.37
26	LA	1779	U	C3'-O3'	-6.12	1.33	1.42
2	SA	119	A	C1'-N9	-6.12	1.38	1.46
2	SA	1273	C	C4-C5	-6.12	1.38	1.43
26	LA	174	U	C5'-C4'	6.12	1.58	1.51
26	LA	421	C	O4'-C1'	-6.12	1.33	1.41
26	LA	482	A	C4'-C3'	6.12	1.59	1.53
26	LA	1054	A	C8-N7	-6.12	1.27	1.31
26	LA	1639	C	N3-C4	-6.12	1.29	1.33
26	LA	2569	G	C5'-C4'	6.12	1.58	1.51
26	LA	2660	A	P-O5'	-6.12	1.53	1.59
2	SA	243	A	C2'-C1'	-6.11	1.46	1.53
2	SA	791	G	C2'-O2'	-6.11	1.33	1.41
26	LA	133	U	C3'-O3'	6.11	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	507	A	C2'-C1'	-6.11	1.46	1.53
26	LA	705	A	C8-N7	-6.11	1.27	1.31
26	LA	1039	A	C6-N6	6.11	1.38	1.33
26	LA	1041	G	O3'-P	-6.11	1.53	1.61
26	LA	1503	A	C6-N1	6.11	1.39	1.35
2	SA	1208	C	N1-C6	6.11	1.40	1.37
26	LA	25	U	N1-C2	-6.11	1.33	1.38
26	LA	768	G	N7-C5	-6.11	1.35	1.39
26	LA	2235	G	O3'-P	-6.11	1.53	1.61
2	SA	588	G	C2-N3	6.11	1.37	1.32
2	SA	602	A	N9-C8	-6.11	1.32	1.37
26	LA	1216	G	O4'-C1'	-6.11	1.33	1.41
26	LA	1248	G	N9-C8	6.11	1.42	1.37
26	LA	1320	C	N3-C4	-6.11	1.29	1.33
26	LA	2046	G	C8-N7	6.11	1.34	1.30
38	LE	179	ARG	CD-NE	6.11	1.56	1.46
2	SA	4	U	C2-O2	6.11	1.27	1.22
26	LA	445	C	C4-N4	-6.11	1.28	1.33
26	LA	705	A	C2'-C1'	-6.11	1.46	1.53
26	LA	965	C	C4-C5	-6.11	1.38	1.43
26	LA	1675	C	C4'-C3'	6.11	1.59	1.53
26	LA	1970	A	O4'-C1'	-6.11	1.33	1.41
26	LA	2130	U	C5'-C4'	6.11	1.58	1.51
26	LA	2795	C	N1-C6	-6.11	1.33	1.37
2	SA	656	G	P-O5'	-6.11	1.53	1.59
25	LB	51	G	C2-N2	-6.11	1.28	1.34
25	LB	54	G	C3'-C2'	-6.11	1.46	1.52
26	LA	478	A	C1'-N9	-6.11	1.38	1.46
26	LA	1941	C	C2-N3	-6.11	1.30	1.35
26	LA	2515	C	C5'-C4'	6.11	1.58	1.51
26	LA	2723	C	C5'-C4'	6.11	1.58	1.51
2	SA	364	A	C4'-C3'	6.11	1.59	1.53
2	SA	755	G	N7-C5	-6.11	1.35	1.39
2	SA	978	A	N7-C5	6.11	1.43	1.39
26	LA	698	C	C4-C5	-6.11	1.38	1.43
26	LA	731	C	N1-C2	-6.11	1.34	1.40
26	LA	1041	G	N7-C5	-6.11	1.35	1.39
2	SA	327	A	O4'-C1'	6.10	1.49	1.41
2	SA	728	A	P-O5'	-6.10	1.53	1.59
2	SA	1053	G	P-O5'	6.10	1.65	1.59
26	LA	910	A	C4'-C3'	-6.10	1.46	1.53
26	LA	52	A	C2'-C1'	-6.10	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	288	U	O4'-C1'	6.10	1.49	1.41
26	LA	488	G	C1'-N9	-6.10	1.38	1.46
26	LA	651	G	N9-C8	-6.10	1.33	1.37
26	LA	900	A	C5-C4	-6.10	1.34	1.38
26	LA	967	U	C5-C6	6.10	1.39	1.34
26	LA	1247	A	N3-C4	-6.10	1.31	1.34
26	LA	1747	U	C2'-C1'	-6.10	1.46	1.53
2	SA	550	G	C4'-C3'	-6.10	1.46	1.53
4	S2	64	G	C3'-O3'	6.10	1.50	1.42
26	LA	224	U	O5'-C5'	6.10	1.54	1.44
26	LA	530	G	N7-C5	-6.10	1.35	1.39
2	SA	96	U	C3'-O3'	6.10	1.50	1.42
2	SA	579	A	O3'-P	-6.10	1.53	1.61
2	SA	1333	A	O4'-C1'	6.10	1.49	1.41
26	LA	67	U	N1-C2	-6.10	1.33	1.38
26	LA	76	C	N1-C6	6.10	1.40	1.37
26	LA	310	A	C5'-C4'	6.10	1.58	1.51
26	LA	828	U	C1'-N1	-6.10	1.38	1.46
26	LA	1521	G	N3-C4	6.10	1.39	1.35
26	LA	1549	A	C5-C4	-6.10	1.34	1.38
2	SA	958	A	C6-N1	-6.10	1.31	1.35
2	SA	1207	G	O3'-P	-6.10	1.53	1.61
26	LA	1004	U	C2-N3	-6.10	1.33	1.37
26	LA	2330	G	C4'-O4'	-6.10	1.37	1.45
26	LA	2598	A	C6-N6	-6.10	1.29	1.33
2	SA	524	G	C2'-C1'	-6.10	1.46	1.53
2	SA	526	C	N1-C6	6.10	1.40	1.37
26	LA	363	G	N9-C8	-6.10	1.33	1.37
26	LA	977	G	O3'-P	-6.10	1.53	1.61
2	SA	383	A	C8-N7	-6.09	1.27	1.31
2	SA	781	A	C6-N6	6.09	1.38	1.33
25	LB	94	A	P-O5'	-6.09	1.53	1.59
26	LA	592	A	N9-C4	-6.09	1.34	1.37
26	LA	1237	A	C5'-C4'	6.09	1.58	1.51
26	LA	1600	C	C4'-C3'	-6.09	1.46	1.53
26	LA	2134	A	C6-N1	-6.09	1.31	1.35
26	LA	2592	G	C2'-C1'	-6.09	1.46	1.53
26	LA	2645	G	C2-N2	-6.09	1.28	1.34
2	SA	1493	A	P-O5'	6.09	1.65	1.59
25	LB	44	G	C1'-N9	-6.09	1.38	1.46
2	SA	141	G	C5'-C4'	-6.09	1.44	1.51
3	S1	30	U	P-O5'	6.09	1.65	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	15	G	N1-C2	-6.09	1.32	1.37
26	LA	702	U	N1-C6	-6.09	1.32	1.38
26	LA	983	A	C5-C6	-6.09	1.35	1.41
26	LA	1002	G	C6-N1	-6.09	1.35	1.39
26	LA	1214	A	C8-N7	6.09	1.35	1.31
26	LA	1255	U	P-O5'	-6.09	1.53	1.59
2	SA	1095	U	C5'-C4'	6.09	1.58	1.51
2	SA	1471	U	C4-C5	-6.09	1.38	1.43
10	SJ	72	ARG	CD-NE	6.09	1.56	1.46
26	LA	423	A	C3'-O3'	6.09	1.50	1.42
26	LA	2166	U	C5'-C4'	6.09	1.58	1.51
26	LA	2385	C	P-O5'	-6.09	1.53	1.59
2	SA	696	A	N7-C5	-6.09	1.35	1.39
26	LA	137	U	P-O5'	-6.09	1.53	1.59
26	LA	695	G	N9-C4	-6.09	1.33	1.38
26	LA	1168	G	C3'-C2'	6.09	1.59	1.52
26	LA	1240	U	C5-C6	-6.09	1.28	1.34
26	LA	1721	G	P-O5'	-6.09	1.53	1.59
2	SA	29	U	N3-C4	-6.09	1.32	1.38
2	SA	120	A	N3-C4	6.09	1.38	1.34
2	SA	198	G	N7-C5	-6.09	1.35	1.39
2	SA	339	C	O4'-C1'	6.09	1.49	1.41
3	S1	21	U	C4-C5	-6.09	1.38	1.43
26	LA	1091	G	C5-C4	-6.09	1.34	1.38
26	LA	1301	A	C5'-C4'	-6.09	1.44	1.51
26	LA	1339	G	P-O5'	-6.09	1.53	1.59
26	LA	1646	C	C2-N3	-6.09	1.30	1.35
26	LA	1682	G	N9-C8	-6.09	1.33	1.37
26	LA	1780	A	C1'-N9	-6.09	1.38	1.46
26	LA	1794	A	C2'-C1'	-6.09	1.46	1.53
26	LA	1919	A	C6-N1	-6.09	1.31	1.35
26	LA	2776	A	N7-C5	6.09	1.43	1.39
2	SA	242	G	N7-C5	-6.08	1.35	1.39
2	SA	688	G	C4'-C3'	6.08	1.59	1.53
2	SA	1318	A	C6-N1	6.08	1.39	1.35
25	LB	22	U	C1'-N1	6.08	1.57	1.48
26	LA	1087	G	N7-C5	6.08	1.43	1.39
26	LA	1663	G	C2-N3	6.08	1.37	1.32
26	LA	1953	A	C2'-C1'	-6.08	1.46	1.53
2	SA	733	G	O3'-P	-6.08	1.53	1.61
2	SA	763	G	C5'-C4'	6.08	1.58	1.51
2	SA	964	A	C3'-C2'	-6.08	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1493	A	O3'-P	-6.08	1.53	1.61
2	SA	1499	A	C5-C4	-6.08	1.34	1.38
16	SP	35	ARG	CD-NE	6.08	1.56	1.46
23	SR	42	ARG	CD-NE	6.08	1.56	1.46
26	LA	494	G	O4'-C1'	6.08	1.49	1.41
26	LA	1171	G	C1'-N9	6.08	1.57	1.48
26	LA	1202	G	C2'-C1'	-6.08	1.46	1.53
26	LA	1280	G	C5-C4	-6.08	1.34	1.38
26	LA	2029	G	C2-N3	-6.08	1.27	1.32
26	LA	2172	U	C3'-O3'	6.08	1.50	1.42
2	SA	1106	G	N7-C5	-6.08	1.35	1.39
2	SA	1123	U	C2'-C1'	-6.08	1.46	1.53
26	LA	92	U	C2-N3	6.08	1.42	1.37
26	LA	993	G	C8-N7	-6.08	1.27	1.30
26	LA	1538	G	N9-C8	-6.08	1.33	1.37
26	LA	2425	A	O4'-C1'	-6.08	1.33	1.41
26	LA	2559	C	C5-C6	-6.08	1.29	1.34
27	LD	219	VAL	CA-CB	-6.08	1.42	1.54
2	SA	13	U	N3-C4	-6.08	1.32	1.38
25	LB	37	C	C4'-C3'	6.08	1.59	1.53
25	LB	97	C	N1-C2	-6.08	1.34	1.40
26	LA	1004	U	C2'-C1'	-6.08	1.46	1.53
26	LA	1086	A	C5'-C4'	6.08	1.58	1.51
2	SA	31	G	C4'-C3'	6.08	1.59	1.53
2	SA	209	U	N1-C2	6.08	1.44	1.38
2	SA	780	A	C8-N7	-6.08	1.27	1.31
3	S1	57	C	N1-C6	6.08	1.40	1.37
25	LB	104	A	C2'-C1'	-6.08	1.46	1.53
26	LA	140	C	C5-C6	-6.08	1.29	1.34
26	LA	771	G	C8-N7	6.08	1.34	1.30
26	LA	1928	A	C5'-C4'	6.08	1.58	1.51
26	LA	2454	G	N3-C4	-6.08	1.31	1.35
26	LA	2483	C	N3-C4	-6.08	1.29	1.33
2	SA	270	A	C5-C4	-6.08	1.34	1.38
26	LA	800	A	C1'-N9	-6.08	1.38	1.46
26	LA	994	C	C2'-C1'	-6.08	1.46	1.53
26	LA	1675	C	C3'-C2'	-6.08	1.46	1.52
2	SA	266	G	C4'-O4'	-6.08	1.37	1.45
2	SA	914	A	N9-C4	-6.08	1.34	1.37
26	LA	276	U	C2'-C1'	-6.08	1.46	1.53
26	LA	373	U	P-O5'	-6.08	1.53	1.59
26	LA	401	A	C4'-C3'	6.08	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	525	U	C2'-C1'	-6.08	1.46	1.53
26	LA	707	G	C6-N1	-6.08	1.35	1.39
26	LA	796	C	C2'-C1'	-6.08	1.46	1.53
26	LA	857	G	C2-N2	-6.08	1.28	1.34
26	LA	1019	U	N3-C4	-6.08	1.32	1.38
26	LA	2311	A	C6-N6	6.08	1.38	1.33
2	SA	1473	G	C3'-O3'	6.07	1.50	1.42
26	LA	85	G	C4'-O4'	-6.07	1.37	1.45
26	LA	1039	A	N7-C5	6.07	1.42	1.39
26	LA	1165	A	C3'-C2'	-6.07	1.46	1.52
2	SA	813	U	O5'-C5'	6.07	1.54	1.44
26	LA	1194	A	C2-N3	6.07	1.39	1.33
26	LA	2899	A	C2'-C1'	-6.07	1.46	1.53
2	SA	255	G	C4'-C3'	-6.07	1.46	1.53
2	SA	293	G	N7-C5	-6.07	1.35	1.39
2	SA	349	A	C6-N1	-6.07	1.31	1.35
2	SA	656	G	C5-C4	-6.07	1.34	1.38
2	SA	697	U	N1-C6	-6.07	1.32	1.38
26	LA	243	U	P-O5'	6.07	1.65	1.59
26	LA	1313	U	C4'-C3'	6.07	1.59	1.53
26	LA	1366	A	C8-N7	6.07	1.35	1.31
26	LA	1442	U	C5'-C4'	6.07	1.58	1.51
26	LA	1616	A	N9-C4	-6.07	1.34	1.37
26	LA	1982	U	P-O5'	-6.07	1.53	1.59
26	LA	2330	G	N9-C4	-6.07	1.33	1.38
2	SA	55	A	O4'-C1'	6.07	1.49	1.41
2	SA	633	G	N9-C4	6.07	1.42	1.38
26	LA	982	C	C5'-C4'	6.07	1.58	1.51
26	LA	1907	G	C8-N7	6.07	1.34	1.30
2	SA	29	U	C5'-C4'	6.07	1.58	1.51
2	SA	621	A	C1'-N9	-6.07	1.38	1.46
2	SA	1494	G	C5-C6	-6.07	1.36	1.42
26	LA	71	A	C4'-C3'	-6.07	1.46	1.53
26	LA	282	A	N7-C5	-6.07	1.35	1.39
26	LA	451	U	N1-C6	-6.07	1.32	1.38
26	LA	522	A	P-O5'	-6.07	1.53	1.59
26	LA	655	A	C4'-C3'	6.07	1.59	1.53
26	LA	772	C	C2'-C1'	-6.07	1.46	1.53
26	LA	1325	U	P-O5'	-6.07	1.53	1.59
26	LA	1578	U	O4'-C1'	-6.07	1.33	1.41
26	LA	2017	U	C4'-O4'	-6.07	1.37	1.45
26	LA	2249	U	C1'-N1	-6.07	1.38	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2412	A	C5-C4	-6.07	1.34	1.38
26	LA	2724	U	C2-N3	-6.07	1.33	1.37
2	SA	394	G	O3'-P	-6.07	1.53	1.61
2	SA	540	G	N3-C4	-6.07	1.31	1.35
2	SA	776	G	C5'-C4'	6.07	1.58	1.51
2	SA	958	A	P-O5'	-6.07	1.53	1.59
2	SA	1190	G	C2-N2	-6.07	1.28	1.34
26	LA	207	A	C5'-C4'	6.07	1.58	1.51
26	LA	771	G	C1'-N9	-6.07	1.38	1.46
26	LA	803	U	N3-C4	6.07	1.44	1.38
26	LA	891	G	C3'-O3'	6.07	1.50	1.42
26	LA	1373	A	C5-C4	-6.07	1.34	1.38
26	LA	1387	A	N9-C8	6.07	1.42	1.37
26	LA	1417	C	N3-C4	6.07	1.38	1.33
26	LA	1670	C	C4-C5	-6.07	1.38	1.43
26	LA	1987	A	C5-C6	-6.07	1.35	1.41
26	LA	2461	A	C2'-C1'	-6.07	1.46	1.53
26	LA	2687	U	N1-C2	-6.07	1.33	1.38
26	LA	2690	U	C4'-C3'	6.07	1.59	1.53
2	SA	215	C	C3'-O3'	6.06	1.50	1.42
2	SA	1112	C	O3'-P	6.06	1.68	1.61
2	SA	1364	U	C3'-O3'	6.06	1.50	1.42
26	LA	1046	A	C5-C4	6.06	1.43	1.38
26	LA	2215	C	C4-N4	-6.06	1.28	1.33
2	SA	402	G	C5'-C4'	6.06	1.58	1.51
2	SA	542	G	C2-N2	-6.06	1.28	1.34
2	SA	706	A	P-O5'	-6.06	1.53	1.59
2	SA	1013	G	C2'-C1'	-6.06	1.46	1.53
2	SA	1187	G	N7-C5	-6.06	1.35	1.39
26	LA	423	A	N7-C5	-6.06	1.35	1.39
26	LA	848	C	O3'-P	-6.06	1.53	1.61
26	LA	1451	C	C4'-C3'	-6.06	1.46	1.53
26	LA	2813	A	C6-N6	6.06	1.38	1.33
2	SA	370	C	C5'-C4'	6.06	1.58	1.51
2	SA	576	C	O3'-P	-6.06	1.53	1.61
2	SA	676	A	C5-C4	-6.06	1.34	1.38
2	SA	1290	G	C3'-O3'	6.06	1.50	1.42
2	SA	1478	U	N3-C4	-6.06	1.32	1.38
2	SA	1541	U	C2-N3	-6.06	1.33	1.37
26	LA	780	G	C4'-C3'	-6.06	1.46	1.53
26	LA	1316	U	C5'-C4'	6.06	1.58	1.51
44	LF	158	PHE	CB-CG	-6.06	1.41	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	685	G	O4'-C1'	6.06	1.49	1.41
2	SA	847	G	C5'-C4'	6.06	1.58	1.51
2	SA	953	G	C2-N3	6.06	1.37	1.32
26	LA	1496	A	N9-C4	-6.06	1.34	1.37
26	LA	2170	A	C5'-C4'	6.06	1.58	1.51
2	SA	70	U	C5'-C4'	6.06	1.58	1.51
2	SA	314	C	C4-C5	-6.06	1.38	1.43
2	SA	473	U	O4'-C1'	6.06	1.49	1.41
2	SA	614	C	C4-N4	-6.06	1.28	1.33
18	SB	103	TRP	CB-CG	6.06	1.61	1.50
26	LA	249	C	C4'-C3'	-6.06	1.46	1.53
26	LA	349	U	C2'-C1'	-6.06	1.46	1.53
26	LA	431	U	N1-C6	6.06	1.43	1.38
26	LA	801	G	C5-C4	-6.06	1.34	1.38
26	LA	1164	C	C4'-C3'	-6.06	1.46	1.53
26	LA	338	G	C5-C4	-6.06	1.34	1.38
2	SA	16	A	C6-N1	-6.05	1.31	1.35
2	SA	76	G	C5'-C4'	6.05	1.58	1.51
2	SA	264	C	C5'-C4'	6.05	1.58	1.51
2	SA	1533	C	P-O5'	-6.05	1.53	1.59
4	S2	4	G	C6-N1	-6.05	1.35	1.39
26	LA	919	U	C4'-O4'	-6.05	1.37	1.45
26	LA	1850	G	N3-C4	-6.05	1.31	1.35
26	LA	1905	C	N3-C4	6.05	1.38	1.33
26	LA	2259	U	P-O5'	-6.05	1.53	1.59
26	LA	2291	U	C3'-O3'	6.05	1.50	1.42
26	LA	2682	A	C5'-C4'	6.05	1.58	1.51
26	LA	2713	U	N1-C6	6.05	1.43	1.38
26	LA	2786	U	N3-C4	-6.05	1.33	1.38
4	S2	32	G	O4'-C1'	-6.05	1.33	1.41
26	LA	1020	A	C3'-O3'	6.05	1.50	1.42
26	LA	1317	G	C8-N7	6.05	1.34	1.30
2	SA	135	C	C5-C6	-6.05	1.29	1.34
2	SA	449	G	C8-N7	-6.05	1.27	1.30
26	LA	270	A	C8-N7	6.05	1.35	1.31
26	LA	943	A	P-O5'	-6.05	1.53	1.59
26	LA	988	A	C2'-C1'	-6.05	1.46	1.53
26	LA	1039	A	C8-N7	-6.05	1.27	1.31
26	LA	1264	A	C4'-C3'	-6.05	1.46	1.53
26	LA	2487	G	C2'-C1'	-6.05	1.46	1.53
26	LA	2736	A	C5-C4	6.05	1.43	1.38
26	LA	2799	A	C2'-C1'	6.05	1.60	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	217	C	C3'-O3'	6.05	1.50	1.42
2	SA	660	C	C4-N4	-6.05	1.28	1.33
2	SA	817	C	C2'-C1'	-6.05	1.46	1.53
2	SA	1165	U	P-O5'	-6.05	1.53	1.59
26	LA	1073	A	C5-C4	6.05	1.43	1.38
26	LA	1627	G	N9-C8	-6.05	1.33	1.37
26	LA	1836	C	C4'-O4'	-6.05	1.37	1.45
26	LA	2389	G	C2-N2	-6.05	1.28	1.34
2	SA	450	G	C8-N7	6.05	1.34	1.30
2	SA	1342	C	C5-C6	6.05	1.39	1.34
2	SA	1488	G	C3'-C2'	-6.05	1.46	1.52
26	LA	809	G	N9-C8	6.05	1.42	1.37
26	LA	881	G	C2-N3	6.05	1.37	1.32
26	LA	1215	G	N3-C4	6.05	1.39	1.35
26	LA	2593	U	N3-C4	6.05	1.43	1.38
2	SA	700	G	C2-N2	-6.05	1.28	1.34
2	SA	1052	U	C4-C5	-6.05	1.38	1.43
2	SA	1271	A	C5-C4	6.05	1.43	1.38
2	SA	1452	C	C4-C5	6.05	1.47	1.43
26	LA	1095	A	N9-C4	-6.05	1.34	1.37
26	LA	2392	A	O3'-P	-6.05	1.53	1.61
26	LA	2699	C	C2-N3	6.05	1.40	1.35
2	SA	441	A	C2-N3	6.04	1.39	1.33
2	SA	486	U	C4'-O4'	6.04	1.53	1.45
2	SA	1075	U	N1-C6	-6.04	1.32	1.38
4	S2	47	A	C5-C4	6.04	1.43	1.38
26	LA	504	A	C6-N6	6.04	1.38	1.33
26	LA	1211	C	N1-C2	-6.04	1.34	1.40
26	LA	1428	C	C4'-O4'	-6.04	1.37	1.45
26	LA	2160	C	C4'-O4'	6.04	1.53	1.45
2	SA	117	G	C2-N2	-6.04	1.28	1.34
2	SA	158	G	C2'-C1'	-6.04	1.46	1.53
2	SA	354	G	N1-C2	-6.04	1.32	1.37
2	SA	740	U	C2'-O2'	-6.04	1.33	1.41
2	SA	1396	A	C5'-C4'	6.04	1.58	1.51
26	LA	616	A	C6-N1	6.04	1.39	1.35
26	LA	1435	G	C8-N7	6.04	1.34	1.30
26	LA	1651	G	N9-C8	-6.04	1.33	1.37
26	LA	1773	A	N9-C8	-6.04	1.32	1.37
26	LA	2162	G	N3-C4	-6.04	1.31	1.35
26	LA	2224	G	O4'-C1'	-6.04	1.33	1.41
2	SA	189	A	N9-C8	-6.04	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	423	G	O3'-P	-6.04	1.53	1.61
2	SA	782	A	O3'-P	-6.04	1.53	1.61
2	SA	1116	U	C4-C5	-6.04	1.38	1.43
26	LA	345	A	C2'-C1'	-6.04	1.46	1.53
26	LA	871	U	C4'-O4'	6.04	1.53	1.45
26	LA	1133	A	C5-C4	-6.04	1.34	1.38
26	LA	1534	U	C4'-C3'	6.04	1.59	1.53
26	LA	2101	A	N3-C4	6.04	1.38	1.34
2	SA	95	C	C4-C5	6.04	1.47	1.43
2	SA	746	A	C8-N7	-6.04	1.27	1.31
26	LA	2451	A	C6-N1	6.04	1.39	1.35
2	SA	408	A	C6-N1	6.04	1.39	1.35
2	SA	936	C	P-O5'	6.04	1.65	1.59
26	LA	132	G	C5-C4	-6.04	1.34	1.38
26	LA	248	G	O3'-P	-6.04	1.53	1.61
26	LA	755	U	C2'-C1'	-6.04	1.46	1.53
26	LA	1376	C	C5'-C4'	6.04	1.58	1.51
26	LA	1491	G	C5-C4	6.04	1.42	1.38
26	LA	1618	C	P-O5'	-6.04	1.53	1.59
26	LA	2124	G	C4'-C3'	6.04	1.59	1.53
26	LA	2207	C	C4'-C3'	6.04	1.59	1.53
2	SA	601	G	C5-C6	6.04	1.48	1.42
21	SE	99	SER	CB-OG	6.04	1.50	1.42
26	LA	1217	U	C4'-O4'	-6.04	1.37	1.45
26	LA	2509	G	C5'-C4'	6.04	1.58	1.51
26	LA	2680	U	C1'-N1	-6.04	1.38	1.46
26	LA	2837	A	N7-C5	6.04	1.42	1.39
2	SA	394	G	C8-N7	6.04	1.34	1.30
2	SA	570	G	C8-N7	-6.04	1.27	1.30
2	SA	926	G	C4'-O4'	6.04	1.53	1.45
2	SA	1243	C	C2'-C1'	6.04	1.59	1.53
26	LA	335	C	C4-C5	-6.04	1.38	1.43
26	LA	1112	G	C5-C4	6.04	1.42	1.38
26	LA	1416	G	C5-C4	6.04	1.42	1.38
26	LA	2042	A	C2'-C1'	-6.04	1.46	1.53
26	LA	2279	G	C5'-C4'	6.04	1.58	1.51
26	LA	2382	G	C5'-C4'	6.04	1.58	1.51
47	LJ	124	ARG	CZ-NH1	6.04	1.40	1.33
2	SA	814	A	C5-C4	6.03	1.43	1.38
2	SA	1404	C	C4-N4	-6.03	1.28	1.33
26	LA	33	C	C3'-C2'	-6.03	1.46	1.52
26	LA	148	U	P-O5'	-6.03	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	181	A	P-O5'	6.03	1.65	1.59
26	LA	655	A	C8-N7	-6.03	1.27	1.31
26	LA	984	A	C6-N1	-6.03	1.31	1.35
26	LA	1068	G	N1-C2	-6.03	1.32	1.37
26	LA	2865	U	C4-C5	6.03	1.49	1.43
2	SA	362	G	C2'-C1'	-6.03	1.46	1.53
2	SA	426	U	C2-N3	-6.03	1.33	1.37
2	SA	1118	U	C1'-N1	6.03	1.57	1.48
2	SA	1316	G	C4'-C3'	-6.03	1.46	1.53
26	LA	2874	C	C3'-C2'	6.03	1.59	1.52
2	SA	172	A	N7-C5	-6.03	1.35	1.39
2	SA	176	C	C5-C6	6.03	1.39	1.34
2	SA	383	A	C5'-C4'	6.03	1.58	1.51
2	SA	414	A	N9-C4	6.03	1.41	1.37
2	SA	1404	C	C4'-C3'	-6.03	1.46	1.53
26	LA	27	G	C2'-C1'	-6.03	1.46	1.53
26	LA	410	G	C6-O6	-6.03	1.18	1.24
26	LA	733	G	C3'-C2'	-6.03	1.46	1.52
26	LA	782	A	C2-N3	-6.03	1.28	1.33
26	LA	2773	C	N3-C4	-6.03	1.29	1.33
26	LA	1000	A	N9-C8	-6.03	1.32	1.37
26	LA	2826	A	N9-C4	-6.03	1.34	1.37
2	SA	381	C	N1-C2	6.03	1.46	1.40
2	SA	907	A	C1'-N9	-6.03	1.38	1.46
2	SA	1411	C	P-O5'	-6.03	1.53	1.59
26	LA	1419	A	C4'-O4'	-6.03	1.37	1.45
26	LA	1604	C	O3'-P	-6.03	1.53	1.61
26	LA	1874	C	P-O5'	-6.03	1.53	1.59
26	LA	2166	U	C4'-C3'	6.03	1.59	1.53
26	LA	2528	U	O3'-P	-6.03	1.53	1.61
2	SA	369	G	N9-C8	-6.03	1.33	1.37
25	LB	46	A	C4'-C3'	6.03	1.59	1.53
26	LA	499	U	N3-C4	-6.03	1.33	1.38
26	LA	590	A	C6-N1	-6.03	1.31	1.35
2	SA	310	G	C2'-C1'	-6.02	1.46	1.53
2	SA	772	U	C2'-C1'	-6.02	1.46	1.53
2	SA	816	A	C8-N7	-6.02	1.27	1.31
2	SA	879	C	C2-N3	-6.02	1.30	1.35
2	SA	1007	U	C5'-C4'	6.02	1.58	1.51
26	LA	2182	U	C2-N3	-6.02	1.33	1.37
26	LA	2483	C	N1-C2	-6.02	1.34	1.40
26	LA	2535	G	C5-C4	-6.02	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	37	U	C2-N3	-6.02	1.33	1.37
2	SA	65	A	C3'-O3'	6.02	1.50	1.42
2	SA	1035	A	C5'-C4'	6.02	1.58	1.51
4	S2	10	G	N9-C8	6.02	1.42	1.37
25	LB	73	A	N3-C4	-6.02	1.31	1.34
26	LA	613	A	C2'-C1'	-6.02	1.46	1.53
26	LA	1011	G	N1-C2	6.02	1.42	1.37
26	LA	1521	G	C5-C4	-6.02	1.34	1.38
26	LA	1526	C	C3'-C2'	6.02	1.59	1.52
26	LA	1675	C	C4-N4	-6.02	1.28	1.33
26	LA	1682	G	C5-C4	-6.02	1.34	1.38
26	LA	2673	G	P-O5'	-6.02	1.53	1.59
26	LA	2860	A	C5'-C4'	6.02	1.58	1.51
2	SA	1487	G	C5'-C4'	-6.02	1.44	1.51
26	LA	2264	C	N1-C6	-6.02	1.33	1.37
2	SA	671	G	C5-C4	-6.02	1.34	1.38
2	SA	802	A	N1-C2	6.02	1.39	1.34
26	LA	4	U	P-O5'	-6.02	1.53	1.59
26	LA	355	U	N3-C4	6.02	1.43	1.38
26	LA	425	G	P-O5'	-6.02	1.53	1.59
26	LA	1046	A	C5'-C4'	6.02	1.58	1.51
26	LA	1622	G	O5'-C5'	6.02	1.54	1.44
26	LA	2485	G	C6-N1	6.02	1.43	1.39
2	SA	145	G	C2-N2	-6.02	1.28	1.34
2	SA	326	G	O3'-P	-6.02	1.53	1.61
26	LA	239	C	C4-N4	-6.02	1.28	1.33
26	LA	977	G	C5-C4	-6.02	1.34	1.38
26	LA	119	A	C6-N1	-6.02	1.31	1.35
26	LA	1074	G	C2-N3	-6.02	1.27	1.32
2	SA	698	G	C5-C4	-6.01	1.34	1.38
2	SA	890	G	N7-C5	-6.01	1.35	1.39
2	SA	1113	C	C2'-C1'	-6.01	1.46	1.53
2	SA	1158	C	N1-C2	6.01	1.46	1.40
26	LA	676	A	C5-C4	-6.01	1.34	1.38
26	LA	1595	C	O3'-P	-6.01	1.53	1.61
26	LA	1834	U	C3'-C2'	-6.01	1.46	1.52
26	LA	2148	G	N9-C4	6.01	1.42	1.38
26	LA	964	C	C3'-C2'	-6.01	1.46	1.52
26	LA	2304	G	N7-C5	6.01	1.42	1.39
26	LA	2839	G	N9-C8	-6.01	1.33	1.37
2	SA	26	A	N3-C4	-6.01	1.31	1.34
2	SA	1482	G	C5'-C4'	6.01	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	48	C	C4'-O4'	6.01	1.53	1.45
26	LA	51	G	C5'-C4'	6.01	1.58	1.51
26	LA	117	G	C3'-C2'	-6.01	1.46	1.52
26	LA	247	G	C2-N2	-6.01	1.28	1.34
26	LA	336	C	C4'-O4'	6.01	1.53	1.45
26	LA	1069	A	C4'-C3'	-6.01	1.46	1.53
26	LA	1524	G	C6-N1	-6.01	1.35	1.39
26	LA	2083	G	N1-C2	-6.01	1.32	1.37
26	LA	2553	G	C4'-O4'	-6.01	1.37	1.45
2	SA	304	U	C2-N3	-6.01	1.33	1.37
2	SA	577	G	O4'-C1'	-6.01	1.33	1.41
2	SA	1072	G	C2'-O2'	-6.01	1.33	1.41
2	SA	1426	G	C3'-C2'	-6.01	1.46	1.52
4	S2	40	C	C4-C5	-6.01	1.38	1.43
26	LA	93	G	C5-C4	6.01	1.42	1.38
26	LA	1174	U	C3'-O3'	6.01	1.50	1.42
26	LA	1538	G	P-O5'	6.01	1.65	1.59
26	LA	1541	C	C2-N3	-6.01	1.30	1.35
26	LA	2881	U	C5'-C4'	6.01	1.58	1.51
2	SA	204	G	N7-C5	-6.01	1.35	1.39
2	SA	1000	A	C6-N1	-6.01	1.31	1.35
2	SA	1058	G	N1-C2	6.01	1.42	1.37
2	SA	1437	A	O3'-P	-6.01	1.53	1.61
26	LA	1218	G	C3'-C2'	6.01	1.59	1.52
26	LA	1494	A	N9-C4	6.01	1.41	1.37
26	LA	1954	G	N1-C2	-6.01	1.32	1.37
2	SA	102	G	O3'-P	-6.01	1.53	1.61
4	S2	29	C	N1-C6	-6.01	1.33	1.37
26	LA	73	A	N3-C4	-6.01	1.31	1.34
26	LA	922	C	C2'-C1'	-6.01	1.46	1.53
26	LA	1163	G	C3'-C2'	-6.01	1.46	1.52
26	LA	1570	A	N9-C8	-6.01	1.32	1.37
26	LA	1707	G	P-O5'	-6.01	1.53	1.59
26	LA	2169	A	O3'-P	-6.01	1.53	1.61
2	SA	1207	G	C2-N2	-6.00	1.28	1.34
26	LA	1148	U	C5-C6	6.00	1.39	1.34
26	LA	1401	G	C5-C4	-6.00	1.34	1.38
26	LA	2563	U	C3'-O3'	6.00	1.50	1.42
2	SA	451	A	C5'-C4'	6.00	1.58	1.51
2	SA	1163	A	C5-C4	-6.00	1.34	1.38
26	LA	141	G	N7-C5	6.00	1.42	1.39
26	LA	497	A	C1'-N9	-6.00	1.38	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	634	C	C4-C5	-6.00	1.38	1.43
26	LA	652	U	C5-C6	-6.00	1.28	1.34
26	LA	1214	A	N3-C4	-6.00	1.31	1.34
26	LA	1921	G	C5'-C4'	6.00	1.58	1.51
2	SA	253	A	C6-N6	-6.00	1.29	1.33
2	SA	760	G	N7-C5	-6.00	1.35	1.39
2	SA	765	G	N1-C2	-6.00	1.32	1.37
2	SA	786	G	C4'-C3'	-6.00	1.46	1.52
2	SA	799	G	C2-N3	-6.00	1.27	1.32
2	SA	1228	C	C4'-C3'	-6.00	1.46	1.52
4	S2	59	A	N3-C4	-6.00	1.31	1.34
13	SM	62	PHE	CB-CG	-6.00	1.41	1.51
26	LA	74	A	C5-C6	-6.00	1.35	1.41
26	LA	125	A	C8-N7	6.00	1.35	1.31
26	LA	777	G	N1-C2	-6.00	1.32	1.37
26	LA	1992	G	N3-C4	-6.00	1.31	1.35
26	LA	2620	C	N3-C4	6.00	1.38	1.33
26	LA	2784	U	P-O5'	-6.00	1.53	1.59
2	SA	868	C	C5'-C4'	6.00	1.58	1.51
2	SA	930	C	C3'-O3'	6.00	1.50	1.42
2	SA	1116	U	C5'-C4'	6.00	1.58	1.51
2	SA	1196	A	C5'-C4'	6.00	1.58	1.51
2	SA	1297	G	N3-C4	6.00	1.39	1.35
26	LA	841	G	N9-C4	-6.00	1.33	1.38
26	LA	1021	A	N9-C8	-6.00	1.32	1.37
26	LA	2866	U	P-O5'	-6.00	1.53	1.59
2	SA	905	U	C4-C5	-6.00	1.38	1.43
2	SA	924	C	C4'-O4'	6.00	1.53	1.45
26	LA	716	A	C5-C4	-6.00	1.34	1.38
26	LA	794	A	C4'-O4'	-6.00	1.37	1.45
26	LA	845	A	N1-C2	-6.00	1.28	1.34
26	LA	891	G	N3-C4	6.00	1.39	1.35
26	LA	933	A	C6-N6	6.00	1.38	1.33
26	LA	954	G	N9-C4	-6.00	1.33	1.38
26	LA	1018	U	C2'-C1'	-6.00	1.46	1.53
26	LA	1779	U	C4'-O4'	-6.00	1.37	1.45
26	LA	2643	G	N7-C5	-6.00	1.35	1.39
44	LF	49	ARG	CZ-NH2	-6.00	1.25	1.33
2	SA	68	G	C2-N2	-6.00	1.28	1.34
2	SA	293	G	O3'-P	-6.00	1.53	1.61
26	LA	204	A	C4'-C3'	6.00	1.59	1.53
26	LA	407	G	N9-C8	-6.00	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	507	A	N9-C4	-6.00	1.34	1.37
26	LA	629	G	N1-C2	-6.00	1.32	1.37
26	LA	2751	G	C4'-C3'	6.00	1.59	1.53
26	LA	719	C	P-O5'	-6.00	1.53	1.59
2	SA	844	G	C2-N2	-5.99	1.28	1.34
3	S1	50	U	C4'-C3'	5.99	1.59	1.53
4	S2	60	A	N7-C5	-5.99	1.35	1.39
25	LB	6	G	C5'-C4'	5.99	1.58	1.51
26	LA	282	A	C6-N6	-5.99	1.29	1.33
26	LA	293	U	C5-C6	-5.99	1.28	1.34
26	LA	712	G	N3-C4	5.99	1.39	1.35
26	LA	2226	C	C4'-O4'	-5.99	1.37	1.45
26	LA	2775	G	C6-N1	5.99	1.43	1.39
2	SA	938	A	C3'-C2'	-5.99	1.46	1.52
26	LA	1162	G	C8-N7	-5.99	1.27	1.30
26	LA	2846	G	C5-C6	-5.99	1.36	1.42
2	SA	755	G	C8-N7	-5.99	1.27	1.30
2	SA	1139	G	N7-C5	-5.99	1.35	1.39
2	SA	1163	A	C3'-C2'	5.99	1.59	1.52
2	SA	1498	U	C4'-C3'	-5.99	1.46	1.52
25	LB	64	G	C6-N1	5.99	1.43	1.39
26	LA	268	C	P-O5'	-5.99	1.53	1.59
26	LA	564	C	P-O5'	-5.99	1.53	1.59
26	LA	669	G	C2-N3	-5.99	1.27	1.32
26	LA	764	A	N3-C4	-5.99	1.31	1.34
26	LA	1046	A	N7-C5	5.99	1.42	1.39
26	LA	1841	U	C3'-C2'	-5.99	1.46	1.52
26	LA	2506	U	P-O5'	5.99	1.65	1.59
26	LA	2858	C	C2-N3	5.99	1.40	1.35
2	SA	326	G	C3'-O3'	5.99	1.50	1.42
26	LA	58	G	C5'-C4'	-5.99	1.44	1.51
26	LA	215	G	C5-C6	-5.99	1.36	1.42
26	LA	450	G	C5'-C4'	5.99	1.58	1.51
26	LA	628	G	N3-C4	-5.99	1.31	1.35
26	LA	1459	G	C5-C4	5.99	1.42	1.38
26	LA	1465	G	O3'-P	-5.99	1.53	1.61
26	LA	1548	A	C5'-C4'	5.99	1.58	1.51
26	LA	1597	A	N7-C5	-5.99	1.35	1.39
26	LA	1924	C	P-O5'	-5.99	1.53	1.59
56	LR	1	SER	N-CA	5.99	1.58	1.46
26	LA	334	C	C2-N3	-5.99	1.30	1.35
26	LA	909	A	N9-C4	-5.99	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	928	A	N3-C4	-5.99	1.31	1.34
2	SA	525	C	C5'-C4'	5.99	1.58	1.51
2	SA	940	C	O3'-P	-5.99	1.53	1.61
2	SA	1524	C	C4-C5	-5.99	1.38	1.43
26	LA	125	A	C6-N1	-5.99	1.31	1.35
26	LA	215	G	N9-C4	-5.99	1.33	1.38
26	LA	266	G	C5'-C4'	5.99	1.58	1.51
26	LA	1374	G	C5-C6	-5.99	1.36	1.42
26	LA	2209	G	C5-C4	5.99	1.42	1.38
2	SA	883	C	C1'-N1	-5.98	1.38	1.46
4	S2	16	C	C2'-C1'	-5.98	1.46	1.53
25	LB	107	G	C2-N3	5.98	1.37	1.32
26	LA	68	G	N7-C5	5.98	1.42	1.39
26	LA	792	A	N9-C4	-5.98	1.34	1.37
26	LA	1127	A	C6-N1	-5.98	1.31	1.35
26	LA	2825	G	N9-C8	-5.98	1.33	1.37
34	L0	59	GLU	CB-CG	5.98	1.63	1.52
2	SA	444	G	C2-N2	-5.98	1.28	1.34
2	SA	928	G	N9-C8	-5.98	1.33	1.37
2	SA	1132	C	P-O5'	-5.98	1.53	1.59
7	SG	43	TYR	CE2-CZ	-5.98	1.30	1.38
24	S3	476	PHE	CG-CD1	5.98	1.47	1.38
25	LB	78	A	C6-N1	-5.98	1.31	1.35
26	LA	36	G	C5-C6	5.98	1.48	1.42
26	LA	597	G	C6-N1	5.98	1.43	1.39
26	LA	882	G	P-O5'	5.98	1.65	1.59
26	LA	2085	U	C2-N3	-5.98	1.33	1.37
26	LA	2379	G	C2-N3	-5.98	1.27	1.32
2	SA	170	U	N1-C6	-5.98	1.32	1.38
7	SG	145	GLU	CD-OE2	5.98	1.32	1.25
26	LA	642	U	C5-C6	-5.98	1.28	1.34
26	LA	908	C	N3-C4	5.98	1.38	1.33
26	LA	1115	G	C4'-O4'	5.98	1.53	1.45
26	LA	1131	G	N7-C5	-5.98	1.35	1.39
26	LA	1479	G	N9-C8	-5.98	1.33	1.37
26	LA	1902	C	N1-C2	-5.98	1.34	1.40
26	LA	2647	U	O3'-P	-5.98	1.53	1.61
26	LA	2706	A	N3-C4	5.98	1.38	1.34
26	LA	2886	A	C5-C4	5.98	1.43	1.38
2	SA	854	U	C3'-O3'	5.98	1.50	1.42
2	SA	1415	G	C4'-C3'	5.98	1.59	1.53
26	LA	774	G	P-O5'	-5.98	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1146	C	O3'-P	-5.98	1.53	1.61
26	LA	1525	A	C6-N1	-5.98	1.31	1.35
2	SA	576	C	C2-N3	-5.98	1.30	1.35
23	SR	5	ARG	CD-NE	5.98	1.56	1.46
26	LA	358	U	O3'-P	-5.98	1.53	1.61
26	LA	1459	G	N7-C5	5.98	1.42	1.39
26	LA	1613	G	N3-C4	-5.98	1.31	1.35
26	LA	2282	G	C2-N2	-5.98	1.28	1.34
26	LA	2416	C	N1-C2	5.98	1.46	1.40
26	LA	2858	C	C5'-C4'	5.98	1.58	1.51
26	LA	2601	C	C3'-O3'	-5.98	1.33	1.42
2	SA	821	G	C5'-C4'	5.97	1.58	1.51
2	SA	1439	G	C4'-C3'	5.97	1.59	1.53
26	LA	134	G	C8-N7	-5.97	1.27	1.30
26	LA	605	G	C3'-O3'	5.97	1.50	1.42
26	LA	1241	A	C6-N6	-5.97	1.29	1.33
26	LA	1383	A	C6-N1	-5.97	1.31	1.35
26	LA	1965	C	C4-C5	-5.97	1.38	1.43
26	LA	2668	G	C2'-O2'	5.97	1.49	1.41
26	LA	2802	G	N9-C4	5.97	1.42	1.38
3	S1	37	G	C5'-C4'	5.97	1.58	1.51
4	S2	12	G	C6-N1	5.97	1.43	1.39
26	LA	1041	G	N3-C4	-5.97	1.31	1.35
26	LA	2314	A	N9-C4	-5.97	1.34	1.37
26	LA	2696	U	C5'-C4'	5.97	1.58	1.51
26	LA	2882	A	C1'-N9	-5.97	1.38	1.46
2	SA	209	U	C2'-C1'	5.97	1.59	1.53
2	SA	708	C	C2-N3	-5.97	1.30	1.35
26	LA	592	A	O3'-P	-5.97	1.53	1.61
26	LA	1333	G	C5-C4	-5.97	1.34	1.38
2	SA	3	A	N9-C8	5.97	1.42	1.37
2	SA	641	U	O3'-P	-5.97	1.53	1.61
2	SA	908	A	C3'-C2'	-5.97	1.46	1.52
2	SA	1062	U	C4-C5	5.97	1.49	1.43
2	SA	1131	G	C3'-C2'	-5.97	1.46	1.52
2	SA	1199	U	C2'-C1'	-5.97	1.46	1.53
26	LA	37	C	C5'-C4'	5.97	1.58	1.51
26	LA	54	G	C2-N2	-5.97	1.28	1.34
26	LA	460	A	N3-C4	-5.97	1.31	1.34
26	LA	2217	G	N9-C4	5.97	1.42	1.38
23	SR	4	PHE	CG-CD2	5.97	1.47	1.38
26	LA	744	U	N3-C4	-5.97	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1014	A	C2'-C1'	-5.97	1.46	1.53
26	LA	1658	C	N3-C4	5.97	1.38	1.33
26	LA	2007	U	P-O5'	-5.97	1.53	1.59
26	LA	2012	G	C5-C4	-5.97	1.34	1.38
2	SA	68	G	C6-N1	-5.97	1.35	1.39
2	SA	748	G	C2-N3	-5.97	1.27	1.32
2	SA	830	G	O4'-C1'	5.97	1.49	1.41
2	SA	1232	U	C4'-C3'	5.97	1.59	1.53
2	SA	1323	G	C3'-O3'	5.97	1.50	1.42
26	LA	124	G	N9-C4	-5.97	1.33	1.38
26	LA	702	U	N1-C2	-5.97	1.33	1.38
26	LA	1597	A	C6-N1	-5.97	1.31	1.35
26	LA	1794	A	C5'-C4'	5.97	1.58	1.51
2	SA	93	U	C2'-C1'	-5.96	1.46	1.53
2	SA	925	G	N1-C2	-5.96	1.32	1.37
2	SA	1241	G	C5-C4	5.96	1.42	1.38
2	SA	1442	G	C4'-C3'	5.96	1.59	1.53
25	LB	34	A	C2'-C1'	-5.96	1.46	1.53
26	LA	400	G	C5-C4	-5.96	1.34	1.38
26	LA	626	A	C6-N1	-5.96	1.31	1.35
26	LA	1742	U	C5'-C4'	5.96	1.58	1.51
26	LA	2270	A	C3'-C2'	-5.96	1.46	1.52
26	LA	2644	G	C8-N7	5.96	1.34	1.30
26	LA	53	A	N7-C5	-5.96	1.35	1.39
26	LA	344	A	N3-C4	-5.96	1.31	1.34
26	LA	1121	C	O3'-P	-5.96	1.53	1.61
26	LA	1177	G	C8-N7	-5.96	1.27	1.30
26	LA	1481	U	C2-N3	5.96	1.42	1.37
26	LA	1836	C	O3'-P	-5.96	1.53	1.61
26	LA	2530	A	C8-N7	-5.96	1.27	1.31
38	LE	15	PHE	CB-CG	-5.96	1.41	1.51
2	SA	74	A	N9-C4	5.96	1.41	1.37
2	SA	111	G	C6-N1	-5.96	1.35	1.39
2	SA	1509	C	C4-C5	5.96	1.47	1.43
4	S2	25	U	O3'-P	-5.96	1.53	1.61
26	LA	480	A	N7-C5	-5.96	1.35	1.39
26	LA	585	G	C2-N3	5.96	1.37	1.32
26	LA	761	A	C2'-C1'	-5.96	1.46	1.53
26	LA	958	U	C2'-C1'	-5.96	1.46	1.53
26	LA	1303	G	C5-C4	-5.96	1.34	1.38
26	LA	1445	G	C6-N1	-5.96	1.35	1.39
26	LA	1573	G	N9-C4	-5.96	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1825	U	O3'-P	-5.96	1.53	1.61
2	SA	418	C	N1-C6	5.96	1.40	1.37
26	LA	1339	G	C1'-N9	-5.96	1.38	1.46
26	LA	2165	C	N1-C6	5.96	1.40	1.37
2	SA	275	G	C2-N2	-5.96	1.28	1.34
2	SA	596	A	N3-C4	5.96	1.38	1.34
2	SA	743	A	N9-C4	-5.96	1.34	1.37
2	SA	1176	A	O3'-P	-5.96	1.54	1.61
22	SF	49	TYR	CB-CG	-5.96	1.42	1.51
26	LA	593	U	N3-C4	-5.96	1.33	1.38
26	LA	962	G	C2'-C1'	-5.96	1.46	1.53
26	LA	966	G	N9-C8	-5.96	1.33	1.37
26	LA	2363	G	C1'-N9	-5.96	1.38	1.46
26	LA	2551	C	N1-C6	-5.96	1.33	1.37
2	SA	741	G	C2'-C1'	-5.96	1.46	1.53
26	LA	780	G	O3'-P	-5.96	1.54	1.61
26	LA	879	G	N7-C5	-5.96	1.35	1.39
26	LA	1225	G	N3-C4	5.96	1.39	1.35
26	LA	1942	C	P-O5'	5.96	1.65	1.59
2	SA	794	A	C8-N7	-5.96	1.27	1.31
2	SA	1193	G	C2-N3	-5.96	1.27	1.32
2	SA	1283	U	C5'-C4'	5.96	1.58	1.51
26	LA	301	G	P-O5'	-5.96	1.53	1.59
26	LA	1331	G	N1-C2	-5.96	1.32	1.37
2	SA	201	G	C2-N2	-5.95	1.28	1.34
2	SA	1099	G	N7-C5	-5.95	1.35	1.39
2	SA	1421	G	N7-C5	-5.95	1.35	1.39
26	LA	277	G	C6-O6	-5.95	1.18	1.24
26	LA	403	U	P-O5'	5.95	1.65	1.59
26	LA	767	U	N1-C2	-5.95	1.33	1.38
26	LA	1681	G	N9-C8	-5.95	1.33	1.37
26	LA	1906	G	C4'-O4'	5.95	1.53	1.45
26	LA	2683	C	O3'-P	-5.95	1.54	1.61
2	SA	184	G	C5'-C4'	5.95	1.58	1.51
2	SA	1431	A	C4'-C3'	-5.95	1.46	1.52
26	LA	973	A	C2'-O2'	-5.95	1.33	1.41
26	LA	2676	C	C5'-C4'	5.95	1.58	1.51
2	SA	119	A	P-O5'	-5.95	1.53	1.59
2	SA	548	G	N9-C8	5.95	1.42	1.37
2	SA	633	G	C5-C6	5.95	1.48	1.42
2	SA	1244	G	N1-C2	5.95	1.42	1.37
2	SA	1325	C	C5-C6	-5.95	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1354	U	C5'-C4'	5.95	1.58	1.51
4	S2	22	A	O3'-P	-5.95	1.54	1.61
26	LA	474	G	O3'-P	-5.95	1.54	1.61
26	LA	544	C	O3'-P	-5.95	1.54	1.61
26	LA	691	C	C4-N4	5.95	1.39	1.33
26	LA	928	A	O4'-C1'	-5.95	1.33	1.41
26	LA	1012	U	N3-C4	-5.95	1.33	1.38
26	LA	1866	A	C2-N3	-5.95	1.28	1.33
26	LA	1938	A	C5-C6	-5.95	1.35	1.41
26	LA	2432	A	P-O5'	-5.95	1.53	1.59
2	SA	148	G	C4'-O4'	-5.95	1.37	1.45
2	SA	360	G	N7-C5	-5.95	1.35	1.39
2	SA	821	G	N9-C8	5.95	1.42	1.37
26	LA	9	G	C1'-N9	-5.95	1.38	1.46
26	LA	164	C	P-O5'	-5.95	1.53	1.59
26	LA	171	U	O3'-P	-5.95	1.54	1.61
26	LA	497	A	C6-N1	-5.95	1.31	1.35
26	LA	509	C	P-O5'	-5.95	1.53	1.59
26	LA	1249	U	C2-N3	-5.95	1.33	1.37
26	LA	1492	G	C4'-O4'	5.95	1.53	1.45
26	LA	1995	U	P-O5'	5.95	1.65	1.59
26	LA	2022	U	C4'-C3'	-5.95	1.46	1.52
26	LA	2579	C	P-O5'	-5.95	1.53	1.59
25	LB	28	C	C4-C5	5.95	1.47	1.43
26	LA	240	C	C1'-N1	5.95	1.57	1.48
26	LA	1395	A	C1'-N9	-5.95	1.38	1.46
26	LA	2357	G	C2-N3	5.95	1.37	1.32
26	LA	2711	A	C3'-C2'	-5.95	1.46	1.52
2	SA	313	A	C5-C4	-5.95	1.34	1.38
2	SA	454	G	N3-C4	5.95	1.39	1.35
3	S1	54	U	O4'-C1'	5.95	1.49	1.41
25	LB	118	C	C2-N3	-5.95	1.30	1.35
26	LA	1009	A	C1'-N9	-5.95	1.38	1.46
26	LA	489	G	C6-N1	5.94	1.43	1.39
26	LA	1263	U	O4'-C1'	-5.94	1.33	1.41
26	LA	2233	U	N1-C2	-5.94	1.33	1.38
2	SA	1264	U	C5'-C4'	5.94	1.58	1.51
2	SA	1420	U	O3'-P	-5.94	1.54	1.61
26	LA	388	G	C6-N1	-5.94	1.35	1.39
26	LA	2064	C	C2-N3	-5.94	1.30	1.35
26	LA	2358	A	C3'-C2'	-5.94	1.46	1.52
26	LA	2734	A	C2-N3	5.94	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	113	G	N3-C4	-5.94	1.31	1.35
2	SA	399	G	C6-N1	-5.94	1.35	1.39
2	SA	420	U	C5-C6	5.94	1.39	1.34
2	SA	598	U	P-O5'	-5.94	1.53	1.59
26	LA	633	A	N7-C5	-5.94	1.35	1.39
26	LA	728	G	C8-N7	-5.94	1.27	1.30
26	LA	1136	G	P-O5'	5.94	1.65	1.59
26	LA	1492	G	N3-C4	-5.94	1.31	1.35
26	LA	1978	A	C6-N6	-5.94	1.29	1.33
26	LA	2170	A	C5-C4	-5.94	1.34	1.38
26	LA	2221	G	C4'-O4'	-5.94	1.37	1.45
2	SA	1054	C	O3'-P	-5.94	1.54	1.61
2	SA	1463	U	P-O5'	-5.94	1.53	1.59
26	LA	156	A	C6-N1	-5.94	1.31	1.35
26	LA	689	A	C8-N7	-5.94	1.27	1.31
26	LA	1133	A	O4'-C1'	-5.94	1.33	1.41
26	LA	1959	G	C2-N3	-5.94	1.27	1.32
26	LA	1989	G	C5-C4	-5.94	1.34	1.38
2	SA	326	G	C8-N7	5.94	1.34	1.30
2	SA	529	G	C2-N3	5.94	1.37	1.32
2	SA	885	G	C6-N1	-5.94	1.35	1.39
2	SA	916	U	O3'-P	-5.94	1.54	1.61
26	LA	898	C	O3'-P	-5.94	1.54	1.61
26	LA	1350	C	C5'-C4'	5.94	1.58	1.51
26	LA	1945	G	C3'-O3'	5.94	1.50	1.42
38	LE	143	PRO	CA-C	-5.94	1.41	1.52
2	SA	18	C	C5'-C4'	-5.94	1.44	1.51
2	SA	578	C	C4'-C3'	-5.94	1.46	1.52
2	SA	668	G	O3'-P	-5.94	1.54	1.61
2	SA	1207	G	C5-C4	-5.94	1.34	1.38
26	LA	1030	C	N1-C2	-5.94	1.34	1.40
26	LA	2537	U	C5'-C4'	5.94	1.58	1.51
2	SA	165	G	C5-C6	-5.93	1.36	1.42
2	SA	329	A	O3'-P	-5.93	1.54	1.61
2	SA	497	G	N9-C4	5.93	1.42	1.38
2	SA	778	G	N9-C4	-5.93	1.33	1.38
2	SA	828	U	N1-C6	5.93	1.43	1.38
25	LB	57	A	C8-N7	-5.93	1.27	1.31
26	LA	236	C	C3'-C2'	-5.93	1.46	1.52
26	LA	553	G	P-O5'	-5.93	1.53	1.59
26	LA	1274	A	C5'-C4'	5.93	1.58	1.51
26	LA	2525	G	C2'-C1'	-5.93	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2673	G	N9-C4	-5.93	1.33	1.38
26	LA	2724	U	P-O5'	-5.93	1.53	1.59
26	LA	2729	G	C3'-O3'	5.93	1.50	1.42
2	SA	107	G	C5-C4	-5.93	1.34	1.38
2	SA	277	C	N3-C4	-5.93	1.29	1.33
2	SA	287	U	C2'-C1'	-5.93	1.46	1.53
2	SA	541	G	C5-C4	-5.93	1.34	1.38
2	SA	881	G	C2-N2	-5.93	1.28	1.34
2	SA	1284	C	C5'-C4'	5.93	1.58	1.51
26	LA	180	G	N9-C8	-5.93	1.33	1.37
26	LA	997	G	N7-C5	-5.93	1.35	1.39
26	LA	1397	U	P-O5'	-5.93	1.53	1.59
26	LA	1397	U	C4-C5	5.93	1.48	1.43
26	LA	1511	G	C1'-N9	-5.93	1.38	1.46
26	LA	1517	G	C2'-O2'	5.93	1.49	1.41
26	LA	2425	A	C3'-O3'	5.93	1.50	1.42
26	LA	2829	A	C6-N1	-5.93	1.31	1.35
2	SA	595	A	C2-N3	-5.93	1.28	1.33
3	S1	33	A	C3'-C2'	5.93	1.59	1.52
25	LB	34	A	C5'-C4'	5.93	1.58	1.51
26	LA	59	U	C2'-C1'	-5.93	1.46	1.53
26	LA	2631	G	C1'-N9	5.93	1.57	1.48
52	LO	31	PHE	CB-CG	-5.93	1.41	1.51
2	SA	356	A	C4'-O4'	5.93	1.53	1.45
2	SA	690	G	O3'-P	-5.93	1.54	1.61
2	SA	1141	C	C2-O2	5.93	1.29	1.24
2	SA	1276	G	C3'-C2'	-5.93	1.46	1.52
26	LA	186	G	N9-C8	-5.93	1.33	1.37
26	LA	583	G	C8-N7	5.93	1.34	1.30
26	LA	1628	G	C6-O6	-5.93	1.18	1.24
26	LA	1744	A	O3'-P	-5.93	1.54	1.61
26	LA	2564	A	C2'-C1'	-5.93	1.46	1.53
26	LA	2627	G	N3-C4	-5.93	1.31	1.35
26	LA	2730	C	N3-C4	-5.93	1.29	1.33
2	SA	1495	U	N1-C6	-5.93	1.32	1.38
26	LA	42	A	C6-N1	5.93	1.39	1.35
26	LA	731	C	C5'-C4'	5.93	1.58	1.51
26	LA	1879	C	C5-C6	-5.93	1.29	1.34
26	LA	2279	G	C6-O6	-5.93	1.18	1.24
2	SA	387	U	C2-N3	-5.93	1.33	1.37
26	LA	572	A	C4'-C3'	-5.93	1.46	1.52
26	LA	1192	G	O3'-P	-5.93	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1358	G	C5-C6	-5.93	1.36	1.42
26	LA	1701	A	C5'-C4'	5.93	1.58	1.51
26	LA	1729	U	C5'-C4'	5.93	1.58	1.51
26	LA	1853	A	C1'-N9	-5.93	1.38	1.46
26	LA	2018	G	C6-N1	-5.93	1.35	1.39
26	LA	2238	G	O3'-P	-5.93	1.54	1.61
26	LA	2491	U	C4-O4	-5.93	1.19	1.23
26	LA	2835	A	P-O5'	-5.93	1.53	1.59
52	LO	18	ARG	CD-NE	5.93	1.56	1.46
2	SA	54	C	C5'-C4'	5.92	1.58	1.51
2	SA	515	G	C2-N3	5.92	1.37	1.32
2	SA	833	G	C2'-C1'	-5.92	1.46	1.53
2	SA	1036	A	O3'-P	-5.92	1.54	1.61
2	SA	1261	A	N9-C8	5.92	1.42	1.37
2	SA	1431	A	O5'-C5'	5.92	1.53	1.44
26	LA	49	A	O4'-C1'	-5.92	1.33	1.41
26	LA	730	A	C2'-C1'	-5.92	1.46	1.53
26	LA	852	U	C2-N3	-5.92	1.33	1.37
26	LA	1188	U	P-O5'	-5.92	1.53	1.59
26	LA	2003	A	C8-N7	5.92	1.35	1.31
26	LA	2117	A	C6-N1	5.92	1.39	1.35
26	LA	2246	G	N9-C8	5.92	1.42	1.37
26	LA	2698	U	N3-C4	-5.92	1.33	1.38
26	LA	2772	C	C5-C6	5.92	1.39	1.34
30	LW	43	LYS	CE-NZ	-5.92	1.34	1.49
2	SA	596	A	C4'-O4'	5.92	1.53	1.45
2	SA	887	G	N3-C4	-5.92	1.31	1.35
2	SA	1502	A	C3'-C2'	-5.92	1.46	1.52
25	LB	30	C	N1-C6	-5.92	1.33	1.37
26	LA	308	G	C8-N7	-5.92	1.27	1.30
26	LA	721	A	N9-C8	-5.92	1.33	1.37
26	LA	1768	C	C4'-C3'	-5.92	1.46	1.52
26	LA	2731	G	C4'-O4'	-5.92	1.37	1.45
2	SA	1411	C	N1-C6	-5.92	1.33	1.37
26	LA	1039	A	C2'-C1'	-5.92	1.46	1.53
26	LA	1364	G	C5'-C4'	5.92	1.58	1.51
26	LA	1606	C	C4-N4	5.92	1.39	1.33
26	LA	1809	A	C8-N7	-5.92	1.27	1.31
26	LA	2432	A	N9-C4	-5.92	1.34	1.37
2	SA	575	G	N9-C4	-5.92	1.33	1.38
2	SA	986	U	C2-N3	-5.92	1.33	1.37
2	SA	1092	A	O4'-C1'	-5.92	1.33	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1198	G	C8-N7	5.92	1.34	1.30
2	SA	1427	C	C3'-C2'	5.92	1.59	1.52
26	LA	1976	U	N1-C6	-5.92	1.32	1.38
26	LA	2379	G	C4'-O4'	5.92	1.53	1.45
26	LA	2494	G	C8-N7	5.92	1.34	1.30
2	SA	206	C	C5'-C4'	5.92	1.58	1.51
2	SA	303	A	O3'-P	-5.92	1.54	1.61
2	SA	748	G	N9-C4	-5.92	1.33	1.38
2	SA	909	A	C5-C6	-5.92	1.35	1.41
2	SA	1499	A	C1'-N9	-5.92	1.38	1.46
20	SD	169	TRP	CG-CD1	-5.92	1.28	1.36
26	LA	323	C	C4-C5	-5.92	1.38	1.43
26	LA	788	A	N7-C5	-5.92	1.35	1.39
26	LA	1707	G	C8-N7	5.92	1.34	1.30
26	LA	1731	G	O3'-P	-5.92	1.54	1.61
26	LA	1835	G	C2-N3	5.92	1.37	1.32
26	LA	2038	G	C6-N1	-5.92	1.35	1.39
26	LA	2745	C	C4'-O4'	-5.92	1.37	1.45
2	SA	353	A	C5'-C4'	5.92	1.58	1.51
2	SA	515	G	N7-C5	5.92	1.42	1.39
2	SA	705	G	P-O5'	-5.92	1.53	1.59
2	SA	1269	A	C8-N7	5.92	1.35	1.31
2	SA	1416	G	O3'-P	-5.92	1.54	1.61
4	S2	30	G	N7-C5	-5.92	1.35	1.39
22	SF	125	GLU	CG-CD	5.92	1.60	1.51
26	LA	1007	C	N1-C6	5.92	1.40	1.37
26	LA	1197	G	C4'-C3'	5.92	1.59	1.53
26	LA	1653	G	C2-N3	5.92	1.37	1.32
26	LA	2273	A	C4'-C3'	-5.92	1.46	1.52
26	LA	2345	G	C2'-C1'	-5.92	1.46	1.53
2	SA	249	U	C4-C5	-5.92	1.38	1.43
2	SA	1194	U	C2'-C1'	-5.92	1.46	1.53
26	LA	898	C	C4-C5	-5.92	1.38	1.43
26	LA	2511	U	C5-C6	5.92	1.39	1.34
2	SA	1061	G	C8-N7	5.91	1.34	1.30
4	S2	68	C	C1'-N1	-5.91	1.38	1.46
26	LA	62	U	C2-N3	-5.91	1.33	1.37
26	LA	2294	G	C2-N2	-5.91	1.28	1.34
46	LH	163	TYR	CG-CD2	5.91	1.46	1.39
50	LL	44	TYR	CB-CG	-5.91	1.42	1.51
2	SA	359	G	C2-N3	5.91	1.37	1.32
2	SA	1396	A	O3'-P	-5.91	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	85	G	C2'-C1'	-5.91	1.46	1.53
26	LA	782	A	N7-C5	-5.91	1.35	1.39
26	LA	1234	U	O3'-P	-5.91	1.54	1.61
26	LA	1847	A	C5-C4	5.91	1.42	1.38
29	LV	80	TRP	CB-CG	5.91	1.60	1.50
40	L4	5	ARG	CD-NE	5.91	1.56	1.46
47	LJ	95	PHE	CB-CG	-5.91	1.41	1.51
2	SA	18	C	N3-C4	5.91	1.38	1.33
2	SA	171	A	C5'-C4'	5.91	1.58	1.51
25	LB	85	G	C3'-C2'	-5.91	1.46	1.52
26	LA	352	A	O3'-P	-5.91	1.54	1.61
26	LA	1103	A	C5'-C4'	5.91	1.58	1.51
26	LA	1136	G	N3-C4	-5.91	1.31	1.35
26	LA	1158	C	P-O5'	5.91	1.65	1.59
26	LA	1650	A	N9-C4	-5.91	1.34	1.37
2	SA	73	C	C4-N4	-5.91	1.28	1.33
2	SA	425	G	C5-C4	-5.91	1.34	1.38
2	SA	586	C	N1-C6	-5.91	1.33	1.37
2	SA	790	A	C3'-C2'	5.91	1.59	1.52
2	SA	1385	G	N1-C2	5.91	1.42	1.37
2	SA	1509	C	C5-C6	5.91	1.39	1.34
26	LA	274	C	C4'-O4'	-5.91	1.37	1.45
26	LA	368	A	N3-C4	-5.91	1.31	1.34
26	LA	1125	G	N1-C2	-5.91	1.33	1.37
26	LA	2340	A	O4'-C1'	5.91	1.49	1.41
26	LA	2455	G	C5'-C4'	5.91	1.58	1.51
26	LA	2648	G	O3'-P	-5.91	1.54	1.61
2	SA	31	G	N3-C4	-5.91	1.31	1.35
2	SA	459	A	C2-N3	-5.91	1.28	1.33
2	SA	1297	G	C8-N7	5.91	1.34	1.30
26	LA	266	G	C8-N7	-5.91	1.27	1.30
26	LA	554	U	C2'-C1'	-5.91	1.46	1.53
2	SA	139	A	N9-C4	-5.91	1.34	1.37
25	LB	36	C	N1-C2	5.91	1.46	1.40
26	LA	333	G	C3'-O3'	5.91	1.50	1.42
26	LA	634	C	C4'-C3'	-5.91	1.46	1.52
26	LA	843	G	C6-N1	-5.91	1.35	1.39
26	LA	1287	A	C6-N6	5.91	1.38	1.33
26	LA	1583	A	N9-C4	-5.91	1.34	1.37
26	LA	2179	C	N3-C4	5.91	1.38	1.33
26	LA	2252	G	C4'-C3'	5.91	1.59	1.53
26	LA	2734	A	N9-C4	5.91	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2794	C	C3'-O3'	5.91	1.50	1.42
2	SA	1257	A	C2'-C1'	-5.90	1.46	1.53
2	SA	1486	G	N3-C4	-5.90	1.31	1.35
26	LA	443	A	C3'-C2'	-5.90	1.46	1.52
26	LA	815	C	O3'-P	-5.90	1.54	1.61
26	LA	1613	G	N9-C8	-5.90	1.33	1.37
2	SA	30	U	C4-C5	-5.90	1.38	1.43
2	SA	231	U	C2-N3	-5.90	1.33	1.37
26	LA	357	C	C4'-C3'	-5.90	1.46	1.52
26	LA	1475	G	C8-N7	-5.90	1.27	1.30
26	LA	1818	U	N3-C4	-5.90	1.33	1.38
26	LA	2632	A	O3'-P	-5.90	1.54	1.61
26	LA	2634	A	N1-C2	-5.90	1.29	1.34
2	SA	319	G	P-O5'	5.90	1.65	1.59
2	SA	772	U	C3'-C2'	-5.90	1.46	1.52
2	SA	948	C	C4'-C3'	-5.90	1.46	1.52
2	SA	1425	U	C2'-O2'	5.90	1.49	1.41
2	SA	1534	A	C5'-C4'	5.90	1.58	1.51
26	LA	221	A	O5'-C5'	5.90	1.53	1.44
26	LA	247	G	O4'-C1'	-5.90	1.33	1.41
26	LA	430	A	C4'-C3'	-5.90	1.46	1.52
26	LA	1432	G	N3-C4	-5.90	1.31	1.35
26	LA	2045	C	C4-N4	-5.90	1.28	1.33
26	LA	2419	U	C5-C6	-5.90	1.28	1.34
26	LA	2492	U	O4'-C1'	-5.90	1.33	1.41
2	SA	457	G	N3-C4	5.90	1.39	1.35
2	SA	1508	A	C3'-C2'	-5.90	1.46	1.52
2	SA	111	G	N9-C4	-5.90	1.33	1.38
2	SA	477	C	N1-C6	-5.90	1.33	1.37
2	SA	762	U	C4'-C3'	5.90	1.59	1.53
2	SA	1143	G	C5-C4	-5.90	1.34	1.38
2	SA	1326	U	C4'-C3'	5.90	1.59	1.53
2	SA	1443	C	O3'-P	-5.90	1.54	1.61
4	S2	40	C	C5'-C4'	5.90	1.58	1.51
25	LB	39	A	C2-N3	5.90	1.38	1.33
26	LA	42	A	N3-C4	-5.90	1.31	1.34
26	LA	327	G	C2-N2	-5.90	1.28	1.34
26	LA	788	A	C5'-C4'	5.90	1.58	1.51
26	LA	1366	A	N9-C8	-5.90	1.33	1.37
26	LA	1381	G	C1'-N9	-5.90	1.38	1.46
26	LA	2575	C	N1-C2	5.90	1.46	1.40
2	SA	140	U	C2-N3	-5.90	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1473	G	C5'-C4'	5.90	1.58	1.51
26	LA	1571	A	C3'-C2'	-5.90	1.46	1.52
26	LA	2786	U	C4-C5	5.90	1.48	1.43
26	LA	2803	G	C4'-C3'	5.90	1.59	1.53
2	SA	822	U	C2-N3	-5.89	1.33	1.37
2	SA	1039	G	C3'-O3'	5.89	1.50	1.42
2	SA	1133	G	C5-C4	-5.89	1.34	1.38
2	SA	1272	G	C5-C4	-5.89	1.34	1.38
26	LA	907	G	C2'-C1'	-5.89	1.46	1.53
26	LA	1807	G	N9-C4	-5.89	1.33	1.38
26	LA	1906	G	O3'-P	-5.89	1.54	1.61
26	LA	2023	C	C2-N3	-5.89	1.31	1.35
2	SA	842	U	C4-O4	5.89	1.28	1.23
2	SA	977	A	N9-C8	-5.89	1.33	1.37
2	SA	1238	A	C5-C6	5.89	1.46	1.41
2	SA	1349	A	C8-N7	-5.89	1.27	1.31
26	LA	215	G	C3'-C2'	5.89	1.59	1.52
26	LA	332	A	C6-N1	-5.89	1.31	1.35
26	LA	1439	A	C2'-C1'	-5.89	1.46	1.53
26	LA	1576	U	C2-N3	-5.89	1.33	1.37
26	LA	2399	G	C8-N7	-5.89	1.27	1.30
2	SA	954	G	C2-N3	-5.89	1.28	1.32
26	LA	775	G	C2-N3	5.89	1.37	1.32
26	LA	1082	U	P-O5'	-5.89	1.53	1.59
26	LA	2683	C	C2-O2	5.89	1.29	1.24
2	SA	431	A	C6-N1	5.89	1.39	1.35
2	SA	500	G	C2'-C1'	-5.89	1.46	1.53
26	LA	209	C	C4-N4	-5.89	1.28	1.33
26	LA	1855	U	O3'-P	-5.89	1.54	1.61
26	LA	1991	U	N1-C2	-5.89	1.33	1.38
26	LA	2750	A	O3'-P	-5.89	1.54	1.61
26	LA	2865	U	N3-C4	-5.89	1.33	1.38
2	SA	279	A	C6-N1	5.89	1.39	1.35
26	LA	1637	A	C4'-C3'	-5.89	1.46	1.52
26	LA	1819	A	C5'-C4'	5.89	1.58	1.51
26	LA	2124	G	C2-N2	-5.89	1.28	1.34
2	SA	807	A	C3'-C2'	-5.89	1.46	1.52
26	LA	316	C	P-O5'	-5.89	1.53	1.59
26	LA	885	C	O3'-P	-5.89	1.54	1.61
26	LA	1573	G	C2-N2	-5.89	1.28	1.34
26	LA	1638	C	C2-O2	-5.89	1.19	1.24
26	LA	1893	C	C4'-C3'	5.89	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	234	C	C2-N3	-5.88	1.31	1.35
2	SA	383	A	N7-C5	-5.88	1.35	1.39
2	SA	425	G	C5'-C4'	5.88	1.58	1.51
2	SA	748	G	C4'-C3'	5.88	1.59	1.53
2	SA	836	G	C6-N1	-5.88	1.35	1.39
2	SA	1028	C	C5-C6	5.88	1.39	1.34
2	SA	1125	U	C4'-C3'	5.88	1.59	1.53
2	SA	1280	A	C4'-O4'	5.88	1.53	1.45
25	LB	75	G	N9-C8	-5.88	1.33	1.37
26	LA	326	G	P-O5'	-5.88	1.53	1.59
26	LA	1684	G	C2-N2	-5.88	1.28	1.34
26	LA	2011	U	N3-C4	-5.88	1.33	1.38
26	LA	2102	G	N1-C2	-5.88	1.33	1.37
26	LA	2186	G	C5'-C4'	5.88	1.58	1.51
26	LA	2374	C	C3'-C2'	-5.88	1.46	1.52
26	LA	2692	G	C2-N3	5.88	1.37	1.32
2	SA	338	A	C5-C4	-5.88	1.34	1.38
2	SA	1242	G	N9-C8	5.88	1.42	1.37
26	LA	1767	G	C3'-O3'	5.88	1.50	1.42
26	LA	1841	U	C4'-C3'	5.88	1.59	1.53
26	LA	2595	G	N1-C2	-5.88	1.33	1.37
2	SA	145	G	N9-C8	-5.88	1.33	1.37
2	SA	780	A	N7-C5	-5.88	1.35	1.39
2	SA	915	A	C2'-C1'	-5.88	1.46	1.53
26	LA	375	G	C5-C4	-5.88	1.34	1.38
26	LA	844	A	C6-N6	-5.88	1.29	1.33
26	LA	1359	A	C4'-O4'	5.88	1.53	1.45
26	LA	2271	G	C2-N2	-5.88	1.28	1.34
26	LA	2868	A	C2'-C1'	-5.88	1.46	1.53
2	SA	567	G	C2-N2	-5.88	1.28	1.34
2	SA	1222	G	N1-C2	5.88	1.42	1.37
26	LA	2069	G	C4'-C3'	5.88	1.59	1.53
26	LA	2139	U	C4-O4	5.88	1.28	1.23
26	LA	2800	A	C4'-C3'	-5.88	1.46	1.52
2	SA	297	G	N9-C8	-5.88	1.33	1.37
2	SA	664	G	P-O5'	-5.88	1.53	1.59
2	SA	1385	G	C3'-C2'	5.88	1.59	1.52
2	SA	1487	G	O3'-P	-5.88	1.54	1.61
3	S1	54	U	C5'-C4'	5.88	1.58	1.51
23	SR	19	GLU	CB-CG	5.88	1.63	1.52
25	LB	29	A	C8-N7	-5.88	1.27	1.31
26	LA	302	C	C2'-C1'	-5.88	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	778	G	N9-C8	-5.88	1.33	1.37
26	LA	1381	G	N3-C4	-5.88	1.31	1.35
26	LA	1527	G	C8-N7	-5.88	1.27	1.30
26	LA	1677	A	P-O5'	5.88	1.65	1.59
26	LA	2850	A	N3-C4	-5.88	1.31	1.34
2	SA	1190	G	N9-C4	-5.88	1.33	1.38
2	SA	1279	G	N7-C5	-5.88	1.35	1.39
26	LA	1639	C	C4'-C3'	-5.88	1.46	1.52
26	LA	2054	A	N9-C4	-5.88	1.34	1.37
26	LA	2709	G	C6-N1	-5.88	1.35	1.39
26	LA	2814	A	N7-C5	-5.88	1.35	1.39
2	SA	88	U	C3'-O3'	5.88	1.50	1.42
2	SA	1068	G	C5-C6	-5.88	1.36	1.42
26	LA	1286	A	N3-C4	-5.88	1.31	1.34
26	LA	1607	C	N3-C4	-5.88	1.29	1.33
2	SA	83	C	C2'-C1'	5.87	1.59	1.53
2	SA	509	A	P-O5'	-5.87	1.53	1.59
2	SA	515	G	C5-C6	-5.87	1.36	1.42
4	S2	39	A	N9-C4	5.87	1.41	1.37
25	LB	17	C	C4-N4	-5.87	1.28	1.33
25	LB	105	G	C3'-C2'	-5.87	1.46	1.52
26	LA	408	G	C3'-O3'	5.87	1.50	1.42
26	LA	724	U	C4'-C3'	5.87	1.59	1.53
26	LA	1224	U	N1-C6	-5.87	1.32	1.38
26	LA	1495	A	N9-C8	-5.87	1.33	1.37
2	SA	113	G	N9-C8	-5.87	1.33	1.37
2	SA	137	U	C4-C5	5.87	1.48	1.43
2	SA	238	A	C8-N7	5.87	1.35	1.31
2	SA	385	C	C4-N4	5.87	1.39	1.33
2	SA	674	G	N9-C4	-5.87	1.33	1.38
2	SA	836	G	C4'-C3'	5.87	1.59	1.53
10	SJ	47	GLU	N-CA	-5.87	1.34	1.46
26	LA	590	A	N9-C4	-5.87	1.34	1.37
26	LA	702	U	C5'-C4'	5.87	1.58	1.51
26	LA	1584	U	N1-C2	5.87	1.43	1.38
26	LA	2388	A	C1'-N9	-5.87	1.38	1.46
26	LA	2435	A	N7-C5	-5.87	1.35	1.39
2	SA	978	A	N9-C8	-5.87	1.33	1.37
2	SA	7	A	C5-C6	5.87	1.46	1.41
2	SA	457	G	N9-C4	-5.87	1.33	1.38
2	SA	842	U	C5'-C4'	5.87	1.58	1.51
2	SA	1172	C	N3-C4	-5.87	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1367	C	C4-N4	-5.87	1.28	1.33
2	SA	1446	A	C5-C4	-5.87	1.34	1.38
22	SF	59	TYR	CG-CD1	-5.87	1.31	1.39
26	LA	254	G	C5-C6	-5.87	1.36	1.42
26	LA	441	U	N1-C6	-5.87	1.32	1.38
26	LA	840	C	C2'-C1'	-5.87	1.46	1.53
26	LA	1383	A	N7-C5	-5.87	1.35	1.39
26	LA	2687	U	O3'-P	-5.87	1.54	1.61
2	SA	1143	G	P-O5'	-5.87	1.53	1.59
26	LA	1699	G	C8-N7	-5.87	1.27	1.30
26	LA	1886	U	C2-N3	-5.87	1.33	1.37
26	LA	2318	G	C4'-C3'	-5.87	1.46	1.52
26	LA	2524	G	C6-O6	-5.87	1.18	1.24
26	LA	2883	A	C5'-C4'	5.87	1.58	1.51
51	LI	91	PHE	CG-CD1	5.87	1.47	1.38
4	S2	65	G	C5-C4	-5.87	1.34	1.38
26	LA	105	C	C2-N3	-5.87	1.31	1.35
26	LA	985	C	P-O5'	-5.87	1.53	1.59
38	LE	134	HIS	N-CA	-5.87	1.34	1.46
2	SA	761	G	C2'-C1'	-5.86	1.46	1.53
2	SA	796	C	O3'-P	-5.86	1.54	1.61
2	SA	922	G	O4'-C1'	-5.86	1.34	1.41
3	S1	48	C	N1-C6	5.86	1.40	1.37
26	LA	572	A	C6-N1	-5.86	1.31	1.35
26	LA	866	A	N7-C5	-5.86	1.35	1.39
26	LA	882	G	N7-C5	-5.86	1.35	1.39
26	LA	928	A	C4'-C3'	-5.86	1.46	1.52
26	LA	1750	G	C2'-C1'	-5.86	1.47	1.53
26	LA	2493	U	C1'-N1	-5.86	1.38	1.46
2	SA	1441	A	C2-N3	5.86	1.38	1.33
26	LA	1274	A	O4'-C1'	-5.86	1.34	1.41
26	LA	1286	A	N7-C5	-5.86	1.35	1.39
26	LA	2495	G	C1'-N9	-5.86	1.38	1.46
26	LA	2725	A	N7-C5	-5.86	1.35	1.39
2	SA	67	C	C4-N4	-5.86	1.28	1.33
2	SA	559	A	C4'-C3'	5.86	1.59	1.53
2	SA	949	A	C2'-C1'	-5.86	1.47	1.53
26	LA	887	U	C3'-O3'	5.86	1.50	1.42
26	LA	1279	G	P-O5'	-5.86	1.53	1.59
26	LA	1398	C	C2-O2	-5.86	1.19	1.24
26	LA	1912	A	C2'-C1'	-5.86	1.47	1.53
26	LA	2824	C	C4-N4	5.86	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	597	G	C5-C4	-5.86	1.34	1.38
26	LA	213	A	C2'-C1'	-5.86	1.47	1.53
26	LA	679	C	N3-C4	-5.86	1.29	1.33
26	LA	1491	G	O3'-P	-5.86	1.54	1.61
26	LA	2316	G	P-O5'	-5.86	1.53	1.59
2	SA	507	C	C2'-O2'	-5.86	1.34	1.41
4	S2	21	U	N1-C2	5.86	1.43	1.38
25	LB	50	A	C2'-C1'	-5.86	1.47	1.53
26	LA	226	A	C2'-C1'	-5.86	1.47	1.53
26	LA	583	G	N7-C5	-5.86	1.35	1.39
26	LA	1204	A	N7-C5	-5.86	1.35	1.39
26	LA	1449	G	C5'-C4'	5.86	1.58	1.51
26	LA	1616	A	C2'-C1'	-5.86	1.47	1.53
26	LA	1766	G	N9-C8	5.86	1.42	1.37
26	LA	1977	A	N3-C4	-5.86	1.31	1.34
26	LA	1996	C	C2-N3	-5.86	1.31	1.35
26	LA	2342	C	C4'-C3'	5.86	1.59	1.53
2	SA	156	C	C2-N3	-5.86	1.31	1.35
2	SA	251	G	C6-N1	5.86	1.43	1.39
2	SA	327	A	N9-C4	5.86	1.41	1.37
24	S3	284	TYR	CG-CD1	5.86	1.46	1.39
24	S3	533	TYR	CG-CD1	5.86	1.46	1.39
25	LB	31	C	C3'-C2'	-5.86	1.46	1.52
26	LA	557	C	C3'-C2'	-5.86	1.46	1.52
26	LA	1554	U	C4'-C3'	5.86	1.59	1.53
26	LA	1948	G	N7-C5	-5.86	1.35	1.39
26	LA	2168	G	C6-N1	-5.86	1.35	1.39
2	SA	178	C	N3-C4	5.85	1.38	1.33
2	SA	457	G	C5'-C4'	5.85	1.58	1.51
2	SA	803	G	N1-C2	5.85	1.42	1.37
4	S2	52	C	N1-C6	-5.85	1.33	1.37
26	LA	76	C	C3'-C2'	-5.85	1.46	1.52
26	LA	1478	G	N7-C5	-5.85	1.35	1.39
26	LA	1652	A	C2'-C1'	-5.85	1.47	1.53
26	LA	2618	G	C5-C6	-5.85	1.36	1.42
2	SA	59	A	N7-C5	5.85	1.42	1.39
2	SA	89	U	C4'-O4'	5.85	1.53	1.45
2	SA	221	C	N1-C2	5.85	1.46	1.40
2	SA	1008	U	N3-C4	5.85	1.43	1.38
2	SA	1293	C	C3'-C2'	-5.85	1.46	1.52
2	SA	1361	G	C2'-C1'	-5.85	1.47	1.53
3	S1	51	C	C4'-C3'	5.85	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	SE	9	GLU	CG-CD	5.85	1.60	1.51
26	LA	9	G	N7-C5	-5.85	1.35	1.39
26	LA	430	A	N1-C2	-5.85	1.29	1.34
26	LA	558	U	C3'-O3'	5.85	1.50	1.42
26	LA	1124	G	C1'-N9	-5.85	1.38	1.46
26	LA	1336	A	P-O5'	-5.85	1.53	1.59
26	LA	1604	C	C4-N4	-5.85	1.28	1.33
26	LA	1641	A	N7-C5	-5.85	1.35	1.39
26	LA	1754	A	O3'-P	-5.85	1.54	1.61
26	LA	1795	C	C3'-C2'	-5.85	1.46	1.52
26	LA	2054	A	C2'-C1'	-5.85	1.47	1.53
26	LA	2253	G	N1-C2	5.85	1.42	1.37
26	LA	2353	G	C5-C6	-5.85	1.36	1.42
26	LA	18	U	P-O5'	-5.85	1.53	1.59
26	LA	41	C	N1-C2	-5.85	1.34	1.40
26	LA	742	A	C6-N6	-5.85	1.29	1.33
26	LA	1120	G	N3-C4	-5.85	1.31	1.35
26	LA	1770	G	C2'-C1'	-5.85	1.47	1.53
2	SA	159	G	C2-N2	-5.85	1.28	1.34
2	SA	869	G	C6-N1	5.85	1.43	1.39
2	SA	1345	U	C4'-O4'	5.85	1.53	1.45
26	LA	292	U	C2'-C1'	-5.85	1.47	1.53
26	LA	565	C	C2-O2	5.85	1.29	1.24
26	LA	1428	C	N3-C4	-5.85	1.29	1.33
26	LA	1510	G	C6-O6	-5.85	1.18	1.24
26	LA	2681	C	C4-N4	-5.85	1.28	1.33
37	LC	178	VAL	CA-CB	-5.85	1.42	1.54
55	LQ	13	ARG	CD-NE	5.85	1.56	1.46
2	SA	398	U	N3-C4	-5.85	1.33	1.38
2	SA	472	U	C2-N3	-5.85	1.33	1.37
25	LB	34	A	C4'-O4'	5.85	1.53	1.45
26	LA	1489	C	C3'-C2'	5.85	1.59	1.52
26	LA	2188	U	C5'-C4'	5.85	1.58	1.51
26	LA	2641	G	N9-C4	5.85	1.42	1.38
26	LA	2880	C	C3'-C2'	-5.85	1.46	1.52
2	SA	813	U	C2-N3	5.85	1.41	1.37
2	SA	872	A	N3-C4	-5.85	1.31	1.34
2	SA	1243	C	C3'-C2'	-5.85	1.46	1.52
26	LA	791	C	C3'-C2'	5.85	1.59	1.52
26	LA	811	U	N3-C4	-5.85	1.33	1.38
26	LA	1031	G	C8-N7	-5.85	1.27	1.30
26	LA	1645	G	C6-N1	-5.85	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1672	A	N7-C5	-5.85	1.35	1.39
26	LA	1701	A	C4'-O4'	5.85	1.53	1.45
26	LA	2292	U	N1-C6	-5.85	1.32	1.38
26	LA	2528	U	C4'-O4'	-5.85	1.38	1.45
2	SA	432	A	C2'-C1'	-5.84	1.47	1.53
2	SA	497	G	C2'-C1'	-5.84	1.47	1.53
2	SA	867	G	O4'-C1'	-5.84	1.34	1.41
2	SA	1002	G	C4'-C3'	5.84	1.59	1.53
4	S2	74	A	N9-C8	5.84	1.42	1.37
26	LA	61	C	O5'-C5'	-5.84	1.33	1.42
26	LA	1383	A	C2'-O2'	-5.84	1.34	1.41
26	LA	2522	U	N3-C4	-5.84	1.33	1.38
26	LA	2812	G	C8-N7	-5.84	1.27	1.30
2	SA	192	A	C3'-O3'	5.84	1.50	1.42
2	SA	372	C	C4-C5	5.84	1.47	1.43
2	SA	548	G	N9-C4	-5.84	1.33	1.38
26	LA	417	C	C2-N3	-5.84	1.31	1.35
26	LA	460	A	N9-C4	5.84	1.41	1.37
26	LA	1277	G	C2-N2	-5.84	1.28	1.34
26	LA	1284	A	C8-N7	-5.84	1.27	1.31
26	LA	1587	G	C5-C4	-5.84	1.34	1.38
26	LA	1665	A	C4'-C3'	5.84	1.59	1.53
26	LA	2646	C	N3-C4	5.84	1.38	1.33
2	SA	745	G	C5'-C4'	5.84	1.58	1.51
2	SA	1015	G	C3'-C2'	5.84	1.59	1.52
26	LA	81	G	C5'-C4'	5.84	1.58	1.51
26	LA	131	A	P-O5'	5.84	1.65	1.59
26	LA	704	G	C2'-C1'	-5.84	1.47	1.53
26	LA	979	A	C3'-C2'	-5.84	1.46	1.52
26	LA	1075	C	O3'-P	-5.84	1.54	1.61
26	LA	1360	G	C2-N2	-5.84	1.28	1.34
26	LA	1600	C	C2-N3	-5.84	1.31	1.35
26	LA	2045	C	C2'-C1'	5.84	1.59	1.53
26	LA	2414	G	C5'-C4'	5.84	1.58	1.51
37	LC	201	PRO	N-CD	-5.84	1.39	1.47
2	SA	950	U	C3'-C2'	-5.84	1.46	1.52
2	SA	1106	G	C4'-C3'	-5.84	1.46	1.52
2	SA	1370	G	N7-C5	5.84	1.42	1.39
26	LA	50	U	C4'-C3'	5.84	1.59	1.53
26	LA	1888	G	C8-N7	-5.84	1.27	1.30
26	LA	1997	C	N1-C6	-5.84	1.33	1.37
26	LA	2043	C	C5'-C4'	5.84	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2820	A	C8-N7	-5.84	1.27	1.31
26	LA	2863	C	C2'-C1'	-5.84	1.47	1.53
2	SA	865	A	N7-C5	-5.84	1.35	1.39
2	SA	1095	U	N3-C4	-5.84	1.33	1.38
2	SA	1115	U	N1-C6	-5.84	1.32	1.38
26	LA	1939	U	O4'-C1'	-5.84	1.34	1.41
56	LR	50	ARG	CD-NE	5.84	1.56	1.46
2	SA	412	A	C5-C6	-5.84	1.35	1.41
2	SA	1079	G	N9-C4	-5.84	1.33	1.38
4	S2	53	G	C2-N3	-5.84	1.28	1.32
26	LA	10	A	C2'-C1'	-5.84	1.47	1.53
26	LA	53	A	C2'-C1'	-5.84	1.47	1.53
26	LA	518	G	N9-C4	-5.84	1.33	1.38
26	LA	699	A	C2'-C1'	-5.84	1.47	1.53
26	LA	904	G	C6-N1	-5.84	1.35	1.39
26	LA	1212	G	C2'-C1'	-5.84	1.47	1.53
26	LA	1697	G	N9-C8	5.84	1.42	1.37
26	LA	2459	A	N7-C5	-5.84	1.35	1.39
26	LA	2811	G	C5-C4	-5.84	1.34	1.38
2	SA	210	C	C5-C6	5.83	1.39	1.34
2	SA	574	A	C5-C4	-5.83	1.34	1.38
2	SA	633	G	C4'-O4'	5.83	1.53	1.45
25	LB	86	G	C4'-C3'	5.83	1.59	1.53
26	LA	792	A	C6-N1	-5.83	1.31	1.35
26	LA	1564	C	C5-C6	5.83	1.39	1.34
2	SA	159	G	N9-C4	-5.83	1.33	1.38
2	SA	1072	G	C2'-C1'	-5.83	1.47	1.53
26	LA	125	A	C3'-C2'	5.83	1.59	1.52
26	LA	876	C	C4-N4	-5.83	1.28	1.33
26	LA	1078	U	C4-C5	-5.83	1.38	1.43
26	LA	1364	G	N3-C4	-5.83	1.31	1.35
26	LA	1673	G	C6-O6	-5.83	1.19	1.24
26	LA	1768	C	C3'-C2'	-5.83	1.46	1.52
26	LA	2116	G	N9-C4	5.83	1.42	1.38
26	LA	2278	A	C3'-O3'	5.83	1.50	1.42
26	LA	2720	U	P-O5'	-5.83	1.53	1.59
2	SA	112	G	O3'-P	-5.83	1.54	1.61
2	SA	297	G	C3'-C2'	5.83	1.59	1.52
2	SA	454	G	C8-N7	5.83	1.34	1.30
2	SA	720	C	N3-C4	5.83	1.38	1.33
2	SA	1242	G	C1'-N9	-5.83	1.38	1.46
2	SA	1513	A	C5'-C4'	-5.83	1.44	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	771	G	C2-N2	-5.83	1.28	1.34
26	LA	799	G	C2'-C1'	-5.83	1.47	1.53
26	LA	2378	A	N9-C8	5.83	1.42	1.37
2	SA	244	U	C4-O4	-5.83	1.19	1.23
2	SA	532	A	C6-N6	5.83	1.38	1.33
2	SA	874	G	O3'-P	-5.83	1.54	1.61
2	SA	1062	U	C2'-C1'	-5.83	1.47	1.53
2	SA	1330	U	C2-N3	5.83	1.41	1.37
2	SA	1504	G	O3'-P	5.83	1.68	1.61
26	LA	1107	G	N9-C8	5.83	1.42	1.37
26	LA	1328	A	C5'-C4'	5.83	1.58	1.51
26	LA	2223	G	O3'-P	-5.83	1.54	1.61
26	LA	2514	U	C2'-C1'	-5.83	1.47	1.53
26	LA	2902	C	N3-C4	5.83	1.38	1.33
2	SA	412	A	O3'-P	-5.83	1.54	1.61
2	SA	998	C	C5-C6	5.83	1.39	1.34
26	LA	1511	G	P-O5'	-5.83	1.53	1.59
2	SA	481	G	P-O5'	5.83	1.65	1.59
2	SA	520	A	O3'-P	-5.83	1.54	1.61
2	SA	627	G	C2-N2	-5.83	1.28	1.34
12	SL	14	LYS	CA-CB	5.83	1.66	1.53
25	LB	120	U	C4-C5	5.83	1.48	1.43
26	LA	865	C	C2'-C1'	-5.83	1.47	1.53
26	LA	1375	U	C4-C5	-5.83	1.38	1.43
26	LA	2224	G	P-O5'	-5.83	1.53	1.59
2	SA	300	A	N7-C5	-5.82	1.35	1.39
2	SA	477	C	C1'-N1	5.82	1.57	1.48
2	SA	729	A	C6-N1	5.82	1.39	1.35
2	SA	974	A	N7-C5	-5.82	1.35	1.39
25	LB	10	G	N9-C4	-5.82	1.33	1.38
25	LB	35	C	P-O5'	5.82	1.65	1.59
26	LA	455	C	N3-C4	5.82	1.38	1.33
26	LA	800	A	C2'-C1'	-5.82	1.47	1.53
26	LA	1462	C	C3'-O3'	5.82	1.50	1.42
26	LA	1624	U	C5'-C4'	5.82	1.58	1.51
26	LA	1685	C	O3'-P	-5.82	1.54	1.61
26	LA	2719	G	N1-C2	-5.82	1.33	1.37
26	LA	2726	A	C6-N1	-5.82	1.31	1.35
51	LI	93	SER	N-CA	5.82	1.57	1.46
2	SA	220	G	C2'-C1'	-5.82	1.47	1.53
2	SA	833	G	O3'-P	-5.82	1.54	1.61
2	SA	1238	A	C2'-C1'	5.82	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	40	G	N9-C8	-5.82	1.33	1.37
26	LA	1134	A	N9-C4	5.82	1.41	1.37
26	LA	1141	U	C4'-C3'	5.82	1.59	1.53
26	LA	1455	G	O4'-C1'	5.82	1.49	1.41
26	LA	2465	C	C2-N3	5.82	1.40	1.35
26	LA	2668	G	C4'-O4'	5.82	1.53	1.45
26	LA	2839	G	C6-N1	5.82	1.43	1.39
2	SA	508	U	N1-C2	-5.82	1.33	1.38
2	SA	934	C	C2'-C1'	-5.82	1.47	1.53
2	SA	1242	G	C5-C6	5.82	1.48	1.42
4	S2	76	C	O3'-P	-5.82	1.54	1.61
24	S3	304	THR	C-N	-5.82	1.23	1.34
25	LB	20	G	N9-C4	-5.82	1.33	1.38
26	LA	31	C	C3'-O3'	5.82	1.50	1.42
26	LA	375	G	N7-C5	5.82	1.42	1.39
26	LA	404	A	C6-N6	5.82	1.38	1.33
26	LA	501	A	O5'-C5'	5.82	1.53	1.44
26	LA	2103	C	N1-C6	-5.82	1.33	1.37
26	LA	2268	A	C5-C6	-5.82	1.35	1.41
26	LA	2360	G	N3-C4	5.82	1.39	1.35
2	SA	187	G	C2'-O2'	5.82	1.49	1.41
2	SA	1344	C	C4-N4	-5.82	1.28	1.33
26	LA	55	G	C5'-C4'	5.82	1.58	1.51
2	SA	205	A	P-O5'	5.82	1.65	1.59
2	SA	540	G	O3'-P	-5.82	1.54	1.61
2	SA	674	G	P-O5'	-5.82	1.53	1.59
2	SA	1357	A	N3-C4	5.82	1.38	1.34
25	LB	94	A	N9-C4	-5.82	1.34	1.37
26	LA	212	G	C2-N2	-5.82	1.28	1.34
26	LA	320	A	C8-N7	-5.82	1.27	1.31
26	LA	558	U	C2-N3	-5.82	1.33	1.37
26	LA	714	U	C4-O4	-5.82	1.19	1.23
26	LA	1225	G	C2'-C1'	-5.82	1.47	1.53
26	LA	1464	G	C2-N2	-5.82	1.28	1.34
26	LA	1528	A	C5'-C4'	5.82	1.58	1.51
26	LA	2662	A	C4'-O4'	-5.82	1.38	1.45
3	S1	19	A	C5'-C4'	5.82	1.58	1.51
4	S2	73	A	O3'-P	-5.82	1.54	1.61
18	SB	103	TRP	CZ3-CH2	5.82	1.49	1.40
26	LA	227	A	O4'-C1'	5.82	1.49	1.41
26	LA	1271	G	C2-N2	-5.82	1.28	1.34
26	LA	2281	A	C4'-O4'	-5.82	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2666	C	C2'-C1'	5.82	1.59	1.53
2	SA	289	G	N9-C4	5.81	1.42	1.38
26	LA	2450	A	C5-C4	-5.81	1.34	1.38
2	SA	613	C	C4-N4	-5.81	1.28	1.33
2	SA	783	C	C2-O2	5.81	1.29	1.24
2	SA	1073	U	P-O5'	-5.81	1.53	1.59
2	SA	1079	G	C8-N7	5.81	1.34	1.30
2	SA	1383	C	N1-C2	-5.81	1.34	1.40
2	SA	1513	A	N3-C4	-5.81	1.31	1.34
26	LA	1253	A	C1'-N9	-5.81	1.38	1.46
26	LA	1716	U	C4-O4	-5.81	1.19	1.23
26	LA	1949	G	N9-C8	-5.81	1.33	1.37
26	LA	2350	C	C4-C5	-5.81	1.38	1.43
26	LA	2368	C	N1-C6	-5.81	1.33	1.37
26	LA	2599	G	N9-C4	-5.81	1.33	1.38
26	LA	2612	C	P-O5'	-5.81	1.53	1.59
2	SA	191	G	C2'-C1'	-5.81	1.47	1.53
2	SA	1010	U	N3-C4	-5.81	1.33	1.38
26	LA	122	G	C1'-N9	-5.81	1.38	1.46
26	LA	149	A	C6-N1	5.81	1.39	1.35
26	LA	990	A	N9-C4	-5.81	1.34	1.37
2	SA	22	G	C5-C6	-5.81	1.36	1.42
2	SA	683	G	O3'-P	-5.81	1.54	1.61
2	SA	1206	G	C6-N1	-5.81	1.35	1.39
2	SA	1225	A	C5'-C4'	5.81	1.58	1.51
2	SA	1294	G	N9-C4	5.81	1.42	1.38
4	S2	34	U	C3'-C2'	-5.81	1.46	1.52
26	LA	354	A	N9-C4	5.81	1.41	1.37
26	LA	1120	G	O3'-P	-5.81	1.54	1.61
26	LA	1397	U	C4'-C3'	5.81	1.59	1.53
26	LA	2595	G	C6-N1	5.81	1.43	1.39
26	LA	2627	G	C6-N1	-5.81	1.35	1.39
26	LA	2865	U	C4'-C3'	-5.81	1.46	1.52
2	SA	1044	A	C4'-C3'	-5.81	1.46	1.52
2	SA	1048	G	C5'-C4'	5.81	1.58	1.51
2	SA	1060	U	C2-N3	5.81	1.41	1.37
4	S2	23	G	C6-N1	-5.81	1.35	1.39
26	LA	50	U	O3'-P	-5.81	1.54	1.61
26	LA	696	G	N3-C4	-5.81	1.31	1.35
26	LA	929	U	C4-O4	-5.81	1.19	1.23
26	LA	1143	A	C2'-C1'	-5.81	1.47	1.53
26	LA	1380	G	C3'-O3'	5.81	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2006	C	N1-C6	-5.81	1.33	1.37
26	LA	2397	G	N9-C8	5.81	1.42	1.37
2	SA	1303	C	C2-N3	5.81	1.40	1.35
4	S2	59	A	P-O5'	5.81	1.65	1.59
26	LA	382	A	C5-C4	-5.81	1.34	1.38
26	LA	1903	G	C4'-O4'	5.81	1.53	1.45
26	LA	1999	C	C4-N4	-5.81	1.28	1.33
26	LA	2524	G	C2'-C1'	-5.81	1.47	1.53
2	SA	146	G	N7-C5	5.80	1.42	1.39
2	SA	521	G	N9-C4	-5.80	1.33	1.38
2	SA	1144	G	N7-C5	-5.80	1.35	1.39
2	SA	1217	C	C2'-C1'	-5.80	1.47	1.53
13	SM	22	TYR	CB-CG	-5.80	1.43	1.51
26	LA	60	G	N9-C4	-5.80	1.33	1.38
26	LA	84	A	C2'-C1'	-5.80	1.47	1.53
26	LA	457	A	C6-N1	-5.80	1.31	1.35
26	LA	840	C	P-O5'	-5.80	1.53	1.59
26	LA	914	G	C2-N2	-5.80	1.28	1.34
26	LA	1021	A	C3'-C2'	-5.80	1.46	1.52
26	LA	2026	U	C5'-C4'	5.80	1.58	1.51
26	LA	2156	G	P-O5'	-5.80	1.53	1.59
26	LA	2285	C	C5'-C4'	5.80	1.58	1.51
26	LA	2783	U	N3-C4	-5.80	1.33	1.38
2	SA	683	G	N9-C8	-5.80	1.33	1.37
2	SA	1152	A	C2-N3	-5.80	1.28	1.33
4	S2	42	C	C2-O2	-5.80	1.19	1.24
24	S3	604	PHE	CG-CD2	5.80	1.47	1.38
25	LB	116	G	C2'-C1'	5.80	1.59	1.53
26	LA	1399	C	P-O5'	-5.80	1.53	1.59
26	LA	1598	A	C8-N7	-5.80	1.27	1.31
26	LA	2383	G	C2'-C1'	-5.80	1.47	1.53
2	SA	65	A	N1-C2	5.80	1.39	1.34
2	SA	574	A	C5-C6	-5.80	1.35	1.41
2	SA	966	G	C5-C6	-5.80	1.36	1.42
26	LA	1316	U	C2'-C1'	-5.80	1.47	1.53
26	LA	1446	C	C4-C5	-5.80	1.38	1.43
26	LA	1540	G	N1-C2	5.80	1.42	1.37
26	LA	1857	G	C5'-C4'	5.80	1.58	1.51
26	LA	2501	C	C4'-C3'	-5.80	1.46	1.52
26	LA	2730	C	C5-C6	-5.80	1.29	1.34
26	LA	2897	U	P-O5'	-5.80	1.53	1.59
29	LV	13	ALA	C-N	-5.80	1.23	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	709	U	C4-C5	-5.80	1.38	1.43
2	SA	783	C	C2'-C1'	-5.80	1.47	1.53
2	SA	1074	G	C2-N2	-5.80	1.28	1.34
2	SA	1254	A	N9-C8	-5.80	1.33	1.37
26	LA	598	U	N1-C2	5.80	1.43	1.38
26	LA	733	G	N1-C2	-5.80	1.33	1.37
26	LA	1223	G	C5'-C4'	5.80	1.58	1.51
26	LA	1528	A	C3'-O3'	5.80	1.50	1.42
26	LA	2138	G	C2-N3	5.80	1.37	1.32
26	LA	2307	G	C5-C4	-5.80	1.34	1.38
2	SA	388	G	P-O5'	5.80	1.65	1.59
2	SA	568	G	O5'-C5'	5.80	1.53	1.44
2	SA	659	U	C3'-O3'	5.80	1.50	1.42
26	LA	213	A	N1-C2	-5.80	1.29	1.34
26	LA	1016	G	N7-C5	-5.80	1.35	1.39
26	LA	1136	G	C5-C6	-5.80	1.36	1.42
26	LA	1330	C	C4'-O4'	-5.80	1.38	1.45
2	SA	974	A	P-O5'	-5.80	1.53	1.59
4	S2	13	C	C2-O2	-5.80	1.19	1.24
26	LA	462	C	C4-C5	-5.80	1.38	1.43
26	LA	601	C	C4'-O4'	5.80	1.53	1.45
26	LA	748	G	C5'-C4'	5.80	1.58	1.51
26	LA	1073	A	C3'-O3'	5.80	1.50	1.42
26	LA	1248	G	N7-C5	5.80	1.42	1.39
26	LA	1858	A	C3'-O3'	5.80	1.50	1.42
26	LA	2146	C	N3-C4	-5.80	1.29	1.33
26	LA	2291	U	P-O5'	-5.80	1.53	1.59
26	LA	2341	G	N9-C8	5.80	1.42	1.37
26	LA	2795	C	C5'-C4'	5.80	1.58	1.51
49	LK	137	LEU	N-CA	-5.80	1.34	1.46
2	SA	1229	A	N9-C4	5.79	1.41	1.37
2	SA	1401	G	C5-C4	-5.79	1.34	1.38
26	LA	1920	C	C4'-O4'	5.79	1.53	1.45
26	LA	2344	U	C5'-C4'	5.79	1.58	1.51
2	SA	348	G	C2-N2	-5.79	1.28	1.34
2	SA	628	G	C2-N2	-5.79	1.28	1.34
3	S1	44	U	N1-C6	5.79	1.43	1.38
25	LB	113	C	C3'-C2'	-5.79	1.46	1.52
26	LA	136	G	O4'-C1'	5.79	1.49	1.41
26	LA	293	U	C4-C5	5.79	1.48	1.43
26	LA	1093	G	C3'-O3'	-5.79	1.34	1.42
26	LA	1213	A	N7-C5	-5.79	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1276	A	C8-N7	5.79	1.35	1.31
26	LA	1619	G	C5'-C4'	5.79	1.58	1.51
26	LA	2208	C	C4-C5	5.79	1.47	1.43
26	LA	2579	C	N3-C4	-5.79	1.29	1.33
2	SA	1515	G	C4'-C3'	-5.79	1.46	1.52
26	LA	1584	U	P-O5'	5.79	1.65	1.59
26	LA	1850	G	C2'-C1'	-5.79	1.47	1.53
26	LA	2219	U	O3'-P	-5.79	1.54	1.61
26	LA	2336	A	N3-C4	5.79	1.38	1.34
26	LA	2732	G	C4'-C3'	5.79	1.59	1.53
2	SA	1490	U	N3-C4	5.79	1.43	1.38
26	LA	279	A	C5-C4	-5.79	1.34	1.38
26	LA	324	A	O4'-C1'	5.79	1.49	1.41
26	LA	1984	G	C6-O6	-5.79	1.19	1.24
2	SA	410	G	C6-N1	-5.79	1.35	1.39
2	SA	761	G	C5'-C4'	5.79	1.58	1.51
26	LA	521	U	C5'-C4'	5.79	1.58	1.51
26	LA	1021	A	C5'-C4'	5.79	1.58	1.51
26	LA	1826	G	C4'-C3'	-5.79	1.46	1.52
26	LA	1886	U	O3'-P	-5.79	1.54	1.61
2	SA	368	U	C2-N3	-5.79	1.33	1.37
2	SA	1184	G	N9-C8	-5.79	1.33	1.37
26	LA	1045	C	P-O5'	5.79	1.65	1.59
26	LA	2526	G	N9-C8	-5.79	1.33	1.37
26	LA	2639	A	C8-N7	-5.79	1.27	1.31
2	SA	478	A	N7-C5	-5.79	1.35	1.39
2	SA	663	A	P-O5'	-5.79	1.53	1.59
2	SA	880	C	C2'-O2'	-5.79	1.34	1.41
2	SA	1077	G	N9-C4	-5.79	1.33	1.38
2	SA	1162	C	C4-N4	-5.79	1.28	1.33
2	SA	1321	U	C4-C5	5.79	1.48	1.43
2	SA	1375	A	N9-C4	-5.79	1.34	1.37
4	S2	63	C	C5'-C4'	5.79	1.58	1.51
15	SO	77	TYR	CD1-CE1	5.79	1.48	1.39
26	LA	143	C	C2-O2	5.79	1.29	1.24
26	LA	1277	G	C5-C4	5.79	1.42	1.38
26	LA	1720	U	O3'-P	-5.79	1.54	1.61
26	LA	1771	C	C4'-O4'	-5.79	1.38	1.45
26	LA	2087	G	N9-C4	-5.79	1.33	1.38
2	SA	363	A	N7-C5	-5.78	1.35	1.39
2	SA	452	A	C2-N3	5.78	1.38	1.33
2	SA	905	U	C3'-C2'	5.78	1.59	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1416	G	N1-C2	5.78	1.42	1.37
7	SG	153	TYR	CB-CG	-5.78	1.43	1.51
26	LA	160	A	N9-C8	5.78	1.42	1.37
26	LA	684	G	C3'-C2'	-5.78	1.46	1.52
26	LA	792	A	N9-C8	-5.78	1.33	1.37
26	LA	796	C	C4'-C3'	-5.78	1.46	1.52
26	LA	995	C	N3-C4	-5.78	1.29	1.33
26	LA	1210	G	C6-N1	5.78	1.43	1.39
26	LA	1245	G	C2-N2	-5.78	1.28	1.34
26	LA	2338	C	C5-C6	-5.78	1.29	1.34
26	LA	2420	C	O3'-P	-5.78	1.54	1.61
26	LA	2462	C	C4-C5	-5.78	1.38	1.43
26	LA	2553	G	C2-N3	5.78	1.37	1.32
2	SA	537	G	C4'-O4'	5.78	1.53	1.45
2	SA	997	U	C2-N3	5.78	1.41	1.37
2	SA	1270	G	N9-C4	-5.78	1.33	1.38
25	LB	2	G	N9-C4	-5.78	1.33	1.38
26	LA	966	G	C2-N2	-5.78	1.28	1.34
26	LA	1380	G	C6-N1	5.78	1.43	1.39
26	LA	1471	G	N9-C8	5.78	1.41	1.37
26	LA	1665	A	C3'-C2'	-5.78	1.46	1.52
26	LA	2405	G	C2-N2	-5.78	1.28	1.34
29	LV	78	SER	CB-OG	5.78	1.49	1.42
2	SA	84	U	P-O5'	5.78	1.65	1.59
2	SA	423	G	N9-C4	5.78	1.42	1.38
2	SA	573	A	C4'-C3'	-5.78	1.46	1.52
2	SA	744	C	C3'-C2'	-5.78	1.46	1.52
2	SA	819	A	C5-C4	5.78	1.42	1.38
2	SA	1013	G	C5-C6	5.78	1.48	1.42
2	SA	1358	U	N1-C6	-5.78	1.32	1.38
25	LB	32	U	C4-C5	5.78	1.48	1.43
26	LA	455	C	C4'-O4'	-5.78	1.38	1.45
26	LA	477	A	N1-C2	-5.78	1.29	1.34
26	LA	1103	A	C2-N3	5.78	1.38	1.33
26	LA	1536	C	C5'-C4'	5.78	1.58	1.51
26	LA	1815	A	C2-N3	-5.78	1.28	1.33
26	LA	1846	G	N7-C5	-5.78	1.35	1.39
26	LA	2406	A	P-O5'	5.78	1.65	1.59
26	LA	2443	C	N1-C6	-5.78	1.33	1.37
26	LA	2553	G	C2-N2	-5.78	1.28	1.34
2	SA	297	G	N7-C5	-5.78	1.35	1.39
2	SA	1082	A	C5'-C4'	5.78	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	581	C	C2'-C1'	-5.78	1.47	1.53
26	LA	1798	U	C2-N3	-5.78	1.33	1.37
26	LA	2427	C	C5-C6	5.78	1.39	1.34
26	LA	2771	C	N1-C2	-5.78	1.34	1.40
2	SA	100	G	N3-C4	-5.78	1.31	1.35
2	SA	276	G	N3-C4	-5.78	1.31	1.35
2	SA	497	G	N7-C5	5.78	1.42	1.39
2	SA	552	U	C3'-C2'	-5.78	1.46	1.52
2	SA	914	A	O4'-C1'	-5.78	1.34	1.41
2	SA	1244	G	C8-N7	5.78	1.34	1.30
26	LA	287	G	N3-C4	-5.78	1.31	1.35
26	LA	610	C	C3'-C2'	5.78	1.59	1.52
26	LA	705	A	N1-C2	-5.78	1.29	1.34
26	LA	1306	C	C2-N3	5.78	1.40	1.35
26	LA	1370	C	P-O5'	-5.78	1.53	1.59
26	LA	1783	A	C5-C4	5.78	1.42	1.38
26	LA	2006	C	C4-C5	-5.78	1.38	1.43
33	LZ	76	LYS	N-CA	-5.78	1.34	1.46
2	SA	467	U	C2-N3	-5.78	1.33	1.37
2	SA	579	A	C2'-C1'	-5.78	1.47	1.53
2	SA	821	G	N3-C4	-5.78	1.31	1.35
2	SA	1143	G	N9-C4	5.78	1.42	1.38
11	SK	123	PRO	N-CA	-5.78	1.37	1.47
26	LA	674	G	C8-N7	-5.78	1.27	1.30
26	LA	1139	G	C6-N1	-5.78	1.35	1.39
26	LA	1343	G	C5-C4	5.78	1.42	1.38
26	LA	1918	A	O3'-P	5.78	1.68	1.61
26	LA	2024	G	C6-O6	-5.78	1.19	1.24
26	LA	2239	G	N3-C4	5.78	1.39	1.35
26	LA	2787	C	C2'-O2'	5.78	1.49	1.41
2	SA	514	C	C2-N3	-5.77	1.31	1.35
2	SA	1129	C	C3'-C2'	5.77	1.59	1.52
24	S3	533	TYR	CE2-CZ	5.77	1.46	1.38
26	LA	778	G	C3'-C2'	-5.77	1.46	1.52
26	LA	1660	G	C2-N2	-5.77	1.28	1.34
26	LA	1697	G	O4'-C1'	-5.77	1.34	1.41
2	SA	15	G	C8-N7	5.77	1.34	1.30
2	SA	581	G	C2-N2	-5.77	1.28	1.34
2	SA	810	C	P-O5'	-5.77	1.53	1.59
26	LA	384	A	N3-C4	-5.77	1.31	1.34
26	LA	478	A	C4'-O4'	-5.77	1.38	1.45
26	LA	489	G	C1'-N9	-5.77	1.38	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1141	U	N1-C6	-5.77	1.32	1.38
26	LA	1881	C	C4'-C3'	5.77	1.59	1.53
26	LA	1975	G	C6-N1	-5.77	1.35	1.39
26	LA	1993	U	N1-C2	-5.77	1.33	1.38
26	LA	2475	C	C5-C6	5.77	1.39	1.34
2	SA	143	A	N9-C4	5.77	1.41	1.37
2	SA	823	C	C5-C6	-5.77	1.29	1.34
2	SA	1467	C	P-O5'	-5.77	1.53	1.59
26	LA	817	C	C2-N3	-5.77	1.31	1.35
26	LA	1276	A	N7-C5	-5.77	1.35	1.39
26	LA	1517	G	N1-C2	-5.77	1.33	1.37
26	LA	2831	G	O3'-P	-5.77	1.54	1.61
2	SA	360	G	N9-C8	-5.77	1.33	1.37
2	SA	366	A	C1'-N9	-5.77	1.38	1.46
2	SA	878	A	C3'-O3'	5.77	1.50	1.42
2	SA	933	G	O4'-C1'	5.77	1.49	1.41
2	SA	1502	A	C4'-C3'	-5.77	1.46	1.52
26	LA	66	C	C4-N4	-5.77	1.28	1.33
26	LA	712	G	C5-C4	-5.77	1.34	1.38
26	LA	1196	C	C2'-C1'	-5.77	1.47	1.53
2	SA	88	U	C4-C5	-5.77	1.38	1.43
2	SA	208	U	C2-N3	-5.77	1.33	1.37
2	SA	318	G	C1'-N9	-5.77	1.38	1.46
2	SA	546	A	P-O5'	5.77	1.65	1.59
2	SA	903	G	C6-N1	-5.77	1.35	1.39
2	SA	1312	G	N3-C4	-5.77	1.31	1.35
2	SA	1530	G	C5-C6	5.77	1.48	1.42
4	S2	13	C	C4-C5	-5.77	1.38	1.43
4	S2	53	G	O3'-P	-5.77	1.54	1.61
18	SB	20	ARG	CD-NE	5.77	1.56	1.46
26	LA	49	A	P-O5'	-5.77	1.53	1.59
26	LA	787	C	C4'-C3'	-5.77	1.46	1.52
26	LA	846	U	C2-N3	5.77	1.41	1.37
26	LA	1393	A	O4'-C1'	-5.77	1.34	1.41
26	LA	2508	G	N7-C5	-5.77	1.35	1.39
2	SA	313	A	N3-C4	-5.77	1.31	1.34
26	LA	2236	U	C4-C5	-5.77	1.38	1.43
2	SA	788	U	C2-N3	-5.76	1.33	1.37
2	SA	887	G	C5-C4	-5.76	1.34	1.38
4	S2	47	A	N3-C4	-5.76	1.31	1.34
26	LA	2112	G	C8-N7	-5.76	1.27	1.30
26	LA	2117	A	P-O5'	5.76	1.65	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2217	G	C3'-O3'	5.76	1.50	1.42
26	LA	2671	G	C5'-C4'	5.76	1.58	1.51
52	LO	10	ARG	CD-NE	5.76	1.56	1.46
2	SA	734	G	O5'-C5'	5.76	1.53	1.44
26	LA	1042	G	P-O5'	-5.76	1.53	1.59
26	LA	1815	A	C5-C4	-5.76	1.34	1.38
2	SA	778	G	O3'-P	-5.76	1.54	1.61
2	SA	862	C	C2-N3	-5.76	1.31	1.35
2	SA	1483	A	C6-N6	5.76	1.38	1.33
26	LA	127	A	C8-N7	-5.76	1.27	1.31
26	LA	413	C	C4-C5	5.76	1.47	1.43
26	LA	451	U	N3-C4	-5.76	1.33	1.38
26	LA	605	G	O4'-C1'	-5.76	1.34	1.41
26	LA	689	A	C5'-C4'	5.76	1.58	1.51
26	LA	820	A	C6-N1	-5.76	1.31	1.35
26	LA	978	G	N3-C4	-5.76	1.31	1.35
26	LA	1321	A	C5-C4	-5.76	1.34	1.38
26	LA	2626	C	C3'-C2'	-5.76	1.46	1.52
26	LA	2843	G	N9-C4	-5.76	1.33	1.38
26	LA	2867	G	N1-C2	-5.76	1.33	1.37
2	SA	76	G	C8-N7	-5.76	1.27	1.30
2	SA	590	U	C3'-C2'	-5.76	1.46	1.52
2	SA	691	G	C5-C4	-5.76	1.34	1.38
2	SA	1188	A	C6-N1	-5.76	1.31	1.35
2	SA	1322	C	C5'-C4'	5.76	1.58	1.51
26	LA	109	C	O3'-P	-5.76	1.54	1.61
26	LA	222	A	C4'-C3'	-5.76	1.46	1.52
26	LA	231	A	C6-N6	5.76	1.38	1.33
26	LA	445	C	C2-N3	-5.76	1.31	1.35
26	LA	506	G	C2-N2	-5.76	1.28	1.34
26	LA	728	G	N3-C4	-5.76	1.31	1.35
26	LA	826	U	C3'-C2'	-5.76	1.46	1.52
26	LA	1638	C	C4'-O4'	-5.76	1.38	1.45
26	LA	1886	U	N3-C4	-5.76	1.33	1.38
26	LA	2074	U	C5-C6	5.76	1.39	1.34
2	SA	488	C	C5'-C4'	5.76	1.58	1.51
2	SA	1484	C	C4-C5	5.76	1.47	1.43
26	LA	1176	U	C3'-C2'	5.76	1.59	1.52
26	LA	1468	U	O3'-P	-5.76	1.54	1.61
26	LA	1732	C	C4-C5	5.76	1.47	1.43
26	LA	2148	G	C2-N3	5.76	1.37	1.32
26	LA	2157	G	N1-C2	-5.76	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	228	A	C5'-C4'	5.76	1.58	1.51
2	SA	1454	G	N9-C8	-5.76	1.33	1.37
26	LA	298	G	C2-N3	5.76	1.37	1.32
26	LA	462	C	C5-C6	5.76	1.39	1.34
26	LA	1721	G	C2'-C1'	-5.76	1.47	1.53
26	LA	1868	C	O3'-P	-5.76	1.54	1.61
26	LA	1935	G	C4'-C3'	-5.76	1.46	1.52
26	LA	2012	G	N7-C5	-5.76	1.35	1.39
26	LA	2156	G	C5-C4	5.76	1.42	1.38
26	LA	2226	C	C2-N3	-5.76	1.31	1.35
26	LA	1192	G	N9-C4	-5.75	1.33	1.38
26	LA	1479	G	C8-N7	-5.75	1.27	1.30
26	LA	2027	G	N3-C4	-5.75	1.31	1.35
26	LA	2521	C	P-O5'	-5.75	1.53	1.59
2	SA	864	A	O3'-P	-5.75	1.54	1.61
26	LA	647	G	C5-C6	-5.75	1.36	1.42
26	LA	647	G	N9-C8	5.75	1.41	1.37
26	LA	2585	U	C3'-C2'	5.75	1.59	1.52
2	SA	133	U	C2-N3	-5.75	1.33	1.37
2	SA	170	U	C5'-C4'	5.75	1.58	1.51
2	SA	946	A	C3'-O3'	5.75	1.50	1.42
2	SA	1213	A	C4'-O4'	-5.75	1.38	1.45
26	LA	475	C	C2'-C1'	-5.75	1.47	1.53
26	LA	482	A	N7-C5	-5.75	1.35	1.39
26	LA	595	C	P-O5'	-5.75	1.53	1.59
26	LA	1048	A	N9-C4	-5.75	1.34	1.37
26	LA	1131	G	C2'-C1'	-5.75	1.47	1.53
26	LA	2714	G	N3-C4	-5.75	1.31	1.35
36	L2	15	SER	CA-CB	5.75	1.61	1.52
2	SA	633	G	N9-C8	5.75	1.41	1.37
2	SA	1394	A	N9-C8	5.75	1.42	1.37
25	LB	4	C	C4-C5	-5.75	1.38	1.43
26	LA	182	A	N9-C4	-5.75	1.34	1.37
26	LA	1458	U	N1-C6	5.75	1.43	1.38
26	LA	2336	A	C1'-N9	-5.75	1.38	1.46
26	LA	2822	G	C2-N3	-5.75	1.28	1.32
2	SA	123	U	C2-N3	-5.75	1.33	1.37
13	SM	25	GLY	CA-C	-5.75	1.42	1.51
26	LA	287	G	N1-C2	-5.75	1.33	1.37
26	LA	931	U	C4-C5	-5.75	1.38	1.43
26	LA	1059	G	N7-C5	-5.75	1.35	1.39
26	LA	1064	C	O3'-P	-5.75	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1164	C	C3'-O3'	5.75	1.50	1.42
26	LA	1246	A	N9-C8	5.75	1.42	1.37
26	LA	1676	A	P-O5'	5.75	1.65	1.59
26	LA	1792	G	N9-C8	-5.75	1.33	1.37
26	LA	1801	A	C5-C4	5.75	1.42	1.38
26	LA	2672	U	C4'-O4'	-5.75	1.38	1.45
26	LA	2762	C	O4'-C1'	-5.75	1.34	1.41
26	LA	2810	A	O4'-C1'	-5.75	1.34	1.41
2	SA	888	G	O3'-P	-5.75	1.54	1.61
26	LA	858	G	N7-C5	-5.75	1.35	1.39
26	LA	1834	U	C4-O4	-5.75	1.19	1.23
26	LA	1985	C	C5'-C4'	5.75	1.58	1.51
26	LA	2257	U	C4'-C3'	-5.75	1.46	1.52
26	LA	2306	C	C3'-O3'	5.75	1.50	1.42
26	LA	2459	A	P-O5'	-5.75	1.54	1.59
26	LA	2470	G	C8-N7	5.75	1.34	1.30
48	LN	110	VAL	CA-CB	-5.75	1.42	1.54
2	SA	1383	C	O4'-C1'	5.75	1.49	1.41
26	LA	1039	A	O3'-P	-5.75	1.54	1.61
2	SA	3	A	C6-N6	5.74	1.38	1.33
2	SA	89	U	C3'-C2'	-5.74	1.46	1.52
2	SA	310	G	C4'-C3'	-5.74	1.46	1.52
2	SA	410	G	C2'-C1'	-5.74	1.47	1.53
2	SA	722	G	C5'-C4'	5.74	1.58	1.51
2	SA	812	G	C8-N7	-5.74	1.27	1.30
2	SA	960	U	N3-C4	-5.74	1.33	1.38
2	SA	1327	C	N3-C4	-5.74	1.29	1.33
3	S1	24	A	C8-N7	-5.74	1.27	1.31
3	S1	38	G	C5-C6	-5.74	1.36	1.42
4	S2	62	C	C2-N3	-5.74	1.31	1.35
25	LB	78	A	N9-C4	-5.74	1.34	1.37
26	LA	361	G	C8-N7	5.74	1.34	1.30
26	LA	1283	G	C2-N3	5.74	1.37	1.32
26	LA	1585	C	C2-N3	-5.74	1.31	1.35
26	LA	2592	G	C2-N2	-5.74	1.28	1.34
26	LA	2601	C	C2'-C1'	-5.74	1.47	1.53
26	LA	2716	C	C3'-C2'	-5.74	1.46	1.52
2	SA	68	G	C8-N7	-5.74	1.27	1.30
26	LA	1315	C	C2'-C1'	-5.74	1.47	1.53
26	LA	1387	A	C2'-C1'	-5.74	1.47	1.53
26	LA	1490	A	N9-C8	-5.74	1.33	1.37
26	LA	1973	G	C3'-C2'	-5.74	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2433	A	N7-C5	-5.74	1.35	1.39
26	LA	2752	C	C3'-C2'	5.74	1.59	1.52
2	SA	23	C	C2-N3	5.74	1.40	1.35
2	SA	336	A	N9-C4	5.74	1.41	1.37
26	LA	460	A	C2'-C1'	-5.74	1.47	1.53
26	LA	647	G	N1-C2	-5.74	1.33	1.37
26	LA	662	G	C3'-O3'	5.74	1.50	1.42
26	LA	815	C	C5'-C4'	5.74	1.58	1.51
26	LA	1569	A	P-O5'	-5.74	1.54	1.59
26	LA	1628	G	C2'-C1'	-5.74	1.47	1.53
26	LA	1768	C	N3-C4	-5.74	1.29	1.33
26	LA	1900	A	N3-C4	5.74	1.38	1.34
26	LA	1975	G	C2-N3	5.74	1.37	1.32
26	LA	2618	G	C5'-C4'	5.74	1.58	1.51
38	LE	145	SER	CA-CB	5.74	1.61	1.52
2	SA	272	C	C2-N3	-5.74	1.31	1.35
2	SA	793	U	N3-C4	5.74	1.43	1.38
26	LA	4	U	N3-C4	-5.74	1.33	1.38
26	LA	333	G	C6-N1	-5.74	1.35	1.39
26	LA	855	G	N1-C2	-5.74	1.33	1.37
26	LA	1407	G	N3-C4	5.74	1.39	1.35
26	LA	1607	C	C2-N3	-5.74	1.31	1.35
26	LA	1681	G	N1-C2	5.74	1.42	1.37
26	LA	1860	G	N9-C4	5.74	1.42	1.38
26	LA	2087	G	C6-N1	-5.74	1.35	1.39
26	LA	2367	G	C2-N3	5.74	1.37	1.32
27	LD	82	TYR	CE1-CZ	5.74	1.46	1.38
27	LD	246	PRO	N-CD	-5.74	1.39	1.47
2	SA	90	C	O3'-P	-5.74	1.54	1.61
26	LA	1230	A	N1-C2	-5.74	1.29	1.34
26	LA	1968	G	C3'-C2'	-5.74	1.46	1.52
26	LA	2856	A	C5-C4	-5.74	1.34	1.38
2	SA	313	A	C1'-N9	-5.74	1.38	1.46
2	SA	405	U	C2'-C1'	-5.74	1.47	1.53
2	SA	937	A	N1-C2	5.74	1.39	1.34
2	SA	970	C	C4-N4	-5.74	1.28	1.33
2	SA	1327	C	C5'-C4'	5.74	1.58	1.51
26	LA	784	G	C5-C6	-5.74	1.36	1.42
26	LA	1319	C	C4-C5	-5.74	1.38	1.43
26	LA	1536	C	C3'-C2'	5.74	1.59	1.52
26	LA	1568	G	C3'-O3'	5.74	1.50	1.42
26	LA	2477	U	C5-C6	-5.74	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2801	G	C2-N2	-5.74	1.28	1.34
26	LA	2881	U	C3'-C2'	-5.74	1.46	1.52
26	LA	2893	A	C8-N7	-5.74	1.27	1.31
2	SA	64	G	C5-C4	5.73	1.42	1.38
25	LB	36	C	O4'-C1'	5.73	1.49	1.41
26	LA	2306	C	C4'-O4'	5.73	1.53	1.45
26	LA	2452	C	C4'-C3'	-5.73	1.46	1.52
2	SA	790	A	C4'-O4'	5.73	1.53	1.45
2	SA	843	U	C2-O2	5.73	1.27	1.22
2	SA	978	A	C5'-C4'	5.73	1.58	1.51
2	SA	1076	U	C2'-C1'	-5.73	1.47	1.53
26	LA	361	G	O4'-C1'	-5.73	1.34	1.41
26	LA	662	G	C2'-C1'	-5.73	1.47	1.53
26	LA	866	A	N1-C2	-5.73	1.29	1.34
26	LA	944	C	C2-N3	-5.73	1.31	1.35
26	LA	973	A	N7-C5	5.73	1.42	1.39
26	LA	1308	A	N3-C4	-5.73	1.31	1.34
26	LA	1533	C	C4'-O4'	5.73	1.53	1.45
26	LA	1738	G	N1-C2	-5.73	1.33	1.37
37	LC	230	SER	CB-OG	5.73	1.49	1.42
2	SA	202	G	C5'-C4'	5.73	1.58	1.51
2	SA	984	C	C5'-C4'	5.73	1.58	1.51
2	SA	1408	A	P-O5'	-5.73	1.54	1.59
2	SA	1506	U	C5'-C4'	5.73	1.58	1.51
26	LA	667	U	C2-O2	5.73	1.27	1.22
26	LA	685	A	N9-C4	-5.73	1.34	1.37
26	LA	931	U	C3'-O3'	5.73	1.50	1.42
26	LA	2602	A	P-O5'	-5.73	1.54	1.59
2	SA	204	G	N3-C4	5.73	1.39	1.35
2	SA	1236	A	C5-C4	5.73	1.42	1.38
26	LA	149	A	N3-C4	-5.73	1.31	1.34
26	LA	2618	G	N7-C5	-5.73	1.35	1.39
2	SA	123	U	C2'-C1'	5.73	1.59	1.53
2	SA	129	A	O4'-C1'	-5.73	1.34	1.41
2	SA	199	A	C8-N7	5.73	1.35	1.31
2	SA	380	G	C2-N2	-5.73	1.28	1.34
2	SA	727	G	O5'-C5'	5.73	1.53	1.44
2	SA	1296	C	P-O5'	-5.73	1.54	1.59
5	ST	59	ARG	CD-NE	5.73	1.56	1.46
26	LA	73	A	C8-N7	-5.73	1.27	1.31
26	LA	353	C	O3'-P	-5.73	1.54	1.61
26	LA	510	C	N3-C4	5.73	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	935	C	C4-C5	-5.73	1.38	1.43
26	LA	954	G	N3-C4	-5.73	1.31	1.35
26	LA	986	C	C1'-N1	-5.73	1.38	1.46
26	LA	1415	U	O3'-P	-5.73	1.54	1.61
26	LA	1434	A	N7-C5	-5.73	1.35	1.39
26	LA	1703	G	C3'-O3'	5.73	1.50	1.42
26	LA	2325	G	N1-C2	-5.73	1.33	1.37
26	LA	2766	A	C6-N1	-5.73	1.31	1.35
30	LW	59	GLU	N-CA	-5.73	1.34	1.46
2	SA	647	C	P-O5'	5.73	1.65	1.59
2	SA	942	G	N7-C5	-5.73	1.35	1.39
2	SA	1347	G	C3'-O3'	5.73	1.50	1.42
26	LA	756	A	N9-C4	-5.73	1.34	1.37
26	LA	1176	U	C3'-O3'	5.73	1.50	1.42
26	LA	2458	G	O4'-C1'	-5.73	1.34	1.41
26	LA	2854	G	P-O5'	-5.73	1.54	1.59
2	SA	57	G	P-O5'	-5.72	1.54	1.59
2	SA	160	A	N1-C2	-5.72	1.29	1.34
2	SA	250	A	C5'-C4'	5.72	1.58	1.51
2	SA	744	C	C5-C6	-5.72	1.29	1.34
2	SA	858	G	C1'-N9	-5.72	1.38	1.46
2	SA	1012	A	N7-C5	-5.72	1.35	1.39
2	SA	1157	A	N3-C4	-5.72	1.31	1.34
2	SA	1344	C	P-O5'	-5.72	1.54	1.59
2	SA	1433	A	O3'-P	-5.72	1.54	1.61
26	LA	446	G	C6-N1	-5.72	1.35	1.39
26	LA	469	G	C8-N7	5.72	1.34	1.30
26	LA	1026	G	C6-N1	-5.72	1.35	1.39
26	LA	1311	G	N1-C2	-5.72	1.33	1.37
26	LA	1539	U	C2-N3	5.72	1.41	1.37
26	LA	1888	G	N9-C4	5.72	1.42	1.38
26	LA	2233	U	C2'-O2'	-5.72	1.34	1.41
26	LA	2455	G	C2'-C1'	-5.72	1.47	1.53
26	LA	2682	A	O4'-C1'	-5.72	1.34	1.41
2	SA	387	U	C4'-O4'	5.72	1.52	1.45
26	LA	588	U	C2-N3	-5.72	1.33	1.37
26	LA	1072	C	P-O5'	5.72	1.65	1.59
26	LA	1694	C	O3'-P	-5.72	1.54	1.61
26	LA	2255	G	C3'-C2'	-5.72	1.46	1.52
26	LA	2719	G	C2-N3	-5.72	1.28	1.32
26	LA	2738	A	N3-C4	-5.72	1.31	1.34
26	LA	2813	A	N1-C2	-5.72	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	56	U	C2'-C1'	-5.72	1.47	1.53
2	SA	1435	G	C6-N1	-5.72	1.35	1.39
26	LA	283	G	C2-N3	5.72	1.37	1.32
26	LA	674	G	N1-C2	-5.72	1.33	1.37
26	LA	993	G	C2-N2	-5.72	1.28	1.34
26	LA	1271	G	C2-N3	-5.72	1.28	1.32
26	LA	1500	G	C2'-C1'	-5.72	1.47	1.53
26	LA	1791	A	O5'-C5'	-5.72	1.33	1.42
26	LA	2827	C	C2'-C1'	-5.72	1.47	1.53
2	SA	297	G	O4'-C1'	-5.72	1.34	1.41
2	SA	322	C	C2-N3	5.72	1.40	1.35
2	SA	332	G	C3'-C2'	-5.72	1.46	1.52
2	SA	573	A	O4'-C1'	-5.72	1.34	1.41
2	SA	1265	C	O4'-C1'	5.72	1.49	1.41
2	SA	1411	C	C3'-O3'	5.72	1.50	1.42
26	LA	478	A	C3'-C2'	5.72	1.59	1.52
26	LA	631	A	N9-C4	-5.72	1.34	1.37
26	LA	1764	C	N1-C6	-5.72	1.33	1.37
26	LA	2210	U	C5-C6	-5.72	1.29	1.34
26	LA	2590	A	O4'-C1'	-5.72	1.34	1.41
26	LA	2721	A	N3-C4	-5.72	1.31	1.34
26	LA	2777	G	N3-C4	5.72	1.39	1.35
26	LA	2837	A	C1'-N9	-5.72	1.38	1.46
2	SA	8	A	O4'-C1'	-5.72	1.34	1.41
3	S1	17	U	C3'-O3'	5.72	1.50	1.42
26	LA	39	G	N9-C4	-5.72	1.33	1.38
26	LA	853	C	N1-C6	-5.72	1.33	1.37
26	LA	917	A	C8-N7	-5.72	1.27	1.31
26	LA	1126	A	N9-C8	-5.72	1.33	1.37
2	SA	208	U	C1'-N1	-5.72	1.38	1.46
2	SA	396	C	C2-O2	-5.72	1.19	1.24
2	SA	440	C	N3-C4	5.72	1.38	1.33
2	SA	929	G	O3'-P	-5.72	1.54	1.61
2	SA	1160	G	P-O5'	-5.72	1.54	1.59
2	SA	1463	U	N1-C2	-5.72	1.33	1.38
26	LA	227	A	O3'-P	-5.72	1.54	1.61
26	LA	554	U	N1-C2	5.72	1.43	1.38
26	LA	1654	A	O3'-P	-5.72	1.54	1.61
26	LA	2204	G	C2-N2	-5.72	1.28	1.34
2	SA	816	A	C4'-C3'	5.71	1.59	1.53
2	SA	834	U	O4'-C1'	-5.71	1.34	1.41
2	SA	909	A	N1-C2	-5.71	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1295	U	C3'-C2'	5.71	1.59	1.52
2	SA	1461	G	C2-N2	-5.71	1.28	1.34
4	S2	31	G	C3'-C2'	5.71	1.59	1.52
8	SH	70	VAL	CA-CB	-5.71	1.42	1.54
26	LA	120	U	C3'-C2'	5.71	1.59	1.52
26	LA	225	C	C2'-C1'	-5.71	1.47	1.53
26	LA	345	A	C5-C4	5.71	1.42	1.38
26	LA	384	A	C6-N1	-5.71	1.31	1.35
26	LA	789	A	C8-N7	-5.71	1.27	1.31
26	LA	849	A	O5'-C5'	5.71	1.53	1.44
26	LA	1177	G	C5-C4	-5.71	1.34	1.38
26	LA	1227	G	N3-C4	-5.71	1.31	1.35
26	LA	1809	A	C2'-C1'	-5.71	1.47	1.53
26	LA	2457	U	C2'-O2'	-5.71	1.34	1.41
26	LA	2539	C	C4'-O4'	5.71	1.52	1.45
2	SA	276	G	C3'-C2'	-5.71	1.46	1.52
2	SA	1534	A	N9-C4	-5.71	1.34	1.37
26	LA	196	A	N3-C4	5.71	1.38	1.34
26	LA	379	G	C3'-C2'	-5.71	1.46	1.52
26	LA	826	U	N1-C2	5.71	1.43	1.38
26	LA	889	C	C4-N4	-5.71	1.28	1.33
26	LA	2286	G	N3-C4	-5.71	1.31	1.35
2	SA	326	G	C2'-C1'	-5.71	1.47	1.53
2	SA	897	C	N1-C6	5.71	1.40	1.37
2	SA	1001	C	C5-C6	-5.71	1.29	1.34
2	SA	1088	G	N3-C4	-5.71	1.31	1.35
26	LA	61	C	C4'-C3'	-5.71	1.46	1.52
26	LA	2110	G	C2-N3	-5.71	1.28	1.32
26	LA	2252	G	N1-C2	-5.71	1.33	1.37
26	LA	2778	A	N3-C4	-5.71	1.31	1.34
2	SA	315	A	N7-C5	-5.71	1.35	1.39
2	SA	496	A	C2'-C1'	-5.71	1.47	1.53
2	SA	1242	G	C2-N2	-5.71	1.28	1.34
2	SA	1456	A	P-O5'	-5.71	1.54	1.59
24	S3	371	GLU	CG-CD	5.71	1.60	1.51
25	LB	117	G	C2'-O2'	-5.71	1.34	1.41
26	LA	16	C	C3'-O3'	5.71	1.50	1.42
26	LA	529	A	C6-N1	-5.71	1.31	1.35
26	LA	1971	U	C4-C5	-5.71	1.38	1.43
53	LP	4	ARG	CD-NE	5.71	1.56	1.46
2	SA	112	G	C2-N3	5.71	1.37	1.32
2	SA	170	U	N3-C4	-5.71	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	38	G	C4'-O4'	5.71	1.52	1.45
26	LA	397	U	N1-C2	-5.71	1.33	1.38
26	LA	524	G	C2-N3	-5.71	1.28	1.32
26	LA	842	U	C2-N3	-5.71	1.33	1.37
26	LA	912	C	C5-C6	-5.71	1.29	1.34
26	LA	1861	G	C6-N1	5.71	1.43	1.39
26	LA	1881	C	N1-C2	5.71	1.45	1.40
26	LA	2206	C	O3'-P	-5.71	1.54	1.61
26	LA	2572	A	C4'-C3'	-5.71	1.46	1.52
26	LA	2864	G	P-O5'	-5.71	1.54	1.59
2	SA	16	A	C6-N6	-5.71	1.29	1.33
2	SA	529	G	N7-C5	-5.71	1.35	1.39
2	SA	770	C	N1-C6	-5.71	1.33	1.37
2	SA	1209	C	N1-C2	5.71	1.45	1.40
26	LA	38	A	N9-C4	-5.71	1.34	1.37
26	LA	182	A	C3'-C2'	5.71	1.59	1.52
26	LA	1188	U	C4'-C3'	5.71	1.59	1.53
26	LA	1325	U	C2'-C1'	5.71	1.59	1.53
2	SA	509	A	N3-C4	-5.71	1.31	1.34
2	SA	629	A	C5-C6	-5.71	1.35	1.41
2	SA	896	C	C4'-C3'	-5.71	1.46	1.52
2	SA	1514	G	N9-C8	5.71	1.41	1.37
3	S1	42	U	O4'-C1'	5.71	1.49	1.41
26	LA	747	U	N1-C2	-5.71	1.33	1.38
26	LA	2195	U	C5'-C4'	5.71	1.58	1.51
26	LA	2309	A	N1-C2	5.71	1.39	1.34
26	LA	2511	U	C3'-O3'	5.71	1.50	1.42
2	SA	373	A	P-O5'	5.70	1.65	1.59
2	SA	949	A	N1-C2	-5.70	1.29	1.34
2	SA	1496	C	C3'-C2'	5.70	1.59	1.52
26	LA	141	G	C4'-C3'	5.70	1.59	1.53
26	LA	524	G	N1-C2	-5.70	1.33	1.37
26	LA	1977	A	N1-C2	-5.70	1.29	1.34
26	LA	2000	C	C4'-C3'	-5.70	1.46	1.52
26	LA	2014	A	C5-C6	-5.70	1.35	1.41
26	LA	2091	C	C4-C5	-5.70	1.38	1.43
26	LA	2151	U	C2'-C1'	5.70	1.59	1.53
26	LA	2454	G	C8-N7	-5.70	1.27	1.30
26	LA	2614	A	C2'-C1'	-5.70	1.47	1.53
26	LA	2683	C	C4'-C3'	-5.70	1.46	1.52
26	LA	2882	A	N9-C8	-5.70	1.33	1.37
2	SA	12	U	O4'-C1'	5.70	1.49	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	28	A	C6-N6	-5.70	1.29	1.33
2	SA	874	G	C2'-C1'	-5.70	1.47	1.53
2	SA	1249	C	C3'-C2'	5.70	1.59	1.52
26	LA	142	A	C5'-C4'	5.70	1.58	1.51
26	LA	449	A	N3-C4	-5.70	1.31	1.34
26	LA	899	A	C5'-C4'	5.70	1.58	1.51
26	LA	1672	A	C5-C4	5.70	1.42	1.38
26	LA	1981	A	N9-C8	-5.70	1.33	1.37
26	LA	2440	C	C5'-C4'	5.70	1.58	1.51
2	SA	215	C	O4'-C1'	5.70	1.49	1.41
2	SA	350	G	C6-N1	-5.70	1.35	1.39
2	SA	562	U	C3'-C2'	5.70	1.59	1.52
2	SA	688	G	N1-C2	-5.70	1.33	1.37
2	SA	702	A	C5-C4	-5.70	1.34	1.38
2	SA	952	U	C5'-C4'	5.70	1.58	1.51
26	LA	261	G	C5-C4	-5.70	1.34	1.38
26	LA	372	G	N1-C2	-5.70	1.33	1.37
26	LA	697	G	C4'-O4'	-5.70	1.38	1.45
26	LA	930	G	N1-C2	-5.70	1.33	1.37
26	LA	934	U	C3'-C2'	-5.70	1.46	1.52
26	LA	1385	A	C1'-N9	-5.70	1.38	1.46
26	LA	1924	C	O5'-C5'	5.70	1.53	1.44
26	LA	2728	U	C1'-N1	-5.70	1.38	1.46
2	SA	50	A	O3'-P	-5.70	1.54	1.61
2	SA	506	G	C6-N1	-5.70	1.35	1.39
26	LA	580	U	C4'-O4'	5.70	1.52	1.45
26	LA	1610	A	N9-C8	-5.70	1.33	1.37
26	LA	1616	A	N9-C8	-5.70	1.33	1.37
26	LA	2168	G	O3'-P	-5.70	1.54	1.61
26	LA	2668	G	O3'-P	-5.70	1.54	1.61
2	SA	332	G	O5'-C5'	5.70	1.53	1.44
26	LA	816	C	C4-C5	5.70	1.47	1.43
26	LA	1464	G	N7-C5	5.70	1.42	1.39
26	LA	1520	U	N1-C6	-5.70	1.32	1.38
26	LA	1702	G	C8-N7	-5.70	1.27	1.30
2	SA	145	G	N1-C2	5.70	1.42	1.37
2	SA	212	G	C4'-O4'	5.70	1.52	1.45
2	SA	699	C	P-O5'	5.70	1.65	1.59
2	SA	1084	G	O3'-P	-5.70	1.54	1.61
2	SA	1274	A	C2'-C1'	-5.70	1.47	1.53
26	LA	231	A	C2'-C1'	-5.70	1.47	1.53
26	LA	250	G	C2-N3	5.70	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	276	U	P-O5'	-5.70	1.54	1.59
26	LA	388	G	C2-N3	-5.70	1.28	1.32
26	LA	670	A	C4'-C3'	5.70	1.59	1.53
26	LA	1140	C	C2-N3	5.70	1.40	1.35
26	LA	1790	C	C3'-O3'	5.70	1.50	1.42
26	LA	1912	A	C4'-C3'	-5.70	1.46	1.52
26	LA	2342	C	O3'-P	-5.70	1.54	1.61
26	LA	2675	A	N9-C4	-5.70	1.34	1.37
2	SA	237	G	P-O5'	-5.69	1.54	1.59
2	SA	1008	U	C3'-C2'	-5.69	1.46	1.52
25	LB	84	G	N9-C8	-5.69	1.33	1.37
26	LA	2518	A	C3'-C2'	-5.69	1.46	1.52
2	SA	520	A	N9-C4	-5.69	1.34	1.37
19	SC	121	SER	CB-OG	5.69	1.49	1.42
26	LA	311	A	C2-N3	-5.69	1.28	1.33
26	LA	315	G	C2-N2	-5.69	1.28	1.34
26	LA	776	G	P-O5'	-5.69	1.54	1.59
26	LA	1257	C	P-O5'	-5.69	1.54	1.59
26	LA	2868	A	N1-C2	-5.69	1.29	1.34
26	LA	2870	C	N3-C4	5.69	1.38	1.33
2	SA	347	G	C8-N7	-5.69	1.27	1.30
26	LA	2252	G	N7-C5	-5.69	1.35	1.39
26	LA	2598	A	C6-N1	-5.69	1.31	1.35
26	LA	2780	G	N9-C8	5.69	1.41	1.37
2	SA	21	G	C5-C4	-5.69	1.34	1.38
2	SA	513	C	N1-C2	5.69	1.45	1.40
2	SA	813	U	N1-C6	-5.69	1.32	1.38
2	SA	832	G	C6-N1	-5.69	1.35	1.39
2	SA	1331	G	C4'-O4'	5.69	1.52	1.45
26	LA	133	U	P-O5'	-5.69	1.54	1.59
26	LA	285	G	C2-N2	-5.69	1.28	1.34
26	LA	954	G	C2'-C1'	-5.69	1.47	1.53
26	LA	1010	A	C8-N7	-5.69	1.27	1.31
26	LA	1256	G	P-O5'	-5.69	1.54	1.59
26	LA	1488	C	C4'-O4'	5.69	1.52	1.45
26	LA	1785	A	O3'-P	-5.69	1.54	1.61
26	LA	1831	G	C5'-C4'	5.69	1.58	1.51
26	LA	1987	A	N7-C5	5.69	1.42	1.39
2	SA	72	A	O3'-P	-5.69	1.54	1.61
25	LB	73	A	N7-C5	-5.69	1.35	1.39
26	LA	375	G	C4'-C3'	5.69	1.59	1.53
26	LA	433	C	C3'-C2'	5.69	1.59	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1365	A	N1-C2	-5.69	1.29	1.34
26	LA	1866	A	C6-N1	5.69	1.39	1.35
26	LA	1887	C	C2-N3	-5.69	1.31	1.35
2	SA	1093	A	C3'-O3'	5.68	1.50	1.42
2	SA	1344	C	C5-C6	5.68	1.38	1.34
25	LB	100	G	C5'-C4'	5.68	1.58	1.51
26	LA	281	C	P-O5'	-5.68	1.54	1.59
26	LA	370	G	C5'-C4'	5.68	1.58	1.51
26	LA	2127	G	C3'-C2'	5.68	1.59	1.52
26	LA	2488	G	N1-C2	-5.68	1.33	1.37
26	LA	2856	A	C4'-C3'	-5.68	1.46	1.52
2	SA	579	A	C1'-N9	-5.68	1.38	1.46
2	SA	785	G	C2-N3	-5.68	1.28	1.32
2	SA	1443	C	C3'-C2'	5.68	1.59	1.52
25	LB	69	G	N9-C4	-5.68	1.33	1.38
26	LA	1365	A	O3'-P	-5.68	1.54	1.61
26	LA	1475	G	C4'-C3'	5.68	1.59	1.53
26	LA	2153	C	N1-C6	-5.68	1.33	1.37
26	LA	2412	A	N9-C4	5.68	1.41	1.37
26	LA	2604	U	C5-C6	-5.68	1.29	1.34
26	LA	2720	U	C4'-O4'	-5.68	1.38	1.45
2	SA	174	A	N9-C4	5.68	1.41	1.37
2	SA	786	G	C3'-C2'	5.68	1.59	1.52
26	LA	411	G	N9-C4	5.68	1.42	1.38
26	LA	739	A	C5-C4	-5.68	1.34	1.38
26	LA	768	G	C2-N3	-5.68	1.28	1.32
26	LA	1692	U	O4'-C1'	-5.68	1.34	1.41
26	LA	2330	G	N3-C4	-5.68	1.31	1.35
45	LG	113	PHE	CE1-CZ	5.68	1.48	1.37
2	SA	510	A	C3'-C2'	5.68	1.59	1.52
2	SA	517	G	N1-C2	-5.68	1.33	1.37
2	SA	1297	G	C2'-C1'	5.68	1.59	1.53
24	S3	359	PHE	CB-CG	-5.68	1.41	1.51
25	LB	90	C	C4'-C3'	-5.68	1.46	1.52
26	LA	374	A	O3'-P	-5.68	1.54	1.61
26	LA	951	C	N3-C4	5.68	1.38	1.33
26	LA	1165	A	C5-C4	-5.68	1.34	1.38
26	LA	1189	A	N9-C4	-5.68	1.34	1.37
26	LA	1955	U	P-O5'	-5.68	1.54	1.59
26	LA	1980	G	C4'-C3'	-5.68	1.46	1.52
26	LA	2416	C	C4'-C3'	5.68	1.59	1.53
26	LA	2691	C	N1-C6	-5.68	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	179	A	C5-C4	5.68	1.42	1.38
2	SA	211	G	C8-N7	-5.68	1.27	1.30
26	LA	568	U	O4'-C1'	-5.68	1.34	1.41
26	LA	764	A	O3'-P	-5.68	1.54	1.61
26	LA	1002	G	N3-C4	5.68	1.39	1.35
26	LA	1824	G	C1'-N9	-5.68	1.39	1.46
26	LA	2500	U	N1-C2	-5.68	1.33	1.38
26	LA	2602	A	N9-C4	5.68	1.41	1.37
26	LA	2869	G	C8-N7	5.68	1.34	1.30
2	SA	792	A	C1'-N9	-5.68	1.39	1.46
2	SA	997	U	C5-C6	5.68	1.39	1.34
2	SA	1320	C	C4-C5	5.68	1.47	1.43
4	S2	64	G	C8-N7	-5.68	1.27	1.30
26	LA	1089	A	P-O5'	5.68	1.65	1.59
26	LA	1837	C	C5-C6	-5.68	1.29	1.34
26	LA	2143	C	C3'-C2'	-5.68	1.46	1.52
26	LA	2793	C	C2'-C1'	-5.68	1.47	1.53
2	SA	553	A	N1-C2	5.67	1.39	1.34
2	SA	1300	G	C6-N1	-5.67	1.35	1.39
4	S2	54	G	N9-C8	5.67	1.41	1.37
26	LA	74	A	N9-C8	-5.67	1.33	1.37
26	LA	162	U	O4'-C1'	5.67	1.49	1.41
26	LA	173	A	C2-N3	-5.67	1.28	1.33
26	LA	219	A	C6-N6	5.67	1.38	1.33
26	LA	669	G	C5-C4	-5.67	1.34	1.38
26	LA	1107	G	O3'-P	-5.67	1.54	1.61
26	LA	1960	A	C2'-C1'	-5.67	1.47	1.53
26	LA	2018	G	C5'-C4'	5.67	1.58	1.51
2	SA	228	A	C2'-C1'	-5.67	1.47	1.53
2	SA	514	C	C5'-C4'	5.67	1.58	1.51
2	SA	960	U	C2'-C1'	-5.67	1.47	1.53
26	LA	522	A	C5-C4	5.67	1.42	1.38
26	LA	2376	A	C3'-C2'	5.67	1.59	1.52
26	LA	2553	G	C5-C4	-5.67	1.34	1.38
2	SA	273	U	C5'-C4'	5.67	1.58	1.51
15	SO	25	GLU	CB-CG	5.67	1.62	1.52
26	LA	3	U	C5-C6	5.67	1.39	1.34
26	LA	15	G	C5-C6	-5.67	1.36	1.42
26	LA	383	C	N3-C4	5.67	1.38	1.33
26	LA	863	A	C1'-N9	-5.67	1.39	1.46
26	LA	1153	C	C2'-O2'	-5.67	1.34	1.41
26	LA	1435	G	N3-C4	-5.67	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2183	A	C2-N3	5.67	1.38	1.33
26	LA	2326	C	N1-C6	5.67	1.40	1.37
26	LA	2511	U	O3'-P	-5.67	1.54	1.61
26	LA	2758	A	C1'-N9	-5.67	1.39	1.46
26	LA	2803	G	O3'-P	-5.67	1.54	1.61
45	LG	117	SER	CA-CB	5.67	1.61	1.52
2	SA	589	U	N1-C6	-5.67	1.32	1.38
2	SA	919	A	N3-C4	-5.67	1.31	1.34
2	SA	1509	C	C4-N4	-5.67	1.28	1.33
26	LA	97	C	C2-N3	-5.67	1.31	1.35
26	LA	424	G	C3'-C2'	-5.67	1.46	1.52
26	LA	1087	G	N3-C4	-5.67	1.31	1.35
26	LA	1298	C	P-O5'	5.67	1.65	1.59
26	LA	1758	U	N1-C2	5.67	1.43	1.38
2	SA	201	G	P-O5'	-5.67	1.54	1.59
2	SA	268	U	C3'-O3'	5.67	1.50	1.42
2	SA	568	G	C5'-C4'	5.67	1.58	1.51
2	SA	1253	G	C2-N3	5.67	1.37	1.32
2	SA	1479	C	C4'-C3'	-5.67	1.46	1.52
2	SA	1505	G	C2-N3	-5.67	1.28	1.32
26	LA	263	G	N9-C8	-5.67	1.33	1.37
26	LA	289	G	C2'-C1'	-5.67	1.47	1.53
26	LA	617	G	N1-C2	-5.67	1.33	1.37
26	LA	1355	G	N9-C8	-5.67	1.33	1.37
26	LA	1372	U	N1-C2	-5.67	1.33	1.38
26	LA	2352	A	N3-C4	-5.67	1.31	1.34
26	LA	2384	U	N3-C4	-5.67	1.33	1.38
26	LA	2481	G	C1'-N9	-5.67	1.39	1.46
26	LA	2531	A	C5'-C4'	5.67	1.58	1.51
49	LK	126	ARG	CD-NE	5.67	1.56	1.46
2	SA	1045	C	C5-C6	5.67	1.38	1.34
2	SA	1050	G	C2'-C1'	5.67	1.59	1.53
2	SA	1340	A	C2'-C1'	-5.67	1.47	1.53
4	S2	38	A	P-O5'	5.67	1.65	1.59
25	LB	105	G	N1-C2	-5.67	1.33	1.37
26	LA	84	A	O3'-P	-5.67	1.54	1.61
26	LA	1364	G	N7-C5	5.67	1.42	1.39
26	LA	1545	A	N7-C5	-5.67	1.35	1.39
26	LA	1557	C	C4'-C3'	-5.67	1.46	1.52
26	LA	1652	A	C4'-C3'	-5.67	1.46	1.52
26	LA	2061	G	C2-N3	-5.67	1.28	1.32
26	LA	2352	A	C6-N1	-5.67	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2445	G	C4'-C3'	-5.67	1.46	1.52
26	LA	2662	A	N1-C2	-5.67	1.29	1.34
26	LA	2666	C	N3-C4	-5.67	1.29	1.33
26	LA	2864	G	C5'-C4'	5.67	1.58	1.51
2	SA	516	U	C4-O4	5.67	1.28	1.23
2	SA	1230	C	N1-C6	-5.67	1.33	1.37
26	LA	365	U	O4'-C1'	-5.67	1.34	1.41
26	LA	2361	G	C5-C4	-5.67	1.34	1.38
26	LA	2668	G	N3-C4	-5.67	1.31	1.35
2	SA	255	G	C4'-O4'	-5.66	1.38	1.45
2	SA	358	U	O3'-P	-5.66	1.54	1.61
2	SA	451	A	C3'-C2'	5.66	1.59	1.52
2	SA	759	A	O3'-P	-5.66	1.54	1.61
2	SA	884	U	P-O5'	-5.66	1.54	1.59
2	SA	1087	G	P-O5'	-5.66	1.54	1.59
2	SA	1312	G	C5-C4	-5.66	1.34	1.38
4	S2	67	C	C2'-C1'	-5.66	1.47	1.53
26	LA	308	G	O3'-P	-5.66	1.54	1.61
26	LA	576	U	C2'-C1'	-5.66	1.47	1.53
26	LA	757	G	N9-C8	-5.66	1.33	1.37
26	LA	1010	A	C1'-N9	-5.66	1.39	1.46
26	LA	1100	C	N1-C6	-5.66	1.33	1.37
26	LA	2333	A	C6-N6	-5.66	1.29	1.33
2	SA	559	A	C4'-O4'	5.66	1.52	1.45
2	SA	766	A	C2'-C1'	-5.66	1.47	1.53
26	LA	340	A	N9-C8	-5.66	1.33	1.37
26	LA	826	U	C5'-C4'	5.66	1.58	1.51
26	LA	1763	G	C5-C4	5.66	1.42	1.38
26	LA	1868	C	C4'-O4'	-5.66	1.38	1.45
2	SA	377	G	N9-C8	5.66	1.41	1.37
2	SA	439	U	O3'-P	-5.66	1.54	1.61
2	SA	651	C	O3'-P	-5.66	1.54	1.61
2	SA	726	C	C4-C5	-5.66	1.38	1.43
2	SA	879	C	C4'-C3'	-5.66	1.46	1.52
2	SA	986	U	C2'-C1'	5.66	1.59	1.53
2	SA	1129	C	N3-C4	-5.66	1.29	1.33
4	S2	3	C	P-O5'	-5.66	1.54	1.59
26	LA	279	A	C3'-O3'	5.66	1.50	1.42
26	LA	625	G	C5-C4	-5.66	1.34	1.38
26	LA	811	U	C3'-C2'	-5.66	1.46	1.52
26	LA	1056	G	P-O5'	5.66	1.65	1.59
26	LA	1129	A	C2-N3	5.66	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1524	G	C2-N2	-5.66	1.28	1.34
26	LA	1663	G	O3'-P	-5.66	1.54	1.61
26	LA	2603	G	C5-C4	-5.66	1.34	1.38
2	SA	79	G	C2-N2	-5.66	1.28	1.34
2	SA	350	G	C2-N2	-5.66	1.28	1.34
2	SA	483	C	C5'-C4'	5.66	1.58	1.51
2	SA	773	G	N3-C4	-5.66	1.31	1.35
2	SA	851	G	C2-N2	-5.66	1.28	1.34
4	S2	18	U	C4'-O4'	5.66	1.52	1.45
26	LA	524	G	P-O5'	-5.66	1.54	1.59
26	LA	547	A	N9-C8	-5.66	1.33	1.37
26	LA	991	C	C3'-C2'	-5.66	1.46	1.52
26	LA	1134	A	N3-C4	5.66	1.38	1.34
26	LA	1413	A	O3'-P	-5.66	1.54	1.61
26	LA	1430	G	C3'-O3'	5.66	1.50	1.42
26	LA	1455	G	C2-N2	-5.66	1.28	1.34
26	LA	1588	G	C5'-C4'	5.66	1.58	1.51
26	LA	1659	G	C2'-C1'	-5.66	1.47	1.53
2	SA	165	G	O3'-P	-5.66	1.54	1.61
2	SA	362	G	C3'-C2'	-5.66	1.46	1.52
26	LA	64	A	C5-C6	5.66	1.46	1.41
2	SA	82	G	N9-C8	5.66	1.41	1.37
2	SA	132	C	C4-N4	-5.66	1.28	1.33
2	SA	234	C	N3-C4	-5.66	1.29	1.33
2	SA	388	G	N9-C4	-5.66	1.33	1.38
2	SA	967	C	O3'-P	-5.66	1.54	1.61
2	SA	1273	C	C5'-C4'	-5.66	1.44	1.51
2	SA	1310	G	C3'-O3'	5.66	1.50	1.42
3	S1	14	G	C6-N1	-5.66	1.35	1.39
26	LA	950	G	C3'-C2'	-5.66	1.46	1.52
26	LA	1037	G	C5'-C4'	5.66	1.58	1.51
26	LA	1864	U	C4'-C3'	-5.66	1.46	1.52
26	LA	2737	G	C6-N1	-5.66	1.35	1.39
20	SD	186	GLU	CD-OE2	5.65	1.31	1.25
26	LA	116	C	O4'-C1'	-5.65	1.34	1.41
26	LA	405	U	C5'-C4'	5.65	1.58	1.51
26	LA	728	G	N7-C5	-5.65	1.35	1.39
26	LA	905	A	N1-C2	5.65	1.39	1.34
26	LA	1638	C	C2'-C1'	-5.65	1.47	1.53
26	LA	1875	G	C3'-C2'	-5.65	1.46	1.52
26	LA	2039	U	N3-C4	-5.65	1.33	1.38
26	LA	2782	G	C2-N3	5.65	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	149	A	O3'-P	-5.65	1.54	1.61
2	SA	172	A	C6-N6	5.65	1.38	1.33
2	SA	205	A	C2-N3	-5.65	1.28	1.33
2	SA	452	A	P-O5'	-5.65	1.54	1.59
2	SA	556	C	C1'-N1	5.65	1.57	1.48
2	SA	1447	A	O3'-P	-5.65	1.54	1.61
3	S1	28	U	N3-C4	-5.65	1.33	1.38
25	LB	69	G	C5-C4	-5.65	1.34	1.38
26	LA	116	C	C4-C5	-5.65	1.38	1.43
26	LA	244	A	C5-C6	-5.65	1.35	1.41
26	LA	629	G	N7-C5	-5.65	1.35	1.39
26	LA	768	G	C2'-C1'	-5.65	1.47	1.53
26	LA	1401	G	C4'-O4'	-5.65	1.38	1.45
26	LA	1931	U	C4'-O4'	-5.65	1.38	1.45
26	LA	2278	A	C8-N7	-5.65	1.27	1.31
26	LA	2502	G	C2-N3	5.65	1.37	1.32
2	SA	162	A	C5-C4	-5.65	1.34	1.38
2	SA	167	A	O4'-C1'	5.65	1.49	1.41
2	SA	200	G	C5-C4	5.65	1.42	1.38
2	SA	753	A	C2'-O2'	-5.65	1.34	1.41
2	SA	877	G	C2'-C1'	-5.65	1.47	1.53
2	SA	891	U	N3-C4	-5.65	1.33	1.38
2	SA	1361	G	N1-C2	-5.65	1.33	1.37
2	SA	1403	C	C3'-O3'	5.65	1.50	1.42
26	LA	342	A	C4'-O4'	-5.65	1.38	1.45
26	LA	1162	G	N1-C2	-5.65	1.33	1.37
26	LA	1730	C	C2-N3	5.65	1.40	1.35
26	LA	1872	A	C5'-C4'	5.65	1.58	1.51
26	LA	1900	A	N9-C4	-5.65	1.34	1.37
26	LA	2103	C	O3'-P	-5.65	1.54	1.61
26	LA	2128	G	N7-C5	-5.65	1.35	1.39
26	LA	2287	A	C8-N7	-5.65	1.27	1.31
26	LA	2498	C	O3'-P	-5.65	1.54	1.61
26	LA	2597	G	C2-N2	-5.65	1.28	1.34
26	LA	2674	G	O4'-C1'	-5.65	1.34	1.41
44	LF	30	GLN	CA-CB	5.65	1.66	1.53
2	SA	1248	A	P-O5'	5.65	1.65	1.59
26	LA	2557	G	C5'-C4'	5.65	1.58	1.51
26	LA	2628	C	C4'-C3'	5.65	1.59	1.53
2	SA	811	C	C4'-C3'	5.65	1.59	1.53
2	SA	829	G	N9-C8	-5.65	1.33	1.37
2	SA	1188	A	C4'-O4'	-5.65	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1323	G	C2'-C1'	-5.65	1.47	1.53
26	LA	64	A	N9-C4	-5.65	1.34	1.37
26	LA	145	C	C2-N3	-5.65	1.31	1.35
26	LA	230	G	N3-C4	-5.65	1.31	1.35
26	LA	1836	C	C5-C6	-5.65	1.29	1.34
26	LA	2332	C	O4'-C1'	5.65	1.49	1.41
26	LA	2546	U	C2-O2	-5.65	1.17	1.22
26	LA	2587	A	N3-C4	-5.65	1.31	1.34
26	LA	2723	C	N1-C2	5.65	1.45	1.40
2	SA	102	G	C2-N2	-5.65	1.28	1.34
2	SA	1115	U	C2-O2	5.65	1.27	1.22
2	SA	1253	G	O4'-C1'	5.65	1.49	1.41
26	LA	55	G	C3'-O3'	5.65	1.50	1.42
26	LA	1911	U	N1-C2	-5.65	1.33	1.38
26	LA	2117	A	C6-N6	5.65	1.38	1.33
26	LA	2482	A	N7-C5	-5.65	1.35	1.39
26	LA	2502	G	C8-N7	5.65	1.34	1.30
26	LA	2549	G	C5'-C4'	5.65	1.58	1.51
26	LA	2691	C	C4-N4	-5.65	1.28	1.33
2	SA	28	A	C5-C4	-5.64	1.34	1.38
2	SA	397	A	C5'-C4'	5.64	1.58	1.51
2	SA	701	U	C4'-O4'	-5.64	1.38	1.45
2	SA	887	G	O5'-C5'	5.64	1.53	1.44
2	SA	945	G	C6-N1	-5.64	1.35	1.39
2	SA	1142	G	C5-C4	5.64	1.42	1.38
2	SA	1176	A	C6-N1	5.64	1.39	1.35
2	SA	1406	U	C3'-C2'	-5.64	1.46	1.52
26	LA	7	G	N7-C5	-5.64	1.35	1.39
26	LA	1052	C	N1-C6	5.64	1.40	1.37
26	LA	1228	G	C3'-C2'	-5.64	1.46	1.52
26	LA	1274	A	C6-N6	5.64	1.38	1.33
26	LA	1373	A	C6-N1	5.64	1.39	1.35
26	LA	1449	G	N3-C4	5.64	1.39	1.35
26	LA	2111	U	C4-C5	-5.64	1.38	1.43
31	LX	2	PHE	CG-CD2	-5.64	1.30	1.38
2	SA	270	A	C8-N7	-5.64	1.27	1.31
2	SA	781	A	C5-C4	5.64	1.42	1.38
3	S1	56	G	O4'-C1'	5.64	1.49	1.41
26	LA	1262	A	C5-C6	-5.64	1.35	1.41
26	LA	2507	C	C5'-C4'	5.64	1.58	1.51
26	LA	2819	G	N9-C8	-5.64	1.33	1.37
2	SA	756	C	C4'-C3'	5.64	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	872	U	C3'-O3'	5.64	1.50	1.42
26	LA	884	U	N1-C6	5.64	1.43	1.38
26	LA	1544	A	N1-C2	-5.64	1.29	1.34
26	LA	2205	A	N3-C4	-5.64	1.31	1.34
26	LA	2281	A	C3'-O3'	5.64	1.50	1.42
26	LA	2644	G	C2-N2	5.64	1.40	1.34
2	SA	336	A	N7-C5	5.64	1.42	1.39
2	SA	1338	G	C5'-C4'	-5.64	1.44	1.51
2	SA	1513	A	O3'-P	-5.64	1.54	1.61
2	SA	1529	G	C5'-C4'	-5.64	1.44	1.51
5	ST	43	LYS	CA-CB	5.64	1.66	1.53
25	LB	3	C	C3'-O3'	5.64	1.50	1.42
26	LA	24	G	C2-N2	-5.64	1.28	1.34
26	LA	675	A	C6-N1	-5.64	1.31	1.35
26	LA	823	C	N1-C6	-5.64	1.33	1.37
26	LA	957	C	C2'-C1'	-5.64	1.47	1.53
26	LA	1522	A	P-O5'	-5.64	1.54	1.59
26	LA	1645	G	C8-N7	-5.64	1.27	1.30
26	LA	1854	A	N9-C4	-5.64	1.34	1.37
26	LA	2587	A	O3'-P	-5.64	1.54	1.61
26	LA	2605	U	C3'-C2'	-5.64	1.46	1.52
26	LA	2882	A	N1-C2	-5.64	1.29	1.34
26	LA	197	A	C8-N7	-5.64	1.27	1.31
26	LA	478	A	N1-C2	-5.64	1.29	1.34
2	SA	602	A	C2'-C1'	-5.64	1.47	1.53
2	SA	622	A	C5'-C4'	5.64	1.58	1.51
2	SA	638	U	N1-C2	-5.64	1.33	1.38
2	SA	846	G	C5'-C4'	5.64	1.58	1.51
26	LA	493	G	N1-C2	-5.64	1.33	1.37
26	LA	677	A	C8-N7	-5.64	1.27	1.31
26	LA	876	C	C2-N3	-5.64	1.31	1.35
26	LA	1676	A	N3-C4	5.64	1.38	1.34
26	LA	2495	G	C5'-C4'	5.64	1.58	1.51
26	LA	2607	G	P-O5'	-5.64	1.54	1.59
2	SA	226	G	C5'-C4'	5.63	1.58	1.51
2	SA	957	U	O4'-C1'	-5.63	1.34	1.41
2	SA	1289	A	N3-C4	-5.63	1.31	1.34
3	S1	45	G	O4'-C1'	-5.63	1.34	1.41
26	LA	89	A	O3'-P	-5.63	1.54	1.61
26	LA	790	U	N3-C4	-5.63	1.33	1.38
26	LA	883	G	C3'-C2'	5.63	1.59	1.52
26	LA	1072	C	O3'-P	-5.63	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1231	U	O3'-P	-5.63	1.54	1.61
26	LA	1331	G	N9-C4	-5.63	1.33	1.38
26	LA	2224	G	O3'-P	-5.63	1.54	1.61
26	LA	2551	C	C2'-C1'	-5.63	1.47	1.53
2	SA	954	G	N9-C4	-5.63	1.33	1.38
2	SA	1152	A	O4'-C1'	-5.63	1.34	1.41
26	LA	412	A	C5-C6	-5.63	1.35	1.41
26	LA	498	G	C6-N1	5.63	1.43	1.39
26	LA	2107	G	C5-C4	-5.63	1.34	1.38
2	SA	468	A	N9-C4	5.63	1.41	1.37
2	SA	505	G	N9-C4	5.63	1.42	1.38
4	S2	8	U	C4-C5	5.63	1.48	1.43
25	LB	1	U	C3'-C2'	-5.63	1.46	1.52
25	LB	76	G	C2-N2	-5.63	1.28	1.34
26	LA	774	G	O4'-C1'	-5.63	1.34	1.41
26	LA	951	C	C4'-C3'	5.63	1.59	1.53
26	LA	1360	G	C2'-C1'	-5.63	1.47	1.53
26	LA	1631	G	N9-C8	5.63	1.41	1.37
26	LA	2172	U	C1'-N1	5.63	1.57	1.48
26	LA	2340	A	C3'-C2'	5.63	1.59	1.52
26	LA	2359	C	N3-C4	-5.63	1.30	1.33
26	LA	2660	A	C5-C4	-5.63	1.34	1.38
26	LA	2819	G	C5-C6	-5.63	1.36	1.42
26	LA	108	G	P-O5'	-5.63	1.54	1.59
26	LA	624	C	C5'-C4'	5.63	1.58	1.51
26	LA	1191	G	N3-C4	-5.63	1.31	1.35
26	LA	2035	G	N7-C5	5.63	1.42	1.39
26	LA	2095	A	C5-C4	5.63	1.42	1.38
26	LA	2490	G	C3'-O3'	5.63	1.50	1.42
2	SA	182	A	N9-C8	5.63	1.42	1.37
2	SA	219	U	C4-O4	-5.63	1.19	1.23
2	SA	762	U	N3-C4	-5.63	1.33	1.38
2	SA	1501	C	C4-C5	-5.63	1.38	1.43
26	LA	282	A	O3'-P	-5.63	1.54	1.61
26	LA	477	A	C1'-N9	-5.63	1.39	1.46
26	LA	546	U	C5'-C4'	5.63	1.58	1.51
26	LA	573	U	C2'-O2'	-5.63	1.34	1.41
26	LA	1009	A	N7-C5	-5.63	1.35	1.39
26	LA	1679	A	N9-C4	-5.63	1.34	1.37
26	LA	2095	A	C2'-C1'	-5.63	1.47	1.53
26	LA	2346	A	C2-N3	-5.63	1.28	1.33
26	LA	2619	C	N1-C6	-5.63	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2700	A	O3'-P	-5.63	1.54	1.61
2	SA	16	A	C1'-N9	-5.63	1.39	1.46
2	SA	296	U	N3-C4	5.63	1.43	1.38
2	SA	320	A	N3-C4	-5.63	1.31	1.34
2	SA	502	A	C2'-C1'	-5.63	1.47	1.53
4	S2	51	U	N1-C2	5.63	1.43	1.38
26	LA	223	A	N9-C8	-5.63	1.33	1.37
26	LA	758	C	C4'-O4'	5.63	1.52	1.45
26	LA	918	A	O3'-P	-5.63	1.54	1.61
26	LA	1546	G	P-O5'	5.63	1.65	1.59
26	LA	1566	A	P-O5'	-5.63	1.54	1.59
26	LA	1623	G	C5-C6	-5.63	1.36	1.42
26	LA	1987	A	C6-N1	-5.63	1.31	1.35
26	LA	2181	U	C4'-C3'	5.63	1.59	1.53
26	LA	2371	G	N7-C5	5.63	1.42	1.39
2	SA	695	A	N1-C2	-5.62	1.29	1.34
2	SA	1047	G	C5'-C4'	5.62	1.58	1.51
2	SA	1324	A	C2'-C1'	-5.62	1.47	1.53
26	LA	415	A	C8-N7	-5.62	1.27	1.31
26	LA	1625	C	C4-C5	-5.62	1.38	1.43
47	LJ	55	ARG	CD-NE	5.62	1.56	1.46
2	SA	112	G	C2-N2	-5.62	1.28	1.34
2	SA	297	G	C2'-C1'	-5.62	1.47	1.53
2	SA	602	A	C5'-C4'	5.62	1.58	1.51
2	SA	773	G	C5-C6	-5.62	1.36	1.42
2	SA	904	U	C4'-C3'	-5.62	1.47	1.52
2	SA	946	A	C2-N3	5.62	1.38	1.33
4	S2	73	A	N9-C4	-5.62	1.34	1.37
26	LA	8	C	C3'-O3'	5.62	1.50	1.42
26	LA	77	G	C6-N1	-5.62	1.35	1.39
26	LA	758	C	C2'-C1'	-5.62	1.47	1.53
26	LA	1317	G	C6-N1	-5.62	1.35	1.39
26	LA	1419	A	C1'-N9	-5.62	1.39	1.46
26	LA	1503	A	C1'-N9	-5.62	1.39	1.46
26	LA	2202	U	C4-C5	-5.62	1.38	1.43
26	LA	2337	G	N1-C2	-5.62	1.33	1.37
26	LA	2697	G	N9-C4	5.62	1.42	1.38
27	LD	270	ARG	CD-NE	5.62	1.56	1.46
32	LY	40	ARG	CZ-NH1	5.62	1.40	1.33
2	SA	128	G	N1-C2	-5.62	1.33	1.37
25	LB	73	A	C2-N3	5.62	1.38	1.33
26	LA	9	G	O3'-P	-5.62	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	167	A	C5'-C4'	5.62	1.58	1.51
26	LA	527	C	C3'-C2'	-5.62	1.46	1.52
26	LA	752	A	N9-C8	-5.62	1.33	1.37
26	LA	1170	C	O3'-P	-5.62	1.54	1.61
26	LA	1490	A	C4'-C3'	5.62	1.59	1.53
26	LA	2840	C	C5'-C4'	-5.62	1.44	1.51
2	SA	939	G	C3'-O3'	5.62	1.50	1.42
2	SA	1052	U	C4'-C3'	5.62	1.59	1.53
2	SA	1113	C	C3'-C2'	-5.62	1.46	1.52
25	LB	9	G	P-O5'	-5.62	1.54	1.59
26	LA	601	C	C3'-O3'	5.62	1.50	1.42
26	LA	1148	U	C4'-O4'	-5.62	1.38	1.45
26	LA	1797	G	P-O5'	-5.62	1.54	1.59
26	LA	2745	C	N1-C2	-5.62	1.34	1.40
2	SA	582	C	P-O5'	-5.62	1.54	1.59
2	SA	606	G	P-O5'	5.62	1.65	1.59
2	SA	901	A	C5'-C4'	5.62	1.58	1.51
2	SA	919	A	N7-C5	-5.62	1.35	1.39
2	SA	1178	G	C4'-C3'	5.62	1.59	1.53
26	LA	612	G	N9-C8	-5.62	1.33	1.37
26	LA	717	C	C4'-O4'	5.62	1.52	1.45
26	LA	884	U	N1-C2	-5.62	1.33	1.38
26	LA	1381	G	C5-C4	-5.62	1.34	1.38
26	LA	1693	U	N1-C6	-5.62	1.32	1.38
26	LA	1791	A	C6-N1	-5.62	1.31	1.35
26	LA	2609	U	N1-C6	-5.62	1.32	1.38
26	LA	2744	G	N1-C2	-5.62	1.33	1.37
2	SA	1181	G	C3'-C2'	-5.62	1.46	1.52
26	LA	1153	C	N1-C6	5.62	1.40	1.37
26	LA	1862	G	C8-N7	-5.62	1.27	1.30
26	LA	2224	G	N1-C2	-5.62	1.33	1.37
26	LA	2290	G	N3-C4	-5.62	1.31	1.35
2	SA	15	G	C6-O6	-5.62	1.19	1.24
2	SA	102	G	N7-C5	5.62	1.42	1.39
2	SA	303	A	C3'-O3'	5.62	1.50	1.42
2	SA	684	U	C2-N3	-5.62	1.33	1.37
2	SA	1079	G	N7-C5	-5.62	1.35	1.39
2	SA	1128	C	C4-C5	-5.62	1.38	1.43
2	SA	1138	G	C1'-N9	5.62	1.57	1.48
26	LA	109	C	C3'-C2'	-5.62	1.46	1.52
26	LA	470	A	N7-C5	-5.62	1.35	1.39
26	LA	1283	G	C8-N7	5.62	1.34	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1616	A	C6-N6	-5.62	1.29	1.33
26	LA	1844	C	C4-C5	5.62	1.47	1.43
26	LA	2409	G	O3'-P	-5.62	1.54	1.61
26	LA	2506	U	C5'-C4'	5.62	1.58	1.51
26	LA	2673	G	C5-C6	-5.62	1.36	1.42
26	LA	2805	C	O3'-P	-5.62	1.54	1.61
2	SA	604	G	C5-C4	5.61	1.42	1.38
2	SA	873	A	C2'-C1'	-5.61	1.47	1.53
2	SA	1245	C	N1-C6	-5.61	1.33	1.37
2	SA	1344	C	N3-C4	-5.61	1.30	1.33
26	LA	184	C	C1'-N1	-5.61	1.39	1.46
26	LA	206	U	C4-O4	-5.61	1.19	1.23
26	LA	830	G	O3'-P	-5.61	1.54	1.61
26	LA	856	G	C2-N3	-5.61	1.28	1.32
26	LA	982	C	C2-N3	-5.61	1.31	1.35
26	LA	1397	U	N1-C6	5.61	1.43	1.38
26	LA	1695	G	N9-C4	5.61	1.42	1.38
26	LA	2160	C	C1'-N1	5.61	1.57	1.48
26	LA	2398	U	C3'-C2'	-5.61	1.46	1.52
26	LA	2435	A	P-O5'	-5.61	1.54	1.59
26	LA	2787	C	O3'-P	-5.61	1.54	1.61
2	SA	734	G	O3'-P	-5.61	1.54	1.61
2	SA	1130	A	C4'-O4'	5.61	1.52	1.45
2	SA	1377	A	C5-C6	-5.61	1.35	1.41
2	SA	1476	A	P-O5'	-5.61	1.54	1.59
25	LB	54	G	N3-C4	-5.61	1.31	1.35
26	LA	1368	G	C4'-O4'	5.61	1.52	1.45
26	LA	1845	G	C6-N1	-5.61	1.35	1.39
26	LA	2167	U	C3'-O3'	5.61	1.50	1.42
26	LA	2538	C	C5-C6	-5.61	1.29	1.34
2	SA	223	A	C1'-N9	-5.61	1.39	1.46
2	SA	503	C	C4-C5	-5.61	1.38	1.43
2	SA	601	G	C4'-C3'	-5.61	1.47	1.52
2	SA	810	C	N1-C6	5.61	1.40	1.37
2	SA	1014	A	C3'-C2'	5.61	1.59	1.52
2	SA	1198	G	C2-N3	5.61	1.37	1.32
2	SA	1220	G	C8-N7	5.61	1.34	1.30
26	LA	52	A	C2-N3	-5.61	1.28	1.33
26	LA	86	G	C8-N7	5.61	1.34	1.30
26	LA	155	A	C5'-C4'	5.61	1.58	1.51
26	LA	310	A	C3'-C2'	-5.61	1.46	1.52
26	LA	518	G	O3'-P	-5.61	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	792	A	O4'-C1'	-5.61	1.34	1.41
26	LA	1211	C	C3'-O3'	5.61	1.50	1.42
26	LA	1613	G	O3'-P	5.61	1.67	1.61
26	LA	1699	G	N9-C4	-5.61	1.33	1.38
26	LA	1980	G	C5'-C4'	5.61	1.58	1.51
26	LA	2288	A	C3'-C2'	-5.61	1.46	1.52
27	LD	183	VAL	CA-CB	-5.61	1.43	1.54
2	SA	409	U	C3'-C2'	-5.61	1.46	1.52
26	LA	537	G	N1-C2	-5.61	1.33	1.37
26	LA	1661	G	O3'-P	-5.61	1.54	1.61
26	LA	2365	G	C5-C4	-5.61	1.34	1.38
26	LA	2667	C	C5'-C4'	5.61	1.58	1.51
2	SA	25	C	C4-C5	-5.61	1.38	1.43
2	SA	86	G	N9-C4	-5.61	1.33	1.38
2	SA	1047	G	C5-C6	-5.61	1.36	1.42
24	S3	71	TRP	CZ2-CH2	5.61	1.48	1.37
26	LA	12	U	C4'-O4'	5.61	1.52	1.45
26	LA	301	G	N7-C5	5.61	1.42	1.39
26	LA	385	C	O4'-C1'	-5.61	1.34	1.41
26	LA	400	G	C6-N1	5.61	1.43	1.39
26	LA	453	A	P-O5'	5.61	1.65	1.59
26	LA	1258	U	C4'-O4'	-5.61	1.38	1.45
26	LA	1549	A	C2'-C1'	-5.61	1.47	1.53
26	LA	1697	G	N3-C4	-5.61	1.31	1.35
26	LA	2089	C	C2'-C1'	-5.61	1.47	1.53
26	LA	2125	G	O3'-P	-5.61	1.54	1.61
26	LA	2135	A	C2-N3	5.61	1.38	1.33
26	LA	2368	C	C2'-C1'	-5.61	1.47	1.53
26	LA	2454	G	C4'-O4'	-5.61	1.38	1.45
2	SA	957	U	C2-O2	5.61	1.27	1.22
26	LA	586	A	N9-C4	-5.61	1.34	1.37
26	LA	603	A	C4'-O4'	-5.61	1.38	1.45
26	LA	1546	G	C6-O6	-5.61	1.19	1.24
26	LA	1563	U	C3'-C2'	-5.61	1.46	1.52
26	LA	1826	G	C5'-C4'	5.61	1.58	1.51
26	LA	2896	C	C5'-C4'	5.61	1.58	1.51
2	SA	362	G	C2-N2	-5.60	1.28	1.34
26	LA	609	A	N7-C5	-5.60	1.35	1.39
26	LA	1107	G	N7-C5	5.60	1.42	1.39
26	LA	1176	U	N3-C4	-5.60	1.33	1.38
26	LA	1955	U	C3'-O3'	5.60	1.50	1.42
25	LB	99	A	N7-C5	-5.60	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	992	C	N1-C6	-5.60	1.33	1.37
26	LA	1007	C	O3'-P	-5.60	1.54	1.61
26	LA	1179	G	C2-N3	5.60	1.37	1.32
26	LA	1182	G	O3'-P	-5.60	1.54	1.61
26	LA	1617	C	N3-C4	-5.60	1.30	1.33
26	LA	2052	A	N9-C4	-5.60	1.34	1.37
26	LA	2142	A	C2-N3	-5.60	1.28	1.33
2	SA	99	C	C4'-O4'	-5.60	1.38	1.45
2	SA	695	A	N9-C8	-5.60	1.33	1.37
2	SA	1341	U	C2-N3	-5.60	1.33	1.37
26	LA	1572	A	C6-N6	5.60	1.38	1.33
26	LA	1829	A	C6-N1	-5.60	1.31	1.35
26	LA	2167	U	C4-O4	-5.60	1.19	1.23
2	SA	75	G	N9-C8	5.60	1.41	1.37
2	SA	143	A	C3'-C2'	-5.60	1.46	1.52
2	SA	274	A	N3-C4	5.60	1.38	1.34
2	SA	726	C	C5'-C4'	5.60	1.58	1.51
2	SA	768	A	C6-N1	-5.60	1.31	1.35
2	SA	1134	G	P-O5'	-5.60	1.54	1.59
2	SA	1170	A	C1'-N9	-5.60	1.39	1.46
2	SA	1279	G	N9-C4	5.60	1.42	1.38
24	S3	452	SER	CA-CB	5.60	1.61	1.52
26	LA	63	A	N1-C2	-5.60	1.29	1.34
26	LA	92	U	C3'-C2'	-5.60	1.46	1.52
26	LA	239	C	C2'-C1'	-5.60	1.47	1.53
26	LA	519	U	N1-C2	-5.60	1.33	1.38
26	LA	530	G	N1-C2	-5.60	1.33	1.37
26	LA	566	U	N3-C4	-5.60	1.33	1.38
26	LA	971	G	N1-C2	-5.60	1.33	1.37
26	LA	1455	G	C3'-C2'	-5.60	1.46	1.52
26	LA	1472	C	C5'-C4'	5.60	1.58	1.51
26	LA	1507	C	C4-C5	5.60	1.47	1.43
26	LA	1833	C	O4'-C1'	-5.60	1.34	1.41
26	LA	2049	G	C6-N1	5.60	1.43	1.39
26	LA	2190	G	O3'-P	-5.60	1.54	1.61
26	LA	2391	G	N9-C8	-5.60	1.33	1.37
26	LA	2556	C	N1-C6	5.60	1.40	1.37
26	LA	2879	A	C4'-C3'	5.60	1.59	1.53
2	SA	52	C	C4-N4	-5.60	1.28	1.33
2	SA	936	C	N1-C6	-5.60	1.33	1.37
2	SA	968	A	C5'-C4'	-5.60	1.44	1.51
2	SA	1138	G	C3'-O3'	5.60	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1199	U	C5'-C4'	5.60	1.58	1.51
26	LA	17	G	C6-N1	-5.60	1.35	1.39
26	LA	1003	G	C5-C4	5.60	1.42	1.38
26	LA	1521	G	C2'-C1'	-5.60	1.47	1.53
26	LA	2029	G	N3-C4	-5.60	1.31	1.35
26	LA	2088	A	C8-N7	-5.60	1.27	1.31
26	LA	2208	C	C3'-O3'	5.60	1.50	1.42
26	LA	2334	U	C4'-O4'	-5.60	1.38	1.45
26	LA	2391	G	C2-N2	-5.60	1.28	1.34
26	LA	2635	A	C2-N3	-5.60	1.28	1.33
25	LB	39	A	N1-C2	-5.60	1.29	1.34
25	LB	113	C	C2'-C1'	-5.60	1.47	1.53
26	LA	68	G	C5-C6	-5.60	1.36	1.42
26	LA	272	A	C3'-C2'	5.60	1.59	1.52
26	LA	1924	C	C4'-O4'	5.60	1.52	1.45
2	SA	660	C	C4-C5	-5.59	1.38	1.43
2	SA	1079	G	C2'-C1'	-5.59	1.47	1.53
26	LA	91	A	N1-C2	-5.59	1.29	1.34
26	LA	95	A	P-O5'	-5.59	1.54	1.59
26	LA	312	G	O3'-P	-5.59	1.54	1.61
26	LA	650	C	C4-C5	-5.59	1.38	1.43
26	LA	770	G	C6-N1	-5.59	1.35	1.39
26	LA	1130	U	C4-C5	5.59	1.48	1.43
26	LA	1598	A	C6-N1	-5.59	1.31	1.35
26	LA	1730	C	C5'-C4'	5.59	1.58	1.51
26	LA	1946	U	P-O5'	-5.59	1.54	1.59
26	LA	2392	A	C8-N7	-5.59	1.27	1.31
2	SA	1089	G	N3-C4	-5.59	1.31	1.35
26	LA	1096	A	C2-N3	-5.59	1.28	1.33
26	LA	1410	G	C8-N7	-5.59	1.27	1.30
26	LA	2349	G	P-O5'	-5.59	1.54	1.59
2	SA	617	G	C8-N7	5.59	1.34	1.30
2	SA	1474	U	O3'-P	-5.59	1.54	1.61
2	SA	1500	A	N7-C5	-5.59	1.35	1.39
26	LA	391	A	C5-C4	5.59	1.42	1.38
26	LA	597	G	C2'-C1'	-5.59	1.47	1.53
26	LA	1380	G	C2-N2	-5.59	1.28	1.34
26	LA	1451	C	O4'-C1'	-5.59	1.34	1.41
26	LA	1688	U	C3'-O3'	5.59	1.50	1.42
26	LA	1694	C	C2-N3	-5.59	1.31	1.35
26	LA	2449	U	C5-C6	5.59	1.39	1.34
2	SA	1186	G	N9-C8	-5.59	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	40	U	C5'-C4'	5.59	1.58	1.51
26	LA	189	G	C4'-O4'	-5.59	1.38	1.45
26	LA	886	A	C8-N7	5.59	1.35	1.31
26	LA	1832	C	C2-N3	5.59	1.40	1.35
26	LA	1918	A	C2'-C1'	-5.59	1.47	1.53
26	LA	2282	G	C6-O6	-5.59	1.19	1.24
2	SA	130	A	C5-C4	-5.59	1.34	1.38
2	SA	351	G	C5-C4	5.59	1.42	1.38
2	SA	571	U	P-O5'	-5.59	1.54	1.59
26	LA	300	A	C4'-O4'	5.59	1.52	1.45
26	LA	388	G	O3'-P	-5.59	1.54	1.61
26	LA	555	G	C4'-O4'	-5.59	1.38	1.45
26	LA	2305	U	N1-C2	-5.59	1.33	1.38
26	LA	2401	U	N1-C6	5.59	1.43	1.38
2	SA	11	G	O3'-P	-5.59	1.54	1.61
2	SA	503	C	N1-C6	-5.59	1.33	1.37
2	SA	912	C	C2-O2	-5.59	1.19	1.24
2	SA	1524	C	O3'-P	-5.59	1.54	1.61
26	LA	262	A	C2'-C1'	-5.59	1.47	1.53
26	LA	706	A	C2-N3	-5.59	1.28	1.33
26	LA	1082	U	O3'-P	-5.59	1.54	1.61
26	LA	1813	G	C2'-C1'	-5.59	1.47	1.53
26	LA	1867	G	C5'-C4'	5.59	1.58	1.51
26	LA	2114	A	N9-C8	5.59	1.42	1.37
26	LA	2234	G	C2'-C1'	5.59	1.59	1.53
26	LA	2659	G	P-O5'	-5.59	1.54	1.59
26	LA	2682	A	C6-N6	-5.59	1.29	1.33
2	SA	138	G	C8-N7	-5.58	1.27	1.30
2	SA	532	A	C5-C6	5.58	1.46	1.41
2	SA	1394	A	C2-N3	-5.58	1.28	1.33
26	LA	1847	A	N7-C5	-5.58	1.35	1.39
2	SA	138	G	C2-N3	-5.58	1.28	1.32
2	SA	373	A	N3-C4	5.58	1.38	1.34
2	SA	752	G	C2-N2	-5.58	1.28	1.34
2	SA	868	C	C2-O2	-5.58	1.19	1.24
2	SA	896	C	C4-C5	-5.58	1.38	1.43
2	SA	933	G	C5-C6	-5.58	1.36	1.42
2	SA	1210	C	C3'-O3'	5.58	1.50	1.42
2	SA	1362	A	C6-N1	-5.58	1.31	1.35
26	LA	798	G	O3'-P	-5.58	1.54	1.61
26	LA	833	A	C6-N6	-5.58	1.29	1.33
26	LA	1453	A	C6-N6	5.58	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2209	G	C5-C6	-5.58	1.36	1.42
26	LA	2352	A	N9-C4	-5.58	1.34	1.37
26	LA	2539	C	C2'-C1'	-5.58	1.47	1.53
26	LA	2778	A	N7-C5	-5.58	1.35	1.39
52	LO	23	GLY	CA-C	-5.58	1.43	1.51
2	SA	858	G	O3'-P	-5.58	1.54	1.61
2	SA	1036	A	P-O5'	-5.58	1.54	1.59
3	S1	16	A	N3-C4	5.58	1.38	1.34
25	LB	1	U	C4'-C3'	5.58	1.59	1.53
26	LA	570	G	N3-C4	-5.58	1.31	1.35
26	LA	617	G	P-O5'	-5.58	1.54	1.59
26	LA	1040	A	N3-C4	-5.58	1.31	1.34
26	LA	1507	C	O4'-C1'	-5.58	1.34	1.41
26	LA	1687	G	C2'-C1'	-5.58	1.47	1.53
26	LA	1735	A	O3'-P	-5.58	1.54	1.61
26	LA	2280	G	C1'-N9	-5.58	1.39	1.46
26	LA	2603	G	N9-C8	-5.58	1.33	1.37
2	SA	158	G	C6-N1	5.58	1.43	1.39
2	SA	501	C	N1-C6	5.58	1.40	1.37
25	LB	116	G	P-O5'	-5.58	1.54	1.59
26	LA	1959	G	N9-C8	-5.58	1.33	1.37
26	LA	2468	A	C3'-C2'	-5.58	1.46	1.52
26	LA	2812	G	C3'-C2'	-5.58	1.46	1.52
2	SA	67	C	C2'-O2'	-5.58	1.34	1.41
2	SA	121	U	C3'-O3'	5.58	1.50	1.42
2	SA	295	C	C4-N4	-5.58	1.28	1.33
2	SA	640	A	N7-C5	-5.58	1.35	1.39
2	SA	1022	A	C4'-C3'	-5.58	1.47	1.52
2	SA	1043	G	C4'-O4'	5.58	1.52	1.45
2	SA	1415	G	N7-C5	5.58	1.42	1.39
26	LA	160	A	C1'-N9	-5.58	1.39	1.46
26	LA	256	A	C5'-C4'	5.58	1.58	1.51
26	LA	359	G	N9-C8	-5.58	1.33	1.37
26	LA	735	A	O3'-P	-5.58	1.54	1.61
26	LA	1163	G	N1-C2	-5.58	1.33	1.37
26	LA	1781	U	P-O5'	-5.58	1.54	1.59
26	LA	798	G	C2-N2	-5.58	1.28	1.34
26	LA	1731	G	C3'-C2'	-5.58	1.46	1.52
2	SA	390	U	C3'-C2'	-5.58	1.46	1.52
2	SA	425	G	C3'-O3'	5.58	1.50	1.42
2	SA	963	G	P-O5'	-5.58	1.54	1.59
2	SA	1064	G	C2'-C1'	-5.58	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1422	G	C5-C6	-5.58	1.36	1.42
2	SA	1426	G	N1-C2	-5.58	1.33	1.37
2	SA	1430	A	C3'-O3'	5.58	1.50	1.42
26	LA	556	A	C2'-C1'	-5.58	1.47	1.53
26	LA	611	C	C4-N4	-5.58	1.28	1.33
26	LA	664	G	C5'-C4'	5.58	1.58	1.51
26	LA	708	G	C5-C4	-5.58	1.34	1.38
26	LA	1389	G	C4'-O4'	-5.58	1.38	1.45
26	LA	1524	G	C5-C4	5.58	1.42	1.38
26	LA	1734	G	C5'-C4'	5.58	1.58	1.51
26	LA	2354	C	C5-C6	5.58	1.38	1.34
26	LA	2389	G	N9-C4	-5.58	1.33	1.38
26	LA	2568	U	N1-C2	-5.58	1.33	1.38
26	LA	2743	U	C3'-C2'	-5.58	1.46	1.52
26	LA	2774	C	C5'-C4'	5.58	1.58	1.51
2	SA	506	G	N9-C8	-5.57	1.33	1.37
2	SA	1423	G	C2'-O2'	-5.57	1.34	1.41
2	SA	1493	A	C8-N7	-5.57	1.27	1.31
4	S2	19	G	N9-C8	-5.57	1.33	1.37
4	S2	21	U	C3'-O3'	5.57	1.50	1.42
4	S2	71	G	P-O5'	-5.57	1.54	1.59
26	LA	110	G	C3'-C2'	-5.57	1.46	1.52
26	LA	176	A	C5-C4	5.57	1.42	1.38
26	LA	357	C	N3-C4	-5.57	1.30	1.33
26	LA	432	A	C1'-N9	-5.57	1.39	1.46
26	LA	602	A	N7-C5	-5.57	1.35	1.39
26	LA	669	G	O3'-P	-5.57	1.54	1.61
26	LA	1122	G	C1'-N9	-5.57	1.39	1.46
26	LA	1301	A	C8-N7	-5.57	1.27	1.31
26	LA	1354	A	C2-N3	-5.57	1.28	1.33
26	LA	1834	U	N3-C4	-5.57	1.33	1.38
26	LA	2050	C	C3'-C2'	-5.57	1.46	1.52
26	LA	2557	G	N7-C5	-5.57	1.35	1.39
26	LA	2795	C	N1-C2	5.57	1.45	1.40
26	LA	2831	G	C6-N1	-5.57	1.35	1.39
2	SA	1499	A	C3'-C2'	-5.57	1.46	1.52
26	LA	356	G	C8-N7	5.57	1.34	1.30
26	LA	1171	G	O3'-P	-5.57	1.54	1.61
26	LA	1374	G	N7-C5	-5.57	1.35	1.39
2	SA	1339	A	O4'-C1'	-5.57	1.34	1.41
26	LA	292	U	N1-C6	5.57	1.43	1.38
26	LA	498	G	C2-N3	-5.57	1.28	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	793	A	C6-N1	5.57	1.39	1.35
26	LA	1254	A	C4'-C3'	5.57	1.59	1.53
26	LA	1594	U	C4'-C3'	-5.57	1.47	1.52
26	LA	1653	G	C5-C6	-5.57	1.36	1.42
26	LA	1805	A	C4'-C3'	5.57	1.59	1.53
26	LA	1975	G	N7-C5	-5.57	1.35	1.39
26	LA	2221	G	N7-C5	-5.57	1.35	1.39
2	SA	95	C	N3-C4	-5.57	1.30	1.33
2	SA	634	C	N1-C2	-5.57	1.34	1.40
2	SA	1032	G	C2'-C1'	-5.57	1.47	1.53
2	SA	1340	A	O3'-P	-5.57	1.54	1.61
26	LA	666	A	N3-C4	-5.57	1.31	1.34
26	LA	2454	G	O3'-P	-5.57	1.54	1.61
2	SA	345	C	C5'-C4'	5.57	1.58	1.51
2	SA	786	G	N7-C5	-5.57	1.35	1.39
2	SA	1300	G	C8-N7	5.57	1.34	1.30
2	SA	1508	A	C2-N3	-5.57	1.28	1.33
3	S1	41	A	N9-C8	5.57	1.42	1.37
25	LB	41	G	O3'-P	-5.57	1.54	1.61
26	LA	514	A	C3'-O3'	5.57	1.50	1.42
26	LA	824	U	C5-C6	-5.57	1.29	1.34
26	LA	1651	G	O3'-P	-5.57	1.54	1.61
26	LA	1921	G	N9-C4	-5.57	1.33	1.38
26	LA	1952	A	C5'-C4'	5.57	1.58	1.51
26	LA	1981	A	O3'-P	-5.57	1.54	1.61
26	LA	2039	U	C4-O4	-5.57	1.19	1.23
2	SA	208	U	N3-C4	-5.57	1.33	1.38
2	SA	423	G	C4'-C3'	5.57	1.59	1.53
2	SA	449	G	C5-C6	-5.57	1.36	1.42
2	SA	542	G	N1-C2	-5.57	1.33	1.37
2	SA	754	C	C5'-C4'	5.57	1.58	1.51
2	SA	1314	C	O3'-P	-5.57	1.54	1.61
26	LA	339	U	O3'-P	-5.57	1.54	1.61
26	LA	874	G	C4'-C3'	5.57	1.59	1.53
26	LA	1674	G	C6-N1	-5.57	1.35	1.39
26	LA	1960	A	C3'-O3'	5.57	1.50	1.42
26	LA	2082	A	N3-C4	-5.57	1.31	1.34
53	LP	96	ARG	CZ-NH2	-5.57	1.25	1.33
2	SA	1176	A	N9-C8	-5.56	1.33	1.37
23	SR	36	GLY	CA-C	-5.56	1.43	1.51
26	LA	257	C	O3'-P	-5.56	1.54	1.61
26	LA	2369	A	N3-C4	5.56	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	175	C	C3'-C2'	-5.56	1.46	1.52
2	SA	774	G	C2-N3	-5.56	1.28	1.32
2	SA	1232	U	C5'-C4'	5.56	1.58	1.51
2	SA	1383	C	C3'-C2'	5.56	1.59	1.52
2	SA	1468	A	C3'-C2'	5.56	1.59	1.52
25	LB	42	C	C4-C5	5.56	1.47	1.43
26	LA	241	A	C2'-C1'	-5.56	1.47	1.53
26	LA	348	A	N9-C4	5.56	1.41	1.37
26	LA	376	G	C5'-C4'	5.56	1.58	1.51
26	LA	804	A	C2'-C1'	-5.56	1.47	1.53
26	LA	820	A	N9-C8	-5.56	1.33	1.37
26	LA	842	U	P-O5'	-5.56	1.54	1.59
26	LA	1066	U	C5-C6	5.56	1.39	1.34
26	LA	1144	A	C5'-C4'	5.56	1.58	1.51
26	LA	1175	A	C5-C4	-5.56	1.34	1.38
26	LA	1425	G	C2'-O2'	5.56	1.48	1.41
26	LA	1544	A	C1'-N9	-5.56	1.39	1.46
26	LA	2361	G	C1'-N9	-5.56	1.39	1.46
26	LA	2410	G	C2'-C1'	-5.56	1.47	1.53
26	LA	2822	G	C2'-C1'	-5.56	1.47	1.53
45	LG	147	ARG	CD-NE	5.56	1.55	1.46
2	SA	652	U	C2-N3	-5.56	1.33	1.37
2	SA	1332	A	C5'-C4'	5.56	1.58	1.51
7	SG	128	GLU	CB-CG	5.56	1.62	1.52
26	LA	1294	U	N1-C6	5.56	1.43	1.38
26	LA	1729	U	P-O5'	5.56	1.65	1.59
26	LA	2529	G	C4'-C3'	-5.56	1.47	1.52
2	SA	350	G	C3'-O3'	5.56	1.50	1.42
2	SA	517	G	C6-O6	-5.56	1.19	1.24
2	SA	587	G	N3-C4	5.56	1.39	1.35
2	SA	842	U	O3'-P	-5.56	1.54	1.61
2	SA	916	U	C4'-C3'	-5.56	1.47	1.52
2	SA	929	G	N9-C4	5.56	1.42	1.38
2	SA	1036	A	C5'-C4'	5.56	1.58	1.51
26	LA	117	G	O3'-P	-5.56	1.54	1.61
26	LA	146	A	O4'-C1'	5.56	1.48	1.41
26	LA	516	C	C3'-O3'	-5.56	1.34	1.42
26	LA	900	A	N3-C4	-5.56	1.31	1.34
26	LA	909	A	P-O5'	-5.56	1.54	1.59
26	LA	1508	A	O3'-P	-5.56	1.54	1.61
26	LA	1695	G	C2-N3	5.56	1.37	1.32
26	LA	1829	A	N7-C5	-5.56	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2731	G	C2'-C1'	-5.56	1.47	1.53
2	SA	259	G	N7-C5	-5.56	1.35	1.39
2	SA	364	A	C2'-C1'	-5.56	1.47	1.53
2	SA	394	G	O5'-C5'	5.56	1.53	1.44
2	SA	512	U	C1'-N1	-5.56	1.39	1.46
2	SA	671	G	O3'-P	-5.56	1.54	1.61
2	SA	698	G	O3'-P	-5.56	1.54	1.61
2	SA	875	U	C2-N3	5.56	1.41	1.37
2	SA	888	G	O4'-C1'	-5.56	1.34	1.41
2	SA	1201	A	C3'-C2'	5.56	1.59	1.52
2	SA	1339	A	N9-C4	-5.56	1.34	1.37
20	SD	61	ARG	N-CA	-5.56	1.35	1.46
26	LA	760	G	C5-C6	-5.56	1.36	1.42
26	LA	818	G	C2'-C1'	-5.56	1.47	1.53
26	LA	1184	U	C2-N3	-5.56	1.33	1.37
26	LA	2055	C	C4-C5	-5.56	1.38	1.43
26	LA	2266	A	C3'-C2'	5.56	1.59	1.52
26	LA	2293	G	N3-C4	5.56	1.39	1.35
26	LA	2328	A	N3-C4	-5.56	1.31	1.34
26	LA	2505	G	P-O5'	5.56	1.65	1.59
2	SA	100	G	C1'-N9	-5.56	1.39	1.46
2	SA	647	C	N3-C4	5.56	1.37	1.33
24	S3	402	PRO	N-CD	-5.56	1.40	1.47
25	LB	69	G	C5-C6	-5.56	1.36	1.42
26	LA	479	A	C5'-C4'	5.56	1.58	1.51
26	LA	494	G	C3'-C2'	-5.56	1.46	1.52
26	LA	513	A	C3'-C2'	-5.56	1.46	1.52
26	LA	1832	C	C4'-C3'	-5.56	1.47	1.52
26	LA	2732	G	C6-N1	5.56	1.43	1.39
2	SA	544	G	C4'-C3'	-5.55	1.47	1.52
24	S3	436	ARG	CZ-NH1	-5.55	1.25	1.33
25	LB	9	G	N7-C5	5.55	1.42	1.39
26	LA	248	G	N3-C4	-5.55	1.31	1.35
26	LA	415	A	C4'-C3'	5.55	1.59	1.53
26	LA	601	C	C4'-C3'	5.55	1.59	1.53
26	LA	763	G	N9-C4	-5.55	1.33	1.38
26	LA	924	G	C2'-C1'	-5.55	1.47	1.53
26	LA	1050	A	P-O5'	-5.55	1.54	1.59
26	LA	1330	C	P-O5'	-5.55	1.54	1.59
26	LA	1375	U	N3-C4	-5.55	1.33	1.38
26	LA	1574	C	P-O5'	-5.55	1.54	1.59
26	LA	2400	G	C5-C6	-5.55	1.36	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	994	A	C8-N7	-5.55	1.27	1.31
2	SA	1066	C	N1-C6	5.55	1.40	1.37
10	SJ	65	TYR	CB-CG	-5.55	1.43	1.51
26	LA	2174	C	C3'-C2'	5.55	1.59	1.52
26	LA	2418	A	O3'-P	-5.55	1.54	1.61
26	LA	2534	A	C5-C6	-5.55	1.36	1.41
26	LA	2675	A	C5-C4	-5.55	1.34	1.38
2	SA	221	C	P-O5'	-5.55	1.54	1.59
2	SA	1214	C	C3'-O3'	5.55	1.50	1.42
4	S2	58	A	C4'-C3'	5.55	1.59	1.53
12	SL	83	GLY	CA-C	-5.55	1.43	1.51
26	LA	697	G	N1-C2	-5.55	1.33	1.37
26	LA	1224	U	O3'-P	-5.55	1.54	1.61
26	LA	1250	G	C3'-C2'	-5.55	1.46	1.52
26	LA	2327	A	C2-N3	5.55	1.38	1.33
2	SA	627	G	C4'-C3'	5.55	1.59	1.53
2	SA	794	A	C1'-N9	-5.55	1.39	1.46
2	SA	1059	C	C5'-C4'	-5.55	1.44	1.51
2	SA	1187	G	C4'-C3'	5.55	1.59	1.53
16	SP	17	TYR	N-CA	-5.55	1.35	1.46
25	LB	81	G	C2-N3	5.55	1.37	1.32
26	LA	289	G	C3'-C2'	-5.55	1.46	1.52
26	LA	575	A	C6-N6	-5.55	1.29	1.33
26	LA	590	A	P-O5'	-5.55	1.54	1.59
26	LA	1377	G	N7-C5	-5.55	1.35	1.39
26	LA	1571	A	N9-C4	-5.55	1.34	1.37
2	SA	78	A	C2'-C1'	-5.55	1.47	1.53
2	SA	392	C	C4-N4	5.55	1.39	1.33
2	SA	990	C	C2-N3	5.55	1.40	1.35
2	SA	1118	U	N1-C6	-5.55	1.32	1.38
26	LA	380	G	C6-N1	5.55	1.43	1.39
26	LA	487	C	P-O5'	-5.55	1.54	1.59
26	LA	1221	C	C5'-C4'	5.55	1.58	1.51
2	SA	94	G	N9-C4	-5.55	1.33	1.38
2	SA	486	U	P-O5'	-5.55	1.54	1.59
2	SA	776	G	N9-C4	-5.55	1.33	1.38
2	SA	860	A	C2'-C1'	-5.55	1.47	1.53
2	SA	1316	G	C5-C6	-5.55	1.36	1.42
25	LB	118	C	N1-C6	-5.55	1.33	1.37
26	LA	377	G	C4'-O4'	-5.55	1.38	1.45
26	LA	648	G	N9-C4	-5.55	1.33	1.38
26	LA	650	C	C5'-C4'	5.55	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	910	A	C3'-C2'	-5.55	1.46	1.52
26	LA	1382	G	O3'-P	-5.55	1.54	1.61
26	LA	1812	U	C2'-C1'	-5.55	1.47	1.53
26	LA	2322	A	P-O5'	-5.55	1.54	1.59
26	LA	2603	G	C6-N1	-5.55	1.35	1.39
2	SA	34	C	P-O5'	-5.54	1.54	1.59
2	SA	310	G	C6-N1	5.54	1.43	1.39
2	SA	386	C	N3-C4	-5.54	1.30	1.33
2	SA	507	C	C3'-O3'	5.54	1.50	1.42
26	LA	394	C	N1-C2	-5.54	1.34	1.40
26	LA	1154	G	C6-N1	-5.54	1.35	1.39
26	LA	1412	U	O4'-C1'	-5.54	1.34	1.41
28	LU	38	TYR	CB-CG	-5.54	1.43	1.51
2	SA	39	G	N9-C8	5.54	1.41	1.37
2	SA	761	G	C3'-C2'	5.54	1.59	1.52
25	LB	84	G	C2-N3	-5.54	1.28	1.32
26	LA	45	G	C5'-C4'	5.54	1.58	1.51
26	LA	56	A	C2-N3	5.54	1.38	1.33
26	LA	838	C	C3'-C2'	-5.54	1.46	1.52
26	LA	1771	C	C2-N3	-5.54	1.31	1.35
26	LA	2198	A	C2-N3	5.54	1.38	1.33
26	LA	2481	G	C6-O6	5.54	1.29	1.24
2	SA	1074	G	N7-C5	-5.54	1.35	1.39
26	LA	769	U	N3-C4	-5.54	1.33	1.38
26	LA	834	G	N3-C4	-5.54	1.31	1.35
26	LA	861	A	C5'-C4'	5.54	1.58	1.51
26	LA	1923	U	N1-C2	5.54	1.43	1.38
26	LA	2430	A	C2'-O2'	-5.54	1.34	1.41
2	SA	379	C	C2'-C1'	-5.54	1.47	1.53
2	SA	719	C	C2-N3	-5.54	1.31	1.35
2	SA	851	G	C5-C4	-5.54	1.34	1.38
26	LA	74	A	N9-C4	5.54	1.41	1.37
26	LA	552	U	C3'-O3'	5.54	1.50	1.42
26	LA	1937	A	C1'-N9	-5.54	1.39	1.46
26	LA	2100	G	C8-N7	-5.54	1.27	1.30
2	SA	21	G	C3'-C2'	-5.54	1.46	1.52
2	SA	390	U	C4'-O4'	5.54	1.52	1.45
2	SA	653	U	C1'-N1	5.54	1.57	1.48
2	SA	733	G	N9-C4	-5.54	1.33	1.38
2	SA	1464	U	C3'-C2'	5.54	1.59	1.52
26	LA	1308	A	C4'-O4'	5.54	1.52	1.45
26	LA	1352	U	N1-C2	-5.54	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2014	A	N9-C4	5.54	1.41	1.37
26	LA	2433	A	C2-N3	-5.54	1.28	1.33
2	SA	771	G	C5'-C4'	5.54	1.57	1.51
2	SA	1144	G	N1-C2	-5.54	1.33	1.37
2	SA	1386	G	C5-C4	-5.54	1.34	1.38
25	LB	42	C	C2-N3	5.54	1.40	1.35
26	LA	1948	G	C2-N2	-5.54	1.29	1.34
2	SA	515	G	N9-C8	-5.54	1.33	1.37
2	SA	528	C	N3-C4	5.54	1.37	1.33
2	SA	736	C	C5-C6	-5.54	1.29	1.34
2	SA	846	G	N9-C8	5.54	1.41	1.37
2	SA	1405	G	C4'-C3'	-5.54	1.47	1.52
2	SA	1507	A	N1-C2	-5.54	1.29	1.34
26	LA	252	G	C4'-C3'	-5.54	1.47	1.52
26	LA	450	G	C2'-C1'	-5.54	1.47	1.53
26	LA	1426	G	O3'-P	-5.54	1.54	1.61
26	LA	1791	A	C3'-C2'	-5.54	1.46	1.52
26	LA	1875	G	C5'-C4'	5.54	1.57	1.51
26	LA	1896	G	C3'-C2'	-5.54	1.46	1.52
26	LA	2040	G	P-O5'	-5.54	1.54	1.59
26	LA	2148	G	C5'-C4'	5.54	1.57	1.51
26	LA	2318	G	P-O5'	-5.54	1.54	1.59
26	LA	2573	C	P-O5'	-5.54	1.54	1.59
2	SA	386	C	O4'-C1'	5.53	1.48	1.41
2	SA	715	A	P-O5'	-5.53	1.54	1.59
2	SA	833	G	O4'-C1'	5.53	1.48	1.41
26	LA	4	U	N1-C2	5.53	1.43	1.38
26	LA	464	U	O3'-P	-5.53	1.54	1.61
26	LA	1230	A	C5-C4	-5.53	1.34	1.38
26	LA	1321	A	C4'-O4'	-5.53	1.38	1.45
26	LA	2124	G	C8-N7	-5.53	1.27	1.30
26	LA	2179	C	C5-C6	-5.53	1.29	1.34
26	LA	2793	C	C4'-C3'	5.53	1.59	1.53
2	SA	920	U	C4-O4	-5.53	1.19	1.23
2	SA	1083	U	C2-N3	-5.53	1.33	1.37
2	SA	1280	A	C5-C4	5.53	1.42	1.38
2	SA	1491	G	N9-C8	-5.53	1.33	1.37
24	S3	308	ARG	CD-NE	5.53	1.55	1.46
26	LA	28	A	C5'-C4'	5.53	1.57	1.51
26	LA	87	U	N1-C6	-5.53	1.32	1.38
26	LA	272	A	C5'-C4'	5.53	1.57	1.51
26	LA	2059	A	N3-C4	-5.53	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	237	G	C5-C6	-5.53	1.36	1.42
2	SA	1372	U	O3'-P	-5.53	1.54	1.61
2	SA	1395	C	C3'-O3'	5.53	1.49	1.42
3	S1	51	C	C5-C6	5.53	1.38	1.34
26	LA	138	U	C5'-C4'	5.53	1.57	1.51
26	LA	1074	G	C5-C4	-5.53	1.34	1.38
26	LA	1141	U	O4'-C1'	-5.53	1.34	1.41
26	LA	1394	U	O4'-C1'	-5.53	1.34	1.41
26	LA	2556	C	C4'-C3'	-5.53	1.47	1.52
26	LA	2757	A	C6-N1	-5.53	1.31	1.35
2	SA	70	U	C4-O4	5.53	1.28	1.23
2	SA	337	G	O3'-P	-5.53	1.54	1.61
2	SA	797	C	N3-C4	5.53	1.37	1.33
4	S2	27	G	N3-C4	-5.53	1.31	1.35
26	LA	672	C	C4-C5	-5.53	1.38	1.43
26	LA	2399	G	N9-C8	-5.53	1.33	1.37
2	SA	640	A	N1-C2	-5.53	1.29	1.34
2	SA	1088	G	C5-C4	-5.53	1.34	1.38
4	S2	24	C	C2'-C1'	-5.53	1.47	1.53
20	SD	106	PHE	CG-CD2	5.53	1.47	1.38
26	LA	433	C	C4'-O4'	5.53	1.52	1.45
26	LA	945	A	N1-C2	5.53	1.39	1.34
26	LA	1272	A	N3-C4	-5.53	1.31	1.34
26	LA	2529	G	N9-C4	-5.53	1.33	1.38
2	SA	430	A	N1-C2	5.53	1.39	1.34
2	SA	661	G	C4'-O4'	-5.53	1.38	1.45
2	SA	1003	G	C8-N7	5.53	1.34	1.30
2	SA	1444	U	N1-C6	-5.53	1.32	1.38
26	LA	56	A	P-O5'	-5.53	1.54	1.59
26	LA	203	A	C6-N6	-5.53	1.29	1.33
26	LA	224	U	N1-C6	5.53	1.43	1.38
26	LA	517	C	O3'-P	-5.53	1.54	1.61
26	LA	1923	U	C2-N3	-5.53	1.33	1.37
2	SA	177	G	N7-C5	5.52	1.42	1.39
2	SA	1035	A	N9-C8	-5.52	1.33	1.37
26	LA	7	G	C5-C6	-5.52	1.36	1.42
26	LA	268	C	C2'-C1'	-5.52	1.47	1.53
26	LA	1860	G	C6-N1	5.52	1.43	1.39
26	LA	1971	U	C2-N3	-5.52	1.33	1.37
2	SA	153	C	N1-C6	-5.52	1.33	1.37
26	LA	107	G	C1'-N9	-5.52	1.39	1.46
26	LA	145	C	C5'-C4'	5.52	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	191	A	C5-C6	-5.52	1.36	1.41
26	LA	207	A	P-O5'	-5.52	1.54	1.59
26	LA	381	G	N1-C2	-5.52	1.33	1.37
26	LA	1059	G	C5-C6	5.52	1.47	1.42
26	LA	1139	G	C3'-C2'	-5.52	1.46	1.52
26	LA	1397	U	C5-C6	5.52	1.39	1.34
26	LA	1605	C	C2'-C1'	-5.52	1.47	1.53
26	LA	2129	C	O5'-C5'	5.52	1.53	1.44
26	LA	2632	A	C6-N6	5.52	1.38	1.33
26	LA	2680	U	C5'-C4'	5.52	1.57	1.51
49	LK	61	TYR	CA-CB	5.52	1.66	1.53
2	SA	16	A	N9-C8	5.52	1.42	1.37
2	SA	824	G	N9-C8	5.52	1.41	1.37
2	SA	1055	A	N9-C4	-5.52	1.34	1.37
26	LA	115	C	C5'-C4'	5.52	1.57	1.51
26	LA	525	U	P-O5'	5.52	1.65	1.59
26	LA	566	U	O3'-P	-5.52	1.54	1.61
2	SA	274	A	N9-C4	5.52	1.41	1.37
2	SA	658	C	C5'-C4'	5.52	1.57	1.51
2	SA	972	C	C2-N3	-5.52	1.31	1.35
2	SA	1099	G	O4'-C1'	-5.52	1.34	1.41
26	LA	817	C	C5-C6	-5.52	1.29	1.34
26	LA	850	U	O3'-P	-5.52	1.54	1.61
26	LA	2405	G	N3-C4	-5.52	1.31	1.35
26	LA	2421	G	C1'-N9	-5.52	1.39	1.46
26	LA	2692	G	C6-N1	-5.52	1.35	1.39
2	SA	94	G	P-O5'	-5.52	1.54	1.59
2	SA	226	G	C6-N1	-5.52	1.35	1.39
2	SA	1229	A	N7-C5	-5.52	1.35	1.39
2	SA	1308	U	C2'-C1'	-5.52	1.47	1.53
2	SA	1322	C	C5-C6	-5.52	1.29	1.34
25	LB	29	A	C3'-C2'	-5.52	1.46	1.52
26	LA	855	G	C6-N1	-5.52	1.35	1.39
26	LA	1180	U	N1-C6	5.52	1.43	1.38
26	LA	1412	U	C4-O4	-5.52	1.19	1.23
26	LA	2162	G	O3'-P	-5.52	1.54	1.61
26	LA	2488	G	C5-C4	-5.52	1.34	1.38
26	LA	2703	C	P-O5'	5.52	1.65	1.59
28	LU	87	PRO	N-CD	-5.52	1.40	1.47
2	SA	1013	G	C5'-C4'	5.52	1.57	1.51
2	SA	1092	A	N3-C4	5.52	1.38	1.34
2	SA	1488	G	N9-C8	-5.52	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1255	U	O3'-P	-5.52	1.54	1.61
26	LA	1894	C	C2-N3	-5.52	1.31	1.35
26	LA	1945	G	C4'-C3'	-5.52	1.47	1.52
26	LA	2138	G	C2'-C1'	-5.52	1.47	1.53
26	LA	2544	G	C6-N1	-5.52	1.35	1.39
26	LA	2854	G	C4'-O4'	5.52	1.52	1.45
2	SA	55	A	C5-C4	-5.51	1.34	1.38
2	SA	454	G	C3'-O3'	5.51	1.49	1.42
2	SA	706	A	N3-C4	5.51	1.38	1.34
2	SA	1156	G	O3'-P	-5.51	1.54	1.61
2	SA	1246	A	C4'-O4'	5.51	1.52	1.45
3	S1	37	G	C5-C4	-5.51	1.34	1.38
19	SC	228	ARG	CD-NE	5.51	1.55	1.46
25	LB	2	G	C2'-O2'	-5.51	1.34	1.41
25	LB	26	C	O4'-C1'	5.51	1.48	1.41
26	LA	252	G	N3-C4	-5.51	1.31	1.35
26	LA	499	U	N1-C2	-5.51	1.33	1.38
26	LA	512	G	C4'-C3'	-5.51	1.47	1.52
26	LA	794	A	C8-N7	-5.51	1.27	1.31
26	LA	821	A	N9-C4	-5.51	1.34	1.37
26	LA	1047	G	O5'-C5'	5.51	1.53	1.44
26	LA	1157	G	C8-N7	-5.51	1.27	1.30
26	LA	1195	G	C3'-O3'	5.51	1.49	1.42
26	LA	1331	G	C2-N2	-5.51	1.29	1.34
26	LA	1452	G	C8-N7	-5.51	1.27	1.30
26	LA	1880	U	O3'-P	-5.51	1.54	1.61
26	LA	2059	A	P-O5'	-5.51	1.54	1.59
26	LA	2437	G	C5-C6	-5.51	1.36	1.42
26	LA	2645	G	C3'-C2'	-5.51	1.46	1.52
26	LA	1814	G	N9-C4	-5.51	1.33	1.38
26	LA	1916	A	C6-N1	-5.51	1.31	1.35
2	SA	204	G	C6-O6	-5.51	1.19	1.24
2	SA	284	C	C2'-C1'	-5.51	1.47	1.53
2	SA	927	G	C2-N2	-5.51	1.29	1.34
26	LA	105	C	C5-C6	-5.51	1.29	1.34
26	LA	464	U	N1-C6	-5.51	1.32	1.38
26	LA	1091	G	C1'-N9	-5.51	1.39	1.46
26	LA	1382	G	C5-C4	5.51	1.42	1.38
26	LA	1768	C	C2'-C1'	-5.51	1.47	1.53
2	SA	315	A	C2'-C1'	-5.51	1.47	1.53
2	SA	899	C	C2-N3	-5.51	1.31	1.35
2	SA	1251	A	C2'-C1'	-5.51	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	53	G	C3'-C2'	-5.51	1.46	1.52
26	LA	254	G	C6-N1	-5.51	1.35	1.39
26	LA	484	C	C5-C6	-5.51	1.29	1.34
26	LA	788	A	C6-N1	-5.51	1.31	1.35
26	LA	805	G	N1-C2	-5.51	1.33	1.37
26	LA	1011	G	P-O5'	-5.51	1.54	1.59
26	LA	1019	U	P-O5'	-5.51	1.54	1.59
26	LA	1247	A	C8-N7	-5.51	1.27	1.31
26	LA	1757	A	C5'-C4'	5.51	1.57	1.51
26	LA	1779	U	N3-C4	5.51	1.43	1.38
26	LA	1779	U	C5'-C4'	5.51	1.57	1.51
26	LA	2455	G	C5-C6	5.51	1.47	1.42
26	LA	2861	U	N3-C4	-5.51	1.33	1.38
26	LA	2898	U	C2'-O2'	5.51	1.48	1.41
2	SA	1000	A	O3'-P	-5.51	1.54	1.61
25	LB	61	G	N7-C5	-5.51	1.35	1.39
26	LA	2733	A	N9-C8	-5.51	1.33	1.37
2	SA	324	G	C1'-N9	-5.51	1.39	1.46
2	SA	367	U	C4'-C3'	-5.51	1.47	1.52
2	SA	1431	A	C8-N7	5.51	1.35	1.31
26	LA	176	A	C5-C6	-5.51	1.36	1.41
26	LA	348	A	N1-C2	5.51	1.39	1.34
26	LA	705	A	C4'-O4'	5.51	1.52	1.45
26	LA	970	U	P-O5'	-5.51	1.54	1.59
26	LA	995	C	C4'-O4'	-5.51	1.38	1.45
26	LA	1016	G	N9-C4	-5.51	1.33	1.38
26	LA	1788	C	C4'-C3'	-5.51	1.47	1.52
2	SA	60	A	O3'-P	-5.50	1.54	1.61
2	SA	949	A	C2-N3	5.50	1.38	1.33
26	LA	2389	G	N9-C8	-5.50	1.33	1.37
2	SA	311	C	C2-O2	-5.50	1.19	1.24
2	SA	639	G	C1'-N9	-5.50	1.39	1.46
2	SA	1516	G	C6-O6	-5.50	1.19	1.24
3	S1	25	U	C4-C5	-5.50	1.38	1.43
26	LA	264	C	C4-C5	-5.50	1.38	1.43
26	LA	841	G	N3-C4	5.50	1.39	1.35
26	LA	1800	C	C2'-C1'	-5.50	1.47	1.53
2	SA	132	C	C4-C5	5.50	1.47	1.43
2	SA	690	G	P-O5'	-5.50	1.54	1.59
2	SA	814	A	C8-N7	-5.50	1.27	1.31
2	SA	1497	G	N1-C2	-5.50	1.33	1.37
25	LB	94	A	C5'-C4'	5.50	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	232	G	C2-N2	-5.50	1.29	1.34
26	LA	327	G	C2'-C1'	-5.50	1.47	1.53
26	LA	429	A	C3'-O3'	5.50	1.49	1.42
26	LA	1125	G	C4'-O4'	-5.50	1.38	1.45
26	LA	1634	A	N9-C4	-5.50	1.34	1.37
26	LA	1694	C	N1-C2	-5.50	1.34	1.40
26	LA	1731	G	C5'-C4'	5.50	1.57	1.51
26	LA	1850	G	P-O5'	-5.50	1.54	1.59
26	LA	2236	U	O3'-P	-5.50	1.54	1.61
26	LA	2405	G	C6-O6	5.50	1.29	1.24
2	SA	161	A	N1-C2	-5.50	1.29	1.34
26	LA	29	U	C3'-C2'	-5.50	1.46	1.52
26	LA	2335	A	C5-C6	5.50	1.46	1.41
26	LA	2463	C	C3'-O3'	5.50	1.49	1.42
26	LA	2516	A	C2-N3	-5.50	1.28	1.33
2	SA	451	A	C6-N6	5.50	1.38	1.33
2	SA	601	G	C2'-C1'	-5.50	1.47	1.53
2	SA	811	C	N1-C6	-5.50	1.33	1.37
2	SA	1511	G	C1'-N9	-5.50	1.39	1.46
2	SA	1529	G	P-O5'	-5.50	1.54	1.59
4	S2	22	A	O4'-C1'	-5.50	1.34	1.41
26	LA	124	G	P-O5'	-5.50	1.54	1.59
26	LA	1435	G	C5-C4	-5.50	1.34	1.38
26	LA	1982	U	C3'-O3'	5.50	1.49	1.42
26	LA	2368	C	C5-C6	5.50	1.38	1.34
26	LA	2384	U	C3'-C2'	-5.50	1.46	1.52
26	LA	2568	U	N3-C4	-5.50	1.33	1.38
26	LA	2742	G	O3'-P	-5.50	1.54	1.61
2	SA	267	C	C4'-C3'	-5.50	1.47	1.52
2	SA	1174	G	N9-C8	5.50	1.41	1.37
2	SA	1339	A	C2-N3	5.50	1.38	1.33
2	SA	1419	G	C5'-C4'	5.50	1.57	1.51
26	LA	182	A	N3-C4	-5.50	1.31	1.34
26	LA	200	U	P-O5'	-5.50	1.54	1.59
26	LA	340	A	C3'-O3'	5.50	1.49	1.42
26	LA	341	C	O5'-C5'	-5.50	1.34	1.42
26	LA	432	A	C3'-C2'	-5.50	1.46	1.52
26	LA	628	G	C1'-N9	-5.50	1.39	1.46
26	LA	733	G	O3'-P	-5.50	1.54	1.61
26	LA	1255	U	C2'-C1'	5.50	1.59	1.53
26	LA	1466	U	P-O5'	-5.50	1.54	1.59
26	LA	1938	A	N9-C8	-5.50	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2119	A	C4'-O4'	-5.50	1.38	1.45
26	LA	2819	G	C2-N2	-5.50	1.29	1.34
2	SA	899	C	C1'-N1	-5.50	1.39	1.46
2	SA	1301	U	O3'-P	-5.50	1.54	1.61
4	S2	69	C	C4-N4	-5.50	1.29	1.33
26	LA	107	G	C2'-C1'	5.50	1.59	1.53
26	LA	1509	A	N3-C4	5.50	1.38	1.34
26	LA	2513	A	O3'-P	-5.50	1.54	1.61
2	SA	54	C	C5-C6	-5.49	1.29	1.34
2	SA	82	G	C3'-O3'	-5.49	1.34	1.42
2	SA	117	G	C2-N3	-5.49	1.28	1.32
2	SA	611	C	O3'-P	-5.49	1.54	1.61
4	S2	3	C	C4-C5	5.49	1.47	1.43
26	LA	148	U	C4-C5	5.49	1.48	1.43
26	LA	668	A	C3'-C2'	-5.49	1.46	1.52
26	LA	782	A	C4'-C3'	5.49	1.59	1.53
26	LA	2006	C	C4-N4	-5.49	1.29	1.33
26	LA	2055	C	P-O5'	5.49	1.65	1.59
26	LA	2199	A	C6-N1	-5.49	1.31	1.35
26	LA	2267	A	N7-C5	-5.49	1.35	1.39
26	LA	2283	C	C2'-O2'	-5.49	1.34	1.41
26	LA	2458	G	C6-O6	-5.49	1.19	1.24
26	LA	2468	A	N9-C8	-5.49	1.33	1.37
37	LC	208	TYR	CA-CB	5.49	1.66	1.53
2	SA	455	G	C5'-C4'	5.49	1.57	1.51
2	SA	555	U	C3'-C2'	-5.49	1.46	1.52
2	SA	623	C	C2'-C1'	-5.49	1.47	1.53
2	SA	1491	G	C6-N1	-5.49	1.35	1.39
26	LA	261	G	O4'-C1'	-5.49	1.34	1.41
26	LA	1061	U	C4-C5	-5.49	1.38	1.43
26	LA	1591	A	C3'-O3'	5.49	1.49	1.42
26	LA	1929	G	O4'-C1'	-5.49	1.34	1.41
26	LA	2542	A	C2'-C1'	-5.49	1.47	1.53
2	SA	18	C	P-O5'	-5.49	1.54	1.59
2	SA	501	C	N1-C2	-5.49	1.34	1.40
2	SA	549	C	C1'-N1	-5.49	1.39	1.46
2	SA	1254	A	N9-C4	-5.49	1.34	1.37
4	S2	56	U	C5'-C4'	5.49	1.57	1.51
26	LA	821	A	C6-N1	-5.49	1.31	1.35
26	LA	1598	A	C5-C4	-5.49	1.34	1.38
26	LA	1716	U	C2'-C1'	5.49	1.59	1.53
26	LA	1767	G	C2'-C1'	-5.49	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2123	G	N3-C4	-5.49	1.31	1.35
26	LA	2176	A	C3'-O3'	5.49	1.49	1.42
50	LL	79	GLY	CA-C	-5.49	1.43	1.51
2	SA	260	G	N3-C4	-5.49	1.31	1.35
2	SA	462	G	C5-C6	-5.49	1.36	1.42
2	SA	663	A	C4'-C3'	-5.49	1.47	1.52
2	SA	804	U	O3'-P	-5.49	1.54	1.61
2	SA	1022	A	N3-C4	-5.49	1.31	1.34
2	SA	1219	A	C5-C4	-5.49	1.34	1.38
2	SA	1417	G	P-O5'	-5.49	1.54	1.59
26	LA	84	A	N7-C5	5.49	1.42	1.39
26	LA	459	U	C4'-C3'	-5.49	1.47	1.52
26	LA	488	G	O3'-P	-5.49	1.54	1.61
26	LA	771	G	C4'-C3'	-5.49	1.47	1.52
26	LA	1838	C	N3-C4	5.49	1.37	1.33
26	LA	1887	C	C2'-C1'	-5.49	1.47	1.53
26	LA	2116	G	N9-C8	5.49	1.41	1.37
26	LA	2156	G	N9-C8	5.49	1.41	1.37
26	LA	2499	C	P-O5'	5.49	1.65	1.59
49	LK	52	LEU	CA-CB	5.49	1.66	1.53
2	SA	676	A	C5'-C4'	5.49	1.57	1.51
25	LB	111	U	N3-C4	-5.49	1.33	1.38
26	LA	187	G	C3'-O3'	5.49	1.49	1.42
26	LA	1029	A	C5'-C4'	5.49	1.57	1.51
26	LA	1155	A	C6-N6	-5.49	1.29	1.33
26	LA	1757	A	N7-C5	-5.49	1.35	1.39
2	SA	143	A	O3'-P	-5.49	1.54	1.61
2	SA	452	A	C5'-C4'	5.49	1.57	1.51
2	SA	656	G	C2'-O2'	5.49	1.48	1.41
2	SA	1080	A	N7-C5	5.49	1.42	1.39
2	SA	1252	A	C5-C4	-5.49	1.34	1.38
2	SA	1503	A	C2'-C1'	-5.49	1.47	1.53
26	LA	392	U	N1-C6	-5.49	1.33	1.38
26	LA	868	U	C2'-C1'	-5.49	1.47	1.53
26	LA	1329	U	C2-N3	-5.49	1.33	1.37
26	LA	1421	G	C5'-C4'	5.49	1.57	1.51
26	LA	1570	A	C2'-C1'	-5.49	1.47	1.53
26	LA	1578	U	C5'-C4'	5.49	1.57	1.51
26	LA	1650	A	O3'-P	-5.49	1.54	1.61
26	LA	2160	C	O3'-P	-5.49	1.54	1.61
26	LA	2437	G	N9-C4	-5.49	1.33	1.38
26	LA	2495	G	C2'-C1'	-5.49	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2496	C	C2-N3	-5.49	1.31	1.35
2	SA	116	A	C5'-C4'	5.48	1.57	1.51
26	LA	1165	A	C2'-C1'	-5.48	1.47	1.53
26	LA	2111	U	P-O5'	5.48	1.65	1.59
26	LA	2235	G	C2-N2	-5.48	1.29	1.34
2	SA	42	G	C5-C6	-5.48	1.36	1.42
2	SA	602	A	N3-C4	-5.48	1.31	1.34
2	SA	702	A	N7-C5	-5.48	1.35	1.39
2	SA	1155	A	C5-C6	-5.48	1.36	1.41
4	S2	4	G	C8-N7	5.48	1.34	1.30
26	LA	804	A	P-O5'	5.48	1.65	1.59
26	LA	904	G	C3'-O3'	5.48	1.49	1.42
26	LA	942	G	N9-C4	-5.48	1.33	1.38
26	LA	1071	G	C8-N7	5.48	1.34	1.30
26	LA	1224	U	C3'-C2'	-5.48	1.46	1.52
26	LA	1320	C	N1-C6	-5.48	1.33	1.37
26	LA	1543	G	P-O5'	5.48	1.65	1.59
26	LA	1592	C	C5'-C4'	5.48	1.57	1.51
26	LA	1846	G	P-O5'	-5.48	1.54	1.59
26	LA	2010	G	C2'-C1'	-5.48	1.47	1.53
26	LA	2093	G	O4'-C1'	5.48	1.48	1.41
2	SA	348	G	C5-C4	-5.48	1.34	1.38
2	SA	568	G	C2'-C1'	-5.48	1.47	1.53
2	SA	1465	A	N9-C4	5.48	1.41	1.37
26	LA	154	U	O4'-C1'	5.48	1.48	1.41
26	LA	307	G	O3'-P	-5.48	1.54	1.61
26	LA	403	U	C4'-C3'	5.48	1.59	1.53
26	LA	1553	A	C6-N6	-5.48	1.29	1.33
26	LA	1646	C	C4-C5	-5.48	1.38	1.43
26	LA	2106	U	O3'-P	-5.48	1.54	1.61
26	LA	2140	G	C3'-O3'	5.48	1.49	1.42
26	LA	2552	U	O4'-C1'	-5.48	1.34	1.41
26	LA	2772	C	C4-N4	-5.48	1.29	1.33
2	SA	168	G	C5-C6	-5.48	1.36	1.42
25	LB	66	A	C6-N6	5.48	1.38	1.33
26	LA	357	C	C4-C5	-5.48	1.38	1.43
26	LA	1008	A	C5-C4	-5.48	1.34	1.38
26	LA	1035	U	N3-C4	-5.48	1.33	1.38
26	LA	1700	A	C3'-O3'	5.48	1.49	1.42
26	LA	1812	U	C4-C5	-5.48	1.38	1.43
26	LA	2724	U	O3'-P	-5.48	1.54	1.61
2	SA	389	A	C6-N1	-5.48	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	966	G	C6-N1	-5.48	1.35	1.39
2	SA	1010	U	C2'-C1'	-5.48	1.47	1.53
3	S1	28	U	C4'-C3'	5.48	1.59	1.53
26	LA	316	C	C2'-C1'	-5.48	1.47	1.53
26	LA	948	C	C4-C5	-5.48	1.38	1.43
26	LA	1554	U	N1-C6	5.48	1.42	1.38
26	LA	2241	A	N3-C4	-5.48	1.31	1.34
26	LA	2768	U	C2'-O2'	-5.48	1.34	1.41
26	LA	2899	A	C4'-C3'	-5.48	1.47	1.52
2	SA	1272	G	C8-N7	-5.48	1.27	1.30
2	SA	1536	C	C5'-C4'	5.48	1.57	1.51
26	LA	1559	U	O4'-C1'	-5.48	1.34	1.41
26	LA	2043	C	C5-C6	-5.48	1.29	1.34
26	LA	2303	G	N9-C8	-5.48	1.34	1.37
26	LA	2358	A	P-O5'	5.48	1.65	1.59
2	SA	122	G	C2-N2	-5.47	1.29	1.34
2	SA	787	A	C5-C6	-5.47	1.36	1.41
2	SA	930	C	C2'-C1'	-5.47	1.47	1.53
2	SA	1014	A	C4'-O4'	5.47	1.52	1.45
2	SA	1352	C	N1-C6	5.47	1.40	1.37
25	LB	78	A	C5-C4	-5.47	1.34	1.38
26	LA	89	A	N7-C5	-5.47	1.35	1.39
26	LA	114	U	N3-C4	-5.47	1.33	1.38
26	LA	271	G	N7-C5	-5.47	1.35	1.39
26	LA	372	G	C1'-N9	-5.47	1.39	1.46
26	LA	1076	C	C4-N4	-5.47	1.29	1.33
26	LA	1102	C	C4'-C3'	5.47	1.59	1.53
26	LA	1285	A	C6-N6	-5.47	1.29	1.33
26	LA	1412	U	C2-O2	5.47	1.27	1.22
26	LA	1574	C	N1-C6	5.47	1.40	1.37
26	LA	1603	A	C4'-C3'	5.47	1.59	1.53
26	LA	2134	A	C2'-C1'	-5.47	1.47	1.53
26	LA	2276	G	C4'-C3'	-5.47	1.47	1.52
26	LA	2333	A	C6-N1	-5.47	1.31	1.35
2	SA	362	G	N3-C4	5.47	1.39	1.35
2	SA	514	C	C2'-C1'	-5.47	1.47	1.53
2	SA	547	A	O3'-P	-5.47	1.54	1.61
2	SA	1447	A	C8-N7	-5.47	1.27	1.31
25	LB	107	G	C5'-C4'	5.47	1.57	1.51
26	LA	121	G	C1'-N9	-5.47	1.39	1.46
26	LA	673	C	C2'-C1'	-5.47	1.47	1.53
26	LA	786	C	C5'-C4'	5.47	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1371	G	C8-N7	-5.47	1.27	1.30
26	LA	1405	U	N1-C2	-5.47	1.33	1.38
26	LA	1735	A	N3-C4	-5.47	1.31	1.34
26	LA	2482	A	N3-C4	-5.47	1.31	1.34
20	SD	102	TYR	CB-CG	-5.47	1.43	1.51
26	LA	807	U	N1-C6	-5.47	1.33	1.38
26	LA	2105	U	N1-C6	-5.47	1.33	1.38
26	LA	2317	A	N3-C4	-5.47	1.31	1.34
26	LA	2595	G	C8-N7	5.47	1.34	1.30
2	SA	704	A	P-O5'	-5.47	1.54	1.59
2	SA	1364	U	C3'-C2'	5.47	1.58	1.52
2	SA	1385	G	N3-C4	-5.47	1.31	1.35
2	SA	1453	G	C5-C6	5.47	1.47	1.42
26	LA	997	G	P-O5'	-5.47	1.54	1.59
26	LA	1106	G	N9-C4	-5.47	1.33	1.38
26	LA	1299	G	P-O5'	-5.47	1.54	1.59
26	LA	1818	U	C3'-C2'	-5.47	1.46	1.52
26	LA	2212	A	N9-C4	-5.47	1.34	1.37
26	LA	2449	U	C2-N3	5.47	1.41	1.37
26	LA	2477	U	N1-C2	-5.47	1.33	1.38
4	S2	20	G	C3'-C2'	5.47	1.58	1.52
26	LA	2200	C	N1-C2	-5.47	1.34	1.40
26	LA	2293	G	O4'-C1'	-5.47	1.34	1.41
26	LA	2407	A	N7-C5	-5.47	1.35	1.39
2	SA	314	C	C2-N3	-5.47	1.31	1.35
2	SA	784	A	P-O5'	-5.47	1.54	1.59
2	SA	1022	A	C8-N7	5.47	1.35	1.31
2	SA	1053	G	C2'-C1'	-5.47	1.47	1.53
2	SA	1197	A	N7-C5	5.47	1.42	1.39
2	SA	1519	A	C4'-O4'	-5.47	1.38	1.45
26	LA	347	A	C5-C6	5.47	1.46	1.41
26	LA	647	G	C6-N1	-5.47	1.35	1.39
26	LA	827	U	N1-C2	-5.47	1.33	1.38
26	LA	1054	A	C2'-O2'	5.47	1.48	1.41
26	LA	1079	C	C5'-C4'	5.47	1.57	1.51
26	LA	1086	A	C3'-C2'	-5.47	1.46	1.52
26	LA	1169	A	P-O5'	-5.47	1.54	1.59
26	LA	1528	A	N7-C5	-5.47	1.35	1.39
26	LA	2072	C	C2-N3	-5.47	1.31	1.35
26	LA	2125	G	N9-C4	-5.47	1.33	1.38
26	LA	2480	C	O4'-C1'	5.47	1.48	1.41
26	LA	2635	A	N7-C5	5.47	1.42	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	304	U	C4'-O4'	5.46	1.52	1.45
2	SA	615	G	C2-N2	-5.46	1.29	1.34
2	SA	1046	A	N9-C4	-5.46	1.34	1.37
26	LA	122	G	N9-C4	-5.46	1.33	1.38
26	LA	328	U	C2'-C1'	-5.46	1.47	1.53
26	LA	518	G	C5-C6	-5.46	1.36	1.42
26	LA	843	G	C4'-O4'	5.46	1.52	1.45
26	LA	908	C	C3'-C2'	-5.46	1.46	1.52
26	LA	1151	A	C6-N6	-5.46	1.29	1.33
26	LA	1342	A	C2'-C1'	-5.46	1.47	1.53
26	LA	1805	A	O4'-C1'	-5.46	1.34	1.41
26	LA	1820	U	C2-N3	-5.46	1.33	1.37
26	LA	2677	G	C2'-C1'	-5.46	1.47	1.53
26	LA	2704	C	C4'-C3'	5.46	1.59	1.53
26	LA	2724	U	C4'-O4'	-5.46	1.38	1.45
26	LA	2889	C	P-O5'	-5.46	1.54	1.59
2	SA	1229	A	C2'-C1'	-5.46	1.47	1.53
2	SA	1398	A	P-O5'	-5.46	1.54	1.59
25	LB	32	U	P-O5'	5.46	1.65	1.59
26	LA	350	G	C4'-O4'	5.46	1.52	1.45
26	LA	485	C	C2-N3	-5.46	1.31	1.35
26	LA	1858	A	C2'-C1'	5.46	1.59	1.53
2	SA	440	C	C4-C5	-5.46	1.38	1.43
2	SA	664	G	C2-N2	-5.46	1.29	1.34
2	SA	1351	U	C1'-N1	5.46	1.56	1.48
26	LA	427	U	O3'-P	-5.46	1.54	1.61
26	LA	441	U	C4-C5	-5.46	1.38	1.43
26	LA	1019	U	O3'-P	-5.46	1.54	1.61
26	LA	1147	A	C6-N6	-5.46	1.29	1.33
26	LA	1219	U	C4-O4	-5.46	1.19	1.23
26	LA	1514	G	C4'-C3'	-5.46	1.47	1.52
26	LA	1538	G	N1-C2	5.46	1.42	1.37
26	LA	2031	A	C5'-C4'	5.46	1.57	1.51
26	LA	2289	G	C2-N2	-5.46	1.29	1.34
26	LA	2325	G	O4'-C1'	-5.46	1.34	1.41
48	LN	126	ARG	CD-NE	5.46	1.55	1.46
2	SA	1434	A	C4'-C3'	5.46	1.59	1.53
3	S1	50	U	C1'-N1	5.46	1.56	1.48
4	S2	19	G	C4'-O4'	5.46	1.52	1.45
26	LA	1707	G	N3-C4	5.46	1.39	1.35
26	LA	2249	U	C4'-O4'	-5.46	1.38	1.45
26	LA	2589	A	C8-N7	-5.46	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
51	LI	119	ASN	CB-CG	5.46	1.63	1.51
2	SA	482	A	C3'-C2'	-5.46	1.46	1.52
2	SA	814	A	O4'-C1'	-5.46	1.34	1.41
26	LA	1319	C	C3'-C2'	-5.46	1.46	1.52
26	LA	1398	C	C5-C6	-5.46	1.29	1.34
26	LA	2018	G	O3'-P	-5.46	1.54	1.61
2	SA	721	G	C5'-C4'	5.46	1.57	1.51
2	SA	796	C	C2'-C1'	-5.46	1.47	1.53
2	SA	825	A	N9-C4	-5.46	1.34	1.37
2	SA	1135	U	C4-O4	-5.46	1.19	1.23
8	SH	76	ARG	CZ-NH2	-5.46	1.25	1.33
26	LA	142	A	N3-C4	-5.46	1.31	1.34
26	LA	921	C	N3-C4	5.46	1.37	1.33
26	LA	1432	G	O3'-P	-5.46	1.54	1.61
26	LA	2184	A	C1'-N9	-5.46	1.39	1.46
26	LA	2487	G	N9-C4	-5.46	1.33	1.38
2	SA	187	G	C2-N3	5.46	1.37	1.32
2	SA	1035	A	C6-N6	5.46	1.38	1.33
26	LA	986	C	N1-C6	-5.46	1.33	1.37
26	LA	1884	G	N1-C2	-5.46	1.33	1.37
2	SA	369	G	C5-C4	-5.45	1.34	1.38
2	SA	716	A	N3-C4	-5.45	1.31	1.34
26	LA	28	A	C5-C4	-5.45	1.34	1.38
26	LA	236	C	C4'-C3'	5.45	1.59	1.53
26	LA	447	A	C1'-N9	-5.45	1.39	1.46
26	LA	735	A	N9-C4	-5.45	1.34	1.37
26	LA	905	A	C6-N6	5.45	1.38	1.33
26	LA	1197	G	P-O5'	-5.45	1.54	1.59
26	LA	1727	C	C5-C6	5.45	1.38	1.34
26	LA	1967	C	O3'-P	-5.45	1.54	1.61
26	LA	2263	C	C2'-C1'	-5.45	1.47	1.53
26	LA	2756	U	N1-C2	-5.45	1.33	1.38
2	SA	223	A	C2'-C1'	-5.45	1.47	1.53
2	SA	777	A	N9-C4	-5.45	1.34	1.37
2	SA	962	C	C2-N3	-5.45	1.31	1.35
2	SA	1089	G	C3'-C2'	-5.45	1.46	1.52
2	SA	1419	G	C3'-O3'	5.45	1.49	1.42
26	LA	19	A	N3-C4	-5.45	1.31	1.34
26	LA	659	G	C2-N2	-5.45	1.29	1.34
26	LA	933	A	N9-C4	-5.45	1.34	1.37
26	LA	2026	U	C2-N3	-5.45	1.33	1.37
2	SA	15	G	C2'-C1'	-5.45	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1197	A	C2-N3	-5.45	1.28	1.33
4	S2	45	A	N9-C8	-5.45	1.33	1.37
26	LA	561	G	C1'-N9	-5.45	1.39	1.46
26	LA	1440	U	C2'-O2'	5.45	1.48	1.41
26	LA	1544	A	P-O5'	-5.45	1.54	1.59
26	LA	1652	A	C2'-O2'	-5.45	1.34	1.41
26	LA	1757	A	P-O5'	-5.45	1.54	1.59
26	LA	1765	U	N3-C4	-5.45	1.33	1.38
26	LA	1909	C	C4-N4	-5.45	1.29	1.33
26	LA	1924	C	C4-N4	5.45	1.38	1.33
26	LA	1964	G	C3'-O3'	5.45	1.49	1.42
26	LA	2109	U	C5'-C4'	5.45	1.57	1.51
26	LA	2176	A	C4'-O4'	5.45	1.52	1.45
26	LA	2250	G	C2-N2	-5.45	1.29	1.34
26	LA	2565	A	C6-N6	-5.45	1.29	1.33
26	LA	2579	C	C5'-C4'	-5.45	1.44	1.51
26	LA	2604	U	N1-C6	5.45	1.42	1.38
26	LA	2699	C	N1-C6	-5.45	1.33	1.37
2	SA	754	C	C4'-O4'	-5.45	1.38	1.45
2	SA	1396	A	N3-C4	-5.45	1.31	1.34
25	LB	107	G	C2'-O2'	-5.45	1.34	1.41
26	LA	492	A	N7-C5	-5.45	1.35	1.39
26	LA	526	A	C5'-C4'	5.45	1.57	1.51
26	LA	940	G	C6-N1	-5.45	1.35	1.39
26	LA	1720	U	C3'-O3'	5.45	1.49	1.42
26	LA	2155	U	C4'-C3'	5.45	1.59	1.53
26	LA	2164	C	C4'-O4'	5.45	1.52	1.45
26	LA	2381	A	C5-C6	5.45	1.46	1.41
26	LA	2476	A	N7-C5	5.45	1.42	1.39
2	SA	477	C	C5-C6	-5.45	1.29	1.34
2	SA	1145	A	C2-N3	-5.45	1.28	1.33
3	S1	38	G	C5'-C4'	5.45	1.57	1.51
24	S3	132	TYR	CG-CD2	5.45	1.46	1.39
26	LA	1455	G	C5-C6	-5.45	1.36	1.42
26	LA	1719	G	C6-N1	-5.45	1.35	1.39
26	LA	1805	A	C3'-C2'	-5.45	1.46	1.52
26	LA	1959	G	C3'-C2'	-5.45	1.46	1.52
26	LA	2323	G	N9-C8	5.45	1.41	1.37
26	LA	2376	A	C6-N1	-5.45	1.31	1.35
2	SA	58	C	C5-C6	-5.45	1.29	1.34
2	SA	112	G	P-O5'	-5.45	1.54	1.59
2	SA	1031	C	C4'-C3'	5.45	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1267	C	C5'-C4'	5.45	1.57	1.51
2	SA	1302	C	N3-C4	5.45	1.37	1.33
2	SA	1542	A	C5'-C4'	5.45	1.57	1.51
26	LA	328	U	C1'-N1	-5.45	1.39	1.46
26	LA	839	U	C2'-C1'	-5.45	1.47	1.53
26	LA	857	G	C5'-C4'	5.45	1.57	1.51
26	LA	982	C	N1-C6	-5.45	1.33	1.37
26	LA	1034	G	O4'-C1'	5.45	1.48	1.41
26	LA	1341	G	C3'-O3'	5.45	1.49	1.42
26	LA	1612	C	P-O5'	-5.45	1.54	1.59
26	LA	2376	A	C2'-C1'	-5.45	1.47	1.53
26	LA	2432	A	N7-C5	-5.45	1.35	1.39
26	LA	2575	C	C1'-N1	5.45	1.56	1.48
26	LA	2600	A	C3'-C2'	-5.45	1.46	1.52
2	SA	885	G	C3'-C2'	-5.44	1.46	1.52
2	SA	1051	C	C4'-O4'	5.44	1.52	1.45
9	SI	6	TYR	CB-CG	-5.44	1.43	1.51
14	SN	48	GLN	CG-CD	5.44	1.63	1.51
26	LA	441	U	N3-C4	5.44	1.43	1.38
26	LA	1063	G	O3'-P	-5.44	1.54	1.61
26	LA	1634	A	C5'-C4'	5.44	1.57	1.51
2	SA	610	U	N3-C4	-5.44	1.33	1.38
2	SA	634	C	C4'-C3'	-5.44	1.47	1.52
2	SA	1233	G	P-O5'	-5.44	1.54	1.59
2	SA	1292	G	O3'-P	-5.44	1.54	1.61
2	SA	1376	U	O4'-C1'	-5.44	1.34	1.41
3	S1	14	G	C2'-C1'	-5.44	1.47	1.53
26	LA	442	G	N1-C2	-5.44	1.33	1.37
26	LA	907	G	O3'-P	-5.44	1.54	1.61
26	LA	981	A	C6-N6	5.44	1.38	1.33
26	LA	1479	G	C5'-C4'	5.44	1.57	1.51
26	LA	2342	C	C5'-C4'	5.44	1.57	1.51
2	SA	167	A	C6-N1	5.44	1.39	1.35
2	SA	360	G	C5-C6	-5.44	1.36	1.42
2	SA	688	G	C5-C4	-5.44	1.34	1.38
4	S2	25	U	N3-C4	-5.44	1.33	1.38
26	LA	33	C	C3'-O3'	5.44	1.49	1.42
26	LA	46	G	C3'-C2'	5.44	1.58	1.52
26	LA	505	A	C6-N6	5.44	1.38	1.33
26	LA	685	A	C4'-O4'	-5.44	1.38	1.45
26	LA	1037	G	N9-C4	5.44	1.42	1.38
26	LA	1059	G	P-O5'	-5.44	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1610	A	C2'-C1'	-5.44	1.47	1.53
26	LA	1997	C	C5'-C4'	5.44	1.57	1.51
26	LA	2275	C	C4-C5	-5.44	1.38	1.43
26	LA	2732	G	N7-C5	5.44	1.42	1.39
2	SA	441	A	C5-C4	-5.44	1.34	1.38
25	LB	13	G	C3'-O3'	5.44	1.49	1.42
26	LA	555	G	C8-N7	5.44	1.34	1.30
26	LA	1226	A	C8-N7	5.44	1.35	1.31
26	LA	1703	G	N9-C4	-5.44	1.33	1.38
26	LA	1751	U	C4-C5	-5.44	1.38	1.43
26	LA	1769	U	N1-C2	-5.44	1.33	1.38
26	LA	1788	C	O4'-C1'	-5.44	1.34	1.41
26	LA	2868	A	C6-N6	5.44	1.38	1.33
2	SA	218	U	N1-C6	5.44	1.42	1.38
2	SA	759	A	C2'-O2'	-5.44	1.34	1.41
2	SA	1101	A	C5-C6	-5.44	1.36	1.41
2	SA	1305	G	C8-N7	-5.44	1.27	1.30
2	SA	1315	U	C2-N3	5.44	1.41	1.37
4	S2	71	G	N1-C2	5.44	1.42	1.37
25	LB	75	G	O3'-P	-5.44	1.54	1.61
26	LA	393	C	N3-C4	-5.44	1.30	1.33
26	LA	688	U	C3'-C2'	-5.44	1.46	1.52
26	LA	1374	G	C2'-C1'	-5.44	1.47	1.53
26	LA	1432	G	C8-N7	5.44	1.34	1.30
26	LA	1483	G	N9-C8	5.44	1.41	1.37
26	LA	1682	G	C2'-C1'	5.44	1.59	1.53
26	LA	2026	U	O3'-P	-5.44	1.54	1.61
26	LA	2205	A	P-O5'	-5.44	1.54	1.59
26	LA	2370	G	N3-C4	-5.44	1.31	1.35
26	LA	2633	G	C2-N2	-5.44	1.29	1.34
26	LA	2753	A	C5-C4	-5.44	1.34	1.38
41	L5	5	PHE	CB-CG	-5.44	1.42	1.51
2	SA	922	G	N9-C8	-5.44	1.34	1.37
2	SA	1458	G	C2-N3	-5.44	1.28	1.32
26	LA	114	U	C4-C5	5.44	1.48	1.43
26	LA	192	C	C5-C6	-5.44	1.30	1.34
26	LA	1080	A	C5-C6	-5.44	1.36	1.41
26	LA	2193	G	C2-N3	-5.44	1.28	1.32
2	SA	258	G	C3'-C2'	5.43	1.58	1.52
2	SA	528	C	C2-O2	-5.43	1.19	1.24
2	SA	1108	G	C2'-C1'	-5.43	1.47	1.53
2	SA	1478	U	C3'-C2'	5.43	1.58	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1486	G	C8-N7	-5.43	1.27	1.30
26	LA	106	C	C2-N3	5.43	1.40	1.35
26	LA	1236	G	C5-C6	-5.43	1.36	1.42
26	LA	1381	G	C2-N3	-5.43	1.28	1.32
26	LA	1501	G	P-O5'	5.43	1.65	1.59
26	LA	1703	G	P-O5'	-5.43	1.54	1.59
26	LA	2239	G	N9-C8	-5.43	1.34	1.37
2	SA	127	G	C5-C4	5.43	1.42	1.38
2	SA	663	A	N3-C4	-5.43	1.31	1.34
2	SA	936	C	O3'-P	-5.43	1.54	1.61
26	LA	1252	G	P-O5'	5.43	1.65	1.59
26	LA	1304	A	C2'-C1'	-5.43	1.47	1.53
26	LA	2877	G	C4'-C3'	5.43	1.59	1.53
53	LP	49	GLU	CG-CD	5.43	1.60	1.51
2	SA	922	G	N1-C2	-5.43	1.33	1.37
26	LA	98	G	C5-C6	-5.43	1.36	1.42
26	LA	1366	A	C4'-C3'	5.43	1.59	1.53
26	LA	1538	G	C5-C6	-5.43	1.36	1.42
26	LA	2545	G	C2-N2	-5.43	1.29	1.34
26	LA	2688	G	C8-N7	-5.43	1.27	1.30
26	LA	2722	G	N7-C5	-5.43	1.35	1.39
2	SA	37	U	P-O5'	5.43	1.65	1.59
2	SA	1502	A	N7-C5	-5.43	1.35	1.39
4	S2	36	A	C2-N3	5.43	1.38	1.33
4	S2	58	A	C6-N6	5.43	1.38	1.33
25	LB	119	A	O3'-P	-5.43	1.54	1.61
26	LA	1068	G	N9-C4	5.43	1.42	1.38
26	LA	1959	G	N7-C5	5.43	1.42	1.39
26	LA	2477	U	C4'-C3'	-5.43	1.47	1.52
55	LQ	22	GLY	CA-C	5.43	1.60	1.51
2	SA	688	G	C4'-O4'	5.43	1.52	1.45
2	SA	1538	C	C1'-N1	5.43	1.56	1.48
26	LA	721	A	C2-N3	5.43	1.38	1.33
26	LA	759	G	C6-O6	-5.43	1.19	1.24
26	LA	1249	U	C5-C6	-5.43	1.29	1.34
2	SA	915	A	C5-C4	-5.43	1.34	1.38
2	SA	922	G	C3'-C2'	-5.43	1.46	1.52
25	LB	63	C	C2-O2	5.43	1.29	1.24
26	LA	802	A	C5'-C4'	5.43	1.57	1.51
26	LA	1168	G	N3-C4	-5.43	1.31	1.35
26	LA	1436	G	N7-C5	-5.43	1.35	1.39
26	LA	1455	G	C4'-O4'	5.43	1.52	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1784	A	C3'-O3'	5.43	1.49	1.42
26	LA	2056	G	C5-C4	-5.43	1.34	1.38
26	LA	2251	U	C4'-C3'	5.43	1.59	1.53
26	LA	2498	C	C4-C5	-5.43	1.38	1.43
26	LA	2549	G	C2-N3	5.43	1.37	1.32
26	LA	2881	U	N1-C6	-5.43	1.33	1.38
2	SA	14	U	C3'-O3'	5.42	1.49	1.42
2	SA	358	U	P-O5'	-5.42	1.54	1.59
2	SA	1182	G	C6-N1	-5.42	1.35	1.39
2	SA	1209	C	C2'-O2'	5.42	1.48	1.41
2	SA	1348	U	P-O5'	-5.42	1.54	1.59
26	LA	278	A	N7-C5	-5.42	1.35	1.39
26	LA	463	G	N9-C8	5.42	1.41	1.37
26	LA	639	U	C3'-O3'	5.42	1.49	1.42
26	LA	1101	U	C1'-N1	5.42	1.56	1.48
26	LA	1496	A	O4'-C1'	5.42	1.48	1.41
26	LA	1627	G	N7-C5	-5.42	1.35	1.39
26	LA	1933	G	N9-C4	-5.42	1.33	1.38
2	SA	706	A	O3'-P	-5.42	1.54	1.61
26	LA	481	G	C3'-C2'	-5.42	1.46	1.52
26	LA	537	G	C2-N3	-5.42	1.28	1.32
26	LA	637	A	C8-N7	-5.42	1.27	1.31
26	LA	793	A	C6-N6	5.42	1.38	1.33
26	LA	1700	A	C6-N6	-5.42	1.29	1.33
26	LA	1854	A	C5'-C4'	5.42	1.57	1.51
26	LA	2695	U	C4-C5	-5.42	1.38	1.43
2	SA	687	A	C2-N3	-5.42	1.28	1.33
2	SA	1348	U	C2'-C1'	-5.42	1.47	1.53
25	LB	27	C	C5'-C4'	5.42	1.57	1.51
26	LA	1173	U	O5'-C5'	5.42	1.53	1.44
26	LA	1608	A	C6-N6	5.42	1.38	1.33
26	LA	1615	C	C2'-C1'	-5.42	1.47	1.53
26	LA	1739	A	N3-C4	-5.42	1.31	1.34
26	LA	2015	A	N9-C8	-5.42	1.33	1.37
26	LA	2335	A	N1-C2	5.42	1.39	1.34
26	LA	2579	C	N1-C6	-5.42	1.33	1.37
26	LA	2785	C	C2-N3	-5.42	1.31	1.35
26	LA	2832	U	C5'-C4'	5.42	1.57	1.51
38	LE	37	VAL	N-CA	-5.42	1.35	1.46
2	SA	55	A	C2'-C1'	-5.42	1.47	1.53
2	SA	303	A	P-O5'	-5.42	1.54	1.59
2	SA	558	G	C8-N7	-5.42	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	913	A	C5-C6	-5.42	1.36	1.41
2	SA	937	A	C5-C4	-5.42	1.34	1.38
2	SA	1280	A	C5-C6	5.42	1.46	1.41
26	LA	124	G	N1-C2	-5.42	1.33	1.37
26	LA	130	C	C4-N4	-5.42	1.29	1.33
26	LA	1479	G	P-O5'	-5.42	1.54	1.59
26	LA	1755	A	C6-N1	-5.42	1.31	1.35
26	LA	2328	A	C3'-C2'	-5.42	1.46	1.52
26	LA	2505	G	C5-C4	-5.42	1.34	1.38
26	LA	2707	U	C2-N3	-5.42	1.33	1.37
2	SA	100	G	N9-C4	-5.42	1.33	1.38
2	SA	162	A	C8-N7	-5.42	1.27	1.31
2	SA	210	C	C5'-C4'	5.42	1.57	1.51
2	SA	277	C	C3'-C2'	-5.42	1.46	1.52
2	SA	377	G	C2-N2	-5.42	1.29	1.34
2	SA	584	G	C1'-N9	-5.42	1.39	1.46
2	SA	649	A	C3'-O3'	5.42	1.49	1.42
2	SA	890	G	N9-C8	-5.42	1.34	1.37
2	SA	1072	G	N3-C4	-5.42	1.31	1.35
2	SA	1182	G	C1'-N9	-5.42	1.39	1.46
2	SA	1415	G	C2-N2	-5.42	1.29	1.34
11	SK	43	TRP	CB-CG	5.42	1.60	1.50
14	SN	62	ARG	CD-NE	5.42	1.55	1.46
26	LA	598	U	N3-C4	-5.42	1.33	1.38
26	LA	1142	A	N9-C4	-5.42	1.34	1.37
26	LA	1416	G	C3'-C2'	5.42	1.58	1.52
26	LA	1700	A	C8-N7	5.42	1.35	1.31
26	LA	1837	C	C4'-O4'	-5.42	1.38	1.45
26	LA	1999	C	C5'-C4'	5.42	1.57	1.51
26	LA	2614	A	O3'-P	-5.42	1.54	1.61
26	LA	2666	C	C3'-C2'	5.42	1.58	1.52
26	LA	2826	A	C5'-C4'	5.42	1.57	1.51
2	SA	471	U	N1-C6	-5.42	1.33	1.38
2	SA	748	G	C4'-O4'	5.42	1.52	1.45
2	SA	749	A	N9-C8	-5.42	1.33	1.37
2	SA	1347	G	O4'-C1'	-5.42	1.34	1.41
25	LB	34	A	N3-C4	-5.42	1.31	1.34
26	LA	57	C	C2-N3	5.42	1.40	1.35
26	LA	177	G	N1-C2	-5.42	1.33	1.37
26	LA	1251	C	O4'-C1'	-5.42	1.34	1.41
26	LA	1295	C	O3'-P	-5.42	1.54	1.61
26	LA	1655	A	N9-C4	-5.42	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	271	C	N1-C6	5.42	1.40	1.37
2	SA	429	U	C3'-O3'	5.42	1.49	1.42
2	SA	1001	C	C4-C5	-5.42	1.38	1.43
2	SA	1210	C	C4-C5	5.42	1.47	1.43
4	S2	20	G	C2-N3	-5.42	1.28	1.32
26	LA	158	U	C5-C6	-5.42	1.29	1.34
26	LA	1811	G	C6-O6	-5.42	1.19	1.24
26	LA	2135	A	C4'-O4'	-5.42	1.38	1.45
26	LA	2550	G	N3-C4	-5.42	1.31	1.35
2	SA	55	A	C4'-C3'	-5.41	1.47	1.52
2	SA	200	G	N3-C4	5.41	1.39	1.35
2	SA	852	G	N7-C5	-5.41	1.36	1.39
2	SA	865	A	C2'-C1'	-5.41	1.47	1.53
2	SA	977	A	C5-C4	-5.41	1.34	1.38
2	SA	1278	G	N9-C8	5.41	1.41	1.37
2	SA	1356	G	C2-N3	5.41	1.37	1.32
26	LA	146	A	O3'-P	-5.41	1.54	1.61
26	LA	1108	U	N3-C4	-5.41	1.33	1.38
26	LA	1149	G	C2'-C1'	-5.41	1.47	1.53
26	LA	1212	G	P-O5'	5.41	1.65	1.59
26	LA	1705	A	C8-N7	-5.41	1.27	1.31
26	LA	2035	G	C8-N7	5.41	1.34	1.30
26	LA	2901	C	C4-C5	5.41	1.47	1.43
2	SA	196	A	N3-C4	5.41	1.38	1.34
25	LB	114	C	C3'-O3'	5.41	1.49	1.42
26	LA	899	A	C4'-C3'	5.41	1.59	1.53
26	LA	1130	U	C3'-O3'	5.41	1.49	1.42
26	LA	1384	A	N3-C4	-5.41	1.31	1.34
26	LA	2030	U	P-O5'	-5.41	1.54	1.59
26	LA	2291	U	C4'-C3'	-5.41	1.47	1.52
44	LF	127	GLU	CD-OE1	-5.41	1.19	1.25
2	SA	160	A	C5'-C4'	5.41	1.57	1.51
2	SA	430	A	C5-C4	-5.41	1.34	1.38
2	SA	796	C	C4-C5	-5.41	1.38	1.43
2	SA	1125	U	C2-N3	5.41	1.41	1.37
26	LA	667	U	O5'-C5'	5.41	1.53	1.44
26	LA	716	A	C5'-C4'	5.41	1.57	1.51
26	LA	1178	C	C4-C5	5.41	1.47	1.43
26	LA	1340	U	C3'-O3'	5.41	1.49	1.42
26	LA	2847	U	C5'-C4'	5.41	1.57	1.51
2	SA	814	A	P-O5'	-5.41	1.54	1.59
2	SA	1098	C	C2'-C1'	-5.41	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	88	C	C2-N3	-5.41	1.31	1.35
26	LA	274	C	C3'-O3'	5.41	1.49	1.42
26	LA	366	C	C4'-O4'	5.41	1.52	1.45
26	LA	411	G	N1-C2	-5.41	1.33	1.37
26	LA	635	C	C2'-O2'	-5.41	1.34	1.41
26	LA	792	A	C8-N7	-5.41	1.27	1.31
26	LA	917	A	N9-C4	-5.41	1.34	1.37
26	LA	1100	C	C4-N4	-5.41	1.29	1.33
26	LA	2073	C	N1-C6	5.41	1.40	1.37
26	LA	2235	G	O4'-C1'	-5.41	1.34	1.41
26	LA	2829	A	C3'-C2'	-5.41	1.46	1.52
2	SA	1044	A	C3'-O3'	5.41	1.49	1.42
26	LA	1972	G	C2'-C1'	-5.41	1.47	1.53
26	LA	2050	C	C2'-O2'	-5.41	1.34	1.41
31	LX	29	ILE	N-CA	-5.41	1.35	1.46
2	SA	376	G	O3'-P	-5.41	1.54	1.61
2	SA	987	G	N9-C8	-5.41	1.34	1.37
25	LB	74	U	P-O5'	5.41	1.65	1.59
26	LA	78	U	C2-O2	5.41	1.27	1.22
26	LA	1196	C	O4'-C1'	5.41	1.48	1.41
26	LA	1252	G	N3-C4	-5.41	1.31	1.35
26	LA	1599	U	C4'-C3'	-5.41	1.47	1.52
26	LA	1781	U	C2-N3	5.41	1.41	1.37
26	LA	2206	C	C5-C6	-5.41	1.30	1.34
26	LA	2327	A	C8-N7	-5.41	1.27	1.31
26	LA	2464	G	C8-N7	5.41	1.34	1.30
26	LA	2603	G	C4'-C3'	-5.41	1.47	1.52
2	SA	29	U	C3'-O3'	5.40	1.49	1.42
2	SA	753	A	C6-N6	5.40	1.38	1.33
2	SA	1494	G	C2-N2	-5.40	1.29	1.34
26	LA	187	G	C4'-C3'	-5.40	1.47	1.52
26	LA	479	A	O3'-P	-5.40	1.54	1.61
26	LA	512	G	N9-C8	-5.40	1.34	1.37
26	LA	543	G	C1'-N9	-5.40	1.39	1.46
26	LA	803	U	C2-N3	5.40	1.41	1.37
26	LA	1687	G	O3'-P	-5.40	1.54	1.61
26	LA	2087	G	P-O5'	-5.40	1.54	1.59
2	SA	166	U	C5-C6	5.40	1.39	1.34
2	SA	348	G	C4'-C3'	5.40	1.59	1.53
2	SA	1005	A	N3-C4	5.40	1.38	1.34
2	SA	1513	A	C4'-C3'	-5.40	1.47	1.52
2	SA	1530	G	C4'-C3'	5.40	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	S1	47	C	C4-N4	5.40	1.38	1.33
4	S2	4	G	C5-C6	-5.40	1.36	1.42
17	SQ	45	VAL	N-CA	-5.40	1.35	1.46
25	LB	99	A	C6-N6	-5.40	1.29	1.33
25	LB	108	A	O3'-P	-5.40	1.54	1.61
26	LA	260	G	N9-C8	-5.40	1.34	1.37
26	LA	340	A	C1'-N9	-5.40	1.39	1.46
26	LA	1029	A	N7-C5	-5.40	1.36	1.39
26	LA	1455	G	C2-N3	5.40	1.37	1.32
26	LA	1537	G	C2'-C1'	-5.40	1.47	1.53
26	LA	1745	A	C2'-C1'	-5.40	1.47	1.53
26	LA	2048	G	N1-C2	-5.40	1.33	1.37
26	LA	2518	A	O4'-C1'	-5.40	1.34	1.41
2	SA	232	G	N3-C4	5.40	1.39	1.35
2	SA	718	A	C8-N7	-5.40	1.27	1.31
2	SA	985	C	O3'-P	-5.40	1.54	1.61
2	SA	1035	A	O5'-C5'	5.40	1.53	1.44
24	S3	236	TYR	CZ-OH	5.40	1.47	1.37
25	LB	38	C	C2'-C1'	-5.40	1.47	1.53
25	LB	44	G	P-O5'	-5.40	1.54	1.59
26	LA	24	G	O3'-P	-5.40	1.54	1.61
26	LA	34	U	C5'-C4'	-5.40	1.44	1.51
26	LA	220	G	C6-N1	-5.40	1.35	1.39
26	LA	261	G	C2'-C1'	-5.40	1.47	1.53
26	LA	1215	G	C4'-O4'	5.40	1.52	1.45
26	LA	1440	U	P-O5'	-5.40	1.54	1.59
26	LA	1797	G	N7-C5	-5.40	1.36	1.39
26	LA	1837	C	P-O5'	-5.40	1.54	1.59
2	SA	579	A	N9-C4	-5.40	1.34	1.37
2	SA	752	G	C8-N7	-5.40	1.27	1.30
2	SA	1105	A	C2-N3	5.40	1.38	1.33
2	SA	1490	U	P-O5'	-5.40	1.54	1.59
4	S2	13	C	C3'-C2'	-5.40	1.46	1.52
26	LA	91	A	C5'-C4'	5.40	1.57	1.51
26	LA	639	U	P-O5'	-5.40	1.54	1.59
26	LA	2322	A	C6-N6	-5.40	1.29	1.33
26	LA	2401	U	N1-C2	-5.40	1.33	1.38
26	LA	2481	G	N3-C4	-5.40	1.31	1.35
2	SA	105	G	C5-C4	5.40	1.42	1.38
2	SA	191	G	C3'-O3'	5.40	1.49	1.42
2	SA	490	C	N3-C4	-5.40	1.30	1.33
2	SA	798	U	N1-C6	5.40	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	806	C	C1'-N1	-5.40	1.39	1.46
2	SA	944	G	O3'-P	-5.40	1.54	1.61
2	SA	1078	U	O4'-C1'	5.40	1.48	1.41
2	SA	1089	G	O3'-P	-5.40	1.54	1.61
2	SA	1355	G	C2-N2	-5.40	1.29	1.34
25	LB	12	C	P-O5'	5.40	1.65	1.59
26	LA	55	G	N3-C4	-5.40	1.31	1.35
26	LA	186	G	O4'-C1'	5.40	1.48	1.41
26	LA	697	G	O3'-P	-5.40	1.54	1.61
26	LA	1108	U	C2'-C1'	-5.40	1.47	1.53
26	LA	1609	A	N1-C2	-5.40	1.29	1.34
26	LA	2100	G	C5-C6	-5.40	1.36	1.42
26	LA	2573	C	O3'-P	-5.40	1.54	1.61
2	SA	359	G	C5-C6	-5.40	1.36	1.42
2	SA	723	U	C4-C5	-5.40	1.38	1.43
2	SA	728	A	O3'-P	-5.40	1.54	1.61
2	SA	1213	A	C6-N6	5.40	1.38	1.33
26	LA	424	G	C5-C6	-5.40	1.36	1.42
26	LA	899	A	N9-C4	-5.40	1.34	1.37
26	LA	986	C	N1-C2	-5.40	1.34	1.40
26	LA	1453	A	N7-C5	5.40	1.42	1.39
2	SA	8	A	N3-C4	5.39	1.38	1.34
2	SA	286	C	C2-N3	-5.39	1.31	1.35
26	LA	1118	C	C4-N4	-5.39	1.29	1.33
26	LA	1587	G	N9-C4	-5.39	1.33	1.38
26	LA	1865	U	N1-C6	-5.39	1.33	1.38
2	SA	1	A	N3-C4	-5.39	1.31	1.34
2	SA	882	C	P-O5'	-5.39	1.54	1.59
2	SA	961	U	C3'-C2'	-5.39	1.46	1.52
2	SA	1348	U	C5'-C4'	5.39	1.57	1.51
26	LA	122	G	C5-C6	-5.39	1.36	1.42
26	LA	500	G	N3-C4	5.39	1.39	1.35
26	LA	506	G	C6-N1	-5.39	1.35	1.39
26	LA	673	C	N1-C6	-5.39	1.33	1.37
26	LA	845	A	C1'-N9	-5.39	1.39	1.46
26	LA	1120	G	P-O5'	5.39	1.65	1.59
26	LA	1257	C	C3'-O3'	5.39	1.49	1.42
26	LA	1800	C	C1'-N1	-5.39	1.39	1.46
26	LA	2137	U	C4-C5	-5.39	1.38	1.43
26	LA	2206	C	C5'-C4'	5.39	1.57	1.51
26	LA	2276	G	C5-C4	-5.39	1.34	1.38
26	LA	2287	A	O3'-P	-5.39	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2630	G	N9-C8	5.39	1.41	1.37
26	LA	2666	C	C4'-O4'	5.39	1.52	1.45
26	LA	2851	A	C6-N6	-5.39	1.29	1.33
46	LH	129	GLU	CD-OE1	5.39	1.31	1.25
2	SA	664	G	N3-C4	-5.39	1.31	1.35
2	SA	784	A	C3'-O3'	5.39	1.49	1.42
2	SA	791	G	N1-C2	5.39	1.42	1.37
3	S1	41	A	P-O5'	-5.39	1.54	1.59
25	LB	75	G	C6-N1	-5.39	1.35	1.39
26	LA	297	G	C3'-O3'	5.39	1.49	1.42
26	LA	2702	G	C2-N2	-5.39	1.29	1.34
1	SS	33	TRP	CZ3-CH2	5.39	1.48	1.40
2	SA	409	U	C5'-C4'	5.39	1.57	1.51
3	S1	57	C	C5'-C4'	5.39	1.57	1.51
26	LA	110	G	C6-N1	-5.39	1.35	1.39
26	LA	262	A	C5'-C4'	5.39	1.57	1.51
26	LA	425	G	C5'-C4'	5.39	1.57	1.51
26	LA	875	G	C5'-C4'	5.39	1.57	1.51
26	LA	885	C	N3-C4	5.39	1.37	1.33
26	LA	1010	A	C5-C4	-5.39	1.34	1.38
26	LA	1344	U	C3'-O3'	5.39	1.49	1.42
26	LA	1433	A	N9-C4	-5.39	1.34	1.37
26	LA	1473	G	N9-C8	5.39	1.41	1.37
26	LA	1912	A	C3'-O3'	-5.39	1.34	1.42
26	LA	2614	A	P-O5'	-5.39	1.54	1.59
2	SA	158	G	N7-C5	5.39	1.42	1.39
2	SA	932	C	C2'-O2'	5.39	1.48	1.41
2	SA	1108	G	C2-N2	-5.39	1.29	1.34
26	LA	805	G	C2-N3	5.39	1.37	1.32
26	LA	1519	G	N3-C4	5.39	1.39	1.35
26	LA	1551	A	C5'-C4'	5.39	1.57	1.51
26	LA	2217	G	O3'-P	-5.39	1.54	1.61
26	LA	2259	U	C2'-O2'	-5.39	1.34	1.41
26	LA	2629	U	C4'-C3'	-5.39	1.47	1.52
53	LP	15	SER	CA-CB	5.39	1.61	1.52
26	LA	369	U	C3'-O3'	5.39	1.49	1.42
26	LA	442	G	C6-N1	-5.39	1.35	1.39
26	LA	454	A	N9-C8	-5.39	1.33	1.37
26	LA	758	C	C3'-C2'	-5.39	1.46	1.52
26	LA	1307	A	C2'-C1'	-5.39	1.47	1.53
26	LA	1472	C	C4'-O4'	5.39	1.52	1.45
26	LA	2070	A	C6-N6	5.39	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2097	A	N9-C4	-5.39	1.34	1.37
26	LA	2196	C	C4-N4	-5.39	1.29	1.33
26	LA	2210	U	C2'-C1'	-5.39	1.47	1.53
26	LA	2253	G	C2-N3	-5.39	1.28	1.32
26	LA	2548	U	C4-O4	-5.39	1.19	1.23
26	LA	2883	A	C4'-C3'	-5.39	1.47	1.52
2	SA	398	U	N1-C2	5.38	1.43	1.38
2	SA	1112	C	C5'-C4'	5.38	1.57	1.51
22	SF	25	TYR	CG-CD1	5.38	1.46	1.39
26	LA	933	A	N3-C4	-5.38	1.31	1.34
26	LA	1045	C	C4-N4	-5.38	1.29	1.33
26	LA	1138	G	C2'-C1'	-5.38	1.47	1.53
26	LA	1147	A	C1'-N9	-5.38	1.39	1.46
26	LA	1726	C	O4'-C1'	-5.38	1.34	1.41
26	LA	1954	G	C6-N1	-5.38	1.35	1.39
26	LA	2341	G	C6-O6	-5.38	1.19	1.24
26	LA	2423	U	C5-C6	5.38	1.39	1.34
26	LA	2600	A	N9-C8	-5.38	1.33	1.37
26	LA	2895	G	C1'-N9	-5.38	1.39	1.46
2	SA	1106	G	N9-C8	-5.38	1.34	1.37
2	SA	1279	G	N1-C2	5.38	1.42	1.37
7	SG	142	ARG	CZ-NH2	-5.38	1.26	1.33
25	LB	25	U	O3'-P	-5.38	1.54	1.61
26	LA	954	G	N9-C8	-5.38	1.34	1.37
26	LA	1265	A	C5'-C4'	5.38	1.57	1.51
26	LA	1517	G	C8-N7	-5.38	1.27	1.30
26	LA	2092	U	N1-C2	-5.38	1.33	1.38
26	LA	2320	U	N1-C6	5.38	1.42	1.38
2	SA	331	G	C5-C4	5.38	1.42	1.38
2	SA	1344	C	C4'-C3'	5.38	1.59	1.53
14	SN	31	SER	CA-CB	5.38	1.61	1.52
25	LB	56	G	O3'-P	-5.38	1.54	1.61
26	LA	238	C	C2-O2	-5.38	1.19	1.24
26	LA	670	A	C8-N7	-5.38	1.27	1.31
26	LA	738	G	C2'-O2'	-5.38	1.34	1.41
26	LA	814	C	N3-C4	-5.38	1.30	1.33
26	LA	998	C	P-O5'	-5.38	1.54	1.59
26	LA	1651	G	N1-C2	-5.38	1.33	1.37
26	LA	1664	A	N1-C2	-5.38	1.29	1.34
26	LA	1731	G	C6-N1	5.38	1.43	1.39
26	LA	1872	A	C8-N7	-5.38	1.27	1.31
26	LA	2002	G	N9-C4	-5.38	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2154	A	C5-C6	5.38	1.45	1.41
2	SA	1361	G	C4'-C3'	-5.38	1.47	1.52
4	S2	31	G	C4'-O4'	5.38	1.52	1.45
26	LA	712	G	O3'-P	-5.38	1.54	1.61
26	LA	909	A	O5'-C5'	5.38	1.53	1.44
26	LA	1333	G	N1-C2	-5.38	1.33	1.37
26	LA	2891	U	N1-C2	-5.38	1.33	1.38
2	SA	341	C	P-O5'	-5.38	1.54	1.59
2	SA	1159	U	N3-C4	5.38	1.43	1.38
2	SA	1193	G	C5'-C4'	5.38	1.57	1.51
2	SA	1396	A	C6-N6	5.38	1.38	1.33
20	SD	102	TYR	CE2-CZ	5.38	1.45	1.38
26	LA	347	A	C3'-C2'	-5.38	1.46	1.52
26	LA	457	A	C8-N7	5.38	1.35	1.31
26	LA	701	G	C5-C4	-5.38	1.34	1.38
26	LA	832	U	N1-C2	-5.38	1.33	1.38
26	LA	1637	A	C8-N7	5.38	1.35	1.31
26	LA	2078	C	C3'-O3'	5.38	1.49	1.42
26	LA	2393	U	P-O5'	-5.38	1.54	1.59
26	LA	2814	A	C6-N6	5.38	1.38	1.33
46	LH	31	GLU	N-CA	-5.38	1.35	1.46
2	SA	160	A	O4'-C1'	5.38	1.48	1.41
2	SA	188	C	C3'-O3'	5.38	1.49	1.42
2	SA	287	U	O3'-P	-5.38	1.54	1.61
2	SA	373	A	O3'-P	-5.38	1.54	1.61
2	SA	962	C	N3-C4	5.38	1.37	1.33
2	SA	998	C	C2'-C1'	-5.38	1.47	1.53
2	SA	1098	C	C3'-O3'	5.38	1.49	1.42
2	SA	1303	C	N1-C6	5.38	1.40	1.37
26	LA	53	A	P-O5'	5.38	1.65	1.59
26	LA	247	G	C8-N7	-5.38	1.27	1.30
26	LA	1096	A	N7-C5	-5.38	1.36	1.39
26	LA	1461	C	C2'-C1'	5.38	1.59	1.53
26	LA	1786	A	C4'-C3'	5.38	1.59	1.53
26	LA	2282	G	C3'-O3'	5.38	1.49	1.42
2	SA	1316	G	C3'-C2'	5.38	1.58	1.52
15	SO	68	TYR	CB-CG	-5.38	1.43	1.51
26	LA	161	A	N9-C4	-5.38	1.34	1.37
26	LA	265	A	C4'-C3'	-5.38	1.47	1.52
26	LA	368	A	C6-N6	5.38	1.38	1.33
26	LA	1170	C	C4-C5	-5.38	1.38	1.43
2	SA	253	A	C2-N3	5.37	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	279	A	N3-C4	5.37	1.38	1.34
2	SA	417	G	C8-N7	5.37	1.34	1.30
2	SA	1213	A	N9-C4	-5.37	1.34	1.37
2	SA	1302	C	C5'-C4'	5.37	1.57	1.51
2	SA	1303	C	C2-O2	-5.37	1.19	1.24
26	LA	105	C	C5'-C4'	5.37	1.57	1.51
26	LA	127	A	C2-N3	5.37	1.38	1.33
26	LA	149	A	N7-C5	-5.37	1.36	1.39
26	LA	178	G	C1'-N9	-5.37	1.39	1.46
26	LA	220	G	C3'-O3'	5.37	1.49	1.42
26	LA	299	A	N1-C2	-5.37	1.29	1.34
26	LA	1279	G	C5-C6	-5.37	1.36	1.42
26	LA	1285	A	C4'-C3'	5.37	1.59	1.53
26	LA	1439	A	N9-C4	-5.37	1.34	1.37
26	LA	1855	U	N3-C4	-5.37	1.33	1.38
26	LA	2199	A	N1-C2	5.37	1.39	1.34
26	LA	2437	G	N7-C5	-5.37	1.36	1.39
50	LL	75	TYR	CB-CG	-5.37	1.43	1.51
2	SA	1039	G	C2-N3	5.37	1.37	1.32
2	SA	1172	C	C3'-O3'	5.37	1.49	1.42
20	SD	152	SER	CA-CB	5.37	1.61	1.52
26	LA	812	C	N3-C4	5.37	1.37	1.33
26	LA	829	A	C5-C6	-5.37	1.36	1.41
26	LA	1363	C	C5-C6	-5.37	1.30	1.34
26	LA	1920	C	O3'-P	-5.37	1.54	1.61
26	LA	1998	A	P-O5'	-5.37	1.54	1.59
26	LA	2356	U	C2-O2	5.37	1.27	1.22
26	LA	2453	A	P-O5'	-5.37	1.54	1.59
26	LA	2659	G	C2-N3	-5.37	1.28	1.32
26	LA	2694	G	C2-N3	-5.37	1.28	1.32
27	LD	84	PRO	N-CD	-5.37	1.40	1.47
45	LG	146	ASP	N-CA	-5.37	1.35	1.46
2	SA	259	G	C5'-C4'	5.37	1.57	1.51
2	SA	325	A	N3-C4	-5.37	1.31	1.34
2	SA	848	C	C3'-O3'	5.37	1.49	1.42
2	SA	1032	G	C2-N3	5.37	1.37	1.32
2	SA	1468	A	N7-C5	-5.37	1.36	1.39
26	LA	2670	A	C4'-C3'	-5.37	1.47	1.52
2	SA	10	A	C1'-N9	-5.37	1.39	1.46
2	SA	110	C	C2-O2	5.37	1.29	1.24
2	SA	404	G	C8-N7	5.37	1.34	1.30
2	SA	1408	A	C5-C4	-5.37	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1507	A	C5-C6	-5.37	1.36	1.41
26	LA	46	G	C2-N2	-5.37	1.29	1.34
26	LA	215	G	C5'-C4'	5.37	1.57	1.51
26	LA	279	A	C1'-N9	-5.37	1.39	1.46
26	LA	572	A	N7-C5	5.37	1.42	1.39
26	LA	1626	A	C5-C6	5.37	1.45	1.41
26	LA	1703	G	C2-N3	5.37	1.37	1.32
26	LA	1713	A	C1'-N9	-5.37	1.39	1.46
26	LA	1913	A	N9-C4	5.37	1.41	1.37
26	LA	1947	C	C3'-O3'	5.37	1.49	1.42
26	LA	2157	G	O3'-P	-5.37	1.54	1.61
26	LA	2414	G	N9-C4	5.37	1.42	1.38
26	LA	2418	A	C6-N1	5.37	1.39	1.35
26	LA	2455	G	C4'-O4'	-5.37	1.38	1.45
26	LA	2607	G	C3'-C2'	-5.37	1.46	1.52
26	LA	2670	A	C5-C6	5.37	1.45	1.41
2	SA	81	A	N9-C4	5.37	1.41	1.37
2	SA	266	G	O4'-C1'	-5.37	1.34	1.41
2	SA	1032	G	O4'-C1'	-5.37	1.34	1.41
4	S2	52	C	C3'-O3'	5.37	1.49	1.42
25	LB	92	C	C4-C5	5.37	1.47	1.43
26	LA	1006	C	P-O5'	-5.37	1.54	1.59
26	LA	1589	U	N3-C4	5.37	1.43	1.38
26	LA	1873	G	N3-C4	-5.37	1.31	1.35
26	LA	2328	A	N9-C8	-5.37	1.33	1.37
26	LA	2397	G	C2'-C1'	5.37	1.59	1.53
2	SA	1441	A	C2'-C1'	-5.37	1.47	1.53
7	SG	40	SER	CA-CB	5.37	1.60	1.52
25	LB	70	C	O3'-P	-5.37	1.54	1.61
26	LA	10	A	C5-C6	5.37	1.45	1.41
26	LA	132	G	C2-N3	-5.37	1.28	1.32
26	LA	480	A	C2'-C1'	-5.37	1.47	1.53
26	LA	2023	C	P-O5'	-5.37	1.54	1.59
26	LA	2674	G	N7-C5	-5.37	1.36	1.39
26	LA	2692	G	O4'-C1'	5.37	1.48	1.41
26	LA	2824	C	C3'-C2'	-5.37	1.46	1.52
37	LC	78	PHE	CB-CG	5.37	1.60	1.51
53	LP	112	TYR	CB-CG	-5.37	1.43	1.51
2	SA	146	G	C6-N1	5.36	1.43	1.39
2	SA	215	C	P-O5'	-5.36	1.54	1.59
2	SA	318	G	N3-C4	5.36	1.39	1.35
2	SA	373	A	C2'-C1'	-5.36	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	443	C	C2'-C1'	-5.36	1.47	1.53
2	SA	585	G	C8-N7	-5.36	1.27	1.30
2	SA	772	U	P-O5'	-5.36	1.54	1.59
25	LB	106	G	C6-O6	5.36	1.28	1.24
26	LA	191	A	N3-C4	-5.36	1.31	1.34
26	LA	231	A	P-O5'	-5.36	1.54	1.59
26	LA	438	G	N3-C4	5.36	1.39	1.35
26	LA	610	C	C5'-C4'	5.36	1.57	1.51
26	LA	654	A	C5'-C4'	5.36	1.57	1.51
26	LA	750	A	C2-N3	5.36	1.38	1.33
26	LA	1543	G	C8-N7	5.36	1.34	1.30
2	SA	83	C	N1-C6	-5.36	1.33	1.37
2	SA	737	C	P-O5'	-5.36	1.54	1.59
2	SA	944	G	O4'-C1'	5.36	1.48	1.41
26	LA	991	C	C2-O2	-5.36	1.19	1.24
26	LA	1570	A	C3'-O3'	5.36	1.49	1.42
2	SA	413	G	P-O5'	5.36	1.65	1.59
2	SA	1144	G	C2-N2	-5.36	1.29	1.34
2	SA	1373	G	C3'-O3'	5.36	1.49	1.42
2	SA	1387	G	C2-N2	5.36	1.40	1.34
26	LA	44	A	C3'-C2'	-5.36	1.46	1.52
26	LA	99	U	C3'-O3'	5.36	1.49	1.42
26	LA	231	A	N1-C2	5.36	1.39	1.34
26	LA	302	C	O3'-P	-5.36	1.54	1.61
26	LA	558	U	O4'-C1'	-5.36	1.34	1.41
26	LA	718	A	C2-N3	5.36	1.38	1.33
26	LA	910	A	O3'-P	-5.36	1.54	1.61
26	LA	919	U	C4-C5	-5.36	1.38	1.43
26	LA	2025	C	C4-C5	-5.36	1.38	1.43
26	LA	2353	G	C6-N1	-5.36	1.35	1.39
26	LA	2570	G	C3'-C2'	-5.36	1.46	1.52
33	LZ	10	ARG	CA-C	-5.36	1.39	1.52
2	SA	244	U	O3'-P	-5.36	1.54	1.61
26	LA	227	A	C2'-C1'	-5.36	1.47	1.53
26	LA	266	G	N7-C5	-5.36	1.36	1.39
26	LA	720	U	C2-N3	-5.36	1.33	1.37
26	LA	1194	A	N9-C8	-5.36	1.33	1.37
26	LA	2878	U	C5'-C4'	5.36	1.57	1.51
2	SA	407	U	C4'-O4'	5.36	1.52	1.45
2	SA	1183	U	N1-C6	-5.36	1.33	1.38
2	SA	1422	G	C2'-O2'	-5.36	1.34	1.41
25	LB	19	C	C5-C6	5.36	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	100	U	C1'-N1	5.36	1.56	1.48
26	LA	151	C	O4'-C1'	5.36	1.48	1.41
26	LA	226	A	C5-C6	5.36	1.45	1.41
26	LA	430	A	C2'-O2'	-5.36	1.34	1.41
26	LA	1160	G	P-O5'	-5.36	1.54	1.59
26	LA	1253	A	O4'-C1'	-5.36	1.34	1.41
26	LA	1593	A	C3'-O3'	5.36	1.49	1.42
26	LA	1732	C	C2'-O2'	-5.36	1.34	1.41
26	LA	2130	U	C2-N3	5.36	1.41	1.37
26	LA	2384	U	N1-C6	-5.36	1.33	1.38
26	LA	2468	A	N9-C4	-5.36	1.34	1.37
26	LA	2560	A	C4'-C3'	-5.36	1.47	1.52
26	LA	2700	A	C3'-C2'	5.36	1.58	1.52
2	SA	1265	C	C2'-C1'	-5.36	1.47	1.53
2	SA	1433	A	C4'-O4'	5.36	1.52	1.45
2	SA	1500	A	C5-C4	-5.36	1.35	1.38
26	LA	684	G	C5-C4	-5.36	1.34	1.38
26	LA	794	A	N9-C4	-5.36	1.34	1.37
26	LA	803	U	N1-C6	5.36	1.42	1.38
26	LA	1129	A	N9-C4	-5.36	1.34	1.37
26	LA	1665	A	N9-C8	-5.36	1.33	1.37
26	LA	1849	G	C1'-N9	-5.36	1.39	1.46
51	LI	34	GLY	CA-C	-5.36	1.43	1.51
2	SA	1155	A	C6-N1	-5.35	1.31	1.35
2	SA	1244	G	C1'-N9	-5.35	1.39	1.46
2	SA	1394	A	C3'-C2'	-5.35	1.46	1.52
26	LA	703	U	C5'-C4'	5.35	1.57	1.51
26	LA	1260	A	C4'-O4'	-5.35	1.38	1.45
26	LA	1532	A	N7-C5	-5.35	1.36	1.39
26	LA	2329	U	N1-C2	-5.35	1.33	1.38
2	SA	170	U	C1'-N1	5.35	1.56	1.48
2	SA	312	C	O4'-C1'	-5.35	1.34	1.41
2	SA	523	A	N9-C8	-5.35	1.33	1.37
2	SA	799	G	N1-C2	-5.35	1.33	1.37
2	SA	912	C	C4-C5	-5.35	1.38	1.43
2	SA	968	A	C5-C4	-5.35	1.35	1.38
2	SA	994	A	C1'-N9	-5.35	1.39	1.46
2	SA	1176	A	C4'-O4'	5.35	1.52	1.45
3	S1	45	G	N1-C2	5.35	1.42	1.37
25	LB	109	A	O5'-C5'	5.35	1.53	1.44
26	LA	546	U	C2-N3	-5.35	1.34	1.37
26	LA	789	A	N9-C8	-5.35	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	869	G	C5-C4	-5.35	1.34	1.38
26	LA	1004	U	N3-C4	5.35	1.43	1.38
26	LA	1303	G	C2-N2	-5.35	1.29	1.34
26	LA	1398	C	C2-N3	-5.35	1.31	1.35
26	LA	1710	G	N9-C8	5.35	1.41	1.37
26	LA	1733	G	N7-C5	-5.35	1.36	1.39
26	LA	2129	C	C1'-N1	5.35	1.56	1.48
26	LA	2436	G	C8-N7	5.35	1.34	1.30
26	LA	2599	G	O3'-P	-5.35	1.54	1.61
46	LH	57	TYR	CB-CG	5.35	1.59	1.51
52	LO	92	TRP	NE1-CE2	-5.35	1.30	1.37
52	LO	125	PRO	N-CD	-5.35	1.40	1.47
2	SA	310	G	P-O5'	5.35	1.65	1.59
2	SA	611	C	N1-C6	5.35	1.40	1.37
2	SA	950	U	C4-O4	5.35	1.27	1.23
2	SA	1431	A	O3'-P	5.35	1.67	1.61
22	SF	108	GLU	CB-CG	5.35	1.62	1.52
26	LA	127	A	C4'-O4'	-5.35	1.38	1.45
26	LA	466	A	O3'-P	-5.35	1.54	1.61
26	LA	501	A	O3'-P	-5.35	1.54	1.61
26	LA	1830	C	C4'-C3'	-5.35	1.47	1.52
2	SA	130	A	C3'-C2'	-5.35	1.46	1.52
2	SA	671	G	C6-O6	-5.35	1.19	1.24
2	SA	771	G	N1-C2	-5.35	1.33	1.37
2	SA	915	A	O4'-C1'	-5.35	1.34	1.41
2	SA	918	A	N9-C4	-5.35	1.34	1.37
2	SA	1169	A	N7-C5	-5.35	1.36	1.39
2	SA	1363	A	C5-C6	-5.35	1.36	1.41
26	LA	157	C	C4-N4	-5.35	1.29	1.33
26	LA	1456	G	C2'-C1'	-5.35	1.47	1.53
26	LA	1585	C	N1-C2	5.35	1.45	1.40
26	LA	1619	G	C6-N1	-5.35	1.35	1.39
26	LA	2089	C	C5-C6	-5.35	1.30	1.34
26	LA	2386	A	N3-C4	-5.35	1.31	1.34
26	LA	2754	U	N3-C4	-5.35	1.33	1.38
33	LZ	10	ARG	C-N	-5.35	1.24	1.34
2	SA	331	G	P-O5'	5.35	1.65	1.59
2	SA	389	A	C2-N3	5.35	1.38	1.33
2	SA	461	A	C2'-C1'	5.35	1.59	1.53
2	SA	1399	C	P-O5'	5.35	1.65	1.59
26	LA	412	A	C1'-N9	-5.35	1.39	1.46
26	LA	776	G	C6-N1	-5.35	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	794	A	C5-C4	-5.35	1.35	1.38
26	LA	2349	G	N9-C8	-5.35	1.34	1.37
26	LA	2556	C	O3'-P	-5.35	1.54	1.61
26	LA	2639	A	N3-C4	5.35	1.38	1.34
26	LA	2759	G	N1-C2	-5.35	1.33	1.37
26	LA	2760	C	N1-C6	5.35	1.40	1.37
2	SA	712	A	C5'-C4'	5.35	1.57	1.51
26	LA	240	C	N3-C4	-5.35	1.30	1.33
26	LA	1624	U	C3'-O3'	5.35	1.49	1.42
26	LA	2088	A	P-O5'	-5.35	1.54	1.59
26	LA	2510	C	O3'-P	-5.35	1.54	1.61
26	LA	2678	C	O3'-P	-5.35	1.54	1.61
2	SA	22	G	C6-N1	-5.34	1.35	1.39
2	SA	33	A	O3'-P	-5.34	1.54	1.61
2	SA	898	G	C2-N2	-5.34	1.29	1.34
2	SA	1223	C	N1-C6	5.34	1.40	1.37
26	LA	85	G	N9-C8	-5.34	1.34	1.37
26	LA	841	G	C8-N7	5.34	1.34	1.30
26	LA	1610	A	C6-N1	5.34	1.39	1.35
26	LA	1774	C	O4'-C1'	-5.34	1.34	1.41
26	LA	1793	C	C2-O2	-5.34	1.19	1.24
26	LA	2055	C	N1-C2	-5.34	1.34	1.40
26	LA	2082	A	C2'-C1'	-5.34	1.47	1.53
26	LA	2098	U	C5'-C4'	5.34	1.57	1.51
26	LA	2490	G	C2-N3	-5.34	1.28	1.32
26	LA	2504	U	O3'-P	-5.34	1.54	1.61
26	LA	2682	A	P-O5'	-5.34	1.54	1.59
26	LA	2815	C	C4'-C3'	-5.34	1.47	1.52
29	LV	42	GLU	CA-CB	5.34	1.65	1.53
2	SA	195	A	N1-C2	-5.34	1.29	1.34
26	LA	491	G	C2-N3	5.34	1.37	1.32
26	LA	514	A	C2'-C1'	-5.34	1.47	1.53
26	LA	1421	G	N9-C8	5.34	1.41	1.37
26	LA	1687	G	N1-C2	-5.34	1.33	1.37
2	SA	132	C	O3'-P	-5.34	1.54	1.61
2	SA	175	C	C2-N3	5.34	1.40	1.35
2	SA	348	G	P-O5'	5.34	1.65	1.59
2	SA	1312	G	C5-C6	-5.34	1.37	1.42
26	LA	1485	U	C3'-O3'	5.34	1.49	1.42
26	LA	1620	G	N9-C4	-5.34	1.33	1.38
26	LA	1645	G	C3'-C2'	-5.34	1.46	1.52
26	LA	1989	G	N1-C2	5.34	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2782	G	C5'-C4'	5.34	1.57	1.51
2	SA	303	A	C5-C6	-5.34	1.36	1.41
2	SA	698	G	C5'-C4'	5.34	1.57	1.51
2	SA	1305	G	N3-C4	-5.34	1.31	1.35
26	LA	156	A	N9-C4	5.34	1.41	1.37
26	LA	594	U	N1-C6	5.34	1.42	1.38
26	LA	1153	C	N3-C4	-5.34	1.30	1.33
26	LA	1264	A	P-O5'	-5.34	1.54	1.59
26	LA	1530	G	C2'-C1'	-5.34	1.47	1.53
26	LA	1629	U	O3'-P	-5.34	1.54	1.61
26	LA	1684	G	C4'-C3'	-5.34	1.47	1.52
26	LA	1956	U	C5'-C4'	5.34	1.57	1.51
26	LA	2278	A	N7-C5	5.34	1.42	1.39
26	LA	2702	G	C8-N7	-5.34	1.27	1.30
2	SA	282	A	N9-C8	-5.34	1.33	1.37
2	SA	289	G	C2'-C1'	-5.34	1.47	1.53
2	SA	442	G	C5'-C4'	5.34	1.57	1.51
2	SA	861	G	C6-O6	-5.34	1.19	1.24
2	SA	1038	C	C3'-O3'	5.34	1.49	1.42
3	S1	54	U	C3'-C2'	-5.34	1.46	1.52
26	LA	1179	G	O3'-P	5.34	1.67	1.61
26	LA	1395	A	O3'-P	-5.34	1.54	1.61
26	LA	1447	C	N1-C6	-5.34	1.33	1.37
26	LA	2163	A	C4'-C3'	5.34	1.59	1.53
26	LA	2290	G	C2-N3	-5.34	1.28	1.32
26	LA	2844	G	N3-C4	-5.34	1.31	1.35
2	SA	43	C	C4-N4	-5.34	1.29	1.33
2	SA	1461	G	C2-N3	5.34	1.37	1.32
4	S2	43	G	N7-C5	5.34	1.42	1.39
18	SB	225	SER	CA-CB	5.34	1.60	1.52
26	LA	275	C	N1-C6	5.34	1.40	1.37
26	LA	279	A	C6-N6	5.34	1.38	1.33
26	LA	1568	G	C6-N1	-5.34	1.35	1.39
26	LA	1576	U	O3'-P	-5.34	1.54	1.61
26	LA	1584	U	O3'-P	5.34	1.67	1.61
26	LA	1613	G	C2'-C1'	-5.34	1.47	1.53
26	LA	2048	G	C6-N1	-5.34	1.35	1.39
37	LC	64	VAL	CA-CB	-5.34	1.43	1.54
2	SA	161	A	N9-C4	-5.33	1.34	1.37
3	S1	55	A	N7-C5	-5.33	1.36	1.39
26	LA	27	G	N9-C4	-5.33	1.33	1.38
26	LA	469	G	C4'-O4'	-5.33	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	584	C	O3'-P	-5.33	1.54	1.61
26	LA	1684	G	C2'-O2'	-5.33	1.34	1.41
26	LA	2654	A	C6-N6	5.33	1.38	1.33
26	LA	2814	A	O4'-C1'	-5.33	1.34	1.41
2	SA	9	G	C5-C6	-5.33	1.37	1.42
2	SA	33	A	C1'-N9	-5.33	1.39	1.46
2	SA	182	A	C5'-C4'	5.33	1.57	1.51
2	SA	433	G	C6-N1	5.33	1.43	1.39
2	SA	455	G	C8-N7	5.33	1.34	1.30
2	SA	693	G	C1'-N9	5.33	1.56	1.48
2	SA	996	A	C1'-N9	-5.33	1.39	1.46
4	S2	44	A	C5-C4	5.33	1.42	1.38
4	S2	62	C	C4-C5	-5.33	1.38	1.43
26	LA	149	A	O3'-P	-5.33	1.54	1.61
26	LA	728	G	N9-C8	-5.33	1.34	1.37
26	LA	1194	A	C3'-C2'	-5.33	1.46	1.52
26	LA	1444	G	C8-N7	5.33	1.34	1.30
26	LA	1544	A	C2'-C1'	-5.33	1.47	1.53
26	LA	1726	C	C2-O2	-5.33	1.19	1.24
26	LA	2821	A	C1'-N9	-5.33	1.39	1.46
2	SA	116	A	C2'-C1'	-5.33	1.47	1.53
2	SA	147	G	N1-C2	-5.33	1.33	1.37
2	SA	517	G	C8-N7	5.33	1.34	1.30
2	SA	700	G	C5'-C4'	5.33	1.57	1.51
2	SA	883	C	C4-C5	-5.33	1.38	1.43
2	SA	994	A	O3'-P	-5.33	1.54	1.61
2	SA	1278	G	C5-C6	5.33	1.47	1.42
23	SR	10	CYS	CB-SG	5.33	1.91	1.82
26	LA	743	A	C8-N7	-5.33	1.27	1.31
26	LA	1377	G	N9-C8	-5.33	1.34	1.37
26	LA	1449	G	P-O5'	-5.33	1.54	1.59
26	LA	1575	C	C4-N4	5.33	1.38	1.33
26	LA	1969	A	N9-C4	-5.33	1.34	1.37
26	LA	2184	A	N9-C8	-5.33	1.33	1.37
26	LA	2702	G	C6-N1	-5.33	1.35	1.39
26	LA	2840	C	C2-N3	-5.33	1.31	1.35
2	SA	1453	G	C1'-N9	5.33	1.56	1.48
4	S2	25	U	C4'-O4'	5.33	1.52	1.45
26	LA	232	G	C3'-O3'	5.33	1.49	1.42
26	LA	250	G	C5'-C4'	5.33	1.57	1.51
26	LA	1455	G	C5'-C4'	5.33	1.57	1.51
26	LA	1833	C	N1-C6	5.33	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	LH	2	ARG	CD-NE	5.33	1.55	1.46
2	SA	91	U	C4'-C3'	5.33	1.59	1.53
2	SA	719	C	C3'-C2'	5.33	1.58	1.52
2	SA	728	A	C5-C4	-5.33	1.35	1.38
2	SA	747	A	C2-N3	5.33	1.38	1.33
2	SA	922	G	C2-N2	-5.33	1.29	1.34
2	SA	1325	C	C4'-C3'	-5.33	1.47	1.52
2	SA	1396	A	C4'-C3'	-5.33	1.47	1.52
2	SA	1402	C	C3'-O3'	5.33	1.49	1.42
26	LA	483	A	C1'-N9	-5.33	1.39	1.46
26	LA	723	C	C4-C5	-5.33	1.38	1.43
26	LA	781	A	C5-C4	-5.33	1.35	1.38
26	LA	959	A	C1'-N9	-5.33	1.39	1.46
26	LA	1067	A	C4'-O4'	5.33	1.52	1.45
26	LA	1113	U	C4-C5	-5.33	1.38	1.43
26	LA	1759	A	O4'-C1'	5.33	1.48	1.41
26	LA	2186	G	C8-N7	5.33	1.34	1.30
26	LA	2381	A	C2'-C1'	5.33	1.59	1.53
2	SA	149	A	C6-N1	5.33	1.39	1.35
2	SA	547	A	C6-N1	5.33	1.39	1.35
2	SA	1035	A	P-O5'	5.33	1.65	1.59
2	SA	1064	G	C2-N2	-5.33	1.29	1.34
26	LA	442	G	C4'-C3'	5.33	1.59	1.53
26	LA	1268	A	C5-C6	-5.33	1.36	1.41
26	LA	2265	U	C4'-C3'	5.33	1.59	1.53
26	LA	2803	G	N9-C4	5.33	1.42	1.38
2	SA	7	A	N1-C2	-5.33	1.29	1.34
2	SA	153	C	P-O5'	-5.33	1.54	1.59
2	SA	410	G	O3'-P	-5.33	1.54	1.61
2	SA	699	C	C5-C6	5.33	1.38	1.34
4	S2	15	G	C2'-C1'	-5.33	1.47	1.53
26	LA	75	G	O4'-C1'	-5.33	1.34	1.41
26	LA	504	A	C2'-C1'	-5.33	1.47	1.53
26	LA	916	G	C4'-O4'	5.33	1.52	1.45
26	LA	1336	A	C1'-N9	-5.33	1.39	1.46
26	LA	1338	G	C2-N3	-5.33	1.28	1.32
26	LA	1484	U	C2'-O2'	-5.33	1.34	1.41
26	LA	1548	A	C8-N7	-5.33	1.27	1.31
26	LA	2090	A	C4'-O4'	5.33	1.52	1.45
26	LA	2312	U	C2-N3	5.33	1.41	1.37
26	LA	2775	G	N7-C5	-5.33	1.36	1.39
26	LA	2844	G	C2-N3	-5.33	1.28	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	688	G	P-O5'	-5.32	1.54	1.59
2	SA	1062	U	C5'-C4'	5.32	1.57	1.51
2	SA	1285	A	N3-C4	-5.32	1.31	1.34
2	SA	1295	U	N1-C6	-5.32	1.33	1.38
14	SN	100	TRP	CD2-CE3	-5.32	1.32	1.40
19	SC	216	PRO	N-CD	-5.32	1.40	1.47
26	LA	315	G	N1-C2	-5.32	1.33	1.37
26	LA	554	U	C4-C5	5.32	1.48	1.43
26	LA	849	A	C2'-O2'	-5.32	1.34	1.41
26	LA	855	G	C2'-C1'	-5.32	1.47	1.53
26	LA	1254	A	C6-N6	5.32	1.38	1.33
26	LA	2540	C	O4'-C1'	-5.32	1.34	1.41
26	LA	2630	G	N3-C4	-5.32	1.31	1.35
26	LA	2644	G	C5'-C4'	5.32	1.57	1.51
2	SA	294	U	C3'-C2'	5.32	1.58	1.52
2	SA	1246	A	N7-C5	-5.32	1.36	1.39
26	LA	1321	A	C4'-C3'	5.32	1.59	1.53
26	LA	1832	C	C4-C5	5.32	1.47	1.43
26	LA	1860	G	N7-C5	-5.32	1.36	1.39
2	SA	161	A	C6-N6	-5.32	1.29	1.33
2	SA	286	C	C2'-C1'	-5.32	1.47	1.53
2	SA	638	U	C5-C6	-5.32	1.29	1.34
2	SA	1106	G	O3'-P	-5.32	1.54	1.61
2	SA	1175	G	N9-C8	-5.32	1.34	1.37
19	SC	199	VAL	CA-CB	-5.32	1.43	1.54
26	LA	24	G	C5'-C4'	5.32	1.57	1.51
26	LA	244	A	O3'-P	5.32	1.67	1.61
26	LA	968	C	N1-C2	-5.32	1.34	1.40
26	LA	1029	A	N1-C2	-5.32	1.29	1.34
26	LA	1226	A	N3-C4	-5.32	1.31	1.34
26	LA	1734	G	C1'-N9	-5.32	1.39	1.46
26	LA	2310	C	O4'-C1'	5.32	1.48	1.41
26	LA	2476	A	C2'-C1'	-5.32	1.47	1.53
2	SA	29	U	O3'-P	-5.32	1.54	1.61
2	SA	189	A	C5-C4	-5.32	1.35	1.38
2	SA	324	G	C2-N2	-5.32	1.29	1.34
3	S1	21	U	C1'-N1	5.32	1.56	1.48
25	LB	34	A	C5-C6	5.32	1.45	1.41
26	LA	2054	A	O3'-P	-5.32	1.54	1.61
26	LA	2343	U	N1-C2	-5.32	1.33	1.38
26	LA	2577	A	N9-C8	5.32	1.42	1.37
26	LA	2857	G	N7-C5	5.32	1.42	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	662	U	C4-C5	-5.32	1.38	1.43
2	SA	676	A	N1-C2	5.32	1.39	1.34
2	SA	1021	A	C5-C6	5.32	1.45	1.41
2	SA	1229	A	C3'-C2'	5.32	1.58	1.52
26	LA	34	U	C3'-C2'	5.32	1.58	1.52
26	LA	344	A	C3'-O3'	5.32	1.49	1.42
26	LA	625	G	N3-C4	-5.32	1.31	1.35
26	LA	950	G	C2'-C1'	-5.32	1.47	1.53
26	LA	1087	G	P-O5'	-5.32	1.54	1.59
26	LA	1572	A	C3'-C2'	-5.32	1.47	1.52
26	LA	1604	C	C4'-C3'	-5.32	1.47	1.52
26	LA	1928	A	C6-N1	-5.32	1.31	1.35
26	LA	1991	U	C3'-O3'	5.32	1.49	1.42
26	LA	2311	A	N1-C2	-5.32	1.29	1.34
2	SA	434	U	C3'-C2'	-5.32	1.47	1.52
2	SA	655	A	C6-N6	-5.32	1.29	1.33
2	SA	1100	C	C2'-C1'	-5.32	1.47	1.53
2	SA	1491	G	C4'-C3'	-5.32	1.47	1.52
26	LA	280	U	C2'-O2'	5.32	1.48	1.41
26	LA	459	U	O4'-C1'	5.32	1.48	1.41
26	LA	527	C	P-O5'	5.32	1.65	1.59
26	LA	1478	G	C1'-N9	-5.32	1.39	1.46
26	LA	1563	U	O4'-C1'	-5.32	1.34	1.41
26	LA	1575	C	C2'-C1'	-5.32	1.47	1.53
26	LA	1625	C	N1-C6	-5.32	1.33	1.37
26	LA	1869	G	C8-N7	-5.32	1.27	1.30
26	LA	1890	A	C6-N6	-5.32	1.29	1.33
26	LA	2873	A	C2'-C1'	5.32	1.59	1.53
2	SA	131	A	N9-C8	5.31	1.42	1.37
2	SA	557	G	C8-N7	-5.31	1.27	1.30
2	SA	1166	G	C4'-C3'	-5.31	1.47	1.52
21	SE	44	ARG	CD-NE	5.31	1.55	1.46
26	LA	93	G	N9-C4	5.31	1.42	1.38
26	LA	2783	U	C4-O4	5.31	1.27	1.23
2	SA	288	A	C5-C6	-5.31	1.36	1.41
2	SA	1359	C	O3'-P	5.31	1.67	1.61
26	LA	357	C	O3'-P	5.31	1.67	1.61
26	LA	616	A	N9-C4	5.31	1.41	1.37
26	LA	807	U	C3'-C2'	-5.31	1.47	1.52
26	LA	1749	A	C5-C6	5.31	1.45	1.41
26	LA	2885	G	C2'-C1'	-5.31	1.47	1.53
2	SA	102	G	C6-N1	5.31	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	303	A	C2-N3	-5.31	1.28	1.33
2	SA	821	G	C3'-O3'	5.31	1.49	1.42
2	SA	900	A	O4'-C1'	5.31	1.48	1.41
2	SA	1342	C	N1-C6	5.31	1.40	1.37
2	SA	1370	G	O5'-C5'	5.31	1.52	1.44
2	SA	1379	G	N7-C5	-5.31	1.36	1.39
4	S2	44	A	N1-C2	5.31	1.39	1.34
26	LA	592	A	N9-C8	5.31	1.42	1.37
26	LA	904	G	N9-C4	-5.31	1.33	1.38
26	LA	1051	G	C5-C6	-5.31	1.37	1.42
26	LA	1412	U	O3'-P	-5.31	1.54	1.61
26	LA	1606	C	C2-N3	-5.31	1.31	1.35
26	LA	1660	G	C2'-C1'	-5.31	1.47	1.53
2	SA	112	G	C5-C6	-5.31	1.37	1.42
2	SA	562	U	C4-C5	-5.31	1.38	1.43
2	SA	563	A	O3'-P	-5.31	1.54	1.61
2	SA	947	G	O4'-C1'	5.31	1.48	1.41
2	SA	1360	A	C5-C6	-5.31	1.36	1.41
4	S2	12	G	N3-C4	-5.31	1.31	1.35
26	LA	160	A	C2-N3	5.31	1.38	1.33
26	LA	179	C	C2-O2	-5.31	1.19	1.24
26	LA	307	G	N3-C4	-5.31	1.31	1.35
26	LA	1014	A	C4'-O4'	-5.31	1.38	1.45
26	LA	1049	C	O4'-C1'	-5.31	1.34	1.41
26	LA	1178	C	C2'-C1'	-5.31	1.47	1.53
26	LA	1396	U	P-O5'	5.31	1.65	1.59
26	LA	1688	U	P-O5'	-5.31	1.54	1.59
26	LA	1856	U	C4'-C3'	5.31	1.58	1.53
26	LA	1910	G	O3'-P	-5.31	1.54	1.61
26	LA	2648	G	C5-C6	-5.31	1.37	1.42
26	LA	2853	C	C4-C5	-5.31	1.38	1.43
2	SA	132	C	C3'-C2'	-5.31	1.47	1.52
2	SA	294	U	C2'-C1'	-5.31	1.47	1.53
2	SA	302	G	C6-N1	5.31	1.43	1.39
2	SA	325	A	C6-N1	5.31	1.39	1.35
2	SA	848	C	C4'-O4'	5.31	1.52	1.45
2	SA	1263	C	O3'-P	-5.31	1.54	1.61
22	SF	43	GLY	N-CA	5.31	1.54	1.46
26	LA	201	C	C2-O2	-5.31	1.19	1.24
26	LA	273	G	O3'-P	-5.31	1.54	1.61
26	LA	812	C	O4'-C1'	-5.31	1.34	1.41
26	LA	1006	C	C5'-C4'	5.31	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1064	C	C4-N4	-5.31	1.29	1.33
26	LA	1461	C	C2'-O2'	5.31	1.48	1.41
26	LA	1665	A	C2'-C1'	5.31	1.59	1.53
26	LA	2594	C	C5'-C4'	5.31	1.57	1.51
26	LA	2703	C	C4'-O4'	-5.31	1.38	1.45
26	LA	2819	G	O4'-C1'	5.31	1.48	1.41
26	LA	27	G	O4'-C1'	5.31	1.48	1.41
26	LA	193	U	O5'-C5'	5.31	1.52	1.44
26	LA	806	C	O3'-P	-5.31	1.54	1.61
26	LA	2258	C	C5'-C4'	5.31	1.57	1.51
26	LA	2742	G	N1-C2	-5.31	1.33	1.37
2	SA	55	A	N7-C5	-5.30	1.36	1.39
2	SA	114	U	O4'-C1'	-5.30	1.34	1.41
2	SA	147	G	C1'-N9	5.30	1.56	1.48
2	SA	985	C	N1-C6	-5.30	1.33	1.37
2	SA	1122	U	C2-N3	-5.30	1.34	1.37
3	S1	27	A	N9-C8	5.30	1.42	1.37
16	SP	45	GLU	CB-CG	5.30	1.62	1.52
26	LA	367	G	N3-C4	-5.30	1.31	1.35
26	LA	521	U	C3'-C2'	-5.30	1.47	1.52
26	LA	570	G	C3'-O3'	5.30	1.49	1.42
26	LA	1085	A	C8-N7	5.30	1.35	1.31
26	LA	1110	G	N7-C5	-5.30	1.36	1.39
26	LA	1443	U	C4'-O4'	-5.30	1.38	1.45
26	LA	1622	G	C4'-C3'	-5.30	1.47	1.52
26	LA	2515	C	P-O5'	5.30	1.65	1.59
26	LA	2616	C	C4-N4	-5.30	1.29	1.33
2	SA	758	C	P-O5'	-5.30	1.54	1.59
3	S1	13	A	N7-C5	5.30	1.42	1.39
26	LA	1252	G	C2'-O2'	-5.30	1.34	1.41
26	LA	2434	A	C2'-C1'	-5.30	1.47	1.53
2	SA	9	G	N1-C2	-5.30	1.33	1.37
2	SA	104	G	P-O5'	-5.30	1.54	1.59
2	SA	122	G	C5'-C4'	5.30	1.57	1.51
2	SA	629	A	C6-N6	-5.30	1.29	1.33
2	SA	1281	C	O3'-P	-5.30	1.54	1.61
2	SA	1316	G	N9-C4	-5.30	1.33	1.38
2	SA	1356	G	C2-N2	-5.30	1.29	1.34
25	LB	105	G	N7-C5	-5.30	1.36	1.39
26	LA	2	G	C5-C4	-5.30	1.34	1.38
26	LA	144	A	C5'-C4'	5.30	1.57	1.51
26	LA	179	C	P-O5'	-5.30	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1040	A	C2'-C1'	-5.30	1.47	1.53
26	LA	1259	G	O3'-P	-5.30	1.54	1.61
26	LA	1361	G	C3'-O3'	5.30	1.49	1.42
26	LA	1510	G	C5-C6	5.30	1.47	1.42
26	LA	1579	A	C5-C6	5.30	1.45	1.41
26	LA	1984	G	C5-C4	-5.30	1.34	1.38
26	LA	2020	A	C4'-C3'	-5.30	1.47	1.52
26	LA	2223	G	N9-C4	-5.30	1.33	1.38
26	LA	2361	G	N9-C8	-5.30	1.34	1.37
26	LA	2687	U	C5'-C4'	-5.30	1.45	1.51
2	SA	316	C	N1-C2	-5.30	1.34	1.40
2	SA	321	A	O4'-C1'	-5.30	1.34	1.41
2	SA	490	C	C4-N4	-5.30	1.29	1.33
2	SA	1143	G	C2'-C1'	-5.30	1.47	1.53
4	S2	36	A	C4'-C3'	-5.30	1.47	1.52
26	LA	340	A	O3'-P	-5.30	1.54	1.61
26	LA	979	A	N9-C4	-5.30	1.34	1.37
26	LA	1224	U	N1-C2	-5.30	1.33	1.38
26	LA	1403	A	C8-N7	-5.30	1.27	1.31
26	LA	1634	A	C8-N7	-5.30	1.27	1.31
26	LA	2636	C	C4'-C3'	5.30	1.58	1.53
2	SA	1134	G	C2'-O2'	5.30	1.48	1.41
2	SA	1299	A	C5-C4	5.30	1.42	1.38
2	SA	1386	G	C2'-C1'	-5.30	1.47	1.53
3	S1	20	G	N9-C8	5.30	1.41	1.37
3	S1	23	C	N3-C4	5.30	1.37	1.33
26	LA	749	A	N9-C8	-5.30	1.33	1.37
26	LA	1083	U	C2-N3	-5.30	1.34	1.37
26	LA	1649	G	N3-C4	-5.30	1.31	1.35
26	LA	2540	C	C3'-C2'	-5.30	1.47	1.52
2	SA	715	A	O3'-P	-5.30	1.54	1.61
2	SA	772	U	C4-C5	-5.30	1.38	1.43
2	SA	1027	C	N3-C4	5.30	1.37	1.33
2	SA	1226	C	C5-C6	-5.30	1.30	1.34
2	SA	1238	A	N1-C2	5.30	1.39	1.34
24	S3	408	MET	CA-CB	5.30	1.65	1.53
26	LA	254	G	N1-C2	-5.30	1.33	1.37
26	LA	931	U	N1-C6	5.30	1.42	1.38
26	LA	958	U	P-O5'	-5.30	1.54	1.59
26	LA	1262	A	C5-C4	-5.30	1.35	1.38
26	LA	1613	G	C2-N3	5.30	1.36	1.32
26	LA	1721	G	N3-C4	-5.30	1.31	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1803	A	C6-N6	-5.30	1.29	1.33
26	LA	1857	G	C2-N2	-5.30	1.29	1.34
26	LA	1871	A	N9-C4	-5.30	1.34	1.37
26	LA	1875	G	N3-C4	5.30	1.39	1.35
26	LA	2478	A	C3'-O3'	5.30	1.49	1.42
26	LA	2847	U	O4'-C1'	-5.30	1.34	1.41
57	LS	75	TYR	CG-CD1	-5.30	1.32	1.39
2	SA	38	G	C6-N1	-5.29	1.35	1.39
26	LA	491	G	P-O5'	5.29	1.65	1.59
26	LA	1892	C	C4-N4	-5.29	1.29	1.33
26	LA	2061	G	C8-N7	5.29	1.34	1.30
26	LA	2236	U	N1-C2	-5.29	1.33	1.38
26	LA	2309	A	C2-N3	5.29	1.38	1.33
2	SA	258	G	C5-C6	-5.29	1.37	1.42
2	SA	615	G	P-O5'	-5.29	1.54	1.59
2	SA	718	A	O3'-P	5.29	1.67	1.61
2	SA	719	C	C2'-C1'	-5.29	1.47	1.53
2	SA	1206	G	C8-N7	-5.29	1.27	1.30
2	SA	1261	A	C6-N6	-5.29	1.29	1.33
4	S2	10	G	C2-N2	-5.29	1.29	1.34
26	LA	60	G	C8-N7	5.29	1.34	1.30
26	LA	555	G	N1-C2	-5.29	1.33	1.37
26	LA	1076	C	N3-C4	-5.29	1.30	1.33
26	LA	1168	G	N9-C8	-5.29	1.34	1.37
26	LA	1904	G	C4'-O4'	-5.29	1.38	1.45
26	LA	2491	U	C2-N3	5.29	1.41	1.37
37	LC	20	GLN	CG-CD	5.29	1.63	1.51
2	SA	353	A	C1'-N9	-5.29	1.39	1.46
2	SA	406	G	N9-C8	5.29	1.41	1.37
4	S2	1	C	N3-C4	5.29	1.37	1.33
4	S2	7	G	C5'-C4'	5.29	1.57	1.51
4	S2	74	A	C5'-C4'	5.29	1.57	1.51
26	LA	428	A	C5-C6	5.29	1.45	1.41
26	LA	470	A	N9-C4	-5.29	1.34	1.37
26	LA	1058	U	C3'-O3'	5.29	1.49	1.42
26	LA	1175	A	N7-C5	-5.29	1.36	1.39
26	LA	1484	U	C2-N3	5.29	1.41	1.37
26	LA	1586	A	C8-N7	-5.29	1.27	1.31
26	LA	2111	U	C4'-O4'	5.29	1.52	1.45
26	LA	2197	U	C2'-C1'	-5.29	1.47	1.53
26	LA	2759	G	O3'-P	-5.29	1.54	1.61
26	LA	2853	C	P-O5'	-5.29	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2866	U	C5-C6	5.29	1.39	1.34
2	SA	246	A	N9-C4	-5.29	1.34	1.37
2	SA	1160	G	C2'-C1'	-5.29	1.47	1.53
26	LA	87	U	C5'-C4'	5.29	1.57	1.51
26	LA	442	G	P-O5'	-5.29	1.54	1.59
26	LA	1195	G	C8-N7	-5.29	1.27	1.30
26	LA	2260	C	C3'-C2'	-5.29	1.47	1.52
26	LA	2445	G	C5-C6	-5.29	1.37	1.42
38	LE	152	PRO	N-CA	-5.29	1.38	1.47
2	SA	65	A	C6-N1	5.29	1.39	1.35
2	SA	570	G	C5'-C4'	5.29	1.57	1.51
2	SA	671	G	C5'-C4'	-5.29	1.45	1.51
2	SA	709	U	C4-O4	-5.29	1.19	1.23
4	S2	69	C	C3'-C2'	-5.29	1.47	1.52
26	LA	5	A	N9-C8	-5.29	1.33	1.37
26	LA	774	G	N3-C4	-5.29	1.31	1.35
26	LA	869	G	C8-N7	-5.29	1.27	1.30
26	LA	957	C	N1-C6	-5.29	1.33	1.37
26	LA	1167	C	C1'-N1	-5.29	1.39	1.46
26	LA	1359	A	C3'-O3'	5.29	1.49	1.42
26	LA	1426	G	C2-N3	5.29	1.36	1.32
26	LA	1896	G	C5-C6	-5.29	1.37	1.42
26	LA	1896	G	P-O5'	-5.29	1.54	1.59
26	LA	2223	G	N9-C8	-5.29	1.34	1.37
26	LA	2735	G	C8-N7	5.29	1.34	1.30
26	LA	620	G	C4'-C3'	-5.29	1.47	1.52
26	LA	1471	G	C2'-O2'	-5.29	1.34	1.41
26	LA	2316	G	O4'-C1'	-5.29	1.34	1.41
2	SA	883	C	O3'-P	-5.29	1.54	1.61
2	SA	883	C	N1-C2	-5.29	1.34	1.40
2	SA	1011	C	C2-O2	-5.29	1.19	1.24
2	SA	1483	A	C5'-C4'	5.29	1.57	1.51
25	LB	65	U	P-O5'	-5.29	1.54	1.59
26	LA	142	A	C6-N6	-5.29	1.29	1.33
26	LA	217	A	N3-C4	-5.29	1.31	1.34
26	LA	252	G	O4'-C1'	-5.29	1.34	1.41
26	LA	497	A	P-O5'	-5.29	1.54	1.59
26	LA	1306	C	N1-C2	-5.29	1.34	1.40
26	LA	1331	G	C1'-N9	-5.29	1.39	1.46
26	LA	1928	A	C5-C4	-5.29	1.35	1.38
26	LA	1999	C	C4'-C3'	-5.29	1.47	1.52
26	LA	2268	A	C8-N7	-5.29	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2288	A	N9-C8	-5.29	1.33	1.37
26	LA	2553	G	C8-N7	5.29	1.34	1.30
26	LA	2714	G	C2-N2	-5.29	1.29	1.34
26	LA	2844	G	C6-N1	-5.29	1.35	1.39
53	LP	77	ALA	N-CA	-5.29	1.35	1.46
2	SA	579	A	N3-C4	-5.28	1.31	1.34
2	SA	585	G	C4'-C3'	-5.28	1.47	1.52
2	SA	700	G	C1'-N9	-5.28	1.39	1.46
2	SA	1127	G	C2-N2	-5.28	1.29	1.34
2	SA	1323	G	C2-N3	5.28	1.36	1.32
26	LA	571	U	C2'-C1'	-5.28	1.47	1.53
26	LA	706	A	O3'-P	-5.28	1.54	1.61
26	LA	1000	A	C8-N7	5.28	1.35	1.31
26	LA	1427	A	C8-N7	-5.28	1.27	1.31
26	LA	1536	C	C4-C5	-5.28	1.38	1.43
2	SA	227	G	O3'-P	-5.28	1.54	1.61
2	SA	1494	G	C3'-C2'	-5.28	1.47	1.52
26	LA	2217	G	N9-C8	-5.28	1.34	1.37
26	LA	2345	G	N3-C4	-5.28	1.31	1.35
2	SA	655	A	C5-C4	-5.28	1.35	1.38
2	SA	962	C	C4'-O4'	-5.28	1.38	1.45
2	SA	1493	A	C5-C4	5.28	1.42	1.38
4	S2	28	U	O3'-P	-5.28	1.54	1.61
26	LA	250	G	C6-O6	-5.28	1.19	1.24
26	LA	326	G	C5-C4	-5.28	1.34	1.38
26	LA	780	G	C3'-O3'	5.28	1.49	1.42
26	LA	1188	U	N1-C6	-5.28	1.33	1.38
26	LA	1488	C	N3-C4	-5.28	1.30	1.33
26	LA	2031	A	C5-C4	-5.28	1.35	1.38
26	LA	2034	U	C4-C5	-5.28	1.38	1.43
26	LA	2389	G	C5'-C4'	5.28	1.57	1.51
26	LA	2888	C	O3'-P	-5.28	1.54	1.61
44	LF	186	VAL	CA-CB	-5.28	1.43	1.54
2	SA	746	A	C5'-C4'	5.28	1.57	1.51
4	S2	69	C	C2'-C1'	-5.28	1.47	1.53
26	LA	433	C	C5-C6	5.28	1.38	1.34
26	LA	468	G	N9-C4	-5.28	1.33	1.38
26	LA	670	A	C5-C6	-5.28	1.36	1.41
26	LA	1216	G	N9-C4	5.28	1.42	1.38
26	LA	1505	A	C1'-N9	-5.28	1.39	1.46
26	LA	2473	U	C3'-C2'	5.28	1.58	1.52
33	LZ	77	TYR	CD2-CE2	5.28	1.47	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	299	G	C2-N2	-5.28	1.29	1.34
2	SA	1141	C	O4'-C1'	5.28	1.48	1.41
26	LA	1376	C	C3'-C2'	-5.28	1.47	1.52
26	LA	1449	G	C2'-C1'	-5.28	1.47	1.53
26	LA	1755	A	C8-N7	5.28	1.35	1.31
26	LA	1849	G	O3'-P	-5.28	1.54	1.61
26	LA	2121	G	N9-C8	5.28	1.41	1.37
26	LA	2127	G	O3'-P	-5.28	1.54	1.61
56	LR	43	GLU	CG-CD	-5.28	1.44	1.51
2	SA	475	C	P-O5'	-5.28	1.54	1.59
2	SA	624	C	C3'-C2'	-5.28	1.47	1.52
2	SA	1458	G	C1'-N9	-5.28	1.39	1.46
4	S2	60	A	N3-C4	5.28	1.38	1.34
26	LA	21	A	N1-C2	-5.28	1.29	1.34
26	LA	1527	G	C6-N1	-5.28	1.35	1.39
26	LA	1794	A	C6-N1	5.28	1.39	1.35
26	LA	2304	G	C2'-C1'	-5.28	1.47	1.53
26	LA	2706	A	C6-N6	5.28	1.38	1.33
26	LA	2867	G	C5-C4	-5.28	1.34	1.38
26	LA	2868	A	C5-C4	-5.28	1.35	1.38
57	LS	46	TYR	CG-CD2	-5.28	1.32	1.39
2	SA	124	C	C5'-C4'	5.27	1.57	1.51
2	SA	173	U	C5'-C4'	5.27	1.57	1.51
9	SI	127	SER	CA-CB	5.27	1.60	1.52
26	LA	494	G	N7-C5	5.27	1.42	1.39
26	LA	602	A	N9-C4	-5.27	1.34	1.37
26	LA	1155	A	C1'-N9	-5.27	1.39	1.46
26	LA	1740	G	N3-C4	-5.27	1.31	1.35
2	SA	313	A	C8-N7	-5.27	1.27	1.31
2	SA	445	G	C2'-O2'	-5.27	1.34	1.41
2	SA	1282	C	C3'-O3'	5.27	1.49	1.42
4	S2	11	A	N9-C8	-5.27	1.33	1.37
25	LB	4	C	O4'-C1'	-5.27	1.34	1.41
25	LB	25	U	N1-C6	5.27	1.42	1.38
25	LB	72	G	P-O5'	5.27	1.65	1.59
26	LA	353	C	N1-C2	-5.27	1.34	1.40
26	LA	531	C	O3'-P	-5.27	1.54	1.61
26	LA	1041	G	N9-C8	-5.27	1.34	1.37
26	LA	1715	G	C2-N2	-5.27	1.29	1.34
26	LA	2593	U	C4-C5	-5.27	1.38	1.43
26	LA	2714	G	C2'-C1'	-5.27	1.47	1.53
2	SA	98	A	C4'-C3'	-5.27	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1228	C	C3'-O3'	5.27	1.49	1.42
26	LA	26	G	C4'-C3'	5.27	1.58	1.53
26	LA	465	G	N9-C8	-5.27	1.34	1.37
26	LA	1833	C	C4'-O4'	-5.27	1.38	1.45
2	SA	126	G	C2-N2	-5.27	1.29	1.34
2	SA	354	G	C4'-C3'	-5.27	1.47	1.52
2	SA	479	U	N1-C6	-5.27	1.33	1.38
2	SA	488	C	N3-C4	5.27	1.37	1.33
2	SA	639	G	O3'-P	-5.27	1.54	1.61
26	LA	701	G	C8-N7	5.27	1.34	1.30
26	LA	1558	C	N1-C2	-5.27	1.34	1.40
26	LA	1709	U	P-O5'	-5.27	1.54	1.59
26	LA	1925	C	C2'-C1'	-5.27	1.47	1.53
26	LA	2675	A	N9-C8	5.27	1.42	1.37
26	LA	2878	U	N3-C4	-5.27	1.33	1.38
52	LO	8	LYS	N-CA	-5.27	1.35	1.46
2	SA	3	A	C2'-C1'	-5.27	1.47	1.53
2	SA	192	A	N9-C4	-5.27	1.34	1.37
2	SA	282	A	N1-C2	-5.27	1.29	1.34
2	SA	1099	G	O3'-P	-5.27	1.54	1.61
11	SK	126	ARG	CZ-NH1	-5.27	1.26	1.33
26	LA	195	A	N9-C8	5.27	1.42	1.37
26	LA	567	U	C5'-C4'	5.27	1.57	1.51
26	LA	614	A	O4'-C1'	5.27	1.48	1.41
26	LA	687	C	C2'-C1'	-5.27	1.47	1.53
26	LA	1592	C	C4-N4	5.27	1.38	1.33
26	LA	1898	U	C2'-C1'	-5.27	1.47	1.53
26	LA	1930	G	C6-N1	5.27	1.43	1.39
26	LA	1959	G	P-O5'	-5.27	1.54	1.59
26	LA	2505	G	N3-C4	5.27	1.39	1.35
26	LA	2628	C	C3'-C2'	-5.27	1.47	1.52
26	LA	2761	A	C3'-O3'	5.27	1.49	1.42
26	LA	2846	G	C4'-O4'	5.27	1.52	1.45
2	SA	161	A	P-O5'	5.27	1.65	1.59
2	SA	1196	A	C3'-O3'	5.27	1.49	1.42
26	LA	1043	C	C5-C6	-5.27	1.30	1.34
26	LA	1183	U	P-O5'	5.27	1.65	1.59
26	LA	1364	G	N9-C4	-5.27	1.33	1.38
26	LA	2566	A	N9-C8	-5.27	1.33	1.37
26	LA	2659	G	C5-C4	-5.27	1.34	1.38
2	SA	923	A	N3-C4	5.26	1.38	1.34
2	SA	1033	G	C5-C6	-5.26	1.37	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1151	A	C2'-C1'	-5.26	1.47	1.53
2	SA	1260	G	C6-N1	-5.26	1.35	1.39
26	LA	610	C	C4-N4	-5.26	1.29	1.33
26	LA	1399	C	C2'-C1'	-5.26	1.47	1.53
26	LA	1591	A	C5'-C4'	5.26	1.57	1.51
26	LA	1628	G	C5-C4	-5.26	1.34	1.38
26	LA	2082	A	C4'-O4'	5.26	1.52	1.45
26	LA	2688	G	O3'-P	-5.26	1.54	1.61
26	LA	1245	G	O4'-C1'	5.26	1.48	1.41
26	LA	1560	G	N9-C4	5.26	1.42	1.38
26	LA	1645	G	C3'-O3'	5.26	1.49	1.42
2	SA	903	G	C3'-O3'	5.26	1.49	1.42
26	LA	389	G	N9-C4	-5.26	1.33	1.38
26	LA	445	C	O3'-P	-5.26	1.54	1.61
26	LA	896	A	C6-N6	-5.26	1.29	1.33
26	LA	1494	A	N7-C5	5.26	1.42	1.39
26	LA	1919	A	C6-N6	5.26	1.38	1.33
26	LA	2169	A	N7-C5	-5.26	1.36	1.39
26	LA	2742	G	C5-C6	5.26	1.47	1.42
2	SA	1344	C	N1-C6	-5.26	1.33	1.37
2	SA	1385	G	C5-C4	5.26	1.42	1.38
4	S2	32	G	N9-C4	-5.26	1.33	1.38
26	LA	199	A	O3'-P	-5.26	1.54	1.61
26	LA	406	G	P-O5'	-5.26	1.54	1.59
26	LA	1925	C	N1-C6	5.26	1.40	1.37
26	LA	2418	A	N9-C8	-5.26	1.33	1.37
26	LA	2505	G	O4'-C1'	5.26	1.48	1.41
26	LA	2734	A	N9-C8	5.26	1.42	1.37
53	LP	55	ALA	N-CA	-5.26	1.35	1.46
2	SA	186	C	O3'-P	-5.26	1.54	1.61
2	SA	1119	C	C2-N3	5.26	1.40	1.35
25	LB	59	A	C4'-C3'	5.26	1.58	1.53
25	LB	98	G	C4'-O4'	5.26	1.52	1.45
2	SA	281	G	C2-N3	-5.26	1.28	1.32
2	SA	1185	G	C5'-C4'	5.26	1.57	1.51
2	SA	1331	G	O3'-P	-5.26	1.54	1.61
18	SB	77	GLU	CD-OE2	5.26	1.31	1.25
25	LB	64	G	C2'-C1'	-5.26	1.47	1.53
26	LA	87	U	C2'-C1'	-5.26	1.47	1.53
26	LA	257	C	N1-C2	-5.26	1.34	1.40
26	LA	1090	A	C4'-C3'	5.26	1.58	1.53
26	LA	1111	A	C2'-C1'	-5.26	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1202	G	C8-N7	5.26	1.34	1.30
26	LA	1461	C	C4-C5	5.26	1.47	1.43
26	LA	1565	C	C2-N3	-5.26	1.31	1.35
26	LA	2373	G	P-O5'	-5.26	1.54	1.59
2	SA	590	U	P-O5'	-5.25	1.54	1.59
2	SA	674	G	C5-C6	-5.25	1.37	1.42
2	SA	688	G	C2-N2	-5.25	1.29	1.34
2	SA	695	A	N7-C5	-5.25	1.36	1.39
4	S2	77	A	C5'-C4'	5.25	1.57	1.51
26	LA	1672	A	N1-C2	5.25	1.39	1.34
26	LA	2004	G	C2'-C1'	-5.25	1.47	1.53
26	LA	2331	G	C4'-C3'	5.25	1.58	1.53
26	LA	2662	A	N9-C8	5.25	1.42	1.37
26	LA	2775	G	N3-C4	-5.25	1.31	1.35
2	SA	53	A	P-O5'	5.25	1.65	1.59
2	SA	325	A	C5-C4	-5.25	1.35	1.38
2	SA	1051	C	N3-C4	5.25	1.37	1.33
2	SA	1197	A	P-OP1	5.25	1.57	1.49
2	SA	1531	A	C2'-O2'	-5.25	1.34	1.41
26	LA	1073	A	N7-C5	5.25	1.42	1.39
26	LA	1258	U	C4-O4	-5.25	1.19	1.23
26	LA	1315	C	C4'-C3'	-5.25	1.47	1.52
26	LA	1477	A	C2'-O2'	5.25	1.48	1.41
26	LA	1843	C	O4'-C1'	-5.25	1.34	1.41
26	LA	2637	U	N1-C6	-5.25	1.33	1.38
2	SA	457	G	C4'-O4'	5.25	1.52	1.45
2	SA	1368	A	C2'-C1'	-5.25	1.47	1.53
2	SA	1418	A	N3-C4	-5.25	1.31	1.34
26	LA	8	C	P-O5'	-5.25	1.54	1.59
26	LA	350	G	C2'-O2'	5.25	1.48	1.41
26	LA	419	U	P-O5'	-5.25	1.54	1.59
2	SA	457	G	C5-C6	-5.25	1.37	1.42
2	SA	561	U	C3'-C2'	5.25	1.58	1.52
2	SA	847	G	C5-C4	5.25	1.42	1.38
2	SA	1318	A	O4'-C1'	5.25	1.48	1.41
2	SA	1510	C	C2'-O2'	-5.25	1.34	1.41
26	LA	1230	A	C3'-C2'	-5.25	1.47	1.52
26	LA	1546	G	N9-C8	-5.25	1.34	1.37
26	LA	1868	C	P-O5'	-5.25	1.54	1.59
26	LA	2083	G	C3'-C2'	-5.25	1.47	1.52
26	LA	2508	G	C5'-C4'	5.25	1.57	1.51
2	SA	604	G	O4'-C1'	-5.25	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1082	A	N1-C2	-5.25	1.29	1.34
2	SA	1223	C	C2-N3	5.25	1.40	1.35
4	S2	42	C	N1-C6	-5.25	1.34	1.37
24	S3	508	SER	C-N	5.25	1.42	1.33
26	LA	823	C	C4-N4	-5.25	1.29	1.33
26	LA	1219	U	P-O5'	-5.25	1.54	1.59
26	LA	1340	U	C4'-O4'	-5.25	1.38	1.45
26	LA	1843	C	P-O5'	-5.25	1.54	1.59
26	LA	2823	A	P-O5'	-5.25	1.54	1.59
56	LR	26	GLU	CD-OE1	5.25	1.31	1.25
2	SA	982	U	C4-C5	-5.25	1.38	1.43
2	SA	1001	C	C2'-C1'	-5.25	1.47	1.53
2	SA	1266	G	C6-O6	-5.25	1.19	1.24
2	SA	1508	A	N7-C5	-5.25	1.36	1.39
6	SU	30	GLU	CD-OE2	5.25	1.31	1.25
26	LA	179	C	C4'-C3'	-5.25	1.47	1.52
26	LA	529	A	N3-C4	-5.25	1.31	1.34
26	LA	880	G	C2'-C1'	-5.25	1.47	1.53
26	LA	908	C	C4'-C3'	-5.25	1.47	1.52
26	LA	977	G	C8-N7	5.25	1.34	1.30
26	LA	1048	A	N3-C4	-5.25	1.31	1.34
26	LA	1084	A	N9-C8	5.25	1.42	1.37
26	LA	1376	C	O3'-P	-5.25	1.54	1.61
26	LA	1679	A	C5-C6	-5.25	1.36	1.41
26	LA	1823	G	C3'-O3'	5.25	1.49	1.42
26	LA	1988	G	C8-N7	5.25	1.34	1.30
2	SA	309	A	C8-N7	-5.25	1.27	1.31
2	SA	1393	U	O3'-P	-5.25	1.54	1.61
26	LA	451	U	O3'-P	-5.25	1.54	1.61
26	LA	2487	G	C6-N1	5.25	1.43	1.39
26	LA	2639	A	C4'-O4'	-5.25	1.38	1.45
2	SA	120	A	C5'-C4'	5.24	1.57	1.51
2	SA	131	A	N9-C4	-5.24	1.34	1.37
2	SA	260	G	C2-N3	5.24	1.36	1.32
2	SA	404	G	N1-C2	-5.24	1.33	1.37
2	SA	615	G	C8-N7	-5.24	1.27	1.30
2	SA	1002	G	C5-C4	-5.24	1.34	1.38
2	SA	1054	C	C2-O2	-5.24	1.19	1.24
2	SA	1058	G	N9-C8	-5.24	1.34	1.37
2	SA	1222	G	C6-N1	-5.24	1.35	1.39
2	SA	1417	G	C4'-C3'	5.24	1.58	1.53
5	ST	35	TYR	CG-CD2	5.24	1.46	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	55	U	C3'-C2'	-5.24	1.47	1.52
25	LB	95	U	C4-C5	-5.24	1.38	1.43
26	LA	999	U	O3'-P	-5.24	1.54	1.61
26	LA	1550	C	C1'-N1	5.24	1.56	1.48
26	LA	2468	A	C5-C4	-5.24	1.35	1.38
26	LA	2495	G	C6-O6	-5.24	1.19	1.24
2	SA	218	U	P-O5'	-5.24	1.54	1.59
2	SA	324	G	O3'-P	-5.24	1.54	1.61
2	SA	587	G	O4'-C1'	-5.24	1.34	1.41
2	SA	878	A	N1-C2	-5.24	1.29	1.34
2	SA	1030	U	C3'-C2'	5.24	1.58	1.52
2	SA	1058	G	C4'-C3'	-5.24	1.47	1.52
2	SA	1528	U	C2'-C1'	-5.24	1.47	1.53
26	LA	811	U	C2-O2	5.24	1.27	1.22
26	LA	1236	G	C5-C4	5.24	1.42	1.38
26	LA	1430	G	N9-C8	-5.24	1.34	1.37
26	LA	1709	U	C1'-N1	-5.24	1.39	1.46
26	LA	2533	U	C2'-C1'	-5.24	1.47	1.53
26	LA	2751	G	N3-C4	-5.24	1.31	1.35
26	LA	2777	G	C5-C4	-5.24	1.34	1.38
35	L1	10	ARG	CD-NE	5.24	1.55	1.46
2	SA	149	A	C3'-O3'	5.24	1.49	1.42
2	SA	182	A	C8-N7	-5.24	1.27	1.31
2	SA	222	C	C2-N3	5.24	1.40	1.35
2	SA	535	A	C5'-C4'	5.24	1.57	1.51
2	SA	716	A	C5'-C4'	5.24	1.57	1.51
2	SA	1309	G	C8-N7	-5.24	1.27	1.30
2	SA	1476	A	N7-C5	-5.24	1.36	1.39
24	S3	385	ILE	CA-C	-5.24	1.39	1.52
26	LA	239	C	N1-C6	-5.24	1.34	1.37
26	LA	791	C	C5-C6	-5.24	1.30	1.34
26	LA	833	A	C4'-C3'	-5.24	1.47	1.52
26	LA	899	A	C2'-C1'	-5.24	1.47	1.53
26	LA	1626	A	C2'-O2'	-5.24	1.34	1.41
26	LA	1637	A	N7-C5	5.24	1.42	1.39
26	LA	1876	A	O3'-P	-5.24	1.54	1.61
26	LA	2747	G	N7-C5	-5.24	1.36	1.39
2	SA	141	G	C2'-C1'	5.24	1.59	1.53
2	SA	270	A	C3'-C2'	5.24	1.58	1.52
2	SA	773	G	C4'-C3'	5.24	1.58	1.53
2	SA	1348	U	O3'-P	-5.24	1.54	1.61
25	LB	58	A	N9-C4	-5.24	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	100	G	C2'-C1'	-5.24	1.47	1.53
26	LA	482	A	C5'-C4'	5.24	1.57	1.51
26	LA	538	A	N9-C4	-5.24	1.34	1.37
26	LA	2330	G	C2-N2	-5.24	1.29	1.34
26	LA	2472	G	C1'-N9	-5.24	1.39	1.46
2	SA	45	G	C5-C6	-5.24	1.37	1.42
4	S2	28	U	C4'-C3'	-5.24	1.47	1.52
26	LA	189	G	N9-C4	-5.24	1.33	1.38
26	LA	595	C	C5'-C4'	5.24	1.57	1.51
26	LA	878	A	C5-C4	-5.24	1.35	1.38
26	LA	1481	U	O4'-C1'	5.24	1.48	1.41
26	LA	1766	G	C2-N3	5.24	1.36	1.32
26	LA	2227	A	C4'-C3'	5.24	1.58	1.53
2	SA	554	A	P-O5'	-5.24	1.54	1.59
2	SA	844	G	N1-C2	-5.24	1.33	1.37
2	SA	1026	G	N9-C4	5.24	1.42	1.38
2	SA	1289	A	N1-C2	-5.24	1.29	1.34
3	S1	21	U	C4'-O4'	5.24	1.52	1.45
4	S2	20	G	C1'-N9	-5.24	1.39	1.46
19	SC	95	GLY	CA-C	-5.24	1.43	1.51
26	LA	126	A	N9-C8	-5.24	1.33	1.37
26	LA	390	U	C2-N3	5.24	1.41	1.37
26	LA	796	C	C4-C5	5.24	1.47	1.43
26	LA	954	G	N1-C2	-5.24	1.33	1.37
26	LA	1523	U	C4'-C3'	5.24	1.58	1.53
26	LA	1642	G	C1'-N9	-5.24	1.39	1.46
26	LA	1782	U	O3'-P	-5.24	1.54	1.61
26	LA	2362	C	C4'-O4'	-5.24	1.38	1.45
26	LA	2453	A	C5'-C4'	5.24	1.57	1.51
27	LD	216	ARG	C-N	-5.24	1.24	1.34
2	SA	424	G	C2'-C1'	-5.23	1.47	1.53
2	SA	601	G	C4'-O4'	5.23	1.52	1.45
2	SA	1099	G	N9-C4	-5.23	1.33	1.38
26	LA	666	A	C2'-C1'	-5.23	1.47	1.53
26	LA	756	A	C1'-N9	-5.23	1.39	1.46
26	LA	1175	A	C6-N1	5.23	1.39	1.35
26	LA	1617	C	C4-N4	-5.23	1.29	1.33
26	LA	2016	U	C4'-O4'	-5.23	1.38	1.45
26	LA	2040	G	N7-C5	-5.23	1.36	1.39
26	LA	2114	A	C3'-C2'	-5.23	1.47	1.52
26	LA	2236	U	C1'-N1	5.23	1.56	1.48
2	SA	970	C	C4'-C3'	5.23	1.58	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	26	C	C3'-O3'	5.23	1.49	1.42
26	LA	303	G	O4'-C1'	5.23	1.48	1.41
26	LA	1310	G	C2-N2	-5.23	1.29	1.34
26	LA	1408	G	C6-O6	-5.23	1.19	1.24
26	LA	1415	U	N1-C2	-5.23	1.33	1.38
26	LA	2074	U	C2'-C1'	-5.23	1.47	1.53
26	LA	2109	U	C2-O2	5.23	1.27	1.22
26	LA	2237	G	C4'-O4'	-5.23	1.38	1.45
54	LM	70	ARG	CZ-NH1	-5.23	1.26	1.33
2	SA	202	G	C2'-C1'	-5.23	1.47	1.53
2	SA	550	G	N1-C2	5.23	1.42	1.37
2	SA	884	U	N3-C4	-5.23	1.33	1.38
2	SA	1234	C	N1-C6	5.23	1.40	1.37
26	LA	392	U	C4'-O4'	5.23	1.52	1.45
26	LA	429	A	N7-C5	-5.23	1.36	1.39
26	LA	430	A	C2'-C1'	-5.23	1.47	1.53
26	LA	840	C	C5-C6	-5.23	1.30	1.34
26	LA	1254	A	N3-C4	5.23	1.38	1.34
26	LA	1683	U	C4-C5	5.23	1.48	1.43
26	LA	1745	A	N9-C8	5.23	1.42	1.37
26	LA	2069	G	C6-N1	5.23	1.43	1.39
2	SA	131	A	O3'-P	5.23	1.67	1.61
2	SA	862	C	C5'-C4'	5.23	1.57	1.51
2	SA	988	G	C2'-O2'	5.23	1.48	1.41
25	LB	94	A	C3'-C2'	-5.23	1.47	1.52
26	LA	12	U	N1-C2	-5.23	1.33	1.38
26	LA	313	G	C5-C4	-5.23	1.34	1.38
26	LA	997	G	C5-C4	-5.23	1.34	1.38
26	LA	2300	C	C4-N4	-5.23	1.29	1.33
26	LA	2574	G	C4'-O4'	5.23	1.52	1.45
26	LA	2759	G	N9-C8	-5.23	1.34	1.37
2	SA	1016	A	C3'-O3'	5.23	1.49	1.42
26	LA	182	A	N7-C5	5.23	1.42	1.39
26	LA	313	G	P-O5'	-5.23	1.54	1.59
26	LA	344	A	N9-C4	5.23	1.41	1.37
26	LA	865	C	C4-C5	-5.23	1.38	1.43
26	LA	1185	G	C2'-C1'	5.23	1.59	1.53
26	LA	1200	C	N3-C4	-5.23	1.30	1.33
26	LA	1636	U	O3'-P	-5.23	1.54	1.61
26	LA	1770	G	P-O5'	5.23	1.65	1.59
26	LA	1940	U	C2-N3	-5.23	1.34	1.37
26	LA	1989	G	C8-N7	5.23	1.34	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2500	U	O4'-C1'	-5.23	1.34	1.41
26	LA	2754	U	C4-C5	5.23	1.48	1.43
2	SA	798	U	P-O5'	-5.23	1.54	1.59
2	SA	817	C	C3'-O3'	5.23	1.49	1.42
2	SA	851	G	C5-C6	5.23	1.47	1.42
24	S3	431	GLY	N-CA	5.23	1.53	1.46
25	LB	116	G	C3'-C2'	5.23	1.58	1.52
26	LA	40	U	N3-C4	-5.23	1.33	1.38
26	LA	1884	G	C4'-O4'	-5.23	1.38	1.45
2	SA	367	U	N3-C4	-5.22	1.33	1.38
2	SA	437	U	C2-N3	5.22	1.41	1.37
2	SA	578	C	O5'-C5'	5.22	1.52	1.44
2	SA	1072	G	C6-O6	5.22	1.28	1.24
26	LA	184	C	C4-C5	-5.22	1.38	1.43
26	LA	243	U	C5'-C4'	5.22	1.57	1.51
26	LA	737	C	C4-C5	-5.22	1.38	1.43
26	LA	1096	A	N1-C2	5.22	1.39	1.34
26	LA	1370	C	C3'-C2'	-5.22	1.47	1.52
26	LA	2133	G	C3'-C2'	5.22	1.58	1.52
26	LA	2333	A	O4'-C1'	-5.22	1.34	1.41
26	LA	2829	A	C5'-C4'	5.22	1.57	1.51
56	LR	35	SER	CA-CB	5.22	1.60	1.52
2	SA	58	C	C2-N3	-5.22	1.31	1.35
2	SA	137	U	C3'-O3'	5.22	1.49	1.42
2	SA	549	C	P-O5'	-5.22	1.54	1.59
2	SA	573	A	C3'-C2'	5.22	1.58	1.52
2	SA	1256	A	C6-N1	5.22	1.39	1.35
2	SA	1416	G	C2-N3	-5.22	1.28	1.32
26	LA	160	A	O3'-P	-5.22	1.54	1.61
26	LA	759	G	C2-N3	-5.22	1.28	1.32
26	LA	805	G	O3'-P	-5.22	1.54	1.61
26	LA	877	A	N9-C4	5.22	1.41	1.37
26	LA	1187	G	N7-C5	-5.22	1.36	1.39
26	LA	1345	C	C3'-C2'	-5.22	1.47	1.52
26	LA	2335	A	C6-N6	5.22	1.38	1.33
26	LA	2811	G	C2-N2	-5.22	1.29	1.34
26	LA	2854	G	N9-C8	5.22	1.41	1.37
27	LD	117	SER	CA-CB	5.22	1.60	1.52
2	SA	673	A	N9-C4	-5.22	1.34	1.37
2	SA	743	A	C3'-C2'	-5.22	1.47	1.52
26	LA	1096	A	N9-C4	-5.22	1.34	1.37
2	SA	237	G	C2-N2	-5.22	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	1270	G	C2'-C1'	-5.22	1.47	1.53
2	SA	1307	U	N1-C6	5.22	1.42	1.38
3	S1	59	A	C4'-C3'	-5.22	1.47	1.52
26	LA	306	U	C2-O2	5.22	1.27	1.22
26	LA	558	U	N1-C2	-5.22	1.33	1.38
26	LA	930	G	C2-N3	5.22	1.36	1.32
26	LA	979	A	C5'-C4'	-5.22	1.45	1.51
26	LA	2024	G	C2-N2	-5.22	1.29	1.34
26	LA	2444	G	C2-N3	5.22	1.36	1.32
2	SA	651	C	C5-C6	5.22	1.38	1.34
2	SA	690	G	N3-C4	-5.22	1.31	1.35
2	SA	1220	G	C2'-C1'	-5.22	1.47	1.53
2	SA	1499	A	C6-N6	-5.22	1.29	1.33
26	LA	55	G	C5-C4	-5.22	1.34	1.38
26	LA	185	G	C5-C6	-5.22	1.37	1.42
26	LA	1656	C	C3'-O3'	5.22	1.49	1.42
26	LA	1658	C	N1-C6	-5.22	1.34	1.37
26	LA	1941	C	O3'-P	-5.22	1.54	1.61
2	SA	424	G	N3-C4	-5.22	1.31	1.35
3	S1	47	C	C4-C5	-5.22	1.38	1.43
25	LB	38	C	P-O5'	-5.22	1.54	1.59
26	LA	73	A	C5-C4	5.22	1.42	1.38
26	LA	551	G	N7-C5	-5.22	1.36	1.39
26	LA	979	A	N3-C4	-5.22	1.31	1.34
26	LA	1460	U	C5-C6	-5.22	1.29	1.34
26	LA	1806	C	C4'-C3'	5.22	1.58	1.53
26	LA	2440	C	C4'-C3'	5.22	1.58	1.53
2	SA	915	A	N9-C8	5.21	1.42	1.37
2	SA	1151	A	C6-N6	5.21	1.38	1.33
20	SD	19	PHE	CE1-CZ	5.21	1.47	1.37
26	LA	435	C	N1-C6	5.21	1.40	1.37
26	LA	514	A	N1-C2	-5.21	1.29	1.34
26	LA	519	U	C4-C5	5.21	1.48	1.43
26	LA	592	A	C3'-C2'	-5.21	1.47	1.52
26	LA	619	G	C8-N7	-5.21	1.27	1.30
26	LA	673	C	C2-N3	-5.21	1.31	1.35
26	LA	734	A	C8-N7	-5.21	1.27	1.31
26	LA	1270	C	C2'-C1'	-5.21	1.47	1.53
26	LA	1410	G	N7-C5	-5.21	1.36	1.39
26	LA	1508	A	C8-N7	5.21	1.35	1.31
26	LA	1589	U	P-O5'	-5.21	1.54	1.59
26	LA	2285	C	C2'-C1'	-5.21	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2593	U	C2-N3	-5.21	1.34	1.37
2	SA	621	A	C3'-O3'	5.21	1.49	1.42
2	SA	1505	G	C1'-N9	-5.21	1.39	1.46
26	LA	42	A	P-O5'	-5.21	1.54	1.59
26	LA	577	G	C3'-C2'	-5.21	1.47	1.52
26	LA	770	G	C5'-C4'	5.21	1.57	1.51
26	LA	1097	U	C4'-C3'	5.21	1.58	1.53
26	LA	1145	C	C2-N3	-5.21	1.31	1.35
26	LA	1212	G	N7-C5	5.21	1.42	1.39
26	LA	2679	A	N1-C2	5.21	1.39	1.34
45	LG	133	GLU	CD-OE2	5.21	1.31	1.25
2	SA	325	A	C5-C6	-5.21	1.36	1.41
2	SA	508	U	C2'-O2'	-5.21	1.34	1.41
2	SA	722	G	C2-N3	-5.21	1.28	1.32
2	SA	1357	A	C6-N6	-5.21	1.29	1.33
2	SA	1442	G	O3'-P	-5.21	1.54	1.61
4	S2	72	C	N1-C6	5.21	1.40	1.37
26	LA	202	U	C4-O4	5.21	1.27	1.23
26	LA	266	G	N1-C2	5.21	1.42	1.37
26	LA	426	C	C2'-O2'	5.21	1.48	1.41
26	LA	651	G	C5-C4	-5.21	1.34	1.38
26	LA	716	A	C6-N6	5.21	1.38	1.33
26	LA	889	C	C2-O2	5.21	1.29	1.24
26	LA	1569	A	C5-C4	-5.21	1.35	1.38
26	LA	2435	A	C4'-O4'	5.21	1.52	1.45
26	LA	2487	G	C4'-C3'	-5.21	1.47	1.52
7	SG	87	PRO	N-CD	-5.21	1.40	1.47
26	LA	1020	A	C8-N7	-5.21	1.27	1.31
26	LA	1511	G	N9-C8	-5.21	1.34	1.37
26	LA	2692	G	C5-C6	-5.21	1.37	1.42
26	LA	2791	G	C2-N2	-5.21	1.29	1.34
2	SA	29	U	N1-C2	-5.21	1.33	1.38
2	SA	457	G	N9-C8	-5.21	1.34	1.37
2	SA	471	U	C2'-C1'	-5.21	1.47	1.53
2	SA	1139	G	C4'-O4'	5.21	1.52	1.45
2	SA	1228	C	N1-C6	-5.21	1.34	1.37
2	SA	1377	A	N7-C5	-5.21	1.36	1.39
2	SA	1454	G	C5-C4	-5.21	1.34	1.38
26	LA	685	A	C1'-N9	-5.21	1.39	1.46
26	LA	995	C	C5'-C4'	5.21	1.57	1.51
26	LA	1054	A	N3-C4	5.21	1.38	1.34
26	LA	1163	G	C2'-O2'	-5.21	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1951	U	O3'-P	-5.21	1.54	1.61
26	LA	2252	G	C5'-C4'	5.21	1.57	1.51
2	SA	130	A	C8-N7	-5.21	1.27	1.31
2	SA	293	G	C8-N7	5.21	1.34	1.30
2	SA	702	A	C1'-N9	-5.21	1.39	1.46
2	SA	703	G	C2'-C1'	-5.21	1.47	1.53
2	SA	1053	G	C3'-C2'	-5.21	1.47	1.52
2	SA	1101	A	O4'-C1'	-5.21	1.34	1.41
2	SA	1391	U	N1-C6	5.21	1.42	1.38
26	LA	491	G	N9-C8	-5.21	1.34	1.37
26	LA	750	A	N9-C4	-5.21	1.34	1.37
26	LA	955	U	C1'-N1	5.21	1.56	1.48
26	LA	1525	A	N9-C4	-5.21	1.34	1.37
26	LA	1712	U	C4-C5	-5.21	1.38	1.43
26	LA	2069	G	N3-C4	-5.21	1.31	1.35
26	LA	2895	G	C3'-O3'	5.21	1.49	1.42
2	SA	1028	C	C5'-C4'	5.21	1.57	1.51
2	SA	2	A	N9-C8	5.20	1.42	1.37
2	SA	3	A	C6-N1	-5.20	1.31	1.35
2	SA	89	U	N1-C6	5.20	1.42	1.38
2	SA	407	U	C4-C5	-5.20	1.38	1.43
2	SA	519	C	C4'-O4'	-5.20	1.38	1.45
2	SA	763	G	N9-C8	-5.20	1.34	1.37
2	SA	1002	G	N7-C5	-5.20	1.36	1.39
2	SA	1104	G	C8-N7	5.20	1.34	1.30
2	SA	1340	A	C5-C4	-5.20	1.35	1.38
2	SA	1374	A	O3'-P	-5.20	1.54	1.61
2	SA	1383	C	C4-N4	-5.20	1.29	1.33
2	SA	1413	A	C2'-C1'	-5.20	1.47	1.53
2	SA	1428	A	C6-N1	-5.20	1.31	1.35
26	LA	282	A	N9-C8	-5.20	1.33	1.37
26	LA	372	G	C6-N1	-5.20	1.35	1.39
26	LA	562	U	C4'-C3'	5.20	1.58	1.53
26	LA	2637	U	C4-O4	-5.20	1.19	1.23
26	LA	2718	G	C4'-C3'	-5.20	1.47	1.52
2	SA	83	C	C2-O2	5.20	1.29	1.24
2	SA	482	A	C8-N7	-5.20	1.27	1.31
2	SA	1332	A	C6-N1	-5.20	1.31	1.35
2	SA	1398	A	C5-C4	-5.20	1.35	1.38
26	LA	749	A	N1-C2	-5.20	1.29	1.34
26	LA	983	A	C5-C4	-5.20	1.35	1.38
26	LA	1296	G	C4'-C3'	-5.20	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2041	U	P-O5'	-5.20	1.54	1.59
40	L4	50	GLU	N-CA	5.20	1.56	1.46
2	SA	1263	C	P-O5'	5.20	1.65	1.59
2	SA	1321	U	C2'-C1'	-5.20	1.47	1.53
2	SA	1492	A	O5'-C5'	5.20	1.52	1.44
26	LA	168	G	N1-C2	-5.20	1.33	1.37
26	LA	1163	G	C5'-C4'	5.20	1.57	1.51
26	LA	1264	A	N9-C8	-5.20	1.33	1.37
26	LA	1403	A	O3'-P	-5.20	1.54	1.61
26	LA	1609	A	C6-N1	5.20	1.39	1.35
26	LA	1661	G	C5-C6	-5.20	1.37	1.42
26	LA	1909	C	C5-C6	5.20	1.38	1.34
26	LA	2076	U	N1-C2	-5.20	1.33	1.38
26	LA	2240	U	O3'-P	-5.20	1.54	1.61
26	LA	2749	A	C5'-C4'	5.20	1.57	1.51
2	SA	179	A	N3-C4	5.20	1.38	1.34
2	SA	791	G	N3-C4	-5.20	1.31	1.35
2	SA	937	A	C5'-C4'	5.20	1.57	1.51
2	SA	1148	U	P-O5'	-5.20	1.54	1.59
2	SA	1484	C	N1-C6	-5.20	1.34	1.37
6	SU	32	ARG	CD-NE	5.20	1.55	1.46
21	SE	150	GLU	CD-OE1	5.20	1.31	1.25
25	LB	67	G	N9-C4	-5.20	1.33	1.38
25	LB	88	C	O3'-P	-5.20	1.54	1.61
26	LA	580	U	N1-C6	-5.20	1.33	1.38
26	LA	738	G	O3'-P	-5.20	1.54	1.61
26	LA	750	A	C1'-N9	-5.20	1.39	1.46
26	LA	1150	C	C1'-N1	5.20	1.56	1.48
26	LA	1250	G	O3'-P	-5.20	1.54	1.61
26	LA	1498	C	C5-C6	-5.20	1.30	1.34
26	LA	1500	G	C3'-O3'	5.20	1.49	1.42
26	LA	2484	G	C2-N3	5.20	1.36	1.32
26	LA	2733	A	N9-C4	-5.20	1.34	1.37
26	LA	2867	G	O3'-P	-5.20	1.54	1.61
52	LO	91	TYR	CB-CG	-5.20	1.43	1.51
3	S1	41	A	C2-N3	-5.20	1.28	1.33
4	S2	46	G	C3'-C2'	5.20	1.58	1.52
4	S2	66	C	P-O5'	5.20	1.65	1.59
26	LA	1613	G	C2-N2	-5.20	1.29	1.34
26	LA	1776	G	C3'-C2'	-5.20	1.47	1.52
26	LA	2328	A	P-O5'	5.20	1.65	1.59
26	LA	2762	C	C2'-C1'	-5.20	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	190	A	C5'-C4'	5.20	1.57	1.51
2	SA	605	U	C2-N3	-5.20	1.34	1.37
2	SA	1454	G	C5'-C4'	5.20	1.57	1.51
4	S2	54	G	C6-O6	-5.20	1.19	1.24
24	S3	490	ARG	CD-NE	5.20	1.55	1.46
24	S3	582	TYR	CG-CD1	5.20	1.46	1.39
26	LA	1016	G	C2-N3	-5.20	1.28	1.32
26	LA	1442	U	C3'-O3'	5.20	1.49	1.42
26	LA	1470	A	C6-N1	-5.20	1.31	1.35
26	LA	1611	C	O3'-P	-5.20	1.54	1.61
26	LA	1746	A	C5-C6	-5.20	1.36	1.41
26	LA	2188	U	O3'-P	-5.20	1.54	1.61
26	LA	2281	A	C2'-C1'	-5.20	1.47	1.53
26	LA	2354	C	C4'-O4'	-5.20	1.38	1.45
26	LA	2436	G	O3'-P	-5.20	1.54	1.61
2	SA	901	A	C4'-O4'	5.19	1.52	1.45
2	SA	1106	G	C2-N3	-5.19	1.28	1.32
26	LA	172	A	C3'-O3'	5.19	1.49	1.42
26	LA	454	A	O4'-C1'	-5.19	1.34	1.41
26	LA	1026	G	C3'-O3'	5.19	1.49	1.42
26	LA	1339	G	C2-N2	-5.19	1.29	1.34
26	LA	1792	G	C1'-N9	-5.19	1.39	1.46
26	LA	1991	U	C2'-O2'	-5.19	1.34	1.41
26	LA	2014	A	C2'-C1'	5.19	1.59	1.53
2	SA	913	A	O4'-C1'	-5.19	1.34	1.41
2	SA	1387	G	C8-N7	5.19	1.34	1.30
26	LA	151	C	C1'-N1	-5.19	1.39	1.46
26	LA	284	U	C4-O4	-5.19	1.19	1.23
26	LA	548	G	C6-N1	-5.19	1.35	1.39
26	LA	557	C	O4'-C1'	-5.19	1.34	1.41
26	LA	655	A	C2'-C1'	-5.19	1.47	1.53
26	LA	951	C	P-O5'	-5.19	1.54	1.59
26	LA	1786	A	C5-C4	-5.19	1.35	1.38
26	LA	1910	G	N1-C2	5.19	1.42	1.37
26	LA	2298	A	C4'-O4'	-5.19	1.38	1.45
26	LA	2484	G	C5-C4	-5.19	1.34	1.38
26	LA	2682	A	N3-C4	-5.19	1.31	1.34
26	LA	2880	C	N3-C4	-5.19	1.30	1.33
2	SA	328	C	O3'-P	-5.19	1.54	1.61
2	SA	395	C	N1-C2	5.19	1.45	1.40
2	SA	1001	C	N1-C6	-5.19	1.34	1.37
26	LA	389	G	C6-N1	-5.19	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	798	G	C6-O6	-5.19	1.19	1.24
26	LA	897	C	C4-C5	5.19	1.47	1.43
26	LA	1289	C	C4-C5	-5.19	1.38	1.43
26	LA	1489	C	C2-O2	5.19	1.29	1.24
26	LA	1665	A	O3'-P	-5.19	1.54	1.61
26	LA	1897	G	N7-C5	-5.19	1.36	1.39
26	LA	2553	G	C6-O6	5.19	1.28	1.24
2	SA	542	G	C6-N1	-5.19	1.35	1.39
2	SA	595	A	C5-C4	5.19	1.42	1.38
4	S2	39	A	N7-C5	-5.19	1.36	1.39
26	LA	178	G	N9-C8	-5.19	1.34	1.37
26	LA	884	U	N3-C4	5.19	1.43	1.38
26	LA	1386	C	P-O5'	-5.19	1.54	1.59
26	LA	2690	U	C2'-C1'	-5.19	1.47	1.53
26	LA	2882	A	N3-C4	-5.19	1.31	1.34
27	LD	221	GLY	CA-C	-5.19	1.43	1.51
2	SA	158	G	C2-N2	-5.19	1.29	1.34
2	SA	253	A	N3-C4	-5.19	1.31	1.34
2	SA	847	G	C3'-C2'	-5.19	1.47	1.52
2	SA	851	G	C4'-C3'	-5.19	1.47	1.52
2	SA	968	A	C5-C6	5.19	1.45	1.41
2	SA	1371	G	C5-C4	-5.19	1.34	1.38
2	SA	1539	C	C2-O2	5.19	1.29	1.24
4	S2	75	C	C5'-C4'	5.19	1.57	1.51
25	LB	12	C	O3'-P	-5.19	1.54	1.61
25	LB	91	C	N1-C6	5.19	1.40	1.37
26	LA	414	C	C4-N4	-5.19	1.29	1.33
26	LA	577	G	C2-N3	-5.19	1.28	1.32
26	LA	658	U	C1'-N1	-5.19	1.39	1.46
26	LA	1233	C	C2-N3	-5.19	1.31	1.35
26	LA	1321	A	C3'-O3'	5.19	1.49	1.42
26	LA	1562	U	O3'-P	-5.19	1.54	1.61
26	LA	2028	U	C4'-C3'	-5.19	1.47	1.52
26	LA	2032	G	C6-N1	-5.19	1.35	1.39
26	LA	2093	G	N9-C8	-5.19	1.34	1.37
26	LA	2690	U	O3'-P	-5.19	1.54	1.61
50	LL	44	TYR	CE2-CZ	5.19	1.45	1.38
2	SA	281	G	O3'-P	-5.19	1.54	1.61
2	SA	410	G	C2-N2	-5.19	1.29	1.34
2	SA	577	G	C3'-C2'	-5.19	1.47	1.52
26	LA	1652	A	C5'-C4'	5.19	1.57	1.51
26	LA	2073	C	O3'-P	-5.19	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2777	G	N7-C5	-5.19	1.36	1.39
2	SA	201	G	C4'-O4'	5.18	1.52	1.45
2	SA	271	C	N3-C4	5.18	1.37	1.33
2	SA	371	A	N3-C4	-5.18	1.31	1.34
2	SA	380	G	N7-C5	-5.18	1.36	1.39
2	SA	784	A	C3'-C2'	-5.18	1.47	1.52
2	SA	917	G	C5'-C4'	5.18	1.57	1.51
2	SA	986	U	P-O5'	-5.18	1.54	1.59
2	SA	1179	A	C5-C6	-5.18	1.36	1.41
2	SA	1443	C	O4'-C1'	5.18	1.48	1.41
22	SF	65	GLU	CD-OE1	5.18	1.31	1.25
25	LB	33	G	C5'-C4'	5.18	1.57	1.51
26	LA	13	A	N9-C4	-5.18	1.34	1.37
26	LA	295	G	C8-N7	5.18	1.34	1.30
26	LA	791	C	N1-C6	-5.18	1.34	1.37
26	LA	819	A	C2-N3	5.18	1.38	1.33
26	LA	1093	G	C6-N1	-5.18	1.35	1.39
26	LA	1466	U	O3'-P	-5.18	1.54	1.61
26	LA	1525	A	P-O5'	-5.18	1.54	1.59
26	LA	1817	G	C5-C6	-5.18	1.37	1.42
26	LA	2086	U	N1-C2	-5.18	1.33	1.38
26	LA	2228	G	C6-N1	5.18	1.43	1.39
26	LA	2321	U	C4'-C3'	-5.18	1.47	1.52
26	LA	2440	C	C2-O2	-5.18	1.19	1.24
26	LA	2627	G	O3'-P	-5.18	1.54	1.61
2	SA	26	A	O3'-P	-5.18	1.54	1.61
2	SA	32	A	N7-C5	-5.18	1.36	1.39
2	SA	495	A	N9-C8	-5.18	1.33	1.37
26	LA	636	G	C4'-C3'	-5.18	1.47	1.52
26	LA	785	G	C5-C4	-5.18	1.34	1.38
26	LA	1021	A	N3-C4	-5.18	1.31	1.34
26	LA	1206	G	N9-C8	-5.18	1.34	1.37
26	LA	1365	A	O4'-C1'	5.18	1.48	1.41
26	LA	1705	A	N9-C4	-5.18	1.34	1.37
26	LA	2071	A	C5-C6	-5.18	1.36	1.41
26	LA	2269	G	C2-N2	-5.18	1.29	1.34
26	LA	2643	G	C2'-C1'	-5.18	1.47	1.53
2	SA	356	A	N7-C5	-5.18	1.36	1.39
2	SA	779	C	N3-C4	-5.18	1.30	1.33
2	SA	780	A	N9-C8	-5.18	1.33	1.37
2	SA	867	G	C5-C4	-5.18	1.34	1.38
26	LA	780	G	C5-C6	-5.18	1.37	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	871	U	C5'-C4'	5.18	1.57	1.51
30	LW	36	GLU	CD-OE2	5.18	1.31	1.25
2	SA	228	A	N9-C4	-5.18	1.34	1.37
2	SA	390	U	O4'-C1'	5.18	1.48	1.41
2	SA	574	A	C2'-C1'	-5.18	1.47	1.53
2	SA	683	G	C2-N2	-5.18	1.29	1.34
2	SA	819	A	C8-N7	5.18	1.35	1.31
2	SA	1030	U	C4'-C3'	5.18	1.58	1.53
2	SA	1104	G	N1-C2	-5.18	1.33	1.37
2	SA	1161	C	C5'-C4'	-5.18	1.45	1.51
26	LA	126	A	C1'-N9	5.18	1.56	1.48
26	LA	286	U	N1-C6	-5.18	1.33	1.38
26	LA	318	C	N1-C2	5.18	1.45	1.40
26	LA	1452	G	C6-N1	-5.18	1.35	1.39
26	LA	1455	G	C3'-O3'	5.18	1.49	1.42
26	LA	1735	A	C5-C6	-5.18	1.36	1.41
26	LA	1791	A	C5-C4	5.18	1.42	1.38
26	LA	1962	C	C5'-C4'	5.18	1.57	1.51
26	LA	2364	C	O3'-P	-5.18	1.54	1.61
26	LA	2412	A	C1'-N9	-5.18	1.39	1.46
26	LA	2732	G	N9-C8	-5.18	1.34	1.37
26	LA	2747	G	N9-C4	-5.18	1.33	1.38
26	LA	2755	C	C5'-C4'	5.18	1.57	1.51
26	LA	2844	G	C5-C4	-5.18	1.34	1.38
2	SA	791	G	C5'-C4'	5.18	1.57	1.51
2	SA	913	A	N7-C5	5.18	1.42	1.39
2	SA	937	A	N9-C8	-5.18	1.33	1.37
2	SA	1149	C	C4-N4	-5.18	1.29	1.33
2	SA	1410	A	N1-C2	-5.18	1.29	1.34
26	LA	1403	A	N7-C5	-5.18	1.36	1.39
2	SA	33	A	C8-N7	5.18	1.35	1.31
2	SA	153	C	C5-C6	5.18	1.38	1.34
2	SA	507	C	C3'-C2'	5.18	1.58	1.52
2	SA	560	A	C5-C4	-5.18	1.35	1.38
2	SA	776	G	C2-N3	-5.18	1.28	1.32
2	SA	1041	G	C5-C4	5.18	1.42	1.38
25	LB	54	G	C2'-C1'	-5.18	1.47	1.53
26	LA	118	A	O3'-P	-5.18	1.54	1.61
26	LA	627	A	N3-C4	5.18	1.38	1.34
26	LA	1005	C	C4-N4	-5.18	1.29	1.33
26	LA	1852	U	O4'-C1'	-5.18	1.34	1.41
26	LA	2502	G	C5-C4	5.18	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2567	G	C5-C6	-5.18	1.37	1.42
26	LA	2751	G	C2'-C1'	5.18	1.59	1.53
44	LF	40	ARG	CD-NE	5.18	1.55	1.46
2	SA	171	A	C2'-C1'	5.17	1.59	1.53
2	SA	489	C	C3'-O3'	5.17	1.49	1.42
4	S2	46	G	C5-C4	5.17	1.42	1.38
26	LA	51	G	C2-N2	-5.17	1.29	1.34
26	LA	2001	C	O3'-P	-5.17	1.54	1.61
26	LA	2086	U	O4'-C1'	-5.17	1.34	1.41
26	LA	2418	A	C4'-O4'	5.17	1.52	1.45
26	LA	2873	A	C2'-O2'	-5.17	1.34	1.41
50	LL	92	MET	CG-SD	5.17	1.94	1.81
2	SA	365	U	C2-N3	-5.17	1.34	1.37
2	SA	859	G	N3-C4	-5.17	1.31	1.35
26	LA	648	G	P-O5'	5.17	1.65	1.59
26	LA	769	U	O4'-C1'	-5.17	1.34	1.41
26	LA	962	G	C6-O6	-5.17	1.19	1.24
26	LA	1203	U	O3'-P	-5.17	1.54	1.61
26	LA	1366	A	C3'-C2'	5.17	1.58	1.52
2	SA	111	G	C2-N2	-5.17	1.29	1.34
2	SA	207	C	C2'-C1'	-5.17	1.47	1.53
2	SA	271	C	P-O5'	-5.17	1.54	1.59
2	SA	274	A	N7-C5	-5.17	1.36	1.39
2	SA	291	U	P-O5'	-5.17	1.54	1.59
2	SA	433	G	C4'-O4'	5.17	1.52	1.45
2	SA	454	G	C5-C6	-5.17	1.37	1.42
2	SA	1211	U	C2-O2	5.17	1.27	1.22
26	LA	275	C	C4-N4	-5.17	1.29	1.33
26	LA	370	G	C2'-C1'	-5.17	1.47	1.53
26	LA	531	C	C4-C5	-5.17	1.38	1.43
26	LA	760	G	N1-C2	-5.17	1.33	1.37
26	LA	1403	A	P-O5'	5.17	1.65	1.59
26	LA	1979	U	C3'-C2'	-5.17	1.47	1.52
26	LA	2853	C	C2'-C1'	-5.17	1.47	1.53
48	LN	85	VAL	CB-CG1	5.17	1.63	1.52
2	SA	1517	G	C2-N2	-5.17	1.29	1.34
26	LA	157	C	C5'-C4'	5.17	1.57	1.51
26	LA	1073	A	O3'-P	-5.17	1.54	1.61
26	LA	1244	A	N9-C4	-5.17	1.34	1.37
26	LA	1276	A	O3'-P	-5.17	1.54	1.61
26	LA	2608	G	C6-N1	-5.17	1.35	1.39
2	SA	59	A	N1-C2	-5.17	1.29	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	281	G	C2'-C1'	-5.17	1.47	1.53
2	SA	804	U	C4-C5	-5.17	1.38	1.43
2	SA	1103	C	P-O5'	-5.17	1.54	1.59
2	SA	1216	A	C4'-O4'	-5.17	1.38	1.45
3	S1	16	A	C4'-O4'	-5.17	1.38	1.45
26	LA	603	A	N9-C8	-5.17	1.33	1.37
26	LA	741	U	N3-C4	-5.17	1.33	1.38
26	LA	1269	A	N9-C4	-5.17	1.34	1.37
26	LA	1819	A	N1-C2	-5.17	1.29	1.34
26	LA	2217	G	C2'-O2'	5.17	1.48	1.41
26	LA	2431	U	C4-C5	-5.17	1.38	1.43
26	LA	2667	C	C4-N4	-5.17	1.29	1.33
26	LA	2765	A	N9-C4	-5.17	1.34	1.37
2	SA	924	C	C4-N4	-5.17	1.29	1.33
2	SA	1053	G	C5-C6	5.17	1.47	1.42
2	SA	1515	G	C5-C4	5.17	1.42	1.38
25	LB	85	G	N9-C8	-5.17	1.34	1.37
26	LA	389	G	C2'-O2'	-5.17	1.34	1.41
26	LA	812	C	C4'-O4'	-5.17	1.38	1.45
26	LA	2545	G	C5-C4	-5.17	1.34	1.38
26	LA	2698	U	C2-N3	-5.17	1.34	1.37
2	SA	1305	G	N9-C8	5.17	1.41	1.37
2	SA	1318	A	N9-C4	5.17	1.41	1.37
26	LA	249	C	P-O5'	5.17	1.65	1.59
26	LA	861	A	C5-C4	-5.17	1.35	1.38
26	LA	1873	G	N7-C5	-5.17	1.36	1.39
26	LA	2162	G	C2'-C1'	-5.17	1.47	1.53
26	LA	2309	A	C8-N7	5.17	1.35	1.31
50	LL	113	PRO	N-CD	-5.17	1.40	1.47
2	SA	37	U	O3'-P	-5.16	1.54	1.61
2	SA	306	A	N9-C8	5.16	1.41	1.37
2	SA	403	C	C3'-O3'	5.16	1.49	1.42
2	SA	786	G	N1-C2	-5.16	1.33	1.37
2	SA	820	U	C4'-C3'	-5.16	1.47	1.52
2	SA	1449	C	C4-C5	5.16	1.47	1.43
15	SO	1	SER	CA-CB	5.16	1.60	1.52
26	LA	446	G	N3-C4	-5.16	1.31	1.35
26	LA	680	C	O3'-P	-5.16	1.54	1.61
26	LA	1311	G	C5'-C4'	5.16	1.57	1.51
26	LA	1721	G	C5-C4	-5.16	1.34	1.38
26	LA	2192	U	N1-C2	5.16	1.43	1.38
26	LA	2340	A	C4'-O4'	5.16	1.52	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2439	A	N7-C5	-5.16	1.36	1.39
2	SA	15	G	N9-C4	5.16	1.42	1.38
26	LA	124	G	C4'-C3'	-5.16	1.47	1.52
26	LA	735	A	C6-N6	-5.16	1.29	1.33
26	LA	2613	U	N1-C2	5.16	1.43	1.38
26	LA	2718	G	C3'-C2'	-5.16	1.47	1.52
2	SA	587	G	C4'-C3'	5.16	1.58	1.53
2	SA	823	C	C5'-C4'	5.16	1.57	1.51
2	SA	1121	U	O5'-C5'	5.16	1.52	1.44
2	SA	1200	C	C2'-C1'	-5.16	1.47	1.53
2	SA	1278	G	C2-N3	-5.16	1.28	1.32
2	SA	1315	U	P-O5'	-5.16	1.54	1.59
2	SA	1319	A	C6-N6	5.16	1.38	1.33
2	SA	1354	U	O5'-C5'	5.16	1.52	1.44
2	SA	1516	G	C2-N2	-5.16	1.29	1.34
3	S1	13	A	N9-C8	5.16	1.41	1.37
3	S1	42	U	C5'-C4'	5.16	1.57	1.51
26	LA	106	C	C2'-C1'	-5.16	1.47	1.53
26	LA	125	A	C3'-O3'	5.16	1.49	1.42
26	LA	305	C	C4-C5	5.16	1.47	1.43
26	LA	313	G	C6-N1	-5.16	1.35	1.39
26	LA	424	G	C6-N1	-5.16	1.35	1.39
26	LA	512	G	N3-C4	-5.16	1.31	1.35
26	LA	574	A	C5-C6	-5.16	1.36	1.41
26	LA	1257	C	C4'-O4'	-5.16	1.38	1.45
26	LA	1627	G	O3'-P	-5.16	1.54	1.61
26	LA	1751	U	O3'-P	-5.16	1.54	1.61
26	LA	2049	G	O3'-P	-5.16	1.54	1.61
26	LA	2056	G	C5-C6	-5.16	1.37	1.42
26	LA	2080	A	P-O5'	-5.16	1.54	1.59
26	LA	2087	G	C3'-C2'	-5.16	1.47	1.52
26	LA	2166	U	C2'-C1'	-5.16	1.47	1.53
26	LA	2544	G	C5-C4	-5.16	1.34	1.38
26	LA	2823	A	N7-C5	-5.16	1.36	1.39
26	LA	2887	A	C6-N1	-5.16	1.31	1.35
2	SA	120	A	C2'-C1'	-5.16	1.47	1.53
2	SA	670	G	C6-N1	-5.16	1.35	1.39
2	SA	695	A	C3'-C2'	-5.16	1.47	1.52
2	SA	1474	U	C4'-C3'	-5.16	1.47	1.52
26	LA	132	G	C6-N1	5.16	1.43	1.39
26	LA	171	U	C4-O4	-5.16	1.19	1.23
26	LA	198	C	N3-C4	5.16	1.37	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	977	G	C1'-N9	-5.16	1.39	1.46
26	LA	1124	G	N3-C4	-5.16	1.31	1.35
26	LA	1140	C	N3-C4	-5.16	1.30	1.33
26	LA	1166	G	C4'-C3'	5.16	1.58	1.53
26	LA	1246	A	O4'-C1'	-5.16	1.34	1.41
26	LA	1641	A	C2-N3	5.16	1.38	1.33
26	LA	1877	A	O3'-P	-5.16	1.54	1.61
26	LA	2191	A	N7-C5	-5.16	1.36	1.39
26	LA	2376	A	C6-N6	5.16	1.38	1.33
26	LA	2383	G	N1-C2	-5.16	1.33	1.37
26	LA	2609	U	P-O5'	-5.16	1.54	1.59
26	LA	2695	U	C3'-O3'	5.16	1.49	1.42
56	LR	97	TYR	CE1-CZ	5.16	1.45	1.38
2	SA	13	U	C2'-C1'	-5.16	1.47	1.53
2	SA	437	U	N3-C4	-5.16	1.33	1.38
2	SA	461	A	C4'-O4'	-5.16	1.38	1.45
2	SA	550	G	C5-C4	-5.16	1.34	1.38
2	SA	1217	C	N1-C6	-5.16	1.34	1.37
26	LA	545	U	C5'-C4'	5.16	1.57	1.51
26	LA	630	G	C6-N1	-5.16	1.35	1.39
26	LA	759	G	C1'-N9	-5.16	1.39	1.46
26	LA	1179	G	C8-N7	-5.16	1.27	1.30
26	LA	1934	C	C2-N3	-5.16	1.31	1.35
26	LA	2067	G	C2-N2	-5.16	1.29	1.34
26	LA	2228	G	C4'-C3'	5.16	1.58	1.53
2	SA	910	C	N1-C6	-5.16	1.34	1.37
2	SA	1379	G	C4'-C3'	5.16	1.58	1.53
26	LA	518	G	C3'-O3'	5.16	1.49	1.42
26	LA	599	A	C4'-C3'	-5.16	1.47	1.52
26	LA	717	C	C5'-C4'	5.16	1.57	1.51
26	LA	1722	A	O3'-P	-5.16	1.54	1.61
26	LA	1803	A	C5-C4	-5.16	1.35	1.38
26	LA	1853	A	O3'-P	-5.16	1.54	1.61
26	LA	2141	G	C6-N1	-5.16	1.35	1.39
26	LA	2178	C	C4'-O4'	5.16	1.52	1.45
26	LA	2655	G	C2-N2	-5.16	1.29	1.34
26	LA	189	G	C3'-C2'	-5.15	1.47	1.52
26	LA	447	A	C4'-C3'	-5.15	1.47	1.52
2	SA	364	A	C5-C4	-5.15	1.35	1.38
2	SA	597	G	O3'-P	-5.15	1.54	1.61
2	SA	688	G	N9-C4	-5.15	1.33	1.38
2	SA	1124	G	C5-C6	5.15	1.47	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	631	A	N7-C5	-5.15	1.36	1.39
26	LA	652	U	C2'-C1'	5.15	1.59	1.53
26	LA	729	G	O3'-P	-5.15	1.54	1.61
26	LA	773	U	N1-C6	-5.15	1.33	1.38
26	LA	874	G	O3'-P	-5.15	1.54	1.61
26	LA	999	U	N1-C2	-5.15	1.33	1.38
26	LA	1027	A	C5'-C4'	5.15	1.57	1.51
26	LA	1602	U	C2'-O2'	-5.15	1.34	1.41
26	LA	1618	C	C4-N4	5.15	1.38	1.33
26	LA	1664	A	N9-C8	-5.15	1.33	1.37
26	LA	1948	G	C5-C6	-5.15	1.37	1.42
2	SA	10	A	N9-C4	-5.15	1.34	1.37
2	SA	190	A	C2'-O2'	-5.15	1.34	1.41
2	SA	360	G	O3'-P	-5.15	1.54	1.61
2	SA	489	C	N1-C2	-5.15	1.34	1.40
2	SA	617	G	N9-C8	-5.15	1.34	1.37
2	SA	845	A	C3'-C2'	5.15	1.58	1.52
2	SA	880	C	O4'-C1'	-5.15	1.34	1.41
2	SA	1187	G	O5'-C5'	5.15	1.52	1.44
16	SP	28	ARG	CD-NE	5.15	1.55	1.46
24	S3	456	ILE	N-CA	-5.15	1.36	1.46
26	LA	260	G	C2'-C1'	-5.15	1.47	1.53
26	LA	730	A	C4'-C3'	-5.15	1.47	1.52
26	LA	1002	G	C2'-C1'	-5.15	1.47	1.53
26	LA	1106	G	P-O5'	-5.15	1.54	1.59
26	LA	1239	G	C5'-C4'	5.15	1.57	1.51
26	LA	1319	C	N3-C4	5.15	1.37	1.33
26	LA	1323	C	C2-N3	-5.15	1.31	1.35
26	LA	1803	A	N1-C2	-5.15	1.29	1.34
26	LA	2008	C	P-O5'	-5.15	1.54	1.59
26	LA	2205	A	C6-N6	5.15	1.38	1.33
26	LA	2405	G	O3'-P	-5.15	1.54	1.61
26	LA	2846	G	C2-N2	-5.15	1.29	1.34
32	LY	61	LYS	CA-CB	5.15	1.65	1.53
2	SA	256	U	C5-C6	5.15	1.38	1.34
2	SA	767	A	N9-C8	-5.15	1.33	1.37
2	SA	861	G	C2-N2	5.15	1.39	1.34
2	SA	878	A	C3'-C2'	-5.15	1.47	1.52
26	LA	1265	A	C6-N1	-5.15	1.31	1.35
26	LA	1742	U	N3-C4	5.15	1.43	1.38
26	LA	1863	G	C8-N7	5.15	1.34	1.30
26	LA	2404	U	P-O5'	-5.15	1.54	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2462	C	O3'-P	-5.15	1.54	1.61
2	SA	370	C	C4-N4	-5.15	1.29	1.33
2	SA	936	C	C4-C5	-5.15	1.38	1.43
2	SA	1285	A	P-O5'	-5.15	1.54	1.59
2	SA	1473	G	C8-N7	5.15	1.34	1.30
2	SA	1507	A	P-O5'	-5.15	1.54	1.59
2	SA	1536	C	N1-C2	5.15	1.45	1.40
26	LA	442	G	O4'-C1'	5.15	1.48	1.41
26	LA	512	G	C4'-O4'	5.15	1.52	1.45
26	LA	736	C	O3'-P	-5.15	1.54	1.61
26	LA	973	A	C5-C4	-5.15	1.35	1.38
26	LA	1467	U	P-O5'	5.15	1.64	1.59
26	LA	1677	A	O3'-P	-5.15	1.54	1.61
26	LA	1829	A	C3'-C2'	-5.15	1.47	1.52
26	LA	2124	G	N9-C8	-5.15	1.34	1.37
2	SA	433	G	C8-N7	-5.15	1.27	1.30
3	S1	59	A	O4'-C1'	-5.15	1.34	1.41
26	LA	92	U	C4-O4	-5.15	1.19	1.23
26	LA	916	G	N9-C8	-5.15	1.34	1.37
26	LA	1194	A	P-O5'	-5.15	1.54	1.59
26	LA	1464	G	C6-N1	-5.15	1.35	1.39
26	LA	2702	G	N7-C5	-5.15	1.36	1.39
26	LA	2833	U	C3'-O3'	5.15	1.49	1.42
2	SA	59	A	C8-N7	-5.14	1.27	1.31
2	SA	156	C	N1-C6	-5.14	1.34	1.37
2	SA	620	C	C3'-O3'	5.14	1.49	1.42
2	SA	993	G	C4'-O4'	-5.14	1.38	1.45
2	SA	1348	U	C3'-O3'	5.14	1.49	1.42
2	SA	1458	G	N9-C4	5.14	1.42	1.38
2	SA	1513	A	C1'-N9	-5.14	1.39	1.46
4	S2	62	C	C2'-O2'	5.14	1.48	1.41
26	LA	1274	A	P-O5'	-5.14	1.54	1.59
26	LA	1468	U	C3'-C2'	-5.14	1.47	1.52
26	LA	1622	G	C2'-C1'	-5.14	1.47	1.53
26	LA	1699	G	N3-C4	5.14	1.39	1.35
26	LA	1797	G	C2'-C1'	-5.14	1.47	1.53
26	LA	2070	A	C1'-N9	-5.14	1.39	1.46
26	LA	2821	A	C2'-C1'	-5.14	1.47	1.53
2	SA	280	C	C3'-C2'	5.14	1.58	1.52
2	SA	455	G	N7-C5	5.14	1.42	1.39
2	SA	677	U	C4-C5	-5.14	1.39	1.43
2	SA	716	A	C4'-O4'	5.14	1.52	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	940	C	N3-C4	5.14	1.37	1.33
2	SA	1452	C	N1-C6	-5.14	1.34	1.37
4	S2	66	C	C3'-O3'	5.14	1.49	1.42
26	LA	49	A	N3-C4	-5.14	1.31	1.34
26	LA	675	A	O4'-C1'	-5.14	1.34	1.41
26	LA	987	C	C2-N3	5.14	1.39	1.35
26	LA	1217	U	C5-C6	-5.14	1.29	1.34
26	LA	1266	G	C2'-C1'	-5.14	1.47	1.53
26	LA	2129	C	C4'-C3'	-5.14	1.47	1.52
26	LA	2550	G	N9-C4	-5.14	1.33	1.38
26	LA	2695	U	C2'-C1'	5.14	1.59	1.53
26	LA	2892	G	N9-C4	-5.14	1.33	1.38
2	SA	502	A	P-O5'	-5.14	1.54	1.59
2	SA	519	C	O3'-P	-5.14	1.54	1.61
2	SA	687	A	C8-N7	-5.14	1.27	1.31
10	SJ	27	GLU	CG-CD	-5.14	1.44	1.51
26	LA	1478	G	C3'-O3'	5.14	1.49	1.42
26	LA	2570	G	O3'-P	-5.14	1.54	1.61
2	SA	205	A	C5-C6	-5.14	1.36	1.41
2	SA	376	G	P-O5'	-5.14	1.54	1.59
2	SA	574	A	N1-C2	-5.14	1.29	1.34
2	SA	1090	U	C2'-C1'	-5.14	1.47	1.53
2	SA	1123	U	N1-C6	-5.14	1.33	1.38
26	LA	287	G	C4'-C3'	5.14	1.58	1.53
26	LA	681	G	C3'-O3'	5.14	1.49	1.42
26	LA	692	C	N1-C6	-5.14	1.34	1.37
26	LA	892	A	C5'-C4'	5.14	1.57	1.51
26	LA	1152	C	C2-N3	-5.14	1.31	1.35
26	LA	1877	A	C5-C6	-5.14	1.36	1.41
2	SA	692	U	C2'-C1'	5.14	1.59	1.53
2	SA	859	G	N7-C5	-5.14	1.36	1.39
25	LB	102	G	P-O5'	-5.14	1.54	1.59
26	LA	870	U	O3'-P	-5.14	1.54	1.61
26	LA	1896	G	C2'-O2'	5.14	1.48	1.41
26	LA	2566	A	N7-C5	-5.14	1.36	1.39
26	LA	2842	G	C2-N2	-5.14	1.29	1.34
2	SA	739	C	C3'-O3'	5.14	1.49	1.42
2	SA	939	G	C2'-C1'	5.14	1.59	1.53
2	SA	1177	G	P-O5'	-5.14	1.54	1.59
2	SA	1429	A	N3-C4	-5.14	1.31	1.34
2	SA	1463	U	C2-N3	5.14	1.41	1.37
4	S2	53	G	P-O5'	5.14	1.64	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LB	117	G	C4'-O4'	-5.14	1.38	1.45
26	LA	241	A	C5-C4	-5.14	1.35	1.38
26	LA	2474	U	C4-C5	5.14	1.48	1.43
2	SA	608	A	C2'-O2'	-5.13	1.34	1.41
2	SA	850	U	C1'-N1	5.13	1.56	1.48
2	SA	1288	A	N9-C4	-5.13	1.34	1.37
26	LA	90	U	O3'-P	-5.13	1.54	1.61
26	LA	494	G	N9-C8	-5.13	1.34	1.37
26	LA	880	G	C4'-C3'	-5.13	1.47	1.52
26	LA	925	A	N1-C2	-5.13	1.29	1.34
26	LA	1142	A	C3'-C2'	5.13	1.58	1.52
26	LA	1164	C	O4'-C1'	-5.13	1.34	1.41
26	LA	1698	A	N3-C4	-5.13	1.31	1.34
26	LA	2768	U	N3-C4	-5.13	1.33	1.38
2	SA	826	C	O4'-C1'	5.13	1.48	1.41
2	SA	1004	A	C8-N7	-5.13	1.27	1.31
2	SA	1051	C	C5-C6	5.13	1.38	1.34
2	SA	1314	C	C2-N3	5.13	1.39	1.35
26	LA	224	U	C4-C5	5.13	1.48	1.43
26	LA	329	G	N9-C8	-5.13	1.34	1.37
26	LA	1341	G	O3'-P	-5.13	1.54	1.61
26	LA	1400	U	C2-N3	-5.13	1.34	1.37
26	LA	2287	A	O4'-C1'	5.13	1.48	1.41
2	SA	187	G	N1-C2	-5.13	1.33	1.37
2	SA	881	G	C4'-O4'	-5.13	1.38	1.45
2	SA	899	C	N1-C2	5.13	1.45	1.40
2	SA	1096	C	P-O5'	-5.13	1.54	1.59
2	SA	1149	C	C3'-O3'	5.13	1.49	1.42
2	SA	1373	G	C8-N7	-5.13	1.27	1.30
2	SA	1472	U	C4'-O4'	5.13	1.52	1.45
2	SA	1525	G	O5'-C5'	5.13	1.52	1.44
20	SD	171	GLU	CD-OE1	5.13	1.31	1.25
23	SR	72	ARG	CZ-NH2	5.13	1.39	1.33
26	LA	33	C	O3'-P	-5.13	1.54	1.61
26	LA	583	G	C5-C6	-5.13	1.37	1.42
26	LA	604	G	C6-O6	-5.13	1.19	1.24
26	LA	772	C	C2-N3	-5.13	1.31	1.35
26	LA	1067	A	O4'-C1'	5.13	1.48	1.41
26	LA	1176	U	N1-C6	5.13	1.42	1.38
26	LA	1453	A	C5-C4	5.13	1.42	1.38
26	LA	1756	G	P-O5'	-5.13	1.54	1.59
26	LA	1773	A	P-O5'	5.13	1.64	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1788	C	C4-C5	-5.13	1.38	1.43
26	LA	2030	U	C2-N3	5.13	1.41	1.37
26	LA	2162	G	C5'-C4'	5.13	1.57	1.51
26	LA	2356	U	N1-C6	5.13	1.42	1.38
26	LA	2669	G	N9-C8	-5.13	1.34	1.37
49	LK	60	VAL	N-CA	-5.13	1.36	1.46
2	SA	769	G	C2-N3	5.13	1.36	1.32
2	SA	1075	U	P-O5'	-5.13	1.54	1.59
26	LA	697	G	N3-C4	-5.13	1.31	1.35
26	LA	719	C	C4'-C3'	5.13	1.58	1.53
26	LA	793	A	N3-C4	-5.13	1.31	1.34
26	LA	1145	C	C2-O2	-5.13	1.19	1.24
26	LA	1910	G	C6-N1	-5.13	1.35	1.39
26	LA	1958	C	C2'-C1'	-5.13	1.47	1.53
26	LA	2193	G	O5'-C5'	5.13	1.52	1.44
26	LA	2216	G	C5'-C4'	5.13	1.57	1.51
26	LA	2751	G	C1'-N9	-5.13	1.39	1.46
2	SA	98	A	C2-N3	-5.13	1.28	1.33
2	SA	432	A	C8-N7	-5.13	1.27	1.31
2	SA	495	A	O4'-C1'	-5.13	1.34	1.41
2	SA	547	A	O4'-C1'	-5.13	1.34	1.41
2	SA	673	A	C8-N7	-5.13	1.27	1.31
2	SA	790	A	C4'-C3'	5.13	1.58	1.53
2	SA	927	G	P-O5'	-5.13	1.54	1.59
2	SA	949	A	C6-N1	-5.13	1.31	1.35
2	SA	1267	C	C3'-O3'	5.13	1.49	1.42
2	SA	1374	A	C5-C4	-5.13	1.35	1.38
2	SA	1397	C	C5'-C4'	5.13	1.57	1.51
4	S2	11	A	O4'-C1'	5.13	1.48	1.41
24	S3	70	PHE	CE2-CZ	5.13	1.47	1.37
25	LB	24	G	C2-N3	5.13	1.36	1.32
25	LB	26	C	C2-N3	-5.13	1.31	1.35
26	LA	324	A	C5-C4	5.13	1.42	1.38
26	LA	856	G	C8-N7	5.13	1.34	1.30
26	LA	1591	A	C2'-C1'	-5.13	1.47	1.53
26	LA	1667	G	C4'-C3'	-5.13	1.47	1.52
2	SA	354	G	C5-C4	-5.13	1.34	1.38
2	SA	465	A	O3'-P	-5.13	1.54	1.61
2	SA	1524	C	N3-C4	-5.13	1.30	1.33
25	LB	81	G	C6-N1	-5.13	1.35	1.39
26	LA	13	A	C3'-O3'	5.13	1.49	1.42
26	LA	211	C	C2'-C1'	-5.13	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	300	A	N9-C4	-5.13	1.34	1.37
26	LA	939	G	C2-N3	-5.13	1.28	1.32
26	LA	1028	A	C2'-C1'	-5.13	1.47	1.53
26	LA	1235	G	C8-N7	5.13	1.34	1.30
26	LA	1965	C	C4-N4	-5.13	1.29	1.33
26	LA	2204	G	N9-C8	-5.13	1.34	1.37
26	LA	2330	G	C6-N1	-5.13	1.35	1.39
26	LA	2647	U	C5-C6	-5.13	1.29	1.34
26	LA	2889	C	N3-C4	-5.13	1.30	1.33
44	LF	176	ASP	C-N	-5.13	1.24	1.34
2	SA	1235	U	C3'-O3'	5.12	1.49	1.42
26	LA	460	A	C4'-C3'	5.12	1.58	1.53
26	LA	1993	U	C2-N3	-5.12	1.34	1.37
26	LA	2123	G	C2-N2	-5.12	1.29	1.34
26	LA	2130	U	N3-C4	-5.12	1.33	1.38
55	LQ	29	HIS	CB-CG	-5.12	1.40	1.50
2	SA	827	U	N1-C2	-5.12	1.33	1.38
2	SA	952	U	C3'-C2'	-5.12	1.47	1.52
2	SA	1517	G	N1-C2	-5.12	1.33	1.37
3	S1	44	U	C4-C5	5.12	1.48	1.43
4	S2	10	G	C2'-C1'	5.12	1.58	1.53
25	LB	90	C	P-O5'	-5.12	1.54	1.59
26	LA	738	G	C3'-O3'	5.12	1.49	1.42
26	LA	1336	A	C6-N6	5.12	1.38	1.33
26	LA	1410	G	C3'-C2'	-5.12	1.47	1.52
26	LA	2410	G	P-O5'	-5.12	1.54	1.59
26	LA	2606	C	C3'-C2'	-5.12	1.47	1.52
37	LC	21	TYR	CG-CD2	5.12	1.45	1.39
50	LL	47	HIS	CB-CG	-5.12	1.40	1.50
2	SA	545	C	C1'-N1	-5.12	1.39	1.46
2	SA	793	U	C5'-C4'	5.12	1.57	1.51
2	SA	1112	C	P-O5'	-5.12	1.54	1.59
25	LB	87	U	C2'-C1'	-5.12	1.47	1.53
26	LA	665	U	C5'-C4'	5.12	1.57	1.51
26	LA	869	G	C5'-C4'	5.12	1.57	1.51
26	LA	978	G	C8-N7	-5.12	1.27	1.30
26	LA	1115	G	C6-N1	-5.12	1.35	1.39
26	LA	1276	A	C2-N3	5.12	1.38	1.33
26	LA	1411	U	C4-O4	-5.12	1.19	1.23
26	LA	1512	C	C3'-C2'	-5.12	1.47	1.52
26	LA	2323	G	C6-N1	-5.12	1.35	1.39
26	LA	2464	G	O3'-P	-5.12	1.55	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2603	G	C1'-N9	-5.12	1.39	1.46
26	LA	2819	G	N7-C5	5.12	1.42	1.39
2	SA	405	U	C3'-O3'	5.12	1.49	1.42
2	SA	1222	G	N3-C4	-5.12	1.31	1.35
2	SA	1523	G	C3'-O3'	5.12	1.49	1.42
4	S2	15	G	N9-C4	-5.12	1.33	1.38
26	LA	409	G	P-O5'	-5.12	1.54	1.59
26	LA	684	G	O3'-P	-5.12	1.55	1.61
26	LA	2163	A	C6-N6	5.12	1.38	1.33
26	LA	2392	A	P-OP2	-5.12	1.40	1.49
26	LA	2518	A	C1'-N9	-5.12	1.39	1.46
2	SA	272	C	C5'-C4'	5.12	1.57	1.51
2	SA	423	G	N3-C4	5.12	1.39	1.35
2	SA	643	C	C4-C5	5.12	1.47	1.43
4	S2	4	G	C2'-C1'	5.12	1.58	1.53
26	LA	359	G	C4'-O4'	5.12	1.52	1.45
26	LA	1445	G	N3-C4	-5.12	1.31	1.35
26	LA	1782	U	N3-C4	-5.12	1.33	1.38
26	LA	2182	U	C5'-C4'	5.12	1.57	1.51
26	LA	2212	A	P-O5'	-5.12	1.54	1.59
2	SA	112	G	C1'-N9	-5.12	1.39	1.46
2	SA	291	U	C4-C5	5.12	1.48	1.43
2	SA	1336	C	N1-C6	5.12	1.40	1.37
2	SA	1338	G	N3-C4	-5.12	1.31	1.35
25	LB	114	C	C1'-N1	-5.12	1.39	1.46
26	LA	110	G	C2-N3	-5.12	1.28	1.32
26	LA	683	U	C5'-C4'	5.12	1.57	1.51
26	LA	686	U	C3'-O3'	5.12	1.49	1.42
26	LA	799	G	C5'-C4'	5.12	1.57	1.51
26	LA	1071	G	C1'-N9	-5.12	1.39	1.46
26	LA	1700	A	O3'-P	-5.12	1.55	1.61
26	LA	1795	C	C3'-O3'	5.12	1.49	1.42
26	LA	2559	C	C4-C5	-5.12	1.38	1.43
2	SA	703	G	C5-C4	5.12	1.42	1.38
2	SA	1154	G	N3-C4	5.12	1.39	1.35
2	SA	1191	A	C5'-C4'	5.12	1.57	1.51
2	SA	1311	A	C5-C4	-5.12	1.35	1.38
26	LA	255	A	C4'-C3'	-5.12	1.47	1.52
26	LA	1369	G	N7-C5	-5.12	1.36	1.39
26	LA	1395	A	C3'-C2'	5.12	1.58	1.52
26	LA	1559	U	C5'-C4'	5.12	1.57	1.51
26	LA	1652	A	O3'-P	-5.12	1.55	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1657	U	N1-C6	-5.12	1.33	1.38
26	LA	2444	G	N9-C8	-5.12	1.34	1.37
26	LA	2790	U	C2'-C1'	-5.12	1.47	1.53
2	SA	20	U	C4'-C3'	-5.11	1.47	1.52
2	SA	463	U	N1-C6	-5.11	1.33	1.38
2	SA	479	U	C4-O4	-5.11	1.19	1.23
2	SA	903	G	O4'-C1'	5.11	1.48	1.41
26	LA	37	C	C4-C5	5.11	1.47	1.43
26	LA	267	C	C3'-O3'	5.11	1.49	1.42
26	LA	545	U	C4'-C3'	5.11	1.58	1.53
26	LA	644	A	N7-C5	-5.11	1.36	1.39
26	LA	726	G	C5'-C4'	5.11	1.57	1.51
26	LA	1191	G	O4'-C1'	5.11	1.48	1.41
26	LA	1279	G	N9-C8	-5.11	1.34	1.37
26	LA	1428	C	C3'-O3'	5.11	1.49	1.42
26	LA	1633	G	C5-C4	5.11	1.42	1.38
26	LA	1998	A	O4'-C1'	-5.11	1.35	1.41
26	LA	2686	G	O3'-P	-5.11	1.55	1.61
26	LA	2897	U	N1-C6	-5.11	1.33	1.38
2	SA	66	A	C6-N6	-5.11	1.29	1.33
2	SA	435	A	C4'-O4'	5.11	1.52	1.45
2	SA	1171	A	C2'-C1'	-5.11	1.47	1.53
26	LA	733	G	C1'-N9	-5.11	1.39	1.46
26	LA	1242	U	C5'-C4'	5.11	1.57	1.51
26	LA	1461	C	C5'-C4'	5.11	1.57	1.51
26	LA	2301	C	C3'-C2'	5.11	1.58	1.52
26	LA	2442	C	N1-C6	5.11	1.40	1.37
2	SA	404	G	C5'-C4'	5.11	1.57	1.51
2	SA	953	G	C5'-C4'	5.11	1.57	1.51
2	SA	988	G	C6-N1	-5.11	1.35	1.39
2	SA	1073	U	C3'-O3'	5.11	1.49	1.42
2	SA	1301	U	C2'-O2'	5.11	1.48	1.41
2	SA	1359	C	C3'-C2'	5.11	1.58	1.52
2	SA	1428	A	C8-N7	-5.11	1.27	1.31
2	SA	1516	G	N9-C8	5.11	1.41	1.37
25	LB	20	G	N9-C8	-5.11	1.34	1.37
26	LA	38	A	N7-C5	-5.11	1.36	1.39
26	LA	292	U	C4'-C3'	-5.11	1.47	1.52
26	LA	632	A	C8-N7	-5.11	1.27	1.31
26	LA	1406	U	N1-C6	-5.11	1.33	1.38
26	LA	1863	G	C6-O6	-5.11	1.19	1.24
26	LA	1870	C	C3'-O3'	5.11	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2246	G	C2-N2	-5.11	1.29	1.34
26	LA	2388	A	C5-C4	-5.11	1.35	1.38
26	LA	2421	G	C6-N1	5.11	1.43	1.39
26	LA	2457	U	C5-C6	5.11	1.38	1.34
50	LL	75	TYR	CZ-OH	5.11	1.46	1.37
2	SA	667	G	O3'-P	-5.11	1.55	1.61
2	SA	916	U	P-OP2	-5.11	1.40	1.49
26	LA	197	A	P-O5'	-5.11	1.54	1.59
26	LA	1125	G	N9-C8	-5.11	1.34	1.37
26	LA	1713	A	N9-C8	5.11	1.41	1.37
26	LA	1713	A	N7-C5	-5.11	1.36	1.39
26	LA	2821	A	C5-C4	-5.11	1.35	1.38
26	LA	2852	G	O4'-C1'	-5.11	1.35	1.41
2	SA	112	G	C8-N7	5.11	1.34	1.30
2	SA	468	A	C3'-O3'	5.11	1.49	1.42
2	SA	532	A	C4'-C3'	5.11	1.58	1.53
26	LA	30	G	N9-C8	-5.11	1.34	1.37
26	LA	153	U	C4-C5	-5.11	1.39	1.43
26	LA	260	G	C5-C6	-5.11	1.37	1.42
26	LA	338	G	P-O5'	-5.11	1.54	1.59
26	LA	339	U	N1-C6	-5.11	1.33	1.38
26	LA	890	C	C4'-O4'	5.11	1.52	1.45
26	LA	1078	U	P-O5'	5.11	1.64	1.59
26	LA	1587	G	O4'-C1'	-5.11	1.35	1.41
26	LA	2859	G	N3-C4	-5.11	1.31	1.35
2	SA	796	C	C2-N3	-5.11	1.31	1.35
2	SA	1438	G	O3'-P	-5.11	1.55	1.61
2	SA	1525	G	O3'-P	-5.11	1.55	1.61
4	S2	56	U	C1'-N1	5.11	1.56	1.48
25	LB	111	U	C3'-C2'	5.11	1.58	1.52
26	LA	20	C	N1-C2	5.11	1.45	1.40
26	LA	123	G	C2'-O2'	-5.11	1.35	1.41
26	LA	375	G	C4'-O4'	5.11	1.52	1.45
26	LA	432	A	O3'-P	-5.11	1.55	1.61
26	LA	495	G	C3'-O3'	5.11	1.49	1.42
26	LA	663	G	C5-C6	-5.11	1.37	1.42
26	LA	966	G	C2-N3	5.11	1.36	1.32
26	LA	977	G	N3-C4	5.11	1.39	1.35
26	LA	1078	U	C4-O4	-5.11	1.19	1.23
26	LA	1180	U	C4'-C3'	-5.11	1.47	1.52
26	LA	1190	G	N3-C4	-5.11	1.31	1.35
26	LA	1512	C	O4'-C1'	-5.11	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1540	G	C3'-O3'	5.11	1.49	1.42
26	LA	1577	C	N1-C2	-5.11	1.35	1.40
26	LA	2052	A	C5-C6	-5.11	1.36	1.41
26	LA	2350	C	C2-O2	-5.11	1.19	1.24
26	LA	2395	C	C4-N4	-5.11	1.29	1.33
26	LA	2397	G	N1-C2	-5.11	1.33	1.37
26	LA	2727	A	N7-C5	-5.11	1.36	1.39
26	LA	2797	U	C2-O2	-5.11	1.17	1.22
26	LA	2860	A	C3'-C2'	-5.11	1.47	1.52
27	LD	22	GLU	CD-OE2	5.11	1.31	1.25
2	SA	121	U	C4-O4	-5.10	1.19	1.23
2	SA	197	A	C5-C4	-5.10	1.35	1.38
3	S1	39	U	C4'-C3'	5.10	1.58	1.53
26	LA	1555	G	C2'-O2'	-5.10	1.35	1.41
26	LA	2353	G	C4'-C3'	5.10	1.58	1.53
26	LA	2439	A	C3'-O3'	5.10	1.49	1.42
26	LA	2777	G	O3'-P	-5.10	1.55	1.61
2	SA	577	G	C6-N1	5.10	1.43	1.39
2	SA	658	C	C2'-C1'	-5.10	1.47	1.53
2	SA	959	A	O3'-P	5.10	1.67	1.61
2	SA	1103	C	N1-C2	-5.10	1.35	1.40
2	SA	1108	G	P-O5'	5.10	1.64	1.59
26	LA	303	G	C2-N3	-5.10	1.28	1.32
26	LA	1187	G	P-O5'	-5.10	1.54	1.59
26	LA	1772	A	P-O5'	-5.10	1.54	1.59
26	LA	2120	G	C8-N7	-5.10	1.27	1.30
26	LA	2537	U	C4-O4	-5.10	1.19	1.23
2	SA	889	A	C5-C4	-5.10	1.35	1.38
2	SA	1107	C	N1-C6	-5.10	1.34	1.37
26	LA	614	A	N7-C5	5.10	1.42	1.39
26	LA	1521	G	N7-C5	5.10	1.42	1.39
26	LA	1761	C	N3-C4	5.10	1.37	1.33
26	LA	2386	A	O3'-P	-5.10	1.55	1.61
2	SA	324	G	N9-C8	5.10	1.41	1.37
2	SA	368	U	N3-C4	5.10	1.43	1.38
2	SA	824	G	N3-C4	5.10	1.39	1.35
2	SA	1248	A	C6-N1	-5.10	1.31	1.35
2	SA	1270	G	C2-N2	-5.10	1.29	1.34
2	SA	1439	G	N7-C5	5.10	1.42	1.39
4	S2	64	G	C5-C4	5.10	1.42	1.38
25	LB	34	A	O3'-P	-5.10	1.55	1.61
25	LB	98	G	C8-N7	-5.10	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	14	A	N3-C4	5.10	1.38	1.34
26	LA	141	G	N1-C2	5.10	1.41	1.37
26	LA	673	C	O3'-P	-5.10	1.55	1.61
26	LA	882	G	C2-N3	5.10	1.36	1.32
26	LA	1265	A	C6-N6	-5.10	1.29	1.33
26	LA	1548	A	N3-C4	-5.10	1.31	1.34
26	LA	1669	A	C3'-C2'	5.10	1.58	1.52
26	LA	1719	G	N9-C8	5.10	1.41	1.37
26	LA	1725	U	C5'-C4'	5.10	1.57	1.51
26	LA	1900	A	C6-N1	-5.10	1.31	1.35
26	LA	1902	C	C4-C5	-5.10	1.38	1.43
26	LA	2127	G	N9-C8	-5.10	1.34	1.37
26	LA	2314	A	N9-C8	-5.10	1.33	1.37
26	LA	2456	C	N3-C4	-5.10	1.30	1.33
26	LA	2732	G	C1'-N9	-5.10	1.39	1.46
26	LA	2867	G	C3'-C2'	5.10	1.58	1.52
2	SA	280	C	O4'-C1'	5.10	1.48	1.41
2	SA	331	G	C2-N3	5.10	1.36	1.32
2	SA	688	G	O3'-P	-5.10	1.55	1.61
2	SA	790	A	C2'-O2'	-5.10	1.35	1.41
2	SA	973	G	C3'-C2'	-5.10	1.47	1.52
2	SA	1027	C	N1-C6	5.10	1.40	1.37
2	SA	1506	U	N1-C2	-5.10	1.33	1.38
26	LA	134	G	N7-C5	-5.10	1.36	1.39
26	LA	436	C	P-O5'	-5.10	1.54	1.59
26	LA	1818	U	C2-N3	-5.10	1.34	1.37
26	LA	1847	A	C5'-C4'	5.10	1.57	1.51
26	LA	1928	A	N9-C4	5.10	1.41	1.37
26	LA	2280	G	N1-C2	-5.10	1.33	1.37
55	LQ	80	GLU	CB-CG	5.10	1.61	1.52
2	SA	874	G	P-O5'	5.10	1.64	1.59
2	SA	1375	A	P-O5'	-5.10	1.54	1.59
10	SJ	13	PHE	CG-CD2	5.10	1.46	1.38
26	LA	111	A	C8-N7	5.10	1.35	1.31
26	LA	608	A	N1-C2	-5.10	1.29	1.34
26	LA	1681	G	P-O5'	-5.10	1.54	1.59
2	SA	120	A	C8-N7	-5.09	1.27	1.31
2	SA	612	C	C4-C5	-5.09	1.38	1.43
2	SA	722	G	N9-C8	5.09	1.41	1.37
2	SA	762	U	C5'-C4'	5.09	1.57	1.51
2	SA	1145	A	P-O5'	-5.09	1.54	1.59
2	SA	1459	G	N7-C5	-5.09	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	S2	49	C	C5-C6	-5.09	1.30	1.34
26	LA	129	C	N1-C6	-5.09	1.34	1.37
26	LA	208	C	C3'-C2'	-5.09	1.47	1.52
26	LA	250	G	P-OP2	-5.09	1.40	1.49
26	LA	1433	A	P-O5'	-5.09	1.54	1.59
26	LA	1712	U	C5'-C4'	5.09	1.57	1.51
26	LA	2152	G	N7-C5	-5.09	1.36	1.39
26	LA	2459	A	C5'-C4'	5.09	1.57	1.51
26	LA	2523	G	C5-C4	-5.09	1.34	1.38
26	LA	2817	U	O3'-P	-5.09	1.55	1.61
2	SA	22	G	C5'-C4'	5.09	1.57	1.51
2	SA	515	G	N9-C4	-5.09	1.33	1.38
2	SA	759	A	C3'-C2'	-5.09	1.47	1.52
26	LA	218	A	N9-C8	-5.09	1.33	1.37
26	LA	1465	G	C2-N2	-5.09	1.29	1.34
26	LA	1817	G	C8-N7	-5.09	1.27	1.30
26	LA	2212	A	C3'-O3'	-5.09	1.35	1.42
26	LA	2227	A	N9-C8	5.09	1.41	1.37
26	LA	2243	U	N3-C4	-5.09	1.33	1.38
26	LA	2341	G	C4'-C3'	5.09	1.58	1.53
2	SA	120	A	C2-N3	-5.09	1.28	1.33
2	SA	237	G	C4'-O4'	5.09	1.52	1.45
2	SA	526	C	C5'-C4'	5.09	1.57	1.51
2	SA	625	U	O3'-P	-5.09	1.55	1.61
2	SA	1405	G	C4'-O4'	-5.09	1.39	1.45
25	LB	105	G	C4'-O4'	-5.09	1.39	1.45
26	LA	58	G	C2-N3	-5.09	1.28	1.32
26	LA	367	G	C2-N2	-5.09	1.29	1.34
26	LA	526	A	C2'-C1'	5.09	1.58	1.53
26	LA	621	A	C6-N1	-5.09	1.31	1.35
26	LA	1301	A	C6-N1	-5.09	1.31	1.35
26	LA	1303	G	C8-N7	-5.09	1.27	1.30
26	LA	1513	U	P-O5'	-5.09	1.54	1.59
26	LA	2090	A	O4'-C1'	5.09	1.48	1.41
26	LA	2501	C	C2-N3	-5.09	1.31	1.35
26	LA	2722	G	C6-N1	-5.09	1.35	1.39
26	LA	2831	G	C5'-C4'	5.09	1.57	1.51
2	SA	94	G	C4'-C3'	5.09	1.58	1.53
2	SA	164	G	C5'-C4'	5.09	1.57	1.51
2	SA	496	A	O3'-P	-5.09	1.55	1.61
2	SA	666	G	N1-C2	-5.09	1.33	1.37
2	SA	764	C	C3'-O3'	-5.09	1.35	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	950	U	C4-C5	-5.09	1.39	1.43
26	LA	196	A	C3'-O3'	5.09	1.49	1.42
26	LA	1181	U	C4-C5	-5.09	1.39	1.43
26	LA	1401	G	O3'-P	-5.09	1.55	1.61
26	LA	1476	U	O5'-C5'	5.09	1.52	1.44
2	SA	189	A	N9-C4	-5.09	1.34	1.37
2	SA	420	U	O3'-P	-5.09	1.55	1.61
26	LA	1129	A	C6-N6	5.09	1.38	1.33
26	LA	1482	G	C3'-C2'	-5.09	1.47	1.52
26	LA	1946	U	C3'-O3'	5.09	1.49	1.42
26	LA	2711	A	N7-C5	-5.09	1.36	1.39
2	SA	355	C	C4-C5	-5.09	1.38	1.43
2	SA	1102	A	N7-C5	-5.09	1.36	1.39
2	SA	1225	A	C1'-N9	5.09	1.56	1.48
24	S3	203	TYR	CG-CD2	5.09	1.45	1.39
24	S3	620	VAL	CB-CG2	5.09	1.63	1.52
26	LA	165	A	C5'-C4'	5.09	1.57	1.51
26	LA	395	U	N1-C2	5.09	1.43	1.38
26	LA	581	C	C5-C6	-5.09	1.30	1.34
26	LA	1296	G	C2-N2	-5.09	1.29	1.34
26	LA	2131	U	C1'-N1	5.09	1.56	1.48
26	LA	2229	U	C5-C6	-5.09	1.29	1.34
26	LA	2273	A	C3'-C2'	5.09	1.58	1.52
26	LA	2727	A	N3-C4	5.09	1.38	1.34
2	SA	429	U	N3-C4	-5.08	1.33	1.38
2	SA	1084	G	C8-N7	5.08	1.34	1.30
2	SA	1097	C	C2'-C1'	-5.08	1.47	1.53
26	LA	1160	G	C2-N2	-5.08	1.29	1.34
2	SA	259	G	C4'-O4'	5.08	1.52	1.45
2	SA	573	A	N7-C5	-5.08	1.36	1.39
2	SA	973	G	C8-N7	5.08	1.33	1.30
2	SA	1233	G	C2-N2	-5.08	1.29	1.34
2	SA	1256	A	C5-C4	5.08	1.42	1.38
17	SQ	10	ARG	CD-NE	5.08	1.55	1.46
18	SB	232	ALA	N-CA	-5.08	1.36	1.46
25	LB	17	C	C2'-C1'	-5.08	1.47	1.53
26	LA	409	G	O3'-P	-5.08	1.55	1.61
26	LA	606	U	O4'-C1'	-5.08	1.35	1.41
26	LA	1152	C	C2-O2	5.08	1.29	1.24
26	LA	1278	C	O3'-P	-5.08	1.55	1.61
26	LA	2319	G	N3-C4	-5.08	1.31	1.35
26	LA	2608	G	C1'-N9	-5.08	1.39	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2690	U	N1-C2	5.08	1.43	1.38
26	LA	2723	C	N1-C6	-5.08	1.34	1.37
2	SA	269	C	C4-N4	5.08	1.38	1.33
2	SA	330	C	C5-C6	-5.08	1.30	1.34
2	SA	592	G	C3'-O3'	5.08	1.49	1.42
2	SA	1042	A	C6-N1	-5.08	1.31	1.35
2	SA	1451	U	C4'-C3'	5.08	1.58	1.53
4	S2	11	A	N9-C4	-5.08	1.34	1.37
25	LB	79	G	N9-C8	-5.08	1.34	1.37
26	LA	254	G	N9-C8	-5.08	1.34	1.37
26	LA	451	U	C4-O4	-5.08	1.19	1.23
26	LA	825	A	C5'-C4'	-5.08	1.45	1.51
26	LA	1386	C	N1-C6	-5.08	1.34	1.37
26	LA	1980	G	C4'-O4'	5.08	1.52	1.45
26	LA	2226	C	C5-C6	-5.08	1.30	1.34
26	LA	2322	A	N9-C4	-5.08	1.34	1.37
52	LO	81	ARG	CD-NE	5.08	1.55	1.46
26	LA	198	C	C4-C5	-5.08	1.38	1.43
26	LA	507	A	P-O5'	5.08	1.64	1.59
26	LA	680	C	C2'-C1'	-5.08	1.47	1.53
26	LA	770	G	C5-C4	5.08	1.42	1.38
26	LA	1876	A	C5'-C4'	5.08	1.57	1.51
26	LA	2157	G	N3-C4	-5.08	1.31	1.35
26	LA	2719	G	N3-C4	-5.08	1.31	1.35
2	SA	132	C	C5'-C4'	5.08	1.57	1.51
2	SA	472	U	C3'-O3'	5.08	1.49	1.42
2	SA	1178	G	C2-N3	-5.08	1.28	1.32
26	LA	296	U	N1-C6	5.08	1.42	1.38
26	LA	770	G	N3-C4	-5.08	1.31	1.35
26	LA	1017	G	N9-C4	-5.08	1.33	1.38
26	LA	1024	G	C3'-C2'	-5.08	1.47	1.52
26	LA	2106	U	C4'-C3'	-5.08	1.47	1.52
26	LA	2465	C	C2'-C1'	-5.08	1.47	1.53
26	LA	2597	G	C8-N7	-5.08	1.27	1.30
31	LX	91	PHE	CG-CD1	5.08	1.46	1.38
2	SA	22	G	N9-C4	-5.08	1.33	1.38
2	SA	313	A	N1-C2	-5.08	1.29	1.34
2	SA	320	A	C6-N6	5.08	1.38	1.33
2	SA	668	G	N9-C8	5.08	1.41	1.37
2	SA	676	A	N9-C8	-5.08	1.33	1.37
2	SA	1331	G	C2-N3	-5.08	1.28	1.32
25	LB	59	A	O3'-P	-5.08	1.55	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	529	A	O4'-C1'	-5.08	1.35	1.41
26	LA	923	G	C6-N1	-5.08	1.35	1.39
26	LA	1584	U	C3'-O3'	5.08	1.49	1.42
26	LA	1852	U	C2-N3	-5.08	1.34	1.37
2	SA	213	G	N7-C5	-5.08	1.36	1.39
2	SA	346	G	C4'-C3'	5.08	1.58	1.53
2	SA	510	A	C1'-N9	-5.08	1.39	1.46
9	SI	37	TYR	CE1-CZ	5.08	1.45	1.38
26	LA	114	U	C5'-C4'	5.08	1.57	1.51
26	LA	446	G	N7-C5	-5.08	1.36	1.39
26	LA	525	U	C5-C6	-5.08	1.29	1.34
26	LA	543	G	C6-N1	-5.08	1.35	1.39
26	LA	897	C	N3-C4	5.08	1.37	1.33
26	LA	1450	G	N9-C8	5.08	1.41	1.37
26	LA	1892	C	C2'-C1'	-5.08	1.47	1.53
26	LA	2019	A	O4'-C1'	-5.08	1.35	1.41
26	LA	2191	A	C3'-O3'	5.08	1.49	1.42
26	LA	2400	G	P-O5'	-5.08	1.54	1.59
26	LA	2609	U	N3-C4	-5.08	1.33	1.38
26	LA	2729	G	O4'-C1'	-5.08	1.35	1.41
48	LN	76	GLU	CB-CG	5.08	1.61	1.52
58	LT	70	GLU	CD-OE2	5.08	1.31	1.25
2	SA	150	U	C3'-C2'	-5.07	1.47	1.52
2	SA	224	U	C4-C5	-5.07	1.39	1.43
2	SA	424	G	C4'-O4'	-5.07	1.39	1.45
2	SA	466	A	C6-N6	5.07	1.38	1.33
2	SA	607	A	C2'-C1'	-5.07	1.47	1.53
2	SA	677	U	C3'-C2'	-5.07	1.47	1.52
2	SA	1267	C	N3-C4	5.07	1.37	1.33
26	LA	829	A	N1-C2	-5.07	1.29	1.34
26	LA	976	G	C2'-C1'	-5.07	1.47	1.53
26	LA	1028	A	O3'-P	-5.07	1.55	1.61
26	LA	1058	U	C4-O4	5.07	1.27	1.23
26	LA	1093	G	C5-C4	-5.07	1.34	1.38
26	LA	1369	G	N1-C2	-5.07	1.33	1.37
26	LA	1381	G	C3'-O3'	5.07	1.49	1.42
26	LA	1676	A	C4'-O4'	5.07	1.52	1.45
26	LA	2182	U	C4'-O4'	5.07	1.52	1.45
26	LA	2408	U	P-O5'	-5.07	1.54	1.59
26	LA	2478	A	C1'-N9	-5.07	1.39	1.46
26	LA	2709	G	C5'-C4'	5.07	1.57	1.51
26	LA	2724	U	N1-C2	-5.07	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	27	G	C6-O6	5.07	1.28	1.24
2	SA	1008	U	C2-O2	5.07	1.26	1.22
2	SA	1275	A	C3'-O3'	5.07	1.49	1.42
6	SU	20	ARG	CZ-NH1	-5.07	1.26	1.33
26	LA	223	A	C3'-C2'	-5.07	1.47	1.52
26	LA	2111	U	C5'-C4'	5.07	1.57	1.51
26	LA	2887	A	C6-N6	-5.07	1.29	1.33
2	SA	319	G	N7-C5	5.07	1.42	1.39
2	SA	609	A	N3-C4	5.07	1.37	1.34
2	SA	849	G	C2-N2	-5.07	1.29	1.34
2	SA	977	A	N1-C2	-5.07	1.29	1.34
2	SA	1170	A	P-O5'	-5.07	1.54	1.59
3	S1	28	U	C2'-O2'	-5.07	1.35	1.41
4	S2	12	G	C6-O6	5.07	1.28	1.24
4	S2	31	G	C2-N3	5.07	1.36	1.32
7	SG	91	ARG	CA-CB	5.07	1.65	1.53
21	SE	161	GLU	CD-OE2	5.07	1.31	1.25
26	LA	525	U	N1-C6	-5.07	1.33	1.38
26	LA	557	C	N3-C4	-5.07	1.30	1.33
26	LA	716	A	C4'-C3'	-5.07	1.47	1.52
26	LA	1307	A	N7-C5	-5.07	1.36	1.39
26	LA	1506	U	O3'-P	-5.07	1.55	1.61
26	LA	1522	A	C6-N1	-5.07	1.32	1.35
26	LA	1554	U	C2-N3	-5.07	1.34	1.37
26	LA	1756	G	C8-N7	5.07	1.33	1.30
26	LA	1839	G	C4'-C3'	5.07	1.58	1.53
26	LA	2122	U	C4-O4	5.07	1.27	1.23
26	LA	2744	G	C2-N2	-5.07	1.29	1.34
35	L1	17	PRO	CA-C	5.07	1.62	1.52
2	SA	24	U	C4-C5	5.07	1.48	1.43
2	SA	1468	A	C1'-N9	-5.07	1.39	1.46
26	LA	411	G	C4'-O4'	-5.07	1.39	1.45
26	LA	1217	U	N1-C2	-5.07	1.33	1.38
2	SA	24	U	C5-C6	-5.07	1.29	1.34
2	SA	54	C	O3'-P	-5.07	1.55	1.61
2	SA	850	U	C2'-C1'	-5.07	1.47	1.53
2	SA	910	C	C4'-C3'	-5.07	1.47	1.52
2	SA	981	U	C2-O2	-5.07	1.17	1.22
2	SA	1085	U	C4'-C3'	-5.07	1.47	1.52
2	SA	1401	G	C2-N3	-5.07	1.28	1.32
2	SA	1488	G	N9-C4	-5.07	1.33	1.38
2	SA	1539	C	C5-C6	-5.07	1.30	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	12	U	C5-C6	-5.07	1.29	1.34
26	LA	429	A	C8-N7	5.07	1.35	1.31
26	LA	526	A	P-O5'	5.07	1.64	1.59
26	LA	650	C	C2'-C1'	5.07	1.58	1.53
26	LA	678	C	C2'-C1'	-5.07	1.47	1.53
26	LA	682	G	O5'-C5'	5.07	1.52	1.44
26	LA	787	C	C4-C5	-5.07	1.38	1.43
26	LA	840	C	C3'-O3'	5.07	1.49	1.42
26	LA	960	A	C8-N7	5.07	1.35	1.31
26	LA	1115	G	N7-C5	5.07	1.42	1.39
26	LA	1802	A	O3'-P	-5.07	1.55	1.61
26	LA	1885	A	C3'-O3'	-5.07	1.35	1.42
26	LA	2707	U	N1-C6	-5.07	1.33	1.38
2	SA	16	A	C4'-C3'	-5.07	1.47	1.52
2	SA	282	A	C6-N6	-5.07	1.29	1.33
2	SA	377	G	N9-C4	5.07	1.42	1.38
2	SA	696	A	C2-N3	-5.07	1.28	1.33
2	SA	814	A	C2'-C1'	5.07	1.58	1.53
2	SA	825	A	C4'-C3'	5.07	1.58	1.53
2	SA	1077	G	C2-N3	5.07	1.36	1.32
2	SA	1107	C	P-O5'	-5.07	1.54	1.59
2	SA	1367	C	C5'-C4'	5.07	1.57	1.51
18	SB	67	LEU	N-CA	-5.07	1.36	1.46
21	SE	51	LYS	CA-CB	5.07	1.65	1.53
25	LB	73	A	C6-N1	-5.07	1.32	1.35
26	LA	171	U	P-O5'	5.07	1.64	1.59
26	LA	537	G	N7-C5	5.07	1.42	1.39
26	LA	902	C	O4'-C1'	5.07	1.48	1.41
26	LA	1194	A	C2'-C1'	-5.07	1.47	1.53
26	LA	2384	U	C5'-C4'	5.07	1.57	1.51
26	LA	2504	U	C5'-C4'	5.07	1.57	1.51
2	SA	52	C	C3'-C2'	-5.06	1.47	1.52
2	SA	320	A	O4'-C1'	-5.06	1.35	1.41
2	SA	609	A	P-O5'	5.06	1.64	1.59
2	SA	660	C	C2'-O2'	-5.06	1.35	1.41
2	SA	852	G	C5-C4	5.06	1.41	1.38
4	S2	37	U	N3-C4	-5.06	1.33	1.38
26	LA	799	G	N7-C5	-5.06	1.36	1.39
26	LA	2775	G	C8-N7	5.06	1.33	1.30
26	LA	2794	C	C2-N3	5.06	1.39	1.35
2	SA	108	G	C2-N3	-5.06	1.28	1.32
2	SA	251	G	C2-N3	5.06	1.36	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	735	C	C4-C5	-5.06	1.38	1.43
2	SA	1505	G	C3'-O3'	5.06	1.49	1.42
26	LA	868	U	C3'-C2'	5.06	1.58	1.52
26	LA	1480	C	N3-C4	5.06	1.37	1.33
26	LA	2344	U	O4'-C1'	-5.06	1.35	1.41
26	LA	2621	G	C3'-O3'	5.06	1.49	1.42
2	SA	388	G	C4'-C3'	5.06	1.58	1.53
2	SA	696	A	O3'-P	5.06	1.67	1.61
2	SA	1406	U	C5'-C4'	5.06	1.57	1.51
26	LA	201	C	C4'-C3'	-5.06	1.47	1.52
29	LV	1	MET	CA-CB	5.06	1.65	1.53
2	SA	77	A	C2'-C1'	-5.06	1.47	1.53
2	SA	266	G	N9-C4	-5.06	1.33	1.38
2	SA	596	A	C5-C6	-5.06	1.36	1.41
2	SA	973	G	N1-C2	-5.06	1.33	1.37
6	SU	54	ARG	CD-NE	5.06	1.55	1.46
9	SI	63	TYR	CD1-CE1	5.06	1.47	1.39
25	LB	9	G	C2-N3	5.06	1.36	1.32
25	LB	61	G	C5'-C4'	5.06	1.57	1.51
26	LA	154	U	O3'-P	-5.06	1.55	1.61
26	LA	428	A	C2-N3	5.06	1.38	1.33
26	LA	1420	A	C8-N7	5.06	1.35	1.31
26	LA	1529	G	C8-N7	-5.06	1.27	1.30
26	LA	1759	A	C4'-C3'	-5.06	1.47	1.52
26	LA	1944	U	O5'-C5'	5.06	1.52	1.44
26	LA	2033	A	C4'-C3'	5.06	1.58	1.53
26	LA	2337	G	N3-C4	-5.06	1.31	1.35
26	LA	2373	G	C6-O6	-5.06	1.19	1.24
26	LA	2410	G	C2-N2	-5.06	1.29	1.34
26	LA	2766	A	C5-C4	-5.06	1.35	1.38
26	LA	2817	U	N1-C6	-5.06	1.33	1.38
26	LA	2868	A	C6-N1	5.06	1.39	1.35
57	LS	86	SER	CA-CB	5.06	1.60	1.52
2	SA	80	A	N9-C8	-5.06	1.33	1.37
2	SA	599	C	C4'-O4'	-5.06	1.39	1.45
2	SA	782	A	N9-C4	-5.06	1.34	1.37
2	SA	1322	C	N3-C4	5.06	1.37	1.33
25	LB	105	G	N9-C4	-5.06	1.33	1.38
26	LA	45	G	C4'-O4'	-5.06	1.39	1.45
26	LA	332	A	C5-C4	5.06	1.42	1.38
26	LA	968	C	P-O5'	-5.06	1.54	1.59
26	LA	1440	U	O3'-P	-5.06	1.55	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1473	G	C6-N1	-5.06	1.36	1.39
26	LA	1935	G	C5-C4	-5.06	1.34	1.38
26	LA	2148	G	C8-N7	5.06	1.33	1.30
26	LA	2299	U	C5'-C4'	5.06	1.57	1.51
26	LA	2615	U	C2-N3	5.06	1.41	1.37
26	LA	2703	C	C1'-N1	5.06	1.56	1.48
2	SA	860	A	N3-C4	5.06	1.37	1.34
2	SA	1167	A	N3-C4	-5.06	1.31	1.34
26	LA	28	A	N9-C4	-5.06	1.34	1.37
26	LA	2793	C	C5'-C4'	5.06	1.57	1.51
2	SA	167	A	N7-C5	-5.05	1.36	1.39
2	SA	360	G	C3'-O3'	5.05	1.49	1.42
2	SA	847	G	C6-O6	-5.05	1.19	1.24
2	SA	873	A	C5-C6	-5.05	1.36	1.41
2	SA	926	G	N7-C5	-5.05	1.36	1.39
2	SA	1489	G	N7-C5	-5.05	1.36	1.39
2	SA	1490	U	C4-C5	-5.05	1.39	1.43
3	S1	15	G	O3'-P	-5.05	1.55	1.61
9	SI	37	TYR	CG-CD1	5.05	1.45	1.39
26	LA	316	C	C4-C5	5.05	1.47	1.43
26	LA	368	A	N7-C5	-5.05	1.36	1.39
26	LA	844	A	O4'-C1'	-5.05	1.35	1.41
26	LA	1117	C	O3'-P	-5.05	1.55	1.61
26	LA	1422	G	C8-N7	5.05	1.33	1.30
26	LA	1513	U	N1-C2	-5.05	1.34	1.38
26	LA	1609	A	O4'-C1'	-5.05	1.35	1.41
26	LA	1823	G	C8-N7	-5.05	1.27	1.30
26	LA	2086	U	C2-N3	-5.05	1.34	1.37
26	LA	2785	C	C2'-C1'	-5.05	1.47	1.53
2	SA	1413	A	C4'-O4'	-5.05	1.39	1.45
26	LA	872	U	P-O5'	-5.05	1.54	1.59
26	LA	1316	U	C5-C6	-5.05	1.29	1.34
26	LA	1320	C	O3'-P	-5.05	1.55	1.61
2	SA	115	G	N7-C5	-5.05	1.36	1.39
2	SA	744	C	C4'-C3'	5.05	1.58	1.53
2	SA	1014	A	C5-C4	5.05	1.42	1.38
2	SA	1323	G	C6-O6	-5.05	1.19	1.24
2	SA	1444	U	O3'-P	-5.05	1.55	1.61
26	LA	324	A	C8-N7	5.05	1.35	1.31
26	LA	733	G	C2-N3	-5.05	1.28	1.32
26	LA	1194	A	C6-N1	5.05	1.39	1.35
26	LA	1768	C	C5'-C4'	5.05	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	1827	U	C3'-C2'	-5.05	1.47	1.52
26	LA	1962	C	P-O5'	-5.05	1.54	1.59
26	LA	2170	A	C3'-O3'	5.05	1.49	1.42
26	LA	2382	G	C2-N2	-5.05	1.29	1.34
26	LA	2590	A	C4'-C3'	-5.05	1.47	1.52
26	LA	2599	G	C5-C4	-5.05	1.34	1.38
26	LA	2636	C	C4-C5	5.05	1.47	1.43
2	SA	221	C	C4'-C3'	-5.05	1.47	1.52
2	SA	406	G	O4'-C1'	-5.05	1.35	1.41
2	SA	521	G	N1-C2	-5.05	1.33	1.37
2	SA	908	A	C2'-C1'	-5.05	1.47	1.53
2	SA	993	G	O4'-C1'	-5.05	1.35	1.41
2	SA	1024	G	C5'-C4'	5.05	1.57	1.51
2	SA	1111	A	C5-C4	5.05	1.42	1.38
20	SD	75	TYR	CG-CD2	5.05	1.45	1.39
26	LA	35	G	C4'-C3'	-5.05	1.47	1.52
26	LA	656	G	N9-C8	-5.05	1.34	1.37
26	LA	792	A	C5-C6	-5.05	1.36	1.41
26	LA	1109	C	C5'-C4'	5.05	1.57	1.51
26	LA	1321	A	C6-N1	5.05	1.39	1.35
26	LA	1472	C	C2-N3	5.05	1.39	1.35
26	LA	1864	U	C3'-O3'	5.05	1.49	1.42
26	LA	1986	C	P-O5'	-5.05	1.54	1.59
26	LA	2349	G	C8-N7	-5.05	1.27	1.30
26	LA	2823	A	N3-C4	-5.05	1.31	1.34
2	SA	200	G	N9-C8	5.05	1.41	1.37
2	SA	248	C	N1-C2	-5.05	1.35	1.40
2	SA	1061	G	C1'-N9	-5.05	1.39	1.46
25	LB	40	U	P-O5'	-5.05	1.54	1.59
26	LA	523	C	O3'-P	-5.05	1.55	1.61
26	LA	1738	G	N9-C8	-5.05	1.34	1.37
2	SA	820	U	C5-C6	-5.05	1.29	1.34
26	LA	137	U	C5-C6	-5.05	1.29	1.34
26	LA	182	A	C2'-O2'	-5.05	1.35	1.41
26	LA	961	C	C4'-O4'	-5.05	1.39	1.45
26	LA	1229	C	C4'-O4'	5.05	1.52	1.45
26	LA	1389	G	C2-N3	5.05	1.36	1.32
26	LA	1973	G	C2-N3	-5.05	1.28	1.32
26	LA	1989	G	C2-N3	-5.05	1.28	1.32
26	LA	2375	G	C5-C6	-5.05	1.37	1.42
26	LA	2533	U	C4-C5	-5.05	1.39	1.43
26	LA	2807	U	C3'-O3'	5.05	1.49	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2831	G	C1'-N9	-5.05	1.39	1.46
26	LA	2873	A	C3'-O3'	5.05	1.49	1.42
2	SA	467	U	O4'-C1'	5.04	1.48	1.41
23	SR	72	ARG	CD-NE	5.04	1.55	1.46
26	LA	790	U	C5-C6	5.04	1.38	1.34
26	LA	1965	C	C1'-N1	5.04	1.56	1.48
26	LA	2274	A	C4'-O4'	-5.04	1.39	1.45
2	SA	146	G	C8-N7	-5.04	1.27	1.30
2	SA	148	G	N7-C5	5.04	1.42	1.39
2	SA	275	G	C2-N3	5.04	1.36	1.32
2	SA	548	G	C1'-N9	-5.04	1.39	1.46
2	SA	648	A	N9-C4	-5.04	1.34	1.37
2	SA	653	U	P-O5'	5.04	1.64	1.59
2	SA	766	A	N1-C2	-5.04	1.29	1.34
26	LA	46	G	N9-C8	5.04	1.41	1.37
26	LA	52	A	C5'-C4'	5.04	1.57	1.51
26	LA	520	G	N1-C2	5.04	1.41	1.37
26	LA	757	G	N7-C5	-5.04	1.36	1.39
26	LA	1011	G	O3'-P	-5.04	1.55	1.61
26	LA	1291	C	C3'-O3'	5.04	1.49	1.42
26	LA	1391	U	C2-N3	-5.04	1.34	1.37
26	LA	1458	U	N1-C2	-5.04	1.34	1.38
26	LA	1737	G	O4'-C1'	-5.04	1.35	1.41
26	LA	2035	G	C1'-N9	-5.04	1.39	1.46
26	LA	2190	G	C5-C4	5.04	1.41	1.38
26	LA	2750	A	C6-N1	5.04	1.39	1.35
2	SA	581	G	O3'-P	-5.04	1.55	1.61
2	SA	924	C	N3-C4	5.04	1.37	1.33
2	SA	1477	U	C2'-C1'	-5.04	1.47	1.53
3	S1	34	U	C2-N3	-5.04	1.34	1.37
26	LA	622	G	C1'-N9	-5.04	1.39	1.46
26	LA	664	G	N1-C2	-5.04	1.33	1.37
26	LA	1352	U	N1-C6	-5.04	1.33	1.38
26	LA	1444	G	C4'-O4'	5.04	1.52	1.45
26	LA	1703	G	C4'-C3'	5.04	1.58	1.53
26	LA	1740	G	C3'-O3'	5.04	1.49	1.42
26	LA	1784	A	N9-C8	-5.04	1.33	1.37
26	LA	1996	C	P-O5'	-5.04	1.54	1.59
26	LA	2061	G	C3'-C2'	5.04	1.58	1.52
26	LA	2207	C	C3'-O3'	5.04	1.49	1.42
26	LA	2315	G	P-O5'	-5.04	1.54	1.59
40	L4	43	ARG	CD-NE	5.04	1.55	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	148	G	N9-C4	-5.04	1.33	1.38
2	SA	281	G	P-O5'	5.04	1.64	1.59
2	SA	690	G	C5'-C4'	5.04	1.57	1.51
2	SA	1166	G	C2-N3	5.04	1.36	1.32
26	LA	846	U	C5'-C4'	5.04	1.57	1.51
26	LA	2172	U	C4-O4	5.04	1.27	1.23
2	SA	251	G	C5-C6	-5.04	1.37	1.42
2	SA	404	G	N7-C5	-5.04	1.36	1.39
2	SA	485	U	O3'-P	-5.04	1.55	1.61
2	SA	512	U	C2-N3	-5.04	1.34	1.37
2	SA	557	G	O4'-C1'	-5.04	1.35	1.41
2	SA	922	G	C5-C6	-5.04	1.37	1.42
4	S2	41	C	N3-C4	-5.04	1.30	1.33
26	LA	107	G	N1-C2	-5.04	1.33	1.37
26	LA	291	G	N9-C8	5.04	1.41	1.37
26	LA	474	G	N3-C4	5.04	1.39	1.35
26	LA	682	G	C2-N2	-5.04	1.29	1.34
26	LA	799	G	N1-C2	-5.04	1.33	1.37
26	LA	1120	G	C2-N3	5.04	1.36	1.32
26	LA	1450	G	C2'-C1'	-5.04	1.47	1.53
26	LA	1498	C	C2-O2	-5.04	1.20	1.24
26	LA	2247	A	C2'-C1'	-5.04	1.47	1.53
26	LA	2609	U	O3'-P	-5.04	1.55	1.61
26	LA	2670	A	N7-C5	-5.04	1.36	1.39
2	SA	647	C	C5-C6	-5.04	1.30	1.34
2	SA	1145	A	N1-C2	-5.04	1.29	1.34
2	SA	1348	U	N1-C6	-5.04	1.33	1.38
2	SA	1484	C	P-O5'	-5.04	1.54	1.59
26	LA	279	A	C4'-O4'	5.04	1.52	1.45
2	SA	24	U	C2'-C1'	-5.04	1.47	1.53
2	SA	75	G	O3'-P	-5.04	1.55	1.61
2	SA	518	C	N3-C4	-5.04	1.30	1.33
2	SA	1488	G	C2'-C1'	-5.04	1.47	1.53
3	S1	35	G	C5-C6	5.04	1.47	1.42
3	S1	56	G	C3'-C2'	5.04	1.58	1.52
26	LA	590	A	C5'-C4'	5.04	1.57	1.51
26	LA	638	G	N7-C5	5.04	1.42	1.39
26	LA	1137	G	O5'-C5'	5.04	1.52	1.44
26	LA	1145	C	O4'-C1'	5.04	1.48	1.41
26	LA	1494	A	C4'-O4'	-5.04	1.39	1.45
26	LA	1519	G	C8-N7	-5.04	1.27	1.30
26	LA	2059	A	C2'-C1'	5.04	1.58	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2245	U	C5-C6	-5.04	1.29	1.34
26	LA	2286	G	O3'-P	-5.04	1.55	1.61
26	LA	2594	C	P-O5'	-5.04	1.54	1.59
2	SA	27	G	C5-C4	-5.03	1.34	1.38
2	SA	338	A	C2-N3	-5.03	1.29	1.33
2	SA	979	C	C3'-O3'	5.03	1.49	1.42
3	S1	15	G	N3-C4	5.03	1.39	1.35
4	S2	4	G	C2-N2	-5.03	1.29	1.34
24	S3	347	THR	CA-C	-5.03	1.39	1.52
26	LA	485	C	O4'-C1'	-5.03	1.35	1.41
26	LA	744	U	C4-C5	5.03	1.48	1.43
26	LA	1830	C	C2-O2	-5.03	1.20	1.24
26	LA	2088	A	C5'-C4'	5.03	1.57	1.51
26	LA	2095	A	P-O5'	-5.03	1.54	1.59
26	LA	2508	G	N9-C8	-5.03	1.34	1.37
26	LA	2738	A	C5-C4	-5.03	1.35	1.38
2	SA	680	C	C3'-C2'	5.03	1.58	1.52
2	SA	977	A	C5'-C4'	5.03	1.57	1.51
26	LA	688	U	N1-C2	-5.03	1.34	1.38
26	LA	1179	G	C2'-C1'	-5.03	1.47	1.53
26	LA	1248	G	C1'-N9	-5.03	1.39	1.46
26	LA	1992	G	C2-N2	-5.03	1.29	1.34
26	LA	2132	U	C2'-C1'	5.03	1.58	1.53
26	LA	2836	U	C3'-O3'	5.03	1.49	1.42
2	SA	1249	C	N3-C4	-5.03	1.30	1.33
2	SA	1357	A	N9-C4	-5.03	1.34	1.37
3	S1	48	C	C5-C6	5.03	1.38	1.34
26	LA	35	G	C8-N7	-5.03	1.27	1.30
26	LA	535	G	C5-C6	-5.03	1.37	1.42
26	LA	827	U	O3'-P	-5.03	1.55	1.61
26	LA	1418	G	C6-N1	-5.03	1.36	1.39
26	LA	1435	G	N9-C4	-5.03	1.33	1.38
26	LA	2769	U	N1-C6	5.03	1.42	1.38
26	LA	2837	A	O4'-C1'	-5.03	1.35	1.41
2	SA	118	U	C2'-C1'	-5.03	1.47	1.53
2	SA	528	C	O4'-C1'	-5.03	1.35	1.41
2	SA	636	U	C3'-O3'	5.03	1.49	1.42
2	SA	1374	A	C3'-O3'	5.03	1.49	1.42
2	SA	1447	A	C1'-N9	5.03	1.56	1.48
26	LA	1471	G	C3'-O3'	5.03	1.49	1.42
26	LA	2772	C	C3'-C2'	-5.03	1.47	1.52
2	SA	108	G	O3'-P	5.03	1.67	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	379	C	P-OP1	5.03	1.57	1.49
2	SA	475	C	C2-O2	5.03	1.28	1.24
2	SA	522	C	C2-N3	5.03	1.39	1.35
2	SA	738	C	C4-C5	-5.03	1.39	1.43
2	SA	1006	G	C5'-C4'	5.03	1.57	1.51
2	SA	1089	G	C1'-N9	-5.03	1.39	1.46
26	LA	550	C	N3-C4	5.03	1.37	1.33
26	LA	878	A	C2'-O2'	5.03	1.48	1.41
26	LA	965	C	C2'-C1'	-5.03	1.47	1.53
26	LA	1025	G	C8-N7	-5.03	1.27	1.30
26	LA	2209	G	C5'-C4'	5.03	1.57	1.51
26	LA	2217	G	C5-C6	-5.03	1.37	1.42
26	LA	2542	A	N9-C4	5.03	1.40	1.37
2	SA	101	A	C8-N7	-5.03	1.28	1.31
2	SA	235	C	C5'-C4'	5.03	1.57	1.51
2	SA	438	U	C3'-C2'	-5.03	1.47	1.52
2	SA	990	C	O3'-P	5.03	1.67	1.61
2	SA	1143	G	O3'-P	-5.03	1.55	1.61
2	SA	1348	U	C4'-C3'	5.03	1.58	1.53
11	SK	90	PRO	N-CD	-5.03	1.40	1.47
26	LA	94	A	N7-C5	-5.03	1.36	1.39
26	LA	157	C	C3'-C2'	5.03	1.58	1.52
26	LA	1264	A	C2'-O2'	-5.03	1.35	1.41
26	LA	1953	A	C6-N1	5.03	1.39	1.35
26	LA	2038	G	N1-C2	5.03	1.41	1.37
26	LA	2130	U	C2-O2	5.03	1.26	1.22
26	LA	2201	G	C2-N2	-5.03	1.29	1.34
26	LA	2375	G	N7-C5	5.03	1.42	1.39
26	LA	2528	U	N3-C4	-5.03	1.33	1.38
33	LZ	34	SER	CB-OG	5.03	1.48	1.42
2	SA	223	A	C5'-C4'	5.02	1.57	1.51
2	SA	561	U	N1-C6	-5.02	1.33	1.38
26	LA	205	G	C2-N2	-5.02	1.29	1.34
26	LA	545	U	C5-C6	-5.02	1.29	1.34
26	LA	953	G	C6-N1	-5.02	1.36	1.39
26	LA	1220	G	N9-C8	-5.02	1.34	1.37
26	LA	1250	G	N7-C5	-5.02	1.36	1.39
26	LA	1288	G	N1-C2	-5.02	1.33	1.37
26	LA	1434	A	C6-N1	-5.02	1.32	1.35
26	LA	2627	G	N9-C8	-5.02	1.34	1.37
26	LA	2634	A	C1'-N9	-5.02	1.39	1.46
2	SA	113	G	C2-N3	-5.02	1.28	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	583	A	C5-C4	5.02	1.42	1.38
2	SA	594	U	C4'-C3'	-5.02	1.47	1.52
2	SA	778	G	C3'-C2'	-5.02	1.47	1.52
2	SA	861	G	O3'-P	-5.02	1.55	1.61
2	SA	1011	C	N3-C4	5.02	1.37	1.33
2	SA	1290	G	C2-N3	-5.02	1.28	1.32
11	SK	18	GLY	CA-C	-5.02	1.43	1.51
24	S3	665	TYR	N-CA	-5.02	1.36	1.46
26	LA	219	A	N9-C4	-5.02	1.34	1.37
26	LA	259	G	O3'-P	-5.02	1.55	1.61
26	LA	277	G	C8-N7	5.02	1.33	1.30
26	LA	782	A	P-O5'	5.02	1.64	1.59
26	LA	805	G	C1'-N9	-5.02	1.39	1.46
26	LA	852	U	C5-C6	5.02	1.38	1.34
26	LA	1111	A	C6-N1	5.02	1.39	1.35
26	LA	1218	G	C5'-C4'	5.02	1.57	1.51
26	LA	2635	A	C2'-C1'	-5.02	1.47	1.53
26	LA	2868	A	C4'-O4'	-5.02	1.39	1.45
2	SA	792	A	O3'-P	-5.02	1.55	1.61
2	SA	1396	A	N1-C2	-5.02	1.29	1.34
26	LA	893	C	C3'-O3'	5.02	1.49	1.42
26	LA	1516	G	N9-C8	-5.02	1.34	1.37
26	LA	1587	G	C4'-C3'	-5.02	1.47	1.52
26	LA	1828	G	P-O5'	-5.02	1.54	1.59
26	LA	2606	C	C4'-C3'	-5.02	1.47	1.52
2	SA	179	A	C8-N7	5.02	1.35	1.31
2	SA	403	C	C2-N3	-5.02	1.31	1.35
2	SA	631	C	N1-C6	5.02	1.40	1.37
2	SA	1400	C	C2-O2	5.02	1.28	1.24
4	S2	40	C	C2-N3	-5.02	1.31	1.35
4	S2	69	C	N3-C4	-5.02	1.30	1.33
10	SJ	31	ARG	CD-NE	5.02	1.54	1.46
26	LA	18	U	N3-C4	-5.02	1.33	1.38
26	LA	315	G	N9-C8	-5.02	1.34	1.37
26	LA	340	A	C5-C6	5.02	1.45	1.41
26	LA	925	A	C4'-O4'	5.02	1.52	1.45
26	LA	1141	U	C3'-C2'	5.02	1.58	1.52
26	LA	2409	G	N7-C5	-5.02	1.36	1.39
26	LA	2587	A	C8-N7	-5.02	1.28	1.31
32	LY	19	ARG	CD-NE	5.02	1.54	1.46
2	SA	95	C	C3'-O3'	5.02	1.49	1.42
2	SA	156	C	C4-N4	-5.02	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	462	G	N7-C5	-5.02	1.36	1.39
2	SA	899	C	C5-C6	-5.02	1.30	1.34
2	SA	1072	G	N9-C4	5.02	1.42	1.38
2	SA	1075	U	O3'-P	-5.02	1.55	1.61
26	LA	126	A	C2'-C1'	5.02	1.58	1.53
26	LA	196	A	N9-C8	-5.02	1.33	1.37
26	LA	502	A	C2'-C1'	-5.02	1.47	1.53
26	LA	977	G	N9-C4	-5.02	1.33	1.38
26	LA	1256	G	C6-O6	-5.02	1.19	1.24
26	LA	2635	A	C6-N6	-5.02	1.29	1.33
26	LA	2820	A	C2'-O2'	-5.02	1.35	1.41
2	SA	380	G	C2-N3	-5.02	1.28	1.32
26	LA	688	U	C5'-C4'	5.02	1.57	1.51
26	LA	831	G	C2-N3	-5.02	1.28	1.32
26	LA	1500	G	N9-C8	5.02	1.41	1.37
26	LA	1976	U	N3-C4	-5.02	1.33	1.38
2	SA	17	U	C5'-C4'	5.01	1.57	1.51
2	SA	147	G	N3-C4	-5.01	1.31	1.35
2	SA	252	U	C4'-O4'	5.01	1.52	1.45
2	SA	288	A	P-O5'	-5.01	1.54	1.59
2	SA	1497	G	N3-C4	-5.01	1.31	1.35
26	LA	226	A	N9-C8	5.01	1.41	1.37
26	LA	334	C	N3-C4	-5.01	1.30	1.33
26	LA	495	G	N1-C2	-5.01	1.33	1.37
26	LA	1014	A	C4'-C3'	5.01	1.58	1.53
26	LA	1266	G	C1'-N9	-5.01	1.39	1.46
26	LA	1379	U	N1-C6	-5.01	1.33	1.38
26	LA	1838	C	C4-N4	-5.01	1.29	1.33
26	LA	2001	C	C5-C6	-5.01	1.30	1.34
26	LA	2342	C	C2'-C1'	-5.01	1.47	1.53
26	LA	2355	G	O4'-C1'	-5.01	1.35	1.41
26	LA	2434	A	P-O5'	5.01	1.64	1.59
26	LA	2490	G	C6-N1	-5.01	1.36	1.39
30	LW	62	ALA	N-CA	-5.01	1.36	1.46
2	SA	306	A	C3'-C2'	-5.01	1.47	1.52
2	SA	438	U	O3'-P	-5.01	1.55	1.61
26	LA	698	C	C1'-N1	-5.01	1.39	1.46
26	LA	1070	A	C3'-O3'	5.01	1.49	1.42
26	LA	1572	A	C5'-C4'	5.01	1.57	1.51
26	LA	1619	G	C3'-O3'	5.01	1.49	1.42
26	LA	1874	C	C5'-C4'	5.01	1.57	1.51
53	LP	94	TYR	CB-CG	-5.01	1.44	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	SA	299	G	O3'-P	-5.01	1.55	1.61
2	SA	367	U	C2-O2	5.01	1.26	1.22
2	SA	899	C	O4'-C1'	5.01	1.48	1.41
2	SA	1196	A	N7-C5	-5.01	1.36	1.39
2	SA	1465	A	C6-N6	5.01	1.38	1.33
3	S1	37	G	C4'-C3'	-5.01	1.47	1.52
11	SK	114	PRO	N-CD	-5.01	1.40	1.47
24	S3	9	TYR	CZ-OH	5.01	1.46	1.37
26	LA	220	G	C1'-N9	-5.01	1.39	1.46
26	LA	538	A	N9-C8	-5.01	1.33	1.37
26	LA	633	A	C6-N6	-5.01	1.29	1.33
26	LA	665	U	N1-C2	-5.01	1.34	1.38
26	LA	1239	G	C2'-C1'	-5.01	1.47	1.53
26	LA	1416	G	C2'-C1'	5.01	1.58	1.53
26	LA	1671	U	C5-C6	-5.01	1.29	1.34
26	LA	1677	A	C2'-O2'	-5.01	1.35	1.41
26	LA	2103	C	C4-N4	5.01	1.38	1.33
26	LA	2311	A	O3'-P	-5.01	1.55	1.61
26	LA	2429	G	C2-N3	5.01	1.36	1.32
26	LA	2467	C	C5-C6	-5.01	1.30	1.34
26	LA	2489	U	N1-C2	-5.01	1.34	1.38
27	LD	160	TYR	CD1-CE1	5.01	1.46	1.39
56	LR	61	ARG	CD-NE	5.01	1.54	1.46
2	SA	63	C	C4-N4	5.01	1.38	1.33
2	SA	100	G	C6-O6	-5.01	1.19	1.24
2	SA	174	A	C2-N3	-5.01	1.29	1.33
2	SA	347	G	N3-C4	-5.01	1.31	1.35
2	SA	1489	G	N9-C4	-5.01	1.33	1.38
20	SD	105	GLY	CA-C	-5.01	1.43	1.51
25	LB	2	G	C2-N3	5.01	1.36	1.32
26	LA	337	C	C4-C5	-5.01	1.39	1.43
26	LA	393	C	O4'-C1'	-5.01	1.35	1.41
26	LA	433	C	C1'-N1	5.01	1.56	1.48
26	LA	1152	C	C4-C5	-5.01	1.39	1.43
26	LA	1886	U	O4'-C1'	-5.01	1.35	1.41
26	LA	2015	A	C5-C4	-5.01	1.35	1.38
26	LA	2598	A	C4'-C3'	-5.01	1.47	1.52
2	SA	1096	C	C2'-O2'	5.01	1.48	1.41
8	SH	26	MET	CG-SD	-5.01	1.68	1.81
24	S3	494	ARG	CD-NE	5.01	1.54	1.46
26	LA	399	U	C2'-C1'	-5.01	1.47	1.53
26	LA	1844	C	C2'-O2'	-5.01	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2515	C	N1-C6	5.01	1.40	1.37
26	LA	2756	U	N3-C4	5.01	1.43	1.38
2	SA	21	G	C6-N1	-5.01	1.36	1.39
2	SA	235	C	C3'-C2'	-5.01	1.47	1.52
2	SA	685	G	N7-C5	-5.01	1.36	1.39
2	SA	733	G	C6-N1	-5.01	1.36	1.39
2	SA	836	G	C2'-C1'	-5.01	1.47	1.53
2	SA	1530	G	C8-N7	5.01	1.33	1.30
3	S1	56	G	N9-C8	-5.01	1.34	1.37
8	SH	74	ILE	CA-CB	-5.01	1.43	1.54
25	LB	23	G	C4'-O4'	5.01	1.52	1.45
25	LB	61	G	C2'-C1'	-5.01	1.47	1.53
26	LA	344	A	N1-C2	5.01	1.38	1.34
26	LA	461	C	P-O5'	-5.01	1.54	1.59
26	LA	573	U	C2-N3	-5.01	1.34	1.37
26	LA	603	A	C8-N7	5.01	1.35	1.31
26	LA	819	A	C8-N7	-5.01	1.28	1.31
26	LA	1597	A	C3'-O3'	5.01	1.49	1.42
26	LA	1646	C	C2'-C1'	-5.01	1.47	1.53
26	LA	2571	U	C4-O4	-5.01	1.19	1.23
50	LL	53	TYR	CZ-OH	5.01	1.46	1.37
57	LS	95	ALA	N-CA	-5.01	1.36	1.46
2	SA	424	G	N9-C4	5.00	1.42	1.38
25	LB	50	A	C3'-O3'	5.00	1.49	1.42
26	LA	103	A	N9-C4	5.00	1.40	1.37
26	LA	1228	G	N9-C8	5.00	1.41	1.37
2	SA	80	A	N9-C4	5.00	1.40	1.37
2	SA	123	U	C2-O2	5.00	1.26	1.22
2	SA	177	G	C4'-C3'	-5.00	1.47	1.52
2	SA	243	A	C4'-O4'	-5.00	1.39	1.45
2	SA	724	G	C2-N2	-5.00	1.29	1.34
2	SA	1131	G	C4'-C3'	-5.00	1.47	1.52
2	SA	1522	U	P-O5'	-5.00	1.54	1.59
2	SA	1532	U	C4-O4	5.00	1.27	1.23
26	LA	75	G	C6-N1	5.00	1.43	1.39
26	LA	84	A	C3'-C2'	-5.00	1.47	1.52
26	LA	180	G	C3'-C2'	-5.00	1.47	1.52
26	LA	757	G	N1-C2	-5.00	1.33	1.37
26	LA	1027	A	C2'-C1'	-5.00	1.47	1.53
26	LA	1115	G	P-O5'	-5.00	1.54	1.59
26	LA	2167	U	C4'-C3'	-5.00	1.47	1.52
26	LA	2396	G	N9-C4	5.00	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LA	2417	C	C4'-C3'	-5.00	1.47	1.52
26	LA	2740	A	P-O5'	5.00	1.64	1.59
39	L3	47	TYR	CG-CD1	5.00	1.45	1.39
2	SA	191	G	C4'-C3'	5.00	1.58	1.53
2	SA	777	A	N3-C4	5.00	1.37	1.34
2	SA	1181	G	C2'-C1'	-5.00	1.47	1.53
2	SA	1527	U	C4-C5	-5.00	1.39	1.43
18	SB	117	GLU	CD-OE2	-5.00	1.20	1.25
26	LA	271	G	P-O5'	-5.00	1.54	1.59
26	LA	371	A	O3'-P	-5.00	1.55	1.61
26	LA	725	G	N7-C5	-5.00	1.36	1.39
26	LA	994	C	C5'-C4'	5.00	1.57	1.51
26	LA	1871	A	N1-C2	-5.00	1.29	1.34
26	LA	2407	A	C6-N1	-5.00	1.32	1.35
26	LA	2435	A	O3'-P	-5.00	1.55	1.61
26	LA	2721	A	C5-C4	5.00	1.42	1.38
28	LU	49	LYS	N-CA	-5.00	1.36	1.46

All (27062) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	SF	44	ARG	NE-CZ-NH1	30.21	135.41	120.30
26	LA	826	U	P-O3'-C3'	28.10	153.42	119.70
26	LA	2451	A	O4'-C1'-N9	27.95	130.56	108.20
26	LA	1005	C	C6-N1-C2	-25.59	110.06	120.30
26	LA	2899	A	N1-C6-N6	23.91	132.94	118.60
26	LA	1568	G	P-O5'-C5'	23.71	158.84	120.90
2	SA	1316	G	P-O3'-C3'	22.89	147.17	119.70
26	LA	453	A	N1-C6-N6	-22.81	104.91	118.60
2	SA	844	G	N1-C6-O6	22.60	133.46	119.90
2	SA	147	G	N1-C6-O6	22.47	133.38	119.90
2	SA	568	G	C5-C6-O6	-21.80	115.52	128.60
26	LA	2648	G	C5-C6-O6	-21.69	115.59	128.60
2	SA	490	C	C6-N1-C2	-21.50	111.70	120.30
2	SA	511	C	C6-N1-C2	-21.29	111.78	120.30
6	SU	17	ARG	NE-CZ-NH2	-21.27	109.66	120.30
2	SA	765	G	C5-C6-O6	-21.18	115.89	128.60
2	SA	147	G	C5-C6-O6	-21.11	115.93	128.60
2	SA	765	G	N1-C6-O6	20.93	132.46	119.90
26	LA	1930	G	N1-C6-O6	20.90	132.44	119.90
24	S3	474	ARG	NE-CZ-NH1	20.86	130.73	120.30
2	SA	119	A	P-O3'-C3'	20.86	144.73	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	SU	17	ARG	NE-CZ-NH1	20.77	130.69	120.30
26	LA	1758	U	C2-N3-C4	-20.67	114.60	127.00
26	LA	2469	A	N1-C6-N6	-20.63	106.22	118.60
26	LA	974	G	P-O3'-C3'	20.53	144.33	119.70
26	LA	2500	U	P-O3'-C3'	20.49	144.28	119.70
30	LW	81	ARG	NE-CZ-NH1	20.46	130.53	120.30
52	LO	91	TYR	CB-CG-CD1	-20.04	108.98	121.00
26	LA	574	A	O4'-C1'-N9	20.04	124.23	108.20
2	SA	412	A	P-O3'-C3'	19.99	143.69	119.70
26	LA	2816	G	N9-C4-C5	-19.86	97.45	105.40
2	SA	361	G	C5-C6-O6	-19.85	116.69	128.60
2	SA	224	U	P-O3'-C3'	19.79	143.44	119.70
26	LA	776	G	P-O3'-C3'	19.68	143.32	119.70
26	LA	1649	G	C5-C6-O6	-19.65	116.81	128.60
2	SA	324	G	C5-C6-O6	-19.47	116.92	128.60
26	LA	2479	U	C2-N3-C4	-19.44	115.34	127.00
26	LA	1146	C	C6-N1-C2	-19.36	112.56	120.30
6	SU	20	ARG	NE-CZ-NH1	19.27	129.93	120.30
2	SA	337	G	N1-C6-O6	19.25	131.45	119.90
2	SA	533	A	N1-C6-N6	-19.25	107.05	118.60
26	LA	653	U	P-O3'-C3'	19.25	142.79	119.70
26	LA	1628	G	C5-C6-O6	-19.20	117.08	128.60
2	SA	674	G	N1-C6-O6	19.11	131.37	119.90
27	LD	257	ARG	NE-CZ-NH1	19.08	129.84	120.30
26	LA	537	G	C5-C6-O6	-19.05	117.17	128.60
2	SA	1488	G	N1-C6-O6	19.02	131.31	119.90
2	SA	674	G	C5-C6-O6	-19.00	117.20	128.60
26	LA	450	G	C5-C6-O6	-18.98	117.21	128.60
2	SA	841	C	P-O3'-C3'	18.94	142.43	119.70
34	L0	52	ARG	NE-CZ-NH1	-18.92	110.84	120.30
26	LA	1167	C	O4'-C1'-N1	18.88	123.31	108.20
26	LA	2708	G	C5-C6-O6	-18.64	117.42	128.60
26	LA	2648	G	N1-C6-O6	18.62	131.07	119.90
45	LG	79	ARG	NE-CZ-NH1	-18.59	111.01	120.30
13	SM	92	ARG	NE-CZ-NH1	18.59	129.59	120.30
2	SA	1012	A	N1-C2-N3	-18.51	120.05	129.30
26	LA	189	G	C5-C6-O6	-18.49	117.51	128.60
25	LB	34	A	P-O3'-C3'	18.44	141.83	119.70
2	SA	1524	C	C6-N1-C2	-18.43	112.93	120.30
2	SA	3	A	P-O3'-C3'	18.42	141.81	119.70
26	LA	1921	G	O4'-C1'-N9	18.42	122.94	108.20
2	SA	819	A	O4'-C1'-N9	18.35	122.88	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2516	A	P-O5'-C5'	18.34	150.25	120.90
26	LA	1080	A	N1-C6-N6	-18.32	107.61	118.60
26	LA	2517	C	C6-N1-C2	-18.29	112.99	120.30
26	LA	100	U	O4'-C1'-N1	18.26	122.81	108.20
26	LA	822	G	C5-C6-O6	-18.26	117.64	128.60
2	SA	764	C	P-O3'-C3'	18.17	141.50	119.70
2	SA	1362	A	O4'-C1'-N9	18.16	122.73	108.20
26	LA	18	U	O4'-C1'-N1	18.14	122.71	108.20
26	LA	1223	G	C5-C6-O6	-18.11	117.74	128.60
26	LA	1409	U	P-O5'-C5'	18.10	149.86	120.90
26	LA	900	A	P-O3'-C3'	18.07	141.39	119.70
26	LA	2107	G	C8-N9-C4	18.06	113.62	106.40
3	S1	23	C	P-O3'-C3'	18.02	141.33	119.70
26	LA	1731	G	P-O3'-C3'	18.02	141.32	119.70
2	SA	271	C	P-O3'-C3'	17.99	141.29	119.70
26	LA	2287	A	P-O3'-C3'	17.97	141.26	119.70
26	LA	1556	C	N3-C4-C5	-17.92	114.73	121.90
26	LA	1988	G	C5-C6-O6	-17.88	117.87	128.60
2	SA	1257	A	P-O3'-C3'	17.85	141.12	119.70
26	LA	2832	U	P-O3'-C3'	17.78	141.03	119.70
14	SN	89	ARG	NE-CZ-NH1	17.74	129.17	120.30
26	LA	2163	A	O4'-C1'-N9	17.74	122.39	108.20
26	LA	113	U	O4'-C1'-N1	17.70	122.36	108.20
26	LA	791	C	N3-C4-C5	-17.70	114.82	121.90
26	LA	1961	C	C6-N1-C2	-17.64	113.24	120.30
26	LA	184	C	C6-N1-C2	-17.64	113.24	120.30
26	LA	776	G	C5-C6-O6	-17.62	118.03	128.60
26	LA	468	G	C5-C6-O6	-17.59	118.05	128.60
58	LT	80	ARG	NE-CZ-NH1	17.54	129.07	120.30
26	LA	1761	C	P-O3'-C3'	17.46	140.65	119.70
24	S3	100	ARG	NE-CZ-NH2	-17.44	111.58	120.30
20	SD	46	ARG	NE-CZ-NH1	17.42	129.01	120.30
2	SA	1536	C	N3-C4-C5	-17.42	114.93	121.90
26	LA	1074	G	N1-C6-O6	17.42	130.35	119.90
3	S1	20	G	C5-C6-O6	-17.36	118.19	128.60
5	ST	23	ARG	NE-CZ-NH1	17.28	128.94	120.30
2	SA	844	G	C5-C6-O6	-17.26	118.24	128.60
2	SA	932	C	N3-C4-C5	17.20	128.78	121.90
2	SA	1082	A	N1-C6-N6	-17.19	108.28	118.60
24	S3	254	ARG	NE-CZ-NH2	-17.13	111.73	120.30
26	LA	1988	G	N1-C6-O6	17.12	130.17	119.90
26	LA	101	A	O4'-C1'-N9	17.08	121.86	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1872	A	C8-N9-C4	-17.06	98.98	105.80
26	LA	2803	G	C5-C6-O6	-17.03	118.38	128.60
24	S3	254	ARG	NE-CZ-NH1	17.03	128.81	120.30
2	SA	1207	G	P-O3'-C3'	17.02	140.13	119.70
26	LA	1042	G	N9-C4-C5	-17.02	98.59	105.40
26	LA	538	A	N1-C6-N6	-17.00	108.40	118.60
2	SA	791	G	O4'-C1'-N9	16.98	121.78	108.20
2	SA	972	C	O4'-C1'-N1	16.96	121.77	108.20
54	LM	108	ARG	NE-CZ-NH1	16.93	128.77	120.30
26	LA	2383	G	N1-C6-O6	16.93	130.06	119.90
26	LA	126	A	O4'-C1'-N9	16.91	121.73	108.20
2	SA	211	G	O4'-C1'-N9	16.90	121.72	108.20
3	S1	21	U	O4'-C1'-N1	16.89	121.71	108.20
26	LA	455	C	P-O3'-C3'	16.85	139.92	119.70
26	LA	2708	G	N1-C6-O6	16.84	130.00	119.90
26	LA	1930	G	C5-C6-O6	-16.83	118.50	128.60
2	SA	1317	C	C6-N1-C2	-16.77	113.59	120.30
26	LA	609	A	N1-C6-N6	16.69	128.62	118.60
26	LA	2891	U	O4'-C1'-N1	16.69	121.55	108.20
26	LA	2107	G	N7-C8-N9	-16.66	104.77	113.10
19	SC	155	ARG	NE-CZ-NH1	16.64	128.62	120.30
2	SA	321	A	N9-C4-C5	16.62	112.45	105.80
26	LA	1489	C	C6-N1-C2	-16.62	113.65	120.30
52	LO	91	TYR	CB-CG-CD2	16.61	130.97	121.00
26	LA	508	A	N1-C2-N3	-16.61	121.00	129.30
26	LA	2212	A	N1-C6-N6	-16.59	108.65	118.60
26	LA	2272	U	C2-N3-C4	-16.59	117.05	127.00
24	S3	436	ARG	NE-CZ-NH2	-16.58	112.01	120.30
26	LA	372	G	O4'-C1'-N9	16.58	121.46	108.20
26	LA	2899	A	C5-C6-N6	-16.58	110.44	123.70
26	LA	974	G	N1-C6-O6	16.57	129.84	119.90
2	SA	795	C	O4'-C1'-N1	16.56	121.45	108.20
26	LA	776	G	N1-C6-O6	16.55	129.83	119.90
26	LA	937	C	C6-N1-C2	-16.50	113.70	120.30
19	SC	87	ARG	NE-CZ-NH1	16.42	128.51	120.30
26	LA	140	C	O4'-C1'-N1	16.41	121.32	108.20
3	S1	22	G	P-O3'-C3'	16.39	139.37	119.70
26	LA	1890	A	C5-C6-N1	16.39	125.90	117.70
2	SA	568	G	N1-C6-O6	16.39	129.73	119.90
26	LA	1875	G	N1-C6-O6	16.38	129.73	119.90
26	LA	1507	C	N3-C2-O2	-16.35	110.45	121.90
26	LA	2290	G	C5-C6-O6	-16.35	118.79	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	209	U	P-O3'-C3'	16.35	139.31	119.70
57	LS	32	ARG	NE-CZ-NH2	16.33	128.47	120.30
26	LA	1933	G	C5-C6-O6	-16.33	118.80	128.60
4	S2	60	A	N9-C4-C5	-16.32	99.27	105.80
2	SA	1202	U	O4'-C1'-N1	16.32	121.26	108.20
26	LA	2462	C	C6-N1-C2	-16.28	113.79	120.30
26	LA	63	A	C8-N9-C4	-16.26	99.30	105.80
26	LA	1708	C	C6-N1-C2	-16.26	113.80	120.30
4	S2	32	G	N9-C4-C5	16.21	111.88	105.40
26	LA	880	G	P-O5'-C5'	16.20	146.82	120.90
26	LA	1210	G	P-O3'-C3'	16.15	139.08	119.70
2	SA	956	U	P-O3'-C3'	16.13	139.06	119.70
2	SA	667	G	C5-C6-O6	-16.13	118.92	128.60
26	LA	948	C	C6-N1-C2	-16.11	113.86	120.30
2	SA	221	C	C6-N1-C2	-16.11	113.86	120.30
26	LA	2872	A	N1-C6-N6	-16.10	108.94	118.60
26	LA	1878	G	N1-C6-O6	-16.08	110.25	119.90
26	LA	670	A	N1-C6-N6	-16.07	108.96	118.60
2	SA	1002	G	C5-C6-O6	-16.06	118.96	128.60
26	LA	370	G	P-O3'-C3'	16.06	138.97	119.70
24	S3	637	ARG	NE-CZ-NH2	-16.05	112.28	120.30
26	LA	2425	A	N1-C6-N6	-16.05	108.97	118.60
2	SA	1128	C	C6-N1-C2	-16.04	113.88	120.30
20	SD	187	ARG	NE-CZ-NH2	-16.03	112.29	120.30
26	LA	2451	A	P-O5'-C5'	16.02	146.53	120.90
13	SM	85	TYR	CB-CG-CD1	-16.01	111.39	121.00
26	LA	1540	G	C5-C6-O6	-15.99	119.00	128.60
26	LA	2587	A	N1-C6-N6	-15.98	109.01	118.60
2	SA	824	G	C5-C6-O6	-15.97	119.02	128.60
13	SM	97	ARG	NE-CZ-NH2	-15.96	112.32	120.30
26	LA	993	G	C5-C6-O6	-15.94	119.04	128.60
23	SR	2	ARG	NE-CZ-NH1	15.92	128.26	120.30
26	LA	2679	A	N9-C4-C5	-15.90	99.44	105.80
26	LA	577	G	C5-C6-O6	-15.88	119.07	128.60
2	SA	1417	G	P-O3'-C3'	15.88	138.75	119.70
26	LA	1890	A	N1-C6-N6	-15.86	109.08	118.60
2	SA	840	C	N3-C4-C5	15.84	128.24	121.90
26	LA	1062	G	N1-C6-O6	15.82	129.39	119.90
3	S1	38	G	C5-C6-O6	-15.82	119.11	128.60
26	LA	981	A	C8-N9-C4	15.81	112.12	105.80
26	LA	777	G	N1-C6-O6	15.81	129.38	119.90
2	SA	271	C	C6-N1-C2	-15.80	113.98	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1053	C	C6-N1-C2	-15.76	114.00	120.30
2	SA	184	G	N1-C6-O6	15.75	129.35	119.90
26	LA	2096	C	O4'-C1'-N1	15.74	120.79	108.20
26	LA	669	G	P-O3'-C3'	15.73	138.58	119.70
20	SD	103	ARG	NE-CZ-NH1	15.73	128.17	120.30
41	L5	19	ARG	NE-CZ-NH1	-15.72	112.44	120.30
26	LA	141	G	O4'-C1'-N9	15.71	120.77	108.20
2	SA	853	C	O4'-C1'-N1	15.71	120.77	108.20
26	LA	1223	G	N1-C6-O6	15.70	129.32	119.90
26	LA	1150	C	O4'-C1'-N1	15.70	120.76	108.20
52	LO	40	ARG	NE-CZ-NH2	15.70	128.15	120.30
26	LA	1022	G	O4'-C1'-N9	15.68	120.74	108.20
26	LA	2492	U	O4'-C1'-N1	15.65	120.72	108.20
26	LA	1586	A	N1-C6-N6	-15.63	109.22	118.60
26	LA	909	A	P-O3'-C3'	15.60	138.42	119.70
2	SA	540	G	C5-C6-O6	-15.60	119.24	128.60
26	LA	2278	A	N9-C4-C5	15.60	112.04	105.80
4	S2	20	G	P-O3'-C3'	15.59	138.41	119.70
26	LA	2132	U	C2-N3-C4	-15.59	117.65	127.00
32	LY	13	ARG	NE-CZ-NH2	-15.54	112.53	120.30
2	SA	1345	U	O4'-C1'-N1	15.53	120.62	108.20
26	LA	2129	C	C6-N1-C2	-15.53	114.09	120.30
30	LW	93	ARG	NE-CZ-NH1	15.53	128.06	120.30
2	SA	156	C	O4'-C1'-N1	15.53	120.62	108.20
26	LA	1074	G	C5-C6-O6	-15.52	119.29	128.60
2	SA	411	A	P-O3'-C3'	15.51	138.32	119.70
2	SA	945	G	C5-C6-O6	-15.51	119.29	128.60
26	LA	974	G	C5-C6-O6	-15.51	119.29	128.60
2	SA	725	G	C5-C6-O6	-15.50	119.30	128.60
26	LA	29	U	P-O3'-C3'	15.50	138.29	119.70
4	S2	54	G	N1-C6-O6	15.49	129.20	119.90
26	LA	1706	C	O4'-C1'-N1	15.49	120.59	108.20
54	LM	105	ARG	NE-CZ-NH2	-15.49	112.55	120.30
26	LA	712	G	N3-C2-N2	15.49	130.75	119.90
26	LA	2581	G	P-O3'-C3'	15.47	138.27	119.70
26	LA	1746	A	N1-C6-N6	-15.46	109.32	118.60
2	SA	811	C	C6-N1-C2	-15.46	114.12	120.30
26	LA	2803	G	N1-C6-O6	15.40	129.14	119.90
2	SA	995	C	P-O5'-C5'	15.39	145.53	120.90
10	SJ	68	ARG	NE-CZ-NH2	-15.39	112.60	120.30
26	LA	2508	G	C8-N9-C4	-15.39	100.25	106.40
26	LA	574	A	C1'-O4'-C4'	-15.37	97.60	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	717	C	O4'-C1'-N1	15.34	120.47	108.20
26	LA	2436	G	C4-C5-N7	15.33	116.93	110.80
26	LA	2753	A	C5-N7-C8	-15.32	96.24	103.90
26	LA	1929	G	N9-C4-C5	-15.31	99.28	105.40
26	LA	2498	C	C6-N1-C2	-15.31	114.18	120.30
26	LA	367	G	C5-C6-O6	-15.31	119.42	128.60
26	LA	2056	G	C5-C6-O6	-15.30	119.42	128.60
26	LA	93	G	N1-C6-O6	15.30	129.08	119.90
26	LA	2290	G	N1-C6-O6	15.30	129.08	119.90
26	LA	2694	G	C5-C6-O6	-15.29	119.43	128.60
26	LA	2508	G	N7-C8-N9	15.25	120.72	113.10
26	LA	2433	A	C8-N9-C4	-15.24	99.70	105.80
26	LA	1684	G	C5-C6-O6	-15.24	119.46	128.60
26	LA	2336	A	N1-C6-N6	15.21	127.73	118.60
26	LA	1192	G	C5-C6-O6	-15.20	119.48	128.60
2	SA	1141	C	O4'-C1'-N1	15.18	120.35	108.20
26	LA	1574	C	C6-N1-C2	-15.18	114.23	120.30
26	LA	2609	U	P-O3'-C3'	15.17	137.91	119.70
26	LA	1628	G	N1-C6-O6	15.16	129.00	119.90
26	LA	2158	A	N1-C6-N6	-15.16	109.50	118.60
26	LA	1990	C	C2-N3-C4	-15.15	112.32	119.90
6	SU	54	ARG	NE-CZ-NH2	-15.12	112.74	120.30
26	LA	991	C	C6-N1-C2	-15.12	114.25	120.30
26	LA	964	C	C2-N3-C4	-15.11	112.35	119.90
26	LA	246	C	N1-C2-O2	15.11	127.96	118.90
26	LA	2440	C	C6-N1-C2	-15.11	114.26	120.30
41	L5	14	ARG	NE-CZ-NH1	-15.09	112.75	120.30
26	LA	2400	G	C4-C5-N7	15.09	116.83	110.80
26	LA	2808	G	P-O3'-C3'	15.08	137.80	119.70
26	LA	2665	A	O4'-C1'-N9	15.07	120.26	108.20
26	LA	2256	G	O4'-C1'-N9	15.07	120.26	108.20
26	LA	2048	G	C8-N9-C4	-15.06	100.37	106.40
26	LA	2078	C	C6-N1-C2	-15.06	114.27	120.30
25	LB	81	G	C5-C6-O6	-15.06	119.56	128.60
2	SA	1304	G	C8-N9-C4	-15.05	100.38	106.40
26	LA	2642	G	C8-N9-C4	-15.04	100.38	106.40
2	SA	1362	A	N1-C6-N6	-15.03	109.58	118.60
26	LA	2808	G	O4'-C1'-N9	15.02	120.22	108.20
41	L5	3	ARG	NE-CZ-NH2	15.01	127.81	120.30
2	SA	1055	A	N1-C6-N6	-15.01	109.59	118.60
26	LA	2867	G	P-O3'-C3'	15.00	137.70	119.70
2	SA	1000	A	P-O3'-C3'	14.99	137.69	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1296	C	C6-N1-C2	-14.99	114.30	120.30
26	LA	229	C	N3-C4-C5	-14.98	115.91	121.90
26	LA	463	G	C8-N9-C4	-14.98	100.41	106.40
25	LB	68	C	O4'-C1'-N1	14.98	120.18	108.20
2	SA	1392	G	C5-C6-O6	-14.97	119.62	128.60
19	SC	135	ARG	NE-CZ-NH1	14.97	127.79	120.30
25	LB	109	A	N1-C6-N6	-14.95	109.63	118.60
26	LA	1272	A	O4'-C1'-N9	14.95	120.16	108.20
26	LA	1349	C	C6-N1-C2	-14.95	114.32	120.30
2	SA	1434	A	N1-C6-N6	14.95	127.57	118.60
26	LA	125	A	O4'-C1'-N9	14.94	120.15	108.20
8	SH	12	ARG	NE-CZ-NH2	-14.91	112.84	120.30
2	SA	668	G	C5-C6-O6	-14.90	119.66	128.60
26	LA	1378	A	N1-C6-N6	-14.90	109.66	118.60
26	LA	1080	A	C5-C6-N1	14.89	125.15	117.70
26	LA	2422	C	C2-N3-C4	-14.89	112.45	119.90
2	SA	87	C	N3-C4-C5	-14.89	115.94	121.90
26	LA	1338	G	C8-N9-C4	-14.88	100.45	106.40
26	LA	1332	G	C8-N9-C4	-14.87	100.45	106.40
26	LA	1953	A	O4'-C1'-N9	14.86	120.09	108.20
50	LL	27	ARG	NE-CZ-NH1	14.85	127.72	120.30
26	LA	1934	C	C6-N1-C2	-14.84	114.36	120.30
26	LA	114	U	P-O5'-C5'	14.84	144.63	120.90
26	LA	1176	U	P-O3'-C3'	-14.83	101.90	119.70
26	LA	2271	G	C8-N9-C4	-14.83	100.47	106.40
26	LA	1832	C	C5-C6-N1	14.82	128.41	121.00
26	LA	1275	A	C1'-O4'-C4'	-14.81	98.05	109.90
2	SA	58	C	C6-N1-C2	-14.80	114.38	120.30
26	LA	777	G	C5-C6-O6	-14.79	119.73	128.60
2	SA	1518	A	C5-N7-C8	-14.77	96.51	103.90
26	LA	798	G	N7-C8-N9	-14.76	105.72	113.10
26	LA	1322	A	N1-C2-N3	-14.76	121.92	129.30
26	LA	2572	A	P-O3'-C3'	14.76	137.41	119.70
2	SA	45	G	C5-C6-O6	-14.76	119.75	128.60
26	LA	2844	G	C5-N7-C8	-14.75	96.92	104.30
26	LA	2160	C	C6-N1-C2	-14.75	114.40	120.30
26	LA	1287	A	C5-C6-N6	14.74	135.49	123.70
2	SA	1497	G	O4'-C1'-N9	14.74	119.99	108.20
2	SA	243	A	P-O3'-C3'	14.73	137.37	119.70
26	LA	1518	C	O4'-C1'-N1	14.72	119.97	108.20
2	SA	1045	C	C5-C4-N4	-14.71	109.90	120.20
2	SA	428	G	N1-C6-O6	14.71	128.72	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	283	G	N1-C6-O6	14.70	128.72	119.90
26	LA	537	G	N1-C6-O6	14.69	128.72	119.90
2	SA	1037	C	C2-N3-C4	-14.69	112.55	119.90
2	SA	227	G	P-O3'-C3'	14.66	137.29	119.70
26	LA	1592	C	O4'-C1'-N1	14.66	119.93	108.20
26	LA	1452	G	C8-N9-C4	14.65	112.26	106.40
26	LA	1901	A	O4'-C1'-N9	14.64	119.92	108.20
2	SA	979	C	N3-C4-C5	14.63	127.75	121.90
26	LA	2133	G	P-O3'-C3'	14.63	137.26	119.70
2	SA	518	C	P-O3'-C3'	14.62	137.25	119.70
26	LA	2872	A	C5-C6-N6	14.62	135.40	123.70
26	LA	164	C	O4'-C1'-N1	14.60	119.88	108.20
26	LA	1978	A	N1-C6-N6	14.60	127.36	118.60
2	SA	42	G	O4'-C1'-N9	14.58	119.86	108.20
30	LW	21	ARG	NE-CZ-NH1	14.58	127.59	120.30
26	LA	267	C	C6-N1-C2	-14.57	114.47	120.30
2	SA	1136	C	O4'-C1'-N1	14.56	119.85	108.20
2	SA	6	G	N1-C6-O6	14.55	128.63	119.90
3	S1	24	A	N1-C6-N6	-14.55	109.87	118.60
11	SK	52	ARG	NE-CZ-NH1	14.52	127.56	120.30
26	LA	2427	C	P-O5'-C5'	14.52	144.13	120.90
2	SA	97	G	N1-C6-O6	14.52	128.61	119.90
26	LA	2058	A	O4'-C1'-N9	14.51	119.81	108.20
24	S3	284	TYR	CB-CG-CD2	14.50	129.70	121.00
2	SA	833	G	C5-C6-O6	-14.50	119.90	128.60
2	SA	459	A	N1-C6-N6	14.50	127.30	118.60
26	LA	340	A	N1-C6-N6	-14.49	109.91	118.60
2	SA	182	A	O4'-C1'-N9	14.49	119.79	108.20
26	LA	2358	A	C6-N1-C2	-14.49	109.91	118.60
26	LA	1964	G	P-O3'-C3'	-14.46	102.35	119.70
26	LA	2260	C	O4'-C1'-N1	14.46	119.77	108.20
2	SA	1344	C	O3'-P-O5'	14.46	131.47	104.00
26	LA	1616	A	N1-C6-N6	14.45	127.27	118.60
25	LB	14	U	C5-C6-N1	14.44	129.92	122.70
26	LA	885	C	C5-C6-N1	14.43	128.22	121.00
26	LA	2579	C	P-O3'-C3'	14.43	137.02	119.70
2	SA	1002	G	C4-C5-N7	14.43	116.57	110.80
26	LA	2165	C	C6-N1-C2	-14.43	114.53	120.30
19	SC	155	ARG	NE-CZ-NH2	-14.42	113.09	120.30
26	LA	2531	A	N1-C6-N6	14.41	127.25	118.60
2	SA	458	U	O4'-C1'-N1	14.40	119.72	108.20
13	SM	85	TYR	CB-CG-CD2	14.39	129.63	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	394	C	N3-C4-N4	14.39	128.07	118.00
26	LA	2581	G	O4'-C1'-N9	14.39	119.71	108.20
26	LA	1085	A	N1-C6-N6	14.38	127.23	118.60
2	SA	184	G	C5-C6-O6	-14.38	119.97	128.60
26	LA	289	G	C2-N3-C4	14.36	119.08	111.90
26	LA	280	U	C5-C4-O4	-14.36	117.28	125.90
14	SN	8	ARG	NE-CZ-NH2	-14.36	113.12	120.30
2	SA	324	G	N1-C6-O6	14.35	128.51	119.90
23	SR	72	ARG	NE-CZ-NH2	-14.35	113.12	120.30
26	LA	101	A	P-O3'-C3'	14.35	136.92	119.70
2	SA	151	A	C8-N9-C4	-14.34	100.06	105.80
26	LA	2353	G	C5-C6-O6	-14.34	120.00	128.60
26	LA	2363	G	N9-C4-C5	-14.33	99.67	105.40
2	SA	900	A	N9-C4-C5	14.33	111.53	105.80
26	LA	367	G	N1-C6-O6	14.32	128.49	119.90
56	LR	52	ARG	NE-CZ-NH2	14.32	127.46	120.30
26	LA	1966	A	O4'-C1'-N9	14.32	119.66	108.20
2	SA	899	C	P-O3'-C3'	14.30	136.86	119.70
26	LA	1901	A	N1-C6-N6	-14.29	110.03	118.60
26	LA	100	U	P-O3'-C3'	14.27	136.82	119.70
2	SA	1101	A	C2-N3-C4	14.26	117.73	110.60
2	SA	1043	G	O4'-C1'-N9	14.25	119.60	108.20
26	LA	274	C	N3-C4-C5	-14.25	116.20	121.90
2	SA	1504	G	C5-C6-O6	-14.24	120.05	128.60
26	LA	1976	U	C2-N3-C4	-14.24	118.45	127.00
52	LO	18	ARG	NE-CZ-NH2	14.24	127.42	120.30
26	LA	1912	A	P-O5'-C5'	14.24	143.68	120.90
2	SA	485	U	O4'-C1'-N1	14.23	119.59	108.20
26	LA	889	C	C6-N1-C2	-14.22	114.61	120.30
26	LA	353	C	O4'-C1'-N1	14.22	119.58	108.20
2	SA	572	A	N1-C6-N6	14.21	127.13	118.60
26	LA	877	A	N1-C6-N6	-14.21	110.07	118.60
26	LA	2185	U	O4'-C1'-N1	14.21	119.57	108.20
26	LA	2338	C	O4'-C1'-N1	14.21	119.57	108.20
25	LB	66	A	P-O3'-C3'	14.18	136.72	119.70
26	LA	298	G	P-O3'-C3'	14.18	136.72	119.70
2	SA	1110	A	N1-C6-N6	-14.18	110.09	118.60
2	SA	848	C	O4'-C1'-N1	14.18	119.54	108.20
26	LA	1453	A	O4'-C1'-N9	14.15	119.52	108.20
2	SA	852	G	C5-C6-O6	-14.14	120.12	128.60
26	LA	1547	C	C6-N1-C2	-14.14	114.64	120.30
26	LA	2889	C	P-O5'-C5'	14.14	143.52	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	475	C	C6-N1-C2	-14.12	114.65	120.30
26	LA	595	C	N3-C4-C5	-14.12	116.25	121.90
2	SA	1476	A	N1-C6-N6	-14.09	110.14	118.60
2	SA	951	G	N1-C6-O6	14.09	128.35	119.90
26	LA	19	A	O4'-C1'-N9	14.09	119.47	108.20
26	LA	75	G	N1-C6-O6	14.09	128.35	119.90
26	LA	189	G	N1-C6-O6	14.08	128.35	119.90
22	SF	25	TYR	CB-CG-CD2	-14.07	112.56	121.00
2	SA	310	G	C5-C6-O6	-14.07	120.16	128.60
2	SA	1131	G	N1-C6-O6	14.07	128.34	119.90
26	LA	2223	G	N9-C4-C5	14.07	111.03	105.40
26	LA	2105	U	P-O5'-C5'	14.06	143.40	120.90
26	LA	1420	A	C8-N9-C4	-14.05	100.18	105.80
26	LA	443	A	O4'-C1'-N9	14.05	119.44	108.20
26	LA	798	G	C5-N7-C8	14.04	111.32	104.30
26	LA	1114	C	C6-N1-C2	-14.04	114.68	120.30
26	LA	806	C	O4'-C1'-N1	14.04	119.43	108.20
2	SA	494	G	C5-C6-O6	-14.04	120.18	128.60
26	LA	115	C	C6-N1-C2	-14.02	114.69	120.30
26	LA	2377	A	N1-C6-N6	-14.01	110.19	118.60
2	SA	1440	U	P-O3'-C3'	14.01	136.51	119.70
2	SA	1101	A	N1-C2-N3	-14.00	122.30	129.30
37	LC	162	ARG	NE-CZ-NH1	13.98	127.29	120.30
26	LA	2446	G	C5-C6-O6	-13.97	120.22	128.60
2	SA	4	U	P-O3'-C3'	13.97	136.46	119.70
2	SA	975	A	C8-N9-C4	13.96	111.39	105.80
54	LM	105	ARG	NE-CZ-NH1	13.96	127.28	120.30
26	LA	2476	A	C2-N3-C4	-13.96	103.62	110.60
2	SA	308	C	O4'-C1'-N1	13.96	119.37	108.20
2	SA	1358	U	O4'-C4'-C3'	-13.96	90.04	104.00
54	LM	112	PHE	CB-CG-CD2	-13.95	111.03	120.80
26	LA	1000	A	N1-C6-N6	-13.95	110.23	118.60
26	LA	1586	A	C5-C6-N6	13.95	134.86	123.70
26	LA	359	G	N1-C6-O6	13.95	128.27	119.90
52	LO	66	ARG	NE-CZ-NH1	13.94	127.27	120.30
2	SA	1146	A	N1-C6-N6	-13.93	110.24	118.60
19	SC	87	ARG	NE-CZ-NH2	-13.93	113.33	120.30
2	SA	851	G	N1-C6-O6	13.93	128.26	119.90
26	LA	1176	U	O4'-C1'-N1	13.92	119.34	108.20
26	LA	1275	A	O4'-C1'-N9	13.92	119.33	108.20
2	SA	331	G	N1-C6-O6	13.91	128.25	119.90
4	S2	15	G	N9-C4-C5	13.91	110.96	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	211	C	C6-N1-C2	-13.91	114.74	120.30
26	LA	570	G	N1-C6-O6	13.91	128.24	119.90
3	S1	54	U	C2-N3-C4	-13.90	118.66	127.00
2	SA	1302	C	P-O3'-C3'	13.89	136.36	119.70
2	SA	1407	C	C6-N1-C2	-13.88	114.75	120.30
2	SA	1299	A	O4'-C1'-N9	13.88	119.31	108.20
2	SA	1517	G	N1-C6-O6	-13.88	111.57	119.90
26	LA	283	G	C5-C6-O6	-13.88	120.27	128.60
26	LA	1960	A	N1-C2-N3	13.87	136.24	129.30
2	SA	766	A	C8-N9-C4	-13.87	100.25	105.80
26	LA	387	U	O4'-C1'-N1	13.87	119.29	108.20
25	LB	108	A	C8-N9-C4	13.86	111.34	105.80
26	LA	81	G	N1-C6-O6	13.85	128.21	119.90
26	LA	1598	A	N1-C6-N6	-13.85	110.29	118.60
2	SA	533	A	C5-C6-N6	13.84	134.78	123.70
2	SA	321	A	N1-C6-N6	13.84	126.90	118.60
2	SA	389	A	N1-C6-N6	-13.84	110.30	118.60
26	LA	400	G	C5-C6-O6	-13.83	120.30	128.60
2	SA	699	C	C6-N1-C2	-13.83	114.77	120.30
2	SA	557	G	N1-C6-O6	13.82	128.19	119.90
2	SA	59	A	O4'-C1'-N9	13.81	119.25	108.20
26	LA	1837	C	C6-N1-C2	-13.81	114.78	120.30
2	SA	1150	A	N1-C6-N6	-13.79	110.33	118.60
26	LA	1069	A	P-O3'-C3'	13.79	136.25	119.70
26	LA	869	G	C5-C6-O6	-13.79	120.33	128.60
26	LA	1804	C	C5-C6-N1	13.78	127.89	121.00
26	LA	2409	G	N1-C6-O6	13.78	128.17	119.90
2	SA	393	A	O4'-C1'-N9	13.77	119.22	108.20
2	SA	449	G	C5-C6-O6	-13.77	120.34	128.60
26	LA	1968	G	C5-C6-O6	-13.77	120.34	128.60
26	LA	1449	G	C8-N9-C4	13.76	111.91	106.40
26	LA	2353	G	C8-N9-C4	13.76	111.91	106.40
2	SA	941	G	N3-C2-N2	-13.76	110.27	119.90
26	LA	2295	C	O4'-C1'-N1	13.75	119.20	108.20
2	SA	360	G	C5-C6-O6	-13.74	120.35	128.60
2	SA	372	C	P-O3'-C3'	13.74	136.19	119.70
2	SA	776	G	P-O3'-C3'	13.74	136.19	119.70
12	SL	8	ARG	NE-CZ-NH2	13.72	127.16	120.30
26	LA	1849	G	N1-C6-O6	13.71	128.13	119.90
26	LA	247	G	N1-C6-O6	13.71	128.13	119.90
4	S2	76	C	P-O3'-C3'	13.71	136.15	119.70
2	SA	647	C	C4-C5-C6	13.70	124.25	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	ST	35	TYR	CB-CG-CD1	-13.70	112.78	121.00
26	LA	332	A	N1-C6-N6	-13.70	110.38	118.60
26	LA	1205	A	P-O3'-C3'	13.70	136.14	119.70
26	LA	2595	G	C5-C6-O6	-13.69	120.39	128.60
2	SA	1229	A	C8-N9-C4	-13.69	100.33	105.80
26	LA	2427	C	C2-N3-C4	-13.68	113.06	119.90
26	LA	500	G	C5-C6-O6	-13.67	120.40	128.60
26	LA	1897	G	O4'-C1'-N9	13.66	119.13	108.20
2	SA	899	C	O4'-C1'-N1	13.66	119.13	108.20
13	SM	106	ARG	NE-CZ-NH2	-13.66	113.47	120.30
26	LA	450	G	N1-C6-O6	13.65	128.09	119.90
2	SA	158	G	O4'-C1'-N9	13.65	119.12	108.20
2	SA	1374	A	O4'-C1'-N9	13.64	119.11	108.20
2	SA	307	C	P-O3'-C3'	13.64	136.06	119.70
2	SA	420	U	P-O3'-C3'	13.63	136.06	119.70
26	LA	76	C	C6-N1-C2	-13.63	114.85	120.30
26	LA	1728	C	C6-N1-C2	-13.63	114.85	120.30
26	LA	2168	G	C5-C6-O6	-13.63	120.42	128.60
25	LB	98	G	C5-C6-O6	-13.62	120.43	128.60
26	LA	1386	C	O4'-C1'-N1	13.61	119.09	108.20
26	LA	1460	U	P-O3'-C3'	13.61	136.03	119.70
26	LA	1761	C	O4'-C1'-N1	13.61	119.09	108.20
26	LA	678	C	C6-N1-C2	-13.61	114.86	120.30
40	L4	43	ARG	NE-CZ-NH2	-13.60	113.50	120.30
26	LA	1875	G	C5-C6-O6	-13.60	120.44	128.60
26	LA	2134	A	O4'-C1'-N9	13.60	119.08	108.20
32	LY	13	ARG	NE-CZ-NH1	13.58	127.09	120.30
2	SA	475	C	P-O5'-C5'	13.58	142.63	120.90
26	LA	2019	A	P-O3'-C3'	13.58	136.00	119.70
2	SA	792	A	P-O5'-C5'	13.57	142.62	120.90
2	SA	1096	C	O4'-C1'-N1	13.57	119.06	108.20
2	SA	575	G	N1-C6-O6	13.56	128.04	119.90
2	SA	777	A	N1-C6-N6	13.56	126.74	118.60
26	LA	2765	A	N1-C6-N6	-13.56	110.46	118.60
26	LA	2827	C	O4'-C1'-N1	13.56	119.05	108.20
2	SA	1424	U	C5-C6-N1	-13.56	115.92	122.70
26	LA	1384	A	N1-C6-N6	13.56	126.73	118.60
26	LA	1241	A	O4'-C1'-N9	13.56	119.05	108.20
26	LA	2709	G	C8-N9-C4	-13.55	100.98	106.40
26	LA	1172	C	C6-N1-C2	-13.55	114.88	120.30
2	SA	616	G	C5-C6-O6	-13.55	120.47	128.60
25	LB	86	G	P-O3'-C3'	13.54	135.95	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	SS	36	ARG	NE-CZ-NH1	13.53	127.07	120.30
2	SA	1521	C	N3-C4-N4	13.53	127.47	118.00
4	S2	63	C	C6-N1-C2	-13.53	114.89	120.30
2	SA	977	A	N1-C6-N6	13.53	126.72	118.60
13	SM	97	ARG	NE-CZ-NH1	13.53	127.06	120.30
26	LA	517	C	C2-N3-C4	-13.53	113.14	119.90
26	LA	974	G	C8-N9-C4	-13.51	101.00	106.40
26	LA	2663	G	P-O3'-C3'	13.51	135.91	119.70
25	LB	59	A	N7-C8-N9	13.51	120.55	113.80
26	LA	1649	G	N1-C6-O6	13.50	128.00	119.90
6	SU	66	ARG	NE-CZ-NH2	13.50	127.05	120.30
26	LA	1287	A	N1-C6-N6	-13.49	110.50	118.60
45	LG	127	TYR	CB-CG-CD1	-13.49	112.90	121.00
2	SA	673	A	O4'-C1'-N9	13.49	118.99	108.20
26	LA	958	U	C5-C6-N1	-13.49	115.96	122.70
26	LA	2454	G	C5-C6-O6	-13.48	120.51	128.60
26	LA	2734	A	C5-C6-N1	13.47	124.44	117.70
2	SA	872	A	C2-N3-C4	-13.47	103.86	110.60
2	SA	433	G	N7-C8-N9	13.47	119.83	113.10
26	LA	247	G	C5-C6-O6	-13.47	120.52	128.60
26	LA	2247	A	N1-C6-N6	13.46	126.68	118.60
26	LA	1174	U	O4'-C1'-N1	13.46	118.97	108.20
2	SA	636	U	C5-C4-O4	-13.46	117.82	125.90
26	LA	2383	G	C5-C6-O6	-13.46	120.53	128.60
26	LA	804	A	N1-C6-N6	-13.46	110.53	118.60
2	SA	787	A	N1-C2-N3	-13.45	122.58	129.30
26	LA	789	A	O4'-C1'-N9	13.45	118.96	108.20
26	LA	299	A	N1-C6-N6	13.45	126.67	118.60
26	LA	1142	A	P-O3'-C3'	13.45	135.84	119.70
26	LA	2466	C	C6-N1-C2	-13.45	114.92	120.30
26	LA	2596	U	N3-C4-O4	13.44	128.81	119.40
2	SA	1213	A	P-O3'-C3'	13.44	135.83	119.70
26	LA	142	A	N9-C4-C5	-13.44	100.42	105.80
2	SA	478	A	N1-C6-N6	13.44	126.66	118.60
26	LA	1483	G	C2-N3-C4	13.43	118.62	111.90
26	LA	1788	C	C6-N1-C2	-13.43	114.93	120.30
26	LA	2782	G	C5-C6-O6	-13.43	120.54	128.60
2	SA	670	G	C5-C6-O6	13.42	136.65	128.60
4	S2	7	G	P-O3'-C3'	13.42	135.80	119.70
26	LA	2144	G	N1-C6-O6	13.42	127.95	119.90
26	LA	33	C	O4'-C1'-N1	13.39	118.92	108.20
2	SA	1208	C	P-O3'-C3'	13.39	135.77	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1916	A	P-O5'-C5'	13.38	142.31	120.90
2	SA	1299	A	N9-C4-C5	-13.38	100.45	105.80
26	LA	2829	A	N9-C4-C5	-13.38	100.45	105.80
2	SA	717	U	P-O3'-C3'	13.37	135.74	119.70
26	LA	93	G	C5-C6-O6	-13.37	120.58	128.60
38	LE	124	ARG	NE-CZ-NH1	13.36	126.98	120.30
4	S2	70	C	C6-N1-C2	-13.36	114.96	120.30
26	LA	63	A	N9-C4-C5	13.36	111.14	105.80
26	LA	1489	C	C5-C6-N1	13.36	127.68	121.00
26	LA	1990	C	N3-C4-C5	13.35	127.24	121.90
2	SA	1451	U	P-O3'-C3'	13.35	135.71	119.70
2	SA	193	C	C6-N1-C2	-13.34	114.97	120.30
26	LA	2168	G	N1-C6-O6	13.34	127.90	119.90
2	SA	97	G	C5-C6-O6	-13.33	120.60	128.60
2	SA	197	A	P-O3'-C3'	13.32	135.69	119.70
2	SA	349	A	N1-C6-N6	13.32	126.59	118.60
12	SL	85	ARG	NE-CZ-NH2	-13.32	113.64	120.30
25	LB	70	C	C6-N1-C2	-13.32	114.97	120.30
26	LA	2227	A	C8-N9-C4	-13.32	100.47	105.80
26	LA	628	G	O4'-C1'-N9	13.31	118.85	108.20
2	SA	1073	U	O4'-C1'-N1	13.31	118.84	108.20
2	SA	830	G	N1-C6-O6	13.30	127.88	119.90
26	LA	2270	A	N1-C2-N3	13.30	135.95	129.30
26	LA	1437	C	N3-C4-C5	-13.29	116.58	121.90
2	SA	251	G	N9-C4-C5	13.29	110.72	105.40
26	LA	1420	A	O4'-C1'-N9	13.29	118.83	108.20
26	LA	2822	G	C4-C5-N7	13.29	116.11	110.80
26	LA	139	U	P-O3'-C3'	13.27	135.62	119.70
26	LA	831	G	O4'-C1'-N9	13.27	118.81	108.20
26	LA	2901	C	O4'-C1'-N1	13.27	118.81	108.20
2	SA	1176	A	N1-C6-N6	-13.26	110.64	118.60
2	SA	417	G	C5-C6-O6	13.25	136.55	128.60
2	SA	654	G	C5-C6-O6	-13.25	120.65	128.60
26	LA	2293	G	C5-C6-O6	-13.25	120.65	128.60
26	LA	1849	G	C5-C6-O6	-13.24	120.65	128.60
26	LA	2458	G	O4'-C1'-N9	13.24	118.79	108.20
26	LA	131	A	O4'-C1'-N9	13.23	118.78	108.20
26	LA	1009	A	N1-C6-N6	-13.23	110.66	118.60
26	LA	1878	G	C5-C6-O6	13.23	136.54	128.60
2	SA	1486	G	C8-N9-C4	-13.22	101.11	106.40
2	SA	840	C	P-O5'-C5'	13.22	142.05	120.90
26	LA	316	C	O4'-C1'-N1	13.22	118.78	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	555	G	N3-C2-N2	13.21	129.15	119.90
26	LA	1430	G	C4-C5-N7	-13.21	105.52	110.80
13	SM	22	TYR	CB-CG-CD1	-13.20	113.08	121.00
26	LA	2070	A	N1-C6-N6	-13.20	110.68	118.60
26	LA	2849	U	C2-N3-C4	-13.20	119.08	127.00
26	LA	1759	A	C4-C5-C6	-13.20	110.40	117.00
26	LA	1369	G	C5-C6-O6	-13.17	120.70	128.60
26	LA	2650	U	C5-C4-O4	-13.17	118.00	125.90
16	SP	14	ARG	NE-CZ-NH1	13.17	126.88	120.30
26	LA	2519	U	C2-N3-C4	-13.16	119.10	127.00
26	LA	158	U	C5-C4-O4	13.15	133.79	125.90
26	LA	695	G	C8-N9-C4	13.15	111.66	106.40
2	SA	2	A	P-O3'-C3'	13.15	135.47	119.70
22	SF	44	ARG	NE-CZ-NH2	-13.15	113.73	120.30
2	SA	47	C	O4'-C1'-N1	13.14	118.71	108.20
26	LA	540	C	O4'-C1'-N1	13.13	118.71	108.20
2	SA	454	G	N1-C6-O6	13.13	127.78	119.90
26	LA	1726	C	C6-N1-C2	-13.13	115.05	120.30
26	LA	1122	G	C5'-C4'-C3'	13.13	137.01	116.00
26	LA	1285	A	C8-N9-C4	13.13	111.05	105.80
26	LA	473	G	N1-C6-O6	-13.12	112.03	119.90
3	S1	58	C	N3-C4-C5	-13.12	116.65	121.90
26	LA	2250	G	C4-C5-N7	13.12	116.05	110.80
26	LA	2677	G	C8-N9-C4	13.12	111.65	106.40
1	SS	2	ARG	NE-CZ-NH2	13.11	126.85	120.30
26	LA	1925	C	C5'-C4'-O4'	13.11	124.83	109.10
2	SA	639	G	C5-C6-O6	-13.10	120.74	128.60
2	SA	1342	C	N3-C4-C5	-13.10	116.66	121.90
26	LA	311	A	O4'-C1'-N9	13.10	118.68	108.20
26	LA	418	C	C4-C5-C6	-13.10	110.85	117.40
26	LA	2551	C	O4'-C1'-N1	13.09	118.67	108.20
2	SA	48	C	O4'-C1'-N1	13.09	118.67	108.20
2	SA	1457	G	C4-C5-N7	13.09	116.03	110.80
26	LA	1979	U	C2-N3-C4	-13.09	119.15	127.00
26	LA	1110	G	C8-N9-C4	13.08	111.63	106.40
26	LA	736	C	O4'-C1'-N1	13.08	118.66	108.20
4	S2	57	C	C6-N1-C2	-13.08	115.07	120.30
26	LA	1078	U	O4'-C1'-N1	13.08	118.66	108.20
26	LA	81	G	C5-C6-O6	-13.07	120.76	128.60
25	LB	6	G	O4'-C1'-N9	13.07	118.66	108.20
26	LA	570	G	C5-C6-O6	-13.07	120.76	128.60
26	LA	889	C	O4'-C1'-N1	13.07	118.66	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	516	C	P-O3'-C3'	13.06	135.38	119.70
26	LA	1100	C	O4'-C1'-N1	13.06	118.65	108.20
26	LA	1531	C	O4'-C1'-N1	13.06	118.65	108.20
4	S2	58	A	P-O3'-C3'	13.06	135.37	119.70
11	SK	121	ARG	NE-CZ-NH1	-13.05	113.77	120.30
27	LD	166	ARG	NE-CZ-NH1	13.05	126.83	120.30
26	LA	257	C	O4'-C1'-N1	13.05	118.64	108.20
2	SA	930	C	O4'-C1'-N1	13.04	118.63	108.20
26	LA	2873	A	O4'-C1'-N9	13.04	118.63	108.20
26	LA	985	C	O4'-C1'-N1	13.03	118.63	108.20
26	LA	1757	A	C1'-O4'-C4'	-13.03	99.47	109.90
26	LA	564	C	C6-N1-C2	-13.03	115.09	120.30
2	SA	818	G	C5-C6-O6	-13.02	120.79	128.60
26	LA	1556	C	C4-C5-C6	13.02	123.91	117.40
2	SA	1193	G	O4'-C1'-N9	13.02	118.61	108.20
26	LA	2314	A	N1-C6-N6	13.02	126.41	118.60
2	SA	1542	A	C8-N9-C4	-13.02	100.59	105.80
26	LA	595	C	C6-N1-C2	-13.01	115.09	120.30
26	LA	2439	A	N1-C2-N3	-13.01	122.79	129.30
2	SA	788	U	C5-C4-O4	13.01	133.71	125.90
26	LA	2429	G	C4-C5-N7	-13.01	105.60	110.80
26	LA	877	A	C5-C6-N6	13.00	134.10	123.70
26	LA	995	C	C6-N1-C2	-12.99	115.10	120.30
4	S2	3	C	C5-C6-N1	12.99	127.50	121.00
26	LA	184	C	C5-C6-N1	12.99	127.50	121.00
26	LA	2400	G	C5-C6-O6	-12.99	120.81	128.60
23	SR	62	ARG	NE-CZ-NH2	12.99	126.80	120.30
26	LA	187	G	C5-C6-O6	-12.99	120.81	128.60
2	SA	1034	G	O4'-C1'-N9	12.98	118.59	108.20
26	LA	1007	C	C6-N1-C2	-12.98	115.11	120.30
2	SA	1541	U	P-O5'-C5'	12.98	141.66	120.90
26	LA	710	U	C5-C6-N1	12.98	129.19	122.70
26	LA	1248	G	C5-C6-O6	-12.97	120.81	128.60
2	SA	1030	U	N1-C2-O2	12.96	131.87	122.80
26	LA	2534	A	C8-N9-C4	-12.96	100.61	105.80
52	LO	81	ARG	NE-CZ-NH2	-12.96	113.82	120.30
26	LA	1552	A	C8-N9-C4	-12.96	100.62	105.80
26	LA	2111	U	C2-N3-C4	-12.96	119.22	127.00
26	LA	2534	A	N9-C4-C5	12.96	110.98	105.80
26	LA	2171	A	P-O3'-C3'	12.95	135.24	119.70
2	SA	730	G	N3-C2-N2	12.95	128.96	119.90
26	LA	1953	A	N1-C2-N3	12.95	135.77	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	942	G	C5-C6-O6	-12.95	120.83	128.60
58	LT	13	ARG	NE-CZ-NH1	12.95	126.77	120.30
26	LA	217	A	P-O3'-C3'	12.94	135.23	119.70
2	SA	433	G	C8-N9-C4	-12.93	101.23	106.40
2	SA	559	A	C8-N9-C4	-12.93	100.63	105.80
26	LA	1019	U	N3-C2-O2	-12.93	113.15	122.20
2	SA	407	U	C5-C4-O4	-12.93	118.14	125.90
2	SA	428	G	C6-C5-N7	-12.92	122.65	130.40
31	LX	21	ARG	NE-CZ-NH1	12.92	126.76	120.30
2	SA	1021	A	C8-N9-C4	-12.92	100.63	105.80
26	LA	1192	G	N1-C6-O6	12.92	127.65	119.90
2	SA	881	G	N7-C8-N9	12.91	119.56	113.10
47	LJ	41	ARG	NE-CZ-NH1	12.91	126.75	120.30
2	SA	1468	A	N1-C6-N6	-12.91	110.86	118.60
26	LA	410	G	C4-C5-N7	-12.90	105.64	110.80
26	LA	351	C	C6-N1-C2	12.90	125.46	120.30
2	SA	271	C	C5-C4-N4	-12.89	111.17	120.20
2	SA	1497	G	C2-N3-C4	12.89	118.35	111.90
26	LA	168	G	C8-N9-C4	12.89	111.56	106.40
2	SA	811	C	O4'-C1'-N1	12.89	118.51	108.20
26	LA	163	C	O4'-C1'-N1	12.88	118.50	108.20
26	LA	1232	G	N7-C8-N9	12.88	119.54	113.10
26	LA	1382	G	O4'-C1'-N9	12.87	118.50	108.20
2	SA	650	G	P-O3'-C3'	12.87	135.14	119.70
26	LA	2072	C	O4'-C1'-N1	12.87	118.50	108.20
26	LA	1632	A	N1-C6-N6	-12.87	110.88	118.60
2	SA	393	A	N1-C2-N3	12.87	135.73	129.30
26	LA	2264	C	N3-C4-C5	-12.86	116.75	121.90
2	SA	44	A	N1-C6-N6	12.86	126.31	118.60
2	SA	923	A	N1-C6-N6	12.85	126.31	118.60
26	LA	973	A	N9-C4-C5	12.85	110.94	105.80
26	LA	155	A	N1-C2-N3	-12.85	122.88	129.30
26	LA	2800	A	P-O5'-C5'	12.85	141.45	120.90
2	SA	1206	G	P-O5'-C5'	12.84	141.45	120.90
26	LA	845	A	N1-C6-N6	-12.84	110.90	118.60
26	LA	1408	G	C5-C6-O6	12.84	136.30	128.60
26	LA	674	G	C5-C6-N1	12.83	117.92	111.50
26	LA	2223	G	N3-C4-C5	-12.83	122.18	128.60
2	SA	454	G	C5-C6-O6	-12.83	120.90	128.60
26	LA	2061	G	C4-C5-N7	12.82	115.93	110.80
4	S2	29	C	P-O5'-C5'	12.82	141.41	120.90
26	LA	1216	G	N1-C2-N3	-12.82	116.21	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1200	C	C6-N1-C2	-12.81	115.17	120.30
26	LA	139	U	O4'-C1'-N1	12.81	118.45	108.20
2	SA	1432	G	C5-C6-O6	-12.80	120.92	128.60
26	LA	2221	G	C5-C6-O6	-12.80	120.92	128.60
2	SA	212	G	N1-C6-O6	-12.80	112.22	119.90
26	LA	451	U	C1'-O4'-C4'	-12.79	99.67	109.90
26	LA	1379	U	O4'-C1'-N1	12.79	118.43	108.20
2	SA	406	G	N7-C8-N9	-12.79	106.71	113.10
47	LJ	158	ARG	NE-CZ-NH1	12.79	126.69	120.30
50	LL	37	ARG	NE-CZ-NH1	12.79	126.69	120.30
2	SA	182	A	N1-C6-N6	-12.78	110.93	118.60
2	SA	515	G	C8-N9-C4	12.79	111.51	106.40
2	SA	1391	U	N3-C2-O2	-12.79	113.25	122.20
2	SA	1293	C	C6-N1-C2	-12.78	115.19	120.30
26	LA	2012	G	O4'-C1'-N9	12.78	118.42	108.20
2	SA	418	C	N3-C4-C5	12.77	127.01	121.90
26	LA	511	U	P-O3'-C3'	12.77	135.02	119.70
26	LA	869	G	N1-C6-O6	12.76	127.56	119.90
2	SA	1323	G	C5-C6-O6	-12.76	120.94	128.60
26	LA	2226	C	C6-N1-C2	-12.76	115.20	120.30
26	LA	25	U	C5-C6-N1	-12.75	116.32	122.70
26	LA	1570	A	N1-C6-N6	-12.75	110.95	118.60
26	LA	814	C	N3-C4-C5	-12.74	116.80	121.90
26	LA	936	A	C4-C5-N7	12.74	117.07	110.70
26	LA	2738	A	C8-N9-C4	12.74	110.89	105.80
26	LA	2171	A	N9-C4-C5	12.74	110.89	105.80
26	LA	2715	C	C6-N1-C2	-12.73	115.21	120.30
2	SA	1013	G	N1-C6-O6	12.73	127.54	119.90
26	LA	467	G	N1-C6-O6	12.72	127.53	119.90
26	LA	2851	A	N1-C6-N6	-12.72	110.97	118.60
44	LF	117	ARG	NE-CZ-NH1	12.72	126.66	120.30
26	LA	1097	U	O4'-C1'-N1	12.71	118.37	108.20
26	LA	656	G	C8-N9-C4	-12.71	101.32	106.40
2	SA	1131	G	C5-N7-C8	-12.71	97.95	104.30
26	LA	2125	G	C5-C6-O6	-12.70	120.98	128.60
26	LA	2213	U	O4'-C1'-N1	12.71	118.36	108.20
4	S2	2	G	O4'-C1'-N9	12.70	118.36	108.20
2	SA	1496	C	C6-N1-C2	-12.69	115.22	120.30
26	LA	1311	G	N9-C4-C5	12.69	110.48	105.40
26	LA	879	G	C5-C6-O6	-12.69	120.99	128.60
26	LA	2000	C	C2-N3-C4	-12.68	113.56	119.90
26	LA	804	A	C2-N3-C4	12.68	116.94	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1264	A	C8-N9-C4	-12.68	100.73	105.80
2	SA	79	G	C5-C6-O6	-12.68	121.00	128.60
2	SA	1399	C	N3-C4-C5	-12.68	116.83	121.90
26	LA	2584	U	O4'-C1'-N1	12.67	118.34	108.20
26	LA	2877	G	C5-C6-N1	12.67	117.83	111.50
3	S1	30	U	C5-C4-O4	-12.66	118.30	125.90
26	LA	1164	C	O4'-C1'-N1	12.66	118.33	108.20
26	LA	876	C	P-O3'-C3'	12.66	134.89	119.70
2	SA	1184	G	C5-C6-O6	12.65	136.19	128.60
2	SA	1448	C	P-O5'-C5'	12.65	141.15	120.90
4	S2	22	A	C1'-O4'-C4'	-12.65	99.78	109.90
26	LA	2127	G	P-O3'-C3'	12.65	134.88	119.70
26	LA	986	C	O4'-C1'-N1	12.65	118.32	108.20
4	S2	62	C	C6-N1-C2	-12.65	115.24	120.30
27	LD	101	ARG	NE-CZ-NH1	12.64	126.62	120.30
2	SA	255	G	C5-C6-O6	-12.64	121.02	128.60
26	LA	125	A	P-O3'-C3'	12.64	134.87	119.70
25	LB	60	C	O4'-C1'-N1	12.64	118.31	108.20
2	SA	849	G	C8-N9-C4	12.64	111.45	106.40
26	LA	861	A	O4'-C1'-N9	12.63	118.30	108.20
26	LA	467	G	C5-C6-O6	-12.62	121.03	128.60
26	LA	1927	A	P-O3'-C3'	12.62	134.84	119.70
26	LA	2385	C	P-O3'-C3'	-12.62	104.56	119.70
2	SA	1088	G	C5-C6-O6	-12.62	121.03	128.60
26	LA	2190	G	C2-N3-C4	12.61	118.21	111.90
2	SA	1177	G	N1-C6-O6	12.61	127.47	119.90
25	LB	56	G	N9-C4-C5	12.61	110.44	105.40
26	LA	214	G	C8-N9-C4	-12.61	101.36	106.40
20	SD	164	ARG	NE-CZ-NH1	12.61	126.60	120.30
2	SA	811	C	P-O5'-C5'	12.61	141.07	120.90
26	LA	2018	G	O4'-C1'-N9	12.61	118.28	108.20
26	LA	1807	G	C5-C6-N1	12.60	117.80	111.50
26	LA	1197	G	C5-C6-O6	-12.60	121.04	128.60
26	LA	1031	G	C5-C6-O6	-12.59	121.05	128.60
26	LA	1492	G	C8-N9-C4	12.59	111.44	106.40
26	LA	2549	G	N9-C4-C5	12.59	110.44	105.40
26	LA	1042	G	C8-N9-C4	12.59	111.43	106.40
26	LA	2601	C	C6-N1-C2	-12.59	115.27	120.30
2	SA	1327	C	O4'-C1'-N1	12.58	118.27	108.20
26	LA	1767	G	N1-C6-O6	12.58	127.45	119.90
26	LA	2446	G	N1-C6-O6	12.58	127.45	119.90
26	LA	931	U	O4'-C1'-N1	12.58	118.26	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	SI	44	ARG	NE-CZ-NH2	-12.57	114.01	120.30
2	SA	706	A	N9-C4-C5	12.57	110.83	105.80
26	LA	1240	U	P-O5'-C5'	12.56	141.00	120.90
26	LA	1699	G	O4'-C1'-N9	12.56	118.25	108.20
2	SA	194	C	N3-C4-C5	12.56	126.92	121.90
26	LA	2480	C	O4'-C1'-N1	12.56	118.25	108.20
26	LA	1123	C	O4'-C1'-N1	12.56	118.25	108.20
3	S1	41	A	P-O3'-C3'	12.55	134.76	119.70
11	SK	10	ARG	NE-CZ-NH2	-12.55	114.02	120.30
26	LA	2624	G	N3-C2-N2	12.55	128.68	119.90
2	SA	711	G	N1-C6-O6	12.54	127.42	119.90
2	SA	530	G	C5-C6-O6	-12.54	121.08	128.60
2	SA	1369	C	O4'-C1'-N1	12.54	118.23	108.20
2	SA	497	G	P-O3'-C3'	12.53	134.74	119.70
26	LA	2169	A	N9-C4-C5	-12.53	100.79	105.80
26	LA	1209	U	P-O3'-C3'	-12.52	104.67	119.70
26	LA	1290	C	C5-C4-N4	-12.52	111.44	120.20
26	LA	980	A	C2-N3-C4	12.52	116.86	110.60
26	LA	2583	G	C5-C6-O6	-12.51	121.09	128.60
2	SA	538	G	C8-N9-C4	12.51	111.40	106.40
2	SA	604	G	C4-C5-N7	12.51	115.80	110.80
26	LA	664	G	C5-C6-N1	12.51	117.75	111.50
26	LA	1832	C	C6-N1-C2	-12.51	115.30	120.30
26	LA	2100	G	C5-C6-O6	-12.50	121.10	128.60
26	LA	2501	C	O4'-C1'-N1	12.50	118.20	108.20
26	LA	1903	G	O4'-C1'-N9	12.50	118.20	108.20
26	LA	2521	C	O4'-C1'-N1	12.50	118.20	108.20
2	SA	1323	G	N3-C2-N2	12.50	128.65	119.90
2	SA	348	G	C5'-C4'-C3'	12.49	135.99	116.00
26	LA	813	U	C5-C4-O4	-12.49	118.40	125.90
26	LA	1019	U	C2-N3-C4	-12.49	119.50	127.00
2	SA	391	G	C5-C6-O6	-12.49	121.11	128.60
26	LA	2623	G	C5-C6-O6	-12.49	121.11	128.60
26	LA	1918	A	N1-C6-N6	-12.48	111.11	118.60
4	S2	42	C	N3-C4-N4	12.48	126.73	118.00
2	SA	567	G	C5-C6-O6	-12.47	121.12	128.60
26	LA	1511	G	O4'-C1'-N9	12.47	118.18	108.20
48	LN	69	ARG	NE-CZ-NH1	12.47	126.53	120.30
26	LA	1493	C	O4'-C1'-N1	12.46	118.17	108.20
2	SA	1529	G	P-O3'-C3'	12.45	134.64	119.70
25	LB	63	C	C6-N1-C2	-12.46	115.32	120.30
2	SA	616	G	N7-C8-N9	-12.45	106.87	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	15	G	C4-C5-N7	-12.45	105.82	110.80
56	LR	88	ARG	NE-CZ-NH2	12.45	126.53	120.30
26	LA	917	A	N1-C6-N6	-12.45	111.13	118.60
26	LA	1461	C	O4'-C1'-N1	12.44	118.16	108.20
2	SA	467	U	O4'-C1'-N1	12.43	118.15	108.20
26	LA	688	U	C2-N3-C4	-12.43	119.54	127.00
26	LA	481	G	O4'-C1'-N9	12.43	118.14	108.20
26	LA	280	U	N3-C4-O4	12.43	128.10	119.40
26	LA	2157	G	P-O3'-C3'	12.42	134.61	119.70
2	SA	734	G	C2-N3-C4	-12.42	105.69	111.90
26	LA	699	A	N1-C2-N3	12.42	135.51	129.30
26	LA	1713	A	N1-C2-N3	12.42	135.51	129.30
26	LA	829	A	N1-C2-N3	12.41	135.51	129.30
26	LA	1886	U	C5-C4-O4	-12.41	118.45	125.90
45	LG	6	TYR	CB-CG-CD2	-12.41	113.55	121.00
2	SA	1405	G	N3-C2-N2	12.41	128.59	119.90
26	LA	1129	A	N1-C6-N6	-12.41	111.15	118.60
26	LA	2236	U	P-O3'-C3'	12.41	134.59	119.70
26	LA	1648	U	C5-C4-O4	12.41	133.34	125.90
26	LA	1690	A	C8-N9-C4	-12.41	100.84	105.80
2	SA	237	G	N1-C6-O6	12.40	127.34	119.90
2	SA	128	G	P-O3'-C3'	12.39	134.57	119.70
2	SA	329	A	C8-N9-C4	12.39	110.76	105.80
2	SA	205	A	N1-C6-N6	-12.39	111.17	118.60
28	LU	18	ARG	NE-CZ-NH1	12.39	126.49	120.30
25	LB	69	G	C5-C6-O6	-12.38	121.17	128.60
2	SA	1097	C	N3-C4-C5	-12.38	116.95	121.90
26	LA	1235	G	C5-C6-O6	-12.38	121.17	128.60
26	LA	1762	A	N1-C2-N3	-12.38	123.11	129.30
26	LA	2688	G	C6-C5-N7	-12.38	122.97	130.40
2	SA	288	A	N1-C6-N6	-12.37	111.18	118.60
26	LA	401	A	O4'-C1'-N9	12.37	118.09	108.20
2	SA	616	G	N1-C6-O6	12.36	127.32	119.90
26	LA	757	G	N1-C6-O6	-12.36	112.48	119.90
2	SA	769	G	C6-N1-C2	-12.35	117.69	125.10
26	LA	317	G	N1-C6-O6	-12.35	112.49	119.90
26	LA	825	A	N1-C2-N3	12.35	135.47	129.30
26	LA	2779	U	O4'-C1'-N1	12.34	118.07	108.20
2	SA	1289	A	N1-C6-N6	12.34	126.00	118.60
44	LF	19	PHE	CB-CG-CD1	12.34	129.44	120.80
15	SO	76	ARG	NE-CZ-NH1	12.34	126.47	120.30
26	LA	1924	C	O4'-C1'-N1	12.34	118.07	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	LC	60	ARG	NE-CZ-NH1	12.33	126.47	120.30
26	LA	885	C	C4-C5-C6	-12.33	111.24	117.40
26	LA	1341	G	P-O3'-C3'	-12.32	104.91	119.70
6	SU	68	ARG	NE-CZ-NH1	12.32	126.46	120.30
26	LA	2277	G	C5-C6-O6	-12.32	121.21	128.60
2	SA	769	G	C5-C6-O6	-12.31	121.21	128.60
26	LA	2693	G	C5-C6-O6	-12.31	121.21	128.60
2	SA	9	G	O4'-C1'-N9	12.31	118.05	108.20
26	LA	27	G	P-O3'-C3'	12.31	134.47	119.70
26	LA	1157	G	C8-N9-C4	-12.30	101.48	106.40
26	LA	1847	A	P-O3'-C3'	-12.30	104.94	119.70
2	SA	847	G	N3-C4-C5	-12.30	122.45	128.60
2	SA	1150	A	C4-C5-C6	-12.30	110.85	117.00
26	LA	2071	A	P-O5'-C5'	12.30	140.57	120.90
26	LA	2414	G	C5-C6-O6	-12.30	121.22	128.60
26	LA	2454	G	N1-C6-O6	12.29	127.28	119.90
3	S1	56	G	C8-N9-C4	12.29	111.32	106.40
15	SO	68	TYR	CB-CG-CD1	-12.29	113.63	121.00
26	LA	2400	G	N9-C4-C5	-12.28	100.49	105.40
7	SG	142	ARG	NE-CZ-NH2	-12.28	114.16	120.30
26	LA	2397	G	C5-C6-O6	-12.27	121.24	128.60
2	SA	1282	C	C6-N1-C2	-12.27	115.39	120.30
2	SA	1290	G	C8-N9-C4	12.27	111.31	106.40
26	LA	2264	C	C4-C5-C6	12.27	123.53	117.40
20	SD	187	ARG	NE-CZ-NH1	12.26	126.43	120.30
26	LA	2463	C	O4'-C1'-N1	12.26	118.01	108.20
26	LA	1674	G	N1-C2-N3	12.26	131.26	123.90
4	S2	60	A	C2-N3-C4	-12.26	104.47	110.60
26	LA	543	G	C5-C6-O6	-12.26	121.25	128.60
26	LA	1480	C	O4'-C1'-N1	12.26	118.01	108.20
37	LC	38	PHE	CB-CG-CD1	12.25	129.38	120.80
2	SA	1184	G	N1-C6-O6	-12.25	112.55	119.90
2	SA	691	G	N9-C4-C5	12.25	110.30	105.40
33	LZ	77	TYR	CB-CG-CD1	-12.25	113.65	121.00
2	SA	1363	A	C5-C6-N6	-12.24	113.91	123.70
26	LA	1129	A	C5-C6-N1	12.24	123.82	117.70
26	LA	1610	A	N1-C6-N6	-12.24	111.26	118.60
26	LA	282	A	C8-N9-C4	12.23	110.69	105.80
2	SA	379	C	C5-C6-N1	12.23	127.11	121.00
26	LA	2455	G	N1-C6-O6	-12.23	112.56	119.90
2	SA	1229	A	C2-N3-C4	12.23	116.71	110.60
2	SA	462	G	N7-C8-N9	-12.22	106.99	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2238	G	N1-C6-O6	12.22	127.23	119.90
26	LA	1929	G	O4'-C1'-N9	12.22	117.98	108.20
26	LA	2448	A	N1-C2-N3	-12.22	123.19	129.30
2	SA	337	G	C5-C6-O6	-12.22	121.27	128.60
26	LA	713	G	N3-C2-N2	12.22	128.45	119.90
26	LA	2024	G	N3-C4-C5	-12.22	122.49	128.60
2	SA	1397	C	P-O3'-C3'	12.21	134.36	119.70
26	LA	756	A	C5-C6-N1	12.21	123.81	117.70
26	LA	2223	G	C4-C5-N7	-12.21	105.92	110.80
2	SA	1131	G	C5-C6-O6	-12.21	121.28	128.60
26	LA	1656	C	N3-C4-C5	-12.21	117.02	121.90
2	SA	280	C	N3-C4-C5	12.20	126.78	121.90
26	LA	1704	C	O4'-C1'-N1	12.20	117.96	108.20
26	LA	474	G	C5-C6-N1	12.19	117.59	111.50
26	LA	298	G	C4-C5-N7	12.19	115.68	110.80
2	SA	547	A	N1-C6-N6	-12.19	111.29	118.60
2	SA	642	A	N1-C6-N6	12.18	125.91	118.60
2	SA	882	C	N3-C4-C5	-12.18	117.03	121.90
2	SA	1144	G	N7-C8-N9	12.18	119.19	113.10
26	LA	1616	A	C4-C5-C6	12.18	123.09	117.00
26	LA	2057	G	C5-C6-O6	-12.18	121.29	128.60
26	LA	1921	G	N1-C6-O6	-12.18	112.59	119.90
31	LX	18	ARG	NE-CZ-NH1	12.18	126.39	120.30
48	LN	78	ARG	NE-CZ-NH1	12.18	126.39	120.30
2	SA	538	G	C5-C6-O6	-12.18	121.29	128.60
26	LA	125	A	N3-C4-C5	-12.17	118.28	126.80
2	SA	1195	C	P-O3'-C3'	12.17	134.30	119.70
26	LA	1725	U	C5-C4-O4	-12.16	118.60	125.90
26	LA	2793	C	O4'-C1'-N1	12.16	117.93	108.20
27	LD	132	ARG	NE-CZ-NH1	12.16	126.38	120.30
26	LA	1287	A	C4-C5-C6	12.16	123.08	117.00
26	LA	1638	C	O4'-C1'-N1	12.16	117.93	108.20
26	LA	58	G	C2-N3-C4	12.15	117.98	111.90
3	S1	20	G	N1-C6-O6	12.15	127.19	119.90
26	LA	2362	C	C6-N1-C2	-12.15	115.44	120.30
26	LA	2132	U	N1-C2-N3	12.15	122.19	114.90
2	SA	180	U	N3-C4-O4	-12.14	110.90	119.40
2	SA	309	A	P-O3'-C3'	-12.14	105.13	119.70
26	LA	667	U	C6-N1-C2	-12.14	113.72	121.00
2	SA	971	G	N1-C6-O6	12.14	127.18	119.90
26	LA	1992	G	C5-C6-O6	-12.14	121.32	128.60
2	SA	1433	A	P-O3'-C3'	12.14	134.26	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	46	G	C5-C6-O6	-12.13	121.32	128.60
2	SA	488	C	C6-N1-C2	12.13	125.15	120.30
26	LA	522	A	N1-C6-N6	12.13	125.88	118.60
35	L1	44	ARG	NE-CZ-NH2	12.13	126.36	120.30
26	LA	2478	A	C5-C6-N1	12.13	123.77	117.70
2	SA	558	G	C8-N9-C4	12.13	111.25	106.40
26	LA	1110	G	N3-C2-N2	12.13	128.39	119.90
26	LA	1406	U	P-O5'-C5'	12.13	140.31	120.90
2	SA	833	G	N1-C6-O6	12.13	127.18	119.90
5	ST	17	ARG	NE-CZ-NH2	-12.13	114.24	120.30
26	LA	1608	A	C5-C6-N1	12.12	123.76	117.70
26	LA	2490	G	C5-C6-O6	-12.12	121.33	128.60
26	LA	1128	G	O4'-C1'-N9	12.12	117.89	108.20
26	LA	1384	A	O4'-C1'-N9	12.11	117.89	108.20
26	LA	2851	A	C8-N9-C4	-12.11	100.96	105.80
56	LR	100	ARG	NE-CZ-NH1	-12.11	114.25	120.30
2	SA	1358	U	C5'-C4'-C3'	12.11	135.37	116.00
26	LA	2711	A	N7-C8-N9	12.10	119.85	113.80
48	LN	47	ARG	NE-CZ-NH2	-12.09	114.25	120.30
26	LA	885	C	C6-N1-C2	-12.09	115.46	120.30
26	LA	498	G	C2-N3-C4	12.09	117.94	111.90
26	LA	383	C	O4'-C1'-N1	12.08	117.86	108.20
26	LA	1966	A	P-O3'-C3'	12.08	134.19	119.70
2	SA	429	U	C4'-C3'-C2'	-12.07	90.53	102.60
2	SA	1001	C	O4'-C1'-N1	12.07	117.86	108.20
2	SA	1488	G	C5-C6-O6	-12.07	121.36	128.60
2	SA	516	U	C2-N3-C4	-12.06	119.76	127.00
2	SA	361	G	C5-C6-N1	12.06	117.53	111.50
2	SA	423	G	N1-C6-O6	12.06	127.14	119.90
26	LA	2106	U	N1-C2-O2	12.06	131.24	122.80
26	LA	887	U	O4'-C1'-N1	12.05	117.84	108.20
2	SA	837	U	O4'-C1'-N1	12.05	117.84	108.20
2	SA	1144	G	C8-N9-C4	-12.05	101.58	106.40
26	LA	216	A	N1-C6-N6	-12.05	111.37	118.60
26	LA	1610	A	C8-N9-C4	-12.05	100.98	105.80
47	LJ	152	ARG	NE-CZ-NH1	12.05	126.33	120.30
26	LA	885	C	P-O5'-C5'	12.05	140.17	120.90
2	SA	78	A	C8-N9-C4	-12.04	100.99	105.80
2	SA	825	A	C8-N9-C4	-12.03	100.99	105.80
26	LA	859	G	O4'-C1'-N9	12.03	117.83	108.20
26	LA	77	G	N1-C6-O6	-12.03	112.68	119.90
26	LA	343	C	O4'-C1'-N1	12.02	117.82	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	366	C	C6-N1-C2	-12.02	115.49	120.30
2	SA	547	A	C5-C6-N6	12.02	133.31	123.70
2	SA	165	G	O4'-C1'-N9	12.01	117.81	108.20
2	SA	1355	G	N1-C6-O6	12.01	127.11	119.90
26	LA	2409	G	C5-C6-O6	-12.01	121.40	128.60
26	LA	1694	C	O4'-C1'-N1	12.00	117.80	108.20
26	LA	1974	C	C6-N1-C2	-12.00	115.50	120.30
26	LA	402	A	N1-C6-N6	-12.00	111.40	118.60
26	LA	989	G	O4'-C1'-N9	12.00	117.80	108.20
2	SA	496	A	N1-C6-N6	-11.99	111.40	118.60
2	SA	218	U	O4'-C1'-N1	11.99	117.79	108.20
26	LA	1246	A	N1-C6-N6	-11.99	111.41	118.60
26	LA	781	A	N1-C6-N6	11.98	125.79	118.60
3	S1	56	G	N1-C6-O6	11.98	127.09	119.90
2	SA	831	A	O4'-C1'-N9	11.98	117.78	108.20
26	LA	1312	U	C5-C6-N1	-11.98	116.71	122.70
26	LA	2421	G	N9-C4-C5	-11.97	100.61	105.40
26	LA	2644	G	C8-N9-C4	-11.97	101.61	106.40
26	LA	1659	G	N1-C6-O6	-11.97	112.72	119.90
35	L1	29	ARG	NE-CZ-NH2	11.97	126.28	120.30
2	SA	235	C	C6-N1-C2	-11.96	115.51	120.30
26	LA	1997	C	O4'-C1'-N1	11.96	117.77	108.20
26	LA	1308	A	C5-C6-N1	11.96	123.68	117.70
2	SA	1384	C	O4'-C1'-N1	11.96	117.77	108.20
26	LA	1953	A	C2-N3-C4	-11.96	104.62	110.60
2	SA	448	A	N1-C2-N3	-11.96	123.32	129.30
26	LA	2258	C	C2-N3-C4	-11.96	113.92	119.90
26	LA	2160	C	C2-N3-C4	-11.96	113.92	119.90
2	SA	1538	C	P-O3'-C3'	11.95	134.04	119.70
26	LA	216	A	O4'-C1'-N9	11.95	117.76	108.20
2	SA	322	C	C2-N3-C4	-11.95	113.92	119.90
19	SC	163	ARG	NE-CZ-NH2	-11.95	114.33	120.30
26	LA	828	U	C6-N1-C2	-11.95	113.83	121.00
2	SA	453	G	C5-C6-N1	-11.94	105.53	111.50
26	LA	359	G	C5-C6-O6	-11.94	121.44	128.60
26	LA	759	G	N1-C6-O6	11.94	127.06	119.90
26	LA	1905	C	C5'-C4'-O4'	11.94	123.43	109.10
2	SA	990	C	C6-N1-C2	-11.94	115.53	120.30
26	LA	1631	G	C2-N3-C4	-11.94	105.93	111.90
26	LA	2666	C	C6-N1-C2	-11.94	115.53	120.30
26	LA	896	A	P-O5'-C5'	11.94	140.00	120.90
26	LA	34	U	P-O3'-C3'	11.93	134.02	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1940	U	P-O5'-C5'	11.93	139.99	120.90
26	LA	2755	C	N3-C4-C5	-11.93	117.13	121.90
37	LC	38	PHE	CB-CG-CD2	-11.93	112.45	120.80
2	SA	1038	C	O4'-C1'-N1	11.93	117.74	108.20
2	SA	1119	C	C2-N3-C4	-11.93	113.93	119.90
53	LP	12	ARG	NE-CZ-NH1	11.93	126.27	120.30
26	LA	748	G	C1'-O4'-C4'	-11.93	100.36	109.90
26	LA	2351	G	C5-C6-O6	-11.93	121.44	128.60
26	LA	1268	A	N1-C2-N3	-11.92	123.34	129.30
37	LC	9	ARG	NE-CZ-NH2	-11.92	114.34	120.30
3	S1	42	U	P-O3'-C3'	11.92	134.00	119.70
26	LA	2215	C	C6-N1-C2	-11.92	115.53	120.30
25	LB	42	C	C5-C6-N1	-11.91	115.04	121.00
26	LA	2349	G	O4'-C1'-N9	11.91	117.73	108.20
2	SA	202	G	N1-C2-N3	11.91	131.04	123.90
2	SA	808	C	O4'-C1'-N1	11.91	117.72	108.20
12	SL	30	ARG	NE-CZ-NH2	-11.91	114.35	120.30
26	LA	389	G	C5-C6-O6	-11.90	121.46	128.60
2	SA	449	G	N3-C4-C5	-11.90	122.65	128.60
2	SA	765	G	C5-N7-C8	-11.90	98.35	104.30
2	SA	1504	G	O4'-C1'-N9	11.90	117.72	108.20
26	LA	2094	A	N1-C6-N6	11.90	125.74	118.60
26	LA	2224	G	C5-C6-N1	11.89	117.45	111.50
26	LA	1288	G	N1-C6-O6	11.89	127.03	119.90
26	LA	2863	C	N3-C2-O2	-11.89	113.58	121.90
26	LA	71	A	O4'-C1'-N9	11.89	117.71	108.20
26	LA	1430	G	N9-C4-C5	11.89	110.16	105.40
2	SA	838	G	C5-C6-O6	-11.88	121.47	128.60
2	SA	516	U	C5-C4-O4	-11.88	118.77	125.90
4	S2	66	C	O4'-C1'-N1	11.87	117.70	108.20
2	SA	668	G	N1-C6-O6	11.87	127.02	119.90
26	LA	391	A	N1-C6-N6	11.87	125.72	118.60
26	LA	1385	A	C8-N9-C4	-11.87	101.05	105.80
2	SA	810	C	O4'-C1'-N1	11.87	117.69	108.20
26	LA	317	G	C5-C6-O6	11.86	135.72	128.60
26	LA	1537	G	N3-C4-C5	-11.87	122.67	128.60
26	LA	1608	A	N1-C6-N6	-11.87	111.48	118.60
56	LR	38	ARG	NE-CZ-NH2	11.86	126.23	120.30
3	S1	26	U	O4'-C1'-N1	11.86	117.69	108.20
26	LA	2711	A	C5-N7-C8	-11.85	97.97	103.90
2	SA	527	G	C8-N9-C4	11.85	111.14	106.40
4	S2	21	U	O4'-C1'-N1	11.85	117.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1759	A	O4'-C1'-N9	11.85	117.68	108.20
2	SA	274	A	O4'-C1'-N9	11.85	117.68	108.20
2	SA	1520	C	N3-C4-N4	11.85	126.29	118.00
51	LI	123	ARG	NE-CZ-NH1	11.85	126.22	120.30
2	SA	1035	A	N9-C4-C5	-11.84	101.06	105.80
26	LA	121	G	C5-C6-O6	-11.84	121.50	128.60
26	LA	285	G	C8-N9-C4	-11.84	101.66	106.40
2	SA	634	C	C6-N1-C2	-11.84	115.56	120.30
26	LA	1168	G	C5-C6-O6	-11.84	121.50	128.60
26	LA	1895	C	O4'-C1'-N1	11.84	117.67	108.20
45	LG	91	ARG	NE-CZ-NH2	11.84	126.22	120.30
26	LA	453	A	C5-C6-N6	11.83	133.17	123.70
2	SA	873	A	C6-N1-C2	-11.83	111.50	118.60
2	SA	978	A	N9-C4-C5	-11.83	101.07	105.80
26	LA	2248	C	O4'-C1'-N1	11.83	117.66	108.20
2	SA	362	G	C2-N3-C4	-11.82	105.99	111.90
26	LA	2119	A	P-O3'-C3'	11.82	133.88	119.70
26	LA	2471	A	C5-C6-N6	-11.82	114.24	123.70
26	LA	1408	G	N1-C6-O6	-11.81	112.81	119.90
2	SA	782	A	C5-C6-N1	-11.81	111.79	117.70
2	SA	1470	U	O4'-C1'-N1	11.81	117.65	108.20
26	LA	2623	G	N1-C6-O6	11.81	126.99	119.90
4	S2	65	G	N9-C4-C5	11.81	110.12	105.40
26	LA	2255	G	C6-N1-C2	-11.81	118.01	125.10
2	SA	605	U	C5-C4-O4	-11.81	118.82	125.90
26	LA	864	G	C5-C6-O6	-11.81	121.52	128.60
2	SA	439	U	C5-C4-O4	-11.81	118.82	125.90
2	SA	1531	A	C5-C6-N1	-11.80	111.80	117.70
26	LA	234	U	O4'-C1'-N1	11.80	117.64	108.20
26	LA	1819	A	N1-C6-N6	-11.80	111.52	118.60
2	SA	202	G	C2-N3-C4	-11.80	106.00	111.90
26	LA	1640	A	N1-C6-N6	-11.80	111.52	118.60
2	SA	881	G	C8-N9-C4	-11.79	101.68	106.40
2	SA	328	C	P-O3'-C3'	11.79	133.85	119.70
26	LA	1629	U	C5-C4-O4	-11.79	118.83	125.90
26	LA	2469	A	C5-C6-N6	11.79	133.13	123.70
26	LA	978	G	N1-C6-O6	-11.79	112.83	119.90
21	SE	53	ARG	NE-CZ-NH2	-11.79	114.41	120.30
2	SA	453	G	C5-C6-O6	11.78	135.67	128.60
2	SA	654	G	N3-C2-N2	11.77	128.14	119.90
26	LA	1088	A	N1-C6-N6	11.77	125.66	118.60
2	SA	1432	G	N1-C6-O6	11.77	126.96	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	445	C	N3-C4-C5	11.77	126.61	121.90
2	SA	890	G	C5'-C4'-O4'	11.77	123.22	109.10
26	LA	436	C	O4'-C1'-N1	11.77	117.61	108.20
26	LA	1163	G	C4-C5-N7	11.77	115.51	110.80
2	SA	175	C	C2-N1-C1'	11.76	131.74	118.80
26	LA	781	A	N9-C4-C5	11.76	110.50	105.80
26	LA	1813	G	C5-C6-O6	-11.76	121.54	128.60
26	LA	1675	C	P-O3'-C3'	-11.76	105.59	119.70
3	S1	44	U	O4'-C1'-N1	11.76	117.61	108.20
26	LA	1643	G	P-O3'-C3'	11.75	133.81	119.70
2	SA	1490	U	C5-C6-N1	-11.75	116.82	122.70
26	LA	2719	G	N1-C6-O6	11.75	126.95	119.90
2	SA	1029	U	P-O3'-C3'	11.75	133.80	119.70
4	S2	45	A	O4'-C1'-N9	11.75	117.60	108.20
26	LA	413	C	N3-C4-C5	-11.75	117.20	121.90
26	LA	2152	G	C2-N3-C4	-11.75	106.03	111.90
26	LA	1942	C	P-O3'-C3'	11.75	133.80	119.70
50	LL	34	ARG	NE-CZ-NH1	11.75	126.17	120.30
57	LS	32	ARG	NE-CZ-NH1	-11.75	114.42	120.30
26	LA	2414	G	N1-C6-O6	11.75	126.95	119.90
2	SA	787	A	O4'-C1'-N9	11.74	117.59	108.20
26	LA	1874	C	O4'-C1'-N1	11.74	117.60	108.20
2	SA	51	A	N1-C6-N6	11.74	125.64	118.60
26	LA	205	G	N9-C4-C5	11.74	110.10	105.40
26	LA	900	A	C4-C5-N7	11.74	116.57	110.70
26	LA	1963	U	P-O3'-C3'	11.74	133.79	119.70
26	LA	62	U	O4'-C1'-N1	11.74	117.59	108.20
26	LA	2246	G	C5'-C4'-C3'	-11.74	97.22	116.00
26	LA	2351	G	N1-C6-O6	11.74	126.94	119.90
2	SA	186	C	C6-N1-C2	-11.74	115.61	120.30
26	LA	567	U	C2-N3-C4	-11.74	119.96	127.00
26	LA	2401	U	O4'-C1'-N1	11.73	117.59	108.20
2	SA	825	A	N1-C2-N3	-11.73	123.43	129.30
26	LA	1515	A	N1-C6-N6	-11.72	111.57	118.60
3	S1	56	G	C5-C6-O6	-11.72	121.57	128.60
26	LA	267	C	P-O5'-C5'	11.72	139.65	120.90
48	LN	69	ARG	NE-CZ-NH2	-11.71	114.44	120.30
26	LA	199	A	N1-C6-N6	-11.71	111.58	118.60
26	LA	1617	C	O4'-C1'-N1	11.71	117.57	108.20
26	LA	1306	C	O4'-C1'-N1	11.71	117.56	108.20
26	LA	870	U	C5'-C4'-O4'	11.70	123.14	109.10
2	SA	377	G	C5-C6-O6	-11.69	121.58	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2652	C	C6-N1-C2	-11.70	115.62	120.30
26	LA	125	A	N3-C4-N9	11.69	136.75	127.40
2	SA	1099	G	C5-C6-O6	-11.69	121.59	128.60
4	S2	30	G	N7-C8-N9	11.69	118.94	113.10
26	LA	142	A	N1-C6-N6	-11.69	111.59	118.60
26	LA	2435	A	C5-C6-N1	11.69	123.54	117.70
26	LA	2566	A	P-O3'-C3'	-11.68	105.68	119.70
26	LA	1811	G	C5-C6-O6	-11.68	121.59	128.60
26	LA	1862	G	N9-C4-C5	-11.68	100.73	105.40
2	SA	1391	U	N3-C4-O4	-11.68	111.22	119.40
26	LA	1890	A	C6-N1-C2	-11.68	111.59	118.60
26	LA	386	G	P-O3'-C3'	11.67	133.71	119.70
26	LA	2252	G	C5-C6-O6	-11.67	121.60	128.60
2	SA	1340	A	C5-C6-N1	-11.67	111.86	117.70
2	SA	1131	G	N7-C8-N9	11.67	118.94	113.10
18	SB	236	PHE	CB-CG-CD2	11.67	128.97	120.80
26	LA	2470	G	C5-C6-O6	-11.66	121.60	128.60
26	LA	1150	C	C6-N1-C2	-11.66	115.64	120.30
26	LA	1610	A	C6-N1-C2	-11.66	111.60	118.60
26	LA	1138	G	N9-C4-C5	11.66	110.06	105.40
26	LA	2056	G	C6-N1-C2	-11.66	118.11	125.10
26	LA	1319	C	O4'-C1'-N1	11.65	117.52	108.20
25	LB	114	C	C6-N1-C2	-11.65	115.64	120.30
26	LA	1097	U	C1'-O4'-C4'	-11.65	100.58	109.90
26	LA	1486	U	O4'-C1'-N1	11.65	117.52	108.20
4	S2	70	C	N3-C2-O2	-11.65	113.75	121.90
26	LA	2497	A	N1-C2-N3	11.64	135.12	129.30
2	SA	1530	G	O4'-C1'-N9	11.64	117.51	108.20
26	LA	1618	C	C2-N3-C4	-11.64	114.08	119.90
26	LA	2732	G	C5-C6-O6	-11.64	121.62	128.60
2	SA	998	C	O4'-C1'-N1	11.63	117.51	108.20
3	S1	40	G	O4'-C1'-N9	11.63	117.51	108.20
26	LA	289	G	N1-C2-N3	-11.63	116.92	123.90
26	LA	517	C	N3-C4-C5	11.63	126.55	121.90
26	LA	1149	G	C5-C6-O6	-11.63	121.62	128.60
26	LA	1314	C	N3-C4-N4	11.63	126.14	118.00
2	SA	1481	U	C5-C4-O4	11.63	132.88	125.90
26	LA	460	A	N1-C6-N6	11.63	125.58	118.60
45	LG	177	ARG	NE-CZ-NH2	-11.63	114.48	120.30
3	S1	58	C	O4'-C1'-N1	11.63	117.50	108.20
26	LA	2637	U	C2-N3-C4	-11.62	120.03	127.00
2	SA	1177	G	C5-C6-O6	-11.62	121.63	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	37	U	P-O3'-C3'	11.62	133.65	119.70
26	LA	313	G	N1-C6-O6	-11.62	112.93	119.90
3	S1	48	C	P-O3'-C3'	11.62	133.64	119.70
26	LA	125	A	C2-N3-C4	11.62	116.41	110.60
26	LA	2797	U	N3-C4-C5	-11.62	107.63	114.60
2	SA	517	G	N3-C2-N2	11.62	128.03	119.90
26	LA	2694	G	N1-C6-O6	11.61	126.87	119.90
26	LA	512	G	C5-C6-O6	-11.61	121.64	128.60
26	LA	1356	G	C5-C6-O6	-11.61	121.63	128.60
26	LA	388	G	N3-C4-C5	-11.60	122.80	128.60
26	LA	2378	A	C8-N9-C4	-11.60	101.16	105.80
26	LA	375	G	N1-C6-O6	11.60	126.86	119.90
26	LA	2433	A	N7-C8-N9	11.60	119.60	113.80
26	LA	611	C	O4'-C1'-N1	11.60	117.48	108.20
2	SA	585	G	C6-N1-C2	-11.59	118.14	125.10
26	LA	1743	G	C4-C5-N7	11.59	115.44	110.80
26	LA	1005	C	N3-C4-C5	-11.59	117.26	121.90
26	LA	1500	G	C8-N9-C4	-11.59	101.77	106.40
26	LA	2395	C	O4'-C1'-N1	11.59	117.47	108.20
26	LA	1999	C	C5-C4-N4	-11.59	112.09	120.20
26	LA	1927	A	N9-C4-C5	11.58	110.43	105.80
2	SA	951	G	C5-C6-N1	-11.58	105.71	111.50
2	SA	295	C	O4'-C1'-N1	11.57	117.46	108.20
26	LA	2682	A	C8-N9-C4	-11.57	101.17	105.80
2	SA	686	U	P-O3'-C3'	11.57	133.59	119.70
26	LA	1875	G	C5-N7-C8	-11.57	98.51	104.30
26	LA	1960	A	C8-N9-C4	11.57	110.43	105.80
4	S2	75	C	O4'-C1'-N1	11.57	117.45	108.20
26	LA	20	C	O4'-C1'-N1	11.57	117.45	108.20
3	S1	25	U	O4'-C1'-N1	11.56	117.45	108.20
26	LA	931	U	C3'-C2'-C1'	-11.56	92.25	101.50
2	SA	336	A	N1-C6-N6	11.56	125.54	118.60
2	SA	706	A	C4-C5-N7	-11.56	104.92	110.70
25	LB	10	G	C2-N3-C4	11.56	117.68	111.90
26	LA	2653	U	O4'-C1'-N1	11.56	117.45	108.20
2	SA	1176	A	C4-C5-C6	-11.56	111.22	117.00
25	LB	65	U	N3-C4-O4	11.55	127.49	119.40
26	LA	2821	A	C2-N3-C4	11.55	116.38	110.60
51	LI	132	PHE	CB-CG-CD1	11.55	128.89	120.80
26	LA	891	G	C5-C6-O6	-11.55	121.67	128.60
26	LA	1727	C	C2-N3-C4	-11.55	114.13	119.90
19	SC	106	ARG	NE-CZ-NH2	-11.54	114.53	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
46	LH	34	ARG	NE-CZ-NH1	11.54	126.07	120.30
26	LA	574	A	C5'-C4'-O4'	11.54	122.95	109.10
26	LA	590	A	C8-N9-C4	11.54	110.42	105.80
26	LA	1369	G	C4'-C3'-C2'	-11.54	91.06	102.60
26	LA	1055	G	C5-C6-O6	-11.54	121.68	128.60
25	LB	36	C	O4'-C1'-N1	11.54	117.43	108.20
26	LA	1278	C	O4'-C1'-N1	11.54	117.43	108.20
26	LA	981	A	N7-C8-N9	-11.54	108.03	113.80
26	LA	2024	G	C8-N9-C4	-11.53	101.79	106.40
26	LA	1203	U	N3-C4-O4	11.53	127.47	119.40
26	LA	1394	U	C5-C4-O4	-11.53	118.98	125.90
2	SA	1290	G	N1-C2-N3	11.52	130.81	123.90
2	SA	918	A	N1-C6-N6	11.52	125.51	118.60
26	LA	1042	G	N3-C4-C5	11.52	134.36	128.60
26	LA	1623	G	C2-N3-C4	-11.51	106.14	111.90
38	LE	46	ARG	NE-CZ-NH1	11.51	126.06	120.30
25	LB	102	G	P-O3'-C3'	11.51	133.51	119.70
26	LA	1314	C	C6-N1-C2	-11.51	115.70	120.30
26	LA	2538	C	C6-N1-C2	-11.51	115.70	120.30
2	SA	1361	G	N1-C6-O6	11.51	126.80	119.90
2	SA	810	C	C5-C4-N4	-11.50	112.15	120.20
57	LS	10	ARG	NE-CZ-NH1	11.50	126.05	120.30
2	SA	576	C	O4'-C1'-N1	11.50	117.40	108.20
2	SA	1514	G	N1-C6-O6	11.49	126.80	119.90
26	LA	1339	G	O4'-C1'-N9	11.49	117.40	108.20
2	SA	428	G	C5-C6-O6	-11.48	121.71	128.60
2	SA	742	G	C2-N3-C4	-11.48	106.16	111.90
2	SA	947	G	O4'-C1'-N9	11.48	117.38	108.20
26	LA	2621	G	P-O3'-C3'	11.48	133.48	119.70
2	SA	939	G	N3-C2-N2	11.48	127.94	119.90
26	LA	2880	C	C6-N1-C2	-11.48	115.71	120.30
2	SA	416	G	N1-C6-O6	11.47	126.78	119.90
2	SA	1536	C	C6-N1-C2	-11.47	115.71	120.30
2	SA	263	A	N1-C6-N6	11.47	125.48	118.60
2	SA	851	G	C4-C5-N7	-11.47	106.21	110.80
26	LA	1917	U	C2-N1-C1'	11.47	131.47	117.70
2	SA	956	U	P-O5'-C5'	11.47	139.25	120.90
2	SA	138	G	N1-C6-O6	11.46	126.78	119.90
25	LB	89	U	C6-N1-C2	-11.46	114.12	121.00
26	LA	2695	U	C2-N1-C1'	-11.46	103.95	117.70
26	LA	737	C	C6-N1-C2	-11.46	115.72	120.30
26	LA	1547	C	N3-C2-O2	-11.46	113.88	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1300	G	C5-C6-O6	-11.44	121.73	128.60
26	LA	963	U	C6-N1-C2	-11.44	114.13	121.00
26	LA	2048	G	N7-C8-N9	11.44	118.82	113.10
2	SA	670	G	N1-C6-O6	-11.44	113.04	119.90
26	LA	1560	G	C5-C6-O6	-11.44	121.74	128.60
1	SS	80	ARG	NE-CZ-NH1	11.43	126.02	120.30
10	SJ	48	ARG	NE-CZ-NH1	11.43	126.02	120.30
26	LA	2178	C	C6-N1-C2	-11.43	115.73	120.30
26	LA	426	C	C6-N1-C2	-11.43	115.73	120.30
25	LB	31	C	C2-N3-C4	-11.43	114.19	119.90
26	LA	944	C	C6-N1-C2	-11.43	115.73	120.30
26	LA	2149	U	N1-C2-O2	11.42	130.79	122.80
26	LA	700	G	O4'-C1'-N9	11.42	117.33	108.20
26	LA	838	C	C5-C4-N4	-11.42	112.21	120.20
2	SA	1317	C	C5-C6-N1	11.41	126.71	121.00
27	LD	188	ARG	NE-CZ-NH1	11.41	126.01	120.30
9	SI	6	TYR	CB-CG-CD1	11.41	127.85	121.00
26	LA	1223	G	C4-C5-N7	-11.41	106.24	110.80
26	LA	2425	A	C5-C6-N6	11.40	132.82	123.70
2	SA	869	G	N1-C6-O6	11.40	126.74	119.90
2	SA	1077	G	N3-C2-N2	11.40	127.88	119.90
26	LA	2812	G	O4'-C1'-N9	11.40	117.32	108.20
26	LA	2644	G	N9-C4-C5	11.40	109.96	105.40
2	SA	607	A	C8-N9-C4	-11.40	101.24	105.80
26	LA	818	G	C5-C6-O6	-11.39	121.77	128.60
57	LS	54	ARG	NE-CZ-NH2	-11.39	114.61	120.30
52	LO	51	ARG	NE-CZ-NH2	11.39	125.99	120.30
26	LA	816	C	C6-N1-C2	-11.38	115.75	120.30
26	LA	2543	G	N1-C6-O6	11.38	126.73	119.90
26	LA	1582	C	P-O5'-C5'	11.38	139.11	120.90
2	SA	484	G	C8-N9-C4	-11.38	101.85	106.40
2	SA	647	C	C5-C6-N1	-11.38	115.31	121.00
2	SA	752	G	N9-C4-C5	-11.38	100.85	105.40
47	LJ	75	PHE	CB-CG-CD2	11.38	128.76	120.80
26	LA	2867	G	C8-N9-C4	-11.37	101.85	106.40
2	SA	297	G	N1-C6-O6	-11.37	113.08	119.90
22	SF	79	ARG	NE-CZ-NH2	-11.37	114.61	120.30
26	LA	2030	U	O4'-C1'-N1	11.37	117.30	108.20
26	LA	69	C	C6-N1-C2	-11.37	115.75	120.30
26	LA	705	A	P-O3'-C3'	11.37	133.34	119.70
27	LD	181	ARG	NE-CZ-NH1	11.37	125.98	120.30
48	LN	18	ARG	NE-CZ-NH2	-11.37	114.61	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1753	G	N1-C6-O6	11.37	126.72	119.90
2	SA	572	A	C5-C6-N6	-11.37	114.61	123.70
2	SA	42	G	N1-C6-O6	-11.36	113.08	119.90
26	LA	300	A	P-O3'-C3'	-11.36	106.06	119.70
26	LA	380	G	N1-C6-O6	11.36	126.72	119.90
26	LA	1168	G	N1-C6-O6	11.37	126.72	119.90
2	SA	1063	C	C2-N3-C4	-11.36	114.22	119.90
23	SR	60	ARG	NE-CZ-NH1	11.36	125.98	120.30
26	LA	1425	G	C5-C6-O6	-11.36	121.78	128.60
2	SA	467	U	C5-C6-N1	-11.36	117.02	122.70
25	LB	72	G	O4'-C1'-N9	11.36	117.29	108.20
26	LA	2127	G	C5'-C4'-C3'	11.36	134.17	116.00
26	LA	2297	A	C5-C6-N1	-11.36	112.02	117.70
50	LL	34	ARG	NE-CZ-NH2	-11.36	114.62	120.30
26	LA	19	A	C5-N7-C8	-11.35	98.22	103.90
45	LG	114	ARG	NE-CZ-NH1	-11.35	114.62	120.30
2	SA	552	U	O4'-C1'-N1	11.35	117.28	108.20
2	SA	642	A	P-O5'-C5'	11.35	139.06	120.90
26	LA	846	U	O4'-C1'-N1	11.35	117.28	108.20
26	LA	2613	U	C2-N3-C4	-11.35	120.19	127.00
26	LA	1310	G	C4-C5-N7	11.35	115.34	110.80
26	LA	838	C	C2-N3-C4	-11.35	114.23	119.90
26	LA	1399	C	N3-C4-C5	-11.35	117.36	121.90
27	LD	68	ARG	NE-CZ-NH2	-11.35	114.63	120.30
24	S3	361	ARG	NE-CZ-NH1	11.34	125.97	120.30
26	LA	606	U	C2-N3-C4	-11.34	120.20	127.00
2	SA	98	A	N1-C6-N6	-11.34	111.80	118.60
2	SA	180	U	C5-C4-O4	11.34	132.70	125.90
2	SA	353	A	N7-C8-N9	-11.34	108.13	113.80
26	LA	1469	A	C2-N3-C4	11.34	116.27	110.60
26	LA	1945	G	C4-C5-N7	11.34	115.33	110.80
2	SA	74	A	N9-C4-C5	-11.33	101.27	105.80
2	SA	405	U	O4'-C1'-N1	11.33	117.27	108.20
2	SA	1128	C	O4'-C1'-N1	11.33	117.26	108.20
26	LA	548	G	P-O3'-C3'	11.33	133.30	119.70
26	LA	922	C	C6-N1-C2	-11.33	115.77	120.30
26	LA	1745	A	C8-N9-C4	-11.33	101.27	105.80
26	LA	12	U	N3-C2-O2	-11.33	114.27	122.20
26	LA	2751	G	C3'-C2'-C1'	-11.33	92.44	101.50
26	LA	1856	U	P-O5'-C5'	11.33	139.02	120.90
26	LA	1639	C	O4'-C1'-N1	11.32	117.26	108.20
2	SA	1363	A	N1-C6-N6	11.32	125.39	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	SI	63	TYR	CB-CG-CD2	-11.32	114.21	121.00
26	LA	957	C	C6-N1-C2	-11.32	115.77	120.30
26	LA	1515	A	N9-C4-C5	-11.32	101.27	105.80
2	SA	722	G	C6-N1-C2	-11.32	118.31	125.10
24	S3	358	ARG	NE-CZ-NH1	11.32	125.96	120.30
26	LA	1055	G	N1-C6-O6	11.32	126.69	119.90
26	LA	1507	C	C4-C5-C6	11.32	123.06	117.40
26	LA	1654	A	N1-C2-N3	11.32	134.96	129.30
26	LA	1846	G	N3-C2-N2	-11.32	111.98	119.90
26	LA	2568	U	C2-N3-C4	-11.31	120.21	127.00
26	LA	2038	G	C5-C6-O6	-11.31	121.81	128.60
26	LA	2091	C	N3-C4-N4	11.31	125.92	118.00
2	SA	424	G	O4'-C1'-N9	11.30	117.24	108.20
2	SA	715	A	N7-C8-N9	11.30	119.45	113.80
2	SA	730	G	N1-C2-N2	-11.30	106.03	116.20
26	LA	1125	G	C8-N9-C4	-11.30	101.88	106.40
26	LA	1401	G	N3-C2-N2	11.30	127.81	119.90
2	SA	296	U	C2-N3-C4	-11.30	120.22	127.00
20	SD	25	ARG	NE-CZ-NH1	-11.30	114.65	120.30
5	ST	28	ARG	NE-CZ-NH2	-11.30	114.65	120.30
26	LA	689	A	N1-C6-N6	11.30	125.38	118.60
26	LA	1947	C	C2-N3-C4	-11.30	114.25	119.90
2	SA	237	G	C5-C6-O6	-11.29	121.82	128.60
28	LU	110	ARG	NE-CZ-NH2	11.30	125.95	120.30
2	SA	214	C	O4'-C1'-N1	11.29	117.23	108.20
40	L4	19	PHE	CB-CG-CD1	11.29	128.70	120.80
26	LA	698	C	N3-C4-C5	11.29	126.42	121.90
2	SA	1232	U	C5-C6-N1	11.29	128.34	122.70
26	LA	2699	C	C2-N3-C4	-11.29	114.26	119.90
26	LA	140	C	C2-N1-C1'	11.28	131.21	118.80
37	LC	12	ARG	NE-CZ-NH2	11.28	125.94	120.30
2	SA	110	C	O4'-C1'-N1	11.28	117.22	108.20
2	SA	777	A	C5-C6-N6	-11.28	114.68	123.70
26	LA	1794	A	N1-C2-N3	-11.28	123.66	129.30
26	LA	1192	G	C5-N7-C8	-11.27	98.67	104.30
26	LA	1533	C	O4'-C1'-N1	11.27	117.22	108.20
26	LA	296	U	O4'-C1'-N1	11.27	117.21	108.20
25	LB	59	A	C5-N7-C8	-11.26	98.27	103.90
26	LA	2543	G	C5-C6-O6	-11.26	121.84	128.60
26	LA	2271	G	N1-C6-O6	11.26	126.65	119.90
26	LA	2801	G	C5-C6-O6	-11.26	121.85	128.60
26	LA	2112	G	O4'-C1'-N9	11.25	117.20	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	582	A	N1-C6-N6	11.25	125.35	118.60
26	LA	1184	U	C5'-C4'-O4'	11.25	122.60	109.10
26	LA	627	A	O4'-C1'-N9	11.25	117.20	108.20
26	LA	2575	C	C5'-C4'-C3'	11.25	134.00	116.00
26	LA	72	U	C5-C6-N1	-11.25	117.08	122.70
26	LA	1897	G	C5'-C4'-C3'	-11.24	98.01	116.00
2	SA	1188	A	P-O3'-C3'	11.24	133.19	119.70
2	SA	1399	C	N3-C4-N4	11.24	125.87	118.00
26	LA	1090	A	P-O3'-C3'	11.24	133.19	119.70
26	LA	2602	A	C1'-O4'-C4'	-11.24	100.91	109.90
2	SA	895	G	N1-C2-N3	-11.24	117.16	123.90
2	SA	102	G	N1-C6-O6	11.24	126.64	119.90
26	LA	1994	C	C2-N3-C4	-11.24	114.28	119.90
26	LA	490	C	N3-C4-N4	11.23	125.86	118.00
26	LA	2346	A	P-O3'-C3'	11.23	133.18	119.70
2	SA	814	A	O4'-C1'-N9	11.23	117.19	108.20
26	LA	2776	A	N1-C2-N3	11.23	134.92	129.30
26	LA	667	U	N3-C2-O2	-11.23	114.34	122.20
18	SB	183	PHE	CB-CG-CD1	-11.22	112.94	120.80
26	LA	306	U	C5-C4-O4	-11.22	119.17	125.90
26	LA	603	A	P-O3'-C3'	11.22	133.17	119.70
26	LA	1472	C	C6-N1-C2	-11.22	115.81	120.30
26	LA	2545	G	C4-C5-N7	11.22	115.29	110.80
2	SA	692	U	C5-C6-N1	-11.21	117.09	122.70
26	LA	1622	G	C5-C6-O6	-11.21	121.87	128.60
2	SA	851	G	C5-C6-N1	-11.21	105.89	111.50
24	S3	370	ARG	NE-CZ-NH2	-11.21	114.69	120.30
26	LA	141	G	C5'-C4'-C3'	-11.21	98.06	116.00
26	LA	2213	U	P-O3'-C3'	11.21	133.16	119.70
27	LD	257	ARG	NE-CZ-NH2	-11.21	114.69	120.30
27	LD	261	ARG	NE-CZ-NH1	11.21	125.91	120.30
2	SA	1047	G	C5-C6-O6	-11.21	121.88	128.60
2	SA	1447	A	O3'-P-O5'	-11.21	82.70	104.00
26	LA	1381	G	C5-C6-O6	-11.21	121.87	128.60
26	LA	1775	U	C2-N3-C4	-11.21	120.28	127.00
26	LA	1888	G	C5-C6-O6	-11.21	121.88	128.60
2	SA	890	G	C3'-C2'-C1'	-11.20	92.54	101.50
26	LA	1338	G	N1-C6-O6	11.20	126.62	119.90
2	SA	178	C	O4'-C1'-N1	11.20	117.16	108.20
26	LA	2238	G	C5-C6-O6	-11.20	121.88	128.60
26	LA	1979	U	N3-C4-C5	11.20	121.32	114.60
26	LA	154	U	O4'-C1'-N1	11.20	117.16	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	432	A	C1'-O4'-C4'	-11.19	100.95	109.90
26	LA	679	C	C6-N1-C2	-11.19	115.82	120.30
26	LA	1248	G	N1-C6-O6	11.19	126.61	119.90
26	LA	1406	U	O4'-C1'-N1	11.19	117.15	108.20
26	LA	2287	A	C5-C6-N1	-11.19	112.11	117.70
26	LA	987	C	N3-C4-N4	11.19	125.83	118.00
26	LA	2237	G	O4'-C1'-N9	11.19	117.15	108.20
2	SA	331	G	C5-C6-O6	-11.18	121.89	128.60
2	SA	975	A	N7-C8-N9	-11.18	108.21	113.80
2	SA	1072	G	N7-C8-N9	11.18	118.69	113.10
45	LG	109	ARG	NE-CZ-NH2	11.18	125.89	120.30
2	SA	631	C	P-O3'-C3'	11.18	133.12	119.70
24	S3	637	ARG	NE-CZ-NH1	11.18	125.89	120.30
26	LA	1723	G	C8-N9-C4	-11.18	101.93	106.40
26	LA	2017	U	P-O3'-C3'	11.18	133.12	119.70
26	LA	2843	G	O4'-C1'-N9	11.18	117.14	108.20
2	SA	1416	G	C8-N9-C4	11.18	110.87	106.40
4	S2	16	C	C6-N1-C2	-11.18	115.83	120.30
26	LA	1331	G	C5-C6-O6	-11.18	121.89	128.60
26	LA	533	G	C5-C6-O6	-11.17	121.89	128.60
26	LA	2567	G	P-O3'-C3'	11.17	133.11	119.70
2	SA	1009	U	O4'-C1'-N1	11.17	117.14	108.20
2	SA	1054	C	C4'-C3'-C2'	11.17	113.77	102.60
26	LA	1380	G	N1-C6-O6	-11.17	113.20	119.90
2	SA	19	A	N1-C6-N6	-11.17	111.90	118.60
26	LA	2456	C	N3-C4-N4	11.17	125.82	118.00
2	SA	858	G	C5-C6-O6	-11.16	121.90	128.60
26	LA	323	C	O4'-C1'-N1	11.16	117.13	108.20
26	LA	834	G	C8-N9-C4	-11.16	101.94	106.40
2	SA	116	A	N1-C6-N6	11.16	125.29	118.60
4	S2	17	C	N3-C4-C5	-11.16	117.44	121.90
26	LA	2313	C	O4'-C1'-N1	11.16	117.12	108.20
2	SA	307	C	C6-N1-C2	-11.15	115.84	120.30
2	SA	1054	C	O4'-C1'-N1	11.15	117.12	108.20
26	LA	2604	U	C2-N3-C4	-11.15	120.31	127.00
26	LA	2253	G	P-O3'-C3'	11.15	133.08	119.70
2	SA	1229	A	N9-C4-C5	11.15	110.26	105.80
2	SA	1247	U	C2-N3-C4	-11.15	120.31	127.00
2	SA	1054	C	C6-N1-C2	-11.14	115.84	120.30
3	S1	31	U	C1'-O4'-C4'	-11.14	100.99	109.90
26	LA	94	A	O4'-C1'-N9	11.14	117.11	108.20
2	SA	717	U	O4'-C1'-N1	11.14	117.11	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	68	C	C6-N1-C2	-11.14	115.84	120.30
25	LB	91	C	O4'-C1'-N1	11.14	117.11	108.20
26	LA	902	C	C6-N1-C2	11.14	124.75	120.30
26	LA	1241	A	C6-N1-C2	-11.13	111.92	118.60
26	LA	1801	A	N1-C6-N6	-11.13	111.92	118.60
25	LB	65	U	C5-C4-O4	-11.13	119.22	125.90
25	LB	110	C	C6-N1-C2	-11.13	115.85	120.30
25	LB	41	G	C6-N1-C2	-11.13	118.42	125.10
26	LA	2394	C	C5-C6-N1	-11.13	115.44	121.00
22	SF	45	ARG	NE-CZ-NH1	11.12	125.86	120.30
26	LA	739	A	N1-C6-N6	-11.12	111.92	118.60
2	SA	174	A	C2-N3-C4	-11.12	105.04	110.60
2	SA	254	G	N9-C4-C5	-11.12	100.95	105.40
27	LD	174	ARG	NE-CZ-NH1	11.12	125.86	120.30
2	SA	1152	A	N1-C6-N6	11.11	125.27	118.60
2	SA	1283	U	O4'-C1'-N1	11.12	117.09	108.20
48	LN	123	ARG	NE-CZ-NH2	-11.12	114.74	120.30
11	SK	127	ARG	NE-CZ-NH2	-11.11	114.74	120.30
26	LA	973	A	C8-N9-C4	-11.11	101.36	105.80
26	LA	2791	G	C8-N9-C4	-11.11	101.95	106.40
2	SA	1260	G	O4'-C1'-N9	11.11	117.09	108.20
26	LA	1901	A	C2-N3-C4	11.11	116.16	110.60
26	LA	2139	U	O4'-C1'-N1	11.11	117.08	108.20
26	LA	2421	G	C4-C5-N7	11.11	115.24	110.80
41	L5	19	ARG	NE-CZ-NH2	11.10	125.85	120.30
2	SA	238	A	C4-C5-N7	11.10	116.25	110.70
26	LA	1681	G	C6-N1-C2	-11.10	118.44	125.10
2	SA	62	U	N3-C2-O2	-11.10	114.43	122.20
26	LA	1691	C	N1-C2-O2	-11.10	112.24	118.90
26	LA	2889	C	C5-C4-N4	11.10	127.97	120.20
2	SA	772	U	C2-N3-C4	-11.10	120.34	127.00
2	SA	1402	C	C6-N1-C2	-11.10	115.86	120.30
2	SA	1536	C	C4-C5-C6	11.09	122.95	117.40
26	LA	1335	C	O4'-C1'-N1	11.09	117.07	108.20
26	LA	1559	U	C5'-C4'-O4'	11.09	122.41	109.10
26	LA	2400	G	N3-C4-C5	11.09	134.15	128.60
2	SA	393	A	C6-N1-C2	-11.09	111.95	118.60
2	SA	1468	A	C4-C5-C6	-11.09	111.45	117.00
26	LA	1534	U	N1-C2-O2	11.09	130.56	122.80
26	LA	1421	G	N1-C2-N3	-11.09	117.25	123.90
2	SA	221	C	C5-C6-N1	11.09	126.54	121.00
2	SA	1022	A	N1-C6-N6	-11.09	111.95	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	765	G	C3'-C2'-C1'	11.08	110.36	101.50
26	LA	1334	G	C5-C6-O6	-11.08	121.95	128.60
26	LA	2497	A	C4'-C3'-C2'	-11.08	91.52	102.60
26	LA	2519	U	N1-C2-O2	-11.08	115.05	122.80
57	LS	10	ARG	NE-CZ-NH2	-11.08	114.76	120.30
6	SU	20	ARG	NE-CZ-NH2	-11.07	114.76	120.30
26	LA	102	U	C6-N1-C2	-11.07	114.36	121.00
26	LA	1588	G	C8-N9-C4	-11.07	101.97	106.40
40	L4	5	ARG	NE-CZ-NH1	11.07	125.84	120.30
2	SA	945	G	N1-C6-O6	11.07	126.54	119.90
2	SA	652	U	P-O3'-C3'	11.07	132.98	119.70
2	SA	1102	A	O4'-C1'-N9	11.07	117.06	108.20
26	LA	387	U	C2-N3-C4	-11.07	120.36	127.00
26	LA	1490	A	N1-C2-N3	-11.07	123.77	129.30
26	LA	2596	U	C5-C4-O4	-11.07	119.26	125.90
2	SA	825	A	C5-N7-C8	-11.07	98.37	103.90
18	SB	68	PHE	CB-CG-CD2	-11.07	113.05	120.80
25	LB	49	C	C6-N1-C2	11.07	124.73	120.30
26	LA	393	C	C6-N1-C2	-11.07	115.87	120.30
26	LA	2844	G	C4-C5-N7	11.07	115.23	110.80
2	SA	698	G	C5-C6-O6	-11.06	121.96	128.60
26	LA	1651	G	C8-N9-C4	11.06	110.83	106.40
2	SA	423	G	O4'-C1'-N9	11.06	117.05	108.20
25	LB	88	C	P-O3'-C3'	11.06	132.97	119.70
26	LA	1595	C	C2-N3-C4	-11.06	114.37	119.90
2	SA	235	C	C1'-O4'-C4'	-11.06	101.05	109.90
2	SA	415	A	C2-N3-C4	11.06	116.13	110.60
2	SA	1473	G	P-O5'-C5'	11.05	138.59	120.90
26	LA	1148	U	N1-C2-N3	11.05	121.53	114.90
26	LA	2250	G	C5-C6-O6	-11.05	121.97	128.60
26	LA	2402	U	P-O3'-C3'	-11.05	106.44	119.70
4	S2	66	C	C5-C4-N4	-11.05	112.46	120.20
26	LA	1369	G	N1-C6-O6	11.05	126.53	119.90
26	LA	2835	A	O4'-C1'-N9	11.05	117.04	108.20
20	SD	46	ARG	NE-CZ-NH2	-11.05	114.78	120.30
26	LA	925	A	O4'-C1'-N9	11.05	117.04	108.20
26	LA	782	A	C5-C6-N1	-11.05	112.18	117.70
2	SA	354	G	N1-C6-O6	-11.04	113.28	119.90
26	LA	1253	A	C2-N3-C4	-11.04	105.08	110.60
24	S3	335	PHE	CB-CG-CD2	11.04	128.53	120.80
26	LA	168	G	N1-C6-O6	-11.04	113.28	119.90
26	LA	276	U	N3-C4-O4	11.04	127.13	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1048	A	C5-N7-C8	-11.04	98.38	103.90
26	LA	198	C	C2-N3-C4	-11.04	114.38	119.90
2	SA	1525	G	C5-C6-O6	-11.03	121.98	128.60
26	LA	1452	G	N7-C8-N9	-11.03	107.58	113.10
2	SA	194	C	C2-N3-C4	-11.03	114.39	119.90
2	SA	1253	G	C5-C6-N1	11.03	117.02	111.50
26	LA	2465	C	P-O5'-C5'	11.03	138.54	120.90
26	LA	2471	A	C5'-C4'-O4'	11.03	122.33	109.10
26	LA	2601	C	N3-C4-C5	-11.03	117.49	121.90
26	LA	1338	G	N9-C4-C5	11.02	109.81	105.40
26	LA	1811	G	C5'-C4'-C3'	11.02	133.64	116.00
26	LA	1914	C	C6-N1-C2	-11.02	115.89	120.30
26	LA	2156	G	O4'-C1'-N9	11.02	117.02	108.20
25	LB	87	U	N3-C2-O2	11.02	129.91	122.20
51	LI	68	ARG	NE-CZ-NH2	11.02	125.81	120.30
26	LA	2345	G	N3-C2-N2	11.02	127.61	119.90
26	LA	129	C	O4'-C1'-N1	11.01	117.01	108.20
26	LA	98	G	C2-N3-C4	11.01	117.41	111.90
26	LA	1993	U	C5-C4-O4	-11.01	119.29	125.90
2	SA	960	U	P-O3'-C3'	11.01	132.91	119.70
25	LB	49	C	C5-C6-N1	-11.01	115.50	121.00
26	LA	1206	G	N3-C4-C5	-11.01	123.10	128.60
26	LA	351	C	O4'-C1'-N1	11.01	117.00	108.20
26	LA	386	G	C5-C6-O6	-11.01	122.00	128.60
26	LA	992	C	O4'-C1'-N1	11.01	117.00	108.20
26	LA	1569	A	O4'-C1'-N9	11.01	117.00	108.20
26	LA	1680	U	C2-N3-C4	-11.01	120.40	127.00
26	LA	2490	G	N1-C6-O6	11.01	126.50	119.90
2	SA	1429	A	C5-C6-N1	11.00	123.20	117.70
26	LA	780	G	C5-C6-O6	-11.00	122.00	128.60
26	LA	1198	U	C2-N3-C4	-11.00	120.40	127.00
26	LA	1202	G	O4'-C1'-N9	11.00	117.00	108.20
30	LW	81	ARG	NE-CZ-NH2	-11.00	114.80	120.30
26	LA	321	U	C5-C6-N1	-11.00	117.20	122.70
26	LA	2439	A	C2-N3-C4	11.00	116.10	110.60
26	LA	251	A	N1-C2-N3	-10.99	123.80	129.30
26	LA	1048	A	N7-C8-N9	10.99	119.30	113.80
2	SA	873	A	C5-C6-N1	10.99	123.19	117.70
26	LA	1727	C	O4'-C1'-N1	10.99	116.99	108.20
26	LA	2874	C	N3-C4-N4	10.99	125.69	118.00
2	SA	965	U	P-O3'-C3'	10.98	132.88	119.70
53	LP	45	ARG	NE-CZ-NH2	-10.98	114.81	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	900	A	C8-N9-C4	-10.98	101.41	105.80
26	LA	2838	G	C4-C5-N7	10.98	115.19	110.80
3	S1	59	A	N1-C6-N6	10.98	125.19	118.60
26	LA	259	G	C4-C5-N7	10.98	115.19	110.80
3	S1	45	G	C8-N9-C1'	-10.98	112.73	127.00
26	LA	1709	U	C2-N3-C4	-10.97	120.42	127.00
26	LA	1970	A	N1-C2-N3	10.97	134.79	129.30
2	SA	626	G	C5-C6-O6	-10.97	122.02	128.60
2	SA	853	C	N3-C4-C5	-10.97	117.51	121.90
2	SA	1338	G	C5-C6-O6	10.97	135.18	128.60
26	LA	1718	G	N1-C6-O6	10.97	126.48	119.90
26	LA	2479	U	P-O5'-C5'	10.97	138.45	120.90
26	LA	122	G	C6-C5-N7	-10.97	123.82	130.40
26	LA	377	G	N1-C6-O6	10.97	126.48	119.90
2	SA	417	G	O4'-C1'-N9	10.96	116.97	108.20
26	LA	1050	A	C8-N9-C4	10.97	110.19	105.80
2	SA	715	A	C8-N9-C4	-10.96	101.42	105.80
26	LA	1505	A	N1-C6-N6	10.96	125.18	118.60
26	LA	404	A	C5-C6-N1	10.96	123.18	117.70
26	LA	1045	C	O4'-C1'-N1	10.96	116.97	108.20
26	LA	2094	A	C5-C6-N6	-10.96	114.93	123.70
2	SA	775	G	C5-C6-O6	-10.95	122.03	128.60
26	LA	1110	G	N1-C2-N2	-10.95	106.34	116.20
26	LA	141	G	N1-C6-O6	10.95	126.47	119.90
26	LA	1582	C	C6-N1-C2	-10.95	115.92	120.30
26	LA	320	A	N9-C4-C5	10.95	110.18	105.80
26	LA	1779	U	N1-C2-N3	-10.95	108.33	114.90
2	SA	539	A	C4'-C3'-C2'	-10.95	91.65	102.60
26	LA	590	A	N7-C8-N9	-10.95	108.33	113.80
26	LA	1182	G	C5-N7-C8	-10.95	98.83	104.30
2	SA	1253	G	C6-N1-C2	-10.94	118.53	125.10
2	SA	1162	C	C6-N1-C2	-10.94	115.92	120.30
26	LA	821	A	P-O3'-C3'	10.94	132.83	119.70
2	SA	900	A	N3-C4-N9	-10.94	118.65	127.40
2	SA	208	U	O4'-C1'-N1	10.94	116.95	108.20
2	SA	540	G	N1-C6-O6	10.94	126.46	119.90
26	LA	801	G	N1-C6-O6	10.94	126.46	119.90
26	LA	1740	G	O4'-C1'-N9	10.94	116.95	108.20
2	SA	274	A	N9-C4-C5	-10.94	101.43	105.80
26	LA	647	G	C5-C6-N1	10.94	116.97	111.50
2	SA	1042	A	O4'-C1'-N9	10.93	116.95	108.20
2	SA	746	A	N1-C6-N6	-10.93	112.04	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1052	U	O4'-C1'-N1	10.93	116.94	108.20
15	SO	79	ARG	NE-CZ-NH2	-10.93	114.84	120.30
26	LA	2358	A	N1-C2-N3	10.93	134.76	129.30
26	LA	2715	C	N3-C4-N4	10.93	125.65	118.00
2	SA	252	U	O4'-C1'-N1	10.93	116.94	108.20
2	SA	851	G	P-O3'-C3'	10.93	132.81	119.70
25	LB	87	U	C3'-C2'-C1'	-10.93	92.76	101.50
10	SJ	68	ARG	NE-CZ-NH1	10.92	125.76	120.30
26	LA	2385	C	O4'-C1'-N1	10.92	116.94	108.20
26	LA	269	C	O4'-C1'-N1	10.92	116.94	108.20
26	LA	689	A	C5-C6-N6	-10.92	114.97	123.70
2	SA	529	G	C8-N9-C4	-10.92	102.03	106.40
26	LA	214	G	O4'-C1'-N9	10.91	116.93	108.20
26	LA	1170	C	C5-C4-N4	-10.91	112.56	120.20
25	LB	72	G	C5-C6-O6	-10.91	122.05	128.60
26	LA	1151	A	N1-C6-N6	-10.91	112.05	118.60
26	LA	1254	A	N7-C8-N9	-10.91	108.34	113.80
2	SA	1201	A	N1-C2-N3	10.91	134.75	129.30
2	SA	35	G	N3-C4-C5	-10.91	123.15	128.60
2	SA	1189	U	C5'-C4'-O4'	10.91	122.19	109.10
26	LA	1558	C	N3-C4-C5	-10.91	117.54	121.90
26	LA	1999	C	N3-C4-N4	10.91	125.64	118.00
26	LA	641	U	C2-N1-C1'	10.90	130.78	117.70
26	LA	780	G	N1-C6-O6	10.90	126.44	119.90
26	LA	1264	A	N9-C4-C5	10.90	110.16	105.80
26	LA	2654	A	C5-N7-C8	10.90	109.35	103.90
26	LA	1268	A	C2-N3-C4	10.90	116.05	110.60
26	LA	1629	U	C2-N3-C4	-10.90	120.46	127.00
2	SA	857	C	O4'-C1'-N1	10.90	116.92	108.20
3	S1	45	G	O4'-C1'-N9	10.90	116.92	108.20
26	LA	287	G	O4'-C1'-N9	10.90	116.92	108.20
26	LA	805	G	C5-C6-N1	10.90	116.95	111.50
26	LA	2711	A	P-O3'-C3'	10.90	132.78	119.70
32	LY	40	ARG	NE-CZ-NH1	10.90	125.75	120.30
26	LA	1872	A	P-O3'-C3'	10.89	132.77	119.70
26	LA	1985	C	O4'-C1'-N1	10.89	116.92	108.20
2	SA	1442	G	C5-N7-C8	-10.89	98.85	104.30
26	LA	1490	A	P-O3'-C3'	10.89	132.77	119.70
26	LA	2645	G	P-O3'-C3'	10.89	132.77	119.70
26	LA	2421	G	O4'-C1'-N9	10.89	116.91	108.20
36	L2	59	ARG	NE-CZ-NH1	10.89	125.75	120.30
26	LA	1503	A	C2-N3-C4	10.89	116.04	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	722	G	N3-C2-N2	10.88	127.52	119.90
26	LA	2403	C	C6-N1-C2	-10.89	115.94	120.30
26	LA	2753	A	N7-C8-N9	10.89	119.24	113.80
2	SA	1221	G	C2-N3-C4	-10.88	106.46	111.90
26	LA	1528	A	C5-N7-C8	10.88	109.34	103.90
26	LA	2436	G	C6-C5-N7	-10.88	123.87	130.40
26	LA	2440	C	P-O3'-C3'	10.88	132.76	119.70
2	SA	174	A	N1-C2-N3	10.88	134.74	129.30
2	SA	380	G	P-O3'-C3'	10.88	132.75	119.70
26	LA	38	A	O4'-C1'-N9	10.88	116.90	108.20
2	SA	697	U	C2-N3-C4	-10.87	120.48	127.00
2	SA	406	G	N3-C4-C5	-10.87	123.16	128.60
2	SA	470	C	N3-C4-N4	10.87	125.61	118.00
2	SA	774	G	C4-C5-N7	10.87	115.15	110.80
2	SA	689	C	O4'-C1'-N1	10.87	116.90	108.20
26	LA	2892	G	N1-C6-O6	-10.87	113.38	119.90
3	S1	38	G	N1-C6-O6	10.87	126.42	119.90
21	SE	49	TYR	CB-CG-CD1	-10.87	114.48	121.00
26	LA	997	G	C8-N9-C4	-10.87	102.05	106.40
12	SL	37	TYR	CB-CG-CD2	-10.87	114.48	121.00
26	LA	295	G	C5'-C4'-O4'	10.86	122.13	109.10
26	LA	1280	G	C5-C6-O6	-10.86	122.08	128.60
2	SA	944	G	C5-C6-O6	-10.86	122.09	128.60
26	LA	1098	A	C8-N9-C4	10.86	110.14	105.80
26	LA	1541	C	O4'-C1'-N1	10.86	116.89	108.20
26	LA	1975	G	C2-N3-C4	-10.86	106.47	111.90
26	LA	2567	G	C8-N9-C4	-10.86	102.06	106.40
2	SA	799	G	C4-C5-N7	10.85	115.14	110.80
26	LA	1944	U	C5-C6-N1	-10.85	117.27	122.70
25	LB	9	G	C8-N9-C4	10.85	110.74	106.40
2	SA	616	G	C5-N7-C8	10.85	109.72	104.30
26	LA	2655	G	C5-C6-O6	-10.85	122.09	128.60
26	LA	1930	G	C5-C6-N1	-10.84	106.08	111.50
26	LA	958	U	O4'-C1'-N1	10.84	116.87	108.20
26	LA	1768	C	O4'-C1'-N1	10.84	116.87	108.20
26	LA	756	A	C2-N3-C4	10.84	116.02	110.60
2	SA	80	A	C2-N3-C4	10.84	116.02	110.60
26	LA	1925	C	O4'-C1'-N1	10.84	116.87	108.20
2	SA	722	G	C8-N9-C4	-10.84	102.07	106.40
2	SA	1504	G	N1-C6-O6	10.84	126.40	119.90
26	LA	880	G	C4-N9-C1'	-10.84	112.41	126.50
26	LA	1812	U	C5-C6-N1	-10.84	117.28	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	812	G	C5-C6-O6	-10.84	122.10	128.60
2	SA	1339	A	N1-C6-N6	-10.84	112.10	118.60
2	SA	1399	C	C6-N1-C2	-10.83	115.97	120.30
26	LA	1659	G	C5-C6-O6	10.83	135.10	128.60
26	LA	617	G	N1-C6-O6	-10.83	113.40	119.90
26	LA	1510	G	C8-N9-C4	-10.83	102.07	106.40
26	LA	2123	G	C5-C6-O6	-10.83	122.10	128.60
2	SA	719	C	O4'-C1'-N1	10.83	116.86	108.20
2	SA	1006	G	P-O5'-C5'	10.83	138.22	120.90
26	LA	2399	G	N1-C6-O6	10.83	126.39	119.90
26	LA	1220	G	N1-C6-O6	-10.82	113.41	119.90
2	SA	1222	G	O4'-C1'-N9	10.82	116.86	108.20
4	S2	76	C	P-O5'-C5'	10.82	138.21	120.90
26	LA	2227	A	N1-C6-N6	10.82	125.09	118.60
1	SS	35	ARG	NE-CZ-NH2	10.82	125.71	120.30
26	LA	774	G	C6-N1-C2	-10.82	118.61	125.10
2	SA	1266	G	C4-C5-N7	-10.81	106.47	110.80
2	SA	1362	A	C1'-O4'-C4'	-10.81	101.25	109.90
26	LA	702	U	O4'-C1'-N1	10.81	116.85	108.20
2	SA	1321	U	C5-C6-N1	-10.81	117.29	122.70
2	SA	764	C	O4'-C1'-N1	10.81	116.85	108.20
25	LB	37	C	O4'-C1'-N1	10.81	116.85	108.20
26	LA	186	G	O4'-C1'-N9	10.81	116.85	108.20
26	LA	1042	G	C4-C5-N7	10.81	115.12	110.80
2	SA	478	A	O4'-C1'-N9	10.81	116.85	108.20
25	LB	31	C	O4'-C1'-N1	10.81	116.85	108.20
26	LA	2294	G	C5-C6-O6	-10.81	122.11	128.60
26	LA	2823	A	C8-N9-C4	10.81	110.12	105.80
26	LA	630	G	C5-C6-O6	-10.80	122.12	128.60
26	LA	1737	G	C5-C6-O6	-10.80	122.12	128.60
2	SA	1345	U	O5'-P-OP1	-10.80	95.98	105.70
26	LA	2270	A	O4'-C1'-N9	10.80	116.84	108.20
25	LB	109	A	O4'-C1'-N9	10.80	116.84	108.20
2	SA	34	C	N3-C4-C5	10.79	126.22	121.90
2	SA	418	C	C2-N3-C4	-10.79	114.50	119.90
2	SA	462	G	C5-N7-C8	10.79	109.70	104.30
2	SA	1301	U	P-O5'-C5'	10.79	138.17	120.90
26	LA	1730	C	P-O3'-C3'	10.79	132.65	119.70
26	LA	242	G	P-O5'-C5'	10.79	138.17	120.90
26	LA	271	G	C5'-C4'-C3'	-10.79	98.74	116.00
26	LA	1782	U	N3-C2-O2	-10.79	114.65	122.20
26	LA	2435	A	C8-N9-C4	-10.79	101.48	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	391	G	N1-C6-O6	10.79	126.37	119.90
26	LA	2642	G	P-O3'-C3'	-10.79	106.76	119.70
38	LE	118	PHE	CB-CG-CD1	10.79	128.35	120.80
2	SA	1477	U	N3-C4-O4	10.79	126.95	119.40
26	LA	332	A	O4'-C1'-C2'	-10.78	95.02	105.80
26	LA	488	G	C4-C5-N7	10.79	115.11	110.80
26	LA	2545	G	C5-N7-C8	-10.79	98.91	104.30
25	LB	94	A	O4'-C1'-N9	10.78	116.83	108.20
26	LA	1127	A	O4'-C1'-N9	10.78	116.83	108.20
2	SA	596	A	N1-C6-N6	-10.78	112.13	118.60
26	LA	671	C	C6-N1-C2	10.78	124.61	120.30
26	LA	997	G	C5-C6-O6	-10.78	122.13	128.60
2	SA	1251	A	C6-N1-C2	-10.77	112.14	118.60
26	LA	1662	U	C5-C4-O4	-10.77	119.44	125.90
25	LB	41	G	N1-C2-N3	10.77	130.36	123.90
26	LA	2336	A	C5-C6-N6	-10.77	115.08	123.70
26	LA	489	G	N1-C6-O6	10.76	126.36	119.90
26	LA	1834	U	O4'-C1'-N1	10.76	116.81	108.20
26	LA	1363	C	O4'-C1'-N1	10.76	116.81	108.20
2	SA	660	C	O4'-C1'-N1	10.76	116.81	108.20
26	LA	2186	G	C4-C5-C6	10.76	125.26	118.80
26	LA	1576	U	N3-C4-O4	10.76	126.93	119.40
26	LA	822	G	N1-C6-O6	10.75	126.35	119.90
2	SA	454	G	C8-N9-C4	-10.75	102.10	106.40
2	SA	306	A	N1-C6-N6	-10.75	112.15	118.60
4	S2	9	G	C5-C6-O6	-10.75	122.15	128.60
26	LA	1507	C	C5-C6-N1	-10.75	115.63	121.00
4	S2	10	G	N3-C2-N2	10.74	127.42	119.90
2	SA	1063	C	N3-C2-O2	-10.74	114.38	121.90
26	LA	413	C	C2-N3-C4	10.74	125.27	119.90
25	LB	107	G	C5-N7-C8	-10.74	98.93	104.30
2	SA	129	A	C2-N3-C4	-10.74	105.23	110.60
26	LA	2718	G	O4'-C1'-N9	10.74	116.79	108.20
2	SA	441	A	C4-C5-C6	10.74	122.37	117.00
4	S2	55	U	C5-C4-O4	-10.74	119.46	125.90
26	LA	20	C	N3-C2-O2	-10.74	114.38	121.90
26	LA	1252	G	N9-C4-C5	-10.74	101.10	105.40
26	LA	2661	G	O4'-C1'-N9	10.74	116.79	108.20
2	SA	535	A	C5-C6-N1	-10.74	112.33	117.70
26	LA	1588	G	O4'-C1'-N9	10.73	116.79	108.20
2	SA	305	G	C4-C5-N7	-10.73	106.51	110.80
26	LA	1016	G	N1-C6-O6	10.73	126.34	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1440	U	O4'-C1'-N1	10.73	116.79	108.20
26	LA	1531	C	N3-C4-N4	-10.73	110.49	118.00
26	LA	1741	C	N1-C2-N3	10.73	126.71	119.20
20	SD	181	PHE	CB-CG-CD1	-10.73	113.29	120.80
26	LA	793	A	C4-C5-N7	10.73	116.06	110.70
26	LA	2197	U	C5-C4-O4	-10.73	119.46	125.90
2	SA	687	A	N1-C6-N6	10.72	125.03	118.60
26	LA	1291	C	O4'-C1'-N1	10.72	116.78	108.20
26	LA	2251	U	C2-N3-C4	-10.72	120.57	127.00
26	LA	2695	U	N1-C2-N3	-10.72	108.47	114.90
26	LA	388	G	C5'-C4'-O4'	10.72	121.97	109.10
26	LA	1662	U	N3-C4-O4	10.72	126.91	119.40
26	LA	459	U	C5-C4-O4	10.72	132.33	125.90
26	LA	940	G	C5-C6-N1	10.72	116.86	111.50
26	LA	1840	G	C6-N1-C2	-10.72	118.67	125.10
2	SA	846	G	P-O3'-C3'	-10.72	106.84	119.70
26	LA	1324	G	O4'-C1'-N9	10.72	116.77	108.20
26	LA	1923	U	C5-C4-O4	10.71	132.33	125.90
2	SA	369	G	O4'-C1'-N9	10.71	116.77	108.20
2	SA	715	A	N9-C4-C5	10.71	110.08	105.80
26	LA	2884	U	O4'-C1'-N1	10.71	116.77	108.20
2	SA	1527	U	C5-C4-O4	-10.71	119.48	125.90
26	LA	1827	U	O4'-C1'-N1	10.70	116.76	108.20
26	LA	1904	G	N9-C4-C5	-10.70	101.12	105.40
26	LA	2228	G	C5-C6-O6	-10.70	122.18	128.60
2	SA	483	C	P-O5'-C5'	10.70	138.01	120.90
24	S3	252	ARG	NE-CZ-NH1	10.70	125.65	120.30
26	LA	773	U	C2-N3-C4	-10.70	120.58	127.00
26	LA	1354	A	C4-C5-C6	-10.70	111.65	117.00
2	SA	1457	G	C5-N7-C8	-10.69	98.95	104.30
44	LF	162	ARG	NE-CZ-NH2	10.69	125.65	120.30
2	SA	543	U	O4'-C1'-N1	10.69	116.75	108.20
2	SA	322	C	O4'-C1'-N1	10.69	116.75	108.20
2	SA	1181	G	C5-C6-O6	-10.69	122.19	128.60
2	SA	1282	C	C5-C6-N1	10.69	126.34	121.00
44	LF	61	ARG	NE-CZ-NH2	10.69	125.64	120.30
2	SA	496	A	O4'-C1'-N9	10.69	116.75	108.20
25	LB	71	C	N3-C4-N4	-10.69	110.52	118.00
26	LA	312	G	C5-N7-C8	10.69	109.64	104.30
26	LA	68	G	O4'-C1'-N9	10.69	116.75	108.20
2	SA	271	C	C2-N3-C4	-10.68	114.56	119.90
26	LA	1900	A	O4'-C1'-N9	10.68	116.75	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2352	A	P-O3'-C3'	10.68	132.52	119.70
26	LA	2405	G	N9-C4-C5	-10.68	101.13	105.40
26	LA	1520	U	C6-N1-C2	-10.68	114.59	121.00
26	LA	331	C	C6-N1-C2	-10.68	116.03	120.30
2	SA	1495	U	C2-N3-C4	-10.68	120.59	127.00
4	S2	1	C	O4'-C1'-N1	10.67	116.74	108.20
26	LA	474	G	N3-C2-N2	10.67	127.37	119.90
26	LA	512	G	P-O3'-C3'	10.67	132.51	119.70
26	LA	2380	C	C6-N1-C2	-10.67	116.03	120.30
2	SA	961	U	N3-C4-C5	-10.67	108.20	114.60
26	LA	2512	C	C5-C6-N1	-10.67	115.67	121.00
26	LA	1951	U	O4'-C1'-N1	10.67	116.73	108.20
26	LA	900	A	C4-C5-C6	-10.67	111.67	117.00
2	SA	1213	A	O4'-C1'-N9	-10.66	99.67	108.20
26	LA	2024	G	N3-C2-N2	10.66	127.36	119.90
26	LA	1715	G	N3-C2-N2	-10.66	112.44	119.90
26	LA	2604	U	N3-C4-C5	10.66	121.00	114.60
26	LA	2452	C	C6-N1-C2	-10.66	116.04	120.30
4	S2	56	U	P-O3'-C3'	10.66	132.49	119.70
9	SI	6	TYR	CB-CG-CD2	-10.66	114.61	121.00
26	LA	2814	A	N1-C2-N3	-10.66	123.97	129.30
2	SA	513	C	O4'-C1'-N1	10.65	116.72	108.20
2	SA	683	G	C5-C6-O6	-10.65	122.21	128.60
26	LA	1583	A	C1'-O4'-C4'	-10.65	101.38	109.90
26	LA	2874	C	C5-C4-N4	-10.65	112.74	120.20
2	SA	404	G	N9-C1'-C2'	-10.65	100.16	114.00
26	LA	196	A	C1'-O4'-C4'	-10.65	101.38	109.90
26	LA	2647	U	P-O3'-C3'	10.65	132.48	119.70
4	S2	43	G	C5-C6-N1	-10.64	106.18	111.50
2	SA	866	C	P-O5'-C5'	10.64	137.93	120.90
2	SA	1045	C	N3-C4-N4	10.64	125.45	118.00
26	LA	387	U	C5'-C4'-O4'	10.64	121.87	109.10
26	LA	907	G	O4'-C1'-N9	10.64	116.71	108.20
26	LA	651	G	C5-C6-O6	-10.64	122.22	128.60
26	LA	1053	C	O4'-C1'-N1	10.63	116.71	108.20
26	LA	1920	C	C6-N1-C2	-10.63	116.05	120.30
26	LA	1333	G	C5-C6-O6	-10.63	122.22	128.60
26	LA	1540	G	C6-N1-C2	-10.63	118.72	125.10
26	LA	2307	G	N1-C6-O6	10.63	126.28	119.90
2	SA	1494	G	N1-C6-O6	10.63	126.28	119.90
2	SA	276	G	C5-C6-O6	-10.62	122.23	128.60
26	LA	396	G	N1-C2-N3	10.62	130.28	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1107	C	N3-C4-C5	-10.62	117.65	121.90
2	SA	1454	G	C5-C6-O6	-10.62	122.23	128.60
26	LA	1841	U	N1-C2-N3	10.62	121.27	114.90
2	SA	276	G	N3-C2-N2	10.62	127.33	119.90
2	SA	304	U	C2-N3-C4	-10.62	120.63	127.00
26	LA	493	G	C5-C6-O6	-10.62	122.23	128.60
26	LA	2831	G	O4'-C1'-N9	10.62	116.70	108.20
2	SA	812	G	O4'-C1'-N9	10.62	116.69	108.20
26	LA	1807	G	O4'-C1'-N9	10.62	116.69	108.20
26	LA	1290	C	N3-C4-N4	10.62	125.43	118.00
26	LA	2682	A	C4'-C3'-C2'	-10.62	91.98	102.60
26	LA	1597	A	C2-N3-C4	-10.61	105.29	110.60
26	LA	2877	G	C5-C6-O6	-10.61	122.23	128.60
26	LA	560	C	O4'-C1'-N1	10.61	116.69	108.20
26	LA	2373	G	O4'-C1'-N9	10.61	116.69	108.20
26	LA	2648	G	C8-N9-C4	10.61	110.64	106.40
2	SA	305	G	O4'-C1'-N9	10.60	116.68	108.20
26	LA	1154	G	C4-C5-N7	10.60	115.04	110.80
26	LA	387	U	C5-C4-O4	-10.60	119.54	125.90
26	LA	1301	A	N1-C6-N6	-10.60	112.24	118.60
26	LA	1543	G	C5'-C4'-O4'	10.60	121.82	109.10
26	LA	1287	A	C8-N9-C4	-10.60	101.56	105.80
26	LA	66	C	O4'-C1'-N1	10.60	116.68	108.20
26	LA	1378	A	C5'-C4'-O4'	10.60	121.82	109.10
2	SA	668	G	C4-C5-N7	10.60	115.04	110.80
26	LA	2598	A	N1-C6-N6	-10.60	112.24	118.60
2	SA	1404	C	O4'-C1'-N1	10.59	116.67	108.20
25	LB	97	C	O4'-C1'-N1	10.59	116.67	108.20
26	LA	551	G	N1-C6-O6	10.59	126.26	119.90
53	LP	45	ARG	NE-CZ-NH1	10.59	125.60	120.30
4	S2	22	A	C8-N9-C4	10.59	110.04	105.80
26	LA	326	G	C5-C6-O6	-10.59	122.25	128.60
26	LA	390	U	C6-N1-C2	10.59	127.36	121.00
26	LA	619	G	C5-N7-C8	-10.59	99.00	104.30
26	LA	1999	C	O4'-C1'-N1	10.59	116.67	108.20
26	LA	1530	G	C2-N3-C4	10.59	117.19	111.90
26	LA	1764	C	O4'-C1'-N1	10.59	116.67	108.20
21	SE	53	ARG	NE-CZ-NH1	10.58	125.59	120.30
26	LA	748	G	C4-C5-N7	-10.58	106.57	110.80
26	LA	1323	C	P-O3'-C3'	10.58	132.40	119.70
26	LA	853	C	C5-C6-N1	10.58	126.29	121.00
26	LA	1416	G	O4'-C1'-N9	10.58	116.67	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1420	A	N9-C4-C5	10.58	110.03	105.80
2	SA	402	G	N3-C4-N9	10.58	132.35	126.00
2	SA	772	U	N1-C2-N3	10.58	121.25	114.90
26	LA	338	G	C8-N9-C4	10.58	110.63	106.40
2	SA	898	G	C4'-C3'-C2'	-10.57	92.03	102.60
26	LA	752	A	C3'-C2'-C1'	-10.57	93.04	101.50
26	LA	2061	G	C6-N1-C2	-10.57	118.75	125.10
26	LA	2298	A	O4'-C1'-N9	10.57	116.66	108.20
26	LA	525	U	P-O3'-C3'	10.57	132.39	119.70
26	LA	1462	C	C6-N1-C2	-10.57	116.07	120.30
2	SA	119	A	N1-C6-N6	-10.57	112.26	118.60
2	SA	669	G	N1-C6-O6	10.57	126.24	119.90
2	SA	1450	U	O4'-C1'-N1	10.57	116.65	108.20
26	LA	2136	G	O4'-C1'-N9	10.57	116.66	108.20
2	SA	527	G	C4-C5-C6	-10.56	112.46	118.80
2	SA	1460	C	O4'-C1'-N1	10.56	116.65	108.20
26	LA	2242	G	P-O3'-C3'	10.56	132.38	119.70
2	SA	1271	A	N1-C6-N6	10.56	124.94	118.60
2	SA	1477	U	C5-C4-O4	-10.56	119.56	125.90
26	LA	242	G	P-O3'-C3'	10.56	132.38	119.70
26	LA	1162	G	N1-C6-O6	10.56	126.24	119.90
26	LA	1565	C	C5-C4-N4	-10.56	112.81	120.20
26	LA	2753	A	C4-C5-N7	10.56	115.98	110.70
2	SA	372	C	O4'-C1'-N1	10.56	116.65	108.20
2	SA	545	C	O4'-C1'-N1	10.56	116.65	108.20
2	SA	1232	U	C6-N1-C2	-10.56	114.66	121.00
2	SA	1442	G	N1-C6-O6	-10.56	113.56	119.90
26	LA	218	A	C5-C6-N1	-10.56	112.42	117.70
26	LA	411	G	N9-C4-C5	-10.56	101.18	105.40
26	LA	2602	A	O4'-C1'-N9	10.56	116.65	108.20
26	LA	1969	A	C8-N9-C4	10.56	110.02	105.80
26	LA	886	A	O4'-C1'-N9	10.55	116.64	108.20
26	LA	1076	C	O4'-C1'-N1	10.55	116.64	108.20
26	LA	15	G	O4'-C1'-N9	10.55	116.64	108.20
26	LA	1427	A	C8-N9-C4	10.55	110.02	105.80
26	LA	2055	C	O4'-C1'-N1	10.54	116.64	108.20
2	SA	60	A	P-O3'-C3'	10.54	132.35	119.70
26	LA	2324	U	O4'-C1'-N1	10.54	116.63	108.20
2	SA	277	C	N3-C4-C5	10.54	126.12	121.90
26	LA	2451	A	N1-C6-N6	-10.54	112.28	118.60
26	LA	1816	C	O4'-C1'-N1	10.54	116.63	108.20
26	LA	2432	A	C5-C6-N1	-10.54	112.43	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	423	G	C8-N9-C4	-10.53	102.19	106.40
2	SA	1129	C	O4'-C1'-N1	10.53	116.63	108.20
26	LA	2900	A	O4'-C1'-N9	10.53	116.63	108.20
2	SA	406	G	C5-N7-C8	10.53	109.56	104.30
2	SA	621	A	O4'-C1'-N9	10.53	116.62	108.20
2	SA	818	G	P-O3'-C3'	10.53	132.34	119.70
2	SA	1253	G	C5-C6-O6	-10.53	122.28	128.60
26	LA	54	G	C5-N7-C8	-10.53	99.03	104.30
2	SA	1109	C	N3-C4-N4	10.53	125.37	118.00
26	LA	124	G	C3'-C2'-C1'	-10.53	93.08	101.50
26	LA	2279	G	N3-C4-C5	-10.53	123.33	128.60
26	LA	2676	C	N1-C2-O2	10.53	125.22	118.90
2	SA	494	G	C5-C6-N1	10.53	116.76	111.50
2	SA	1486	G	N9-C4-C5	10.53	109.61	105.40
7	SG	150	PHE	CB-CG-CD2	-10.53	113.43	120.80
26	LA	125	A	O3'-P-O5'	10.53	124.00	104.00
26	LA	1521	G	C8-N9-C4	10.53	110.61	106.40
26	LA	2471	A	N1-C6-N6	10.53	124.92	118.60
36	L2	49	ARG	NE-CZ-NH2	10.53	125.56	120.30
26	LA	224	U	C5'-C4'-C3'	-10.52	99.16	116.00
26	LA	2867	G	N1-C2-N3	-10.52	117.59	123.90
2	SA	604	G	N9-C4-C5	-10.52	101.19	105.40
2	SA	782	A	C2-N3-C4	-10.52	105.34	110.60
34	L0	52	ARG	NE-CZ-NH2	10.52	125.56	120.30
26	LA	1341	G	N1-C6-O6	-10.52	113.59	119.90
26	LA	1923	U	N1-C2-O2	10.52	130.16	122.80
26	LA	2773	C	C6-N1-C2	-10.52	116.09	120.30
26	LA	2169	A	C8-N9-C4	10.52	110.01	105.80
2	SA	667	G	N1-C6-O6	10.51	126.21	119.90
26	LA	1339	G	C5-C6-N1	10.51	116.76	111.50
26	LA	1634	A	C2-N3-C4	-10.51	105.34	110.60
26	LA	2146	C	C2-N3-C4	-10.51	114.64	119.90
26	LA	377	G	N3-C4-C5	-10.51	123.34	128.60
26	LA	1576	U	O4'-C1'-N1	10.51	116.61	108.20
2	SA	1030	U	N3-C2-O2	-10.51	114.84	122.20
26	LA	57	C	C6-N1-C2	-10.51	116.10	120.30
2	SA	226	G	C2-N3-C4	10.51	117.15	111.90
2	SA	268	U	O4'-C1'-N1	10.51	116.61	108.20
2	SA	524	G	C2-N3-C4	10.51	117.15	111.90
26	LA	2710	C	C4-C5-C6	10.51	122.65	117.40
21	SE	44	ARG	NE-CZ-NH1	10.51	125.55	120.30
26	LA	1693	U	C2-N3-C4	-10.51	120.70	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1792	G	N1-C6-O6	10.51	126.20	119.90
26	LA	2132	U	O4'-C1'-N1	10.51	116.61	108.20
3	S1	28	U	O4'-C1'-N1	10.50	116.60	108.20
26	LA	2126	A	C4'-C3'-C2'	-10.50	92.10	102.60
2	SA	318	G	C8-N9-C4	10.50	110.60	106.40
26	LA	28	A	O4'-C1'-N9	10.50	116.60	108.20
26	LA	2710	C	O4'-C1'-N1	10.50	116.60	108.20
2	SA	233	C	O4'-C1'-N1	10.50	116.60	108.20
2	SA	741	G	P-O3'-C3'	-10.50	107.11	119.70
2	SA	1131	G	P-O5'-C5'	10.50	137.69	120.90
26	LA	2340	A	C8-N9-C4	-10.50	101.60	105.80
10	SJ	62	ARG	NE-CZ-NH2	10.49	125.55	120.30
26	LA	2435	A	C6-N1-C2	-10.49	112.30	118.60
2	SA	144	G	C8-N9-C4	-10.49	102.20	106.40
2	SA	430	A	C6-N1-C2	-10.49	112.31	118.60
26	LA	1854	A	C8-N9-C4	10.49	110.00	105.80
26	LA	570	G	C3'-C2'-C1'	-10.48	93.11	101.50
26	LA	1413	A	C5-C6-N1	-10.48	112.46	117.70
26	LA	2840	C	P-O3'-C3'	-10.48	107.12	119.70
2	SA	566	G	C5-C6-O6	-10.48	122.31	128.60
26	LA	1874	C	N1-C2-O2	10.48	125.19	118.90
2	SA	676	A	O4'-C1'-N9	10.48	116.58	108.20
26	LA	572	A	P-O3'-C3'	10.48	132.27	119.70
24	S3	471	ARG	NE-CZ-NH2	-10.48	115.06	120.30
2	SA	1076	U	P-O3'-C3'	-10.47	107.13	119.70
26	LA	2399	G	O4'-C1'-N9	10.47	116.58	108.20
25	LB	107	G	C4-C5-N7	10.47	114.99	110.80
26	LA	880	G	O4'-C1'-N9	10.47	116.58	108.20
26	LA	1923	U	C2-N3-C4	10.47	133.28	127.00
2	SA	469	C	C2-N3-C4	-10.47	114.66	119.90
26	LA	541	A	P-O5'-C5'	10.47	137.66	120.90
26	LA	1514	G	P-O5'-C5'	10.47	137.66	120.90
4	S2	49	C	P-O5'-C5'	10.47	137.65	120.90
23	SR	72	ARG	NE-CZ-NH1	10.47	125.54	120.30
26	LA	1389	G	N3-C2-N2	10.47	127.23	119.90
14	SN	40	ARG	NE-CZ-NH2	-10.47	115.07	120.30
26	LA	469	G	P-O3'-C3'	-10.47	107.14	119.70
26	LA	1643	G	C5'-C4'-C3'	10.47	132.75	116.00
26	LA	2111	U	N1-C2-N3	10.47	121.18	114.90
26	LA	2151	U	N1-C2-O2	-10.47	115.47	122.80
26	LA	2100	G	N1-C6-O6	10.47	126.18	119.90
26	LA	1528	A	N7-C8-N9	-10.46	108.57	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1924	C	C6-N1-C2	-10.46	116.11	120.30
2	SA	401	C	C5-C4-N4	10.46	127.52	120.20
26	LA	2624	G	C5-C6-O6	-10.46	122.32	128.60
2	SA	1312	G	N9-C4-C5	10.46	109.58	105.40
26	LA	174	U	C4-C5-C6	-10.46	113.42	119.70
26	LA	811	U	N3-C2-O2	-10.46	114.88	122.20
2	SA	932	C	C4-C5-C6	-10.46	112.17	117.40
25	LB	117	G	O4'-C1'-N9	10.46	116.56	108.20
26	LA	437	U	C1'-O4'-C4'	-10.46	101.54	109.90
26	LA	573	U	C5-C6-N1	-10.46	117.47	122.70
26	LA	790	U	N1-C2-N3	10.46	121.17	114.90
2	SA	100	G	C5'-C4'-O4'	10.45	121.64	109.10
2	SA	802	A	O4'-C1'-N9	10.45	116.56	108.20
26	LA	1992	G	N1-C6-O6	10.45	126.17	119.90
25	LB	32	U	N1-C2-N3	10.45	121.17	114.90
2	SA	264	C	C5-C4-N4	-10.44	112.89	120.20
26	LA	1917	U	C6-N1-C1'	-10.45	106.58	121.20
26	LA	2796	U	P-O5'-C5'	10.45	137.61	120.90
2	SA	334	C	O4'-C1'-N1	10.44	116.55	108.20
2	SA	1516	G	C3'-C2'-C1'	10.44	109.85	101.50
2	SA	870	U	O5'-P-OP1	-10.44	96.30	105.70
26	LA	1585	C	C6-N1-C2	-10.44	116.12	120.30
26	LA	1702	G	C5-C6-N1	10.44	116.72	111.50
26	LA	2480	C	C6-N1-C2	-10.44	116.13	120.30
2	SA	1316	G	C5-C6-O6	-10.43	122.34	128.60
2	SA	1378	C	O4'-C1'-N1	10.43	116.55	108.20
7	SG	153	TYR	CB-CG-CD1	-10.43	114.74	121.00
20	SD	173	ASP	CB-CG-OD2	10.43	127.69	118.30
26	LA	1023	U	O4'-C1'-N1	10.43	116.55	108.20
26	LA	1332	G	C4-N9-C1'	10.43	140.06	126.50
26	LA	1600	C	O4'-C1'-N1	10.43	116.55	108.20
2	SA	34	C	O4'-C1'-N1	10.43	116.55	108.20
2	SA	336	A	C5-C6-N6	-10.43	115.36	123.70
2	SA	401	C	N3-C4-C5	-10.43	117.73	121.90
26	LA	774	G	N3-C2-N2	-10.43	112.60	119.90
26	LA	1996	C	C6-N1-C2	-10.43	116.13	120.30
26	LA	295	G	N3-C2-N2	10.43	127.20	119.90
26	LA	1741	C	C6-N1-C2	-10.43	116.13	120.30
26	LA	2309	A	C6-N1-C2	-10.43	112.34	118.60
2	SA	446	G	C4-C5-N7	10.43	114.97	110.80
2	SA	1294	G	C8-N9-C4	-10.43	102.23	106.40
26	LA	2474	U	O4'-C1'-N1	10.43	116.54	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1408	A	C6-N1-C2	-10.42	112.35	118.60
26	LA	209	C	O4'-C1'-N1	10.42	116.54	108.20
26	LA	1551	A	C5-C6-N6	-10.42	115.36	123.70
26	LA	1962	C	P-O5'-C5'	10.42	137.57	120.90
24	S3	474	ARG	NE-CZ-NH2	-10.42	115.09	120.30
25	LB	68	C	C2-N3-C4	-10.42	114.69	119.90
26	LA	1073	A	N1-C6-N6	10.42	124.85	118.60
26	LA	1911	U	C5'-C4'-C3'	-10.42	99.33	116.00
2	SA	131	A	C5-N7-C8	10.42	109.11	103.90
26	LA	684	G	N1-C6-O6	10.42	126.15	119.90
47	LJ	61	ARG	NE-CZ-NH2	-10.42	115.09	120.30
26	LA	798	G	C4-C5-N7	-10.41	106.63	110.80
26	LA	1893	C	O4'-C1'-N1	10.41	116.53	108.20
26	LA	695	G	C4'-C3'-C2'	-10.41	92.19	102.60
26	LA	1551	A	N1-C6-N6	10.41	124.85	118.60
42	L6	63	TYR	CB-CG-CD1	10.41	127.25	121.00
56	LR	52	ARG	NE-CZ-NH1	-10.41	115.10	120.30
26	LA	830	G	C5-C6-O6	-10.41	122.36	128.60
26	LA	2677	G	C6-N1-C2	10.40	131.34	125.10
26	LA	1603	A	C5-C6-N6	-10.40	115.38	123.70
2	SA	1328	C	O4'-C1'-N1	10.40	116.52	108.20
2	SA	8	A	C5-N7-C8	10.39	109.10	103.90
2	SA	177	G	O4'-C1'-N9	10.39	116.51	108.20
2	SA	1515	G	C5-C6-O6	-10.39	122.36	128.60
26	LA	1097	U	C3'-C2'-C1'	-10.39	93.18	101.50
26	LA	2270	A	C6-N1-C2	-10.39	112.36	118.60
2	SA	636	U	C4-C5-C6	-10.39	113.47	119.70
26	LA	1507	C	N1-C2-N3	10.39	126.47	119.20
26	LA	1819	A	C8-N9-C4	10.39	109.96	105.80
26	LA	2806	C	N3-C4-C5	-10.39	117.74	121.90
26	LA	182	A	N9-C4-C5	10.39	109.96	105.80
2	SA	799	G	N9-C4-C5	-10.39	101.25	105.40
26	LA	218	A	C5-C6-N6	10.39	132.01	123.70
27	LD	268	ARG	NE-CZ-NH2	-10.39	115.11	120.30
26	LA	113	U	O4'-C1'-C2'	-10.38	95.42	105.80
26	LA	127	A	C8-N9-C4	-10.39	101.65	105.80
26	LA	2887	A	O4'-C1'-N9	10.38	116.51	108.20
33	LZ	2	ARG	NE-CZ-NH1	-10.38	115.11	120.30
2	SA	481	G	O4'-C1'-N9	10.38	116.51	108.20
26	LA	209	C	N3-C4-C5	-10.38	117.75	121.90
2	SA	724	G	N3-C2-N2	10.38	127.17	119.90
12	SL	82	ARG	NE-CZ-NH1	10.38	125.49	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	777	G	N1-C2-N3	10.38	130.13	123.90
26	LA	291	G	C5-C6-O6	-10.38	122.37	128.60
26	LA	1484	U	C5-C4-O4	10.38	132.13	125.90
54	LM	78	ARG	NE-CZ-NH2	-10.38	115.11	120.30
26	LA	1254	A	C8-N9-C4	10.38	109.95	105.80
26	LA	2150	C	O4'-C1'-N1	10.38	116.50	108.20
26	LA	1145	C	C5-C6-N1	-10.37	115.81	121.00
2	SA	1463	U	C2-N3-C4	-10.37	120.78	127.00
26	LA	917	A	N7-C8-N9	10.37	118.99	113.80
26	LA	437	U	C5-C6-N1	10.37	127.89	122.70
2	SA	963	G	O4'-C1'-N9	10.37	116.50	108.20
26	LA	143	C	C6-N1-C2	-10.37	116.15	120.30
26	LA	1446	C	O4'-C1'-N1	10.37	116.50	108.20
2	SA	708	C	C6-N1-C2	10.37	124.45	120.30
2	SA	1511	G	P-O3'-C3'	10.37	132.14	119.70
26	LA	830	G	C5-N7-C8	-10.37	99.12	104.30
26	LA	2190	G	N1-C6-O6	10.37	126.12	119.90
25	LB	6	G	P-O5'-C5'	10.37	137.48	120.90
26	LA	2307	G	C5-C6-O6	-10.37	122.38	128.60
29	LV	73	ARG	NE-CZ-NH2	-10.37	115.12	120.30
27	LD	216	ARG	NE-CZ-NH1	10.36	125.48	120.30
2	SA	567	G	N9-C4-C5	10.36	109.54	105.40
26	LA	1530	G	N3-C4-C5	-10.36	123.42	128.60
26	LA	1728	C	N1-C2-N3	10.36	126.45	119.20
26	LA	880	G	C8-N9-C1'	10.36	140.47	127.00
26	LA	239	C	N3-C4-C5	-10.36	117.76	121.90
15	SO	62	ARG	NE-CZ-NH2	-10.35	115.12	120.30
26	LA	462	C	C2-N3-C4	10.35	125.08	119.90
26	LA	2451	A	C5-N7-C8	10.35	109.08	103.90
26	LA	1458	U	P-O3'-C3'	10.35	132.12	119.70
26	LA	2793	C	P-O5'-C5'	10.35	137.46	120.90
51	LI	97	ARG	NE-CZ-NH2	-10.35	115.12	120.30
26	LA	1663	G	C2-N3-C4	-10.35	106.73	111.90
2	SA	601	G	C2-N3-C4	10.35	117.07	111.90
26	LA	2207	C	O4'-C1'-N1	10.35	116.48	108.20
26	LA	218	A	P-O3'-C3'	10.35	132.11	119.70
26	LA	1272	A	P-O3'-C3'	10.34	132.11	119.70
2	SA	31	G	N1-C6-O6	10.34	126.10	119.90
2	SA	268	U	C5-C4-O4	10.34	132.10	125.90
2	SA	1198	G	C5-C6-O6	-10.34	122.40	128.60
2	SA	1392	G	C5-N7-C8	-10.34	99.13	104.30
25	LB	102	G	C5-C6-O6	-10.34	122.40	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2095	A	O4'-C1'-N9	10.34	116.47	108.20
26	LA	2403	C	O4'-C1'-N1	10.33	116.47	108.20
2	SA	221	C	C2-N3-C4	-10.33	114.73	119.90
2	SA	270	A	C2-N3-C4	-10.33	105.43	110.60
26	LA	2471	A	O4'-C1'-N9	10.33	116.47	108.20
26	LA	2850	A	C4-C5-N7	-10.33	105.53	110.70
26	LA	1055	G	C8-N9-C4	-10.33	102.27	106.40
2	SA	226	G	N1-C2-N3	-10.33	117.70	123.90
25	LB	56	G	C4-C5-N7	-10.33	106.67	110.80
4	S2	32	G	C4-C5-N7	-10.32	106.67	110.80
2	SA	322	C	N3-C4-C5	10.32	126.03	121.90
12	SL	113	ARG	NE-CZ-NH1	10.32	125.46	120.30
26	LA	1559	U	C5'-C4'-C3'	-10.32	99.49	116.00
2	SA	1331	G	N1-C6-O6	10.32	126.09	119.90
26	LA	14	A	O4'-C1'-N9	10.32	116.45	108.20
26	LA	229	C	C4'-C3'-C2'	-10.32	92.28	102.60
26	LA	2163	A	P-O3'-C3'	10.32	132.08	119.70
26	LA	1279	G	C8-N9-C4	-10.32	102.27	106.40
26	LA	1587	G	O4'-C1'-N9	10.32	116.45	108.20
26	LA	2163	A	C8-N9-C4	-10.32	101.67	105.80
2	SA	459	A	C5-C6-N6	-10.31	115.45	123.70
2	SA	776	G	C4-C5-N7	10.31	114.93	110.80
11	SK	6	ARG	NE-CZ-NH2	10.31	125.46	120.30
26	LA	1906	G	O4'-C1'-N9	10.31	116.45	108.20
26	LA	1979	U	C4-C5-C6	-10.31	113.51	119.70
2	SA	413	G	C5-C6-O6	-10.31	122.42	128.60
26	LA	1684	G	N1-C6-O6	10.31	126.08	119.90
37	LC	163	TYR	CB-CG-CD1	-10.31	114.82	121.00
48	LN	58	TYR	CB-CG-CD1	-10.30	114.82	121.00
26	LA	2266	A	N9-C4-C5	-10.30	101.68	105.80
26	LA	2445	G	N3-C4-C5	-10.30	123.45	128.60
2	SA	45	G	C6-N1-C2	-10.30	118.92	125.10
2	SA	1055	A	C5-C6-N6	10.30	131.94	123.70
38	LE	141	ARG	NE-CZ-NH1	10.30	125.45	120.30
26	LA	1538	G	C4-C5-N7	-10.30	106.68	110.80
26	LA	2066	C	C2-N3-C4	-10.30	114.75	119.90
26	LA	914	G	C5'-C4'-C3'	-10.30	99.53	116.00
2	SA	414	A	N1-C6-N6	10.30	124.78	118.60
2	SA	1419	G	C5-C6-O6	-10.30	122.42	128.60
26	LA	588	U	C2-N3-C4	-10.30	120.82	127.00
26	LA	2816	G	N1-C6-O6	10.30	126.08	119.90
2	SA	874	G	C5-C6-O6	-10.29	122.42	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1012	A	C2-N3-C4	10.29	115.75	110.60
26	LA	1197	G	C4-C5-N7	10.29	114.92	110.80
2	SA	22	G	N7-C8-N9	-10.29	107.95	113.10
2	SA	1014	A	N1-C2-N3	10.29	134.45	129.30
26	LA	656	G	N7-C8-N9	10.29	118.25	113.10
26	LA	1533	C	C6-N1-C2	-10.29	116.18	120.30
26	LA	2205	A	N9-C4-C5	10.29	109.92	105.80
2	SA	722	G	C5-C6-N1	10.29	116.64	111.50
2	SA	1244	G	N3-C2-N2	10.29	127.10	119.90
26	LA	727	A	C5-C6-N1	10.29	122.84	117.70
2	SA	1336	C	N1-C2-O2	10.29	125.07	118.90
2	SA	1521	C	C5-C4-N4	-10.29	113.00	120.20
25	LB	30	C	C2-N3-C4	-10.28	114.76	119.90
26	LA	204	A	C2-N3-C4	10.29	115.74	110.60
26	LA	264	C	C6-N1-C2	-10.29	116.19	120.30
26	LA	551	G	C5'-C4'-C3'	10.29	132.46	116.00
26	LA	861	A	C6-N1-C2	-10.29	112.43	118.60
26	LA	2465	C	C6-N1-C2	-10.29	116.19	120.30
26	LA	2382	G	N9-C4-C5	-10.28	101.29	105.40
2	SA	45	G	C5-C6-N1	10.28	116.64	111.50
2	SA	229	U	C6-N1-C2	-10.28	114.83	121.00
26	LA	2705	A	C8-N9-C4	10.28	109.91	105.80
26	LA	1448	G	C4-C5-N7	10.28	114.91	110.80
2	SA	643	C	N3-C4-C5	-10.28	117.79	121.90
26	LA	487	C	C2-N3-C4	-10.28	114.76	119.90
26	LA	500	G	N1-C6-O6	10.28	126.07	119.90
26	LA	774	G	N1-C2-N3	10.28	130.07	123.90
26	LA	2180	U	O4'-C1'-N1	10.28	116.42	108.20
53	LP	96	ARG	NE-CZ-NH2	-10.28	115.16	120.30
26	LA	1715	G	C5-C6-O6	10.28	134.77	128.60
26	LA	143	C	C5-C4-N4	-10.27	113.01	120.20
26	LA	443	A	P-O3'-C3'	-10.27	107.37	119.70
26	LA	1510	G	C4-N9-C1'	10.27	139.85	126.50
25	LB	104	A	N7-C8-N9	-10.27	108.67	113.80
26	LA	915	C	C6-N1-C2	-10.27	116.19	120.30
26	LA	1926	U	O4'-C1'-N1	10.27	116.42	108.20
26	LA	45	G	N9-C4-C5	-10.27	101.29	105.40
26	LA	2410	G	C2-N3-C4	10.27	117.03	111.90
2	SA	408	A	N1-C6-N6	-10.26	112.44	118.60
26	LA	423	A	N1-C2-N3	10.26	134.43	129.30
16	SP	23	ASP	CB-CG-OD2	10.26	127.53	118.30
26	LA	268	C	O4'-C1'-N1	10.26	116.41	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2731	G	P-O5'-C5'	10.26	137.32	120.90
2	SA	376	G	N1-C6-O6	10.26	126.05	119.90
4	S2	77	A	C5-C6-N1	10.26	122.83	117.70
25	LB	14	U	C4-C5-C6	-10.26	113.55	119.70
26	LA	2044	C	C2-N3-C4	-10.26	114.77	119.90
2	SA	204	G	P-O3'-C3'	10.25	132.00	119.70
26	LA	713	G	N1-C2-N2	-10.25	106.97	116.20
26	LA	266	G	N3-C2-N2	10.25	127.08	119.90
26	LA	2853	C	C4-C5-C6	10.25	122.53	117.40
4	S2	15	G	N1-C6-O6	10.25	126.05	119.90
26	LA	1438	U	P-O5'-C5'	10.25	137.30	120.90
26	LA	2317	A	C5-N7-C8	-10.25	98.77	103.90
2	SA	1227	A	C3'-C2'-C1'	-10.25	93.30	101.50
26	LA	923	G	C8-N9-C4	-10.25	102.30	106.40
46	LH	151	ARG	NE-CZ-NH1	10.25	125.42	120.30
4	S2	46	G	C5-C6-O6	-10.25	122.45	128.60
2	SA	456	A	N7-C8-N9	-10.24	108.68	113.80
26	LA	751	A	C5-N7-C8	-10.24	98.78	103.90
26	LA	2688	G	N1-C6-O6	10.24	126.05	119.90
26	LA	1117	C	C6-N1-C2	-10.24	116.20	120.30
26	LA	2841	C	C5'-C4'-C3'	-10.24	99.61	116.00
26	LA	2671	G	C5-C6-O6	10.24	134.75	128.60
2	SA	188	C	O4'-C1'-N1	10.24	116.39	108.20
2	SA	944	G	C1'-O4'-C4'	-10.24	101.71	109.90
26	LA	532	A	N1-C6-N6	10.24	124.74	118.60
26	LA	609	A	N9-C4-C5	-10.24	101.70	105.80
26	LA	1807	G	C5-N7-C8	-10.24	99.18	104.30
2	SA	769	G	O4'-C1'-N9	10.24	116.39	108.20
2	SA	1204	A	C2-N3-C4	-10.24	105.48	110.60
24	S3	582	TYR	CG-CD1-CE1	-10.24	113.11	121.30
6	SU	37	TYR	CB-CG-CD2	-10.23	114.86	121.00
2	SA	1380	U	C5-C4-O4	-10.23	119.76	125.90
26	LA	1110	G	N7-C8-N9	-10.23	107.99	113.10
2	SA	78	A	N9-C4-C5	10.23	109.89	105.80
2	SA	265	G	C4-C5-N7	10.23	114.89	110.80
2	SA	781	A	O4'-C1'-N9	10.23	116.38	108.20
26	LA	34	U	C2'-C3'-O3'	10.23	132.00	109.50
26	LA	1935	G	N3-C4-N9	-10.23	119.86	126.00
26	LA	2062	A	N9-C4-C5	-10.22	101.71	105.80
26	LA	1000	A	C5-C6-N1	10.22	122.81	117.70
2	SA	88	U	P-O3'-C3'	-10.22	107.44	119.70
2	SA	425	G	N1-C2-N3	-10.22	117.77	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	436	C	C5-C4-N4	-10.22	113.05	120.20
26	LA	350	G	C8-N9-C4	-10.22	102.31	106.40
26	LA	1674	G	C6-N1-C2	-10.22	118.97	125.10
26	LA	2218	G	C6-C5-N7	10.22	136.53	130.40
26	LA	896	A	C4-C5-C6	-10.22	111.89	117.00
26	LA	1064	C	C6-N1-C2	-10.22	116.21	120.30
2	SA	435	A	O4'-C1'-N9	10.21	116.37	108.20
26	LA	1338	G	C6-C5-N7	-10.21	124.27	130.40
26	LA	445	C	O4'-C1'-N1	10.21	116.37	108.20
26	LA	1243	C	C5-C6-N1	-10.21	115.89	121.00
26	LA	2409	G	O4'-C1'-N9	10.21	116.37	108.20
2	SA	57	G	N1-C6-O6	10.21	126.03	119.90
2	SA	634	C	O4'-C1'-N1	10.21	116.37	108.20
2	SA	841	C	N3-C2-O2	-10.21	114.75	121.90
8	SH	14	ARG	NE-CZ-NH1	10.21	125.40	120.30
26	LA	1062	G	C5-C6-N1	-10.21	106.40	111.50
26	LA	1862	G	N3-C4-N9	10.21	132.12	126.00
48	LN	21	ARG	NE-CZ-NH2	-10.21	115.20	120.30
2	SA	1128	C	C5-C6-N1	10.21	126.10	121.00
26	LA	1932	A	C5-N7-C8	10.21	109.00	103.90
2	SA	748	G	N1-C6-O6	-10.20	113.78	119.90
2	SA	1419	G	O4'-C1'-N9	10.20	116.36	108.20
26	LA	1781	U	C4'-C3'-C2'	10.20	112.80	102.60
2	SA	605	U	N3-C4-O4	10.20	126.54	119.40
26	LA	2577	A	C8-N9-C4	-10.20	101.72	105.80
2	SA	651	C	C6-N1-C2	-10.20	116.22	120.30
26	LA	179	C	O4'-C1'-N1	10.20	116.36	108.20
26	LA	451	U	N3-C4-O4	10.20	126.54	119.40
26	LA	2345	G	C4-C5-N7	-10.20	106.72	110.80
26	LA	2502	G	C6-N1-C2	10.20	131.22	125.10
26	LA	2844	G	P-O3'-C3'	10.20	131.94	119.70
26	LA	1220	G	C5-C6-N1	10.20	116.60	111.50
26	LA	1457	U	O4'-C1'-N1	10.19	116.36	108.20
26	LA	1595	C	N3-C4-C5	10.20	125.98	121.90
26	LA	2314	A	C5-C6-N6	-10.19	115.54	123.70
2	SA	182	A	C5'-C4'-C3'	-10.19	99.69	116.00
26	LA	284	U	C5-C6-N1	10.19	127.80	122.70
26	LA	1858	A	N1-C2-N3	-10.19	124.20	129.30
26	LA	2422	C	N3-C4-C5	10.19	125.98	121.90
2	SA	379	C	C6-N1-C2	-10.19	116.22	120.30
2	SA	390	U	O4'-C1'-N1	10.19	116.35	108.20
2	SA	1538	C	O4'-C1'-N1	10.19	116.35	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	110	G	C8-N9-C4	-10.19	102.32	106.40
26	LA	295	G	C8-N9-C4	10.19	110.48	106.40
26	LA	2663	G	C6-N1-C2	-10.19	118.99	125.10
26	LA	1045	C	P-O3'-C3'	10.19	131.93	119.70
26	LA	1092	C	O4'-C1'-N1	10.19	116.35	108.20
26	LA	2001	C	C3'-C2'-C1'	10.19	109.65	101.50
2	SA	402	G	C5-C6-O6	-10.18	122.49	128.60
26	LA	964	C	N1-C2-N3	10.18	126.33	119.20
26	LA	1914	C	P-O3'-C3'	-10.18	107.48	119.70
26	LA	1904	G	C5-C6-O6	-10.18	122.49	128.60
26	LA	2110	G	O4'-C1'-N9	10.18	116.35	108.20
26	LA	2781	A	N1-C6-N6	10.18	124.71	118.60
2	SA	525	C	C4-C5-C6	10.18	122.49	117.40
26	LA	332	A	C5-C6-N6	10.18	131.84	123.70
26	LA	2176	A	C5'-C4'-C3'	-10.18	99.71	116.00
26	LA	2761	A	N1-C6-N6	-10.18	112.49	118.60
26	LA	1025	G	P-O3'-C3'	10.18	131.91	119.70
2	SA	104	G	C6-C5-N7	-10.17	124.30	130.40
2	SA	921	U	C4'-C3'-C2'	-10.17	92.43	102.60
2	SA	942	G	N3-C2-N2	10.17	127.02	119.90
26	LA	1840	G	C4-C5-C6	-10.17	112.70	118.80
26	LA	1500	G	N9-C4-C5	10.17	109.47	105.40
26	LA	2026	U	C6-N1-C2	-10.17	114.90	121.00
2	SA	991	U	N1-C2-N3	10.17	121.00	114.90
2	SA	1342	C	C6-N1-C2	-10.17	116.23	120.30
26	LA	2568	U	N1-C2-N3	10.17	121.00	114.90
2	SA	800	G	C8-N9-C4	-10.16	102.33	106.40
2	SA	1071	C	O4'-C1'-N1	10.16	116.33	108.20
2	SA	1200	C	N3-C4-C5	10.16	125.97	121.90
25	LB	42	C	C4-C5-C6	10.16	122.48	117.40
26	LA	2143	C	P-O3'-C3'	-10.16	107.50	119.70
7	SG	77	ARG	NE-CZ-NH2	-10.16	115.22	120.30
26	LA	1937	A	C1'-O4'-C4'	-10.16	101.77	109.90
2	SA	27	G	N9-C4-C5	10.16	109.46	105.40
2	SA	318	G	N1-C6-O6	-10.16	113.80	119.90
2	SA	371	A	O4'-C1'-N9	10.16	116.33	108.20
2	SA	1466	C	O4'-C1'-N1	10.16	116.33	108.20
25	LB	71	C	C2-N3-C4	-10.16	114.82	119.90
26	LA	1905	C	N3-C4-C5	-10.16	117.84	121.90
3	S1	44	U	C1'-O4'-C4'	-10.16	101.77	109.90
9	SI	63	TYR	CB-CG-CD1	10.16	127.09	121.00
26	LA	1558	C	C5'-C4'-O4'	10.16	121.29	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1927	A	N1-C6-N6	10.16	124.69	118.60
26	LA	859	G	C3'-C2'-C1'	-10.15	93.38	101.50
26	LA	994	C	O4'-C1'-N1	10.15	116.32	108.20
26	LA	2207	C	C5'-C4'-O4'	10.15	121.29	109.10
26	LA	1315	C	N3-C4-N4	-10.15	110.89	118.00
26	LA	2765	A	O4'-C1'-N9	10.15	116.32	108.20
2	SA	830	G	C5-C6-O6	-10.15	122.51	128.60
26	LA	489	G	C8-N9-C4	10.15	110.46	106.40
26	LA	749	A	O4'-C1'-N9	10.15	116.32	108.20
2	SA	427	U	C2-N3-C4	-10.14	120.91	127.00
26	LA	498	G	N1-C6-O6	-10.14	113.81	119.90
26	LA	601	C	O4'-C1'-N1	10.14	116.32	108.20
26	LA	1005	C	C5-C6-N1	10.14	126.07	121.00
26	LA	1335	C	C5-C4-N4	-10.14	113.10	120.20
2	SA	1221	G	N1-C6-O6	10.14	125.98	119.90
26	LA	976	G	C4-C5-N7	10.14	114.86	110.80
26	LA	1919	A	O4'-C1'-N9	10.14	116.31	108.20
2	SA	446	G	N9-C4-C5	-10.14	101.34	105.40
26	LA	2418	A	C8-N9-C4	-10.14	101.75	105.80
2	SA	620	C	C6-N1-C2	-10.13	116.25	120.30
2	SA	623	C	C2-N3-C4	-10.13	114.83	119.90
2	SA	1390	U	C4-C5-C6	-10.13	113.62	119.70
26	LA	1565	C	P-O5'-C5'	10.13	137.12	120.90
26	LA	1634	A	N9-C4-C5	-10.14	101.75	105.80
54	LM	18	ARG	NE-CZ-NH2	-10.13	115.23	120.30
26	LA	2443	C	N3-C4-C5	10.13	125.95	121.90
26	LA	369	U	N1-C2-O2	-10.13	115.71	122.80
26	LA	1863	G	O4'-C1'-N9	10.13	116.30	108.20
26	LA	2666	C	C2-N1-C1'	10.13	129.94	118.80
26	LA	133	U	P-O5'-C5'	10.13	137.10	120.90
2	SA	699	C	N3-C2-O2	-10.12	114.81	121.90
26	LA	2458	G	N3-C4-C5	-10.12	123.54	128.60
2	SA	251	G	C8-N9-C4	-10.12	102.35	106.40
2	SA	826	C	N3-C4-C5	-10.12	117.85	121.90
2	SA	1477	U	O4'-C1'-N1	10.12	116.30	108.20
2	SA	372	C	C6-N1-C1'	-10.12	108.66	120.80
2	SA	52	C	O4'-C1'-N1	10.12	116.29	108.20
2	SA	522	C	O4'-C1'-N1	10.12	116.29	108.20
2	SA	74	A	C4-C5-C6	-10.11	111.94	117.00
2	SA	138	G	O4'-C1'-N9	10.11	116.29	108.20
26	LA	1008	A	N1-C2-N3	-10.11	124.24	129.30
26	LA	1200	C	N3-C2-O2	-10.11	114.82	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	169	C	C2-N3-C4	-10.11	114.84	119.90
26	LA	108	G	C5-C6-O6	-10.11	122.53	128.60
57	LS	69	ARG	NE-CZ-NH2	10.11	125.35	120.30
2	SA	606	G	C8-N9-C4	10.11	110.44	106.40
2	SA	1426	G	N3-C4-C5	-10.11	123.55	128.60
3	S1	45	G	N3-C2-N2	10.11	126.97	119.90
2	SA	810	C	P-O5'-C5'	10.10	137.07	120.90
26	LA	543	G	N9-C1'-C2'	-10.10	100.87	114.00
26	LA	1890	A	C4-C5-C6	-10.10	111.95	117.00
26	LA	2069	G	C6-N1-C2	-10.10	119.04	125.10
2	SA	107	G	N1-C6-O6	10.10	125.96	119.90
15	SO	79	ARG	NE-CZ-NH1	10.10	125.35	120.30
26	LA	1694	C	C1'-O4'-C4'	-10.10	101.82	109.90
26	LA	2178	C	N3-C4-C5	-10.10	117.86	121.90
26	LA	2892	G	P-O3'-C3'	10.10	131.82	119.70
26	LA	2394	C	C2-N3-C4	10.10	124.95	119.90
26	LA	2436	G	N9-C4-C5	-10.09	101.36	105.40
26	LA	481	G	C5-C6-O6	-10.09	122.55	128.60
26	LA	2253	G	C5-C6-O6	-10.09	122.55	128.60
26	LA	2729	G	C5-C6-O6	-10.09	122.55	128.60
26	LA	2743	U	O4'-C1'-N1	10.09	116.27	108.20
26	LA	325	G	C5-C6-O6	-10.09	122.55	128.60
4	S2	51	U	O4'-C1'-N1	10.09	116.27	108.20
26	LA	1808	A	C8-N9-C4	10.09	109.83	105.80
26	LA	2441	U	C5-C6-N1	-10.09	117.66	122.70
26	LA	2503	A	O4'-C1'-N9	10.09	116.27	108.20
2	SA	861	G	C5-C6-O6	-10.08	122.55	128.60
2	SA	1081	A	O4'-C1'-N9	10.08	116.27	108.20
26	LA	88	G	N3-C2-N2	10.08	126.96	119.90
26	LA	890	C	O4'-C1'-N1	10.08	116.27	108.20
26	LA	1812	U	O4'-C1'-N1	10.08	116.27	108.20
2	SA	74	A	C6-N1-C2	10.08	124.65	118.60
2	SA	142	G	O4'-C1'-N9	10.08	116.27	108.20
2	SA	478	A	N1-C2-N3	-10.08	124.26	129.30
26	LA	1309	G	C5-C6-O6	10.08	134.65	128.60
2	SA	615	G	N3-C2-N2	-10.08	112.84	119.90
2	SA	884	U	C5-C6-N1	10.08	127.74	122.70
26	LA	1456	G	C5-C6-O6	-10.08	122.55	128.60
2	SA	1081	A	C5-N7-C8	10.08	108.94	103.90
26	LA	2482	A	C4-C5-C6	10.08	122.04	117.00
2	SA	1220	G	C5-C6-O6	-10.08	122.56	128.60
2	SA	1348	U	O4'-C1'-N1	10.08	116.26	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	277	C	C6-N1-C2	-10.07	116.27	120.30
26	LA	1782	U	C6-N1-C2	-10.07	114.95	121.00
26	LA	394	C	C5-C4-N4	-10.07	113.15	120.20
26	LA	1019	U	N1-C2-N3	10.07	120.94	114.90
26	LA	1285	A	N7-C8-N9	-10.07	108.77	113.80
26	LA	2808	G	N1-C2-N3	10.07	129.94	123.90
2	SA	257	G	N1-C6-O6	10.07	125.94	119.90
5	ST	23	ARG	NE-CZ-NH2	-10.07	115.27	120.30
26	LA	535	G	N1-C6-O6	10.07	125.94	119.90
2	SA	230	G	O4'-C1'-N9	10.06	116.25	108.20
2	SA	730	G	C5-C6-O6	-10.06	122.56	128.60
26	LA	407	G	N1-C6-O6	10.06	125.94	119.90
2	SA	577	G	C5-C6-O6	-10.06	122.56	128.60
2	SA	930	C	N3-C4-C5	10.06	125.92	121.90
2	SA	1297	G	P-O3'-C3'	10.06	131.78	119.70
26	LA	813	U	N3-C4-O4	10.06	126.44	119.40
26	LA	1173	U	O4'-C1'-N1	10.06	116.25	108.20
26	LA	2247	A	C5-C6-N6	-10.06	115.65	123.70
26	LA	1983	G	N1-C2-N3	-10.06	117.87	123.90
26	LA	2713	U	P-O3'-C3'	10.06	131.77	119.70
26	LA	1665	A	C5-C6-N1	-10.05	112.67	117.70
2	SA	84	U	C5-C6-N1	10.05	127.73	122.70
2	SA	294	U	N1-C2-N3	10.05	120.93	114.90
26	LA	2121	G	N1-C6-O6	10.05	125.93	119.90
26	LA	2293	G	N1-C6-O6	10.05	125.93	119.90
2	SA	769	G	N1-C6-O6	10.05	125.93	119.90
26	LA	879	G	N7-C8-N9	10.05	118.12	113.10
26	LA	1581	G	C8-N9-C4	10.05	110.42	106.40
46	LH	162	ARG	NE-CZ-NH2	10.05	125.32	120.30
2	SA	1259	C	C5'-C4'-C3'	-10.05	99.93	116.00
2	SA	349	A	C5-C6-N6	-10.04	115.67	123.70
26	LA	751	A	N1-C2-N3	-10.04	124.28	129.30
26	LA	1848	A	C5-C6-N6	10.04	131.74	123.70
26	LA	739	A	C5-N7-C8	-10.04	98.88	103.90
2	SA	1227	A	O4'-C1'-N9	10.04	116.23	108.20
26	LA	1160	G	C5'-C4'-C3'	-10.04	99.94	116.00
2	SA	845	A	N9-C4-C5	-10.04	101.78	105.80
11	SK	92	ARG	CD-NE-CZ	10.04	137.66	123.60
26	LA	1449	G	C4-N9-C1'	-10.04	113.45	126.50
36	L2	9	TYR	CB-CG-CD1	-10.04	114.98	121.00
26	LA	397	U	C6-N1-C2	10.04	127.02	121.00
2	SA	404	G	C5-C6-O6	-10.04	122.58	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1360	A	O4'-C1'-N9	10.03	116.23	108.20
26	LA	1475	G	C2-N3-C4	-10.04	106.88	111.90
2	SA	840	C	C5-C4-N4	-10.03	113.18	120.20
4	S2	60	A	C8-N9-C4	10.03	109.81	105.80
26	LA	1063	G	C5-C6-O6	-10.03	122.58	128.60
26	LA	2456	C	N3-C4-C5	-10.03	117.89	121.90
26	LA	2644	G	O4'-C1'-N9	10.03	116.22	108.20
2	SA	353	A	O4'-C1'-N9	10.03	116.22	108.20
2	SA	384	G	C5-C6-O6	-10.03	122.58	128.60
2	SA	1435	G	C5-C6-O6	-10.03	122.58	128.60
2	SA	985	C	O4'-C1'-N1	10.03	116.22	108.20
2	SA	1143	G	C4-C5-N7	10.03	114.81	110.80
2	SA	756	C	C6-N1-C2	-10.03	116.29	120.30
2	SA	1120	C	O4'-C1'-N1	10.03	116.22	108.20
2	SA	1155	A	N1-C2-N3	-10.03	124.29	129.30
25	LB	120	U	O4'-C1'-N1	10.03	116.22	108.20
26	LA	143	C	N3-C4-N4	10.03	125.02	118.00
26	LA	366	C	O4'-C1'-N1	10.03	116.22	108.20
26	LA	1778	U	C5'-C4'-C3'	-10.03	99.96	116.00
2	SA	6	G	C5-C6-O6	-10.02	122.59	128.60
26	LA	524	G	C5-C6-O6	-10.02	122.59	128.60
26	LA	1614	A	C5-N7-C8	-10.02	98.89	103.90
26	LA	1771	C	C6-N1-C2	-10.02	116.29	120.30
26	LA	759	G	N1-C2-N2	-10.02	107.18	116.20
2	SA	132	C	N3-C4-N4	-10.02	110.99	118.00
2	SA	865	A	C5-C6-N6	-10.02	115.69	123.70
26	LA	2708	G	N3-C4-C5	-10.02	123.59	128.60
2	SA	772	U	C5'-C4'-O4'	10.02	121.12	109.10
7	SG	176	TYR	CB-CG-CD1	-10.02	114.99	121.00
22	SF	13	ASP	CB-CG-OD2	-10.02	109.28	118.30
26	LA	2671	G	C8-N9-C4	-10.02	102.39	106.40
26	LA	299	A	C5-C6-N1	-10.01	112.69	117.70
26	LA	1085	A	O4'-C1'-N9	10.01	116.21	108.20
26	LA	1695	G	N3-C2-N2	10.01	126.91	119.90
2	SA	101	A	N7-C8-N9	10.01	118.81	113.80
25	LB	92	C	C2-N3-C4	-10.01	114.89	119.90
26	LA	1747	U	O4'-C1'-N1	10.01	116.21	108.20
2	SA	1249	C	C5-C6-N1	-10.01	116.00	121.00
26	LA	2751	G	N3-C4-C5	-10.01	123.60	128.60
26	LA	1921	G	C8-N9-C4	10.01	110.40	106.40
2	SA	933	G	N3-C2-N2	10.00	126.90	119.90
11	SK	104	PHE	CB-CG-CD2	-10.00	113.80	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	474	G	N3-C4-C5	-10.00	123.60	128.60
26	LA	2486	C	C1'-O4'-C4'	-10.00	101.90	109.90
26	LA	2503	A	N7-C8-N9	10.00	118.80	113.80
26	LA	2566	A	C4'-C3'-C2'	10.00	112.60	102.60
2	SA	173	U	O4'-C1'-N1	10.00	116.20	108.20
26	LA	28	A	N1-C6-N6	-10.00	112.60	118.60
26	LA	1762	A	C5-C6-N6	-10.00	115.70	123.70
46	LH	152	ARG	NE-CZ-NH2	10.00	125.30	120.30
2	SA	222	C	N3-C4-C5	9.99	125.90	121.90
26	LA	75	G	C5-C6-O6	-9.99	122.60	128.60
26	LA	836	G	N3-C4-C5	-9.99	123.60	128.60
26	LA	219	A	P-O3'-C3'	9.99	131.69	119.70
28	LU	99	ARG	NE-CZ-NH1	9.99	125.30	120.30
4	S2	68	C	O4'-C1'-N1	9.99	116.19	108.20
26	LA	645	C	C5-C6-N1	-9.99	116.01	121.00
26	LA	1762	A	O4'-C1'-N9	9.99	116.19	108.20
25	LB	53	A	N1-C2-N3	-9.99	124.31	129.30
26	LA	1224	U	C2-N3-C4	-9.99	121.01	127.00
26	LA	1958	C	O4'-C1'-N1	9.99	116.19	108.20
2	SA	302	G	N1-C6-O6	9.98	125.89	119.90
2	SA	863	U	C5-C4-O4	-9.98	119.91	125.90
26	LA	756	A	N1-C6-N6	-9.98	112.61	118.60
26	LA	880	G	P-O3'-C3'	-9.98	107.72	119.70
26	LA	500	G	N3-C4-C5	-9.98	123.61	128.60
26	LA	1834	U	C4'-C3'-C2'	9.98	112.58	102.60
2	SA	207	C	O4'-C1'-N1	9.98	116.18	108.20
26	LA	2057	G	N1-C6-O6	9.98	125.89	119.90
2	SA	239	U	O4'-C1'-N1	9.98	116.18	108.20
2	SA	1402	C	O4'-C1'-N1	9.98	116.18	108.20
4	S2	43	G	C4-C5-C6	9.98	124.79	118.80
26	LA	472	A	N1-C6-N6	9.98	124.59	118.60
2	SA	177	G	C8-N9-C1'	-9.97	114.03	127.00
26	LA	1228	G	O4'-C1'-N9	9.97	116.18	108.20
2	SA	1366	C	C6-N1-C2	-9.97	116.31	120.30
26	LA	2017	U	C2-N3-C4	-9.97	121.02	127.00
26	LA	2513	A	N7-C8-N9	-9.97	108.81	113.80
53	LP	96	ARG	NE-CZ-NH1	9.97	125.29	120.30
2	SA	260	G	O4'-C1'-N9	9.97	116.18	108.20
26	LA	71	A	N1-C6-N6	-9.97	112.62	118.60
26	LA	1805	A	C4-C5-N7	9.97	115.69	110.70
2	SA	1289	A	C2-N3-C4	-9.97	105.61	110.60
26	LA	577	G	N1-C6-O6	9.97	125.88	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1154	G	N9-C4-C5	-9.97	101.41	105.40
2	SA	933	G	P-O5'-C5'	9.97	136.85	120.90
26	LA	1268	A	C4-C5-C6	-9.97	112.02	117.00
2	SA	532	A	N1-C6-N6	9.96	124.58	118.60
26	LA	564	C	C2-N3-C4	-9.97	114.92	119.90
4	S2	1	C	C6-N1-C2	-9.96	116.31	120.30
26	LA	1390	U	C2-N3-C4	-9.96	121.02	127.00
26	LA	1738	G	N3-C2-N2	9.96	126.88	119.90
26	LA	2385	C	C1'-O4'-C4'	-9.97	101.93	109.90
26	LA	2427	C	N1-C2-N3	9.96	126.18	119.20
29	LV	3	ARG	NE-CZ-NH1	9.96	125.28	120.30
54	LM	112	PHE	CB-CG-CD1	9.97	127.78	120.80
2	SA	521	G	N9-C4-C5	9.96	109.39	105.40
26	LA	1595	C	O4'-C1'-N1	9.96	116.17	108.20
2	SA	255	G	C4'-C3'-C2'	-9.96	92.64	102.60
2	SA	1002	G	C5-N7-C8	-9.96	99.32	104.30
26	LA	1956	U	C6-N1-C2	-9.96	115.02	121.00
2	SA	988	G	O4'-C1'-N9	9.96	116.17	108.20
26	LA	1197	G	C5-N7-C8	-9.96	99.32	104.30
2	SA	815	A	O4'-C1'-N9	9.96	116.17	108.20
2	SA	871	U	C1'-O4'-C4'	-9.96	101.93	109.90
26	LA	405	U	O4'-C1'-N1	9.96	116.17	108.20
26	LA	968	C	O4'-C1'-N1	9.96	116.17	108.20
26	LA	1321	A	N1-C6-N6	-9.96	112.62	118.60
25	LB	53	A	O4'-C1'-N9	9.96	116.16	108.20
26	LA	1767	G	C5-C6-O6	-9.96	122.63	128.60
26	LA	1626	A	N1-C6-N6	9.95	124.57	118.60
26	LA	2598	A	C4-C5-N7	9.95	115.68	110.70
26	LA	2850	A	N9-C4-C5	9.95	109.78	105.80
26	LA	1450	G	P-O3'-C3'	9.95	131.64	119.70
26	LA	545	U	O4'-C1'-N1	9.95	116.16	108.20
26	LA	865	C	C5-C4-N4	-9.95	113.24	120.20
38	LE	124	ARG	NE-CZ-NH2	-9.95	115.33	120.30
26	LA	1710	G	N9-C4-C5	9.94	109.38	105.40
26	LA	2802	G	N9-C1'-C2'	-9.94	101.06	112.00
2	SA	38	G	N1-C6-O6	9.94	125.87	119.90
2	SA	702	A	C2-N3-C4	9.94	115.57	110.60
26	LA	285	G	N7-C8-N9	9.94	118.07	113.10
26	LA	1255	U	C5'-C4'-O4'	9.94	121.03	109.10
26	LA	1610	A	N1-C2-N3	9.94	134.27	129.30
26	LA	1904	G	C4-N9-C1'	-9.94	113.58	126.50
26	LA	2287	A	C6-N1-C2	9.94	124.56	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	39	G	N9-C4-C5	9.94	109.38	105.40
26	LA	586	A	N7-C8-N9	-9.94	108.83	113.80
26	LA	2250	G	C5-N7-C8	-9.94	99.33	104.30
26	LA	2317	A	C4-C5-N7	9.94	115.67	110.70
2	SA	111	G	N3-C2-N2	9.94	126.86	119.90
2	SA	328	C	O5'-P-OP1	-9.94	96.76	105.70
2	SA	1243	C	C6-N1-C2	9.94	124.27	120.30
26	LA	463	G	C5-C6-N1	-9.94	106.53	111.50
26	LA	2540	C	C6-N1-C2	-9.94	116.33	120.30
2	SA	51	A	O4'-C1'-N9	9.93	116.15	108.20
26	LA	1604	C	O4'-C1'-N1	9.93	116.15	108.20
26	LA	2483	C	P-O3'-C3'	-9.93	107.78	119.70
26	LA	2646	C	N3-C2-O2	-9.93	114.95	121.90
26	LA	1763	G	N1-C6-O6	9.93	125.86	119.90
26	LA	893	C	O4'-C1'-N1	9.93	116.14	108.20
26	LA	1322	A	P-O3'-C3'	9.93	131.61	119.70
26	LA	1628	G	C8-N9-C4	-9.93	102.43	106.40
26	LA	1935	G	C4-C5-C6	-9.93	112.84	118.80
44	LF	19	PHE	CB-CG-CD2	-9.93	113.85	120.80
26	LA	1864	U	C5-C6-N1	-9.93	117.74	122.70
26	LA	1897	G	N3-C4-C5	-9.92	123.64	128.60
2	SA	1382	C	O4'-C1'-N1	9.92	116.14	108.20
2	SA	1389	C	C6-N1-C2	-9.92	116.33	120.30
26	LA	1211	C	P-O3'-C3'	9.92	131.61	119.70
26	LA	2711	A	N1-C6-N6	9.92	124.55	118.60
2	SA	807	A	N1-C6-N6	-9.92	112.65	118.60
26	LA	284	U	C2-N3-C4	9.92	132.95	127.00
26	LA	1233	C	N3-C4-C5	-9.92	117.93	121.90
2	SA	1163	A	N7-C8-N9	-9.92	108.84	113.80
26	LA	2822	G	C5-N7-C8	-9.92	99.34	104.30
2	SA	1108	G	N7-C8-N9	-9.92	108.14	113.10
26	LA	776	G	C3'-C2'-C1'	-9.92	93.57	101.50
26	LA	849	A	O4'-C1'-N9	9.92	116.13	108.20
26	LA	1814	G	N1-C6-O6	9.92	125.85	119.90
26	LA	2600	A	N1-C2-N3	-9.92	124.34	129.30
1	SS	54	ARG	NE-CZ-NH2	9.91	125.26	120.30
2	SA	1238	A	C5-C6-N6	9.91	131.63	123.70
26	LA	618	G	C6-C5-N7	9.91	136.35	130.40
26	LA	2466	C	C5-C6-N1	9.91	125.95	121.00
2	SA	19	A	C6-N1-C2	-9.91	112.66	118.60
4	S2	4	G	C5-C6-O6	-9.91	122.66	128.60
26	LA	1259	G	O4'-C1'-N9	9.91	116.13	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1924	C	N3-C4-N4	9.91	124.94	118.00
26	LA	1973	G	C1'-O4'-C4'	-9.91	101.97	109.90
26	LA	695	G	C4-N9-C1'	-9.90	113.62	126.50
26	LA	1794	A	C8-N9-C4	9.90	109.76	105.80
26	LA	1648	U	C5'-C4'-C3'	-9.90	100.16	116.00
26	LA	2102	G	N3-C4-C5	-9.90	123.65	128.60
36	L2	9	TYR	CB-CG-CD2	9.90	126.94	121.00
26	LA	1795	C	N3-C2-O2	-9.90	114.97	121.90
26	LA	1836	C	N3-C4-N4	9.90	124.93	118.00
26	LA	2511	U	C6-N1-C2	-9.90	115.06	121.00
2	SA	182	A	C5-C6-N6	9.90	131.62	123.70
26	LA	1437	C	C3'-C2'-C1'	9.90	109.42	101.50
26	LA	2903	U	O4'-C1'-N1	9.90	116.12	108.20
26	LA	474	G	N3-C4-N9	9.89	131.94	126.00
26	LA	2602	A	N1-C6-N6	9.89	124.54	118.60
2	SA	373	A	N1-C6-N6	9.89	124.53	118.60
2	SA	769	G	N3-C4-C5	-9.89	123.66	128.60
2	SA	1330	U	N3-C4-O4	-9.89	112.48	119.40
26	LA	1975	G	N9-C4-C5	-9.89	101.44	105.40
26	LA	2143	C	C5-C4-N4	-9.89	113.28	120.20
2	SA	446	G	N3-C4-C5	9.89	133.54	128.60
2	SA	1236	A	O4'-C1'-N9	9.89	116.11	108.20
9	SI	5	TYR	CB-CG-CD1	9.89	126.93	121.00
26	LA	1954	G	N3-C4-C5	-9.89	123.66	128.60
26	LA	126	A	C5'-C4'-O4'	9.89	120.96	109.10
26	LA	892	A	C5-C6-N1	-9.89	112.76	117.70
26	LA	306	U	C5'-C4'-C3'	-9.89	100.18	116.00
2	SA	1517	G	O4'-C1'-N9	9.88	116.11	108.20
25	LB	48	U	C5-C4-O4	-9.88	119.97	125.90
26	LA	2095	A	C6-C5-N7	9.89	139.22	132.30
2	SA	8	A	C3'-C2'-C1'	-9.88	93.59	101.50
26	LA	2349	G	C5-C6-O6	-9.88	122.67	128.60
2	SA	1515	G	N3-C4-C5	-9.88	123.66	128.60
26	LA	727	A	N1-C2-N3	9.88	134.24	129.30
26	LA	1520	U	O4'-C1'-N1	9.88	116.11	108.20
26	LA	2545	G	C6-C5-N7	-9.88	124.47	130.40
2	SA	1217	C	C6-N1-C2	-9.88	116.35	120.30
26	LA	2597	G	C4-C5-N7	9.88	114.75	110.80
26	LA	2702	G	O4'-C1'-N9	9.88	116.10	108.20
2	SA	1441	A	O4'-C1'-N9	9.88	116.10	108.20
2	SA	516	U	N1-C2-N3	9.87	120.83	114.90
4	S2	73	A	C5'-C4'-O4'	9.88	120.95	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	132	G	C4-C5-N7	9.87	114.75	110.80
46	LH	156	TYR	CB-CG-CD1	9.88	126.92	121.00
2	SA	796	C	C6-N1-C2	-9.87	116.35	120.30
2	SA	579	A	O4'-C1'-N9	9.87	116.10	108.20
26	LA	2190	G	N1-C2-N3	-9.87	117.98	123.90
26	LA	2196	C	O4'-C1'-N1	9.87	116.10	108.20
2	SA	98	A	O4'-C1'-N9	9.87	116.10	108.20
2	SA	976	G	C2-N3-C4	-9.87	106.97	111.90
26	LA	2138	G	N1-C2-N3	-9.87	117.98	123.90
2	SA	1135	U	C5-C4-O4	-9.87	119.98	125.90
2	SA	1162	C	O4'-C1'-N1	9.87	116.09	108.20
26	LA	469	G	C5'-C4'-O4'	9.87	120.94	109.10
26	LA	1313	U	O4'-C1'-N1	9.87	116.09	108.20
26	LA	1914	C	C5'-C4'-C3'	-9.87	100.21	116.00
26	LA	2513	A	C5-N7-C8	9.87	108.83	103.90
2	SA	65	A	O4'-C1'-N9	9.87	116.09	108.20
2	SA	168	G	C5-C6-O6	-9.87	122.68	128.60
2	SA	486	U	C6-N1-C2	-9.87	115.08	121.00
26	LA	16	C	N3-C4-C5	9.86	125.85	121.90
26	LA	1804	C	N3-C4-C5	-9.86	117.95	121.90
26	LA	2472	G	N3-C2-N2	9.86	126.81	119.90
26	LA	1612	C	O4'-C1'-N1	9.86	116.09	108.20
26	LA	2703	C	N3-C4-N4	9.86	124.90	118.00
26	LA	289	G	C8-N9-C4	-9.86	102.46	106.40
26	LA	612	G	N3-C4-N9	-9.86	120.08	126.00
2	SA	94	G	C5-C6-O6	-9.86	122.69	128.60
2	SA	559	A	C2-N3-C4	9.86	115.53	110.60
2	SA	832	G	N9-C1'-C2'	-9.86	101.16	112.00
2	SA	1238	A	C5-C6-N1	-9.86	112.77	117.70
26	LA	2751	G	N3-C4-N9	9.86	131.92	126.00
2	SA	772	U	P-O5'-C5'	9.86	136.67	120.90
26	LA	964	C	C2-N1-C1'	9.86	129.64	118.80
26	LA	1987	A	C4-C5-C6	9.86	121.93	117.00
26	LA	2667	C	O4'-C1'-N1	9.86	116.09	108.20
26	LA	2848	G	P-O3'-C3'	9.86	131.53	119.70
26	LA	2730	C	N3-C4-C5	-9.85	117.96	121.90
2	SA	556	C	O4'-C1'-N1	9.85	116.08	108.20
2	SA	1118	U	O4'-C1'-N1	9.85	116.08	108.20
3	S1	38	G	C3'-C2'-C1'	9.85	109.38	101.50
26	LA	61	C	C6-N1-C2	-9.85	116.36	120.30
26	LA	1051	G	C4-C5-N7	-9.85	106.86	110.80
26	LA	568	U	C5-C4-O4	9.85	131.81	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	LC	53	ARG	NE-CZ-NH1	9.85	125.23	120.30
2	SA	290	C	P-O3'-C3'	-9.85	107.88	119.70
2	SA	1328	C	C2-N3-C4	-9.85	114.98	119.90
26	LA	1794	A	N1-C6-N6	9.85	124.51	118.60
26	LA	2455	G	C5-C6-O6	9.85	134.51	128.60
26	LA	2317	A	C6-N1-C2	-9.85	112.69	118.60
24	S3	336	ARG	NE-CZ-NH2	9.85	125.22	120.30
26	LA	941	A	P-O5'-C5'	9.85	136.65	120.90
26	LA	1976	U	N1-C2-N3	9.85	120.81	114.90
26	LA	1449	G	O4'-C1'-N9	9.84	116.08	108.20
26	LA	777	G	C2-N3-C4	-9.84	106.98	111.90
2	SA	447	G	O4'-C1'-N9	9.84	116.07	108.20
26	LA	212	G	C5-C6-O6	-9.84	122.70	128.60
26	LA	2706	A	N1-C6-N6	9.84	124.50	118.60
26	LA	2809	A	C4-C5-C6	9.84	121.92	117.00
2	SA	257	G	C5-C6-O6	-9.84	122.70	128.60
2	SA	346	G	C4-C5-C6	-9.84	112.90	118.80
26	LA	1975	G	C5-C6-O6	-9.84	122.70	128.60
26	LA	2300	C	C4-C5-C6	-9.84	112.48	117.40
53	LP	63	ARG	NE-CZ-NH1	9.84	125.22	120.30
2	SA	786	G	N3-C2-N2	9.84	126.78	119.90
26	LA	963	U	O4'-C1'-N1	9.84	116.07	108.20
2	SA	423	G	N3-C2-N2	9.83	126.78	119.90
2	SA	1152	A	O4'-C1'-N9	9.83	116.07	108.20
2	SA	1257	A	C8-N9-C4	-9.83	101.87	105.80
14	SN	52	ARG	NE-CZ-NH1	9.83	125.22	120.30
26	LA	362	A	N1-C6-N6	9.83	124.50	118.60
26	LA	626	A	N1-C6-N6	-9.83	112.70	118.60
26	LA	1433	A	C5-C6-N6	-9.83	115.83	123.70
26	LA	2067	G	O4'-C1'-N9	9.83	116.07	108.20
26	LA	2069	G	C5-C6-O6	-9.83	122.70	128.60
2	SA	451	A	N7-C8-N9	-9.83	108.89	113.80
26	LA	1490	A	C6-N1-C2	9.83	124.50	118.60
26	LA	2279	G	C2-N3-C4	9.83	116.81	111.90
26	LA	2408	U	C5-C6-N1	9.83	127.61	122.70
2	SA	397	A	N1-C6-N6	-9.83	112.70	118.60
2	SA	1028	C	O4'-C1'-N1	9.83	116.06	108.20
2	SA	1429	A	C4-C5-C6	-9.83	112.09	117.00
26	LA	909	A	O3'-P-O5'	-9.83	85.33	104.00
2	SA	97	G	O4'-C1'-N9	9.82	116.06	108.20
2	SA	1417	G	N3-C2-N2	-9.82	113.02	119.90
26	LA	450	G	C6-N1-C2	-9.82	119.20	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1239	G	C5-C6-O6	-9.82	122.70	128.60
2	SA	386	C	O4'-C1'-N1	9.82	116.06	108.20
2	SA	978	A	C5-C6-N1	9.82	122.61	117.70
5	ST	9	ARG	NE-CZ-NH2	9.82	125.21	120.30
5	ST	17	ARG	NE-CZ-NH1	9.82	125.21	120.30
26	LA	1212	G	C8-N9-C4	9.82	110.33	106.40
26	LA	2501	C	N3-C4-N4	9.82	124.88	118.00
2	SA	1478	U	O4'-C1'-N1	9.82	116.06	108.20
26	LA	201	C	O4'-C1'-N1	9.82	116.06	108.20
26	LA	1233	C	C6-N1-C2	-9.82	116.37	120.30
26	LA	1372	U	C5-C6-N1	-9.82	117.79	122.70
26	LA	1739	A	C5-C6-N6	9.82	131.55	123.70
2	SA	145	G	C6-N1-C2	-9.81	119.21	125.10
26	LA	483	A	N1-C2-N3	9.81	134.21	129.30
26	LA	493	G	C5-C6-N1	9.81	116.41	111.50
2	SA	310	G	N1-C6-O6	9.81	125.79	119.90
25	LB	13	G	C8-N9-C4	9.81	110.33	106.40
26	LA	366	C	N1-C1'-C2'	-9.81	101.21	112.00
2	SA	1099	G	N1-C6-O6	9.81	125.78	119.90
2	SA	1339	A	O4'-C1'-N9	9.81	116.05	108.20
25	LB	102	G	O4'-C1'-N9	9.81	116.05	108.20
26	LA	214	G	N7-C8-N9	9.81	118.00	113.10
57	LS	56	PHE	CB-CG-CD1	9.81	127.67	120.80
2	SA	910	C	N3-C4-C5	-9.81	117.98	121.90
26	LA	1581	G	C5-C6-N1	9.81	116.40	111.50
2	SA	1062	U	O4'-C1'-N1	9.80	116.04	108.20
26	LA	550	C	C1'-O4'-C4'	-9.80	102.06	109.90
26	LA	2461	A	C4-C5-C6	-9.80	112.10	117.00
26	LA	2610	C	N3-C4-C5	-9.80	117.98	121.90
2	SA	1524	C	N1-C2-O2	-9.80	113.02	118.90
3	S1	35	G	P-O5'-C5'	9.80	136.58	120.90
4	S2	5	G	N1-C6-O6	9.80	125.78	119.90
25	LB	71	C	O4'-C1'-N1	9.80	116.04	108.20
25	LB	102	G	N1-C6-O6	9.80	125.78	119.90
26	LA	266	G	N1-C2-N3	-9.80	118.02	123.90
26	LA	1157	G	C4-N9-C1'	9.80	139.24	126.50
26	LA	361	G	O4'-C1'-N9	9.80	116.04	108.20
26	LA	993	G	N1-C6-O6	9.80	125.78	119.90
26	LA	1849	G	N9-C4-C5	-9.80	101.48	105.40
26	LA	2655	G	P-O5'-C5'	-9.80	105.22	120.90
26	LA	2857	G	N3-C2-N2	9.80	126.76	119.90
26	LA	1840	G	C5'-C4'-C3'	-9.80	100.33	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	783	A	C5-C6-N1	9.79	122.60	117.70
26	LA	2700	A	C4'-C3'-C2'	-9.79	92.81	102.60
2	SA	933	G	O4'-C1'-N9	9.79	116.03	108.20
26	LA	393	C	N3-C2-O2	-9.79	115.05	121.90
26	LA	2112	G	P-O3'-C3'	9.79	131.45	119.70
2	SA	1473	G	N9-C4-C5	9.79	109.32	105.40
26	LA	264	C	O4'-C1'-N1	9.79	116.03	108.20
26	LA	1163	G	C5-N7-C8	-9.79	99.41	104.30
2	SA	413	G	N1-C6-O6	9.79	125.77	119.90
2	SA	711	G	C5-C6-O6	-9.79	122.73	128.60
26	LA	2770	G	C4-C5-N7	9.79	114.72	110.80
20	SD	55	ARG	NE-CZ-NH1	9.78	125.19	120.30
20	SD	164	ARG	NE-CZ-NH2	-9.79	115.41	120.30
26	LA	2606	C	C6-N1-C2	-9.79	116.39	120.30
45	LG	137	PHE	CB-CG-CD2	-9.79	113.95	120.80
26	LA	912	C	N1-C2-O2	9.78	124.77	118.90
54	LM	49	ARG	NE-CZ-NH2	-9.78	115.41	120.30
2	SA	361	G	N1-C6-O6	9.78	125.77	119.90
2	SA	590	U	N3-C4-O4	9.78	126.25	119.40
20	SD	69	ARG	NE-CZ-NH1	9.78	125.19	120.30
26	LA	4	U	O4'-C1'-N1	9.78	116.02	108.20
26	LA	39	G	C8-N9-C4	-9.78	102.49	106.40
2	SA	954	G	N1-C6-O6	9.78	125.77	119.90
2	SA	1383	C	O4'-C1'-N1	9.78	116.02	108.20
3	S1	27	A	P-O3'-C3'	9.78	131.43	119.70
26	LA	1830	C	C2-N3-C4	-9.78	115.01	119.90
2	SA	1029	U	C5-C6-N1	-9.77	117.81	122.70
6	SU	16	ARG	NE-CZ-NH2	9.77	125.19	120.30
26	LA	644	A	N1-C2-N3	9.77	134.19	129.30
26	LA	581	C	N1-C2-O2	-9.77	113.04	118.90
26	LA	1123	C	P-O3'-C3'	9.77	131.43	119.70
26	LA	62	U	C6-N1-C2	-9.77	115.14	121.00
26	LA	346	A	N1-C2-N3	9.77	134.18	129.30
26	LA	1845	G	O4'-C1'-N9	9.77	116.01	108.20
26	LA	1382	G	C5-C6-O6	-9.77	122.74	128.60
26	LA	704	G	P-O3'-C3'	9.76	131.42	119.70
2	SA	555	U	O4'-C1'-N1	9.76	116.01	108.20
2	SA	1166	G	C2-N3-C4	-9.76	107.02	111.90
2	SA	1200	C	C2-N3-C4	-9.76	115.02	119.90
2	SA	1473	G	C4-C5-N7	-9.76	106.89	110.80
4	S2	10	G	C5-C6-O6	9.76	134.46	128.60
26	LA	2327	A	C8-N9-C4	-9.76	101.89	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2682	A	C5-N7-C8	-9.76	99.02	103.90
26	LA	1757	A	C5-C6-N1	9.76	122.58	117.70
26	LA	2897	U	C2-N3-C4	9.76	132.85	127.00
24	S3	445	ARG	NE-CZ-NH1	9.76	125.18	120.30
26	LA	1193	G	C5-C6-O6	-9.76	122.75	128.60
2	SA	831	A	C5'-C4'-C3'	-9.76	100.39	116.00
26	LA	1741	C	C2-N3-C4	-9.76	115.02	119.90
26	LA	2825	G	O4'-C1'-N9	9.76	116.01	108.20
2	SA	406	G	O4'-C1'-N9	9.75	116.00	108.20
26	LA	473	G	N3-C2-N2	-9.75	113.08	119.90
26	LA	1162	G	C5-C6-O6	-9.75	122.75	128.60
26	LA	1530	G	C5-C6-O6	-9.75	122.75	128.60
2	SA	135	C	C1'-O4'-C4'	-9.75	102.10	109.90
26	LA	918	A	O4'-C1'-N9	9.75	116.00	108.20
26	LA	52	A	C8-N9-C4	-9.74	101.90	105.80
26	LA	137	U	O4'-C1'-N1	9.74	116.00	108.20
26	LA	1470	A	C4-C5-N7	9.74	115.57	110.70
26	LA	2508	G	C5'-C4'-C3'	9.74	131.59	116.00
26	LA	1717	A	C5-N7-C8	-9.74	99.03	103.90
2	SA	451	A	C4-C5-C6	-9.74	112.13	117.00
26	LA	1814	G	C5-C6-O6	-9.74	122.76	128.60
26	LA	93	G	C1'-O4'-C4'	9.74	117.69	109.90
26	LA	1618	C	N1-C2-N3	9.74	126.02	119.20
2	SA	285	C	O4'-C1'-N1	9.73	115.99	108.20
2	SA	845	A	C8-N9-C4	9.73	109.69	105.80
26	LA	1574	C	N3-C2-O2	-9.73	115.09	121.90
26	LA	2551	C	N1-C2-O2	9.73	124.74	118.90
2	SA	402	G	N3-C4-C5	-9.73	123.73	128.60
2	SA	527	G	C4-C5-N7	9.73	114.69	110.80
2	SA	972	C	C6-N1-C2	-9.73	116.41	120.30
26	LA	45	G	P-O3'-C3'	9.73	131.38	119.70
26	LA	2754	U	O4'-C1'-N1	9.73	115.99	108.20
26	LA	2521	C	C2-N3-C4	-9.73	115.03	119.90
2	SA	465	A	C5-C6-N6	9.73	131.48	123.70
2	SA	1415	G	C5-C6-O6	-9.73	122.76	128.60
2	SA	1502	A	O4'-C1'-N9	9.73	115.98	108.20
26	LA	2657	A	P-O5'-C5'	9.73	136.47	120.90
26	LA	826	U	O4'-C1'-N1	9.72	115.98	108.20
7	SG	137	ARG	NE-CZ-NH1	9.72	125.16	120.30
26	LA	1539	U	C5-C4-O4	-9.72	120.07	125.90
26	LA	1815	A	C8-N9-C4	9.72	109.69	105.80
26	LA	2499	C	C6-N1-C2	-9.72	116.41	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	10	G	N1-C6-O6	-9.72	114.07	119.90
26	LA	2193	G	C6-N1-C2	-9.72	119.27	125.10
26	LA	2181	U	O4'-C1'-N1	9.72	115.98	108.20
1	SS	77	ARG	NE-CZ-NH1	9.72	125.16	120.30
2	SA	175	C	C6-N1-C2	-9.72	116.41	120.30
26	LA	458	G	C3'-C2'-C1'	-9.72	93.73	101.50
26	LA	575	A	N9-C4-C5	-9.72	101.91	105.80
26	LA	2094	A	C1'-O4'-C4'	-9.72	102.13	109.90
2	SA	206	C	O4'-C1'-N1	9.71	115.97	108.20
2	SA	825	A	N7-C8-N9	9.71	118.66	113.80
2	SA	983	A	C2-N3-C4	-9.71	105.74	110.60
26	LA	129	C	C2-N3-C4	-9.71	115.04	119.90
2	SA	415	A	C6-N1-C2	-9.71	112.77	118.60
2	SA	804	U	C2-N3-C4	-9.71	121.17	127.00
4	S2	74	A	P-O3'-C3'	-9.71	108.05	119.70
25	LB	114	C	N1-C2-N3	9.71	126.00	119.20
26	LA	2119	A	N1-C2-N3	-9.71	124.44	129.30
26	LA	2432	A	O4'-C1'-N9	9.71	115.97	108.20
26	LA	1277	G	N7-C8-N9	9.71	117.95	113.10
26	LA	2255	G	N1-C2-N3	9.71	129.73	123.90
41	L5	14	ARG	NE-CZ-NH2	9.71	125.16	120.30
2	SA	1542	A	N9-C4-C5	9.71	109.68	105.80
2	SA	175	C	O4'-C1'-N1	9.71	115.97	108.20
2	SA	1493	A	C5-C6-N1	9.71	122.55	117.70
26	LA	368	A	C3'-C2'-C1'	9.71	109.27	101.50
26	LA	1259	G	C5-C6-O6	-9.71	122.78	128.60
26	LA	1285	A	P-O3'-C3'	9.71	131.35	119.70
26	LA	1795	C	N1-C2-O2	9.71	124.72	118.90
26	LA	1398	C	C2-N3-C4	-9.71	115.05	119.90
25	LB	87	U	C1'-O4'-C4'	-9.71	102.14	109.90
26	LA	1793	C	C2-N3-C4	-9.71	115.05	119.90
26	LA	195	A	C3'-C2'-C1'	9.70	109.26	101.50
26	LA	995	C	P-O5'-C5'	9.71	136.43	120.90
26	LA	1141	U	C2-N3-C4	-9.70	121.18	127.00
26	LA	1618	C	N3-C2-O2	-9.70	115.11	121.90
2	SA	921	U	P-O3'-C3'	-9.70	108.06	119.70
26	LA	788	A	O4'-C1'-N9	9.70	115.96	108.20
26	LA	2397	G	C4-C5-N7	9.70	114.68	110.80
2	SA	214	C	C6-N1-C2	-9.70	116.42	120.30
2	SA	1498	U	P-O3'-C3'	9.70	131.34	119.70
4	S2	2	G	P-O5'-C5'	9.70	136.42	120.90
26	LA	1875	G	C4-C5-N7	9.70	114.68	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2566	A	P-O5'-C5'	-9.70	105.38	120.90
26	LA	1715	G	P-O3'-C3'	9.70	131.34	119.70
26	LA	1961	C	C4-C5-C6	-9.70	112.55	117.40
42	L6	7	ARG	NE-CZ-NH2	-9.70	115.45	120.30
2	SA	945	G	N1-C2-N3	-9.70	118.08	123.90
26	LA	390	U	O4'-C1'-N1	9.70	115.96	108.20
26	LA	944	C	N3-C4-N4	9.70	124.79	118.00
26	LA	1743	G	C5-C6-O6	-9.70	122.78	128.60
26	LA	1469	A	N1-C2-N3	-9.69	124.45	129.30
26	LA	2667	C	C6-N1-C2	9.69	124.18	120.30
25	LB	12	C	P-O3'-C3'	-9.69	108.07	119.70
26	LA	54	G	C4-C5-N7	9.69	114.68	110.80
45	LG	137	PHE	CB-CG-CD1	9.69	127.58	120.80
2	SA	788	U	N3-C4-C5	-9.69	108.79	114.60
2	SA	1422	G	O4'-C1'-N9	9.69	115.95	108.20
26	LA	530	G	N7-C8-N9	-9.69	108.25	113.10
26	LA	1572	A	N1-C2-N3	-9.69	124.45	129.30
26	LA	1465	G	C5-C6-O6	-9.69	122.79	128.60
26	LA	1853	A	N9-C4-C5	9.69	109.67	105.80
2	SA	577	G	N1-C6-O6	9.69	125.71	119.90
2	SA	1113	C	O4'-C1'-N1	9.69	115.95	108.20
26	LA	126	A	C6-N1-C2	-9.69	112.79	118.60
2	SA	1197	A	O4'-C1'-N9	9.68	115.95	108.20
2	SA	1237	C	O4'-C1'-N1	9.68	115.95	108.20
26	LA	2887	A	P-O5'-C5'	9.68	136.39	120.90
2	SA	110	C	C2-N1-C1'	9.68	129.45	118.80
2	SA	505	G	O4'-C1'-N9	9.68	115.94	108.20
26	LA	1297	C	C4-C5-C6	9.68	122.24	117.40
26	LA	2126	A	O3'-P-O5'	-9.68	85.61	104.00
26	LA	2677	G	N1-C6-O6	9.68	125.71	119.90
2	SA	276	G	N1-C6-O6	9.68	125.71	119.90
2	SA	395	C	C4'-C3'-C2'	-9.68	92.92	102.60
26	LA	2689	U	O4'-C1'-C2'	9.68	116.31	107.60
2	SA	649	A	C4-C5-C6	-9.68	112.16	117.00
3	S1	15	G	O4'-C1'-C2'	-9.68	96.12	105.80
26	LA	1641	A	N1-C6-N6	9.68	124.41	118.60
2	SA	821	G	O4'-C1'-N9	9.67	115.94	108.20
26	LA	116	C	C6-N1-C2	-9.67	116.43	120.30
26	LA	671	C	C5-C6-N1	-9.67	116.16	121.00
26	LA	1127	A	P-O3'-C3'	9.67	131.31	119.70
26	LA	1260	A	C4-C5-C6	9.67	121.84	117.00
26	LA	1762	A	N1-C6-N6	9.67	124.40	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1864	U	O4'-C1'-N1	9.67	115.94	108.20
26	LA	2055	C	N3-C2-O2	9.67	128.67	121.90
26	LA	2153	C	N3-C4-N4	9.67	124.77	118.00
26	LA	2385	C	O4'-C1'-C2'	9.67	116.31	107.60
26	LA	225	C	N3-C4-N4	-9.67	111.23	118.00
26	LA	592	A	N1-C6-N6	9.67	124.40	118.60
26	LA	674	G	C5-C6-O6	-9.67	122.80	128.60
26	LA	1268	A	C5-C6-N1	9.67	122.53	117.70
2	SA	1230	C	C6-N1-C2	-9.67	116.43	120.30
26	LA	1913	A	N1-C2-N3	9.67	134.13	129.30
26	LA	2781	A	C5-C6-N6	-9.67	115.97	123.70
2	SA	1035	A	N1-C6-N6	9.66	124.40	118.60
26	LA	1499	C	O4'-C1'-N1	9.66	115.93	108.20
26	LA	2503	A	N1-C2-N3	-9.66	124.47	129.30
2	SA	585	G	C5-C6-O6	-9.66	122.80	128.60
2	SA	1524	C	O4'-C1'-N1	9.66	115.93	108.20
26	LA	2001	C	C6-N1-C2	-9.66	116.44	120.30
2	SA	1457	G	C2-N3-C4	-9.66	107.07	111.90
26	LA	1726	C	C2-N3-C4	-9.66	115.07	119.90
2	SA	1388	C	C5'-C4'-C3'	-9.66	100.55	116.00
26	LA	674	G	C4-C5-C6	-9.66	113.00	118.80
26	LA	1138	G	N3-C4-C5	-9.66	123.77	128.60
26	LA	403	U	N1-C2-N3	-9.66	109.11	114.90
2	SA	1507	A	C4-C5-N7	-9.66	105.87	110.70
2	SA	1535	C	C1'-O4'-C4'	-9.66	102.17	109.90
26	LA	1099	G	C4-C5-N7	9.66	114.66	110.80
56	LR	50	ARG	NE-CZ-NH1	-9.66	115.47	120.30
26	LA	2137	U	O4'-C1'-N1	9.66	115.92	108.20
26	LA	2277	G	N1-C6-O6	9.66	125.69	119.90
2	SA	199	A	P-O5'-C5'	9.65	136.34	120.90
2	SA	659	U	N3-C2-O2	-9.65	115.44	122.20
2	SA	1262	C	O4'-C1'-N1	9.65	115.92	108.20
2	SA	1045	C	C6-N1-C2	-9.65	116.44	120.30
26	LA	468	G	C6-N1-C2	-9.65	119.31	125.10
26	LA	771	G	C8-N9-C4	-9.65	102.54	106.40
26	LA	2326	C	C6-N1-C2	-9.65	116.44	120.30
26	LA	2695	U	O4'-C1'-N1	9.65	115.92	108.20
2	SA	445	G	N3-C4-C5	-9.65	123.77	128.60
26	LA	1757	A	C4'-C3'-C2'	-9.65	92.95	102.60
2	SA	1176	A	N9-C4-C5	-9.65	101.94	105.80
26	LA	1692	U	P-O3'-C3'	9.65	131.28	119.70
26	LA	13	A	N9-C4-C5	9.65	109.66	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	791	C	C2-N3-C4	9.65	124.72	119.90
26	LA	1653	G	C2-N3-C4	-9.65	107.08	111.90
2	SA	1053	G	N1-C6-O6	9.65	125.69	119.90
26	LA	1825	U	C2-N3-C4	-9.65	121.21	127.00
2	SA	1370	G	O4'-C1'-N9	9.65	115.92	108.20
2	SA	1401	G	C5-C6-O6	-9.65	122.81	128.60
26	LA	2822	G	C6-C5-N7	-9.65	124.61	130.40
33	LZ	26	ARG	NE-CZ-NH1	9.65	125.12	120.30
2	SA	247	G	P-O5'-C5'	9.64	136.33	120.90
26	LA	879	G	C8-N9-C4	-9.64	102.54	106.40
3	S1	57	C	O4'-C1'-N1	9.64	115.91	108.20
2	SA	1068	G	C8-N9-C4	9.64	110.25	106.40
2	SA	177	G	C4-N9-C1'	9.64	139.03	126.50
2	SA	1510	C	C2-N3-C4	-9.64	115.08	119.90
26	LA	1441	G	N1-C6-O6	-9.64	114.12	119.90
2	SA	79	G	N1-C6-O6	9.63	125.68	119.90
2	SA	502	A	N9-C4-C5	-9.63	101.95	105.80
2	SA	1482	G	C4-C5-N7	-9.63	106.95	110.80
26	LA	242	G	C4-C5-N7	9.63	114.65	110.80
26	LA	2701	U	C2-N3-C4	-9.63	121.22	127.00
26	LA	1538	G	O4'-C1'-N9	9.63	115.91	108.20
52	LO	130	PHE	CB-CG-CD1	-9.63	114.06	120.80
2	SA	87	C	N1-C2-O2	9.63	124.68	118.90
2	SA	1366	C	N3-C4-C5	-9.63	118.05	121.90
2	SA	847	G	O4'-C1'-N9	9.63	115.90	108.20
26	LA	1591	A	C8-N9-C4	9.62	109.65	105.80
26	LA	2065	C	C6-N1-C2	-9.62	116.45	120.30
2	SA	1018	G	C5'-C4'-C3'	-9.62	100.61	116.00
11	SK	105	ARG	NE-CZ-NH2	9.62	125.11	120.30
26	LA	205	G	N3-C4-N9	-9.62	120.23	126.00
26	LA	513	A	C5'-C4'-C3'	-9.62	100.60	116.00
26	LA	1122	G	C5-C6-O6	-9.62	122.83	128.60
26	LA	1377	G	N9-C4-C5	9.62	109.25	105.40
26	LA	763	G	C5'-C4'-C3'	9.62	131.39	116.00
26	LA	2840	C	C4-C5-C6	-9.62	112.59	117.40
2	SA	936	C	N3-C4-C5	-9.62	118.05	121.90
2	SA	1146	A	O4'-C1'-N9	9.62	115.90	108.20
26	LA	670	A	C5-C6-N6	9.62	131.39	123.70
26	LA	879	G	N1-C6-O6	9.62	125.67	119.90
26	LA	1790	C	C6-N1-C2	-9.62	116.45	120.30
26	LA	896	A	C8-N9-C4	9.62	109.65	105.80
26	LA	2631	G	C5-C6-N1	9.62	116.31	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	86	G	C4'-C3'-C2'	-9.62	92.98	102.60
26	LA	1527	G	C4-C5-N7	-9.62	106.95	110.80
26	LA	1739	A	C2-N3-C4	-9.61	105.79	110.60
2	SA	1172	C	N3-C4-C5	-9.61	118.06	121.90
2	SA	148	G	C4-N9-C1'	-9.61	114.00	126.50
2	SA	1392	G	C5-C6-N1	9.61	116.31	111.50
2	SA	1463	U	O4'-C1'-N1	9.61	115.89	108.20
26	LA	1057	A	O4'-C1'-N9	9.61	115.89	108.20
26	LA	1794	A	N7-C8-N9	-9.61	108.99	113.80
26	LA	2152	G	O4'-C1'-N9	9.61	115.89	108.20
6	SU	37	TYR	CB-CG-CD1	9.61	126.77	121.00
26	LA	638	G	C5-C6-N1	9.61	116.30	111.50
26	LA	917	A	C8-N9-C4	-9.61	101.96	105.80
26	LA	1335	C	N3-C4-N4	9.61	124.73	118.00
2	SA	33	A	N9-C4-C5	9.61	109.64	105.80
26	LA	2668	G	C5-C6-N1	-9.61	106.70	111.50
2	SA	645	G	C5-N7-C8	-9.61	99.50	104.30
2	SA	1346	A	O4'-C1'-C2'	-9.61	96.19	105.80
26	LA	548	G	C5-C6-O6	-9.61	122.84	128.60
26	LA	733	G	O4'-C1'-N9	9.61	115.88	108.20
26	LA	1180	U	O4'-C1'-N1	9.61	115.88	108.20
26	LA	1932	A	C4-C5-C6	-9.61	112.20	117.00
26	LA	2354	C	C6-N1-C2	-9.61	116.46	120.30
2	SA	120	A	C5'-C4'-C3'	-9.60	100.63	116.00
26	LA	2064	C	O4'-C1'-N1	9.60	115.88	108.20
2	SA	150	U	P-O5'-C5'	9.60	136.26	120.90
2	SA	1446	A	O4'-C1'-N9	9.60	115.88	108.20
26	LA	2151	U	P-O5'-C5'	9.60	136.26	120.90
26	LA	295	G	O4'-C1'-N9	9.60	115.88	108.20
26	LA	763	G	C5-N7-C8	-9.60	99.50	104.30
26	LA	1128	G	C5-C6-O6	-9.60	122.84	128.60
26	LA	256	A	N1-C6-N6	-9.60	112.84	118.60
26	LA	2538	C	C5-C6-N1	9.60	125.80	121.00
2	SA	19	A	C5-C6-N1	9.59	122.50	117.70
2	SA	755	G	N1-C2-N3	-9.59	118.14	123.90
26	LA	1933	G	N9-C4-C5	9.59	109.24	105.40
26	LA	2607	G	P-O3'-C3'	-9.59	108.19	119.70
54	LM	31	ARG	NE-CZ-NH1	9.59	125.10	120.30
2	SA	158	G	C6-N1-C2	-9.59	119.35	125.10
26	LA	236	C	C6-N1-C2	-9.59	116.46	120.30
2	SA	838	G	N1-C6-O6	9.59	125.65	119.90
26	LA	1497	U	O4'-C1'-N1	9.59	115.87	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	58	C	C5-C6-N1	9.59	125.79	121.00
2	SA	539	A	N1-C2-N3	9.59	134.09	129.30
26	LA	1136	G	C6-C5-N7	-9.59	124.65	130.40
26	LA	1843	C	P-O3'-C3'	9.59	131.21	119.70
2	SA	403	C	O4'-C1'-N1	9.59	115.87	108.20
11	SK	12	ARG	NE-CZ-NH1	9.59	125.09	120.30
26	LA	1272	A	C5-C6-N1	-9.59	112.91	117.70
34	L0	26	PHE	CB-CG-CD1	-9.59	114.09	120.80
2	SA	337	G	N9-C4-C5	-9.58	101.57	105.40
2	SA	991	U	N3-C2-O2	-9.58	115.49	122.20
26	LA	11	C	C6-N1-C2	-9.58	116.47	120.30
26	LA	465	G	C5-C6-O6	-9.58	122.85	128.60
26	LA	659	G	N1-C6-O6	-9.58	114.15	119.90
26	LA	1654	A	C4-C5-C6	-9.58	112.21	117.00
26	LA	2676	C	C5-C6-N1	-9.58	116.21	121.00
2	SA	1194	U	N3-C2-O2	9.58	128.91	122.20
26	LA	2006	C	C6-N1-C2	-9.58	116.47	120.30
18	SB	221	ARG	NE-CZ-NH2	-9.58	115.51	120.30
26	LA	911	A	C4-C5-C6	9.58	121.79	117.00
2	SA	931	C	N3-C4-N4	-9.58	111.30	118.00
25	LB	33	G	N1-C6-O6	9.58	125.65	119.90
26	LA	1117	C	O4'-C1'-N1	9.58	115.86	108.20
2	SA	151	A	N9-C4-C5	9.57	109.63	105.80
2	SA	304	U	C5-C6-N1	-9.57	117.91	122.70
2	SA	1343	G	N3-C2-N2	9.57	126.60	119.90
26	LA	1143	A	C5-C6-N1	9.57	122.49	117.70
26	LA	1465	G	N1-C6-O6	9.57	125.64	119.90
2	SA	399	G	C5-C6-O6	-9.57	122.86	128.60
26	LA	2131	U	C6-N1-C1'	-9.57	107.80	121.20
26	LA	667	U	N1-C2-N3	9.57	120.64	114.90
26	LA	1125	G	N7-C8-N9	9.57	117.89	113.10
2	SA	463	U	P-O3'-C3'	9.57	131.18	119.70
2	SA	725	G	N1-C6-O6	9.57	125.64	119.90
4	S2	76	C	N3-C4-C5	-9.57	118.07	121.90
26	LA	2611	C	C5-C6-N1	9.57	125.78	121.00
26	LA	2874	C	O4'-C1'-N1	9.57	115.86	108.20
26	LA	292	U	O4'-C1'-N1	9.57	115.85	108.20
26	LA	679	C	O4'-C1'-N1	9.57	115.85	108.20
2	SA	527	G	N9-C4-C5	-9.56	101.58	105.40
2	SA	1204	A	O4'-C1'-N9	9.56	115.85	108.20
2	SA	1300	G	N1-C6-O6	9.56	125.64	119.90
26	LA	846	U	P-O3'-C3'	9.56	131.18	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	356	G	N3-C4-C5	-9.56	123.82	128.60
2	SA	321	A	C5-C6-N6	-9.56	116.05	123.70
2	SA	265	G	C5-N7-C8	-9.56	99.52	104.30
2	SA	153	C	C5'-C4'-O4'	9.56	120.57	109.10
2	SA	810	C	C4'-C3'-C2'	-9.56	93.04	102.60
2	SA	1268	G	P-O3'-C3'	9.56	131.17	119.70
2	SA	1335	U	N3-C2-O2	-9.56	115.51	122.20
16	SP	8	ARG	NE-CZ-NH1	9.56	125.08	120.30
26	LA	1808	A	C6-N1-C2	9.56	124.33	118.60
26	LA	2286	G	C8-N9-C4	9.56	110.22	106.40
26	LA	1087	G	O4'-C1'-N9	9.55	115.84	108.20
2	SA	712	A	O4'-C1'-N9	9.55	115.84	108.20
26	LA	2262	U	C4'-C3'-C2'	-9.55	93.05	102.60
26	LA	2682	A	O4'-C1'-N9	9.55	115.84	108.20
2	SA	1198	G	N1-C6-O6	9.55	125.63	119.90
26	LA	1740	G	N7-C8-N9	9.55	117.88	113.10
26	LA	584	C	N3-C4-C5	9.55	125.72	121.90
26	LA	1854	A	N9-C4-C5	-9.55	101.98	105.80
26	LA	2712	C	O4'-C1'-N1	9.55	115.84	108.20
26	LA	215	G	O4'-C1'-N9	9.55	115.84	108.20
26	LA	1020	A	C6-N1-C2	-9.55	112.87	118.60
26	LA	1129	A	C6-N1-C2	-9.55	112.87	118.60
26	LA	1171	G	C6-N1-C2	-9.55	119.37	125.10
26	LA	1338	G	C4-C5-C6	9.55	124.53	118.80
26	LA	1341	G	C4'-C3'-C2'	-9.55	93.05	102.60
42	L6	41	ARG	NE-CZ-NH2	9.55	125.07	120.30
2	SA	197	A	P-O5'-C5'	-9.54	105.63	120.90
2	SA	1170	A	O4'-C1'-N9	9.54	115.84	108.20
26	LA	176	A	C2-N3-C4	-9.54	105.83	110.60
26	LA	2205	A	C4'-C3'-C2'	-9.55	93.05	102.60
26	LA	2369	A	O4'-C1'-N9	9.55	115.84	108.20
26	LA	223	A	C1'-O4'-C4'	-9.54	102.27	109.90
26	LA	1092	C	C5'-C4'-O4'	9.54	120.55	109.10
2	SA	112	G	N1-C6-O6	-9.54	114.18	119.90
2	SA	779	C	O4'-C1'-N1	9.54	115.83	108.20
2	SA	888	G	C5-C6-O6	-9.54	122.87	128.60
26	LA	1223	G	N9-C4-C5	9.54	109.22	105.40
2	SA	812	G	C3'-C2'-C1'	9.54	109.13	101.50
26	LA	2672	U	O4'-C1'-N1	9.54	115.83	108.20
26	LA	579	G	O4'-C1'-N9	9.54	115.83	108.20
2	SA	178	C	C6-N1-C2	9.54	124.11	120.30
26	LA	144	A	O4'-C1'-N9	9.54	115.83	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1416	G	O4'-C1'-N9	9.54	115.83	108.20
26	LA	1359	A	C6-N1-C2	9.54	124.32	118.60
26	LA	1389	G	P-O5'-C5'	-9.54	105.64	120.90
26	LA	1421	G	P-O3'-C3'	9.54	131.15	119.70
26	LA	2497	A	C8-N9-C4	-9.54	101.98	105.80
26	LA	2545	G	C2-N3-C4	-9.54	107.13	111.90
2	SA	688	G	N9-C4-C5	9.54	109.21	105.40
2	SA	867	G	C5-C6-O6	-9.54	122.88	128.60
2	SA	915	A	N1-C6-N6	-9.54	112.88	118.60
2	SA	922	G	N7-C8-N9	9.54	117.87	113.10
26	LA	186	G	C5-C6-O6	-9.54	122.88	128.60
2	SA	909	A	P-O5'-C5'	9.53	136.15	120.90
26	LA	829	A	C6-N1-C2	-9.53	112.88	118.60
26	LA	974	G	C3'-C2'-C1'	-9.54	93.87	101.50
26	LA	984	A	C5-N7-C8	-9.53	99.13	103.90
26	LA	1393	A	N7-C8-N9	9.53	118.57	113.80
26	LA	1692	U	C5-C6-N1	-9.53	117.93	122.70
26	LA	2046	G	C5-C6-O6	-9.54	122.88	128.60
26	LA	2319	G	C6-N1-C2	9.54	130.82	125.10
34	L0	48	ARG	NE-CZ-NH1	9.53	125.07	120.30
26	LA	1728	C	O4'-C1'-N1	9.53	115.83	108.20
26	LA	1212	G	P-O3'-C3'	-9.53	108.26	119.70
26	LA	1924	C	C5-C4-N4	-9.53	113.53	120.20
26	LA	2222	C	O4'-C1'-N1	9.53	115.83	108.20
2	SA	242	G	N1-C6-O6	9.53	125.62	119.90
2	SA	475	C	O4'-C1'-N1	9.53	115.82	108.20
25	LB	89	U	N1-C2-N3	9.53	120.62	114.90
26	LA	382	A	O4'-C1'-N9	9.53	115.82	108.20
26	LA	2451	A	C6-N1-C2	-9.53	112.88	118.60
26	LA	2452	C	C5-C6-N1	9.53	125.76	121.00
26	LA	2642	G	N7-C8-N9	9.53	117.86	113.10
2	SA	592	G	C5-C6-O6	-9.53	122.88	128.60
2	SA	1002	G	C5-C6-N1	9.53	116.26	111.50
2	SA	1089	G	O4'-C1'-N9	9.53	115.82	108.20
26	LA	1358	G	C5-C6-O6	-9.53	122.88	128.60
26	LA	374	A	N1-C6-N6	9.53	124.31	118.60
26	LA	1792	G	O4'-C1'-N9	9.53	115.82	108.20
9	SI	105	ARG	NE-CZ-NH1	9.52	125.06	120.30
25	LB	21	G	N1-C6-O6	-9.52	114.19	119.90
26	LA	122	G	C4-C5-N7	9.52	114.61	110.80
26	LA	784	G	N1-C6-O6	9.52	125.61	119.90
26	LA	1999	C	C6-N1-C2	-9.52	116.49	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	57	C	O4'-C1'-N1	9.52	115.82	108.20
26	LA	1079	C	O4'-C1'-N1	9.52	115.82	108.20
2	SA	1156	G	N1-C6-O6	9.52	125.61	119.90
2	SA	1454	G	C2-N3-C4	9.52	116.66	111.90
26	LA	1183	U	C5-C6-N1	-9.52	117.94	122.70
26	LA	2118	U	O4'-C1'-N1	9.52	115.81	108.20
26	LA	2418	A	O4'-C1'-N9	9.52	115.81	108.20
27	LD	47	ARG	NE-CZ-NH1	9.52	125.06	120.30
2	SA	1510	C	N1-C2-O2	-9.51	113.19	118.90
26	LA	1900	A	C8-N9-C4	9.51	109.61	105.80
2	SA	1267	C	C3'-C2'-C1'	9.51	109.11	101.50
2	SA	1323	G	C5-C6-N1	9.51	116.26	111.50
26	LA	1192	G	N7-C8-N9	9.51	117.86	113.10
26	LA	2371	G	C5-N7-C8	-9.51	99.55	104.30
4	S2	70	C	N1-C2-N3	9.51	125.86	119.20
25	LB	48	U	C4-C5-C6	-9.51	114.00	119.70
26	LA	306	U	N3-C2-O2	-9.51	115.54	122.20
2	SA	48	C	C1'-O4'-C4'	-9.51	102.30	109.90
26	LA	816	C	N3-C2-O2	-9.51	115.25	121.90
26	LA	1564	C	N1-C2-N3	9.51	125.86	119.20
3	S1	58	C	C1'-O4'-C4'	-9.51	102.30	109.90
26	LA	1276	A	C5-C6-N1	9.51	122.45	117.70
26	LA	1904	G	C8-N9-C4	9.51	110.20	106.40
2	SA	905	U	C5-C4-O4	-9.50	120.20	125.90
26	LA	11	C	P-O3'-C3'	9.50	131.10	119.70
26	LA	2464	G	C3'-C2'-C1'	9.50	109.10	101.50
2	SA	810	C	N3-C4-N4	9.50	124.65	118.00
26	LA	686	U	N3-C4-C5	-9.50	108.90	114.60
26	LA	1804	C	C6-N1-C2	-9.50	116.50	120.30
26	LA	2261	C	N1-C2-O2	-9.50	113.20	118.90
26	LA	2394	C	N3-C4-C5	-9.50	118.10	121.90
2	SA	1281	C	C6-N1-C2	-9.50	116.50	120.30
26	LA	106	C	C5-C4-N4	9.50	126.85	120.20
26	LA	1369	G	C2-N3-C4	9.50	116.65	111.90
41	L5	34	ARG	NE-CZ-NH2	9.50	125.05	120.30
26	LA	141	G	C5-C6-O6	-9.49	122.90	128.60
26	LA	803	U	C5-C4-O4	-9.49	120.20	125.90
26	LA	1653	G	P-O3'-C3'	-9.49	108.31	119.70
26	LA	1764	C	C6-N1-C2	-9.49	116.50	120.30
26	LA	2091	C	C4-C5-C6	9.49	122.15	117.40
2	SA	43	C	O4'-C1'-N1	9.49	115.79	108.20
2	SA	1219	A	C5-N7-C8	-9.49	99.15	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2282	G	C4-C5-N7	-9.49	107.00	110.80
2	SA	355	C	C5'-C4'-O4'	9.49	120.48	109.10
2	SA	557	G	C5-C6-O6	-9.49	122.91	128.60
26	LA	1906	G	N3-C4-C5	-9.49	123.86	128.60
26	LA	2397	G	N1-C6-O6	9.49	125.59	119.90
26	LA	312	G	N7-C8-N9	-9.48	108.36	113.10
2	SA	268	U	N3-C4-O4	-9.48	112.76	119.40
2	SA	1064	G	N7-C8-N9	-9.48	108.36	113.10
39	L3	15	ARG	NE-CZ-NH2	9.48	125.04	120.30
3	S1	52	U	P-O3'-C3'	9.48	131.08	119.70
2	SA	1510	C	O4'-C1'-N1	9.48	115.78	108.20
2	SA	404	G	C5'-C4'-O4'	9.48	120.47	109.10
2	SA	1042	A	C4-C5-C6	-9.48	112.26	117.00
26	LA	124	G	C5-N7-C8	-9.48	99.56	104.30
26	LA	2005	A	P-O3'-C3'	9.48	131.07	119.70
2	SA	644	U	N1-C2-N3	-9.48	109.21	114.90
26	LA	1739	A	N1-C6-N6	-9.48	112.92	118.60
26	LA	2283	C	O4'-C1'-N1	9.48	115.78	108.20
2	SA	343	U	P-O3'-C3'	9.47	131.07	119.70
2	SA	550	G	C8-N9-C4	9.47	110.19	106.40
3	S1	16	A	N7-C8-N9	9.47	118.54	113.80
26	LA	1894	C	N3-C2-O2	-9.47	115.27	121.90
26	LA	2730	C	N3-C4-N4	9.47	124.63	118.00
2	SA	33	A	C2-N3-C4	9.47	115.34	110.60
26	LA	2461	A	C5-C6-N6	-9.47	116.12	123.70
26	LA	924	G	N1-C6-O6	9.47	125.58	119.90
2	SA	169	C	O4'-C1'-N1	9.47	115.77	108.20
2	SA	874	G	O4'-C1'-N9	9.47	115.78	108.20
26	LA	910	A	O5'-P-OP1	9.47	122.06	110.70
26	LA	758	C	O4'-C1'-N1	9.47	115.77	108.20
2	SA	843	U	O4'-C1'-N1	9.46	115.77	108.20
2	SA	1502	A	P-O3'-C3'	-9.47	108.34	119.70
26	LA	304	U	O4'-C1'-N1	9.47	115.77	108.20
26	LA	1723	G	C4-C5-N7	-9.46	107.01	110.80
2	SA	493	A	C5-N7-C8	-9.46	99.17	103.90
26	LA	1476	U	P-O5'-C5'	-9.46	105.76	120.90
26	LA	1728	C	C2-N3-C4	-9.46	115.17	119.90
2	SA	364	A	C8-N9-C4	9.46	109.58	105.80
2	SA	908	A	N1-C6-N6	9.46	124.28	118.60
25	LB	105	G	N1-C6-O6	-9.46	114.22	119.90
2	SA	1135	U	N3-C4-O4	9.46	126.02	119.40
26	LA	808	G	N3-C2-N2	9.45	126.52	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	862	G	C5'-C4'-O4'	9.45	120.44	109.10
26	LA	911	A	O4'-C1'-N9	9.45	115.76	108.20
26	LA	1151	A	C5-C6-N6	9.45	131.26	123.70
26	LA	1022	G	C2-N3-C4	-9.45	107.17	111.90
26	LA	1300	G	P-O3'-C3'	-9.45	108.36	119.70
25	LB	115	A	C1'-O4'-C4'	-9.45	102.34	109.90
26	LA	136	G	N3-C4-C5	-9.45	123.88	128.60
26	LA	142	A	C5-C6-N6	9.45	131.26	123.70
26	LA	1276	A	C8-N9-C4	-9.45	102.02	105.80
26	LA	2079	U	N1-C2-N3	9.45	120.57	114.90
26	LA	2258	C	C2-N1-C1'	9.45	129.19	118.80
26	LA	1385	A	N7-C8-N9	9.45	118.52	113.80
2	SA	536	C	N3-C4-N4	9.45	124.61	118.00
2	SA	759	A	N1-C2-N3	9.45	134.02	129.30
4	S2	3	C	C4-C5-C6	-9.44	112.68	117.40
4	S2	15	G	C8-N9-C1'	9.45	139.28	127.00
26	LA	575	A	C5'-C4'-C3'	9.45	131.11	116.00
26	LA	1137	G	C8-N9-C4	-9.45	102.62	106.40
26	LA	1670	C	P-O3'-C3'	9.44	131.03	119.70
26	LA	1943	U	N3-C4-C5	9.45	120.27	114.60
4	S2	2	G	C8-N9-C4	-9.44	102.62	106.40
12	SL	108	ASP	CB-CG-OD1	9.44	126.80	118.30
26	LA	1986	C	O4'-C1'-N1	9.44	115.75	108.20
26	LA	2150	C	N3-C4-N4	9.44	124.61	118.00
26	LA	654	A	O4'-C1'-N9	9.44	115.75	108.20
26	LA	2568	U	N3-C2-O2	-9.44	115.59	122.20
26	LA	645	C	N1-C2-O2	9.44	124.56	118.90
26	LA	1625	C	C5-C4-N4	9.44	126.81	120.20
26	LA	1761	C	C6-N1-C1'	-9.44	109.47	120.80
2	SA	1140	C	O4'-C1'-N1	9.44	115.75	108.20
26	LA	350	G	C5-C6-O6	-9.44	122.94	128.60
26	LA	793	A	N9-C4-C5	-9.44	102.03	105.80
26	LA	1490	A	C5-C6-N1	-9.44	112.98	117.70
26	LA	2098	U	N1-C2-N3	9.44	120.56	114.90
26	LA	2829	A	N3-C4-N9	9.44	134.95	127.40
2	SA	1058	G	C5-C6-N1	9.43	116.22	111.50
26	LA	486	C	C6-N1-C2	-9.43	116.53	120.30
26	LA	1619	G	N1-C6-O6	9.43	125.56	119.90
26	LA	606	U	C5-C6-N1	-9.43	117.98	122.70
26	LA	1777	U	C2-N3-C4	-9.43	121.34	127.00
2	SA	941	G	C6-N1-C2	-9.43	119.44	125.10
2	SA	982	U	C5-C4-O4	-9.43	120.24	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1088	G	N1-C6-O6	9.43	125.56	119.90
26	LA	1529	G	N1-C6-O6	9.43	125.56	119.90
2	SA	636	U	O4'-C1'-N1	9.43	115.74	108.20
2	SA	1171	A	O4'-C1'-N9	9.43	115.74	108.20
26	LA	111	A	N1-C2-N3	9.43	134.01	129.30
2	SA	1136	C	C6-N1-C2	-9.42	116.53	120.30
26	LA	1853	A	C2-N3-C4	9.42	115.31	110.60
26	LA	2116	G	C6-C5-N7	-9.42	124.75	130.40
26	LA	2337	G	C3'-C2'-C1'	-9.42	93.96	101.50
38	LE	13	ARG	NE-CZ-NH1	9.42	125.01	120.30
2	SA	119	A	O4'-C1'-N9	-9.42	100.66	108.20
2	SA	410	G	C5-C6-O6	-9.42	122.95	128.60
2	SA	1183	U	O4'-C1'-N1	9.42	115.74	108.20
2	SA	1229	A	N1-C2-N3	-9.42	124.59	129.30
26	LA	36	G	C8-N9-C4	-9.42	102.63	106.40
26	LA	1374	G	C5-C6-O6	-9.42	122.95	128.60
26	LA	1113	U	P-O3'-C3'	-9.42	108.40	119.70
26	LA	1136	G	N3-C4-C5	-9.42	123.89	128.60
2	SA	530	G	N1-C6-O6	9.42	125.55	119.90
26	LA	2897	U	N1-C2-N3	-9.42	109.25	114.90
26	LA	1013	C	C4-C5-C6	-9.41	112.69	117.40
25	LB	6	G	C5-C6-N1	9.41	116.21	111.50
26	LA	832	U	O4'-C1'-N1	9.41	115.73	108.20
26	LA	2385	C	P-O5'-C5'	9.41	135.96	120.90
32	LY	10	ARG	NE-CZ-NH1	9.41	125.01	120.30
26	LA	2777	G	N1-C6-O6	9.41	125.55	119.90
2	SA	722	G	N1-C2-N2	-9.41	107.73	116.20
2	SA	941	G	N3-C4-C5	9.41	133.31	128.60
20	SD	62	ARG	NE-CZ-NH1	9.41	125.00	120.30
25	LB	6	G	C5-C6-O6	-9.41	122.95	128.60
26	LA	1961	C	O4'-C1'-N1	9.41	115.73	108.20
26	LA	389	G	P-O3'-C3'	9.41	130.99	119.70
26	LA	2340	A	O4'-C1'-N9	9.41	115.73	108.20
26	LA	2679	A	C4-C5-N7	9.41	115.41	110.70
2	SA	353	A	N1-C2-N3	-9.41	124.60	129.30
26	LA	1354	A	N1-C6-N6	-9.41	112.95	118.60
2	SA	827	U	C5-C4-O4	-9.41	120.26	125.90
26	LA	648	G	C5-C6-N1	-9.41	106.80	111.50
2	SA	998	C	N3-C4-N4	-9.40	111.42	118.00
26	LA	2102	G	C2-N3-C4	9.40	116.60	111.90
26	LA	282	A	N7-C8-N9	-9.40	109.10	113.80
26	LA	1398	C	N3-C4-C5	9.40	125.66	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1862	G	N1-C2-N3	9.40	129.54	123.90
26	LA	2592	G	N3-C4-C5	-9.40	123.90	128.60
2	SA	167	A	O4'-C1'-N9	9.40	115.72	108.20
26	LA	298	G	N3-C2-N2	9.40	126.48	119.90
2	SA	1253	G	C8-N9-C4	-9.40	102.64	106.40
2	SA	1468	A	N9-C4-C5	-9.40	102.04	105.80
26	LA	1189	A	O4'-C1'-N9	9.40	115.72	108.20
43	L7	24	ARG	NE-CZ-NH2	9.40	125.00	120.30
26	LA	1236	G	P-O3'-C3'	-9.39	108.43	119.70
26	LA	1403	A	N1-C6-N6	-9.39	112.96	118.60
2	SA	254	G	N3-C4-N9	9.39	131.64	126.00
12	SL	35	ARG	NE-CZ-NH1	-9.39	115.60	120.30
21	SE	92	ARG	NE-CZ-NH2	-9.39	115.60	120.30
25	LB	106	G	C5-C6-O6	-9.39	122.96	128.60
26	LA	71	A	C4-C5-C6	-9.39	112.30	117.00
26	LA	1647	U	C1'-O4'-C4'	-9.39	102.39	109.90
26	LA	2056	G	N3-C2-N2	-9.39	113.32	119.90
26	LA	2243	U	P-O3'-C3'	9.39	130.97	119.70
2	SA	148	G	C5-C6-O6	-9.39	122.97	128.60
2	SA	269	C	O4'-C1'-N1	9.39	115.71	108.20
2	SA	1222	G	C4-C5-C6	-9.39	113.17	118.80
2	SA	1223	C	N1-C2-O2	-9.39	113.27	118.90
26	LA	574	A	C5-N7-C8	-9.39	99.20	103.90
26	LA	1907	G	C3'-C2'-C1'	-9.39	93.99	101.50
26	LA	2528	U	O4'-C1'-N1	9.39	115.71	108.20
2	SA	979	C	C4-C5-C6	-9.39	112.70	117.40
26	LA	1239	G	N7-C8-N9	9.39	117.79	113.10
26	LA	2109	U	O4'-C1'-N1	9.39	115.71	108.20
26	LA	2650	U	N3-C4-O4	9.39	125.97	119.40
26	LA	2722	G	C5-N7-C8	-9.39	99.61	104.30
2	SA	609	A	O4'-C1'-N9	9.39	115.71	108.20
2	SA	825	A	N9-C4-C5	9.39	109.55	105.80
2	SA	907	A	N1-C2-N3	-9.39	124.61	129.30
3	S1	17	U	C3'-C2'-C1'	9.38	109.01	101.50
26	LA	392	U	C1'-O4'-C4'	-9.39	102.39	109.90
26	LA	1508	A	P-O3'-C3'	9.38	130.96	119.70
26	LA	1515	A	C5-C6-N1	9.38	122.39	117.70
26	LA	1968	G	N1-C6-O6	9.38	125.53	119.90
26	LA	2676	C	N3-C2-O2	-9.38	115.33	121.90
2	SA	275	G	C5-C6-O6	-9.38	122.97	128.60
2	SA	614	C	C6-N1-C2	-9.38	116.55	120.30
26	LA	2396	G	C6-N1-C2	-9.38	119.47	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	614	A	C2-N3-C4	-9.38	105.91	110.60
26	LA	1885	A	C2-N3-C4	-9.38	105.91	110.60
26	LA	2499	C	N3-C4-C5	-9.38	118.15	121.90
26	LA	2583	G	N1-C6-O6	9.38	125.53	119.90
25	LB	25	U	C6-N1-C2	-9.38	115.37	121.00
26	LA	1918	A	C5'-C4'-O4'	9.38	120.35	109.10
26	LA	2700	A	C3'-C2'-C1'	9.38	109.00	101.50
26	LA	2714	G	C5-C6-O6	-9.38	122.97	128.60
48	LN	64	PHE	CB-CG-CD2	-9.38	114.23	120.80
2	SA	852	G	O4'-C1'-N9	9.38	115.70	108.20
2	SA	1163	A	O4'-C1'-N9	9.38	115.70	108.20
25	LB	29	A	C2-N3-C4	9.37	115.29	110.60
26	LA	2073	C	N3-C4-C5	-9.37	118.15	121.90
4	S2	10	G	C8-N9-C4	-9.37	102.65	106.40
26	LA	450	G	O4'-C1'-N9	9.37	115.70	108.20
26	LA	1567	G	C5-C6-N1	9.37	116.19	111.50
2	SA	1338	G	P-O5'-C5'	-9.37	105.91	120.90
26	LA	2062	A	C2-N3-C4	9.37	115.29	110.60
26	LA	168	G	C5-C6-N1	9.37	116.19	111.50
26	LA	1105	U	O4'-C1'-N1	9.37	115.70	108.20
26	LA	1667	G	C5-C6-O6	-9.36	122.98	128.60
26	LA	2178	C	P-O5'-C5'	9.37	135.88	120.90
26	LA	2223	G	C4-C5-C6	9.37	124.42	118.80
26	LA	2781	A	C8-N9-C4	-9.37	102.05	105.80
2	SA	1241	G	O4'-C1'-N9	9.36	115.69	108.20
2	SA	611	C	C6-N1-C2	-9.36	116.56	120.30
26	LA	144	A	N1-C2-N3	-9.36	124.62	129.30
26	LA	227	A	O4'-C1'-N9	9.36	115.69	108.20
26	LA	765	C	O4'-C1'-N1	9.36	115.69	108.20
26	LA	1378	A	C5-C6-N1	9.36	122.38	117.70
26	LA	1587	G	P-O5'-C5'	9.36	135.88	120.90
2	SA	933	G	N7-C8-N9	-9.36	108.42	113.10
25	LB	102	G	C5-N7-C8	-9.36	99.62	104.30
26	LA	167	A	N9-C4-C5	-9.36	102.06	105.80
26	LA	483	A	C2-N3-C4	-9.36	105.92	110.60
2	SA	696	A	C3'-C2'-C1'	-9.36	94.02	101.50
2	SA	964	A	N1-C2-N3	-9.36	124.62	129.30
4	S2	48	U	P-O3'-C3'	-9.36	108.47	119.70
26	LA	505	A	N3-C4-C5	9.36	133.35	126.80
26	LA	801	G	C8-N9-C4	-9.36	102.66	106.40
26	LA	1960	A	N1-C6-N6	-9.36	112.99	118.60
26	LA	2734	A	N1-C6-N6	-9.36	112.99	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	185	U	P-O5'-C5'	9.35	135.87	120.90
2	SA	517	G	C4-C5-N7	9.35	114.54	110.80
2	SA	1391	U	C2-N3-C4	-9.35	121.39	127.00
26	LA	2270	A	P-O5'-C5'	9.35	135.86	120.90
2	SA	847	G	N3-C4-N9	9.35	131.61	126.00
26	LA	2228	G	C2-N3-C4	9.35	116.57	111.90
26	LA	2291	U	O4'-C1'-N1	9.35	115.68	108.20
2	SA	317	U	C5-C6-N1	9.35	127.37	122.70
26	LA	2215	C	N1-C2-O2	-9.35	113.29	118.90
2	SA	430	A	C5-C6-N1	9.35	122.37	117.70
26	LA	318	C	C6-N1-C2	-9.35	116.56	120.30
26	LA	777	G	C5'-C4'-C3'	9.35	130.95	116.00
26	LA	917	A	C5-N7-C8	-9.35	99.23	103.90
26	LA	2731	G	O4'-C1'-C2'	9.35	116.01	107.60
26	LA	117	G	N1-C6-O6	-9.34	114.29	119.90
26	LA	491	G	N1-C6-O6	-9.34	114.29	119.90
26	LA	937	C	O4'-C1'-N1	9.34	115.67	108.20
26	LA	2744	G	C5-C6-N1	9.34	116.17	111.50
2	SA	1168	U	N3-C4-C5	-9.34	109.00	114.60
26	LA	1717	A	N7-C8-N9	9.34	118.47	113.80
2	SA	4	U	C5-C6-N1	9.34	127.37	122.70
2	SA	798	U	C6-N1-C2	-9.34	115.40	121.00
2	SA	794	A	N9-C4-C5	9.34	109.54	105.80
2	SA	999	C	O4'-C1'-N1	9.34	115.67	108.20
26	LA	1112	G	N7-C8-N9	9.34	117.77	113.10
26	LA	1368	G	O4'-C1'-N9	9.34	115.67	108.20
26	LA	2021	C	N3-C4-N4	9.34	124.54	118.00
26	LA	2278	A	C8-N9-C4	-9.34	102.06	105.80
3	S1	47	C	N3-C4-C5	9.34	125.64	121.90
26	LA	2841	C	N3-C4-N4	-9.34	111.46	118.00
2	SA	273	U	O4'-C1'-N1	9.34	115.67	108.20
26	LA	852	U	C5-C4-O4	-9.34	120.30	125.90
26	LA	1276	A	N1-C2-N3	-9.34	124.63	129.30
26	LA	2245	U	O3'-P-O5'	-9.34	86.26	104.00
26	LA	2688	G	C5-C6-O6	-9.34	123.00	128.60
19	SC	192	TYR	CB-CG-CD2	9.34	126.60	121.00
26	LA	2307	G	O4'-C1'-N9	9.34	115.67	108.20
25	LB	109	A	C5-C6-N6	9.33	131.17	123.70
26	LA	24	G	O4'-C1'-N9	9.33	115.67	108.20
26	LA	1612	C	N3-C2-O2	-9.33	115.37	121.90
26	LA	1905	C	C5'-C4'-C3'	-9.33	101.07	116.00
26	LA	1951	U	P-O3'-C3'	9.33	130.90	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	LO	28	PHE	CB-CG-CD2	9.33	127.33	120.80
2	SA	442	G	N9-C4-C5	-9.33	101.67	105.40
2	SA	271	C	N3-C4-C5	9.33	125.63	121.90
25	LB	105	G	C5-C6-O6	9.33	134.20	128.60
26	LA	368	A	O4'-C1'-N9	9.33	115.66	108.20
26	LA	896	A	C5-C6-N1	9.33	122.36	117.70
26	LA	1722	A	N1-C6-N6	9.33	124.20	118.60
2	SA	1391	U	N1-C2-N3	9.33	120.50	114.90
2	SA	1454	G	O4'-C1'-N9	9.33	115.66	108.20
26	LA	285	G	C5-N7-C8	-9.33	99.64	104.30
26	LA	783	A	O4'-C1'-N9	9.33	115.66	108.20
26	LA	2161	C	C5-C4-N4	-9.33	113.67	120.20
26	LA	2680	U	C6-N1-C2	-9.33	115.41	121.00
2	SA	321	A	C4-C5-N7	-9.32	106.04	110.70
2	SA	749	A	N1-C6-N6	9.32	124.19	118.60
25	LB	67	G	C4-C5-N7	-9.32	107.07	110.80
26	LA	1543	G	C5-C6-N1	9.32	116.16	111.50
26	LA	277	G	C1'-O4'-C4'	-9.32	102.44	109.90
42	L6	63	TYR	CB-CG-CD2	-9.32	115.41	121.00
48	LN	66	PHE	CB-CG-CD2	9.32	127.33	120.80
2	SA	824	G	C5-C6-N1	9.32	116.16	111.50
2	SA	1194	U	C5'-C4'-O4'	9.32	120.29	109.10
2	SA	1266	G	O4'-C1'-N9	9.32	115.66	108.20
2	SA	1323	G	N1-C2-N2	-9.32	107.81	116.20
26	LA	2011	U	C5'-C4'-O4'	9.32	120.28	109.10
26	LA	2123	G	O4'-C1'-N9	9.32	115.66	108.20
2	SA	1263	C	O4'-C1'-N1	9.32	115.65	108.20
26	LA	966	G	C4-C5-N7	-9.32	107.07	110.80
26	LA	1066	U	C5-C4-O4	-9.32	120.31	125.90
2	SA	26	A	N9-C4-C5	9.32	109.53	105.80
26	LA	208	C	O4'-C1'-N1	9.31	115.65	108.20
2	SA	211	G	N3-C2-N2	9.31	126.42	119.90
2	SA	337	G	N3-C4-N9	9.31	131.59	126.00
2	SA	1057	G	O4'-C1'-N9	9.31	115.65	108.20
26	LA	427	U	C2-N3-C4	-9.31	121.41	127.00
57	LS	29	ARG	NE-CZ-NH1	9.31	124.96	120.30
26	LA	610	C	O4'-C1'-N1	9.31	115.65	108.20
26	LA	841	G	N7-C8-N9	-9.31	108.44	113.10
2	SA	559	A	O4'-C1'-N9	9.31	115.64	108.20
26	LA	379	G	N9-C4-C5	9.31	109.12	105.40
26	LA	2252	G	C5-C6-N1	9.31	116.15	111.50
26	LA	2391	G	N9-C4-C5	-9.31	101.68	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2399	G	C5-C6-O6	-9.31	123.02	128.60
26	LA	1311	G	C4-C5-N7	-9.31	107.08	110.80
2	SA	165	G	N1-C6-O6	-9.30	114.32	119.90
3	S1	17	U	P-O3'-C3'	9.30	130.86	119.70
26	LA	264	C	C4'-C3'-C2'	-9.30	93.30	102.60
26	LA	1694	C	C2-N3-C4	-9.30	115.25	119.90
26	LA	2373	G	N3-C4-C5	9.30	133.25	128.60
26	LA	2885	G	N9-C4-C5	-9.30	101.68	105.40
40	L4	43	ARG	NE-CZ-NH1	9.30	124.95	120.30
2	SA	399	G	C4-C5-N7	9.30	114.52	110.80
26	LA	1837	C	N3-C2-O2	-9.30	115.39	121.90
26	LA	2694	G	C8-N9-C4	-9.30	102.68	106.40
26	LA	2476	A	N1-C2-N3	9.30	133.95	129.30
2	SA	821	G	C8-N9-C4	-9.30	102.68	106.40
2	SA	1078	U	C1'-O4'-C4'	-9.29	102.46	109.90
26	LA	1141	U	C4-C5-C6	-9.29	114.12	119.70
26	LA	1168	G	C5-N7-C8	-9.30	99.65	104.30
26	LA	1435	G	C5-C6-O6	-9.29	123.02	128.60
26	LA	1622	G	C6-N1-C2	-9.29	119.52	125.10
26	LA	2025	C	C5-C6-N1	9.29	125.65	121.00
2	SA	1268	G	N3-C2-N2	9.29	126.41	119.90
26	LA	125	A	C5-C6-N1	9.29	122.35	117.70
26	LA	1713	A	C2-N3-C4	-9.29	105.95	110.60
26	LA	2715	C	C4-C5-C6	9.29	122.05	117.40
40	L4	48	TYR	CB-CG-CD2	-9.29	115.42	121.00
2	SA	1175	G	O4'-C1'-N9	9.29	115.63	108.20
26	LA	1889	A	N9-C4-C5	9.29	109.52	105.80
26	LA	2179	C	O4'-C1'-N1	9.29	115.63	108.20
26	LA	2310	C	P-O3'-C3'	9.29	130.85	119.70
26	LA	2643	G	N3-C4-N9	-9.29	120.43	126.00
54	LM	108	ARG	NE-CZ-NH2	-9.29	115.66	120.30
2	SA	780	A	N1-C2-N3	-9.29	124.66	129.30
26	LA	1032	A	O4'-C1'-N9	9.29	115.63	108.20
44	LF	61	ARG	NE-CZ-NH1	-9.29	115.66	120.30
2	SA	371	A	C4'-C3'-C2'	-9.29	93.31	102.60
26	LA	1157	G	N7-C8-N9	9.28	117.74	113.10
26	LA	1985	C	C6-N1-C2	-9.28	116.59	120.30
26	LA	873	C	O4'-C1'-N1	9.28	115.62	108.20
26	LA	922	C	P-O3'-C3'	9.28	130.84	119.70
26	LA	1577	C	P-O3'-C3'	9.28	130.84	119.70
26	LA	490	C	C1'-O4'-C4'	-9.28	102.48	109.90
55	LQ	94	ARG	NE-CZ-NH1	9.28	124.94	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1100	C	P-O5'-C5'	9.28	135.74	120.90
4	S2	60	A	N1-C2-N3	9.28	133.94	129.30
26	LA	194	G	P-O5'-C5'	9.28	135.74	120.90
26	LA	1844	C	N3-C4-C5	-9.28	118.19	121.90
2	SA	538	G	N1-C6-O6	9.27	125.47	119.90
2	SA	1290	G	N3-C2-N2	-9.27	113.41	119.90
4	S2	39	A	C5'-C4'-C3'	-9.27	101.16	116.00
26	LA	664	G	C6-N1-C2	-9.27	119.54	125.10
2	SA	682	G	N7-C8-N9	-9.27	108.47	113.10
4	S2	33	C	C4'-C3'-C2'	-9.27	93.33	102.60
26	LA	6	A	P-O3'-C3'	9.27	130.82	119.70
26	LA	490	C	N3-C4-C5	-9.27	118.19	121.90
26	LA	1236	G	C4-C5-N7	9.27	114.51	110.80
26	LA	1615	C	N3-C4-N4	9.27	124.49	118.00
26	LA	2373	G	N1-C6-O6	-9.27	114.34	119.90
26	LA	2652	C	C5'-C4'-C3'	9.27	130.83	116.00
2	SA	294	U	C6-N1-C2	-9.27	115.44	121.00
13	SM	70	ARG	NE-CZ-NH2	-9.27	115.67	120.30
26	LA	1763	G	C5-C6-O6	-9.27	123.04	128.60
3	S1	19	A	O4'-C1'-N9	9.27	115.61	108.20
2	SA	1438	G	C6-N1-C2	-9.26	119.54	125.10
26	LA	1241	A	C2-N3-C4	9.26	115.23	110.60
26	LA	1431	A	C2-N3-C4	-9.26	105.97	110.60
26	LA	1983	G	O4'-C1'-N9	9.26	115.61	108.20
26	LA	2622	U	C2-N3-C4	-9.26	121.44	127.00
26	LA	982	C	P-O3'-C3'	9.26	130.81	119.70
26	LA	2026	U	N1-C2-N3	9.26	120.46	114.90
2	SA	654	G	N1-C6-O6	9.26	125.45	119.90
25	LB	69	G	C4-C5-N7	9.26	114.50	110.80
26	LA	1077	A	C2-N3-C4	-9.26	105.97	110.60
2	SA	354	G	O4'-C1'-N9	9.26	115.60	108.20
2	SA	973	G	P-O3'-C3'	9.26	130.81	119.70
25	LB	97	C	C6-N1-C2	-9.26	116.60	120.30
26	LA	101	A	N1-C6-N6	9.26	124.15	118.60
26	LA	1107	G	C5'-C4'-C3'	-9.26	101.19	116.00
26	LA	2550	G	N3-C4-N9	9.26	131.55	126.00
26	LA	1154	G	N1-C6-O6	9.26	125.45	119.90
26	LA	2219	U	C5-C6-N1	-9.26	118.07	122.70
2	SA	1416	G	C6-N1-C2	-9.25	119.55	125.10
26	LA	853	C	C6-N1-C2	-9.25	116.60	120.30
26	LA	1061	U	N3-C4-C5	9.25	120.15	114.60
26	LA	1323	C	O4'-C1'-N1	9.25	115.60	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	851	G	N9-C4-C5	9.25	109.10	105.40
26	LA	394	C	N3-C2-O2	-9.25	115.42	121.90
26	LA	923	G	P-O3'-C3'	-9.25	108.60	119.70
26	LA	950	G	C4-C5-N7	9.25	114.50	110.80
26	LA	1687	G	N1-C2-N3	9.25	129.45	123.90
26	LA	2417	C	C2-N3-C4	-9.25	115.28	119.90
2	SA	98	A	C8-N9-C4	9.25	109.50	105.80
26	LA	306	U	C5-C6-N1	9.25	127.32	122.70
26	LA	2546	U	O4'-C1'-N1	9.25	115.60	108.20
2	SA	235	C	P-O5'-C5'	-9.24	106.11	120.90
26	LA	2550	G	C8-N9-C4	9.24	110.10	106.40
2	SA	424	G	C5-C6-O6	-9.24	123.06	128.60
2	SA	654	G	N1-C2-N2	-9.24	107.88	116.20
26	LA	1171	G	C5-C6-N1	9.24	116.12	111.50
26	LA	1575	C	O4'-C1'-N1	9.24	115.59	108.20
26	LA	1649	G	N7-C8-N9	9.24	117.72	113.10
26	LA	2654	A	C2-N3-C4	-9.24	105.98	110.60
26	LA	2682	A	N1-C2-N3	-9.24	124.68	129.30
2	SA	90	C	C3'-C2'-C1'	-9.24	94.11	101.50
2	SA	1374	A	C1'-O4'-C4'	-9.24	102.51	109.90
6	SU	16	ARG	NE-CZ-NH1	9.24	124.92	120.30
25	LB	33	G	C5-C6-N1	-9.24	106.88	111.50
26	LA	232	G	P-O3'-C3'	-9.24	108.61	119.70
26	LA	1262	A	N7-C8-N9	-9.24	109.18	113.80
26	LA	2514	U	C5-C4-O4	-9.24	120.36	125.90
26	LA	2529	G	C3'-C2'-C1'	9.24	108.89	101.50
26	LA	2601	C	C2-N1-C1'	9.24	128.96	118.80
2	SA	156	C	N3-C4-C5	-9.24	118.21	121.90
2	SA	818	G	N1-C6-O6	9.24	125.44	119.90
26	LA	805	G	C4-C5-N7	9.24	114.50	110.80
26	LA	1956	U	N1-C2-N3	9.24	120.44	114.90
26	LA	2606	C	C5-C4-N4	-9.24	113.73	120.20
26	LA	2824	C	C2-N3-C4	-9.23	115.28	119.90
2	SA	357	G	C5-C6-O6	-9.23	123.06	128.60
2	SA	367	U	N3-C2-O2	-9.23	115.74	122.20
2	SA	1230	C	N3-C4-N4	9.23	124.46	118.00
25	LB	76	G	N3-C2-N2	9.23	126.36	119.90
26	LA	1176	U	N3-C2-O2	-9.23	115.74	122.20
26	LA	1693	U	N1-C2-N3	9.23	120.44	114.90
26	LA	2068	U	O4'-C1'-N1	9.23	115.59	108.20
2	SA	136	C	O4'-C1'-N1	9.23	115.58	108.20
2	SA	784	A	O4'-C1'-N9	9.23	115.58	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	836	G	N9-C4-C5	9.23	109.09	105.40
26	LA	1292	G	C5-C6-O6	-9.23	123.06	128.60
38	LE	33	ARG	NE-CZ-NH1	-9.23	115.68	120.30
26	LA	2886	A	O4'-C1'-N9	9.23	115.58	108.20
19	SC	168	ARG	NE-CZ-NH2	-9.23	115.69	120.30
2	SA	388	G	N3-C4-C5	-9.23	123.99	128.60
2	SA	451	A	C8-N9-C4	9.23	109.49	105.80
2	SA	485	U	C6-N1-C2	-9.23	115.46	121.00
2	SA	944	G	N1-C6-O6	9.23	125.44	119.90
2	SA	1303	C	O4'-C1'-N1	9.23	115.58	108.20
2	SA	1454	G	C5'-C4'-C3'	9.23	130.76	116.00
3	S1	19	A	P-O5'-C5'	9.23	135.66	120.90
25	LB	115	A	N1-C2-N3	-9.23	124.69	129.30
26	LA	943	A	N1-C6-N6	-9.23	113.06	118.60
26	LA	1709	U	N1-C2-N3	9.23	120.44	114.90
26	LA	1805	A	N9-C4-C5	-9.23	102.11	105.80
26	LA	1807	G	C4-C5-N7	9.23	114.49	110.80
26	LA	2726	A	C4'-C3'-C2'	-9.23	93.37	102.60
44	LF	158	PHE	CB-CG-CD1	-9.23	114.34	120.80
2	SA	251	G	O4'-C1'-N9	9.22	115.58	108.20
2	SA	513	C	C2-N3-C4	9.22	124.51	119.90
2	SA	551	U	N1-C2-N3	-9.22	109.36	114.90
2	SA	780	A	C4-C5-C6	9.22	121.61	117.00
25	LB	25	U	N3-C2-O2	-9.22	115.74	122.20
26	LA	397	U	C5'-C4'-C3'	-9.22	101.24	116.00
26	LA	1388	G	C5-C6-O6	-9.22	123.07	128.60
2	SA	441	A	C6-C5-N7	-9.22	125.84	132.30
26	LA	2617	U	O4'-C1'-N1	9.22	115.58	108.20
2	SA	691	G	C6-C5-N7	-9.22	124.87	130.40
2	SA	841	C	N1-C2-O2	9.22	124.43	118.90
2	SA	844	G	C6-N1-C2	9.22	130.63	125.10
2	SA	1144	G	C5-N7-C8	-9.22	99.69	104.30
26	LA	984	A	O4'-C1'-N9	-9.22	100.82	108.20
26	LA	1389	G	C5-C6-O6	-9.22	123.07	128.60
26	LA	2104	C	N3-C2-O2	9.22	128.35	121.90
26	LA	1022	G	N1-C2-N3	9.22	129.43	123.90
2	SA	1053	G	P-O3'-C3'	-9.21	108.64	119.70
26	LA	352	A	O4'-C1'-N9	9.22	115.57	108.20
26	LA	1075	C	N3-C4-C5	-9.22	118.21	121.90
26	LA	1608	A	C6-N1-C2	-9.21	113.07	118.60
26	LA	2258	C	C6-N1-C1'	-9.22	109.74	120.80
29	LV	12	ARG	NE-CZ-NH2	-9.21	115.69	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	113	U	C4'-C3'-C2'	-9.21	93.39	102.60
2	SA	520	A	C2-N3-C4	-9.21	106.00	110.60
2	SA	159	G	N9-C1'-C2'	-9.21	101.87	112.00
26	LA	2073	C	C4-C5-C6	9.21	122.00	117.40
2	SA	336	A	N9-C4-C5	-9.21	102.12	105.80
2	SA	895	G	C2-N3-C4	9.21	116.50	111.90
26	LA	597	G	O4'-C1'-N9	9.21	115.56	108.20
26	LA	317	G	N7-C8-N9	-9.20	108.50	113.10
26	LA	1702	G	C5-C6-O6	-9.21	123.08	128.60
26	LA	1871	A	N1-C6-N6	-9.20	113.08	118.60
26	LA	2232	C	N3-C4-N4	9.20	124.44	118.00
26	LA	2638	G	N3-C4-N9	9.20	131.52	126.00
26	LA	2796	U	N3-C4-O4	9.21	125.84	119.40
2	SA	683	G	C5-N7-C8	-9.20	99.70	104.30
26	LA	322	A	P-O3'-C3'	9.20	130.74	119.70
2	SA	278	G	C8-N9-C4	-9.20	102.72	106.40
2	SA	1229	A	C4-C5-N7	-9.20	106.10	110.70
2	SA	1525	G	C8-N9-C4	9.20	110.08	106.40
26	LA	2752	C	O4'-C1'-N1	9.20	115.56	108.20
2	SA	560	A	N7-C8-N9	-9.20	109.20	113.80
2	SA	847	G	C1'-O4'-C4'	-9.20	102.54	109.90
26	LA	1494	A	C5-C6-N6	-9.20	116.34	123.70
26	LA	2708	G	C6-N1-C2	-9.20	119.58	125.10
26	LA	2863	C	N1-C2-O2	9.20	124.42	118.90
2	SA	564	C	C5-C6-N1	-9.20	116.40	121.00
2	SA	1539	C	C5-C6-N1	9.20	125.60	121.00
6	SU	66	ARG	NH1-CZ-NH2	-9.20	109.28	119.40
26	LA	1740	G	C8-N9-C4	-9.20	102.72	106.40
26	LA	729	G	C5'-C4'-C3'	-9.19	101.29	116.00
26	LA	1510	G	C8-N9-C1'	-9.19	115.05	127.00
26	LA	1694	C	C3'-C2'-C1'	-9.20	94.14	101.50
2	SA	582	C	C5'-C4'-O4'	9.19	120.13	109.10
2	SA	843	U	C2-N1-C1'	9.19	128.73	117.70
2	SA	964	A	P-O3'-C3'	9.19	130.73	119.70
2	SA	1008	U	O4'-C1'-N1	9.19	115.55	108.20
2	SA	350	G	C8-N9-C4	9.19	110.08	106.40
2	SA	62	U	N1-C2-N3	9.19	120.41	114.90
2	SA	1064	G	N3-C2-N2	9.19	126.33	119.90
26	LA	1068	G	C8-N9-C4	-9.19	102.72	106.40
26	LA	1180	U	N1-C2-O2	9.19	129.23	122.80
2	SA	1020	G	C4-C5-N7	-9.19	107.12	110.80
2	SA	393	A	C4'-C3'-C2'	-9.19	93.42	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	739	C	C5-C6-N1	-9.19	116.41	121.00
2	SA	1270	G	O4'-C1'-N9	9.19	115.55	108.20
26	LA	193	U	N1-C2-N3	9.19	120.41	114.90
26	LA	1571	A	P-O3'-C3'	9.19	130.72	119.70
26	LA	2140	G	C4'-C3'-C2'	-9.19	93.41	102.60
2	SA	191	G	C5-N7-C8	9.18	108.89	104.30
2	SA	835	U	O4'-C1'-N1	9.18	115.55	108.20
2	SA	1176	A	C5-C6-N1	9.18	122.29	117.70
25	LB	53	A	N1-C6-N6	-9.18	113.09	118.60
2	SA	745	G	O4'-C1'-N9	9.18	115.55	108.20
26	LA	470	A	O4'-C1'-N9	9.18	115.55	108.20
26	LA	522	A	C5-C6-N6	-9.18	116.35	123.70
26	LA	2498	C	C5-C6-N1	9.18	125.59	121.00
2	SA	276	G	P-O5'-C5'	9.18	135.59	120.90
2	SA	639	G	C6-N1-C2	-9.18	119.59	125.10
2	SA	1203	C	C6-N1-C2	-9.18	116.63	120.30
26	LA	1591	A	N1-C6-N6	-9.18	113.09	118.60
26	LA	2083	G	P-O3'-C3'	9.18	130.72	119.70
26	LA	2245	U	P-O5'-C5'	9.18	135.59	120.90
26	LA	2334	U	C5-C4-O4	-9.18	120.39	125.90
26	LA	2405	G	N3-C4-C5	9.18	133.19	128.60
2	SA	400	C	O4'-C1'-N1	9.18	115.54	108.20
2	SA	573	A	C8-N9-C4	-9.18	102.13	105.80
2	SA	893	C	O4'-C1'-N1	9.18	115.54	108.20
26	LA	447	A	C5-C6-N1	9.18	122.29	117.70
26	LA	451	U	C5-C4-O4	-9.18	120.39	125.90
26	LA	1248	G	C4-C5-N7	9.18	114.47	110.80
2	SA	1426	G	N1-C6-O6	9.17	125.40	119.90
26	LA	2726	A	N9-C1'-C2'	-9.17	101.91	112.00
25	LB	11	C	O4'-C1'-N1	9.17	115.54	108.20
26	LA	858	G	O4'-C1'-N9	9.17	115.54	108.20
26	LA	1107	G	C4-C5-N7	9.17	114.47	110.80
26	LA	1428	C	C4-C5-C6	9.17	121.99	117.40
26	LA	1943	U	C2-N1-C1'	9.17	128.71	117.70
26	LA	2080	A	N1-C6-N6	-9.17	113.10	118.60
26	LA	2677	G	C2-N3-C4	-9.17	107.31	111.90
2	SA	1167	A	C1'-O4'-C4'	-9.17	102.56	109.90
26	LA	98	G	N1-C2-N3	-9.17	118.40	123.90
26	LA	1351	C	N3-C4-N4	-9.17	111.58	118.00
26	LA	2719	G	N1-C2-N3	9.17	129.40	123.90
26	LA	1314	C	C5-C4-N4	-9.17	113.78	120.20
26	LA	1530	G	N1-C6-O6	9.17	125.40	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1836	C	C5-C4-N4	-9.17	113.78	120.20
26	LA	1904	G	C3'-C2'-C1'	-9.17	94.17	101.50
2	SA	198	G	C8-N9-C4	-9.17	102.73	106.40
2	SA	362	G	C5-C6-O6	-9.17	123.10	128.60
2	SA	1076	U	P-O5'-C5'	9.17	135.57	120.90
4	S2	65	G	C2-N3-C4	9.17	116.48	111.90
26	LA	865	C	O4'-C1'-N1	9.17	115.53	108.20
2	SA	959	A	O4'-C1'-N9	9.17	115.53	108.20
3	S1	44	U	C6-N1-C2	-9.17	115.50	121.00
3	S1	45	G	C4-N9-C1'	9.17	138.42	126.50
26	LA	1806	C	O4'-C1'-N1	9.17	115.53	108.20
33	LZ	17	ARG	NE-CZ-NH1	-9.17	115.72	120.30
2	SA	380	G	O4'-C1'-N9	9.16	115.53	108.20
2	SA	449	G	N3-C4-N9	9.16	131.50	126.00
2	SA	1264	U	P-O5'-C5'	9.16	135.56	120.90
26	LA	1695	G	O4'-C1'-N9	9.16	115.53	108.20
2	SA	1247	U	N3-C4-C5	9.16	120.10	114.60
4	S2	64	G	N9-C4-C5	-9.16	101.73	105.40
4	S2	67	C	O4'-C1'-N1	9.16	115.53	108.20
26	LA	373	U	N3-C4-C5	-9.16	109.10	114.60
26	LA	753	A	OP1-P-OP2	-9.16	105.86	119.60
26	LA	1170	C	O4'-C1'-N1	9.16	115.53	108.20
26	LA	1567	G	C5-C6-O6	-9.16	123.10	128.60
26	LA	2295	C	C3'-C2'-C1'	9.16	108.83	101.50
2	SA	625	U	N1-C2-N3	9.16	120.40	114.90
2	SA	176	C	P-O3'-C3'	-9.16	108.71	119.70
26	LA	125	A	C3'-C2'-C1'	9.16	108.83	101.50
26	LA	641	U	C5-C4-O4	-9.16	120.41	125.90
2	SA	696	A	N1-C6-N6	9.16	124.09	118.60
26	LA	642	U	C5-C4-O4	-9.16	120.41	125.90
26	LA	757	G	C5-N7-C8	-9.16	99.72	104.30
26	LA	1931	U	C5-C4-O4	-9.16	120.41	125.90
26	LA	2772	C	N3-C2-O2	-9.16	115.49	121.90
26	LA	2885	G	N3-C4-N9	9.16	131.49	126.00
26	LA	2888	C	N3-C4-N4	9.16	124.41	118.00
2	SA	532	A	C5-C6-N1	-9.15	113.12	117.70
2	SA	1502	A	C2-N3-C4	-9.15	106.02	110.60
13	SM	56	ARG	NE-CZ-NH1	9.15	124.88	120.30
26	LA	751	A	C5-C6-N1	9.15	122.28	117.70
26	LA	1321	A	C6-N1-C2	-9.15	113.11	118.60
26	LA	2121	G	N3-C2-N2	-9.15	113.49	119.90
4	S2	74	A	N9-C4-C5	-9.15	102.14	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	275	C	C2-N1-C1'	-9.15	108.73	118.80
26	LA	1590	A	C5-C6-N6	-9.15	116.38	123.70
26	LA	1950	G	P-O5'-C5'	9.15	135.54	120.90
2	SA	38	G	N3-C4-C5	-9.15	124.03	128.60
26	LA	590	A	P-O5'-C5'	9.15	135.54	120.90
26	LA	1548	A	C8-N9-C4	-9.15	102.14	105.80
26	LA	1839	G	N1-C6-O6	9.15	125.39	119.90
26	LA	1870	C	C2-N1-C1'	9.15	128.87	118.80
26	LA	2223	G	P-O3'-C3'	9.15	130.68	119.70
31	LX	21	ARG	NE-CZ-NH2	-9.15	115.72	120.30
2	SA	148	G	O4'-C1'-N9	9.15	115.52	108.20
2	SA	752	G	C8-N9-C4	9.15	110.06	106.40
26	LA	454	A	N1-C6-N6	-9.15	113.11	118.60
2	SA	362	G	N3-C4-C5	9.15	133.17	128.60
2	SA	1146	A	C5-C6-N6	9.15	131.02	123.70
26	LA	773	U	C5'-C4'-C3'	-9.15	101.37	116.00
26	LA	1756	G	C8-N9-C4	-9.15	102.74	106.40
26	LA	145	C	O4'-C1'-N1	9.14	115.51	108.20
26	LA	2488	G	O4'-C1'-N9	9.14	115.52	108.20
26	LA	2805	C	O4'-C1'-N1	9.14	115.52	108.20
2	SA	796	C	P-O3'-C3'	-9.14	108.73	119.70
2	SA	1325	C	C6-N1-C2	-9.14	116.64	120.30
24	S3	2	ARG	NE-CZ-NH1	9.14	124.87	120.30
26	LA	392	U	C2-N3-C4	-9.14	121.52	127.00
26	LA	2410	G	C4'-C3'-C2'	-9.14	93.46	102.60
13	SM	2	ARG	NE-CZ-NH1	9.14	124.87	120.30
37	LC	208	TYR	CB-CG-CD2	9.14	126.48	121.00
3	S1	44	U	C5-C6-N1	9.14	127.27	122.70
26	LA	883	G	C4'-C3'-C2'	-9.14	93.46	102.60
26	LA	774	G	N9-C4-C5	-9.13	101.75	105.40
25	LB	48	U	O4'-C1'-N1	9.13	115.51	108.20
26	LA	894	U	P-O3'-C3'	-9.13	108.74	119.70
26	LA	967	U	N3-C4-O4	-9.13	113.01	119.40
26	LA	1116	G	C8-N9-C4	9.13	110.05	106.40
2	SA	434	U	N3-C2-O2	-9.13	115.81	122.20
26	LA	266	G	C5'-C4'-C3'	9.13	130.61	116.00
26	LA	1034	G	P-O3'-C3'	9.13	130.66	119.70
26	LA	1431	A	N1-C2-N3	9.13	133.87	129.30
2	SA	1320	C	N3-C4-C5	-9.13	118.25	121.90
26	LA	2347	C	C6-N1-C2	-9.13	116.65	120.30
2	SA	247	G	O4'-C1'-N9	9.13	115.50	108.20
2	SA	797	C	C5-C6-N1	9.13	125.56	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2607	G	C4-N9-C1'	-9.13	114.63	126.50
26	LA	2844	G	N3-C2-N2	-9.13	113.51	119.90
2	SA	1163	A	C8-N9-C4	9.12	109.45	105.80
26	LA	108	G	N3-C2-N2	9.12	126.29	119.90
26	LA	1277	G	O4'-C1'-N9	9.13	115.50	108.20
26	LA	1591	A	N9-C4-C5	-9.13	102.15	105.80
26	LA	2324	U	C5-C4-O4	9.12	131.38	125.90
26	LA	2836	U	C6-N1-C2	-9.13	115.52	121.00
26	LA	2851	A	C5-C6-N1	9.13	122.26	117.70
26	LA	2389	G	C8-N9-C4	9.12	110.05	106.40
26	LA	664	G	N3-C4-C5	-9.12	124.04	128.60
26	LA	1308	A	C8-N9-C4	-9.12	102.15	105.80
26	LA	1560	G	N1-C6-O6	9.12	125.37	119.90
53	LP	94	TYR	CB-CG-CD1	-9.12	115.53	121.00
26	LA	808	G	O4'-C1'-N9	9.12	115.50	108.20
2	SA	846	G	O4'-C1'-N9	9.12	115.49	108.20
26	LA	475	C	C2-N3-C4	9.12	124.46	119.90
26	LA	1244	A	N9-C4-C5	9.12	109.45	105.80
26	LA	1927	A	C8-N9-C4	-9.12	102.15	105.80
26	LA	2678	C	O4'-C1'-N1	9.12	115.50	108.20
26	LA	2271	G	N7-C8-N9	9.12	117.66	113.10
2	SA	276	G	P-O3'-C3'	9.12	130.64	119.70
26	LA	2165	C	C4'-C3'-C2'	-9.12	93.48	102.60
2	SA	541	G	N1-C6-O6	-9.11	114.43	119.90
2	SA	1092	A	O4'-C1'-N9	9.11	115.49	108.20
2	SA	1270	G	N3-C2-N2	9.11	126.28	119.90
26	LA	858	G	C4-C5-N7	9.11	114.45	110.80
26	LA	1666	G	O4'-C1'-N9	9.11	115.49	108.20
26	LA	1840	G	C5-C6-N1	9.11	116.06	111.50
2	SA	1464	U	O4'-C1'-N1	9.11	115.49	108.20
25	LB	118	C	C6-N1-C2	-9.11	116.66	120.30
26	LA	297	G	C5'-C4'-C3'	-9.11	101.42	116.00
26	LA	1452	G	N9-C4-C5	-9.11	101.75	105.40
26	LA	1612	C	C5-C6-N1	9.11	125.56	121.00
37	LC	163	TYR	CB-CG-CD2	9.11	126.47	121.00
2	SA	106	C	O4'-C1'-N1	9.11	115.49	108.20
26	LA	1020	A	P-O3'-C3'	9.11	130.63	119.70
26	LA	1561	C	C2-N3-C4	-9.11	115.35	119.90
26	LA	1708	C	O4'-C1'-N1	9.11	115.49	108.20
26	LA	2086	U	C5-C4-O4	-9.11	120.44	125.90
26	LA	2829	A	C5-N7-C8	9.11	108.45	103.90
2	SA	504	C	C2-N3-C4	-9.11	115.35	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	708	C	C3'-C2'-C1'	9.11	108.78	101.50
26	LA	43	G	C8-N9-C4	-9.11	102.76	106.40
26	LA	725	G	C5-C6-O6	-9.11	123.14	128.60
26	LA	991	C	O4'-C1'-N1	9.11	115.48	108.20
26	LA	1168	G	P-O5'-C5'	9.11	135.47	120.90
26	LA	1341	G	C1'-O4'-C4'	-9.11	102.62	109.90
26	LA	2126	A	P-O3'-C3'	9.11	130.63	119.70
2	SA	232	G	N9-C4-C5	9.10	109.04	105.40
2	SA	931	C	C5'-C4'-C3'	9.10	130.57	116.00
26	LA	2721	A	C5'-C4'-O4'	9.10	120.03	109.10
26	LA	294	A	N1-C6-N6	9.10	124.06	118.60
26	LA	543	G	O4'-C1'-N9	9.10	115.48	108.20
26	LA	1602	U	N3-C4-O4	9.10	125.77	119.40
26	LA	2040	G	O4'-C1'-N9	9.10	115.48	108.20
26	LA	2083	G	C5-C6-O6	-9.10	123.14	128.60
2	SA	1341	U	C1'-O4'-C4'	9.10	117.18	109.90
2	SA	1375	A	P-O5'-C5'	9.10	135.46	120.90
26	LA	1011	G	N1-C6-O6	9.10	125.36	119.90
26	LA	1287	A	N9-C4-C5	9.10	109.44	105.80
8	SH	14	ARG	NE-CZ-NH2	-9.10	115.75	120.30
26	LA	2862	G	O4'-C1'-N9	9.10	115.48	108.20
26	LA	2903	U	N3-C2-O2	-9.10	115.83	122.20
2	SA	664	G	N3-C2-N2	9.10	126.27	119.90
2	SA	1035	A	O4'-C1'-N9	9.10	115.48	108.20
26	LA	1075	C	C2-N3-C4	9.10	124.45	119.90
26	LA	2550	G	O4'-C1'-N9	9.10	115.48	108.20
2	SA	440	C	O4'-C1'-N1	9.09	115.47	108.20
2	SA	1529	G	O4'-C1'-N9	9.09	115.47	108.20
2	SA	1486	G	C4'-C3'-C2'	-9.09	93.51	102.60
26	LA	1470	A	C5-N7-C8	-9.09	99.35	103.90
26	LA	2178	C	O4'-C1'-N1	9.09	115.47	108.20
27	LD	216	ARG	NE-CZ-NH2	-9.09	115.75	120.30
2	SA	1276	G	N9-C4-C5	9.09	109.04	105.40
3	S1	58	C	C2-N3-C4	9.09	124.44	119.90
26	LA	85	G	N1-C6-O6	-9.09	114.45	119.90
26	LA	577	G	C1'-O4'-C4'	-9.09	102.63	109.90
26	LA	1998	A	N1-C2-N3	-9.09	124.75	129.30
2	SA	22	G	N1-C6-O6	-9.09	114.45	119.90
2	SA	1102	A	N3-C4-C5	-9.09	120.44	126.80
2	SA	1172	C	O4'-C1'-N1	9.09	115.47	108.20
26	LA	1097	U	C5-C6-N1	-9.09	118.16	122.70
26	LA	2209	G	N9-C4-C5	-9.09	101.77	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	968	A	C5-C6-N1	-9.09	113.16	117.70
2	SA	1216	A	N1-C6-N6	-9.09	113.15	118.60
26	LA	488	G	N3-C2-N2	9.09	126.26	119.90
26	LA	1248	G	C5-N7-C8	-9.09	99.76	104.30
26	LA	1354	A	O4'-C1'-N9	9.09	115.47	108.20
26	LA	1804	C	C2-N3-C4	9.09	124.44	119.90
26	LA	2541	A	N9-C4-C5	9.09	109.43	105.80
45	LG	19	PHE	CB-CG-CD1	-9.09	114.44	120.80
2	SA	132	C	C5-C4-N4	9.08	126.56	120.20
2	SA	1051	C	O4'-C1'-N1	9.08	115.47	108.20
2	SA	1449	C	C5'-C4'-C3'	-9.08	101.47	116.00
26	LA	79	C	C4'-C3'-C2'	-9.08	93.52	102.60
26	LA	1123	C	N1-C1'-C2'	-9.08	102.01	112.00
26	LA	2610	C	C2-N1-C1'	9.08	128.79	118.80
2	SA	78	A	N3-C4-C5	-9.08	120.44	126.80
26	LA	1307	A	P-O3'-C3'	9.08	130.60	119.70
2	SA	266	G	N7-C8-N9	9.08	117.64	113.10
2	SA	397	A	O4'-C1'-N9	9.08	115.46	108.20
2	SA	775	G	N1-C6-O6	9.08	125.35	119.90
26	LA	251	A	C5-N7-C8	-9.08	99.36	103.90
26	LA	1652	A	N7-C8-N9	-9.08	109.26	113.80
26	LA	1925	C	C6-N1-C2	-9.08	116.67	120.30
26	LA	2507	C	P-O5'-C5'	9.08	135.43	120.90
25	LB	45	A	C5-N7-C8	-9.08	99.36	103.90
26	LA	2278	A	C4-C5-N7	-9.08	106.16	110.70
26	LA	2497	A	N9-C4-C5	9.08	109.43	105.80
2	SA	401	C	C6-N1-C2	9.07	123.93	120.30
2	SA	449	G	N1-C6-O6	9.07	125.34	119.90
26	LA	793	A	C5-N7-C8	-9.07	99.36	103.90
26	LA	1530	G	C8-N9-C4	-9.07	102.77	106.40
26	LA	1745	A	N7-C8-N9	9.07	118.34	113.80
2	SA	668	G	N3-C4-C5	9.07	133.14	128.60
2	SA	854	U	O4'-C1'-N1	9.07	115.46	108.20
26	LA	574	A	C3'-C2'-C1'	-9.07	94.24	101.50
26	LA	71	A	C5-C6-N1	9.07	122.23	117.70
26	LA	109	C	P-O3'-C3'	9.07	130.58	119.70
26	LA	825	A	C2-N3-C4	-9.07	106.06	110.60
26	LA	2321	U	O4'-C1'-N1	9.07	115.46	108.20
26	LA	1667	G	C4-C5-N7	9.07	114.43	110.80
26	LA	2268	A	C6-N1-C2	-9.07	113.16	118.60
2	SA	699	C	N3-C4-C5	-9.07	118.27	121.90
13	SM	106	ARG	NE-CZ-NH1	9.07	124.83	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	560	C	N3-C4-C5	9.07	125.53	121.90
26	LA	1232	G	C5-N7-C8	-9.07	99.77	104.30
26	LA	1964	G	O4'-C1'-N9	-9.07	100.95	108.20
26	LA	1404	C	C6-N1-C2	-9.07	116.67	120.30
45	LG	127	TYR	CB-CG-CD2	9.07	126.44	121.00
26	LA	165	A	N1-C6-N6	-9.06	113.16	118.60
2	SA	885	G	C5-C6-O6	-9.06	123.16	128.60
2	SA	1392	G	C6-N1-C2	-9.06	119.66	125.10
26	LA	1843	C	C5-C4-N4	-9.06	113.86	120.20
2	SA	546	A	N1-C6-N6	-9.06	113.16	118.60
2	SA	791	G	C8-N9-C4	9.06	110.02	106.40
22	SF	4	TYR	CB-CG-CD1	-9.06	115.56	121.00
26	LA	220	G	C4-N9-C1'	9.06	138.28	126.50
26	LA	356	G	C2-N3-C4	9.06	116.43	111.90
26	LA	1373	A	N7-C8-N9	-9.06	109.27	113.80
26	LA	1596	A	C2-N3-C4	9.06	115.13	110.60
26	LA	2381	A	N1-C6-N6	-9.06	113.16	118.60
2	SA	529	G	C5-C6-O6	-9.06	123.16	128.60
2	SA	1055	A	C4'-C3'-C2'	-9.06	93.54	102.60
26	LA	2669	G	C5-C6-O6	-9.06	123.17	128.60
3	S1	16	A	C8-N9-C4	-9.06	102.18	105.80
26	LA	621	A	C4-C5-N7	-9.06	106.17	110.70
26	LA	2497	A	C2-N3-C4	-9.06	106.07	110.60
26	LA	2768	U	N1-C2-N3	9.06	120.33	114.90
2	SA	167	A	C8-N9-C4	-9.05	102.18	105.80
2	SA	524	G	C5-C6-O6	-9.05	123.17	128.60
2	SA	1473	G	C5-C6-O6	9.06	134.03	128.60
26	LA	10	A	N3-C4-N9	-9.06	120.16	127.40
26	LA	42	A	P-O5'-C5'	9.06	135.39	120.90
26	LA	388	G	N1-C6-O6	-9.05	114.47	119.90
26	LA	939	G	N3-C4-C5	-9.05	124.07	128.60
26	LA	954	G	N1-C2-N2	-9.05	108.05	116.20
26	LA	2165	C	P-O3'-C3'	-9.05	108.83	119.70
26	LA	2587	A	C5'-C4'-C3'	9.06	130.49	116.00
4	S2	42	C	C6-N1-C2	-9.05	116.68	120.30
26	LA	1787	A	N1-C2-N3	9.05	133.83	129.30
26	LA	2177	C	O4'-C1'-N1	9.05	115.44	108.20
26	LA	2558	C	N3-C4-N4	9.05	124.34	118.00
26	LA	2602	A	C2-N3-C4	9.05	115.13	110.60
4	S2	30	G	C5-N7-C8	-9.05	99.77	104.30
26	LA	2144	G	N3-C4-N9	-9.05	120.57	126.00
2	SA	222	C	O4'-C1'-N1	9.05	115.44	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1472	U	O4'-C1'-N1	9.05	115.44	108.20
9	SI	84	ARG	NE-CZ-NH2	-9.05	115.78	120.30
19	SC	130	ARG	CD-NE-CZ	9.05	136.27	123.60
26	LA	1705	A	N1-C6-N6	9.05	124.03	118.60
2	SA	72	A	N1-C2-N3	9.04	133.82	129.30
2	SA	846	G	C4-C5-N7	9.04	114.42	110.80
26	LA	1459	G	P-O3'-C3'	9.04	130.55	119.70
26	LA	2254	C	O4'-C1'-N1	9.04	115.43	108.20
26	LA	1196	C	O4'-C1'-N1	9.04	115.43	108.20
2	SA	455	G	N1-C6-O6	9.04	125.32	119.90
2	SA	1377	A	OP1-P-OP2	-9.04	106.04	119.60
26	LA	283	G	N9-C4-C5	-9.04	101.78	105.40
26	LA	664	G	C2-N3-C4	9.04	116.42	111.90
26	LA	2429	G	O4'-C1'-N9	9.04	115.43	108.20
2	SA	425	G	N3-C2-N2	9.04	126.23	119.90
2	SA	952	U	O4'-C1'-N1	9.04	115.43	108.20
4	S2	30	G	C5'-C4'-C3'	9.04	130.46	116.00
26	LA	2309	A	C8-N9-C4	9.04	109.42	105.80
26	LA	1222	U	C3'-C2'-C1'	9.04	108.73	101.50
26	LA	1967	C	P-O5'-C5'	9.04	135.36	120.90
26	LA	2123	G	C4-C5-N7	-9.03	107.19	110.80
26	LA	945	A	C5-C6-N6	-9.03	116.47	123.70
26	LA	2148	G	O4'-C1'-N9	9.03	115.42	108.20
26	LA	2560	A	C5-N7-C8	-9.03	99.38	103.90
26	LA	2887	A	N1-C2-N3	9.03	133.82	129.30
46	LH	151	ARG	NE-CZ-NH2	-9.03	115.78	120.30
2	SA	756	C	P-O3'-C3'	9.03	130.53	119.70
19	SC	53	ARG	NE-CZ-NH2	-9.03	115.78	120.30
25	LB	41	G	C3'-C2'-C1'	-9.03	94.28	101.50
26	LA	2293	G	C5'-C4'-C3'	-9.03	101.55	116.00
26	LA	1763	G	P-O3'-C3'	9.03	130.53	119.70
26	LA	2031	A	O4'-C1'-N9	9.03	115.42	108.20
2	SA	774	G	N9-C4-C5	-9.03	101.79	105.40
2	SA	958	A	C4-C5-N7	9.03	115.21	110.70
26	LA	451	U	O4'-C1'-N1	9.03	115.42	108.20
26	LA	914	G	O4'-C1'-N9	9.03	115.42	108.20
26	LA	1138	G	C4-C5-N7	-9.03	107.19	110.80
26	LA	2400	G	C5-C6-N1	9.03	116.01	111.50
26	LA	2705	A	C4-C5-C6	9.03	121.51	117.00
2	SA	171	A	O4'-C1'-N9	9.02	115.42	108.20
26	LA	463	G	N1-C6-O6	9.02	125.31	119.90
2	SA	941	G	C6-C5-N7	9.02	135.81	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2155	U	O4'-C1'-N1	9.02	115.42	108.20
26	LA	2499	C	C2-N1-C1'	9.02	128.72	118.80
26	LA	2655	G	O4'-C1'-N9	9.02	115.42	108.20
37	LC	208	TYR	CB-CG-CD1	-9.02	115.59	121.00
2	SA	1404	C	P-O5'-C5'	9.02	135.33	120.90
2	SA	92	U	C5-C6-N1	9.02	127.21	122.70
2	SA	1250	A	N7-C8-N9	9.02	118.31	113.80
4	S2	50	G	N7-C8-N9	-9.02	108.59	113.10
26	LA	668	A	O4'-C1'-N9	9.02	115.42	108.20
2	SA	1348	U	C2-N3-C4	-9.02	121.59	127.00
2	SA	1487	G	C5-N7-C8	-9.02	99.79	104.30
3	S1	26	U	C5-C6-N1	-9.02	118.19	122.70
26	LA	1674	G	C5-C6-O6	-9.02	123.19	128.60
26	LA	2258	C	C4'-C3'-C2'	-9.02	93.58	102.60
26	LA	585	G	C2-N3-C4	-9.01	107.39	111.90
26	LA	1888	G	C5-C6-N1	9.01	116.01	111.50
26	LA	1968	G	N3-C2-N2	9.01	126.21	119.90
2	SA	457	G	O4'-C1'-N9	9.01	115.41	108.20
26	LA	13	A	N1-C2-N3	-9.01	124.80	129.30
26	LA	543	G	C5-N7-C8	-9.01	99.80	104.30
26	LA	784	G	C5-C6-O6	-9.01	123.19	128.60
26	LA	2114	A	C4-C5-C6	-9.01	112.50	117.00
26	LA	2728	U	C1'-O4'-C4'	-9.01	102.69	109.90
2	SA	83	C	O4'-C1'-N1	9.01	115.41	108.20
2	SA	183	C	C6-N1-C2	9.01	123.90	120.30
2	SA	221	C	N1-C2-N3	9.01	125.50	119.20
26	LA	1007	C	C5-C6-N1	9.01	125.50	121.00
26	LA	2101	A	P-O5'-C5'	9.01	135.31	120.90
2	SA	560	A	C8-N9-C4	9.01	109.40	105.80
2	SA	1388	C	O4'-C1'-N1	9.01	115.41	108.20
16	SP	35	ARG	NE-CZ-NH1	9.00	124.80	120.30
26	LA	1126	A	C8-N9-C4	9.00	109.40	105.80
26	LA	372	G	N1-C2-N3	-9.00	118.50	123.90
26	LA	1282	U	N3-C2-O2	-9.00	115.90	122.20
2	SA	344	A	O4'-C1'-N9	9.00	115.40	108.20
2	SA	1442	G	C5-C6-O6	9.00	134.00	128.60
14	SN	62	ARG	NE-CZ-NH1	-9.00	115.80	120.30
26	LA	306	U	N1-C2-O2	9.00	129.10	122.80
26	LA	2432	A	N1-C6-N6	9.00	124.00	118.60
26	LA	2864	G	C2-N3-C4	-9.00	107.40	111.90
26	LA	118	A	C8-N9-C4	9.00	109.40	105.80
26	LA	278	A	N1-C6-N6	9.00	124.00	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1495	A	C2-N3-C4	9.00	115.10	110.60
26	LA	2131	U	N1-C2-O2	9.00	129.10	122.80
26	LA	2597	G	C6-C5-N7	-9.00	125.00	130.40
26	LA	2338	C	C4-C5-C6	9.00	121.90	117.40
26	LA	1050	A	N1-C2-N3	-8.99	124.80	129.30
26	LA	2092	U	N3-C4-C5	-8.99	109.20	114.60
26	LA	2703	C	C5-C4-N4	-8.99	113.90	120.20
2	SA	248	C	N3-C4-C5	-8.99	118.30	121.90
4	S2	66	C	C5'-C4'-C3'	-8.99	101.61	116.00
26	LA	201	C	C2-N3-C4	-8.99	115.40	119.90
26	LA	1110	G	O4'-C1'-N9	8.99	115.39	108.20
26	LA	1333	G	N1-C6-O6	8.99	125.30	119.90
26	LA	2598	A	C5-C6-N1	8.99	122.20	117.70
26	LA	2894	G	P-O3'-C3'	-8.99	108.91	119.70
2	SA	768	A	C8-N9-C4	-8.99	102.20	105.80
26	LA	2234	G	O4'-C1'-N9	8.99	115.39	108.20
26	LA	2315	G	C5-C6-O6	-8.99	123.21	128.60
26	LA	2441	U	C6-N1-C1'	-8.99	108.61	121.20
2	SA	1206	G	C8-N9-C1'	8.99	138.68	127.00
26	LA	1427	A	N9-C4-C5	-8.99	102.20	105.80
2	SA	181	A	O4'-C1'-N9	8.98	115.39	108.20
5	ST	50	PHE	CB-CG-CD1	-8.98	114.51	120.80
26	LA	212	G	C4'-C3'-C2'	-8.98	93.62	102.60
26	LA	2081	U	O4'-C1'-N1	8.98	115.39	108.20
26	LA	2489	U	C6-N1-C2	-8.98	115.61	121.00
2	SA	326	G	O4'-C1'-N9	8.98	115.39	108.20
2	SA	728	A	P-O3'-C3'	8.98	130.48	119.70
2	SA	1429	A	N1-C2-N3	-8.98	124.81	129.30
2	SA	917	G	N3-C2-N2	8.98	126.19	119.90
2	SA	1132	C	C6-N1-C2	-8.98	116.71	120.30
26	LA	1330	C	O4'-C1'-N1	8.98	115.39	108.20
2	SA	423	G	C5-C6-O6	-8.98	123.21	128.60
2	SA	704	A	N9-C4-C5	-8.98	102.21	105.80
2	SA	1314	C	O4'-C1'-N1	8.98	115.38	108.20
2	SA	1488	G	C5-C6-N1	-8.98	107.01	111.50
26	LA	1350	C	P-O3'-C3'	-8.98	108.93	119.70
26	LA	2206	C	O4'-C1'-N1	8.98	115.38	108.20
26	LA	1687	G	N1-C2-N2	-8.98	108.12	116.20
26	LA	1723	G	N9-C4-C5	8.98	108.99	105.40
2	SA	1185	G	C8-N9-C4	-8.97	102.81	106.40
26	LA	2230	G	C6-N1-C2	-8.97	119.72	125.10
2	SA	1293	C	O4'-C1'-N1	8.97	115.38	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1336	C	N3-C4-C5	-8.97	118.31	121.90
26	LA	42	A	C8-N9-C4	-8.97	102.21	105.80
26	LA	2391	G	O4'-C1'-N9	8.97	115.38	108.20
26	LA	2748	A	C5-N7-C8	8.97	108.39	103.90
2	SA	584	G	C8-N9-C4	-8.97	102.81	106.40
2	SA	1074	G	C5-C6-N1	8.97	115.99	111.50
2	SA	1271	A	C5-C6-N6	-8.97	116.52	123.70
25	LB	32	U	N3-C2-O2	-8.97	115.92	122.20
26	LA	678	C	N1-C2-N3	8.97	125.48	119.20
26	LA	1933	G	C8-N9-C4	-8.97	102.81	106.40
28	LU	95	ARG	NE-CZ-NH1	8.97	124.78	120.30
2	SA	36	C	O4'-C1'-N1	8.97	115.38	108.20
26	LA	379	G	C5'-C4'-O4'	-8.97	98.34	109.10
26	LA	487	C	C4-C5-C6	-8.97	112.92	117.40
26	LA	2297	A	N9-C4-C5	8.97	109.39	105.80
26	LA	53	A	N9-C4-C5	8.97	109.39	105.80
26	LA	2478	A	C6-N1-C2	-8.97	113.22	118.60
2	SA	18	C	N3-C2-O2	-8.96	115.62	121.90
2	SA	155	A	O4'-C1'-N9	8.96	115.37	108.20
2	SA	332	G	N3-C2-N2	8.96	126.17	119.90
2	SA	1267	C	O4'-C1'-N1	8.96	115.37	108.20
19	SC	228	ARG	NE-CZ-NH2	-8.96	115.82	120.30
26	LA	277	G	O4'-C1'-N9	8.96	115.37	108.20
26	LA	1548	A	N9-C4-C5	8.97	109.39	105.80
26	LA	1009	A	C5-C6-N6	8.96	130.87	123.70
26	LA	1338	G	N7-C8-N9	8.96	117.58	113.10
2	SA	38	G	C5-C6-O6	-8.96	123.22	128.60
2	SA	321	A	C5'-C4'-C3'	8.96	130.34	116.00
2	SA	516	U	N3-C4-O4	8.96	125.67	119.40
26	LA	101	A	O4'-C1'-C2'	-8.96	96.84	105.80
37	LC	180	PHE	CB-CG-CD1	8.96	127.07	120.80
2	SA	77	A	O4'-C1'-N9	8.96	115.37	108.20
2	SA	570	G	C5-C6-O6	-8.96	123.22	128.60
26	LA	994	C	N1-C2-O2	-8.96	113.52	118.90
2	SA	221	C	N3-C2-O2	-8.96	115.63	121.90
2	SA	596	A	C8-N9-C4	-8.96	102.22	105.80
26	LA	109	C	O4'-C1'-N1	8.96	115.37	108.20
26	LA	982	C	O4'-C1'-N1	8.96	115.37	108.20
26	LA	2054	A	O4'-C1'-N9	8.96	115.36	108.20
2	SA	1351	U	C4'-C3'-C2'	-8.96	93.64	102.60
26	LA	286	U	O4'-C1'-N1	8.96	115.36	108.20
26	LA	556	A	N1-C6-N6	8.96	123.97	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	581	C	N3-C4-N4	8.95	124.27	118.00
26	LA	948	C	N3-C4-N4	-8.96	111.73	118.00
26	LA	1183	U	P-O3'-C3'	8.96	130.45	119.70
26	LA	2726	A	C1'-O4'-C4'	-8.96	102.74	109.90
2	SA	196	A	C8-N9-C4	-8.95	102.22	105.80
2	SA	1001	C	N3-C4-C5	-8.95	118.32	121.90
26	LA	44	A	C5'-C4'-C3'	-8.95	101.68	116.00
26	LA	666	A	O4'-C1'-N9	8.95	115.36	108.20
26	LA	1703	G	N3-C2-N2	8.95	126.17	119.90
26	LA	2495	G	C6-N1-C2	-8.95	119.73	125.10
26	LA	2539	C	O4'-C1'-N1	8.95	115.36	108.20
2	SA	562	U	C5-C6-N1	-8.95	118.23	122.70
2	SA	1045	C	P-O5'-C5'	8.95	135.22	120.90
2	SA	1442	G	C5'-C4'-C3'	8.95	130.32	116.00
4	S2	54	G	C5'-C4'-O4'	8.95	119.84	109.10
26	LA	246	C	C6-N1-C2	8.95	123.88	120.30
26	LA	2190	G	O4'-C1'-N9	8.95	115.36	108.20
26	LA	2410	G	N7-C8-N9	-8.95	108.62	113.10
2	SA	1527	U	N3-C4-O4	8.95	125.66	119.40
26	LA	741	U	C2-N3-C4	-8.95	121.63	127.00
26	LA	822	G	C2-N3-C4	8.95	116.37	111.90
26	LA	904	G	C5-N7-C8	-8.95	99.83	104.30
26	LA	1696	G	C5'-C4'-C3'	8.95	130.31	116.00
26	LA	1953	A	C3'-C2'-C1'	8.94	108.66	101.50
26	LA	2316	G	C1'-O4'-C4'	-8.95	102.74	109.90
2	SA	558	G	N9-C4-C5	-8.94	101.82	105.40
2	SA	1189	U	O4'-C1'-N1	8.94	115.35	108.20
26	LA	1231	U	O4'-C1'-N1	8.94	115.35	108.20
4	S2	25	U	O4'-C1'-N1	8.94	115.35	108.20
26	LA	2812	G	C8-N9-C4	-8.94	102.82	106.40
2	SA	834	U	C5'-C4'-C3'	-8.94	101.70	116.00
26	LA	1686	C	P-O5'-C5'	8.94	135.20	120.90
26	LA	2281	A	O4'-C1'-N9	8.94	115.35	108.20
26	LA	2863	C	C4'-C3'-C2'	-8.94	93.66	102.60
2	SA	654	G	P-O3'-C3'	-8.94	108.97	119.70
26	LA	1359	A	N1-C2-N3	-8.94	124.83	129.30
2	SA	145	G	C5'-C4'-O4'	8.94	119.82	109.10
26	LA	1710	G	C8-N9-C4	-8.94	102.83	106.40
26	LA	2759	G	O4'-C1'-N9	8.94	115.35	108.20
2	SA	1041	G	C4-C5-C6	-8.93	113.44	118.80
26	LA	295	G	C4-C5-N7	8.93	114.37	110.80
26	LA	544	C	O4'-C1'-N1	8.93	115.35	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1528	A	C8-N9-C4	8.93	109.37	105.80
26	LA	1594	U	O4'-C1'-N1	8.93	115.35	108.20
47	LJ	75	PHE	CB-CG-CD1	-8.93	114.55	120.80
2	SA	879	C	O4'-C1'-N1	8.93	115.34	108.20
16	SP	16	PHE	CB-CG-CD1	8.93	127.05	120.80
26	LA	595	C	O4'-C1'-N1	8.93	115.34	108.20
26	LA	857	G	C5-C6-O6	-8.93	123.24	128.60
26	LA	1603	A	N1-C6-N6	8.93	123.96	118.60
26	LA	1649	G	O4'-C1'-N9	8.93	115.34	108.20
30	LW	30	SER	N-CA-CB	8.93	123.90	110.50
2	SA	279	A	P-O3'-C3'	8.93	130.41	119.70
2	SA	1234	C	O4'-C1'-N1	8.93	115.34	108.20
26	LA	124	G	P-O3'-C3'	-8.93	108.99	119.70
2	SA	702	A	C4-C5-C6	8.93	121.46	117.00
26	LA	95	A	C4'-C3'-C2'	-8.93	93.67	102.60
33	LZ	39	VAL	CA-CB-CG1	8.93	124.29	110.90
55	LQ	30	ARG	NE-CZ-NH2	-8.93	115.84	120.30
26	LA	630	G	O4'-C1'-N9	8.92	115.34	108.20
26	LA	1136	G	N9-C4-C5	8.92	108.97	105.40
26	LA	1611	C	C5-C4-N4	-8.92	113.95	120.20
26	LA	2002	G	C2-N3-C4	8.92	116.36	111.90
26	LA	1471	G	C5-C6-O6	-8.92	123.25	128.60
26	LA	1785	A	N1-C6-N6	-8.92	113.25	118.60
2	SA	990	C	C5-C4-N4	8.92	126.44	120.20
2	SA	998	C	C6-N1-C2	8.92	123.87	120.30
2	SA	1182	G	O4'-C1'-N9	8.92	115.34	108.20
26	LA	1740	G	P-O5'-C5'	8.92	135.17	120.90
26	LA	2135	A	C5'-C4'-C3'	-8.92	101.73	116.00
26	LA	2589	A	C4-C5-C6	8.92	121.46	117.00
26	LA	90	U	C6-N1-C2	-8.92	115.65	121.00
26	LA	523	C	C6-N1-C2	-8.92	116.73	120.30
26	LA	1558	C	C2-N3-C4	-8.92	115.44	119.90
26	LA	1320	C	P-O5'-C5'	8.92	135.17	120.90
26	LA	1728	C	N3-C2-O2	-8.92	115.66	121.90
26	LA	2153	C	O4'-C1'-N1	8.92	115.33	108.20
4	S2	7	G	C5-C6-O6	-8.91	123.25	128.60
26	LA	1510	G	N1-C2-N3	8.91	129.25	123.90
20	SD	25	ARG	NE-CZ-NH2	8.91	124.76	120.30
26	LA	2429	G	N7-C8-N9	8.91	117.56	113.10
49	LK	126	ARG	NE-CZ-NH2	8.91	124.76	120.30
26	LA	950	G	N1-C2-N3	-8.91	118.55	123.90
26	LA	2295	C	C4'-C3'-C2'	-8.91	93.69	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	902	G	N1-C2-N2	-8.91	108.18	116.20
26	LA	1040	A	N1-C6-N6	-8.91	113.25	118.60
26	LA	1052	C	C6-N1-C2	-8.91	116.74	120.30
26	LA	2221	G	C4-C5-N7	8.91	114.36	110.80
54	LM	98	ARG	NE-CZ-NH1	8.91	124.75	120.30
55	LQ	15	ARG	NE-CZ-NH1	8.91	124.76	120.30
2	SA	1462	C	C4-C5-C6	8.91	121.85	117.40
4	S2	17	C	N1-C2-O2	8.91	124.25	118.90
26	LA	2300	C	O4'-C1'-N1	8.91	115.33	108.20
2	SA	419	C	C2-N3-C4	-8.91	115.45	119.90
2	SA	724	G	N7-C8-N9	-8.91	108.65	113.10
2	SA	1489	G	C5-C6-N1	8.91	115.95	111.50
26	LA	111	A	C4-C5-N7	-8.91	106.25	110.70
26	LA	2770	G	C2-N3-C4	-8.91	107.45	111.90
7	SG	43	TYR	CB-CG-CD2	-8.91	115.66	121.00
26	LA	346	A	C6-N1-C2	-8.91	113.26	118.60
26	LA	1612	C	C2-N3-C4	-8.91	115.45	119.90
26	LA	1960	A	C6-N1-C2	-8.91	113.26	118.60
2	SA	220	G	C5'-C4'-O4'	8.90	119.78	109.10
2	SA	265	G	P-O3'-C3'	-8.90	109.01	119.70
2	SA	1002	G	O4'-C1'-N9	8.90	115.32	108.20
26	LA	205	G	C1'-O4'-C4'	-8.90	102.78	109.90
26	LA	2501	C	C4-C5-C6	8.90	121.85	117.40
2	SA	1223	C	P-O3'-C3'	8.90	130.38	119.70
2	SA	1455	G	N3-C4-C5	-8.90	124.15	128.60
26	LA	1847	A	N3-C4-C5	-8.90	120.57	126.80
26	LA	2270	A	C2-N3-C4	-8.90	106.15	110.60
2	SA	656	G	O4'-C1'-N9	8.90	115.32	108.20
2	SA	953	G	O4'-C1'-N9	8.90	115.32	108.20
2	SA	1168	U	P-O3'-C3'	8.90	130.38	119.70
26	LA	200	U	C4-C5-C6	-8.90	114.36	119.70
26	LA	2213	U	C3'-C2'-C1'	-8.90	94.38	101.50
2	SA	322	C	C5-C4-N4	-8.89	113.97	120.20
26	LA	859	G	O4'-C1'-C2'	-8.89	96.91	105.80
26	LA	2782	G	C5'-C4'-O4'	8.89	119.77	109.10
2	SA	276	G	C2-N3-C4	8.89	116.35	111.90
2	SA	1094	G	C5-C6-N1	8.89	115.95	111.50
26	LA	836	G	C5-C6-O6	-8.89	123.26	128.60
26	LA	966	G	C5-C6-O6	-8.89	123.26	128.60
4	S2	22	A	N1-C2-N3	-8.89	124.85	129.30
26	LA	26	G	C5-C6-O6	-8.89	123.27	128.60
26	LA	329	G	C5-C6-O6	-8.89	123.27	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	LQ	25	ARG	NE-CZ-NH1	8.89	124.75	120.30
2	SA	466	A	C5-C6-N1	8.89	122.14	117.70
26	LA	104	A	C5-C6-N1	-8.89	113.25	117.70
26	LA	746	U	C2-N3-C4	-8.89	121.67	127.00
26	LA	1138	G	N1-C6-O6	8.89	125.23	119.90
2	SA	282	A	C8-N9-C4	-8.89	102.25	105.80
2	SA	1517	G	C4'-C3'-C2'	-8.89	93.71	102.60
26	LA	2337	G	C4-C5-N7	8.89	114.36	110.80
2	SA	1459	G	C4-C5-N7	8.89	114.36	110.80
24	S3	579	PHE	CB-CG-CD2	-8.89	114.58	120.80
26	LA	2708	G	C6-C5-N7	-8.89	125.07	130.40
2	SA	832	G	O4'-C1'-N9	8.88	115.31	108.20
2	SA	1449	C	P-O3'-C3'	-8.88	109.04	119.70
3	S1	38	G	N1-C2-N3	-8.88	118.57	123.90
26	LA	1483	G	N9-C1'-C2'	-8.88	102.23	112.00
2	SA	846	G	N3-C4-C5	8.88	133.04	128.60
4	S2	56	U	O4'-C1'-N1	8.88	115.31	108.20
26	LA	981	A	N9-C4-C5	-8.88	102.25	105.80
26	LA	1490	A	N1-C6-N6	8.88	123.93	118.60
29	LV	73	ARG	NE-CZ-NH1	8.88	124.74	120.30
2	SA	582	C	C5'-C4'-C3'	-8.88	101.79	116.00
2	SA	1400	C	N3-C4-C5	-8.88	118.35	121.90
26	LA	2218	G	C4-C5-N7	-8.88	107.25	110.80
2	SA	533	A	C3'-C2'-C1'	-8.88	94.40	101.50
2	SA	27	G	O4'-C1'-N9	8.88	115.30	108.20
2	SA	457	G	C5-C6-O6	-8.88	123.27	128.60
2	SA	759	A	P-O3'-C3'	8.88	130.35	119.70
2	SA	1125	U	O4'-C1'-N1	8.88	115.30	108.20
2	SA	1127	G	C4-C5-N7	8.88	114.35	110.80
4	S2	22	A	O4'-C1'-N9	8.88	115.30	108.20
7	SG	142	ARG	NE-CZ-NH1	8.88	124.74	120.30
1	SS	31	ARG	NE-CZ-NH2	-8.88	115.86	120.30
2	SA	544	G	C5-C6-N1	8.88	115.94	111.50
26	LA	173	A	O4'-C1'-N9	8.87	115.30	108.20
26	LA	341	C	O4'-C1'-N1	8.88	115.30	108.20
26	LA	1035	U	C5-C4-O4	8.87	131.22	125.90
26	LA	1052	C	C5-C6-N1	8.88	125.44	121.00
26	LA	2853	C	O4'-C1'-N1	8.88	115.30	108.20
26	LA	1881	C	O4'-C1'-N1	8.87	115.30	108.20
2	SA	794	A	N3-C4-N9	-8.87	120.30	127.40
2	SA	903	G	N3-C4-N9	8.87	131.32	126.00
2	SA	973	G	C5-C6-O6	-8.87	123.28	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1383	C	C6-N1-C2	-8.87	116.75	120.30
26	LA	2506	U	C2-N3-C4	-8.87	121.68	127.00
26	LA	468	G	N9-C4-C5	8.87	108.95	105.40
2	SA	658	C	O4'-C1'-N1	8.87	115.30	108.20
2	SA	1156	G	O4'-C1'-N9	8.87	115.30	108.20
2	SA	1351	U	P-O3'-C3'	8.87	130.34	119.70
26	LA	1160	G	N1-C6-O6	8.87	125.22	119.90
2	SA	408	A	C5-C6-N6	8.87	130.79	123.70
2	SA	455	G	C6-C5-N7	-8.87	125.08	130.40
26	LA	2118	U	C2-N1-C1'	8.87	128.34	117.70
53	LP	69	ARG	NE-CZ-NH2	-8.87	115.87	120.30
2	SA	127	G	N1-C2-N3	-8.86	118.58	123.90
2	SA	962	C	C5'-C4'-C3'	-8.86	101.82	116.00
26	LA	160	A	N7-C8-N9	-8.87	109.37	113.80
26	LA	884	U	O4'-C1'-N1	8.87	115.29	108.20
26	LA	518	G	C5-C6-O6	-8.86	123.28	128.60
26	LA	2607	G	C8-N9-C1'	8.86	138.52	127.00
26	LA	1499	C	C5'-C4'-O4'	8.86	119.73	109.10
26	LA	2451	A	N9-C4-C5	8.86	109.34	105.80
26	LA	2844	G	C5'-C4'-O4'	8.86	119.73	109.10
2	SA	104	G	O4'-C1'-N9	8.86	115.29	108.20
2	SA	183	C	O4'-C4'-C3'	8.86	113.19	106.10
2	SA	388	G	N3-C4-N9	8.86	131.32	126.00
2	SA	616	G	C8-N9-C4	8.86	109.94	106.40
2	SA	1167	A	O4'-C1'-N9	8.86	115.29	108.20
26	LA	676	A	N1-C6-N6	-8.86	113.28	118.60
26	LA	1088	A	C5-C6-N1	-8.86	113.27	117.70
50	LL	116	ARG	NE-CZ-NH1	8.86	124.73	120.30
2	SA	1271	A	N9-C4-C5	8.86	109.34	105.80
2	SA	1474	U	N1-C2-N3	-8.86	109.59	114.90
26	LA	348	A	N7-C8-N9	8.86	118.23	113.80
26	LA	1571	A	N9-C4-C5	8.86	109.34	105.80
26	LA	727	A	C8-N9-C4	-8.86	102.26	105.80
26	LA	881	G	P-O3'-C3'	8.86	130.33	119.70
26	LA	1016	G	C5-C6-O6	-8.86	123.29	128.60
26	LA	2242	G	C8-N9-C4	-8.86	102.86	106.40
29	LV	6	ARG	NE-CZ-NH1	8.86	124.73	120.30
2	SA	1306	A	P-O3'-C3'	-8.85	109.08	119.70
2	SA	127	G	C8-N9-C4	-8.85	102.86	106.40
2	SA	896	C	O4'-C1'-N1	8.85	115.28	108.20
2	SA	1015	G	N3-C4-C5	-8.85	124.17	128.60
26	LA	823	C	C5-C4-N4	-8.85	114.00	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1268	A	P-O3'-C3'	-8.85	109.08	119.70
26	LA	1098	A	N1-C6-N6	8.85	123.91	118.60
26	LA	2108	A	O4'-C1'-N9	8.85	115.28	108.20
2	SA	55	A	N9-C4-C5	-8.85	102.26	105.80
2	SA	178	C	C5'-C4'-O4'	8.85	119.72	109.10
2	SA	239	U	C5'-C4'-O4'	8.85	119.72	109.10
26	LA	201	C	C5-C6-N1	-8.85	116.58	121.00
2	SA	242	G	C6-N1-C2	8.85	130.41	125.10
2	SA	1428	A	C8-N9-C4	8.85	109.34	105.80
9	SI	129	ARG	NE-CZ-NH1	8.85	124.72	120.30
26	LA	401	A	C2-N3-C4	-8.85	106.18	110.60
26	LA	2360	G	N3-C4-N9	-8.85	120.69	126.00
26	LA	2643	G	N9-C4-C5	8.85	108.94	105.40
26	LA	2631	G	N1-C2-N2	-8.85	108.24	116.20
2	SA	381	C	O4'-C1'-N1	8.85	115.28	108.20
2	SA	423	G	C2-N3-C4	8.85	116.32	111.90
2	SA	998	C	C5-C4-N4	8.85	126.39	120.20
26	LA	618	G	C4-C5-N7	-8.85	107.26	110.80
2	SA	577	G	N3-C2-N2	8.85	126.09	119.90
2	SA	151	A	N7-C8-N9	8.84	118.22	113.80
26	LA	463	G	N3-C2-N2	8.84	126.09	119.90
2	SA	1233	G	C2-N3-C4	8.84	116.32	111.90
26	LA	279	A	O4'-C1'-N9	8.84	115.27	108.20
26	LA	380	G	C5-C6-N1	-8.84	107.08	111.50
26	LA	1428	C	P-O3'-C3'	-8.84	109.09	119.70
26	LA	2171	A	C8-N9-C4	-8.84	102.26	105.80
2	SA	1306	A	N1-C6-N6	8.84	123.90	118.60
15	SO	73	ASP	CB-CG-OD2	-8.84	110.34	118.30
26	LA	595	C	N3-C4-N4	8.84	124.19	118.00
26	LA	888	C	O4'-C1'-N1	8.84	115.27	108.20
52	LO	28	PHE	CB-CG-CD1	-8.84	114.61	120.80
26	LA	744	U	C5-C4-O4	-8.84	120.60	125.90
26	LA	791	C	O4'-C1'-N1	8.84	115.27	108.20
26	LA	1651	G	N9-C4-C5	-8.84	101.86	105.40
26	LA	2043	C	C4-C5-C6	8.84	121.82	117.40
26	LA	246	C	C2-N1-C1'	-8.84	109.08	118.80
26	LA	1169	A	C2-N3-C4	8.84	115.02	110.60
26	LA	2785	C	C4-C5-C6	8.84	121.82	117.40
2	SA	195	A	C5-C6-N1	8.84	122.12	117.70
26	LA	849	A	C5'-C4'-C3'	-8.84	101.86	116.00
26	LA	2034	U	C6-N1-C2	-8.84	115.70	121.00
26	LA	2436	G	O4'-C1'-N9	8.84	115.27	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	455	G	C5-N7-C8	-8.83	99.88	104.30
2	SA	1031	C	N3-C4-C5	-8.83	118.37	121.90
24	S3	150	PHE	CB-CG-CD1	-8.83	114.62	120.80
26	LA	306	U	N3-C4-O4	8.83	125.58	119.40
2	SA	719	C	P-O3'-C3'	-8.83	109.10	119.70
2	SA	1493	A	N1-C6-N6	-8.83	113.30	118.60
26	LA	589	U	N3-C2-O2	8.83	128.38	122.20
2	SA	225	C	C4'-C3'-C2'	-8.83	93.77	102.60
26	LA	1797	G	C6-N1-C2	-8.83	119.80	125.10
2	SA	1142	G	N1-C6-O6	8.83	125.20	119.90
2	SA	1259	C	O4'-C1'-N1	8.83	115.26	108.20
26	LA	1531	C	C5-C4-N4	8.83	126.38	120.20
26	LA	2334	U	C2-N3-C4	-8.83	121.70	127.00
26	LA	1571	A	C6-N1-C2	-8.83	113.30	118.60
2	SA	444	G	P-O3'-C3'	-8.83	109.11	119.70
26	LA	1203	U	N3-C4-C5	-8.83	109.30	114.60
26	LA	1231	U	O5'-P-OP1	-8.83	97.75	105.70
26	LA	1510	G	C5'-C4'-C3'	-8.83	101.88	116.00
26	LA	2006	C	O4'-C1'-N1	8.83	115.26	108.20
2	SA	222	C	C4-C5-C6	-8.82	112.99	117.40
2	SA	311	C	C5-C4-N4	-8.82	114.02	120.20
26	LA	862	G	N1-C2-N2	-8.82	108.26	116.20
26	LA	2661	G	N3-C4-C5	8.82	133.01	128.60
26	LA	9	G	N1-C6-O6	8.82	125.19	119.90
26	LA	1827	U	N1-C2-N3	8.82	120.19	114.90
2	SA	172	A	N7-C8-N9	8.82	118.21	113.80
2	SA	203	G	C5-C6-O6	8.82	133.89	128.60
2	SA	489	C	P-O5'-C5'	8.82	135.01	120.90
26	LA	362	A	N9-C4-C5	8.82	109.33	105.80
26	LA	601	C	C1'-O4'-C4'	-8.82	102.84	109.90
26	LA	1245	G	C5'-C4'-O4'	8.82	119.69	109.10
26	LA	2186	G	C6-C5-N7	-8.82	125.11	130.40
2	SA	1441	A	C3'-C2'-C1'	8.82	108.56	101.50
17	SQ	56	ASP	CB-CG-OD1	8.82	126.24	118.30
26	LA	2159	G	P-O3'-C3'	8.82	130.28	119.70
2	SA	143	A	O4'-C1'-N9	8.82	115.25	108.20
2	SA	1434	A	C5-C6-N1	-8.82	113.29	117.70
24	S3	145	ARG	NE-CZ-NH2	8.82	124.71	120.30
26	LA	106	C	O4'-C1'-N1	8.82	115.25	108.20
26	LA	322	A	C5'-C4'-C3'	8.82	130.11	116.00
26	LA	542	C	O4'-C1'-N1	8.82	115.25	108.20
2	SA	716	A	C4-C5-C6	-8.81	112.59	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1647	U	C2'-C3'-O3'	8.81	128.89	109.50
2	SA	836	G	C5'-C4'-C3'	8.81	130.10	116.00
2	SA	1267	C	C6-N1-C1'	-8.81	110.22	120.80
26	LA	1813	G	C6-N1-C2	-8.81	119.81	125.10
26	LA	47	C	O4'-C1'-N1	8.81	115.25	108.20
26	LA	273	G	P-O3'-C3'	8.81	130.27	119.70
26	LA	849	A	N1-C6-N6	8.81	123.89	118.60
26	LA	1655	A	C5-C6-N6	-8.81	116.65	123.70
26	LA	201	C	N1-C2-N3	8.81	125.37	119.20
26	LA	1966	A	C3'-C2'-C1'	8.81	108.55	101.50
48	LN	66	PHE	CB-CG-CD1	-8.81	114.63	120.80
2	SA	551	U	C2-N3-C4	8.81	132.28	127.00
26	LA	172	A	O4'-C1'-N9	8.81	115.25	108.20
26	LA	808	G	N1-C2-N2	-8.81	108.27	116.20
26	LA	2729	G	N1-C6-O6	8.81	125.19	119.90
2	SA	1203	C	O4'-C1'-N1	8.81	115.25	108.20
26	LA	1932	A	N7-C8-N9	-8.81	109.40	113.80
2	SA	666	G	C5-C6-O6	-8.81	123.32	128.60
2	SA	292	G	N1-C2-N3	8.80	129.18	123.90
2	SA	602	A	C5-C6-N6	-8.80	116.66	123.70
2	SA	818	G	N9-C4-C5	-8.80	101.88	105.40
4	S2	75	C	C6-N1-C2	-8.80	116.78	120.30
26	LA	366	C	N3-C2-O2	-8.80	115.74	121.90
26	LA	552	U	O4'-C1'-N1	8.80	115.24	108.20
26	LA	1448	G	N9-C4-C5	-8.80	101.88	105.40
26	LA	1499	C	C5-C4-N4	-8.80	114.04	120.20
26	LA	2106	U	P-O3'-C3'	8.80	130.26	119.70
2	SA	753	A	P-O3'-C3'	-8.80	109.14	119.70
2	SA	1106	G	O4'-C1'-N9	8.80	115.24	108.20
2	SA	1290	G	N7-C8-N9	-8.80	108.70	113.10
2	SA	1490	U	C2-N3-C4	-8.80	121.72	127.00
2	SA	1534	A	P-O3'-C3'	8.80	130.26	119.70
26	LA	235	U	P-O3'-C3'	8.80	130.26	119.70
26	LA	1585	C	O4'-C1'-N1	8.80	115.24	108.20
2	SA	86	G	O4'-C1'-N9	8.80	115.24	108.20
2	SA	311	C	N3-C4-N4	8.80	124.16	118.00
26	LA	712	G	N1-C6-O6	8.80	125.18	119.90
26	LA	2149	U	N3-C2-O2	-8.80	116.04	122.20
2	SA	476	U	C5'-C4'-C3'	-8.80	101.92	116.00
2	SA	1365	G	C5-C6-O6	8.80	133.88	128.60
26	LA	140	C	C6-N1-C2	-8.80	116.78	120.30
26	LA	341	C	N3-C4-N4	-8.80	111.84	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1088	A	C6-C5-N7	-8.80	126.14	132.30
26	LA	1765	U	O4'-C1'-N1	8.80	115.24	108.20
26	LA	2554	U	O4'-C1'-N1	8.80	115.24	108.20
26	LA	2715	C	N3-C4-C5	-8.80	118.38	121.90
4	S2	54	G	C5-C6-O6	-8.80	123.32	128.60
26	LA	111	A	C5'-C4'-C3'	-8.80	101.93	116.00
26	LA	1148	U	C6-N1-C2	-8.80	115.72	121.00
26	LA	1681	G	P-O3'-C3'	-8.80	109.14	119.70
26	LA	2451	A	C4-C5-N7	-8.80	106.30	110.70
2	SA	451	A	N9-C4-C5	-8.79	102.28	105.80
2	SA	1035	A	C5-C6-N6	-8.79	116.67	123.70
26	LA	1056	G	C8-N9-C1'	8.79	138.43	127.00
2	SA	26	A	C8-N9-C4	-8.79	102.28	105.80
2	SA	107	G	C5-C6-O6	-8.79	123.33	128.60
2	SA	994	A	C8-N9-C4	-8.79	102.28	105.80
2	SA	1122	U	O4'-C1'-N1	8.79	115.23	108.20
26	LA	50	U	O4'-C1'-N1	8.79	115.23	108.20
2	SA	1163	A	C2-N3-C4	-8.79	106.20	110.60
2	SA	1282	C	N3-C4-C5	-8.79	118.38	121.90
26	LA	99	U	O4'-C1'-N1	8.79	115.23	108.20
26	LA	1061	U	C4-C5-C6	-8.79	114.42	119.70
26	LA	1669	A	C6-N1-C2	-8.79	113.33	118.60
26	LA	2008	C	N3-C4-C5	-8.79	118.38	121.90
2	SA	1448	C	O4'-C1'-N1	8.79	115.23	108.20
26	LA	1906	G	C1'-O4'-C4'	-8.79	102.87	109.90
26	LA	2447	G	P-O3'-C3'	8.79	130.25	119.70
2	SA	207	C	C6-N1-C2	-8.79	116.78	120.30
2	SA	1392	G	C4-C5-N7	8.79	114.31	110.80
2	SA	1466	C	N1-C2-O2	8.79	124.17	118.90
26	LA	675	A	N7-C8-N9	-8.79	109.41	113.80
26	LA	1276	A	C5-C6-N6	-8.79	116.67	123.70
2	SA	1221	G	C5-C6-O6	-8.79	123.33	128.60
2	SA	1230	C	C5-C6-N1	8.79	125.39	121.00
26	LA	972	A	C5-C6-N6	-8.78	116.67	123.70
26	LA	1086	A	N9-C4-C5	8.79	109.31	105.80
26	LA	1862	G	C8-N9-C4	8.79	109.91	106.40
26	LA	2579	C	O4'-C1'-N1	8.79	115.23	108.20
26	LA	2656	U	C6-N1-C1'	8.79	133.50	121.20
2	SA	1453	G	P-O3'-C3'	8.78	130.24	119.70
2	SA	1154	G	N3-C4-C5	-8.78	124.21	128.60
26	LA	508	A	C2-N3-C4	8.78	114.99	110.60
26	LA	774	G	C4-C5-N7	8.78	114.31	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2220	U	O4'-C1'-N1	8.78	115.22	108.20
26	LA	2802	G	C3'-C2'-C1'	-8.78	94.47	101.50
2	SA	1133	G	C6-N1-C2	-8.78	119.83	125.10
46	LH	108	PHE	CB-CG-CD2	8.78	126.95	120.80
2	SA	1282	C	C5-C4-N4	8.78	126.34	120.20
26	LA	624	C	O4'-C1'-N1	8.78	115.22	108.20
26	LA	1475	G	P-O3'-C3'	-8.78	109.17	119.70
26	LA	2151	U	N1-C2-N3	8.78	120.17	114.90
26	LA	2762	C	N3-C4-N4	-8.78	111.85	118.00
26	LA	2829	A	N7-C8-N9	-8.78	109.41	113.80
26	LA	2267	A	C8-N9-C4	8.78	109.31	105.80
2	SA	792	A	N9-C4-C5	-8.78	102.29	105.80
2	SA	1199	U	N3-C4-O4	-8.78	113.26	119.40
25	LB	68	C	C5'-C4'-C3'	-8.78	101.96	116.00
26	LA	92	U	C5-C6-N1	8.78	127.09	122.70
26	LA	98	G	C5-C6-N1	8.78	115.89	111.50
25	LB	119	A	N9-C4-C5	-8.77	102.29	105.80
26	LA	931	U	C2-N1-C1'	8.77	128.23	117.70
26	LA	1012	U	C1'-O4'-C4'	-8.77	102.88	109.90
26	LA	1886	U	C2-N3-C4	-8.77	121.73	127.00
26	LA	2156	G	C5-N7-C8	8.77	108.69	104.30
26	LA	2377	A	C5-C6-N6	8.77	130.72	123.70
38	LE	161	MET	CG-SD-CE	-8.77	86.16	100.20
2	SA	87	C	O4'-C1'-N1	8.77	115.22	108.20
26	LA	2556	C	C6-N1-C2	-8.77	116.79	120.30
2	SA	784	A	C8-N9-C4	-8.77	102.29	105.80
2	SA	1227	A	N9-C4-C5	-8.77	102.29	105.80
2	SA	1438	G	N1-C2-N3	8.77	129.16	123.90
26	LA	472	A	C3'-C2'-C1'	-8.77	94.48	101.50
2	SA	381	C	N3-C4-N4	-8.77	111.86	118.00
26	LA	19	A	N3-C4-N9	-8.77	120.39	127.40
35	L1	10	ARG	NE-CZ-NH1	8.77	124.69	120.30
50	LL	120	ARG	NE-CZ-NH2	8.77	124.68	120.30
26	LA	881	G	O4'-C1'-N9	8.77	115.21	108.20
26	LA	1604	C	N3-C2-O2	-8.77	115.76	121.90
26	LA	1664	A	O4'-C1'-N9	8.77	115.21	108.20
26	LA	2761	A	C5-C6-N6	8.77	130.71	123.70
26	LA	1925	C	C5'-C4'-C3'	-8.77	101.98	116.00
2	SA	649	A	C5-C6-N1	8.76	122.08	117.70
26	LA	1346	G	O4'-C1'-N9	8.76	115.21	108.20
26	LA	2588	G	C5-C6-O6	-8.76	123.34	128.60
2	SA	931	C	N3-C2-O2	-8.76	115.77	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	448	A	N1-C6-N6	8.76	123.86	118.60
2	SA	1249	C	C4-C5-C6	8.76	121.78	117.40
26	LA	730	A	O5'-P-OP1	-8.76	97.82	105.70
26	LA	935	C	P-O5'-C5'	8.76	134.91	120.90
2	SA	163	C	O4'-C1'-N1	8.76	115.21	108.20
2	SA	669	G	N9-C4-C5	8.76	108.90	105.40
2	SA	842	U	C6-N1-C1'	-8.76	108.94	121.20
26	LA	1114	C	O4'-C1'-N1	8.76	115.20	108.20
26	LA	1219	U	O4'-C1'-N1	8.76	115.20	108.20
26	LA	1857	G	C2-N3-C4	-8.76	107.52	111.90
26	LA	2725	A	C3'-C2'-C1'	8.76	108.50	101.50
2	SA	632	U	O4'-C1'-N1	8.75	115.20	108.20
2	SA	819	A	O4'-C1'-C2'	-8.75	97.05	105.80
26	LA	801	G	N9-C4-C5	8.75	108.90	105.40
26	LA	1693	U	N1-C2-O2	-8.75	116.67	122.80
2	SA	1466	C	C2-N3-C4	8.75	124.28	119.90
26	LA	823	C	C5'-C4'-O4'	8.75	119.60	109.10
2	SA	250	A	C1'-O4'-C4'	-8.75	102.90	109.90
26	LA	795	C	C6-N1-C2	-8.75	116.80	120.30
26	LA	1022	G	N1-C6-O6	8.75	125.15	119.90
26	LA	1420	A	C1'-O4'-C4'	-8.75	102.90	109.90
26	LA	1507	C	C2-N3-C4	-8.75	115.53	119.90
2	SA	811	C	C2-N3-C4	-8.75	115.53	119.90
2	SA	923	A	C5-C6-N6	-8.75	116.70	123.70
2	SA	971	G	P-O3'-C3'	-8.75	109.20	119.70
2	SA	1234	C	C6-N1-C2	-8.75	116.80	120.30
4	S2	31	G	C4'-C3'-C2'	-8.75	93.85	102.60
25	LB	91	C	C2-N3-C4	8.75	124.27	119.90
26	LA	185	G	N7-C8-N9	-8.75	108.73	113.10
26	LA	348	A	O4'-C1'-N9	8.75	115.20	108.20
26	LA	2643	G	C8-N9-C4	-8.75	102.90	106.40
33	LZ	59	ASP	CB-CG-OD1	8.75	126.17	118.30
2	SA	495	A	C5-N7-C8	-8.74	99.53	103.90
26	LA	1573	G	P-O5'-C5'	8.74	134.89	120.90
26	LA	2758	A	C1'-O4'-C4'	-8.74	102.90	109.90
2	SA	1531	A	C6-N1-C2	8.74	123.85	118.60
26	LA	58	G	N3-C4-C5	-8.74	124.23	128.60
26	LA	1565	C	N3-C4-N4	8.74	124.12	118.00
26	LA	1907	G	C2-N3-C4	8.74	116.27	111.90
2	SA	1012	A	P-O3'-C3'	-8.74	109.21	119.70
26	LA	1979	U	N1-C2-N3	8.74	120.14	114.90
26	LA	978	G	N9-C4-C5	-8.74	101.91	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2039	U	C5-C4-O4	-8.74	120.66	125.90
26	LA	2174	C	O4'-C4'-C3'	-8.74	95.26	104.00
26	LA	2875	C	N1-C2-O2	8.74	124.14	118.90
26	LA	2796	U	C5-C4-O4	-8.74	120.66	125.90
2	SA	148	G	N1-C6-O6	8.74	125.14	119.90
2	SA	511	C	N3-C2-O2	-8.74	115.78	121.90
2	SA	899	C	N3-C4-N4	8.74	124.11	118.00
14	SN	80	ARG	NE-CZ-NH1	8.74	124.67	120.30
26	LA	977	G	N1-C2-N2	-8.74	108.34	116.20
26	LA	1812	U	N3-C4-O4	8.74	125.52	119.40
26	LA	2536	G	C5-C6-O6	-8.74	123.36	128.60
2	SA	575	G	C5-C6-O6	-8.73	123.36	128.60
2	SA	1395	C	C5'-C4'-O4'	8.73	119.58	109.10
26	LA	27	G	C4-C5-N7	-8.73	107.31	110.80
26	LA	1923	U	N3-C4-C5	-8.73	109.36	114.60
26	LA	2060	A	N1-C2-N3	8.73	133.67	129.30
26	LA	2353	G	N7-C8-N9	-8.73	108.73	113.10
26	LA	2437	G	C5'-C4'-O4'	8.73	119.58	109.10
26	LA	2589	A	N1-C2-N3	8.73	133.67	129.30
2	SA	616	G	C4-C5-N7	-8.73	107.31	110.80
2	SA	1063	C	C5-C4-N4	-8.73	114.09	120.20
22	SF	45	ARG	NE-CZ-NH2	-8.73	115.93	120.30
26	LA	563	A	N1-C6-N6	-8.73	113.36	118.60
26	LA	911	A	C5-C6-N1	-8.73	113.33	117.70
26	LA	1944	U	P-O3'-C3'	-8.73	109.22	119.70
56	LR	42	PHE	CB-CG-CD1	-8.73	114.69	120.80
26	LA	2690	U	N3-C2-O2	-8.73	116.09	122.20
49	LK	115	ASP	CB-CG-OD2	-8.73	110.44	118.30
4	S2	37	U	N1-C2-N3	8.73	120.14	114.90
8	SH	79	ARG	NE-CZ-NH2	8.73	124.67	120.30
26	LA	1428	C	C5-C6-N1	-8.73	116.64	121.00
26	LA	1861	G	O4'-C1'-N9	8.73	115.18	108.20
26	LA	2001	C	C5-C4-N4	-8.73	114.09	120.20
26	LA	2198	A	P-O3'-C3'	8.73	130.18	119.70
26	LA	1933	G	C4-C5-N7	-8.73	107.31	110.80
26	LA	2427	C	N3-C2-O2	-8.73	115.79	121.90
2	SA	1142	G	C5-C6-N1	-8.72	107.14	111.50
26	LA	2226	C	N3-C4-C5	-8.72	118.41	121.90
2	SA	362	G	N1-C6-O6	8.72	125.13	119.90
26	LA	458	G	C8-N9-C4	8.72	109.89	106.40
26	LA	704	G	C2'-C3'-O3'	8.72	128.69	109.50
2	SA	171	A	P-O3'-C3'	8.72	130.17	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	534	U	O4'-C1'-N1	8.72	115.18	108.20
26	LA	106	C	N3-C4-N4	-8.72	111.89	118.00
26	LA	313	G	C5-C6-N1	8.72	115.86	111.50
26	LA	64	A	N9-C4-C5	8.72	109.29	105.80
26	LA	1543	G	C5'-C4'-C3'	-8.72	102.05	116.00
2	SA	381	C	C5-C4-N4	8.72	126.30	120.20
2	SA	940	C	O4'-C1'-N1	8.72	115.17	108.20
2	SA	1024	G	C5-C6-O6	-8.72	123.37	128.60
26	LA	568	U	P-O5'-C5'	-8.72	106.95	120.90
26	LA	1302	A	O4'-C1'-N9	8.72	115.17	108.20
26	LA	568	U	C6-N1-C2	-8.72	115.77	121.00
26	LA	1962	C	C5-C6-N1	-8.72	116.64	121.00
2	SA	769	G	N1-C2-N2	-8.72	108.36	116.20
26	LA	1720	U	C5-C6-N1	8.72	127.06	122.70
2	SA	90	C	C5-C6-N1	8.71	125.36	121.00
3	S1	56	G	C8-N9-C1'	-8.71	115.67	127.00
26	LA	1097	U	P-O3'-C3'	8.71	130.16	119.70
2	SA	527	G	N1-C6-O6	-8.71	114.67	119.90
2	SA	688	G	N3-C4-C5	-8.71	124.24	128.60
26	LA	1214	A	C2-N3-C4	8.71	114.96	110.60
26	LA	1869	G	C4-C5-N7	-8.71	107.31	110.80
26	LA	2114	A	N1-C2-N3	-8.71	124.94	129.30
1	SS	73	PHE	CB-CG-CD1	-8.71	114.70	120.80
2	SA	163	C	C5-C6-N1	-8.71	116.64	121.00
2	SA	928	G	N1-C6-O6	8.71	125.13	119.90
25	LB	91	C	P-O3'-C3'	8.71	130.15	119.70
26	LA	1965	C	C5'-C4'-C3'	-8.71	102.06	116.00
26	LA	2344	U	N1-C2-O2	8.71	128.90	122.80
26	LA	362	A	C5'-C4'-C3'	-8.71	102.06	116.00
2	SA	294	U	C2-N3-C4	-8.71	121.78	127.00
2	SA	1152	A	C5-C6-N1	-8.71	113.35	117.70
2	SA	1403	C	O4'-C1'-N1	8.71	115.17	108.20
2	SA	1420	U	C5'-C4'-O4'	8.71	119.55	109.10
25	LB	14	U	O4'-C1'-C2'	-8.71	97.09	105.80
26	LA	875	G	C4-C5-N7	-8.71	107.32	110.80
26	LA	2754	U	N1-C2-N3	8.71	120.12	114.90
2	SA	538	G	N3-C4-C5	-8.71	124.25	128.60
26	LA	643	A	N1-C2-N3	-8.71	124.95	129.30
2	SA	166	U	C1'-O4'-C4'	-8.70	102.94	109.90
11	SK	8	ARG	NE-CZ-NH2	-8.71	115.95	120.30
26	LA	2160	C	P-O3'-C3'	8.71	130.15	119.70
26	LA	2281	A	P-O3'-C3'	-8.71	109.25	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2310	C	N3-C2-O2	-8.70	115.81	121.90
26	LA	2328	A	C6-C5-N7	8.70	138.39	132.30
26	LA	2443	C	C3'-C2'-C1'	8.70	108.46	101.50
26	LA	2581	G	C4'-C3'-C2'	-8.70	93.90	102.60
26	LA	2727	A	C5'-C4'-O4'	8.70	119.54	109.10
2	SA	1321	U	O4'-C1'-N1	8.70	115.16	108.20
26	LA	663	G	C5-C6-O6	-8.70	123.38	128.60
24	S3	70	PHE	CB-CG-CD1	8.70	126.89	120.80
26	LA	2230	G	O4'-C1'-N9	8.70	115.16	108.20
26	LA	2574	G	O4'-C1'-N9	8.70	115.16	108.20
2	SA	415	A	N1-C6-N6	-8.70	113.38	118.60
2	SA	1057	G	P-O3'-C3'	-8.70	109.26	119.70
4	S2	39	A	N1-C6-N6	8.70	123.82	118.60
26	LA	552	U	N3-C2-O2	8.70	128.29	122.20
26	LA	892	A	C4-C5-C6	8.70	121.35	117.00
26	LA	1433	A	N1-C6-N6	8.70	123.82	118.60
2	SA	60	A	C5-N7-C8	8.70	108.25	103.90
2	SA	1112	C	C3'-C2'-C1'	8.70	108.46	101.50
2	SA	1296	C	C1'-O4'-C4'	-8.70	102.94	109.90
26	LA	603	A	C8-N9-C4	-8.70	102.32	105.80
26	LA	735	A	C5'-C4'-O4'	8.70	119.53	109.10
26	LA	972	A	N9-C4-C5	8.70	109.28	105.80
43	L7	20	ASP	CB-CG-OD2	-8.70	110.47	118.30
26	LA	942	G	N1-C6-O6	8.70	125.12	119.90
26	LA	1012	U	N1-C1'-C2'	8.70	125.30	114.00
26	LA	1564	C	C2-N3-C4	-8.70	115.55	119.90
26	LA	2355	G	O4'-C1'-N9	8.70	115.16	108.20
26	LA	2778	A	C5-C6-N1	-8.70	113.35	117.70
53	LP	112	TYR	CB-CG-CD2	8.69	126.22	121.00
55	LQ	33	ARG	NE-CZ-NH2	-8.69	115.95	120.30
2	SA	1410	A	O4'-C1'-N9	8.69	115.15	108.20
26	LA	37	C	N3-C2-O2	-8.69	115.81	121.90
26	LA	406	G	C6-N1-C2	-8.69	119.89	125.10
26	LA	679	C	N3-C2-O2	-8.69	115.81	121.90
26	LA	2371	G	N7-C8-N9	8.69	117.45	113.10
26	LA	2667	C	P-O5'-C5'	8.69	134.81	120.90
26	LA	2834	G	C6-C5-N7	-8.69	125.19	130.40
26	LA	2879	A	C5-C6-N1	-8.69	113.36	117.70
2	SA	125	U	N3-C4-C5	8.69	119.81	114.60
2	SA	565	U	C5'-C4'-C3'	8.69	129.90	116.00
26	LA	877	A	P-O3'-C3'	8.69	130.13	119.70
26	LA	2123	G	P-O5'-C5'	8.69	134.80	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	668	G	C4-C5-C6	-8.69	113.59	118.80
2	SA	732	C	O4'-C1'-N1	8.69	115.15	108.20
2	SA	841	C	N3-C4-C5	-8.69	118.42	121.90
25	LB	27	C	C1'-O4'-C4'	-8.69	102.95	109.90
26	LA	1024	G	N3-C2-N2	8.69	125.98	119.90
26	LA	1556	C	C5-C4-N4	8.69	126.28	120.20
26	LA	1667	G	N1-C6-O6	8.69	125.11	119.90
2	SA	1330	U	C2-N3-C4	-8.69	121.79	127.00
26	LA	1210	G	C6-C5-N7	-8.69	125.19	130.40
26	LA	504	A	C5-N7-C8	-8.69	99.56	103.90
26	LA	651	G	N1-C6-O6	8.69	125.11	119.90
26	LA	675	A	C5'-C4'-C3'	-8.69	102.10	116.00
26	LA	1969	A	N9-C4-C5	-8.69	102.33	105.80
34	L0	47	ARG	NE-CZ-NH1	8.69	124.64	120.30
2	SA	46	G	C5-C6-N1	8.68	115.84	111.50
2	SA	907	A	O4'-C1'-N9	8.68	115.15	108.20
2	SA	160	A	N1-C2-N3	-8.68	124.96	129.30
26	LA	1606	C	N3-C4-C5	-8.68	118.43	121.90
26	LA	1722	A	N1-C2-N3	8.68	133.64	129.30
26	LA	1929	G	N1-C6-O6	8.68	125.11	119.90
26	LA	2357	G	C4'-C3'-C2'	-8.68	93.92	102.60
26	LA	2456	C	N1-C2-O2	8.68	124.11	118.90
2	SA	134	G	N1-C6-O6	8.68	125.11	119.90
2	SA	1346	A	N1-C6-N6	8.68	123.81	118.60
26	LA	349	U	C3'-C2'-C1'	-8.68	94.56	101.50
2	SA	514	C	N3-C4-C5	-8.68	118.43	121.90
2	SA	1422	G	N3-C4-C5	-8.68	124.26	128.60
25	LB	65	U	P-O3'-C3'	8.68	130.11	119.70
26	LA	2360	G	N9-C4-C5	8.68	108.87	105.40
48	LN	78	ARG	NE-CZ-NH2	-8.68	115.96	120.30
2	SA	1447	A	N9-C4-C5	-8.68	102.33	105.80
17	SQ	10	ARG	NE-CZ-NH2	-8.68	115.96	120.30
2	SA	211	G	N1-C2-N2	-8.67	108.39	116.20
2	SA	1169	A	O4'-C1'-N9	8.67	115.14	108.20
2	SA	72	A	O4'-C1'-N9	8.67	115.14	108.20
2	SA	765	G	O4'-C1'-N9	8.67	115.14	108.20
2	SA	820	U	C5-C6-N1	-8.67	118.36	122.70
2	SA	946	A	C8-N9-C4	-8.67	102.33	105.80
2	SA	1022	A	C5-C6-N1	8.67	122.04	117.70
2	SA	1134	G	C2-N3-C4	8.67	116.24	111.90
25	LB	81	G	N3-C2-N2	8.67	125.97	119.90
26	LA	2298	A	C5'-C4'-O4'	8.67	119.51	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	645	C	N3-C2-O2	-8.67	115.83	121.90
26	LA	727	A	C6-N1-C2	-8.67	113.40	118.60
26	LA	932	U	C3'-C2'-C1'	8.67	108.44	101.50
26	LA	990	A	N9-C4-C5	8.67	109.27	105.80
26	LA	1718	G	C4-C5-N7	-8.67	107.33	110.80
26	LA	2289	G	C5-N7-C8	-8.67	99.97	104.30
26	LA	2574	G	C4-C5-N7	8.67	114.27	110.80
26	LA	2702	G	C5-C6-O6	-8.67	123.40	128.60
2	SA	437	U	O5'-P-OP2	-8.67	97.90	105.70
2	SA	1426	G	N3-C4-N9	8.67	131.20	126.00
26	LA	2269	G	N1-C6-O6	-8.67	114.70	119.90
26	LA	2456	C	C6-N1-C2	-8.67	116.83	120.30
26	LA	2602	A	C5-C6-N6	-8.67	116.77	123.70
2	SA	1468	A	C4-C5-N7	8.66	115.03	110.70
4	S2	65	G	N3-C4-C5	-8.66	124.27	128.60
25	LB	69	G	C5-C6-N1	8.66	115.83	111.50
26	LA	1801	A	C5-C6-N6	8.66	130.63	123.70
26	LA	2184	A	N9-C4-C5	-8.66	102.33	105.80
2	SA	337	G	C6-C5-N7	-8.66	125.20	130.40
26	LA	819	A	C8-N9-C4	8.66	109.27	105.80
26	LA	998	C	C6-N1-C2	-8.66	116.83	120.30
26	LA	2373	G	C4-C5-C6	-8.66	113.60	118.80
26	LA	1978	A	N9-C4-C5	8.66	109.27	105.80
26	LA	2247	A	N7-C8-N9	8.66	118.13	113.80
26	LA	2781	A	N1-C2-N3	8.66	133.63	129.30
26	LA	1186	G	O4'-C1'-N9	8.66	115.13	108.20
1	SS	77	ARG	NH1-CZ-NH2	-8.66	109.88	119.40
2	SA	441	A	C5'-C4'-O4'	8.66	119.49	109.10
26	LA	747	U	C2-N3-C4	-8.66	121.81	127.00
26	LA	2421	G	C8-N9-C4	8.66	109.86	106.40
26	LA	2631	G	C6-N1-C2	-8.66	119.90	125.10
2	SA	669	G	C8-N9-C4	-8.66	102.94	106.40
6	SU	16	ARG	NH1-CZ-NH2	-8.66	109.88	119.40
26	LA	648	G	C5-C6-O6	8.66	133.79	128.60
26	LA	1055	G	N9-C4-C5	8.66	108.86	105.40
26	LA	1448	G	C5-N7-C8	-8.66	99.97	104.30
26	LA	1493	C	C5-C6-N1	-8.66	116.67	121.00
26	LA	2352	A	C8-N9-C4	-8.66	102.34	105.80
26	LA	1101	U	O4'-C1'-N1	8.66	115.12	108.20
26	LA	2558	C	C5-C4-N4	-8.66	114.14	120.20
2	SA	124	C	C5'-C4'-O4'	8.65	119.49	109.10
2	SA	573	A	P-O3'-C3'	8.65	130.08	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1315	C	C5-C4-N4	8.65	126.26	120.20
26	LA	1342	A	N9-C4-C5	-8.65	102.34	105.80
2	SA	802	A	C6-N1-C2	-8.65	113.41	118.60
25	LB	108	A	N7-C8-N9	-8.65	109.47	113.80
26	LA	1266	G	C6-N1-C2	-8.65	119.91	125.10
26	LA	1879	C	N3-C4-C5	-8.65	118.44	121.90
26	LA	2254	C	C5'-C4'-O4'	8.65	119.48	109.10
2	SA	1539	C	O4'-C1'-N1	8.65	115.12	108.20
26	LA	2027	G	C5-C6-N1	8.65	115.83	111.50
26	LA	936	A	C2-N3-C4	-8.65	106.28	110.60
26	LA	2429	G	N1-C2-N3	-8.65	118.71	123.90
2	SA	423	G	N1-C2-N3	-8.65	118.71	123.90
26	LA	1141	U	C5-C6-N1	8.65	127.02	122.70
26	LA	1284	A	C8-N9-C4	8.65	109.26	105.80
2	SA	602	A	C4-C5-C6	-8.64	112.68	117.00
26	LA	1207	C	C4'-C3'-C2'	-8.64	93.95	102.60
26	LA	1246	A	C5-C6-N6	8.64	130.62	123.70
26	LA	2356	U	N3-C2-O2	8.64	128.25	122.20
2	SA	569	C	O4'-C1'-N1	8.64	115.11	108.20
2	SA	975	A	N9-C4-C5	-8.64	102.34	105.80
26	LA	839	U	O4'-C1'-N1	8.64	115.11	108.20
26	LA	894	U	O4'-C1'-N1	8.64	115.11	108.20
26	LA	1210	G	N1-C6-O6	8.64	125.09	119.90
26	LA	2306	C	N3-C2-O2	-8.64	115.85	121.90
26	LA	2633	G	C4-C5-N7	8.64	114.26	110.80
2	SA	296	U	N1-C2-N3	8.64	120.08	114.90
2	SA	1078	U	N1-C2-N3	8.64	120.08	114.90
2	SA	1268	G	C2-N3-C4	8.64	116.22	111.90
26	LA	309	A	O4'-C1'-N9	8.64	115.11	108.20
26	LA	1263	U	P-O3'-C3'	8.64	130.07	119.70
26	LA	1766	G	N3-C4-C5	8.64	132.92	128.60
26	LA	1510	G	C5-C6-O6	-8.64	123.42	128.60
2	SA	59	A	C4-C5-C6	-8.64	112.68	117.00
2	SA	1530	G	C8-N9-C1'	-8.64	115.77	127.00
26	LA	1525	A	O4'-C1'-N9	8.64	115.11	108.20
2	SA	910	C	O4'-C1'-N1	8.64	115.11	108.20
2	SA	1109	C	C6-N1-C2	-8.64	116.84	120.30
26	LA	173	A	C5-N7-C8	-8.64	99.58	103.90
26	LA	188	G	N9-C4-C5	8.64	108.86	105.40
26	LA	327	G	N1-C6-O6	8.64	125.08	119.90
26	LA	1112	G	C8-N9-C4	-8.64	102.94	106.40
26	LA	331	C	C5-C6-N1	8.64	125.32	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1848	A	C5-C6-N1	-8.64	113.38	117.70
26	LA	2337	G	N3-C2-N2	8.64	125.94	119.90
2	SA	144	G	C5-C6-O6	-8.63	123.42	128.60
2	SA	746	A	C5'-C4'-C3'	-8.63	102.18	116.00
2	SA	908	A	N1-C2-N3	-8.63	124.98	129.30
3	S1	24	A	C5-N7-C8	-8.63	99.58	103.90
26	LA	471	A	C5'-C4'-O4'	8.63	119.46	109.10
26	LA	1505	A	C5-C6-N6	-8.63	116.79	123.70
26	LA	2171	A	C4-C5-N7	-8.63	106.38	110.70
26	LA	2553	G	N9-C4-C5	8.63	108.85	105.40
2	SA	811	C	C3'-C2'-C1'	8.63	108.41	101.50
2	SA	1290	G	C5-C6-O6	-8.63	123.42	128.60
2	SA	1294	G	C6-N1-C2	-8.63	119.92	125.10
2	SA	1347	G	O4'-C1'-N9	8.63	115.11	108.20
2	SA	1393	U	O4'-C1'-N1	8.63	115.11	108.20
26	LA	1202	G	C5-C6-O6	-8.63	123.42	128.60
26	LA	1988	G	O4'-C1'-N9	8.63	115.11	108.20
33	LZ	2	ARG	NE-CZ-NH2	8.63	124.62	120.30
50	LL	96	ARG	NE-CZ-NH2	8.63	124.62	120.30
2	SA	830	G	C5'-C4'-O4'	8.63	119.45	109.10
25	LB	56	G	C8-N9-C4	-8.63	102.95	106.40
26	LA	183	C	C6-N1-C2	-8.63	116.85	120.30
26	LA	1900	A	N7-C8-N9	-8.63	109.48	113.80
26	LA	2120	G	C8-N9-C1'	-8.63	115.78	127.00
26	LA	2427	C	O4'-C1'-N1	8.63	115.10	108.20
26	LA	1414	C	O4'-C1'-N1	8.63	115.10	108.20
2	SA	131	A	N7-C8-N9	-8.63	109.49	113.80
2	SA	1111	A	C4-C5-C6	-8.63	112.69	117.00
2	SA	1483	A	N1-C2-N3	8.63	133.61	129.30
26	LA	396	G	N1-C6-O6	8.63	125.08	119.90
26	LA	798	G	C5'-C4'-C3'	-8.63	102.19	116.00
26	LA	850	U	O4'-C1'-N1	8.63	115.10	108.20
26	LA	2138	G	C2-N3-C4	8.63	116.21	111.90
26	LA	1359	A	O4'-C1'-N9	8.63	115.10	108.20
2	SA	348	G	C2-N3-C4	8.62	116.21	111.90
2	SA	376	G	C5-C6-O6	-8.62	123.42	128.60
2	SA	816	A	C4'-C3'-C2'	-8.62	93.97	102.60
8	SH	79	ARG	NE-CZ-NH1	-8.62	115.99	120.30
26	LA	987	C	C3'-C2'-C1'	8.63	108.40	101.50
26	LA	1071	G	P-O5'-C5'	8.62	134.70	120.90
2	SA	1092	A	N9-C4-C5	-8.62	102.35	105.80
2	SA	1524	C	N1-C2-N3	8.62	125.23	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	SP	60	TRP	CB-CG-CD2	-8.62	115.39	126.60
26	LA	260	G	C5-C6-N1	8.62	115.81	111.50
26	LA	351	C	N1-C2-O2	8.62	124.07	118.90
26	LA	670	A	C8-N9-C4	-8.62	102.35	105.80
26	LA	817	C	C5-C6-N1	8.62	125.31	121.00
26	LA	1138	G	C8-N9-C4	-8.62	102.95	106.40
26	LA	715	A	O4'-C1'-N9	8.62	115.10	108.20
26	LA	1455	G	C4-C5-N7	-8.62	107.35	110.80
26	LA	1733	G	O4'-C1'-N9	8.62	115.10	108.20
26	LA	1837	C	N1-C2-N3	8.62	125.23	119.20
26	LA	1932	A	N9-C4-C5	-8.62	102.35	105.80
26	LA	2656	U	C2-N1-C1'	-8.62	107.35	117.70
44	LF	21	ARG	NE-CZ-NH1	-8.62	115.99	120.30
2	SA	551	U	C6-N1-C2	8.62	126.17	121.00
26	LA	126	A	C1'-O4'-C4'	-8.62	103.00	109.90
26	LA	1860	G	C4-C5-N7	8.62	114.25	110.80
26	LA	2405	G	C8-N9-C4	8.62	109.85	106.40
2	SA	196	A	C5'-C4'-C3'	-8.62	102.21	116.00
2	SA	372	C	C2-N1-C1'	8.62	128.28	118.80
26	LA	2404	U	N3-C2-O2	-8.62	116.17	122.20
2	SA	442	G	C4-C5-N7	8.62	114.25	110.80
4	S2	19	G	P-O5'-C5'	8.62	134.69	120.90
26	LA	418	C	P-O3'-C3'	8.62	130.04	119.70
26	LA	515	A	C8-N9-C4	8.62	109.25	105.80
26	LA	745	G	O4'-C1'-N9	8.62	115.09	108.20
26	LA	774	G	C8-N9-C4	8.62	109.85	106.40
26	LA	820	A	N9-C4-C5	8.62	109.25	105.80
47	LJ	158	ARG	NE-CZ-NH2	-8.62	115.99	120.30
2	SA	473	U	C6-N1-C2	-8.62	115.83	121.00
26	LA	39	G	C6-N1-C2	-8.62	119.93	125.10
26	LA	1849	G	N3-C4-C5	8.62	132.91	128.60
2	SA	519	C	C3'-C2'-C1'	8.61	108.39	101.50
2	SA	740	U	C5'-C4'-O4'	8.61	119.44	109.10
2	SA	943	U	C4-C5-C6	-8.62	114.53	119.70
26	LA	1650	A	C2-N3-C4	8.62	114.91	110.60
26	LA	2772	C	C2-N3-C4	-8.62	115.59	119.90
26	LA	748	G	N3-C4-C5	-8.61	124.29	128.60
26	LA	1047	G	OP1-P-OP2	-8.61	106.68	119.60
26	LA	1283	G	N9-C4-C5	8.61	108.85	105.40
26	LA	1880	U	C6-N1-C2	-8.62	115.83	121.00
26	LA	2743	U	C6-N1-C2	8.61	126.17	121.00
2	SA	776	G	C6-N1-C2	-8.61	119.93	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	SK	92	ARG	NE-CZ-NH2	-8.61	115.99	120.30
26	LA	213	A	N7-C8-N9	-8.61	109.49	113.80
26	LA	1843	C	O4'-C1'-N1	8.61	115.09	108.20
26	LA	2453	A	N1-C6-N6	-8.61	113.43	118.60
26	LA	2502	G	P-O3'-C3'	8.61	130.03	119.70
26	LA	2837	A	O4'-C1'-N9	8.61	115.09	108.20
26	LA	108	G	N1-C6-O6	8.61	125.07	119.90
26	LA	472	A	C5-C6-N6	-8.61	116.81	123.70
26	LA	624	C	C4'-C3'-C2'	-8.61	93.99	102.60
26	LA	698	C	C5-C4-N4	-8.61	114.17	120.20
26	LA	2282	G	P-O3'-C3'	8.61	130.03	119.70
26	LA	2364	C	C2-N3-C4	-8.61	115.60	119.90
2	SA	931	C	C6-N1-C2	-8.61	116.86	120.30
26	LA	1036	G	O4'-C1'-N9	8.61	115.08	108.20
26	LA	1126	A	N9-C4-C5	-8.61	102.36	105.80
26	LA	1654	A	C2-N3-C4	-8.61	106.30	110.60
26	LA	1959	G	N1-C2-N3	8.61	129.06	123.90
2	SA	1484	C	O4'-C4'-C3'	-8.60	95.40	104.00
22	SF	110	ARG	NE-CZ-NH1	8.60	124.60	120.30
26	LA	413	C	N3-C4-N4	8.60	124.02	118.00
26	LA	1006	C	N3-C4-C5	-8.60	118.46	121.90
26	LA	1219	U	N3-C4-C5	-8.60	109.44	114.60
26	LA	1675	C	O4'-C1'-N1	8.60	115.08	108.20
26	LA	1948	G	P-O3'-C3'	-8.60	109.38	119.70
26	LA	2099	U	C5-C4-O4	8.60	131.06	125.90
2	SA	526	C	P-O3'-C3'	8.60	130.02	119.70
2	SA	1043	G	C8-N9-C4	8.60	109.84	106.40
26	LA	1706	C	C2-N3-C4	-8.60	115.60	119.90
26	LA	1736	U	C2-N3-C4	-8.60	121.84	127.00
26	LA	1935	G	C5-C6-O6	-8.60	123.44	128.60
26	LA	789	A	N1-C6-N6	8.60	123.76	118.60
26	LA	1540	G	N1-C6-O6	8.60	125.06	119.90
26	LA	2599	G	O4'-C1'-N9	8.60	115.08	108.20
2	SA	73	C	C2-N3-C4	-8.60	115.60	119.90
2	SA	686	U	O4'-C1'-C2'	-8.60	97.20	105.80
2	SA	742	G	C5'-C4'-C3'	-8.60	102.25	116.00
2	SA	1535	C	C2-N3-C4	8.60	124.20	119.90
26	LA	695	G	N7-C8-N9	-8.60	108.80	113.10
26	LA	721	A	C4-C5-C6	8.60	121.30	117.00
26	LA	981	A	N1-C6-N6	8.60	123.76	118.60
2	SA	372	C	C4'-C3'-C2'	8.59	111.19	102.60
26	LA	962	G	C5-N7-C8	-8.59	100.00	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1198	U	N3-C4-C5	8.59	119.76	114.60
26	LA	2684	U	C5'-C4'-O4'	8.59	119.41	109.10
26	LA	216	A	C5-C6-N6	8.59	130.57	123.70
26	LA	2692	G	O4'-C1'-N9	8.59	115.07	108.20
2	SA	1280	A	C2-N3-C4	8.59	114.89	110.60
26	LA	896	A	C1'-O4'-C4'	-8.59	103.03	109.90
26	LA	1382	G	C8-N9-C4	-8.59	102.96	106.40
26	LA	1661	G	C1'-O4'-C4'	-8.59	103.03	109.90
26	LA	1748	C	O4'-C1'-N1	8.59	115.07	108.20
2	SA	69	G	C5-N7-C8	8.59	108.59	104.30
2	SA	727	G	C4-C5-N7	-8.59	107.36	110.80
3	S1	20	G	C4-N9-C1'	8.59	137.66	126.50
25	LB	55	U	C2-N1-C1'	-8.59	107.39	117.70
26	LA	1107	G	C5-N7-C8	-8.59	100.01	104.30
26	LA	1087	G	C5'-C4'-C3'	-8.59	102.26	116.00
26	LA	1112	G	C2-N3-C4	-8.59	107.61	111.90
26	LA	1235	G	C6-N1-C2	-8.59	119.95	125.10
26	LA	1246	A	O4'-C1'-N9	8.59	115.07	108.20
26	LA	1523	U	O4'-C1'-N1	8.59	115.07	108.20
26	LA	388	G	C6-N1-C2	-8.58	119.95	125.10
12	SL	30	ARG	NE-CZ-NH1	8.58	124.59	120.30
26	LA	2869	G	C2-N3-C4	-8.58	107.61	111.90
2	SA	42	G	C5-C6-N1	8.58	115.79	111.50
26	LA	84	A	P-O5'-C5'	-8.58	107.17	120.90
26	LA	708	G	N3-C4-C5	-8.58	124.31	128.60
26	LA	2209	G	N1-C2-N2	-8.58	108.48	116.20
2	SA	213	G	N1-C6-O6	8.58	125.05	119.90
2	SA	1054	C	C5'-C4'-O4'	8.58	119.39	109.10
16	SP	16	PHE	CB-CG-CD2	-8.58	114.80	120.80
43	L7	12	ARG	NE-CZ-NH2	-8.58	116.01	120.30
2	SA	485	U	C4'-C3'-C2'	-8.58	94.02	102.60
26	LA	1871	A	C4'-C3'-C2'	-8.58	94.02	102.60
2	SA	97	G	C5-N7-C8	8.58	108.59	104.30
2	SA	311	C	C6-N1-C2	-8.58	116.87	120.30
2	SA	806	C	O4'-C1'-N1	8.58	115.06	108.20
8	SH	76	ARG	NE-CZ-NH2	8.58	124.59	120.30
26	LA	274	C	C5'-C4'-C3'	-8.58	102.28	116.00
26	LA	535	G	C1'-O4'-C4'	-8.58	103.04	109.90
26	LA	592	A	C2-N3-C4	-8.58	106.31	110.60
2	SA	339	C	P-O3'-C3'	-8.57	109.41	119.70
2	SA	689	C	C5-C6-N1	8.57	125.29	121.00
26	LA	1239	G	C8-N9-C4	-8.57	102.97	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	SK	104	PHE	CB-CG-CD1	8.57	126.80	120.80
25	LB	53	A	C2-N3-C4	8.57	114.89	110.60
26	LA	46	G	C4'-C3'-C2'	-8.57	94.03	102.60
26	LA	936	A	N3-C4-C5	8.57	132.80	126.80
26	LA	659	G	C6-C5-N7	8.57	135.54	130.40
2	SA	679	C	C2-N3-C4	-8.57	115.62	119.90
2	SA	1485	U	N1-C2-N3	8.57	120.04	114.90
17	SQ	27	PHE	CB-CG-CD1	-8.57	114.80	120.80
26	LA	10	A	N1-C2-N3	8.57	133.58	129.30
26	LA	1290	C	C3'-C2'-C1'	8.57	108.35	101.50
26	LA	2431	U	N1-C2-N3	8.57	120.04	114.90
26	LA	908	C	N3-C4-C5	8.57	125.33	121.90
26	LA	2497	A	O4'-C1'-N9	8.57	115.05	108.20
26	LA	2515	C	O4'-C1'-N1	8.57	115.05	108.20
2	SA	1111	A	N1-C6-N6	-8.56	113.46	118.60
2	SA	485	U	O4'-C1'-C2'	-8.56	97.24	105.80
2	SA	550	G	N7-C8-N9	-8.56	108.82	113.10
26	LA	396	G	C5-C6-O6	-8.56	123.46	128.60
26	LA	1131	G	C8-N9-C4	8.56	109.83	106.40
26	LA	1344	U	P-O3'-C3'	-8.56	109.42	119.70
26	LA	1757	A	C6-N1-C2	-8.56	113.46	118.60
26	LA	2552	U	C2-N3-C4	-8.56	121.86	127.00
2	SA	424	G	C2-N3-C4	8.56	116.18	111.90
26	LA	231	A	P-O3'-C3'	8.56	129.97	119.70
26	LA	397	U	O4'-C1'-N1	8.56	115.05	108.20
26	LA	1287	A	O4'-C1'-N9	8.56	115.05	108.20
26	LA	2475	C	C6-N1-C2	-8.56	116.88	120.30
26	LA	2587	A	C5-C6-N6	8.56	130.55	123.70
2	SA	211	G	N7-C8-N9	8.56	117.38	113.10
2	SA	1207	G	C5-C6-N1	-8.56	107.22	111.50
2	SA	1398	A	N1-C6-N6	-8.56	113.46	118.60
26	LA	410	G	O4'-C1'-N9	8.56	115.05	108.20
26	LA	997	G	N1-C6-O6	8.56	125.03	119.90
26	LA	1559	U	O4'-C1'-N1	8.56	115.05	108.20
26	LA	1846	G	N3-C4-N9	-8.56	120.86	126.00
26	LA	1934	C	P-O3'-C3'	8.56	129.97	119.70
26	LA	2904	U	O4'-C1'-N1	8.56	115.05	108.20
26	LA	1343	G	C1'-O4'-C4'	-8.56	103.05	109.90
26	LA	1384	A	N9-C4-C5	8.56	109.22	105.80
5	ST	73	ARG	NE-CZ-NH1	8.56	124.58	120.30
26	LA	37	C	P-O3'-C3'	8.56	129.97	119.70
2	SA	625	U	C5-C4-O4	-8.55	120.77	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1223	C	C4-C5-C6	8.55	121.68	117.40
26	LA	2239	G	C2-N3-C4	-8.55	107.62	111.90
2	SA	1135	U	O4'-C1'-N1	8.55	115.04	108.20
2	SA	1467	C	P-O5'-C5'	8.55	134.58	120.90
22	SF	64	VAL	O-C-N	-8.55	109.01	122.70
24	S3	670	ARG	NE-CZ-NH2	8.55	124.58	120.30
26	LA	1348	C	C6-N1-C2	-8.55	116.88	120.30
26	LA	1892	C	O4'-C1'-N1	8.55	115.04	108.20
2	SA	976	G	N1-C6-O6	-8.55	114.77	119.90
2	SA	1535	C	O4'-C1'-N1	8.55	115.04	108.20
26	LA	170	U	O4'-C1'-N1	8.55	115.04	108.20
26	LA	530	G	C5-C6-N1	-8.55	107.22	111.50
26	LA	1615	C	C5-C4-N4	-8.55	114.21	120.20
26	LA	2401	U	C5-C4-O4	8.55	131.03	125.90
2	SA	858	G	C6-N1-C2	-8.55	119.97	125.10
26	LA	282	A	N9-C4-C5	-8.55	102.38	105.80
26	LA	1009	A	P-O3'-C3'	-8.55	109.44	119.70
26	LA	2074	U	N1-C2-N3	8.55	120.03	114.90
26	LA	2853	C	N3-C4-N4	8.55	123.98	118.00
2	SA	147	G	C2-N3-C4	-8.54	107.63	111.90
2	SA	379	C	C4-C5-C6	-8.54	113.13	117.40
2	SA	1347	G	C8-N9-C4	8.54	109.82	106.40
26	LA	1115	G	C5-C6-O6	-8.55	123.47	128.60
4	S2	65	G	C5-C6-O6	-8.54	123.47	128.60
26	LA	725	G	C4-C5-N7	8.54	114.22	110.80
26	LA	1148	U	N1-C2-O2	-8.54	116.82	122.80
26	LA	1725	U	C1'-O4'-C4'	-8.54	103.06	109.90
26	LA	1759	A	N9-C4-C5	-8.54	102.38	105.80
26	LA	1765	U	N3-C4-O4	8.54	125.38	119.40
26	LA	2797	U	C4-C5-C6	8.54	124.83	119.70
2	SA	185	U	N3-C2-O2	-8.54	116.22	122.20
2	SA	892	A	C5-C6-N6	-8.54	116.87	123.70
26	LA	780	G	N3-C2-N2	8.54	125.88	119.90
26	LA	812	C	N3-C2-O2	-8.54	115.92	121.90
26	LA	937	C	C5-C6-N1	8.54	125.27	121.00
26	LA	1014	A	C6-N1-C2	-8.54	113.47	118.60
26	LA	1239	G	C5'-C4'-O4'	8.54	119.35	109.10
26	LA	1931	U	O4'-C1'-N1	8.54	115.03	108.20
2	SA	52	C	N3-C4-N4	-8.54	112.02	118.00
2	SA	251	G	C4-C5-N7	-8.54	107.38	110.80
2	SA	525	C	O4'-C1'-N1	8.54	115.03	108.20
2	SA	1062	U	C2-N3-C4	-8.54	121.88	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1291	U	C3'-C2'-C1'	8.54	108.33	101.50
2	SA	1534	A	C8-N9-C4	-8.54	102.38	105.80
26	LA	79	C	N3-C4-C5	-8.54	118.48	121.90
26	LA	348	A	C6-C5-N7	-8.54	126.32	132.30
26	LA	2461	A	C5-C6-N1	8.54	121.97	117.70
26	LA	473	G	N9-C4-C5	-8.54	101.98	105.40
26	LA	747	U	C4-C5-C6	-8.54	114.58	119.70
26	LA	935	C	C5-C6-N1	8.54	125.27	121.00
26	LA	1794	A	C5-N7-C8	8.54	108.17	103.90
26	LA	2031	A	C2-N3-C4	8.54	114.87	110.60
26	LA	2364	C	O4'-C1'-N1	8.54	115.03	108.20
2	SA	463	U	C5-C4-O4	-8.54	120.78	125.90
26	LA	295	G	C2-N3-C4	8.54	116.17	111.90
26	LA	340	A	C5-C6-N6	8.54	130.53	123.70
26	LA	612	G	C5-C6-N1	-8.54	107.23	111.50
2	SA	399	G	C5-N7-C8	-8.53	100.03	104.30
2	SA	1082	A	C5-C6-N6	8.53	130.53	123.70
2	SA	1520	C	O4'-C1'-N1	8.53	115.03	108.20
25	LB	45	A	N1-C6-N6	8.53	123.72	118.60
26	LA	989	G	C5-C6-O6	8.54	133.72	128.60
26	LA	1000	A	C6-N1-C2	-8.54	113.48	118.60
26	LA	1992	G	N3-C2-N2	-8.54	113.92	119.90
33	LZ	36	ARG	NE-CZ-NH1	-8.53	116.03	120.30
2	SA	153	C	C5-C4-N4	-8.53	114.23	120.20
2	SA	669	G	C5-C6-O6	-8.53	123.48	128.60
2	SA	17	U	O4'-C1'-N1	8.53	115.03	108.20
2	SA	978	A	C4-C5-C6	-8.53	112.73	117.00
4	S2	68	C	C5'-C4'-C3'	8.53	129.65	116.00
26	LA	368	A	C8-N9-C4	8.53	109.21	105.80
26	LA	763	G	C4-C5-N7	8.53	114.21	110.80
26	LA	1624	U	C1'-O4'-C4'	-8.53	103.08	109.90
26	LA	1743	G	C4'-C3'-C2'	-8.53	94.07	102.60
26	LA	2307	G	C8-N9-C4	-8.53	102.99	106.40
26	LA	2823	A	N7-C8-N9	-8.53	109.53	113.80
2	SA	154	U	P-O5'-C5'	8.53	134.55	120.90
2	SA	164	G	C5-C6-O6	-8.53	123.48	128.60
2	SA	569	C	C2-N3-C4	-8.53	115.64	119.90
26	LA	638	G	C5-C6-O6	-8.53	123.48	128.60
2	SA	755	G	C5-C6-N1	8.53	115.76	111.50
26	LA	10	A	N1-C6-N6	-8.53	113.48	118.60
26	LA	1241	A	N1-C6-N6	8.53	123.72	118.60
26	LA	2638	G	N3-C4-C5	-8.53	124.33	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1899	A	N9-C4-C5	-8.53	102.39	105.80
26	LA	2363	G	C4-C5-N7	8.53	114.21	110.80
2	SA	1258	G	O4'-C1'-N9	8.53	115.02	108.20
26	LA	75	G	C5-C6-N1	-8.53	107.24	111.50
26	LA	195	A	C8-N9-C4	-8.53	102.39	105.80
26	LA	2646	C	O4'-C1'-N1	8.53	115.02	108.20
26	LA	821	A	N1-C6-N6	-8.53	113.48	118.60
26	LA	13	A	C5-C6-N6	8.52	130.52	123.70
26	LA	1321	A	C5-C6-N1	8.52	121.96	117.70
26	LA	2253	G	C5-C6-N1	8.52	115.76	111.50
25	LB	49	C	O4'-C1'-N1	8.52	115.02	108.20
26	LA	60	G	C8-N9-C4	8.52	109.81	106.40
26	LA	805	G	N1-C2-N3	-8.52	118.79	123.90
26	LA	978	G	C5-C6-O6	8.52	133.71	128.60
26	LA	1388	G	O4'-C1'-N9	8.52	115.02	108.20
26	LA	2529	G	N3-C4-C5	-8.52	124.34	128.60
26	LA	1933	G	C5-C6-N1	8.52	115.76	111.50
2	SA	235	C	O4'-C1'-C2'	8.52	115.27	107.60
2	SA	296	U	O4'-C1'-N1	8.52	115.02	108.20
2	SA	608	A	C3'-C2'-C1'	-8.52	94.69	101.50
2	SA	1266	G	N9-C4-C5	8.52	108.81	105.40
25	LB	28	C	P-O3'-C3'	-8.52	109.48	119.70
26	LA	143	C	O4'-C1'-N1	8.52	115.02	108.20
26	LA	1218	G	C6-N1-C2	-8.52	119.99	125.10
26	LA	1609	A	N1-C2-N3	-8.52	125.04	129.30
2	SA	1224	U	P-O3'-C3'	8.52	129.92	119.70
26	LA	1042	G	C5-C6-O6	-8.52	123.49	128.60
26	LA	2631	G	C1'-O4'-C4'	-8.52	103.09	109.90
2	SA	215	C	C5'-C4'-C3'	-8.52	102.38	116.00
2	SA	934	C	C6-N1-C2	-8.52	116.89	120.30
2	SA	327	A	N1-C6-N6	8.52	123.71	118.60
2	SA	722	G	N3-C4-C5	-8.52	124.34	128.60
2	SA	883	C	C6-N1-C2	-8.52	116.89	120.30
2	SA	1035	A	C8-N9-C4	8.52	109.21	105.80
25	LB	55	U	P-O3'-C3'	-8.52	109.48	119.70
26	LA	512	G	N1-C6-O6	8.52	125.01	119.90
26	LA	1555	G	C5-N7-C8	8.52	108.56	104.30
33	LZ	27	ARG	NE-CZ-NH1	8.52	124.56	120.30
2	SA	87	C	C2-N3-C4	8.51	124.16	119.90
2	SA	87	C	C5-C4-N4	8.51	126.16	120.20
2	SA	1391	U	O4'-C1'-N1	8.51	115.01	108.20
26	LA	99	U	C6-N1-C2	-8.51	115.89	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	241	A	N1-C6-N6	-8.51	113.49	118.60
26	LA	1703	G	O5'-P-OP2	-8.51	98.04	105.70
26	LA	1911	U	C5'-C4'-O4'	8.51	119.32	109.10
26	LA	2111	U	P-O3'-C3'	-8.51	109.48	119.70
26	LA	2562	U	N3-C4-C5	-8.51	109.49	114.60
26	LA	2737	G	O4'-C1'-N9	8.51	115.01	108.20
2	SA	17	U	C5'-C4'-O4'	8.51	119.31	109.10
2	SA	1227	A	C5-C6-N1	-8.51	113.44	117.70
26	LA	538	A	C5-C6-N6	8.51	130.51	123.70
2	SA	689	C	C6-N1-C2	-8.51	116.90	120.30
26	LA	730	A	N1-C6-N6	-8.51	113.49	118.60
26	LA	1012	U	C5'-C4'-O4'	8.51	119.31	109.10
26	LA	1808	A	C5-C6-N1	-8.51	113.45	117.70
26	LA	2117	A	N1-C6-N6	-8.51	113.49	118.60
26	LA	2146	C	N3-C4-C5	8.51	125.30	121.90
26	LA	2366	A	C5-C6-N1	8.51	121.95	117.70
14	SN	60	ARG	NE-CZ-NH1	-8.51	116.05	120.30
26	LA	8	C	O4'-C1'-N1	8.51	115.01	108.20
26	LA	1308	A	C4-C5-C6	-8.51	112.75	117.00
26	LA	2244	U	C2-N3-C4	-8.51	121.90	127.00
2	SA	1126	U	C2-N3-C4	-8.51	121.90	127.00
2	SA	1268	G	C8-N9-C4	-8.51	103.00	106.40
4	S2	5	G	C5-C6-N1	-8.51	107.25	111.50
26	LA	1579	A	N1-C6-N6	-8.51	113.50	118.60
46	LH	148	ARG	NE-CZ-NH2	8.51	124.55	120.30
2	SA	89	U	N3-C2-O2	-8.50	116.25	122.20
2	SA	679	C	N1-C2-N3	8.50	125.15	119.20
2	SA	1223	C	O4'-C1'-N1	8.50	115.00	108.20
4	S2	2	G	C4'-C3'-C2'	-8.50	94.10	102.60
26	LA	158	U	N3-C4-O4	-8.50	113.45	119.40
26	LA	225	C	C5-C4-N4	8.50	126.15	120.20
26	LA	1590	A	N1-C6-N6	8.50	123.70	118.60
26	LA	1412	U	C1'-O4'-C4'	8.50	116.70	109.90
26	LA	1794	A	N9-C4-C5	-8.50	102.40	105.80
26	LA	2122	U	C5'-C4'-O4'	8.50	119.30	109.10
26	LA	1656	C	OP1-P-OP2	-8.50	106.85	119.60
2	SA	991	U	C5-C4-O4	-8.50	120.80	125.90
3	S1	23	C	N3-C4-C5	-8.50	118.50	121.90
26	LA	1308	A	C5'-C4'-O4'	8.50	119.30	109.10
26	LA	2436	G	N7-C8-N9	-8.50	108.85	113.10
2	SA	1097	C	C6-N1-C2	-8.50	116.90	120.30
26	LA	300	A	C2-N3-C4	-8.50	106.35	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1786	A	C6-N1-C2	-8.50	113.50	118.60
2	SA	27	G	N1-C6-O6	8.50	125.00	119.90
2	SA	606	G	P-O3'-C3'	-8.50	109.50	119.70
2	SA	708	C	C5-C6-N1	-8.50	116.75	121.00
26	LA	175	G	N3-C4-C5	-8.50	124.35	128.60
26	LA	1665	A	C1'-O4'-C4'	-8.50	103.10	109.90
26	LA	2309	A	C5-N7-C8	-8.50	99.65	103.90
26	LA	2450	A	N1-C6-N6	8.50	123.70	118.60
41	L5	21	ARG	NE-CZ-NH1	-8.50	116.05	120.30
2	SA	442	G	C5'-C4'-O4'	8.49	119.29	109.10
2	SA	477	C	C4'-C3'-C2'	-8.49	94.11	102.60
26	LA	290	U	O4'-C1'-N1	8.49	115.00	108.20
26	LA	349	U	O4'-C1'-N1	8.49	115.00	108.20
26	LA	685	A	C5-C6-N6	8.49	130.50	123.70
26	LA	1338	G	N3-C4-C5	-8.49	124.35	128.60
26	LA	1629	U	N1-C2-N3	8.49	120.00	114.90
26	LA	1754	A	N1-C6-N6	8.49	123.70	118.60
26	LA	2056	G	N1-C6-O6	8.49	125.00	119.90
26	LA	1933	G	C6-C5-N7	8.49	135.50	130.40
26	LA	2302	U	C1'-O4'-C4'	-8.49	103.11	109.90
26	LA	2559	C	P-O3'-C3'	8.49	129.89	119.70
2	SA	35	G	C8-N9-C4	-8.49	103.00	106.40
2	SA	309	A	N1-C6-N6	-8.49	113.50	118.60
2	SA	1028	C	P-O5'-C5'	8.49	134.48	120.90
2	SA	1190	G	N1-C6-O6	-8.49	114.81	119.90
26	LA	1570	A	C5'-C4'-O4'	8.49	119.29	109.10
26	LA	816	C	C5-C6-N1	8.49	125.25	121.00
26	LA	1227	G	N9-C4-C5	-8.49	102.00	105.40
26	LA	1659	G	N3-C4-C5	-8.49	124.36	128.60
26	LA	1858	A	O4'-C1'-N9	8.49	114.99	108.20
26	LA	2043	C	P-O3'-C3'	8.49	129.89	119.70
26	LA	2212	A	O4'-C1'-N9	8.49	114.99	108.20
26	LA	2410	G	C5-N7-C8	8.49	108.55	104.30
26	LA	2641	G	C2-N3-C4	-8.49	107.65	111.90
26	LA	156	A	C6-N1-C2	8.49	123.69	118.60
26	LA	2105	U	O4'-C1'-N1	8.49	114.99	108.20
2	SA	416	G	C8-N9-C4	-8.49	103.01	106.40
2	SA	1205	U	C5-C4-O4	8.49	130.99	125.90
26	LA	2606	C	O4'-C1'-N1	8.49	114.99	108.20
2	SA	433	G	C2-N3-C4	8.48	116.14	111.90
2	SA	743	A	C6-C5-N7	-8.48	126.36	132.30
26	LA	922	C	O4'-C1'-N1	8.48	114.99	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2024	G	N1-C2-N2	-8.48	108.56	116.20
26	LA	2211	A	N1-C6-N6	-8.48	113.51	118.60
2	SA	173	U	P-O3'-C3'	8.48	129.88	119.70
2	SA	337	G	C5-C6-N1	-8.48	107.26	111.50
26	LA	434	U	O4'-C1'-N1	8.48	114.99	108.20
26	LA	1040	A	C1'-O4'-C4'	-8.48	103.11	109.90
26	LA	2641	G	N1-C6-O6	-8.48	114.81	119.90
2	SA	499	A	C2-N3-C4	-8.48	106.36	110.60
2	SA	869	G	N3-C2-N2	8.48	125.84	119.90
26	LA	607	U	N3-C4-C5	8.48	119.69	114.60
26	LA	688	U	N1-C2-N3	8.48	119.99	114.90
26	LA	729	G	N1-C6-O6	-8.48	114.81	119.90
15	SO	87	ARG	NE-CZ-NH1	8.48	124.54	120.30
26	LA	484	C	C6-N1-C2	8.48	123.69	120.30
26	LA	2716	C	C3'-C2'-C1'	8.48	108.28	101.50
26	LA	158	U	N3-C2-O2	-8.48	116.27	122.20
26	LA	898	C	P-O3'-C3'	8.48	129.87	119.70
26	LA	964	C	O4'-C1'-N1	8.48	114.98	108.20
26	LA	974	G	C4-N9-C1'	8.48	137.52	126.50
26	LA	1552	A	N7-C8-N9	8.48	118.04	113.80
26	LA	2416	C	C4-C5-C6	8.48	121.64	117.40
57	LS	12	ARG	NE-CZ-NH2	8.48	124.54	120.30
2	SA	1201	A	C2-N3-C4	-8.47	106.36	110.60
26	LA	335	C	O4'-C1'-N1	8.47	114.98	108.20
26	LA	641	U	C6-N1-C1'	-8.47	109.33	121.20
26	LA	773	U	P-O5'-C5'	8.47	134.46	120.90
26	LA	732	C	O4'-C1'-N1	8.47	114.98	108.20
26	LA	1321	A	P-O3'-C3'	8.47	129.87	119.70
26	LA	2032	G	C5-C6-O6	-8.47	123.52	128.60
26	LA	2095	A	C4-C5-N7	-8.47	106.46	110.70
26	LA	2126	A	P-O5'-C5'	-8.47	107.34	120.90
26	LA	2186	G	C1'-O4'-C4'	-8.47	103.12	109.90
54	LM	30	ARG	NE-CZ-NH1	-8.47	116.06	120.30
2	SA	9	G	C8-N9-C4	-8.47	103.01	106.40
2	SA	170	U	C5'-C4'-C3'	-8.47	102.45	116.00
2	SA	466	A	O4'-C1'-N9	8.47	114.98	108.20
26	LA	1192	G	C4-C5-N7	8.47	114.19	110.80
2	SA	754	C	C6-N1-C2	-8.47	116.91	120.30
6	SU	54	ARG	NE-CZ-NH1	8.47	124.53	120.30
26	LA	370	G	N3-C2-N2	8.47	125.83	119.90
26	LA	454	A	P-O3'-C3'	-8.47	109.53	119.70
26	LA	717	C	C2-N3-C4	-8.47	115.67	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2431	U	C2-N3-C4	-8.47	121.92	127.00
2	SA	327	A	N9-C4-C5	-8.47	102.41	105.80
2	SA	479	U	P-O3'-C3'	-8.47	109.54	119.70
2	SA	865	A	N1-C6-N6	8.47	123.68	118.60
4	S2	59	A	C4-C5-N7	8.47	114.93	110.70
26	LA	907	G	C2-N3-C4	-8.47	107.67	111.90
26	LA	2785	C	N3-C2-O2	-8.47	115.97	121.90
26	LA	1677	A	C4-C5-C6	-8.47	112.77	117.00
2	SA	83	C	C4'-C3'-C2'	-8.46	94.14	102.60
2	SA	117	G	O4'-C1'-C2'	8.46	115.22	107.60
26	LA	727	A	C2-N3-C4	-8.47	106.37	110.60
26	LA	2402	U	O4'-C1'-N1	8.47	114.97	108.20
2	SA	1355	G	O4'-C1'-N9	8.46	114.97	108.20
26	LA	2547	A	C5'-C4'-O4'	8.46	119.26	109.10
2	SA	730	G	N1-C6-O6	8.46	124.98	119.90
2	SA	852	G	C2-N3-C4	8.46	116.13	111.90
26	LA	1059	G	C8-N9-C4	-8.46	103.02	106.40
2	SA	664	G	C5-C6-O6	-8.46	123.52	128.60
2	SA	1031	C	C2-N3-C4	8.46	124.13	119.90
2	SA	1500	A	C8-N9-C4	-8.46	102.42	105.80
25	LB	59	A	C8-N9-C4	-8.46	102.42	105.80
25	LB	116	G	C5-C6-O6	-8.46	123.52	128.60
26	LA	156	A	N1-C2-N3	-8.46	125.07	129.30
26	LA	756	A	C5'-C4'-C3'	-8.46	102.46	116.00
26	LA	2164	C	O4'-C1'-N1	8.46	114.97	108.20
26	LA	2183	A	N1-C6-N6	8.46	123.68	118.60
26	LA	48	G	C5-C6-O6	-8.46	123.52	128.60
26	LA	644	A	P-O3'-C3'	-8.46	109.55	119.70
26	LA	828	U	O4'-C1'-N1	8.46	114.97	108.20
26	LA	1072	C	N3-C4-N4	-8.46	112.08	118.00
26	LA	1365	A	C2-N3-C4	-8.46	106.37	110.60
2	SA	309	A	O4'-C1'-N9	8.46	114.97	108.20
2	SA	1201	A	C2'-C3'-O3'	8.46	128.11	109.50
26	LA	1946	U	C2-N3-C4	-8.46	121.92	127.00
26	LA	875	G	N1-C2-N2	-8.46	108.59	116.20
26	LA	1392	A	N9-C4-C5	-8.46	102.42	105.80
26	LA	1733	G	C3'-C2'-C1'	-8.46	94.73	101.50
26	LA	2100	G	C5'-C4'-C3'	8.46	129.53	116.00
26	LA	2174	C	O4'-C1'-N1	8.46	114.97	108.20
46	LH	156	TYR	CB-CG-CD2	-8.46	115.92	121.00
2	SA	554	A	N1-C6-N6	-8.46	113.53	118.60
26	LA	2169	A	N7-C8-N9	-8.46	109.57	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1133	G	N1-C2-N3	8.45	128.97	123.90
2	SA	1269	A	N9-C4-C5	-8.46	102.42	105.80
26	LA	1744	A	P-O3'-C3'	8.45	129.84	119.70
26	LA	2716	C	C5-C4-N4	8.45	126.12	120.20
2	SA	433	G	C1'-O4'-C4'	-8.45	103.14	109.90
4	S2	2	G	N1-C2-N2	-8.45	108.59	116.20
26	LA	1070	A	C2-N3-C4	-8.45	106.37	110.60
2	SA	1086	U	C5'-C4'-C3'	-8.45	102.48	116.00
2	SA	1457	G	C5-C6-O6	-8.45	123.53	128.60
18	SB	73	ARG	NE-CZ-NH2	-8.45	116.08	120.30
26	LA	1272	A	C6-C5-N7	-8.45	126.38	132.30
26	LA	1535	A	C6-N1-C2	-8.45	113.53	118.60
26	LA	2444	G	C3'-C2'-C1'	8.45	108.26	101.50
2	SA	529	G	N1-C6-O6	8.45	124.97	119.90
4	S2	73	A	C2'-C3'-O3'	8.45	128.09	109.50
26	LA	1936	A	C5-C6-N1	-8.45	113.47	117.70
2	SA	631	C	P-O5'-C5'	-8.45	107.38	120.90
2	SA	665	A	O4'-C1'-N9	8.45	114.96	108.20
26	LA	63	A	P-O5'-C5'	-8.45	107.38	120.90
26	LA	554	U	C3'-C2'-C1'	8.45	108.26	101.50
26	LA	763	G	N9-C4-C5	-8.45	102.02	105.40
26	LA	1022	G	C5-C6-O6	-8.45	123.53	128.60
26	LA	1160	G	C6-N1-C2	8.45	130.17	125.10
26	LA	1471	G	P-O3'-C3'	-8.45	109.56	119.70
26	LA	2435	A	N1-C6-N6	-8.45	113.53	118.60
26	LA	2454	G	C4-C5-N7	8.45	114.18	110.80
2	SA	1247	U	O4'-C1'-N1	8.45	114.96	108.20
4	S2	39	A	C8-N9-C4	-8.45	102.42	105.80
26	LA	1383	A	N9-C4-C5	-8.45	102.42	105.80
26	LA	1826	G	C5-C6-N1	8.45	115.72	111.50
2	SA	980	C	C1'-O4'-C4'	-8.44	103.14	109.90
4	S2	68	C	N3-C2-O2	-8.45	115.99	121.90
25	LB	14	U	C6-N1-C2	-8.45	115.93	121.00
26	LA	296	U	C5'-C4'-O4'	8.45	119.23	109.10
26	LA	1890	A	C5-N7-C8	-8.45	99.68	103.90
26	LA	2111	U	O4'-C1'-N1	8.45	114.96	108.20
26	LA	2253	G	O4'-C1'-N9	8.45	114.96	108.20
26	LA	2271	G	C5-C6-O6	-8.44	123.53	128.60
4	S2	76	C	N3-C4-N4	8.44	123.91	118.00
26	LA	72	U	C6-N1-C2	8.44	126.07	121.00
26	LA	2144	G	P-O3'-C3'	-8.44	109.57	119.70
26	LA	2196	C	N3-C4-C5	-8.44	118.52	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	L1	44	ARG	NE-CZ-NH1	-8.44	116.08	120.30
2	SA	73	C	C6-N1-C2	-8.44	116.92	120.30
2	SA	227	G	N3-C4-C5	-8.44	124.38	128.60
2	SA	1233	G	C5-C6-O6	-8.44	123.54	128.60
2	SA	1310	G	C5-C6-O6	-8.44	123.54	128.60
3	S1	38	G	C2-N3-C4	8.44	116.12	111.90
26	LA	1024	G	C5-C6-N1	8.44	115.72	111.50
2	SA	1394	A	O4'-C1'-N9	8.44	114.95	108.20
26	LA	1228	G	C5-C6-O6	-8.44	123.54	128.60
26	LA	2067	G	N7-C8-N9	-8.44	108.88	113.10
26	LA	492	A	C5-N7-C8	8.44	108.12	103.90
26	LA	1787	A	C6-N1-C2	-8.44	113.54	118.60
26	LA	1890	A	N1-C2-N3	8.44	133.52	129.30
26	LA	2755	C	C1'-O4'-C4'	-8.44	103.15	109.90
26	LA	2623	G	C4'-C3'-C2'	-8.44	94.17	102.60
47	LJ	30	ARG	NE-CZ-NH2	8.44	124.52	120.30
2	SA	1049	U	C5-C6-N1	-8.43	118.48	122.70
2	SA	1138	G	N1-C6-O6	8.43	124.96	119.90
26	LA	1891	G	C4-C5-N7	8.43	114.17	110.80
26	LA	2758	A	N1-C6-N6	8.43	123.66	118.60
26	LA	548	G	P-O5'-C5'	8.43	134.39	120.90
26	LA	1059	G	C1'-O4'-C4'	-8.43	103.16	109.90
26	LA	2675	A	N1-C6-N6	8.43	123.66	118.60
2	SA	388	G	N1-C6-O6	8.43	124.96	119.90
2	SA	975	A	C5-N7-C8	8.43	108.11	103.90
2	SA	1202	U	P-O3'-C3'	-8.43	109.58	119.70
2	SA	1233	G	C1'-O4'-C4'	-8.43	103.16	109.90
26	LA	958	U	C4-C5-C6	8.43	124.76	119.70
26	LA	2159	G	C8-N9-C4	-8.43	103.03	106.40
2	SA	1128	C	C2-N1-C1'	8.43	128.07	118.80
26	LA	366	C	C2-N3-C4	-8.43	115.69	119.90
26	LA	1635	A	O4'-C1'-N9	8.43	114.94	108.20
26	LA	2324	U	N3-C4-O4	-8.43	113.50	119.40
2	SA	320	A	C4'-C3'-C2'	-8.43	94.17	102.60
2	SA	511	C	O4'-C1'-N1	8.43	114.94	108.20
25	LB	27	C	C2-N3-C4	8.43	124.11	119.90
26	LA	2543	G	N1-C2-N3	8.43	128.96	123.90
26	LA	2681	C	C2-N1-C1'	8.43	128.07	118.80
26	LA	2817	U	O4'-C1'-N1	8.43	114.94	108.20
2	SA	1237	C	C2-N3-C4	8.43	124.11	119.90
26	LA	612	G	C1'-O4'-C4'	-8.43	103.16	109.90
26	LA	2349	G	N1-C6-O6	8.43	124.95	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2360	G	O4'-C1'-N9	8.43	114.94	108.20
2	SA	560	A	C2-N3-C4	-8.42	106.39	110.60
2	SA	698	G	C1'-O4'-C4'	-8.42	103.16	109.90
2	SA	979	C	C2-N3-C4	-8.42	115.69	119.90
2	SA	1127	G	N1-C6-O6	8.42	124.95	119.90
25	LB	8	C	O4'-C1'-N1	8.42	114.94	108.20
25	LB	114	C	N3-C2-O2	-8.42	116.00	121.90
26	LA	315	G	N3-C4-C5	8.42	132.81	128.60
26	LA	1283	G	C5-C6-O6	-8.42	123.55	128.60
26	LA	2167	U	O4'-C1'-N1	8.42	114.94	108.20
2	SA	642	A	C5-C6-N6	-8.42	116.96	123.70
2	SA	684	U	N1-C2-O2	-8.42	116.91	122.80
2	SA	1199	U	C5-C4-O4	8.42	130.95	125.90
25	LB	4	C	N3-C4-N4	-8.42	112.11	118.00
26	LA	238	C	C1'-O4'-C4'	-8.42	103.17	109.90
26	LA	548	G	N1-C6-O6	8.42	124.95	119.90
26	LA	757	G	N7-C8-N9	8.42	117.31	113.10
26	LA	805	G	C4-C5-C6	-8.42	113.75	118.80
26	LA	876	C	N1-C2-O2	-8.42	113.85	118.90
26	LA	977	G	N7-C8-N9	-8.42	108.89	113.10
26	LA	2736	A	C2-N3-C4	8.42	114.81	110.60
2	SA	890	G	C1'-O4'-C4'	-8.42	103.17	109.90
2	SA	1426	G	C6-C5-N7	-8.42	125.35	130.40
4	S2	2	G	N7-C8-N9	8.42	117.31	113.10
19	SC	33	ASP	CB-CG-OD1	8.42	125.88	118.30
26	LA	2711	A	C8-N9-C4	-8.42	102.43	105.80
2	SA	336	A	O4'-C1'-N9	8.42	114.93	108.20
2	SA	919	A	O4'-C1'-N9	8.42	114.93	108.20
2	SA	932	C	N3-C4-N4	-8.42	112.11	118.00
2	SA	954	G	N7-C8-N9	8.42	117.31	113.10
26	LA	60	G	C4'-C3'-C2'	-8.42	94.18	102.60
26	LA	604	G	P-O5'-C5'	8.42	134.37	120.90
26	LA	1397	U	N1-C2-N3	8.42	119.95	114.90
26	LA	1790	C	C5-C6-N1	8.42	125.21	121.00
26	LA	2624	G	N1-C6-O6	8.42	124.95	119.90
48	LN	64	PHE	CB-CG-CD1	8.42	126.69	120.80
2	SA	194	C	C5'-C4'-C3'	-8.41	102.54	116.00
2	SA	214	C	C5-C6-N1	8.41	125.21	121.00
2	SA	812	G	P-O3'-C3'	8.41	129.80	119.70
2	SA	1427	C	C2-N3-C4	-8.41	115.69	119.90
26	LA	1118	C	N3-C4-C5	8.41	125.27	121.90
26	LA	2175	C	O4'-C1'-N1	8.41	114.93	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2834	G	C5-C6-O6	-8.41	123.55	128.60
25	LB	86	G	N7-C8-N9	8.41	117.31	113.10
26	LA	307	G	P-O3'-C3'	8.41	129.79	119.70
26	LA	1219	U	C2-N3-C4	8.41	132.05	127.00
26	LA	1639	C	C6-N1-C2	-8.41	116.94	120.30
2	SA	121	U	C3'-C2'-C1'	-8.41	94.77	101.50
2	SA	267	C	O4'-C1'-N1	8.41	114.93	108.20
26	LA	613	A	C4'-C3'-C2'	-8.41	94.19	102.60
26	LA	1074	G	C1'-O4'-C4'	-8.41	103.17	109.90
26	LA	1365	A	C4-C5-C6	-8.41	112.79	117.00
2	SA	168	G	C4'-C3'-C2'	-8.41	94.19	102.60
2	SA	384	G	C5-C6-N1	8.41	115.70	111.50
26	LA	811	U	C2-N1-C1'	8.41	127.79	117.70
26	LA	1308	A	C5-C6-N6	-8.41	116.97	123.70
26	LA	1648	U	C5-C6-N1	-8.41	118.50	122.70
26	LA	1737	G	C8-N9-C1'	8.41	137.93	127.00
26	LA	2833	U	C5-C4-O4	8.41	130.95	125.90
26	LA	2361	G	N1-C6-O6	8.41	124.94	119.90
2	SA	612	C	C2-N3-C4	-8.41	115.70	119.90
2	SA	1108	G	O4'-C1'-N9	8.41	114.93	108.20
2	SA	1203	C	C5-C4-N4	-8.41	114.31	120.20
2	SA	1330	U	C5-C4-O4	8.41	130.94	125.90
2	SA	1336	C	P-O3'-C3'	8.41	129.79	119.70
26	LA	1500	G	C5-C6-O6	-8.41	123.56	128.60
26	LA	1865	U	C5-C6-N1	-8.41	118.50	122.70
26	LA	2394	C	C6-N1-C2	8.41	123.66	120.30
26	LA	1983	G	C5-C6-O6	8.41	133.64	128.60
26	LA	2081	U	OP1-P-OP2	-8.41	106.99	119.60
2	SA	346	G	N7-C8-N9	8.40	117.30	113.10
25	LB	90	C	O4'-C1'-N1	8.40	114.92	108.20
4	S2	73	A	C3'-C2'-C1'	-8.40	94.78	101.50
26	LA	129	C	C5'-C4'-O4'	8.40	119.19	109.10
26	LA	1885	A	N7-C8-N9	-8.40	109.60	113.80
26	LA	2811	G	C4-C5-N7	8.40	114.16	110.80
26	LA	2695	U	C6-N1-C2	8.40	126.04	121.00
2	SA	1500	A	P-O3'-C3'	-8.40	109.62	119.70
20	SD	110	ARG	NE-CZ-NH1	8.40	124.50	120.30
26	LA	2036	C	N3-C4-C5	-8.40	118.54	121.90
26	LA	2897	U	N3-C4-C5	-8.40	109.56	114.60
26	LA	2853	C	C5-C6-N1	-8.40	116.80	121.00
2	SA	971	G	O4'-C1'-N9	8.40	114.92	108.20
2	SA	604	G	C5-N7-C8	-8.40	100.10	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1088	G	C4-C5-N7	8.40	114.16	110.80
26	LA	1288	G	C5-C6-O6	-8.40	123.56	128.60
2	SA	1132	C	O4'-C1'-N1	8.40	114.92	108.20
4	S2	3	C	O4'-C1'-N1	8.40	114.92	108.20
26	LA	648	G	O4'-C1'-N9	8.40	114.92	108.20
26	LA	1548	A	C6-N1-C2	-8.40	113.56	118.60
26	LA	2140	G	C1'-O4'-C4'	-8.40	103.18	109.90
26	LA	2624	G	OP1-P-OP2	-8.40	107.01	119.60
2	SA	829	G	N3-C4-N9	-8.39	120.96	126.00
2	SA	841	C	C1'-O4'-C4'	-8.39	103.18	109.90
4	S2	71	G	N1-C6-O6	8.39	124.94	119.90
26	LA	927	A	C5-C6-N1	8.39	121.90	117.70
26	LA	1317	G	C6-N1-C2	-8.39	120.06	125.10
2	SA	51	A	P-O3'-C3'	8.39	129.77	119.70
2	SA	852	G	C5-C6-N1	8.39	115.70	111.50
26	LA	2084	C	N3-C2-O2	8.39	127.78	121.90
26	LA	2506	U	C4'-C3'-C2'	-8.39	94.21	102.60
26	LA	2687	U	N1-C2-N3	8.39	119.94	114.90
2	SA	327	A	N7-C8-N9	8.39	118.00	113.80
2	SA	890	G	O4'-C1'-N9	8.39	114.91	108.20
2	SA	1122	U	C6-N1-C2	-8.39	115.97	121.00
2	SA	1455	G	N3-C2-N2	8.39	125.77	119.90
26	LA	561	G	P-O3'-C3'	8.39	129.77	119.70
26	LA	724	U	P-O3'-C3'	8.39	129.77	119.70
26	LA	935	C	O4'-C1'-N1	8.39	114.91	108.20
2	SA	1143	G	N9-C4-C5	-8.39	102.05	105.40
2	SA	1246	A	C5'-C4'-C3'	-8.39	102.58	116.00
2	SA	1494	G	C6-C5-N7	-8.39	125.37	130.40
9	SI	118	ARG	NE-CZ-NH1	8.39	124.49	120.30
13	SM	92	ARG	NE-CZ-NH2	-8.39	116.11	120.30
26	LA	18	U	P-O5'-C5'	8.39	134.32	120.90
26	LA	36	G	N9-C4-C5	8.39	108.75	105.40
26	LA	38	A	C3'-C2'-C1'	8.39	108.21	101.50
26	LA	546	U	P-O3'-C3'	8.39	129.76	119.70
26	LA	571	U	C6-N1-C2	-8.39	115.97	121.00
26	LA	984	A	C2-N3-C4	-8.39	106.41	110.60
26	LA	2038	G	N1-C6-O6	8.39	124.93	119.90
26	LA	2597	G	N1-C6-O6	8.39	124.93	119.90
2	SA	350	G	N9-C4-C5	-8.39	102.05	105.40
2	SA	659	U	C6-N1-C2	-8.39	115.97	121.00
26	LA	176	A	N1-C6-N6	-8.39	113.57	118.60
26	LA	543	G	N1-C6-O6	8.39	124.93	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1923	U	P-O5'-C5'	8.39	134.32	120.90
2	SA	476	U	P-O5'-C5'	8.38	134.31	120.90
26	LA	2337	G	C2-N3-C4	8.38	116.09	111.90
26	LA	1322	A	C6-N1-C2	8.38	123.63	118.60
2	SA	922	G	N3-C4-C5	-8.38	124.41	128.60
2	SA	1431	A	P-O5'-C5'	-8.38	107.49	120.90
26	LA	118	A	N1-C6-N6	8.38	123.63	118.60
26	LA	980	A	P-O3'-C3'	8.38	129.76	119.70
26	LA	1011	G	C5-C6-O6	-8.38	123.57	128.60
26	LA	2127	G	P-O5'-C5'	8.38	134.31	120.90
26	LA	1190	G	C5'-C4'-O4'	8.38	119.16	109.10
26	LA	2247	A	P-O5'-C5'	8.38	134.31	120.90
26	LA	2316	G	C3'-C2'-C1'	-8.38	94.80	101.50
2	SA	231	U	C2-N3-C4	-8.38	121.97	127.00
2	SA	542	G	C8-N9-C1'	8.38	137.89	127.00
24	S3	334	PHE	CB-CG-CD2	-8.38	114.94	120.80
26	LA	619	G	C4-C5-N7	8.38	114.15	110.80
26	LA	645	C	C4-C5-C6	8.38	121.59	117.40
26	LA	833	A	C6-N1-C2	-8.38	113.57	118.60
26	LA	1083	U	P-O3'-C3'	8.38	129.75	119.70
26	LA	1991	U	C5-C4-O4	8.38	130.93	125.90
2	SA	1056	U	C5-C6-N1	-8.38	118.51	122.70
26	LA	114	U	C5-C4-O4	8.38	130.93	125.90
26	LA	2587	A	C5-N7-C8	8.38	108.09	103.90
2	SA	1340	A	C6-N1-C2	8.37	123.62	118.60
26	LA	1738	G	C5-C6-O6	-8.38	123.58	128.60
26	LA	2027	G	O4'-C1'-N9	8.37	114.90	108.20
26	LA	2171	A	O4'-C1'-N9	8.38	114.90	108.20
26	LA	2293	G	C4-C5-N7	8.38	114.15	110.80
2	SA	190	A	N1-C2-N3	-8.37	125.11	129.30
2	SA	462	G	O4'-C1'-N9	8.37	114.90	108.20
2	SA	636	U	N3-C4-C5	8.37	119.62	114.60
2	SA	684	U	N1-C2-N3	8.37	119.92	114.90
26	LA	547	A	C2-N3-C4	8.37	114.79	110.60
26	LA	1160	G	N9-C1'-C2'	-8.37	102.79	112.00
13	SM	89	ARG	NE-CZ-NH2	8.37	124.49	120.30
22	SF	59	TYR	CB-CG-CD2	-8.37	115.98	121.00
26	LA	1455	G	C5-C6-N1	8.37	115.69	111.50
26	LA	1668	A	P-O3'-C3'	-8.37	109.65	119.70
26	LA	1933	G	N1-C6-O6	8.37	124.92	119.90
26	LA	2665	A	C4'-C3'-C2'	-8.37	94.23	102.60
26	LA	2685	G	P-O3'-C3'	8.37	129.75	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2812	G	N7-C8-N9	8.37	117.29	113.10
2	SA	720	C	O4'-C1'-N1	8.37	114.90	108.20
2	SA	766	A	N9-C4-C5	8.37	109.15	105.80
26	LA	1215	G	C4-C5-N7	8.37	114.15	110.80
2	SA	815	A	C8-N9-C4	8.37	109.15	105.80
2	SA	883	C	O4'-C1'-N1	8.37	114.89	108.20
26	LA	25	U	P-O5'-C5'	8.37	134.29	120.90
26	LA	27	G	C2'-C3'-O3'	8.37	127.91	109.50
26	LA	1784	A	C8-N9-C4	8.37	109.15	105.80
26	LA	2458	G	C4-N9-C1'	8.37	137.38	126.50
52	LO	18	ARG	NE-CZ-NH1	-8.37	116.12	120.30
54	LM	18	ARG	NE-CZ-NH1	8.37	124.48	120.30
2	SA	996	A	C8-N9-C4	-8.37	102.45	105.80
2	SA	1437	A	C8-N9-C4	-8.37	102.45	105.80
26	LA	9	G	C2-N3-C4	-8.37	107.72	111.90
26	LA	2394	C	C4-C5-C6	8.37	121.58	117.40
26	LA	2667	C	N1-C2-O2	8.37	123.92	118.90
26	LA	1983	G	C6-C5-N7	-8.36	125.38	130.40
26	LA	2564	A	P-O3'-C3'	-8.36	109.66	119.70
26	LA	2877	G	N3-C4-C5	-8.36	124.42	128.60
26	LA	2892	G	C5-C6-O6	8.36	133.62	128.60
2	SA	89	U	N3-C4-C5	-8.36	109.58	114.60
2	SA	486	U	C5'-C4'-C3'	-8.36	102.62	116.00
2	SA	608	A	P-O3'-C3'	8.36	129.74	119.70
26	LA	115	C	N1-C2-N3	8.36	125.05	119.20
26	LA	1162	G	C8-N9-C4	-8.36	103.06	106.40
10	SJ	45	ARG	NE-CZ-NH2	-8.36	116.12	120.30
26	LA	1813	G	N1-C2-N3	8.36	128.92	123.90
26	LA	2371	G	C5-C6-O6	-8.36	123.58	128.60
2	SA	928	G	C2-N3-C4	-8.36	107.72	111.90
2	SA	1139	G	C1'-O4'-C4'	-8.36	103.21	109.90
26	LA	2284	A	O4'-C1'-N9	8.36	114.89	108.20
26	LA	992	C	C5'-C4'-O4'	8.36	119.13	109.10
26	LA	2544	G	C1'-O4'-C4'	-8.36	103.21	109.90
26	LA	2607	G	C1'-O4'-C4'	-8.36	103.21	109.90
2	SA	414	A	N1-C2-N3	8.36	133.48	129.30
2	SA	750	C	O4'-C1'-N1	8.36	114.89	108.20
14	SN	8	ARG	NH1-CZ-NH2	8.36	128.59	119.40
2	SA	1153	G	C2-N3-C4	-8.36	107.72	111.90
26	LA	342	A	C2-N3-C4	8.36	114.78	110.60
26	LA	668	A	C5-C6-N6	8.36	130.38	123.70
26	LA	1456	G	C2-N3-C4	8.36	116.08	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1763	G	O4'-C1'-N9	8.36	114.88	108.20
27	LD	102	TYR	CB-CG-CD1	8.36	126.01	121.00
24	S3	490	ARG	NE-CZ-NH1	-8.35	116.12	120.30
25	LB	40	U	O4'-C1'-N1	8.35	114.88	108.20
26	LA	2179	C	N3-C4-C5	-8.35	118.56	121.90
2	SA	465	A	C2-N3-C4	-8.35	106.42	110.60
26	LA	865	C	C5'-C4'-O4'	8.35	119.12	109.10
26	LA	1069	A	N7-C8-N9	8.35	117.98	113.80
26	LA	2697	G	C8-N9-C4	-8.35	103.06	106.40
26	LA	531	C	C4'-C3'-C2'	-8.35	94.25	102.60
26	LA	970	U	C2-N3-C4	-8.35	121.99	127.00
26	LA	1136	G	C8-N9-C4	-8.35	103.06	106.40
26	LA	1680	U	N1-C2-O2	-8.35	116.95	122.80
57	LS	23	TYR	CB-CG-CD1	-8.35	115.99	121.00
26	LA	2021	C	C1'-O4'-C4'	-8.35	103.22	109.90
2	SA	257	G	C8-N9-C4	8.35	109.74	106.40
2	SA	264	C	N3-C4-N4	8.35	123.84	118.00
2	SA	709	U	O4'-C1'-N1	8.35	114.88	108.20
2	SA	1500	A	O4'-C1'-N9	8.35	114.88	108.20
2	SA	1347	G	C5-C6-N1	-8.35	107.33	111.50
26	LA	611	C	C4'-C3'-C2'	-8.35	94.25	102.60
26	LA	1112	G	N1-C6-O6	8.35	124.91	119.90
2	SA	493	A	O4'-C1'-N9	8.34	114.87	108.20
2	SA	762	U	O4'-C1'-N1	8.34	114.87	108.20
2	SA	849	G	O4'-C4'-C3'	-8.34	95.66	104.00
26	LA	1150	C	N3-C4-N4	-8.34	112.16	118.00
2	SA	148	G	C5'-C4'-C3'	8.34	129.34	116.00
2	SA	410	G	O3'-P-O5'	8.34	119.84	104.00
2	SA	893	C	C2-N3-C4	-8.34	115.73	119.90
2	SA	1331	G	C5-C6-O6	-8.34	123.60	128.60
3	S1	39	U	C4'-C3'-C2'	-8.34	94.26	102.60
26	LA	757	G	O4'-C1'-N9	8.34	114.87	108.20
26	LA	784	G	C5'-C4'-O4'	8.34	119.11	109.10
20	SD	191	SER	N-CA-CB	8.34	123.01	110.50
25	LB	98	G	N9-C4-C5	-8.34	102.06	105.40
26	LA	1163	G	O4'-C1'-N9	8.34	114.87	108.20
26	LA	2692	G	C5-C6-O6	-8.34	123.60	128.60
26	LA	1123	C	C5-C4-N4	-8.34	114.36	120.20
26	LA	2595	G	N1-C6-O6	8.34	124.90	119.90
2	SA	517	G	N1-C2-N2	-8.34	108.70	116.20
2	SA	518	C	O4'-C1'-N1	8.34	114.87	108.20
2	SA	955	U	O4'-C1'-N1	8.34	114.87	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1033	U	C6-N1-C2	-8.34	116.00	121.00
26	LA	1735	A	C8-N9-C4	8.34	109.14	105.80
26	LA	2591	C	O4'-C1'-N1	8.34	114.87	108.20
26	LA	2749	A	C2-N3-C4	-8.34	106.43	110.60
26	LA	2274	A	C1'-O4'-C4'	8.34	116.57	109.90
26	LA	2721	A	C2-N3-C4	-8.34	106.43	110.60
26	LA	1741	C	N3-C2-O2	-8.33	116.07	121.90
2	SA	3	A	C8-N9-C4	-8.33	102.47	105.80
2	SA	55	A	C5-C6-N1	8.33	121.87	117.70
2	SA	226	G	O4'-C1'-N9	8.33	114.87	108.20
2	SA	765	G	C1'-O4'-C4'	8.33	116.56	109.90
24	S3	376	VAL	CA-CB-CG1	-8.33	98.40	110.90
26	LA	2557	G	C5-C6-N1	8.33	115.67	111.50
26	LA	2902	C	C2-N3-C4	-8.33	115.73	119.90
26	LA	366	C	N1-C2-N3	8.33	125.03	119.20
24	S3	636	ARG	NE-CZ-NH1	8.33	124.46	120.30
25	LB	56	G	C4'-C3'-C2'	8.33	110.93	102.60
26	LA	324	A	C1'-O4'-C4'	-8.33	103.24	109.90
26	LA	2306	C	C6-N1-C2	-8.33	116.97	120.30
48	LN	111	ILE	CA-CB-CG1	8.33	126.83	111.00
2	SA	901	A	C5-C6-N6	-8.33	117.04	123.70
26	LA	1029	A	C2-N3-C4	-8.33	106.44	110.60
2	SA	455	G	C4-C5-N7	8.33	114.13	110.80
26	LA	132	G	N3-C4-C5	8.33	132.76	128.60
26	LA	455	C	C6-N1-C2	-8.33	116.97	120.30
26	LA	2768	U	N3-C4-O4	-8.33	113.57	119.40
27	LD	101	ARG	NE-CZ-NH2	-8.33	116.14	120.30
2	SA	7	A	O4'-C1'-N9	8.32	114.86	108.20
2	SA	331	G	C8-N9-C4	8.32	109.73	106.40
2	SA	354	G	C5-C6-N1	8.32	115.66	111.50
26	LA	2596	U	O4'-C1'-N1	8.32	114.86	108.20
2	SA	929	G	C8-N9-C4	-8.32	103.07	106.40
26	LA	2618	G	C6-N1-C2	-8.32	120.11	125.10
26	LA	2681	C	C2-N3-C4	-8.32	115.74	119.90
27	LD	239	PHE	CB-CG-CD1	-8.32	114.97	120.80
2	SA	283	U	C4-C5-C6	-8.32	114.71	119.70
2	SA	533	A	C5'-C4'-O4'	8.32	119.08	109.10
2	SA	1181	G	C4-C5-N7	-8.32	107.47	110.80
2	SA	1301	U	C5-C4-O4	-8.32	120.91	125.90
26	LA	1214	A	C5-C6-N6	-8.32	117.04	123.70
2	SA	290	C	O4'-C1'-N1	8.32	114.86	108.20
2	SA	1179	A	C4'-C3'-C2'	-8.32	94.28	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	S3	407	ARG	NE-CZ-NH2	-8.32	116.14	120.30
26	LA	1879	C	O4'-C1'-N1	8.32	114.86	108.20
26	LA	564	C	N3-C4-N4	-8.32	112.18	118.00
26	LA	2410	G	N3-C4-C5	-8.32	124.44	128.60
2	SA	1294	G	C2-N3-C4	8.32	116.06	111.90
2	SA	853	C	C5'-C4'-O4'	8.32	119.08	109.10
26	LA	63	A	N1-C6-N6	-8.32	113.61	118.60
26	LA	181	A	O4'-C1'-N9	8.32	114.86	108.20
26	LA	728	G	P-O3'-C3'	-8.32	109.72	119.70
26	LA	1967	C	C5'-C4'-C3'	8.32	129.31	116.00
26	LA	1625	C	C6-N1-C2	-8.32	116.97	120.30
26	LA	2193	G	N3-C4-C5	-8.32	124.44	128.60
2	SA	1342	C	C2-N3-C4	8.31	124.06	119.90
26	LA	99	U	O5'-P-OP2	-8.31	98.22	105.70
26	LA	856	G	C2-N3-C4	8.31	116.06	111.90
2	SA	437	U	O4'-C1'-N1	8.31	114.85	108.20
2	SA	1381	U	C5-C4-O4	8.31	130.89	125.90
26	LA	985	C	C6-N1-C2	-8.31	116.97	120.30
26	LA	1396	U	P-O3'-C3'	-8.31	109.72	119.70
26	LA	1331	G	N1-C6-O6	8.31	124.89	119.90
26	LA	1673	G	O4'-C1'-N9	8.31	114.85	108.20
26	LA	2806	C	C4-C5-C6	8.31	121.56	117.40
2	SA	242	G	C3'-C2'-C1'	-8.31	94.85	101.50
2	SA	813	U	O4'-C4'-C3'	8.31	112.75	106.10
26	LA	863	A	P-O3'-C3'	-8.31	109.73	119.70
26	LA	1068	G	N7-C8-N9	8.31	117.26	113.10
26	LA	2267	A	C4-C5-C6	-8.31	112.84	117.00
26	LA	1483	G	N1-C2-N2	8.31	123.68	116.20
26	LA	1652	A	C8-N9-C4	8.31	109.12	105.80
26	LA	1920	C	C5-C6-N1	8.31	125.16	121.00
26	LA	2716	C	C5'-C4'-C3'	8.31	129.30	116.00
2	SA	1206	G	C5-C6-N1	8.31	115.66	111.50
26	LA	1875	G	N9-C4-C5	-8.31	102.08	105.40
26	LA	2132	U	C6-N1-C2	-8.31	116.02	121.00
2	SA	397	A	C4-C5-C6	-8.31	112.85	117.00
2	SA	430	A	N3-C4-C5	8.31	132.62	126.80
2	SA	1214	C	C5-C6-N1	8.31	125.15	121.00
2	SA	1222	G	N1-C2-N3	-8.31	118.92	123.90
2	SA	1421	G	N3-C4-C5	-8.31	124.45	128.60
26	LA	402	A	O4'-C1'-N9	8.31	114.84	108.20
26	LA	1435	G	C4-C5-N7	8.31	114.12	110.80
26	LA	2186	G	C5-C6-N1	-8.31	107.35	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	103	U	C5'-C4'-O4'	8.31	119.07	109.10
2	SA	1109	C	C1'-O4'-C4'	-8.30	103.26	109.90
26	LA	964	C	C5'-C4'-O4'	8.30	119.07	109.10
26	LA	1722	A	C2-N3-C4	-8.30	106.45	110.60
26	LA	2683	C	O4'-C1'-N1	8.31	114.84	108.20
2	SA	657	U	N3-C4-O4	-8.30	113.59	119.40
26	LA	1912	A	C8-N9-C4	-8.30	102.48	105.80
2	SA	1043	G	C5-C6-O6	-8.30	123.62	128.60
2	SA	1492	A	N7-C8-N9	8.30	117.95	113.80
25	LB	18	G	C2-N3-C4	8.30	116.05	111.90
26	LA	1722	A	C5-C6-N6	-8.30	117.06	123.70
26	LA	2434	A	N7-C8-N9	-8.30	109.65	113.80
2	SA	417	G	N1-C6-O6	-8.30	114.92	119.90
26	LA	1481	U	C5-C4-O4	-8.30	120.92	125.90
2	SA	1044	A	O4'-C1'-N9	8.30	114.84	108.20
26	LA	46	G	C1'-O4'-C4'	-8.30	103.26	109.90
26	LA	2383	G	C4-C5-N7	8.30	114.12	110.80
26	LA	2442	C	C6-N1-C2	-8.30	116.98	120.30
26	LA	490	C	O4'-C1'-N1	8.30	114.84	108.20
26	LA	1709	U	N3-C4-C5	8.30	119.58	114.60
2	SA	245	U	O4'-C1'-N1	8.29	114.84	108.20
2	SA	432	A	O4'-C1'-C2'	8.29	115.06	107.60
2	SA	621	A	N1-C6-N6	-8.29	113.62	118.60
2	SA	417	G	N1-C2-N2	-8.29	108.74	116.20
2	SA	1518	A	N9-C4-C5	-8.29	102.48	105.80
26	LA	1392	A	C1'-O4'-C4'	-8.29	103.27	109.90
26	LA	1455	G	C5-C6-O6	-8.29	123.62	128.60
26	LA	2894	G	N1-C6-O6	8.29	124.88	119.90
26	LA	2036	C	N3-C2-O2	-8.29	116.10	121.90
26	LA	2345	G	N1-C2-N2	-8.29	108.74	116.20
29	LV	70	HIS	N-CA-CB	8.29	125.53	110.60
2	SA	66	A	C5-C6-N6	-8.29	117.07	123.70
2	SA	347	G	C5-N7-C8	8.29	108.44	104.30
2	SA	333	U	C2-N3-C4	-8.29	122.03	127.00
2	SA	796	C	C1'-O4'-C4'	-8.29	103.27	109.90
26	LA	2278	A	N3-C4-N9	-8.29	120.77	127.40
2	SA	569	C	N1-C2-O2	-8.29	113.93	118.90
2	SA	1150	A	N7-C8-N9	-8.29	109.66	113.80
24	S3	351	SER	N-CA-CB	-8.29	98.07	110.50
25	LB	83	G	C5-C6-O6	-8.29	123.63	128.60
26	LA	2157	G	O4'-C1'-N9	8.29	114.83	108.20
2	SA	1516	G	C4-C5-N7	8.28	114.11	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1125	G	C5-C6-O6	-8.29	123.63	128.60
36	L2	43	PHE	CB-CG-CD2	-8.29	115.00	120.80
2	SA	243	A	N1-C6-N6	8.28	123.57	118.60
2	SA	973	G	C4-N9-C1'	-8.28	115.73	126.50
2	SA	1060	U	P-O3'-C3'	8.28	129.64	119.70
2	SA	1507	A	O4'-C1'-N9	8.28	114.83	108.20
4	S2	33	C	C3'-C2'-C1'	8.28	108.12	101.50
26	LA	609	A	C5-C6-N6	-8.28	117.07	123.70
26	LA	1051	G	N9-C4-C5	8.28	108.71	105.40
26	LA	2886	A	N1-C6-N6	8.28	123.57	118.60
26	LA	1136	G	C2-N3-C4	8.28	116.04	111.90
26	LA	2188	U	C5'-C4'-O4'	8.28	119.04	109.10
26	LA	2635	A	O4'-C1'-N9	8.28	114.83	108.20
26	LA	2848	G	C5-C6-O6	-8.28	123.63	128.60
2	SA	907	A	C2-N3-C4	8.28	114.74	110.60
26	LA	297	G	C8-N9-C4	8.28	109.71	106.40
26	LA	1909	C	C2-N3-C4	-8.28	115.76	119.90
52	LO	81	ARG	NE-CZ-NH1	8.28	124.44	120.30
26	LA	685	A	N1-C6-N6	-8.28	113.63	118.60
26	LA	1210	G	C5-C6-O6	-8.28	123.63	128.60
26	LA	1309	G	C5-C6-N1	-8.28	107.36	111.50
26	LA	1869	G	C5-N7-C8	8.28	108.44	104.30
26	LA	2084	C	O4'-C1'-N1	8.28	114.82	108.20
26	LA	2290	G	C5-N7-C8	8.28	108.44	104.30
2	SA	776	G	C5-N7-C8	-8.28	100.16	104.30
2	SA	1253	G	C8-N9-C1'	8.28	137.76	127.00
4	S2	9	G	C2-N3-C4	-8.28	107.76	111.90
26	LA	656	G	N1-C2-N3	-8.28	118.94	123.90
26	LA	1571	A	O4'-C1'-N9	8.28	114.82	108.20
26	LA	1926	U	N1-C1'-C2'	-8.28	102.90	112.00
26	LA	2418	A	N7-C8-N9	8.28	117.94	113.80
29	LV	84	TYR	CB-CG-CD2	8.28	125.97	121.00
2	SA	679	C	C5-C4-N4	-8.27	114.41	120.20
2	SA	1064	G	N1-C2-N2	-8.27	108.75	116.20
26	LA	274	C	N3-C4-N4	8.27	123.79	118.00
2	SA	537	G	C4-C5-N7	-8.27	107.49	110.80
2	SA	679	C	O4'-C1'-N1	8.27	114.82	108.20
2	SA	715	A	C5-N7-C8	-8.27	99.76	103.90
26	LA	1270	C	O4'-C1'-C2'	8.27	115.04	107.60
26	LA	1434	A	P-O3'-C3'	-8.27	109.77	119.70
26	LA	2371	G	N3-C4-C5	8.27	132.74	128.60
26	LA	536	G	C5-C6-O6	-8.27	123.64	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	614	A	C1'-O4'-C4'	-8.27	103.28	109.90
26	LA	2742	G	O4'-C1'-N9	8.27	114.82	108.20
2	SA	246	A	N1-C2-N3	-8.27	125.17	129.30
2	SA	1059	C	C5'-C4'-O4'	8.27	119.02	109.10
26	LA	712	G	O4'-C1'-N9	8.27	114.81	108.20
26	LA	821	A	C2-N3-C4	-8.27	106.47	110.60
58	LT	53	PHE	CB-CG-CD1	-8.27	115.01	120.80
26	LA	911	A	C6-C5-N7	-8.27	126.51	132.30
26	LA	1050	A	N9-C4-C5	-8.27	102.49	105.80
2	SA	75	G	C8-N9-C4	-8.27	103.09	106.40
2	SA	732	C	C6-N1-C2	-8.27	116.99	120.30
2	SA	859	G	C5-C6-N1	8.27	115.63	111.50
2	SA	1176	A	N3-C4-C5	8.27	132.59	126.80
26	LA	93	G	C5'-C4'-C3'	8.27	129.22	116.00
26	LA	1522	A	C5'-C4'-C3'	8.27	129.22	116.00
26	LA	2503	A	C2-N3-C4	8.27	114.73	110.60
2	SA	165	G	C5-C6-N1	8.26	115.63	111.50
2	SA	618	C	C5'-C4'-O4'	8.26	119.02	109.10
26	LA	675	A	C8-N9-C4	8.26	109.11	105.80
26	LA	1042	G	C4-C5-C6	-8.26	113.84	118.80
26	LA	1225	G	C5-C6-O6	-8.26	123.64	128.60
2	SA	473	U	N3-C4-O4	-8.26	113.62	119.40
2	SA	1490	U	P-O5'-C5'	8.26	134.12	120.90
3	S1	53	G	P-O5'-C5'	8.26	134.12	120.90
26	LA	375	G	N9-C4-C5	8.26	108.70	105.40
26	LA	1039	A	C3'-C2'-C1'	-8.26	94.89	101.50
26	LA	1188	U	O4'-C1'-N1	8.26	114.81	108.20
26	LA	1616	A	C6-C5-N7	-8.26	126.52	132.30
26	LA	2231	U	C6-N1-C2	-8.26	116.04	121.00
26	LA	2306	C	O4'-C1'-N1	8.26	114.81	108.20
37	LC	137	MET	CG-SD-CE	-8.26	86.98	100.20
2	SA	992	U	C4-C5-C6	-8.26	114.74	119.70
2	SA	1081	A	C5'-C4'-C3'	-8.26	102.78	116.00
26	LA	435	C	N3-C4-C5	-8.26	118.60	121.90
26	LA	1493	C	N1-C2-O2	8.26	123.86	118.90
26	LA	2257	U	C6-N1-C2	8.26	125.96	121.00
26	LA	2528	U	P-O3'-C3'	8.26	129.61	119.70
2	SA	1063	C	N1-C2-N3	8.26	124.98	119.20
2	SA	199	A	N1-C2-N3	-8.26	125.17	129.30
2	SA	1147	C	N3-C2-O2	-8.26	116.12	121.90
2	SA	1338	G	C8-N9-C1'	-8.26	116.27	127.00
4	S2	3	C	C6-N1-C2	-8.26	117.00	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	142	A	O4'-C1'-N9	8.26	114.80	108.20
26	LA	535	G	N3-C2-N2	8.26	125.68	119.90
26	LA	538	A	C4-C5-N7	8.26	114.83	110.70
26	LA	838	C	N3-C4-C5	8.26	125.20	121.90
26	LA	1570	A	C5'-C4'-C3'	-8.26	102.79	116.00
3	S1	24	A	C5-C6-N6	8.25	130.30	123.70
26	LA	669	G	C4-C5-N7	8.25	114.10	110.80
2	SA	57	G	O4'-C1'-N9	8.25	114.80	108.20
2	SA	1056	U	O4'-C1'-N1	8.25	114.80	108.20
26	LA	436	C	P-O5'-C5'	8.25	134.10	120.90
26	LA	998	C	C1'-O4'-C4'	-8.25	103.30	109.90
26	LA	2209	G	N1-C6-O6	-8.25	114.95	119.90
2	SA	203	G	P-O3'-C3'	8.25	129.60	119.70
2	SA	978	A	N7-C8-N9	8.25	117.92	113.80
2	SA	1220	G	N1-C6-O6	8.25	124.85	119.90
26	LA	1198	U	O4'-C1'-N1	8.25	114.80	108.20
26	LA	954	G	P-O3'-C3'	-8.25	109.80	119.70
26	LA	1350	C	N3-C4-N4	-8.25	112.23	118.00
26	LA	2636	C	C5-C6-N1	-8.25	116.88	121.00
26	LA	111	A	N9-C4-C5	8.25	109.10	105.80
2	SA	430	A	C4-C5-C6	-8.25	112.88	117.00
2	SA	698	G	C6-N1-C2	-8.25	120.15	125.10
4	S2	25	U	P-O3'-C3'	8.25	129.60	119.70
26	LA	268	C	OP1-P-OP2	-8.25	107.23	119.60
26	LA	622	G	C4-C5-N7	-8.25	107.50	110.80
26	LA	1287	A	C4-C5-N7	-8.25	106.58	110.70
26	LA	2328	A	C5'-C4'-O4'	8.25	119.00	109.10
45	LG	142	TYR	CB-CG-CD2	-8.24	116.05	121.00
2	SA	538	G	N7-C8-N9	-8.24	108.98	113.10
2	SA	973	G	N1-C6-O6	8.24	124.85	119.90
2	SA	987	G	C1'-O4'-C4'	-8.24	103.31	109.90
26	LA	141	G	C8-N9-C1'	-8.24	116.28	127.00
2	SA	1069	C	C4-C5-C6	8.24	121.52	117.40
3	S1	29	G	N9-C4-C5	-8.24	102.10	105.40
26	LA	1381	G	N1-C6-O6	8.24	124.84	119.90
2	SA	732	C	N3-C4-C5	-8.24	118.60	121.90
2	SA	976	G	N1-C2-N2	-8.24	108.78	116.20
26	LA	640	C	P-O5'-C5'	8.24	134.09	120.90
26	LA	1405	U	C5-C6-N1	-8.24	118.58	122.70
26	LA	388	G	C5-C6-N1	8.24	115.62	111.50
26	LA	943	A	C4-C5-N7	8.24	114.82	110.70
26	LA	1955	U	C1'-O4'-C4'	-8.24	103.31	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	8	A	N7-C8-N9	-8.24	109.68	113.80
2	SA	394	G	C4'-C3'-C2'	-8.24	94.36	102.60
2	SA	907	A	N1-C6-N6	-8.24	113.66	118.60
26	LA	502	A	N1-C2-N3	-8.24	125.18	129.30
26	LA	1166	G	C5-C6-O6	8.24	133.54	128.60
2	SA	407	U	C2-N3-C4	-8.24	122.06	127.00
2	SA	643	C	O4'-C1'-N1	8.24	114.79	108.20
26	LA	54	G	N9-C4-C5	-8.24	102.11	105.40
26	LA	2030	U	N1-C2-O2	-8.24	117.03	122.80
26	LA	2316	G	O4'-C1'-C2'	8.24	115.01	107.60
2	SA	41	G	N7-C8-N9	-8.23	108.98	113.10
2	SA	389	A	N7-C8-N9	8.23	117.92	113.80
2	SA	1193	G	N3-C2-N2	-8.23	114.14	119.90
2	SA	1210	C	O4'-C1'-N1	8.23	114.79	108.20
2	SA	1327	C	N3-C4-C5	-8.23	118.61	121.90
3	S1	21	U	C5'-C4'-O4'	8.23	118.98	109.10
26	LA	747	U	O4'-C1'-N1	8.23	114.79	108.20
26	LA	1656	C	C6-N1-C2	-8.23	117.01	120.30
26	LA	2256	G	C5-C6-O6	-8.23	123.66	128.60
26	LA	2649	C	N3-C4-C5	-8.23	118.61	121.90
50	LL	74	TYR	CB-CG-CD2	8.23	125.94	121.00
2	SA	1027	C	N1-C2-O2	8.23	123.84	118.90
2	SA	1197	A	N1-C6-N6	-8.23	113.66	118.60
25	LB	41	G	C2-N3-C4	-8.23	107.78	111.90
52	LO	6	ARG	NE-CZ-NH2	-8.23	116.18	120.30
26	LA	896	A	P-O3'-C3'	8.23	129.58	119.70
26	LA	151	C	C5-C6-N1	-8.23	116.89	121.00
26	LA	1290	C	O4'-C1'-N1	8.23	114.78	108.20
26	LA	1123	C	N3-C4-N4	8.23	123.76	118.00
2	SA	381	C	C2-N1-C1'	8.22	127.85	118.80
2	SA	581	G	C5-C6-O6	-8.22	123.67	128.60
26	LA	2125	G	N1-C6-O6	8.22	124.83	119.90
2	SA	695	A	N1-C6-N6	8.22	123.53	118.60
2	SA	978	A	O4'-C1'-N9	8.22	114.78	108.20
2	SA	1124	G	N3-C4-C5	8.22	132.71	128.60
26	LA	350	G	C5'-C4'-O4'	8.22	118.97	109.10
26	LA	1293	C	C5'-C4'-O4'	8.22	118.97	109.10
26	LA	2102	G	C5-C6-O6	-8.22	123.67	128.60
26	LA	2257	U	O5'-P-OP2	-8.22	98.30	105.70
26	LA	2285	C	O4'-C1'-N1	8.22	114.78	108.20
26	LA	2442	C	N1-C2-O2	-8.22	113.97	118.90
26	LA	2826	A	N1-C2-N3	8.22	133.41	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2837	A	C1'-O4'-C4'	-8.22	103.32	109.90
25	LB	72	G	N1-C6-O6	8.22	124.83	119.90
2	SA	676	A	C6-N1-C2	-8.22	113.67	118.60
2	SA	1031	C	N1-C2-O2	8.22	123.83	118.90
4	S2	1	C	N3-C4-N4	8.22	123.75	118.00
26	LA	1333	G	N3-C4-C5	-8.22	124.49	128.60
26	LA	1618	C	O4'-C1'-N1	8.22	114.78	108.20
26	LA	1440	U	C6-N1-C2	-8.22	116.07	121.00
26	LA	1562	U	P-O3'-C3'	8.22	129.56	119.70
2	SA	478	A	C5-C6-N6	-8.22	117.13	123.70
26	LA	274	C	N3-C2-O2	-8.22	116.15	121.90
26	LA	1434	A	O4'-C4'-C3'	-8.22	95.78	104.00
26	LA	2030	U	N1-C2-N3	8.22	119.83	114.90
26	LA	536	G	N3-C2-N2	8.22	125.65	119.90
26	LA	1825	U	O4'-C1'-N1	8.22	114.77	108.20
2	SA	90	C	C6-N1-C2	-8.21	117.02	120.30
2	SA	829	G	C5-C6-N1	8.21	115.61	111.50
2	SA	1099	G	N9-C1'-C2'	-8.21	102.96	112.00
25	LB	76	G	O4'-C1'-N9	8.22	114.77	108.20
26	LA	241	A	C5-C6-N6	8.21	130.27	123.70
26	LA	686	U	O4'-C1'-N1	8.21	114.77	108.20
26	LA	712	G	C5-C6-O6	-8.21	123.67	128.60
26	LA	1008	A	C2-N3-C4	8.21	114.71	110.60
26	LA	2110	G	C8-N9-C4	8.22	109.69	106.40
26	LA	1276	A	N9-C4-C5	8.21	109.09	105.80
2	SA	650	G	N1-C6-O6	-8.21	114.97	119.90
2	SA	1482	G	N3-C4-C5	-8.21	124.49	128.60
4	S2	18	U	O4'-C1'-C2'	-8.21	97.59	105.80
26	LA	534	U	C5-C6-N1	-8.21	118.59	122.70
26	LA	2497	A	P-O3'-C3'	8.21	129.56	119.70
2	SA	111	G	N7-C8-N9	-8.21	109.00	113.10
12	SL	55	ARG	NE-CZ-NH2	-8.21	116.19	120.30
26	LA	1592	C	C2-N3-C4	-8.21	115.79	119.90
15	SO	21	THR	N-CA-CB	8.21	125.90	110.30
26	LA	121	G	C5-C6-N1	8.21	115.61	111.50
2	SA	326	G	C6-N1-C2	-8.21	120.17	125.10
26	LA	620	G	N1-C6-O6	8.21	124.83	119.90
2	SA	566	G	C5'-C4'-O4'	8.21	118.95	109.10
2	SA	1126	U	C5-C4-O4	-8.21	120.97	125.90
2	SA	1427	C	N3-C2-O2	-8.21	116.15	121.90
2	SA	1432	G	N1-C2-N3	-8.21	118.98	123.90
2	SA	1457	G	N1-C2-N3	8.21	128.82	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	37	C	C2-N3-C4	-8.21	115.80	119.90
26	LA	312	G	C5-C6-O6	8.21	133.53	128.60
26	LA	945	A	N1-C2-N3	-8.21	125.20	129.30
26	LA	1177	G	C3'-C2'-C1'	8.21	108.07	101.50
2	SA	557	G	O4'-C1'-N9	8.20	114.76	108.20
2	SA	1252	A	P-O3'-C3'	-8.20	109.86	119.70
26	LA	666	A	C4-C5-C6	-8.20	112.90	117.00
26	LA	2815	C	C6-N1-C2	-8.20	117.02	120.30
2	SA	352	C	C5'-C4'-C3'	-8.20	102.88	116.00
2	SA	748	G	N7-C8-N9	-8.20	109.00	113.10
2	SA	882	C	C4-C5-C6	8.20	121.50	117.40
26	LA	1181	U	N3-C2-O2	-8.20	116.46	122.20
4	S2	13	C	N3-C4-C5	-8.20	118.62	121.90
26	LA	1293	C	O4'-C1'-N1	8.20	114.76	108.20
26	LA	1958	C	C4'-C3'-C2'	-8.20	94.40	102.60
26	LA	2562	U	O4'-C1'-N1	8.20	114.76	108.20
26	LA	2745	C	O5'-P-OP1	-8.20	98.32	105.70
26	LA	2116	G	O4'-C1'-N9	8.20	114.76	108.20
2	SA	256	U	O4'-C1'-N1	8.20	114.76	108.20
2	SA	966	G	C5-C6-O6	-8.20	123.68	128.60
2	SA	1476	A	C5-C6-N6	8.20	130.26	123.70
25	LB	3	C	C4-C5-C6	8.20	121.50	117.40
26	LA	551	G	C5-C6-O6	-8.20	123.68	128.60
26	LA	1069	A	C4-C5-C6	-8.20	112.90	117.00
26	LA	1355	G	C4-C5-N7	8.20	114.08	110.80
26	LA	1385	A	O4'-C1'-N9	8.20	114.76	108.20
26	LA	2831	G	N1-C6-O6	-8.20	114.98	119.90
26	LA	1813	G	N1-C6-O6	8.20	124.82	119.90
2	SA	204	G	O4'-C1'-N9	8.20	114.76	108.20
2	SA	219	U	O4'-C1'-N1	8.20	114.76	108.20
2	SA	991	U	O4'-C1'-N1	8.20	114.76	108.20
2	SA	1106	G	P-O5'-C5'	8.20	134.02	120.90
26	LA	172	A	C2-N3-C4	8.20	114.70	110.60
26	LA	254	G	N3-C2-N2	8.20	125.64	119.90
2	SA	1326	U	P-O3'-C3'	-8.20	109.87	119.70
26	LA	356	G	C8-N9-C4	-8.20	103.12	106.40
26	LA	2475	C	C5'-C4'-O4'	8.20	118.94	109.10
26	LA	2645	G	C5-C6-N1	8.20	115.60	111.50
12	SL	94	TYR	CB-CG-CD2	8.19	125.92	121.00
26	LA	643	A	N1-C6-N6	-8.20	113.68	118.60
26	LA	726	G	N1-C6-O6	8.20	124.82	119.90
26	LA	2001	C	N3-C4-N4	8.20	123.74	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	893	C	C1'-O4'-C4'	-8.19	103.34	109.90
26	LA	1102	C	N3-C2-O2	-8.20	116.16	121.90
26	LA	1868	C	C4-C5-C6	8.20	121.50	117.40
26	LA	2441	U	C3'-C2'-C1'	8.19	108.06	101.50
2	SA	980	C	C4-C5-C6	8.19	121.50	117.40
26	LA	890	C	C4-C5-C6	8.19	121.50	117.40
26	LA	2570	G	C5-C6-N1	8.19	115.60	111.50
26	LA	2646	C	C2-N3-C4	-8.19	115.80	119.90
2	SA	27	G	C5-C6-O6	-8.19	123.69	128.60
2	SA	88	U	N3-C2-O2	8.19	127.93	122.20
2	SA	831	A	C4'-C3'-C2'	-8.19	94.41	102.60
26	LA	55	G	C4-C5-N7	-8.19	107.52	110.80
26	LA	898	C	C4-C5-C6	8.19	121.50	117.40
2	SA	1213	A	C5'-C4'-C3'	8.19	129.10	116.00
24	S3	568	TYR	CB-CG-CD2	-8.19	116.09	121.00
2	SA	1238	A	P-O3'-C3'	8.19	129.53	119.70
26	LA	77	G	C6-C5-N7	8.19	135.31	130.40
26	LA	140	C	C5-C6-N1	8.19	125.09	121.00
26	LA	524	G	N9-C4-C5	8.19	108.68	105.40
26	LA	1231	U	N1-C2-N3	8.19	119.81	114.90
26	LA	2655	G	C6-N1-C2	-8.19	120.19	125.10
26	LA	498	G	C6-N1-C2	-8.19	120.19	125.10
2	SA	167	A	P-O5'-C5'	8.19	134.00	120.90
2	SA	714	G	C5-C6-N1	8.19	115.59	111.50
2	SA	816	A	N1-C2-N3	8.19	133.39	129.30
25	LB	20	G	N9-C1'-C2'	-8.19	103.00	112.00
26	LA	233	A	O4'-C1'-N9	8.19	114.75	108.20
26	LA	827	U	C1'-O4'-C4'	-8.19	103.35	109.90
26	LA	849	A	C8-N9-C4	8.19	109.08	105.80
26	LA	575	A	N1-C2-N3	8.19	133.39	129.30
26	LA	878	A	C4-C5-N7	8.19	114.79	110.70
26	LA	1662	U	C2-N3-C4	-8.19	122.09	127.00
26	LA	888	C	N3-C4-C5	-8.19	118.63	121.90
26	LA	1936	A	C5-N7-C8	-8.19	99.81	103.90
4	S2	73	A	N1-C6-N6	8.18	123.51	118.60
26	LA	317	G	C5'-C4'-C3'	8.18	129.09	116.00
26	LA	1759	A	C2-N3-C4	8.18	114.69	110.60
2	SA	18	C	O4'-C1'-N1	8.18	114.75	108.20
2	SA	42	G	C6-N1-C2	-8.18	120.19	125.10
13	SM	100	ARG	NE-CZ-NH2	-8.18	116.21	120.30
26	LA	1236	G	P-O5'-C5'	8.18	133.99	120.90
26	LA	2376	A	N1-C6-N6	-8.18	113.69	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2512	C	C4-C5-C6	8.18	121.49	117.40
32	LY	59	PHE	CB-CG-CD1	-8.18	115.07	120.80
2	SA	160	A	N1-C6-N6	-8.18	113.69	118.60
26	LA	328	U	C2-N3-C4	-8.18	122.09	127.00
26	LA	1768	C	C6-N1-C2	-8.18	117.03	120.30
26	LA	404	A	C6-N1-C2	-8.18	113.69	118.60
26	LA	759	G	C5-C6-N1	-8.18	107.41	111.50
26	LA	2863	C	C3'-C2'-C1'	8.18	108.04	101.50
26	LA	1284	A	N1-C2-N3	8.18	133.39	129.30
26	LA	1861	G	C2-N3-C4	8.18	115.99	111.90
26	LA	2337	G	N1-C2-N3	-8.18	118.99	123.90
26	LA	2643	G	C6-N1-C2	-8.18	120.19	125.10
26	LA	2744	G	C8-N9-C4	-8.18	103.13	106.40
53	LP	30	ARG	NE-CZ-NH1	8.18	124.39	120.30
2	SA	482	A	N1-C6-N6	-8.18	113.69	118.60
2	SA	1267	C	C6-N1-C2	8.18	123.57	120.30
4	S2	63	C	C5-C6-N1	8.18	125.09	121.00
7	SG	30	MET	CG-SD-CE	-8.18	87.12	100.20
26	LA	251	A	C4-C5-N7	8.18	114.79	110.70
26	LA	1408	G	N3-C2-N2	-8.18	114.18	119.90
26	LA	1510	G	P-O5'-C5'	8.18	133.98	120.90
26	LA	1555	G	C5'-C4'-C3'	-8.18	102.92	116.00
26	LA	2782	G	C5-C6-N1	8.18	115.59	111.50
26	LA	1591	A	P-O3'-C3'	-8.18	109.89	119.70
2	SA	151	A	P-O3'-C3'	-8.17	109.89	119.70
2	SA	534	U	C4-C5-C6	-8.17	114.80	119.70
2	SA	1227	A	C6-C5-N7	-8.17	126.58	132.30
12	SL	98	ARG	NE-CZ-NH2	8.17	124.39	120.30
26	LA	455	C	C2-N3-C4	-8.17	115.81	119.90
26	LA	565	C	N1-C2-O2	8.17	123.80	118.90
26	LA	2619	C	O4'-C1'-N1	8.17	114.74	108.20
2	SA	447	G	N3-C4-N9	8.17	130.90	126.00
2	SA	482	A	C5-C6-N1	8.17	121.78	117.70
26	LA	414	C	C2-N3-C4	-8.17	115.81	119.90
26	LA	1588	G	N3-C4-C5	-8.17	124.51	128.60
26	LA	2022	U	C1'-O4'-C4'	-8.17	103.36	109.90
2	SA	816	A	O4'-C1'-N9	8.17	114.74	108.20
2	SA	761	G	C6-C5-N7	-8.17	125.50	130.40
26	LA	242	G	C6-C5-N7	-8.17	125.50	130.40
26	LA	1546	G	C8-N9-C4	8.17	109.67	106.40
26	LA	289	G	N9-C4-C5	8.17	108.67	105.40
26	LA	2325	G	C1'-O4'-C4'	-8.16	103.37	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	S3	308	ARG	NE-CZ-NH2	8.16	124.38	120.30
26	LA	915	C	O4'-C1'-N1	8.16	114.73	108.20
26	LA	1720	U	C5-C4-O4	8.16	130.80	125.90
2	SA	254	G	N1-C2-N2	-8.16	108.86	116.20
2	SA	337	G	O4'-C1'-N9	8.16	114.73	108.20
26	LA	2050	C	P-O5'-C5'	8.16	133.96	120.90
26	LA	2531	A	O4'-C1'-N9	8.16	114.73	108.20
26	LA	2569	G	C3'-C2'-C1'	8.16	108.03	101.50
26	LA	2738	A	O4'-C1'-N9	8.16	114.73	108.20
2	SA	293	G	C5-C6-O6	-8.16	123.71	128.60
2	SA	1317	C	P-O3'-C3'	-8.16	109.91	119.70
3	S1	56	G	O4'-C1'-N9	8.16	114.73	108.20
25	LB	106	G	N1-C2-N3	-8.16	119.00	123.90
26	LA	559	G	C4-C5-N7	-8.16	107.54	110.80
26	LA	2021	C	P-O3'-C3'	8.16	129.49	119.70
26	LA	2444	G	C2-N3-C4	-8.16	107.82	111.90
26	LA	2881	U	N3-C2-O2	-8.16	116.49	122.20
2	SA	490	C	O4'-C1'-N1	8.15	114.72	108.20
2	SA	490	C	N1-C2-N3	8.15	124.91	119.20
21	SE	28	ARG	NE-CZ-NH2	8.15	124.38	120.30
3	S1	46	C	O4'-C1'-N1	8.15	114.72	108.20
26	LA	936	A	C5-C6-N6	-8.15	117.18	123.70
26	LA	2716	C	O4'-C1'-N1	8.15	114.72	108.20
26	LA	2770	G	C5-N7-C8	-8.15	100.22	104.30
2	SA	1007	U	C5'-C4'-C3'	-8.15	102.96	116.00
2	SA	1090	U	O4'-C1'-N1	8.15	114.72	108.20
26	LA	1472	C	O4'-C1'-N1	8.15	114.72	108.20
26	LA	2067	G	C5'-C4'-O4'	8.15	118.88	109.10
2	SA	470	C	N3-C4-C5	-8.15	118.64	121.90
2	SA	1000	A	N1-C6-N6	8.15	123.49	118.60
25	LB	57	A	C5'-C4'-O4'	8.15	118.88	109.10
2	SA	691	G	O4'-C1'-N9	8.15	114.72	108.20
2	SA	956	U	C5-C6-N1	-8.15	118.63	122.70
25	LB	74	U	C2-N3-C4	-8.15	122.11	127.00
26	LA	542	C	C5-C4-N4	-8.15	114.50	120.20
26	LA	2441	U	O4'-C1'-N1	8.15	114.72	108.20
26	LA	2259	U	C6-N1-C2	-8.15	116.11	121.00
2	SA	541	G	N3-C2-N2	8.14	125.60	119.90
2	SA	903	G	O4'-C1'-N9	8.14	114.72	108.20
2	SA	1137	C	O4'-C1'-N1	8.14	114.72	108.20
2	SA	1198	G	C1'-O4'-C4'	-8.14	103.38	109.90
2	SA	275	G	O4'-C1'-N9	8.14	114.71	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	470	C	O4'-C1'-N1	8.14	114.72	108.20
26	LA	1144	A	N1-C6-N6	-8.14	113.71	118.60
26	LA	1642	G	N1-C6-O6	-8.14	115.01	119.90
26	LA	1709	U	C4-C5-C6	-8.14	114.81	119.70
26	LA	2371	G	N1-C6-O6	8.14	124.79	119.90
26	LA	2584	U	C2-N3-C4	-8.14	122.11	127.00
26	LA	2612	C	C5-C4-N4	-8.14	114.50	120.20
26	LA	2630	G	C5-C6-O6	-8.14	123.71	128.60
2	SA	153	C	C5'-C4'-C3'	-8.14	102.97	116.00
2	SA	1432	G	O4'-C1'-N9	8.14	114.71	108.20
2	SA	1247	U	C5-C6-N1	-8.14	118.63	122.70
26	LA	309	A	N1-C6-N6	8.14	123.48	118.60
26	LA	1506	U	N3-C4-O4	8.14	125.10	119.40
26	LA	1544	A	C8-N9-C4	-8.14	102.54	105.80
26	LA	1580	A	C8-N9-C4	8.14	109.06	105.80
26	LA	1843	C	C4'-C3'-C2'	-8.14	94.46	102.60
26	LA	2687	U	N3-C2-O2	-8.14	116.50	122.20
2	SA	626	G	C4-C5-N7	8.14	114.06	110.80
2	SA	41	G	C5-N7-C8	8.14	108.37	104.30
2	SA	98	A	C4-C5-C6	-8.13	112.93	117.00
2	SA	803	G	C8-N9-C4	-8.13	103.15	106.40
25	LB	73	A	N1-C6-N6	-8.13	113.72	118.60
25	LB	81	G	N1-C6-O6	8.13	124.78	119.90
26	LA	326	G	N3-C4-C5	-8.13	124.53	128.60
26	LA	356	G	O4'-C1'-N9	8.13	114.71	108.20
26	LA	667	U	P-O5'-C5'	-8.13	107.88	120.90
26	LA	717	C	N3-C4-C5	8.13	125.15	121.90
26	LA	1135	C	O4'-C1'-N1	8.13	114.71	108.20
26	LA	2536	G	N3-C4-C5	-8.14	124.53	128.60
1	SS	31	ARG	NE-CZ-NH1	8.13	124.37	120.30
2	SA	987	G	N3-C2-N2	8.13	125.59	119.90
2	SA	1044	A	N1-C6-N6	-8.13	113.72	118.60
2	SA	1250	A	C5-N7-C8	-8.13	99.83	103.90
26	LA	1699	G	C1'-O4'-C4'	-8.13	103.39	109.90
26	LA	2317	A	N9-C4-C5	-8.13	102.55	105.80
2	SA	1530	G	C4-C5-N7	8.13	114.05	110.80
4	S2	58	A	C4'-C3'-C2'	-8.13	94.47	102.60
5	ST	51	ASN	N-CA-CB	8.13	125.24	110.60
26	LA	465	G	N1-C6-O6	8.13	124.78	119.90
26	LA	1103	A	N1-C2-N3	-8.13	125.23	129.30
26	LA	784	G	C4-N9-C1'	8.13	137.07	126.50
26	LA	1072	C	P-O3'-C3'	-8.13	109.94	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1631	G	N1-C6-O6	8.13	124.78	119.90
26	LA	1654	A	C6-N1-C2	-8.13	113.72	118.60
26	LA	1726	C	N1-C2-N3	8.13	124.89	119.20
26	LA	1857	G	C5-C6-O6	8.13	133.48	128.60
26	LA	2593	U	P-O3'-C3'	-8.13	109.94	119.70
26	LA	2654	A	C5-C6-N1	-8.13	113.64	117.70
26	LA	777	G	O4'-C1'-N9	8.13	114.70	108.20
26	LA	1063	G	N1-C6-O6	8.13	124.78	119.90
26	LA	1500	G	N7-C8-N9	8.13	117.16	113.10
26	LA	2501	C	C5-C4-N4	-8.13	114.51	120.20
2	SA	757	U	O4'-C1'-N1	8.13	114.70	108.20
44	LF	60	TRP	CB-CG-CD2	-8.13	116.04	126.60
2	SA	673	A	C5'-C4'-C3'	-8.12	103.00	116.00
26	LA	384	A	P-O3'-C3'	8.12	129.45	119.70
26	LA	611	C	C5'-C4'-C3'	-8.12	103.00	116.00
26	LA	2225	A	N3-C4-C5	8.12	132.49	126.80
2	SA	606	G	C2-N3-C4	8.12	115.96	111.90
2	SA	645	G	N7-C8-N9	8.12	117.16	113.10
2	SA	1163	A	P-O3'-C3'	-8.12	109.95	119.70
25	LB	42	C	O5'-P-OP1	-8.12	98.39	105.70
26	LA	375	G	C5-C6-O6	-8.12	123.73	128.60
26	LA	556	A	C5-C6-N6	-8.12	117.20	123.70
26	LA	1370	C	N1-C2-O2	8.12	123.77	118.90
26	LA	1544	A	C2-N3-C4	-8.12	106.54	110.60
26	LA	1797	G	N1-C6-O6	-8.12	115.03	119.90
26	LA	1997	C	N3-C4-C5	-8.12	118.65	121.90
2	SA	936	C	C6-N1-C2	-8.12	117.05	120.30
4	S2	42	C	C5-C4-N4	-8.12	114.52	120.20
2	SA	254	G	C8-N9-C4	8.12	109.65	106.40
2	SA	533	A	N7-C8-N9	-8.12	109.74	113.80
2	SA	584	G	N1-C6-O6	8.12	124.77	119.90
2	SA	782	A	P-O3'-C3'	8.12	129.44	119.70
2	SA	804	U	C5'-C4'-O4'	8.12	118.84	109.10
2	SA	875	U	P-O3'-C3'	8.12	129.44	119.70
26	LA	447	A	N1-C6-N6	-8.12	113.73	118.60
26	LA	493	G	O4'-C1'-N9	8.12	114.69	108.20
26	LA	1298	C	P-O3'-C3'	8.12	129.44	119.70
26	LA	1725	U	N3-C4-O4	8.12	125.08	119.40
26	LA	1596	A	C4-C5-C6	8.12	121.06	117.00
2	SA	207	C	C5-C6-N1	8.11	125.06	121.00
2	SA	936	C	O4'-C1'-N1	8.12	114.69	108.20
2	SA	1127	G	N9-C4-C5	-8.12	102.15	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2762	C	C5-C4-N4	8.12	125.88	120.20
2	SA	1490	U	C4-C5-C6	8.11	124.57	119.70
26	LA	158	U	O4'-C1'-N1	8.11	114.69	108.20
26	LA	173	A	C4-C5-N7	8.11	114.76	110.70
2	SA	1002	G	N1-C6-O6	8.11	124.77	119.90
2	SA	187	G	O4'-C1'-N9	8.11	114.69	108.20
2	SA	1217	C	C3'-C2'-C1'	8.11	107.99	101.50
26	LA	717	C	O4'-C4'-C3'	-8.11	95.89	104.00
26	LA	1094	U	O4'-C1'-N1	8.11	114.69	108.20
26	LA	1148	U	O4'-C1'-N1	8.11	114.69	108.20
2	SA	1124	G	C1'-O4'-C4'	-8.11	103.41	109.90
26	LA	1972	G	C6-N1-C2	-8.11	120.23	125.10
26	LA	2278	A	O4'-C1'-N9	8.11	114.69	108.20
2	SA	412	A	C6-N1-C2	8.11	123.47	118.60
14	SN	40	ARG	NE-CZ-NH1	8.11	124.35	120.30
26	LA	193	U	C2-N3-C4	-8.11	122.14	127.00
26	LA	968	C	N3-C4-C5	-8.11	118.66	121.90
26	LA	1921	G	N3-C4-N9	8.11	130.87	126.00
2	SA	388	G	C2-N3-C4	8.11	115.95	111.90
2	SA	515	G	N9-C4-C5	-8.11	102.16	105.40
2	SA	34	C	C2-N3-C4	-8.11	115.85	119.90
2	SA	802	A	C8-N9-C4	-8.11	102.56	105.80
26	LA	622	G	N9-C4-C5	8.11	108.64	105.40
3	S1	47	C	C5-C4-N4	-8.11	114.53	120.20
26	LA	778	G	N3-C4-C5	-8.11	124.55	128.60
26	LA	809	G	C8-N9-C4	-8.11	103.16	106.40
26	LA	815	C	O4'-C1'-N1	8.11	114.68	108.20
26	LA	983	A	C8-N9-C4	-8.11	102.56	105.80
26	LA	1769	U	C5-C4-O4	8.11	130.76	125.90
26	LA	2058	A	N9-C4-C5	-8.11	102.56	105.80
26	LA	2690	U	N1-C2-O2	8.11	128.47	122.80
26	LA	674	G	C6-C5-N7	8.10	135.26	130.40
2	SA	224	U	O4'-C1'-N1	8.10	114.68	108.20
2	SA	512	U	O4'-C1'-N1	8.10	114.68	108.20
2	SA	869	G	C5-C6-N1	-8.10	107.45	111.50
26	LA	707	G	O4'-C1'-N9	8.10	114.68	108.20
26	LA	989	G	C5-C6-N1	-8.10	107.45	111.50
26	LA	1122	G	O4'-C1'-N9	8.10	114.68	108.20
26	LA	1346	G	P-O5'-C5'	-8.10	107.94	120.90
26	LA	2069	G	C4'-C3'-C2'	-8.10	94.50	102.60
26	LA	2423	U	N1-C2-O2	-8.10	117.13	122.80
26	LA	2834	G	N1-C6-O6	8.10	124.76	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2508	G	C5-N7-C8	-8.10	100.25	104.30
26	LA	2559	C	C6-N1-C2	-8.10	117.06	120.30
2	SA	123	U	C5-C4-O4	-8.10	121.04	125.90
4	S2	22	A	N1-C6-N6	8.10	123.46	118.60
26	LA	2544	G	C3'-C2'-C1'	-8.10	95.02	101.50
2	SA	99	C	N3-C2-O2	-8.10	116.23	121.90
2	SA	1344	C	C5'-C4'-C3'	8.10	128.96	116.00
17	SQ	81	ALA	N-CA-CB	8.10	121.44	110.10
26	LA	1095	A	C4'-C3'-C2'	-8.10	94.50	102.60
2	SA	27	G	C4-C5-N7	-8.10	107.56	110.80
2	SA	262	A	O4'-C1'-N9	8.10	114.68	108.20
2	SA	660	C	P-O3'-C3'	-8.10	109.98	119.70
2	SA	660	C	C6-N1-C2	-8.10	117.06	120.30
2	SA	859	G	N1-C6-O6	-8.10	115.04	119.90
2	SA	347	G	N7-C8-N9	-8.10	109.05	113.10
26	LA	101	A	C4'-C3'-C2'	-8.10	94.50	102.60
26	LA	359	G	C5'-C4'-C3'	-8.10	103.05	116.00
26	LA	2059	A	C2-N3-C4	8.10	114.65	110.60
2	SA	485	U	N3-C2-O2	-8.09	116.53	122.20
2	SA	815	A	C5-N7-C8	8.09	107.95	103.90
2	SA	842	U	C5-C6-N1	-8.09	118.65	122.70
25	LB	10	G	O4'-C1'-N9	8.09	114.67	108.20
26	LA	826	U	C1'-O4'-C4'	-8.09	103.42	109.90
26	LA	1355	G	N9-C4-C5	-8.09	102.16	105.40
26	LA	2255	G	N3-C2-N2	-8.09	114.23	119.90
26	LA	2681	C	O4'-C1'-N1	8.09	114.67	108.20
2	SA	365	U	N3-C2-O2	-8.09	116.54	122.20
2	SA	659	U	N1-C2-N3	8.09	119.75	114.90
2	SA	1318	A	C3'-C2'-C1'	-8.09	95.03	101.50
26	LA	862	G	N3-C2-N2	8.09	125.56	119.90
26	LA	2226	C	O4'-C1'-N1	8.09	114.67	108.20
26	LA	2575	C	C5'-C4'-O4'	8.09	118.81	109.10
2	SA	362	G	N3-C4-N9	-8.09	121.14	126.00
2	SA	1116	U	N3-C2-O2	-8.09	116.54	122.20
2	SA	1416	G	C4-C5-N7	-8.09	107.56	110.80
26	LA	61	C	P-O3'-C3'	-8.09	109.99	119.70
26	LA	230	G	O4'-C1'-N9	8.09	114.67	108.20
26	LA	552	U	N1-C2-O2	-8.09	117.14	122.80
26	LA	1874	C	N3-C2-O2	-8.09	116.24	121.90
26	LA	899	A	O4'-C1'-N9	8.09	114.67	108.20
2	SA	402	G	N1-C6-O6	8.09	124.75	119.90
2	SA	804	U	N3-C4-C5	8.09	119.45	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	874	G	N1-C6-O6	8.09	124.75	119.90
2	SA	1338	G	N9-C4-C5	-8.09	102.17	105.40
8	SH	116	ARG	NE-CZ-NH1	8.09	124.34	120.30
26	LA	481	G	C8-N9-C4	8.09	109.64	106.40
26	LA	693	A	N9-C4-C5	8.09	109.03	105.80
26	LA	1417	C	C4'-C3'-C2'	-8.09	94.51	102.60
2	SA	411	A	O4'-C1'-C2'	-8.09	97.72	105.80
4	S2	72	C	N1-C2-O2	8.09	123.75	118.90
26	LA	222	A	C1'-O4'-C4'	-8.09	103.43	109.90
26	LA	393	C	N1-C2-N3	8.09	124.86	119.20
26	LA	1288	G	C4-N9-C1'	8.09	137.01	126.50
26	LA	2659	G	C2-N3-C4	8.09	115.94	111.90
2	SA	451	A	C4-C5-N7	8.08	114.74	110.70
26	LA	659	G	C2-N3-C4	-8.08	107.86	111.90
26	LA	266	G	N7-C8-N9	8.08	117.14	113.10
26	LA	911	A	C5-N7-C8	-8.08	99.86	103.90
26	LA	1433	A	N7-C8-N9	-8.08	109.76	113.80
26	LA	1945	G	C6-C5-N7	-8.08	125.55	130.40
26	LA	2064	C	C1'-O4'-C4'	-8.08	103.43	109.90
26	LA	2403	C	P-O5'-C5'	-8.08	107.97	120.90
26	LA	2487	G	C5-C6-O6	-8.08	123.75	128.60
26	LA	2841	C	C5'-C4'-O4'	8.08	118.80	109.10
2	SA	726	C	N1-C2-O2	8.08	123.75	118.90
26	LA	1906	G	P-O3'-C3'	-8.08	110.00	119.70
26	LA	2566	A	O4'-C1'-N9	8.08	114.67	108.20
15	SO	76	ARG	NE-CZ-NH2	-8.08	116.26	120.30
26	LA	125	A	O4'-C4'-C3'	8.08	112.56	106.10
26	LA	492	A	C6-N1-C2	-8.08	113.75	118.60
26	LA	1792	G	C5-C6-N1	-8.08	107.46	111.50
26	LA	1936	A	N9-C4-C5	8.08	109.03	105.80
26	LA	2153	C	C5-C4-N4	-8.08	114.54	120.20
2	SA	626	G	N1-C6-O6	8.08	124.75	119.90
2	SA	671	G	C6-C5-N7	-8.08	125.55	130.40
4	S2	28	U	C2-N3-C4	8.08	131.85	127.00
26	LA	143	C	C5'-C4'-O4'	8.08	118.79	109.10
26	LA	608	A	N1-C2-N3	-8.08	125.26	129.30
26	LA	791	C	C4-C5-C6	8.08	121.44	117.40
26	LA	2374	C	C6-N1-C2	-8.08	117.07	120.30
45	LG	76	PHE	CB-CG-CD2	-8.08	115.15	120.80
26	LA	1041	G	O4'-C1'-N9	8.08	114.66	108.20
26	LA	1047	G	O4'-C1'-N9	8.08	114.66	108.20
26	LA	1626	A	C5-N7-C8	8.08	107.94	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1659	G	C6-N1-C2	-8.08	120.25	125.10
26	LA	2568	U	P-O5'-C5'	8.08	133.82	120.90
26	LA	2679	A	O4'-C1'-N9	8.08	114.66	108.20
2	SA	280	C	P-O3'-C3'	8.07	129.39	119.70
26	LA	865	C	N3-C4-N4	8.07	123.65	118.00
2	SA	1073	U	C5'-C4'-C3'	-8.07	103.08	116.00
26	LA	119	A	C3'-C2'-C1'	8.07	107.96	101.50
26	LA	482	A	C3'-C2'-C1'	8.07	107.96	101.50
26	LA	1515	A	C8-N9-C4	8.07	109.03	105.80
2	SA	899	C	C5-C4-N4	-8.07	114.55	120.20
2	SA	924	C	O4'-C1'-N1	8.07	114.66	108.20
2	SA	1347	G	C6-N1-C2	8.07	129.94	125.10
26	LA	281	C	P-O5'-C5'	8.07	133.82	120.90
26	LA	851	C	C6-N1-C2	-8.07	117.07	120.30
26	LA	548	G	C3'-C2'-C1'	-8.07	95.04	101.50
26	LA	690	G	N9-C4-C5	8.07	108.63	105.40
26	LA	1539	U	N3-C4-O4	8.07	125.05	119.40
26	LA	170	U	C5-C6-N1	-8.07	118.67	122.70
26	LA	654	A	C8-N9-C4	-8.07	102.57	105.80
26	LA	2610	C	N1-C2-O2	8.07	123.74	118.90
7	SG	176	TYR	CB-CG-CD2	8.07	125.84	121.00
26	LA	738	G	N1-C6-O6	8.07	124.74	119.90
26	LA	2228	G	N1-C6-O6	8.07	124.74	119.90
26	LA	2316	G	C5-C6-N1	-8.07	107.47	111.50
2	SA	970	C	N3-C4-C5	-8.06	118.67	121.90
26	LA	1861	G	C5-N7-C8	-8.06	100.27	104.30
26	LA	2643	G	C5-N7-C8	-8.06	100.27	104.30
2	SA	1123	U	C5-C4-O4	8.06	130.74	125.90
3	S1	21	U	N3-C4-O4	-8.06	113.76	119.40
26	LA	20	C	C5-C6-N1	-8.06	116.97	121.00
26	LA	373	U	O4'-C1'-N1	8.06	114.65	108.20
26	LA	1447	C	C2-N3-C4	-8.06	115.87	119.90
26	LA	1530	G	C5-N7-C8	-8.06	100.27	104.30
26	LA	1958	C	C6-N1-C2	-8.06	117.08	120.30
26	LA	1998	A	N7-C8-N9	-8.06	109.77	113.80
26	LA	2813	A	C4-C5-N7	-8.06	106.67	110.70
2	SA	72	A	C5-C6-N1	-8.06	113.67	117.70
2	SA	702	A	N1-C2-N3	-8.06	125.27	129.30
2	SA	920	U	P-O3'-C3'	8.06	129.37	119.70
25	LB	25	U	O4'-C1'-N1	8.06	114.65	108.20
26	LA	679	C	C4'-C3'-C2'	-8.06	94.54	102.60
26	LA	1214	A	N1-C2-N3	-8.06	125.27	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2396	G	C5-C6-N1	8.06	115.53	111.50
51	LI	79	THR	CA-CB-CG2	-8.06	101.11	112.40
2	SA	68	G	P-O5'-C5'	8.06	133.79	120.90
2	SA	166	U	O4'-C1'-N1	8.06	114.65	108.20
2	SA	748	G	N1-C2-N3	8.06	128.74	123.90
4	S2	26	C	O4'-C1'-N1	8.06	114.65	108.20
26	LA	313	G	C5'-C4'-C3'	-8.06	103.11	116.00
26	LA	443	A	C1'-O4'-C4'	-8.06	103.45	109.90
2	SA	1235	U	C5-C6-N1	8.06	126.73	122.70
26	LA	472	A	O4'-C1'-N9	8.06	114.65	108.20
26	LA	783	A	C6-N1-C2	-8.06	113.77	118.60
26	LA	1654	A	C4'-C3'-C2'	8.06	110.66	102.60
26	LA	1689	A	C4-C5-C6	-8.06	112.97	117.00
26	LA	1955	U	C5-C4-O4	8.06	130.73	125.90
2	SA	381	C	C6-N1-C1'	-8.05	111.13	120.80
2	SA	1539	C	C6-N1-C2	-8.06	117.08	120.30
8	SH	12	ARG	NE-CZ-NH1	8.05	124.33	120.30
26	LA	1192	G	C8-N9-C4	-8.06	103.18	106.40
26	LA	2078	C	C5-C6-N1	8.06	125.03	121.00
26	LA	2176	A	N7-C8-N9	-8.06	109.77	113.80
2	SA	689	C	C4-C5-C6	-8.05	113.37	117.40
2	SA	761	G	N3-C4-C5	-8.05	124.57	128.60
26	LA	134	G	P-O3'-C3'	-8.05	110.03	119.70
25	LB	57	A	O4'-C1'-N9	8.05	114.64	108.20
26	LA	618	G	O4'-C1'-N9	8.05	114.64	108.20
26	LA	789	A	C5-C6-N1	-8.05	113.67	117.70
26	LA	1073	A	C2'-C3'-O3'	8.05	127.22	109.50
26	LA	1569	A	C6-N1-C2	-8.05	113.77	118.60
26	LA	1803	A	P-O3'-C3'	8.05	129.36	119.70
2	SA	101	A	C5-N7-C8	-8.05	99.87	103.90
2	SA	277	C	C2-N3-C4	-8.05	115.87	119.90
2	SA	757	U	C3'-C2'-C1'	8.05	107.94	101.50
2	SA	773	G	O4'-C1'-N9	8.05	114.64	108.20
2	SA	1103	C	C2-N3-C4	-8.05	115.88	119.90
2	SA	1268	G	N1-C2-N3	-8.05	119.07	123.90
2	SA	1385	G	O4'-C1'-N9	8.05	114.64	108.20
26	LA	479	A	P-O3'-C3'	8.05	129.36	119.70
26	LA	1098	A	C5-C6-N6	-8.05	117.26	123.70
26	LA	1573	G	C5-C6-O6	-8.05	123.77	128.60
26	LA	1891	G	C5-C6-N1	8.05	115.53	111.50
26	LA	2516	A	C5-C6-N1	8.05	121.72	117.70
2	SA	96	U	C4'-C3'-C2'	-8.05	94.55	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	385	C	O4'-C1'-N1	8.05	114.64	108.20
2	SA	400	C	N3-C4-N4	8.05	123.63	118.00
2	SA	1365	G	O4'-C1'-N9	8.05	114.64	108.20
2	SA	1397	C	O4'-C1'-N1	8.05	114.64	108.20
26	LA	468	G	N1-C6-O6	8.05	124.73	119.90
26	LA	1262	A	C8-N9-C4	8.05	109.02	105.80
26	LA	1996	C	O4'-C4'-C3'	8.05	112.54	106.10
2	SA	1081	A	N7-C8-N9	-8.05	109.78	113.80
2	SA	1239	A	C8-N9-C4	8.05	109.02	105.80
20	SD	145	ARG	NE-CZ-NH1	8.05	124.32	120.30
26	LA	504	A	N7-C8-N9	8.05	117.82	113.80
26	LA	1124	G	O4'-C1'-N9	8.05	114.64	108.20
2	SA	327	A	C1'-O4'-C4'	-8.04	103.46	109.90
2	SA	1104	G	C5-C6-O6	-8.05	123.77	128.60
4	S2	74	A	C4-C5-N7	8.05	114.72	110.70
26	LA	1727	C	N1-C2-N3	8.05	124.83	119.20
2	SA	919	A	N1-C6-N6	8.04	123.43	118.60
25	LB	27	C	N3-C4-C5	-8.04	118.68	121.90
26	LA	1668	A	C8-N9-C4	-8.05	102.58	105.80
26	LA	1647	U	C3'-C2'-C1'	-8.04	95.06	101.50
26	LA	2714	G	N9-C4-C5	-8.04	102.18	105.40
26	LA	2889	C	O4'-C1'-N1	8.04	114.64	108.20
45	LG	172	PHE	CB-CG-CD2	-8.04	115.17	120.80
2	SA	87	C	N3-C2-O2	-8.04	116.27	121.90
2	SA	280	C	C5-C4-N4	-8.04	114.57	120.20
2	SA	290	C	C6-N1-C2	-8.04	117.08	120.30
2	SA	573	A	N1-C6-N6	-8.04	113.78	118.60
2	SA	630	A	C8-N9-C4	-8.04	102.58	105.80
26	LA	116	C	N3-C4-N4	-8.04	112.37	118.00
2	SA	844	G	N1-C2-N3	-8.04	119.08	123.90
26	LA	104	A	N9-C4-C5	8.04	109.02	105.80
26	LA	193	U	C5-C6-N1	-8.04	118.68	122.70
26	LA	2873	A	N1-C2-N3	-8.04	125.28	129.30
26	LA	336	C	O4'-C1'-N1	8.04	114.63	108.20
26	LA	533	G	O4'-C1'-N9	8.04	114.63	108.20
26	LA	637	A	C4-C5-N7	-8.04	106.68	110.70
26	LA	965	C	C4-C5-C6	8.04	121.42	117.40
26	LA	1996	C	C1'-O4'-C4'	-8.04	103.47	109.90
26	LA	2297	A	C2-N3-C4	-8.04	106.58	110.60
2	SA	687	A	C2-N3-C4	8.04	114.62	110.60
3	S1	56	G	N9-C4-C5	-8.04	102.18	105.40
4	S2	54	G	C5-C6-N1	-8.04	107.48	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	SG	3	ARG	NE-CZ-NH1	8.04	124.32	120.30
19	SC	30	ASP	CB-CG-OD2	8.04	125.54	118.30
26	LA	500	G	N3-C2-N2	8.04	125.53	119.90
2	SA	635	A	P-O3'-C3'	8.04	129.34	119.70
2	SA	802	A	N1-C6-N6	-8.04	113.78	118.60
2	SA	848	C	C4'-C3'-C2'	-8.04	94.56	102.60
2	SA	1174	G	O4'-C1'-N9	8.04	114.63	108.20
26	LA	187	G	C6-N1-C2	-8.04	120.28	125.10
26	LA	488	G	N1-C2-N2	-8.04	108.97	116.20
26	LA	587	C	N3-C4-C5	8.04	125.11	121.90
26	LA	625	G	C4-C5-N7	8.04	114.02	110.80
26	LA	1007	C	C4-C5-C6	-8.04	113.38	117.40
26	LA	2047	C	C2-N3-C4	-8.04	115.88	119.90
26	LA	2755	C	N3-C4-N4	8.04	123.63	118.00
2	SA	1232	U	C1'-O4'-C4'	-8.04	103.47	109.90
2	SA	1348	U	C4'-C3'-C2'	-8.04	94.56	102.60
2	SA	1525	G	C5-N7-C8	-8.04	100.28	104.30
26	LA	213	A	O4'-C1'-N9	8.04	114.63	108.20
26	LA	1246	A	C6-C5-N7	-8.04	126.67	132.30
26	LA	2375	G	C5'-C4'-C3'	-8.04	103.14	116.00
26	LA	1912	A	C5-N7-C8	8.03	107.92	103.90
26	LA	1912	A	C4-C5-N7	-8.03	106.68	110.70
26	LA	1919	A	C5-C6-N6	-8.03	117.27	123.70
2	SA	665	A	C8-N9-C4	8.03	109.01	105.80
25	LB	104	A	C5'-C4'-C3'	-8.03	103.15	116.00
26	LA	932	U	P-O3'-C3'	8.03	129.34	119.70
26	LA	1029	A	N1-C6-N6	8.03	123.42	118.60
26	LA	1356	G	O4'-C1'-N9	8.03	114.62	108.20
26	LA	1752	C	P-O5'-C5'	8.03	133.75	120.90
26	LA	1921	G	C5-C6-N1	8.03	115.52	111.50
26	LA	2158	A	C5-C6-N1	8.03	121.72	117.70
2	SA	999	C	C2-N3-C4	8.03	123.92	119.90
2	SA	1182	G	N7-C8-N9	-8.03	109.08	113.10
2	SA	1429	A	N1-C6-N6	-8.03	113.78	118.60
2	SA	389	A	C5'-C4'-O4'	8.03	118.73	109.10
2	SA	682	G	C2-N3-C4	-8.03	107.89	111.90
2	SA	1255	G	P-O3'-C3'	8.03	129.34	119.70
24	S3	568	TYR	CB-CG-CD1	8.03	125.82	121.00
26	LA	1627	G	N1-C2-N3	-8.03	119.08	123.90
26	LA	1642	G	C5-C6-N1	8.03	115.51	111.50
26	LA	2411	A	C8-N9-C4	-8.03	102.59	105.80
45	LG	172	PHE	CB-CG-CD1	8.03	126.42	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	417	G	N3-C2-N2	8.03	125.52	119.90
2	SA	931	C	N3-C4-C5	8.03	125.11	121.90
26	LA	1462	C	N3-C4-C5	-8.03	118.69	121.90
26	LA	2492	U	C5-C4-O4	8.03	130.72	125.90
26	LA	359	G	C5'-C4'-O4'	8.03	118.73	109.10
26	LA	1007	C	P-O3'-C3'	8.03	129.33	119.70
26	LA	1060	U	P-O3'-C3'	8.03	129.33	119.70
26	LA	2169	A	C6-C5-N7	-8.03	126.68	132.30
26	LA	2418	A	C6-N1-C2	-8.03	113.78	118.60
2	SA	493	A	C4-C5-N7	8.02	114.71	110.70
2	SA	559	A	C5-C6-N6	-8.02	117.28	123.70
2	SA	726	C	C5-C4-N4	-8.02	114.58	120.20
26	LA	1496	A	P-O5'-C5'	8.02	133.74	120.90
26	LA	2289	G	C4-C5-C6	-8.02	113.99	118.80
2	SA	48	C	C2-N1-C1'	8.02	127.62	118.80
2	SA	406	G	N3-C4-N9	8.02	130.81	126.00
26	LA	179	C	C2-N3-C4	-8.02	115.89	119.90
26	LA	1189	A	N1-C2-N3	8.02	133.31	129.30
26	LA	2574	G	C4'-C3'-C2'	-8.02	94.58	102.60
2	SA	1150	A	C5-C6-N1	8.02	121.71	117.70
26	LA	348	A	C8-N9-C4	-8.02	102.59	105.80
26	LA	995	C	N3-C2-O2	-8.02	116.29	121.90
26	LA	2829	A	C8-N9-C4	8.02	109.01	105.80
2	SA	884	U	C6-N1-C2	-8.02	116.19	121.00
2	SA	1311	A	N1-C6-N6	8.02	123.41	118.60
3	S1	32	U	C5'-C4'-C3'	8.02	128.83	116.00
25	LB	88	C	N3-C4-C5	-8.02	118.69	121.90
26	LA	399	U	C4'-C3'-C2'	-8.02	94.58	102.60
26	LA	600	G	C4-C5-N7	8.02	114.01	110.80
26	LA	2200	C	N3-C4-C5	-8.02	118.69	121.90
26	LA	2680	U	N1-C2-N3	8.02	119.71	114.90
2	SA	722	G	C2-N3-C4	8.02	115.91	111.90
2	SA	386	C	P-O5'-C5'	8.02	133.72	120.90
2	SA	1154	G	C5-N7-C8	8.02	108.31	104.30
2	SA	1247	U	C5-C4-O4	-8.02	121.09	125.90
4	S2	13	C	O3'-P-O5'	8.02	119.23	104.00
26	LA	139	U	N1-C2-O2	8.02	128.41	122.80
26	LA	140	C	C5'-C4'-C3'	8.02	128.83	116.00
26	LA	1923	U	N1-C2-N3	-8.02	110.09	114.90
26	LA	2212	A	C5-C6-N6	8.02	130.11	123.70
2	SA	814	A	C5-C6-N6	8.01	130.11	123.70
26	LA	2734	A	O4'-C1'-N9	8.01	114.61	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	43	C	C5-C6-N1	-8.01	116.99	121.00
2	SA	216	U	P-O5'-C5'	8.01	133.72	120.90
26	LA	801	G	C5-C6-N1	-8.01	107.49	111.50
26	LA	2469	A	C5'-C4'-C3'	-8.01	103.18	116.00
2	SA	1043	G	P-O5'-C5'	8.01	133.72	120.90
26	LA	1922	G	C8-N9-C4	8.01	109.61	106.40
2	SA	345	C	O4'-C1'-N1	8.01	114.61	108.20
2	SA	399	G	N1-C6-O6	8.01	124.70	119.90
2	SA	415	A	N3-C4-C5	-8.01	121.19	126.80
2	SA	576	C	N3-C4-N4	8.01	123.61	118.00
2	SA	760	G	N7-C8-N9	-8.01	109.09	113.10
26	LA	315	G	C5-C6-O6	-8.01	123.79	128.60
26	LA	331	C	P-O3'-C3'	8.01	129.31	119.70
2	SA	864	A	C2-N3-C4	-8.01	106.60	110.60
26	LA	793	A	O4'-C1'-N9	8.01	114.61	108.20
26	LA	1400	U	N1-C2-N3	8.01	119.70	114.90
2	SA	38	G	P-O3'-C3'	-8.01	110.09	119.70
2	SA	1522	U	C5-C4-O4	-8.01	121.09	125.90
26	LA	268	C	C1'-O4'-C4'	-8.01	103.49	109.90
26	LA	1042	G	C2-N3-C4	-8.01	107.90	111.90
26	LA	1160	G	C5-C6-O6	-8.01	123.80	128.60
26	LA	1287	A	C5-C6-N1	-8.01	113.70	117.70
26	LA	1472	C	C5'-C4'-C3'	-8.01	103.19	116.00
26	LA	2000	C	N1-C2-O2	-8.01	114.10	118.90
2	SA	72	A	N1-C6-N6	8.01	123.40	118.60
2	SA	657	U	O4'-C1'-N1	8.01	114.60	108.20
26	LA	302	C	O4'-C1'-N1	8.01	114.60	108.20
26	LA	661	A	O4'-C1'-N9	8.01	114.60	108.20
26	LA	665	U	C5'-C4'-C3'	-8.01	103.19	116.00
26	LA	1170	C	C6-N1-C2	-8.01	117.10	120.30
26	LA	2436	G	C8-N9-C4	8.01	109.60	106.40
2	SA	511	C	C1'-O4'-C4'	-8.00	103.50	109.90
2	SA	1441	A	P-O5'-C5'	8.00	133.71	120.90
26	LA	134	G	C5-C6-N1	-8.00	107.50	111.50
25	LB	87	U	O4'-C1'-N1	8.00	114.60	108.20
26	LA	239	C	O4'-C1'-N1	8.00	114.60	108.20
26	LA	473	G	C5-C6-O6	8.00	133.40	128.60
26	LA	1627	G	N1-C6-O6	8.00	124.70	119.90
26	LA	2154	A	C2-N3-C4	-8.00	106.60	110.60
2	SA	542	G	C8-N9-C4	-8.00	103.20	106.40
2	SA	1006	G	C2-N3-C4	8.00	115.90	111.90
26	LA	2022	U	P-O3'-C3'	-8.00	110.10	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2251	U	C5-C6-N1	-8.00	118.70	122.70
26	LA	2479	U	C5-C6-N1	-8.00	118.70	122.70
2	SA	1176	A	C5'-C4'-C3'	-8.00	103.20	116.00
26	LA	524	G	C5-C6-N1	8.00	115.50	111.50
26	LA	784	G	C8-N9-C1'	-8.00	116.60	127.00
2	SA	961	U	N3-C4-O4	8.00	125.00	119.40
2	SA	1347	G	P-O3'-C3'	8.00	129.30	119.70
26	LA	117	G	C5-C6-O6	8.00	133.40	128.60
26	LA	468	G	C5-C6-N1	8.00	115.50	111.50
26	LA	708	G	N3-C4-N9	8.00	130.80	126.00
26	LA	1227	G	N3-C4-N9	8.00	130.80	126.00
26	LA	1446	C	P-O5'-C5'	8.00	133.69	120.90
26	LA	2543	G	C5'-C4'-C3'	-8.00	103.21	116.00
2	SA	72	A	C2-N3-C4	-8.00	106.60	110.60
21	SE	102	THR	N-CA-CB	8.00	125.49	110.30
26	LA	1412	U	C5-C6-N1	-8.00	118.70	122.70
2	SA	1196	A	N1-C6-N6	7.99	123.40	118.60
7	SG	77	ARG	NE-CZ-NH1	7.99	124.30	120.30
26	LA	377	G	C4-C5-C6	7.99	123.60	118.80
26	LA	555	G	C4-C5-N7	-7.99	107.60	110.80
26	LA	1182	G	C4-C5-N7	7.99	114.00	110.80
45	LG	29	ARG	NE-CZ-NH2	7.99	124.30	120.30
2	SA	33	A	C5-N7-C8	-7.99	99.90	103.90
2	SA	82	G	C5-C6-O6	-7.99	123.81	128.60
26	LA	86	G	O4'-C1'-C2'	7.99	114.79	107.60
26	LA	487	C	N3-C4-C5	7.99	125.10	121.90
26	LA	564	C	C4'-C3'-C2'	-7.99	94.61	102.60
26	LA	581	C	C1'-O4'-C4'	-7.99	103.51	109.90
26	LA	1120	G	N9-C4-C5	7.99	108.60	105.40
2	SA	838	G	N3-C4-C5	-7.99	124.60	128.60
2	SA	1359	C	N3-C2-O2	-7.99	116.31	121.90
24	S3	377	ARG	NE-CZ-NH1	7.99	124.30	120.30
26	LA	328	U	N1-C2-N3	7.99	119.69	114.90
26	LA	455	C	N1-C2-N3	7.99	124.79	119.20
26	LA	1815	A	N9-C4-C5	-7.99	102.60	105.80
26	LA	2120	G	O4'-C1'-N9	7.99	114.59	108.20
26	LA	2377	A	O4'-C1'-N9	7.99	114.59	108.20
26	LA	2816	G	C5-C6-O6	-7.99	123.81	128.60
50	LL	35	ARG	NE-CZ-NH1	7.99	124.30	120.30
2	SA	304	U	C5'-C4'-C3'	-7.99	103.22	116.00
25	LB	23	G	N1-C2-N3	-7.99	119.11	123.90
26	LA	961	C	C2-N3-C4	-7.99	115.91	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1532	A	C5'-C4'-O4'	7.99	118.69	109.10
26	LA	2287	A	C5-C6-N6	7.99	130.09	123.70
26	LA	2888	C	O4'-C1'-N1	7.99	114.59	108.20
2	SA	627	G	C4-C5-N7	7.99	114.00	110.80
4	S2	18	U	C6-N1-C2	-7.99	116.21	121.00
26	LA	1000	A	C2-N3-C4	7.99	114.59	110.60
26	LA	42	A	O4'-C1'-N9	7.99	114.59	108.20
26	LA	346	A	P-O5'-C5'	7.99	133.68	120.90
2	SA	632	U	N3-C4-O4	7.98	124.99	119.40
3	S1	27	A	N1-C6-N6	-7.98	113.81	118.60
26	LA	1546	G	N7-C8-N9	-7.98	109.11	113.10
26	LA	2604	U	C5'-C4'-O4'	7.98	118.68	109.10
2	SA	365	U	N1-C2-N3	7.98	119.69	114.90
2	SA	398	U	C6-N1-C2	-7.98	116.21	121.00
26	LA	515	A	N9-C4-C5	-7.98	102.61	105.80
26	LA	940	G	C6-N1-C2	-7.98	120.31	125.10
26	LA	1778	U	P-O3'-C3'	-7.98	110.12	119.70
2	SA	84	U	P-O5'-C5'	-7.98	108.13	120.90
2	SA	649	A	C8-N9-C4	-7.98	102.61	105.80
2	SA	929	G	C5'-C4'-C3'	-7.98	103.23	116.00
26	LA	847	U	C6-N1-C2	-7.98	116.21	121.00
26	LA	945	A	P-O3'-C3'	7.98	129.28	119.70
26	LA	2709	G	N1-C2-N3	-7.98	119.11	123.90
2	SA	513	C	C5-C6-N1	-7.98	117.01	121.00
2	SA	727	G	P-O3'-C3'	7.98	129.27	119.70
2	SA	1484	C	C1'-O4'-C4'	7.98	116.28	109.90
2	SA	560	A	C5-N7-C8	7.98	107.89	103.90
2	SA	605	U	P-O3'-C3'	7.98	129.27	119.70
26	LA	1264	A	N7-C8-N9	7.98	117.79	113.80
26	LA	1938	A	C8-N9-C4	7.98	108.99	105.80
26	LA	242	G	C5'-C4'-C3'	-7.98	103.24	116.00
26	LA	419	U	N3-C4-C5	-7.98	109.81	114.60
26	LA	1565	C	C6-N1-C2	7.98	123.49	120.30
26	LA	2105	U	C2-N3-C4	-7.98	122.22	127.00
2	SA	1056	U	O5'-P-OP1	-7.97	98.52	105.70
25	LB	54	G	P-O5'-C5'	7.97	133.66	120.90
26	LA	575	A	C6-N1-C2	-7.97	113.82	118.60
26	LA	1591	A	C4-C5-C6	-7.97	113.01	117.00
26	LA	2347	C	N3-C4-C5	-7.97	118.71	121.90
26	LA	2379	G	C8-N9-C4	-7.97	103.21	106.40
26	LA	2604	U	N1-C2-O2	-7.97	117.22	122.80
2	SA	854	U	N3-C4-O4	7.97	124.98	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	310	A	O4'-C1'-N9	7.97	114.58	108.20
26	LA	2327	A	N9-C4-C5	7.97	108.99	105.80
26	LA	2428	G	N3-C4-N9	-7.97	121.22	126.00
26	LA	2466	C	O4'-C1'-N1	7.97	114.58	108.20
26	LA	2565	A	O4'-C1'-N9	7.97	114.58	108.20
2	SA	309	A	C5-C6-N1	7.97	121.69	117.70
2	SA	903	G	N3-C4-C5	-7.97	124.61	128.60
2	SA	215	C	P-O5'-C5'	7.97	133.65	120.90
2	SA	1169	A	C4-C5-C6	-7.97	113.02	117.00
26	LA	8	C	N3-C4-C5	-7.97	118.71	121.90
26	LA	265	A	C5-N7-C8	-7.97	99.92	103.90
26	LA	600	G	C5-N7-C8	-7.97	100.31	104.30
26	LA	679	C	N1-C2-N3	7.97	124.78	119.20
26	LA	1111	A	N9-C4-C5	7.97	108.99	105.80
26	LA	1267	U	O4'-C1'-N1	7.97	114.58	108.20
26	LA	2631	G	N7-C8-N9	7.97	117.08	113.10
26	LA	2636	C	C2-N3-C4	-7.97	115.92	119.90
2	SA	481	G	C2-N3-C4	7.97	115.88	111.90
2	SA	560	A	C4-C5-C6	7.97	120.98	117.00
2	SA	941	G	N3-C4-N9	-7.97	121.22	126.00
2	SA	1470	U	C5-C6-N1	-7.97	118.72	122.70
2	SA	1514	G	C6-C5-N7	-7.97	125.62	130.40
26	LA	1737	G	N1-C6-O6	7.97	124.68	119.90
2	SA	501	C	C6-N1-C2	-7.97	117.11	120.30
26	LA	488	G	N9-C4-C5	-7.97	102.21	105.40
26	LA	811	U	N3-C4-O4	-7.97	113.82	119.40
26	LA	1308	A	C2-N3-C4	7.97	114.58	110.60
26	LA	1485	U	C1'-O4'-C4'	7.97	116.27	109.90
26	LA	2124	G	N9-C4-C5	-7.97	102.21	105.40
26	LA	2489	U	C5-C6-N1	7.97	126.68	122.70
2	SA	370	C	P-O3'-C3'	-7.96	110.14	119.70
26	LA	202	U	O4'-C1'-N1	7.96	114.57	108.20
2	SA	241	G	O4'-C1'-N9	7.96	114.57	108.20
26	LA	405	U	N1-C2-N3	-7.96	110.12	114.90
26	LA	2125	G	C4-C5-C6	-7.96	114.02	118.80
2	SA	226	G	C6-N1-C2	7.96	129.88	125.10
2	SA	973	G	C8-N9-C1'	7.96	137.35	127.00
2	SA	1362	A	C6-N1-C2	-7.96	113.82	118.60
26	LA	167	A	C4-C5-N7	7.96	114.68	110.70
26	LA	487	C	C5-C6-N1	7.96	124.98	121.00
26	LA	622	G	N3-C4-C5	-7.96	124.62	128.60
2	SA	747	A	P-O5'-C5'	7.96	133.63	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	330	A	N1-C2-N3	7.96	133.28	129.30
26	LA	801	G	C5-C6-O6	-7.96	123.82	128.60
26	LA	2269	G	C5-C6-N1	7.96	115.48	111.50
2	SA	792	A	C5'-C4'-C3'	7.96	128.73	116.00
26	LA	737	C	O4'-C1'-N1	7.96	114.57	108.20
26	LA	2565	A	P-O3'-C3'	7.96	129.25	119.70
2	SA	116	A	C5-C6-N6	-7.96	117.33	123.70
2	SA	331	G	C5'-C4'-O4'	7.96	118.65	109.10
2	SA	760	G	N3-C4-C5	7.96	132.58	128.60
26	LA	114	U	C3'-C2'-C1'	-7.96	95.13	101.50
26	LA	489	G	C2-N3-C4	-7.96	107.92	111.90
26	LA	1308	A	C6-N1-C2	-7.96	113.83	118.60
26	LA	1393	A	C5-N7-C8	-7.96	99.92	103.90
26	LA	2330	G	P-O3'-C3'	-7.96	110.15	119.70
26	LA	2519	U	P-O5'-C5'	7.96	133.63	120.90
37	LC	7	ARG	NE-CZ-NH1	7.96	124.28	120.30
2	SA	196	A	O4'-C1'-N9	7.96	114.56	108.20
2	SA	428	G	C4-C5-C6	7.96	123.57	118.80
2	SA	641	U	N1-C2-N3	7.96	119.67	114.90
2	SA	797	C	N1-C1'-C2'	-7.95	103.25	112.00
2	SA	994	A	C5-C6-N1	-7.95	113.72	117.70
24	S3	436	ARG	NE-CZ-NH1	7.95	124.28	120.30
26	LA	957	C	C2-N1-C1'	7.95	127.55	118.80
26	LA	1969	A	N1-C6-N6	-7.95	113.83	118.60
2	SA	1124	G	C8-N9-C4	7.95	109.58	106.40
24	S3	499	ASP	CB-CG-OD2	7.95	125.46	118.30
2	SA	264	C	P-O5'-C5'	7.95	133.62	120.90
26	LA	1582	C	N1-C2-N3	7.95	124.77	119.20
2	SA	232	G	C5-C6-O6	-7.95	123.83	128.60
2	SA	1185	G	C5-C6-N1	7.95	115.47	111.50
2	SA	1199	U	P-O5'-C5'	7.95	133.62	120.90
3	S1	33	A	C5'-C4'-C3'	7.95	128.72	116.00
26	LA	1252	G	C5-C6-O6	-7.95	123.83	128.60
26	LA	1419	A	C8-N9-C4	7.95	108.98	105.80
26	LA	2234	G	N9-C4-C5	7.95	108.58	105.40
26	LA	2256	G	C6-N1-C2	-7.95	120.33	125.10
26	LA	2423	U	C5-C6-N1	-7.95	118.73	122.70
41	L5	28	ARG	NE-CZ-NH1	7.95	124.27	120.30
2	SA	1474	U	N1-C2-O2	7.95	128.36	122.80
19	SC	178	ARG	NE-CZ-NH2	-7.95	116.33	120.30
26	LA	370	G	C5-C6-O6	-7.95	123.83	128.60
26	LA	2056	G	C5-C6-N1	7.95	115.47	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2087	G	N3-C2-N2	-7.95	114.34	119.90
26	LA	2838	G	C2-N3-C4	-7.95	107.93	111.90
26	LA	984	A	C5-C6-N1	7.95	121.67	117.70
26	LA	2241	A	C4'-C3'-C2'	-7.95	94.66	102.60
26	LA	2624	G	N1-C2-N2	-7.95	109.05	116.20
2	SA	587	G	O3'-P-O5'	-7.94	88.91	104.00
26	LA	1216	G	C2-N3-C4	7.94	115.87	111.90
26	LA	1322	A	N9-C4-C5	-7.94	102.62	105.80
26	LA	2638	G	N1-C6-O6	-7.94	115.13	119.90
2	SA	3	A	O4'-C1'-N9	7.94	114.55	108.20
2	SA	1377	A	C8-N9-C4	-7.94	102.62	105.80
22	SF	2	ARG	NE-CZ-NH2	-7.94	116.33	120.30
26	LA	555	G	N1-C6-O6	7.94	124.66	119.90
26	LA	1259	G	N3-C2-N2	7.94	125.46	119.90
26	LA	1579	A	C1'-O4'-C4'	-7.94	103.55	109.90
26	LA	2734	A	C4'-C3'-C2'	-7.94	94.66	102.60
26	LA	2768	U	N3-C2-O2	-7.94	116.64	122.20
26	LA	2805	C	P-O5'-C5'	7.94	133.60	120.90
2	SA	878	A	C5'-C4'-O4'	7.94	118.63	109.10
26	LA	1482	G	C8-N9-C4	-7.94	103.22	106.40
26	LA	1659	G	C4'-C3'-C2'	-7.94	94.66	102.60
26	LA	2399	G	C1'-O4'-C4'	-7.94	103.55	109.90
26	LA	400	G	N1-C6-O6	7.94	124.66	119.90
26	LA	699	A	C1'-O4'-C4'	-7.94	103.55	109.90
26	LA	923	G	O4'-C1'-N9	7.94	114.55	108.20
26	LA	1184	U	N1-C2-O2	-7.94	117.24	122.80
26	LA	2010	G	O4'-C1'-N9	7.94	114.55	108.20
26	LA	2616	C	C5-C6-N1	-7.94	117.03	121.00
26	LA	2525	G	C2-N3-C4	-7.94	107.93	111.90
2	SA	1023	U	C5'-C4'-O4'	7.93	118.62	109.10
4	S2	12	G	P-O3'-C3'	7.93	129.22	119.70
26	LA	1512	C	C6-N1-C2	-7.93	117.13	120.30
26	LA	2760	C	N3-C2-O2	-7.93	116.35	121.90
26	LA	2803	G	P-O5'-C5'	-7.93	108.20	120.90
58	LT	80	ARG	NH1-CZ-NH2	-7.93	110.67	119.40
2	SA	25	C	C6-N1-C2	-7.93	117.13	120.30
2	SA	992	U	C2-N3-C4	-7.93	122.24	127.00
4	S2	9	G	N1-C6-O6	7.93	124.66	119.90
26	LA	1021	A	P-O3'-C3'	-7.93	110.18	119.70
26	LA	1492	G	N7-C8-N9	-7.93	109.13	113.10
26	LA	2299	U	O4'-C1'-N1	7.93	114.55	108.20
26	LA	2550	G	C2-N3-C4	7.93	115.87	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	69	G	N3-C2-N2	7.93	125.45	119.90
26	LA	1861	G	C6-N1-C2	-7.93	120.34	125.10
26	LA	2270	A	N1-C6-N6	-7.93	113.84	118.60
26	LA	2360	G	C4-C5-N7	-7.93	107.63	110.80
26	LA	2677	G	N7-C8-N9	-7.93	109.14	113.10
2	SA	1269	A	C4-C5-N7	7.93	114.67	110.70
26	LA	377	G	C4-C5-N7	-7.93	107.63	110.80
26	LA	606	U	C2-N1-C1'	-7.93	108.19	117.70
26	LA	708	G	C8-N9-C4	7.93	109.57	106.40
26	LA	983	A	C5-C6-N6	7.93	130.04	123.70
26	LA	1800	C	O4'-C1'-N1	7.93	114.54	108.20
26	LA	2330	G	O4'-C1'-N9	7.93	114.54	108.20
45	LG	79	ARG	NE-CZ-NH2	7.93	124.27	120.30
2	SA	404	G	C5'-C4'-C3'	-7.93	103.32	116.00
2	SA	1008	U	P-O5'-C5'	7.93	133.59	120.90
26	LA	575	A	C8-N9-C4	7.93	108.97	105.80
26	LA	1324	G	P-O3'-C3'	-7.93	110.19	119.70
26	LA	697	G	O4'-C1'-N9	7.93	114.54	108.20
26	LA	1220	G	O4'-C1'-N9	7.93	114.54	108.20
26	LA	2725	A	C4'-C3'-C2'	-7.93	94.67	102.60
2	SA	1101	A	N1-C6-N6	-7.92	113.84	118.60
2	SA	1312	G	C6-N1-C2	-7.92	120.34	125.10
26	LA	101	A	P-O5'-C5'	7.92	133.58	120.90
26	LA	1388	G	N7-C8-N9	7.92	117.06	113.10
26	LA	1612	C	C6-N1-C2	-7.92	117.13	120.30
26	LA	2813	A	C5-C6-N6	-7.92	117.36	123.70
26	LA	2903	U	C6-N1-C2	-7.92	116.25	121.00
27	LD	65	ASP	CB-CG-OD2	7.92	125.43	118.30
53	LP	67	PHE	CB-CG-CD2	-7.92	115.25	120.80
2	SA	1234	C	N3-C2-O2	-7.92	116.35	121.90
2	SA	1247	U	N1-C2-N3	7.92	119.65	114.90
22	SF	44	ARG	NH1-CZ-NH2	-7.92	110.68	119.40
2	SA	479	U	O4'-C1'-N1	7.92	114.54	108.20
2	SA	761	G	C4-C5-C6	7.92	123.55	118.80
2	SA	1390	U	C5-C4-O4	-7.92	121.15	125.90
26	LA	618	G	C5-C6-N1	7.92	115.46	111.50
26	LA	2223	G	N1-C6-O6	7.92	124.65	119.90
26	LA	2326	C	C4-C5-C6	7.92	121.36	117.40
48	LN	81	ASP	CB-CG-OD1	7.92	125.43	118.30
2	SA	616	G	N3-C4-C5	-7.92	124.64	128.60
2	SA	1377	A	N9-C4-C5	7.92	108.97	105.80
26	LA	1528	A	C4-C5-N7	-7.92	106.74	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1318	A	O4'-C1'-N9	7.92	114.53	108.20
26	LA	464	U	C4'-C3'-C2'	-7.92	94.68	102.60
26	LA	626	A	C4-C5-N7	7.92	114.66	110.70
26	LA	1668	A	C4'-C3'-C2'	-7.92	94.68	102.60
26	LA	1750	G	C2-N3-C4	7.92	115.86	111.90
26	LA	2353	G	C5-C6-N1	7.92	115.46	111.50
26	LA	2811	G	N7-C8-N9	-7.92	109.14	113.10
2	SA	328	C	N1-C2-O2	7.92	123.65	118.90
2	SA	477	C	C4-C5-C6	7.92	121.36	117.40
2	SA	532	A	C6-N1-C2	7.92	123.35	118.60
2	SA	768	A	O4'-C1'-N9	7.92	114.53	108.20
26	LA	114	U	C1'-O4'-C4'	-7.92	103.57	109.90
26	LA	710	U	C3'-C2'-C1'	-7.92	95.17	101.50
26	LA	851	C	N3-C4-C5	-7.92	118.73	121.90
26	LA	991	C	N1-C2-N3	7.92	124.74	119.20
26	LA	1944	U	C2-N3-C4	-7.92	122.25	127.00
26	LA	2044	C	N1-C2-O2	-7.92	114.15	118.90
26	LA	2538	C	N3-C4-C5	-7.92	118.73	121.90
26	LA	2545	G	N3-C2-N2	-7.92	114.36	119.90
36	L2	59	ARG	NE-CZ-NH2	-7.92	116.34	120.30
53	LP	38	LEU	CB-CG-CD2	-7.92	97.54	111.00
26	LA	1338	G	C5-C6-N1	-7.92	107.54	111.50
2	SA	1317	C	C2-N1-C1'	7.91	127.50	118.80
25	LB	34	A	O4'-C1'-N9	7.91	114.53	108.20
26	LA	167	A	C2-N3-C4	-7.91	106.64	110.60
26	LA	712	G	N1-C2-N2	-7.91	109.08	116.20
26	LA	2302	U	N1-C2-O2	7.91	128.34	122.80
26	LA	2478	A	C8-N9-C4	-7.91	102.63	105.80
26	LA	2643	G	N1-C2-N2	-7.91	109.08	116.20
56	LR	97	TYR	CB-CG-CD1	7.91	125.75	121.00
26	LA	2572	A	C4-C5-C6	-7.91	113.04	117.00
18	SB	221	ARG	NE-CZ-NH1	7.91	124.25	120.30
26	LA	1732	C	C6-N1-C2	-7.91	117.14	120.30
2	SA	1457	G	N9-C4-C5	-7.91	102.24	105.40
26	LA	532	A	C5-C6-N6	-7.91	117.37	123.70
26	LA	986	C	C4-C5-C6	-7.91	113.45	117.40
26	LA	1021	A	N7-C8-N9	7.91	117.75	113.80
26	LA	1706	C	C4-C5-C6	7.91	121.35	117.40
26	LA	1785	A	C5-N7-C8	-7.91	99.95	103.90
26	LA	1797	G	C5-C6-O6	7.91	133.34	128.60
2	SA	471	U	O4'-C1'-N1	7.91	114.53	108.20
26	LA	213	A	C8-N9-C4	7.91	108.96	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1290	C	C6-N1-C2	-7.91	117.14	120.30
26	LA	1557	C	N3-C4-C5	-7.91	118.74	121.90
26	LA	2174	C	C5'-C4'-C3'	7.91	128.65	116.00
2	SA	1017	U	O4'-C1'-N1	7.91	114.52	108.20
2	SA	1072	G	C8-N9-C4	-7.91	103.24	106.40
4	S2	73	A	C4'-C3'-C2'	-7.91	94.69	102.60
26	LA	72	U	C2-N3-C4	-7.91	122.26	127.00
26	LA	682	G	N9-C4-C5	7.91	108.56	105.40
26	LA	953	G	P-O3'-C3'	-7.91	110.21	119.70
26	LA	2822	G	P-O3'-C3'	-7.91	110.21	119.70
2	SA	1049	U	C1'-O4'-C4'	-7.90	103.58	109.90
26	LA	241	A	C6-C5-N7	-7.90	126.77	132.30
26	LA	1197	G	C5-C6-N1	7.90	115.45	111.50
26	LA	2543	G	C2-N3-C4	-7.90	107.95	111.90
2	SA	396	C	C6-N1-C2	-7.90	117.14	120.30
26	LA	350	G	C5-C6-N1	7.90	115.45	111.50
26	LA	921	C	C3'-C2'-C1'	-7.90	95.18	101.50
26	LA	1323	C	C5'-C4'-O4'	7.90	118.58	109.10
26	LA	1423	G	C4'-C3'-C2'	-7.90	94.70	102.60
26	LA	1507	C	N3-C4-C5	-7.90	118.74	121.90
26	LA	2118	U	C5-C6-N1	7.90	126.65	122.70
26	LA	2889	C	N3-C4-N4	-7.90	112.47	118.00
26	LA	182	A	O4'-C1'-N9	7.90	114.52	108.20
26	LA	790	U	C6-N1-C2	-7.90	116.26	121.00
26	LA	1604	C	C6-N1-C2	-7.90	117.14	120.30
26	LA	1958	C	N1-C2-N3	7.90	124.73	119.20
2	SA	21	G	C5'-C4'-O4'	7.90	118.58	109.10
2	SA	689	C	O5'-P-OP2	-7.90	98.59	105.70
2	SA	790	A	C4'-C3'-C2'	-7.90	94.70	102.60
26	LA	1210	G	N3-C2-N2	7.90	125.43	119.90
26	LA	1508	A	N1-C2-N3	-7.90	125.35	129.30
26	LA	1857	G	O3'-P-O5'	-7.90	88.99	104.00
26	LA	2250	G	N9-C4-C5	-7.90	102.24	105.40
56	LR	87	ARG	NE-CZ-NH2	-7.90	116.35	120.30
2	SA	782	A	C4-C5-C6	7.90	120.95	117.00
26	LA	660	C	C5-C4-N4	-7.90	114.67	120.20
26	LA	2399	G	C8-N9-C4	-7.90	103.24	106.40
26	LA	2885	G	C6-N1-C2	-7.90	120.36	125.10
31	LX	2	PHE	CB-CG-CD2	-7.90	115.27	120.80
2	SA	764	C	C5'-C4'-C3'	-7.89	103.37	116.00
26	LA	277	G	C5-C6-O6	-7.89	123.86	128.60
26	LA	1333	G	N1-C2-N3	7.89	128.64	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2759	G	C5-C6-O6	-7.89	123.86	128.60
26	LA	2826	A	C4-C5-C6	-7.89	113.05	117.00
2	SA	882	C	C5-C6-N1	-7.89	117.05	121.00
2	SA	932	C	C5-C6-N1	7.89	124.95	121.00
2	SA	1442	G	O4'-C1'-N9	7.89	114.52	108.20
4	S2	42	C	N3-C4-C5	-7.89	118.74	121.90
19	SC	30	ASP	CB-CG-OD1	-7.89	111.20	118.30
22	SF	49	TYR	CB-CG-CD1	7.89	125.74	121.00
26	LA	125	A	C8-N9-C1'	-7.89	113.50	127.70
26	LA	1146	C	C5-C6-N1	7.89	124.95	121.00
26	LA	2386	A	C3'-C2'-C1'	7.89	107.81	101.50
2	SA	1310	G	N1-C6-O6	7.89	124.64	119.90
26	LA	705	A	P-O5'-C5'	-7.89	108.27	120.90
2	SA	1486	G	C4-C5-N7	-7.89	107.64	110.80
26	LA	176	A	P-O5'-C5'	7.89	133.52	120.90
26	LA	285	G	C6-N1-C2	-7.89	120.37	125.10
26	LA	471	A	N7-C8-N9	7.89	117.75	113.80
26	LA	1838	C	C2-N3-C4	-7.89	115.95	119.90
26	LA	2831	G	N7-C8-N9	-7.89	109.16	113.10
4	S2	11	A	C1'-O4'-C4'	-7.89	103.59	109.90
26	LA	1270	C	C1'-O4'-C4'	-7.89	103.59	109.90
2	SA	58	C	C6-N1-C1'	7.89	130.26	120.80
2	SA	1338	G	C6-C5-N7	-7.89	125.67	130.40
26	LA	262	A	C5-C6-N1	-7.89	113.76	117.70
26	LA	594	U	O4'-C1'-N1	7.89	114.51	108.20
26	LA	945	A	C8-N9-C4	-7.89	102.64	105.80
26	LA	1771	C	O4'-C1'-N1	7.89	114.51	108.20
37	LC	179	ASP	CB-CG-OD2	-7.89	111.20	118.30
2	SA	345	C	N1-C2-N3	-7.88	113.68	119.20
2	SA	370	C	O4'-C1'-N1	7.88	114.51	108.20
2	SA	983	A	P-O3'-C3'	7.88	129.16	119.70
26	LA	745	G	P-O3'-C3'	7.88	129.16	119.70
26	LA	1214	A	O4'-C1'-N9	7.88	114.51	108.20
26	LA	1516	G	C1'-O4'-C4'	-7.88	103.59	109.90
26	LA	1530	G	N7-C8-N9	7.88	117.04	113.10
26	LA	2532	G	C6-N1-C2	-7.88	120.37	125.10
26	LA	2589	A	C1'-O4'-C4'	-7.88	103.59	109.90
26	LA	2763	G	P-O3'-C3'	7.88	129.16	119.70
2	SA	1221	G	P-O3'-C3'	-7.88	110.24	119.70
26	LA	2722	G	C4-C5-N7	7.88	113.95	110.80
2	SA	566	G	N3-C4-N9	7.88	130.73	126.00
2	SA	1048	G	C5-C6-O6	-7.88	123.87	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	386	G	C5-C6-N1	7.88	115.44	111.50
26	LA	2792	A	N1-C2-N3	-7.88	125.36	129.30
2	SA	542	G	P-O3'-C3'	7.88	129.16	119.70
26	LA	707	G	C2-N3-C4	-7.88	107.96	111.90
26	LA	1529	G	C5-C6-O6	-7.88	123.87	128.60
2	SA	634	C	N1-C2-N3	7.88	124.72	119.20
26	LA	260	G	C4'-C3'-C2'	-7.88	94.72	102.60
26	LA	974	G	C6-C5-N7	-7.88	125.67	130.40
26	LA	1926	U	C5'-C4'-O4'	7.88	118.56	109.10
26	LA	2227	A	C5-C6-N6	-7.88	117.40	123.70
26	LA	2231	U	C2-N3-C4	-7.88	122.27	127.00
26	LA	2414	G	O4'-C1'-N9	7.88	114.50	108.20
2	SA	348	G	N3-C2-N2	7.88	125.41	119.90
4	S2	68	C	N3-C4-C5	-7.88	118.75	121.90
26	LA	680	C	N3-C2-O2	-7.88	116.39	121.90
26	LA	1279	G	N1-C2-N2	-7.88	109.11	116.20
26	LA	1348	C	N1-C2-N3	7.88	124.71	119.20
26	LA	1679	A	C2-N3-C4	-7.88	106.66	110.60
26	LA	2462	C	O4'-C1'-N1	7.88	114.50	108.20
26	LA	723	C	P-O3'-C3'	7.88	129.15	119.70
26	LA	2274	A	C8-N9-C4	-7.88	102.65	105.80
2	SA	527	G	C5-C6-N1	7.87	115.44	111.50
2	SA	753	A	C5'-C4'-C3'	-7.87	103.40	116.00
26	LA	689	A	P-O3'-C3'	7.87	129.15	119.70
26	LA	1212	G	C2-N3-C4	-7.87	107.96	111.90
26	LA	2134	A	N1-C2-N3	7.87	133.24	129.30
2	SA	455	G	C5-C6-O6	-7.87	123.88	128.60
2	SA	1086	U	N3-C4-C5	-7.87	109.88	114.60
26	LA	256	A	P-O3'-C3'	7.87	129.15	119.70
26	LA	394	C	N3-C4-C5	-7.87	118.75	121.90
26	LA	558	U	C5'-C4'-C3'	-7.87	103.41	116.00
26	LA	689	A	C2-N3-C4	7.87	114.54	110.60
26	LA	888	C	P-O3'-C3'	7.87	129.15	119.70
26	LA	1250	G	O4'-C1'-N9	7.87	114.50	108.20
26	LA	1954	G	N1-C2-N2	-7.87	109.11	116.20
26	LA	581	C	C4-C5-C6	7.87	121.33	117.40
26	LA	1463	C	C5'-C4'-O4'	7.87	118.55	109.10
26	LA	1759	A	C5-C6-N1	7.87	121.64	117.70
26	LA	2521	C	C6-N1-C2	-7.87	117.15	120.30
3	S1	47	C	P-O3'-C3'	7.87	129.14	119.70
3	S1	57	C	N1-C2-O2	7.87	123.62	118.90
4	S2	52	C	O4'-C1'-N1	7.87	114.50	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	329	G	C5-C6-N1	7.87	115.43	111.50
26	LA	533	G	N1-C6-O6	7.87	124.62	119.90
26	LA	1083	U	C2-N3-C4	-7.87	122.28	127.00
26	LA	1205	A	N9-C4-C5	-7.87	102.65	105.80
26	LA	2050	C	O4'-C1'-N1	7.87	114.50	108.20
26	LA	2636	C	O4'-C1'-N1	7.87	114.50	108.20
26	LA	1100	C	N1-C2-O2	-7.87	114.18	118.90
26	LA	1689	A	C5-C6-N1	7.87	121.63	117.70
2	SA	194	C	P-O3'-C3'	-7.87	110.26	119.70
2	SA	1143	G	N1-C6-O6	-7.87	115.18	119.90
26	LA	53	A	N1-C2-N3	-7.87	125.37	129.30
26	LA	105	C	O4'-C1'-N1	7.87	114.49	108.20
26	LA	1793	C	C1'-O4'-C4'	-7.87	103.61	109.90
26	LA	2047	C	O4'-C1'-N1	7.87	114.49	108.20
26	LA	2258	C	N3-C4-C5	7.87	125.05	121.90
26	LA	2264	C	N3-C4-N4	7.87	123.51	118.00
26	LA	2633	G	N9-C4-C5	-7.87	102.25	105.40
2	SA	513	C	C6-N1-C2	7.86	123.44	120.30
2	SA	519	C	C4'-C3'-C2'	-7.86	94.74	102.60
25	LB	6	G	C6-N1-C2	-7.86	120.38	125.10
26	LA	723	C	C6-N1-C2	-7.86	117.16	120.30
26	LA	1027	A	C5-C6-N1	7.86	121.63	117.70
26	LA	1046	A	P-O5'-C5'	7.86	133.48	120.90
26	LA	1241	A	N3-C4-C5	-7.86	121.30	126.80
26	LA	2257	U	N1-C2-N3	-7.86	110.18	114.90
26	LA	2529	G	C8-N9-C1'	-7.86	116.78	127.00
26	LA	1867	G	O4'-C1'-N9	7.86	114.49	108.20
26	LA	1890	A	P-O3'-C3'	-7.86	110.27	119.70
26	LA	424	G	C2-N3-C4	-7.86	107.97	111.90
26	LA	708	G	C2-N3-C4	7.86	115.83	111.90
26	LA	1874	C	N3-C4-N4	-7.86	112.50	118.00
53	LP	103	ARG	NE-CZ-NH2	-7.86	116.37	120.30
57	LS	56	PHE	CB-CG-CD2	-7.86	115.30	120.80
2	SA	1161	C	O4'-C1'-N1	7.86	114.49	108.20
24	S3	317	SER	N-CA-CB	7.86	122.29	110.50
26	LA	195	A	N3-C4-N9	-7.86	121.11	127.40
26	LA	946	C	C5'-C4'-C3'	-7.86	103.43	116.00
26	LA	2289	G	C4-C5-N7	7.86	113.94	110.80
26	LA	2670	A	C6-N1-C2	-7.86	113.89	118.60
2	SA	89	U	P-O5'-C5'	7.86	133.47	120.90
2	SA	307	C	N3-C4-C5	-7.86	118.76	121.90
2	SA	373	A	C1'-O4'-C4'	-7.86	103.61	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	536	C	C6-N1-C2	-7.86	117.16	120.30
26	LA	388	G	C2-N3-C4	7.86	115.83	111.90
26	LA	1234	U	C2-N3-C4	-7.86	122.28	127.00
2	SA	174	A	N9-C4-C5	-7.86	102.66	105.80
2	SA	872	A	N1-C6-N6	-7.86	113.89	118.60
2	SA	1332	A	C8-N9-C4	-7.86	102.66	105.80
18	SB	136	ARG	NE-CZ-NH1	7.86	124.23	120.30
26	LA	756	A	C4-C5-C6	-7.86	113.07	117.00
26	LA	761	A	N1-C6-N6	-7.86	113.89	118.60
26	LA	805	G	C4'-C3'-C2'	-7.86	94.74	102.60
26	LA	1307	A	O4'-C4'-C3'	-7.86	96.14	104.00
26	LA	1763	G	C5-N7-C8	7.86	108.23	104.30
26	LA	2063	C	O4'-C1'-N1	7.86	114.48	108.20
26	LA	2314	A	P-O5'-C5'	-7.86	108.33	120.90
26	LA	2507	C	C2-N3-C4	-7.86	115.97	119.90
26	LA	357	C	C6-N1-C2	-7.85	117.16	120.30
26	LA	1249	U	N3-C4-O4	7.85	124.90	119.40
2	SA	770	C	N3-C4-C5	-7.85	118.76	121.90
6	SU	61	ARG	O-C-N	-7.85	110.14	122.70
26	LA	26	G	N1-C6-O6	7.85	124.61	119.90
26	LA	64	A	O4'-C1'-N9	7.85	114.48	108.20
26	LA	172	A	C5-C6-N1	7.85	121.63	117.70
26	LA	357	C	C4'-C3'-C2'	-7.85	94.75	102.60
26	LA	1149	G	C5-C6-N1	7.85	115.43	111.50
26	LA	2251	U	O4'-C1'-C2'	7.85	114.67	107.60
26	LA	2513	A	C5-C6-N6	-7.85	117.42	123.70
26	LA	2825	G	N7-C8-N9	-7.85	109.17	113.10
2	SA	1175	G	O4'-C4'-C3'	-7.85	96.15	104.00
2	SA	1287	A	C6-N1-C2	-7.85	113.89	118.60
26	LA	2692	G	OP1-P-OP2	-7.85	107.82	119.60
26	LA	2730	C	O4'-C1'-N1	7.85	114.48	108.20
2	SA	75	G	N7-C8-N9	7.85	117.03	113.10
2	SA	823	C	C5'-C4'-O4'	7.85	118.52	109.10
4	S2	70	C	N3-C4-C5	-7.85	118.76	121.90
25	LB	86	G	C8-N9-C4	-7.85	103.26	106.40
26	LA	1598	A	C5-C6-N6	7.85	129.98	123.70
26	LA	1702	G	C1'-O4'-C4'	-7.85	103.62	109.90
2	SA	30	U	C4-C5-C6	7.85	124.41	119.70
2	SA	395	C	C5'-C4'-C3'	-7.85	103.44	116.00
2	SA	935	A	C4-C5-N7	-7.85	106.78	110.70
7	SG	14	ASP	CB-CG-OD1	7.85	125.36	118.30
15	SO	52	ARG	NE-CZ-NH2	-7.85	116.38	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	115	A	N1-C6-N6	-7.85	113.89	118.60
26	LA	271	G	O4'-C1'-C2'	-7.85	97.95	105.80
26	LA	1668	A	C4-C5-N7	7.85	114.62	110.70
26	LA	1807	G	C6-N1-C2	-7.85	120.39	125.10
26	LA	1828	G	C2-N3-C4	-7.85	107.98	111.90
26	LA	2736	A	N3-C4-C5	-7.85	121.31	126.80
26	LA	1486	U	C4'-C3'-C2'	-7.85	94.75	102.60
2	SA	987	G	N1-C2-N3	-7.84	119.19	123.90
26	LA	944	C	C5-C4-N4	-7.84	114.71	120.20
26	LA	1073	A	N9-C4-C5	-7.84	102.66	105.80
26	LA	1704	C	C5-C6-N1	7.84	124.92	121.00
26	LA	2780	G	N7-C8-N9	-7.84	109.18	113.10
2	SA	801	U	C4-C5-C6	-7.84	114.99	119.70
2	SA	1400	C	C1'-O4'-C4'	-7.84	103.63	109.90
3	S1	27	A	O4'-C1'-N9	7.84	114.47	108.20
4	S2	67	C	P-O3'-C3'	-7.84	110.29	119.70
26	LA	963	U	C5-C6-N1	7.84	126.62	122.70
26	LA	1260	A	C6-C5-N7	-7.84	126.81	132.30
26	LA	1600	C	C5-C4-N4	-7.84	114.71	120.20
26	LA	2031	A	C5-C6-N1	7.84	121.62	117.70
26	LA	2662	A	OP1-P-OP2	-7.84	107.83	119.60
2	SA	791	G	N9-C4-C5	-7.84	102.26	105.40
2	SA	970	C	P-O3'-C3'	-7.84	110.29	119.70
26	LA	387	U	N3-C2-O2	-7.84	116.71	122.20
26	LA	582	A	C5-N7-C8	-7.84	99.98	103.90
26	LA	926	G	N1-C6-O6	-7.84	115.19	119.90
26	LA	1117	C	C5'-C4'-O4'	7.84	118.51	109.10
26	LA	1807	G	C4-C5-C6	-7.84	114.09	118.80
2	SA	1039	G	C8-N9-C4	-7.84	103.26	106.40
26	LA	1084	A	C5'-C4'-C3'	-7.84	103.46	116.00
26	LA	1333	G	C6-N1-C2	-7.84	120.40	125.10
26	LA	1629	U	N3-C4-O4	7.84	124.89	119.40
26	LA	1787	A	C8-N9-C4	-7.84	102.66	105.80
26	LA	1831	G	C5-C6-O6	-7.84	123.90	128.60
32	LY	19	ARG	NE-CZ-NH2	7.84	124.22	120.30
26	LA	1440	U	C4'-C3'-C2'	-7.84	94.76	102.60
58	LT	90	ARG	NE-CZ-NH2	-7.84	116.38	120.30
2	SA	49	U	N1-C2-O2	-7.84	117.31	122.80
2	SA	444	G	N3-C4-C5	7.84	132.52	128.60
2	SA	647	C	C6-N1-C2	7.84	123.43	120.30
2	SA	788	U	O4'-C1'-N1	7.84	114.47	108.20
2	SA	1536	C	C1'-O4'-C4'	-7.84	103.63	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	764	A	O4'-C1'-N9	7.84	114.47	108.20
26	LA	964	C	C6-N1-C1'	-7.84	111.40	120.80
26	LA	1086	A	O3'-P-O5'	-7.84	89.11	104.00
26	LA	1404	C	O4'-C1'-N1	7.84	114.47	108.20
26	LA	1975	G	N3-C2-N2	-7.84	114.41	119.90
26	LA	2310	C	N3-C4-C5	-7.84	118.77	121.90
2	SA	565	U	N3-C2-O2	-7.83	116.72	122.20
2	SA	1013	G	C5-C6-N1	-7.83	107.58	111.50
25	LB	33	G	N9-C4-C5	7.83	108.53	105.40
26	LA	2167	U	C1'-O4'-C4'	-7.83	103.63	109.90
2	SA	160	A	C8-N9-C4	-7.83	102.67	105.80
2	SA	293	G	C5-C6-N1	7.83	115.42	111.50
2	SA	833	G	N3-C2-N2	7.83	125.38	119.90
2	SA	1093	A	O4'-C1'-N9	7.83	114.47	108.20
2	SA	1412	C	C5'-C4'-C3'	-7.83	103.47	116.00
26	LA	1043	C	C2-N3-C4	-7.83	115.98	119.90
26	LA	1223	G	N7-C8-N9	-7.83	109.18	113.10
26	LA	1949	G	O4'-C1'-N9	7.83	114.47	108.20
26	LA	2092	U	N3-C2-O2	-7.83	116.72	122.20
26	LA	2543	G	C4-C5-N7	7.83	113.93	110.80
26	LA	2759	G	C5-C6-N1	7.83	115.42	111.50
13	SM	107	THR	CA-CB-CG2	-7.83	101.44	112.40
26	LA	228	C	C4'-C3'-C2'	-7.83	94.77	102.60
26	LA	996	A	C6-C5-N7	-7.83	126.82	132.30
26	LA	1310	G	N7-C8-N9	-7.83	109.19	113.10
26	LA	1322	A	C2'-C3'-O3'	7.83	126.73	109.50
26	LA	1500	G	N3-C4-C5	-7.83	124.68	128.60
26	LA	1538	G	P-O5'-C5'	-7.83	108.37	120.90
26	LA	1635	A	P-O3'-C3'	7.83	129.10	119.70
26	LA	1653	G	N9-C4-C5	-7.83	102.27	105.40
37	LC	111	PHE	CB-CG-CD2	-7.83	115.32	120.80
2	SA	830	G	O4'-C4'-C3'	-7.83	96.17	104.00
26	LA	2251	U	P-O3'-C3'	-7.83	110.30	119.70
2	SA	1337	G	O4'-C1'-N9	7.83	114.46	108.20
2	SA	1381	U	O4'-C1'-N1	7.83	114.46	108.20
4	S2	16	C	O4'-C1'-N1	7.83	114.46	108.20
26	LA	244	A	C5-C6-N1	-7.83	113.79	117.70
26	LA	287	G	C6-C5-N7	-7.83	125.70	130.40
26	LA	931	U	N1-C1'-C2'	-7.83	103.39	112.00
26	LA	2113	U	N1-C2-N3	7.83	119.60	114.90
26	LA	2578	G	C6-N1-C2	-7.83	120.40	125.10
8	SH	87	ARG	NE-CZ-NH2	7.83	124.21	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	88	G	N1-C2-N2	-7.83	109.16	116.20
26	LA	1546	G	N9-C4-C5	-7.83	102.27	105.40
26	LA	1757	A	O4'-C1'-N9	7.83	114.46	108.20
2	SA	287	U	O4'-C1'-N1	7.83	114.46	108.20
2	SA	291	U	C4'-C3'-C2'	-7.83	94.77	102.60
2	SA	341	C	C5'-C4'-O4'	7.83	118.49	109.10
2	SA	471	U	C5'-C4'-C3'	-7.83	103.48	116.00
2	SA	506	G	C2-N3-C4	-7.83	107.99	111.90
25	LB	90	C	C6-N1-C2	-7.83	117.17	120.30
26	LA	471	A	C8-N9-C4	-7.83	102.67	105.80
26	LA	1537	G	C4-C5-N7	-7.83	107.67	110.80
26	LA	2165	C	N1-C1'-C2'	-7.83	103.39	112.00
26	LA	2550	G	N3-C2-N2	7.83	125.38	119.90
26	LA	2758	A	C4'-C3'-C2'	-7.83	94.78	102.60
2	SA	641	U	C6-N1-C2	-7.82	116.31	121.00
3	S1	15	G	O4'-C1'-N9	7.82	114.46	108.20
26	LA	13	A	N1-C6-N6	-7.82	113.91	118.60
26	LA	525	U	C2-N3-C4	-7.82	122.31	127.00
26	LA	824	U	C4'-C3'-C2'	-7.82	94.78	102.60
26	LA	1005	C	C2-N1-C1'	7.82	127.41	118.80
26	LA	1323	C	C3'-C2'-C1'	7.82	107.76	101.50
26	LA	1967	C	O5'-C5'-C4'	7.82	126.56	111.70
2	SA	250	A	N1-C6-N6	-7.82	113.91	118.60
25	LB	45	A	O4'-C1'-N9	7.82	114.46	108.20
26	LA	1632	A	C5-C6-N6	7.82	129.96	123.70
26	LA	1769	U	N3-C4-C5	-7.82	109.91	114.60
26	LA	2131	U	C2-N1-C1'	7.82	127.08	117.70
26	LA	2221	G	N9-C4-C5	-7.82	102.27	105.40
2	SA	1197	A	C6-N1-C2	-7.82	113.91	118.60
25	LB	102	G	C4-C5-N7	7.82	113.93	110.80
26	LA	393	C	P-O3'-C3'	7.82	129.08	119.70
26	LA	912	C	C6-N1-C2	7.82	123.43	120.30
2	SA	559	A	N7-C8-N9	7.82	117.71	113.80
4	S2	15	G	C4-N9-C1'	-7.82	116.34	126.50
26	LA	198	C	N3-C4-C5	7.82	125.03	121.90
26	LA	260	G	O4'-C1'-N9	7.82	114.45	108.20
26	LA	541	A	N7-C8-N9	-7.82	109.89	113.80
26	LA	569	U	C6-N1-C2	-7.82	116.31	121.00
26	LA	1441	G	N3-C4-C5	-7.82	124.69	128.60
26	LA	2210	U	P-O3'-C3'	-7.82	110.32	119.70
26	LA	2765	A	C6-N1-C2	-7.82	113.91	118.60
2	SA	192	A	C4-C5-C6	7.82	120.91	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	369	G	N7-C8-N9	-7.82	109.19	113.10
2	SA	473	U	C5-C4-O4	7.82	130.59	125.90
2	SA	986	U	C5'-C4'-C3'	-7.82	103.50	116.00
26	LA	1133	A	C4-C5-N7	7.82	114.61	110.70
26	LA	1543	G	C8-N9-C4	7.82	109.53	106.40
26	LA	1732	C	P-O5'-C5'	-7.82	108.39	120.90
26	LA	2363	G	N3-C4-N9	7.82	130.69	126.00
26	LA	2686	G	N7-C8-N9	7.82	117.01	113.10
26	LA	2689	U	C1'-O4'-C4'	-7.82	103.65	109.90
45	LG	158	THR	N-CA-CB	7.82	125.15	110.30
2	SA	543	U	C5-C4-O4	-7.81	121.21	125.90
2	SA	776	G	C5-C6-O6	-7.81	123.91	128.60
26	LA	2465	C	C5-C6-N1	7.81	124.91	121.00
26	LA	2797	U	C6-N1-C2	-7.81	116.31	121.00
17	SQ	14	ASP	CB-CG-OD2	-7.81	111.27	118.30
20	SD	2	ARG	NE-CZ-NH1	7.81	124.21	120.30
26	LA	210	C	O4'-C1'-N1	7.81	114.45	108.20
26	LA	389	G	N1-C6-O6	7.81	124.59	119.90
26	LA	508	A	N9-C4-C5	-7.81	102.67	105.80
26	LA	553	G	C4'-C3'-C2'	-7.81	94.79	102.60
26	LA	1010	A	C8-N9-C4	7.81	108.92	105.80
26	LA	1697	G	C6-N1-C2	-7.81	120.41	125.10
26	LA	1754	A	C5-C6-N6	-7.81	117.45	123.70
26	LA	1875	G	N7-C8-N9	7.81	117.01	113.10
2	SA	1148	U	P-O5'-C5'	7.81	133.40	120.90
26	LA	2226	C	C4-C5-C6	7.81	121.31	117.40
2	SA	778	G	N1-C2-N2	-7.81	109.17	116.20
2	SA	935	A	N9-C4-C5	7.81	108.92	105.80
26	LA	651	G	N3-C2-N2	7.81	125.37	119.90
26	LA	1002	G	N3-C2-N2	7.81	125.37	119.90
26	LA	1913	A	C4-C5-N7	-7.81	106.80	110.70
26	LA	2250	G	N1-C6-O6	7.81	124.58	119.90
26	LA	2402	U	C2-N3-C4	7.81	131.69	127.00
26	LA	2525	G	N3-C2-N2	-7.81	114.43	119.90
26	LA	2762	C	O4'-C1'-N1	7.81	114.45	108.20
2	SA	1	A	P-O3'-C3'	-7.81	110.33	119.70
26	LA	342	A	N9-C4-C5	7.81	108.92	105.80
26	LA	684	G	O4'-C1'-N9	7.81	114.45	108.20
26	LA	1177	G	O4'-C1'-N9	7.81	114.45	108.20
26	LA	1868	C	C5'-C4'-O4'	7.81	118.47	109.10
26	LA	2001	C	C2-N1-C1'	-7.81	110.21	118.80
26	LA	2031	A	N3-C4-N9	7.81	133.65	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	414	A	C5-C6-N6	-7.81	117.45	123.70
2	SA	1296	C	O4'-C1'-C2'	7.81	114.62	107.60
26	LA	1528	A	C6-C5-N7	7.81	137.76	132.30
26	LA	2091	C	C5-C4-N4	-7.81	114.73	120.20
32	LY	76	ARG	NE-CZ-NH1	7.81	124.20	120.30
2	SA	607	A	N7-C8-N9	7.80	117.70	113.80
2	SA	1232	U	N1-C2-N3	7.80	119.58	114.90
2	SA	1507	A	C2-N3-C4	7.80	114.50	110.60
26	LA	721	A	C5-C6-N1	-7.80	113.80	117.70
26	LA	834	G	N9-C4-C5	7.80	108.52	105.40
26	LA	1273	U	P-O3'-C3'	-7.80	110.33	119.70
26	LA	1394	U	P-O5'-C5'	7.80	133.39	120.90
26	LA	1420	A	C2-N3-C4	7.80	114.50	110.60
26	LA	1567	G	C2-N3-C4	7.80	115.80	111.90
26	LA	1906	G	N3-C4-N9	7.80	130.68	126.00
2	SA	1050	G	O4'-C1'-N9	7.80	114.44	108.20
26	LA	1719	G	C2-N3-C4	7.80	115.80	111.90
2	SA	391	G	C4-C5-C6	7.80	123.48	118.80
2	SA	462	G	C5-C6-O6	-7.80	123.92	128.60
2	SA	1415	G	N1-C6-O6	7.80	124.58	119.90
26	LA	470	A	C5-C6-N6	-7.80	117.46	123.70
26	LA	791	C	N1-C2-O2	7.80	123.58	118.90
26	LA	895	U	C2-N3-C4	-7.80	122.32	127.00
26	LA	1581	G	C6-C5-N7	7.80	135.08	130.40
2	SA	179	A	C6-C5-N7	7.80	137.76	132.30
22	SF	80	PHE	CB-CG-CD1	-7.80	115.34	120.80
26	LA	84	A	C5-N7-C8	-7.80	100.00	103.90
26	LA	92	U	C4-C5-C6	-7.80	115.02	119.70
26	LA	473	G	C4-C5-N7	7.80	113.92	110.80
26	LA	2642	G	C5'-C4'-C3'	-7.80	103.52	116.00
26	LA	823	C	N3-C4-N4	7.80	123.46	118.00
26	LA	1134	A	C4-C5-N7	-7.80	106.80	110.70
2	SA	641	U	C2-N3-C4	-7.80	122.32	127.00
26	LA	48	G	N3-C2-N2	7.80	125.36	119.90
26	LA	915	C	N3-C2-O2	-7.80	116.44	121.90
26	LA	1439	A	N1-C6-N6	-7.80	113.92	118.60
2	SA	238	A	C5-N7-C8	-7.79	100.00	103.90
26	LA	35	G	C5-C6-O6	-7.79	123.92	128.60
26	LA	1608	A	C1'-O4'-C4'	-7.79	103.66	109.90
26	LA	1625	C	O4'-C1'-N1	7.79	114.44	108.20
26	LA	1750	G	C5-C6-N1	7.79	115.40	111.50
26	LA	2682	A	N9-C1'-C2'	-7.79	103.42	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	454	G	N7-C8-N9	7.79	117.00	113.10
2	SA	828	U	N1-C2-N3	-7.79	110.22	114.90
2	SA	1228	C	P-O3'-C3'	7.79	129.05	119.70
12	SL	65	TYR	CB-CG-CD2	-7.79	116.32	121.00
26	LA	607	U	N1-C2-O2	-7.79	117.34	122.80
26	LA	1565	C	C5'-C4'-C3'	-7.79	103.53	116.00
26	LA	2104	C	N1-C2-O2	-7.79	114.22	118.90
26	LA	2275	C	N3-C4-C5	7.79	125.02	121.90
2	SA	1414	U	O4'-C1'-N1	7.79	114.43	108.20
26	LA	930	G	C4-N9-C1'	-7.79	116.37	126.50
26	LA	1301	A	O4'-C1'-N9	7.79	114.43	108.20
26	LA	2149	U	C5'-C4'-C3'	7.79	128.47	116.00
2	SA	71	A	P-O3'-C3'	-7.79	110.36	119.70
2	SA	263	A	P-O3'-C3'	7.79	129.05	119.70
2	SA	796	C	O4'-C1'-C2'	7.79	114.61	107.60
26	LA	315	G	N9-C4-C5	-7.79	102.28	105.40
26	LA	977	G	C3'-C2'-C1'	7.79	107.73	101.50
26	LA	2275	C	N3-C4-N4	-7.79	112.55	118.00
28	LU	38	TYR	CB-CG-CD1	-7.79	116.33	121.00
14	SN	39	ASP	CB-CG-OD1	7.79	125.31	118.30
26	LA	889	C	N1-C2-O2	-7.79	114.23	118.90
26	LA	1555	G	O4'-C1'-N9	7.79	114.43	108.20
2	SA	281	G	C6-C5-N7	-7.79	125.73	130.40
26	LA	831	G	C5-C6-O6	-7.79	123.93	128.60
26	LA	1732	C	C5-C6-N1	7.79	124.89	121.00
26	LA	2659	G	N1-C2-N3	-7.79	119.23	123.90
2	SA	235	C	C5'-C4'-O4'	7.78	118.44	109.10
2	SA	319	G	N7-C8-N9	7.78	116.99	113.10
2	SA	415	A	C5'-C4'-O4'	7.78	118.44	109.10
2	SA	615	G	N7-C8-N9	-7.78	109.21	113.10
2	SA	961	U	N1-C2-N3	-7.78	110.23	114.90
2	SA	1312	G	C5-C6-O6	-7.78	123.93	128.60
26	LA	626	A	O4'-C1'-N9	7.78	114.43	108.20
26	LA	1676	A	C6-N1-C2	7.78	123.27	118.60
26	LA	1827	U	C3'-C2'-C1'	7.78	107.73	101.50
26	LA	2821	A	P-O5'-C5'	-7.78	108.45	120.90
2	SA	212	G	O4'-C1'-N9	7.78	114.43	108.20
2	SA	568	G	N3-C2-N2	7.78	125.35	119.90
2	SA	1086	U	C4'-C3'-C2'	-7.78	94.82	102.60
2	SA	1365	G	C6-C5-N7	-7.78	125.73	130.40
26	LA	778	G	C4-C5-N7	-7.78	107.69	110.80
34	L0	29	ARG	NE-CZ-NH1	-7.78	116.41	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	37	U	OP1-P-OP2	-7.78	107.93	119.60
2	SA	760	G	C5-C6-O6	-7.78	123.93	128.60
2	SA	1058	G	C5'-C4'-O4'	7.78	118.43	109.10
26	LA	39	G	O4'-C1'-N9	7.78	114.42	108.20
26	LA	81	G	C4'-C3'-C2'	-7.78	94.82	102.60
26	LA	168	G	N3-C4-N9	7.78	130.67	126.00
26	LA	512	G	C5'-C4'-O4'	-7.78	99.77	109.10
26	LA	2385	C	N3-C4-C5	7.78	125.01	121.90
2	SA	873	A	N1-C2-N3	7.78	133.19	129.30
2	SA	1137	C	C3'-C2'-C1'	-7.78	95.28	101.50
2	SA	1433	A	C4'-C3'-C2'	-7.78	94.83	102.60
2	SA	1520	C	N3-C4-C5	-7.78	118.79	121.90
26	LA	75	G	C6-C5-N7	-7.78	125.73	130.40
26	LA	555	G	N1-C2-N2	-7.78	109.20	116.20
26	LA	751	A	C2-N3-C4	7.78	114.49	110.60
26	LA	2120	G	C6-C5-N7	-7.78	125.73	130.40
38	LE	83	ARG	NE-CZ-NH1	-7.78	116.41	120.30
26	LA	1241	A	N1-C2-N3	7.77	133.19	129.30
2	SA	285	C	C5'-C4'-O4'	7.77	118.43	109.10
2	SA	1450	U	C5-C4-O4	-7.77	121.24	125.90
26	LA	375	G	C4-C5-N7	-7.77	107.69	110.80
26	LA	470	A	C4'-C3'-C2'	-7.77	94.83	102.60
26	LA	864	G	C5'-C4'-O4'	7.77	118.43	109.10
26	LA	854	C	C4'-C3'-C2'	-7.77	94.83	102.60
26	LA	2272	U	C2'-C3'-O3'	7.77	126.60	109.50
26	LA	2740	A	N7-C8-N9	-7.77	109.92	113.80
2	SA	44	A	C5-C6-N6	-7.77	117.48	123.70
2	SA	801	U	C6-N1-C2	7.77	125.66	121.00
2	SA	1518	A	C4-C5-N7	7.77	114.58	110.70
3	S1	30	U	N3-C4-C5	7.77	119.26	114.60
26	LA	907	G	N3-C2-N2	-7.77	114.46	119.90
26	LA	1177	G	N3-C4-C5	-7.77	124.72	128.60
26	LA	1292	G	N3-C4-N9	-7.77	121.34	126.00
26	LA	2128	G	P-O5'-C5'	-7.77	108.47	120.90
30	LW	5	ARG	NE-CZ-NH1	7.77	124.19	120.30
2	SA	628	G	C5'-C4'-O4'	7.77	118.42	109.10
2	SA	1026	G	N7-C8-N9	7.77	116.98	113.10
26	LA	103	A	C4-C5-N7	7.77	114.58	110.70
26	LA	361	G	N1-C6-O6	7.77	124.56	119.90
26	LA	1356	G	C4-C5-C6	-7.77	114.14	118.80
26	LA	1369	G	C1'-O4'-C4'	-7.77	103.69	109.90
2	SA	496	A	C5-C6-N6	7.77	129.91	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	632	U	C5-C4-O4	-7.77	121.24	125.90
26	LA	13	A	C8-N9-C4	-7.77	102.69	105.80
26	LA	348	A	N1-C6-N6	7.77	123.26	118.60
31	LX	43	ASP	CB-CG-OD2	-7.77	111.31	118.30
2	SA	26	A	C5'-C4'-C3'	-7.76	103.58	116.00
2	SA	130	A	O4'-C1'-N9	7.76	114.41	108.20
2	SA	818	G	C1'-O4'-C4'	-7.76	103.69	109.90
26	LA	456	C	O4'-C1'-N1	7.76	114.41	108.20
26	LA	1018	U	C5-C6-N1	-7.76	118.82	122.70
26	LA	2148	G	C2-N3-C4	7.76	115.78	111.90
49	LK	7	TYR	CG-CD1-CE1	-7.76	115.09	121.30
2	SA	1224	U	O4'-C1'-N1	7.76	114.41	108.20
26	LA	1103	A	P-O3'-C3'	7.76	129.02	119.70
2	SA	305	G	C5-N7-C8	7.76	108.18	104.30
2	SA	347	G	N9-C4-C5	-7.76	102.30	105.40
2	SA	616	G	C4-N9-C1'	-7.76	116.41	126.50
2	SA	1253	G	C2'-C3'-O3'	7.76	126.58	109.50
2	SA	1386	G	C2-N3-C4	-7.76	108.02	111.90
14	SN	60	ARG	NE-CZ-NH2	7.76	124.18	120.30
26	LA	381	G	C5-N7-C8	-7.76	100.42	104.30
26	LA	1456	G	N1-C6-O6	7.76	124.56	119.90
2	SA	860	A	P-O3'-C3'	-7.76	110.39	119.70
2	SA	996	A	C5'-C4'-O4'	7.76	118.41	109.10
26	LA	2158	A	C4-C5-C6	-7.76	113.12	117.00
26	LA	2473	U	C4'-C3'-C2'	-7.76	94.84	102.60
2	SA	112	G	C4-C5-N7	-7.76	107.70	110.80
26	LA	1791	A	C1'-O4'-C4'	-7.76	103.69	109.90
2	SA	1483	A	C4-C5-N7	-7.76	106.82	110.70
26	LA	1256	G	N9-C4-C5	7.76	108.50	105.40
26	LA	1766	G	N3-C4-N9	-7.76	121.35	126.00
2	SA	696	A	C1'-O4'-C4'	-7.75	103.70	109.90
26	LA	1035	U	C6-N1-C2	-7.75	116.35	121.00
26	LA	2489	U	N1-C2-N3	7.75	119.55	114.90
2	SA	240	G	C5-N7-C8	7.75	108.18	104.30
2	SA	389	A	C2-N3-C4	-7.75	106.72	110.60
2	SA	647	C	C1'-O4'-C4'	-7.75	103.70	109.90
2	SA	748	G	C5-C6-N1	7.75	115.38	111.50
2	SA	846	G	N9-C4-C5	-7.75	102.30	105.40
2	SA	1493	A	N7-C8-N9	7.75	117.68	113.80
2	SA	1520	C	C5-C4-N4	-7.75	114.77	120.20
4	S2	2	G	N3-C2-N2	7.75	125.33	119.90
12	SL	60	PHE	CB-CG-CD2	-7.75	115.37	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	768	G	N1-C2-N2	-7.75	109.22	116.20
26	LA	1516	G	O4'-C1'-N9	7.75	114.40	108.20
26	LA	1729	U	C4'-C3'-C2'	7.75	110.35	102.60
26	LA	1745	A	N1-C2-N3	-7.75	125.42	129.30
26	LA	2620	C	C2-N3-C4	-7.75	116.02	119.90
26	LA	2884	U	P-O5'-C5'	7.75	133.31	120.90
26	LA	1054	A	P-O3'-C3'	-7.75	110.40	119.70
26	LA	1954	G	C2-N3-C4	7.75	115.78	111.90
2	SA	20	U	O4'-C1'-N1	7.75	114.40	108.20
2	SA	1351	U	C5-C4-O4	-7.75	121.25	125.90
9	SI	5	TYR	CB-CG-CD2	-7.75	116.35	121.00
26	LA	1309	G	C6-N1-C2	7.75	129.75	125.10
26	LA	2001	C	N1-C2-O2	7.75	123.55	118.90
2	SA	1345	U	C5-C4-O4	-7.75	121.25	125.90
2	SA	1542	A	N1-C6-N6	7.75	123.25	118.60
26	LA	653	U	C5-C4-O4	7.75	130.55	125.90
26	LA	1214	A	C1'-O4'-C4'	7.75	116.10	109.90
2	SA	1237	C	N3-C4-C5	-7.75	118.80	121.90
26	LA	449	A	O4'-C1'-N9	7.75	114.40	108.20
26	LA	1168	G	N7-C8-N9	7.75	116.97	113.10
26	LA	1546	G	P-O3'-C3'	-7.75	110.41	119.70
26	LA	943	A	P-O3'-C3'	-7.75	110.41	119.70
2	SA	89	U	C5-C4-O4	7.74	130.55	125.90
2	SA	1483	A	N1-C6-N6	7.74	123.25	118.60
26	LA	445	C	C5-C4-N4	-7.74	114.78	120.20
26	LA	1787	A	N7-C8-N9	7.74	117.67	113.80
26	LA	2682	A	N7-C8-N9	7.74	117.67	113.80
26	LA	2795	C	O4'-C1'-N1	7.74	114.39	108.20
2	SA	953	G	C8-N9-C4	-7.74	103.30	106.40
26	LA	1717	A	C6-C5-N7	-7.74	126.88	132.30
26	LA	2238	G	C8-N9-C4	7.74	109.50	106.40
44	LF	131	THR	CA-CB-CG2	-7.74	101.56	112.40
2	SA	411	A	P-O5'-C5'	7.74	133.28	120.90
2	SA	1040	U	O4'-C1'-N1	7.74	114.39	108.20
26	LA	1231	U	N1-C2-O2	-7.74	117.38	122.80
26	LA	1386	C	C1'-O4'-C4'	-7.74	103.71	109.90
26	LA	1640	A	P-O5'-C5'	7.74	133.28	120.90
26	LA	1864	U	N3-C4-O4	-7.74	113.98	119.40
26	LA	2303	G	C8-N9-C4	-7.74	103.30	106.40
26	LA	2402	U	C6-N1-C2	-7.74	116.36	121.00
26	LA	2895	G	C5'-C4'-O4'	7.74	118.39	109.10
2	SA	790	A	O4'-C1'-N9	7.74	114.39	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	25	U	C4-C5-C6	-7.74	115.06	119.70
25	LB	69	G	C5-N7-C8	-7.74	100.43	104.30
26	LA	966	G	N1-C6-O6	7.74	124.54	119.90
26	LA	1596	A	O4'-C1'-N9	7.74	114.39	108.20
26	LA	2239	G	N1-C2-N3	7.74	128.54	123.90
26	LA	2476	A	C6-N1-C2	-7.74	113.96	118.60
26	LA	1006	C	C6-N1-C2	-7.74	117.20	120.30
26	LA	1921	G	C6-N1-C2	-7.74	120.46	125.10
26	LA	2257	U	N3-C2-O2	7.74	127.62	122.20
2	SA	295	C	C6-N1-C2	7.74	123.39	120.30
2	SA	1074	G	N3-C2-N2	7.74	125.31	119.90
2	SA	1367	C	N3-C4-C5	-7.74	118.81	121.90
26	LA	662	G	N3-C2-N2	7.74	125.31	119.90
2	SA	576	C	C4'-C3'-C2'	-7.73	94.87	102.60
2	SA	785	G	C5-C6-O6	-7.73	123.96	128.60
26	LA	877	A	N1-C2-N3	7.73	133.17	129.30
26	LA	1476	U	P-O3'-C3'	-7.73	110.42	119.70
26	LA	2824	C	N1-C2-O2	-7.73	114.26	118.90
2	SA	450	G	O4'-C1'-N9	7.73	114.39	108.20
2	SA	876	C	C6-N1-C2	-7.73	117.21	120.30
2	SA	884	U	C1'-O4'-C4'	-7.73	103.71	109.90
26	LA	1317	G	C5-C6-O6	-7.73	123.96	128.60
26	LA	2610	C	C1'-O4'-C4'	-7.73	103.71	109.90
42	L6	29	ARG	NE-CZ-NH2	7.73	124.17	120.30
26	LA	1432	G	C6-C5-N7	-7.73	125.76	130.40
26	LA	1554	U	C5-C6-N1	-7.73	118.83	122.70
26	LA	2455	G	OP1-P-OP2	-7.73	108.00	119.60
26	LA	2499	C	N1-C2-O2	-7.73	114.26	118.90
26	LA	2531	A	C5-C6-N6	-7.73	117.52	123.70
2	SA	134	G	O4'-C1'-N9	7.73	114.38	108.20
2	SA	822	U	C5-C4-O4	-7.73	121.26	125.90
2	SA	1530	G	C4-N9-C1'	7.73	136.55	126.50
25	LB	96	G	C6-N1-C2	7.73	129.74	125.10
26	LA	583	G	N1-C6-O6	7.73	124.54	119.90
26	LA	1109	C	P-O3'-C3'	7.73	128.97	119.70
26	LA	1140	C	O4'-C1'-N1	7.73	114.38	108.20
2	SA	33	A	N7-C8-N9	7.73	117.66	113.80
2	SA	80	A	N7-C8-N9	7.73	117.66	113.80
26	LA	1061	U	C1'-O4'-C4'	-7.73	103.72	109.90
26	LA	2057	G	N9-C4-C5	7.73	108.49	105.40
26	LA	2566	A	O4'-C1'-C2'	7.73	114.55	107.60
45	LG	12	VAL	CA-CB-CG1	7.73	122.49	110.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	319	G	C1'-O4'-C4'	-7.73	103.72	109.90
26	LA	329	G	N1-C2-N3	-7.73	119.26	123.90
26	LA	2143	C	C5'-C4'-O4'	7.73	118.37	109.10
2	SA	4	U	C4-C5-C6	-7.72	115.06	119.70
2	SA	578	C	O4'-C1'-N1	7.72	114.38	108.20
26	LA	1450	G	O4'-C4'-C3'	-7.72	96.28	104.00
2	SA	199	A	C5'-C4'-O4'	7.72	118.37	109.10
25	LB	7	G	C5-C6-N1	7.72	115.36	111.50
26	LA	9	G	C5-N7-C8	-7.72	100.44	104.30
26	LA	47	C	C2-N3-C4	7.72	123.76	119.90
26	LA	212	G	N1-C6-O6	7.72	124.53	119.90
26	LA	458	G	P-O3'-C3'	7.72	128.97	119.70
26	LA	698	C	O4'-C1'-N1	7.72	114.38	108.20
26	LA	1280	G	C5-C6-N1	7.72	115.36	111.50
26	LA	2402	U	C3'-C2'-C1'	-7.72	95.32	101.50
26	LA	2609	U	C6-N1-C2	-7.72	116.37	121.00
52	LO	68	PHE	CB-CG-CD1	-7.72	115.39	120.80
26	LA	2353	G	N1-C6-O6	7.72	124.53	119.90
2	SA	1154	G	N3-C4-N9	7.72	130.63	126.00
3	S1	53	G	C2'-C3'-O3'	7.72	126.48	109.50
20	SD	24	VAL	CG1-CB-CG2	-7.72	98.55	110.90
26	LA	1008	A	N1-C6-N6	-7.72	113.97	118.60
26	LA	1344	U	C6-N1-C2	-7.72	116.37	121.00
26	LA	1433	A	P-O3'-C3'	7.72	128.96	119.70
26	LA	2481	G	P-O3'-C3'	7.72	128.96	119.70
26	LA	2756	U	P-O3'-C3'	7.72	128.96	119.70
51	LI	123	ARG	NH1-CZ-NH2	-7.72	110.91	119.40
2	SA	592	G	C5-C6-N1	7.72	115.36	111.50
26	LA	887	U	N3-C2-O2	7.72	127.60	122.20
26	LA	1517	G	C5-N7-C8	7.72	108.16	104.30
26	LA	2336	A	O4'-C1'-N9	7.72	114.37	108.20
2	SA	128	G	C8-N9-C4	7.72	109.49	106.40
16	SP	14	ARG	NE-CZ-NH2	-7.72	116.44	120.30
26	LA	987	C	C5-C4-N4	-7.72	114.80	120.20
26	LA	1223	G	C5-N7-C8	7.72	108.16	104.30
26	LA	1375	U	P-O5'-C5'	7.72	133.25	120.90
26	LA	1402	U	N3-C4-O4	7.72	124.80	119.40
2	SA	1074	G	C6-N1-C2	-7.71	120.47	125.10
2	SA	1492	A	C5-N7-C8	-7.71	100.04	103.90
10	SJ	9	ARG	NE-CZ-NH1	7.71	124.16	120.30
21	SE	28	ARG	NE-CZ-NH1	7.71	124.16	120.30
25	LB	98	G	C5-C6-N1	7.71	115.36	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	940	G	P-O3'-C3'	7.71	128.96	119.70
26	LA	1773	A	N7-C8-N9	7.71	117.66	113.80
26	LA	2106	U	N1-C2-N3	-7.71	110.27	114.90
26	LA	2386	A	C5-C6-N1	-7.71	113.84	117.70
50	LL	35	ARG	NE-CZ-NH2	-7.71	116.44	120.30
2	SA	439	U	N1-C2-O2	-7.71	117.40	122.80
2	SA	584	G	C5-C6-O6	-7.71	123.97	128.60
2	SA	272	C	C2-N3-C4	7.71	123.76	119.90
2	SA	456	A	C8-N9-C4	7.71	108.88	105.80
2	SA	746	A	O4'-C1'-N9	7.71	114.37	108.20
2	SA	811	C	N3-C2-O2	-7.71	116.50	121.90
2	SA	1003	G	C5'-C4'-C3'	7.71	128.34	116.00
3	S1	13	A	N1-C6-N6	-7.71	113.97	118.60
3	S1	38	G	C8-N9-C4	7.71	109.48	106.40
26	LA	425	G	C3'-C2'-C1'	-7.71	95.33	101.50
26	LA	1105	U	N3-C2-O2	7.71	127.60	122.20
26	LA	1642	G	N7-C8-N9	-7.71	109.24	113.10
26	LA	2774	C	P-O5'-C5'	7.71	133.24	120.90
2	SA	222	C	C5-C6-N1	7.71	124.86	121.00
2	SA	1416	G	C2-N3-C4	7.71	115.75	111.90
26	LA	22	C	O4'-C1'-N1	7.71	114.37	108.20
26	LA	2472	G	N1-C2-N2	-7.71	109.26	116.20
2	SA	460	A	C8-N9-C4	7.71	108.88	105.80
2	SA	1332	A	N7-C8-N9	7.71	117.65	113.80
26	LA	947	A	C1'-O4'-C4'	7.71	116.07	109.90
26	LA	1018	U	C5'-C4'-O4'	7.71	118.35	109.10
26	LA	2639	A	C4-C5-C6	-7.71	113.14	117.00
26	LA	2857	G	C8-N9-C4	7.71	109.48	106.40
2	SA	174	A	C1'-O4'-C4'	-7.71	103.73	109.90
2	SA	277	C	C4'-C3'-C2'	7.71	110.31	102.60
2	SA	312	C	O4'-C1'-N1	7.71	114.37	108.20
2	SA	631	C	C2-N3-C4	-7.71	116.05	119.90
2	SA	923	A	C8-N9-C4	-7.71	102.72	105.80
26	LA	12	U	N1-C2-O2	7.71	128.19	122.80
26	LA	510	C	C6-N1-C2	7.71	123.38	120.30
26	LA	589	U	O4'-C1'-N1	7.71	114.36	108.20
26	LA	1189	A	C1'-O4'-C4'	-7.71	103.73	109.90
26	LA	2478	A	C5-C6-N6	-7.71	117.53	123.70
2	SA	1036	A	N1-C6-N6	-7.71	113.98	118.60
25	LB	78	A	C4'-C3'-C2'	-7.71	94.89	102.60
26	LA	1339	G	C4-C5-C6	-7.71	114.18	118.80
2	SA	346	G	N3-C4-C5	7.70	132.45	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	513	C	N3-C4-C5	-7.70	118.82	121.90
2	SA	1070	U	P-O3'-C3'	7.70	128.94	119.70
2	SA	1435	G	N3-C2-N2	-7.70	114.51	119.90
2	SA	1517	G	C5-C6-N1	7.70	115.35	111.50
4	S2	43	G	C4-C5-N7	-7.70	107.72	110.80
26	LA	506	G	O4'-C1'-C2'	-7.70	98.10	105.80
26	LA	703	U	C5-C4-O4	7.70	130.52	125.90
26	LA	1260	A	C5-C6-N1	-7.70	113.85	117.70
26	LA	1730	C	C6-N1-C2	-7.70	117.22	120.30
26	LA	2140	G	C5'-C4'-C3'	-7.70	103.68	116.00
26	LA	2774	C	N3-C2-O2	-7.70	116.51	121.90
26	LA	2789	C	O4'-C1'-N1	7.70	114.36	108.20
2	SA	509	A	C5-C6-N1	-7.70	113.85	117.70
2	SA	1368	A	O4'-C1'-N9	7.70	114.36	108.20
26	LA	1207	C	O4'-C1'-N1	7.70	114.36	108.20
2	SA	1095	U	O4'-C1'-N1	7.70	114.36	108.20
26	LA	488	G	C8-N9-C4	7.70	109.48	106.40
26	LA	602	A	N1-C6-N6	7.70	123.22	118.60
26	LA	671	C	N1-C2-O2	7.70	123.52	118.90
26	LA	733	G	C5'-C4'-C3'	7.70	128.32	116.00
26	LA	1080	A	C4-C5-C6	-7.70	113.15	117.00
26	LA	2193	G	N9-C4-C5	7.70	108.48	105.40
26	LA	2233	U	O4'-C1'-N1	7.70	114.36	108.20
26	LA	2297	A	C3'-C2'-C1'	-7.70	95.34	101.50
26	LA	2562	U	C5-C6-N1	-7.70	118.85	122.70
2	SA	1309	G	C1'-O4'-C4'	-7.70	103.74	109.90
26	LA	159	G	C8-N9-C4	-7.70	103.32	106.40
26	LA	286	U	P-O3'-C3'	7.70	128.94	119.70
26	LA	402	A	C5-C6-N1	7.70	121.55	117.70
26	LA	2061	G	C4'-C3'-C2'	-7.70	94.90	102.60
26	LA	2275	C	O4'-C1'-N1	7.70	114.36	108.20
26	LA	2454	G	N9-C4-C5	-7.70	102.32	105.40
26	LA	2610	C	C6-N1-C1'	-7.70	111.56	120.80
46	LH	110	HIS	CA-CB-CG	7.70	126.69	113.60
26	LA	781	A	P-O3'-C3'	7.70	128.94	119.70
26	LA	1024	G	C6-N1-C2	-7.70	120.48	125.10
2	SA	469	C	C5-C6-N1	7.70	124.85	121.00
26	LA	15	G	C5-N7-C8	-7.70	100.45	104.30
26	LA	299	A	C6-N1-C2	7.70	123.22	118.60
26	LA	468	G	C5-N7-C8	-7.70	100.45	104.30
26	LA	885	C	N3-C4-C5	7.70	124.98	121.90
26	LA	1042	G	C5-C6-N1	7.70	115.35	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1093	G	O4'-C1'-N9	7.70	114.36	108.20
26	LA	1430	G	C2-N3-C4	7.70	115.75	111.90
26	LA	1980	G	C8-N9-C1'	-7.70	117.00	127.00
2	SA	554	A	C6-N1-C2	-7.69	113.98	118.60
26	LA	1805	A	C2-N3-C4	-7.69	106.75	110.60
26	LA	2394	C	N3-C4-N4	7.69	123.39	118.00
2	SA	270	A	P-O3'-C3'	-7.69	110.47	119.70
2	SA	731	G	O4'-C1'-N9	7.69	114.36	108.20
2	SA	751	U	O4'-C1'-N1	7.69	114.35	108.20
2	SA	872	A	N1-C2-N3	7.69	133.15	129.30
2	SA	1437	A	C5'-C4'-O4'	7.69	118.33	109.10
26	LA	314	C	O4'-C1'-N1	7.69	114.35	108.20
26	LA	1746	A	C5-C6-N6	7.69	129.85	123.70
31	LX	19	ARG	NE-CZ-NH2	-7.69	116.45	120.30
41	L5	41	ARG	NE-CZ-NH2	7.69	124.15	120.30
2	SA	360	G	C6-N1-C2	-7.69	120.48	125.10
2	SA	910	C	C6-N1-C2	-7.69	117.22	120.30
26	LA	1227	G	C2-N3-C4	7.69	115.75	111.90
26	LA	1907	G	N3-C4-C5	-7.69	124.75	128.60
26	LA	2096	C	C3'-C2'-C1'	-7.69	95.35	101.50
26	LA	2325	G	C5-C6-O6	-7.69	123.99	128.60
26	LA	2803	G	C4-N9-C1'	-7.69	116.50	126.50
26	LA	696	G	P-O5'-C5'	7.69	133.20	120.90
26	LA	1140	C	N3-C4-C5	7.69	124.98	121.90
26	LA	1287	A	C5-N7-C8	7.69	107.74	103.90
26	LA	1588	G	N9-C4-C5	7.69	108.48	105.40
26	LA	1617	C	C6-N1-C2	7.69	123.38	120.30
2	SA	1181	G	N1-C6-O6	7.69	124.51	119.90
2	SA	1359	C	P-O3'-C3'	-7.69	110.47	119.70
2	SA	1445	U	C5-C4-O4	-7.69	121.29	125.90
3	S1	33	A	C4-C5-N7	7.69	114.54	110.70
25	LB	28	C	O4'-C1'-N1	7.69	114.35	108.20
25	LB	116	G	C4-C5-N7	7.69	113.88	110.80
26	LA	975	A	C6-N1-C2	-7.69	113.99	118.60
26	LA	1690	A	N7-C8-N9	7.69	117.64	113.80
26	LA	2631	G	O4'-C1'-N9	7.69	114.35	108.20
26	LA	2758	A	C5-C6-N6	-7.69	117.55	123.70
3	S1	18	A	O4'-C1'-N9	7.69	114.35	108.20
26	LA	690	G	N3-C2-N2	7.69	125.28	119.90
26	LA	1015	U	O4'-C1'-N1	7.69	114.35	108.20
26	LA	1325	U	O4'-C1'-N1	7.69	114.35	108.20
26	LA	1418	G	P-O3'-C3'	7.69	128.92	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1976	U	O4'-C1'-N1	7.69	114.35	108.20
2	SA	359	G	C4-C5-C6	7.68	123.41	118.80
2	SA	727	G	C4-C5-C6	7.68	123.41	118.80
2	SA	1059	C	O4'-C1'-N1	7.68	114.35	108.20
2	SA	1401	G	C4-C5-N7	7.68	113.87	110.80
26	LA	828	U	C2-N1-C1'	7.68	126.92	117.70
26	LA	844	A	O4'-C1'-N9	7.68	114.35	108.20
26	LA	1472	C	C2-N3-C4	-7.68	116.06	119.90
26	LA	1597	A	N1-C2-N3	7.68	133.14	129.30
2	SA	57	G	C5-C6-O6	-7.68	123.99	128.60
2	SA	185	U	N1-C2-O2	7.68	128.18	122.80
2	SA	343	U	C2'-C3'-O3'	7.68	126.40	109.50
2	SA	551	U	N3-C2-O2	7.68	127.58	122.20
2	SA	1006	G	N3-C4-C5	-7.68	124.76	128.60
2	SA	1028	C	N3-C2-O2	-7.68	116.52	121.90
26	LA	682	G	P-O5'-C5'	-7.68	108.61	120.90
26	LA	799	G	N3-C2-N2	7.68	125.28	119.90
2	SA	714	G	C5-C6-O6	-7.68	123.99	128.60
26	LA	1870	C	O4'-C1'-N1	7.68	114.34	108.20
2	SA	983	A	C5-C6-N6	7.68	129.84	123.70
26	LA	410	G	N9-C4-C5	7.68	108.47	105.40
26	LA	524	G	C5-N7-C8	-7.68	100.46	104.30
26	LA	1427	A	C2-N3-C4	-7.68	106.76	110.60
26	LA	2688	G	C4-C5-N7	7.68	113.87	110.80
2	SA	442	G	O4'-C1'-N9	7.68	114.34	108.20
26	LA	1416	G	N9-C4-C5	-7.68	102.33	105.40
2	SA	414	A	C1'-O4'-C4'	-7.68	103.76	109.90
2	SA	767	A	C2-N3-C4	7.68	114.44	110.60
2	SA	1497	G	N3-C4-C5	-7.68	124.76	128.60
26	LA	9	G	N7-C8-N9	7.68	116.94	113.10
26	LA	1036	G	N3-C2-N2	7.68	125.27	119.90
26	LA	1383	A	C4'-C3'-C2'	-7.68	94.92	102.60
26	LA	2184	A	N7-C8-N9	7.68	117.64	113.80
26	LA	2875	C	O4'-C1'-N1	7.68	114.34	108.20
2	SA	53	A	C5'-C4'-O4'	7.67	118.31	109.10
2	SA	727	G	N1-C2-N2	-7.67	109.29	116.20
2	SA	755	G	C4'-C3'-C2'	-7.67	94.93	102.60
2	SA	841	C	N3-C4-N4	7.67	123.37	118.00
2	SA	1054	C	O5'-P-OP2	-7.67	98.79	105.70
26	LA	234	U	C5-C6-N1	-7.67	118.86	122.70
26	LA	263	G	N1-C6-O6	7.67	124.50	119.90
26	LA	1268	A	O4'-C1'-N9	7.67	114.34	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1819	A	N9-C4-C5	-7.67	102.73	105.80
26	LA	2096	C	C4-C5-C6	-7.67	113.56	117.40
48	LN	115	GLU	O-C-N	-7.67	110.42	122.70
52	LO	51	ARG	NE-CZ-NH1	-7.67	116.46	120.30
26	LA	932	U	O4'-C4'-C3'	7.67	112.24	106.10
26	LA	2012	G	O5'-P-OP2	-7.67	98.79	105.70
26	LA	2535	G	P-O5'-C5'	-7.67	108.62	120.90
26	LA	2893	A	N7-C8-N9	-7.67	109.96	113.80
2	SA	811	C	N1-C2-N3	7.67	124.57	119.20
2	SA	969	A	N1-C6-N6	-7.67	114.00	118.60
26	LA	267	C	N3-C4-C5	-7.67	118.83	121.90
26	LA	640	C	C3'-C2'-C1'	7.67	107.64	101.50
26	LA	1358	G	C4-N9-C1'	7.67	136.47	126.50
26	LA	1407	G	C4-C5-N7	-7.67	107.73	110.80
26	LA	2466	C	C5'-C4'-C3'	-7.67	103.73	116.00
26	LA	2834	G	C4-C5-N7	7.67	113.87	110.80
2	SA	369	G	P-O3'-C3'	7.67	128.90	119.70
26	LA	2023	C	C2-N3-C4	-7.67	116.06	119.90
2	SA	161	A	C5-C6-N1	7.67	121.53	117.70
2	SA	895	G	N3-C4-C5	-7.67	124.77	128.60
2	SA	1470	U	C4'-C3'-C2'	-7.67	94.93	102.60
4	S2	60	A	P-O3'-C3'	7.67	128.90	119.70
26	LA	117	G	C4-C5-N7	7.67	113.87	110.80
26	LA	125	A	C4-N9-C1'	7.67	140.10	126.30
26	LA	728	G	N3-C2-N2	7.67	125.27	119.90
26	LA	1211	C	C6-N1-C2	-7.67	117.23	120.30
26	LA	1540	G	C5-C6-N1	7.67	115.33	111.50
34	L0	7	ARG	NE-CZ-NH1	7.67	124.14	120.30
26	LA	215	G	C5-C6-O6	-7.67	124.00	128.60
26	LA	356	G	P-O3'-C3'	-7.67	110.50	119.70
26	LA	424	G	N9-C4-C5	-7.67	102.33	105.40
26	LA	677	A	N7-C8-N9	-7.67	109.97	113.80
26	LA	2053	G	C5'-C4'-O4'	7.67	118.30	109.10
26	LA	1235	G	N1-C6-O6	7.67	124.50	119.90
26	LA	1482	G	C5'-C4'-O4'	7.67	118.30	109.10
26	LA	1484	U	N3-C4-C5	-7.67	110.00	114.60
26	LA	1949	G	C5-C6-N1	7.67	115.33	111.50
2	SA	69	G	N7-C8-N9	-7.66	109.27	113.10
2	SA	615	G	N1-C2-N3	7.66	128.50	123.90
23	SR	63	TYR	CB-CG-CD1	-7.66	116.40	121.00
26	LA	1416	G	C4-N9-C1'	-7.66	116.54	126.50
26	LA	1843	C	N3-C4-N4	7.66	123.36	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2257	U	N3-C4-C5	-7.66	110.00	114.60
26	LA	2765	A	P-O3'-C3'	7.66	128.90	119.70
2	SA	210	C	O4'-C1'-C2'	-7.66	98.14	105.80
26	LA	166	U	N3-C4-O4	7.66	124.76	119.40
26	LA	2536	G	N1-C6-O6	7.66	124.50	119.90
2	SA	182	A	N1-C2-N3	-7.66	125.47	129.30
2	SA	271	C	N1-C2-O2	-7.66	114.30	118.90
2	SA	696	A	C4-C5-C6	7.66	120.83	117.00
24	S3	8	ARG	NE-CZ-NH2	7.66	124.13	120.30
26	LA	386	G	C6-N1-C2	-7.66	120.50	125.10
26	LA	1544	A	N1-C2-N3	7.66	133.13	129.30
26	LA	1644	C	O4'-C1'-N1	7.66	114.33	108.20
26	LA	1943	U	C6-N1-C1'	-7.66	110.48	121.20
26	LA	2235	G	C4-C5-N7	7.66	113.86	110.80
26	LA	2582	G	O4'-C1'-N9	7.66	114.33	108.20
39	L3	51	ARG	CG-CD-NE	-7.66	95.72	111.80
2	SA	882	C	P-O3'-C3'	7.66	128.89	119.70
2	SA	1029	U	C2-N1-C1'	-7.66	108.51	117.70
2	SA	1412	C	N3-C4-N4	7.66	123.36	118.00
26	LA	1242	U	C5-C4-O4	-7.66	121.31	125.90
26	LA	1339	G	N9-C4-C5	-7.66	102.34	105.40
26	LA	2400	G	C6-N1-C2	-7.66	120.50	125.10
26	LA	2587	A	P-O3'-C3'	7.66	128.89	119.70
26	LA	2606	C	N3-C4-N4	7.66	123.36	118.00
2	SA	241	G	C2-N3-C4	7.66	115.73	111.90
2	SA	793	U	C2-N1-C1'	7.66	126.89	117.70
2	SA	38	G	C2-N3-C4	7.66	115.73	111.90
2	SA	376	G	N7-C8-N9	-7.66	109.27	113.10
2	SA	521	G	C1'-O4'-C4'	-7.66	103.78	109.90
26	LA	1196	C	N3-C4-C5	7.66	124.96	121.90
26	LA	1897	G	C2-N3-C4	7.65	115.73	111.90
26	LA	2795	C	C2-N3-C4	7.65	123.73	119.90
26	LA	2878	U	C5-C4-O4	-7.65	121.31	125.90
2	SA	1401	G	O4'-C1'-N9	7.65	114.32	108.20
21	SE	137	ARG	NE-CZ-NH1	7.65	124.13	120.30
23	SR	71	ASP	CB-CG-OD2	7.65	125.19	118.30
26	LA	2408	U	P-O3'-C3'	7.65	128.88	119.70
2	SA	440	C	C5'-C4'-O4'	7.65	118.28	109.10
2	SA	706	A	N1-C2-N3	-7.65	125.47	129.30
26	LA	786	C	OP1-P-OP2	-7.65	108.12	119.60
26	LA	1291	C	C5-C4-N4	-7.65	114.84	120.20
26	LA	1548	A	C5'-C4'-O4'	7.65	118.28	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1826	G	C6-N1-C2	-7.65	120.51	125.10
26	LA	2521	C	C5-C4-N4	-7.65	114.84	120.20
26	LA	2655	G	N7-C8-N9	-7.65	109.28	113.10
2	SA	247	G	OP1-P-OP2	-7.65	108.13	119.60
2	SA	391	G	C5'-C4'-C3'	7.65	128.24	116.00
2	SA	397	A	C5-C6-N1	7.65	121.52	117.70
2	SA	1453	G	C6-N1-C2	-7.65	120.51	125.10
2	SA	60	A	O4'-C1'-C2'	-7.65	98.15	105.80
2	SA	442	G	C4-C5-C6	-7.65	114.21	118.80
4	S2	33	C	O4'-C1'-N1	7.65	114.32	108.20
25	LB	25	U	C2-N3-C4	-7.65	122.41	127.00
26	LA	814	C	O4'-C1'-N1	7.65	114.32	108.20
26	LA	2093	G	C4-C5-N7	7.65	113.86	110.80
57	LS	35	PHE	CB-CG-CD2	-7.65	115.45	120.80
2	SA	1119	C	N3-C4-C5	7.65	124.96	121.90
25	LB	19	C	N3-C4-N4	-7.65	112.65	118.00
26	LA	204	A	N1-C6-N6	7.65	123.19	118.60
2	SA	1019	A	N1-C6-N6	7.64	123.19	118.60
2	SA	1060	U	O4'-C1'-N1	7.64	114.32	108.20
2	SA	1267	C	N1-C2-O2	7.64	123.49	118.90
26	LA	748	G	C5'-C4'-O4'	7.64	118.27	109.10
26	LA	834	G	C5-C6-O6	-7.64	124.01	128.60
26	LA	1282	U	C2-N3-C4	-7.64	122.41	127.00
26	LA	1645	G	P-O3'-C3'	-7.64	110.53	119.70
26	LA	1983	G	N3-C4-C5	-7.64	124.78	128.60
26	LA	2220	U	P-O3'-C3'	-7.64	110.53	119.70
26	LA	1945	G	N3-C2-N2	7.64	125.25	119.90
49	LK	40	ALA	N-CA-C	7.64	131.64	111.00
26	LA	609	A	C5-C6-N1	-7.64	113.88	117.70
26	LA	762	U	N3-C2-O2	-7.64	116.85	122.20
26	LA	1048	A	N1-C2-N3	-7.64	125.48	129.30
26	LA	2616	C	O4'-C1'-N1	7.64	114.31	108.20
2	SA	1518	A	N7-C8-N9	7.64	117.62	113.80
25	LB	19	C	N3-C4-C5	7.64	124.96	121.90
25	LB	117	G	N1-C6-O6	7.64	124.48	119.90
26	LA	111	A	C4'-C3'-C2'	-7.64	94.96	102.60
26	LA	2305	U	N1-C2-N3	7.64	119.48	114.90
26	LA	2584	U	C6-N1-C2	-7.64	116.42	121.00
2	SA	522	C	C6-N1-C2	-7.64	117.25	120.30
26	LA	1495	A	C4'-C3'-C2'	-7.64	94.96	102.60
2	SA	990	C	N3-C4-N4	-7.64	112.66	118.00
2	SA	1287	A	C5-C6-N1	7.64	121.52	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1468	A	C5-N7-C8	-7.64	100.08	103.90
26	LA	788	A	C8-N9-C4	7.64	108.86	105.80
26	LA	1588	G	C6-N1-C2	-7.64	120.52	125.10
26	LA	2553	G	N9-C1'-C2'	-7.64	103.60	112.00
45	LG	6	TYR	CG-CD2-CE2	-7.64	115.19	121.30
2	SA	395	C	C1'-O4'-C4'	-7.63	103.79	109.90
2	SA	416	G	P-O5'-C5'	7.63	133.12	120.90
2	SA	553	A	N9-C4-C5	7.63	108.85	105.80
2	SA	1305	G	C4'-C3'-C2'	-7.63	94.97	102.60
26	LA	182	A	C5-C6-N1	-7.63	113.88	117.70
26	LA	2169	A	C4-C5-C6	-7.63	113.18	117.00
26	LA	2809	A	C4-C5-N7	-7.63	106.88	110.70
26	LA	1159	U	O4'-C1'-C2'	7.63	114.47	107.60
26	LA	2668	G	C6-N1-C2	7.63	129.68	125.10
2	SA	853	C	C5-C4-N4	7.63	125.54	120.20
2	SA	929	G	C5-C6-O6	-7.63	124.02	128.60
4	S2	15	G	N3-C2-N2	-7.63	114.56	119.90
4	S2	45	A	C5-C6-N6	-7.63	117.59	123.70
26	LA	706	A	C2-N3-C4	7.63	114.42	110.60
26	LA	1178	C	C6-N1-C1'	7.63	129.96	120.80
26	LA	1801	A	O4'-C1'-N9	7.63	114.31	108.20
26	LA	2598	A	C4-C5-C6	-7.63	113.18	117.00
2	SA	386	C	C6-N1-C1'	7.63	129.96	120.80
26	LA	1649	G	C4'-C3'-C2'	-7.63	94.97	102.60
26	LA	2843	G	N3-C4-N9	-7.63	121.42	126.00
2	SA	87	C	P-O3'-C3'	-7.63	110.55	119.70
2	SA	195	A	N1-C6-N6	-7.63	114.02	118.60
2	SA	346	G	O4'-C1'-N9	7.63	114.30	108.20
2	SA	616	G	C2-N3-C4	7.63	115.71	111.90
2	SA	824	G	C6-N1-C2	-7.63	120.52	125.10
2	SA	1028	C	C5'-C4'-C3'	-7.63	103.80	116.00
2	SA	1419	G	P-O5'-C5'	-7.63	108.69	120.90
26	LA	1227	G	N7-C8-N9	7.63	116.91	113.10
26	LA	1259	G	C5-C6-N1	7.63	115.31	111.50
26	LA	1532	A	N7-C8-N9	7.63	117.61	113.80
26	LA	2211	A	C6-N1-C2	-7.63	114.02	118.60
2	SA	48	C	C6-N1-C1'	-7.63	111.65	120.80
2	SA	414	A	O5'-P-OP1	7.63	119.85	110.70
2	SA	1398	A	P-O3'-C3'	-7.63	110.55	119.70
2	SA	1529	G	C6-N1-C2	-7.63	120.53	125.10
25	LB	46	A	C8-N9-C4	7.63	108.85	105.80
25	LB	116	G	N1-C6-O6	7.63	124.48	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2198	A	N1-C2-N3	-7.63	125.49	129.30
26	LA	2271	G	C5'-C4'-C3'	7.63	128.20	116.00
2	SA	1222	G	C5-C6-N1	7.62	115.31	111.50
25	LB	10	G	C5'-C4'-C3'	-7.62	103.80	116.00
26	LA	690	G	O4'-C1'-N9	7.62	114.30	108.20
26	LA	1260	A	C8-N9-C4	-7.62	102.75	105.80
26	LA	2221	G	O4'-C1'-N9	7.62	114.30	108.20
2	SA	1335	U	C5-C6-N1	7.62	126.51	122.70
26	LA	1423	G	C3'-C2'-C1'	7.62	107.60	101.50
26	LA	1738	G	N9-C4-C5	-7.62	102.35	105.40
26	LA	1849	G	C4-C5-N7	7.62	113.85	110.80
26	LA	2252	G	C8-N9-C4	-7.62	103.35	106.40
26	LA	2767	C	N1-C2-O2	7.62	123.47	118.90
2	SA	710	G	O4'-C1'-N9	7.62	114.30	108.20
26	LA	692	C	O4'-C1'-N1	7.62	114.30	108.20
26	LA	1638	C	C6-N1-C2	-7.62	117.25	120.30
26	LA	2590	A	N1-C6-N6	7.62	123.17	118.60
2	SA	465	A	C5-C6-N1	-7.62	113.89	117.70
2	SA	1432	G	N3-C4-N9	7.62	130.57	126.00
26	LA	1189	A	C5'-C4'-O4'	7.62	118.24	109.10
26	LA	1613	G	P-O3'-C3'	-7.62	110.56	119.70
26	LA	1995	U	C6-N1-C2	-7.62	116.43	121.00
44	LF	21	ARG	NE-CZ-NH2	7.62	124.11	120.30
2	SA	74	A	N1-C2-N3	-7.62	125.49	129.30
2	SA	373	A	C5-C6-N6	-7.62	117.61	123.70
2	SA	588	G	C6-N1-C2	-7.62	120.53	125.10
2	SA	1067	A	C5-C6-N6	-7.62	117.61	123.70
26	LA	1752	C	C6-N1-C2	-7.62	117.25	120.30
26	LA	1961	C	C4'-C3'-C2'	-7.62	94.98	102.60
2	SA	922	G	C8-N9-C4	-7.62	103.35	106.40
2	SA	1366	C	C5-C4-N4	7.62	125.53	120.20
26	LA	435	C	N1-C2-O2	-7.62	114.33	118.90
26	LA	508	A	C6-N1-C2	7.62	123.17	118.60
26	LA	583	G	C8-N9-C4	-7.62	103.35	106.40
26	LA	1757	A	P-O3'-C3'	7.62	128.84	119.70
26	LA	2411	A	N7-C8-N9	7.62	117.61	113.80
26	LA	2668	G	N7-C8-N9	-7.62	109.29	113.10
2	SA	481	G	N3-C2-N2	7.61	125.23	119.90
2	SA	496	A	C5'-C4'-C3'	7.61	128.18	116.00
2	SA	971	G	N3-C4-N9	7.61	130.57	126.00
2	SA	1043	G	N7-C8-N9	-7.61	109.29	113.10
2	SA	1254	A	O4'-C1'-N9	7.61	114.29	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	96	G	N3-C2-N2	7.61	125.23	119.90
26	LA	622	G	C4-C5-C6	7.61	123.37	118.80
26	LA	973	A	N1-C2-N3	-7.61	125.49	129.30
26	LA	1131	G	N3-C2-N2	7.61	125.23	119.90
26	LA	2170	A	N1-C2-N3	7.61	133.11	129.30
26	LA	4	U	P-O5'-C5'	7.61	133.08	120.90
26	LA	2570	G	N1-C2-N3	-7.61	119.33	123.90
58	LT	35	PHE	CB-CG-CD2	-7.61	115.47	120.80
2	SA	1116	U	C2-N3-C4	-7.61	122.43	127.00
2	SA	1293	C	N3-C4-C5	-7.61	118.86	121.90
2	SA	1486	G	C5-C6-O6	7.61	133.17	128.60
26	LA	385	C	C6-N1-C2	7.61	123.34	120.30
26	LA	1096	A	N1-C2-N3	7.61	133.10	129.30
26	LA	1208	C	C6-N1-C2	7.61	123.34	120.30
26	LA	1311	G	N1-C6-O6	7.61	124.47	119.90
26	LA	1706	C	C5-C6-N1	-7.61	117.19	121.00
26	LA	1921	G	N3-C4-C5	-7.61	124.80	128.60
26	LA	2048	G	N3-C4-C5	-7.61	124.80	128.60
26	LA	2138	G	C5'-C4'-O4'	7.61	118.23	109.10
2	SA	878	A	C4-C5-N7	-7.61	106.89	110.70
26	LA	1515	A	N1-C2-N3	7.61	133.10	129.30
2	SA	952	U	C5-C4-O4	7.61	130.46	125.90
2	SA	992	U	C5-C6-N1	7.61	126.50	122.70
26	LA	289	G	N1-C6-O6	-7.61	115.33	119.90
26	LA	745	G	C6-N1-C2	-7.61	120.54	125.10
26	LA	1738	G	C4-C5-C6	-7.61	114.23	118.80
26	LA	1997	C	C6-N1-C2	-7.61	117.26	120.30
26	LA	2633	G	C4'-C3'-C2'	-7.61	94.99	102.60
27	LD	237	ARG	NE-CZ-NH2	-7.61	116.50	120.30
44	LF	101	TYR	CB-CG-CD2	7.61	125.56	121.00
1	SS	83	ALA	N-CA-CB	-7.61	99.45	110.10
2	SA	40	C	N3-C4-C5	-7.61	118.86	121.90
2	SA	391	G	C8-N9-C4	-7.61	103.36	106.40
2	SA	445	G	C8-N9-C4	-7.61	103.36	106.40
2	SA	567	G	C6-N1-C2	-7.61	120.54	125.10
26	LA	2226	C	C4'-C3'-C2'	-7.61	95.00	102.60
2	SA	348	G	O4'-C1'-N9	7.60	114.28	108.20
4	S2	74	A	C6-C5-N7	-7.60	126.98	132.30
26	LA	1888	G	C8-N9-C4	-7.60	103.36	106.40
43	L7	20	ASP	CB-CG-OD1	7.60	125.14	118.30
2	SA	294	U	N3-C2-O2	-7.60	116.88	122.20
2	SA	1484	C	C5-C4-N4	-7.60	114.88	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	SL	37	TYR	CG-CD1-CE1	-7.60	115.22	121.30
26	LA	341	C	P-O5'-C5'	7.60	133.07	120.90
26	LA	488	G	C1'-O4'-C4'	-7.60	103.82	109.90
26	LA	1538	G	O4'-C4'-C3'	-7.60	96.40	104.00
26	LA	1751	U	C5-C6-N1	-7.60	118.90	122.70
26	LA	1889	A	C4-C5-N7	-7.60	106.90	110.70
2	SA	900	A	C4-C5-C6	-7.60	113.20	117.00
26	LA	201	C	C1'-O4'-C4'	-7.60	103.82	109.90
26	LA	255	A	N9-C4-C5	-7.60	102.76	105.80
26	LA	1464	G	O4'-C1'-N9	7.60	114.28	108.20
26	LA	2458	G	C8-N9-C1'	-7.60	117.12	127.00
26	LA	2649	C	C4-C5-C6	7.60	121.20	117.40
2	SA	254	G	C4-N9-C1'	-7.60	116.62	126.50
2	SA	411	A	N9-C4-C5	-7.60	102.76	105.80
2	SA	457	G	N1-C6-O6	7.60	124.46	119.90
2	SA	958	A	C2-N3-C4	-7.60	106.80	110.60
2	SA	1220	G	OP1-P-OP2	-7.60	108.20	119.60
2	SA	1277	C	O4'-C1'-N1	7.60	114.28	108.20
26	LA	1626	A	C4'-C3'-C2'	7.60	110.20	102.60
26	LA	2385	C	C5'-C4'-C3'	7.60	128.16	116.00
2	SA	50	A	N1-C2-N3	-7.60	125.50	129.30
2	SA	146	G	C5'-C4'-C3'	7.60	128.16	116.00
2	SA	990	C	O5'-P-OP2	-7.60	98.86	105.70
2	SA	1492	A	P-O3'-C3'	-7.60	110.58	119.70
4	S2	57	C	O4'-C1'-N1	7.60	114.28	108.20
26	LA	791	C	C3'-C2'-C1'	-7.60	95.42	101.50
26	LA	1176	U	N1-C2-O2	7.60	128.12	122.80
26	LA	1564	C	N3-C2-O2	-7.60	116.58	121.90
26	LA	2145	C	C2-N1-C1'	7.60	127.16	118.80
26	LA	598	U	P-O3'-C3'	-7.60	110.58	119.70
26	LA	1018	U	O4'-C1'-N1	7.60	114.28	108.20
26	LA	1547	C	O4'-C1'-N1	7.60	114.28	108.20
26	LA	1915	C	C5-C4-N4	-7.60	114.88	120.20
26	LA	2224	G	N1-C2-N2	-7.60	109.36	116.20
2	SA	872	A	C5-C6-N6	7.59	129.78	123.70
2	SA	887	G	N3-C4-N9	-7.59	121.44	126.00
2	SA	996	A	C2-N3-C4	7.59	114.40	110.60
26	LA	969	G	N1-C2-N3	-7.59	119.34	123.90
26	LA	1382	G	P-O3'-C3'	7.59	128.81	119.70
55	LQ	47	VAL	CA-CB-CG1	-7.59	99.51	110.90
2	SA	410	G	C5'-C4'-C3'	-7.59	103.85	116.00
2	SA	1413	A	N1-C6-N6	7.59	123.16	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1526	G	C5-C6-O6	-7.59	124.04	128.60
26	LA	220	G	C8-N9-C1'	-7.59	117.13	127.00
26	LA	2878	U	N3-C4-O4	7.59	124.72	119.40
2	SA	547	A	P-O5'-C5'	-7.59	108.75	120.90
2	SA	682	G	O4'-C1'-N9	7.59	114.27	108.20
2	SA	771	G	C4-C5-N7	7.59	113.84	110.80
2	SA	1465	A	O4'-C1'-N9	7.59	114.27	108.20
26	LA	393	C	O4'-C1'-N1	7.59	114.27	108.20
26	LA	733	G	N1-C2-N2	-7.59	109.37	116.20
26	LA	831	G	C8-N9-C4	-7.59	103.36	106.40
26	LA	1995	U	N1-C2-N3	7.59	119.45	114.90
26	LA	2802	G	C5'-C4'-O4'	7.59	118.21	109.10
2	SA	242	G	C5-C6-N1	-7.59	107.70	111.50
2	SA	548	G	N3-C4-C5	7.59	132.40	128.60
25	LB	81	G	N1-C2-N2	-7.59	109.37	116.20
26	LA	353	C	C6-N1-C2	-7.59	117.26	120.30
26	LA	468	G	C8-N9-C4	-7.59	103.36	106.40
26	LA	1682	G	C6-N1-C2	-7.59	120.55	125.10
26	LA	2023	C	C5-C6-N1	-7.59	117.20	121.00
26	LA	2235	G	C6-C5-N7	-7.59	125.85	130.40
2	SA	266	G	C8-N9-C4	-7.59	103.36	106.40
2	SA	944	G	C5'-C4'-O4'	7.59	118.21	109.10
26	LA	407	G	C5-C6-O6	-7.59	124.05	128.60
26	LA	2448	A	C2-N3-C4	7.59	114.39	110.60
2	SA	879	C	C2-N3-C4	-7.59	116.11	119.90
2	SA	1032	G	C5-C6-O6	-7.59	124.05	128.60
2	SA	1270	G	N3-C4-C5	-7.59	124.81	128.60
24	S3	71	TRP	CB-CG-CD2	-7.59	116.74	126.60
24	S3	338	TYR	CB-CG-CD1	-7.59	116.45	121.00
26	LA	489	G	N7-C8-N9	-7.59	109.31	113.10
26	LA	617	G	C5-C6-O6	7.59	133.15	128.60
26	LA	1212	G	N9-C4-C5	-7.59	102.36	105.40
26	LA	1445	G	N3-C2-N2	7.59	125.21	119.90
26	LA	2328	A	C4-C5-N7	-7.59	106.91	110.70
26	LA	2437	G	C5-C6-O6	-7.59	124.05	128.60
26	LA	2454	G	O4'-C4'-C3'	7.59	112.17	106.10
26	LA	2621	G	O4'-C1'-N9	7.59	114.27	108.20
27	LD	239	PHE	CB-CG-CD2	7.59	126.11	120.80
2	SA	79	G	O4'-C1'-N9	7.58	114.27	108.20
2	SA	923	A	C5'-C4'-O4'	7.58	118.20	109.10
2	SA	1450	U	C2-N3-C4	-7.58	122.45	127.00
26	LA	108	G	C5-N7-C8	7.58	108.09	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	613	A	C5-C6-N1	-7.58	113.91	117.70
26	LA	712	G	N1-C2-N3	-7.58	119.35	123.90
2	SA	1410	A	P-O5'-C5'	7.58	133.03	120.90
26	LA	381	G	N9-C4-C5	7.58	108.43	105.40
26	LA	1342	A	C4-C5-C6	-7.58	113.21	117.00
26	LA	1810	A	C5'-C4'-C3'	7.58	128.13	116.00
26	LA	2642	G	N3-C4-C5	-7.58	124.81	128.60
26	LA	2814	A	C4-C5-C6	-7.58	113.21	117.00
4	S2	13	C	C4-C5-C6	7.58	121.19	117.40
26	LA	753	A	N1-C2-N3	7.58	133.09	129.30
26	LA	1134	A	C5-N7-C8	7.58	107.69	103.90
26	LA	1150	C	C3'-C2'-C1'	-7.58	95.43	101.50
26	LA	1381	G	N9-C4-C5	-7.58	102.37	105.40
26	LA	2454	G	C1'-O4'-C4'	-7.58	103.83	109.90
26	LA	2824	C	C6-N1-C2	-7.58	117.27	120.30
53	LP	110	MET	CG-SD-CE	-7.58	88.07	100.20
26	LA	1421	G	C6-N1-C2	7.58	129.65	125.10
26	LA	1533	C	C5-C6-N1	7.58	124.79	121.00
26	LA	1878	G	N3-C4-C5	-7.58	124.81	128.60
2	SA	788	U	C2-N3-C4	7.58	131.55	127.00
2	SA	1484	C	O4'-C1'-N1	7.58	114.26	108.20
26	LA	926	G	P-O5'-C5'	7.58	133.03	120.90
26	LA	1924	C	N3-C2-O2	-7.58	116.60	121.90
26	LA	2685	G	C5'-C4'-O4'	7.58	118.19	109.10
2	SA	972	C	C5'-C4'-C3'	-7.58	103.88	116.00
2	SA	1338	G	C5-C6-N1	-7.58	107.71	111.50
26	LA	1384	A	C4-C5-C6	7.58	120.79	117.00
26	LA	1574	C	N1-C2-N3	7.58	124.50	119.20
26	LA	1835	G	C5-C6-N1	7.58	115.29	111.50
2	SA	1176	A	O4'-C1'-N9	7.58	114.26	108.20
2	SA	1311	A	N9-C1'-C2'	-7.58	103.67	112.00
26	LA	1584	U	N3-C4-O4	7.58	124.70	119.40
26	LA	2595	G	C4-C5-N7	7.58	113.83	110.80
56	LR	102	ARG	NE-CZ-NH2	-7.58	116.51	120.30
2	SA	564	C	N3-C2-O2	-7.57	116.60	121.90
2	SA	974	A	O4'-C1'-N9	7.57	114.26	108.20
2	SA	1069	C	C5-C6-N1	-7.57	117.21	121.00
4	S2	44	A	C4-C5-C6	7.57	120.79	117.00
26	LA	527	C	C1'-O4'-C4'	-7.57	103.84	109.90
26	LA	2029	G	C4-N9-C1'	7.57	136.34	126.50
26	LA	2178	C	C4-C5-C6	7.57	121.19	117.40
26	LA	2616	C	C6-N1-C2	-7.57	117.27	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2755	C	C2-N3-C4	7.57	123.69	119.90
25	LB	100	G	N3-C4-C5	7.57	132.39	128.60
2	SA	974	A	OP1-P-OP2	-7.57	108.24	119.60
2	SA	1066	C	N3-C2-O2	-7.57	116.60	121.90
26	LA	690	G	C8-N9-C4	-7.57	103.37	106.40
26	LA	1326	U	OP1-P-OP2	-7.57	108.24	119.60
26	LA	1470	A	C8-N9-C4	-7.57	102.77	105.80
26	LA	1821	A	N9-C4-C5	7.57	108.83	105.80
26	LA	1959	G	O4'-C1'-N9	7.57	114.26	108.20
26	LA	2022	U	C5-C6-N1	-7.57	118.92	122.70
26	LA	2824	C	N1-C2-N3	7.57	124.50	119.20
2	SA	644	U	O4'-C1'-N1	7.57	114.25	108.20
2	SA	723	U	O4'-C1'-N1	7.57	114.25	108.20
2	SA	774	G	N3-C4-C5	7.57	132.38	128.60
2	SA	1037	C	N1-C2-N3	7.57	124.50	119.20
2	SA	1489	G	C6-N1-C2	-7.57	120.56	125.10
26	LA	462	C	C5-C4-N4	-7.57	114.90	120.20
26	LA	560	C	C5-C4-N4	-7.57	114.90	120.20
26	LA	1987	A	N1-C2-N3	-7.57	125.52	129.30
52	LO	16	ARG	NE-CZ-NH2	-7.57	116.52	120.30
2	SA	280	C	C4-C5-C6	-7.57	113.62	117.40
2	SA	1525	G	N1-C6-O6	7.57	124.44	119.90
3	S1	19	A	C6-N1-C2	-7.57	114.06	118.60
26	LA	1103	A	C8-N9-C4	-7.57	102.77	105.80
26	LA	1272	A	C1'-O4'-C4'	-7.57	103.85	109.90
26	LA	1670	C	O4'-C4'-C3'	7.57	112.16	106.10
26	LA	1847	A	P-O5'-C5'	7.57	133.01	120.90
2	SA	510	A	N9-C4-C5	7.57	108.83	105.80
2	SA	1361	G	C5-C6-O6	-7.57	124.06	128.60
2	SA	1439	G	C2-N3-C4	7.57	115.68	111.90
26	LA	527	C	C5-C4-N4	-7.57	114.90	120.20
26	LA	879	G	P-O5'-C5'	7.57	133.00	120.90
26	LA	1001	A	C2-N3-C4	-7.57	106.82	110.60
26	LA	1270	C	P-O5'-C5'	7.57	133.00	120.90
26	LA	2030	U	O4'-C1'-C2'	-7.57	98.23	105.80
26	LA	2879	A	C5-N7-C8	-7.57	100.12	103.90
2	SA	933	G	C8-N9-C4	7.56	109.43	106.40
2	SA	1338	G	C4-C5-C6	7.56	123.34	118.80
5	ST	35	TYR	CG-CD2-CE2	-7.56	115.25	121.30
26	LA	2677	G	C5-C6-N1	-7.56	107.72	111.50
2	SA	472	U	O4'-C1'-N1	7.56	114.25	108.20
2	SA	1087	G	O4'-C1'-N9	7.56	114.25	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	128	C	O4'-C1'-N1	7.56	114.25	108.20
26	LA	656	G	N9-C4-C5	7.56	108.42	105.40
26	LA	1278	C	N1-C2-O2	-7.56	114.36	118.90
26	LA	2101	A	C5'-C4'-C3'	-7.56	103.90	116.00
26	LA	2516	A	C2-N3-C4	-7.56	106.82	110.60
2	SA	253	A	C5'-C4'-O4'	7.56	118.17	109.10
2	SA	329	A	N3-C4-N9	7.56	133.45	127.40
2	SA	427	U	N3-C4-C5	7.56	119.14	114.60
2	SA	1383	C	C4-C5-C6	-7.56	113.62	117.40
18	SB	5	MET	CG-SD-CE	-7.56	88.10	100.20
26	LA	921	C	C2-N3-C4	-7.56	116.12	119.90
26	LA	2076	U	P-O3'-C3'	7.56	128.77	119.70
2	SA	377	G	N1-C6-O6	7.56	124.44	119.90
2	SA	789	U	C5-C4-O4	-7.56	121.36	125.90
26	LA	227	A	C3'-C2'-C1'	-7.56	95.45	101.50
26	LA	1203	U	C1'-O4'-C4'	-7.56	103.85	109.90
26	LA	1737	G	O4'-C1'-N9	7.56	114.25	108.20
26	LA	2506	U	O3'-P-O5'	7.56	118.36	104.00
2	SA	411	A	C4-C5-C6	-7.56	113.22	117.00
2	SA	565	U	C5-C6-N1	-7.56	118.92	122.70
2	SA	1072	G	C5-N7-C8	-7.56	100.52	104.30
25	LB	3	C	N3-C4-C5	-7.56	118.88	121.90
26	LA	346	A	C4'-C3'-C2'	-7.56	95.04	102.60
2	SA	50	A	N9-C4-C5	-7.56	102.78	105.80
2	SA	88	U	C5-C6-N1	-7.56	118.92	122.70
2	SA	1184	G	C4-C5-N7	-7.56	107.78	110.80
26	LA	1084	A	C8-N9-C4	-7.56	102.78	105.80
26	LA	2815	C	C1'-O4'-C4'	-7.56	103.86	109.90
2	SA	1099	G	C5-N7-C8	-7.55	100.52	104.30
2	SA	1338	G	C4-N9-C1'	7.55	136.32	126.50
2	SA	1456	A	O4'-C1'-N9	7.55	114.24	108.20
4	S2	57	C	N3-C4-C5	-7.55	118.88	121.90
26	LA	1160	G	C5'-C4'-O4'	7.55	118.17	109.10
26	LA	2754	U	N3-C2-O2	-7.55	116.91	122.20
2	SA	295	C	P-O3'-C3'	-7.55	110.64	119.70
2	SA	1235	U	C5-C4-O4	-7.55	121.37	125.90
4	S2	17	C	P-O3'-C3'	7.55	128.76	119.70
2	SA	842	U	C2-N1-C1'	7.55	126.76	117.70
2	SA	1362	A	P-O5'-C5'	7.55	132.98	120.90
4	S2	43	G	C5-C6-O6	7.55	133.13	128.60
26	LA	1434	A	P-O5'-C5'	7.55	132.98	120.90
26	LA	1948	G	OP1-P-OP2	-7.55	108.27	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	LF	35	TYR	CG-CD2-CE2	-7.55	115.26	121.30
2	SA	186	C	N3-C4-N4	-7.55	112.72	118.00
2	SA	1449	C	C4'-C3'-C2'	-7.55	95.05	102.60
3	S1	51	C	C4'-C3'-C2'	-7.55	95.05	102.60
25	LB	70	C	N3-C2-O2	-7.55	116.62	121.90
26	LA	52	A	N1-C6-N6	-7.55	114.07	118.60
26	LA	827	U	C5-C4-O4	7.55	130.43	125.90
26	LA	1370	C	O4'-C1'-N1	7.55	114.24	108.20
26	LA	1543	G	P-O3'-C3'	7.55	128.76	119.70
26	LA	2423	U	N3-C2-O2	7.55	127.48	122.20
26	LA	2601	C	N3-C4-N4	7.55	123.28	118.00
26	LA	2809	A	N3-C4-C5	-7.55	121.52	126.80
43	L7	19	ARG	NE-CZ-NH1	7.55	124.08	120.30
2	SA	930	C	C2-N3-C4	-7.55	116.13	119.90
2	SA	1412	C	C5-C4-N4	-7.55	114.92	120.20
26	LA	155	A	N1-C6-N6	7.55	123.13	118.60
26	LA	559	G	C3'-C2'-C1'	7.55	107.54	101.50
2	SA	23	C	O4'-C1'-N1	7.55	114.24	108.20
2	SA	779	C	C5'-C4'-O4'	7.55	118.16	109.10
2	SA	1304	G	N3-C4-N9	-7.55	121.47	126.00
2	SA	1477	U	C6-N1-C2	-7.55	116.47	121.00
3	S1	20	G	C8-N9-C1'	-7.55	117.19	127.00
26	LA	1269	A	N7-C8-N9	-7.55	110.03	113.80
26	LA	1386	C	P-O3'-C3'	-7.55	110.64	119.70
2	SA	1048	G	C3'-C2'-C1'	-7.54	95.46	101.50
26	LA	257	C	N3-C4-N4	-7.54	112.72	118.00
26	LA	498	G	N3-C4-C5	-7.54	124.83	128.60
2	SA	360	G	N1-C6-O6	7.54	124.43	119.90
26	LA	317	G	P-O5'-C5'	7.54	132.97	120.90
26	LA	748	G	N7-C8-N9	-7.54	109.33	113.10
26	LA	1003	G	C2-N3-C4	7.54	115.67	111.90
26	LA	1388	G	N1-C6-O6	7.54	124.43	119.90
26	LA	2231	U	P-O3'-C3'	-7.54	110.65	119.70
2	SA	394	G	C5'-C4'-C3'	-7.54	103.93	116.00
2	SA	890	G	N1-C6-O6	7.54	124.42	119.90
2	SA	1332	A	C5'-C4'-O4'	7.54	118.15	109.10
26	LA	1169	A	C4'-C3'-C2'	-7.54	95.06	102.60
26	LA	1551	A	N1-C2-N3	-7.54	125.53	129.30
26	LA	1689	A	N7-C8-N9	-7.54	110.03	113.80
26	LA	2160	C	O4'-C1'-N1	7.54	114.23	108.20
26	LA	677	A	P-O5'-C5'	-7.54	108.84	120.90
2	SA	19	A	C8-N9-C4	-7.54	102.78	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	119	A	C5-C6-N6	7.54	129.73	123.70
2	SA	977	A	C5-N7-C8	-7.54	100.13	103.90
2	SA	1219	A	N7-C8-N9	7.54	117.57	113.80
26	LA	252	G	C5-C6-O6	-7.54	124.08	128.60
26	LA	1439	A	N7-C8-N9	-7.54	110.03	113.80
26	LA	1672	A	C4'-C3'-C2'	-7.54	95.06	102.60
26	LA	2443	C	C2-N3-C4	-7.54	116.13	119.90
26	LA	1559	U	C2-N3-C4	-7.54	122.48	127.00
2	SA	472	U	P-O3'-C3'	-7.54	110.66	119.70
2	SA	964	A	C5-C6-N6	-7.54	117.67	123.70
2	SA	1190	G	P-O3'-C3'	7.54	128.74	119.70
3	S1	43	U	C1'-O4'-C4'	-7.54	103.87	109.90
18	SB	224	ARG	NE-CZ-NH2	-7.54	116.53	120.30
26	LA	198	C	C5-C4-N4	-7.54	114.92	120.20
26	LA	333	G	C5-C6-N1	-7.54	107.73	111.50
26	LA	1387	A	C2-N3-C4	-7.54	106.83	110.60
55	LQ	81	ARG	NE-CZ-NH1	7.54	124.07	120.30
2	SA	157	U	O4'-C1'-N1	7.53	114.23	108.20
2	SA	222	C	C6-N1-C2	-7.53	117.29	120.30
2	SA	265	G	C6-C5-N7	-7.53	125.88	130.40
2	SA	894	G	O4'-C1'-N9	7.53	114.23	108.20
11	SK	3	ALA	CB-CA-C	7.53	121.40	110.10
26	LA	68	G	C5-C6-O6	-7.53	124.08	128.60
26	LA	1138	G	C5-N7-C8	7.53	108.07	104.30
26	LA	1165	A	O4'-C1'-N9	7.53	114.23	108.20
26	LA	1228	G	P-O3'-C3'	7.53	128.74	119.70
26	LA	1408	G	N9-C4-C5	7.53	108.41	105.40
26	LA	1463	C	C5'-C4'-C3'	-7.53	103.95	116.00
26	LA	1858	A	N7-C8-N9	-7.53	110.03	113.80
26	LA	2004	G	N1-C2-N3	-7.53	119.38	123.90
2	SA	155	A	C8-N9-C4	-7.53	102.79	105.80
26	LA	1105	U	C1'-O4'-C4'	-7.53	103.88	109.90
2	SA	1068	G	N7-C8-N9	-7.53	109.33	113.10
2	SA	1234	C	P-O5'-C5'	7.53	132.95	120.90
2	SA	1267	C	C4'-C3'-C2'	-7.53	95.07	102.60
26	LA	424	G	C8-N9-C4	7.53	109.41	106.40
26	LA	1663	G	N1-C2-N2	-7.53	109.42	116.20
26	LA	2133	G	C2'-C3'-O3'	7.53	126.07	109.50
2	SA	1017	U	P-O3'-C3'	-7.53	110.67	119.70
2	SA	1458	G	C4'-C3'-C2'	-7.53	95.07	102.60
2	SA	174	A	N1-C6-N6	7.53	123.12	118.60
2	SA	815	A	N7-C8-N9	-7.53	110.04	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1213	A	C5-C6-N1	-7.53	113.94	117.70
26	LA	462	C	N3-C4-N4	7.53	123.27	118.00
26	LA	1523	U	P-O3'-C3'	7.53	128.73	119.70
26	LA	1573	G	C5-N7-C8	-7.53	100.54	104.30
26	LA	2342	C	C2-N3-C4	-7.53	116.14	119.90
26	LA	2539	C	P-O3'-C3'	-7.53	110.67	119.70
25	LB	58	A	N1-C6-N6	7.53	123.11	118.60
26	LA	140	C	C6-N1-C1'	-7.53	111.77	120.80
26	LA	1217	U	C5-C4-O4	-7.53	121.39	125.90
26	LA	1797	G	N1-C2-N3	7.53	128.41	123.90
26	LA	2343	U	O4'-C1'-N1	7.53	114.22	108.20
2	SA	793	U	P-O3'-C3'	7.52	128.73	119.70
2	SA	1225	A	C5-C6-N6	-7.52	117.68	123.70
2	SA	1248	A	C5-C6-N1	7.52	121.46	117.70
26	LA	759	G	C1'-O4'-C4'	-7.52	103.88	109.90
26	LA	836	G	C2-N3-C4	7.52	115.66	111.90
26	LA	1655	A	C4-C5-N7	7.52	114.46	110.70
2	SA	55	A	O4'-C1'-N9	7.52	114.22	108.20
2	SA	894	G	C2-N3-C4	-7.52	108.14	111.90
2	SA	1055	A	C6-C5-N7	7.52	137.56	132.30
2	SA	1088	G	C8-N9-C4	7.52	109.41	106.40
25	LB	83	G	N1-C6-O6	7.52	124.41	119.90
26	LA	1239	G	N1-C6-O6	7.52	124.41	119.90
26	LA	1343	G	N9-C4-C5	-7.52	102.39	105.40
26	LA	1537	G	P-O3'-C3'	7.52	128.73	119.70
26	LA	1627	G	C2-N3-C4	7.52	115.66	111.90
26	LA	2864	G	C4-N9-C1'	-7.52	116.72	126.50
32	LY	59	PHE	N-CA-CB	7.52	124.14	110.60
2	SA	30	U	N3-C4-C5	-7.52	110.09	114.60
20	SD	181	PHE	CB-CG-CD2	7.52	126.06	120.80
26	LA	822	G	C5-C6-N1	7.52	115.26	111.50
26	LA	1452	G	C3'-C2'-C1'	-7.52	95.48	101.50
2	SA	872	A	O4'-C1'-N9	7.52	114.22	108.20
2	SA	1292	G	C1'-O4'-C4'	-7.52	103.89	109.90
26	LA	1143	A	N7-C8-N9	7.52	117.56	113.80
26	LA	1973	G	N3-C4-C5	-7.52	124.84	128.60
7	SG	153	TYR	CB-CG-CD2	7.52	125.51	121.00
21	SE	94	PHE	CB-CG-CD1	7.52	126.06	120.80
25	LB	43	C	P-O3'-C3'	7.52	128.72	119.70
26	LA	209	C	N3-C4-N4	7.52	123.26	118.00
26	LA	1744	A	C8-N9-C4	7.52	108.81	105.80
26	LA	377	G	C4'-C3'-C2'	-7.51	95.09	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1130	U	C4-C5-C6	-7.51	115.19	119.70
26	LA	1489	C	N1-C2-O2	-7.51	114.39	118.90
26	LA	2096	C	N3-C4-C5	7.51	124.91	121.90
26	LA	2224	G	O4'-C1'-N9	7.51	114.21	108.20
2	SA	713	G	C5-C6-O6	-7.51	124.09	128.60
26	LA	1175	A	C1'-O4'-C4'	-7.51	103.89	109.90
26	LA	1241	A	C5-C6-N6	-7.51	117.69	123.70
26	LA	1552	A	C5-C6-N1	7.51	121.46	117.70
2	SA	297	G	C4-C5-C6	-7.51	114.29	118.80
2	SA	551	U	C5-C4-O4	7.51	130.41	125.90
2	SA	778	G	O4'-C1'-N9	7.51	114.21	108.20
2	SA	778	G	C4-C5-N7	-7.51	107.80	110.80
2	SA	960	U	C2'-C3'-O3'	7.51	126.02	109.50
3	S1	58	C	N3-C4-N4	7.51	123.26	118.00
26	LA	1252	G	N3-C4-C5	7.51	132.35	128.60
26	LA	2209	G	N3-C4-N9	7.51	130.51	126.00
26	LA	2831	G	C2-N3-C4	7.51	115.66	111.90
2	SA	14	U	N3-C4-C5	-7.51	110.09	114.60
2	SA	1486	G	C4-C5-C6	7.51	123.31	118.80
25	LB	52	A	C5'-C4'-C3'	7.51	128.02	116.00
26	LA	614	A	O4'-C1'-N9	7.51	114.21	108.20
26	LA	844	A	N1-C2-N3	-7.51	125.55	129.30
26	LA	1261	C	C4-C5-C6	7.51	121.16	117.40
26	LA	1742	U	C5-C6-N1	7.51	126.45	122.70
26	LA	2264	C	C5-C6-N1	-7.51	117.25	121.00
26	LA	2583	G	N7-C8-N9	-7.51	109.35	113.10
2	SA	302	G	N3-C2-N2	-7.51	114.64	119.90
2	SA	713	G	O4'-C1'-N9	7.51	114.21	108.20
4	S2	1	C	C5-C4-N4	-7.51	114.94	120.20
26	LA	2697	G	C1'-O4'-C4'	-7.51	103.89	109.90
26	LA	2705	A	O4'-C1'-N9	7.51	114.21	108.20
2	SA	1261	A	C4-C5-N7	7.51	114.45	110.70
2	SA	1344	C	O4'-C1'-N1	7.51	114.20	108.20
4	S2	72	C	C1'-O4'-C4'	-7.51	103.89	109.90
26	LA	199	A	C5-C6-N6	7.51	129.71	123.70
26	LA	466	A	C4'-C3'-C2'	-7.51	95.09	102.60
26	LA	2861	U	P-O5'-C5'	7.51	132.91	120.90
2	SA	1155	A	C4-C5-C6	-7.50	113.25	117.00
2	SA	1400	C	C4-C5-C6	7.50	121.15	117.40
4	S2	50	G	C6-N1-C2	-7.50	120.60	125.10
4	S2	77	A	C6-N1-C2	-7.50	114.10	118.60
25	LB	33	G	C6-C5-N7	-7.50	125.90	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1170	C	N3-C4-N4	7.50	123.25	118.00
26	LA	1456	G	N9-C4-C5	7.50	108.40	105.40
26	LA	1594	U	P-O3'-C3'	-7.50	110.69	119.70
26	LA	1601	G	O4'-C1'-N9	7.50	114.20	108.20
26	LA	1867	G	C2-N3-C4	7.50	115.65	111.90
2	SA	248	C	N3-C4-N4	7.50	123.25	118.00
2	SA	534	U	P-O3'-C3'	-7.50	110.70	119.70
2	SA	876	C	C5-C6-N1	7.50	124.75	121.00
2	SA	200	G	N3-C4-C5	-7.50	124.85	128.60
26	LA	139	U	C1'-O4'-C4'	-7.50	103.90	109.90
26	LA	1519	G	C5'-C4'-C3'	-7.50	104.00	116.00
26	LA	1775	U	OP1-P-OP2	-7.50	108.35	119.60
26	LA	2532	G	C6-C5-N7	-7.50	125.90	130.40
26	LA	2641	G	C5'-C4'-C3'	-7.50	104.00	116.00
2	SA	1300	G	P-O5'-C5'	-7.50	108.90	120.90
4	S2	46	G	O3'-P-O5'	7.50	118.25	104.00
25	LB	43	C	C5-C6-N1	-7.50	117.25	121.00
26	LA	1634	A	C5'-C4'-O4'	7.50	118.10	109.10
26	LA	2682	A	C8-N9-C1'	-7.50	114.20	127.70
2	SA	1094	G	N7-C8-N9	7.50	116.85	113.10
26	LA	739	A	N1-C2-N3	-7.50	125.55	129.30
26	LA	1441	G	C1'-O4'-C4'	-7.50	103.90	109.90
26	LA	1521	G	N1-C6-O6	7.50	124.40	119.90
26	LA	1753	G	C5-C6-O6	-7.50	124.10	128.60
26	LA	2519	U	N1-C2-N3	7.50	119.40	114.90
26	LA	2728	U	C5-C4-O4	-7.50	121.40	125.90
32	LY	10	ARG	NE-CZ-NH2	-7.50	116.55	120.30
2	SA	975	A	C5'-C4'-O4'	7.50	118.10	109.10
2	SA	1049	U	O4'-C1'-N1	7.50	114.20	108.20
2	SA	1171	A	N9-C4-C5	-7.50	102.80	105.80
2	SA	1487	G	C5-C6-O6	-7.50	124.10	128.60
25	LB	42	C	C1'-O4'-C4'	-7.50	103.90	109.90
26	LA	504	A	O4'-C1'-N9	7.50	114.20	108.20
26	LA	614	A	N1-C6-N6	7.50	123.10	118.60
26	LA	909	A	N1-C2-N3	-7.50	125.55	129.30
26	LA	927	A	C6-C5-N7	7.50	137.55	132.30
26	LA	1133	A	C5-C6-N1	7.50	121.45	117.70
26	LA	1979	U	C5-C4-O4	-7.50	121.40	125.90
26	LA	2354	C	P-O3'-C3'	-7.50	110.70	119.70
26	LA	2625	G	N3-C2-N2	7.50	125.15	119.90
2	SA	310	G	N9-C4-C5	-7.50	102.40	105.40
2	SA	720	C	OP1-P-OP2	-7.50	108.36	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	169	G	C1'-O4'-C4'	-7.50	103.90	109.90
26	LA	1530	G	C6-C5-N7	-7.50	125.90	130.40
2	SA	986	U	C6-N1-C2	-7.49	116.50	121.00
4	S2	57	C	C2-N1-C1'	7.49	127.04	118.80
26	LA	1096	A	C4-C5-C6	-7.49	113.25	117.00
26	LA	1334	G	N1-C6-O6	7.49	124.40	119.90
26	LA	1503	A	C4-C5-C6	-7.49	113.25	117.00
26	LA	1608	A	C2-N3-C4	7.49	114.35	110.60
26	LA	1702	G	N3-C2-N2	7.49	125.15	119.90
26	LA	2903	U	N3-C4-C5	-7.49	110.10	114.60
2	SA	1151	A	P-O3'-C3'	7.49	128.69	119.70
25	LB	43	C	O4'-C1'-N1	7.49	114.19	108.20
26	LA	102	U	P-O3'-C3'	-7.49	110.71	119.70
26	LA	830	G	N1-C6-O6	7.49	124.39	119.90
2	SA	494	G	C6-N1-C2	-7.49	120.61	125.10
2	SA	1127	G	N7-C8-N9	7.49	116.84	113.10
2	SA	1339	A	C5-C6-N6	7.49	129.69	123.70
26	LA	1616	A	C5-C6-N6	-7.49	117.71	123.70
26	LA	1620	G	N1-C6-O6	7.49	124.39	119.90
26	LA	2013	A	O4'-C1'-N9	7.49	114.19	108.20
26	LA	2622	U	C6-N1-C2	-7.49	116.51	121.00
53	LP	22	ARG	NE-CZ-NH2	7.49	124.05	120.30
2	SA	511	C	N3-C4-C5	-7.49	118.90	121.90
2	SA	930	C	C6-N1-C2	-7.49	117.30	120.30
25	LB	10	G	N3-C4-C5	-7.49	124.86	128.60
26	LA	891	G	C5-C6-N1	7.49	115.24	111.50
26	LA	931	U	C5-C4-O4	-7.49	121.41	125.90
26	LA	1169	A	N1-C2-N3	-7.49	125.56	129.30
26	LA	1928	A	N1-C6-N6	7.49	123.09	118.60
26	LA	2777	G	C5-C6-O6	-7.49	124.11	128.60
26	LA	2887	A	C2-N3-C4	-7.49	106.86	110.60
45	LG	35	LEU	CB-CG-CD1	7.49	123.73	111.00
26	LA	3	U	O4'-C1'-N1	7.49	114.19	108.20
26	LA	624	C	N3-C4-C5	7.49	124.89	121.90
26	LA	2420	C	C2-N3-C4	-7.49	116.16	119.90
2	SA	27	G	C4-N9-C1'	7.49	136.23	126.50
2	SA	525	C	C6-N1-C2	-7.49	117.31	120.30
2	SA	681	A	N1-C6-N6	-7.49	114.11	118.60
2	SA	932	C	C2-N3-C4	-7.49	116.16	119.90
26	LA	618	G	C5-C6-O6	-7.49	124.11	128.60
26	LA	1403	A	C4'-C3'-C2'	-7.49	95.11	102.60
26	LA	1408	G	C4-C5-N7	-7.49	107.81	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1670	C	C4'-C3'-C2'	-7.49	95.11	102.60
26	LA	1871	A	P-O5'-C5'	7.49	132.88	120.90
26	LA	2208	C	N3-C2-O2	-7.49	116.66	121.90
3	S1	28	U	C4'-C3'-C2'	-7.48	95.12	102.60
25	LB	31	C	N3-C4-N4	-7.48	112.76	118.00
26	LA	413	C	O4'-C1'-N1	7.48	114.19	108.20
2	SA	454	G	C2-N3-C4	-7.48	108.16	111.90
2	SA	463	U	C2-N3-C4	-7.48	122.51	127.00
2	SA	846	G	C2-N3-C4	-7.48	108.16	111.90
26	LA	301	G	N9-C4-C5	-7.48	102.41	105.40
26	LA	728	G	N3-C4-N9	7.48	130.49	126.00
26	LA	1218	G	O4'-C1'-N9	7.48	114.19	108.20
26	LA	2008	C	C1'-O4'-C4'	-7.48	103.91	109.90
26	LA	2838	G	C6-C5-N7	-7.48	125.91	130.40
2	SA	69	G	C6-N1-C2	7.48	129.59	125.10
2	SA	159	G	C8-N9-C4	7.48	109.39	106.40
2	SA	805	C	N1-C1'-C2'	7.48	123.72	114.00
2	SA	997	U	O4'-C1'-N1	7.48	114.19	108.20
26	LA	1854	A	N1-C6-N6	-7.48	114.11	118.60
2	SA	165	G	C6-C5-N7	7.48	134.89	130.40
2	SA	340	U	C4'-C3'-C2'	-7.48	95.12	102.60
2	SA	450	G	C8-N9-C4	-7.48	103.41	106.40
2	SA	595	A	C3'-C2'-C1'	-7.48	95.52	101.50
26	LA	284	U	N3-C4-C5	-7.48	110.11	114.60
26	LA	1227	G	N1-C6-O6	-7.48	115.41	119.90
26	LA	1905	C	C3'-C2'-C1'	7.48	107.48	101.50
26	LA	2357	G	C2-N3-C4	-7.48	108.16	111.90
2	SA	1386	G	N1-C6-O6	7.48	124.39	119.90
4	S2	21	U	C5'-C4'-C3'	7.48	127.96	116.00
26	LA	210	C	C2-N3-C4	-7.48	116.16	119.90
26	LA	829	A	N1-C6-N6	-7.48	114.11	118.60
26	LA	2549	G	N1-C6-O6	-7.48	115.41	119.90
2	SA	175	C	C6-N1-C1'	-7.48	111.83	120.80
2	SA	826	C	O4'-C1'-N1	7.48	114.18	108.20
26	LA	1261	C	C4'-C3'-C2'	-7.48	95.12	102.60
26	LA	2273	A	C5-C6-N6	-7.48	117.72	123.70
26	LA	2330	G	N3-C2-N2	7.48	125.13	119.90
26	LA	2407	A	C2-N3-C4	7.48	114.34	110.60
26	LA	31	C	O4'-C1'-N1	7.47	114.18	108.20
26	LA	45	G	C8-N9-C4	7.47	109.39	106.40
26	LA	131	A	N1-C6-N6	7.47	123.08	118.60
26	LA	452	G	C5-N7-C8	-7.47	100.56	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	828	U	N1-C2-O2	-7.47	117.57	122.80
26	LA	944	C	N1-C2-O2	-7.47	114.42	118.90
26	LA	1002	G	C5-N7-C8	-7.47	100.56	104.30
26	LA	1062	G	C5-C6-O6	-7.47	124.12	128.60
26	LA	1285	A	C5-N7-C8	7.47	107.64	103.90
26	LA	2705	A	C5-C6-N1	-7.47	113.96	117.70
2	SA	431	A	N1-C6-N6	-7.47	114.12	118.60
2	SA	1048	G	N9-C4-C5	7.47	108.39	105.40
2	SA	1515	G	C1'-O4'-C4'	7.47	115.88	109.90
26	LA	126	A	N1-C6-N6	-7.47	114.12	118.60
26	LA	145	C	C6-N1-C2	-7.47	117.31	120.30
26	LA	229	C	P-O3'-C3'	-7.47	110.73	119.70
26	LA	306	U	C4-C5-C6	-7.47	115.22	119.70
47	LJ	103	ALA	N-CA-CB	7.47	120.56	110.10
2	SA	510	A	C5'-C4'-C3'	-7.47	104.05	116.00
2	SA	673	A	N1-C2-N3	-7.47	125.56	129.30
26	LA	817	C	O4'-C1'-N1	7.47	114.18	108.20
26	LA	1214	A	N1-C6-N6	7.47	123.08	118.60
26	LA	2612	C	O4'-C1'-N1	7.47	114.18	108.20
2	SA	65	A	N1-C6-N6	-7.47	114.12	118.60
2	SA	388	G	N1-C2-N3	-7.47	119.42	123.90
2	SA	1174	G	C4'-C3'-C2'	-7.47	95.13	102.60
2	SA	1222	G	C5-C6-O6	-7.47	124.12	128.60
2	SA	1428	A	N9-C4-C5	-7.47	102.81	105.80
14	SN	74	ARG	NE-CZ-NH1	7.47	124.03	120.30
26	LA	176	A	C5-N7-C8	-7.47	100.17	103.90
26	LA	204	A	N3-C4-C5	-7.47	121.57	126.80
26	LA	337	C	N3-C4-N4	-7.47	112.77	118.00
26	LA	381	G	C8-N9-C4	-7.47	103.41	106.40
26	LA	400	G	C6-N1-C2	-7.47	120.62	125.10
26	LA	948	C	C5-C6-N1	7.47	124.73	121.00
26	LA	1580	A	N7-C8-N9	-7.47	110.06	113.80
26	LA	1737	G	C4-N9-C1'	-7.47	116.79	126.50
2	SA	124	C	C4'-C3'-C2'	-7.47	95.13	102.60
2	SA	936	C	C5-C6-N1	7.47	124.73	121.00
26	LA	295	G	N9-C4-C5	-7.47	102.41	105.40
26	LA	1638	C	C2-N3-C4	-7.47	116.17	119.90
26	LA	2764	A	C5-C6-N6	7.47	129.68	123.70
2	SA	251	G	C5-C6-O6	7.47	133.08	128.60
2	SA	261	U	C3'-C2'-C1'	7.47	107.47	101.50
2	SA	547	A	C4'-C3'-C2'	-7.47	95.13	102.60
2	SA	753	A	C5-C6-N6	-7.47	117.73	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	965	U	C5-C4-O4	7.47	130.38	125.90
4	S2	36	A	C2-N3-C4	-7.47	106.87	110.60
26	LA	187	G	N1-C6-O6	7.47	124.38	119.90
26	LA	425	G	C6-C5-N7	-7.47	125.92	130.40
26	LA	1202	G	N3-C4-C5	-7.47	124.87	128.60
26	LA	2703	C	N1-C2-N3	7.47	124.43	119.20
2	SA	264	C	O4'-C1'-N1	7.46	114.17	108.20
2	SA	894	G	N1-C2-N3	7.46	128.38	123.90
2	SA	1034	G	C4-C5-C6	-7.46	114.32	118.80
2	SA	1261	A	C5-C6-N1	-7.46	113.97	117.70
2	SA	1427	C	C5-C4-N4	-7.46	114.97	120.20
2	SA	1432	G	C2-N3-C4	7.46	115.63	111.90
25	LB	35	C	C2-N1-C1'	7.46	127.01	118.80
25	LB	44	G	P-O5'-C5'	7.46	132.84	120.90
26	LA	324	A	N9-C4-C5	7.46	108.79	105.80
26	LA	798	G	C5'-C4'-O4'	7.46	118.06	109.10
26	LA	811	U	C1'-O4'-C4'	-7.46	103.93	109.90
26	LA	821	A	C5-C6-N6	7.46	129.67	123.70
26	LA	1021	A	C8-N9-C4	-7.46	102.81	105.80
26	LA	2172	U	P-O3'-C3'	7.46	128.66	119.70
26	LA	2209	G	C5-C6-O6	7.46	133.08	128.60
26	LA	2224	G	C6-N1-C2	-7.46	120.62	125.10
26	LA	2703	C	C2-N3-C4	-7.46	116.17	119.90
26	LA	2741	A	N9-C4-C5	7.46	108.79	105.80
2	SA	824	G	N1-C6-O6	7.46	124.38	119.90
2	SA	1027	C	O4'-C4'-C3'	-7.46	96.54	104.00
2	SA	1444	U	C5'-C4'-C3'	-7.46	104.06	116.00
9	SI	85	ALA	N-CA-CB	7.46	120.55	110.10
26	LA	308	G	C5'-C4'-O4'	7.46	118.06	109.10
26	LA	1931	U	N3-C4-O4	7.46	124.62	119.40
26	LA	2000	C	N1-C2-N3	7.46	124.42	119.20
2	SA	535	A	C6-N1-C2	7.46	123.08	118.60
26	LA	308	G	C5-N7-C8	7.46	108.03	104.30
26	LA	381	G	C5'-C4'-C3'	7.46	127.94	116.00
26	LA	1104	C	C5'-C4'-C3'	-7.46	104.06	116.00
2	SA	404	G	P-O3'-C3'	-7.46	110.75	119.70
25	LB	100	G	C2-N3-C4	-7.46	108.17	111.90
26	LA	2	G	C5-C6-O6	-7.46	124.12	128.60
26	LA	1272	A	C5-C6-N6	7.46	129.67	123.70
26	LA	1284	A	O4'-C1'-N9	7.46	114.17	108.20
26	LA	1889	A	P-O3'-C3'	7.46	128.65	119.70
26	LA	2597	G	C5-C6-O6	-7.46	124.12	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	103	U	N3-C2-O2	7.46	127.42	122.20
2	SA	369	G	C5-N7-C8	7.46	108.03	104.30
3	S1	50	U	O4'-C1'-C2'	7.46	114.31	107.60
26	LA	254	G	O4'-C1'-N9	7.46	114.17	108.20
26	LA	527	C	N3-C4-N4	7.46	123.22	118.00
26	LA	668	A	N1-C6-N6	-7.46	114.12	118.60
26	LA	1046	A	N1-C6-N6	7.46	123.08	118.60
26	LA	221	A	P-O5'-C5'	-7.46	108.97	120.90
26	LA	627	A	C4-C5-C6	-7.46	113.27	117.00
26	LA	1380	G	O4'-C1'-N9	7.46	114.17	108.20
26	LA	1555	G	N7-C8-N9	-7.46	109.37	113.10
26	LA	2309	A	C4-C5-N7	7.46	114.43	110.70
49	LK	64	ARG	NE-CZ-NH1	7.46	124.03	120.30
2	SA	1211	U	P-O3'-C3'	7.46	128.65	119.70
26	LA	299	A	C8-N9-C4	7.46	108.78	105.80
26	LA	1761	C	C6-N1-C2	7.46	123.28	120.30
26	LA	2412	A	N9-C4-C5	7.46	108.78	105.80
26	LA	2547	A	N9-C4-C5	-7.46	102.82	105.80
26	LA	2633	G	C3'-C2'-C1'	7.46	107.46	101.50
2	SA	247	G	C5-C6-O6	7.45	133.07	128.60
2	SA	468	A	OP1-P-OP2	-7.45	108.42	119.60
2	SA	634	C	C5-C6-N1	7.45	124.73	121.00
2	SA	1522	U	O4'-C1'-N1	7.45	114.16	108.20
4	S2	22	A	C3'-C2'-C1'	-7.45	95.54	101.50
26	LA	576	U	C5-C4-O4	-7.45	121.43	125.90
26	LA	900	A	C5-C6-N1	7.45	121.43	117.70
26	LA	1611	C	P-O5'-C5'	-7.45	108.97	120.90
26	LA	1713	A	C5'-C4'-O4'	7.45	118.05	109.10
26	LA	1990	C	O4'-C1'-N1	7.45	114.16	108.20
26	LA	2036	C	N1-C2-O2	7.45	123.37	118.90
26	LA	2217	G	C8-N9-C4	-7.45	103.42	106.40
2	SA	696	A	C5-C6-N1	-7.45	113.97	117.70
2	SA	1517	G	C5-C6-O6	7.45	133.07	128.60
26	LA	205	G	C4'-C3'-C2'	-7.45	95.15	102.60
26	LA	485	C	C4-C5-C6	-7.45	113.67	117.40
26	LA	1709	U	C5-C6-N1	7.45	126.43	122.70
26	LA	2119	A	C1'-O4'-C4'	7.45	115.86	109.90
26	LA	2255	G	N9-C4-C5	7.45	108.38	105.40
2	SA	439	U	N3-C4-C5	7.45	119.07	114.60
2	SA	546	A	C5-C6-N6	7.45	129.66	123.70
2	SA	615	G	C6-N1-C2	-7.45	120.63	125.10
2	SA	656	G	C8-N9-C4	-7.45	103.42	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	846	G	C4-C5-C6	-7.45	114.33	118.80
2	SA	1078	U	P-O3'-C3'	7.45	128.64	119.70
2	SA	1345	U	C2-N3-C4	-7.45	122.53	127.00
26	LA	446	G	C5-N7-C8	-7.45	100.58	104.30
26	LA	590	A	C1'-O4'-C4'	-7.45	103.94	109.90
26	LA	1705	A	C8-N9-C4	-7.45	102.82	105.80
26	LA	1758	U	C1'-O4'-C4'	-7.45	103.94	109.90
26	LA	1900	A	C4-C5-C6	7.45	120.72	117.00
2	SA	924	C	C1'-O4'-C4'	-7.45	103.94	109.90
2	SA	1122	U	C3'-C2'-C1'	-7.45	95.54	101.50
2	SA	1141	C	N3-C4-C5	-7.45	118.92	121.90
2	SA	1347	G	C1'-O4'-C4'	-7.45	103.94	109.90
24	S3	499	ASP	CB-CG-OD1	-7.45	111.60	118.30
26	LA	151	C	C4-C5-C6	7.45	121.12	117.40
26	LA	1374	G	C3'-C2'-C1'	7.45	107.46	101.50
26	LA	2088	A	O4'-C1'-N9	7.45	114.16	108.20
26	LA	2231	U	O4'-C1'-N1	7.45	114.16	108.20
2	SA	394	G	N1-C2-N3	7.45	128.37	123.90
26	LA	1932	A	C8-N9-C4	7.45	108.78	105.80
2	SA	1239	A	P-O3'-C3'	7.45	128.63	119.70
26	LA	305	C	C4-C5-C6	7.45	121.12	117.40
26	LA	1155	A	O4'-C1'-N9	7.45	114.16	108.20
26	LA	1653	G	C5-C6-O6	-7.45	124.13	128.60
26	LA	2705	A	C5'-C4'-O4'	-7.45	100.17	109.10
2	SA	1525	G	C4-C5-N7	7.44	113.78	110.80
14	SN	76	PHE	CB-CG-CD2	-7.44	115.59	120.80
26	LA	1052	C	C4-C5-C6	-7.44	113.68	117.40
26	LA	1493	C	N3-C2-O2	-7.44	116.69	121.90
26	LA	2363	G	C4-N9-C1'	-7.44	116.82	126.50
2	SA	74	A	P-O3'-C3'	-7.44	110.77	119.70
2	SA	225	C	C4-C5-C6	-7.44	113.68	117.40
2	SA	465	A	C5'-C4'-O4'	7.44	118.03	109.10
4	S2	4	G	N3-C2-N2	7.44	125.11	119.90
22	SF	25	TYR	CB-CG-CD1	7.44	125.47	121.00
26	LA	363	G	C8-N9-C4	-7.44	103.42	106.40
26	LA	570	G	C1'-O4'-C4'	-7.44	103.94	109.90
26	LA	1646	C	O4'-C1'-N1	7.44	114.15	108.20
26	LA	1646	C	N3-C2-O2	-7.44	116.69	121.90
26	LA	2234	G	C8-N9-C4	-7.44	103.42	106.40
2	SA	148	G	C8-N9-C4	7.44	109.38	106.40
2	SA	374	A	N9-C4-C5	-7.44	102.82	105.80
2	SA	883	C	C4'-C3'-C2'	-7.44	95.16	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1354	U	C5-C4-O4	-7.44	121.44	125.90
26	LA	355	U	C5-C6-N1	-7.44	118.98	122.70
26	LA	1097	U	C5'-C4'-C3'	7.44	127.90	116.00
26	LA	2113	U	C6-N1-C2	-7.44	116.53	121.00
26	LA	2555	U	O4'-C1'-N1	7.44	114.15	108.20
26	LA	2771	C	C5'-C4'-O4'	7.44	118.03	109.10
2	SA	85	U	O4'-C1'-N1	7.44	114.15	108.20
2	SA	654	G	C6-C5-N7	7.44	134.86	130.40
2	SA	767	A	N3-C4-C5	-7.44	121.59	126.80
26	LA	2389	G	N7-C8-N9	-7.44	109.38	113.10
2	SA	1289	A	C5-C6-N1	-7.44	113.98	117.70
2	SA	1537	U	C2-N3-C4	-7.44	122.54	127.00
26	LA	576	U	N3-C4-O4	7.44	124.61	119.40
26	LA	936	A	N9-C4-C5	-7.44	102.83	105.80
26	LA	1010	A	N1-C6-N6	-7.44	114.14	118.60
26	LA	1671	U	C5-C4-O4	-7.44	121.44	125.90
26	LA	2666	C	C5'-C4'-C3'	-7.44	104.10	116.00
26	LA	2716	C	N3-C4-C5	-7.44	118.92	121.90
2	SA	928	G	N1-C2-N3	7.44	128.36	123.90
2	SA	1469	C	C6-N1-C2	7.44	123.27	120.30
8	SH	127	TYR	CB-CG-CD2	-7.44	116.54	121.00
20	SD	84	ASN	N-CA-CB	-7.44	97.22	110.60
26	LA	642	U	O5'-P-OP1	-7.44	99.01	105.70
26	LA	1890	A	C8-N9-C4	-7.44	102.83	105.80
26	LA	2857	G	N9-C4-C5	-7.44	102.43	105.40
53	LP	86	ARG	NE-CZ-NH2	-7.44	116.58	120.30
2	SA	355	C	C4-C5-C6	7.43	121.12	117.40
2	SA	713	G	C4'-C3'-C2'	-7.43	95.17	102.60
2	SA	1015	G	O4'-C1'-N9	7.43	114.15	108.20
2	SA	1049	U	C3'-C2'-C1'	-7.43	95.55	101.50
11	SK	52	ARG	NE-CZ-NH2	-7.43	116.58	120.30
26	LA	492	A	C4-C5-N7	-7.43	106.98	110.70
26	LA	540	C	C6-N1-C2	-7.43	117.33	120.30
26	LA	860	U	C5-C4-O4	-7.43	121.44	125.90
26	LA	1073	A	C5-N7-C8	-7.43	100.18	103.90
26	LA	1315	C	O4'-C1'-N1	7.43	114.15	108.20
26	LA	1591	A	O4'-C1'-N9	7.43	114.15	108.20
26	LA	2649	C	C6-N1-C2	-7.43	117.33	120.30
2	SA	39	G	OP1-P-OP2	-7.43	108.45	119.60
2	SA	211	G	C5'-C4'-C3'	-7.43	104.11	116.00
2	SA	318	G	O4'-C1'-N9	7.43	114.15	108.20
4	S2	39	A	N7-C8-N9	7.43	117.52	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1332	G	N1-C6-O6	7.43	124.36	119.90
26	LA	1878	G	C4'-C3'-C2'	-7.43	95.17	102.60
26	LA	2516	A	C4-C5-C6	-7.43	113.28	117.00
26	LA	845	A	C5-N7-C8	-7.43	100.18	103.90
2	SA	469	C	O4'-C1'-N1	7.43	114.14	108.20
2	SA	958	A	C5-N7-C8	-7.43	100.19	103.90
2	SA	1278	G	N1-C6-O6	7.43	124.36	119.90
26	LA	196	A	P-O3'-C3'	7.43	128.62	119.70
26	LA	910	A	C2'-C3'-O3'	7.43	125.85	109.50
26	LA	2180	U	C4-C5-C6	7.43	124.16	119.70
2	SA	1485	U	C6-N1-C2	-7.43	116.54	121.00
3	S1	35	G	P-O3'-C3'	7.43	128.61	119.70
26	LA	799	G	C2-N3-C4	7.43	115.61	111.90
26	LA	2470	G	O4'-C1'-N9	7.43	114.14	108.20
2	SA	1020	G	N3-C2-N2	-7.43	114.70	119.90
26	LA	768	G	N3-C2-N2	7.43	125.10	119.90
26	LA	794	A	N1-C6-N6	-7.43	114.14	118.60
26	LA	2784	U	C5-C4-O4	7.43	130.36	125.90
2	SA	282	A	O4'-C1'-N9	7.42	114.14	108.20
26	LA	685	A	C4-C5-N7	-7.42	106.99	110.70
26	LA	1163	G	C8-N9-C4	-7.42	103.43	106.40
26	LA	1868	C	C5-C6-N1	-7.42	117.29	121.00
25	LB	117	G	C8-N9-C4	-7.42	103.43	106.40
26	LA	1291	C	N3-C4-N4	7.42	123.20	118.00
26	LA	1901	A	C1'-O4'-C4'	-7.42	103.96	109.90
26	LA	2214	C	C4'-C3'-C2'	-7.42	95.18	102.60
26	LA	2422	C	P-O3'-C3'	7.42	128.61	119.70
2	SA	588	G	C5'-C4'-C3'	-7.42	104.12	116.00
2	SA	706	A	N3-C4-C5	-7.42	121.61	126.80
2	SA	979	C	C5-C6-N1	7.42	124.71	121.00
26	LA	892	A	C5-N7-C8	-7.42	100.19	103.90
26	LA	1748	C	C5-C6-N1	7.42	124.71	121.00
26	LA	1991	U	C2-N3-C4	7.42	131.45	127.00
26	LA	2751	G	C8-N9-C4	7.42	109.37	106.40
2	SA	444	G	N9-C4-C5	-7.42	102.43	105.40
3	S1	44	U	C5'-C4'-C3'	7.42	127.87	116.00
25	LB	106	G	N9-C4-C5	-7.42	102.43	105.40
26	LA	587	C	N1-C2-O2	7.42	123.35	118.90
26	LA	780	G	N1-C2-N2	-7.42	109.52	116.20
26	LA	1238	G	C6-N1-C2	-7.42	120.65	125.10
26	LA	1879	C	N3-C4-N4	7.42	123.19	118.00
26	LA	1944	U	N1-C2-O2	-7.42	117.61	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	613	C	O4'-C1'-N1	7.42	114.14	108.20
2	SA	733	G	C3'-C2'-C1'	-7.42	95.56	101.50
2	SA	740	U	C5'-C4'-C3'	-7.42	104.13	116.00
26	LA	267	C	C5'-C4'-C3'	-7.42	104.13	116.00
26	LA	2563	U	N3-C2-O2	7.42	127.39	122.20
2	SA	835	U	C2-N3-C4	-7.42	122.55	127.00
4	S2	69	C	O4'-C1'-N1	7.42	114.13	108.20
26	LA	800	A	C4-C5-C6	7.42	120.71	117.00
26	LA	1073	A	C5'-C4'-O4'	7.42	118.00	109.10
26	LA	2235	G	N3-C4-N9	7.42	130.45	126.00
26	LA	2381	A	C6-N1-C2	-7.42	114.15	118.60
26	LA	2838	G	N9-C4-C5	-7.42	102.43	105.40
2	SA	533	A	N1-C2-N3	7.42	133.01	129.30
26	LA	1480	C	N1-C2-O2	7.42	123.35	118.90
2	SA	413	G	O4'-C1'-N9	7.41	114.13	108.20
2	SA	795	C	C2-N3-C4	-7.41	116.19	119.90
4	S2	31	G	C5-C6-O6	-7.41	124.15	128.60
26	LA	348	A	P-O3'-C3'	-7.41	110.80	119.70
26	LA	1966	A	C4-N9-C1'	7.41	139.65	126.30
26	LA	2065	C	C2-N3-C4	-7.41	116.19	119.90
26	LA	2354	C	C5'-C4'-O4'	7.41	118.00	109.10
37	LC	7	ARG	NH1-CZ-NH2	-7.41	111.25	119.40
26	LA	1122	G	C2-N3-C4	7.41	115.61	111.90
26	LA	1185	G	C2-N3-C4	-7.41	108.19	111.90
26	LA	1517	G	N1-C2-N2	-7.41	109.53	116.20
26	LA	1608	A	P-O3'-C3'	7.41	128.59	119.70
26	LA	2077	A	N1-C6-N6	-7.41	114.15	118.60
26	LA	2315	G	C4-C5-N7	-7.41	107.83	110.80
26	LA	2825	G	C8-N9-C4	7.41	109.36	106.40
2	SA	1013	G	C6-N1-C2	7.41	129.55	125.10
2	SA	1352	C	N3-C4-N4	-7.41	112.81	118.00
2	SA	1421	G	C2-N3-C4	7.41	115.61	111.90
26	LA	184	C	C4-C5-C6	-7.41	113.69	117.40
26	LA	299	A	C3'-C2'-C1'	-7.41	95.57	101.50
26	LA	1543	G	C6-C5-N7	7.41	134.85	130.40
26	LA	1798	U	C5-C6-N1	-7.41	119.00	122.70
26	LA	2778	A	C5-C6-N6	7.41	129.63	123.70
58	LT	90	ARG	NE-CZ-NH1	7.41	124.00	120.30
2	SA	90	C	N3-C4-C5	-7.41	118.94	121.90
2	SA	132	C	P-O3'-C3'	7.41	128.59	119.70
2	SA	405	U	C5-C6-N1	-7.41	119.00	122.70
2	SA	792	A	N1-C6-N6	-7.41	114.16	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1455	G	N7-C8-N9	-7.41	109.40	113.10
2	SA	1491	G	N7-C8-N9	-7.41	109.39	113.10
26	LA	214	G	C6-C5-N7	-7.41	125.95	130.40
26	LA	966	G	N9-C4-C5	7.41	108.36	105.40
26	LA	1068	G	C4-C5-C6	-7.41	114.36	118.80
26	LA	1177	G	C5'-C4'-O4'	7.41	117.99	109.10
26	LA	1568	G	O4'-C1'-C2'	7.41	114.27	107.60
26	LA	1821	A	C8-N9-C4	-7.41	102.84	105.80
26	LA	1989	G	C5-C6-O6	-7.41	124.16	128.60
26	LA	2312	U	C5-C6-N1	7.41	126.40	122.70
26	LA	2464	G	N7-C8-N9	-7.41	109.40	113.10
26	LA	2569	G	O4'-C1'-N9	7.41	114.13	108.20
47	LJ	55	ARG	NE-CZ-NH1	7.41	124.00	120.30
2	SA	1041	G	N9-C4-C5	-7.41	102.44	105.40
2	SA	1399	C	O4'-C1'-N1	7.41	114.13	108.20
26	LA	9	G	C5-C6-N1	-7.41	107.80	111.50
26	LA	733	G	C5-C6-O6	-7.41	124.16	128.60
26	LA	1272	A	N9-C4-C5	-7.41	102.84	105.80
26	LA	1524	G	C5-C6-N1	-7.41	107.80	111.50
26	LA	2832	U	O4'-C1'-N1	7.41	114.13	108.20
48	LN	41	ARG	NE-CZ-NH2	-7.41	116.60	120.30
26	LA	288	U	C4'-C3'-C2'	-7.41	95.19	102.60
26	LA	489	G	C5-C6-O6	-7.41	124.16	128.60
26	LA	2189	U	C5'-C4'-C3'	-7.41	104.15	116.00
26	LA	2535	G	N3-C4-C5	-7.41	124.90	128.60
53	LP	80	PHE	CB-CG-CD2	7.41	125.98	120.80
26	LA	2135	A	C4'-C3'-C2'	-7.40	95.20	102.60
2	SA	8	A	O4'-C4'-C3'	-7.40	96.60	104.00
2	SA	1060	U	C2-N1-C1'	-7.40	108.82	117.70
2	SA	1311	A	C1'-O4'-C4'	7.40	115.82	109.90
21	SE	28	ARG	NH1-CZ-NH2	-7.40	111.26	119.40
26	LA	6	A	C5-C6-N1	7.40	121.40	117.70
26	LA	583	G	C5-C6-O6	-7.40	124.16	128.60
26	LA	608	A	C2-N3-C4	7.40	114.30	110.60
26	LA	893	C	C6-N1-C2	-7.40	117.34	120.30
26	LA	2080	A	C4-C5-N7	7.40	114.40	110.70
26	LA	2248	C	P-O5'-C5'	-7.40	109.06	120.90
26	LA	2297	A	P-O5'-C5'	-7.40	109.06	120.90
1	SS	36	ARG	NH1-CZ-NH2	-7.40	111.26	119.40
2	SA	27	G	C8-N9-C4	-7.40	103.44	106.40
2	SA	242	G	P-O5'-C5'	-7.40	109.06	120.90
2	SA	1283	U	N3-C2-O2	7.40	127.38	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1386	G	O4'-C1'-N9	7.40	114.12	108.20
26	LA	564	C	N3-C4-C5	7.40	124.86	121.90
26	LA	685	A	P-O3'-C3'	7.40	128.58	119.70
26	LA	811	U	P-O3'-C3'	-7.40	110.82	119.70
26	LA	1400	U	N1-C2-O2	-7.40	117.62	122.80
25	LB	8	C	P-O5'-C5'	-7.40	109.06	120.90
26	LA	1021	A	C5'-C4'-C3'	-7.40	104.16	116.00
26	LA	1697	G	P-O5'-C5'	7.40	132.74	120.90
2	SA	201	G	N1-C2-N3	7.40	128.34	123.90
2	SA	697	U	C6-N1-C2	-7.40	116.56	121.00
2	SA	997	U	N3-C2-O2	-7.40	117.02	122.20
2	SA	1343	G	P-O3'-C3'	-7.40	110.82	119.70
26	LA	99	U	C5-C6-N1	7.40	126.40	122.70
26	LA	204	A	N1-C2-N3	-7.40	125.60	129.30
26	LA	1495	A	P-O3'-C3'	-7.40	110.82	119.70
26	LA	2455	G	C5'-C4'-C3'	-7.40	104.17	116.00
26	LA	1567	G	OP1-P-OP2	-7.40	108.51	119.60
2	SA	39	G	C4'-C3'-C2'	-7.39	95.20	102.60
2	SA	356	A	N9-C4-C5	7.39	108.76	105.80
2	SA	1034	G	C2-N3-C4	7.39	115.60	111.90
26	LA	74	A	C5-C6-N1	7.39	121.40	117.70
26	LA	1401	G	C3'-C2'-C1'	-7.39	95.58	101.50
26	LA	1659	G	N3-C2-N2	-7.39	114.72	119.90
26	LA	1676	A	O4'-C1'-N9	7.39	114.11	108.20
26	LA	2801	G	C4'-C3'-C2'	-7.39	95.21	102.60
27	LD	220	ARG	NE-CZ-NH1	-7.39	116.60	120.30
2	SA	551	U	C5-C6-N1	-7.39	119.00	122.70
2	SA	957	U	P-O3'-C3'	-7.39	110.83	119.70
2	SA	1230	C	O4'-C1'-N1	7.39	114.11	108.20
2	SA	1510	C	N1-C2-N3	7.39	124.38	119.20
26	LA	328	U	O4'-C1'-N1	7.39	114.11	108.20
26	LA	1930	G	C8-N9-C4	-7.39	103.44	106.40
26	LA	2123	G	N1-C6-O6	7.39	124.34	119.90
26	LA	2340	A	N7-C8-N9	7.39	117.50	113.80
2	SA	628	G	C5-N7-C8	-7.39	100.61	104.30
2	SA	650	G	C1'-O4'-C4'	-7.39	103.99	109.90
2	SA	843	U	C5'-C4'-C3'	-7.39	104.17	116.00
26	LA	2616	C	C5'-C4'-C3'	7.39	127.83	116.00
2	SA	639	G	C5-C6-N1	7.39	115.19	111.50
2	SA	847	G	N1-C2-N3	7.39	128.33	123.90
14	SN	48	GLN	N-CA-CB	-7.39	97.30	110.60
25	LB	6	G	C1'-O4'-C4'	-7.39	103.99	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	697	G	N1-C6-O6	7.39	124.33	119.90
26	LA	900	A	C5-N7-C8	-7.39	100.20	103.90
26	LA	1166	G	O4'-C1'-C2'	7.39	114.25	107.60
26	LA	1553	A	P-O5'-C5'	-7.39	109.08	120.90
26	LA	2187	U	N1-C2-O2	7.39	127.97	122.80
26	LA	2361	G	C5-N7-C8	7.39	108.00	104.30
26	LA	2577	A	P-O3'-C3'	-7.39	110.83	119.70
26	LA	2625	G	N3-C4-N9	7.39	130.43	126.00
26	LA	2697	G	C5-C6-O6	-7.39	124.17	128.60
26	LA	2791	G	N7-C8-N9	7.39	116.80	113.10
36	L2	56	ARG	NE-CZ-NH1	7.39	124.00	120.30
38	LE	128	ARG	NE-CZ-NH2	-7.39	116.61	120.30
2	SA	608	A	O4'-C1'-C2'	7.39	114.25	107.60
2	SA	649	A	O5'-P-OP1	-7.39	99.05	105.70
25	LB	97	C	N3-C4-C5	-7.39	118.94	121.90
26	LA	1382	G	C4-N9-C1'	7.39	136.10	126.50
26	LA	2623	G	N7-C8-N9	-7.39	109.41	113.10
26	LA	2743	U	C3'-C2'-C1'	7.39	107.41	101.50
2	SA	104	G	C5-C6-N1	-7.39	107.81	111.50
2	SA	519	C	C1'-O4'-C4'	-7.39	103.99	109.90
2	SA	1412	C	C5-C6-N1	7.39	124.69	121.00
26	LA	248	G	P-O5'-C5'	7.39	132.72	120.90
26	LA	2307	G	N9-C4-C5	7.39	108.36	105.40
26	LA	2855	C	C5-C6-N1	-7.39	117.31	121.00
47	LJ	50	TYR	CB-CG-CD1	7.39	125.43	121.00
2	SA	624	C	C1'-O4'-C4'	-7.38	103.99	109.90
2	SA	693	G	C4-N9-C1'	7.38	136.10	126.50
2	SA	748	G	C5'-C4'-C3'	7.38	127.81	116.00
2	SA	761	G	C4'-C3'-C2'	-7.38	95.22	102.60
25	LB	97	C	N3-C4-N4	7.38	123.17	118.00
26	LA	259	G	C5-N7-C8	-7.38	100.61	104.30
26	LA	318	C	O4'-C1'-N1	7.38	114.11	108.20
26	LA	927	A	C4-C5-C6	-7.38	113.31	117.00
26	LA	1334	G	C5-N7-C8	-7.38	100.61	104.30
26	LA	2530	A	N9-C4-C5	-7.38	102.85	105.80
2	SA	187	G	P-O3'-C3'	7.38	128.56	119.70
2	SA	990	C	O4'-C1'-N1	7.38	114.11	108.20
26	LA	406	G	N1-C2-N3	7.38	128.33	123.90
26	LA	2316	G	N3-C2-N2	-7.38	114.73	119.90
26	LA	2626	C	C2-N3-C4	-7.38	116.21	119.90
44	LF	79	ARG	NE-CZ-NH1	7.38	123.99	120.30
2	SA	544	G	O4'-C1'-N9	7.38	114.11	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	853	C	N3-C4-C5	-7.38	118.95	121.90
26	LA	1056	G	C8-N9-C4	-7.38	103.45	106.40
26	LA	2569	G	O5'-P-OP1	-7.38	99.06	105.70
26	LA	2655	G	C1'-O4'-C4'	-7.38	103.99	109.90
26	LA	2676	C	N3-C4-N4	7.38	123.17	118.00
26	LA	941	A	C5-N7-C8	-7.38	100.21	103.90
50	LL	120	ARG	NH1-CZ-NH2	-7.38	111.28	119.40
54	LM	17	ARG	NH1-CZ-NH2	-7.38	111.28	119.40
2	SA	266	G	N1-C2-N3	-7.38	119.47	123.90
12	SL	49	ARG	NE-CZ-NH2	7.38	123.99	120.30
26	LA	656	G	C2-N3-C4	7.38	115.59	111.90
26	LA	974	G	N7-C8-N9	7.38	116.79	113.10
26	LA	1104	C	C5'-C4'-O4'	7.38	117.95	109.10
26	LA	1129	A	C4-C5-N7	-7.38	107.01	110.70
26	LA	1631	G	C4'-C3'-C2'	-7.38	95.22	102.60
26	LA	2019	A	C6-N1-C2	-7.38	114.17	118.60
26	LA	2790	U	C5-C4-O4	-7.38	121.47	125.90
2	SA	64	G	N7-C8-N9	7.38	116.79	113.10
2	SA	332	G	P-O3'-C3'	7.38	128.55	119.70
2	SA	631	C	O4'-C1'-N1	7.38	114.10	108.20
2	SA	1526	G	N1-C6-O6	7.38	124.33	119.90
3	S1	14	G	C8-N9-C4	-7.38	103.45	106.40
4	S2	56	U	C2'-C3'-O3'	7.38	125.73	109.50
26	LA	145	C	C5'-C4'-O4'	7.38	117.95	109.10
26	LA	354	A	O4'-C1'-N9	7.38	114.10	108.20
26	LA	1090	A	C2-N3-C4	7.38	114.29	110.60
26	LA	2003	A	P-O3'-C3'	7.38	128.55	119.70
26	LA	2803	G	C4'-C3'-C2'	-7.38	95.22	102.60
2	SA	641	U	C4-C5-C6	-7.38	115.28	119.70
2	SA	1511	G	C5-C6-O6	-7.38	124.17	128.60
25	LB	64	G	N3-C4-C5	7.38	132.29	128.60
26	LA	2518	A	C5-C6-N6	-7.38	117.80	123.70
2	SA	1314	C	C4-C5-C6	7.37	121.09	117.40
26	LA	336	C	C1'-O4'-C4'	-7.37	104.00	109.90
26	LA	530	G	C4-C5-C6	7.37	123.22	118.80
26	LA	759	G	N3-C2-N2	7.37	125.06	119.90
26	LA	1879	C	C4-C5-C6	7.37	121.09	117.40
26	LA	2471	A	C4-C5-C6	-7.37	113.31	117.00
2	SA	376	G	C8-N9-C4	7.37	109.35	106.40
2	SA	439	U	O4'-C1'-N1	7.37	114.10	108.20
2	SA	1433	A	C5-N7-C8	-7.37	100.22	103.90
2	SA	1460	C	C3'-C2'-C1'	-7.37	95.60	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	9	G	N3-C2-N2	-7.37	114.74	119.90
26	LA	812	C	C2-N3-C4	-7.37	116.21	119.90
26	LA	912	C	O5'-P-OP1	-7.37	99.07	105.70
26	LA	977	G	C2-N3-C4	-7.37	108.21	111.90
26	LA	1001	A	N1-C6-N6	7.37	123.02	118.60
26	LA	2118	U	C4-C5-C6	-7.37	115.28	119.70
2	SA	1223	C	N3-C2-O2	7.37	127.06	121.90
12	SL	98	ARG	NE-CZ-NH1	7.37	123.98	120.30
26	LA	2160	C	N3-C4-C5	7.37	124.85	121.90
2	SA	171	A	N1-C6-N6	-7.37	114.18	118.60
2	SA	753	A	N1-C6-N6	7.37	123.02	118.60
26	LA	465	G	N3-C2-N2	7.37	125.06	119.90
26	LA	822	G	O4'-C1'-N9	7.37	114.09	108.20
26	LA	1114	C	C5-C6-N1	7.37	124.68	121.00
26	LA	1473	G	O4'-C1'-N9	7.37	114.10	108.20
26	LA	1649	G	C5-C6-N1	7.37	115.18	111.50
26	LA	1674	G	C2-N3-C4	-7.37	108.22	111.90
26	LA	1764	C	C5'-C4'-C3'	7.37	127.79	116.00
26	LA	1919	A	N1-C6-N6	7.37	123.02	118.60
26	LA	2279	G	O4'-C1'-N9	7.37	114.09	108.20
2	SA	1509	C	N1-C2-N3	7.37	124.36	119.20
26	LA	1351	C	P-O3'-C3'	7.37	128.54	119.70
2	SA	223	A	P-O5'-C5'	7.37	132.69	120.90
2	SA	847	G	N7-C8-N9	7.37	116.78	113.10
2	SA	935	A	O4'-C1'-N9	7.37	114.09	108.20
26	LA	516	C	C2-N3-C4	-7.37	116.22	119.90
26	LA	919	U	N3-C2-O2	7.37	127.36	122.20
26	LA	2689	U	C3'-C2'-C1'	-7.37	95.61	101.50
26	LA	2801	G	N1-C6-O6	7.37	124.32	119.90
2	SA	246	A	C2-N3-C4	7.36	114.28	110.60
2	SA	250	A	O4'-C1'-N9	7.36	114.09	108.20
2	SA	979	C	O4'-C1'-N1	7.36	114.09	108.20
2	SA	987	G	N1-C6-O6	7.36	124.32	119.90
26	LA	212	G	P-O5'-C5'	-7.36	109.12	120.90
26	LA	1705	A	C5-C6-N1	-7.36	114.02	117.70
26	LA	1731	G	O4'-C1'-N9	7.36	114.09	108.20
26	LA	2180	U	N3-C4-C5	-7.36	110.18	114.60
26	LA	2608	G	OP1-P-OP2	-7.36	108.56	119.60
26	LA	2667	C	P-O3'-C3'	-7.36	110.86	119.70
49	LK	7	TYR	CB-CG-CD2	-7.36	116.58	121.00
26	LA	1178	C	O4'-C1'-N1	7.36	114.09	108.20
2	SA	561	U	N3-C4-O4	7.36	124.55	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	567	G	N1-C6-O6	7.36	124.32	119.90
2	SA	1501	C	N3-C4-C5	7.36	124.84	121.90
26	LA	350	G	C4-C5-N7	7.36	113.74	110.80
26	LA	1854	A	OP1-P-OP2	-7.36	108.56	119.60
26	LA	1896	G	C4-C5-N7	-7.36	107.86	110.80
2	SA	136	C	C4-C5-C6	7.36	121.08	117.40
2	SA	1404	C	C5'-C4'-O4'	7.36	117.93	109.10
2	SA	1518	A	C8-N9-C4	7.36	108.74	105.80
26	LA	1648	U	N3-C4-O4	-7.36	114.25	119.40
26	LA	1936	A	N1-C2-N3	-7.36	125.62	129.30
2	SA	100	G	C5-C6-O6	-7.36	124.19	128.60
2	SA	698	G	C5-C6-N1	7.36	115.18	111.50
26	LA	1145	C	O4'-C1'-N1	7.36	114.09	108.20
26	LA	1151	A	N9-C4-C5	-7.36	102.86	105.80
26	LA	2646	C	N1-C2-O2	7.36	123.31	118.90
26	LA	2816	G	P-O3'-C3'	-7.36	110.87	119.70
2	SA	1245	C	C5'-C4'-O4'	7.36	117.93	109.10
2	SA	1444	U	O4'-C1'-N1	7.36	114.08	108.20
26	LA	1023	U	OP1-P-OP2	-7.36	108.57	119.60
26	LA	1376	C	C2-N3-C4	-7.36	116.22	119.90
26	LA	1811	G	C6-N1-C2	-7.36	120.69	125.10
26	LA	2024	G	C2-N3-C4	7.36	115.58	111.90
26	LA	2479	U	O4'-C1'-N1	7.36	114.08	108.20
26	LA	2713	U	O4'-C1'-N1	7.36	114.08	108.20
2	SA	1531	A	C4-C5-C6	7.35	120.68	117.00
26	LA	776	G	C6-C5-N7	-7.35	125.99	130.40
2	SA	810	C	C4-C5-C6	-7.35	113.72	117.40
2	SA	1104	G	C4-C5-N7	-7.35	107.86	110.80
2	SA	1292	G	C2-N3-C4	7.35	115.58	111.90
26	LA	416	U	N1-C2-O2	-7.35	117.65	122.80
26	LA	562	U	N1-C2-N3	7.35	119.31	114.90
26	LA	836	G	C8-N9-C4	-7.35	103.46	106.40
26	LA	1155	A	N1-C6-N6	-7.35	114.19	118.60
26	LA	1976	U	C5'-C4'-C3'	-7.35	104.24	116.00
26	LA	2060	A	C3'-C2'-C1'	-7.35	95.62	101.50
27	LD	269	ARG	NE-CZ-NH1	7.35	123.98	120.30
2	SA	1214	C	P-O3'-C3'	7.35	128.52	119.70
2	SA	1516	G	O4'-C1'-C2'	-7.35	98.45	105.80
26	LA	262	A	C4-C5-C6	7.35	120.67	117.00
26	LA	2162	G	C5'-C4'-C3'	7.35	127.76	116.00
2	SA	360	G	C5-C6-N1	7.35	115.17	111.50
2	SA	1170	A	N1-C6-N6	7.35	123.01	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	275	C	C5-C6-N1	-7.35	117.33	121.00
26	LA	1165	A	C1'-O4'-C4'	-7.35	104.02	109.90
26	LA	1637	A	C5-N7-C8	-7.35	100.22	103.90
26	LA	1775	U	N1-C2-N3	7.35	119.31	114.90
26	LA	1995	U	C6-N1-C1'	7.35	131.49	121.20
26	LA	2301	C	P-O3'-C3'	7.35	128.52	119.70
26	LA	2664	G	N3-C4-C5	-7.35	124.92	128.60
2	SA	145	G	O4'-C1'-N9	7.35	114.08	108.20
25	LB	11	C	C2-N3-C4	-7.35	116.23	119.90
26	LA	530	G	N3-C2-N2	-7.35	114.76	119.90
26	LA	930	G	C8-N9-C4	7.35	109.34	106.40
26	LA	2142	A	N7-C8-N9	7.35	117.47	113.80
26	LA	2158	A	C6-N1-C2	-7.35	114.19	118.60
26	LA	2444	G	C8-N9-C4	7.35	109.34	106.40
26	LA	2592	G	C6-C5-N7	-7.35	125.99	130.40
26	LA	2666	C	N3-C2-O2	-7.35	116.76	121.90
26	LA	832	U	C2-N3-C4	-7.35	122.59	127.00
26	LA	984	A	P-O3'-C3'	-7.35	110.89	119.70
2	SA	1008	U	N3-C4-C5	-7.34	110.19	114.60
2	SA	1277	C	C6-N1-C2	-7.34	117.36	120.30
18	SB	20	ARG	NE-CZ-NH1	7.34	123.97	120.30
26	LA	837	C	O4'-C1'-N1	7.34	114.08	108.20
26	LA	1139	G	C5-C6-O6	-7.34	124.19	128.60
26	LA	1187	G	O4'-C1'-C2'	7.34	114.21	107.60
26	LA	1531	C	C5'-C4'-C3'	7.34	127.75	116.00
26	LA	2053	G	O4'-C1'-N9	7.34	114.08	108.20
26	LA	2144	G	C5-C6-N1	-7.34	107.83	111.50
26	LA	2160	C	C4-C5-C6	-7.34	113.73	117.40
26	LA	2507	C	O5'-P-OP2	-7.34	99.09	105.70
2	SA	1423	G	O4'-C1'-N9	7.34	114.07	108.20
26	LA	555	G	C5-C6-O6	-7.34	124.19	128.60
26	LA	917	A	C5-C6-N6	7.34	129.57	123.70
26	LA	2472	G	N9-C4-C5	-7.34	102.46	105.40
2	SA	233	C	N3-C4-N4	7.34	123.14	118.00
2	SA	1148	U	C5'-C4'-O4'	7.34	117.91	109.10
2	SA	1406	U	C5-C4-O4	-7.34	121.50	125.90
2	SA	1434	A	C5-N7-C8	7.34	107.57	103.90
2	SA	1512	U	C2-N3-C4	-7.34	122.59	127.00
3	S1	34	U	C6-N1-C2	-7.34	116.59	121.00
26	LA	570	G	O4'-C1'-N9	7.34	114.07	108.20
26	LA	1043	C	C4-C5-C6	7.34	121.07	117.40
26	LA	2110	G	C1'-O4'-C4'	-7.34	104.03	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	342	C	C2-N1-C1'	7.34	126.87	118.80
2	SA	427	U	C5-C4-O4	-7.34	121.50	125.90
2	SA	679	C	C6-N1-C2	-7.34	117.36	120.30
2	SA	1359	C	C5'-C4'-O4'	7.34	117.91	109.10
2	SA	1448	C	C6-N1-C2	-7.34	117.36	120.30
26	LA	574	A	C8-N9-C1'	-7.34	114.49	127.70
26	LA	1071	G	O4'-C4'-C3'	7.34	111.97	106.10
26	LA	1978	A	C5-C6-N6	-7.34	117.83	123.70
26	LA	2260	C	P-O3'-C3'	-7.34	110.89	119.70
26	LA	2530	A	C5-C6-N6	-7.34	117.83	123.70
26	LA	2719	G	C5-C6-N1	-7.34	107.83	111.50
2	SA	289	G	C4-C5-N7	7.34	113.73	110.80
4	S2	22	A	C5-C6-N6	-7.34	117.83	123.70
25	LB	76	G	C2-N3-C4	7.34	115.57	111.90
26	LA	860	U	N1-C2-N3	7.34	119.30	114.90
26	LA	1413	A	C6-C5-N7	-7.34	127.16	132.30
26	LA	1761	C	C2-N1-C1'	7.34	126.87	118.80
2	SA	765	G	C5'-C4'-O4'	7.34	117.90	109.10
2	SA	1102	A	N3-C4-N9	7.34	133.27	127.40
26	LA	325	G	N1-C6-O6	7.34	124.30	119.90
26	LA	511	U	P-O5'-C5'	7.34	132.64	120.90
26	LA	1969	A	C4-C5-N7	7.34	114.37	110.70
26	LA	1971	U	N3-C2-O2	7.34	127.34	122.20
26	LA	2255	G	N7-C8-N9	-7.34	109.43	113.10
26	LA	961	C	OP1-P-OP2	-7.33	108.60	119.60
26	LA	2321	U	C6-N1-C1'	-7.33	110.93	121.20
2	SA	1122	U	N3-C4-O4	-7.33	114.27	119.40
26	LA	1643	G	C4-C5-N7	-7.33	107.87	110.80
26	LA	1746	A	N7-C8-N9	-7.33	110.13	113.80
26	LA	1772	A	C8-N9-C4	-7.33	102.87	105.80
26	LA	2320	U	N1-C2-O2	-7.33	117.67	122.80
26	LA	2571	U	P-O3'-C3'	7.33	128.50	119.70
27	LD	79	ARG	NE-CZ-NH1	7.33	123.97	120.30
54	LM	17	ARG	NE-CZ-NH1	7.33	123.97	120.30
2	SA	601	G	C4-C5-N7	7.33	113.73	110.80
2	SA	690	G	C5'-C4'-O4'	7.33	117.90	109.10
2	SA	961	U	O5'-C5'-C4'	7.33	125.63	111.70
2	SA	1100	C	N3-C4-C5	7.33	124.83	121.90
26	LA	136	G	O4'-C1'-N9	7.33	114.06	108.20
26	LA	848	C	C5-C4-N4	-7.33	115.07	120.20
26	LA	1211	C	N3-C4-C5	-7.33	118.97	121.90
26	LA	1216	G	C4-C5-N7	7.33	113.73	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1422	G	O4'-C1'-N9	7.33	114.07	108.20
26	LA	1717	A	C4'-C3'-C2'	-7.33	95.27	102.60
26	LA	2140	G	O4'-C4'-C3'	7.33	111.97	106.10
26	LA	2373	G	C6-C5-N7	7.33	134.80	130.40
26	LA	2665	A	C1'-O4'-C4'	-7.33	104.03	109.90
26	LA	2669	G	N1-C2-N3	-7.33	119.50	123.90
26	LA	2802	G	O4'-C1'-N9	7.33	114.07	108.20
2	SA	1107	C	P-O3'-C3'	-7.33	110.90	119.70
26	LA	387	U	N3-C4-C5	7.33	119.00	114.60
26	LA	783	A	C5-N7-C8	-7.33	100.23	103.90
26	LA	2531	A	C5'-C4'-C3'	-7.33	104.27	116.00
2	SA	711	G	C4'-C3'-C2'	-7.33	95.27	102.60
2	SA	1540	U	C2-N3-C4	-7.33	122.60	127.00
26	LA	752	A	C1'-O4'-C4'	-7.33	104.04	109.90
26	LA	783	A	C1'-O4'-C4'	-7.33	104.04	109.90
26	LA	1154	G	C5-C6-O6	-7.33	124.20	128.60
26	LA	1174	U	C3'-C2'-C1'	7.33	107.36	101.50
26	LA	1340	U	N3-C4-O4	7.33	124.53	119.40
26	LA	1807	G	N9-C4-C5	-7.33	102.47	105.40
26	LA	1839	G	C5-C6-O6	-7.33	124.20	128.60
26	LA	2050	C	C5-C4-N4	-7.33	115.07	120.20
2	SA	187	G	N9-C4-C5	-7.33	102.47	105.40
2	SA	425	G	C2-N3-C4	7.33	115.56	111.90
26	LA	107	G	OP1-P-OP2	-7.33	108.61	119.60
2	SA	505	G	C5'-C4'-O4'	7.33	117.89	109.10
4	S2	38	A	N1-C6-N6	-7.33	114.20	118.60
24	S3	582	TYR	CB-CG-CD2	-7.33	116.60	121.00
25	LB	102	G	N9-C4-C5	-7.33	102.47	105.40
26	LA	10	A	C5-C6-N6	7.33	129.56	123.70
26	LA	164	C	N1-C2-O2	7.33	123.30	118.90
26	LA	301	G	C1'-O4'-C4'	-7.33	104.04	109.90
26	LA	1295	C	C5-C6-N1	7.33	124.66	121.00
46	LH	54	ARG	NE-CZ-NH2	-7.33	116.64	120.30
2	SA	297	G	C5-C6-O6	7.32	132.99	128.60
2	SA	755	G	N1-C6-O6	-7.32	115.51	119.90
4	S2	21	U	N3-C4-O4	7.32	124.53	119.40
26	LA	304	U	P-O3'-C3'	-7.32	110.91	119.70
26	LA	1001	A	C4-C5-N7	7.32	114.36	110.70
26	LA	1699	G	C8-N9-C1'	-7.32	117.48	127.00
26	LA	2595	G	O4'-C1'-N9	7.32	114.06	108.20
2	SA	484	G	N3-C4-C5	-7.32	124.94	128.60
2	SA	1462	C	C5-C6-N1	-7.32	117.34	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	31	C	N3-C4-C5	7.32	124.83	121.90
26	LA	224	U	O4'-C1'-N1	7.32	114.06	108.20
26	LA	285	G	C4-C5-N7	7.32	113.73	110.80
26	LA	665	U	O4'-C1'-N1	7.32	114.06	108.20
26	LA	2111	U	C5'-C4'-O4'	7.32	117.89	109.10
26	LA	2415	G	C5'-C4'-O4'	7.32	117.89	109.10
2	SA	649	A	C6-N1-C2	-7.32	114.21	118.60
2	SA	1105	A	C4-C5-N7	-7.32	107.04	110.70
2	SA	1532	U	C5'-C4'-O4'	7.32	117.89	109.10
25	LB	85	G	C4'-C3'-C2'	7.32	109.92	102.60
26	LA	741	U	C5'-C4'-C3'	-7.32	104.29	116.00
26	LA	1758	U	C5'-C4'-C3'	7.32	127.71	116.00
2	SA	511	C	N3-C4-N4	7.32	123.12	118.00
2	SA	925	G	P-O5'-C5'	7.32	132.61	120.90
2	SA	1154	G	C6-N1-C2	7.32	129.49	125.10
26	LA	1111	A	C4-C5-N7	-7.32	107.04	110.70
26	LA	1507	C	P-O3'-C3'	7.32	128.48	119.70
2	SA	418	C	C5-C4-N4	-7.32	115.08	120.20
2	SA	814	A	N9-C4-C5	-7.32	102.87	105.80
2	SA	1427	C	N1-C2-N3	7.32	124.32	119.20
26	LA	1992	G	C8-N9-C4	-7.32	103.47	106.40
26	LA	2320	U	C6-N1-C2	-7.32	116.61	121.00
26	LA	2420	C	O4'-C1'-N1	7.32	114.05	108.20
38	LE	127	PHE	CB-CG-CD2	7.32	125.92	120.80
2	SA	76	G	O4'-C1'-N9	7.32	114.05	108.20
2	SA	91	U	N3-C4-O4	7.32	124.52	119.40
2	SA	147	G	N9-C4-C5	-7.32	102.47	105.40
2	SA	148	G	C8-N9-C1'	7.32	136.51	127.00
2	SA	158	G	O4'-C4'-C3'	-7.32	96.69	104.00
2	SA	316	C	O4'-C1'-N1	7.32	114.05	108.20
2	SA	1239	A	C5-C6-N6	-7.32	117.85	123.70
21	SE	94	PHE	CB-CG-CD2	-7.32	115.68	120.80
25	LB	4	C	C6-N1-C2	-7.32	117.37	120.30
25	LB	92	C	C5-C6-N1	-7.32	117.34	121.00
26	LA	1376	C	C2-N1-C1'	-7.32	110.75	118.80
26	LA	1520	U	C2-N3-C4	-7.32	122.61	127.00
26	LA	1646	C	N1-C2-O2	7.32	123.29	118.90
26	LA	2709	G	C5-C6-N1	7.32	115.16	111.50
34	L0	22	LEU	C-N-CA	7.32	139.99	121.70
2	SA	612	C	N1-C2-N3	7.31	124.32	119.20
25	LB	84	G	N3-C4-N9	7.31	130.39	126.00
26	LA	1106	G	C6-N1-C2	-7.31	120.71	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1275	A	C5'-C4'-O4'	7.31	117.88	109.10
2	SA	51	A	C6-N1-C2	7.31	122.99	118.60
2	SA	320	A	C5-N7-C8	-7.31	100.24	103.90
2	SA	463	U	N3-C4-O4	7.31	124.52	119.40
4	S2	15	G	C5-C6-O6	-7.31	124.21	128.60
4	S2	19	G	C4'-C3'-C2'	-7.31	95.29	102.60
26	LA	525	U	O4'-C1'-N1	7.31	114.05	108.20
26	LA	586	A	C5-N7-C8	7.31	107.56	103.90
26	LA	759	G	C8-N9-C4	7.31	109.33	106.40
26	LA	2002	G	N3-C2-N2	7.31	125.02	119.90
40	L4	19	PHE	CB-CG-CD2	-7.31	115.68	120.80
26	LA	248	G	C5-C6-O6	-7.31	124.21	128.60
26	LA	420	C	O4'-C1'-N1	7.31	114.05	108.20
26	LA	2144	G	C5-C6-O6	-7.31	124.21	128.60
2	SA	70	U	O4'-C1'-N1	7.31	114.05	108.20
2	SA	215	C	O4'-C1'-N1	7.31	114.05	108.20
2	SA	439	U	C2-N3-C4	-7.31	122.61	127.00
2	SA	512	U	C5-C4-O4	7.31	130.29	125.90
2	SA	732	C	C4-C5-C6	7.31	121.06	117.40
26	LA	2553	G	C1'-O4'-C4'	-7.31	104.05	109.90
26	LA	2803	G	O4'-C1'-N9	7.31	114.05	108.20
26	LA	2877	G	C2-N3-C4	7.31	115.56	111.90
2	SA	78	A	C4-C5-C6	7.31	120.65	117.00
2	SA	325	A	O4'-C1'-N9	7.31	114.05	108.20
2	SA	443	C	C5-C6-N1	7.31	124.65	121.00
2	SA	963	G	C5-C6-O6	-7.31	124.22	128.60
2	SA	1534	A	N1-C6-N6	-7.31	114.22	118.60
26	LA	1229	C	N3-C4-N4	-7.31	112.88	118.00
26	LA	1568	G	C5'-C4'-C3'	-7.31	104.31	116.00
26	LA	2067	G	C5'-C4'-C3'	-7.31	104.31	116.00
26	LA	2291	U	C2-N3-C4	-7.31	122.62	127.00
2	SA	133	U	O4'-C1'-N1	7.31	114.05	108.20
26	LA	882	G	C4'-C3'-C2'	-7.31	95.29	102.60
26	LA	1567	G	O4'-C1'-N9	7.31	114.05	108.20
26	LA	2737	G	C6-C5-N7	-7.31	126.02	130.40
26	LA	2786	U	N3-C2-O2	-7.31	117.09	122.20
2	SA	394	G	N1-C2-N2	-7.30	109.63	116.20
2	SA	412	A	N1-C2-N3	-7.30	125.65	129.30
26	LA	931	U	C5'-C4'-C3'	7.30	127.69	116.00
26	LA	1507	C	N3-C4-N4	7.30	123.11	118.00
26	LA	2522	U	N3-C4-O4	7.30	124.51	119.40
26	LA	2761	A	O4'-C1'-N9	7.30	114.04	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	10	G	N9-C4-C5	7.30	108.32	105.40
26	LA	350	G	C5'-C4'-C3'	-7.30	104.31	116.00
26	LA	830	G	N3-C2-N2	7.30	125.01	119.90
26	LA	910	A	P-O3'-C3'	7.30	128.46	119.70
2	SA	4	U	C6-N1-C2	-7.30	116.62	121.00
2	SA	1273	C	C1'-O4'-C4'	-7.30	104.06	109.90
4	S2	36	A	N1-C6-N6	7.30	122.98	118.60
26	LA	688	U	N1-C2-O2	-7.30	117.69	122.80
26	LA	886	A	C4'-C3'-C2'	-7.30	95.30	102.60
26	LA	960	A	C3'-C2'-C1'	7.30	107.34	101.50
2	SA	485	U	C2'-C3'-O3'	7.30	125.56	109.50
2	SA	647	C	N3-C4-C5	-7.30	118.98	121.90
2	SA	979	C	C6-N1-C2	-7.30	117.38	120.30
26	LA	121	G	O4'-C1'-N9	7.30	114.04	108.20
26	LA	505	A	N1-C2-N3	-7.30	125.65	129.30
26	LA	546	U	C4'-C3'-C2'	7.30	109.90	102.60
26	LA	1219	U	C5-C6-N1	-7.30	119.05	122.70
26	LA	1991	U	N3-C4-C5	-7.30	110.22	114.60
26	LA	2119	A	C3'-C2'-C1'	7.30	107.34	101.50
2	SA	462	G	C5-C6-N1	7.30	115.15	111.50
26	LA	80	G	O4'-C1'-N9	7.30	114.04	108.20
26	LA	543	G	C4-C5-N7	7.30	113.72	110.80
26	LA	612	G	O5'-P-OP1	7.30	119.46	110.70
26	LA	635	C	P-O5'-C5'	7.30	132.58	120.90
26	LA	2661	G	C8-N9-C4	7.30	109.32	106.40
2	SA	275	G	C4-N9-C1'	7.30	135.99	126.50
2	SA	1302	C	C5'-C4'-C3'	-7.30	104.33	116.00
2	SA	1400	C	O4'-C4'-C3'	7.30	111.94	106.10
2	SA	1484	C	N3-C4-N4	7.30	123.11	118.00
25	LB	71	C	C5-C4-N4	7.30	125.31	120.20
26	LA	763	G	C8-N9-C4	7.30	109.32	106.40
26	LA	2524	G	N3-C2-N2	7.30	125.01	119.90
2	SA	377	G	P-O3'-C3'	-7.29	110.95	119.70
2	SA	604	G	C4'-C3'-C2'	-7.29	95.31	102.60
2	SA	908	A	C2-N3-C4	7.29	114.25	110.60
26	LA	1096	A	P-O3'-C3'	-7.29	110.95	119.70
26	LA	1461	C	C2-N3-C4	-7.29	116.25	119.90
18	SB	185	ILE	N-CA-C	-7.29	91.31	111.00
26	LA	219	A	N1-C6-N6	7.29	122.98	118.60
26	LA	922	C	N3-C2-O2	-7.29	116.79	121.90
26	LA	1979	U	C4'-C3'-C2'	-7.29	95.31	102.60
26	LA	2382	G	C5'-C4'-C3'	-7.29	104.33	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	584	G	N7-C8-N9	7.29	116.75	113.10
2	SA	1510	C	C6-N1-C2	-7.29	117.38	120.30
3	S1	19	A	C5-N7-C8	-7.29	100.25	103.90
9	SI	105	ARG	NH1-CZ-NH2	-7.29	111.38	119.40
25	LB	88	C	O4'-C1'-N1	7.29	114.03	108.20
26	LA	713	G	C5-C6-N1	-7.29	107.85	111.50
26	LA	1142	A	C5-C6-N6	-7.29	117.87	123.70
26	LA	1180	U	N3-C2-O2	-7.29	117.10	122.20
26	LA	1567	G	C6-N1-C2	-7.29	120.73	125.10
26	LA	1581	G	C4-C5-C6	-7.29	114.42	118.80
26	LA	2774	C	O4'-C1'-N1	7.29	114.03	108.20
2	SA	428	G	C4-C5-N7	7.29	113.72	110.80
2	SA	1070	U	N1-C2-N3	7.29	119.27	114.90
2	SA	1070	U	C2-N3-C4	-7.29	122.63	127.00
3	S1	24	A	N7-C8-N9	7.29	117.44	113.80
25	LB	13	G	N3-C2-N2	7.29	125.00	119.90
25	LB	56	G	C6-C5-N7	7.29	134.77	130.40
26	LA	1642	G	C4-C5-C6	-7.29	114.43	118.80
43	L7	19	ARG	NE-CZ-NH2	-7.29	116.66	120.30
2	SA	85	U	N1-C2-O2	7.29	127.90	122.80
2	SA	921	U	C2-N3-C4	7.29	131.37	127.00
25	LB	49	C	C3'-C2'-C1'	7.29	107.33	101.50
26	LA	47	C	C5-C6-N1	7.29	124.64	121.00
26	LA	145	C	P-O3'-C3'	-7.29	110.95	119.70
26	LA	569	U	C4-C5-C6	-7.29	115.33	119.70
26	LA	774	G	C5'-C4'-C3'	-7.29	104.34	116.00
26	LA	2437	G	C2'-C3'-O3'	7.29	125.54	109.50
2	SA	390	U	C1'-O4'-C4'	-7.29	104.07	109.90
26	LA	889	C	C5'-C4'-C3'	-7.29	104.34	116.00
26	LA	1983	G	C4-C5-C6	7.29	123.17	118.80
26	LA	2763	G	C4-C5-N7	7.29	113.72	110.80
27	LD	237	ARG	NE-CZ-NH1	7.29	123.94	120.30
2	SA	416	G	C4-C5-N7	-7.29	107.89	110.80
2	SA	669	G	P-O3'-C3'	-7.29	110.96	119.70
2	SA	938	A	P-O3'-C3'	7.29	128.44	119.70
2	SA	1105	A	N9-C4-C5	7.29	108.71	105.80
2	SA	1155	A	C5'-C4'-O4'	7.29	117.84	109.10
3	S1	31	U	OP1-P-OP2	-7.29	108.67	119.60
26	LA	456	C	P-O5'-C5'	7.29	132.56	120.90
26	LA	715	A	OP1-P-OP2	-7.29	108.67	119.60
26	LA	1038	G	C5-C6-O6	-7.29	124.23	128.60
26	LA	1515	A	C6-N1-C2	-7.29	114.23	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1726	C	C4-C5-C6	7.29	121.04	117.40
26	LA	2103	C	C4-C5-C6	7.29	121.04	117.40
26	LA	2744	G	N9-C4-C5	7.29	108.31	105.40
2	SA	108	G	O4'-C1'-N9	7.28	114.03	108.20
2	SA	868	C	N3-C2-O2	-7.28	116.80	121.90
2	SA	1131	G	C8-N9-C4	-7.28	103.49	106.40
2	SA	1325	C	O4'-C1'-N1	7.28	114.03	108.20
26	LA	766	U	P-O3'-C3'	7.28	128.44	119.70
26	LA	805	G	N3-C2-N2	7.28	125.00	119.90
26	LA	1626	A	C5'-C4'-C3'	-7.28	104.35	116.00
26	LA	2028	U	C3'-C2'-C1'	7.28	107.33	101.50
26	LA	2304	G	O4'-C1'-N9	7.28	114.03	108.20
26	LA	2710	C	N3-C4-C5	-7.28	118.99	121.90
2	SA	201	G	N1-C6-O6	7.28	124.27	119.90
2	SA	376	G	C4-C5-N7	7.28	113.71	110.80
26	LA	2312	U	C5'-C4'-O4'	7.28	117.84	109.10
2	SA	164	G	C5'-C4'-O4'	7.28	117.84	109.10
2	SA	288	A	N1-C2-N3	-7.28	125.66	129.30
2	SA	1127	G	C5-C6-O6	-7.28	124.23	128.60
2	SA	1337	G	O5'-P-OP1	7.28	119.44	110.70
3	S1	34	U	C5'-C4'-O4'	7.28	117.84	109.10
26	LA	647	G	O4'-C1'-N9	7.28	114.02	108.20
26	LA	1559	U	N1-C2-N3	7.28	119.27	114.90
26	LA	1782	U	N1-C2-N3	7.28	119.27	114.90
26	LA	1904	G	C4-C5-N7	7.28	113.71	110.80
26	LA	1908	C	N3-C4-C5	7.28	124.81	121.90
26	LA	2330	G	N1-C6-O6	7.28	124.27	119.90
26	LA	1118	C	C5-C6-N1	-7.28	117.36	121.00
26	LA	2427	C	C6-N1-C2	-7.28	117.39	120.30
2	SA	387	U	O4'-C1'-N1	7.28	114.02	108.20
2	SA	640	A	O3'-P-O5'	7.28	117.83	104.00
2	SA	1025	U	C5-C4-O4	-7.28	121.53	125.90
2	SA	1046	A	N9-C4-C5	-7.28	102.89	105.80
2	SA	1124	G	N3-C2-N2	7.28	124.99	119.90
2	SA	1153	G	C6-C5-N7	-7.28	126.03	130.40
26	LA	2206	C	C5-C6-N1	7.28	124.64	121.00
26	LA	2279	G	N3-C4-N9	7.28	130.37	126.00
26	LA	2589	A	C5-C6-N1	-7.28	114.06	117.70
26	LA	2597	G	N9-C4-C5	-7.28	102.49	105.40
2	SA	1457	G	O4'-C1'-N9	7.28	114.02	108.20
26	LA	903	C	P-O3'-C3'	-7.28	110.97	119.70
26	LA	986	C	P-O5'-C5'	7.28	132.54	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1750	G	O4'-C1'-N9	7.28	114.02	108.20
26	LA	1914	C	O4'-C1'-C2'	-7.28	98.53	105.80
26	LA	2207	C	C5-C4-N4	-7.28	115.11	120.20
26	LA	2568	U	O4'-C1'-N1	7.28	114.02	108.20
26	LA	2648	G	P-O5'-C5'	-7.28	109.26	120.90
2	SA	443	C	C5'-C4'-O4'	7.27	117.83	109.10
26	LA	251	A	C6-N1-C2	7.27	122.97	118.60
26	LA	762	U	N1-C2-O2	7.27	127.89	122.80
26	LA	1385	A	C5'-C4'-C3'	-7.27	104.36	116.00
26	LA	2717	C	N1-C2-N3	7.27	124.29	119.20
2	SA	511	C	N1-C2-O2	7.27	123.26	118.90
26	LA	259	G	O4'-C1'-N9	7.27	114.02	108.20
26	LA	952	G	C8-N9-C4	7.27	109.31	106.40
26	LA	1483	G	N3-C4-N9	7.27	130.36	126.00
26	LA	1508	A	O4'-C1'-N9	7.27	114.02	108.20
26	LA	1631	G	N3-C2-N2	-7.27	114.81	119.90
26	LA	1726	C	O5'-P-OP1	-7.27	99.16	105.70
26	LA	2391	G	C4-C5-N7	7.27	113.71	110.80
26	LA	2475	C	O4'-C1'-C2'	7.27	114.15	107.60
26	LA	2626	C	N3-C2-O2	-7.27	116.81	121.90
2	SA	1381	U	C5-C6-N1	7.27	126.34	122.70
26	LA	261	G	N7-C8-N9	-7.27	109.47	113.10
26	LA	351	C	N1-C2-N3	-7.27	114.11	119.20
26	LA	1205	A	O4'-C1'-N9	7.27	114.02	108.20
2	SA	172	A	C8-N9-C4	-7.27	102.89	105.80
2	SA	774	G	C4-C5-C6	-7.27	114.44	118.80
2	SA	893	C	C5-C6-N1	7.27	124.63	121.00
26	LA	1609	A	P-O3'-C3'	7.27	128.42	119.70
26	LA	1696	G	OP1-P-OP2	-7.27	108.69	119.60
26	LA	2714	G	C8-N9-C4	7.27	109.31	106.40
56	LR	71	ARG	NE-CZ-NH1	7.27	123.94	120.30
2	SA	583	A	O4'-C1'-N9	7.27	114.02	108.20
2	SA	612	C	O4'-C1'-N1	7.27	114.01	108.20
2	SA	1424	U	N3-C4-C5	7.27	118.96	114.60
26	LA	405	U	C5'-C4'-C3'	7.27	127.63	116.00
26	LA	1121	C	O4'-C1'-N1	7.27	114.01	108.20
26	LA	1232	G	C8-N9-C4	-7.27	103.49	106.40
26	LA	2429	G	P-O5'-C5'	-7.27	109.27	120.90
26	LA	2663	G	C5'-C4'-O4'	7.27	117.82	109.10
2	SA	346	G	C6-N1-C2	-7.27	120.74	125.10
25	LB	104	A	C8-N9-C4	7.27	108.71	105.80
26	LA	279	A	C5'-C4'-C3'	7.27	127.62	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1350	C	C2-N3-C4	-7.27	116.27	119.90
26	LA	1960	A	C2-N3-C4	-7.27	106.97	110.60
2	SA	782	A	N7-C8-N9	-7.26	110.17	113.80
2	SA	829	G	C6-C5-N7	7.26	134.76	130.40
2	SA	1186	G	N1-C6-O6	7.26	124.26	119.90
4	S2	8	U	N3-C2-O2	7.26	127.29	122.20
26	LA	2671	G	N1-C6-O6	-7.26	115.54	119.90
26	LA	2728	U	C6-N1-C2	-7.26	116.64	121.00
2	SA	120	A	C5'-C4'-O4'	7.26	117.81	109.10
2	SA	562	U	C3'-C2'-C1'	-7.26	95.69	101.50
2	SA	1015	G	N1-C6-O6	7.26	124.26	119.90
2	SA	1398	A	C6-N1-C2	-7.26	114.24	118.60
4	S2	1	C	C2-N1-C1'	7.26	126.79	118.80
26	LA	503	A	P-O3'-C3'	7.26	128.41	119.70
26	LA	664	G	O4'-C1'-N9	7.26	114.01	108.20
2	SA	61	G	C6-C5-N7	-7.26	126.04	130.40
2	SA	110	C	C6-N1-C1'	-7.26	112.09	120.80
2	SA	365	U	C1'-O4'-C4'	-7.26	104.09	109.90
2	SA	941	G	N1-C2-N3	7.26	128.26	123.90
2	SA	1416	G	N3-C4-C5	-7.26	124.97	128.60
2	SA	1473	G	C6-C5-N7	7.26	134.76	130.40
26	LA	2456	C	N3-C2-O2	-7.26	116.82	121.90
26	LA	2835	A	N1-C2-N3	7.26	132.93	129.30
26	LA	2893	A	O4'-C1'-N9	7.26	114.01	108.20
2	SA	23	C	N3-C4-C5	-7.26	119.00	121.90
2	SA	340	U	O4'-C1'-N1	7.26	114.01	108.20
2	SA	1411	C	C4'-C3'-C2'	-7.26	95.34	102.60
25	LB	2	G	N9-C4-C5	7.26	108.30	105.40
26	LA	214	G	C5-N7-C8	-7.26	100.67	104.30
26	LA	1045	C	C6-N1-C1'	-7.26	112.09	120.80
26	LA	1158	C	P-O5'-C5'	-7.26	109.28	120.90
26	LA	1423	G	O4'-C4'-C3'	7.26	111.91	106.10
26	LA	1522	A	C8-N9-C4	7.26	108.70	105.80
26	LA	2159	G	C5'-C4'-O4'	7.26	117.81	109.10
26	LA	2657	A	O4'-C1'-N9	7.26	114.01	108.20
2	SA	99	C	O4'-C1'-N1	7.26	114.01	108.20
2	SA	699	C	N1-C2-O2	7.26	123.25	118.90
2	SA	942	G	C2-N3-C4	7.26	115.53	111.90
26	LA	1178	C	C2-N3-C4	-7.26	116.27	119.90
27	LD	86	ARG	NE-CZ-NH2	-7.26	116.67	120.30
2	SA	1141	C	P-O3'-C3'	-7.26	110.99	119.70
26	LA	752	A	C5'-C4'-C3'	7.26	127.61	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1539	U	P-O3'-C3'	-7.26	110.99	119.70
26	LA	1603	A	O4'-C1'-N9	7.26	114.00	108.20
26	LA	2405	G	C4-C5-N7	7.26	113.70	110.80
26	LA	900	A	C4'-C3'-C2'	-7.25	95.34	102.60
26	LA	1618	C	C6-N1-C2	-7.25	117.40	120.30
2	SA	265	G	N7-C8-N9	7.25	116.73	113.10
2	SA	475	C	N1-C2-O2	7.25	123.25	118.90
2	SA	519	C	C2-N3-C4	-7.25	116.27	119.90
2	SA	955	U	C5-C6-N1	-7.25	119.07	122.70
26	LA	189	G	N9-C1'-C2'	-7.25	104.02	112.00
26	LA	281	C	O4'-C1'-N1	7.25	114.00	108.20
26	LA	562	U	O4'-C1'-N1	7.25	114.00	108.20
26	LA	662	G	C8-N9-C4	7.25	109.30	106.40
26	LA	697	G	P-O3'-C3'	7.25	128.41	119.70
26	LA	1398	C	C3'-C2'-C1'	7.25	107.30	101.50
26	LA	1494	A	P-O5'-C5'	7.25	132.50	120.90
26	LA	1843	C	C2-N3-C4	-7.25	116.27	119.90
2	SA	196	A	P-O3'-C3'	-7.25	111.00	119.70
2	SA	1337	G	C5-C6-O6	-7.25	124.25	128.60
2	SA	1355	G	C5-C6-O6	-7.25	124.25	128.60
4	S2	28	U	N1-C2-N3	-7.25	110.55	114.90
26	LA	1253	A	C4-C5-C6	-7.25	113.38	117.00
26	LA	2521	C	N3-C2-O2	-7.25	116.83	121.90
26	LA	2654	A	C5-C6-N6	7.25	129.50	123.70
26	LA	2844	G	N1-C2-N2	7.25	122.73	116.20
26	LA	169	G	C6-C5-N7	7.25	134.75	130.40
26	LA	491	G	C5-N7-C8	-7.25	100.67	104.30
26	LA	2408	U	C6-N1-C2	-7.25	116.65	121.00
2	SA	1527	U	C1'-O4'-C4'	7.25	115.70	109.90
26	LA	690	G	C4-N9-C1'	7.25	135.92	126.50
26	LA	749	A	P-O3'-C3'	-7.25	111.00	119.70
26	LA	763	G	C4'-C3'-C2'	-7.25	95.35	102.60
26	LA	1641	A	C5-C6-N1	-7.25	114.08	117.70
26	LA	1992	G	N1-C2-N2	7.25	122.72	116.20
26	LA	2830	C	C5'-C4'-O4'	7.25	117.80	109.10
46	LH	42	VAL	CA-CB-CG2	-7.25	100.03	110.90
2	SA	838	G	C5-N7-C8	-7.25	100.68	104.30
2	SA	1481	U	N3-C4-O4	-7.25	114.33	119.40
6	SU	8	ASN	N-CA-CB	7.25	123.64	110.60
26	LA	655	A	C2-N3-C4	-7.25	106.98	110.60
26	LA	807	U	N3-C4-O4	-7.25	114.33	119.40
26	LA	878	A	C8-N9-C4	-7.25	102.90	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1195	G	O4'-C1'-N9	7.25	114.00	108.20
26	LA	1200	C	O3'-P-O5'	7.25	117.77	104.00
26	LA	1328	A	C5-C6-N6	7.25	129.50	123.70
26	LA	1450	G	N3-C4-C5	-7.25	124.98	128.60
26	LA	2153	C	P-O5'-C5'	-7.25	109.31	120.90
26	LA	2285	C	C1'-O4'-C4'	-7.25	104.10	109.90
26	LA	2754	U	C2-N3-C4	-7.25	122.65	127.00
2	SA	849	G	N7-C8-N9	-7.25	109.48	113.10
2	SA	1412	C	C4'-C3'-C2'	-7.25	95.36	102.60
26	LA	144	A	C2-N3-C4	7.25	114.22	110.60
26	LA	445	C	C2-N3-C4	-7.25	116.28	119.90
2	SA	131	A	C4-C5-N7	-7.24	107.08	110.70
2	SA	367	U	N1-C2-O2	7.24	127.87	122.80
2	SA	1181	G	N3-C2-N2	-7.24	114.83	119.90
2	SA	1269	A	C8-N9-C4	7.24	108.70	105.80
3	S1	22	G	O4'-C1'-N9	7.24	113.99	108.20
25	LB	35	C	C5-C4-N4	-7.24	115.13	120.20
26	LA	448	U	N3-C4-O4	7.24	124.47	119.40
26	LA	784	G	N1-C2-N3	-7.24	119.55	123.90
26	LA	1169	A	N3-C4-C5	-7.24	121.73	126.80
26	LA	1219	U	C5'-C4'-O4'	7.24	117.79	109.10
26	LA	2870	C	C2-N1-C1'	-7.24	110.83	118.80
2	SA	1405	G	C5'-C4'-C3'	7.24	127.59	116.00
22	SF	24	ARG	NE-CZ-NH2	-7.24	116.68	120.30
26	LA	334	C	N3-C4-C5	7.24	124.80	121.90
26	LA	1503	A	C5-C6-N1	7.24	121.32	117.70
2	SA	533	A	C8-N9-C4	7.24	108.70	105.80
2	SA	867	G	N1-C6-O6	7.24	124.25	119.90
26	LA	415	A	C5-N7-C8	7.24	107.52	103.90
26	LA	1567	G	C1'-O4'-C4'	-7.24	104.11	109.90
26	LA	1833	C	N3-C4-C5	-7.24	119.00	121.90
55	LQ	91	SER	N-CA-CB	7.24	121.36	110.50
2	SA	141	G	C5-C6-O6	-7.24	124.26	128.60
2	SA	1178	G	C4-C5-C6	-7.24	114.46	118.80
26	LA	180	G	O4'-C4'-C3'	-7.24	96.76	104.00
26	LA	361	G	C5-C6-O6	-7.24	124.26	128.60
26	LA	946	C	C4-C5-C6	7.24	121.02	117.40
26	LA	1946	U	N1-C2-O2	-7.24	117.73	122.80
26	LA	2234	G	N3-C4-N9	-7.24	121.66	126.00
26	LA	2337	G	N3-C4-N9	7.24	130.34	126.00
26	LA	2624	G	N7-C8-N9	-7.24	109.48	113.10
2	SA	477	C	P-O3'-C3'	-7.24	111.02	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	260	G	N1-C6-O6	-7.24	115.56	119.90
2	SA	148	G	O4'-C4'-C3'	-7.24	96.77	104.00
2	SA	606	G	N1-C2-N3	-7.24	119.56	123.90
26	LA	2293	G	C6-C5-N7	-7.24	126.06	130.40
26	LA	2667	C	C2-N3-C4	-7.24	116.28	119.90
26	LA	1416	G	C5-N7-C8	-7.23	100.68	104.30
26	LA	1757	A	C4-C5-C6	-7.23	113.38	117.00
2	SA	1211	U	O4'-C1'-N1	7.23	113.99	108.20
26	LA	80	G	C1'-O4'-C4'	-7.23	104.11	109.90
26	LA	1602	U	C5-C4-O4	-7.23	121.56	125.90
26	LA	2702	G	N7-C8-N9	-7.23	109.48	113.10
26	LA	2851	A	C6-N1-C2	-7.23	114.26	118.60
2	SA	753	A	C5-N7-C8	-7.23	100.28	103.90
2	SA	1178	G	C8-N9-C4	7.23	109.29	106.40
2	SA	1271	A	O4'-C1'-N9	7.23	113.98	108.20
2	SA	1274	A	P-O5'-C5'	7.23	132.47	120.90
2	SA	1280	A	N1-C6-N6	-7.23	114.26	118.60
26	LA	38	A	P-O5'-C5'	7.23	132.47	120.90
26	LA	2163	A	N7-C8-N9	7.23	117.42	113.80
26	LA	2476	A	N3-C4-C5	7.23	131.86	126.80
2	SA	944	G	C4-N9-C1'	7.23	135.90	126.50
9	SI	46	VAL	CA-CB-CG1	-7.23	100.06	110.90
20	SD	153	ARG	NE-CZ-NH1	7.23	123.91	120.30
26	LA	212	G	C8-N9-C4	-7.23	103.51	106.40
26	LA	1944	U	C5-C4-O4	-7.23	121.56	125.90
26	LA	2499	C	C4-C5-C6	7.23	121.02	117.40
2	SA	116	A	O4'-C1'-N9	7.23	113.98	108.20
2	SA	276	G	C6-C5-N7	-7.23	126.06	130.40
2	SA	311	C	C5'-C4'-O4'	7.23	117.77	109.10
2	SA	1262	C	C6-N1-C2	-7.23	117.41	120.30
7	SG	43	TYR	CB-CG-CD1	7.23	125.34	121.00
21	SE	127	TYR	CB-CG-CD2	-7.23	116.66	121.00
26	LA	396	G	C6-N1-C2	-7.23	120.76	125.10
26	LA	953	G	C4-N9-C1'	-7.23	117.10	126.50
26	LA	1299	G	C2-N3-C4	-7.23	108.29	111.90
26	LA	1483	G	C8-N9-C4	-7.23	103.51	106.40
26	LA	1928	A	C5-C6-N6	-7.23	117.92	123.70
2	SA	482	A	C6-N1-C2	-7.23	114.26	118.60
2	SA	877	G	C5'-C4'-C3'	7.23	127.56	116.00
26	LA	63	A	C5-C6-N6	7.23	129.48	123.70
26	LA	326	G	C6-N1-C2	-7.23	120.76	125.10
26	LA	1727	C	N3-C2-O2	-7.23	116.84	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1828	G	C6-C5-N7	-7.23	126.06	130.40
26	LA	2055	C	OP1-P-OP2	-7.23	108.76	119.60
2	SA	398	U	C5-C6-N1	7.22	126.31	122.70
2	SA	1166	G	N1-C2-N3	7.22	128.23	123.90
2	SA	1292	G	O4'-C1'-N9	7.22	113.98	108.20
2	SA	1399	C	P-O3'-C3'	7.22	128.37	119.70
13	SM	78	ARG	NE-CZ-NH2	7.22	123.91	120.30
17	SQ	71	SER	N-CA-CB	-7.22	99.66	110.50
26	LA	507	A	N7-C8-N9	-7.22	110.19	113.80
26	LA	720	U	C5-C6-N1	-7.22	119.09	122.70
26	LA	1075	C	O4'-C1'-N1	7.22	113.98	108.20
26	LA	1250	G	C5'-C4'-O4'	7.22	117.77	109.10
26	LA	1719	G	N1-C2-N3	-7.22	119.56	123.90
26	LA	1792	G	C4-C5-N7	-7.22	107.91	110.80
26	LA	2073	C	N3-C4-N4	7.22	123.06	118.00
26	LA	2092	U	P-O5'-C5'	-7.22	109.34	120.90
26	LA	2126	A	C1'-O4'-C4'	-7.22	104.12	109.90
26	LA	2513	A	O4'-C1'-N9	-7.22	102.42	108.20
26	LA	2537	U	C5-C6-N1	-7.22	119.09	122.70
26	LA	2877	G	C6-N1-C2	-7.22	120.77	125.10
27	LD	82	TYR	CB-CG-CD2	7.22	125.33	121.00
2	SA	598	U	C2-N1-C1'	-7.22	109.03	117.70
2	SA	924	C	C2-N3-C4	-7.22	116.29	119.90
26	LA	556	A	P-O3'-C3'	7.22	128.37	119.70
26	LA	566	U	C2-N3-C4	-7.22	122.67	127.00
26	LA	804	A	N1-C2-N3	-7.22	125.69	129.30
26	LA	898	C	O4'-C1'-N1	7.22	113.98	108.20
26	LA	972	A	N1-C6-N6	7.22	122.93	118.60
26	LA	1299	G	C5-N7-C8	7.22	107.91	104.30
26	LA	2069	G	N1-C2-N3	7.22	128.23	123.90
26	LA	2185	U	N1-C2-N3	-7.22	110.57	114.90
45	LG	70	ARG	NE-CZ-NH1	-7.22	116.69	120.30
2	SA	1375	A	C5-N7-C8	-7.22	100.29	103.90
26	LA	2094	A	P-O3'-C3'	-7.22	111.03	119.70
26	LA	2163	A	C6-N1-C2	7.22	122.93	118.60
26	LA	2876	G	N3-C4-C5	-7.22	124.99	128.60
2	SA	1014	A	C6-N1-C2	-7.22	114.27	118.60
2	SA	1468	A	C5-C6-N1	7.22	121.31	117.70
25	LB	55	U	P-O5'-C5'	7.22	132.45	120.90
25	LB	97	C	C1'-O4'-C4'	-7.22	104.12	109.90
26	LA	1677	A	N3-C4-N9	-7.22	121.62	127.40
26	LA	1826	G	C5-C6-O6	-7.22	124.27	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2065	C	N3-C4-N4	7.22	123.05	118.00
26	LA	231	A	C5'-C4'-O4'	7.22	117.76	109.10
26	LA	464	U	C3'-C2'-C1'	7.22	107.27	101.50
55	LQ	6	ALA	CB-CA-C	7.22	120.93	110.10
2	SA	179	A	C4-C5-C6	-7.22	113.39	117.00
2	SA	1171	A	C8-N9-C4	7.22	108.69	105.80
5	ST	35	TYR	CB-CG-CD2	7.22	125.33	121.00
26	LA	571	U	O4'-C1'-N1	7.22	113.97	108.20
26	LA	1430	G	C8-N9-C4	-7.22	103.51	106.40
2	SA	279	A	C6-C5-N7	-7.21	127.25	132.30
2	SA	924	C	C6-N1-C2	-7.21	117.41	120.30
2	SA	1000	A	C4-C5-C6	7.21	120.61	117.00
26	LA	539	G	O4'-C1'-N9	7.21	113.97	108.20
26	LA	738	G	C5-C6-O6	-7.21	124.27	128.60
26	LA	864	G	N1-C6-O6	7.21	124.23	119.90
26	LA	1659	G	C5'-C4'-O4'	7.21	117.76	109.10
26	LA	2342	C	C5-C6-N1	7.21	124.61	121.00
26	LA	2544	G	O4'-C1'-N9	7.21	113.97	108.20
2	SA	820	U	C4-C5-C6	7.21	124.03	119.70
2	SA	289	G	C6-C5-N7	-7.21	126.07	130.40
2	SA	702	A	C3'-C2'-C1'	-7.21	95.73	101.50
26	LA	22	C	C4'-C3'-C2'	-7.21	95.39	102.60
26	LA	626	A	C5-C6-N6	7.21	129.47	123.70
26	LA	728	G	C2-N3-C4	7.21	115.51	111.90
26	LA	799	G	N9-C4-C5	7.21	108.28	105.40
26	LA	1792	G	C5-C6-O6	-7.21	124.27	128.60
26	LA	1955	U	N1-C2-O2	7.21	127.85	122.80
2	SA	191	G	C1'-O4'-C4'	-7.21	104.13	109.90
2	SA	765	G	N9-C1'-C2'	-7.21	104.07	112.00
2	SA	1012	A	N9-C1'-C2'	-7.21	104.07	112.00
22	SF	13	ASP	CB-CG-OD1	7.21	124.79	118.30
26	LA	859	G	C1'-O4'-C4'	-7.21	104.13	109.90
26	LA	1936	A	N1-C6-N6	7.21	122.93	118.60
26	LA	1947	C	C4'-C3'-C2'	-7.21	95.39	102.60
26	LA	2539	C	C3'-C2'-C1'	7.21	107.27	101.50
2	SA	423	G	N9-C4-C5	7.21	108.28	105.40
9	SI	112	ARG	CD-NE-CZ	-7.21	113.51	123.60
26	LA	256	A	C5-C6-N1	7.21	121.30	117.70
26	LA	263	G	C5-C6-O6	-7.21	124.28	128.60
26	LA	1237	A	C1'-O4'-C4'	-7.21	104.13	109.90
26	LA	1534	U	C2-N3-C4	7.21	131.32	127.00
26	LA	2074	U	O4'-C1'-N1	7.21	113.97	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2570	G	P-O3'-C3'	-7.21	111.05	119.70
26	LA	2634	A	C5-C6-N1	-7.21	114.09	117.70
2	SA	313	A	N1-C6-N6	7.21	122.92	118.60
2	SA	1482	G	C4-C5-C6	7.21	123.12	118.80
4	S2	27	G	N9-C4-C5	7.21	108.28	105.40
26	LA	196	A	N1-C6-N6	7.21	122.92	118.60
26	LA	856	G	N3-C4-C5	-7.21	125.00	128.60
26	LA	973	A	O4'-C1'-N9	7.21	113.97	108.20
26	LA	1664	A	N7-C8-N9	7.21	117.40	113.80
26	LA	1953	A	P-O3'-C3'	-7.21	111.05	119.70
26	LA	2164	C	C4'-C3'-C2'	-7.21	95.39	102.60
26	LA	2728	U	C5-C6-N1	7.21	126.30	122.70
50	LL	74	TYR	CG-CD1-CE1	7.21	127.06	121.30
2	SA	89	U	C4-C5-C6	7.21	124.02	119.70
2	SA	662	U	O4'-C1'-N1	7.21	113.96	108.20
2	SA	1364	U	C5-C4-O4	-7.21	121.58	125.90
2	SA	1391	U	C5-C4-O4	7.21	130.22	125.90
2	SA	1059	C	C2-N3-C4	-7.20	116.30	119.90
3	S1	50	U	P-O3'-C3'	7.20	128.34	119.70
20	SD	80	ARG	NE-CZ-NH2	7.20	123.90	120.30
25	LB	13	G	C2-N3-C4	7.20	115.50	111.90
26	LA	626	A	P-O3'-C3'	7.20	128.34	119.70
26	LA	909	A	N7-C8-N9	-7.20	110.20	113.80
26	LA	2418	A	N9-C4-C5	7.20	108.68	105.80
26	LA	2426	A	C8-N9-C4	7.20	108.68	105.80
26	LA	2640	G	N1-C6-O6	7.20	124.22	119.90
26	LA	2841	C	O4'-C1'-N1	7.20	113.96	108.20
2	SA	204	G	C2-N3-C4	-7.20	108.30	111.90
2	SA	525	C	C5-C6-N1	-7.20	117.40	121.00
26	LA	142	A	O3'-P-O5'	-7.20	90.32	104.00
26	LA	573	U	N1-C2-O2	7.20	127.84	122.80
26	LA	1553	A	C5-N7-C8	-7.20	100.30	103.90
26	LA	2848	G	C5-C6-N1	7.20	115.10	111.50
2	SA	524	G	N1-C2-N3	-7.20	119.58	123.90
2	SA	563	A	O4'-C1'-N9	7.20	113.96	108.20
2	SA	1488	G	C3'-C2'-C1'	7.20	107.26	101.50
26	LA	158	U	C4'-C3'-C2'	-7.20	95.40	102.60
26	LA	990	A	N3-C4-N9	-7.20	121.64	127.40
26	LA	1725	U	C4'-C3'-C2'	-7.20	95.40	102.60
26	LA	2447	G	C5-C6-N1	-7.20	107.90	111.50
26	LA	2579	C	N3-C2-O2	-7.20	116.86	121.90
2	SA	155	A	N1-C6-N6	-7.20	114.28	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	477	C	O4'-C1'-N1	7.20	113.96	108.20
2	SA	679	C	N3-C4-N4	7.20	123.04	118.00
2	SA	681	A	C8-N9-C4	-7.20	102.92	105.80
2	SA	965	U	N3-C4-C5	-7.20	110.28	114.60
26	LA	793	A	C6-C5-N7	-7.20	127.26	132.30
26	LA	1044	C	C5'-C4'-C3'	-7.20	104.48	116.00
2	SA	138	G	C5-C6-O6	-7.20	124.28	128.60
2	SA	465	A	O4'-C1'-N9	7.20	113.96	108.20
26	LA	55	G	C5-C6-O6	7.20	132.92	128.60
26	LA	437	U	N3-C2-O2	7.20	127.24	122.20
26	LA	2353	G	C2-N3-C4	-7.20	108.30	111.90
26	LA	2536	G	N7-C8-N9	7.20	116.70	113.10
26	LA	2856	A	N7-C8-N9	7.20	117.40	113.80
2	SA	927	G	N7-C8-N9	-7.20	109.50	113.10
2	SA	1221	G	OP1-P-OP2	-7.20	108.81	119.60
26	LA	318	C	C5-C6-N1	7.20	124.60	121.00
26	LA	1043	C	N3-C2-O2	-7.20	116.86	121.90
26	LA	2594	C	O4'-C1'-N1	7.20	113.96	108.20
2	SA	727	G	N3-C2-N2	7.19	124.94	119.90
26	LA	1344	U	P-O5'-C5'	7.19	132.41	120.90
26	LA	1719	G	N3-C4-N9	7.19	130.32	126.00
2	SA	435	A	P-O3'-C3'	7.19	128.33	119.70
2	SA	549	C	C5-C4-N4	7.19	125.23	120.20
2	SA	1063	C	OP1-P-OP2	-7.19	108.81	119.60
2	SA	1323	G	N3-C4-N9	7.19	130.31	126.00
12	SL	55	ARG	NE-CZ-NH1	7.19	123.90	120.30
25	LB	77	U	O4'-C1'-N1	7.19	113.95	108.20
26	LA	428	A	N7-C8-N9	7.19	117.40	113.80
26	LA	1200	C	N1-C2-N3	7.19	124.23	119.20
26	LA	1707	G	N3-C4-C5	-7.19	125.00	128.60
26	LA	1752	C	O4'-C1'-N1	7.19	113.95	108.20
26	LA	1870	C	C6-N1-C1'	-7.19	112.17	120.80
26	LA	2192	U	C4-C5-C6	7.19	124.02	119.70
2	SA	54	C	N3-C4-N4	7.19	123.03	118.00
2	SA	769	G	N7-C8-N9	-7.19	109.50	113.10
3	S1	29	G	O4'-C1'-N9	7.19	113.95	108.20
26	LA	1698	A	C5-C6-N6	7.19	129.45	123.70
26	LA	1906	G	N9-C1'-C2'	-7.19	104.09	112.00
54	LM	80	ASP	CB-CG-OD2	-7.19	111.83	118.30
2	SA	745	G	N9-C4-C5	7.19	108.28	105.40
2	SA	1271	A	C4-C5-N7	-7.19	107.11	110.70
2	SA	1524	C	C2-N3-C4	-7.19	116.31	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1003	G	O4'-C1'-N9	7.19	113.95	108.20
26	LA	1384	A	C5-C6-N6	-7.19	117.95	123.70
26	LA	2150	C	N3-C4-C5	-7.19	119.02	121.90
26	LA	2604	U	C5-C6-N1	-7.19	119.11	122.70
49	LK	47	SER	N-CA-CB	7.19	121.28	110.50
2	SA	267	C	N3-C4-N4	7.19	123.03	118.00
2	SA	571	U	P-O5'-C5'	7.19	132.40	120.90
26	LA	600	G	N1-C6-O6	-7.19	115.59	119.90
26	LA	881	G	C5'-C4'-C3'	-7.19	104.50	116.00
26	LA	984	A	C4-C5-C6	-7.19	113.41	117.00
26	LA	1599	U	N3-C2-O2	-7.19	117.17	122.20
26	LA	2023	C	N3-C2-O2	-7.19	116.87	121.90
2	SA	1242	G	O4'-C1'-N9	7.19	113.95	108.20
2	SA	1347	G	C4-C5-N7	-7.19	107.93	110.80
25	LB	36	C	C3'-C2'-C1'	-7.19	95.75	101.50
26	LA	16	C	C5-C4-N4	-7.19	115.17	120.20
26	LA	17	G	OP1-P-OP2	-7.19	108.82	119.60
26	LA	1310	G	C5-C6-N1	7.19	115.09	111.50
26	LA	2297	A	C4-C5-C6	7.19	120.59	117.00
2	SA	325	A	C4'-C3'-C2'	-7.18	95.42	102.60
2	SA	355	C	C5-C4-N4	7.18	125.23	120.20
2	SA	1102	A	N1-C6-N6	-7.18	114.29	118.60
25	LB	98	G	N1-C6-O6	7.18	124.21	119.90
26	LA	724	U	N3-C4-O4	7.18	124.43	119.40
26	LA	958	U	N3-C4-O4	7.18	124.43	119.40
26	LA	1389	G	N3-C4-C5	-7.18	125.01	128.60
26	LA	1459	G	C5-C6-N1	-7.18	107.91	111.50
26	LA	1667	G	N9-C4-C5	-7.18	102.53	105.40
26	LA	2366	A	C4-C5-C6	-7.18	113.41	117.00
26	LA	2533	U	P-O3'-C3'	7.18	128.32	119.70
26	LA	2645	G	C8-N9-C4	7.18	109.27	106.40
2	SA	110	C	N1-C1'-C2'	-7.18	104.10	112.00
2	SA	570	G	C6-N1-C2	-7.18	120.79	125.10
2	SA	936	C	N3-C4-N4	7.18	123.03	118.00
2	SA	1145	A	C8-N9-C4	-7.18	102.93	105.80
25	LB	96	G	C8-N9-C4	-7.18	103.53	106.40
26	LA	25	U	O4'-C1'-N1	7.18	113.94	108.20
26	LA	268	C	N3-C2-O2	-7.18	116.87	121.90
26	LA	408	G	C1'-O4'-C4'	-7.18	104.16	109.90
26	LA	557	C	C6-N1-C2	-7.18	117.43	120.30
26	LA	645	C	O4'-C1'-N1	7.18	113.95	108.20
26	LA	1282	U	O4'-C1'-N1	7.18	113.94	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1600	C	N3-C4-N4	7.18	123.03	118.00
26	LA	1832	C	N3-C4-C5	-7.18	119.03	121.90
26	LA	2863	C	N3-C4-N4	7.18	123.03	118.00
2	SA	884	U	O4'-C4'-C3'	7.18	111.84	106.10
26	LA	231	A	N7-C8-N9	-7.18	110.21	113.80
26	LA	505	A	O4'-C1'-C2'	7.18	114.06	107.60
26	LA	1153	C	O4'-C1'-N1	7.18	113.94	108.20
26	LA	1489	C	C5'-C4'-C3'	-7.18	104.51	116.00
26	LA	1500	G	C2-N3-C4	7.18	115.49	111.90
26	LA	1668	A	C1'-O4'-C4'	-7.18	104.16	109.90
26	LA	2601	C	P-O3'-C3'	-7.18	111.08	119.70
2	SA	277	C	P-O3'-C3'	-7.18	111.08	119.70
2	SA	767	A	C5-C6-N1	7.18	121.29	117.70
2	SA	889	A	C5-C6-N1	7.18	121.29	117.70
2	SA	1514	G	C5-C6-N1	-7.18	107.91	111.50
26	LA	1002	G	N1-C6-O6	-7.18	115.59	119.90
26	LA	1110	G	C3'-C2'-C1'	-7.18	95.76	101.50
26	LA	1240	U	C5'-C4'-C3'	7.18	127.49	116.00
26	LA	1901	A	C5-C6-N6	7.18	129.44	123.70
26	LA	76	C	O4'-C1'-N1	7.18	113.94	108.20
26	LA	801	G	N3-C4-N9	-7.18	121.69	126.00
26	LA	2096	C	P-O3'-C3'	7.18	128.31	119.70
26	LA	2554	U	C5'-C4'-O4'	7.18	117.71	109.10
26	LA	2718	G	C5'-C4'-C3'	7.18	127.48	116.00
2	SA	552	U	O4'-C1'-C2'	7.18	114.06	107.60
2	SA	845	A	C5-C6-N6	7.18	129.44	123.70
20	SD	106	PHE	CB-CG-CD1	7.18	125.82	120.80
25	LB	13	G	N1-C2-N3	-7.18	119.59	123.90
26	LA	821	A	C5'-C4'-C3'	-7.18	104.52	116.00
26	LA	1164	C	N3-C2-O2	-7.18	116.88	121.90
26	LA	1378	A	P-O5'-C5'	-7.18	109.42	120.90
26	LA	1840	G	N1-C2-N3	7.18	128.21	123.90
26	LA	1854	A	C2-N3-C4	-7.18	107.01	110.60
26	LA	2469	A	N7-C8-N9	-7.18	110.21	113.80
2	SA	954	G	C5-C6-N1	-7.17	107.91	111.50
2	SA	1253	G	N7-C8-N9	7.17	116.69	113.10
18	SB	11	ALA	CB-CA-C	-7.17	99.34	110.10
26	LA	1483	G	N3-C4-C5	-7.17	125.01	128.60
26	LA	2478	A	P-O3'-C3'	-7.17	111.09	119.70
26	LA	2732	G	C2'-C3'-O3'	7.17	125.28	109.50
2	SA	211	G	C8-N9-C4	-7.17	103.53	106.40
2	SA	1357	A	N9-C4-C5	7.17	108.67	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	975	A	C5-C6-N1	7.17	121.29	117.70
26	LA	2836	U	N1-C2-N3	7.17	119.20	114.90
2	SA	153	C	C4-C5-C6	-7.17	113.81	117.40
2	SA	677	U	C2-N3-C4	7.17	131.30	127.00
2	SA	845	A	C5-C6-N1	-7.17	114.11	117.70
2	SA	1020	G	C5'-C4'-O4'	7.17	117.70	109.10
26	LA	1775	U	C5-C4-O4	-7.17	121.60	125.90
26	LA	2203	U	C5'-C4'-O4'	7.17	117.71	109.10
26	LA	2225	A	C2-N3-C4	-7.17	107.01	110.60
26	LA	2361	G	C5-C6-O6	-7.17	124.30	128.60
26	LA	2646	C	P-O5'-C5'	-7.17	109.43	120.90
26	LA	2800	A	C2-N3-C4	-7.17	107.01	110.60
2	SA	33	A	C8-N9-C4	-7.17	102.93	105.80
2	SA	463	U	C5'-C4'-O4'	7.17	117.70	109.10
2	SA	742	G	N7-C8-N9	7.17	116.69	113.10
2	SA	795	C	C6-N1-C1'	-7.17	112.19	120.80
2	SA	847	G	C5'-C4'-C3'	-7.17	104.53	116.00
2	SA	982	U	C5-C6-N1	-7.17	119.11	122.70
2	SA	1147	C	C5-C6-N1	-7.17	117.42	121.00
26	LA	818	G	N3-C4-N9	7.17	130.30	126.00
26	LA	1595	C	C4-C5-C6	-7.17	113.81	117.40
26	LA	2648	G	O4'-C1'-N9	7.17	113.94	108.20
2	SA	212	G	C8-N9-C4	7.17	109.27	106.40
2	SA	831	A	P-O3'-C3'	-7.17	111.10	119.70
25	LB	29	A	C4'-C3'-C2'	7.17	109.77	102.60
26	LA	1134	A	O4'-C1'-N9	7.17	113.93	108.20
26	LA	1491	G	N1-C6-O6	-7.17	115.60	119.90
26	LA	1766	G	C5-C6-N1	7.17	115.08	111.50
26	LA	1989	G	C4-C5-N7	7.17	113.67	110.80
26	LA	2708	G	N3-C4-N9	7.17	130.30	126.00
2	SA	17	U	C5'-C4'-C3'	-7.17	104.53	116.00
2	SA	275	G	N1-C6-O6	7.17	124.20	119.90
2	SA	734	G	C6-C5-N7	-7.17	126.10	130.40
2	SA	754	C	O4'-C4'-C3'	7.17	111.83	106.10
2	SA	838	G	N3-C4-N9	7.17	130.30	126.00
2	SA	1338	G	C5-N7-C8	7.17	107.88	104.30
25	LB	7	G	C4-C5-N7	7.17	113.67	110.80
26	LA	1135	C	P-O3'-C3'	7.17	128.30	119.70
26	LA	1242	U	C2-N3-C4	-7.17	122.70	127.00
26	LA	1249	U	N3-C4-C5	-7.17	110.30	114.60
26	LA	1849	G	C2-N3-C4	-7.17	108.32	111.90
26	LA	1965	C	O4'-C1'-N1	7.17	113.93	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2006	C	C5-C4-N4	-7.17	115.18	120.20
26	LA	2093	G	C6-N1-C2	-7.17	120.80	125.10
2	SA	743	A	N1-C6-N6	7.17	122.90	118.60
2	SA	1188	A	C5-C6-N1	7.17	121.28	117.70
26	LA	418	C	O4'-C1'-N1	7.17	113.93	108.20
26	LA	2727	A	N1-C6-N6	-7.17	114.30	118.60
2	SA	771	G	C4-N9-C1'	7.16	135.81	126.50
2	SA	1049	U	P-O3'-C3'	7.16	128.30	119.70
3	S1	34	U	O4'-C4'-C3'	7.16	111.83	106.10
26	LA	280	U	C5'-C4'-O4'	7.16	117.70	109.10
26	LA	690	G	C5-C6-O6	7.16	132.90	128.60
26	LA	1642	G	O4'-C1'-N9	7.16	113.93	108.20
26	LA	2759	G	C8-N9-C4	7.16	109.27	106.40
2	SA	313	A	C5-C6-N1	-7.16	114.12	117.70
26	LA	331	C	P-O5'-C5'	-7.16	109.44	120.90
26	LA	1324	G	P-O5'-C5'	-7.16	109.44	120.90
2	SA	387	U	C5-C6-N1	-7.16	119.12	122.70
2	SA	875	U	C2-N3-C4	-7.16	122.70	127.00
26	LA	960	A	O4'-C1'-N9	-7.16	102.47	108.20
26	LA	1063	G	C1'-O4'-C4'	-7.16	104.17	109.90
26	LA	1099	G	N9-C4-C5	-7.16	102.54	105.40
26	LA	2183	A	C5-C6-N6	-7.16	117.97	123.70
26	LA	2322	A	C6-N1-C2	7.16	122.90	118.60
26	LA	2581	G	C4-C5-N7	7.16	113.66	110.80
2	SA	434	U	N1-C2-N3	7.16	119.19	114.90
2	SA	807	A	C5'-C4'-O4'	7.16	117.69	109.10
2	SA	1368	A	N1-C2-N3	-7.16	125.72	129.30
3	S1	57	C	N3-C2-O2	-7.16	116.89	121.90
26	LA	231	A	C2'-C3'-O3'	7.16	125.25	109.50
26	LA	489	G	C3'-C2'-C1'	7.16	107.23	101.50
26	LA	1043	C	O4'-C1'-N1	7.16	113.93	108.20
26	LA	1366	A	N1-C6-N6	-7.16	114.31	118.60
26	LA	1420	A	N1-C2-N3	-7.16	125.72	129.30
26	LA	1674	G	N1-C6-O6	7.16	124.19	119.90
26	LA	2304	G	C5'-C4'-O4'	7.16	117.69	109.10
2	SA	795	C	N1-C2-N3	7.16	124.21	119.20
26	LA	1577	C	N3-C4-C5	7.16	124.76	121.90
26	LA	1788	C	N1-C2-N3	7.16	124.21	119.20
2	SA	116	A	P-O3'-C3'	-7.16	111.11	119.70
2	SA	226	G	OP1-P-OP2	-7.16	108.87	119.60
26	LA	129	C	N3-C4-C5	7.16	124.76	121.90
26	LA	399	U	O4'-C1'-N1	7.16	113.92	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1493	C	C6-N1-C2	7.16	123.16	120.30
26	LA	1579	A	O4'-C1'-N9	7.16	113.92	108.20
26	LA	2618	G	C5-C6-O6	-7.16	124.31	128.60
26	LA	2858	C	C5-C6-N1	7.16	124.58	121.00
46	LH	84	LYS	N-CA-CB	7.16	123.48	110.60
2	SA	674	G	O4'-C1'-N9	7.15	113.92	108.20
2	SA	1079	G	OP1-P-OP2	-7.15	108.87	119.60
25	LB	116	G	C5'-C4'-C3'	-7.15	104.55	116.00
26	LA	489	G	N9-C4-C5	-7.15	102.54	105.40
26	LA	580	U	N3-C2-O2	-7.15	117.19	122.20
26	LA	950	G	N3-C2-N2	7.15	124.91	119.90
26	LA	2531	A	C1'-O4'-C4'	-7.15	104.18	109.90
2	SA	529	G	C1'-O4'-C4'	-7.15	104.18	109.90
2	SA	559	A	N1-C2-N3	-7.15	125.72	129.30
2	SA	736	C	O4'-C1'-N1	7.15	113.92	108.20
2	SA	1478	U	C5-C4-O4	7.15	130.19	125.90
20	SD	69	ARG	NE-CZ-NH2	-7.15	116.72	120.30
26	LA	675	A	C2'-C3'-O3'	7.15	125.23	109.50
26	LA	908	C	P-O3'-C3'	7.15	128.28	119.70
26	LA	2399	G	N7-C8-N9	7.15	116.68	113.10
26	LA	2772	C	O4'-C1'-N1	7.15	113.92	108.20
2	SA	69	G	C5-C6-O6	7.15	132.89	128.60
2	SA	449	G	P-O5'-C5'	7.15	132.34	120.90
2	SA	703	G	C5-N7-C8	7.15	107.88	104.30
2	SA	737	C	O4'-C1'-N1	7.15	113.92	108.20
2	SA	954	G	O4'-C1'-N9	7.15	113.92	108.20
3	S1	27	A	C5-C6-N6	7.15	129.42	123.70
26	LA	1386	C	C6-N1-C2	7.15	123.16	120.30
26	LA	1430	G	C5-C6-O6	-7.15	124.31	128.60
26	LA	1677	A	C5-N7-C8	-7.15	100.33	103.90
4	S2	72	C	N3-C2-O2	-7.15	116.90	121.90
16	SP	31	ARG	NE-CZ-NH2	-7.15	116.72	120.30
26	LA	191	A	C6-C5-N7	-7.15	127.30	132.30
26	LA	1513	U	P-O5'-C5'	7.15	132.34	120.90
26	LA	2111	U	C6-N1-C2	-7.15	116.71	121.00
26	LA	2457	U	C5-C4-O4	-7.15	121.61	125.90
2	SA	897	C	C2-N1-C1'	7.15	126.66	118.80
2	SA	1021	A	N7-C8-N9	7.15	117.37	113.80
24	S3	553	ASP	CB-CG-OD2	7.15	124.73	118.30
25	LB	41	G	O4'-C1'-N9	7.15	113.92	108.20
26	LA	1204	A	C5-C6-N1	-7.15	114.13	117.70
26	LA	1786	A	C5-C6-N1	7.15	121.27	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2221	G	N1-C6-O6	7.15	124.19	119.90
26	LA	2587	A	O4'-C1'-N9	7.15	113.92	108.20
50	LL	69	ARG	NE-CZ-NH2	7.15	123.87	120.30
26	LA	848	C	C2-N3-C4	-7.15	116.33	119.90
26	LA	1137	G	C4-C5-N7	7.15	113.66	110.80
26	LA	2004	G	N7-C8-N9	-7.15	109.53	113.10
2	SA	481	G	C4-C5-N7	-7.14	107.94	110.80
2	SA	705	G	C8-N9-C4	7.14	109.26	106.40
26	LA	1277	G	C5-N7-C8	-7.14	100.73	104.30
26	LA	1450	G	C1'-O4'-C4'	-7.14	104.19	109.90
26	LA	1600	C	C5-C6-N1	-7.14	117.43	121.00
26	LA	1734	G	C6-C5-N7	-7.14	126.11	130.40
26	LA	2210	U	C6-N1-C1'	-7.14	111.20	121.20
2	SA	6	G	N9-C4-C5	7.14	108.26	105.40
2	SA	184	G	P-O3'-C3'	-7.14	111.13	119.70
2	SA	606	G	C5-C6-N1	7.14	115.07	111.50
3	S1	48	C	C6-N1-C2	-7.14	117.44	120.30
7	SG	128	GLU	O-C-N	-7.14	111.27	122.70
26	LA	143	C	N3-C2-O2	-7.14	116.90	121.90
26	LA	2115	G	C6-C5-N7	-7.14	126.11	130.40
26	LA	2441	U	N1-C2-N3	-7.14	110.61	114.90
2	SA	93	U	N3-C4-C5	-7.14	110.31	114.60
2	SA	492	C	N1-C2-N3	7.14	124.20	119.20
2	SA	782	A	C2'-C3'-O3'	7.14	125.21	109.50
26	LA	19	A	N3-C4-C5	7.14	131.80	126.80
2	SA	543	U	C4-C5-C6	-7.14	115.42	119.70
2	SA	1070	U	N1-C2-O2	-7.14	117.80	122.80
2	SA	1379	G	C1'-O4'-C4'	-7.14	104.19	109.90
4	S2	19	G	C5-N7-C8	-7.14	100.73	104.30
26	LA	595	C	C4-C5-C6	7.14	120.97	117.40
26	LA	852	U	C4-C5-C6	-7.14	115.42	119.70
26	LA	1322	A	C5-N7-C8	-7.14	100.33	103.90
26	LA	2577	A	C5-C6-N1	-7.14	114.13	117.70
26	LA	2841	C	C5-C4-N4	7.14	125.20	120.20
2	SA	423	G	C4-C5-N7	-7.14	107.94	110.80
2	SA	460	A	C4-C5-C6	-7.14	113.43	117.00
4	S2	16	C	C5-C6-N1	7.14	124.57	121.00
26	LA	2034	U	C5-C6-N1	7.14	126.27	122.70
26	LA	2633	G	C4-C5-C6	-7.14	114.52	118.80
2	SA	907	A	C5-C6-N6	7.14	129.41	123.70
2	SA	1082	A	P-O5'-C5'	7.14	132.32	120.90
26	LA	43	G	C2-N3-C4	7.14	115.47	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	460	A	C5-N7-C8	7.14	107.47	103.90
26	LA	772	C	C5-C4-N4	-7.14	115.20	120.20
26	LA	976	G	C5-C6-O6	-7.14	124.32	128.60
26	LA	1254	A	C5'-C4'-C3'	7.14	127.42	116.00
26	LA	2531	A	P-O5'-C5'	-7.14	109.48	120.90
33	LZ	55	MET	CG-SD-CE	-7.14	88.78	100.20
2	SA	79	G	C4-C5-N7	-7.13	107.95	110.80
2	SA	1031	C	C6-N1-C2	7.13	123.15	120.30
4	S2	42	C	C4-C5-C6	7.13	120.97	117.40
26	LA	9	G	N1-C2-N3	7.13	128.18	123.90
26	LA	109	C	C1'-O4'-C4'	-7.13	104.19	109.90
26	LA	147	C	P-O5'-C5'	7.13	132.32	120.90
26	LA	873	C	C1'-O4'-C4'	-7.13	104.19	109.90
26	LA	1018	U	C6-N1-C2	7.13	125.28	121.00
26	LA	1760	C	C5'-C4'-C3'	-7.13	104.59	116.00
26	LA	1777	U	C6-N1-C2	-7.13	116.72	121.00
26	LA	1971	U	C4'-C3'-C2'	-7.13	95.47	102.60
2	SA	1513	A	P-O5'-C5'	-7.13	109.49	120.90
3	S1	39	U	C5'-C4'-C3'	7.13	127.41	116.00
2	SA	50	A	C4-C5-N7	7.13	114.27	110.70
2	SA	85	U	N3-C4-O4	7.13	124.39	119.40
2	SA	134	G	C5-C6-O6	-7.13	124.32	128.60
2	SA	372	C	N3-C4-C5	-7.13	119.05	121.90
3	S1	21	U	P-O3'-C3'	-7.13	111.14	119.70
26	LA	1780	A	C5-N7-C8	-7.13	100.33	103.90
26	LA	2046	G	N1-C6-O6	7.13	124.18	119.90
26	LA	2068	U	C5'-C4'-O4'	7.13	117.66	109.10
25	LB	60	C	P-O3'-C3'	-7.13	111.14	119.70
25	LB	62	C	N3-C4-N4	-7.13	113.01	118.00
26	LA	40	U	C4-C5-C6	-7.13	115.42	119.70
26	LA	2554	U	C1'-O4'-C4'	-7.13	104.20	109.90
2	SA	399	G	C6-C5-N7	-7.13	126.12	130.40
2	SA	980	C	O4'-C1'-N1	7.13	113.90	108.20
4	S2	30	G	C8-N9-C4	-7.13	103.55	106.40
26	LA	126	A	C5-C6-N1	7.13	121.26	117.70
26	LA	799	G	C8-N9-C4	-7.13	103.55	106.40
26	LA	1842	G	C6-C5-N7	-7.13	126.12	130.40
39	L3	12	ARG	NE-CZ-NH1	7.13	123.86	120.30
57	LS	49	ARG	NE-CZ-NH1	7.13	123.86	120.30
2	SA	137	U	P-O3'-C3'	-7.13	111.15	119.70
2	SA	578	C	C5'-C4'-O4'	7.13	117.65	109.10
2	SA	588	G	N7-C8-N9	-7.13	109.54	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1226	C	C2'-C3'-O3'	7.13	125.18	109.50
26	LA	1098	A	N1-C2-N3	-7.13	125.74	129.30
26	LA	1310	G	C8-N9-C4	7.13	109.25	106.40
26	LA	1346	G	C6-C5-N7	-7.13	126.12	130.40
26	LA	2450	A	C5'-C4'-C3'	7.13	127.40	116.00
26	LA	2673	G	C5-C6-N1	7.13	115.06	111.50
2	SA	1077	G	C6-C5-N7	-7.12	126.12	130.40
26	LA	243	U	P-O3'-C3'	7.12	128.25	119.70
26	LA	329	G	C4-C5-C6	-7.12	114.53	118.80
26	LA	1497	U	C4'-C3'-C2'	-7.12	95.47	102.60
26	LA	1567	G	O3'-P-O5'	-7.12	90.46	104.00
2	SA	60	A	N7-C8-N9	-7.12	110.24	113.80
2	SA	384	G	N3-C4-C5	-7.12	125.04	128.60
2	SA	650	G	C2-N3-C4	-7.12	108.34	111.90
2	SA	1159	U	C2-N3-C4	-7.12	122.73	127.00
2	SA	1211	U	N3-C2-O2	-7.12	117.21	122.20
2	SA	1394	A	C4-C5-C6	-7.12	113.44	117.00
22	SF	4	TYR	CG-CD2-CE2	-7.12	115.60	121.30
26	LA	9	G	C8-N9-C4	-7.12	103.55	106.40
26	LA	248	G	C1'-O4'-C4'	-7.12	104.20	109.90
26	LA	1492	G	C1'-O4'-C4'	-7.12	104.20	109.90
26	LA	1713	A	C5-C6-N1	-7.12	114.14	117.70
26	LA	2020	A	C5'-C4'-C3'	7.12	127.40	116.00
26	LA	2286	G	N7-C8-N9	-7.12	109.54	113.10
26	LA	2605	U	C5-C4-O4	-7.12	121.63	125.90
26	LA	2764	A	N1-C6-N6	-7.12	114.33	118.60
2	SA	107	G	C6-C5-N7	-7.12	126.13	130.40
2	SA	880	C	N3-C4-C5	-7.12	119.05	121.90
2	SA	1083	U	N3-C2-O2	-7.12	117.22	122.20
2	SA	1447	A	C4-N9-C1'	-7.12	113.48	126.30
26	LA	156	A	O4'-C1'-N9	7.12	113.90	108.20
26	LA	410	G	C5-N7-C8	7.12	107.86	104.30
26	LA	518	G	N1-C2-N3	7.12	128.17	123.90
26	LA	1432	G	C5-N7-C8	-7.12	100.74	104.30
26	LA	1732	C	O4'-C1'-N1	7.12	113.90	108.20
26	LA	1756	G	N9-C4-C5	7.12	108.25	105.40
26	LA	1975	G	C4-C5-N7	7.12	113.65	110.80
26	LA	1991	U	C5'-C4'-C3'	7.12	127.39	116.00
26	LA	2115	G	C4-N9-C1'	-7.12	117.24	126.50
37	LC	100	LEU	CB-CG-CD2	7.12	123.11	111.00
44	LF	78	TRP	O-C-N	-7.12	111.31	122.70
2	SA	299	G	C5-C6-O6	-7.12	124.33	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1474	U	C1'-O4'-C4'	7.12	115.60	109.90
5	ST	42	ASP	CB-CG-OD1	-7.12	111.89	118.30
25	LB	22	U	C5-C6-N1	7.12	126.26	122.70
26	LA	2082	A	C1'-O4'-C4'	-7.12	104.20	109.90
26	LA	2430	A	C5'-C4'-C3'	7.12	127.39	116.00
2	SA	284	C	O4'-C1'-N1	7.12	113.89	108.20
2	SA	416	G	N7-C8-N9	7.12	116.66	113.10
2	SA	445	G	N3-C4-N9	7.12	130.27	126.00
2	SA	813	U	P-O5'-C5'	-7.12	109.51	120.90
2	SA	1513	A	C4-C5-N7	7.12	114.26	110.70
26	LA	220	G	C5-N7-C8	-7.12	100.74	104.30
26	LA	266	G	C4-C5-N7	7.12	113.65	110.80
26	LA	581	C	N3-C4-C5	-7.12	119.05	121.90
26	LA	1543	G	C4-C5-C6	-7.12	114.53	118.80
26	LA	2242	G	C3'-C2'-C1'	7.12	107.19	101.50
26	LA	2828	G	C5-N7-C8	-7.12	100.74	104.30
2	SA	973	G	N3-C4-C5	-7.12	125.04	128.60
26	LA	377	G	C5-C6-O6	-7.12	124.33	128.60
26	LA	518	G	C2-N3-C4	-7.12	108.34	111.90
26	LA	698	C	C2-N3-C4	-7.12	116.34	119.90
26	LA	883	G	P-O3'-C3'	-7.12	111.16	119.70
26	LA	1619	G	C2-N3-C4	-7.12	108.34	111.90
26	LA	1873	G	N1-C6-O6	7.12	124.17	119.90
2	SA	206	C	N1-C2-O2	7.12	123.17	118.90
2	SA	1473	G	C2-N3-C4	7.12	115.46	111.90
26	LA	27	G	N3-C4-C5	-7.12	125.04	128.60
26	LA	502	A	O4'-C1'-C2'	7.12	114.00	107.60
26	LA	875	G	N1-C6-O6	7.12	124.17	119.90
26	LA	1574	C	C1'-O4'-C4'	-7.12	104.21	109.90
26	LA	1718	G	C5-C6-O6	-7.12	124.33	128.60
26	LA	2027	G	C2-N3-C4	7.12	115.46	111.90
26	LA	2264	C	O4'-C1'-N1	7.12	113.89	108.20
26	LA	2763	G	C6-C5-N7	-7.12	126.13	130.40
2	SA	276	G	N3-C4-C5	-7.11	125.04	128.60
2	SA	1211	U	C5-C6-N1	-7.11	119.14	122.70
2	SA	1277	C	N3-C4-C5	7.11	124.75	121.90
4	S2	52	C	C5-C4-N4	-7.11	115.22	120.20
26	LA	1377	G	C6-N1-C2	-7.11	120.83	125.10
26	LA	2636	C	N3-C2-O2	-7.11	116.92	121.90
26	LA	2728	U	C4-C5-C6	-7.11	115.43	119.70
26	LA	2731	G	C1'-O4'-C4'	-7.11	104.21	109.90
36	L2	2	LYS	N-CA-CB	7.11	123.40	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	11	A	O4'-C1'-N9	7.11	113.89	108.20
24	S3	365	MET	CG-SD-CE	-7.11	88.82	100.20
26	LA	326	G	N9-C4-C5	7.11	108.25	105.40
26	LA	924	G	C5-C6-O6	-7.11	124.33	128.60
26	LA	2652	C	C5-C4-N4	7.11	125.18	120.20
2	SA	69	G	C5'-C4'-O4'	7.11	117.63	109.10
2	SA	174	A	C5-C6-N6	-7.11	118.01	123.70
2	SA	438	U	C5-C4-O4	7.11	130.17	125.90
2	SA	1241	G	P-O5'-C5'	7.11	132.28	120.90
2	SA	1270	G	C2-N3-C4	7.11	115.46	111.90
26	LA	855	G	C5-C6-N1	7.11	115.06	111.50
26	LA	919	U	N1-C2-O2	-7.11	117.82	122.80
26	LA	1576	U	C5-C4-O4	-7.11	121.63	125.90
26	LA	1736	U	C3'-C2'-C1'	7.11	107.19	101.50
26	LA	2770	G	N1-C2-N2	-7.11	109.80	116.20
26	LA	599	A	C8-N9-C4	7.11	108.64	105.80
2	SA	157	U	N3-C4-O4	7.11	124.38	119.40
2	SA	169	C	P-O5'-C5'	7.11	132.27	120.90
2	SA	876	C	N3-C2-O2	-7.11	116.92	121.90
2	SA	1102	A	C5-C6-N6	7.11	129.39	123.70
2	SA	1164	G	N3-C2-N2	-7.11	114.92	119.90
2	SA	1252	A	O5'-P-OP2	-7.11	99.30	105.70
2	SA	1478	U	N1-C2-N3	7.11	119.17	114.90
2	SA	1486	G	N3-C4-C5	-7.11	125.05	128.60
26	LA	922	C	C5-C6-N1	7.11	124.55	121.00
26	LA	1295	C	C4-C5-C6	-7.11	113.85	117.40
26	LA	1359	A	C1'-O4'-C4'	-7.11	104.21	109.90
26	LA	1709	U	C4'-C3'-C2'	-7.11	95.49	102.60
26	LA	1887	C	O4'-C1'-N1	7.11	113.89	108.20
26	LA	2429	G	C6-N1-C2	7.11	129.37	125.10
26	LA	2628	C	N3-C4-C5	-7.11	119.06	121.90
2	SA	130	A	C8-N9-C4	7.11	108.64	105.80
2	SA	432	A	C8-N9-C4	-7.11	102.96	105.80
25	LB	105	G	C2-N3-C4	7.11	115.45	111.90
26	LA	271	G	C5-C6-N1	7.11	115.05	111.50
26	LA	276	U	C6-N1-C2	-7.11	116.74	121.00
26	LA	561	G	N1-C2-N3	7.11	128.16	123.90
26	LA	1852	U	C2-N3-C4	-7.11	122.74	127.00
2	SA	364	A	N1-C2-N3	-7.10	125.75	129.30
26	LA	1491	G	C5-C6-O6	7.10	132.86	128.60
26	LA	1549	A	N9-C4-C5	7.10	108.64	105.80
26	LA	2737	G	C5-C6-O6	7.10	132.86	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	672	U	N1-C2-O2	7.10	127.77	122.80
26	LA	395	U	C2-N3-C4	7.10	131.26	127.00
26	LA	414	C	O4'-C1'-N1	7.10	113.88	108.20
26	LA	856	G	N1-C6-O6	-7.10	115.64	119.90
26	LA	2449	U	P-O3'-C3'	7.10	128.22	119.70
26	LA	2721	A	P-O3'-C3'	-7.10	111.18	119.70
48	LN	21	ARG	NE-CZ-NH1	7.10	123.85	120.30
26	LA	814	C	C2-N3-C4	7.10	123.45	119.90
26	LA	1378	A	C6-N1-C2	-7.10	114.34	118.60
2	SA	422	C	O4'-C1'-N1	7.10	113.88	108.20
2	SA	625	U	N3-C2-O2	-7.10	117.23	122.20
2	SA	840	C	C4-C5-C6	-7.10	113.85	117.40
2	SA	991	U	C2-N3-C4	-7.10	122.74	127.00
2	SA	1272	G	P-O3'-C3'	7.10	128.22	119.70
24	S3	132	TYR	CA-CB-CG	7.10	126.89	113.40
25	LB	74	U	C5-C4-O4	7.10	130.16	125.90
26	LA	89	A	N3-C4-C5	7.10	131.77	126.80
26	LA	296	U	C5-C6-N1	-7.10	119.15	122.70
26	LA	649	G	C8-N9-C4	-7.10	103.56	106.40
26	LA	714	U	O4'-C1'-N1	7.10	113.88	108.20
26	LA	1828	G	N1-C2-N2	-7.10	109.81	116.20
26	LA	2615	U	P-O3'-C3'	7.10	128.22	119.70
26	LA	2743	U	C5-C6-N1	-7.10	119.15	122.70
26	LA	2898	U	C5-C4-O4	-7.10	121.64	125.90
2	SA	130	A	C3'-C2'-C1'	7.10	107.18	101.50
2	SA	582	C	C1'-O4'-C4'	-7.10	104.22	109.90
2	SA	861	G	O4'-C1'-N9	7.10	113.88	108.20
2	SA	1152	A	C5'-C4'-C3'	-7.10	104.65	116.00
26	LA	1008	A	C5-C6-N1	7.10	121.25	117.70
26	LA	1826	G	C8-N9-C4	-7.10	103.56	106.40
26	LA	2655	G	N1-C6-O6	7.10	124.16	119.90
26	LA	2705	A	N1-C2-N3	-7.10	125.75	129.30
26	LA	2732	G	C6-N1-C2	-7.10	120.84	125.10
2	SA	385	C	P-O3'-C3'	-7.10	111.19	119.70
2	SA	1023	U	C2-N3-C4	7.10	131.26	127.00
2	SA	1379	G	N7-C8-N9	-7.10	109.55	113.10
26	LA	672	C	N1-C2-O2	7.10	123.16	118.90
26	LA	729	G	C2-N3-C4	-7.10	108.35	111.90
26	LA	857	G	C5-C6-N1	7.10	115.05	111.50
26	LA	2650	U	C5'-C4'-O4'	7.10	117.61	109.10
57	LS	44	TYR	CG-CD2-CE2	-7.10	115.62	121.30
2	SA	415	A	C5-C6-N1	7.09	121.25	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	672	U	O4'-C1'-N1	7.09	113.88	108.20
2	SA	1437	A	O4'-C1'-N9	7.09	113.88	108.20
26	LA	190	A	C1'-O4'-C4'	-7.09	104.22	109.90
26	LA	651	G	N1-C2-N3	-7.09	119.64	123.90
26	LA	1307	A	P-O5'-C5'	-7.09	109.55	120.90
26	LA	1598	A	N1-C2-N3	-7.09	125.75	129.30
26	LA	1950	G	C1'-O4'-C4'	-7.09	104.22	109.90
26	LA	2091	C	C6-N1-C2	-7.09	117.46	120.30
26	LA	2529	G	C1'-O4'-C4'	7.09	115.58	109.90
26	LA	2652	C	N1-C2-N3	7.09	124.17	119.20
26	LA	2888	C	C5-C4-N4	-7.09	115.23	120.20
26	LA	545	U	N1-C2-O2	7.09	127.77	122.80
26	LA	617	G	C4-C5-N7	-7.09	107.96	110.80
26	LA	2532	G	C5'-C4'-O4'	7.09	117.61	109.10
26	LA	2837	A	C5-N7-C8	-7.09	100.35	103.90
2	SA	791	G	C5'-C4'-C3'	7.09	127.34	116.00
2	SA	1173	U	C5'-C4'-C3'	-7.09	104.65	116.00
3	S1	44	U	N1-C2-O2	-7.09	117.84	122.80
26	LA	199	A	O4'-C1'-C2'	-7.09	98.71	105.80
26	LA	759	G	N7-C8-N9	-7.09	109.55	113.10
26	LA	2036	C	O4'-C1'-N1	7.09	113.87	108.20
2	SA	994	A	N7-C8-N9	7.09	117.34	113.80
2	SA	1126	U	N3-C4-C5	7.09	118.85	114.60
23	SR	50	TYR	CB-CG-CD2	-7.09	116.75	121.00
25	LB	75	G	P-O3'-C3'	7.09	128.21	119.70
26	LA	569	U	N3-C2-O2	7.09	127.16	122.20
26	LA	605	G	N9-C4-C5	7.09	108.24	105.40
26	LA	646	U	O4'-C1'-N1	7.09	113.87	108.20
26	LA	927	A	N9-C4-C5	7.09	108.64	105.80
26	LA	1241	A	N3-C4-N9	7.09	133.07	127.40
26	LA	2161	C	N3-C4-N4	7.09	122.96	118.00
26	LA	2205	A	C4-C5-C6	7.09	120.54	117.00
26	LA	2797	U	N1-C2-O2	-7.09	117.84	122.80
27	LD	79	ARG	NE-CZ-NH2	-7.09	116.75	120.30
35	L1	56	VAL	CG1-CB-CG2	7.09	122.24	110.90
2	SA	510	A	P-O5'-C5'	7.09	132.24	120.90
2	SA	1469	C	O4'-C1'-N1	7.09	113.87	108.20
2	SA	338	A	C6-N1-C2	-7.09	114.35	118.60
2	SA	824	G	O4'-C1'-N9	7.09	113.87	108.20
2	SA	1504	G	C2-N3-C4	7.09	115.44	111.90
17	SQ	39	ARG	NE-CZ-NH1	7.09	123.84	120.30
26	LA	137	U	C5-C6-N1	7.09	126.24	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	726	G	O4'-C1'-N9	7.09	113.87	108.20
26	LA	1704	C	C4-C5-C6	-7.09	113.86	117.40
26	LA	2129	C	C4'-C3'-C2'	-7.09	95.51	102.60
26	LA	2766	A	C8-N9-C4	-7.09	102.97	105.80
2	SA	1080	A	C2-N3-C4	7.08	114.14	110.60
26	LA	573	U	N1-C2-N3	-7.08	110.65	114.90
26	LA	815	C	C1'-O4'-C4'	-7.08	104.23	109.90
26	LA	2804	U	C5-C6-N1	-7.08	119.16	122.70
2	SA	103	U	C5-C6-N1	7.08	126.24	122.70
2	SA	547	A	N7-C8-N9	-7.08	110.26	113.80
2	SA	1281	C	P-O5'-C5'	7.08	132.23	120.90
26	LA	563	A	C6-N1-C2	-7.08	114.35	118.60
26	LA	628	G	C8-N9-C4	7.08	109.23	106.40
26	LA	769	U	C5-C6-N1	-7.08	119.16	122.70
26	LA	1522	A	N1-C2-N3	-7.08	125.76	129.30
26	LA	1915	C	N3-C4-N4	7.08	122.96	118.00
26	LA	2155	U	C1'-O4'-C4'	-7.08	104.23	109.90
26	LA	2203	U	C2-N1-C1'	7.08	126.20	117.70
26	LA	2218	G	O4'-C1'-N9	7.08	113.87	108.20
26	LA	2292	U	O4'-C1'-N1	7.08	113.87	108.20
2	SA	321	A	C4'-C3'-C2'	-7.08	95.52	102.60
2	SA	511	C	C2-N1-C1'	-7.08	111.01	118.80
2	SA	812	G	O4'-C4'-C3'	-7.08	96.92	104.00
2	SA	905	U	C2-N3-C4	-7.08	122.75	127.00
2	SA	1494	G	C4-C5-C6	7.08	123.05	118.80
26	LA	182	A	N3-C4-N9	-7.08	121.73	127.40
26	LA	1031	G	N1-C6-O6	7.08	124.15	119.90
26	LA	1596	A	N1-C6-N6	7.08	122.85	118.60
26	LA	1701	A	C8-N9-C4	7.08	108.63	105.80
26	LA	2669	G	C5'-C4'-C3'	7.08	127.33	116.00
26	LA	2738	A	N7-C8-N9	-7.08	110.26	113.80
2	SA	157	U	C5-C4-O4	-7.08	121.65	125.90
2	SA	1172	C	C4-C5-C6	7.08	120.94	117.40
2	SA	1477	U	C4'-C3'-C2'	-7.08	95.52	102.60
26	LA	1022	G	C4-C5-N7	7.08	113.63	110.80
26	LA	1990	C	N1-C2-N3	7.08	124.16	119.20
26	LA	2536	G	N3-C2-N2	7.08	124.86	119.90
2	SA	4	U	N3-C4-C5	7.08	118.85	114.60
2	SA	14	U	O4'-C1'-N1	7.08	113.86	108.20
2	SA	86	G	N7-C8-N9	7.08	116.64	113.10
2	SA	110	C	N3-C4-N4	7.08	122.96	118.00
2	SA	115	G	C5-N7-C8	7.08	107.84	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	762	U	P-O3'-C3'	7.08	128.19	119.70
26	LA	650	C	C2-N3-C4	-7.08	116.36	119.90
26	LA	817	C	C6-N1-C2	-7.08	117.47	120.30
26	LA	1029	A	N7-C8-N9	7.08	117.34	113.80
26	LA	1242	U	C5'-C4'-C3'	-7.08	104.67	116.00
26	LA	1311	G	C8-N9-C4	-7.08	103.57	106.40
26	LA	1422	G	C4-C5-N7	7.08	113.63	110.80
26	LA	1843	C	C5'-C4'-O4'	7.08	117.59	109.10
34	L0	29	ARG	NE-CZ-NH2	7.08	123.84	120.30
26	LA	1610	A	N7-C8-N9	7.08	117.34	113.80
2	SA	303	A	C5-C6-N1	-7.08	114.16	117.70
2	SA	1294	G	C5-C6-N1	7.08	115.04	111.50
26	LA	384	A	C4-C5-C6	-7.08	113.46	117.00
26	LA	517	C	C6-N1-C2	-7.08	117.47	120.30
26	LA	1176	U	C2-N1-C1'	7.08	126.19	117.70
26	LA	1425	G	N1-C6-O6	7.08	124.14	119.90
26	LA	1444	G	P-O3'-C3'	7.08	128.19	119.70
26	LA	2190	G	C5-C6-O6	-7.08	124.36	128.60
26	LA	2217	G	N1-C6-O6	-7.08	115.66	119.90
26	LA	2512	C	N1-C2-N3	7.08	124.15	119.20
2	SA	15	G	C8-N9-C4	-7.07	103.57	106.40
2	SA	1031	C	C5-C4-N4	7.07	125.15	120.20
21	SE	141	ASP	N-CA-CB	-7.07	97.87	110.60
26	LA	713	G	O4'-C1'-N9	7.07	113.86	108.20
26	LA	1680	U	C5'-C4'-O4'	-7.07	100.61	109.10
2	SA	565	U	C2-N1-C1'	-7.07	109.21	117.70
2	SA	1284	C	C5-C6-N1	7.07	124.54	121.00
26	LA	1494	A	N1-C6-N6	7.07	122.84	118.60
26	LA	2146	C	O4'-C1'-C2'	-7.07	98.73	105.80
2	SA	132	C	O4'-C1'-N1	7.07	113.86	108.20
2	SA	173	U	O4'-C1'-C2'	7.07	113.96	107.60
2	SA	1209	C	O5'-P-OP1	-7.07	99.34	105.70
2	SA	1243	C	C5-C6-N1	-7.07	117.46	121.00
4	S2	58	A	N1-C6-N6	7.07	122.84	118.60
12	SL	98	ARG	NH1-CZ-NH2	-7.07	111.62	119.40
25	LB	84	G	C8-N9-C4	7.07	109.23	106.40
26	LA	1483	G	C8-N9-C1'	7.07	136.19	127.00
26	LA	1300	G	C5'-C4'-O4'	7.07	117.58	109.10
26	LA	1950	G	C6-N1-C2	-7.07	120.86	125.10
26	LA	2213	U	C1'-O4'-C4'	-7.07	104.25	109.90
2	SA	226	G	C4-C5-C6	-7.07	114.56	118.80
2	SA	496	A	P-O5'-C5'	7.07	132.21	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	778	G	N3-C2-N2	7.07	124.85	119.90
2	SA	1489	G	C2-N3-C4	-7.07	108.37	111.90
24	S3	361	ARG	NH1-CZ-NH2	-7.07	111.63	119.40
25	LB	6	G	N3-C4-N9	7.07	130.24	126.00
26	LA	8	C	C4-C5-C6	7.07	120.93	117.40
26	LA	1171	G	C5'-C4'-O4'	7.07	117.58	109.10
26	LA	1769	U	C5-C6-N1	-7.07	119.17	122.70
26	LA	2210	U	C2-N1-C1'	7.07	126.18	117.70
26	LA	2294	G	C6-N1-C2	-7.07	120.86	125.10
2	SA	64	G	P-O3'-C3'	-7.07	111.22	119.70
2	SA	96	U	C6-N1-C1'	7.07	131.09	121.20
2	SA	662	U	C5-C4-O4	-7.07	121.66	125.90
26	LA	721	A	C6-C5-N7	-7.07	127.36	132.30
26	LA	1347	A	C5'-C4'-C3'	-7.07	104.69	116.00
26	LA	2315	G	C5-N7-C8	7.07	107.83	104.30
51	LI	7	ASP	CB-CG-OD2	7.07	124.66	118.30
2	SA	609	A	N9-C1'-C2'	-7.06	104.23	112.00
2	SA	795	C	C6-N1-C2	-7.06	117.47	120.30
26	LA	1330	C	N3-C2-O2	-7.06	116.95	121.90
26	LA	2898	U	O4'-C1'-N1	7.06	113.85	108.20
2	SA	1	A	N1-C6-N6	-7.06	114.36	118.60
2	SA	55	A	N1-C6-N6	-7.06	114.36	118.60
24	S3	356	ARG	NE-CZ-NH1	7.06	123.83	120.30
26	LA	554	U	C2-N3-C4	-7.06	122.76	127.00
26	LA	875	G	N1-C2-N3	7.06	128.14	123.90
26	LA	943	A	C5-C6-N6	7.06	129.35	123.70
26	LA	1646	C	C5-C6-N1	-7.06	117.47	121.00
26	LA	2041	U	C5-C4-O4	-7.06	121.66	125.90
26	LA	2216	G	C6-N1-C2	-7.06	120.86	125.10
26	LA	2345	G	N9-C4-C5	7.06	108.22	105.40
26	LA	2586	U	O4'-C1'-N1	7.06	113.85	108.20
2	SA	1014	A	O4'-C1'-N9	7.06	113.85	108.20
2	SA	1104	G	N3-C4-C5	-7.06	125.07	128.60
3	S1	30	U	C4'-C3'-C2'	-7.06	95.54	102.60
26	LA	2033	A	C5-N7-C8	-7.06	100.37	103.90
2	SA	778	G	N9-C4-C5	7.06	108.22	105.40
2	SA	1206	G	C4-N9-C1'	-7.06	117.32	126.50
26	LA	515	A	C2-N3-C4	-7.06	107.07	110.60
26	LA	780	G	C3'-C2'-C1'	7.06	107.15	101.50
26	LA	2158	A	C3'-C2'-C1'	-7.06	95.85	101.50
26	LA	2489	U	O4'-C1'-N1	7.06	113.85	108.20
46	LH	163	TYR	CA-CB-CG	7.06	126.81	113.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	998	C	N1-C2-O2	7.06	123.13	118.90
2	SA	1306	A	O4'-C1'-N9	7.06	113.85	108.20
2	SA	1531	A	N7-C8-N9	7.06	117.33	113.80
26	LA	470	A	C4-C5-C6	-7.06	113.47	117.00
26	LA	904	G	C4-C5-C6	-7.06	114.56	118.80
26	LA	1713	A	C6-C5-N7	-7.06	127.36	132.30
26	LA	2509	G	C6-C5-N7	-7.06	126.17	130.40
26	LA	2576	G	O4'-C1'-N9	7.06	113.85	108.20
26	LA	2858	C	C6-N1-C2	-7.06	117.48	120.30
26	LA	2892	G	N9-C4-C5	7.06	108.22	105.40
2	SA	50	A	C6-N1-C2	7.06	122.83	118.60
2	SA	527	G	O4'-C4'-C3'	-7.06	96.94	104.00
2	SA	559	A	N1-C6-N6	7.06	122.83	118.60
26	LA	1705	A	C6-N1-C2	7.06	122.83	118.60
26	LA	510	C	C4-C5-C6	-7.05	113.87	117.40
26	LA	568	U	N3-C4-O4	-7.05	114.46	119.40
26	LA	2472	G	C5'-C4'-O4'	7.05	117.56	109.10
26	LA	2514	U	O4'-C1'-N1	7.05	113.84	108.20
26	LA	2747	G	C4-C5-N7	7.05	113.62	110.80
40	L4	5	ARG	NE-CZ-NH2	-7.05	116.77	120.30
26	LA	330	A	C2-N3-C4	-7.05	107.07	110.60
26	LA	718	A	C2-N3-C4	-7.05	107.07	110.60
26	LA	888	C	C2-N1-C1'	7.05	126.56	118.80
26	LA	1220	G	C6-N1-C2	-7.05	120.87	125.10
26	LA	1333	G	C4-C5-C6	7.05	123.03	118.80
26	LA	1510	G	C5'-C4'-O4'	7.05	117.56	109.10
26	LA	2458	G	O3'-P-O5'	-7.05	90.60	104.00
2	SA	55	A	C4-C5-N7	7.05	114.23	110.70
2	SA	670	G	N3-C4-C5	-7.05	125.07	128.60
26	LA	151	C	O4'-C1'-N1	7.05	113.84	108.20
26	LA	229	C	N1-C2-O2	7.05	123.13	118.90
26	LA	417	C	O4'-C1'-N1	7.05	113.84	108.20
26	LA	1206	G	N9-C1'-C2'	-7.05	104.24	112.00
26	LA	1732	C	N3-C4-C5	-7.05	119.08	121.90
26	LA	2013	A	C4-C5-N7	7.05	114.23	110.70
2	SA	1434	A	C4-C5-N7	-7.05	107.17	110.70
4	S2	14	A	P-O3'-C3'	7.05	128.16	119.70
25	LB	70	C	N1-C2-N3	7.05	124.14	119.20
26	LA	15	G	C4-C5-N7	7.05	113.62	110.80
26	LA	125	A	C4'-C3'-C2'	-7.05	95.55	102.60
26	LA	858	G	C6-C5-N7	-7.05	126.17	130.40
26	LA	1135	C	N3-C2-O2	-7.05	116.97	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2190	G	C6-N1-C2	7.05	129.33	125.10
26	LA	2381	A	C8-N9-C4	-7.05	102.98	105.80
26	LA	2669	G	N9-C1'-C2'	-7.05	104.25	112.00
26	LA	2719	G	C2-N3-C4	-7.05	108.38	111.90
2	SA	84	U	C1'-O4'-C4'	-7.05	104.26	109.90
2	SA	706	A	C2-N3-C4	7.05	114.12	110.60
2	SA	1143	G	N3-C4-C5	7.05	132.12	128.60
2	SA	1168	U	C2-N3-C4	7.05	131.23	127.00
2	SA	1238	A	C6-C5-N7	-7.05	127.37	132.30
26	LA	1786	A	O4'-C1'-C2'	-7.05	98.75	105.80
26	LA	2108	A	C4-C5-C6	-7.05	113.48	117.00
26	LA	2183	A	C5-N7-C8	-7.05	100.38	103.90
26	LA	2245	U	OP1-P-O3'	7.05	120.71	105.20
2	SA	374	A	N1-C2-N3	7.05	132.82	129.30
2	SA	1477	U	C3'-C2'-C1'	7.05	107.14	101.50
26	LA	116	C	O4'-C1'-N1	7.05	113.84	108.20
26	LA	617	G	N3-C4-C5	-7.05	125.08	128.60
26	LA	781	A	C5-C6-N1	-7.05	114.18	117.70
26	LA	784	G	N3-C4-C5	-7.05	125.08	128.60
26	LA	793	A	OP1-P-OP2	-7.05	109.03	119.60
26	LA	807	U	N1-C2-N3	7.05	119.13	114.90
26	LA	822	G	C4'-C3'-C2'	7.05	109.65	102.60
26	LA	945	A	C2-N3-C4	7.05	114.12	110.60
26	LA	950	G	C8-N9-C4	-7.05	103.58	106.40
26	LA	1194	A	C8-N9-C4	7.05	108.62	105.80
26	LA	2219	U	O4'-C1'-N1	7.05	113.84	108.20
26	LA	2304	G	C2'-C3'-O3'	7.05	125.00	109.50
26	LA	2740	A	C8-N9-C4	7.05	108.62	105.80
32	LY	38	ARG	NE-CZ-NH1	7.05	123.82	120.30
2	SA	1300	G	C8-N9-C4	7.04	109.22	106.40
26	LA	641	U	N3-C4-O4	7.04	124.33	119.40
26	LA	942	G	N3-C2-N2	7.04	124.83	119.90
26	LA	1316	U	C1'-O4'-C4'	-7.04	104.26	109.90
26	LA	1567	G	C3'-C2'-C1'	-7.04	95.86	101.50
26	LA	1824	G	N9-C4-C5	7.04	108.22	105.40
2	SA	38	G	O4'-C1'-N9	7.04	113.84	108.20
2	SA	107	G	N3-C4-C5	-7.04	125.08	128.60
2	SA	355	C	C6-N1-C2	-7.04	117.48	120.30
2	SA	588	G	C4-C5-N7	7.04	113.62	110.80
2	SA	1484	C	P-O3'-C3'	7.04	128.15	119.70
3	S1	21	U	C4'-C3'-C2'	-7.04	95.56	102.60
26	LA	285	G	C5-C6-N1	7.04	115.02	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	573	U	C4'-C3'-C2'	-7.04	95.56	102.60
26	LA	606	U	P-O3'-C3'	7.04	128.15	119.70
26	LA	730	A	N9-C4-C5	7.04	108.62	105.80
26	LA	1028	A	C2-N3-C4	-7.04	107.08	110.60
26	LA	1113	U	O5'-P-OP1	7.04	119.15	110.70
26	LA	2394	C	N1-C2-O2	7.04	123.13	118.90
26	LA	2448	A	C5-C6-N1	7.04	121.22	117.70
26	LA	2577	A	C3'-C2'-C1'	-7.04	95.86	101.50
2	SA	142	G	N1-C6-O6	-7.04	115.67	119.90
2	SA	227	G	C5-N7-C8	-7.04	100.78	104.30
2	SA	703	G	OP1-P-OP2	-7.04	109.04	119.60
2	SA	787	A	C2-N3-C4	7.04	114.12	110.60
2	SA	1273	C	O4'-C1'-N1	7.04	113.83	108.20
23	SR	52	ARG	NE-CZ-NH2	7.04	123.82	120.30
26	LA	732	C	C6-N1-C2	-7.04	117.48	120.30
26	LA	1009	A	C5'-C4'-O4'	7.04	117.55	109.10
26	LA	1997	C	N3-C2-O2	-7.04	116.97	121.90
26	LA	2078	C	C5'-C4'-O4'	7.04	117.55	109.10
26	LA	2181	U	OP1-P-OP2	-7.04	109.04	119.60
26	LA	2254	C	N3-C4-N4	7.04	122.93	118.00
26	LA	2741	A	C8-N9-C4	-7.04	102.98	105.80
44	LF	35	TYR	CB-CG-CD2	-7.04	116.78	121.00
26	LA	480	A	N1-C2-N3	-7.04	125.78	129.30
26	LA	1358	G	O4'-C1'-N9	7.04	113.83	108.20
2	SA	383	A	P-O3'-C3'	7.04	128.15	119.70
2	SA	1497	G	C4-N9-C1'	-7.04	117.35	126.50
25	LB	114	C	C2-N3-C4	-7.04	116.38	119.90
26	LA	405	U	C5-C6-N1	-7.04	119.18	122.70
26	LA	616	A	C5-N7-C8	7.04	107.42	103.90
26	LA	1907	G	C4-N9-C1'	-7.04	117.35	126.50
27	LD	68	ARG	NE-CZ-NH1	7.04	123.82	120.30
2	SA	1103	C	N3-C2-O2	-7.04	116.97	121.90
26	LA	143	C	N1-C2-O2	7.04	123.12	118.90
26	LA	1285	A	N9-C4-C5	-7.04	102.98	105.80
26	LA	2769	U	N1-C2-N3	7.04	119.12	114.90
2	SA	760	G	C4'-C3'-C2'	-7.04	95.56	102.60
2	SA	833	G	P-O5'-C5'	-7.04	109.64	120.90
3	S1	30	U	C1'-O4'-C4'	-7.04	104.27	109.90
25	LB	46	A	N1-C6-N6	7.04	122.82	118.60
26	LA	35	G	C5-C6-N1	7.04	115.02	111.50
26	LA	374	A	C5-C6-N6	-7.04	118.07	123.70
26	LA	1141	U	N3-C4-C5	7.04	118.82	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1969	A	P-O3'-C3'	7.04	128.14	119.70
26	LA	2502	G	C5-C6-N1	-7.04	107.98	111.50
26	LA	2776	A	C5-C6-N1	-7.04	114.18	117.70
2	SA	1529	G	N7-C8-N9	-7.03	109.58	113.10
3	S1	27	A	C4'-C3'-C2'	-7.03	95.57	102.60
26	LA	59	U	C4-C5-C6	-7.03	115.48	119.70
26	LA	184	C	C5'-C4'-C3'	-7.03	104.75	116.00
26	LA	712	G	C6-N1-C2	7.03	129.32	125.10
26	LA	1360	G	N7-C8-N9	7.03	116.62	113.10
26	LA	2053	G	N3-C2-N2	7.03	124.82	119.90
2	SA	706	A	C4-C5-C6	7.03	120.52	117.00
2	SA	1323	G	N3-C4-C5	-7.03	125.08	128.60
26	LA	1647	U	C6-N1-C2	-7.03	116.78	121.00
26	LA	1712	U	N1-C2-N3	-7.03	110.68	114.90
26	LA	1724	G	O4'-C1'-N9	7.03	113.83	108.20
26	LA	1834	U	P-O3'-C3'	7.03	128.14	119.70
26	LA	2699	C	OP1-P-OP2	-7.03	109.05	119.60
2	SA	47	C	N3-C4-C5	-7.03	119.09	121.90
2	SA	462	G	C1'-O4'-C4'	-7.03	104.28	109.90
26	LA	85	G	N3-C4-N9	7.03	130.22	126.00
26	LA	228	C	C1'-O4'-C4'	-7.03	104.28	109.90
26	LA	1006	C	C2-N3-C4	-7.03	116.39	119.90
26	LA	1498	C	C6-N1-C2	-7.03	117.49	120.30
26	LA	1763	G	C5'-C4'-O4'	7.03	117.54	109.10
26	LA	2043	C	C5-C6-N1	-7.03	117.48	121.00
26	LA	2302	U	N3-C2-O2	-7.03	117.28	122.20
2	SA	1155	A	C5-C6-N1	7.03	121.22	117.70
2	SA	1463	U	C5-C4-O4	-7.03	121.68	125.90
26	LA	44	A	N1-C2-N3	7.03	132.81	129.30
26	LA	242	G	C2-N3-C4	-7.03	108.39	111.90
26	LA	409	G	N3-C2-N2	7.03	124.82	119.90
2	SA	292	G	N1-C2-N2	-7.03	109.88	116.20
2	SA	894	G	C4'-C3'-C2'	-7.03	95.57	102.60
2	SA	1180	A	C6-C5-N7	-7.03	127.38	132.30
2	SA	1337	G	C1'-O4'-C4'	-7.03	104.28	109.90
2	SA	1361	G	C5'-C4'-C3'	7.03	127.24	116.00
15	SO	42	PHE	CB-CG-CD1	-7.03	115.88	120.80
26	LA	450	G	N1-C2-N3	7.03	128.12	123.90
26	LA	488	G	P-O5'-C5'	7.03	132.15	120.90
26	LA	490	C	P-O3'-C3'	7.03	128.13	119.70
26	LA	994	C	C6-N1-C2	-7.03	117.49	120.30
26	LA	1577	C	C4-C5-C6	-7.03	113.89	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	677	U	N1-C2-N3	-7.03	110.68	114.90
2	SA	1048	G	C5-C6-N1	7.03	115.01	111.50
2	SA	1352	C	C2-N3-C4	-7.03	116.39	119.90
25	LB	21	G	C3'-C2'-C1'	7.03	107.12	101.50
26	LA	295	G	C5-N7-C8	-7.03	100.79	104.30
26	LA	785	G	O4'-C1'-N9	7.03	113.82	108.20
26	LA	1930	G	O5'-P-OP2	-7.03	99.38	105.70
26	LA	2197	U	O4'-C1'-N1	7.03	113.82	108.20
57	LS	54	ARG	NE-CZ-NH1	7.03	123.81	120.30
4	S2	27	G	O4'-C1'-N9	7.02	113.82	108.20
26	LA	226	A	O4'-C1'-C2'	7.02	113.92	107.60
2	SA	342	C	O4'-C1'-N1	7.02	113.82	108.20
2	SA	366	A	C1'-O4'-C4'	-7.02	104.28	109.90
2	SA	1383	C	N1-C2-N3	7.02	124.11	119.20
26	LA	1217	U	C6-N1-C2	7.02	125.21	121.00
31	LX	2	PHE	CD1-CG-CD2	7.02	127.43	118.30
38	LE	181	ASP	CB-CG-OD2	-7.02	111.98	118.30
2	SA	530	G	N3-C2-N2	7.02	124.81	119.90
26	LA	475	C	O4'-C1'-C2'	7.02	113.92	107.60
2	SA	117	G	C5-C6-N1	-7.02	107.99	111.50
2	SA	187	G	C4-C5-N7	7.02	113.61	110.80
2	SA	212	G	P-O3'-C3'	-7.02	111.28	119.70
2	SA	449	G	N7-C8-N9	7.02	116.61	113.10
25	LB	21	G	C4-C5-N7	7.02	113.61	110.80
26	LA	232	G	N1-C6-O6	7.02	124.11	119.90
26	LA	1014	A	C8-N9-C4	-7.02	102.99	105.80
26	LA	1082	U	P-O3'-C3'	7.02	128.12	119.70
26	LA	1610	A	C5-C6-N6	7.02	129.32	123.70
38	LE	200	ASP	CB-CG-OD2	7.02	124.62	118.30
2	SA	283	U	O4'-C1'-N1	7.02	113.81	108.20
2	SA	1091	U	C5-C4-O4	-7.02	121.69	125.90
2	SA	1252	A	C4-C5-N7	7.02	114.21	110.70
2	SA	1338	G	O4'-C1'-N9	7.02	113.81	108.20
2	SA	1478	U	N3-C4-O4	-7.02	114.49	119.40
4	S2	38	A	C5-C6-N6	7.02	129.31	123.70
26	LA	592	A	C6-C5-N7	-7.02	127.39	132.30
26	LA	1081	U	P-O5'-C5'	7.02	132.13	120.90
26	LA	1372	U	C2-N3-C4	-7.02	122.79	127.00
26	LA	1641	A	C2-N3-C4	-7.02	107.09	110.60
26	LA	2689	U	O4'-C1'-N1	7.02	113.81	108.20
2	SA	520	A	N1-C2-N3	7.02	132.81	129.30
26	LA	1249	U	C5'-C4'-C3'	-7.02	104.77	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1795	C	O4'-C1'-N1	7.02	113.81	108.20
26	LA	2803	G	C5'-C4'-C3'	-7.02	104.78	116.00
2	SA	460	A	N7-C8-N9	-7.01	110.29	113.80
4	S2	65	G	O4'-C4'-C3'	-7.01	96.98	104.00
4	S2	77	A	C6-C5-N7	7.01	137.21	132.30
26	LA	1809	A	N1-C2-N3	7.01	132.81	129.30
26	LA	1992	G	N3-C4-N9	-7.01	121.79	126.00
25	LB	36	C	C1'-O4'-C4'	-7.01	104.29	109.90
26	LA	805	G	N1-C6-O6	-7.01	115.69	119.90
26	LA	2557	G	C6-N1-C2	-7.01	120.89	125.10
26	LA	2841	C	P-O5'-C5'	7.01	132.12	120.90
26	LA	2897	U	N3-C4-O4	7.01	124.31	119.40
45	LG	156	THR	N-CA-CB	7.01	123.62	110.30
2	SA	40	C	O4'-C1'-N1	7.01	113.81	108.20
2	SA	1382	C	C5-C6-N1	-7.01	117.49	121.00
12	SL	109	ARG	NE-CZ-NH1	7.01	123.81	120.30
26	LA	1358	G	C6-N1-C2	-7.01	120.89	125.10
26	LA	1572	A	O4'-C1'-N9	7.01	113.81	108.20
26	LA	1904	G	O4'-C1'-C2'	7.01	113.91	107.60
26	LA	1962	C	N1-C2-O2	7.01	123.11	118.90
26	LA	2333	A	C5-N7-C8	-7.01	100.39	103.90
2	SA	47	C	C4-C5-C6	7.01	120.91	117.40
2	SA	82	G	C8-N9-C4	-7.01	103.60	106.40
2	SA	469	C	N3-C4-C5	7.01	124.70	121.90
2	SA	1262	C	C5'-C4'-O4'	7.01	117.51	109.10
2	SA	1305	G	N1-C6-O6	7.01	124.11	119.90
10	SJ	62	ARG	NH1-CZ-NH2	-7.01	111.69	119.40
20	SD	64	TYR	CB-CG-CD1	7.01	125.20	121.00
26	LA	255	A	N1-C6-N6	-7.01	114.39	118.60
26	LA	403	U	C2-N1-C1'	-7.01	109.29	117.70
26	LA	776	G	C2-N3-C4	-7.01	108.40	111.90
26	LA	2227	A	C4'-C3'-C2'	-7.01	95.59	102.60
26	LA	2282	G	C5'-C4'-C3'	-7.01	104.78	116.00
26	LA	2434	A	P-O3'-C3'	-7.01	111.29	119.70
26	LA	2696	U	C3'-C2'-C1'	-7.01	95.89	101.50
27	LD	176	ARG	NE-CZ-NH1	7.01	123.81	120.30
2	SA	800	G	N3-C2-N2	7.01	124.81	119.90
25	LB	41	G	N3-C4-C5	7.01	132.10	128.60
26	LA	1599	U	N1-C2-N3	7.01	119.11	114.90
26	LA	1794	A	C5'-C4'-O4'	7.01	117.51	109.10
26	LA	2373	G	N3-C4-N9	-7.01	121.80	126.00
2	SA	740	U	N1-C2-N3	7.01	119.10	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1276	G	P-O3'-C3'	-7.01	111.29	119.70
2	SA	1423	G	C4-C5-N7	7.01	113.60	110.80
4	S2	76	C	O4'-C1'-N1	7.01	113.80	108.20
5	ST	36	ALA	N-CA-CB	-7.01	100.29	110.10
26	LA	1266	G	C5-C6-O6	-7.01	124.40	128.60
26	LA	2373	G	C5-C6-N1	7.01	115.00	111.50
2	SA	66	A	N1-C6-N6	7.00	122.80	118.60
2	SA	626	G	C3'-C2'-C1'	7.00	107.10	101.50
25	LB	10	G	C8-N9-C4	-7.00	103.60	106.40
26	LA	651	G	C1'-O4'-C4'	-7.00	104.30	109.90
26	LA	1017	G	P-O5'-C5'	-7.00	109.69	120.90
2	SA	49	U	N3-C2-O2	7.00	127.10	122.20
2	SA	327	A	C5-C6-N1	-7.00	114.20	117.70
2	SA	465	A	P-O5'-C5'	7.00	132.10	120.90
2	SA	1340	A	C8-N9-C4	7.00	108.60	105.80
26	LA	413	C	C6-N1-C2	-7.00	117.50	120.30
26	LA	1172	C	C5-C6-N1	7.00	124.50	121.00
26	LA	1956	U	C4'-C3'-C2'	-7.00	95.60	102.60
26	LA	2827	C	C2'-C3'-O3'	7.00	124.91	109.50
2	SA	637	C	O4'-C1'-N1	7.00	113.80	108.20
2	SA	926	G	C2'-C3'-O3'	7.00	124.90	113.70
2	SA	934	C	N3-C2-O2	-7.00	117.00	121.90
2	SA	1205	U	N1-C2-N3	7.00	119.10	114.90
2	SA	1463	U	C5-C6-N1	7.00	126.20	122.70
4	S2	45	A	P-O3'-C3'	7.00	128.10	119.70
26	LA	684	G	N1-C2-N2	-7.00	109.90	116.20
26	LA	1516	G	C2-N3-C4	-7.00	108.40	111.90
26	LA	1663	G	C5'-C4'-O4'	7.00	117.50	109.10
26	LA	1841	U	N1-C2-O2	-7.00	117.90	122.80
26	LA	2615	U	C4-C5-C6	7.00	123.90	119.70
17	SQ	5	ARG	NE-CZ-NH2	-7.00	116.80	120.30
26	LA	792	A	N1-C2-N3	7.00	132.80	129.30
26	LA	1493	C	C6-N1-C1'	-7.00	112.40	120.80
26	LA	1902	C	C4'-C3'-C2'	-7.00	95.60	102.60
2	SA	31	G	C5-C6-O6	-7.00	124.40	128.60
2	SA	507	C	C6-N1-C2	7.00	123.10	120.30
2	SA	714	G	C8-N9-C4	7.00	109.20	106.40
2	SA	822	U	C5-C6-N1	-7.00	119.20	122.70
2	SA	894	G	N1-C2-N2	-7.00	109.90	116.20
2	SA	1095	U	C2-N3-C4	-7.00	122.80	127.00
26	LA	874	G	C5-C6-O6	-7.00	124.40	128.60
26	LA	911	A	C2-N3-C4	-7.00	107.10	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1676	A	N1-C2-N3	-7.00	125.80	129.30
26	LA	1737	G	P-O5'-C5'	7.00	132.10	120.90
26	LA	2430	A	C8-N9-C4	-7.00	103.00	105.80
26	LA	2527	C	N3-C4-N4	-7.00	113.10	118.00
2	SA	869	G	N1-C2-N3	-7.00	119.70	123.90
4	S2	66	C	N3-C4-N4	7.00	122.90	118.00
26	LA	708	G	P-O3'-C3'	7.00	128.10	119.70
26	LA	912	C	C1'-O4'-C4'	-7.00	104.30	109.90
2	SA	83	C	N3-C4-C5	-7.00	119.10	121.90
2	SA	897	C	N1-C2-N3	7.00	124.10	119.20
26	LA	293	U	C2-N3-C4	-7.00	122.80	127.00
2	SA	1501	C	C5-C4-N4	-6.99	115.30	120.20
19	SC	106	ARG	NE-CZ-NH1	6.99	123.80	120.30
25	LB	61	G	N3-C4-N9	-6.99	121.80	126.00
26	LA	298	G	C2-N3-C4	-6.99	108.40	111.90
26	LA	550	C	C6-N1-C2	-6.99	117.50	120.30
26	LA	672	C	N3-C2-O2	-6.99	117.00	121.90
26	LA	2663	G	N7-C8-N9	-6.99	109.60	113.10
2	SA	115	G	C5-C6-O6	-6.99	124.41	128.60
3	S1	54	U	C6-N1-C2	-6.99	116.81	121.00
26	LA	1333	G	N1-C2-N2	-6.99	109.91	116.20
26	LA	1491	G	N1-C2-N3	6.99	128.09	123.90
26	LA	2675	A	P-O3'-C3'	6.99	128.09	119.70
2	SA	56	U	C5-C6-N1	-6.99	119.20	122.70
2	SA	172	A	C5-N7-C8	-6.99	100.41	103.90
2	SA	366	A	O4'-C1'-N9	6.99	113.79	108.20
2	SA	418	C	C4'-C3'-C2'	-6.99	95.61	102.60
2	SA	590	U	C5-C4-O4	-6.99	121.70	125.90
2	SA	748	G	C6-N1-C2	-6.99	120.91	125.10
2	SA	1022	A	C6-N1-C2	-6.99	114.41	118.60
2	SA	1327	C	N3-C4-N4	6.99	122.89	118.00
26	LA	153	U	C1'-O4'-C4'	-6.99	104.31	109.90
26	LA	160	A	O4'-C1'-N9	6.99	113.79	108.20
26	LA	459	U	P-O5'-C5'	6.99	132.08	120.90
26	LA	753	A	O5'-P-OP1	6.99	119.09	110.70
26	LA	804	A	C5-C6-N6	6.99	129.29	123.70
26	LA	1156	A	C5-C6-N6	-6.99	118.11	123.70
26	LA	1654	A	C5-C6-N1	6.99	121.19	117.70
26	LA	2543	G	C6-C5-N7	-6.99	126.20	130.40
2	SA	152	A	C8-N9-C4	6.99	108.60	105.80
2	SA	682	G	C5-N7-C8	6.99	107.80	104.30
2	SA	722	G	N7-C8-N9	6.99	116.59	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	503	A	C6-N1-C2	-6.99	114.41	118.60
26	LA	936	A	N1-C6-N6	6.99	122.79	118.60
26	LA	1117	C	C2-N3-C4	-6.99	116.41	119.90
26	LA	1170	C	C5-C6-N1	6.99	124.50	121.00
26	LA	1546	G	N1-C6-O6	-6.99	115.71	119.90
26	LA	1694	C	N3-C2-O2	-6.99	117.01	121.90
26	LA	1916	A	N1-C6-N6	6.99	122.79	118.60
26	LA	2030	U	C2-N3-C4	-6.99	122.81	127.00
26	LA	2046	G	N1-C2-N2	-6.99	109.91	116.20
26	LA	2307	G	N1-C2-N2	6.99	122.49	116.20
26	LA	2887	A	C5'-C4'-O4'	6.99	117.49	109.10
44	LF	69	ARG	NE-CZ-NH1	6.99	123.79	120.30
7	SG	17	PHE	CB-CG-CD1	6.99	125.69	120.80
26	LA	76	C	N3-C4-C5	-6.99	119.11	121.90
26	LA	229	C	C2-N3-C4	6.99	123.39	119.90
26	LA	1713	A	C4-C5-C6	6.99	120.49	117.00
26	LA	2189	U	C5'-C4'-O4'	6.99	117.48	109.10
2	SA	445	G	C6-C5-N7	-6.99	126.21	130.40
2	SA	1070	U	N3-C4-O4	-6.99	114.51	119.40
2	SA	1345	U	P-O3'-C3'	6.99	128.08	119.70
16	SP	56	ARG	NE-CZ-NH2	-6.99	116.81	120.30
24	S3	334	PHE	CB-CG-CD1	6.99	125.69	120.80
26	LA	264	C	C2-N3-C4	-6.99	116.41	119.90
26	LA	1085	A	C5-C6-N6	-6.99	118.11	123.70
26	LA	2235	G	C6-N1-C2	-6.99	120.91	125.10
26	LA	2451	A	C5-C6-N1	6.99	121.19	117.70
26	LA	2501	C	C5'-C4'-C3'	6.99	127.18	116.00
2	SA	1066	C	O4'-C1'-N1	6.98	113.79	108.20
26	LA	803	U	O4'-C1'-N1	6.98	113.79	108.20
26	LA	2504	U	C4'-C3'-C2'	-6.98	95.62	102.60
2	SA	288	A	P-O3'-C3'	-6.98	111.32	119.70
2	SA	561	U	C5'-C4'-C3'	6.98	127.17	116.00
2	SA	782	A	N1-C2-N3	6.98	132.79	129.30
2	SA	1068	G	N9-C4-C5	-6.98	102.61	105.40
3	S1	50	U	C6-N1-C2	6.98	125.19	121.00
26	LA	964	C	N3-C4-C5	6.98	124.69	121.90
26	LA	1336	A	O4'-C1'-N9	6.98	113.79	108.20
26	LA	1364	G	N3-C4-C5	-6.98	125.11	128.60
26	LA	1537	G	C3'-C2'-C1'	6.98	107.08	101.50
26	LA	1628	G	C5'-C4'-C3'	-6.98	104.83	116.00
26	LA	2144	G	N3-C4-C5	6.98	132.09	128.60
26	LA	2309	A	C6-C5-N7	-6.98	127.41	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2587	A	C4-C5-N7	-6.98	107.21	110.70
27	LD	261	ARG	NH1-CZ-NH2	-6.98	111.72	119.40
2	SA	670	G	N3-C2-N2	-6.98	115.01	119.90
2	SA	1092	A	C3'-C2'-C1'	6.98	107.08	101.50
2	SA	1175	G	P-O3'-C3'	-6.98	111.32	119.70
2	SA	1270	G	C5-N7-C8	-6.98	100.81	104.30
25	LB	9	G	N7-C8-N9	-6.98	109.61	113.10
26	LA	821	A	C4'-C3'-C2'	-6.98	95.62	102.60
26	LA	2590	A	C4'-C3'-C2'	-6.98	95.62	102.60
26	LA	2734	A	C6-N1-C2	-6.98	114.41	118.60
2	SA	794	A	N1-C6-N6	6.98	122.79	118.60
26	LA	2668	G	C5-C6-O6	6.98	132.79	128.60
26	LA	2676	C	C5-C4-N4	-6.98	115.31	120.20
2	SA	416	G	C5-C6-O6	-6.98	124.41	128.60
2	SA	1047	G	C2-N3-C4	6.98	115.39	111.90
26	LA	20	C	C4-C5-C6	6.98	120.89	117.40
26	LA	305	C	C1'-O4'-C4'	-6.98	104.32	109.90
26	LA	1346	G	C5-C6-O6	6.98	132.79	128.60
26	LA	2742	G	C5-N7-C8	-6.98	100.81	104.30
26	LA	2882	A	C1'-O4'-C4'	-6.98	104.32	109.90
26	LA	2895	G	O4'-C1'-N9	6.98	113.78	108.20
2	SA	513	C	N1-C2-N3	-6.98	114.32	119.20
2	SA	597	G	N1-C6-O6	-6.97	115.72	119.90
2	SA	886	G	P-O5'-C5'	6.97	132.06	120.90
2	SA	904	U	OP1-P-OP2	-6.97	109.14	119.60
2	SA	1387	G	C1'-O4'-C4'	-6.97	104.32	109.90
24	S3	82	ARG	NE-CZ-NH2	-6.97	116.81	120.30
26	LA	57	C	C4-C5-C6	6.97	120.89	117.40
26	LA	276	U	C5-C4-O4	-6.97	121.72	125.90
26	LA	827	U	N3-C4-C5	-6.97	110.42	114.60
26	LA	2535	G	C1'-O4'-C4'	-6.97	104.32	109.90
26	LA	2612	C	N3-C4-N4	6.97	122.88	118.00
26	LA	2806	C	C4'-C3'-C2'	-6.97	95.62	102.60
2	SA	246	A	O4'-C1'-N9	6.97	113.78	108.20
2	SA	303	A	P-O3'-C3'	-6.97	111.33	119.70
2	SA	1246	A	O4'-C1'-N9	6.97	113.78	108.20
25	LB	106	G	N1-C6-O6	6.97	124.08	119.90
26	LA	113	U	O5'-C5'-C4'	6.97	124.95	111.70
26	LA	759	G	C5-C6-O6	-6.97	124.42	128.60
26	LA	1279	G	N3-C2-N2	6.97	124.78	119.90
26	LA	2819	G	C3'-C2'-C1'	6.97	107.08	101.50
26	LA	2859	G	N9-C1'-C2'	-6.97	104.33	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	275	G	P-O5'-C5'	6.97	132.05	120.90
26	LA	2443	C	OP1-P-OP2	-6.97	109.14	119.60
2	SA	441	A	C5'-C4'-C3'	-6.97	104.85	116.00
25	LB	75	G	C1'-O4'-C4'	-6.97	104.33	109.90
25	LB	98	G	O4'-C1'-N9	6.97	113.78	108.20
26	LA	462	C	O3'-P-O5'	-6.97	90.76	104.00
26	LA	1976	U	C5-C6-N1	-6.97	119.22	122.70
26	LA	2020	A	P-O5'-C5'	-6.97	109.75	120.90
2	SA	489	C	C4-C5-C6	-6.97	113.92	117.40
3	S1	57	C	N3-C4-N4	6.97	122.88	118.00
4	S2	66	C	C2-N3-C4	-6.97	116.42	119.90
2	SA	84	U	C3'-C2'-C1'	-6.97	95.93	101.50
3	S1	33	A	N1-C2-N3	-6.97	125.82	129.30
26	LA	2030	U	C6-N1-C2	-6.97	116.82	121.00
26	LA	2129	C	O4'-C4'-C3'	6.97	111.67	106.10
26	LA	2348	U	N1-C2-N3	6.97	119.08	114.90
26	LA	2418	A	N1-C6-N6	-6.97	114.42	118.60
2	SA	677	U	P-O3'-C3'	6.96	128.06	119.70
2	SA	1305	G	C3'-C2'-C1'	6.96	107.07	101.50
22	SF	78	PHE	CB-CG-CD2	-6.96	115.92	120.80
26	LA	706	A	C5'-C4'-O4'	6.96	117.46	109.10
26	LA	1922	G	C3'-C2'-C1'	-6.96	95.93	101.50
26	LA	2869	G	N1-C2-N3	6.96	128.08	123.90
2	SA	732	C	N3-C2-O2	-6.96	117.03	121.90
26	LA	2831	G	C5-C6-N1	6.96	114.98	111.50
2	SA	67	C	O4'-C1'-N1	6.96	113.77	108.20
2	SA	1159	U	O4'-C1'-N1	6.96	113.77	108.20
25	LB	89	U	C5-C6-N1	6.96	126.18	122.70
26	LA	75	G	C8-N9-C4	-6.96	103.62	106.40
26	LA	1130	U	C5-C4-O4	-6.96	121.72	125.90
26	LA	1238	G	N7-C8-N9	6.96	116.58	113.10
26	LA	2256	G	O5'-P-OP2	-6.96	99.44	105.70
26	LA	2297	A	N7-C8-N9	-6.96	110.32	113.80
2	SA	645	G	N1-C6-O6	-6.96	115.72	119.90
26	LA	666	A	C8-N9-C4	6.96	108.58	105.80
26	LA	853	C	C1'-O4'-C4'	-6.96	104.33	109.90
2	SA	134	G	C8-N9-C4	-6.96	103.62	106.40
4	S2	74	A	N1-C6-N6	-6.96	114.42	118.60
26	LA	381	G	O3'-P-O5'	6.96	117.22	104.00
26	LA	1664	A	C8-N9-C4	-6.96	103.02	105.80
26	LA	1959	G	C6-N1-C2	-6.96	120.92	125.10
26	LA	2669	G	O4'-C1'-N9	6.96	113.77	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1109	C	C5-C4-N4	-6.96	115.33	120.20
2	SA	1242	G	N9-C4-C5	6.96	108.18	105.40
2	SA	1262	C	N1-C2-O2	-6.96	114.73	118.90
3	S1	46	C	C4-C5-C6	6.96	120.88	117.40
26	LA	67	U	C5-C6-N1	6.96	126.18	122.70
26	LA	711	G	O4'-C1'-N9	6.96	113.77	108.20
26	LA	756	A	C4-C5-N7	6.96	114.18	110.70
26	LA	1027	A	C4-C5-C6	-6.96	113.52	117.00
26	LA	1053	C	N1-C2-N3	6.96	124.07	119.20
26	LA	1663	G	O5'-P-OP1	-6.96	99.44	105.70
26	LA	2431	U	C5'-C4'-C3'	-6.96	104.87	116.00
26	LA	2668	G	C4-C5-N7	-6.96	108.02	110.80
2	SA	771	G	C5-C6-N1	6.96	114.98	111.50
2	SA	875	U	O4'-C1'-N1	6.96	113.76	108.20
26	LA	664	G	C1'-O4'-C4'	-6.96	104.34	109.90
26	LA	1858	A	C2-N3-C4	6.96	114.08	110.60
26	LA	2593	U	O4'-C1'-N1	6.96	113.76	108.20
29	LV	69	ARG	NE-CZ-NH1	6.96	123.78	120.30
2	SA	897	C	N3-C2-O2	-6.95	117.03	121.90
2	SA	995	C	O4'-C1'-N1	6.95	113.76	108.20
26	LA	264	C	C5'-C4'-O4'	6.95	117.44	109.10
26	LA	509	C	C6-N1-C1'	-6.95	112.46	120.80
26	LA	549	G	C4'-C3'-C2'	-6.95	95.65	102.60
26	LA	1103	A	C5'-C4'-O4'	6.95	117.44	109.10
26	LA	2413	G	N1-C6-O6	6.95	124.07	119.90
26	LA	2561	U	P-O3'-C3'	-6.95	111.36	119.70
26	LA	2846	G	C5-N7-C8	6.95	107.78	104.30
26	LA	894	U	O4'-C4'-C3'	-6.95	97.05	104.00
26	LA	1503	A	C6-C5-N7	6.95	137.17	132.30
26	LA	1857	G	N1-C2-N2	-6.95	109.94	116.20
26	LA	2585	U	P-O3'-C3'	6.95	128.04	119.70
2	SA	1399	C	N3-C2-O2	-6.95	117.03	121.90
12	SL	94	TYR	CB-CG-CD1	-6.95	116.83	121.00
26	LA	106	C	C6-N1-C2	-6.95	117.52	120.30
26	LA	372	G	O4'-C1'-C2'	-6.95	98.85	105.80
26	LA	491	G	O4'-C1'-N9	6.95	113.76	108.20
26	LA	1156	A	N7-C8-N9	-6.95	110.33	113.80
26	LA	1482	G	N9-C4-C5	6.95	108.18	105.40
26	LA	1512	C	N3-C4-C5	-6.95	119.12	121.90
26	LA	1559	U	P-O5'-C5'	6.95	132.02	120.90
26	LA	2815	C	P-O5'-C5'	-6.95	109.78	120.90
26	LA	2894	G	C8-N9-C4	-6.95	103.62	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	183	C	C5-C4-N4	-6.95	115.34	120.20
2	SA	987	G	C5-C6-O6	-6.95	124.43	128.60
20	SD	148	ALA	N-CA-CB	-6.95	100.37	110.10
24	S3	78	TYR	CB-CG-CD1	-6.95	116.83	121.00
26	LA	71	A	C6-C5-N7	6.95	137.16	132.30
26	LA	295	G	N1-C2-N3	-6.95	119.73	123.90
26	LA	452	G	N1-C2-N3	-6.95	119.73	123.90
26	LA	851	C	N1-C2-N3	6.95	124.06	119.20
26	LA	1256	G	C5-N7-C8	6.95	107.77	104.30
26	LA	1323	C	N3-C4-C5	-6.95	119.12	121.90
2	SA	261	U	O4'-C1'-N1	6.95	113.76	108.20
2	SA	977	A	C6-C5-N7	-6.95	127.44	132.30
2	SA	1185	G	N3-C4-C5	-6.95	125.13	128.60
26	LA	252	G	O4'-C1'-N9	6.95	113.76	108.20
26	LA	768	G	C4-C5-C6	6.95	122.97	118.80
26	LA	1591	A	P-O5'-C5'	6.95	132.01	120.90
26	LA	1934	C	N3-C2-O2	-6.95	117.04	121.90
2	SA	277	C	O4'-C1'-N1	6.95	113.76	108.20
2	SA	805	C	C1'-O4'-C4'	-6.95	104.34	109.90
2	SA	1450	U	C2-N1-C1'	-6.95	109.37	117.70
2	SA	1466	C	C6-N1-C2	6.95	123.08	120.30
7	SG	94	ARG	NE-CZ-NH2	-6.95	116.83	120.30
19	SC	130	ARG	NE-CZ-NH1	-6.95	116.83	120.30
26	LA	380	G	C4-C5-C6	6.95	122.97	118.80
26	LA	823	C	C5-C6-N1	6.95	124.47	121.00
32	LY	29	SER	N-CA-CB	6.95	120.92	110.50
2	SA	785	G	C5'-C4'-C3'	-6.94	104.89	116.00
26	LA	362	A	C8-N9-C4	-6.94	103.02	105.80
26	LA	1429	G	C8-N9-C4	-6.94	103.62	106.40
2	SA	212	G	C5-C6-O6	6.94	132.76	128.60
2	SA	573	A	N9-C4-C5	6.94	108.58	105.80
2	SA	977	A	C5-C6-N6	-6.94	118.15	123.70
26	LA	639	U	O4'-C1'-N1	6.94	113.75	108.20
26	LA	1300	G	C4-C5-N7	6.94	113.58	110.80
2	SA	95	C	N3-C2-O2	-6.94	117.04	121.90
2	SA	1119	C	N1-C2-N3	6.94	124.06	119.20
26	LA	1253	A	N9-C4-C5	-6.94	103.02	105.80
26	LA	1524	G	N1-C6-O6	6.94	124.06	119.90
26	LA	2136	G	C4-C5-N7	6.94	113.58	110.80
2	SA	337	G	C4'-C3'-C2'	-6.94	95.66	102.60
4	S2	16	C	C1'-O4'-C4'	-6.94	104.35	109.90
26	LA	124	G	N7-C8-N9	6.94	116.57	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	473	G	P-O3'-C3'	-6.94	111.37	119.70
26	LA	1441	G	C8-N9-C4	-6.94	103.62	106.40
26	LA	1482	G	C2-N3-C4	6.94	115.37	111.90
26	LA	2195	U	O4'-C1'-N1	6.94	113.75	108.20
2	SA	563	A	N9-C4-C5	-6.94	103.03	105.80
2	SA	701	U	N3-C4-C5	-6.94	110.44	114.60
2	SA	1127	G	C5-N7-C8	-6.94	100.83	104.30
26	LA	387	U	N1-C2-N3	6.94	119.06	114.90
26	LA	411	G	C5-C6-N1	6.94	114.97	111.50
26	LA	1351	C	C5'-C4'-O4'	6.94	117.42	109.10
26	LA	1475	G	N1-C6-O6	6.94	124.06	119.90
26	LA	2486	C	O4'-C1'-C2'	6.94	113.84	107.60
44	LF	35	TYR	CD1-CG-CD2	6.94	125.53	117.90
2	SA	643	C	C6-N1-C2	-6.94	117.53	120.30
2	SA	1222	G	C2-N3-C4	6.94	115.37	111.90
17	SQ	76	ARG	NE-CZ-NH2	-6.93	116.83	120.30
24	S3	136	ARG	NE-CZ-NH1	6.93	123.77	120.30
26	LA	186	G	N1-C6-O6	6.93	124.06	119.90
26	LA	447	A	C2-N3-C4	6.93	114.07	110.60
26	LA	808	G	C3'-C2'-C1'	6.93	107.05	101.50
26	LA	1728	C	C6-N1-C1'	6.93	129.12	120.80
26	LA	1763	G	C4-C5-N7	-6.93	108.03	110.80
26	LA	1967	C	O4'-C1'-N1	6.93	113.75	108.20
26	LA	2199	A	C5'-C4'-O4'	6.93	117.42	109.10
26	LA	2212	A	C5-C6-N1	6.93	121.17	117.70
26	LA	2218	G	N9-C4-C5	6.93	108.17	105.40
26	LA	2591	C	C2-N3-C4	-6.93	116.43	119.90
26	LA	2631	G	N3-C2-N2	6.93	124.75	119.90
2	SA	700	G	C2-N3-C4	6.93	115.37	111.90
2	SA	818	G	C8-N9-C4	6.93	109.17	106.40
26	LA	1204	A	O4'-C1'-N9	6.93	113.75	108.20
26	LA	1515	A	C4-C5-N7	6.93	114.17	110.70
26	LA	1659	G	C8-N9-C4	-6.93	103.63	106.40
26	LA	2087	G	N3-C4-C5	-6.93	125.13	128.60
26	LA	2176	A	P-O3'-C3'	-6.93	111.38	119.70
26	LA	2781	A	C6-N1-C2	-6.93	114.44	118.60
26	LA	2832	U	C2-N1-C1'	6.93	126.02	117.70
2	SA	286	C	C6-N1-C2	-6.93	117.53	120.30
2	SA	499	A	O4'-C1'-C2'	-6.93	98.87	105.80
24	S3	522	TYR	CZ-CE2-CD2	-6.93	113.56	119.80
26	LA	887	U	N3-C4-O4	-6.93	114.55	119.40
2	SA	160	A	O4'-C1'-N9	-6.93	102.66	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	186	C	C4-C5-C6	6.93	120.86	117.40
2	SA	449	G	C6-C5-N7	-6.93	126.24	130.40
2	SA	1121	U	O4'-C1'-N1	6.93	113.74	108.20
2	SA	1166	G	N1-C6-O6	-6.93	115.74	119.90
9	SI	79	ARG	NE-CZ-NH1	6.93	123.76	120.30
25	LB	106	G	C4-C5-N7	6.93	113.57	110.80
26	LA	515	A	O4'-C1'-N9	6.93	113.74	108.20
26	LA	2004	G	O4'-C1'-N9	6.93	113.74	108.20
49	LK	65	SER	N-CA-CB	6.93	120.89	110.50
2	SA	605	U	O4'-C1'-N1	6.93	113.74	108.20
25	LB	59	A	C4-C5-C6	-6.93	113.54	117.00
26	LA	117	G	N9-C4-C5	-6.93	102.63	105.40
26	LA	231	A	C8-N9-C4	6.93	108.57	105.80
26	LA	238	C	O4'-C1'-C2'	6.93	113.83	107.60
26	LA	818	G	N1-C6-O6	6.93	124.06	119.90
26	LA	1205	A	C8-N9-C4	6.93	108.57	105.80
2	SA	524	G	C5-C6-N1	6.93	114.96	111.50
2	SA	579	A	C8-N9-C4	6.93	108.57	105.80
2	SA	640	A	N1-C6-N6	-6.93	114.44	118.60
2	SA	714	G	N7-C8-N9	-6.93	109.64	113.10
26	LA	733	G	N3-C4-C5	-6.93	125.14	128.60
26	LA	863	A	N1-C6-N6	6.93	122.75	118.60
26	LA	872	U	C1'-O4'-C4'	-6.93	104.36	109.90
26	LA	908	C	O4'-C1'-N1	6.93	113.74	108.20
26	LA	2062	A	N3-C4-N9	6.93	132.94	127.40
26	LA	2300	C	C5-C6-N1	6.93	124.46	121.00
26	LA	2509	G	O5'-P-OP1	6.93	119.01	110.70
2	SA	621	A	P-O5'-C5'	-6.92	109.82	120.90
2	SA	771	G	O4'-C1'-N9	6.92	113.74	108.20
2	SA	887	G	N9-C4-C5	6.92	108.17	105.40
2	SA	982	U	C2'-C3'-O3'	6.92	124.78	113.70
4	S2	63	C	N3-C4-C5	-6.92	119.13	121.90
26	LA	500	G	N7-C8-N9	-6.92	109.64	113.10
26	LA	664	G	C5-C6-O6	-6.92	124.44	128.60
26	LA	858	G	N3-C4-C5	-6.92	125.14	128.60
26	LA	1125	G	C2-N3-C4	6.92	115.36	111.90
26	LA	1443	U	O4'-C1'-N1	6.92	113.74	108.20
26	LA	1924	C	C4'-C3'-C2'	-6.92	95.68	102.60
26	LA	2117	A	P-O3'-C3'	-6.92	111.39	119.70
26	LA	2261	C	C2-N3-C4	-6.92	116.44	119.90
53	LP	12	ARG	NH1-CZ-NH2	-6.92	111.78	119.40
2	SA	199	A	O4'-C1'-N9	6.92	113.74	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	985	C	C5'-C4'-O4'	6.92	117.41	109.10
26	LA	124	G	C6-N1-C2	-6.92	120.95	125.10
26	LA	892	A	C6-C5-N7	-6.92	127.45	132.30
26	LA	935	C	P-O3'-C3'	-6.92	111.39	119.70
26	LA	1829	A	O4'-C1'-N9	6.92	113.74	108.20
26	LA	2103	C	C4'-C3'-C2'	6.92	109.52	102.60
26	LA	2246	G	P-O3'-C3'	6.92	128.01	119.70
26	LA	2536	G	P-O3'-C3'	6.92	128.01	119.70
2	SA	17	U	N3-C4-C5	-6.92	110.45	114.60
2	SA	78	A	C2-N3-C4	6.92	114.06	110.60
2	SA	391	G	C6-C5-N7	-6.92	126.25	130.40
2	SA	435	A	N1-C2-N3	-6.92	125.84	129.30
2	SA	530	G	C5'-C4'-C3'	6.92	127.08	116.00
2	SA	593	U	O4'-C1'-N1	6.92	113.74	108.20
2	SA	642	A	OP1-P-OP2	-6.92	109.22	119.60
25	LB	48	U	N3-C4-C5	6.92	118.75	114.60
26	LA	155	A	C2-N3-C4	6.92	114.06	110.60
26	LA	170	U	C6-N1-C2	6.92	125.15	121.00
26	LA	298	G	C5-N7-C8	-6.92	100.84	104.30
26	LA	913	U	C5-C4-O4	-6.92	121.75	125.90
26	LA	2107	G	O4'-C1'-N9	6.92	113.74	108.20
26	LA	2125	G	C6-C5-N7	-6.92	126.25	130.40
26	LA	2268	A	C4'-C3'-C2'	-6.92	95.68	102.60
2	SA	42	G	OP1-P-OP2	-6.92	109.22	119.60
2	SA	347	G	C8-N9-C4	6.92	109.17	106.40
2	SA	1231	G	O5'-P-OP1	-6.92	99.47	105.70
8	SH	111	THR	CA-CB-OG1	6.92	123.53	109.00
13	SM	108	ARG	NE-CZ-NH2	-6.92	116.84	120.30
26	LA	1148	U	C4'-C3'-C2'	-6.92	95.68	102.60
26	LA	1853	A	N3-C4-C5	-6.92	121.96	126.80
26	LA	2501	C	P-O5'-C5'	6.92	131.97	120.90
26	LA	2656	U	N1-C2-N3	6.92	119.05	114.90
2	SA	905	U	N3-C2-O2	-6.92	117.36	122.20
26	LA	415	A	P-O3'-C3'	6.92	128.00	119.70
26	LA	611	C	C2'-C3'-O3'	6.92	124.77	113.70
26	LA	645	C	C1'-O4'-C4'	-6.92	104.36	109.90
26	LA	748	G	C8-N9-C4	6.92	109.17	106.40
26	LA	1131	G	P-O5'-C5'	-6.92	109.83	120.90
26	LA	1560	G	N3-C4-C5	-6.92	125.14	128.60
26	LA	1588	G	C4-C5-N7	-6.92	108.03	110.80
26	LA	2308	G	C2-N3-C4	6.92	115.36	111.90
26	LA	2320	U	N1-C2-N3	6.92	119.05	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	50	A	O4'-C1'-N9	6.92	113.73	108.20
2	SA	490	C	P-O3'-C3'	6.92	128.00	119.70
2	SA	1118	U	C3'-C2'-C1'	6.92	107.03	101.50
2	SA	1331	G	C8-N9-C1'	6.92	135.99	127.00
4	S2	5	G	O4'-C1'-N9	6.92	113.73	108.20
25	LB	61	G	N1-C2-N3	-6.92	119.75	123.90
26	LA	732	C	C2-N3-C4	-6.92	116.44	119.90
26	LA	844	A	C2-N3-C4	6.92	114.06	110.60
26	LA	913	U	P-O3'-C3'	-6.92	111.40	119.70
26	LA	1694	C	N1-C2-N3	6.92	124.04	119.20
26	LA	1753	G	O4'-C1'-N9	6.92	113.73	108.20
26	LA	2593	U	C6-N1-C2	-6.92	116.85	121.00
26	LA	1261	C	N3-C4-C5	-6.92	119.13	121.90
44	LF	48	THR	N-CA-CB	6.92	123.44	110.30
45	LG	142	TYR	CB-CG-CD1	6.92	125.15	121.00
2	SA	424	G	C8-N9-C1'	6.91	135.99	127.00
2	SA	588	G	C5-C6-N1	6.91	114.96	111.50
2	SA	895	G	N1-C2-N2	6.91	122.42	116.20
2	SA	1061	G	C6-N1-C2	-6.91	120.95	125.10
2	SA	1366	C	C5'-C4'-C3'	-6.91	104.94	116.00
21	SE	111	ARG	NE-CZ-NH1	6.91	123.76	120.30
26	LA	462	C	C6-N1-C2	-6.91	117.53	120.30
26	LA	498	G	C5-N7-C8	-6.91	100.84	104.30
26	LA	1177	G	N3-C4-N9	6.91	130.15	126.00
26	LA	1318	U	C6-N1-C1'	6.91	130.88	121.20
26	LA	1677	A	C4'-C3'-C2'	-6.91	95.69	102.60
26	LA	1856	U	C5-C4-O4	-6.91	121.75	125.90
2	SA	775	G	N3-C2-N2	6.91	124.74	119.90
2	SA	1090	U	C5'-C4'-O4'	6.91	117.39	109.10
26	LA	1739	A	N3-C4-C5	6.91	131.64	126.80
26	LA	103	A	C5'-C4'-C3'	-6.91	104.94	116.00
26	LA	1381	G	N3-C2-N2	6.91	124.74	119.90
26	LA	1465	G	O4'-C1'-N9	6.91	113.73	108.20
26	LA	1642	G	C4'-C3'-C2'	-6.91	95.69	102.60
26	LA	2092	U	C5-C4-O4	6.91	130.05	125.90
26	LA	2494	G	C4-N9-C1'	6.91	135.48	126.50
26	LA	2647	U	O4'-C1'-N1	6.91	113.73	108.20
26	LA	2769	U	C6-N1-C2	-6.91	116.85	121.00
2	SA	465	A	N1-C6-N6	-6.91	114.45	118.60
2	SA	561	U	C5-C4-O4	-6.91	121.75	125.90
2	SA	1137	C	N3-C4-C5	6.91	124.66	121.90
2	SA	1353	G	C4'-C3'-C2'	-6.91	95.69	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1522	U	N3-C4-O4	6.91	124.24	119.40
26	LA	811	U	O4'-C1'-C2'	-6.91	98.89	105.80
26	LA	826	U	O4'-C1'-C2'	6.91	113.82	107.60
26	LA	1157	G	C6-C5-N7	-6.91	126.25	130.40
26	LA	1611	C	O4'-C1'-N1	6.91	113.73	108.20
26	LA	2195	U	N3-C4-C5	-6.91	110.45	114.60
26	LA	2358	A	C5-C6-N1	6.91	121.15	117.70
46	LH	139	VAL	CG1-CB-CG2	-6.91	99.85	110.90
2	SA	37	U	C5'-C4'-O4'	6.91	117.39	109.10
2	SA	897	C	C4'-C3'-C2'	-6.91	95.69	102.60
26	LA	1219	U	C4-C5-C6	6.91	123.84	119.70
2	SA	401	C	O4'-C1'-N1	6.91	113.72	108.20
2	SA	538	G	N1-C2-N3	-6.91	119.76	123.90
2	SA	606	G	O4'-C1'-N9	6.91	113.72	108.20
2	SA	769	G	N3-C2-N2	6.91	124.73	119.90
2	SA	844	G	O4'-C1'-N9	6.91	113.72	108.20
2	SA	1154	G	C5-C6-N1	-6.91	108.05	111.50
8	SH	123	GLU	N-CA-CB	6.91	123.03	110.60
26	LA	107	G	C1'-O4'-C4'	-6.91	104.38	109.90
26	LA	372	G	C1'-O4'-C4'	-6.91	104.38	109.90
26	LA	1625	C	N3-C4-N4	-6.91	113.17	118.00
26	LA	2036	C	C4-C5-C6	6.91	120.85	117.40
26	LA	2119	A	O3'-P-O5'	-6.91	90.88	104.00
26	LA	2889	C	N3-C2-O2	-6.91	117.07	121.90
2	SA	219	U	P-O3'-C3'	-6.90	111.42	119.70
2	SA	1509	C	O4'-C1'-N1	6.90	113.72	108.20
4	S2	59	A	C5-N7-C8	-6.90	100.45	103.90
2	SA	479	U	C5-C4-O4	6.90	130.04	125.90
2	SA	1233	G	N3-C4-N9	6.90	130.14	126.00
2	SA	1454	G	N9-C1'-C2'	-6.90	104.41	112.00
9	SI	54	VAL	CA-CB-CG2	6.90	121.25	110.90
15	SO	68	TYR	CZ-CE2-CD2	-6.90	113.59	119.80
26	LA	278	A	C5-C6-N6	-6.90	118.18	123.70
26	LA	535	G	C5-C6-O6	-6.90	124.46	128.60
26	LA	930	G	C5-C6-O6	-6.90	124.46	128.60
26	LA	1662	U	P-O5'-C5'	6.90	131.94	120.90
26	LA	1807	G	O4'-C4'-C3'	-6.90	97.10	104.00
26	LA	2078	C	C2-N3-C4	-6.90	116.45	119.90
26	LA	2112	G	C5'-C4'-O4'	6.90	117.38	109.10
26	LA	2705	A	P-O3'-C3'	6.90	127.98	119.70
2	SA	682	G	C2'-C3'-O3'	6.90	124.74	113.70
2	SA	968	A	N1-C6-N6	6.90	122.74	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1192	C	C4'-C3'-C2'	-6.90	95.70	102.60
2	SA	1287	A	C4-C5-C6	-6.90	113.55	117.00
7	SG	112	ASP	CB-CG-OD2	-6.90	112.09	118.30
26	LA	657	U	N3-C2-O2	-6.90	117.37	122.20
26	LA	943	A	C6-C5-N7	-6.90	127.47	132.30
26	LA	1598	A	C4'-C3'-C2'	-6.90	95.70	102.60
26	LA	1649	G	C8-N9-C4	-6.90	103.64	106.40
26	LA	2016	U	C4'-C3'-C2'	-6.90	95.70	102.60
26	LA	2601	C	N1-C2-N3	6.90	124.03	119.20
54	LM	12	ASP	CB-CG-OD1	6.90	124.51	118.30
2	SA	633	G	C8-N9-C4	-6.90	103.64	106.40
2	SA	1379	G	N1-C2-N3	-6.90	119.76	123.90
26	LA	677	A	C2-N3-C4	-6.90	107.15	110.60
26	LA	1935	G	C5-C6-N1	6.90	114.95	111.50
26	LA	1994	C	N1-C2-N3	6.90	124.03	119.20
26	LA	2314	A	O4'-C1'-N9	6.90	113.72	108.20
26	LA	2572	A	N9-C4-C5	-6.90	103.04	105.80
2	SA	100	G	C1'-O4'-C4'	-6.90	104.38	109.90
2	SA	148	G	N7-C8-N9	-6.90	109.65	113.10
2	SA	427	U	O4'-C1'-N1	6.90	113.72	108.20
2	SA	449	G	C5'-C4'-O4'	6.90	117.38	109.10
2	SA	947	G	C4-C5-N7	-6.90	108.04	110.80
2	SA	1335	U	C6-N1-C2	-6.90	116.86	121.00
2	SA	1491	G	O4'-C1'-N9	6.90	113.72	108.20
5	ST	24	ARG	NE-CZ-NH1	6.90	123.75	120.30
26	LA	48	G	C4-C5-N7	-6.90	108.04	110.80
26	LA	205	G	C3'-C2'-C1'	-6.90	95.98	101.50
26	LA	250	G	N7-C8-N9	-6.90	109.65	113.10
26	LA	1356	G	C5-C6-N1	6.90	114.95	111.50
26	LA	1707	G	N9-C4-C5	6.90	108.16	105.40
26	LA	1717	A	C4-C5-N7	6.90	114.15	110.70
26	LA	2148	G	N3-C4-C5	-6.90	125.15	128.60
26	LA	2595	G	C4-C5-C6	-6.90	114.66	118.80
26	LA	2670	A	N9-C4-C5	-6.90	103.04	105.80
2	SA	318	G	C4'-C3'-C2'	-6.90	95.70	102.60
2	SA	1459	G	C5-C6-O6	-6.90	124.46	128.60
26	LA	301	G	C8-N9-C4	6.90	109.16	106.40
26	LA	1579	A	C4-C5-C6	-6.90	113.55	117.00
26	LA	1853	A	O4'-C1'-N9	6.90	113.72	108.20
26	LA	2023	C	C1'-O4'-C4'	-6.90	104.38	109.90
2	SA	1486	G	C5-C6-N1	-6.89	108.05	111.50
26	LA	561	G	C3'-C2'-C1'	-6.89	95.98	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2301	C	O4'-C1'-N1	6.89	113.72	108.20
26	LA	2396	G	C4-C5-C6	-6.89	114.66	118.80
26	LA	2711	A	C3'-C2'-C1'	6.89	107.02	101.50
2	SA	101	A	OP1-P-OP2	-6.89	109.26	119.60
2	SA	185	U	P-O3'-C3'	-6.89	111.43	119.70
2	SA	1124	G	C4-C5-C6	-6.89	114.66	118.80
2	SA	1396	A	O4'-C1'-N9	6.89	113.71	108.20
19	SC	180	ASP	CB-CG-OD1	-6.89	112.10	118.30
26	LA	342	A	N1-C2-N3	-6.89	125.85	129.30
26	LA	886	A	C1'-O4'-C4'	-6.89	104.39	109.90
26	LA	1710	G	N3-C4-N9	-6.89	121.86	126.00
26	LA	2513	A	N1-C6-N6	6.89	122.74	118.60
26	LA	2513	A	C2-N3-C4	6.89	114.05	110.60
26	LA	2872	A	C2'-C3'-O3'	6.89	124.73	113.70
27	LD	61	TYR	CB-CG-CD1	-6.89	116.86	121.00
2	SA	816	A	C5-C6-N1	6.89	121.14	117.70
2	SA	889	A	C5'-C4'-C3'	6.89	127.03	116.00
26	LA	275	C	C5'-C4'-C3'	6.89	127.03	116.00
26	LA	1441	G	N9-C4-C5	6.89	108.16	105.40
26	LA	2504	U	N3-C4-O4	6.89	124.22	119.40
26	LA	2701	U	N1-C2-N3	6.89	119.03	114.90
2	SA	683	G	O4'-C1'-N9	6.89	113.71	108.20
2	SA	744	C	N3-C4-N4	-6.89	113.18	118.00
26	LA	56	A	C2-N3-C4	-6.89	107.16	110.60
26	LA	687	C	C5-C4-N4	-6.89	115.38	120.20
26	LA	704	G	N3-C2-N2	6.89	124.72	119.90
26	LA	896	A	C3'-C2'-C1'	-6.89	95.99	101.50
26	LA	1228	G	N1-C6-O6	6.89	124.03	119.90
26	LA	1263	U	P-O5'-C5'	6.89	131.92	120.90
26	LA	1351	C	C4'-C3'-C2'	-6.89	95.71	102.60
26	LA	1774	C	O4'-C1'-N1	6.89	113.71	108.20
26	LA	1909	C	C4'-C3'-C2'	-6.89	95.71	102.60
26	LA	1945	G	C6-N1-C2	-6.89	120.97	125.10
26	LA	1965	C	O5'-P-OP1	6.89	118.97	110.70
26	LA	2021	C	C5-C4-N4	-6.89	115.38	120.20
26	LA	2256	G	C4'-C3'-C2'	-6.89	95.71	102.60
26	LA	2332	C	N3-C4-C5	-6.89	119.14	121.90
26	LA	2382	G	N3-C4-N9	6.89	130.13	126.00
2	SA	217	C	C6-N1-C2	-6.89	117.55	120.30
2	SA	1422	G	N9-C1'-C2'	-6.89	104.42	112.00
2	SA	1541	U	O4'-C1'-N1	6.89	113.71	108.20
26	LA	401	A	C3'-C2'-C1'	6.89	107.01	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2705	A	N7-C8-N9	-6.89	110.36	113.80
2	SA	772	U	N1-C2-O2	-6.89	117.98	122.80
2	SA	1073	U	P-O3'-C3'	-6.89	111.44	119.70
2	SA	1505	G	C8-N9-C4	-6.89	103.65	106.40
4	S2	15	G	N3-C4-C5	-6.89	125.16	128.60
26	LA	9	G	C4-C5-N7	6.89	113.56	110.80
26	LA	28	A	N7-C8-N9	-6.89	110.36	113.80
26	LA	739	A	N7-C8-N9	6.89	117.24	113.80
26	LA	1773	A	C8-N9-C4	-6.89	103.05	105.80
26	LA	2319	G	C5-C6-N1	-6.89	108.06	111.50
26	LA	2845	U	O4'-C1'-N1	6.89	113.71	108.20
46	LH	114	HIS	N-CA-CB	6.89	122.99	110.60
2	SA	320	A	O4'-C1'-N9	6.88	113.71	108.20
2	SA	495	A	N1-C2-N3	6.88	132.74	129.30
2	SA	1048	G	N3-C4-C5	-6.88	125.16	128.60
2	SA	1077	G	N7-C8-N9	-6.88	109.66	113.10
26	LA	13	A	O4'-C1'-C2'	-6.88	98.92	105.80
26	LA	1519	G	C5-C6-O6	-6.88	124.47	128.60
26	LA	1547	C	P-O3'-C3'	-6.88	111.44	119.70
26	LA	1697	G	N3-C2-N2	-6.88	115.08	119.90
26	LA	1792	G	C4'-C3'-C2'	-6.88	95.72	102.60
26	LA	1898	U	C5-C4-O4	6.88	130.03	125.90
26	LA	2113	U	C1'-O4'-C4'	-6.88	104.39	109.90
26	LA	2131	U	N3-C2-O2	-6.88	117.38	122.20
2	SA	199	A	P-O3'-C3'	-6.88	111.44	119.70
2	SA	256	U	C5'-C4'-O4'	6.88	117.36	109.10
2	SA	462	G	N1-C2-N3	-6.88	119.77	123.90
2	SA	812	G	C2'-C3'-O3'	6.88	124.71	113.70
2	SA	1252	A	N9-C4-C5	-6.88	103.05	105.80
26	LA	43	G	C1'-O4'-C4'	-6.88	104.39	109.90
26	LA	434	U	C1'-O4'-C4'	-6.88	104.39	109.90
26	LA	1234	U	C3'-C2'-C1'	6.88	107.01	101.50
26	LA	1542	U	C5'-C4'-C3'	-6.88	104.99	116.00
39	L3	39	ARG	NE-CZ-NH2	-6.88	116.86	120.30
2	SA	144	G	O4'-C1'-N9	6.88	113.70	108.20
2	SA	270	A	N1-C6-N6	6.88	122.73	118.60
2	SA	1225	A	O4'-C1'-N9	6.88	113.70	108.20
2	SA	1292	G	O4'-C1'-C2'	6.88	113.79	107.60
26	LA	355	U	C6-N1-C2	6.88	125.13	121.00
26	LA	376	G	C5-C6-O6	-6.88	124.47	128.60
26	LA	1454	C	C1'-O4'-C4'	-6.88	104.39	109.90
26	LA	1509	A	O4'-C1'-N9	6.88	113.71	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2058	A	N7-C8-N9	-6.88	110.36	113.80
26	LA	2750	A	N7-C8-N9	-6.88	110.36	113.80
26	LA	2069	G	N1-C6-O6	6.88	124.03	119.90
26	LA	2459	A	C5'-C4'-C3'	-6.88	104.99	116.00
2	SA	206	C	C2-N1-C1'	6.88	126.37	118.80
2	SA	703	G	N1-C6-O6	6.88	124.03	119.90
2	SA	761	G	N9-C1'-C2'	-6.88	104.43	112.00
26	LA	1037	G	C5-C6-O6	-6.88	124.47	128.60
26	LA	1376	C	O4'-C1'-N1	6.88	113.70	108.20
26	LA	1946	U	C5'-C4'-C3'	6.88	127.01	116.00
26	LA	2066	C	C6-N1-C2	-6.88	117.55	120.30
26	LA	2151	U	C2-N3-C4	-6.88	122.87	127.00
26	LA	2187	U	O4'-C1'-N1	6.88	113.70	108.20
26	LA	2337	G	O4'-C1'-C2'	6.88	113.79	107.60
2	SA	89	U	N1-C2-O2	6.88	127.61	122.80
2	SA	559	A	P-O3'-C3'	6.88	127.95	119.70
2	SA	1342	C	C3'-C2'-C1'	6.88	107.00	101.50
2	SA	1346	A	O4'-C1'-N9	6.88	113.70	108.20
26	LA	1097	U	P-O5'-C5'	-6.88	109.90	120.90
26	LA	1539	U	C5'-C4'-O4'	6.88	117.35	109.10
26	LA	2294	G	N1-C6-O6	6.88	124.03	119.90
26	LA	2846	G	C4-C5-N7	-6.88	108.05	110.80
53	LP	87	PHE	CB-CG-CD2	-6.88	115.99	120.80
57	LS	94	LEU	CB-CG-CD2	-6.88	99.31	111.00
26	LA	593	U	C6-N1-C2	-6.88	116.88	121.00
2	SA	886	G	P-O3'-C3'	-6.87	111.45	119.70
2	SA	1541	U	C1'-O4'-C4'	-6.87	104.40	109.90
26	LA	1317	G	C5-C6-N1	6.87	114.94	111.50
26	LA	1933	G	C6-N1-C2	-6.87	120.97	125.10
26	LA	2162	G	C1'-O4'-C4'	-6.87	104.40	109.90
26	LA	2691	C	P-O3'-C3'	-6.87	111.45	119.70
2	SA	117	G	P-O3'-C3'	-6.87	111.45	119.70
2	SA	714	G	C4-C5-N7	6.87	113.55	110.80
2	SA	1116	U	N1-C2-O2	6.87	127.61	122.80
26	LA	305	C	N1-C2-N3	6.87	124.01	119.20
26	LA	514	A	N1-C2-N3	-6.87	125.86	129.30
26	LA	736	C	C6-N1-C2	-6.87	117.55	120.30
26	LA	2071	A	C6-N1-C2	-6.87	114.48	118.60
26	LA	2132	U	P-O3'-C3'	-6.87	111.45	119.70
26	LA	2765	A	C3'-C2'-C1'	6.87	107.00	101.50
26	LA	2877	G	C4'-C3'-C2'	-6.87	95.73	102.60
2	SA	410	G	N1-C6-O6	6.87	124.02	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1093	A	C8-N9-C4	-6.87	103.05	105.80
26	LA	130	C	C5-C4-N4	-6.87	115.39	120.20
26	LA	220	G	C5-C6-O6	6.87	132.72	128.60
2	SA	451	A	C5-C6-N1	6.87	121.14	117.70
2	SA	880	C	O4'-C1'-N1	6.87	113.69	108.20
2	SA	1001	C	C2-N3-C4	6.87	123.33	119.90
2	SA	1294	G	N9-C4-C5	6.87	108.15	105.40
4	S2	12	G	O4'-C1'-N9	6.87	113.69	108.20
26	LA	251	A	C2-N3-C4	6.87	114.03	110.60
26	LA	637	A	C5-N7-C8	6.87	107.33	103.90
26	LA	811	U	N1-C2-O2	6.87	127.61	122.80
26	LA	1145	C	N1-C2-O2	-6.87	114.78	118.90
26	LA	1668	A	N7-C8-N9	6.87	117.23	113.80
26	LA	2062	A	N1-C2-N3	-6.87	125.87	129.30
26	LA	2468	A	N1-C6-N6	-6.87	114.48	118.60
26	LA	2494	G	C5'-C4'-C3'	-6.87	105.01	116.00
2	SA	53	A	C5-C6-N1	6.87	121.13	117.70
2	SA	153	C	C6-N1-C2	-6.87	117.55	120.30
2	SA	206	C	C6-N1-C1'	-6.87	112.56	120.80
2	SA	861	G	N1-C6-O6	6.87	124.02	119.90
26	LA	89	A	C4-C5-C6	-6.87	113.57	117.00
26	LA	1260	A	O4'-C1'-N9	6.87	113.69	108.20
26	LA	1803	A	C5-C6-N1	6.87	121.13	117.70
26	LA	1838	C	C4-C5-C6	6.87	120.83	117.40
2	SA	401	C	P-O3'-C3'	-6.87	111.46	119.70
2	SA	1178	G	C5-C6-N1	6.87	114.93	111.50
2	SA	1240	U	O4'-C1'-C2'	-6.87	98.93	105.80
2	SA	1254	A	C1'-O4'-C4'	-6.87	104.41	109.90
2	SA	1484	C	P-O5'-C5'	6.87	131.89	120.90
26	LA	239	C	C6-N1-C2	-6.87	117.55	120.30
26	LA	519	U	P-O3'-C3'	-6.87	111.46	119.70
26	LA	726	G	C3'-C2'-C1'	-6.87	96.01	101.50
26	LA	1035	U	N3-C4-O4	-6.87	114.59	119.40
26	LA	1371	G	N7-C8-N9	-6.87	109.67	113.10
26	LA	1453	A	C4'-C3'-C2'	-6.87	95.73	102.60
26	LA	1537	G	C4-C5-C6	6.87	122.92	118.80
26	LA	2121	G	C4-C5-C6	6.87	122.92	118.80
26	LA	2581	G	C4-C5-C6	-6.87	114.68	118.80
2	SA	548	G	C4-C5-N7	6.86	113.55	110.80
2	SA	561	U	N1-C1'-C2'	-6.86	104.45	112.00
2	SA	1399	C	P-O5'-C5'	-6.86	109.92	120.90
25	LB	66	A	C6-N1-C2	6.86	122.72	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	190	A	O4'-C1'-N9	6.86	113.69	108.20
26	LA	1129	A	N9-C4-C5	6.86	108.55	105.80
26	LA	1281	G	C2-N3-C4	6.86	115.33	111.90
26	LA	1817	G	O4'-C1'-N9	6.86	113.69	108.20
26	LA	2274	A	P-O3'-C3'	6.86	127.94	119.70
2	SA	708	C	O4'-C1'-N1	6.86	113.69	108.20
8	SH	64	TYR	CZ-CE2-CD2	6.86	125.98	119.80
26	LA	52	A	C5-C6-N6	6.86	129.19	123.70
26	LA	1024	G	N1-C2-N2	-6.86	110.02	116.20
26	LA	1543	G	O4'-C1'-N9	6.86	113.69	108.20
2	SA	430	A	C5-C6-N6	-6.86	118.21	123.70
25	LB	59	A	N1-C2-N3	-6.86	125.87	129.30
26	LA	196	A	O4'-C1'-N9	6.86	113.69	108.20
26	LA	770	G	C4'-C3'-C2'	-6.86	95.74	102.60
26	LA	1182	G	N3-C4-C5	6.86	132.03	128.60
26	LA	1885	A	P-O5'-C5'	-6.86	109.92	120.90
26	LA	1978	A	C5-N7-C8	6.86	107.33	103.90
26	LA	2116	G	C5'-C4'-O4'	6.86	117.33	109.10
26	LA	2539	C	C5'-C4'-O4'	6.86	117.33	109.10
26	LA	2557	G	C5-C6-O6	-6.86	124.48	128.60
25	LB	100	G	N7-C8-N9	6.86	116.53	113.10
26	LA	83	A	P-O3'-C3'	6.86	127.93	119.70
26	LA	140	C	C4'-C3'-C2'	-6.86	95.74	102.60
26	LA	1152	C	O4'-C1'-N1	6.86	113.69	108.20
26	LA	1402	U	C4'-C3'-C2'	-6.86	95.74	102.60
26	LA	1450	G	N7-C8-N9	-6.86	109.67	113.10
26	LA	1877	A	C4-C5-C6	6.86	120.43	117.00
2	SA	413	G	C4-C5-N7	-6.86	108.06	110.80
2	SA	1082	A	C5-C6-N1	6.86	121.13	117.70
2	SA	1153	G	O4'-C1'-N9	6.86	113.69	108.20
2	SA	1395	C	C5-C4-N4	6.86	125.00	120.20
7	SG	125	ASP	CB-CG-OD2	6.86	124.47	118.30
26	LA	638	G	C6-C5-N7	6.86	134.51	130.40
26	LA	1002	G	N1-C2-N2	-6.86	110.03	116.20
26	LA	1173	U	N3-C4-O4	6.86	124.20	119.40
26	LA	1184	U	N1-C2-N3	6.86	119.02	114.90
26	LA	1546	G	O4'-C1'-N9	6.86	113.69	108.20
26	LA	1829	A	C1'-O4'-C4'	-6.86	104.42	109.90
26	LA	2583	G	C2'-C3'-O3'	6.86	124.67	113.70
26	LA	2700	A	O4'-C1'-N9	6.86	113.69	108.20
26	LA	2733	A	N1-C2-N3	6.86	132.73	129.30
2	SA	266	G	N9-C4-C5	6.86	108.14	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	297	G	N3-C4-C5	6.86	132.03	128.60
2	SA	439	U	N1-C2-N3	6.86	119.01	114.90
26	LA	341	C	C5-C4-N4	6.86	125.00	120.20
26	LA	1038	G	N1-C6-O6	6.86	124.01	119.90
26	LA	1419	A	N1-C2-N3	6.86	132.73	129.30
26	LA	1921	G	C8-N9-C1'	-6.86	118.09	127.00
26	LA	2029	G	C8-N9-C1'	-6.86	118.09	127.00
26	LA	2309	A	N9-C4-C5	-6.86	103.06	105.80
26	LA	2585	U	C2-N3-C4	6.86	131.11	127.00
26	LA	2592	G	N9-C4-C5	6.86	108.14	105.40
26	LA	2731	G	C2-N3-C4	-6.86	108.47	111.90
26	LA	2749	A	N1-C2-N3	6.86	132.73	129.30
26	LA	2803	G	C4-C5-C6	-6.86	114.69	118.80
54	LM	37	ASP	CB-CG-OD1	6.86	124.47	118.30
2	SA	12	U	O4'-C1'-N1	6.85	113.68	108.20
2	SA	59	A	C5'-C4'-O4'	6.85	117.32	109.10
26	LA	200	U	N3-C4-C5	6.85	118.71	114.60
26	LA	2150	C	C5'-C4'-C3'	6.85	126.97	116.00
26	LA	2303	G	N7-C8-N9	6.85	116.53	113.10
26	LA	2846	G	C5-C6-O6	-6.85	124.49	128.60
2	SA	21	G	C6-C5-N7	-6.85	126.29	130.40
2	SA	341	C	C6-N1-C2	-6.85	117.56	120.30
2	SA	713	G	N1-C6-O6	6.85	124.01	119.90
2	SA	1325	C	C5-C4-N4	6.85	125.00	120.20
2	SA	1497	G	C8-N9-C1'	6.85	135.91	127.00
26	LA	26	G	N7-C8-N9	-6.85	109.67	113.10
26	LA	153	U	O4'-C1'-N1	6.85	113.68	108.20
26	LA	294	A	N3-C4-N9	-6.85	121.92	127.40
26	LA	882	G	C5'-C4'-C3'	6.85	126.96	116.00
26	LA	1315	C	N3-C2-O2	-6.85	117.10	121.90
26	LA	2152	G	N3-C2-N2	-6.85	115.10	119.90
2	SA	73	C	O4'-C1'-N1	6.85	113.68	108.20
2	SA	196	A	N9-C4-C5	6.85	108.54	105.80
2	SA	1158	C	N1-C2-O2	6.85	123.01	118.90
26	LA	876	C	O4'-C1'-N1	6.85	113.68	108.20
26	LA	1840	G	C5'-C4'-O4'	6.85	117.32	109.10
26	LA	2287	A	C4-C5-C6	6.85	120.43	117.00
26	LA	2776	A	N1-C6-N6	6.85	122.71	118.60
2	SA	794	A	C4'-C3'-C2'	-6.85	95.75	102.60
2	SA	1525	G	O4'-C1'-N9	6.85	113.68	108.20
26	LA	801	G	C1'-O4'-C4'	-6.85	104.42	109.90
26	LA	2007	U	C1'-O4'-C4'	-6.85	104.42	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2327	A	C4'-C3'-C2'	6.85	109.45	102.60
2	SA	281	G	C8-N9-C1'	-6.85	118.10	127.00
26	LA	1755	A	P-O3'-C3'	6.85	127.92	119.70
26	LA	1989	G	C5-N7-C8	-6.85	100.88	104.30
26	LA	2129	C	N3-C2-O2	-6.85	117.11	121.90
2	SA	1074	G	P-O5'-C5'	6.85	131.85	120.90
26	LA	2602	A	N1-C2-N3	-6.85	125.88	129.30
2	SA	582	C	C4-C5-C6	6.84	120.82	117.40
2	SA	670	G	O4'-C1'-N9	6.84	113.68	108.20
2	SA	829	G	C5-C6-O6	-6.84	124.49	128.60
4	S2	77	A	C4-C5-C6	-6.84	113.58	117.00
26	LA	440	C	C6-N1-C2	-6.84	117.56	120.30
26	LA	533	G	C4-C5-C6	-6.84	114.69	118.80
26	LA	837	C	C4'-C3'-C2'	-6.84	95.76	102.60
26	LA	1010	A	N7-C8-N9	-6.84	110.38	113.80
26	LA	2394	C	N1-C2-N3	-6.84	114.41	119.20
2	SA	1277	C	C2-N3-C4	-6.84	116.48	119.90
12	SL	38	THR	N-CA-CB	6.84	123.30	110.30
26	LA	1104	C	O5'-P-OP2	-6.84	99.54	105.70
26	LA	2384	U	P-O5'-C5'	6.84	131.85	120.90
26	LA	2625	G	N3-C4-C5	-6.84	125.18	128.60
2	SA	225	C	O4'-C1'-N1	6.84	113.67	108.20
2	SA	373	A	N9-C4-C5	-6.84	103.06	105.80
2	SA	760	G	C4-C5-C6	-6.84	114.69	118.80
2	SA	1404	C	C5'-C4'-C3'	-6.84	105.05	116.00
2	SA	1534	A	C5-C6-N6	6.84	129.17	123.70
26	LA	268	C	N1-C2-O2	6.84	123.00	118.90
26	LA	316	C	N3-C4-C5	-6.84	119.16	121.90
26	LA	1264	A	C5'-C4'-O4'	6.84	117.31	109.10
26	LA	1390	U	N3-C2-O2	-6.84	117.41	122.20
26	LA	1646	C	N3-C4-C5	6.84	124.64	121.90
26	LA	1753	G	P-O3'-C3'	-6.84	111.49	119.70
26	LA	2733	A	C2'-C3'-O3'	6.84	124.65	113.70
2	SA	175	C	N3-C2-O2	-6.84	117.11	121.90
2	SA	621	A	C5-C6-N1	6.84	121.12	117.70
2	SA	1349	A	P-O3'-C3'	6.84	127.91	119.70
2	SA	1512	U	C5'-C4'-O4'	6.84	117.31	109.10
25	LB	75	G	N1-C2-N3	-6.84	119.80	123.90
26	LA	285	G	C1'-O4'-C4'	-6.84	104.43	109.90
26	LA	1482	G	N3-C4-C5	-6.84	125.18	128.60
26	LA	1804	C	C4-C5-C6	-6.84	113.98	117.40
26	LA	1919	A	C4-C5-C6	-6.84	113.58	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1940	U	C5'-C4'-C3'	-6.84	105.06	116.00
26	LA	2069	G	O4'-C1'-N9	6.84	113.67	108.20
3	S1	21	U	N3-C4-C5	6.84	118.70	114.60
26	LA	1608	A	O4'-C1'-N9	6.84	113.67	108.20
26	LA	2083	G	N1-C6-O6	6.84	124.00	119.90
26	LA	2370	G	C4-C5-N7	-6.84	108.06	110.80
2	SA	32	A	C4'-C3'-C2'	-6.84	95.76	102.60
2	SA	565	U	P-O3'-C3'	6.84	127.91	119.70
2	SA	1452	C	C4-C5-C6	6.84	120.82	117.40
2	SA	1454	G	C6-C5-N7	6.84	134.50	130.40
26	LA	390	U	C4-C5-C6	-6.84	115.60	119.70
26	LA	579	G	N7-C8-N9	-6.84	109.68	113.10
26	LA	723	C	C5'-C4'-C3'	6.84	126.94	116.00
26	LA	821	A	O3'-P-O5'	-6.84	91.01	104.00
26	LA	1243	C	C4-C5-C6	6.84	120.82	117.40
26	LA	1278	C	C2-N3-C4	-6.84	116.48	119.90
26	LA	1339	G	C8-N9-C4	6.84	109.14	106.40
26	LA	1647	U	C5'-C4'-C3'	6.84	126.94	116.00
26	LA	1896	G	C5'-C4'-C3'	6.84	126.94	116.00
26	LA	2370	G	O4'-C1'-N9	6.84	113.67	108.20
26	LA	2470	G	C5-C6-N1	6.84	114.92	111.50
2	SA	303	A	C4-C5-C6	6.83	120.42	117.00
3	S1	43	U	O4'-C1'-N1	6.83	113.67	108.20
26	LA	1837	C	C2-N3-C4	-6.83	116.48	119.90
26	LA	2638	G	O4'-C1'-N9	6.83	113.67	108.20
26	LA	2862	G	C8-N9-C4	-6.83	103.67	106.40
26	LA	2894	G	P-O5'-C5'	6.83	131.84	120.90
2	SA	1257	A	C6-N1-C2	6.83	122.70	118.60
2	SA	1342	C	C4-C5-C6	6.83	120.82	117.40
2	SA	1348	U	C5-C4-O4	-6.83	121.80	125.90
4	S2	47	A	P-O5'-C5'	-6.83	109.97	120.90
26	LA	24	G	C4'-C3'-C2'	6.83	109.43	102.60
26	LA	275	C	C6-N1-C1'	6.83	129.00	120.80
26	LA	2247	A	N9-C4-C5	-6.83	103.07	105.80
26	LA	2810	A	N1-C6-N6	6.83	122.70	118.60
2	SA	365	U	C5-C4-O4	-6.83	121.80	125.90
2	SA	452	A	N7-C8-N9	6.83	117.22	113.80
2	SA	793	U	C1'-O4'-C4'	-6.83	104.43	109.90
2	SA	1078	U	C6-N1-C2	-6.83	116.90	121.00
25	LB	98	G	C4-C5-N7	6.83	113.53	110.80
26	LA	64	A	N1-C6-N6	6.83	122.70	118.60
26	LA	103	A	C5'-C4'-O4'	6.83	117.30	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	231	A	N1-C2-N3	-6.83	125.88	129.30
26	LA	625	G	C3'-C2'-C1'	6.83	106.97	101.50
26	LA	740	C	O4'-C1'-N1	6.83	113.67	108.20
26	LA	998	C	O4'-C1'-N1	6.83	113.67	108.20
26	LA	2114	A	C6-N1-C2	6.83	122.70	118.60
26	LA	2191	A	C4-C5-C6	6.83	120.42	117.00
26	LA	2471	A	C2'-C3'-O3'	6.83	124.63	113.70
26	LA	2727	A	N3-C4-C5	-6.83	122.02	126.80
2	SA	767	A	P-O3'-C3'	6.83	127.89	119.70
2	SA	1107	C	C5-C4-N4	6.83	124.98	120.20
3	S1	14	G	O4'-C1'-N9	6.83	113.66	108.20
26	LA	541	A	C5-N7-C8	6.83	107.31	103.90
26	LA	1347	A	C5-C6-N1	6.83	121.11	117.70
26	LA	1433	A	C2-N3-C4	6.83	114.02	110.60
26	LA	2246	G	C3'-C2'-C1'	-6.83	96.04	101.50
26	LA	2425	A	P-O3'-C3'	-6.83	111.50	119.70
2	SA	225	C	N1-C2-N3	-6.83	114.42	119.20
2	SA	733	G	C4-C5-N7	-6.83	108.07	110.80
2	SA	756	C	C1'-O4'-C4'	-6.83	104.44	109.90
2	SA	1235	U	C4-C5-C6	-6.83	115.60	119.70
3	S1	31	U	C4-C5-C6	-6.83	115.60	119.70
23	SR	12	PHE	CB-CG-CD1	6.83	125.58	120.80
26	LA	32	C	C5'-C4'-O4'	6.83	117.29	109.10
26	LA	90	U	P-O5'-C5'	6.83	131.82	120.90
26	LA	572	A	C5-N7-C8	-6.83	100.48	103.90
26	LA	895	U	C5'-C4'-C3'	-6.83	105.07	116.00
26	LA	1014	A	O4'-C1'-N9	6.83	113.66	108.20
26	LA	1481	U	C1'-O4'-C4'	-6.83	104.44	109.90
26	LA	1780	A	P-O3'-C3'	6.83	127.89	119.70
26	LA	2107	G	C5-N7-C8	6.83	107.71	104.30
26	LA	2196	C	N3-C4-N4	6.83	122.78	118.00
26	LA	2290	G	N1-C2-N2	-6.83	110.05	116.20
8	SH	78	SER	N-CA-CB	6.83	120.74	110.50
12	SL	78	VAL	CG1-CB-CG2	-6.83	99.98	110.90
25	LB	18	G	N1-C2-N3	-6.83	119.80	123.90
26	LA	130	C	C6-N1-C2	-6.83	117.57	120.30
26	LA	1362	C	O4'-C1'-N1	6.83	113.66	108.20
26	LA	2085	U	O4'-C1'-N1	6.83	113.66	108.20
26	LA	2215	C	C5-C6-N1	6.83	124.41	121.00
2	SA	121	U	C1'-O4'-C4'	-6.83	104.44	109.90
2	SA	805	C	C2-N3-C4	-6.83	116.49	119.90
2	SA	1207	G	C6-C5-N7	-6.83	126.31	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	S1	37	G	O4'-C1'-N9	6.83	113.66	108.20
26	LA	163	C	C5'-C4'-O4'	-6.83	100.91	109.10
26	LA	205	G	C4-C5-N7	-6.83	108.07	110.80
26	LA	210	C	N3-C4-C5	6.83	124.63	121.90
26	LA	378	C	O4'-C1'-N1	6.83	113.66	108.20
26	LA	2618	G	N3-C4-C5	-6.83	125.19	128.60
38	LE	181	ASP	CB-CG-OD1	6.83	124.44	118.30
25	LB	102	G	C6-C5-N7	-6.82	126.31	130.40
26	LA	131	A	C5'-C4'-C3'	6.82	126.92	116.00
26	LA	524	G	C8-N9-C4	-6.82	103.67	106.40
26	LA	819	A	O4'-C4'-C3'	6.82	111.56	106.10
26	LA	876	C	N3-C4-C5	-6.82	119.17	121.90
26	LA	1332	G	C6-C5-N7	-6.82	126.31	130.40
26	LA	1687	G	C5-C6-O6	-6.82	124.51	128.60
26	LA	1841	U	C6-N1-C2	-6.82	116.91	121.00
26	LA	1847	A	O4'-C1'-N9	6.82	113.66	108.20
26	LA	2008	C	O4'-C4'-C3'	6.82	111.56	106.10
26	LA	2095	A	C5'-C4'-O4'	-6.82	100.91	109.10
26	LA	2175	C	N3-C4-N4	6.82	122.78	118.00
26	LA	2417	C	C4-C5-C6	6.82	120.81	117.40
26	LA	2739	U	N1-C2-O2	6.82	127.58	122.80
2	SA	1067	A	C5'-C4'-C3'	-6.82	105.08	116.00
2	SA	1196	A	N1-C2-N3	6.82	132.71	129.30
26	LA	756	A	C4'-C3'-C2'	-6.82	95.78	102.60
26	LA	2611	C	C6-N1-C2	-6.82	117.57	120.30
26	LA	2758	A	P-O3'-C3'	-6.82	111.51	119.70
26	LA	2765	A	C5-C6-N6	6.82	129.16	123.70
26	LA	2807	U	N3-C2-O2	-6.82	117.42	122.20
2	SA	825	A	C6-N1-C2	6.82	122.69	118.60
2	SA	1080	A	P-O3'-C3'	6.82	127.89	119.70
26	LA	890	C	N1-C2-O2	6.82	122.99	118.90
26	LA	910	A	C6-N1-C2	-6.82	114.51	118.60
26	LA	1695	G	N7-C8-N9	6.82	116.51	113.10
26	LA	2024	G	C5'-C4'-C3'	-6.82	105.09	116.00
26	LA	2517	C	C2-N3-C4	-6.82	116.49	119.90
46	LH	163	TYR	CB-CG-CD2	-6.82	116.91	121.00
2	SA	16	A	P-O3'-C3'	-6.82	111.52	119.70
2	SA	315	A	C5-C6-N1	6.82	121.11	117.70
2	SA	769	G	C5-N7-C8	6.82	107.71	104.30
26	LA	1417	C	O4'-C1'-N1	6.82	113.66	108.20
26	LA	2391	G	N1-C2-N3	-6.82	119.81	123.90
26	LA	2701	U	N1-C2-O2	-6.82	118.03	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	622	A	N9-C4-C5	-6.82	103.07	105.80
2	SA	1055	A	C1'-O4'-C4'	-6.82	104.45	109.90
26	LA	64	A	O4'-C1'-C2'	6.82	113.73	107.60
26	LA	297	G	C5-C6-N1	6.82	114.91	111.50
26	LA	611	C	C5'-C4'-O4'	6.82	117.28	109.10
26	LA	726	G	C4'-C3'-C2'	-6.82	95.78	102.60
26	LA	1635	A	N1-C2-N3	-6.82	125.89	129.30
26	LA	1680	U	C4'-C3'-C2'	-6.82	95.78	102.60
26	LA	1834	U	C2'-C3'-O3'	6.82	124.61	113.70
26	LA	2012	G	N7-C8-N9	-6.82	109.69	113.10
26	LA	2263	C	P-O5'-C5'	-6.82	109.99	120.90
26	LA	2649	C	N1-C1'-C2'	-6.82	104.50	112.00
32	LY	78	PHE	CB-CG-CD1	-6.82	116.03	120.80
2	SA	51	A	O4'-C4'-C3'	-6.82	97.18	104.00
2	SA	119	A	N9-C4-C5	-6.82	103.07	105.80
2	SA	129	A	C3'-C2'-C1'	-6.82	96.05	101.50
2	SA	1099	G	N3-C4-N9	-6.82	121.91	126.00
2	SA	1149	C	C5-C6-N1	-6.82	117.59	121.00
25	LB	56	G	C8-N9-C1'	6.82	135.86	127.00
26	LA	1156	A	N1-C2-N3	-6.82	125.89	129.30
26	LA	1658	C	P-O3'-C3'	-6.82	111.52	119.70
26	LA	1736	U	N3-C2-O2	-6.82	117.43	122.20
26	LA	2807	U	O4'-C1'-N1	6.82	113.65	108.20
2	SA	851	G	P-O5'-C5'	-6.81	110.00	120.90
2	SA	1259	C	C4'-C3'-C2'	-6.81	95.79	102.60
2	SA	1416	G	N1-C6-O6	-6.81	115.81	119.90
26	LA	913	U	C4-C5-C6	-6.81	115.61	119.70
26	LA	973	A	C4-C5-N7	-6.81	107.29	110.70
26	LA	993	G	C5-C6-N1	6.81	114.91	111.50
26	LA	1907	G	O4'-C1'-N9	6.81	113.65	108.20
2	SA	308	C	C5-C6-N1	6.81	124.41	121.00
2	SA	957	U	P-O5'-C5'	6.81	131.80	120.90
2	SA	1057	G	N1-C2-N2	-6.81	110.07	116.20
25	LB	49	C	C2-N3-C4	-6.81	116.49	119.90
25	LB	99	A	C4'-C3'-C2'	-6.81	95.79	102.60
26	LA	244	A	O4'-C1'-N9	6.81	113.65	108.20
26	LA	305	C	C2-N3-C4	-6.81	116.49	119.90
26	LA	400	G	C5-C6-N1	6.81	114.91	111.50
26	LA	785	G	C5-C6-O6	-6.81	124.51	128.60
26	LA	792	A	C5-C6-N1	6.81	121.11	117.70
26	LA	1062	G	C6-N1-C2	6.81	129.19	125.10
26	LA	1704	C	C4'-C3'-C2'	-6.81	95.79	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1818	U	C5'-C4'-O4'	6.81	117.28	109.10
26	LA	1944	U	C3'-C2'-C1'	-6.81	96.05	101.50
56	LR	13	LYS	CB-CA-C	-6.81	96.77	110.40
26	LA	528	A	C2-N3-C4	-6.81	107.19	110.60
26	LA	904	G	N3-C2-N2	6.81	124.67	119.90
26	LA	2210	U	O4'-C1'-N1	6.81	113.65	108.20
2	SA	1532	U	P-O5'-C5'	-6.81	110.01	120.90
26	LA	401	A	N9-C4-C5	-6.81	103.08	105.80
26	LA	446	G	N7-C8-N9	6.81	116.50	113.10
26	LA	808	G	N9-C4-C5	6.81	108.12	105.40
26	LA	936	A	C4-C5-C6	-6.81	113.59	117.00
26	LA	1340	U	C5-C4-O4	-6.81	121.81	125.90
26	LA	1356	G	C5-N7-C8	-6.81	100.90	104.30
26	LA	1506	U	O4'-C1'-N1	6.81	113.65	108.20
26	LA	1973	G	O4'-C1'-N9	6.81	113.65	108.20
26	LA	2360	G	N1-C6-O6	6.81	123.99	119.90
2	SA	156	C	P-O3'-C3'	6.81	127.87	119.70
2	SA	215	C	C1'-O4'-C4'	-6.81	104.45	109.90
2	SA	510	A	C5'-C4'-O4'	6.81	117.27	109.10
2	SA	1237	C	N1-C2-O2	6.81	122.98	118.90
19	SC	199	VAL	CG1-CB-CG2	-6.81	100.01	110.90
26	LA	567	U	C5-C4-O4	-6.81	121.81	125.90
26	LA	2144	G	C2-N3-C4	-6.81	108.50	111.90
26	LA	2352	A	C5-C6-N1	6.81	121.10	117.70
27	LD	224	MET	CG-SD-CE	-6.81	89.31	100.20
2	SA	511	C	C4-C5-C6	6.81	120.80	117.40
2	SA	685	G	C5'-C4'-C3'	-6.81	105.11	116.00
2	SA	1276	G	C4-C5-N7	-6.81	108.08	110.80
26	LA	542	C	C6-N1-C2	-6.81	117.58	120.30
26	LA	1889	A	C4-C5-C6	6.81	120.40	117.00
2	SA	259	G	N9-C1'-C2'	-6.80	104.52	112.00
2	SA	703	G	C5-C6-O6	-6.80	124.52	128.60
2	SA	1327	C	C5'-C4'-C3'	-6.80	105.11	116.00
26	LA	925	A	C5'-C4'-C3'	-6.80	105.11	116.00
26	LA	1092	C	C6-N1-C2	-6.80	117.58	120.30
26	LA	1151	A	C8-N9-C4	6.80	108.52	105.80
26	LA	1777	U	N3-C4-O4	-6.80	114.64	119.40
26	LA	1955	U	P-O3'-C3'	6.80	127.87	119.70
26	LA	2637	U	O4'-C1'-N1	6.80	113.64	108.20
53	LP	102	PHE	CB-CG-CD1	-6.80	116.04	120.80
2	SA	908	A	P-O5'-C5'	6.80	131.79	120.90
2	SA	1039	G	N1-C2-N3	-6.80	119.82	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1109	C	C4-C5-C6	6.80	120.80	117.40
11	SK	10	ARG	NE-CZ-NH1	6.80	123.70	120.30
26	LA	142	A	C4'-C3'-C2'	-6.80	95.80	102.60
26	LA	864	G	C2-N3-C4	-6.80	108.50	111.90
26	LA	1033	U	O4'-C1'-N1	6.80	113.64	108.20
26	LA	2563	U	C6-N1-C2	6.80	125.08	121.00
2	SA	30	U	N3-C2-O2	6.80	126.96	122.20
2	SA	847	G	C4-C5-N7	-6.80	108.08	110.80
2	SA	997	U	N1-C2-O2	6.80	127.56	122.80
2	SA	1031	C	N1-C2-N3	-6.80	114.44	119.20
2	SA	1180	A	C5-N7-C8	-6.80	100.50	103.90
2	SA	1207	G	N1-C6-O6	6.80	123.98	119.90
2	SA	1534	A	C5'-C4'-O4'	6.80	117.26	109.10
26	LA	545	U	P-O3'-C3'	6.80	127.86	119.70
26	LA	691	C	C5'-C4'-C3'	-6.80	105.12	116.00
26	LA	1738	G	P-O5'-C5'	-6.80	110.02	120.90
26	LA	1830	C	P-O3'-C3'	-6.80	111.54	119.70
26	LA	2125	G	N1-C2-N3	6.80	127.98	123.90
26	LA	2525	G	C5-C6-N1	-6.80	108.10	111.50
26	LA	2842	G	P-O5'-C5'	6.80	131.78	120.90
26	LA	2890	G	C3'-C2'-C1'	6.80	106.94	101.50
2	SA	686	U	C4-C5-C6	-6.80	115.62	119.70
2	SA	885	G	C5-C6-N1	6.80	114.90	111.50
2	SA	986	U	P-O5'-C5'	6.80	131.78	120.90
2	SA	1238	A	C5'-C4'-O4'	6.80	117.26	109.10
12	SL	53	ARG	NE-CZ-NH1	6.80	123.70	120.30
24	S3	640	MET	N-CA-CB	6.80	122.84	110.60
26	LA	845	A	O4'-C1'-N9	6.80	113.64	108.20
26	LA	861	A	N9-C4-C5	6.80	108.52	105.80
26	LA	1897	G	C8-N9-C4	-6.80	103.68	106.40
26	LA	2222	C	C2-N3-C4	-6.80	116.50	119.90
37	LC	7	ARG	NE-CZ-NH2	6.80	123.70	120.30
44	LF	158	PHE	CB-CG-CD2	6.80	125.56	120.80
2	SA	1494	G	C5-C6-N1	-6.80	108.10	111.50
26	LA	743	A	O4'-C1'-N9	6.80	113.64	108.20
26	LA	1037	G	N1-C6-O6	6.80	123.98	119.90
26	LA	1138	G	C5-C6-O6	-6.80	124.52	128.60
26	LA	1150	C	P-O3'-C3'	-6.80	111.54	119.70
26	LA	2115	G	C3'-C2'-C1'	-6.80	96.06	101.50
2	SA	397	A	C1'-O4'-C4'	-6.80	104.46	109.90
2	SA	545	C	P-O3'-C3'	-6.80	111.55	119.70
2	SA	1152	A	C6-C5-N7	-6.80	127.54	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	584	C	C4-C5-C6	-6.80	114.00	117.40
26	LA	939	G	N3-C4-N9	6.80	130.08	126.00
26	LA	1252	G	C5-N7-C8	-6.80	100.90	104.30
26	LA	1387	A	N3-C4-N9	-6.80	121.96	127.40
26	LA	1479	G	C4-C5-N7	-6.80	108.08	110.80
26	LA	1653	G	N3-C4-C5	6.80	132.00	128.60
26	LA	2158	A	O3'-P-O5'	-6.80	91.09	104.00
26	LA	2215	C	O4'-C1'-N1	6.80	113.64	108.20
26	LA	2362	C	O4'-C1'-C2'	6.80	113.72	107.60
26	LA	2636	C	N1-C2-N3	6.80	123.96	119.20
2	SA	214	C	P-O3'-C3'	6.79	127.86	119.70
26	LA	1438	U	N1-C2-O2	-6.79	118.04	122.80
2	SA	260	G	C4'-C3'-C2'	6.79	109.39	102.60
2	SA	650	G	C6-N1-C2	-6.79	121.02	125.10
2	SA	1080	A	C8-N9-C4	6.79	108.52	105.80
4	S2	50	G	O4'-C1'-N9	6.79	113.64	108.20
26	LA	311	A	N1-C2-N3	6.79	132.70	129.30
26	LA	536	G	N1-C2-N2	-6.79	110.08	116.20
26	LA	699	A	C6-N1-C2	-6.79	114.52	118.60
26	LA	1004	U	C5'-C4'-C3'	-6.79	105.13	116.00
26	LA	1587	G	N3-C4-N9	-6.79	121.92	126.00
26	LA	1913	A	O4'-C1'-N9	6.79	113.63	108.20
26	LA	2120	G	C4-N9-C1'	6.79	135.33	126.50
26	LA	2427	C	N1-C1'-C2'	-6.79	104.53	112.00
2	SA	734	G	N3-C4-C5	6.79	132.00	128.60
2	SA	954	G	P-O3'-C3'	-6.79	111.55	119.70
2	SA	1326	U	N1-C2-N3	6.79	118.97	114.90
2	SA	1515	G	C8-N9-C4	-6.79	103.68	106.40
26	LA	723	C	C5-C6-N1	6.79	124.40	121.00
26	LA	1116	G	C4'-C3'-C2'	-6.79	95.81	102.60
26	LA	1534	U	N3-C2-O2	-6.79	117.45	122.20
26	LA	2477	U	C2-N1-C1'	6.79	125.85	117.70
26	LA	2839	G	C3'-C2'-C1'	6.79	106.93	101.50
50	LL	33	ALA	N-CA-CB	-6.79	100.59	110.10
2	SA	1110	A	C5-C6-N6	6.79	129.13	123.70
3	S1	35	G	C2'-C3'-O3'	6.79	124.56	113.70
26	LA	2030	U	P-O5'-C5'	6.79	131.76	120.90
26	LA	2054	A	N1-C6-N6	-6.79	114.53	118.60
26	LA	2162	G	C5'-C4'-O4'	-6.79	100.95	109.10
2	SA	125	U	C2-N3-C4	-6.79	122.93	127.00
2	SA	422	C	P-O3'-C3'	6.79	127.85	119.70
2	SA	728	A	N1-C6-N6	6.79	122.67	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	S1	22	G	C5-N7-C8	-6.79	100.91	104.30
26	LA	351	C	C2-N3-C4	6.79	123.29	119.90
26	LA	831	G	C5-N7-C8	-6.79	100.91	104.30
26	LA	1264	A	N3-C4-N9	-6.79	121.97	127.40
26	LA	1479	G	N3-C2-N2	6.79	124.65	119.90
26	LA	1956	U	C2-N3-C4	-6.79	122.93	127.00
26	LA	2331	G	O4'-C1'-N9	6.79	113.63	108.20
26	LA	2463	C	N3-C2-O2	-6.79	117.15	121.90
26	LA	2574	G	C5'-C4'-C3'	6.79	126.86	116.00
26	LA	2609	U	N1-C2-N3	6.79	118.97	114.90
42	L6	16	THR	CA-CB-CG2	6.79	121.90	112.40
2	SA	1395	C	C1'-O4'-C4'	-6.79	104.47	109.90
3	S1	46	C	C5-C4-N4	6.79	124.95	120.20
26	LA	463	G	C4'-C3'-C2'	-6.79	95.81	102.60
47	LJ	60	ARG	NE-CZ-NH2	-6.79	116.91	120.30
2	SA	22	G	C5-N7-C8	6.79	107.69	104.30
2	SA	148	G	C1'-O4'-C4'	6.79	115.33	109.90
2	SA	570	G	N1-C6-O6	6.79	123.97	119.90
2	SA	700	G	O4'-C1'-N9	6.79	113.63	108.20
2	SA	1538	C	P-O5'-C5'	6.79	131.76	120.90
26	LA	1073	A	C5'-C4'-C3'	-6.79	105.14	116.00
26	LA	1274	A	N1-C6-N6	-6.79	114.53	118.60
26	LA	1393	A	O4'-C1'-N9	6.79	113.63	108.20
26	LA	1941	C	OP1-P-OP2	-6.79	109.42	119.60
26	LA	2623	G	N3-C2-N2	6.79	124.65	119.90
2	SA	761	G	O4'-C1'-N9	6.78	113.63	108.20
3	S1	59	A	C5-C6-N6	-6.78	118.27	123.70
26	LA	25	U	N1-C2-N3	6.78	118.97	114.90
26	LA	607	U	O4'-C1'-N1	6.78	113.63	108.20
26	LA	830	G	C3'-C2'-C1'	-6.78	96.07	101.50
26	LA	1225	G	O4'-C1'-N9	6.78	113.63	108.20
26	LA	1640	A	C5-C6-N1	6.78	121.09	117.70
26	LA	2327	A	C4-C5-C6	6.78	120.39	117.00
50	LL	125	TYR	CB-CG-CD2	-6.78	116.93	121.00
26	LA	1106	G	P-O3'-C3'	-6.78	111.56	119.70
26	LA	1240	U	O4'-C1'-N1	6.78	113.63	108.20
26	LA	2288	A	O4'-C1'-C2'	-6.78	99.02	105.80
26	LA	2356	U	O4'-C1'-N1	6.78	113.63	108.20
26	LA	2378	A	C5'-C4'-C3'	6.78	126.85	116.00
26	LA	2737	G	N1-C6-O6	-6.78	115.83	119.90
48	LN	143	GLU	OE1-CD-OE2	-6.78	115.16	123.30
2	SA	235	C	C5'-C4'-C3'	-6.78	105.15	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	426	U	P-O3'-C3'	6.78	127.84	119.70
2	SA	599	C	C4'-C3'-C2'	-6.78	95.82	102.60
2	SA	732	C	N3-C4-N4	6.78	122.75	118.00
26	LA	729	G	N1-C2-N2	-6.78	110.10	116.20
26	LA	1064	C	N3-C4-N4	6.78	122.75	118.00
26	LA	1074	G	N9-C1'-C2'	-6.78	104.54	112.00
26	LA	1575	C	P-O3'-C3'	-6.78	111.56	119.70
26	LA	1626	A	O4'-C1'-N9	6.78	113.62	108.20
26	LA	1686	C	C6-N1-C2	-6.78	117.59	120.30
26	LA	2409	G	C5'-C4'-C3'	-6.78	105.15	116.00
26	LA	2823	A	N1-C6-N6	-6.78	114.53	118.60
2	SA	521	G	N7-C8-N9	-6.78	109.71	113.10
2	SA	548	G	C4-C5-C6	-6.78	114.73	118.80
2	SA	1489	G	N3-C2-N2	-6.78	115.16	119.90
26	LA	574	A	C4-N9-C1'	6.78	138.50	126.30
26	LA	2128	G	C5'-C4'-C3'	6.78	126.85	116.00
26	LA	2221	G	C4-C5-C6	-6.78	114.73	118.80
2	SA	507	C	C5-C6-N1	-6.78	117.61	121.00
2	SA	1143	G	C5-C6-O6	6.78	132.67	128.60
4	S2	68	C	N1-C2-O2	6.78	122.97	118.90
17	SQ	14	ASP	CB-CG-OD1	6.78	124.40	118.30
25	LB	61	G	C8-N9-C4	-6.78	103.69	106.40
25	LB	103	U	O4'-C1'-N1	6.78	113.62	108.20
26	LA	581	C	O4'-C1'-N1	6.78	113.62	108.20
26	LA	828	U	N3-C4-O4	-6.78	114.66	119.40
26	LA	1684	G	N3-C4-C5	-6.78	125.21	128.60
26	LA	2681	C	C1'-O4'-C4'	-6.78	104.48	109.90
2	SA	437	U	C5'-C4'-C3'	-6.78	105.16	116.00
26	LA	841	G	C5-C6-O6	-6.78	124.53	128.60
26	LA	1013	C	C5-C4-N4	-6.78	115.46	120.20
26	LA	1249	U	C5'-C4'-O4'	6.78	117.23	109.10
26	LA	1626	A	N7-C8-N9	-6.78	110.41	113.80
26	LA	1901	A	C5'-C4'-O4'	6.78	117.23	109.10
26	LA	1912	A	N9-C1'-C2'	-6.78	104.55	112.00
26	LA	2585	U	N3-C4-C5	-6.78	110.53	114.60
2	SA	1110	A	P-O3'-C3'	6.77	127.83	119.70
26	LA	53	A	C4-C5-C6	6.77	120.39	117.00
2	SA	802	A	P-O3'-C3'	-6.77	111.57	119.70
2	SA	1067	A	N7-C8-N9	-6.77	110.41	113.80
2	SA	1352	C	C6-N1-C2	-6.77	117.59	120.30
2	SA	1459	G	C5-N7-C8	-6.77	100.91	104.30
26	LA	333	G	O4'-C1'-N9	-6.77	102.78	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	453	A	C5-C6-N1	6.77	121.09	117.70
26	LA	1049	C	C6-N1-C2	-6.77	117.59	120.30
26	LA	2440	C	N3-C2-O2	-6.77	117.16	121.90
26	LA	2486	C	O4'-C1'-N1	6.77	113.62	108.20
45	LG	124	ARG	NE-CZ-NH2	-6.77	116.91	120.30
2	SA	443	C	P-O5'-C5'	-6.77	110.07	120.90
2	SA	634	C	C2-N1-C1'	6.77	126.25	118.80
26	LA	1005	C	O3'-P-O5'	-6.77	91.14	104.00
26	LA	1347	A	C6-N1-C2	-6.77	114.54	118.60
26	LA	1945	G	N1-C2-N2	-6.77	110.11	116.20
2	SA	728	A	N7-C8-N9	-6.77	110.42	113.80
2	SA	843	U	C6-N1-C2	-6.77	116.94	121.00
2	SA	1054	C	C3'-C2'-C1'	-6.77	96.08	101.50
3	S1	21	U	C3'-C2'-C1'	6.77	106.92	101.50
25	LB	75	G	C5-C6-N1	6.77	114.89	111.50
26	LA	146	A	C5'-C4'-O4'	6.77	117.22	109.10
26	LA	857	G	N1-C2-N3	6.77	127.96	123.90
26	LA	950	G	C6-N1-C2	6.77	129.16	125.10
26	LA	1164	C	C3'-C2'-C1'	6.77	106.92	101.50
26	LA	1437	C	C2-N3-C4	6.77	123.28	119.90
26	LA	2320	U	C2-N1-C1'	6.77	125.82	117.70
2	SA	123	U	C4-C5-C6	-6.77	115.64	119.70
26	LA	48	G	N1-C6-O6	6.77	123.96	119.90
26	LA	728	G	C5'-C4'-C3'	-6.77	105.17	116.00
26	LA	1189	A	C2-N3-C4	-6.77	107.22	110.60
26	LA	1283	G	P-O3'-C3'	-6.77	111.58	119.70
26	LA	2256	G	C5'-C4'-C3'	-6.77	105.17	116.00
26	LA	2502	G	N1-C2-N3	-6.77	119.84	123.90
46	LH	93	TYR	CB-CG-CD2	-6.77	116.94	121.00
2	SA	188	C	C3'-C2'-C1'	6.77	106.91	101.50
2	SA	203	G	C4-N9-C1'	-6.77	117.70	126.50
2	SA	340	U	C5-C4-O4	-6.77	121.84	125.90
26	LA	80	G	C5-N7-C8	-6.77	100.92	104.30
26	LA	110	G	O4'-C1'-N9	6.77	113.61	108.20
26	LA	298	G	N9-C4-C5	-6.77	102.69	105.40
26	LA	757	G	C5-C6-N1	6.77	114.88	111.50
26	LA	983	A	N1-C6-N6	-6.77	114.54	118.60
26	LA	2302	U	C3'-C2'-C1'	-6.77	96.09	101.50
26	LA	2630	G	O4'-C1'-N9	6.77	113.61	108.20
26	LA	2813	A	OP1-P-OP2	-6.77	109.45	119.60
37	LC	1	MET	CG-SD-CE	-6.77	89.38	100.20
2	SA	4	U	C2-N3-C4	-6.76	122.94	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	565	U	N3-C4-C5	-6.76	110.54	114.60
2	SA	590	U	O4'-C1'-N1	6.76	113.61	108.20
2	SA	1137	C	C5-C4-N4	-6.76	115.47	120.20
2	SA	1176	A	C1'-O4'-C4'	-6.76	104.49	109.90
2	SA	1179	A	P-O3'-C3'	-6.76	111.58	119.70
2	SA	1516	G	C4-C5-C6	-6.76	114.74	118.80
25	LB	13	G	C5'-C4'-O4'	6.76	117.22	109.10
26	LA	236	C	O4'-C1'-N1	6.76	113.61	108.20
26	LA	800	A	C3'-C2'-C1'	-6.76	96.09	101.50
26	LA	2171	A	N3-C4-C5	-6.76	122.06	126.80
2	SA	56	U	N1-C2-N3	6.76	118.96	114.90
2	SA	1351	U	C1'-O4'-C4'	-6.76	104.49	109.90
21	SE	49	TYR	CB-CG-CD2	6.76	125.06	121.00
26	LA	270	A	N1-C2-N3	-6.76	125.92	129.30
26	LA	540	C	C4-C5-C6	6.76	120.78	117.40
26	LA	1244	A	C2-N3-C4	6.76	113.98	110.60
26	LA	1354	A	C5-N7-C8	-6.76	100.52	103.90
26	LA	2416	C	C2-N3-C4	-6.76	116.52	119.90
2	SA	365	U	C5'-C4'-O4'	6.76	117.21	109.10
2	SA	1051	C	C6-N1-C1'	-6.76	112.69	120.80
2	SA	1396	A	C2-N3-C4	-6.76	107.22	110.60
26	LA	640	C	O4'-C1'-N1	6.76	113.61	108.20
26	LA	875	G	N9-C4-C5	6.76	108.11	105.40
26	LA	903	C	C2-N1-C1'	-6.76	111.36	118.80
26	LA	1965	C	C5'-C4'-O4'	6.76	117.21	109.10
26	LA	1968	G	N1-C2-N2	-6.76	110.11	116.20
26	LA	212	G	C3'-C2'-C1'	6.76	106.91	101.50
26	LA	810	U	P-O5'-C5'	6.76	131.71	120.90
26	LA	813	U	C1'-O4'-C4'	-6.76	104.49	109.90
26	LA	821	A	N7-C8-N9	6.76	117.18	113.80
26	LA	2321	U	C2-N1-C1'	6.76	125.81	117.70
26	LA	2567	G	C1'-O4'-C4'	-6.76	104.49	109.90
2	SA	881	G	N1-C6-O6	6.76	123.95	119.90
2	SA	1487	G	P-O3'-C3'	6.76	127.81	119.70
26	LA	1812	U	C2-N3-C4	6.76	131.06	127.00
2	SA	679	C	C5'-C4'-O4'	6.76	117.21	109.10
2	SA	871	U	P-O3'-C3'	6.76	127.81	119.70
2	SA	1069	C	N3-C4-C5	-6.76	119.20	121.90
22	SF	40	GLU	N-CA-CB	6.76	122.76	110.60
25	LB	4	C	C2-N3-C4	-6.76	116.52	119.90
25	LB	21	G	C5-C6-O6	6.76	132.65	128.60
26	LA	73	A	C5'-C4'-C3'	6.76	126.81	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	503	A	O4'-C1'-C2'	6.76	113.68	107.60
26	LA	861	A	C5'-C4'-C3'	-6.76	105.19	116.00
26	LA	1073	A	P-O5'-C5'	6.76	131.71	120.90
26	LA	2510	C	N3-C4-N4	-6.76	113.27	118.00
2	SA	35	G	N9-C4-C5	6.75	108.10	105.40
2	SA	251	G	C4-C5-C6	6.75	122.85	118.80
2	SA	844	G	C5-C6-N1	-6.75	108.12	111.50
2	SA	1241	G	N1-C6-O6	6.75	123.95	119.90
2	SA	1308	U	O4'-C1'-N1	6.75	113.60	108.20
26	LA	620	G	C5-C6-O6	-6.75	124.55	128.60
26	LA	742	A	O4'-C1'-N9	6.75	113.60	108.20
26	LA	1090	A	C5-C6-N6	-6.75	118.30	123.70
26	LA	1265	A	C4'-C3'-C2'	6.75	109.36	102.60
26	LA	1719	G	C5-C6-O6	-6.75	124.55	128.60
26	LA	2117	A	N1-C2-N3	-6.75	125.92	129.30
26	LA	2855	C	O4'-C1'-N1	6.75	113.60	108.20
2	SA	315	A	P-O5'-C5'	-6.75	110.09	120.90
2	SA	643	C	C5'-C4'-O4'	6.75	117.20	109.10
25	LB	65	U	O4'-C1'-N1	6.75	113.60	108.20
26	LA	1160	G	C6-C5-N7	6.75	134.45	130.40
26	LA	1260	A	C4'-C3'-C2'	-6.75	95.85	102.60
26	LA	1524	G	C5'-C4'-O4'	6.75	117.20	109.10
26	LA	1786	A	N9-C4-C5	-6.75	103.10	105.80
26	LA	2145	C	C6-N1-C2	-6.75	117.60	120.30
2	SA	246	A	C1'-O4'-C4'	-6.75	104.50	109.90
2	SA	301	G	C1'-O4'-C4'	-6.75	104.50	109.90
2	SA	417	G	C5-C6-N1	-6.75	108.12	111.50
2	SA	484	G	C5-C6-N1	6.75	114.88	111.50
2	SA	1065	U	O3'-P-O5'	-6.75	91.17	104.00
2	SA	1205	U	C3'-C2'-C1'	6.75	106.90	101.50
2	SA	1250	A	N1-C6-N6	6.75	122.65	118.60
4	S2	38	A	C5'-C4'-O4'	6.75	117.20	109.10
26	LA	540	C	N3-C2-O2	-6.75	117.17	121.90
26	LA	2159	G	N7-C8-N9	6.75	116.48	113.10
26	LA	2274	A	C5-C6-N6	-6.75	118.30	123.70
26	LA	2863	C	C5-C4-N4	-6.75	115.47	120.20
26	LA	2878	U	P-O3'-C3'	6.75	127.80	119.70
2	SA	248	C	O4'-C1'-N1	6.75	113.60	108.20
2	SA	270	A	O4'-C1'-N9	6.75	113.60	108.20
18	SB	137	THR	CA-CB-CG2	-6.75	102.95	112.40
26	LA	980	A	C3'-C2'-C1'	6.75	106.90	101.50
26	LA	2189	U	C5-C6-N1	6.75	126.08	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	128	G	C5-N7-C8	-6.75	100.93	104.30
2	SA	462	G	N3-C4-N9	-6.75	121.95	126.00
2	SA	485	U	O3'-P-O5'	6.75	116.82	104.00
2	SA	515	G	C4-N9-C1'	-6.75	117.73	126.50
2	SA	556	C	C5-C4-N4	-6.75	115.48	120.20
2	SA	807	A	C4-C5-N7	6.75	114.07	110.70
2	SA	946	A	N7-C8-N9	6.75	117.17	113.80
2	SA	1134	G	C4'-C3'-C2'	-6.75	95.85	102.60
2	SA	1343	G	N1-C6-O6	6.75	123.95	119.90
20	SD	110	ARG	NH1-CZ-NH2	-6.75	111.98	119.40
26	LA	1127	A	OP1-P-OP2	-6.75	109.48	119.60
26	LA	1218	G	N9-C1'-C2'	-6.75	104.58	112.00
26	LA	1545	A	N9-C4-C5	-6.75	103.10	105.80
26	LA	1710	G	N1-C2-N3	-6.75	119.85	123.90
26	LA	1723	G	C5-C6-N1	-6.75	108.13	111.50
26	LA	1809	A	N7-C8-N9	6.75	117.17	113.80
26	LA	2363	G	C4-C5-C6	-6.75	114.75	118.80
26	LA	2500	U	O4'-C1'-N1	6.75	113.60	108.20
26	LA	2519	U	C5'-C4'-O4'	6.75	117.20	109.10
26	LA	2578	G	C5-C6-N1	6.75	114.87	111.50
26	LA	2614	A	C1'-O4'-C4'	-6.75	104.50	109.90
26	LA	2785	C	C2-N3-C4	-6.75	116.53	119.90
34	L0	1	MET	CG-SD-CE	-6.75	89.40	100.20
2	SA	43	C	N1-C2-O2	6.75	122.95	118.90
2	SA	151	A	P-O5'-C5'	-6.75	110.10	120.90
2	SA	520	A	C8-N9-C4	6.75	108.50	105.80
2	SA	759	A	N1-C6-N6	6.75	122.65	118.60
2	SA	1102	A	C6-C5-N7	-6.75	127.58	132.30
26	LA	139	U	C4'-C3'-C2'	-6.75	95.85	102.60
26	LA	236	C	C6-N1-C1'	6.75	128.90	120.80
26	LA	238	C	C6-N1-C2	-6.75	117.60	120.30
26	LA	595	C	O5'-P-OP2	6.75	118.80	110.70
26	LA	759	G	C2-N3-C4	-6.75	108.53	111.90
26	LA	1367	A	C5'-C4'-O4'	6.75	117.20	109.10
26	LA	1795	C	C6-N1-C2	-6.75	117.60	120.30
26	LA	2491	U	O4'-C1'-N1	6.75	113.60	108.20
37	LC	180	PHE	CB-CG-CD2	-6.75	116.08	120.80
2	SA	1267	C	N1-C2-N3	-6.75	114.48	119.20
2	SA	1331	G	C4-N9-C1'	-6.75	117.73	126.50
26	LA	2373	G	OP1-P-OP2	-6.75	109.48	119.60
2	SA	793	U	P-O5'-C5'	6.74	131.69	120.90
2	SA	939	G	C3'-C2'-C1'	6.74	106.89	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	12	C	C5'-C4'-O4'	6.74	117.19	109.10
26	LA	139	U	N3-C2-O2	-6.74	117.48	122.20
26	LA	415	A	C6-C5-N7	6.74	137.02	132.30
26	LA	659	G	P-O5'-C5'	-6.74	110.11	120.90
26	LA	811	U	C6-N1-C1'	-6.74	111.76	121.20
26	LA	1116	G	O4'-C1'-N9	6.74	113.59	108.20
26	LA	1191	G	C6-N1-C2	-6.74	121.05	125.10
26	LA	1619	G	C4-C5-N7	6.74	113.50	110.80
26	LA	2443	C	C5'-C4'-O4'	6.74	117.19	109.10
26	LA	2550	G	N3-C4-C5	-6.74	125.23	128.60
26	LA	2800	A	C8-N9-C4	-6.74	103.10	105.80
2	SA	1154	G	N7-C8-N9	-6.74	109.73	113.10
2	SA	1328	C	N1-C2-N3	6.74	123.92	119.20
26	LA	1115	G	C5-C6-N1	6.74	114.87	111.50
46	LH	169	ARG	NE-CZ-NH2	6.74	123.67	120.30
2	SA	161	A	N9-C4-C5	6.74	108.50	105.80
2	SA	474	G	C6-N1-C2	-6.74	121.06	125.10
2	SA	816	A	C5'-C4'-C3'	6.74	126.78	116.00
2	SA	1396	A	C5-N7-C8	-6.74	100.53	103.90
2	SA	1398	A	N9-C4-C5	-6.74	103.10	105.80
2	SA	1405	G	N1-C2-N3	-6.74	119.86	123.90
26	LA	160	A	C5'-C4'-C3'	-6.74	105.22	116.00
26	LA	488	G	C5-N7-C8	-6.74	100.93	104.30
26	LA	945	A	N1-C6-N6	6.74	122.64	118.60
26	LA	1042	G	C4-N9-C1'	-6.74	117.74	126.50
26	LA	1396	U	N1-C2-N3	6.74	118.94	114.90
26	LA	2333	A	C3'-C2'-C1'	6.74	106.89	101.50
45	LG	147	ARG	NE-CZ-NH1	-6.74	116.93	120.30
2	SA	121	U	P-O3'-C3'	-6.74	111.61	119.70
2	SA	530	G	C4'-C3'-C2'	6.74	109.34	102.60
2	SA	681	A	C5'-C4'-C3'	-6.74	105.22	116.00
2	SA	1219	A	C2-N3-C4	6.74	113.97	110.60
7	SG	61	PHE	CB-CG-CD1	6.74	125.52	120.80
26	LA	259	G	C6-C5-N7	-6.74	126.36	130.40
26	LA	901	C	P-O5'-C5'	-6.74	110.12	120.90
26	LA	1019	U	C5'-C4'-C3'	-6.74	105.22	116.00
26	LA	2073	C	O4'-C4'-C3'	6.74	111.49	106.10
45	LG	166	ARG	NE-CZ-NH1	6.74	123.67	120.30
2	SA	931	C	C2-N3-C4	-6.74	116.53	119.90
2	SA	945	G	O4'-C1'-C2'	6.74	113.66	107.60
26	LA	891	G	N9-C4-C5	-6.74	102.70	105.40
26	LA	1197	G	C1'-O4'-C4'	-6.74	104.51	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1310	G	N3-C2-N2	6.74	124.62	119.90
26	LA	1467	U	C1'-O4'-C4'	-6.74	104.51	109.90
2	SA	5	U	C6-N1-C2	-6.74	116.96	121.00
2	SA	1304	G	OP2-P-O3'	6.74	120.02	105.20
2	SA	1390	U	N3-C4-C5	6.74	118.64	114.60
26	LA	164	C	C5'-C4'-C3'	6.74	126.78	116.00
26	LA	987	C	N3-C4-C5	-6.74	119.21	121.90
26	LA	1084	A	C3'-C2'-C1'	6.74	106.89	101.50
26	LA	1821	A	OP2-P-O3'	6.74	120.02	105.20
26	LA	2693	G	N1-C6-O6	6.74	123.94	119.90
26	LA	2729	G	C5'-C4'-C3'	6.74	126.78	116.00
31	LX	9	ARG	NE-CZ-NH2	6.74	123.67	120.30
2	SA	389	A	C5-C6-N1	6.73	121.07	117.70
2	SA	404	G	N1-C6-O6	6.73	123.94	119.90
2	SA	1392	G	N1-C6-O6	6.73	123.94	119.90
26	LA	538	A	C5-C6-N1	6.73	121.07	117.70
26	LA	1348	C	N3-C4-N4	6.73	122.71	118.00
4	S2	70	C	C5-C4-N4	6.73	124.91	120.20
26	LA	329	G	N3-C2-N2	6.73	124.61	119.90
26	LA	1077	A	O4'-C1'-N9	6.73	113.59	108.20
26	LA	1374	G	N3-C2-N2	6.73	124.61	119.90
26	LA	1542	U	C2-N3-C4	-6.73	122.96	127.00
2	SA	283	U	C1'-O4'-C4'	-6.73	104.52	109.90
2	SA	481	G	C4'-C3'-C2'	-6.73	95.87	102.60
2	SA	493	A	N7-C8-N9	6.73	117.17	113.80
2	SA	538	G	C6-N1-C2	6.73	129.14	125.10
2	SA	922	G	O4'-C1'-N9	6.73	113.58	108.20
2	SA	1166	G	C4'-C3'-C2'	6.73	109.33	102.60
2	SA	1336	C	C6-N1-C1'	-6.73	112.72	120.80
3	S1	54	U	C4'-C3'-C2'	6.73	109.33	102.60
26	LA	38	A	C5'-C4'-O4'	6.73	117.18	109.10
26	LA	961	C	C5-C4-N4	-6.73	115.49	120.20
26	LA	1116	G	C4-N9-C1'	-6.73	117.75	126.50
26	LA	1654	A	OP1-P-OP2	-6.73	109.50	119.60
26	LA	1766	G	O4'-C1'-N9	6.73	113.58	108.20
26	LA	2020	A	C5-C6-N1	6.73	121.07	117.70
35	L1	16	LEU	CB-CG-CD2	6.73	122.44	111.00
1	SS	26	ASP	CB-CG-OD2	-6.73	112.24	118.30
2	SA	564	C	N1-C2-O2	6.73	122.94	118.90
2	SA	667	G	C5-C6-N1	6.73	114.86	111.50
2	SA	812	G	C4-N9-C1'	6.73	135.25	126.50
2	SA	1483	A	N9-C4-C5	6.73	108.49	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2558	C	C5'-C4'-O4'	6.73	117.17	109.10
2	SA	863	U	N3-C4-O4	6.73	124.11	119.40
2	SA	1324	A	C5-N7-C8	-6.73	100.54	103.90
26	LA	810	U	C5'-C4'-O4'	6.73	117.17	109.10
26	LA	1465	G	N1-C2-N3	-6.73	119.86	123.90
26	LA	1862	G	C5-C6-O6	6.73	132.64	128.60
26	LA	1890	A	C2-N3-C4	-6.73	107.24	110.60
26	LA	2091	C	N3-C4-C5	-6.73	119.21	121.90
2	SA	266	G	C5-C6-O6	-6.73	124.56	128.60
2	SA	549	C	N3-C4-N4	-6.73	113.29	118.00
26	LA	1385	A	C5-C6-N6	-6.73	118.32	123.70
26	LA	2717	C	C4'-C3'-C2'	-6.73	95.87	102.60
57	LS	51	GLN	O-C-N	-6.73	111.94	122.70
2	SA	391	G	C6-N1-C2	-6.72	121.07	125.10
2	SA	1089	G	C4'-C3'-C2'	-6.72	95.88	102.60
2	SA	1205	U	C6-N1-C2	-6.72	116.97	121.00
25	LB	89	U	N3-C4-O4	-6.72	114.69	119.40
26	LA	611	C	C1'-O4'-C4'	-6.72	104.52	109.90
26	LA	1083	U	O4'-C1'-N1	6.72	113.58	108.20
26	LA	1932	A	C3'-C2'-C1'	-6.72	96.12	101.50
26	LA	2630	G	C5'-C4'-O4'	6.72	117.17	109.10
51	LI	132	PHE	CB-CG-CD2	-6.72	116.09	120.80
2	SA	319	G	O4'-C1'-N9	6.72	113.58	108.20
26	LA	1171	G	C5-C6-O6	-6.72	124.57	128.60
26	LA	1815	A	O4'-C1'-N9	6.72	113.58	108.20
26	LA	1964	G	N3-C4-C5	-6.72	125.24	128.60
26	LA	2242	G	C5'-C4'-C3'	-6.72	105.24	116.00
26	LA	2548	U	N1-C2-O2	6.72	127.51	122.80
26	LA	2651	C	O3'-P-O5'	-6.72	91.23	104.00
2	SA	332	G	C1'-O4'-C4'	-6.72	104.52	109.90
2	SA	514	C	P-O5'-C5'	6.72	131.65	120.90
2	SA	669	G	O4'-C1'-N9	6.72	113.58	108.20
2	SA	1141	C	N1-C2-O2	6.72	122.93	118.90
26	LA	454	A	N9-C4-C5	-6.72	103.11	105.80
26	LA	1339	G	C6-N1-C2	-6.72	121.07	125.10
26	LA	1375	U	O4'-C1'-N1	6.72	113.58	108.20
26	LA	2889	C	N1-C2-N3	6.72	123.91	119.20
2	SA	149	A	C6-N1-C2	-6.72	114.57	118.60
2	SA	311	C	C5-C6-N1	6.72	124.36	121.00
2	SA	384	G	C6-N1-C2	-6.72	121.07	125.10
2	SA	1285	A	C5-C6-N1	-6.72	114.34	117.70
26	LA	411	G	C8-N9-C4	6.72	109.09	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	459	U	N3-C2-O2	6.72	126.90	122.20
26	LA	517	C	O4'-C1'-N1	6.72	113.58	108.20
26	LA	1899	A	C8-N9-C4	6.72	108.49	105.80
26	LA	2103	C	N3-C4-C5	-6.72	119.21	121.90
26	LA	2556	C	C5-C4-N4	-6.72	115.50	120.20
2	SA	194	C	C5-C6-N1	-6.72	117.64	121.00
2	SA	449	G	C1'-O4'-C4'	-6.72	104.53	109.90
2	SA	1110	A	C4-C5-N7	6.72	114.06	110.70
2	SA	1474	U	C2'-C3'-O3'	6.72	124.45	113.70
2	SA	1523	G	O4'-C1'-N9	6.72	113.58	108.20
2	SA	1526	G	OP1-P-OP2	-6.72	109.52	119.60
26	LA	305	C	OP1-P-OP2	-6.72	109.52	119.60
26	LA	571	U	P-O5'-C5'	-6.72	110.15	120.90
26	LA	669	G	N3-C2-N2	-6.72	115.20	119.90
26	LA	914	G	N3-C4-N9	6.72	130.03	126.00
26	LA	1022	G	N1-C2-N2	-6.72	110.15	116.20
26	LA	2644	G	C4-N9-C1'	6.72	135.23	126.50
2	SA	370	C	C5-C4-N4	-6.72	115.50	120.20
2	SA	588	G	O4'-C1'-N9	6.72	113.57	108.20
2	SA	619	U	C5-C4-O4	-6.72	121.87	125.90
2	SA	703	G	C4-C5-N7	-6.72	108.11	110.80
2	SA	793	U	O4'-C1'-N1	6.72	113.57	108.20
25	LB	64	G	C1'-O4'-C4'	-6.72	104.53	109.90
26	LA	77	G	C5-C6-O6	6.72	132.63	128.60
26	LA	288	U	P-O3'-C3'	-6.72	111.64	119.70
26	LA	423	A	C8-N9-C4	6.72	108.49	105.80
26	LA	474	G	C2-N3-C4	6.72	115.26	111.90
26	LA	1266	G	N9-C4-C5	6.72	108.09	105.40
26	LA	1431	A	C4-C5-N7	6.72	114.06	110.70
26	LA	1620	G	C8-N9-C1'	6.72	135.73	127.00
26	LA	2500	U	N3-C4-C5	-6.72	110.57	114.60
26	LA	2600	A	C4'-C3'-C2'	-6.72	95.88	102.60
2	SA	44	A	N7-C8-N9	6.71	117.16	113.80
2	SA	203	G	O4'-C1'-N9	6.71	113.57	108.20
2	SA	566	G	N9-C4-C5	-6.71	102.71	105.40
2	SA	1376	U	C5-C6-N1	-6.71	119.34	122.70
26	LA	177	G	C8-N9-C1'	-6.71	118.27	127.00
26	LA	1030	C	C4-C5-C6	-6.71	114.04	117.40
26	LA	1127	A	C2-N3-C4	-6.71	107.24	110.60
26	LA	1351	C	C2-N3-C4	-6.71	116.54	119.90
26	LA	2056	G	O4'-C4'-C3'	6.71	111.47	106.10
26	LA	2131	U	P-O3'-C3'	-6.71	111.64	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2510	C	C5-C4-N4	6.71	124.90	120.20
26	LA	2566	A	C5'-C4'-C3'	6.71	126.74	116.00
2	SA	130	A	C2-N3-C4	-6.71	107.24	110.60
2	SA	469	C	C5-C4-N4	-6.71	115.50	120.20
2	SA	1354	U	P-O3'-C3'	-6.71	111.64	119.70
26	LA	44	A	C2-N3-C4	-6.71	107.24	110.60
26	LA	477	A	C5-C6-N1	-6.71	114.34	117.70
26	LA	496	G	N7-C8-N9	6.71	116.46	113.10
26	LA	876	C	C5'-C4'-O4'	6.71	117.16	109.10
26	LA	1117	C	N1-C2-N3	6.71	123.90	119.20
37	LC	60	ARG	NE-CZ-NH2	-6.71	116.94	120.30
2	SA	143	A	C8-N9-C1'	6.71	139.78	127.70
2	SA	765	G	C5'-C4'-C3'	-6.71	105.26	116.00
2	SA	855	U	O4'-C1'-N1	6.71	113.57	108.20
2	SA	915	A	O4'-C1'-C2'	6.71	113.64	107.60
2	SA	973	G	C4'-C3'-C2'	-6.71	95.89	102.60
2	SA	976	G	O4'-C1'-N9	6.71	113.57	108.20
2	SA	1239	A	N1-C6-N6	6.71	122.63	118.60
2	SA	1471	U	C4'-C3'-C2'	-6.71	95.89	102.60
26	LA	43	G	C4-C5-N7	6.71	113.48	110.80
26	LA	662	G	C5'-C4'-C3'	-6.71	105.26	116.00
26	LA	948	C	C5-C4-N4	6.71	124.90	120.20
26	LA	1033	U	C4-C5-C6	-6.71	115.67	119.70
26	LA	1036	G	C6-N1-C2	6.71	129.13	125.10
26	LA	2162	G	C4'-C3'-C2'	-6.71	95.89	102.60
26	LA	2287	A	C5-N7-C8	6.71	107.26	103.90
26	LA	2410	G	P-O3'-C3'	6.71	127.75	119.70
26	LA	897	C	P-O5'-C5'	6.71	131.64	120.90
2	SA	261	U	O5'-P-OP2	-6.71	99.66	105.70
2	SA	541	G	C2-N3-C4	6.71	115.25	111.90
2	SA	719	C	N3-C4-C5	-6.71	119.22	121.90
26	LA	1581	G	C5-C6-O6	-6.71	124.58	128.60
26	LA	2282	G	C3'-C2'-C1'	6.71	106.87	101.50
26	LA	2610	C	C2-N3-C4	6.71	123.25	119.90
26	LA	2713	U	C1'-O4'-C4'	-6.71	104.53	109.90
2	SA	309	A	C5'-C4'-O4'	6.71	117.15	109.10
2	SA	336	A	C1'-O4'-C4'	-6.71	104.54	109.90
2	SA	902	G	C2-N3-C4	-6.71	108.55	111.90
2	SA	945	G	N3-C2-N2	6.71	124.59	119.90
26	LA	407	G	N3-C2-N2	6.71	124.59	119.90
26	LA	639	U	C6-N1-C2	-6.71	116.98	121.00
26	LA	1915	C	N1-C2-O2	-6.71	114.88	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2060	A	C2-N3-C4	-6.71	107.25	110.60
26	LA	2086	U	P-O3'-C3'	6.71	127.75	119.70
26	LA	2173	A	O5'-C5'-C4'	6.71	124.44	111.70
26	LA	2561	U	O4'-C1'-N1	6.71	113.56	108.20
26	LA	2662	A	O4'-C1'-N9	-6.71	102.83	108.20
26	LA	2697	G	C5'-C4'-O4'	6.71	117.15	109.10
26	LA	2713	U	C2-N3-C4	6.71	131.02	127.00
2	SA	574	A	OP1-P-OP2	-6.71	109.54	119.60
2	SA	957	U	C4-C5-C6	-6.71	115.68	119.70
26	LA	629	G	P-O3'-C3'	-6.71	111.65	119.70
26	LA	1301	A	C5-C6-N1	6.71	121.05	117.70
26	LA	1912	A	C4'-C3'-C2'	6.71	109.31	102.60
26	LA	1991	U	C6-N1-C2	-6.71	116.98	121.00
26	LA	2073	C	O4'-C1'-N1	6.71	113.56	108.20
26	LA	2894	G	C6-C5-N7	-6.71	126.38	130.40
2	SA	240	G	C4-C5-N7	-6.70	108.12	110.80
2	SA	440	C	N3-C4-N4	6.70	122.69	118.00
2	SA	627	G	O4'-C1'-N9	6.70	113.56	108.20
25	LB	25	U	C5-C6-N1	6.70	126.05	122.70
26	LA	514	A	C5-C6-N6	-6.70	118.34	123.70
26	LA	527	C	O4'-C1'-N1	6.70	113.56	108.20
26	LA	774	G	C1'-O4'-C4'	-6.70	104.54	109.90
26	LA	1560	G	N3-C4-N9	6.70	130.02	126.00
26	LA	1652	A	N1-C6-N6	-6.70	114.58	118.60
26	LA	1853	A	C4-C5-N7	-6.70	107.35	110.70
26	LA	2073	C	P-O3'-C3'	6.70	127.75	119.70
26	LA	2289	G	C5'-C4'-O4'	6.70	117.14	109.10
26	LA	2515	C	N1-C2-O2	-6.70	114.88	118.90
2	SA	503	C	O4'-C1'-N1	6.70	113.56	108.20
2	SA	761	G	C2-N3-C4	6.70	115.25	111.90
25	LB	63	C	N1-C2-N3	6.70	123.89	119.20
26	LA	10	A	C6-N1-C2	-6.70	114.58	118.60
26	LA	135	U	P-O3'-C3'	-6.70	111.66	119.70
26	LA	870	U	O4'-C1'-N1	-6.70	102.84	108.20
26	LA	1636	U	N3-C4-C5	-6.70	110.58	114.60
26	LA	2052	A	C5-C6-N1	-6.70	114.35	117.70
26	LA	2496	C	O4'-C4'-C3'	6.70	111.46	106.10
46	LH	96	ALA	CB-CA-C	6.70	120.15	110.10
2	SA	601	G	OP1-P-OP2	-6.70	109.55	119.60
2	SA	1115	U	C5-C4-O4	-6.70	121.88	125.90
2	SA	1424	U	N3-C4-O4	-6.70	114.71	119.40
2	SA	1527	U	P-O5'-C5'	-6.70	110.18	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	32	G	C4'-C3'-C2'	-6.70	95.90	102.60
26	LA	105	C	P-O5'-C5'	6.70	131.62	120.90
26	LA	113	U	P-O3'-C3'	-6.70	111.66	119.70
26	LA	798	G	P-O3'-C3'	-6.70	111.66	119.70
26	LA	1530	G	N3-C4-N9	6.70	130.02	126.00
26	LA	1562	U	C5-C4-O4	-6.70	121.88	125.90
26	LA	1912	A	N1-C2-N3	-6.70	125.95	129.30
26	LA	2067	G	N1-C6-O6	-6.70	115.88	119.90
26	LA	2252	G	N9-C4-C5	6.70	108.08	105.40
26	LA	2316	G	N1-C6-O6	6.70	123.92	119.90
26	LA	2417	C	N1-C2-N3	6.70	123.89	119.20
26	LA	2703	C	C6-N1-C2	-6.70	117.62	120.30
29	LV	28	ASN	N-CA-CB	6.70	122.66	110.60
2	SA	1047	G	N7-C8-N9	6.70	116.45	113.10
2	SA	1067	A	C2-N3-C4	6.70	113.95	110.60
26	LA	518	G	C5'-C4'-O4'	6.70	117.14	109.10
26	LA	1154	G	C6-C5-N7	-6.70	126.38	130.40
26	LA	1194	A	C6-N1-C2	-6.70	114.58	118.60
26	LA	1427	A	C5-N7-C8	-6.70	100.55	103.90
26	LA	1435	G	C5-C6-N1	6.70	114.85	111.50
26	LA	2058	A	C2-N3-C4	-6.70	107.25	110.60
26	LA	2813	A	C5-C6-N1	6.70	121.05	117.70
2	SA	105	G	OP1-P-OP2	-6.70	109.56	119.60
2	SA	205	A	C5-C6-N1	6.70	121.05	117.70
2	SA	808	C	C6-N1-C2	6.70	122.98	120.30
2	SA	1018	G	C4'-C3'-C2'	-6.70	95.90	102.60
26	LA	906	U	O4'-C1'-N1	6.70	113.56	108.20
26	LA	2332	C	O4'-C1'-N1	6.70	113.56	108.20
26	LA	2478	A	C2-N3-C4	6.70	113.95	110.60
46	LH	163	TYR	CB-CG-CD1	6.70	125.02	121.00
2	SA	15	G	C3'-C2'-C1'	6.70	106.86	101.50
2	SA	126	G	C5-C6-O6	-6.70	124.58	128.60
2	SA	299	G	N3-C4-C5	-6.70	125.25	128.60
2	SA	431	A	N1-C2-N3	-6.70	125.95	129.30
2	SA	700	G	C8-N9-C4	-6.70	103.72	106.40
2	SA	1101	A	C5-N7-C8	6.70	107.25	103.90
3	S1	38	G	N9-C4-C5	-6.70	102.72	105.40
25	LB	26	C	N1-C2-N3	6.70	123.89	119.20
26	LA	196	A	C4-N9-C1'	6.70	138.35	126.30
26	LA	869	G	C8-N9-C4	6.70	109.08	106.40
26	LA	932	U	N3-C2-O2	-6.70	117.51	122.20
26	LA	1326	U	C3'-C2'-C1'	6.70	106.86	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2229	U	C3'-C2'-C1'	-6.70	96.14	101.50
26	LA	2692	G	N3-C2-N2	6.70	124.59	119.90
26	LA	2847	U	O4'-C1'-N1	6.70	113.56	108.20
2	SA	468	A	N1-C2-N3	-6.69	125.95	129.30
2	SA	1496	C	N3-C2-O2	-6.69	117.21	121.90
26	LA	50	U	O4'-C1'-C2'	-6.69	99.11	105.80
26	LA	512	G	O4'-C1'-N9	6.69	113.56	108.20
26	LA	572	A	N1-C2-N3	-6.69	125.95	129.30
26	LA	1545	A	C8-N9-C4	6.69	108.48	105.80
26	LA	1973	G	C4'-C3'-C2'	-6.69	95.91	102.60
2	SA	486	U	C4'-C3'-C2'	-6.69	95.91	102.60
2	SA	701	U	C2-N1-C1'	-6.69	109.67	117.70
2	SA	713	G	C8-N9-C4	-6.69	103.72	106.40
2	SA	727	G	N9-C4-C5	6.69	108.08	105.40
26	LA	157	C	C6-N1-C2	6.69	122.98	120.30
26	LA	573	U	OP1-P-OP2	-6.69	109.56	119.60
26	LA	579	G	C5-C6-O6	-6.69	124.58	128.60
26	LA	964	C	N3-C2-O2	-6.69	117.22	121.90
26	LA	1059	G	O4'-C1'-C2'	6.69	113.62	107.60
26	LA	1507	C	N1-C2-O2	6.69	122.92	118.90
26	LA	2131	U	O4'-C1'-N1	6.69	113.55	108.20
26	LA	2344	U	N3-C2-O2	-6.69	117.52	122.20
26	LA	2693	G	C5-C6-N1	6.69	114.85	111.50
2	SA	363	A	O4'-C1'-N9	6.69	113.55	108.20
2	SA	963	G	N9-C1'-C2'	-6.69	104.64	112.00
2	SA	1312	G	O4'-C1'-N9	6.69	113.55	108.20
2	SA	1470	U	C6-N1-C2	6.69	125.01	121.00
26	LA	111	A	P-O3'-C3'	-6.69	111.67	119.70
26	LA	678	C	N3-C2-O2	-6.69	117.22	121.90
26	LA	1243	C	N3-C2-O2	-6.69	117.22	121.90
26	LA	1313	U	O4'-C1'-C2'	6.69	113.62	107.60
26	LA	1465	G	C2-N3-C4	6.69	115.25	111.90
26	LA	1497	U	C2-N1-C1'	6.69	125.73	117.70
26	LA	1630	A	C1'-O4'-C4'	-6.69	104.55	109.90
26	LA	1938	A	C1'-O4'-C4'	-6.69	104.55	109.90
26	LA	2224	G	C4'-C3'-C2'	-6.69	95.91	102.60
26	LA	2648	G	C1'-O4'-C4'	-6.69	104.55	109.90
2	SA	183	C	C1'-O4'-C4'	-6.69	104.55	109.90
2	SA	214	C	C4-C5-C6	-6.69	114.06	117.40
26	LA	439	A	O4'-C1'-N9	6.69	113.55	108.20
26	LA	2154	A	O5'-C5'-C4'	6.69	124.41	111.70
26	LA	2355	G	C5-C6-N1	6.69	114.84	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	231	U	C5-C6-N1	6.69	126.04	122.70
2	SA	452	A	P-O5'-C5'	6.69	131.60	120.90
2	SA	905	U	O4'-C1'-N1	6.69	113.55	108.20
2	SA	1259	C	C3'-C2'-C1'	6.69	106.85	101.50
3	S1	36	U	O4'-C1'-N1	6.69	113.55	108.20
26	LA	220	G	N3-C2-N2	6.69	124.58	119.90
26	LA	1412	U	C4-C5-C6	6.69	123.71	119.70
26	LA	1442	U	O4'-C1'-N1	6.69	113.55	108.20
26	LA	1867	G	O4'-C1'-C2'	6.69	113.62	107.60
26	LA	1894	C	O4'-C4'-C3'	6.69	111.45	106.10
26	LA	2165	C	N3-C4-N4	6.69	122.68	118.00
26	LA	2375	G	C5-N7-C8	-6.69	100.96	104.30
26	LA	2418	A	N3-C4-N9	-6.69	122.05	127.40
26	LA	2442	C	O4'-C1'-N1	6.69	113.55	108.20
2	SA	411	A	N7-C8-N9	6.69	117.14	113.80
2	SA	1015	G	C5-C6-O6	-6.69	124.59	128.60
2	SA	1409	C	C6-N1-C2	-6.69	117.62	120.30
26	LA	855	G	O4'-C1'-N9	6.69	113.55	108.20
2	SA	1143	G	C2'-C3'-O3'	6.68	124.39	113.70
25	LB	119	A	C4-C5-N7	6.68	114.04	110.70
26	LA	443	A	C5-N7-C8	-6.68	100.56	103.90
26	LA	1015	U	C5'-C4'-C3'	-6.68	105.30	116.00
26	LA	1227	G	C5-C6-O6	6.68	132.61	128.60
26	LA	1368	G	C5-C6-O6	-6.68	124.59	128.60
26	LA	1472	C	N1-C2-N3	6.68	123.88	119.20
26	LA	1655	A	C4-C5-C6	-6.68	113.66	117.00
26	LA	2133	G	C6-C5-N7	-6.68	126.39	130.40
26	LA	2550	G	N7-C8-N9	-6.68	109.76	113.10
26	LA	2579	C	C3'-C2'-C1'	-6.68	96.15	101.50
26	LA	2658	C	N3-C2-O2	-6.68	117.22	121.90
2	SA	102	G	O4'-C1'-N9	6.68	113.55	108.20
2	SA	268	U	N3-C2-O2	6.68	126.88	122.20
2	SA	980	C	C2-N3-C4	-6.68	116.56	119.90
2	SA	1318	A	OP1-P-OP2	-6.68	109.58	119.60
2	SA	1323	G	C3'-C2'-C1'	6.68	106.85	101.50
26	LA	85	G	C3'-C2'-C1'	-6.68	96.16	101.50
26	LA	572	A	C5-C6-N6	-6.68	118.35	123.70
26	LA	582	A	C5-C6-N1	-6.68	114.36	117.70
26	LA	1108	U	C1'-O4'-C4'	-6.68	104.55	109.90
26	LA	1553	A	C4-C5-N7	6.68	114.04	110.70
26	LA	1684	G	C5-N7-C8	-6.68	100.96	104.30
26	LA	1803	A	N7-C8-N9	6.68	117.14	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1811	G	C5-C6-N1	6.68	114.84	111.50
26	LA	2531	A	C5-N7-C8	-6.68	100.56	103.90
2	SA	95	C	C6-N1-C2	-6.68	117.63	120.30
26	LA	806	C	C4'-C3'-C2'	-6.68	95.92	102.60
26	LA	1481	U	C2-N3-C4	-6.68	122.99	127.00
26	LA	1825	U	N1-C2-N3	6.68	118.91	114.90
2	SA	302	G	N1-C2-N3	6.68	127.91	123.90
2	SA	477	C	N3-C4-N4	6.68	122.68	118.00
2	SA	700	G	N7-C8-N9	6.68	116.44	113.10
2	SA	731	G	N1-C2-N3	-6.68	119.89	123.90
2	SA	984	C	O4'-C1'-N1	6.68	113.54	108.20
3	S1	33	A	C6-C5-N7	-6.68	127.62	132.30
4	S2	77	A	P-O5'-C5'	-6.68	110.21	120.90
26	LA	196	A	C3'-C2'-C1'	6.68	106.84	101.50
26	LA	1541	C	O5'-C5'-C4'	6.68	124.39	111.70
26	LA	1834	U	P-O5'-C5'	6.68	131.59	120.90
26	LA	2011	U	C5'-C4'-C3'	-6.68	105.31	116.00
26	LA	2631	G	C8-N9-C4	-6.68	103.73	106.40
2	SA	1045	C	N3-C4-C5	6.68	124.57	121.90
2	SA	1215	G	C5'-C4'-C3'	-6.68	105.32	116.00
26	LA	757	G	C5-C6-O6	6.68	132.61	128.60
26	LA	976	G	C8-N9-C1'	-6.68	118.32	127.00
26	LA	1583	A	C5-N7-C8	-6.68	100.56	103.90
26	LA	2853	C	C5-C4-N4	-6.68	115.53	120.20
2	SA	761	G	C8-N9-C4	-6.68	103.73	106.40
2	SA	1050	G	C8-N9-C4	-6.68	103.73	106.40
24	S3	679	TYR	CB-CG-CD2	-6.68	116.99	121.00
26	LA	925	A	C2-N3-C4	-6.68	107.26	110.60
26	LA	965	C	N1-C1'-C2'	-6.68	104.66	112.00
26	LA	1018	U	C5'-C4'-C3'	-6.68	105.32	116.00
26	LA	1120	G	C8-N9-C4	-6.68	103.73	106.40
26	LA	1645	G	C4-N9-C1'	6.68	135.18	126.50
26	LA	2090	A	C3'-C2'-C1'	6.68	106.84	101.50
26	LA	2508	G	C5-C6-O6	-6.68	124.59	128.60
2	SA	68	G	O4'-C1'-N9	6.67	113.54	108.20
2	SA	391	G	N9-C4-C5	6.67	108.07	105.40
2	SA	557	G	C4-C5-N7	6.67	113.47	110.80
10	SJ	7	ARG	NE-CZ-NH2	-6.67	116.96	120.30
26	LA	448	U	P-O3'-C3'	-6.67	111.69	119.70
26	LA	829	A	C5'-C4'-O4'	6.67	117.11	109.10
26	LA	979	A	C4-C5-C6	6.67	120.34	117.00
26	LA	990	A	O4'-C1'-N9	6.67	113.54	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1359	A	C5'-C4'-O4'	6.67	117.11	109.10
26	LA	1389	G	O4'-C1'-N9	6.67	113.54	108.20
26	LA	1908	C	N3-C2-O2	-6.67	117.23	121.90
26	LA	2069	G	P-O3'-C3'	-6.67	111.69	119.70
26	LA	2493	U	C1'-O4'-C4'	-6.67	104.56	109.90
26	LA	2579	C	N1-C2-O2	6.67	122.91	118.90
2	SA	1317	C	O4'-C1'-N1	6.67	113.54	108.20
25	LB	84	G	C5'-C4'-O4'	6.67	117.11	109.10
26	LA	1433	A	OP1-P-OP2	-6.67	109.59	119.60
26	LA	2345	G	C1'-O4'-C4'	-6.67	104.56	109.90
2	SA	7	A	C5-N7-C8	-6.67	100.56	103.90
2	SA	442	G	C5'-C4'-C3'	-6.67	105.33	116.00
2	SA	548	G	C5-C6-O6	-6.67	124.60	128.60
2	SA	862	C	O4'-C1'-N1	6.67	113.54	108.20
26	LA	9	G	C6-C5-N7	-6.67	126.40	130.40
26	LA	605	G	C5'-C4'-O4'	6.67	117.11	109.10
26	LA	1557	C	C5-C4-N4	-6.67	115.53	120.20
26	LA	1779	U	O4'-C1'-C2'	6.67	113.61	107.60
26	LA	1831	G	C4'-C3'-C2'	-6.67	95.93	102.60
26	LA	2223	G	C4'-C3'-C2'	-6.67	95.93	102.60
2	SA	1063	C	O4'-C1'-N1	6.67	113.54	108.20
2	SA	1176	A	P-O5'-C5'	6.67	131.57	120.90
25	LB	73	A	C8-N9-C4	-6.67	103.13	105.80
26	LA	486	C	C5-C6-N1	6.67	124.33	121.00
26	LA	1194	A	C5'-C4'-O4'	6.67	117.10	109.10
26	LA	1317	G	P-O3'-C3'	6.67	127.70	119.70
26	LA	2377	A	C1'-O4'-C4'	-6.67	104.56	109.90
26	LA	2517	C	C5-C6-N1	6.67	124.33	121.00
26	LA	2811	G	C2-N3-C4	6.67	115.23	111.90
2	SA	65	A	C3'-C2'-C1'	6.67	106.83	101.50
2	SA	536	C	C5-C4-N4	-6.67	115.53	120.20
2	SA	624	C	C6-N1-C2	-6.67	117.63	120.30
2	SA	685	G	C4-C5-N7	6.67	113.47	110.80
2	SA	766	A	C5-C6-N1	6.67	121.03	117.70
2	SA	845	A	C8-N9-C1'	-6.67	115.70	127.70
2	SA	1046	A	OP1-P-OP2	-6.67	109.60	119.60
2	SA	1178	G	O4'-C1'-N9	6.67	113.53	108.20
4	S2	76	C	C2-N3-C4	6.67	123.23	119.90
18	SB	107	ARG	N-CA-CB	6.67	122.60	110.60
26	LA	266	G	N9-C4-C5	-6.67	102.73	105.40
26	LA	816	C	N1-C2-N3	6.67	123.87	119.20
26	LA	882	G	C4-C5-N7	6.67	113.47	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	999	U	N3-C4-O4	6.67	124.07	119.40
26	LA	1580	A	N9-C4-C5	-6.67	103.13	105.80
26	LA	1955	U	P-O5'-C5'	6.67	131.57	120.90
26	LA	2120	G	C5-C6-N1	-6.67	108.17	111.50
26	LA	2730	C	C5'-C4'-O4'	6.67	117.10	109.10
45	LG	27	VAL	CG1-CB-CG2	-6.67	100.23	110.90
2	SA	83	C	C3'-C2'-C1'	6.67	106.83	101.50
2	SA	406	G	C4-N9-C1'	-6.67	117.83	126.50
2	SA	787	A	P-O5'-C5'	-6.67	110.23	120.90
2	SA	933	G	C5-N7-C8	6.67	107.63	104.30
2	SA	1028	C	C2-N3-C4	-6.67	116.57	119.90
2	SA	1304	G	C4-N9-C1'	6.67	135.17	126.50
26	LA	246	C	N1-C2-N3	-6.67	114.53	119.20
26	LA	376	G	N3-C4-C5	-6.67	125.27	128.60
26	LA	1369	G	O4'-C1'-N9	6.67	113.53	108.20
26	LA	1451	C	O4'-C4'-C3'	6.67	111.43	106.10
26	LA	1577	C	C5-C6-N1	6.67	124.33	121.00
26	LA	1922	G	C1'-O4'-C4'	-6.67	104.57	109.90
26	LA	1971	U	N1-C2-O2	-6.67	118.13	122.80
26	LA	2264	C	C5'-C4'-O4'	6.67	117.10	109.10
26	LA	2279	G	C4'-C3'-C2'	-6.67	95.93	102.60
58	LT	95	ASP	CB-CG-OD1	6.67	124.30	118.30
2	SA	1194	U	N1-C2-N3	-6.67	110.90	114.90
2	SA	1531	A	C5-N7-C8	-6.67	100.57	103.90
26	LA	1913	A	C3'-C2'-C1'	-6.67	96.17	101.50
2	SA	69	G	C5-C6-N1	-6.66	108.17	111.50
2	SA	534	U	N1-C2-O2	6.66	127.46	122.80
2	SA	972	C	C4-C5-C6	6.66	120.73	117.40
2	SA	1005	A	O5'-C5'-C4'	6.66	124.36	111.70
2	SA	1343	G	C5-C6-O6	-6.66	124.60	128.60
2	SA	1521	C	N3-C4-C5	-6.66	119.23	121.90
26	LA	1066	U	C5'-C4'-O4'	6.66	117.10	109.10
26	LA	1273	U	N3-C4-O4	-6.66	114.73	119.40
26	LA	1618	C	C2-N1-C1'	6.66	126.13	118.80
26	LA	1956	U	C5-C6-N1	6.66	126.03	122.70
26	LA	2298	A	C5-C6-N6	-6.66	118.37	123.70
26	LA	2446	G	N3-C4-C5	-6.66	125.27	128.60
26	LA	2589	A	O4'-C4'-C3'	6.66	111.43	106.10
33	LZ	72	ALA	CB-CA-C	6.66	120.10	110.10
47	LJ	18	ALA	CB-CA-C	6.66	120.10	110.10
2	SA	1168	U	O4'-C1'-N1	6.66	113.53	108.20
25	LB	26	C	C5'-C4'-O4'	6.66	117.09	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	153	U	C5-C6-N1	-6.66	119.37	122.70
26	LA	1269	A	C6-C5-N7	-6.66	127.64	132.30
26	LA	1816	C	C2-N1-C1'	6.66	126.13	118.80
26	LA	2669	G	OP2-P-O3'	6.66	119.86	105.20
2	SA	84	U	C5-C4-O4	6.66	129.90	125.90
2	SA	306	A	C5'-C4'-C3'	-6.66	105.34	116.00
2	SA	509	A	C4-C5-C6	6.66	120.33	117.00
2	SA	971	G	C5-C6-N1	-6.66	108.17	111.50
2	SA	1256	A	C5'-C4'-O4'	6.66	117.09	109.10
2	SA	1282	C	C5'-C4'-C3'	-6.66	105.34	116.00
26	LA	47	C	N3-C4-C5	-6.66	119.24	121.90
26	LA	95	A	N1-C6-N6	-6.66	114.60	118.60
26	LA	142	A	P-O5'-C5'	6.66	131.56	120.90
26	LA	800	A	C1'-O4'-C4'	-6.66	104.57	109.90
26	LA	1451	C	O4'-C1'-N1	6.66	113.53	108.20
26	LA	1962	C	N3-C2-O2	-6.66	117.24	121.90
58	LT	77	PHE	CB-CG-CD2	6.66	125.46	120.80
2	SA	295	C	N1-C2-N3	-6.66	114.54	119.20
2	SA	388	G	C5-N7-C8	-6.66	100.97	104.30
2	SA	1002	G	P-O5'-C5'	6.66	131.56	120.90
2	SA	1168	U	N1-C2-N3	-6.66	110.90	114.90
26	LA	377	G	N3-C4-N9	6.66	130.00	126.00
26	LA	588	U	C1'-O4'-C4'	-6.66	104.57	109.90
26	LA	2148	G	N3-C2-N2	6.66	124.56	119.90
47	LJ	30	ARG	N-CA-CB	6.66	122.59	110.60
2	SA	678	U	O4'-C1'-N1	6.66	113.53	108.20
26	LA	903	C	C6-N1-C1'	6.66	128.79	120.80
26	LA	1114	C	C5'-C4'-C3'	-6.66	105.35	116.00
26	LA	1820	U	O5'-P-OP2	6.66	118.69	110.70
2	SA	113	G	O4'-C1'-N9	6.66	113.52	108.20
2	SA	858	G	C5'-C4'-O4'	6.66	117.09	109.10
2	SA	1049	U	C5'-C4'-C3'	-6.66	105.35	116.00
26	LA	104	A	C6-N1-C2	6.66	122.59	118.60
26	LA	161	A	C6-N1-C2	-6.66	114.61	118.60
26	LA	800	A	N9-C1'-C2'	-6.66	104.68	112.00
26	LA	1288	G	C6-C5-N7	-6.66	126.41	130.40
26	LA	1672	A	C5-C6-N1	-6.66	114.37	117.70
26	LA	1976	U	N3-C2-O2	-6.66	117.54	122.20
26	LA	2058	A	N1-C6-N6	6.66	122.59	118.60
26	LA	2060	A	P-O3'-C3'	6.66	127.69	119.70
26	LA	2732	G	N1-C6-O6	6.66	123.89	119.90
2	SA	415	A	C8-N9-C4	-6.65	103.14	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	577	G	C2-N3-C4	6.65	115.23	111.90
2	SA	1509	C	C5-C6-N1	-6.65	117.67	121.00
26	LA	40	U	C5-C4-O4	-6.65	121.91	125.90
26	LA	408	G	C2-N3-C4	6.65	115.23	111.90
26	LA	797	G	C4-C5-C6	6.65	122.79	118.80
26	LA	967	U	O4'-C1'-N1	6.65	113.52	108.20
26	LA	1450	G	C5-N7-C8	6.65	107.63	104.30
26	LA	2425	A	C4'-C3'-C2'	-6.65	95.95	102.60
2	SA	89	U	C3'-C2'-C1'	-6.65	96.18	101.50
2	SA	190	A	C4-C5-C6	-6.65	113.67	117.00
2	SA	204	G	C4-N9-C1'	6.65	135.15	126.50
2	SA	413	G	C1'-O4'-C4'	-6.65	104.58	109.90
2	SA	1011	C	O4'-C1'-N1	6.65	113.52	108.20
26	LA	2	G	N7-C8-N9	-6.65	109.77	113.10
26	LA	6	A	O4'-C1'-N9	6.65	113.52	108.20
26	LA	503	A	C1'-O4'-C4'	-6.65	104.58	109.90
26	LA	1555	G	C4-C5-N7	-6.65	108.14	110.80
26	LA	1640	A	O4'-C1'-N9	6.65	113.52	108.20
26	LA	1807	G	OP1-P-OP2	-6.65	109.62	119.60
26	LA	1953	A	C6-N1-C2	-6.65	114.61	118.60
26	LA	2407	A	P-O3'-C3'	-6.65	111.72	119.70
26	LA	2709	G	O4'-C1'-N9	6.65	113.52	108.20
26	LA	2845	U	P-O3'-C3'	-6.65	111.72	119.70
2	SA	544	G	C6-C5-N7	6.65	134.39	130.40
2	SA	1419	G	C5-C6-N1	6.65	114.83	111.50
24	S3	355	ALA	N-CA-CB	-6.65	100.79	110.10
26	LA	5	A	N9-C4-C5	6.65	108.46	105.80
26	LA	231	A	O4'-C1'-N9	6.65	113.52	108.20
26	LA	258	G	OP1-P-OP2	-6.65	109.62	119.60
26	LA	760	G	C4'-C3'-C2'	-6.65	95.95	102.60
26	LA	1208	C	O4'-C1'-C2'	6.65	113.59	107.60
26	LA	1814	G	C8-N9-C4	6.65	109.06	106.40
26	LA	1966	A	C8-N9-C1'	-6.65	115.73	127.70
2	SA	915	A	C8-N9-C4	-6.65	103.14	105.80
2	SA	1008	U	N3-C4-O4	6.65	124.06	119.40
26	LA	1105	U	C5-C6-N1	-6.65	119.38	122.70
2	SA	704	A	C8-N9-C4	6.65	108.46	105.80
2	SA	794	A	C8-N9-C4	-6.65	103.14	105.80
2	SA	1052	U	O4'-C4'-C3'	-6.65	97.35	104.00
26	LA	669	G	C5'-C4'-O4'	6.65	117.08	109.10
26	LA	742	A	N1-C6-N6	-6.65	114.61	118.60
26	LA	1212	G	O4'-C1'-N9	6.65	113.52	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1310	G	C6-C5-N7	-6.65	126.41	130.40
26	LA	1473	G	N3-C4-C5	-6.65	125.28	128.60
26	LA	1838	C	C5'-C4'-C3'	6.65	126.64	116.00
26	LA	2243	U	C5-C6-N1	-6.65	119.38	122.70
2	SA	971	G	C5-C6-O6	-6.64	124.61	128.60
2	SA	1333	A	N1-C6-N6	-6.64	114.61	118.60
2	SA	1442	G	C4-C5-N7	6.64	113.46	110.80
12	SL	120	ARG	NE-CZ-NH1	6.64	123.62	120.30
26	LA	291	G	C6-N1-C2	-6.64	121.11	125.10
26	LA	480	A	P-O3'-C3'	6.64	127.67	119.70
26	LA	767	U	N1-C2-O2	-6.64	118.15	122.80
26	LA	1992	G	C5'-C4'-O4'	-6.64	101.13	109.10
26	LA	2045	C	N3-C4-C5	6.64	124.56	121.90
26	LA	2156	G	C8-N9-C4	-6.64	103.74	106.40
26	LA	2201	G	C2-N3-C4	-6.64	108.58	111.90
26	LA	2223	G	C5-C6-N1	-6.64	108.18	111.50
26	LA	2225	A	O4'-C1'-N9	6.64	113.52	108.20
26	LA	2458	G	OP2-P-O3'	6.64	119.82	105.20
26	LA	2523	G	C5-C6-O6	-6.64	124.61	128.60
31	LX	80	HIS	N-CA-CB	-6.64	98.64	110.60
55	LQ	6	ALA	N-CA-CB	-6.64	100.80	110.10
2	SA	401	C	O5'-P-OP1	6.64	118.67	110.70
2	SA	504	C	N1-C2-N3	6.64	123.85	119.20
2	SA	982	U	P-O3'-C3'	6.64	127.67	119.70
5	ST	78	LEU	CB-CG-CD1	6.64	122.29	111.00
22	SF	109	ARG	NE-CZ-NH1	6.64	123.62	120.30
25	LB	45	A	P-O3'-C3'	-6.64	111.73	119.70
26	LA	251	A	N9-C4-C5	-6.64	103.14	105.80
26	LA	644	A	N1-C6-N6	6.64	122.58	118.60
26	LA	1133	A	C6-N1-C2	-6.64	114.61	118.60
26	LA	1288	G	C8-N9-C1'	-6.64	118.36	127.00
26	LA	1368	G	C1'-O4'-C4'	-6.64	104.59	109.90
26	LA	1541	C	C4-C5-C6	6.64	120.72	117.40
26	LA	2037	A	C6-N1-C2	-6.64	114.61	118.60
26	LA	2477	U	O4'-C1'-N1	6.64	113.51	108.20
52	LO	91	TYR	CG-CD2-CE2	-6.64	115.98	121.30
2	SA	295	C	OP1-P-OP2	-6.64	109.64	119.60
26	LA	64	A	N3-C4-C5	-6.64	122.15	126.80
26	LA	644	A	C4'-C3'-C2'	-6.64	95.96	102.60
2	SA	332	G	O4'-C1'-N9	6.64	113.51	108.20
2	SA	977	A	N9-C4-C5	-6.64	103.14	105.80
26	LA	402	A	C6-N1-C2	-6.64	114.62	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1579	A	C5-C6-N6	6.64	129.01	123.70
26	LA	1707	G	C5-C6-N1	-6.64	108.18	111.50
26	LA	2416	C	C6-N1-C2	-6.64	117.64	120.30
2	SA	128	G	C4-C5-N7	6.64	113.45	110.80
26	LA	1641	A	C6-N1-C2	6.64	122.58	118.60
26	LA	2430	A	C4'-C3'-C2'	6.64	109.24	102.60
26	LA	2821	A	OP2-P-O3'	6.64	119.80	105.20
1	SS	13	HIS	CA-CB-CG	-6.64	102.32	113.60
2	SA	29	U	N1-C2-N3	6.64	118.88	114.90
2	SA	398	U	N3-C4-C5	6.64	118.58	114.60
2	SA	425	G	C5-C6-N1	6.64	114.82	111.50
2	SA	597	G	O4'-C1'-N9	6.64	113.51	108.20
2	SA	619	U	N1-C2-N3	6.64	118.88	114.90
2	SA	1221	G	N3-C4-C5	6.64	131.92	128.60
2	SA	1422	G	N3-C4-N9	6.64	129.98	126.00
3	S1	35	G	N1-C2-N3	6.64	127.88	123.90
26	LA	312	G	P-O3'-C3'	6.64	127.66	119.70
26	LA	874	G	O4'-C1'-N9	6.64	113.51	108.20
26	LA	925	A	N9-C4-C5	-6.64	103.14	105.80
26	LA	1691	C	O4'-C1'-N1	6.64	113.51	108.20
2	SA	581	G	N1-C6-O6	6.63	123.88	119.90
2	SA	739	C	C2-N3-C4	-6.63	116.58	119.90
2	SA	800	G	C2'-C3'-O3'	6.63	124.31	113.70
2	SA	1125	U	C1'-O4'-C4'	-6.63	104.59	109.90
2	SA	1388	C	P-O3'-C3'	-6.63	111.74	119.70
26	LA	358	U	C3'-C2'-C1'	6.63	106.81	101.50
26	LA	972	A	P-O3'-C3'	6.63	127.66	119.70
26	LA	1105	U	N1-C2-O2	-6.63	118.16	122.80
26	LA	1367	A	N1-C6-N6	-6.63	114.62	118.60
26	LA	1411	U	P-O5'-C5'	-6.63	110.28	120.90
26	LA	1682	G	O3'-P-O5'	-6.63	91.39	104.00
26	LA	1764	C	N3-C2-O2	-6.63	117.25	121.90
26	LA	1890	A	N7-C8-N9	6.63	117.12	113.80
26	LA	2010	G	C1'-O4'-C4'	-6.63	104.59	109.90
26	LA	2119	A	P-O5'-C5'	6.63	131.51	120.90
26	LA	2570	G	C2-N3-C4	6.63	115.22	111.90
26	LA	2868	A	C4-C5-N7	6.63	114.02	110.70
2	SA	263	A	C5-C6-N6	-6.63	118.39	123.70
2	SA	664	G	N1-C2-N3	-6.63	119.92	123.90
2	SA	1347	G	C4-C5-C6	6.63	122.78	118.80
25	LB	44	G	C4-C5-N7	-6.63	108.15	110.80
26	LA	239	C	N1-C2-O2	-6.63	114.92	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	885	C	O4'-C1'-N1	6.63	113.51	108.20
26	LA	2355	G	C5-C6-O6	-6.63	124.62	128.60
2	SA	1349	A	N1-C2-N3	-6.63	125.98	129.30
2	SA	1491	G	C4'-C3'-C2'	6.63	109.23	102.60
26	LA	41	C	N3-C4-C5	-6.63	119.25	121.90
26	LA	322	A	C5-C6-N6	-6.63	118.39	123.70
26	LA	1610	A	O4'-C1'-N9	6.63	113.50	108.20
26	LA	1615	C	P-O3'-C3'	6.63	127.66	119.70
26	LA	1663	G	N3-C2-N2	6.63	124.54	119.90
26	LA	1760	C	C6-N1-C2	-6.63	117.65	120.30
26	LA	1873	G	C5'-C4'-C3'	-6.63	105.39	116.00
26	LA	2774	C	C5-C6-N1	6.63	124.32	121.00
2	SA	111	G	N1-C2-N2	-6.63	110.23	116.20
3	S1	57	C	N3-C4-C5	-6.63	119.25	121.90
26	LA	2858	C	N3-C4-C5	-6.63	119.25	121.90
2	SA	423	G	C3'-C2'-C1'	6.63	106.80	101.50
2	SA	917	G	N1-C2-N2	-6.63	110.23	116.20
26	LA	176	A	O4'-C1'-N9	6.63	113.50	108.20
26	LA	354	A	N3-C4-C5	-6.63	122.16	126.80
26	LA	542	C	N3-C4-N4	6.63	122.64	118.00
26	LA	1562	U	O4'-C1'-N1	6.63	113.50	108.20
26	LA	2711	A	C5-C6-N6	-6.63	118.40	123.70
2	SA	351	G	C6-N1-C2	6.63	129.08	125.10
2	SA	688	G	C6-N1-C2	-6.63	121.12	125.10
26	LA	187	G	C5-C6-N1	6.63	114.81	111.50
26	LA	291	G	C5'-C4'-C3'	6.63	126.60	116.00
26	LA	532	A	C4'-C3'-C2'	-6.63	95.97	102.60
26	LA	601	C	C5-C6-N1	-6.63	117.69	121.00
26	LA	2322	A	C5-C6-N6	6.63	129.00	123.70
26	LA	2693	G	OP1-P-OP2	-6.63	109.66	119.60
26	LA	2696	U	C5-C6-N1	6.63	126.01	122.70
25	LB	40	U	P-O3'-C3'	6.62	127.65	119.70
26	LA	325	G	N1-C2-N3	6.62	127.88	123.90
26	LA	1011	G	O4'-C1'-N9	6.62	113.50	108.20
26	LA	1309	G	C4-C5-C6	6.62	122.78	118.80
26	LA	2013	A	C5-N7-C8	-6.62	100.59	103.90
26	LA	2327	A	P-O3'-C3'	6.62	127.65	119.70
26	LA	2480	C	C3'-C2'-C1'	6.62	106.80	101.50
26	LA	2608	G	P-O5'-C5'	-6.62	110.30	120.90
26	LA	2785	C	N3-C4-N4	6.62	122.64	118.00
53	LP	30	ARG	NH1-CZ-NH2	-6.62	112.11	119.40
2	SA	158	G	N1-C6-O6	-6.62	115.93	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	297	G	O4'-C1'-N9	6.62	113.50	108.20
26	LA	951	C	O4'-C1'-N1	6.62	113.50	108.20
26	LA	1295	C	O3'-P-O5'	6.62	116.58	104.00
26	LA	2097	A	N1-C2-N3	6.62	132.61	129.30
2	SA	178	C	N3-C4-C5	-6.62	119.25	121.90
2	SA	692	U	C4'-C3'-C2'	-6.62	95.98	102.60
2	SA	1356	G	C3'-C2'-C1'	6.62	106.80	101.50
2	SA	1487	G	N7-C8-N9	6.62	116.41	113.10
4	S2	26	C	N1-C2-O2	-6.62	114.93	118.90
25	LB	61	G	C5-C6-O6	-6.62	124.63	128.60
26	LA	1655	A	C5-N7-C8	-6.62	100.59	103.90
26	LA	2085	U	C1'-O4'-C4'	6.62	115.20	109.90
26	LA	2143	C	N1-C2-O2	6.62	122.87	118.90
26	LA	2308	G	OP1-P-OP2	-6.62	109.67	119.60
2	SA	166	U	C5-C4-O4	-6.62	121.93	125.90
2	SA	582	C	N3-C4-N4	6.62	122.63	118.00
2	SA	664	G	C2-N3-C4	6.62	115.21	111.90
2	SA	789	U	N3-C4-C5	6.62	118.57	114.60
2	SA	913	A	C4-C5-C6	6.62	120.31	117.00
2	SA	1027	C	O4'-C1'-N1	6.62	113.50	108.20
2	SA	1222	G	C5'-C4'-O4'	6.62	117.04	109.10
21	SE	125	LYS	CB-CA-C	-6.62	97.16	110.40
26	LA	267	C	C3'-C2'-C1'	-6.62	96.20	101.50
26	LA	1688	U	N3-C4-C5	-6.62	110.63	114.60
2	SA	354	G	C8-N9-C1'	-6.62	118.40	127.00
2	SA	1338	G	N3-C4-N9	6.62	129.97	126.00
26	LA	272	A	C5'-C4'-C3'	6.62	126.59	116.00
26	LA	360	U	C4'-C3'-C2'	-6.62	95.98	102.60
26	LA	473	G	C2-N3-C4	-6.62	108.59	111.90
26	LA	1929	G	P-O3'-C3'	-6.62	111.76	119.70
2	SA	1192	C	OP1-P-OP2	-6.62	109.67	119.60
26	LA	1098	A	N9-C4-C5	-6.62	103.15	105.80
26	LA	2721	A	N7-C8-N9	6.62	117.11	113.80
2	SA	76	G	N3-C4-C5	6.62	131.91	128.60
2	SA	890	G	C6-N1-C2	6.62	129.07	125.10
2	SA	1251	A	N7-C8-N9	-6.62	110.49	113.80
25	LB	109	A	O4'-C4'-C3'	-6.62	97.38	104.00
26	LA	57	C	N3-C4-C5	-6.62	119.25	121.90
26	LA	1409	U	C2-N3-C4	-6.62	123.03	127.00
26	LA	1990	C	C3'-C2'-C1'	6.62	106.79	101.50
2	SA	630	A	C6-N1-C2	-6.61	114.63	118.60
2	SA	718	A	C2-N3-C4	-6.61	107.29	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1112	C	O4'-C1'-N1	6.61	113.49	108.20
2	SA	1357	A	C5-C6-N1	6.61	121.01	117.70
3	S1	14	G	OP1-P-OP2	-6.61	109.68	119.60
4	S2	10	G	C3'-C2'-C1'	6.61	106.79	101.50
26	LA	18	U	C3'-C2'-C1'	6.61	106.79	101.50
26	LA	85	G	N3-C4-C5	-6.61	125.29	128.60
26	LA	162	U	C2-N3-C4	-6.61	123.03	127.00
26	LA	470	A	P-O5'-C5'	-6.61	110.32	120.90
26	LA	2197	U	C2-N3-C4	-6.61	123.03	127.00
26	LA	2200	C	N3-C2-O2	-6.61	117.27	121.90
26	LA	2434	A	C5-N7-C8	6.61	107.21	103.90
26	LA	2583	G	P-O5'-C5'	6.61	131.48	120.90
26	LA	2597	G	O4'-C1'-N9	6.61	113.49	108.20
26	LA	489	G	C6-C5-N7	-6.61	126.43	130.40
26	LA	1332	G	N1-C2-N2	-6.61	110.25	116.20
26	LA	1556	C	O4'-C1'-N1	6.61	113.49	108.20
26	LA	2751	G	O4'-C1'-N9	6.61	113.49	108.20
2	SA	120	A	N3-C4-C5	-6.61	122.17	126.80
2	SA	693	G	N1-C6-O6	6.61	123.87	119.90
2	SA	1232	U	O4'-C1'-N1	6.61	113.49	108.20
26	LA	1136	G	C1'-O4'-C4'	-6.61	104.61	109.90
26	LA	1419	A	C4'-C3'-C2'	6.61	109.21	102.60
26	LA	2479	U	N3-C4-C5	6.61	118.57	114.60
2	SA	1086	U	C1'-O4'-C4'	-6.61	104.61	109.90
2	SA	1529	G	N1-C2-N3	6.61	127.86	123.90
26	LA	623	C	C4-C5-C6	-6.61	114.09	117.40
26	LA	2444	G	N3-C4-C5	6.61	131.90	128.60
24	S3	344	SER	CB-CA-C	-6.61	97.55	110.10
26	LA	22	C	C6-N1-C2	6.61	122.94	120.30
26	LA	614	A	N1-C2-N3	6.61	132.60	129.30
26	LA	822	G	C6-N1-C2	-6.61	121.14	125.10
26	LA	1419	A	N7-C8-N9	-6.61	110.50	113.80
26	LA	1700	A	C4'-C3'-C2'	-6.61	95.99	102.60
26	LA	1925	C	C2-N3-C4	6.61	123.20	119.90
26	LA	2005	A	C8-N9-C4	-6.61	103.16	105.80
26	LA	2065	C	N1-C2-N3	6.61	123.83	119.20
26	LA	2467	C	N3-C4-N4	-6.61	113.38	118.00
26	LA	2526	G	OP1-P-OP2	-6.61	109.69	119.60
26	LA	2852	G	C8-N9-C4	-6.61	103.76	106.40
2	SA	108	G	C3'-C2'-C1'	6.61	106.78	101.50
2	SA	791	G	N3-C4-N9	6.61	129.96	126.00
2	SA	1221	G	C8-N9-C4	6.61	109.04	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	982	C	C5-C6-N1	-6.61	117.70	121.00
26	LA	1345	C	N3-C2-O2	-6.61	117.28	121.90
26	LA	1769	U	C3'-C2'-C1'	6.61	106.78	101.50
26	LA	1786	A	C2-N3-C4	-6.61	107.30	110.60
26	LA	2290	G	O4'-C1'-N9	6.61	113.48	108.20
26	LA	2630	G	C6-N1-C2	-6.61	121.14	125.10
26	LA	2792	A	O4'-C1'-N9	6.61	113.48	108.20
26	LA	2870	C	C6-N1-C1'	6.61	128.73	120.80
2	SA	398	U	C5-C4-O4	-6.60	121.94	125.90
26	LA	613	A	C8-N9-C1'	-6.60	115.81	127.70
26	LA	1124	G	C5-C6-O6	-6.60	124.64	128.60
2	SA	253	A	C1'-O4'-C4'	-6.60	104.62	109.90
2	SA	819	A	N7-C8-N9	6.60	117.10	113.80
2	SA	1114	C	N3-C2-O2	-6.60	117.28	121.90
2	SA	1423	G	C6-C5-N7	-6.60	126.44	130.40
26	LA	130	C	N3-C4-N4	6.60	122.62	118.00
26	LA	341	C	N3-C2-O2	-6.60	117.28	121.90
26	LA	418	C	C5-C6-N1	6.60	124.30	121.00
26	LA	514	A	C2-N3-C4	6.60	113.90	110.60
26	LA	795	C	O4'-C1'-N1	6.60	113.48	108.20
26	LA	935	C	C6-N1-C2	-6.60	117.66	120.30
26	LA	1038	G	C5'-C4'-O4'	6.60	117.02	109.10
26	LA	1112	G	C5-C6-O6	-6.60	124.64	128.60
26	LA	1235	G	O4'-C1'-N9	6.60	113.48	108.20
26	LA	1270	C	C5-C4-N4	-6.60	115.58	120.20
26	LA	2115	G	C5-C6-O6	6.60	132.56	128.60
26	LA	2434	A	C8-N9-C4	6.60	108.44	105.80
26	LA	626	A	C6-C5-N7	-6.60	127.68	132.30
26	LA	1332	G	N7-C8-N9	6.60	116.40	113.10
26	LA	1521	G	N9-C4-C5	-6.60	102.76	105.40
26	LA	2666	C	C4'-C3'-C2'	-6.60	96.00	102.60
2	SA	448	A	O4'-C4'-C3'	-6.60	97.40	104.00
2	SA	603	U	C2-N3-C4	6.60	130.96	127.00
2	SA	634	C	N3-C4-C5	-6.60	119.26	121.90
2	SA	869	G	C5'-C4'-C3'	6.60	126.56	116.00
26	LA	293	U	N1-C2-N3	6.60	118.86	114.90
26	LA	1932	A	C6-C5-N7	6.60	136.92	132.30
26	LA	2031	A	N9-C4-C5	-6.60	103.16	105.80
26	LA	2059	A	C4-C5-C6	-6.60	113.70	117.00
26	LA	2168	G	P-O3'-C3'	6.60	127.62	119.70
26	LA	2168	G	N3-C2-N2	-6.60	115.28	119.90
26	LA	2687	U	C5-C6-N1	-6.60	119.40	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	308	C	C2-N3-C4	6.60	123.20	119.90
2	SA	593	U	C2-N3-C4	-6.60	123.04	127.00
25	LB	83	G	O4'-C1'-N9	6.60	113.48	108.20
26	LA	551	G	O4'-C1'-N9	6.60	113.48	108.20
26	LA	1306	C	C5-C6-N1	6.60	124.30	121.00
26	LA	1928	A	C4-C5-C6	-6.60	113.70	117.00
26	LA	2462	C	C5'-C4'-C3'	-6.60	105.44	116.00
26	LA	2513	A	C6-N1-C2	-6.60	114.64	118.60
2	SA	495	A	C6-N1-C2	-6.60	114.64	118.60
2	SA	1034	G	C8-N9-C1'	6.60	135.57	127.00
26	LA	349	U	C1'-O4'-C4'	-6.60	104.62	109.90
26	LA	2464	G	C4'-C3'-C2'	-6.60	96.00	102.60
26	LA	2507	C	C6-N1-C1'	6.60	128.72	120.80
2	SA	488	C	N1-C2-O2	6.59	122.86	118.90
2	SA	1039	G	N3-C2-N2	6.59	124.52	119.90
2	SA	1207	G	O4'-C1'-N9	6.59	113.48	108.20
2	SA	1311	A	C5'-C4'-O4'	6.59	117.01	109.10
2	SA	1330	U	N1-C2-N3	6.59	118.86	114.90
26	LA	187	G	N1-C2-N3	6.59	127.86	123.90
26	LA	397	U	C5-C6-N1	-6.59	119.40	122.70
26	LA	534	U	N3-C2-O2	-6.59	117.58	122.20
26	LA	924	G	P-O3'-C3'	6.59	127.61	119.70
26	LA	954	G	N9-C4-C5	-6.59	102.76	105.40
26	LA	1208	C	O4'-C1'-N1	6.59	113.47	108.20
26	LA	1587	G	N3-C2-N2	6.59	124.52	119.90
26	LA	2002	G	O4'-C1'-N9	6.59	113.48	108.20
26	LA	2235	G	C5'-C4'-O4'	6.59	117.01	109.10
26	LA	2348	U	P-O3'-C3'	-6.59	111.79	119.70
26	LA	2421	G	C5-C6-N1	6.59	114.80	111.50
26	LA	2883	A	N7-C8-N9	-6.59	110.50	113.80
2	SA	661	G	C5-C6-N1	6.59	114.80	111.50
2	SA	1232	U	N3-C2-O2	-6.59	117.58	122.20
26	LA	304	U	C5'-C4'-C3'	-6.59	105.45	116.00
26	LA	2203	U	C6-N1-C1'	-6.59	111.97	121.20
2	SA	141	G	N1-C6-O6	6.59	123.86	119.90
2	SA	835	U	P-O3'-C3'	-6.59	111.79	119.70
2	SA	937	A	O4'-C1'-N9	6.59	113.47	108.20
2	SA	1118	U	N1-C2-N3	-6.59	110.94	114.90
2	SA	1153	G	C4-C5-N7	6.59	113.44	110.80
2	SA	1354	U	C5'-C4'-C3'	-6.59	105.45	116.00
2	SA	1437	A	C6-N1-C2	-6.59	114.64	118.60
3	S1	58	C	P-O3'-C3'	6.59	127.61	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	24	C	C6-N1-C2	-6.59	117.66	120.30
4	S2	57	C	C4'-C3'-C2'	6.59	109.19	102.60
25	LB	117	G	N3-C2-N2	6.59	124.51	119.90
26	LA	414	C	N1-C2-N3	6.59	123.81	119.20
26	LA	622	G	O4'-C1'-N9	6.59	113.47	108.20
26	LA	1416	G	C5-C6-O6	-6.59	124.64	128.60
26	LA	2078	C	C4'-C3'-C2'	-6.59	96.01	102.60
26	LA	2284	A	N1-C2-N3	6.59	132.60	129.30
26	LA	2549	G	N3-C4-N9	-6.59	122.05	126.00
2	SA	869	G	C6-N1-C2	6.59	129.05	125.10
2	SA	915	A	C6-N1-C2	-6.59	114.65	118.60
25	LB	26	C	C2-N3-C4	-6.59	116.61	119.90
25	LB	30	C	O4'-C1'-N1	6.59	113.47	108.20
26	LA	122	G	C5-N7-C8	-6.59	101.00	104.30
26	LA	323	C	N3-C2-O2	-6.59	117.29	121.90
26	LA	581	C	C5'-C4'-C3'	-6.59	105.46	116.00
26	LA	1054	A	C8-N9-C4	-6.59	103.16	105.80
26	LA	1188	U	C2-N3-C4	-6.59	123.05	127.00
2	SA	6	G	C5-C6-N1	-6.59	108.21	111.50
2	SA	30	U	C5-C6-N1	-6.59	119.41	122.70
2	SA	354	G	P-O3'-C3'	6.59	127.61	119.70
2	SA	714	G	O4'-C1'-N9	6.59	113.47	108.20
2	SA	929	G	O4'-C1'-N9	6.59	113.47	108.20
24	S3	390	VAL	CA-CB-CG1	-6.59	101.02	110.90
26	LA	117	G	N3-C4-N9	6.59	129.95	126.00
26	LA	889	C	C2-N1-C1'	6.59	126.05	118.80
26	LA	1185	G	OP1-P-OP2	-6.59	109.72	119.60
26	LA	2056	G	C4'-C3'-C2'	-6.59	96.01	102.60
2	SA	306	A	C4-C5-C6	-6.59	113.71	117.00
2	SA	436	C	N3-C4-N4	6.59	122.61	118.00
4	S2	9	G	C8-N9-C1'	-6.59	118.44	127.00
23	SR	3	TYR	C-N-CA	6.59	138.17	121.70
24	S3	407	ARG	NE-CZ-NH1	6.59	123.59	120.30
26	LA	103	A	N9-C4-C5	-6.59	103.17	105.80
26	LA	115	C	C2-N3-C4	-6.59	116.61	119.90
26	LA	679	C	C2-N3-C4	-6.59	116.61	119.90
26	LA	1100	C	N1-C1'-C2'	-6.59	104.75	112.00
26	LA	1223	G	C6-C5-N7	6.59	134.35	130.40
26	LA	1468	U	C5-C4-O4	-6.59	121.95	125.90
26	LA	1635	A	C8-N9-C4	-6.59	103.17	105.80
26	LA	1775	U	N3-C4-C5	6.59	118.55	114.60
26	LA	2706	A	N7-C8-N9	-6.59	110.51	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2900	A	N1-C6-N6	6.59	122.55	118.60
2	SA	851	G	O4'-C1'-N9	6.58	113.47	108.20
2	SA	1230	C	N3-C4-C5	-6.58	119.27	121.90
2	SA	1400	C	O4'-C1'-N1	6.58	113.47	108.20
20	SD	75	TYR	CB-CG-CD2	-6.58	117.05	121.00
26	LA	112	U	C5'-C4'-O4'	6.58	117.00	109.10
26	LA	2246	G	P-O5'-C5'	6.58	131.44	120.90
2	SA	655	A	OP1-P-OP2	-6.58	109.73	119.60
2	SA	1335	U	O4'-C1'-C2'	6.58	113.53	107.60
4	S2	59	A	N9-C4-C5	-6.58	103.17	105.80
26	LA	244	A	C8-N9-C4	6.58	108.43	105.80
26	LA	386	G	P-O5'-C5'	-6.58	110.37	120.90
26	LA	734	A	C5-C6-N1	-6.58	114.41	117.70
26	LA	1190	G	N1-C6-O6	6.58	123.85	119.90
26	LA	2196	C	C5'-C4'-C3'	-6.58	105.47	116.00
26	LA	2500	U	N3-C4-O4	6.58	124.01	119.40
2	SA	334	C	N3-C4-N4	6.58	122.61	118.00
2	SA	1033	G	N9-C1'-C2'	-6.58	104.76	112.00
2	SA	1163	A	N3-C4-C5	6.58	131.41	126.80
4	S2	39	A	C5-C6-N6	-6.58	118.44	123.70
26	LA	454	A	C4-C5-C6	-6.58	113.71	117.00
26	LA	536	G	C5-N7-C8	6.58	107.59	104.30
26	LA	602	A	C5-C6-N6	-6.58	118.43	123.70
26	LA	1489	C	C5'-C4'-O4'	6.58	117.00	109.10
2	SA	389	A	C5-N7-C8	-6.58	100.61	103.90
2	SA	487	A	N7-C8-N9	-6.58	110.51	113.80
25	LB	41	G	P-O3'-C3'	6.58	127.60	119.70
26	LA	957	C	C6-N1-C1'	-6.58	112.90	120.80
26	LA	1750	G	C3'-C2'-C1'	-6.58	96.24	101.50
26	LA	2054	A	C5'-C4'-O4'	6.58	117.00	109.10
34	L0	32	ALA	CB-CA-C	-6.58	100.23	110.10
2	SA	114	U	C5-C6-N1	-6.58	119.41	122.70
2	SA	1323	G	C5'-C4'-O4'	6.58	116.99	109.10
26	LA	318	C	P-O5'-C5'	6.58	131.43	120.90
26	LA	711	G	C4'-C3'-C2'	-6.58	96.02	102.60
26	LA	724	U	N3-C4-C5	-6.58	110.65	114.60
26	LA	861	A	C4-C5-C6	6.58	120.29	117.00
26	LA	1519	G	O4'-C1'-N9	6.58	113.46	108.20
26	LA	2562	U	C2-N3-C4	-6.58	123.05	127.00
2	SA	544	G	C8-N9-C4	-6.58	103.77	106.40
2	SA	1375	A	N7-C8-N9	6.58	117.09	113.80
2	SA	1454	G	N1-C6-O6	6.58	123.85	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	55	U	C6-N1-C1'	6.58	130.41	121.20
26	LA	163	C	C2-N1-C1'	6.58	126.03	118.80
26	LA	659	G	N3-C4-C5	6.58	131.89	128.60
26	LA	2535	G	N9-C4-C5	6.58	108.03	105.40
26	LA	2674	G	N7-C8-N9	-6.58	109.81	113.10
2	SA	534	U	C5-C4-O4	-6.58	121.95	125.90
2	SA	1021	A	N3-C4-C5	-6.58	122.20	126.80
2	SA	1065	U	C2-N3-C4	-6.58	123.06	127.00
2	SA	1104	G	N1-C6-O6	6.58	123.85	119.90
2	SA	1363	A	O4'-C1'-C2'	-6.58	99.22	105.80
26	LA	332	A	N9-C4-C5	-6.58	103.17	105.80
26	LA	442	G	C5'-C4'-C3'	-6.58	105.48	116.00
26	LA	1185	G	C6-N1-C2	-6.58	121.16	125.10
26	LA	1317	G	C1'-O4'-C4'	-6.58	104.64	109.90
26	LA	1619	G	C6-C5-N7	-6.58	126.45	130.40
26	LA	1689	A	C5-C6-N6	-6.58	118.44	123.70
26	LA	2024	G	N3-C4-N9	6.58	129.94	126.00
26	LA	2429	G	N3-C2-N2	6.58	124.50	119.90
26	LA	2827	C	C5-C6-N1	-6.58	117.71	121.00
2	SA	768	A	C4'-C3'-C2'	-6.57	96.03	102.60
2	SA	937	A	C4-C5-C6	6.57	120.29	117.00
2	SA	1000	A	C5-C6-N1	-6.57	114.41	117.70
2	SA	1070	U	C5'-C4'-O4'	6.57	116.99	109.10
2	SA	1331	G	OP1-P-O3'	6.57	119.66	105.20
2	SA	1401	G	N1-C6-O6	6.57	123.84	119.90
26	LA	1292	G	N1-C6-O6	6.57	123.84	119.90
26	LA	1345	C	N1-C2-N3	6.57	123.80	119.20
26	LA	1586	A	C4-C5-C6	6.57	120.29	117.00
26	LA	2383	G	O3'-P-O5'	6.57	116.49	104.00
26	LA	4	U	C5-C4-O4	-6.57	121.96	125.90
26	LA	1201	U	N3-C4-O4	6.57	124.00	119.40
26	LA	1383	A	O4'-C1'-N9	6.57	113.46	108.20
26	LA	2447	G	N9-C4-C5	-6.57	102.77	105.40
26	LA	2773	C	P-O3'-C3'	-6.57	111.81	119.70
2	SA	229	U	C2-N3-C4	-6.57	123.06	127.00
2	SA	883	C	N3-C2-O2	-6.57	117.30	121.90
14	SN	62	ARG	NE-CZ-NH2	6.57	123.58	120.30
26	LA	2341	G	C6-C5-N7	-6.57	126.46	130.40
26	LA	2782	G	N1-C6-O6	6.57	123.84	119.90
2	SA	551	U	C2-N1-C1'	-6.57	109.82	117.70
2	SA	1067	A	N1-C6-N6	6.57	122.54	118.60
25	LB	84	G	N9-C4-C5	-6.57	102.77	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	474	G	N7-C8-N9	6.57	116.38	113.10
26	LA	1139	G	N9-C1'-C2'	-6.57	104.77	112.00
26	LA	1388	G	C2-N3-C4	-6.57	108.62	111.90
26	LA	2124	G	N1-C2-N3	6.57	127.84	123.90
26	LA	2401	U	C1'-O4'-C4'	6.57	115.16	109.90
26	LA	2428	G	N1-C6-O6	6.57	123.84	119.90
26	LA	2708	G	N1-C2-N3	6.57	127.84	123.90
26	LA	2797	U	N3-C4-O4	6.57	124.00	119.40
26	LA	2860	A	N9-C4-C5	6.57	108.43	105.80
2	SA	1141	C	C5'-C4'-C3'	-6.57	105.49	116.00
26	LA	40	U	N3-C4-C5	6.57	118.54	114.60
26	LA	165	A	C5-N7-C8	-6.57	100.62	103.90
26	LA	1014	A	N1-C2-N3	6.57	132.58	129.30
26	LA	1450	G	C2-N3-C4	6.57	115.18	111.90
26	LA	1532	A	N1-C2-N3	6.57	132.58	129.30
26	LA	2622	U	N3-C2-O2	-6.57	117.60	122.20
26	LA	2780	G	P-O3'-C3'	-6.57	111.82	119.70
2	SA	296	U	N3-C2-O2	-6.57	117.60	122.20
2	SA	355	C	N1-C2-O2	-6.57	114.96	118.90
2	SA	500	G	C4'-C3'-C2'	-6.57	96.03	102.60
2	SA	575	G	C3'-C2'-C1'	-6.57	96.25	101.50
2	SA	768	A	C3'-C2'-C1'	6.57	106.75	101.50
2	SA	1220	G	O4'-C1'-N9	6.57	113.45	108.20
2	SA	1437	A	N9-C4-C5	6.57	108.43	105.80
24	S3	155	ASN	CA-CB-CG	-6.57	98.95	113.40
25	LB	18	G	N3-C4-C5	-6.57	125.32	128.60
25	LB	67	G	N9-C4-C5	6.57	108.03	105.40
26	LA	258	G	N7-C8-N9	6.57	116.38	113.10
26	LA	642	U	N1-C2-N3	-6.57	110.96	114.90
26	LA	1039	A	N1-C2-N3	-6.57	126.02	129.30
26	LA	1150	C	C2-N3-C4	-6.57	116.62	119.90
26	LA	1373	A	C8-N9-C4	6.57	108.43	105.80
26	LA	1454	C	C6-N1-C2	-6.57	117.67	120.30
26	LA	1687	G	N1-C6-O6	6.57	123.84	119.90
2	SA	14	U	C5-C6-N1	6.56	125.98	122.70
2	SA	953	G	N1-C2-N3	-6.56	119.96	123.90
2	SA	1511	G	C5-C6-N1	6.56	114.78	111.50
2	SA	1530	G	N1-C6-O6	6.56	123.84	119.90
26	LA	244	A	C6-N1-C2	6.56	122.54	118.60
26	LA	288	U	O4'-C1'-N1	6.56	113.45	108.20
26	LA	1009	A	P-O5'-C5'	6.56	131.40	120.90
26	LA	1374	G	N1-C6-O6	6.56	123.84	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2679	A	C8-N9-C4	6.56	108.43	105.80
26	LA	2840	C	C5-C4-N4	-6.56	115.61	120.20
2	SA	889	A	N9-C4-C5	6.56	108.42	105.80
2	SA	1206	G	N9-C4-C5	6.56	108.03	105.40
26	LA	1276	A	C5-N7-C8	-6.56	100.62	103.90
26	LA	1509	A	C5-C6-N1	-6.56	114.42	117.70
26	LA	1650	A	N3-C4-C5	-6.56	122.21	126.80
26	LA	2587	A	N1-C2-N3	-6.56	126.02	129.30
37	LC	218	MET	O-C-N	-6.56	112.04	123.20
2	SA	1457	G	C6-C5-N7	-6.56	126.46	130.40
26	LA	55	G	N1-C6-O6	-6.56	115.96	119.90
26	LA	2254	C	C6-N1-C2	-6.56	117.67	120.30
49	LK	14	ALA	N-CA-CB	-6.56	100.92	110.10
2	SA	542	G	N7-C8-N9	6.56	116.38	113.10
2	SA	1101	A	N3-C4-C5	-6.56	122.21	126.80
2	SA	1336	C	O4'-C1'-N1	6.56	113.45	108.20
25	LB	114	C	P-O3'-C3'	-6.56	111.83	119.70
26	LA	286	U	N1-C2-N3	-6.56	110.96	114.90
26	LA	511	U	C5-C6-N1	-6.56	119.42	122.70
26	LA	921	C	C6-N1-C2	-6.56	117.68	120.30
26	LA	1401	G	N1-C2-N2	-6.56	110.30	116.20
26	LA	1415	U	O4'-C1'-N1	6.56	113.45	108.20
26	LA	1479	G	C5-N7-C8	6.56	107.58	104.30
26	LA	1556	C	N3-C2-O2	-6.56	117.31	121.90
26	LA	1726	C	P-O5'-C5'	-6.56	110.41	120.90
26	LA	1860	G	C8-N9-C4	-6.56	103.78	106.40
26	LA	1883	U	C3'-C2'-C1'	6.56	106.75	101.50
26	LA	2397	G	O4'-C1'-N9	6.56	113.45	108.20
26	LA	2781	A	C5'-C4'-C3'	-6.56	105.50	116.00
2	SA	222	C	P-O5'-C5'	6.56	131.39	120.90
26	LA	131	A	O4'-C4'-C3'	-6.56	97.44	104.00
26	LA	564	C	C5'-C4'-C3'	-6.56	105.51	116.00
26	LA	682	G	C5'-C4'-C3'	6.56	126.49	116.00
26	LA	810	U	N3-C4-O4	6.56	123.99	119.40
26	LA	1234	U	C5'-C4'-C3'	-6.56	105.51	116.00
26	LA	1681	G	C5-C6-N1	6.56	114.78	111.50
26	LA	1698	A	C4-C5-C6	6.56	120.28	117.00
26	LA	2506	U	C1'-O4'-C4'	-6.56	104.65	109.90
26	LA	2527	C	C5'-C4'-C3'	6.56	126.49	116.00
26	LA	2529	G	P-O3'-C3'	6.56	127.57	119.70
2	SA	1168	U	C5-C4-O4	6.56	129.83	125.90
4	S2	12	G	C5-C6-O6	-6.56	124.67	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	77	G	C4-C5-N7	-6.56	108.18	110.80
26	LA	2350	C	C5'-C4'-C3'	-6.56	105.51	116.00
26	LA	2369	A	N9-C4-C5	6.56	108.42	105.80
2	SA	1033	G	C4'-C3'-C2'	-6.55	96.05	102.60
2	SA	1074	G	P-O3'-C3'	-6.55	111.83	119.70
2	SA	1139	G	P-O3'-C3'	-6.55	111.84	119.70
2	SA	1231	G	O3'-P-O5'	6.55	116.45	104.00
12	SL	37	TYR	CD1-CG-CD2	6.55	125.11	117.90
26	LA	673	C	O4'-C1'-N1	6.55	113.44	108.20
26	LA	714	U	P-O3'-C3'	6.55	127.56	119.70
26	LA	1021	A	O4'-C1'-N9	6.55	113.44	108.20
26	LA	2092	U	C1'-O4'-C4'	-6.55	104.66	109.90
26	LA	2175	C	N3-C2-O2	-6.55	117.31	121.90
2	SA	488	C	C5'-C4'-C3'	-6.55	105.52	116.00
2	SA	1044	A	C4'-C3'-C2'	-6.55	96.05	102.60
2	SA	1458	G	C2-N3-C4	-6.55	108.62	111.90
26	LA	2840	C	N3-C4-C5	6.55	124.52	121.90
2	SA	94	G	C6-N1-C2	-6.55	121.17	125.10
2	SA	454	G	P-O3'-C3'	-6.55	111.84	119.70
2	SA	514	C	OP1-P-OP2	-6.55	109.77	119.60
2	SA	948	C	O4'-C1'-N1	6.55	113.44	108.20
2	SA	1065	U	C1'-O4'-C4'	-6.55	104.66	109.90
2	SA	1498	U	C3'-C2'-C1'	6.55	106.74	101.50
26	LA	285	G	C5-C6-O6	-6.55	124.67	128.60
26	LA	923	G	C5'-C4'-O4'	6.55	116.96	109.10
26	LA	932	U	N1-C2-O2	6.55	127.39	122.80
26	LA	1449	G	P-O5'-C5'	6.55	131.38	120.90
26	LA	1735	A	N9-C4-C5	-6.55	103.18	105.80
26	LA	2860	A	C5-C6-N1	-6.55	114.42	117.70
2	SA	443	C	O4'-C1'-N1	6.55	113.44	108.20
2	SA	497	G	C5-C6-O6	-6.55	124.67	128.60
2	SA	1418	A	N1-C6-N6	6.55	122.53	118.60
26	LA	159	G	C1'-O4'-C4'	-6.55	104.66	109.90
26	LA	529	A	N7-C8-N9	-6.55	110.53	113.80
26	LA	838	C	N3-C4-N4	6.55	122.58	118.00
26	LA	1634	A	C3'-C2'-C1'	-6.55	96.26	101.50
26	LA	2346	A	C6-N1-C2	-6.55	114.67	118.60
2	SA	166	U	C4-C5-C6	-6.55	115.77	119.70
2	SA	422	C	O4'-C1'-C2'	-6.55	99.25	105.80
2	SA	1490	U	O5'-P-OP1	-6.55	99.81	105.70
2	SA	1501	C	C5'-C4'-O4'	6.55	116.96	109.10
26	LA	1974	C	N3-C2-O2	-6.55	117.32	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	SR	62	ARG	NH1-CZ-NH2	-6.55	112.20	119.40
26	LA	34	U	C2-N3-C4	6.55	130.93	127.00
26	LA	168	G	C5'-C4'-O4'	6.55	116.95	109.10
26	LA	965	C	C6-N1-C2	-6.55	117.68	120.30
26	LA	1415	U	N3-C2-O2	-6.55	117.62	122.20
26	LA	1497	U	C6-N1-C1'	-6.55	112.04	121.20
26	LA	1621	U	C4-C5-C6	6.55	123.63	119.70
26	LA	1775	U	C4'-C3'-C2'	-6.55	96.05	102.60
25	LB	106	G	C8-N9-C4	6.54	109.02	106.40
26	LA	2572	A	C1'-O4'-C4'	-6.54	104.66	109.90
2	SA	276	G	N3-C4-N9	6.54	129.93	126.00
2	SA	507	C	O4'-C1'-N1	6.54	113.44	108.20
2	SA	667	G	C4-C5-C6	-6.54	114.87	118.80
2	SA	803	G	N1-C2-N3	-6.54	119.97	123.90
2	SA	835	U	N3-C2-O2	-6.54	117.62	122.20
2	SA	1145	A	N7-C8-N9	6.54	117.07	113.80
6	SU	42	THR	N-CA-CB	6.54	122.73	110.30
26	LA	481	G	N1-C6-O6	6.54	123.83	119.90
26	LA	1511	G	C5-C6-O6	-6.54	124.67	128.60
26	LA	1743	G	C5-C6-N1	6.54	114.77	111.50
26	LA	2154	A	N1-C2-N3	6.54	132.57	129.30
26	LA	2628	C	C4'-C3'-C2'	-6.54	96.06	102.60
26	LA	2697	G	C4'-C3'-C2'	-6.54	96.06	102.60
26	LA	2803	G	C8-N9-C1'	6.54	135.51	127.00
26	LA	2879	A	N7-C8-N9	6.54	117.07	113.80
41	L5	23	ALA	N-CA-CB	-6.54	100.94	110.10
3	S1	44	U	P-O5'-C5'	6.54	131.37	120.90
10	SJ	24	GLU	OE1-CD-OE2	-6.54	115.45	123.30
15	SO	67	ASP	O-C-N	-6.54	112.23	122.70
20	SD	177	MET	CG-SD-CE	-6.54	89.73	100.20
24	S3	98	VAL	CB-CA-C	-6.54	98.97	111.40
25	LB	100	G	C4-C5-N7	6.54	113.42	110.80
26	LA	570	G	C5'-C4'-O4'	6.54	116.95	109.10
26	LA	1202	G	P-O3'-C3'	-6.54	111.85	119.70
26	LA	1434	A	C5-C6-N6	-6.54	118.47	123.70
26	LA	1614	A	N1-C2-N3	6.54	132.57	129.30
26	LA	2303	G	C8-N9-C1'	6.54	135.50	127.00
26	LA	2318	G	C6-N1-C2	-6.54	121.17	125.10
26	LA	2637	U	C4-C5-C6	-6.54	115.78	119.70
56	LR	20	ARG	NE-CZ-NH2	6.54	123.57	120.30
2	SA	756	C	N3-C2-O2	-6.54	117.32	121.90
2	SA	1248	A	N1-C2-N3	-6.54	126.03	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1269	A	C4-C5-C6	6.54	120.27	117.00
26	LA	1304	A	C8-N9-C4	6.54	108.42	105.80
26	LA	1834	U	C2-N3-C4	-6.54	123.08	127.00
26	LA	2549	G	C1'-O4'-C4'	-6.54	104.67	109.90
26	LA	2573	C	C1'-O4'-C4'	-6.54	104.67	109.90
35	L1	49	ALA	O-C-N	-6.54	112.23	122.70
2	SA	856	C	O4'-C1'-N1	6.54	113.43	108.20
2	SA	1104	G	N1-C2-N3	6.54	127.82	123.90
4	S2	75	C	C2-N1-C1'	6.54	125.99	118.80
26	LA	144	A	P-O5'-C5'	6.54	131.36	120.90
26	LA	2883	A	N1-C6-N6	-6.54	114.68	118.60
50	LL	53	TYR	CB-CG-CD1	-6.54	117.08	121.00
2	SA	95	C	C4'-C3'-C2'	-6.54	96.06	102.60
2	SA	563	A	O4'-C4'-C3'	-6.54	97.46	104.00
2	SA	956	U	C3'-C2'-C1'	6.54	106.73	101.50
26	LA	480	A	C4'-C3'-C2'	-6.54	96.06	102.60
26	LA	577	G	P-O5'-C5'	6.54	131.36	120.90
26	LA	963	U	C1'-O4'-C4'	-6.54	104.67	109.90
26	LA	2025	C	O4'-C1'-N1	6.54	113.43	108.20
2	SA	1209	C	O5'-C5'-C4'	-6.54	99.28	111.70
26	LA	139	U	N1-C1'-C2'	6.54	122.50	114.00
26	LA	321	U	C6-N1-C2	6.54	124.92	121.00
26	LA	1033	U	N3-C2-O2	6.54	126.78	122.20
26	LA	1125	G	N3-C4-C5	-6.54	125.33	128.60
26	LA	1137	G	O4'-C1'-N9	6.54	113.43	108.20
2	SA	772	U	C6-N1-C2	-6.53	117.08	121.00
2	SA	869	G	O4'-C1'-N9	6.53	113.43	108.20
2	SA	982	U	C2-N3-C4	-6.53	123.08	127.00
2	SA	1078	U	N3-C2-O2	-6.53	117.63	122.20
2	SA	1079	G	P-O3'-C3'	-6.53	111.86	119.70
2	SA	1134	G	N3-C4-C5	-6.53	125.33	128.60
26	LA	40	U	C5'-C4'-O4'	6.53	116.94	109.10
26	LA	115	C	C1'-O4'-C4'	-6.53	104.67	109.90
26	LA	679	C	C1'-O4'-C4'	-6.53	104.67	109.90
26	LA	857	G	C6-C5-N7	6.53	134.32	130.40
26	LA	1095	A	O4'-C1'-C2'	-6.53	99.27	105.80
26	LA	1156	A	C2-N3-C4	6.53	113.87	110.60
26	LA	1271	G	C2'-C3'-O3'	6.53	124.15	113.70
26	LA	1926	U	P-O3'-C3'	-6.53	111.86	119.70
26	LA	2446	G	C5-N7-C8	6.53	107.57	104.30
26	LA	2825	G	N9-C4-C5	-6.53	102.79	105.40
2	SA	230	G	C8-N9-C4	-6.53	103.79	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	44	A	C8-N9-C4	6.53	108.41	105.80
26	LA	731	C	C5-C4-N4	-6.53	115.63	120.20
2	SA	659	U	O4'-C1'-N1	6.53	113.42	108.20
2	SA	1107	C	C4-C5-C6	6.53	120.67	117.40
25	LB	5	U	P-O3'-C3'	-6.53	111.86	119.70
26	LA	54	G	N7-C8-N9	6.53	116.36	113.10
26	LA	1277	G	N1-C6-O6	6.53	123.82	119.90
26	LA	1650	A	C8-N9-C4	-6.53	103.19	105.80
26	LA	1679	A	N3-C4-N9	-6.53	122.17	127.40
26	LA	2115	G	O4'-C1'-N9	6.53	113.42	108.20
26	LA	2119	A	O4'-C1'-N9	6.53	113.42	108.20
26	LA	2330	G	N1-C2-N2	-6.53	110.32	116.20
27	LD	185	ALA	N-CA-CB	-6.53	100.96	110.10
2	SA	252	U	N1-C2-N3	6.53	118.82	114.90
2	SA	587	G	P-O3'-C3'	6.53	127.53	119.70
2	SA	784	A	C5-C6-N1	6.53	120.96	117.70
4	S2	73	A	C5-C6-N6	-6.53	118.48	123.70
25	LB	49	C	C2-N1-C1'	-6.53	111.62	118.80
26	LA	1189	A	C5'-C4'-C3'	-6.53	105.55	116.00
26	LA	1813	G	N9-C4-C5	6.53	108.01	105.40
26	LA	1900	A	C8-N9-C1'	-6.53	115.95	127.70
26	LA	1946	U	N1-C2-N3	6.53	118.82	114.90
26	LA	2786	U	C4'-C3'-C2'	-6.53	96.07	102.60
2	SA	692	U	C5'-C4'-C3'	-6.53	105.56	116.00
3	S1	34	U	C5'-C4'-C3'	-6.53	105.56	116.00
12	SL	53	ARG	NE-CZ-NH2	-6.53	117.04	120.30
26	LA	125	A	C6-N1-C2	-6.53	114.68	118.60
26	LA	241	A	C8-N9-C4	6.53	108.41	105.80
26	LA	548	G	C5'-C4'-O4'	6.53	116.93	109.10
26	LA	579	G	N1-C6-O6	6.53	123.82	119.90
26	LA	776	G	C4'-C3'-C2'	-6.53	96.07	102.60
26	LA	1036	G	N1-C2-N2	-6.53	110.33	116.20
26	LA	1306	C	N3-C4-C5	-6.53	119.29	121.90
26	LA	1673	G	C6-N1-C2	-6.53	121.18	125.10
26	LA	1917	U	O4'-C1'-N1	6.53	113.42	108.20
26	LA	1971	U	P-O5'-C5'	-6.53	110.46	120.90
2	SA	257	G	C4-C5-C6	-6.53	114.88	118.80
2	SA	604	G	C2-N3-C4	-6.53	108.64	111.90
2	SA	1522	U	C2-N3-C4	-6.53	123.08	127.00
17	SQ	43	LEU	CB-CA-C	-6.53	97.80	110.20
26	LA	396	G	N9-C4-C5	6.53	108.01	105.40
26	LA	913	U	C2-N3-C4	-6.53	123.08	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1373	A	O4'-C1'-N9	6.53	113.42	108.20
26	LA	1704	C	C1'-O4'-C4'	-6.53	104.68	109.90
26	LA	2010	G	C4'-C3'-C2'	-6.53	96.08	102.60
26	LA	2362	C	C5'-C4'-C3'	-6.53	105.56	116.00
26	LA	2826	A	N1-C6-N6	-6.53	114.69	118.60
27	LD	101	ARG	CD-NE-CZ	6.53	132.73	123.60
2	SA	646	G	P-O3'-C3'	6.52	127.53	119.70
26	LA	2500	U	C3'-C2'-C1'	-6.52	96.28	101.50
2	SA	85	U	N1-C2-N3	-6.52	110.99	114.90
2	SA	162	A	C5-C6-N1	-6.52	114.44	117.70
2	SA	210	C	C4'-C3'-C2'	-6.52	96.08	102.60
2	SA	705	G	O4'-C1'-N9	6.52	113.42	108.20
2	SA	964	A	N1-C6-N6	6.52	122.51	118.60
2	SA	977	A	C5'-C4'-O4'	6.52	116.93	109.10
2	SA	1007	U	C5-C6-N1	6.52	125.96	122.70
4	S2	51	U	C5'-C4'-O4'	6.52	116.93	109.10
26	LA	22	C	N3-C4-N4	6.52	122.56	118.00
26	LA	127	A	N9-C4-C5	6.52	108.41	105.80
26	LA	927	A	C6-N1-C2	-6.52	114.69	118.60
26	LA	1045	C	C2-N1-C1'	6.52	125.97	118.80
26	LA	1174	U	O4'-C1'-C2'	-6.52	99.28	105.80
26	LA	1352	U	C3'-C2'-C1'	6.52	106.72	101.50
26	LA	1484	U	C5-C6-N1	-6.52	119.44	122.70
26	LA	1668	A	C5-N7-C8	-6.52	100.64	103.90
26	LA	1684	G	C2-N3-C4	6.52	115.16	111.90
26	LA	1913	A	C2-N3-C4	-6.52	107.34	110.60
26	LA	2195	U	OP1-P-OP2	-6.52	109.82	119.60
35	L1	35	VAL	O-C-N	-6.52	112.27	122.70
35	L1	49	ALA	N-CA-CB	-6.52	100.97	110.10
53	LP	50	PRO	N-CA-CB	6.52	111.13	103.30
2	SA	89	U	C2-N1-C1'	-6.52	109.88	117.70
2	SA	538	G	N3-C2-N2	6.52	124.47	119.90
26	LA	83	A	C5'-C4'-C3'	-6.52	105.57	116.00
26	LA	1588	G	N3-C2-N2	-6.52	115.33	119.90
26	LA	2011	U	O5'-P-OP1	-6.52	99.83	105.70
26	LA	2443	C	N1-C2-O2	-6.52	114.99	118.90
26	LA	2857	G	N1-C6-O6	6.52	123.81	119.90
38	LE	183	GLU	OE1-CD-OE2	-6.52	115.47	123.30
2	SA	34	C	C4-C5-C6	-6.52	114.14	117.40
2	SA	97	G	N1-C2-N3	6.52	127.81	123.90
2	SA	470	C	C5-C4-N4	-6.52	115.64	120.20
2	SA	741	G	N3-C4-C5	-6.52	125.34	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	746	A	C4'-C3'-C2'	-6.52	96.08	102.60
2	SA	1284	C	C4-C5-C6	-6.52	114.14	117.40
2	SA	1308	U	C5'-C4'-C3'	-6.52	105.57	116.00
2	SA	1411	C	C3'-C2'-C1'	6.52	106.72	101.50
26	LA	422	A	N1-C6-N6	6.52	122.51	118.60
26	LA	616	A	C5'-C4'-C3'	-6.52	105.57	116.00
26	LA	980	A	N1-C2-N3	-6.52	126.04	129.30
26	LA	1164	C	C4-C5-C6	6.52	120.66	117.40
26	LA	1558	C	C4-C5-C6	6.52	120.66	117.40
26	LA	1610	A	N9-C4-C5	6.52	108.41	105.80
26	LA	2142	A	C3'-C2'-C1'	6.52	106.72	101.50
26	LA	2595	G	N3-C4-C5	6.52	131.86	128.60
2	SA	456	A	C2-N3-C4	-6.52	107.34	110.60
2	SA	503	C	C1'-O4'-C4'	6.52	115.11	109.90
2	SA	1015	G	C5'-C4'-C3'	-6.52	105.57	116.00
2	SA	1395	C	N3-C2-O2	-6.52	117.34	121.90
26	LA	61	C	C1'-O4'-C4'	-6.52	104.69	109.90
26	LA	141	G	C4-N9-C1'	6.52	134.97	126.50
26	LA	822	G	O4'-C4'-C3'	-6.52	97.48	104.00
26	LA	831	G	N1-C6-O6	6.52	123.81	119.90
26	LA	1124	G	C6-N1-C2	-6.52	121.19	125.10
26	LA	2517	C	N3-C2-O2	-6.52	117.34	121.90
26	LA	2778	A	N7-C8-N9	6.52	117.06	113.80
51	LI	86	ASP	CB-CG-OD2	-6.52	112.43	118.30
2	SA	200	G	N3-C4-N9	6.52	129.91	126.00
2	SA	241	G	C5-C6-O6	-6.52	124.69	128.60
2	SA	1047	G	C5-C6-N1	6.52	114.76	111.50
15	SO	42	PHE	CB-CG-CD2	6.52	125.36	120.80
24	S3	494	ARG	NE-CZ-NH1	6.52	123.56	120.30
26	LA	49	A	N1-C6-N6	6.52	122.51	118.60
26	LA	2868	A	C5-N7-C8	-6.52	100.64	103.90
2	SA	66	A	C5'-C4'-O4'	6.51	116.92	109.10
2	SA	199	A	O3'-P-O5'	-6.51	91.62	104.00
2	SA	712	A	C1'-O4'-C4'	6.51	115.11	109.90
2	SA	1119	C	C1'-O4'-C4'	-6.51	104.69	109.90
2	SA	1134	G	P-O3'-C3'	6.51	127.52	119.70
2	SA	1212	U	N1-C2-O2	6.51	127.36	122.80
2	SA	1222	G	O4'-C4'-C3'	-6.51	97.48	104.00
3	S1	50	U	N1-C2-O2	6.51	127.36	122.80
9	SI	19	PHE	CB-CG-CD1	-6.51	116.24	120.80
26	LA	36	G	N3-C4-C5	-6.51	125.34	128.60
26	LA	72	U	C4'-C3'-C2'	6.51	109.11	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	670	A	N9-C4-C5	6.51	108.41	105.80
26	LA	1677	A	C4-C5-N7	6.51	113.96	110.70
26	LA	1783	A	C5-N7-C8	-6.51	100.64	103.90
26	LA	1996	C	C4'-C3'-C2'	-6.51	96.09	102.60
26	LA	2251	U	O4'-C1'-N1	6.51	113.41	108.20
26	LA	2851	A	P-O3'-C3'	6.51	127.52	119.70
26	LA	535	G	N9-C1'-C2'	-6.51	104.84	112.00
26	LA	991	C	C2-N3-C4	-6.51	116.64	119.90
26	LA	1309	G	N3-C4-C5	-6.51	125.34	128.60
26	LA	1808	A	N1-C2-N3	-6.51	126.04	129.30
2	SA	10	A	C4'-C3'-C2'	-6.51	96.09	102.60
2	SA	199	A	C5-N7-C8	6.51	107.16	103.90
2	SA	1515	G	C2'-C3'-O3'	6.51	124.12	113.70
24	S3	518	VAL	CA-CB-CG2	-6.51	101.13	110.90
26	LA	48	G	C3'-C2'-C1'	6.51	106.71	101.50
26	LA	210	C	C5'-C4'-O4'	6.51	116.92	109.10
26	LA	213	A	C5'-C4'-O4'	6.51	116.92	109.10
26	LA	361	G	P-O3'-C3'	6.51	127.51	119.70
26	LA	1144	A	C5-C6-N6	6.51	128.91	123.70
26	LA	1949	G	C8-N9-C4	-6.51	103.80	106.40
26	LA	2550	G	C5-C6-O6	-6.51	124.69	128.60
26	LA	2685	G	C8-N9-C1'	-6.51	118.54	127.00
47	LJ	124	ARG	NE-CZ-NH1	6.51	123.56	120.30
2	SA	487	A	P-O5'-C5'	6.51	131.31	120.90
2	SA	566	G	C1'-O4'-C4'	-6.51	104.69	109.90
2	SA	961	U	O4'-C1'-N1	6.51	113.41	108.20
2	SA	969	A	C5-C6-N6	6.51	128.91	123.70
2	SA	1220	G	N3-C2-N2	6.51	124.46	119.90
2	SA	1481	U	C5-C6-N1	6.51	125.95	122.70
3	S1	57	C	C4-C5-C6	6.51	120.66	117.40
4	S2	50	G	C4-N9-C1'	-6.51	118.04	126.50
24	S3	306	ALA	N-CA-CB	-6.51	100.99	110.10
26	LA	111	A	N3-C4-C5	-6.51	122.24	126.80
26	LA	173	A	C5-C6-N1	6.51	120.95	117.70
26	LA	369	U	O4'-C1'-N1	6.51	113.41	108.20
26	LA	1884	G	C1'-O4'-C4'	6.51	115.11	109.90
26	LA	2091	C	N3-C2-O2	-6.51	117.34	121.90
26	LA	2498	C	N1-C2-N3	6.51	123.76	119.20
2	SA	866	C	C5'-C4'-C3'	6.51	126.41	116.00
25	LB	107	G	P-O5'-C5'	6.51	131.31	120.90
26	LA	513	A	C4'-C3'-C2'	-6.51	96.09	102.60
26	LA	2272	U	C3'-C2'-C1'	6.51	106.71	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	116	A	C5'-C4'-O4'	6.51	116.91	109.10
2	SA	520	A	N7-C8-N9	-6.51	110.55	113.80
2	SA	582	C	P-O5'-C5'	6.51	131.31	120.90
2	SA	1109	C	N3-C4-C5	-6.51	119.30	121.90
2	SA	1315	U	P-O5'-C5'	6.51	131.31	120.90
2	SA	1352	C	N1-C2-N3	6.51	123.75	119.20
26	LA	711	G	C8-N9-C4	6.51	109.00	106.40
26	LA	850	U	P-O3'-C3'	6.51	127.51	119.70
26	LA	1119	U	C5-C6-N1	-6.51	119.45	122.70
26	LA	1678	A	O5'-C5'-C4'	6.51	124.06	111.70
26	LA	1763	G	N7-C8-N9	-6.51	109.85	113.10
26	LA	1827	U	C4'-C3'-C2'	-6.51	96.09	102.60
27	LD	262	THR	CA-CB-CG2	-6.51	103.29	112.40
47	LJ	60	ARG	CD-NE-CZ	6.51	132.71	123.60
49	LK	101	SER	N-CA-CB	6.51	120.26	110.50
2	SA	740	U	C3'-C2'-C1'	6.50	106.70	101.50
2	SA	894	G	C6-N1-C2	-6.50	121.20	125.10
7	SG	117	LEU	CB-CG-CD2	6.50	122.06	111.00
20	SD	96	ARG	NE-CZ-NH1	6.50	123.55	120.30
26	LA	162	U	N1-C2-O2	-6.50	118.25	122.80
26	LA	516	C	N3-C2-O2	-6.50	117.35	121.90
26	LA	781	A	C4-C5-C6	6.50	120.25	117.00
48	LN	107	PHE	CB-CG-CD1	6.50	125.35	120.80
21	SE	156	ARG	NE-CZ-NH1	6.50	123.55	120.30
26	LA	315	G	C2-N3-C4	-6.50	108.65	111.90
26	LA	437	U	C4'-C3'-C2'	-6.50	96.10	102.60
26	LA	527	C	C2-N1-C1'	6.50	125.95	118.80
26	LA	1054	A	C5-N7-C8	6.50	107.15	103.90
26	LA	1970	A	C8-N9-C4	-6.50	103.20	105.80
26	LA	2093	G	C5-N7-C8	-6.50	101.05	104.30
26	LA	2296	U	P-O3'-C3'	-6.50	111.89	119.70
26	LA	2633	G	C8-N9-C4	6.50	109.00	106.40
2	SA	52	C	P-O3'-C3'	-6.50	111.90	119.70
2	SA	1278	G	C5-C6-N1	-6.50	108.25	111.50
24	S3	676	ARG	NE-CZ-NH2	-6.50	117.05	120.30
26	LA	109	C	N3-C4-C5	-6.50	119.30	121.90
26	LA	1198	U	C4-C5-C6	-6.50	115.80	119.70
26	LA	2725	A	N9-C4-C5	6.50	108.40	105.80
26	LA	2727	A	N3-C4-N9	6.50	132.60	127.40
26	LA	2845	U	N3-C2-O2	-6.50	117.65	122.20
37	LC	134	ARG	NE-CZ-NH1	6.50	123.55	120.30
46	LH	8	VAL	C-N-CA	6.50	137.96	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	819	A	C1'-O4'-C4'	-6.50	104.70	109.90
2	SA	1294	G	C5'-C4'-C3'	-6.50	105.60	116.00
26	LA	273	G	O4'-C1'-N9	6.50	113.40	108.20
26	LA	858	G	C5-N7-C8	-6.50	101.05	104.30
26	LA	1336	A	C5'-C4'-O4'	6.50	116.90	109.10
26	LA	1482	G	N3-C2-N2	6.50	124.45	119.90
26	LA	1954	G	C5-C6-N1	6.50	114.75	111.50
26	LA	2397	G	C6-N1-C2	-6.50	121.20	125.10
26	LA	2477	U	C5-C4-O4	-6.50	122.00	125.90
2	SA	296	U	C5-C4-O4	-6.50	122.00	125.90
2	SA	1016	A	N9-C4-C5	6.50	108.40	105.80
4	S2	22	A	P-O5'-C5'	-6.50	110.50	120.90
4	S2	43	G	N9-C4-C5	6.50	108.00	105.40
26	LA	55	G	C5-N7-C8	6.50	107.55	104.30
26	LA	116	C	C4'-C3'-C2'	-6.50	96.10	102.60
26	LA	648	G	C4-C5-C6	6.50	122.70	118.80
26	LA	958	U	N3-C4-C5	-6.50	110.70	114.60
26	LA	1701	A	C5'-C4'-O4'	6.50	116.90	109.10
26	LA	2307	G	N3-C2-N2	-6.50	115.35	119.90
26	LA	2575	C	N3-C4-C5	6.50	124.50	121.90
26	LA	2714	G	C6-N1-C2	-6.50	121.20	125.10
2	SA	177	G	C4-C5-N7	-6.50	108.20	110.80
2	SA	894	G	C8-N9-C4	-6.50	103.80	106.40
2	SA	1150	A	O4'-C1'-C2'	6.50	113.45	107.60
2	SA	1164	G	P-O3'-C3'	-6.50	111.90	119.70
2	SA	1523	G	N3-C2-N2	6.50	124.45	119.90
4	S2	6	G	P-O3'-C3'	-6.50	111.90	119.70
5	ST	59	ARG	NE-CZ-NH2	6.50	123.55	120.30
26	LA	245	G	C3'-C2'-C1'	6.50	106.70	101.50
26	LA	727	A	C4-C5-C6	-6.50	113.75	117.00
26	LA	1541	C	O4'-C4'-C3'	-6.50	97.50	104.00
26	LA	1581	G	C3'-C2'-C1'	6.50	106.70	101.50
26	LA	1581	G	N9-C4-C5	-6.50	102.80	105.40
26	LA	1634	A	C4-C5-N7	6.50	113.95	110.70
26	LA	2002	G	C4'-C3'-C2'	-6.50	96.10	102.60
26	LA	2715	C	C5-C4-N4	-6.50	115.65	120.20
34	L0	59	GLU	OE1-CD-OE2	-6.50	115.50	123.30
2	SA	433	G	N3-C2-N2	6.50	124.45	119.90
2	SA	598	U	C6-N1-C1'	6.50	130.29	121.20
26	LA	979	A	N9-C4-C5	6.50	108.40	105.80
26	LA	1016	G	P-O5'-C5'	-6.50	110.51	120.90
26	LA	2019	A	C5-C6-N1	6.50	120.95	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2513	A	C8-N9-C4	6.50	108.40	105.80
2	SA	58	C	N3-C4-C5	-6.49	119.30	121.90
2	SA	169	C	N1-C2-O2	-6.49	115.00	118.90
2	SA	229	U	N1-C2-N3	6.49	118.80	114.90
2	SA	727	G	N3-C4-C5	-6.49	125.35	128.60
2	SA	1178	G	C4-N9-C1'	-6.49	118.06	126.50
15	SO	84	LEU	N-CA-CB	-6.49	97.41	110.40
25	LB	35	C	C6-N1-C1'	-6.49	113.01	120.80
26	LA	849	A	C5-C6-N6	-6.49	118.50	123.70
26	LA	979	A	C5-C6-N1	-6.49	114.45	117.70
26	LA	1589	U	C1'-O4'-C4'	-6.49	104.70	109.90
26	LA	1744	A	OP1-P-OP2	-6.49	109.86	119.60
26	LA	1863	G	N3-C2-N2	6.49	124.45	119.90
26	LA	2475	C	C1'-O4'-C4'	-6.49	104.70	109.90
26	LA	2760	C	N3-C4-C5	-6.49	119.30	121.90
38	LE	20	VAL	CG1-CB-CG2	-6.49	100.51	110.90
2	SA	60	A	C8-N9-C4	6.49	108.40	105.80
2	SA	644	U	N3-C2-O2	6.49	126.75	122.20
2	SA	952	U	C4-C5-C6	6.49	123.59	119.70
4	S2	9	G	OP1-P-OP2	-6.49	109.86	119.60
24	S3	356	ARG	NE-CZ-NH2	-6.49	117.05	120.30
25	LB	71	C	C5-C6-N1	-6.49	117.75	121.00
26	LA	158	U	N1-C2-O2	6.49	127.34	122.80
26	LA	374	A	C5'-C4'-C3'	6.49	126.39	116.00
26	LA	722	A	C5'-C4'-C3'	6.49	126.39	116.00
26	LA	1551	A	C4-C5-C6	-6.49	113.75	117.00
26	LA	1813	G	C4-C5-N7	-6.49	108.20	110.80
26	LA	2614	A	C8-N9-C4	6.49	108.40	105.80
2	SA	239	U	C3'-C2'-C1'	-6.49	96.31	101.50
25	LB	2	G	C1'-O4'-C4'	-6.49	104.71	109.90
26	LA	148	U	C2-N3-C4	-6.49	123.11	127.00
26	LA	395	U	N1-C2-N3	-6.49	111.01	114.90
26	LA	561	G	C5'-C4'-O4'	6.49	116.89	109.10
26	LA	1078	U	C2-N1-C1'	6.49	125.49	117.70
26	LA	1272	A	C6-N1-C2	6.49	122.49	118.60
26	LA	1483	G	N1-C2-N3	-6.49	120.01	123.90
26	LA	2214	C	O4'-C1'-N1	6.49	113.39	108.20
26	LA	2653	U	C5-C4-O4	-6.49	122.01	125.90
2	SA	10	A	C3'-C2'-C1'	6.49	106.69	101.50
2	SA	181	A	P-O3'-C3'	-6.49	111.92	119.70
2	SA	546	A	P-O5'-C5'	-6.49	110.52	120.90
2	SA	579	A	N7-C8-N9	-6.49	110.56	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	746	A	P-O3'-C3'	6.49	127.48	119.70
2	SA	795	C	C2-N1-C1'	6.49	125.94	118.80
2	SA	1046	A	O4'-C1'-N9	6.49	113.39	108.20
3	S1	19	A	C8-N9-C4	-6.49	103.20	105.80
25	LB	24	G	P-O3'-C3'	6.49	127.48	119.70
26	LA	75	G	C4-C5-N7	6.49	113.40	110.80
26	LA	289	G	P-O3'-C3'	-6.49	111.91	119.70
26	LA	831	G	N7-C8-N9	6.49	116.34	113.10
26	LA	879	G	C4-N9-C1'	6.49	134.94	126.50
26	LA	962	G	C8-N9-C4	6.49	109.00	106.40
26	LA	1189	A	C6-N1-C2	-6.49	114.71	118.60
26	LA	1595	C	C6-N1-C2	-6.49	117.70	120.30
26	LA	1832	C	C4-C5-C6	-6.49	114.16	117.40
26	LA	2249	U	C5-C4-O4	-6.49	122.01	125.90
26	LA	2535	G	C4-C5-C6	6.49	122.69	118.80
26	LA	2757	A	C5-C6-N1	6.49	120.94	117.70
47	LJ	82	ALA	N-CA-CB	6.49	119.18	110.10
26	LA	958	U	P-O5'-C5'	-6.49	110.52	120.90
26	LA	1568	G	N1-C6-O6	6.49	123.79	119.90
26	LA	2070	A	C5-C6-N6	6.49	128.89	123.70
2	SA	29	U	P-O5'-C5'	-6.49	110.52	120.90
2	SA	203	G	C6-N1-C2	6.49	128.99	125.10
2	SA	528	C	C5'-C4'-C3'	-6.49	105.62	116.00
2	SA	782	A	C8-N9-C4	6.49	108.39	105.80
26	LA	510	C	N3-C4-C5	6.49	124.49	121.90
26	LA	614	A	O4'-C1'-C2'	6.49	113.44	107.60
26	LA	1382	G	N9-C4-C5	6.49	107.99	105.40
26	LA	1604	C	P-O3'-C3'	-6.49	111.92	119.70
26	LA	2604	U	N1-C2-N3	6.49	118.79	114.90
31	LX	73	LYS	N-CA-CB	6.49	122.27	110.60
50	LL	105	VAL	CG1-CB-CG2	-6.49	100.53	110.90
2	SA	112	G	OP1-P-OP2	-6.48	109.87	119.60
2	SA	1158	C	O4'-C4'-C3'	-6.48	97.52	104.00
3	S1	53	G	N9-C4-C5	-6.48	102.81	105.40
26	LA	1245	G	C6-C5-N7	-6.48	126.51	130.40
26	LA	2354	C	O3'-P-O5'	6.48	116.32	104.00
2	SA	249	U	P-O3'-C3'	-6.48	111.92	119.70
2	SA	309	A	P-O5'-C5'	6.48	131.27	120.90
2	SA	323	U	C4'-C3'-C2'	-6.48	96.12	102.60
2	SA	491	G	C5'-C4'-O4'	6.48	116.88	109.10
2	SA	645	G	C6-C5-N7	-6.48	126.51	130.40
2	SA	905	U	P-O5'-C5'	6.48	131.27	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	967	C	C5'-C4'-O4'	6.48	116.88	109.10
2	SA	1249	C	P-O5'-C5'	6.48	131.27	120.90
26	LA	169	G	C2-N3-C4	6.48	115.14	111.90
26	LA	452	G	C8-N9-C4	6.48	108.99	106.40
26	LA	463	G	C6-C5-N7	-6.48	126.51	130.40
26	LA	782	A	C5-C6-N6	6.48	128.89	123.70
26	LA	1131	G	C6-C5-N7	-6.48	126.51	130.40
26	LA	1221	C	P-O5'-C5'	-6.48	110.53	120.90
26	LA	1547	C	N1-C2-N3	6.48	123.74	119.20
26	LA	2883	A	C8-N9-C4	6.48	108.39	105.80
2	SA	334	C	N3-C2-O2	-6.48	117.36	121.90
2	SA	359	G	N9-C4-C5	6.48	107.99	105.40
2	SA	919	A	C5-C6-N6	-6.48	118.52	123.70
2	SA	935	A	N7-C8-N9	-6.48	110.56	113.80
2	SA	969	A	N1-C2-N3	-6.48	126.06	129.30
2	SA	1401	G	P-O3'-C3'	6.48	127.48	119.70
2	SA	1455	G	N1-C2-N2	-6.48	110.37	116.20
4	S2	57	C	OP1-P-OP2	-6.48	109.88	119.60
26	LA	922	C	C1'-O4'-C4'	-6.48	104.72	109.90
26	LA	1397	U	N3-C4-O4	-6.48	114.86	119.40
26	LA	2248	C	C3'-C2'-C1'	6.48	106.68	101.50
26	LA	2549	G	O4'-C1'-N9	6.48	113.39	108.20
2	SA	30	U	C2-N3-C4	6.48	130.89	127.00
26	LA	2053	G	N1-C2-N2	-6.48	110.37	116.20
2	SA	96	U	N3-C4-C5	-6.48	110.71	114.60
2	SA	190	A	O4'-C1'-N9	6.48	113.38	108.20
2	SA	626	G	C5'-C4'-C3'	-6.48	105.64	116.00
2	SA	648	A	P-O3'-C3'	-6.48	111.93	119.70
2	SA	733	G	N3-C2-N2	6.48	124.43	119.90
2	SA	878	A	N9-C4-C5	6.48	108.39	105.80
2	SA	1362	A	C5-C6-N1	6.48	120.94	117.70
23	SR	31	TYR	CG-CD2-CE2	-6.48	116.12	121.30
26	LA	241	A	C5-N7-C8	-6.48	100.66	103.90
26	LA	246	C	C2-N3-C4	6.48	123.14	119.90
26	LA	325	G	C6-N1-C2	-6.48	121.21	125.10
26	LA	476	G	C5-C6-O6	-6.48	124.71	128.60
26	LA	498	G	P-O3'-C3'	6.48	127.47	119.70
26	LA	878	A	C6-C5-N7	-6.48	127.77	132.30
26	LA	1096	A	C2-N3-C4	-6.48	107.36	110.60
26	LA	1919	A	N1-C2-N3	6.48	132.54	129.30
26	LA	1967	C	C4-C5-C6	6.48	120.64	117.40
26	LA	2163	A	O4'-C1'-C2'	-6.48	99.32	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2265	U	C2-N3-C4	-6.48	123.11	127.00
26	LA	2438	U	C2-N1-C1'	-6.48	109.93	117.70
26	LA	2441	U	C6-N1-C2	6.48	124.89	121.00
2	SA	745	G	C8-N9-C4	-6.48	103.81	106.40
26	LA	1219	U	C5'-C4'-C3'	-6.48	105.64	116.00
26	LA	1515	A	C4-C5-C6	-6.48	113.76	117.00
26	LA	2012	G	C8-N9-C4	6.48	108.99	106.40
2	SA	384	G	N3-C2-N2	-6.47	115.37	119.90
2	SA	881	G	O4'-C1'-N9	6.47	113.38	108.20
2	SA	1191	A	P-O3'-C3'	6.47	127.47	119.70
8	SH	47	ASP	CB-CG-OD1	6.47	124.13	118.30
9	SI	48	ARG	NE-CZ-NH2	6.47	123.54	120.30
26	LA	44	A	C1'-O4'-C4'	-6.47	104.72	109.90
26	LA	410	G	N1-C2-N2	6.47	122.03	116.20
26	LA	530	G	C6-C5-N7	-6.47	126.52	130.40
26	LA	1016	G	O4'-C1'-N9	6.47	113.38	108.20
26	LA	1793	C	P-O5'-C5'	-6.47	110.54	120.90
26	LA	2198	A	C4-C5-C6	6.47	120.24	117.00
26	LA	2840	C	P-O5'-C5'	-6.47	110.54	120.90
30	LW	21	ARG	NH1-CZ-NH2	-6.47	112.28	119.40
56	LR	11	GLN	O-C-N	-6.47	112.34	122.70
2	SA	529	G	N3-C2-N2	6.47	124.43	119.90
2	SA	562	U	O4'-C1'-N1	6.47	113.38	108.20
2	SA	1020	G	C4-N9-C1'	-6.47	118.09	126.50
2	SA	1023	U	C5-C4-O4	-6.47	122.02	125.90
2	SA	1034	G	C6-C5-N7	6.47	134.28	130.40
26	LA	1138	G	C4-C5-C6	6.47	122.68	118.80
26	LA	1269	A	C1'-O4'-C4'	-6.47	104.72	109.90
26	LA	1407	G	C5-C6-O6	-6.47	124.72	128.60
26	LA	1606	C	C2-N3-C4	6.47	123.14	119.90
26	LA	2074	U	C6-N1-C2	-6.47	117.12	121.00
26	LA	2140	G	O4'-C1'-N9	6.47	113.38	108.20
26	LA	2155	U	C4'-C3'-C2'	-6.47	96.13	102.60
52	LO	50	ARG	NE-CZ-NH2	6.47	123.54	120.30
2	SA	311	C	P-O5'-C5'	6.47	131.25	120.90
2	SA	612	C	C6-N1-C2	-6.47	117.71	120.30
2	SA	683	G	N1-C6-O6	6.47	123.78	119.90
2	SA	1174	G	C5-C6-N1	6.47	114.73	111.50
9	SI	123	ARG	NE-CZ-NH2	6.47	123.53	120.30
26	LA	852	U	P-O3'-C3'	-6.47	111.94	119.70
26	LA	1590	A	N7-C8-N9	-6.47	110.56	113.80
52	LO	40	ARG	NH1-CZ-NH2	-6.47	112.28	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	210	C	C5'-C4'-O4'	6.47	116.86	109.10
2	SA	1013	G	OP1-P-OP2	-6.47	109.90	119.60
4	S2	65	G	N1-C6-O6	6.47	123.78	119.90
26	LA	224	U	C5'-C4'-O4'	6.47	116.86	109.10
26	LA	795	C	N3-C4-C5	-6.47	119.31	121.90
26	LA	912	C	C5-C4-N4	6.47	124.73	120.20
26	LA	1318	U	C2-N1-C1'	-6.47	109.94	117.70
26	LA	1464	G	N1-C2-N3	-6.47	120.02	123.90
28	LU	65	ASP	CB-CA-C	6.47	123.34	110.40
2	SA	588	G	C5-C6-O6	-6.47	124.72	128.60
2	SA	655	A	C4'-C3'-C2'	-6.47	96.13	102.60
2	SA	1176	A	C4-C5-N7	6.47	113.93	110.70
26	LA	391	A	C2-N3-C4	-6.47	107.37	110.60
26	LA	402	A	C4-C5-C6	-6.47	113.77	117.00
26	LA	537	G	C6-N1-C2	-6.47	121.22	125.10
26	LA	807	U	C2-N3-C4	-6.47	123.12	127.00
26	LA	1304	A	C5-C6-N6	-6.47	118.53	123.70
26	LA	1888	G	C6-N1-C2	-6.47	121.22	125.10
2	SA	357	G	N1-C6-O6	6.47	123.78	119.90
2	SA	695	A	C5-C6-N6	-6.47	118.53	123.70
2	SA	777	A	OP2-P-O3'	6.47	119.43	105.20
2	SA	1091	U	N3-C4-O4	6.47	123.93	119.40
2	SA	1162	C	N3-C2-O2	-6.47	117.37	121.90
2	SA	1315	U	O4'-C1'-N1	6.47	113.37	108.20
2	SA	1420	U	C5'-C4'-C3'	-6.47	105.65	116.00
2	SA	1504	G	C4'-C3'-C2'	-6.47	96.13	102.60
26	LA	245	G	C4'-C3'-C2'	-6.47	96.13	102.60
26	LA	455	C	C4'-C3'-C2'	-6.47	96.13	102.60
26	LA	778	G	C4-C5-C6	6.47	122.68	118.80
26	LA	1173	U	C5-C4-O4	-6.47	122.02	125.90
26	LA	1475	G	C5-C6-O6	-6.47	124.72	128.60
26	LA	2099	U	N3-C4-O4	-6.47	114.87	119.40
26	LA	2851	A	N3-C4-C5	-6.47	122.27	126.80
45	LG	73	VAL	CA-CB-CG1	-6.47	101.20	110.90
2	SA	60	A	O4'-C1'-N9	6.46	113.37	108.20
2	SA	755	G	C5-N7-C8	6.46	107.53	104.30
2	SA	1037	C	O4'-C1'-N1	6.46	113.37	108.20
2	SA	1253	G	N1-C2-N3	6.46	127.78	123.90
2	SA	1332	A	C2-N3-C4	-6.46	107.37	110.60
2	SA	1534	A	OP1-P-OP2	-6.46	109.90	119.60
26	LA	139	U	C2-N1-C1'	6.46	125.46	117.70
26	LA	180	G	O4'-C1'-N9	6.46	113.37	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1974	C	N1-C2-N3	6.46	123.73	119.20
26	LA	2369	A	C4-C5-C6	-6.46	113.77	117.00
26	LA	2770	G	C6-C5-N7	-6.46	126.52	130.40
26	LA	2799	A	C1'-O4'-C4'	-6.46	104.73	109.90
48	LN	30	THR	N-CA-CB	6.46	122.58	110.30
2	SA	387	U	O4'-C4'-C3'	-6.46	97.54	104.00
2	SA	790	A	C2-N3-C4	6.46	113.83	110.60
25	LB	81	G	N3-C4-C5	-6.46	125.37	128.60
26	LA	1352	U	C4'-C3'-C2'	-6.46	96.14	102.60
26	LA	1555	G	N1-C6-O6	-6.46	116.02	119.90
26	LA	1846	G	C6-N1-C2	-6.46	121.22	125.10
26	LA	2721	A	C5'-C4'-C3'	-6.46	105.66	116.00
2	SA	102	G	N3-C4-C5	-6.46	125.37	128.60
2	SA	1300	G	N3-C4-C5	-6.46	125.37	128.60
4	S2	17	C	O4'-C1'-N1	6.46	113.37	108.20
19	SC	129	PHE	CB-CG-CD2	-6.46	116.28	120.80
26	LA	125	A	N9-C1'-C2'	6.46	122.40	114.00
26	LA	260	G	C6-N1-C2	-6.46	121.22	125.10
26	LA	310	A	C5-C6-N6	-6.46	118.53	123.70
26	LA	1365	A	P-O5'-C5'	-6.46	110.56	120.90
26	LA	1785	A	P-O5'-C5'	-6.46	110.56	120.90
26	LA	2406	A	C4'-C3'-C2'	6.46	109.06	102.60
26	LA	2651	C	O4'-C1'-N1	6.46	113.37	108.20
2	SA	1120	C	C6-N1-C2	-6.46	117.72	120.30
26	LA	915	C	C2-N3-C4	6.46	123.13	119.90
26	LA	2217	G	C5-C6-N1	6.46	114.73	111.50
26	LA	2529	G	C4-N9-C1'	6.46	134.90	126.50
26	LA	2595	G	N9-C4-C5	-6.46	102.82	105.40
2	SA	693	G	C2'-C3'-O3'	6.46	124.03	113.70
2	SA	812	G	O3'-P-O5'	-6.46	91.73	104.00
2	SA	1400	C	C6-N1-C2	-6.46	117.72	120.30
25	LB	82	U	C5'-C4'-O4'	6.46	116.85	109.10
26	LA	44	A	N9-C4-C5	-6.46	103.22	105.80
26	LA	197	A	C8-N9-C4	-6.46	103.22	105.80
26	LA	362	A	C4'-C3'-C2'	6.46	109.06	102.60
26	LA	370	G	N9-C4-C5	-6.46	102.82	105.40
26	LA	403	U	C5-C4-O4	-6.46	122.03	125.90
26	LA	462	C	C4-C5-C6	-6.46	114.17	117.40
26	LA	706	A	C6-C5-N7	6.46	136.82	132.30
26	LA	888	C	N3-C4-N4	6.46	122.52	118.00
26	LA	906	U	N1-C2-O2	-6.46	118.28	122.80
26	LA	916	G	C1'-O4'-C4'	-6.46	104.73	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1421	G	C4-C5-N7	6.46	113.38	110.80
26	LA	1476	U	C2-N3-C4	-6.46	123.12	127.00
26	LA	2236	U	C2-N3-C4	-6.46	123.12	127.00
26	LA	2587	A	C2-N3-C4	6.46	113.83	110.60
26	LA	2624	G	C5-N7-C8	6.46	107.53	104.30
2	SA	752	G	N3-C2-N2	-6.46	115.38	119.90
2	SA	1130	A	N9-C4-C5	6.46	108.38	105.80
2	SA	1482	G	C5-N7-C8	6.46	107.53	104.30
3	S1	22	G	C5-C6-O6	-6.46	124.73	128.60
26	LA	160	A	N1-C2-N3	-6.46	126.07	129.30
26	LA	1357	C	OP1-P-OP2	-6.46	109.91	119.60
26	LA	1371	G	C1'-O4'-C4'	-6.46	104.73	109.90
26	LA	1604	C	N1-C2-O2	6.46	122.77	118.90
26	LA	2727	A	C2-N3-C4	6.46	113.83	110.60
26	LA	2788	C	C6-N1-C1'	-6.46	113.05	120.80
45	LG	91	ARG	NE-CZ-NH1	-6.46	117.07	120.30
2	SA	1170	A	C5-C6-N1	-6.46	114.47	117.70
26	LA	1884	G	N1-C2-N3	6.46	127.77	123.90
26	LA	2424	C	C6-N1-C2	-6.46	117.72	120.30
26	LA	2604	U	C5-C4-O4	-6.46	122.03	125.90
2	SA	937	A	C5-N7-C8	6.45	107.13	103.90
2	SA	1235	U	C6-N1-C2	-6.45	117.13	121.00
26	LA	84	A	N1-C2-N3	6.45	132.53	129.30
26	LA	1351	C	C5'-C4'-C3'	-6.45	105.68	116.00
26	LA	1379	U	P-O5'-C5'	6.45	131.22	120.90
26	LA	1549	A	N1-C2-N3	-6.45	126.07	129.30
26	LA	1742	U	C6-N1-C2	-6.45	117.13	121.00
26	LA	2375	G	C4'-C3'-C2'	-6.45	96.15	102.60
26	LA	2576	G	N1-C2-N3	-6.45	120.03	123.90
42	L6	49	VAL	CG1-CB-CG2	6.45	121.23	110.90
51	LI	1	MET	CG-SD-CE	-6.45	89.87	100.20
2	SA	75	G	N1-C6-O6	6.45	123.77	119.90
2	SA	233	C	OP1-P-OP2	-6.45	109.92	119.60
2	SA	594	U	C5-C4-O4	6.45	129.77	125.90
2	SA	841	C	C6-N1-C2	-6.45	117.72	120.30
20	SD	103	ARG	NE-CZ-NH2	-6.45	117.07	120.30
55	LQ	72	ALA	N-CA-CB	-6.45	101.07	110.10
2	SA	365	U	C2-N3-C4	-6.45	123.13	127.00
2	SA	701	U	C4'-C3'-C2'	-6.45	96.15	102.60
2	SA	872	A	C8-N9-C4	-6.45	103.22	105.80
2	SA	999	C	P-O5'-C5'	6.45	131.22	120.90
2	SA	1423	G	C4'-C3'-C2'	-6.45	96.15	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1535	C	C3'-C2'-C1'	-6.45	96.34	101.50
3	S1	37	G	C5-C6-O6	-6.45	124.73	128.60
4	S2	53	G	C6-C5-N7	6.45	134.27	130.40
4	S2	54	G	C6-C5-N7	-6.45	126.53	130.40
26	LA	60	G	C4-C5-N7	6.45	113.38	110.80
26	LA	75	G	C5'-C4'-C3'	6.45	126.32	116.00
26	LA	463	G	N3-C4-N9	-6.45	122.13	126.00
26	LA	1128	G	C2-N3-C4	6.45	115.12	111.90
26	LA	1222	U	C2-N3-C4	-6.45	123.13	127.00
26	LA	1250	G	C5-C6-O6	-6.45	124.73	128.60
26	LA	1521	G	C5-C6-O6	-6.45	124.73	128.60
26	LA	2046	G	C4-C5-C6	-6.45	114.93	118.80
26	LA	2143	C	O4'-C1'-N1	6.45	113.36	108.20
2	SA	1391	U	N3-C4-C5	6.45	118.47	114.60
26	LA	322	A	C3'-C2'-C1'	-6.45	96.34	101.50
26	LA	422	A	C2-N3-C4	-6.45	107.38	110.60
26	LA	1056	G	C4-N9-C1'	-6.45	118.12	126.50
26	LA	1072	C	C5-C4-N4	6.45	124.71	120.20
26	LA	1148	U	C2-N3-C4	-6.45	123.13	127.00
26	LA	1266	G	C1'-O4'-C4'	-6.45	104.74	109.90
26	LA	1286	A	C5-C6-N1	-6.45	114.48	117.70
26	LA	1342	A	C5-C6-N1	6.45	120.92	117.70
26	LA	1816	C	N1-C2-N3	6.45	123.71	119.20
26	LA	1938	A	N9-C4-C5	-6.45	103.22	105.80
26	LA	2337	G	C6-C5-N7	-6.45	126.53	130.40
2	SA	316	C	C2-N3-C4	-6.45	116.68	119.90
25	LB	57	A	C2-N3-C4	-6.45	107.38	110.60
26	LA	987	C	N1-C2-O2	6.45	122.77	118.90
26	LA	2398	U	C6-N1-C2	-6.45	117.13	121.00
26	LA	2654	A	N1-C2-N3	6.45	132.52	129.30
2	SA	112	G	N9-C4-C5	6.45	107.98	105.40
2	SA	271	C	C5-C6-N1	6.45	124.22	121.00
2	SA	372	C	N3-C4-N4	6.45	122.51	118.00
2	SA	572	A	C1'-O4'-C4'	-6.45	104.74	109.90
2	SA	861	G	C2-N3-C4	6.45	115.12	111.90
2	SA	944	G	C8-N9-C1'	-6.45	118.62	127.00
2	SA	953	G	N3-C4-N9	-6.45	122.13	126.00
26	LA	124	G	C5-C6-O6	-6.45	124.73	128.60
26	LA	258	G	P-O3'-C3'	-6.45	111.97	119.70
26	LA	760	G	C5-C6-N1	6.45	114.72	111.50
26	LA	1342	A	O4'-C1'-N9	6.45	113.36	108.20
26	LA	2467	C	C6-N1-C2	6.45	122.88	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	74	A	P-O5'-C5'	-6.44	110.59	120.90
2	SA	354	G	O5'-P-OP2	-6.44	99.90	105.70
3	S1	38	G	N1-C2-N2	6.44	122.00	116.20
25	LB	87	U	P-O3'-C3'	6.44	127.43	119.70
26	LA	168	G	OP1-P-OP2	-6.44	109.93	119.60
26	LA	518	G	N3-C2-N2	-6.44	115.39	119.90
26	LA	1394	U	N3-C4-O4	6.44	123.91	119.40
26	LA	1981	A	C4-C5-C6	-6.44	113.78	117.00
37	LC	215	SER	N-CA-CB	6.44	120.17	110.50
2	SA	92	U	C4'-C3'-C2'	-6.44	96.16	102.60
2	SA	463	U	O4'-C1'-C2'	6.44	113.40	107.60
2	SA	764	C	C4'-C3'-C2'	-6.44	96.16	102.60
3	S1	17	U	O4'-C1'-N1	6.44	113.35	108.20
26	LA	35	G	C8-N9-C4	6.44	108.98	106.40
26	LA	614	A	C5-C6-N1	-6.44	114.48	117.70
26	LA	763	G	O4'-C1'-N9	6.44	113.35	108.20
26	LA	781	A	C8-N9-C4	-6.44	103.22	105.80
26	LA	1033	U	C2-N1-C1'	6.44	125.43	117.70
26	LA	1178	C	C2-N1-C1'	-6.44	111.71	118.80
26	LA	1212	G	C5-C6-O6	6.44	132.47	128.60
26	LA	1595	C	O4'-C1'-C2'	6.44	113.40	107.60
26	LA	1687	G	C5-N7-C8	-6.44	101.08	104.30
26	LA	1799	G	C4'-C3'-C2'	-6.44	96.16	102.60
26	LA	2106	U	N3-C2-O2	-6.44	117.69	122.20
26	LA	2350	C	O4'-C1'-N1	6.44	113.35	108.20
26	LA	2648	G	C4'-C3'-C2'	-6.44	96.16	102.60
26	LA	2801	G	O4'-C1'-N9	6.44	113.35	108.20
2	SA	1242	G	P-O3'-C3'	-6.44	111.97	119.70
26	LA	5	A	N1-C6-N6	-6.44	114.74	118.60
26	LA	251	A	C3'-C2'-C1'	6.44	106.65	101.50
26	LA	509	C	C2-N1-C1'	6.44	125.89	118.80
26	LA	729	G	C4-C5-N7	6.44	113.38	110.80
26	LA	1622	G	C5-C6-N1	6.44	114.72	111.50
26	LA	2218	G	C5-C6-N1	6.44	114.72	111.50
26	LA	2235	G	N9-C4-C5	-6.44	102.82	105.40
2	SA	565	U	C4'-C3'-C2'	-6.44	96.16	102.60
2	SA	648	A	C2-N3-C4	-6.44	107.38	110.60
4	S2	42	C	P-O3'-C3'	-6.44	111.97	119.70
25	LB	115	A	O4'-C1'-C2'	6.44	113.39	107.60
26	LA	607	U	C2-N3-C4	-6.44	123.14	127.00
26	LA	2061	G	C5-C6-N1	6.44	114.72	111.50
26	LA	2507	C	C5'-C4'-C3'	6.44	126.30	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2588	G	C3'-C2'-C1'	-6.44	96.35	101.50
26	LA	2797	U	N1-C2-N3	6.44	118.76	114.90
2	SA	765	G	C4-C5-N7	6.44	113.38	110.80
2	SA	1181	G	C4'-C3'-C2'	-6.44	96.16	102.60
26	LA	617	G	OP1-P-OP2	-6.44	109.94	119.60
26	LA	643	A	N7-C8-N9	-6.44	110.58	113.80
26	LA	1115	G	O4'-C1'-N9	6.44	113.35	108.20
26	LA	1426	G	C5-C6-O6	-6.44	124.74	128.60
26	LA	2002	G	OP1-P-O3'	6.44	119.36	105.20
26	LA	2042	A	C5-N7-C8	6.44	107.12	103.90
2	SA	497	G	C6-C5-N7	6.44	134.26	130.40
2	SA	801	U	N1-C2-N3	-6.44	111.04	114.90
26	LA	19	A	N1-C6-N6	6.44	122.46	118.60
26	LA	1163	G	N7-C8-N9	6.44	116.32	113.10
26	LA	1379	U	C3'-C2'-C1'	6.44	106.65	101.50
26	LA	1601	G	C5-C6-O6	-6.44	124.74	128.60
26	LA	2061	G	C6-C5-N7	-6.44	126.54	130.40
2	SA	477	C	C5-C4-N4	-6.43	115.70	120.20
2	SA	757	U	C4'-C3'-C2'	-6.43	96.17	102.60
26	LA	916	G	N9-C4-C5	6.43	107.97	105.40
26	LA	1035	U	O3'-P-O5'	6.43	116.23	104.00
26	LA	1133	A	C5'-C4'-O4'	6.43	116.82	109.10
26	LA	1631	G	C5-C6-O6	-6.43	124.74	128.60
26	LA	1764	C	N1-C2-N3	6.43	123.70	119.20
26	LA	2503	A	N9-C4-C5	-6.43	103.23	105.80
2	SA	192	A	C8-N9-C4	-6.43	103.23	105.80
2	SA	1222	G	C4-C5-N7	6.43	113.37	110.80
2	SA	1466	C	P-O5'-C5'	6.43	131.19	120.90
26	LA	131	A	N7-C8-N9	6.43	117.02	113.80
26	LA	1492	G	N9-C4-C5	-6.43	102.83	105.40
26	LA	1628	G	C2-N3-C4	6.43	115.12	111.90
26	LA	1698	A	N3-C4-N9	6.43	132.55	127.40
26	LA	2217	G	C5'-C4'-O4'	6.43	116.82	109.10
26	LA	2412	A	C4-C5-N7	-6.43	107.48	110.70
26	LA	2450	A	C2-N3-C4	-6.43	107.38	110.60
26	LA	2607	G	P-O5'-C5'	6.43	131.19	120.90
31	LX	49	ASN	CA-CB-CG	-6.43	99.25	113.40
7	SG	25	PHE	CG-CD2-CE2	6.43	127.88	120.80
26	LA	1299	G	N1-C6-O6	-6.43	116.04	119.90
26	LA	2880	C	C4-C5-C6	-6.43	114.18	117.40
2	SA	252	U	C5'-C4'-C3'	-6.43	105.71	116.00
2	SA	266	G	C5-N7-C8	-6.43	101.08	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	993	G	C2-N3-C4	-6.43	108.69	111.90
2	SA	1101	A	C3'-C2'-C1'	-6.43	96.36	101.50
2	SA	1155	A	C8-N9-C4	-6.43	103.23	105.80
3	S1	56	G	N7-C8-N9	-6.43	109.89	113.10
25	LB	65	U	C4-C5-C6	6.43	123.56	119.70
26	LA	243	U	N1-C2-O2	-6.43	118.30	122.80
26	LA	884	U	N3-C4-C5	-6.43	110.74	114.60
26	LA	1548	A	P-O3'-C3'	-6.43	111.98	119.70
26	LA	2531	A	O5'-C5'-C4'	6.43	123.92	111.70
2	SA	1027	C	C5'-C4'-O4'	6.43	116.81	109.10
2	SA	1348	U	C3'-C2'-C1'	6.43	106.64	101.50
26	LA	474	G	C5-C6-O6	-6.43	124.74	128.60
26	LA	1354	A	C8-N9-C4	-6.43	103.23	105.80
26	LA	2432	A	C2-N3-C4	-6.43	107.39	110.60
2	SA	301	G	P-O5'-C5'	-6.43	110.62	120.90
2	SA	374	A	C5'-C4'-C3'	-6.43	105.72	116.00
2	SA	797	C	C4'-C3'-C2'	-6.43	96.17	102.60
25	LB	54	G	C5'-C4'-O4'	6.43	116.81	109.10
25	LB	87	U	N1-C2-O2	-6.43	118.30	122.80
26	LA	493	G	C6-N1-C2	-6.43	121.24	125.10
26	LA	852	U	N1-C2-O2	6.43	127.30	122.80
26	LA	1098	A	C2-N3-C4	6.43	113.81	110.60
26	LA	1575	C	O5'-P-OP2	6.43	118.41	110.70
26	LA	1620	G	C4-N9-C1'	-6.43	118.15	126.50
26	LA	2234	G	C3'-C2'-C1'	-6.43	96.36	101.50
28	LU	24	ILE	O-C-N	-6.43	112.42	122.70
2	SA	64	G	C3'-C2'-C1'	-6.42	96.36	101.50
2	SA	122	G	C8-N9-C4	6.42	108.97	106.40
2	SA	182	A	P-O5'-C5'	-6.42	110.62	120.90
2	SA	1076	U	C1'-O4'-C4'	-6.42	104.76	109.90
2	SA	1320	C	O4'-C1'-N1	6.42	113.34	108.20
2	SA	1343	G	C4-C5-N7	6.42	113.37	110.80
4	S2	49	C	O4'-C1'-N1	6.42	113.34	108.20
13	SM	22	TYR	CB-CG-CD2	6.42	124.85	121.00
26	LA	841	G	C5'-C4'-O4'	6.42	116.81	109.10
26	LA	1299	G	C4-N9-C1'	-6.42	118.15	126.50
26	LA	1423	G	C1'-O4'-C4'	-6.42	104.76	109.90
26	LA	2306	C	N1-C2-N3	6.42	123.70	119.20
26	LA	2345	G	C5-C6-N1	-6.42	108.29	111.50
26	LA	2878	U	C6-N1-C2	-6.42	117.14	121.00
28	LU	1	MET	CG-SD-CE	-6.42	89.92	100.20
2	SA	195	A	C4-C5-C6	-6.42	113.79	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	33	C	OP1-P-OP2	-6.42	109.97	119.60
4	S2	41	C	N1-C2-O2	-6.42	115.05	118.90
26	LA	303	G	N3-C4-C5	-6.42	125.39	128.60
26	LA	668	A	C5-N7-C8	-6.42	100.69	103.90
26	LA	1077	A	C5-C6-N1	6.42	120.91	117.70
26	LA	1537	G	N3-C4-N9	6.42	129.85	126.00
26	LA	1914	C	C4'-C3'-C2'	-6.42	96.18	102.60
26	LA	2332	C	C2-N1-C1'	6.42	125.86	118.80
26	LA	2345	G	C5'-C4'-C3'	-6.42	105.72	116.00
26	LA	2576	G	C4-N9-C1'	6.42	134.85	126.50
28	LU	95	ARG	NH1-CZ-NH2	-6.42	112.33	119.40
41	L5	33	ARG	NE-CZ-NH1	-6.42	117.09	120.30
2	SA	769	G	C2-N3-C4	6.42	115.11	111.90
4	S2	17	C	N3-C2-O2	-6.42	117.41	121.90
4	S2	61	U	C2-N1-C1'	-6.42	110.00	117.70
26	LA	696	G	C5-C6-N1	6.42	114.71	111.50
26	LA	891	G	C5'-C4'-C3'	6.42	126.27	116.00
26	LA	908	C	C6-N1-C2	6.42	122.87	120.30
26	LA	1171	G	C4'-C3'-C2'	-6.42	96.18	102.60
26	LA	1429	G	C5'-C4'-O4'	6.42	116.81	109.10
26	LA	1699	G	C4-N9-C1'	6.42	134.85	126.50
26	LA	2075	U	C5-C4-O4	-6.42	122.05	125.90
26	LA	2250	G	C2-N3-C4	6.42	115.11	111.90
26	LA	2286	G	C2-N3-C4	6.42	115.11	111.90
26	LA	2446	G	N3-C4-N9	6.42	129.85	126.00
26	LA	2569	G	O4'-C1'-C2'	-6.42	99.38	105.80
26	LA	2572	A	C4-C5-N7	6.42	113.91	110.70
26	LA	2707	U	N3-C4-C5	-6.42	110.75	114.60
2	SA	558	G	N7-C8-N9	-6.42	109.89	113.10
26	LA	2709	G	P-O5'-C5'	6.42	131.17	120.90
3	S1	20	G	O4'-C1'-N9	6.42	113.33	108.20
3	S1	26	U	C2-N1-C1'	6.42	125.40	117.70
26	LA	1838	C	C6-N1-C1'	-6.42	113.10	120.80
26	LA	2148	G	O5'-P-OP2	6.42	118.40	110.70
26	LA	2290	G	N3-C2-N2	6.42	124.39	119.90
2	SA	318	G	C4-N9-C1'	-6.42	118.16	126.50
2	SA	342	C	P-O5'-C5'	6.42	131.17	120.90
2	SA	729	A	C5-N7-C8	-6.42	100.69	103.90
2	SA	1276	G	C5-C6-O6	-6.42	124.75	128.60
2	SA	1413	A	C5-C6-N6	-6.42	118.57	123.70
26	LA	119	A	C5-C6-N6	-6.42	118.57	123.70
26	LA	204	A	N7-C8-N9	-6.42	110.59	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	369	U	N3-C2-O2	6.42	126.69	122.20
26	LA	780	G	C4'-C3'-C2'	-6.42	96.18	102.60
26	LA	865	C	C6-N1-C2	-6.42	117.73	120.30
26	LA	1031	G	N9-C4-C5	-6.42	102.83	105.40
26	LA	1110	G	C4-N9-C1'	-6.42	118.16	126.50
26	LA	1122	G	O4'-C4'-C3'	-6.42	97.58	104.00
26	LA	2525	G	N1-C2-N3	6.42	127.75	123.90
26	LA	2810	A	P-O5'-C5'	-6.42	110.64	120.90
2	SA	1321	U	C5'-C4'-O4'	-6.42	101.40	109.10
25	LB	92	C	C4-C5-C6	6.42	120.61	117.40
26	LA	390	U	N1-C2-O2	6.42	127.29	122.80
26	LA	996	A	C3'-C2'-C1'	6.42	106.63	101.50
26	LA	1245	G	C5'-C4'-C3'	-6.42	105.74	116.00
26	LA	1691	C	N1-C2-N3	6.42	123.69	119.20
26	LA	2526	G	N9-C4-C5	-6.42	102.83	105.40
26	LA	2670	A	C3'-C2'-C1'	6.42	106.63	101.50
2	SA	39	G	O4'-C1'-N9	-6.41	103.07	108.20
2	SA	117	G	O5'-P-OP1	-6.41	99.93	105.70
2	SA	239	U	C1'-O4'-C4'	-6.41	104.77	109.90
2	SA	365	U	N3-C4-O4	6.41	123.89	119.40
2	SA	563	A	C4-C5-N7	6.41	113.91	110.70
2	SA	571	U	C3'-C2'-C1'	6.41	106.63	101.50
2	SA	1365	G	N1-C2-N2	-6.41	110.43	116.20
2	SA	1389	C	N1-C2-N3	6.41	123.69	119.20
7	SG	20	GLU	OE1-CD-OE2	-6.41	115.60	123.30
24	S3	448	THR	CA-CB-CG2	-6.41	103.42	112.40
26	LA	568	U	OP2-P-O3'	6.41	119.31	105.20
26	LA	623	C	C6-N1-C2	-6.41	117.73	120.30
26	LA	816	C	N3-C4-C5	-6.41	119.33	121.90
26	LA	1005	C	C4'-C3'-C2'	6.41	109.01	102.60
26	LA	1149	G	N1-C2-N3	6.41	127.75	123.90
26	LA	2008	C	O4'-C1'-N1	6.41	113.33	108.20
26	LA	2291	U	N3-C2-O2	-6.41	117.71	122.20
26	LA	2505	G	C4'-C3'-C2'	-6.41	96.19	102.60
2	SA	827	U	OP1-P-OP2	-6.41	109.98	119.60
26	LA	159	G	N9-C4-C5	6.41	107.97	105.40
26	LA	189	G	O4'-C1'-N9	6.41	113.33	108.20
26	LA	195	A	N3-C4-C5	6.41	131.29	126.80
26	LA	396	G	C4-C5-N7	-6.41	108.23	110.80
26	LA	623	C	N3-C4-C5	6.41	124.47	121.90
26	LA	1118	C	C6-N1-C2	6.41	122.86	120.30
26	LA	2453	A	C5-C6-N6	6.41	128.83	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	11	G	N7-C8-N9	6.41	116.31	113.10
2	SA	174	A	N3-C4-C5	6.41	131.29	126.80
2	SA	750	C	P-O5'-C5'	6.41	131.16	120.90
26	LA	171	U	O4'-C1'-N1	6.41	113.33	108.20
26	LA	365	U	N3-C2-O2	-6.41	117.71	122.20
26	LA	1397	U	OP1-P-OP2	-6.41	109.98	119.60
26	LA	1401	G	N7-C8-N9	-6.41	109.89	113.10
26	LA	1685	C	C5-C6-N1	-6.41	117.80	121.00
26	LA	1834	U	N3-C2-O2	6.41	126.69	122.20
26	LA	2029	G	C5'-C4'-C3'	6.41	126.26	116.00
26	LA	2126	A	C3'-C2'-C1'	6.41	106.63	101.50
26	LA	2225	A	N3-C4-N9	-6.41	122.27	127.40
26	LA	2840	C	N3-C2-O2	-6.41	117.41	121.90
26	LA	2860	A	P-O3'-C3'	6.41	127.39	119.70
2	SA	71	A	N9-C4-C5	6.41	108.36	105.80
2	SA	542	G	N1-C2-N2	-6.41	110.43	116.20
2	SA	954	G	C5-N7-C8	-6.41	101.09	104.30
2	SA	1060	U	C2-N3-C4	-6.41	123.16	127.00
4	S2	59	A	OP1-P-O3'	6.41	119.30	105.20
14	SN	52	ARG	NE-CZ-NH2	-6.41	117.10	120.30
26	LA	215	G	C6-C5-N7	-6.41	126.56	130.40
26	LA	361	G	P-O5'-C5'	-6.41	110.65	120.90
26	LA	1226	A	O4'-C1'-N9	6.41	113.33	108.20
26	LA	1331	G	C1'-O4'-C4'	-6.41	104.77	109.90
26	LA	1646	C	N3-C4-N4	-6.41	113.51	118.00
26	LA	2027	G	N3-C4-C5	-6.41	125.39	128.60
26	LA	2148	G	C8-N9-C4	-6.41	103.84	106.40
26	LA	2402	U	C2-N1-C1'	6.41	125.39	117.70
26	LA	2682	A	C2-N3-C4	6.41	113.80	110.60
48	LN	115	GLU	OE1-CD-OE2	-6.41	115.61	123.30
53	LP	76	VAL	O-C-N	-6.41	112.45	122.70
2	SA	1132	C	C4'-C3'-C2'	-6.41	96.19	102.60
2	SA	1292	G	N3-C4-C5	-6.41	125.40	128.60
26	LA	696	G	C2-N3-C4	6.41	115.10	111.90
26	LA	2609	U	C2-N1-C1'	6.41	125.39	117.70
2	SA	203	G	N3-C4-C5	6.41	131.80	128.60
2	SA	639	G	C4-N9-C1'	-6.41	118.17	126.50
2	SA	771	G	C5'-C4'-C3'	-6.41	105.75	116.00
2	SA	931	C	P-O3'-C3'	6.41	127.39	119.70
2	SA	1497	G	P-O3'-C3'	-6.41	112.01	119.70
4	S2	41	C	P-O5'-C5'	6.41	131.15	120.90
25	LB	79	G	OP1-P-OP2	-6.41	109.99	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	202	U	C3'-C2'-C1'	6.41	106.62	101.50
26	LA	353	C	N3-C2-O2	-6.41	117.42	121.90
26	LA	425	G	N9-C4-C5	-6.41	102.84	105.40
26	LA	1720	U	C5'-C4'-O4'	6.41	116.79	109.10
26	LA	1874	C	N3-C4-C5	6.41	124.46	121.90
26	LA	2212	A	P-O5'-C5'	6.41	131.15	120.90
52	LO	44	ARG	NE-CZ-NH2	6.41	123.50	120.30
2	SA	1483	A	N7-C8-N9	6.40	117.00	113.80
26	LA	781	A	N3-C4-N9	-6.40	122.28	127.40
26	LA	1284	A	N9-C4-C5	-6.40	103.24	105.80
2	SA	268	U	P-O5'-C5'	6.40	131.15	120.90
2	SA	413	G	P-O3'-C3'	-6.40	112.02	119.70
2	SA	514	C	C6-N1-C2	-6.40	117.74	120.30
2	SA	1173	U	O4'-C4'-C3'	-6.40	97.60	104.00
25	LB	7	G	C4-C5-C6	-6.40	114.96	118.80
26	LA	109	C	C4'-C3'-C2'	-6.40	96.20	102.60
26	LA	133	U	N1-C2-N3	-6.40	111.06	114.90
26	LA	196	A	N1-C2-N3	-6.40	126.10	129.30
26	LA	437	U	P-O3'-C3'	-6.40	112.02	119.70
26	LA	504	A	C1'-O4'-C4'	-6.40	104.78	109.90
26	LA	664	G	N3-C2-N2	6.40	124.38	119.90
26	LA	953	G	O5'-P-OP2	-6.40	99.94	105.70
26	LA	1387	A	C5-C6-N6	-6.40	118.58	123.70
26	LA	1560	G	O4'-C1'-N9	6.40	113.32	108.20
26	LA	1712	U	O4'-C1'-N1	6.40	113.32	108.20
26	LA	2185	U	N1-C2-O2	6.40	127.28	122.80
26	LA	2289	G	C5-C6-N1	6.40	114.70	111.50
26	LA	2507	C	N3-C4-C5	6.40	124.46	121.90
26	LA	2748	A	C1'-O4'-C4'	-6.40	104.78	109.90
2	SA	88	U	O4'-C1'-N1	6.40	113.32	108.20
2	SA	187	G	N3-C4-C5	6.40	131.80	128.60
2	SA	361	G	OP2-P-O3'	6.40	119.28	105.20
2	SA	427	U	C3'-C2'-C1'	6.40	106.62	101.50
2	SA	601	G	C5-C6-N1	6.40	114.70	111.50
2	SA	1030	U	C2-N3-C4	6.40	130.84	127.00
2	SA	1139	G	C8-N9-C4	-6.40	103.84	106.40
2	SA	1232	U	C4-C5-C6	-6.40	115.86	119.70
26	LA	1137	G	C5-N7-C8	-6.40	101.10	104.30
26	LA	1522	A	P-O5'-C5'	-6.40	110.66	120.90
26	LA	1568	G	C5-C6-O6	-6.40	124.76	128.60
26	LA	2449	U	C4-C5-C6	-6.40	115.86	119.70
2	SA	223	A	N1-C2-N3	-6.40	126.10	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	414	A	C8-N9-C4	-6.40	103.24	105.80
26	LA	963	U	C2-N1-C1'	6.40	125.38	117.70
26	LA	1250	G	N1-C6-O6	6.40	123.74	119.90
26	LA	2560	A	C6-N1-C2	-6.40	114.76	118.60
26	LA	2815	C	P-O3'-C3'	-6.40	112.02	119.70
2	SA	697	U	N3-C2-O2	-6.40	117.72	122.20
2	SA	712	A	O4'-C4'-C3'	-6.40	97.60	104.00
4	S2	23	G	C5-N7-C8	-6.40	101.10	104.30
25	LB	70	C	O4'-C1'-N1	6.40	113.32	108.20
26	LA	967	U	C5-C4-O4	6.40	129.74	125.90
26	LA	1254	A	C5-C6-N1	6.40	120.90	117.70
26	LA	1672	A	N1-C6-N6	6.40	122.44	118.60
26	LA	2164	C	N1-C2-O2	-6.40	115.06	118.90
26	LA	2362	C	C4-C5-C6	6.40	120.60	117.40
26	LA	2697	G	C5'-C4'-C3'	-6.40	105.77	116.00
26	LA	2898	U	N1-C2-O2	-6.40	118.32	122.80
2	SA	242	G	N7-C8-N9	-6.40	109.90	113.10
2	SA	542	G	N1-C2-N3	6.40	127.74	123.90
2	SA	1278	G	O4'-C1'-N9	6.40	113.32	108.20
26	LA	559	G	N9-C4-C5	6.40	107.96	105.40
26	LA	570	G	P-O3'-C3'	-6.40	112.03	119.70
26	LA	625	G	N3-C4-C5	6.40	131.80	128.60
26	LA	987	C	O4'-C1'-N1	6.40	113.32	108.20
26	LA	2084	C	N1-C2-O2	-6.40	115.06	118.90
26	LA	2813	A	C6-C5-N7	6.40	136.78	132.30
2	SA	474	G	C5-N7-C8	6.39	107.50	104.30
2	SA	800	G	N1-C6-O6	6.39	123.74	119.90
2	SA	1217	C	C2-N3-C4	-6.39	116.70	119.90
2	SA	1330	U	N3-C2-O2	-6.39	117.72	122.20
26	LA	28	A	C5'-C4'-O4'	6.39	116.77	109.10
26	LA	1052	C	O4'-C1'-N1	6.39	113.31	108.20
26	LA	1111	A	C4-C5-C6	6.39	120.20	117.00
26	LA	1738	G	C8-N9-C4	6.39	108.96	106.40
26	LA	1903	G	OP1-P-OP2	-6.39	110.01	119.60
26	LA	1986	C	N3-C4-N4	-6.39	113.52	118.00
26	LA	2120	G	C4-C5-N7	6.39	113.36	110.80
26	LA	2396	G	C5'-C4'-C3'	-6.39	105.77	116.00
26	LA	2595	G	C5-C6-N1	6.39	114.70	111.50
26	LA	2697	G	N3-C4-C5	6.39	131.80	128.60
26	LA	2717	C	C6-N1-C2	-6.39	117.74	120.30
26	LA	2893	A	C5-C6-N6	-6.39	118.58	123.70
24	S3	32	TYR	CD1-CE1-CZ	-6.39	114.05	119.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	S3	471	ARG	CG-CD-NE	-6.39	98.38	111.80
25	LB	44	G	C5'-C4'-C3'	6.39	126.23	116.00
26	LA	119	A	N7-C8-N9	-6.39	110.60	113.80
26	LA	444	C	C4'-C3'-C2'	-6.39	96.21	102.60
26	LA	1091	G	O4'-C1'-N9	6.39	113.31	108.20
26	LA	1235	G	C4-C5-C6	-6.39	114.97	118.80
26	LA	1639	C	C3'-C2'-C1'	6.39	106.61	101.50
26	LA	1703	G	N3-C4-C5	-6.39	125.40	128.60
26	LA	2489	U	C5-C4-O4	6.39	129.74	125.90
26	LA	157	C	C5-C6-N1	-6.39	117.81	121.00
26	LA	864	G	C4-C5-C6	-6.39	114.97	118.80
26	LA	1856	U	C5'-C4'-C3'	-6.39	105.77	116.00
26	LA	1971	U	C5-C6-N1	-6.39	119.50	122.70
2	SA	389	A	C6-N1-C2	-6.39	114.77	118.60
2	SA	1398	A	C5-C6-N1	6.39	120.89	117.70
2	SA	1519	A	C4-C5-N7	6.39	113.89	110.70
26	LA	1048	A	O4'-C1'-N9	6.39	113.31	108.20
26	LA	1079	C	O4'-C4'-C3'	-6.39	97.61	104.00
26	LA	1256	G	C4'-C3'-C2'	-6.39	96.21	102.60
26	LA	1563	U	P-O3'-C3'	-6.39	112.03	119.70
26	LA	1688	U	N3-C4-O4	6.39	123.87	119.40
26	LA	1863	G	N7-C8-N9	-6.39	109.91	113.10
26	LA	2003	A	C1'-O4'-C4'	-6.39	104.79	109.90
26	LA	2347	C	P-O3'-C3'	6.39	127.37	119.70
26	LA	2354	C	N3-C4-C5	-6.39	119.34	121.90
26	LA	2893	A	P-O3'-C3'	-6.39	112.03	119.70
31	LX	88	HIS	N-CA-CB	6.39	122.10	110.60
2	SA	398	U	C4-C5-C6	-6.39	115.87	119.70
2	SA	839	C	O4'-C1'-N1	6.39	113.31	108.20
26	LA	88	G	C1'-O4'-C4'	-6.39	104.79	109.90
26	LA	134	G	C4-C5-N7	-6.39	108.25	110.80
26	LA	1311	G	P-O3'-C3'	-6.39	112.03	119.70
26	LA	1536	C	P-O5'-C5'	6.39	131.12	120.90
26	LA	1802	A	N9-C4-C5	6.39	108.36	105.80
26	LA	1927	A	O4'-C1'-N9	6.39	113.31	108.20
26	LA	2285	C	N3-C4-C5	-6.39	119.34	121.90
2	SA	200	G	C4'-C3'-C2'	-6.39	96.21	102.60
2	SA	748	G	N3-C4-C5	-6.39	125.41	128.60
2	SA	790	A	C8-N9-C1'	-6.39	116.20	127.70
2	SA	891	U	C6-N1-C2	-6.39	117.17	121.00
2	SA	1241	G	N9-C4-C5	-6.39	102.85	105.40
26	LA	12	U	P-O5'-C5'	6.39	131.12	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	263	G	N7-C8-N9	6.39	116.29	113.10
26	LA	1106	G	O4'-C4'-C3'	-6.39	97.61	104.00
26	LA	1491	G	C3'-C2'-C1'	6.39	106.61	101.50
26	LA	1557	C	C4-C5-C6	6.39	120.59	117.40
26	LA	1784	A	N7-C8-N9	-6.39	110.61	113.80
26	LA	2141	G	N9-C4-C5	6.39	107.95	105.40
26	LA	2154	A	C6-C5-N7	-6.39	127.83	132.30
26	LA	2549	G	C4-C5-N7	-6.39	108.25	110.80
2	SA	543	U	C5'-C4'-O4'	6.38	116.76	109.10
2	SA	617	G	C5-N7-C8	-6.38	101.11	104.30
26	LA	83	A	O4'-C1'-N9	6.38	113.31	108.20
26	LA	425	G	N9-C1'-C2'	-6.38	104.98	112.00
26	LA	1764	C	O4'-C4'-C3'	-6.38	97.61	104.00
26	LA	2831	G	C4-C5-C6	-6.38	114.97	118.80
2	SA	201	G	C5-C6-O6	-6.38	124.77	128.60
2	SA	237	G	C8-N9-C4	6.38	108.95	106.40
26	LA	2428	G	C5-C6-N1	-6.38	108.31	111.50
26	LA	2560	A	N7-C8-N9	6.38	116.99	113.80
2	SA	176	C	O4'-C1'-N1	6.38	113.31	108.20
2	SA	308	C	N3-C4-C5	-6.38	119.35	121.90
2	SA	333	U	C5-C4-O4	-6.38	122.07	125.90
2	SA	702	A	C5-C6-N1	-6.38	114.51	117.70
2	SA	1143	G	C5'-C4'-O4'	6.38	116.76	109.10
26	LA	103	A	C6-C5-N7	-6.38	127.83	132.30
26	LA	1552	A	N1-C6-N6	-6.38	114.77	118.60
26	LA	2617	U	C5-C6-N1	-6.38	119.51	122.70
2	SA	79	G	N3-C2-N2	6.38	124.37	119.90
2	SA	1010	U	C5'-C4'-O4'	6.38	116.76	109.10
26	LA	189	G	C1'-O4'-C4'	6.38	115.00	109.90
26	LA	581	C	C4'-C3'-C2'	-6.38	96.22	102.60
26	LA	809	G	N9-C4-C5	6.38	107.95	105.40
26	LA	1510	G	N1-C6-O6	6.38	123.73	119.90
26	LA	2136	G	P-O3'-C3'	-6.38	112.04	119.70
2	SA	18	C	P-O5'-C5'	6.38	131.11	120.90
2	SA	335	C	C1'-O4'-C4'	-6.38	104.80	109.90
2	SA	536	C	C5'-C4'-C3'	-6.38	105.80	116.00
2	SA	825	A	N3-C4-N9	-6.38	122.30	127.40
2	SA	954	G	N3-C4-C5	-6.38	125.41	128.60
3	S1	18	A	C8-N9-C4	-6.38	103.25	105.80
22	SF	9	MET	CG-SD-CE	-6.38	89.99	100.20
26	LA	288	U	C1'-O4'-C4'	-6.38	104.80	109.90
26	LA	398	C	O4'-C1'-N1	6.38	113.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	909	A	C8-N9-C4	6.38	108.35	105.80
26	LA	1103	A	N1-C6-N6	-6.38	114.77	118.60
26	LA	1502	A	O4'-C1'-N9	6.38	113.30	108.20
26	LA	2451	A	O3'-P-O5'	-6.38	91.88	104.00
2	SA	149	A	C4'-C3'-C2'	-6.38	96.22	102.60
2	SA	338	A	O4'-C4'-C3'	-6.38	97.62	104.00
2	SA	548	G	N3-C2-N2	-6.38	115.44	119.90
14	SN	89	ARG	NE-CZ-NH2	-6.38	117.11	120.30
25	LB	96	G	N9-C4-C5	6.38	107.95	105.40
26	LA	853	C	C4'-C3'-C2'	-6.38	96.22	102.60
26	LA	1151	A	C5'-C4'-C3'	6.38	126.20	116.00
26	LA	1422	G	N7-C8-N9	-6.38	109.91	113.10
26	LA	1914	C	O4'-C1'-N1	6.38	113.30	108.20
26	LA	2319	G	N1-C2-N3	-6.38	120.08	123.90
26	LA	2397	G	C2'-C3'-O3'	6.38	123.90	113.70
26	LA	2657	A	P-O3'-C3'	-6.38	112.05	119.70
26	LA	2682	A	O4'-C4'-C3'	-6.38	97.62	104.00
38	LE	68	PHE	CB-CG-CD1	6.38	125.26	120.80
2	SA	195	A	C5'-C4'-O4'	6.38	116.75	109.10
2	SA	800	G	C5-C6-N1	-6.38	108.31	111.50
2	SA	969	A	P-O3'-C3'	-6.38	112.05	119.70
2	SA	1124	G	N7-C8-N9	-6.38	109.91	113.10
2	SA	1458	G	N3-C4-C5	6.38	131.79	128.60
13	SM	96	VAL	CG1-CB-CG2	-6.38	100.70	110.90
26	LA	1653	G	O4'-C1'-N9	6.38	113.30	108.20
26	LA	2146	C	C2-N1-C1'	6.38	125.81	118.80
26	LA	2589	A	P-O5'-C5'	6.38	131.10	120.90
2	SA	31	G	C3'-C2'-C1'	-6.37	96.40	101.50
2	SA	159	G	P-O5'-C5'	6.37	131.10	120.90
2	SA	553	A	N1-C6-N6	6.37	122.42	118.60
2	SA	738	C	C3'-C2'-C1'	-6.37	96.40	101.50
4	S2	22	A	C4-C5-N7	-6.37	107.51	110.70
4	S2	64	G	N1-C6-O6	6.37	123.72	119.90
20	SD	118	SER	N-CA-CB	6.37	120.06	110.50
25	LB	89	U	N3-C2-O2	-6.37	117.74	122.20
26	LA	57	C	C2-N3-C4	-6.37	116.71	119.90
26	LA	257	C	C3'-C2'-C1'	-6.37	96.40	101.50
26	LA	315	G	C5-C6-N1	6.37	114.69	111.50
26	LA	500	G	N3-C4-N9	6.37	129.82	126.00
26	LA	1093	G	O3'-P-O5'	-6.37	91.89	104.00
26	LA	1645	G	C5-C6-O6	-6.37	124.78	128.60
26	LA	1722	A	C3'-C2'-C1'	-6.37	96.40	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1856	U	C6-N1-C1'	6.37	130.12	121.20
26	LA	2569	G	C5'-C4'-C3'	6.37	126.20	116.00
26	LA	2695	U	C5-C6-N1	-6.37	119.51	122.70
26	LA	2838	G	O4'-C1'-N9	6.37	113.30	108.20
2	SA	6	G	P-O3'-C3'	-6.37	112.06	119.70
2	SA	877	G	C6-C5-N7	-6.37	126.58	130.40
2	SA	1323	G	C2'-C3'-O3'	6.37	123.89	113.70
2	SA	1403	C	C5-C6-N1	6.37	124.19	121.00
2	SA	1485	U	P-O3'-C3'	-6.37	112.06	119.70
4	S2	47	A	O4'-C1'-N9	6.37	113.30	108.20
4	S2	65	G	O4'-C1'-N9	6.37	113.30	108.20
18	SB	174	GLU	O-C-N	-6.37	112.51	122.70
24	S3	32	TYR	N-CA-CB	6.37	122.07	110.60
26	LA	700	G	N1-C6-O6	6.37	123.72	119.90
34	L0	27	ASN	CA-CB-CG	-6.37	99.38	113.40
2	SA	102	G	C5-C6-N1	-6.37	108.31	111.50
2	SA	935	A	C5-N7-C8	6.37	107.08	103.90
2	SA	952	U	C5-C6-N1	-6.37	119.52	122.70
2	SA	1505	G	OP2-P-O3'	6.37	119.21	105.20
26	LA	23	G	P-O5'-C5'	6.37	131.09	120.90
26	LA	391	A	N9-C4-C5	-6.37	103.25	105.80
26	LA	1765	U	C4-C5-C6	6.37	123.52	119.70
2	SA	865	A	O4'-C1'-N9	6.37	113.29	108.20
2	SA	1070	U	C5-C4-O4	6.37	129.72	125.90
2	SA	1148	U	C4'-C3'-C2'	-6.37	96.23	102.60
3	S1	24	A	C4'-C3'-C2'	-6.37	96.23	102.60
3	S1	30	U	C4-C5-C6	-6.37	115.88	119.70
26	LA	292	U	N3-C4-O4	6.37	123.86	119.40
26	LA	579	G	N3-C4-C5	-6.37	125.42	128.60
26	LA	779	U	P-O5'-C5'	6.37	131.09	120.90
26	LA	827	U	N3-C2-O2	6.37	126.66	122.20
26	LA	1261	C	C5'-C4'-C3'	-6.37	105.81	116.00
26	LA	1674	G	N3-C2-N2	-6.37	115.44	119.90
26	LA	2303	G	N9-C4-C5	6.37	107.95	105.40
26	LA	2822	G	N9-C4-C5	-6.37	102.85	105.40
26	LA	2828	G	C2-N3-C4	6.37	115.08	111.90
26	LA	2859	G	N3-C4-N9	-6.37	122.18	126.00
2	SA	566	G	C4-C5-N7	6.37	113.35	110.80
26	LA	1198	U	N3-C4-O4	-6.37	114.94	119.40
26	LA	1281	G	O4'-C1'-N9	6.37	113.29	108.20
26	LA	2381	A	C5'-C4'-C3'	6.37	126.19	116.00
2	SA	71	A	C4-C5-N7	-6.37	107.52	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	292	G	C5-C6-O6	-6.37	124.78	128.60
2	SA	674	G	N9-C4-C5	6.37	107.95	105.40
2	SA	887	G	O4'-C1'-N9	6.37	113.29	108.20
20	SD	71	PHE	CB-CG-CD1	-6.37	116.34	120.80
26	LA	292	U	C2-N3-C4	6.37	130.82	127.00
26	LA	639	U	C2-N3-C4	6.37	130.82	127.00
26	LA	760	G	P-O3'-C3'	6.37	127.34	119.70
26	LA	1292	G	C5-N7-C8	-6.37	101.12	104.30
26	LA	1358	G	C8-N9-C1'	-6.37	118.73	127.00
26	LA	1747	U	C5'-C4'-O4'	6.37	116.74	109.10
26	LA	2552	U	P-O3'-C3'	6.37	127.34	119.70
37	LC	120	ALA	CB-CA-C	6.37	119.65	110.10
2	SA	1058	G	C5-C6-O6	-6.36	124.78	128.60
2	SA	1215	G	P-O5'-C5'	6.36	131.08	120.90
26	LA	120	U	C5-C6-N1	6.36	125.88	122.70
26	LA	493	G	C5'-C4'-O4'	6.36	116.73	109.10
26	LA	807	U	N3-C4-C5	6.36	118.42	114.60
26	LA	953	G	P-O5'-C5'	6.36	131.08	120.90
26	LA	1475	G	N3-C4-C5	6.36	131.78	128.60
26	LA	1904	G	C1'-O4'-C4'	-6.36	104.81	109.90
26	LA	1915	C	C4-C5-C6	6.36	120.58	117.40
26	LA	2676	C	P-O5'-C5'	-6.36	110.72	120.90
2	SA	280	C	C2-N3-C4	-6.36	116.72	119.90
2	SA	694	A	C4-C5-C6	6.36	120.18	117.00
26	LA	926	G	C5'-C4'-O4'	6.36	116.73	109.10
26	LA	954	G	N3-C2-N2	6.36	124.35	119.90
26	LA	2778	A	C8-N9-C4	-6.36	103.25	105.80
26	LA	2888	C	C4-C5-C6	6.36	120.58	117.40
57	LS	96	ASP	CA-CB-CG	-6.36	99.40	113.40
2	SA	41	G	C4-C5-N7	-6.36	108.25	110.80
2	SA	362	G	O4'-C1'-N9	6.36	113.29	108.20
2	SA	550	G	C5-C6-N1	6.36	114.68	111.50
3	S1	38	G	O4'-C1'-N9	6.36	113.29	108.20
26	LA	614	A	N9-C1'-C2'	-6.36	105.00	112.00
26	LA	1870	C	OP1-P-OP2	-6.36	110.06	119.60
26	LA	2491	U	C5'-C4'-C3'	-6.36	105.82	116.00
30	LW	17	ASP	CB-CG-OD2	6.36	124.03	118.30
50	LL	75	TYR	CG-CD2-CE2	-6.36	116.21	121.30
23	SR	12	PHE	CB-CG-CD2	-6.36	116.35	120.80
24	S3	284	TYR	CB-CG-CD1	-6.36	117.18	121.00
26	LA	66	C	C5-C6-N1	-6.36	117.82	121.00
26	LA	94	A	C4-C5-C6	-6.36	113.82	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1655	A	C5-C6-N1	6.36	120.88	117.70
26	LA	1904	G	C4-C5-C6	-6.36	114.98	118.80
2	SA	109	A	O4'-C1'-N9	6.36	113.28	108.20
2	SA	587	G	C5'-C4'-O4'	6.36	116.73	109.10
2	SA	1114	C	N3-C4-N4	6.36	122.45	118.00
2	SA	1133	G	C4-N9-C1'	-6.36	118.23	126.50
2	SA	1472	U	O5'-P-OP1	-6.36	99.98	105.70
26	LA	124	G	C4-C5-N7	6.36	113.34	110.80
26	LA	566	U	N3-C4-C5	6.36	118.41	114.60
26	LA	1142	A	C4-C5-N7	6.36	113.88	110.70
26	LA	1337	G	C2-N3-C4	-6.36	108.72	111.90
26	LA	1804	C	N1-C1'-C2'	-6.36	105.01	112.00
26	LA	1888	G	O4'-C1'-N9	6.36	113.28	108.20
26	LA	2071	A	OP1-P-OP2	-6.36	110.06	119.60
2	SA	410	G	C4-C5-N7	6.36	113.34	110.80
2	SA	453	G	C6-N1-C2	6.36	128.91	125.10
14	SN	10	VAL	CA-CB-CG2	-6.36	101.37	110.90
26	LA	135	U	O4'-C1'-N1	6.36	113.28	108.20
26	LA	431	U	C1'-O4'-C4'	-6.36	104.81	109.90
26	LA	464	U	C2-N1-C1'	6.36	125.33	117.70
26	LA	584	C	C3'-C2'-C1'	6.36	106.58	101.50
26	LA	998	C	C2-N1-C1'	6.36	125.79	118.80
26	LA	1317	G	O4'-C1'-N9	6.36	113.28	108.20
26	LA	1337	G	N1-C2-N3	6.36	127.71	123.90
26	LA	1533	C	C5'-C4'-O4'	6.36	116.73	109.10
26	LA	2277	G	N3-C2-N2	-6.36	115.45	119.90
26	LA	2652	C	N3-C4-C5	-6.36	119.36	121.90
26	LA	2736	A	C5-C6-N1	6.36	120.88	117.70
29	LV	3	ARG	NH1-CZ-NH2	-6.36	112.41	119.40
53	LP	124	ALA	CB-CA-C	-6.36	100.57	110.10
2	SA	852	G	N3-C4-N9	6.35	129.81	126.00
26	LA	394	C	C4-C5-C6	6.35	120.58	117.40
26	LA	895	U	C6-N1-C2	-6.35	117.19	121.00
26	LA	1006	C	N1-C2-N3	6.35	123.65	119.20
26	LA	1082	U	C5-C6-N1	-6.35	119.52	122.70
26	LA	1374	G	N3-C4-C5	-6.35	125.42	128.60
26	LA	1503	A	C8-N9-C4	6.35	108.34	105.80
26	LA	1531	C	P-O3'-C3'	6.35	127.33	119.70
26	LA	1778	U	C2-N3-C4	-6.35	123.19	127.00
2	SA	553	A	C5-C6-N1	-6.35	114.52	117.70
2	SA	689	C	C2-N3-C4	-6.35	116.72	119.90
2	SA	1179	A	N7-C8-N9	-6.35	110.62	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1304	G	N9-C4-C5	6.35	107.94	105.40
26	LA	232	G	N3-C4-C5	-6.35	125.42	128.60
26	LA	480	A	C2-N3-C4	6.35	113.78	110.60
26	LA	580	U	C4'-C3'-C2'	-6.35	96.25	102.60
26	LA	1541	C	P-O5'-C5'	6.35	131.06	120.90
26	LA	1792	G	C5-N7-C8	6.35	107.48	104.30
26	LA	2003	A	N1-C6-N6	6.35	122.41	118.60
26	LA	2747	G	C6-C5-N7	-6.35	126.59	130.40
26	LA	2808	G	P-O5'-C5'	6.35	131.06	120.90
2	SA	339	C	N1-C2-N3	6.35	123.64	119.20
2	SA	883	C	P-O3'-C3'	6.35	127.32	119.70
2	SA	1349	A	C8-N9-C4	6.35	108.34	105.80
26	LA	317	G	N9-C4-C5	6.35	107.94	105.40
26	LA	1074	G	O4'-C1'-C2'	6.35	113.31	107.60
26	LA	1492	G	C5-C6-O6	-6.35	124.79	128.60
26	LA	2506	U	O4'-C1'-N1	6.35	113.28	108.20
2	SA	18	C	C5-C6-N1	-6.35	117.83	121.00
2	SA	187	G	C2-N3-C4	-6.35	108.73	111.90
2	SA	1176	A	C8-N9-C4	6.35	108.34	105.80
6	SU	11	PHE	CG-CD1-CE1	-6.35	113.81	120.80
26	LA	305	C	C6-N1-C2	-6.35	117.76	120.30
26	LA	392	U	C6-N1-C2	6.35	124.81	121.00
26	LA	747	U	C5'-C4'-C3'	-6.35	105.84	116.00
26	LA	875	G	C5-C6-O6	-6.35	124.79	128.60
26	LA	912	C	O4'-C1'-N1	6.35	113.28	108.20
26	LA	1265	A	C5-C6-N1	6.35	120.88	117.70
26	LA	2274	A	N1-C6-N6	6.35	122.41	118.60
26	LA	2275	C	C5'-C4'-C3'	6.35	126.16	116.00
2	SA	221	C	C5'-C4'-C3'	-6.35	105.85	116.00
2	SA	596	A	C5-C6-N6	6.35	128.78	123.70
2	SA	1319	A	N9-C4-C5	-6.35	103.26	105.80
25	LB	57	A	C2'-C3'-O3'	6.35	123.86	113.70
25	LB	81	G	C6-N1-C2	-6.35	121.29	125.10
26	LA	50	U	C2-N1-C1'	6.35	125.32	117.70
26	LA	71	A	C2-N3-C4	-6.35	107.43	110.60
26	LA	261	G	N3-C2-N2	6.35	124.34	119.90
26	LA	915	C	N1-C2-O2	6.35	122.71	118.90
26	LA	938	G	C5-N7-C8	6.35	107.47	104.30
26	LA	989	G	N9-C1'-C2'	-6.35	105.02	112.00
26	LA	1745	A	C5-N7-C8	-6.35	100.73	103.90
26	LA	1978	A	C4'-C3'-C2'	-6.35	96.25	102.60
26	LA	2741	A	C1'-O4'-C4'	-6.35	104.82	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	LX	48	MET	CG-SD-CE	-6.35	90.04	100.20
2	SA	35	G	N3-C2-N2	6.35	124.34	119.90
8	SH	20	ASN	N-CA-CB	-6.35	99.18	110.60
26	LA	691	C	C5'-C4'-O4'	6.35	116.72	109.10
26	LA	711	G	N3-C4-C5	6.35	131.77	128.60
26	LA	792	A	P-O5'-C5'	6.35	131.05	120.90
26	LA	907	G	C8-N9-C4	6.35	108.94	106.40
26	LA	988	A	C5'-C4'-C3'	6.35	126.15	116.00
2	SA	223	A	C6-N1-C2	-6.34	114.79	118.60
2	SA	691	G	N3-C4-N9	-6.34	122.19	126.00
2	SA	1336	C	C4'-C3'-C2'	-6.34	96.26	102.60
2	SA	1369	C	P-O3'-C3'	6.34	127.31	119.70
2	SA	1425	U	C4'-C3'-C2'	-6.34	96.25	102.60
2	SA	1491	G	N9-C1'-C2'	-6.34	105.02	112.00
9	SI	89	TYR	N-CA-CB	-6.34	99.18	110.60
12	SL	16	ALA	N-CA-CB	-6.34	101.22	110.10
26	LA	1135	C	C2-N3-C4	-6.34	116.73	119.90
26	LA	1240	U	C2-N1-C1'	-6.34	110.09	117.70
26	LA	1860	G	C5'-C4'-C3'	-6.34	105.85	116.00
26	LA	1894	C	C6-N1-C2	-6.34	117.76	120.30
26	LA	1959	G	N3-C2-N2	-6.34	115.46	119.90
26	LA	2532	G	C5-N7-C8	-6.34	101.13	104.30
26	LA	2588	G	C5-C6-N1	6.34	114.67	111.50
26	LA	2663	G	P-O5'-C5'	6.34	131.05	120.90
2	SA	1041	G	N7-C8-N9	6.34	116.27	113.10
2	SA	1420	U	N3-C4-O4	6.34	123.84	119.40
2	SA	1477	U	N3-C2-O2	-6.34	117.76	122.20
21	SE	120	HIS	CA-CB-CG	-6.34	102.82	113.60
26	LA	599	A	O4'-C1'-N9	6.34	113.27	108.20
26	LA	2006	C	O4'-C4'-C3'	6.34	111.17	106.10
26	LA	2682	A	C4-C5-N7	6.34	113.87	110.70
26	LA	2844	G	C5-C6-O6	-6.34	124.79	128.60
2	SA	17	U	P-O3'-C3'	-6.34	112.09	119.70
2	SA	140	U	O4'-C1'-N1	6.34	113.27	108.20
2	SA	232	G	O4'-C4'-C3'	-6.34	97.66	104.00
2	SA	1524	C	N3-C4-C5	6.34	124.44	121.90
26	LA	24	G	C8-N9-C4	-6.34	103.86	106.40
26	LA	133	U	C1'-O4'-C4'	-6.34	104.83	109.90
26	LA	423	A	N1-C6-N6	6.34	122.41	118.60
26	LA	1249	U	P-O3'-C3'	-6.34	112.09	119.70
26	LA	1277	G	N3-C2-N2	6.34	124.34	119.90
26	LA	1875	G	N3-C4-N9	6.34	129.81	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2235	G	N1-C2-N3	6.34	127.70	123.90
2	SA	6	G	N3-C4-C5	-6.34	125.43	128.60
18	SB	145	ASN	N-CA-CB	6.34	122.01	110.60
25	LB	114	C	O4'-C1'-N1	6.34	113.27	108.20
26	LA	23	G	N9-C4-C5	6.34	107.94	105.40
26	LA	611	C	P-O3'-C3'	6.34	127.31	119.70
26	LA	720	U	N1-C1'-C2'	-6.34	105.03	112.00
26	LA	952	G	N3-C2-N2	6.34	124.34	119.90
26	LA	1275	A	P-O3'-C3'	-6.34	112.09	119.70
26	LA	2631	G	P-O5'-C5'	-6.34	110.76	120.90
2	SA	454	G	C8-N9-C1'	6.34	135.24	127.00
2	SA	1173	U	O4'-C1'-N1	6.34	113.27	108.20
26	LA	513	A	O4'-C1'-N9	6.34	113.27	108.20
26	LA	554	U	C4'-C3'-C2'	-6.34	96.26	102.60
26	LA	893	C	N1-C2-N3	6.34	123.64	119.20
26	LA	1020	A	O3'-P-O5'	6.34	116.04	104.00
26	LA	1490	A	C3'-C2'-C1'	6.34	106.57	101.50
2	SA	139	A	P-O3'-C3'	-6.34	112.10	119.70
2	SA	141	G	C5'-C4'-C3'	-6.34	105.86	116.00
2	SA	403	C	C4-C5-C6	-6.34	114.23	117.40
2	SA	451	A	N1-C2-N3	-6.34	126.13	129.30
2	SA	1097	C	C5-C6-N1	6.34	124.17	121.00
2	SA	1485	U	N3-C4-O4	6.34	123.84	119.40
26	LA	43	G	N3-C2-N2	6.34	124.34	119.90
26	LA	261	G	N1-C2-N3	-6.34	120.10	123.90
26	LA	799	G	O5'-P-OP1	-6.34	100.00	105.70
26	LA	1003	G	N3-C4-C5	-6.34	125.43	128.60
26	LA	1186	G	N1-C2-N3	-6.34	120.10	123.90
26	LA	1444	G	C5'-C4'-O4'	-6.34	101.50	109.10
26	LA	2130	U	C6-N1-C2	-6.34	117.20	121.00
26	LA	2250	G	P-O5'-C5'	-6.34	110.76	120.90
26	LA	2810	A	C4-C5-N7	6.34	113.87	110.70
2	SA	180	U	C2-N3-C4	-6.33	123.20	127.00
2	SA	625	U	C2-N3-C4	-6.33	123.20	127.00
2	SA	1496	C	C4-C5-C6	-6.33	114.23	117.40
7	SG	78	ARG	NE-CZ-NH2	6.33	123.47	120.30
16	SP	28	ARG	NE-CZ-NH1	6.33	123.47	120.30
24	S3	126	TRP	CB-CG-CD2	-6.33	118.36	126.60
26	LA	385	C	P-O5'-C5'	-6.33	110.76	120.90
26	LA	1610	A	C4-C5-N7	-6.33	107.53	110.70
26	LA	2738	A	N1-C6-N6	6.33	122.40	118.60
2	SA	115	G	P-O5'-C5'	-6.33	110.77	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	563	A	N1-C2-N3	6.33	132.47	129.30
2	SA	1006	G	O3'-P-O5'	-6.33	91.97	104.00
2	SA	1280	A	C1'-O4'-C4'	-6.33	104.83	109.90
26	LA	1096	A	C8-N9-C4	6.33	108.33	105.80
26	LA	2252	G	C6-C5-N7	-6.33	126.60	130.40
26	LA	2773	C	N3-C4-C5	-6.33	119.37	121.90
26	LA	2785	C	N1-C2-N3	6.33	123.63	119.20
31	LX	43	ASP	CB-CA-C	-6.33	97.73	110.40
2	SA	884	U	C2-N3-C4	6.33	130.80	127.00
2	SA	993	G	C4-N9-C1'	6.33	134.73	126.50
2	SA	1264	U	N3-C2-O2	6.33	126.63	122.20
26	LA	27	G	C4'-C3'-C2'	6.33	108.93	102.60
26	LA	403	U	P-O5'-C5'	6.33	131.03	120.90
26	LA	1041	G	C5'-C4'-C3'	-6.33	105.87	116.00
26	LA	1815	A	N1-C6-N6	-6.33	114.80	118.60
26	LA	1901	A	N1-C2-N3	-6.33	126.13	129.30
26	LA	1948	G	C6-N1-C2	-6.33	121.30	125.10
26	LA	2550	G	C3'-C2'-C1'	-6.33	96.43	101.50
26	LA	2846	G	N1-C6-O6	6.33	123.70	119.90
38	LE	179	ARG	NE-CZ-NH2	6.33	123.47	120.30
5	ST	27	MET	CG-SD-CE	-6.33	90.07	100.20
26	LA	113	U	C5'-C4'-C3'	6.33	126.13	116.00
26	LA	450	G	C5-C6-N1	6.33	114.67	111.50
26	LA	777	G	C6-N1-C2	-6.33	121.30	125.10
26	LA	1673	G	C5'-C4'-O4'	6.33	116.70	109.10
26	LA	1725	U	P-O3'-C3'	-6.33	112.11	119.70
1	SS	36	ARG	C-N-CA	6.33	137.52	121.70
2	SA	62	U	C2-N3-C4	-6.33	123.20	127.00
2	SA	323	U	P-O5'-C5'	6.33	131.03	120.90
2	SA	348	G	N1-C2-N3	-6.33	120.10	123.90
2	SA	421	U	N3-C4-O4	6.33	123.83	119.40
2	SA	741	G	O4'-C1'-N9	6.33	113.26	108.20
2	SA	793	U	C6-N1-C1'	-6.33	112.34	121.20
24	S3	514	TYR	CB-CG-CD2	6.33	124.80	121.00
26	LA	503	A	N1-C6-N6	-6.33	114.80	118.60
26	LA	578	G	C6-C5-N7	-6.33	126.60	130.40
26	LA	1627	G	N3-C4-N9	6.33	129.80	126.00
26	LA	2382	G	C5-C6-N1	6.33	114.66	111.50
26	LA	2618	G	P-O5'-C5'	6.33	131.03	120.90
2	SA	1208	C	N1-C1'-C2'	-6.33	105.04	112.00
2	SA	1336	C	C2-N1-C1'	6.33	125.76	118.80
26	LA	267	C	C5'-C4'-O4'	6.33	116.69	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	482	A	P-O3'-C3'	6.33	127.29	119.70
26	LA	821	A	C8-N9-C4	-6.33	103.27	105.80
26	LA	1766	G	C5'-C4'-C3'	-6.33	105.88	116.00
26	LA	2321	U	C5-C6-N1	-6.33	119.54	122.70
26	LA	2719	G	N3-C2-N2	-6.33	115.47	119.90
2	SA	57	G	N3-C4-C5	-6.33	125.44	128.60
2	SA	689	C	N1-C2-O2	-6.33	115.11	118.90
26	LA	38	A	C4'-C3'-C2'	-6.33	96.27	102.60
26	LA	640	C	C5-C4-N4	-6.33	115.77	120.20
26	LA	643	A	C5'-C4'-O4'	6.33	116.69	109.10
26	LA	981	A	C5-C6-N6	-6.33	118.64	123.70
26	LA	1122	G	C3'-C2'-C1'	-6.33	96.44	101.50
26	LA	1532	A	C2-N3-C4	-6.33	107.44	110.60
26	LA	1595	C	N1-C2-O2	-6.33	115.11	118.90
26	LA	1649	G	C1'-O4'-C4'	-6.33	104.84	109.90
26	LA	1848	A	N1-C6-N6	-6.33	114.81	118.60
26	LA	2317	A	C5-C6-N1	6.33	120.86	117.70
26	LA	2409	G	C5-N7-C8	-6.33	101.14	104.30
48	LN	113	ALA	N-CA-CB	6.33	118.95	110.10
2	SA	112	G	C4'-C3'-C2'	-6.32	96.28	102.60
2	SA	231	U	C4-C5-C6	-6.32	115.91	119.70
2	SA	895	G	C6-N1-C2	6.32	128.89	125.10
2	SA	927	G	N1-C6-O6	-6.32	116.11	119.90
2	SA	1354	U	O4'-C1'-N1	6.32	113.26	108.20
4	S2	74	A	O4'-C1'-N9	6.32	113.26	108.20
24	S3	432	LEU	CB-CG-CD1	6.32	121.75	111.00
25	LB	66	A	C5-C6-N1	-6.32	114.54	117.70
26	LA	627	A	C5'-C4'-C3'	-6.32	105.88	116.00
26	LA	803	U	N3-C4-O4	6.32	123.83	119.40
26	LA	1524	G	O4'-C1'-N9	6.32	113.26	108.20
26	LA	1616	A	C5-C6-N1	-6.32	114.54	117.70
26	LA	2633	G	C5-N7-C8	-6.32	101.14	104.30
27	LD	139	THR	CA-CB-CG2	-6.32	103.55	112.40
37	LC	18	THR	CA-CB-OG1	6.32	122.28	109.00
41	L5	10	LEU	CB-CA-C	6.32	122.22	110.20
45	LG	154	THR	CA-CB-CG2	-6.32	103.55	112.40
2	SA	479	U	N3-C4-C5	-6.32	110.81	114.60
2	SA	1236	A	N7-C8-N9	6.32	116.96	113.80
24	S3	91	ALA	N-CA-CB	-6.32	101.25	110.10
26	LA	928	A	C8-N9-C4	-6.32	103.27	105.80
26	LA	1029	A	C5-N7-C8	-6.32	100.74	103.90
26	LA	2153	C	O4'-C1'-C2'	-6.32	99.48	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2218	G	N3-C4-N9	-6.32	122.21	126.00
26	LA	2258	C	C1'-O4'-C4'	-6.32	104.84	109.90
2	SA	892	A	N7-C8-N9	-6.32	110.64	113.80
25	LB	23	G	C2-N3-C4	6.32	115.06	111.90
26	LA	262	A	C3'-C2'-C1'	6.32	106.56	101.50
26	LA	497	A	OP1-P-OP2	-6.32	110.12	119.60
26	LA	505	A	N3-C4-N9	-6.32	122.34	127.40
26	LA	558	U	N3-C4-O4	-6.32	114.98	119.40
26	LA	899	A	N7-C8-N9	-6.32	110.64	113.80
26	LA	2337	G	O3'-P-O5'	6.32	116.01	104.00
26	LA	2574	G	C6-C5-N7	-6.32	126.61	130.40
26	LA	2819	G	C5-C6-N1	6.32	114.66	111.50
2	SA	251	G	N1-C2-N3	-6.32	120.11	123.90
2	SA	377	G	N3-C4-C5	-6.32	125.44	128.60
2	SA	383	A	N1-C6-N6	-6.32	114.81	118.60
26	LA	741	U	C5'-C4'-O4'	6.32	116.68	109.10
26	LA	1076	C	P-O5'-C5'	6.32	131.01	120.90
26	LA	1137	G	C4'-C3'-C2'	-6.32	96.28	102.60
26	LA	1174	U	N3-C4-O4	6.32	123.82	119.40
26	LA	1431	A	N9-C4-C5	-6.32	103.27	105.80
26	LA	2341	G	OP1-P-OP2	-6.32	110.12	119.60
26	LA	2709	G	N1-C2-N2	6.32	121.89	116.20
2	SA	251	G	O3'-P-O5'	-6.32	92.00	104.00
2	SA	275	G	C8-N9-C1'	-6.32	118.79	127.00
2	SA	797	C	O4'-C1'-N1	6.32	113.25	108.20
26	LA	147	C	C4'-C3'-C2'	-6.32	96.28	102.60
26	LA	410	G	N3-C2-N2	-6.32	115.48	119.90
26	LA	654	A	C4-N9-C1'	6.32	137.67	126.30
26	LA	680	C	N1-C2-O2	6.32	122.69	118.90
26	LA	930	G	N7-C8-N9	-6.32	109.94	113.10
26	LA	1187	G	O4'-C1'-N9	6.32	113.25	108.20
26	LA	1341	G	C5-C6-O6	6.32	132.39	128.60
26	LA	1381	G	O4'-C1'-N9	6.32	113.25	108.20
26	LA	1829	A	N1-C2-N3	-6.32	126.14	129.30
26	LA	1840	G	C5-C6-O6	-6.32	124.81	128.60
26	LA	2246	G	C5-C6-O6	-6.32	124.81	128.60
26	LA	2530	A	N1-C2-N3	6.32	132.46	129.30
26	LA	2717	C	O3'-P-O5'	6.32	116.00	104.00
58	LT	12	HIS	CB-CA-C	-6.32	97.76	110.40
2	SA	11	G	C2-N3-C4	-6.32	108.74	111.90
2	SA	818	G	C4-C5-C6	-6.32	115.01	118.80
2	SA	1051	C	C4'-C3'-C2'	-6.32	96.28	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1102	A	C4'-C3'-C2'	-6.32	96.28	102.60
18	SB	112	ARG	NE-CZ-NH1	6.32	123.46	120.30
26	LA	517	C	N1-C2-N3	6.32	123.62	119.20
26	LA	1158	C	C2-N1-C1'	-6.32	111.85	118.80
26	LA	1340	U	N1-C2-O2	6.32	127.22	122.80
26	LA	1422	G	C5'-C4'-C3'	-6.32	105.90	116.00
26	LA	2516	A	N3-C4-C5	6.32	131.22	126.80
26	LA	2669	G	O4'-C4'-C3'	-6.32	97.69	104.00
2	SA	142	G	C5-C6-O6	6.31	132.39	128.60
2	SA	577	G	N1-C2-N3	-6.31	120.11	123.90
2	SA	750	C	C5'-C4'-C3'	-6.31	105.90	116.00
2	SA	930	C	C4-C5-C6	-6.31	114.24	117.40
2	SA	1146	A	C8-N9-C4	-6.31	103.27	105.80
26	LA	568	U	C5'-C4'-C3'	6.31	126.10	116.00
26	LA	1810	A	C5-N7-C8	-6.31	100.74	103.90
26	LA	2166	U	C5'-C4'-C3'	-6.31	105.90	116.00
26	LA	2801	G	O5'-P-OP1	-6.31	100.02	105.70
26	LA	2891	U	C3'-C2'-C1'	6.31	106.55	101.50
26	LA	2901	C	O4'-C4'-C3'	6.31	111.15	106.10
2	SA	585	G	N1-C2-N3	6.31	127.69	123.90
2	SA	628	G	N7-C8-N9	6.31	116.26	113.10
2	SA	826	C	C5'-C4'-O4'	6.31	116.67	109.10
2	SA	1495	U	C5-C6-N1	6.31	125.86	122.70
26	LA	165	A	P-O5'-C5'	6.31	131.00	120.90
26	LA	655	A	N1-C2-N3	6.31	132.46	129.30
26	LA	723	C	C2-N1-C1'	6.31	125.74	118.80
26	LA	1016	G	C3'-C2'-C1'	6.31	106.55	101.50
26	LA	1607	C	C5'-C4'-O4'	6.31	116.68	109.10
26	LA	1822	C	N3-C4-C5	-6.31	119.38	121.90
26	LA	2180	U	N1-C2-N3	6.31	118.69	114.90
26	LA	2237	G	C5'-C4'-C3'	-6.31	105.90	116.00
2	SA	1026	G	P-O5'-C5'	6.31	131.00	120.90
2	SA	1522	U	P-O3'-C3'	6.31	127.27	119.70
4	S2	53	G	O4'-C1'-N9	6.31	113.25	108.20
26	LA	1382	G	N1-C6-O6	6.31	123.69	119.90
26	LA	1759	A	C5-C6-N6	-6.31	118.65	123.70
26	LA	2753	A	C4-C5-C6	-6.31	113.84	117.00
2	SA	275	G	C5'-C4'-C3'	-6.31	105.91	116.00
2	SA	295	C	N1-C2-O2	6.31	122.69	118.90
2	SA	564	C	C1'-O4'-C4'	6.31	114.95	109.90
2	SA	927	G	C2-N3-C4	6.31	115.05	111.90
2	SA	993	G	C5'-C4'-O4'	6.31	116.67	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1264	U	N1-C2-O2	-6.31	118.38	122.80
9	SI	108	ARG	NE-CZ-NH1	6.31	123.45	120.30
26	LA	1175	A	O4'-C1'-C2'	6.31	113.28	107.60
26	LA	1478	G	N3-C4-C5	-6.31	125.45	128.60
26	LA	1789	A	C5-N7-C8	-6.31	100.75	103.90
26	LA	2108	A	C5'-C4'-O4'	6.31	116.67	109.10
26	LA	2529	G	N3-C2-N2	6.31	124.32	119.90
26	LA	2675	A	O4'-C1'-N9	6.31	113.25	108.20
26	LA	2748	A	C3'-C2'-C1'	6.31	106.55	101.50
2	SA	74	A	C5-C6-N1	-6.31	114.55	117.70
2	SA	104	G	N9-C4-C5	-6.31	102.88	105.40
2	SA	237	G	C6-N1-C2	-6.31	121.31	125.10
2	SA	474	G	N1-C6-O6	-6.31	116.11	119.90
2	SA	657	U	C6-N1-C2	6.31	124.78	121.00
2	SA	1022	A	C2-N3-C4	6.31	113.75	110.60
2	SA	1468	A	C3'-C2'-C1'	-6.31	96.45	101.50
2	SA	1490	U	C5-C4-O4	-6.31	122.11	125.90
4	S2	41	C	O4'-C1'-N1	6.31	113.25	108.20
4	S2	53	G	O4'-C4'-C3'	-6.31	97.69	104.00
4	S2	71	G	C5-C6-O6	-6.31	124.81	128.60
18	SB	239	ALA	O-C-N	-6.31	112.61	122.70
26	LA	357	C	O4'-C1'-N1	6.31	113.25	108.20
26	LA	1196	C	C2-N3-C4	-6.31	116.75	119.90
26	LA	1211	C	N3-C2-O2	-6.31	117.48	121.90
26	LA	1216	G	C8-N9-C4	-6.31	103.88	106.40
26	LA	2061	G	N1-C6-O6	-6.31	116.11	119.90
26	LA	2357	G	N3-C4-N9	-6.31	122.22	126.00
26	LA	2388	A	C1'-O4'-C4'	-6.31	104.86	109.90
26	LA	2396	G	N3-C2-N2	-6.31	115.48	119.90
2	SA	89	U	O4'-C1'-N1	6.30	113.24	108.20
2	SA	530	G	N3-C4-C5	6.30	131.75	128.60
2	SA	666	G	C4'-C3'-C2'	-6.30	96.30	102.60
2	SA	873	A	C4-C5-C6	-6.30	113.85	117.00
2	SA	1167	A	N1-C6-N6	6.30	122.38	118.60
2	SA	1270	G	N3-C4-N9	6.30	129.78	126.00
26	LA	1203	U	C4-C5-C6	6.30	123.48	119.70
26	LA	1502	A	C4'-C3'-C2'	-6.30	96.30	102.60
26	LA	2058	A	C8-N9-C4	6.30	108.32	105.80
26	LA	2679	A	C4-N9-C1'	-6.30	114.95	126.30
26	LA	2701	U	C3'-C2'-C1'	6.30	106.54	101.50
2	SA	1254	A	P-O5'-C5'	6.30	130.99	120.90
26	LA	606	U	C5'-C4'-O4'	6.30	116.66	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1547	C	C1'-O4'-C4'	-6.30	104.86	109.90
26	LA	1702	G	C4'-C3'-C2'	-6.30	96.30	102.60
26	LA	1811	G	C2-N3-C4	-6.30	108.75	111.90
26	LA	2419	U	N3-C2-O2	-6.30	117.79	122.20
37	LC	145	VAL	C-N-CA	6.30	137.46	121.70
2	SA	7	A	OP2-P-O3'	6.30	119.06	105.20
2	SA	786	G	C2-N3-C4	6.30	115.05	111.90
2	SA	797	C	OP1-P-OP2	-6.30	110.15	119.60
2	SA	850	U	C5'-C4'-C3'	-6.30	105.92	116.00
2	SA	1138	G	OP1-P-OP2	-6.30	110.15	119.60
2	SA	1222	G	P-O3'-C3'	-6.30	112.14	119.70
2	SA	1542	A	C5'-C4'-O4'	6.30	116.66	109.10
25	LB	110	C	N3-C4-N4	6.30	122.41	118.00
26	LA	39	G	N1-C2-N3	6.30	127.68	123.90
26	LA	577	G	C2-N3-C4	6.30	115.05	111.90
26	LA	888	C	C6-N1-C1'	-6.30	113.24	120.80
26	LA	950	G	N1-C6-O6	6.30	123.68	119.90
26	LA	1116	G	C4-C5-C6	-6.30	115.02	118.80
26	LA	1300	G	C4'-C3'-C2'	-6.30	96.30	102.60
26	LA	1845	G	C4-C5-C6	-6.30	115.02	118.80
26	LA	2076	U	C5-C6-N1	-6.30	119.55	122.70
26	LA	2079	U	N3-C2-O2	-6.30	117.79	122.20
26	LA	2406	A	O5'-P-OP1	6.30	118.26	110.70
26	LA	2535	G	C8-N9-C4	-6.30	103.88	106.40
26	LA	2544	G	N3-C4-N9	6.30	129.78	126.00
2	SA	401	C	N3-C4-N4	-6.30	113.59	118.00
2	SA	433	G	C5'-C4'-O4'	6.30	116.66	109.10
2	SA	814	A	C5-C6-N1	-6.30	114.55	117.70
2	SA	858	G	C5-C6-N1	6.30	114.65	111.50
2	SA	935	A	N1-C6-N6	-6.30	114.82	118.60
2	SA	1020	G	C8-N9-C1'	6.30	135.19	127.00
26	LA	89	A	O5'-P-OP1	6.30	118.26	110.70
26	LA	144	A	C4'-C3'-C2'	-6.30	96.30	102.60
26	LA	246	C	N3-C2-O2	-6.30	117.49	121.90
26	LA	605	G	O4'-C1'-N9	6.30	113.24	108.20
26	LA	862	G	C8-N9-C4	-6.30	103.88	106.40
26	LA	1149	G	C6-N1-C2	-6.30	121.32	125.10
26	LA	1183	U	N3-C2-O2	-6.30	117.79	122.20
26	LA	2269	G	P-O5'-C5'	-6.30	110.82	120.90
26	LA	2325	G	N9-C1'-C2'	6.30	122.19	114.00
26	LA	2847	U	C5-C4-O4	6.30	129.68	125.90
2	SA	51	A	C5-C6-N6	-6.30	118.66	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1648	U	O4'-C1'-N1	6.30	113.24	108.20
26	LA	2275	C	C6-N1-C2	-6.30	117.78	120.30
26	LA	2786	U	C4-C5-C6	-6.30	115.92	119.70
26	LA	2902	C	O4'-C1'-N1	6.30	113.24	108.20
2	SA	60	A	C1'-O4'-C4'	-6.30	104.86	109.90
2	SA	157	U	O3'-P-O5'	-6.30	92.04	104.00
2	SA	256	U	C4-C5-C6	-6.30	115.92	119.70
2	SA	996	A	C5-C6-N1	6.30	120.85	117.70
2	SA	1274	A	N1-C2-N3	-6.30	126.15	129.30
26	LA	16	C	C3'-C2'-C1'	6.30	106.54	101.50
26	LA	212	G	P-O3'-C3'	-6.30	112.14	119.70
26	LA	250	G	C8-N9-C4	6.30	108.92	106.40
26	LA	631	A	N7-C8-N9	-6.30	110.65	113.80
26	LA	788	A	C6-N1-C2	-6.30	114.82	118.60
26	LA	1031	G	C5-C6-N1	6.30	114.65	111.50
26	LA	1240	U	O4'-C4'-C3'	-6.30	97.70	104.00
26	LA	441	U	C2-N3-C4	-6.29	123.22	127.00
26	LA	1632	A	N9-C4-C5	6.29	108.32	105.80
26	LA	2514	U	C4'-C3'-C2'	-6.29	96.31	102.60
26	LA	2757	A	C5-N7-C8	-6.29	100.75	103.90
28	LU	53	SER	N-CA-CB	6.29	119.94	110.50
2	SA	249	U	C2-N3-C4	-6.29	123.22	127.00
2	SA	250	A	C4'-C3'-C2'	-6.29	96.31	102.60
2	SA	406	G	N1-C6-O6	6.29	123.68	119.90
2	SA	467	U	C5'-C4'-C3'	6.29	126.07	116.00
2	SA	540	G	OP1-P-OP2	-6.29	110.16	119.60
2	SA	570	G	N3-C4-N9	6.29	129.78	126.00
2	SA	663	A	O4'-C1'-N9	6.29	113.23	108.20
2	SA	1005	A	N3-C4-C5	-6.29	122.39	126.80
2	SA	1402	C	C4-C5-C6	-6.29	114.25	117.40
26	LA	205	G	P-O5'-C5'	6.29	130.97	120.90
26	LA	343	C	N1-C2-O2	6.29	122.68	118.90
26	LA	460	A	C4-N9-C1'	6.29	137.63	126.30
26	LA	593	U	N1-C2-N3	6.29	118.68	114.90
26	LA	622	G	N1-C6-O6	6.29	123.68	119.90
26	LA	1036	G	C5-C6-N1	-6.29	108.35	111.50
26	LA	1349	C	C2'-C3'-O3'	6.29	123.77	113.70
26	LA	1603	A	O5'-P-OP1	6.29	118.25	110.70
26	LA	1879	C	P-O5'-C5'	-6.29	110.83	120.90
26	LA	2387	U	C2-N3-C4	-6.29	123.22	127.00
2	SA	254	G	N9-C1'-C2'	-6.29	105.08	112.00
4	S2	25	U	C5-C6-N1	6.29	125.85	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	162	U	C5'-C4'-O4'	6.29	116.65	109.10
26	LA	481	G	P-O3'-C3'	6.29	127.25	119.70
26	LA	930	G	N1-C6-O6	6.29	123.67	119.90
26	LA	983	A	C4-C5-C6	6.29	120.15	117.00
26	LA	1149	G	C1'-O4'-C4'	-6.29	104.87	109.90
26	LA	1570	A	N1-C2-N3	-6.29	126.16	129.30
26	LA	2055	C	N1-C2-O2	-6.29	115.12	118.90
29	LV	75	GLY	N-CA-C	6.29	128.83	113.10
44	LF	60	TRP	CB-CG-CD1	6.29	135.18	127.00
2	SA	397	A	C4-C5-N7	6.29	113.84	110.70
2	SA	424	G	N1-C6-O6	6.29	123.67	119.90
2	SA	429	U	C3'-C2'-C1'	-6.29	96.47	101.50
2	SA	897	C	C5-C6-N1	-6.29	117.86	121.00
26	LA	12	U	O4'-C1'-N1	6.29	113.23	108.20
26	LA	1482	G	C4-C5-N7	-6.29	108.28	110.80
26	LA	1611	C	N3-C4-N4	6.29	122.40	118.00
26	LA	2121	G	N3-C4-C5	-6.29	125.45	128.60
2	SA	596	A	C6-C5-N7	-6.29	127.90	132.30
2	SA	689	C	C5'-C4'-C3'	6.29	126.06	116.00
2	SA	1047	G	P-O3'-C3'	-6.29	112.16	119.70
23	SR	42	ARG	NE-CZ-NH1	6.29	123.44	120.30
24	S3	284	TYR	CG-CD2-CE2	6.29	126.33	121.30
25	LB	64	G	O4'-C1'-N9	6.29	113.23	108.20
26	LA	301	G	C4'-C3'-C2'	-6.29	96.31	102.60
26	LA	892	A	N7-C8-N9	6.29	116.94	113.80
26	LA	1095	A	C1'-O4'-C4'	-6.29	104.87	109.90
26	LA	1483	G	O4'-C1'-N9	6.29	113.23	108.20
26	LA	1750	G	N3-C2-N2	6.29	124.30	119.90
26	LA	1904	G	P-O5'-C5'	-6.29	110.84	120.90
26	LA	2017	U	O4'-C4'-C3'	6.29	111.13	106.10
26	LA	2159	G	C1'-O4'-C4'	-6.29	104.87	109.90
26	LA	2279	G	C5'-C4'-C3'	6.29	126.06	116.00
26	LA	2422	C	P-O5'-C5'	6.29	130.96	120.90
26	LA	2870	C	C3'-C2'-C1'	-6.29	96.47	101.50
30	LW	92	VAL	CG1-CB-CG2	-6.29	100.84	110.90
2	SA	488	C	C4'-C3'-C2'	-6.29	96.31	102.60
26	LA	256	A	O4'-C1'-N9	6.29	113.23	108.20
26	LA	490	C	C2-N3-C4	6.29	123.04	119.90
26	LA	881	G	C3'-C2'-C1'	-6.29	96.47	101.50
26	LA	1160	G	C3'-C2'-C1'	6.29	106.53	101.50
26	LA	1215	G	C2-N3-C4	-6.29	108.76	111.90
2	SA	434	U	C5'-C4'-C3'	-6.29	105.94	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	558	G	N1-C6-O6	6.29	123.67	119.90
2	SA	766	A	O4'-C1'-N9	6.29	113.23	108.20
2	SA	969	A	C2-N3-C4	6.29	113.74	110.60
2	SA	1136	C	C5-C6-N1	6.29	124.14	121.00
2	SA	1458	G	N3-C4-N9	-6.29	122.23	126.00
26	LA	494	G	C1'-O4'-C4'	-6.29	104.87	109.90
26	LA	678	C	O4'-C1'-N1	6.29	113.23	108.20
26	LA	1179	G	P-O3'-C3'	-6.29	112.16	119.70
26	LA	2326	C	C2-N3-C4	-6.29	116.76	119.90
26	LA	2797	U	O5'-P-OP1	-6.29	100.04	105.70
2	SA	693	G	C5'-C4'-C3'	6.28	126.06	116.00
2	SA	1054	C	O4'-C4'-C3'	-6.28	97.72	104.00
2	SA	1198	G	O4'-C1'-N9	6.28	113.23	108.20
3	S1	32	U	C4'-C3'-C2'	-6.28	96.32	102.60
5	ST	59	ARG	NE-CZ-NH1	6.28	123.44	120.30
16	SP	31	ARG	NE-CZ-NH1	6.28	123.44	120.30
26	LA	264	C	C5-C6-N1	6.28	124.14	121.00
26	LA	1430	G	N3-C4-C5	-6.28	125.46	128.60
26	LA	1951	U	N1-C2-O2	-6.28	118.40	122.80
26	LA	2031	A	C4-C5-N7	6.28	113.84	110.70
26	LA	2475	C	O4'-C4'-C3'	6.28	111.13	106.10
26	LA	2501	C	C2-N3-C4	-6.28	116.76	119.90
47	LJ	58	LEU	CB-CA-C	-6.28	98.26	110.20
2	SA	200	G	C5-C6-O6	-6.28	124.83	128.60
2	SA	342	C	C6-N1-C1'	-6.28	113.26	120.80
25	LB	80	U	C5'-C4'-O4'	6.28	116.64	109.10
26	LA	1026	G	N7-C8-N9	-6.28	109.96	113.10
26	LA	1045	C	O5'-P-OP2	-6.28	100.05	105.70
26	LA	2886	A	C8-N9-C4	-6.28	103.29	105.80
2	SA	708	C	C2'-C3'-O3'	6.28	123.75	113.70
2	SA	904	U	C3'-C2'-C1'	6.28	106.52	101.50
2	SA	1156	G	N7-C8-N9	-6.28	109.96	113.10
2	SA	1185	G	O4'-C4'-C3'	-6.28	97.72	104.00
2	SA	1414	U	C2-N3-C4	6.28	130.77	127.00
4	S2	30	G	P-O3'-C3'	6.28	127.24	119.70
26	LA	178	G	C3'-C2'-C1'	6.28	106.53	101.50
26	LA	363	G	O4'-C1'-N9	6.28	113.22	108.20
26	LA	508	A	N3-C4-N9	6.28	132.43	127.40
26	LA	2809	A	N9-C4-C5	6.28	108.31	105.80
2	SA	693	G	C3'-C2'-C1'	-6.28	96.48	101.50
26	LA	862	G	C6-N1-C2	-6.28	121.33	125.10
2	SA	471	U	C1'-O4'-C4'	-6.28	104.88	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	696	A	N1-C2-N3	6.28	132.44	129.30
2	SA	1007	U	C6-N1-C2	-6.28	117.23	121.00
2	SA	1144	G	OP1-P-OP2	-6.28	110.19	119.60
4	S2	51	U	N3-C4-C5	6.28	118.37	114.60
25	LB	19	C	N3-C2-O2	-6.28	117.50	121.90
26	LA	186	G	C3'-C2'-C1'	6.28	106.52	101.50
26	LA	1256	G	C8-N9-C4	-6.28	103.89	106.40
26	LA	1378	A	C1'-O4'-C4'	-6.28	104.88	109.90
26	LA	1387	A	N1-C6-N6	6.28	122.37	118.60
26	LA	1698	A	C5-C6-N1	-6.28	114.56	117.70
26	LA	1891	G	C6-N1-C2	-6.28	121.33	125.10
26	LA	1922	G	N1-C6-O6	6.28	123.67	119.90
26	LA	2312	U	O3'-P-O5'	6.28	115.93	104.00
2	SA	836	G	C5-C6-O6	6.28	132.37	128.60
26	LA	41	C	N3-C4-N4	6.28	122.39	118.00
26	LA	122	G	C6-N1-C2	-6.28	121.33	125.10
26	LA	400	G	C3'-C2'-C1'	6.28	106.52	101.50
26	LA	566	U	C5-C4-O4	-6.28	122.13	125.90
26	LA	866	A	OP1-P-OP2	-6.28	110.19	119.60
26	LA	2554	U	P-O3'-C3'	-6.28	112.17	119.70
2	SA	199	A	N7-C8-N9	-6.27	110.66	113.80
26	LA	20	C	C2-N3-C4	-6.27	116.76	119.90
26	LA	82	U	N3-C4-O4	6.27	123.79	119.40
26	LA	312	G	O4'-C1'-N9	6.27	113.22	108.20
26	LA	1420	A	N7-C8-N9	6.27	116.94	113.80
26	LA	1537	G	C8-N9-C1'	-6.27	118.84	127.00
27	LD	143	VAL	CB-CA-C	-6.27	99.48	111.40
2	SA	124	C	N3-C4-N4	6.27	122.39	118.00
2	SA	191	G	C4-C5-N7	-6.27	108.29	110.80
2	SA	669	G	C4'-C3'-C2'	-6.27	96.33	102.60
2	SA	776	G	O4'-C4'-C3'	-6.27	97.73	104.00
24	S3	255	VAL	CA-CB-CG2	-6.27	101.49	110.90
26	LA	108	G	C4'-C3'-C2'	-6.27	96.33	102.60
26	LA	474	G	N1-C2-N2	-6.27	110.56	116.20
26	LA	514	A	O4'-C1'-C2'	6.27	113.25	107.60
26	LA	517	C	N1-C2-O2	-6.27	115.14	118.90
26	LA	599	A	N9-C4-C5	-6.27	103.29	105.80
26	LA	733	G	N1-C6-O6	6.27	123.66	119.90
26	LA	1166	G	C1'-O4'-C4'	-6.27	104.88	109.90
26	LA	1394	U	C4'-C3'-C2'	-6.27	96.33	102.60
26	LA	1530	G	N1-C2-N3	-6.27	120.14	123.90
26	LA	1605	C	C2-N3-C4	-6.27	116.76	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2112	G	O4'-C1'-C2'	-6.27	99.53	105.80
46	LH	122	ALA	CB-CA-C	-6.27	100.69	110.10
48	LN	40	SER	CB-CA-C	-6.27	98.18	110.10
2	SA	290	C	C2-N1-C1'	6.27	125.70	118.80
2	SA	1336	C	N3-C2-O2	-6.27	117.51	121.90
2	SA	1448	C	N3-C4-C5	-6.27	119.39	121.90
20	SD	55	ARG	NH1-CZ-NH2	-6.27	112.50	119.40
26	LA	890	C	N3-C4-N4	6.27	122.39	118.00
26	LA	1433	A	N1-C2-N3	-6.27	126.16	129.30
26	LA	2036	C	P-O5'-C5'	-6.27	110.87	120.90
26	LA	2575	C	OP1-P-OP2	-6.27	110.19	119.60
26	LA	2611	C	O5'-P-OP2	6.27	118.22	110.70
2	SA	35	G	C4'-C3'-C2'	-6.27	96.33	102.60
2	SA	45	G	C5-N7-C8	6.27	107.44	104.30
2	SA	497	G	N7-C8-N9	6.27	116.23	113.10
2	SA	506	G	C4-C5-C6	6.27	122.56	118.80
2	SA	680	C	O4'-C1'-N1	6.27	113.22	108.20
2	SA	945	G	C8-N9-C1'	-6.27	118.85	127.00
2	SA	1112	C	C4'-C3'-C2'	-6.27	96.33	102.60
26	LA	350	G	O4'-C1'-N9	6.27	113.22	108.20
26	LA	525	U	O3'-P-O5'	-6.27	92.09	104.00
26	LA	783	A	C3'-C2'-C1'	-6.27	96.48	101.50
26	LA	816	C	N3-C4-N4	6.27	122.39	118.00
26	LA	1520	U	C5-C6-N1	6.27	125.83	122.70
26	LA	1689	A	C6-C5-N7	6.27	136.69	132.30
26	LA	1851	U	C3'-C2'-C1'	6.27	106.52	101.50
26	LA	2252	G	N3-C4-C5	-6.27	125.47	128.60
37	LC	52	ALA	CB-CA-C	6.27	119.50	110.10
37	LC	113	VAL	C-N-CA	6.27	137.37	121.70
2	SA	923	A	C5'-C4'-C3'	-6.27	105.97	116.00
2	SA	1232	U	C4'-C3'-C2'	-6.27	96.33	102.60
26	LA	189	G	C6-N1-C2	-6.27	121.34	125.10
26	LA	338	G	N1-C6-O6	6.27	123.66	119.90
26	LA	555	G	N9-C4-C5	6.27	107.91	105.40
26	LA	990	A	N7-C8-N9	-6.27	110.67	113.80
26	LA	1163	G	C5'-C4'-C3'	-6.27	105.97	116.00
26	LA	1249	U	C4-C5-C6	6.27	123.46	119.70
26	LA	1583	A	N3-C4-N9	-6.27	122.39	127.40
26	LA	1978	A	N7-C8-N9	-6.27	110.67	113.80
26	LA	2362	C	N3-C4-C5	-6.27	119.39	121.90
26	LA	2433	A	N9-C4-C5	6.27	108.31	105.80
26	LA	2665	A	N1-C6-N6	-6.27	114.84	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	LD	200	MET	CG-SD-CE	6.27	110.23	100.20
2	SA	37	U	C1'-O4'-C4'	-6.27	104.89	109.90
2	SA	329	A	N9-C4-C5	-6.27	103.29	105.80
2	SA	968	A	C1'-O4'-C4'	-6.27	104.89	109.90
2	SA	1192	C	C4-C5-C6	-6.27	114.27	117.40
2	SA	1437	A	C5'-C4'-C3'	-6.27	105.97	116.00
3	S1	51	C	C1'-O4'-C4'	-6.27	104.89	109.90
25	LB	84	G	N1-C2-N3	6.27	127.66	123.90
26	LA	455	C	C3'-C2'-C1'	-6.27	96.49	101.50
26	LA	582	A	N7-C8-N9	6.27	116.93	113.80
26	LA	942	G	C3'-C2'-C1'	6.27	106.51	101.50
26	LA	2740	A	C5'-C4'-O4'	6.27	116.62	109.10
2	SA	948	C	C5'-C4'-C3'	-6.26	105.98	116.00
2	SA	1004	A	N7-C8-N9	6.26	116.93	113.80
2	SA	1332	A	C6-C5-N7	-6.26	127.92	132.30
2	SA	1465	A	C8-N9-C4	-6.26	103.30	105.80
24	S3	445	ARG	NE-CZ-NH2	-6.26	117.17	120.30
26	LA	262	A	C4'-C3'-C2'	-6.26	96.33	102.60
26	LA	343	C	N3-C2-O2	-6.26	117.51	121.90
26	LA	539	G	C5'-C4'-O4'	6.26	116.62	109.10
26	LA	540	C	P-O3'-C3'	-6.26	112.18	119.70
26	LA	1748	C	N1-C2-O2	6.26	122.66	118.90
2	SA	166	U	P-O3'-C3'	-6.26	112.18	119.70
2	SA	255	G	P-O3'-C3'	-6.26	112.18	119.70
2	SA	590	U	C5'-C4'-O4'	6.26	116.62	109.10
2	SA	789	U	C5'-C4'-C3'	-6.26	105.98	116.00
2	SA	851	G	C5-C6-O6	-6.26	124.84	128.60
26	LA	603	A	O3'-P-O5'	-6.26	92.10	104.00
26	LA	785	G	C8-N9-C4	-6.26	103.89	106.40
26	LA	791	C	N3-C2-O2	-6.26	117.52	121.90
26	LA	1677	A	N1-C6-N6	6.26	122.36	118.60
2	SA	97	G	C4-C5-N7	-6.26	108.30	110.80
2	SA	210	C	C1'-O4'-C4'	-6.26	104.89	109.90
2	SA	366	A	C4'-C3'-C2'	-6.26	96.34	102.60
2	SA	654	G	O5'-P-OP1	6.26	118.21	110.70
2	SA	1352	C	C5'-C4'-O4'	6.26	116.61	109.10
2	SA	1542	A	C3'-C2'-C1'	6.26	106.51	101.50
26	LA	312	G	N1-C6-O6	-6.26	116.14	119.90
26	LA	506	G	C6-C5-N7	-6.26	126.64	130.40
26	LA	662	G	N1-C6-O6	-6.26	116.14	119.90
26	LA	1036	G	OP1-P-OP2	-6.26	110.21	119.60
26	LA	1047	G	C1'-O4'-C4'	-6.26	104.89	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1106	G	N3-C4-C5	-6.26	125.47	128.60
26	LA	1210	G	C5-N7-C8	-6.26	101.17	104.30
26	LA	1901	A	P-O5'-C5'	-6.26	110.88	120.90
26	LA	2630	G	C4-C5-N7	6.26	113.30	110.80
2	SA	319	G	N3-C2-N2	6.26	124.28	119.90
2	SA	537	G	N9-C4-C5	6.26	107.90	105.40
2	SA	1154	G	C4-C5-C6	6.26	122.56	118.80
2	SA	1249	C	P-O3'-C3'	-6.26	112.19	119.70
2	SA	1408	A	N9-C4-C5	-6.26	103.30	105.80
2	SA	1419	G	C5'-C4'-C3'	6.26	126.01	116.00
25	LB	51	G	C5'-C4'-C3'	-6.26	105.98	116.00
26	LA	616	A	C2-N3-C4	6.26	113.73	110.60
26	LA	789	A	C4-C5-C6	6.26	120.13	117.00
26	LA	878	A	C4-N9-C1'	6.26	137.57	126.30
26	LA	994	C	O5'-P-OP2	-6.26	100.07	105.70
26	LA	1005	C	N3-C4-N4	6.26	122.38	118.00
26	LA	1156	A	P-O5'-C5'	6.26	130.92	120.90
26	LA	1224	U	N1-C2-N3	6.26	118.66	114.90
26	LA	1719	G	N3-C4-C5	-6.26	125.47	128.60
26	LA	1765	U	C3'-C2'-C1'	-6.26	96.49	101.50
44	LF	27	LEU	O-C-N	-6.26	112.68	122.70
2	SA	363	A	N9-C4-C5	6.26	108.30	105.80
2	SA	937	A	C2'-C3'-O3'	6.26	123.71	113.70
2	SA	940	C	N1-C2-O2	6.26	122.66	118.90
2	SA	1230	C	P-O3'-C3'	-6.26	112.19	119.70
4	S2	50	G	C8-N9-C4	6.26	108.90	106.40
9	SI	56	MET	O-C-N	-6.26	112.69	122.70
26	LA	117	G	C5'-C4'-O4'	6.26	116.61	109.10
26	LA	390	U	C2'-C3'-O3'	6.26	123.71	113.70
26	LA	2113	U	C5'-C4'-O4'	6.26	116.61	109.10
26	LA	2518	A	N1-C6-N6	6.26	122.36	118.60
26	LA	2756	U	C6-N1-C1'	-6.26	112.44	121.20
2	SA	1302	C	C1'-O4'-C4'	-6.26	104.89	109.90
6	SU	6	ARG	NE-CZ-NH1	6.26	123.43	120.30
26	LA	148	U	N3-C4-C5	6.26	118.35	114.60
26	LA	370	G	N1-C2-N2	-6.26	110.57	116.20
26	LA	546	U	C2-N1-C1'	6.26	125.21	117.70
26	LA	635	C	C2-N3-C4	-6.26	116.77	119.90
26	LA	792	A	C2-N3-C4	-6.26	107.47	110.60
26	LA	1415	U	O5'-P-OP1	-6.26	100.07	105.70
26	LA	1549	A	C4'-C3'-C2'	6.26	108.86	102.60
26	LA	1627	G	C4'-C3'-C2'	-6.26	96.34	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1689	A	O4'-C1'-N9	6.26	113.20	108.20
2	SA	167	A	N1-C2-N3	6.25	132.43	129.30
2	SA	1267	C	C1'-O4'-C4'	-6.25	104.90	109.90
3	S1	23	C	N3-C4-N4	6.25	122.38	118.00
25	LB	50	A	N9-C4-C5	-6.25	103.30	105.80
26	LA	1358	G	C5-C6-N1	6.25	114.63	111.50
26	LA	1728	C	C5-C6-N1	6.25	124.13	121.00
2	SA	55	A	C5'-C4'-C3'	-6.25	106.00	116.00
4	S2	39	A	C2-N3-C4	-6.25	107.47	110.60
4	S2	60	A	C4'-C3'-C2'	-6.25	96.35	102.60
26	LA	124	G	O3'-P-O5'	-6.25	92.12	104.00
26	LA	815	C	P-O5'-C5'	6.25	130.91	120.90
26	LA	958	U	C6-N1-C1'	-6.25	112.44	121.20
26	LA	1175	A	C3'-C2'-C1'	-6.25	96.50	101.50
26	LA	1215	G	C4'-C3'-C2'	-6.25	96.35	102.60
26	LA	1960	A	N7-C8-N9	-6.25	110.67	113.80
26	LA	2143	C	N3-C4-N4	6.25	122.38	118.00
26	LA	2356	U	N1-C2-O2	-6.25	118.42	122.80
26	LA	2396	G	N1-C6-O6	-6.25	116.15	119.90
37	LC	172	HIS	CA-CB-CG	6.25	124.23	113.60
2	SA	334	C	C4-C5-C6	6.25	120.53	117.40
2	SA	1112	C	N3-C4-C5	6.25	124.40	121.90
25	LB	23	G	C5-C6-O6	-6.25	124.85	128.60
26	LA	381	G	C6-N1-C2	-6.25	121.35	125.10
26	LA	802	A	O4'-C1'-N9	6.25	113.20	108.20
26	LA	1050	A	C5-C6-N6	-6.25	118.70	123.70
26	LA	1238	G	C5-C6-N1	6.25	114.63	111.50
26	LA	1542	U	C5-C6-N1	-6.25	119.57	122.70
26	LA	2017	U	C5-C4-O4	-6.25	122.15	125.90
48	LN	42	SER	N-CA-CB	6.25	119.88	110.50
2	SA	517	G	C5'-C4'-C3'	-6.25	106.00	116.00
2	SA	1276	G	N1-C6-O6	6.25	123.65	119.90
2	SA	1391	U	O4'-C4'-C3'	6.25	111.10	106.10
2	SA	1474	U	C2-N1-C1'	-6.25	110.20	117.70
26	LA	386	G	O4'-C1'-N9	6.25	113.20	108.20
26	LA	1099	G	C6-C5-N7	-6.25	126.65	130.40
26	LA	1174	U	O4'-C4'-C3'	-6.25	97.75	104.00
26	LA	1698	A	N3-C4-C5	-6.25	122.42	126.80
2	SA	28	A	C2-N3-C4	6.25	113.72	110.60
2	SA	514	C	C3'-C2'-C1'	6.25	106.50	101.50
2	SA	567	G	O4'-C1'-N9	6.25	113.20	108.20
2	SA	1279	G	C3'-C2'-C1'	6.25	106.50	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	845	A	C5-C6-N1	6.25	120.82	117.70
26	LA	880	G	C6-N1-C2	-6.25	121.35	125.10
26	LA	1634	A	C1'-O4'-C4'	-6.25	104.90	109.90
26	LA	1968	G	C6-N1-C2	-6.25	121.35	125.10
26	LA	2340	A	N9-C4-C5	6.25	108.30	105.80
2	SA	254	G	N3-C2-N2	6.25	124.27	119.90
2	SA	418	C	C5'-C4'-C3'	6.25	126.00	116.00
2	SA	1280	A	O4'-C1'-N9	6.25	113.20	108.20
2	SA	1407	C	N1-C2-N3	6.25	123.57	119.20
2	SA	1437	A	C5-N7-C8	6.25	107.02	103.90
26	LA	2	G	P-O5'-C5'	6.25	130.89	120.90
26	LA	1031	G	O4'-C1'-N9	6.25	113.20	108.20
26	LA	1179	G	C8-N9-C4	-6.25	103.90	106.40
26	LA	1865	U	N3-C2-O2	6.25	126.57	122.20
2	SA	1	A	O4'-C1'-N9	6.25	113.20	108.20
2	SA	521	G	N1-C2-N3	-6.25	120.15	123.90
26	LA	908	C	C4'-C3'-C2'	6.25	108.84	102.60
26	LA	1783	A	N9-C4-C5	-6.25	103.30	105.80
26	LA	2289	G	P-O5'-C5'	6.25	130.89	120.90
2	SA	118	U	C5'-C4'-O4'	6.24	116.59	109.10
2	SA	829	G	C2-N3-C4	-6.24	108.78	111.90
2	SA	1057	G	C5-C6-N1	6.24	114.62	111.50
3	S1	43	U	C6-N1-C1'	-6.24	112.46	121.20
3	S1	48	C	N3-C4-C5	-6.24	119.40	121.90
26	LA	376	G	C2'-C3'-O3'	6.24	123.69	113.70
26	LA	549	G	C5-C6-N1	-6.24	108.38	111.50
26	LA	572	A	C2-N3-C4	6.24	113.72	110.60
26	LA	772	C	N1-C2-O2	-6.24	115.15	118.90
26	LA	1108	U	P-O3'-C3'	6.24	127.19	119.70
26	LA	2032	G	N7-C8-N9	6.24	116.22	113.10
26	LA	2189	U	C6-N1-C2	-6.24	117.25	121.00
26	LA	2578	G	C8-N9-C4	-6.24	103.90	106.40
2	SA	129	A	N1-C2-N3	6.24	132.42	129.30
2	SA	794	A	O4'-C1'-N9	6.24	113.19	108.20
14	SN	10	VAL	CA-CB-CG1	6.24	120.26	110.90
24	S3	139	PHE	CB-CG-CD2	6.24	125.17	120.80
26	LA	976	G	C4-N9-C1'	6.24	134.61	126.50
26	LA	1160	G	C4-C5-N7	-6.24	108.30	110.80
26	LA	1332	G	C8-N9-C1'	-6.24	118.89	127.00
26	LA	1450	G	N3-C4-N9	6.24	129.75	126.00
2	SA	193	C	N1-C2-N3	6.24	123.57	119.20
2	SA	318	G	C5-C6-N1	6.24	114.62	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	339	C	N1-C2-O2	-6.24	115.16	118.90
2	SA	476	U	O4'-C1'-N1	6.24	113.19	108.20
2	SA	1066	C	N1-C2-N3	6.24	123.57	119.20
19	SC	22	PHE	CB-CG-CD2	-6.24	116.43	120.80
24	S3	32	TYR	CB-CG-CD1	-6.24	117.26	121.00
26	LA	429	A	P-O3'-C3'	-6.24	112.21	119.70
26	LA	616	A	C5-C6-N6	-6.24	118.71	123.70
26	LA	863	A	C5-C6-N1	-6.24	114.58	117.70
26	LA	1868	C	C5'-C4'-C3'	-6.24	106.02	116.00
26	LA	2608	G	C5-N7-C8	-6.24	101.18	104.30
55	LQ	89	ASP	CB-CG-OD2	6.24	123.92	118.30
2	SA	206	C	N3-C4-C5	-6.24	119.40	121.90
2	SA	810	C	N1-C2-O2	-6.24	115.16	118.90
2	SA	1412	C	C1'-O4'-C4'	-6.24	104.91	109.90
4	S2	20	G	C5'-C4'-O4'	6.24	116.59	109.10
26	LA	684	G	C5-C6-N1	-6.24	108.38	111.50
26	LA	737	C	P-O3'-C3'	6.24	127.19	119.70
26	LA	948	C	OP1-P-OP2	-6.24	110.24	119.60
26	LA	1481	U	P-O3'-C3'	6.24	127.19	119.70
26	LA	1687	G	C2-N3-C4	-6.24	108.78	111.90
26	LA	1934	C	N1-C2-N3	6.24	123.57	119.20
26	LA	2044	C	O4'-C1'-N1	6.24	113.19	108.20
26	LA	2049	G	C6-N1-C2	-6.24	121.36	125.10
26	LA	2118	U	O5'-C5'-C4'	6.24	123.55	111.70
26	LA	2255	G	C5-C6-N1	6.24	114.62	111.50
26	LA	2508	G	C5-C6-N1	6.24	114.62	111.50
26	LA	2559	C	OP1-P-OP2	-6.24	110.24	119.60
26	LA	2568	U	P-O3'-C3'	-6.24	112.21	119.70
2	SA	407	U	N3-C4-C5	6.24	118.34	114.60
2	SA	835	U	N3-C4-C5	6.24	118.34	114.60
26	LA	67	U	C4-C5-C6	-6.24	115.96	119.70
26	LA	573	U	N3-C4-C5	-6.24	110.86	114.60
26	LA	1736	U	P-O5'-C5'	6.24	130.88	120.90
2	SA	534	U	OP2-P-O3'	6.24	118.92	105.20
2	SA	559	A	C5'-C4'-O4'	6.24	116.58	109.10
2	SA	925	G	N3-C4-N9	-6.24	122.26	126.00
2	SA	1509	C	C4-C5-C6	6.24	120.52	117.40
9	SI	40	ARG	NE-CZ-NH2	-6.24	117.18	120.30
25	LB	46	A	N7-C8-N9	-6.24	110.68	113.80
26	LA	16	C	N3-C2-O2	6.24	126.27	121.90
26	LA	248	G	C4'-C3'-C2'	-6.24	96.36	102.60
26	LA	294	A	C5-C6-N1	-6.24	114.58	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	616	A	N1-C6-N6	6.24	122.34	118.60
26	LA	623	C	O4'-C1'-N1	6.24	113.19	108.20
26	LA	987	C	OP1-P-OP2	-6.24	110.25	119.60
26	LA	1356	G	C4-N9-C1'	6.24	134.61	126.50
26	LA	1697	G	N3-C4-C5	-6.24	125.48	128.60
26	LA	2271	G	P-O3'-C3'	6.24	127.18	119.70
26	LA	2335	A	N1-C6-N6	-6.24	114.86	118.60
26	LA	2347	C	C4-C5-C6	6.24	120.52	117.40
26	LA	2644	G	N1-C6-O6	6.24	123.64	119.90
26	LA	2791	G	C8-N9-C1'	6.24	135.11	127.00
31	LX	91	PHE	CB-CG-CD1	-6.24	116.44	120.80
2	SA	347	G	C6-N1-C2	-6.23	121.36	125.10
26	LA	1234	U	C5-C4-O4	-6.23	122.16	125.90
26	LA	1365	A	N1-C2-N3	6.23	132.42	129.30
26	LA	1718	G	N9-C4-C5	6.23	107.89	105.40
1	SS	73	PHE	CB-CG-CD2	6.23	125.16	120.80
2	SA	496	A	C6-C5-N7	6.23	136.66	132.30
2	SA	861	G	N7-C8-N9	-6.23	109.98	113.10
2	SA	1041	G	C5-C6-O6	-6.23	124.86	128.60
25	LB	60	C	C5-C4-N4	6.23	124.56	120.20
26	LA	63	A	N3-C4-N9	-6.23	122.42	127.40
26	LA	619	G	C6-C5-N7	-6.23	126.66	130.40
26	LA	628	G	P-O3'-C3'	-6.23	112.22	119.70
26	LA	1089	A	C8-N9-C4	-6.23	103.31	105.80
32	LY	66	VAL	CA-CB-CG1	6.23	120.25	110.90
2	SA	149	A	C5-C6-N6	-6.23	118.72	123.70
2	SA	314	C	O4'-C1'-N1	6.23	113.19	108.20
2	SA	380	G	C5-C6-O6	6.23	132.34	128.60
2	SA	927	G	C8-N9-C4	6.23	108.89	106.40
12	SL	3	VAL	CA-CB-CG1	-6.23	101.55	110.90
26	LA	60	G	C1'-O4'-C4'	-6.23	104.92	109.90
26	LA	598	U	N3-C4-C5	6.23	118.34	114.60
26	LA	1155	A	C5-C6-N1	6.23	120.81	117.70
26	LA	1416	G	C5-C6-N1	6.23	114.62	111.50
26	LA	1950	G	O4'-C1'-N9	6.23	113.19	108.20
26	LA	2212	A	C4-C5-C6	-6.23	113.88	117.00
26	LA	2472	G	C8-N9-C1'	-6.23	118.90	127.00
58	LT	38	VAL	CA-CB-CG2	6.23	120.25	110.90
2	SA	724	G	N1-C2-N2	-6.23	110.59	116.20
2	SA	760	G	C6-C5-N7	6.23	134.14	130.40
2	SA	808	C	C6-N1-C1'	-6.23	113.33	120.80
2	SA	946	A	C5-C6-N1	6.23	120.81	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1009	U	P-O5'-C5'	-6.23	110.93	120.90
2	SA	1489	G	C5'-C4'-O4'	6.23	116.58	109.10
26	LA	259	G	C3'-C2'-C1'	6.23	106.48	101.50
26	LA	1742	U	N3-C4-C5	-6.23	110.86	114.60
26	LA	2041	U	O4'-C1'-N1	6.23	113.18	108.20
26	LA	2293	G	C1'-O4'-C4'	-6.23	104.92	109.90
2	SA	47	C	C5-C6-N1	-6.23	117.89	121.00
2	SA	104	G	C4-C5-N7	6.23	113.29	110.80
2	SA	839	C	P-O5'-C5'	6.23	130.86	120.90
2	SA	1213	A	C4-C5-N7	-6.23	107.59	110.70
26	LA	413	C	P-O5'-C5'	6.23	130.86	120.90
26	LA	415	A	OP1-P-OP2	-6.23	110.26	119.60
26	LA	595	C	N3-C2-O2	-6.23	117.54	121.90
26	LA	705	A	C5'-C4'-C3'	-6.23	106.04	116.00
26	LA	945	A	C5-C6-N1	6.23	120.81	117.70
26	LA	1088	A	C4-C5-C6	6.23	120.11	117.00
26	LA	1093	G	N7-C8-N9	-6.23	109.99	113.10
26	LA	1376	C	C6-N1-C1'	6.23	128.27	120.80
26	LA	1472	C	N1-C2-O2	-6.23	115.16	118.90
26	LA	1656	C	C4'-C3'-C2'	-6.23	96.37	102.60
26	LA	1965	C	P-O3'-C3'	6.23	127.17	119.70
26	LA	2311	A	P-O3'-C3'	6.23	127.17	119.70
26	LA	2504	U	N1-C2-N3	-6.23	111.16	114.90
26	LA	2816	G	C6-C5-N7	-6.23	126.66	130.40
42	L6	48	MET	CG-SD-CE	-6.23	90.23	100.20
2	SA	658	C	C5-C6-N1	6.23	124.11	121.00
2	SA	1315	U	P-O3'-C3'	6.23	127.17	119.70
2	SA	1358	U	N3-C4-C5	-6.23	110.86	114.60
26	LA	921	C	O4'-C1'-N1	6.23	113.18	108.20
26	LA	1217	U	N1-C2-N3	-6.23	111.16	114.90
26	LA	2050	C	P-O3'-C3'	-6.23	112.23	119.70
26	LA	2487	G	C4-C5-N7	-6.23	108.31	110.80
26	LA	2502	G	C8-N9-C1'	-6.23	118.91	127.00
26	LA	2592	G	O4'-C1'-N9	6.23	113.18	108.20
2	SA	687	A	C8-N9-C4	-6.22	103.31	105.80
2	SA	1429	A	N3-C4-C5	6.22	131.16	126.80
20	SD	53	GLN	N-CA-CB	-6.22	99.40	110.60
26	LA	64	A	P-O3'-C3'	-6.22	112.23	119.70
26	LA	250	G	N3-C4-C5	6.22	131.71	128.60
26	LA	1251	C	C5'-C4'-O4'	6.22	116.57	109.10
26	LA	1527	G	C5-N7-C8	6.22	107.41	104.30
26	LA	1645	G	N3-C4-N9	6.22	129.74	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1805	A	O4'-C1'-N9	6.22	113.18	108.20
26	LA	2057	G	C4-N9-C1'	6.22	134.59	126.50
26	LA	2658	C	C6-N1-C2	-6.22	117.81	120.30
2	SA	112	G	C3'-C2'-C1'	6.22	106.48	101.50
2	SA	357	G	C4-C5-N7	6.22	113.29	110.80
2	SA	447	G	C1'-O4'-C4'	-6.22	104.92	109.90
4	S2	22	A	C2-N3-C4	6.22	113.71	110.60
4	S2	40	C	C5'-C4'-C3'	-6.22	106.04	116.00
25	LB	31	C	P-O5'-C5'	6.22	130.86	120.90
26	LA	1265	A	N7-C8-N9	-6.22	110.69	113.80
26	LA	1416	G	C4-C5-N7	6.22	113.29	110.80
26	LA	1700	A	N1-C6-N6	-6.22	114.87	118.60
26	LA	1766	G	C2-N3-C4	-6.22	108.79	111.90
26	LA	2305	U	C3'-C2'-C1'	6.22	106.48	101.50
26	LA	2774	C	N1-C1'-C2'	-6.22	105.16	112.00
26	LA	752	A	O4'-C1'-N9	6.22	113.18	108.20
26	LA	2290	G	N3-C4-N9	6.22	129.73	126.00
2	SA	506	G	N1-C2-N2	-6.22	110.60	116.20
2	SA	612	C	C4-C5-C6	6.22	120.51	117.40
2	SA	668	G	N9-C4-C5	-6.22	102.91	105.40
2	SA	877	G	C5-C6-N1	-6.22	108.39	111.50
2	SA	1013	G	C5-C6-O6	-6.22	124.87	128.60
2	SA	1245	C	C5-C6-N1	6.22	124.11	121.00
2	SA	1375	A	N1-C6-N6	-6.22	114.87	118.60
2	SA	1406	U	N3-C4-O4	6.22	123.75	119.40
2	SA	1428	A	C5-C6-N1	6.22	120.81	117.70
2	SA	1486	G	C1'-O4'-C4'	-6.22	104.92	109.90
6	SU	44	ARG	NE-CZ-NH1	-6.22	117.19	120.30
25	LB	38	C	C5-C4-N4	-6.22	115.85	120.20
26	LA	1404	C	N1-C2-O2	-6.22	115.17	118.90
26	LA	1867	G	C8-N9-C4	-6.22	103.91	106.40
26	LA	1897	G	N3-C2-N2	-6.22	115.55	119.90
26	LA	1954	G	C5-C6-O6	-6.22	124.87	128.60
26	LA	2075	U	O4'-C1'-N1	6.22	113.18	108.20
26	LA	2209	G	N3-C2-N2	6.22	124.25	119.90
26	LA	2216	G	C4'-C3'-C2'	-6.22	96.38	102.60
26	LA	2365	G	P-O3'-C3'	6.22	127.16	119.70
26	LA	2545	G	N1-C6-O6	6.22	123.63	119.90
26	LA	2827	C	C3'-C2'-C1'	6.22	106.48	101.50
26	LA	2851	A	C5'-C4'-C3'	6.22	125.95	116.00
2	SA	1513	A	C6-C5-N7	-6.22	127.95	132.30
26	LA	1001	A	N3-C4-C5	6.22	131.15	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1019	U	C5-C4-O4	-6.22	122.17	125.90
26	LA	1392	A	N1-C2-N3	-6.22	126.19	129.30
26	LA	2391	G	C5-C6-O6	-6.22	124.87	128.60
26	LA	2511	U	C2'-C3'-O3'	6.22	123.65	113.70
26	LA	2770	G	N3-C2-N2	6.22	124.25	119.90
26	LA	2802	G	C1'-O4'-C4'	-6.22	104.93	109.90
41	L5	33	ARG	NE-CZ-NH2	6.22	123.41	120.30
2	SA	538	G	P-O5'-C5'	6.22	130.85	120.90
2	SA	639	G	C8-N9-C1'	6.22	135.08	127.00
2	SA	1022	A	C4-C5-C6	-6.22	113.89	117.00
24	S3	166	VAL	CA-CB-CG2	-6.22	101.58	110.90
26	LA	14	A	C4'-C3'-C2'	-6.22	96.38	102.60
26	LA	154	U	C5-C6-N1	6.22	125.81	122.70
26	LA	271	G	C4-C5-N7	6.22	113.29	110.80
26	LA	475	C	C6-N1-C1'	6.22	128.26	120.80
26	LA	748	G	C5-N7-C8	6.22	107.41	104.30
26	LA	975	A	C5'-C4'-C3'	-6.22	106.05	116.00
26	LA	1040	A	C4'-C3'-C2'	-6.22	96.38	102.60
26	LA	2119	A	C6-N1-C2	6.22	122.33	118.60
26	LA	2221	G	P-O3'-C3'	-6.22	112.24	119.70
26	LA	2225	A	P-O5'-C5'	6.22	130.84	120.90
52	LO	66	ARG	NE-CZ-NH2	-6.22	117.19	120.30
2	SA	486	U	OP2-P-O3'	6.21	118.87	105.20
2	SA	577	G	C3'-C2'-C1'	6.21	106.47	101.50
2	SA	658	C	C6-N1-C2	-6.21	117.81	120.30
2	SA	918	A	C5-C6-N6	-6.21	118.73	123.70
2	SA	1381	U	C4-C5-C6	-6.21	115.97	119.70
10	SJ	5	ARG	O-C-N	-6.21	112.76	122.70
11	SK	51	PHE	CB-CG-CD2	-6.21	116.45	120.80
25	LB	8	C	C2-N3-C4	-6.21	116.79	119.90
25	LB	103	U	C5-C6-N1	-6.21	119.59	122.70
26	LA	267	C	N1-C2-N3	6.21	123.55	119.20
26	LA	526	A	O4'-C1'-N9	6.21	113.17	108.20
26	LA	789	A	N1-C2-N3	6.21	132.41	129.30
26	LA	1789	A	C5'-C4'-O4'	6.21	116.56	109.10
26	LA	2057	G	C6-N1-C2	-6.21	121.37	125.10
26	LA	2829	A	N1-C6-N6	-6.21	114.87	118.60
2	SA	602	A	C5-C6-N1	6.21	120.81	117.70
2	SA	1061	G	C5-N7-C8	-6.21	101.19	104.30
26	LA	1330	C	P-O5'-C5'	6.21	130.84	120.90
26	LA	1436	G	O3'-P-O5'	6.21	115.81	104.00
26	LA	1626	A	C5-C6-N6	-6.21	118.73	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	691	G	N9-C1'-C2'	-6.21	105.17	112.00
2	SA	966	G	O4'-C1'-N9	6.21	113.17	108.20
2	SA	1036	A	O4'-C1'-N9	6.21	113.17	108.20
25	LB	118	C	C1'-O4'-C4'	-6.21	104.93	109.90
26	LA	37	C	O4'-C1'-N1	6.21	113.17	108.20
26	LA	192	C	C6-N1-C2	6.21	122.78	120.30
26	LA	863	A	C4-C5-C6	6.21	120.11	117.00
26	LA	1338	G	C1'-O4'-C4'	-6.21	104.93	109.90
26	LA	1478	G	N7-C8-N9	-6.21	110.00	113.10
26	LA	1630	A	C5-N7-C8	-6.21	100.80	103.90
26	LA	1645	G	O4'-C1'-N9	6.21	113.17	108.20
26	LA	1750	G	N3-C4-C5	-6.21	125.49	128.60
26	LA	1768	C	N3-C2-O2	-6.21	117.55	121.90
26	LA	2736	A	N7-C8-N9	6.21	116.91	113.80
28	LU	22	ASP	O-C-N	-6.21	112.76	122.70
2	SA	521	G	N3-C4-N9	-6.21	122.27	126.00
2	SA	785	G	C5-C6-N1	6.21	114.61	111.50
19	SC	25	THR	CA-CB-CG2	-6.21	103.71	112.40
26	LA	291	G	N1-C2-N3	6.21	127.63	123.90
26	LA	481	G	C1'-O4'-C4'	-6.21	104.93	109.90
26	LA	1160	G	C1'-O4'-C4'	-6.21	104.93	109.90
26	LA	1746	A	C8-N9-C4	6.21	108.28	105.80
26	LA	2061	G	C8-N9-C4	-6.21	103.92	106.40
26	LA	2166	U	O4'-C1'-N1	6.21	113.17	108.20
2	SA	694	A	N9-C4-C5	6.21	108.28	105.80
2	SA	733	G	N3-C4-C5	-6.21	125.50	128.60
2	SA	738	C	P-O5'-C5'	6.21	130.84	120.90
2	SA	1019	A	C8-N9-C4	6.21	108.28	105.80
25	LB	66	A	C8-N9-C4	-6.21	103.32	105.80
26	LA	836	G	N7-C8-N9	6.21	116.20	113.10
26	LA	1266	G	C4'-C3'-C2'	-6.21	96.39	102.60
26	LA	1939	U	OP1-P-OP2	-6.21	110.29	119.60
26	LA	2086	U	P-O5'-C5'	6.21	130.84	120.90
26	LA	2221	G	N3-C4-C5	6.21	131.71	128.60
26	LA	2543	G	C8-N9-C4	-6.21	103.92	106.40
52	LO	27	SER	CB-CA-C	-6.21	98.30	110.10
2	SA	143	A	C4-N9-C1'	-6.21	115.13	126.30
2	SA	521	G	C5'-C4'-C3'	6.21	125.93	116.00
2	SA	977	A	O4'-C1'-N9	6.21	113.16	108.20
4	S2	38	A	C2-N3-C4	-6.21	107.50	110.60
26	LA	1097	U	OP1-P-OP2	-6.21	110.29	119.60
26	LA	1258	U	C5-C4-O4	-6.21	122.18	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1286	A	P-O3'-C3'	-6.21	112.25	119.70
26	LA	1387	A	N3-C4-C5	6.21	131.14	126.80
26	LA	1678	A	C6-N1-C2	-6.21	114.88	118.60
26	LA	1707	G	C5-C6-O6	6.21	132.32	128.60
26	LA	2679	A	P-O3'-C3'	-6.21	112.25	119.70
26	LA	2859	G	N1-C2-N2	-6.21	110.61	116.20
38	LE	17	GLU	N-CA-C	6.21	127.76	111.00
2	SA	332	G	N1-C2-N2	-6.21	110.62	116.20
2	SA	396	C	C2-N1-C1'	6.21	125.63	118.80
2	SA	991	U	C5'-C4'-O4'	6.21	116.55	109.10
2	SA	1081	A	C4'-C3'-C2'	-6.21	96.39	102.60
26	LA	892	A	C5'-C4'-C3'	6.21	125.93	116.00
27	LD	29	PHE	CG-CD1-CE1	-6.21	113.97	120.80
2	SA	119	A	C5'-C4'-O4'	6.20	116.54	109.10
2	SA	267	C	C5-C4-N4	-6.20	115.86	120.20
2	SA	274	A	C5'-C4'-C3'	6.20	125.93	116.00
2	SA	588	G	C5'-C4'-O4'	6.20	116.55	109.10
2	SA	594	U	C1'-O4'-C4'	6.20	114.86	109.90
2	SA	1388	C	C4'-C3'-C2'	-6.20	96.40	102.60
10	SJ	57	VAL	CB-CA-C	6.20	123.19	111.40
18	SB	43	GLU	OE1-CD-OE2	-6.20	115.86	123.30
24	S3	92	VAL	C-N-CA	6.20	137.21	121.70
26	LA	20	C	O4'-C4'-C3'	-6.20	97.80	104.00
26	LA	431	U	C6-N1-C2	-6.20	117.28	121.00
26	LA	448	U	C5-C4-O4	-6.20	122.18	125.90
26	LA	561	G	C6-N1-C2	-6.20	121.38	125.10
26	LA	667	U	O4'-C1'-N1	6.20	113.16	108.20
26	LA	1019	U	P-O5'-C5'	6.20	130.83	120.90
26	LA	1124	G	N3-C4-C5	-6.20	125.50	128.60
26	LA	1503	A	C6-N1-C2	-6.20	114.88	118.60
26	LA	1660	G	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	1748	C	N3-C4-N4	6.20	122.34	118.00
26	LA	2343	U	C5'-C4'-O4'	6.20	116.54	109.10
2	SA	382	A	O4'-C1'-N9	6.20	113.16	108.20
2	SA	1402	C	C5-C4-N4	-6.20	115.86	120.20
20	SD	168	THR	CA-CB-CG2	-6.20	103.72	112.40
26	LA	1746	A	C5-C6-N1	6.20	120.80	117.70
26	LA	2494	G	C8-N9-C4	-6.20	103.92	106.40
26	LA	2808	G	N1-C6-O6	6.20	123.62	119.90
2	SA	56	U	O4'-C1'-N1	6.20	113.16	108.20
2	SA	206	C	N3-C2-O2	-6.20	117.56	121.90
2	SA	567	G	N3-C2-N2	6.20	124.24	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	811	C	C2-N1-C1'	6.20	125.62	118.80
2	SA	971	G	N9-C4-C5	-6.20	102.92	105.40
2	SA	1042	A	C8-N9-C4	-6.20	103.32	105.80
5	ST	51	ASN	CB-CA-C	-6.20	98.00	110.40
25	LB	21	G	N9-C4-C5	-6.20	102.92	105.40
26	LA	1	G	N3-C2-N2	6.20	124.24	119.90
26	LA	646	U	C3'-C2'-C1'	6.20	106.46	101.50
26	LA	926	G	C5-C6-N1	6.20	114.60	111.50
26	LA	945	A	O4'-C1'-N9	-6.20	103.24	108.20
26	LA	989	G	N3-C2-N2	6.20	124.24	119.90
26	LA	1385	A	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	1445	G	C5-C6-N1	6.20	114.60	111.50
26	LA	1623	G	O4'-C1'-N9	6.20	113.16	108.20
26	LA	1734	G	C4'-C3'-C2'	-6.20	96.40	102.60
26	LA	1795	C	C6-N1-C1'	6.20	128.24	120.80
26	LA	1957	C	N3-C4-C5	6.20	124.38	121.90
26	LA	2053	G	C5'-C4'-C3'	-6.20	106.08	116.00
26	LA	2168	G	N9-C4-C5	-6.20	102.92	105.40
26	LA	2207	C	N3-C4-N4	6.20	122.34	118.00
2	SA	504	C	C6-N1-C2	-6.20	117.82	120.30
2	SA	721	G	C8-N9-C4	-6.20	103.92	106.40
25	LB	33	G	N3-C4-N9	-6.20	122.28	126.00
26	LA	177	G	O4'-C1'-N9	6.20	113.16	108.20
26	LA	580	U	C2-N3-C4	-6.20	123.28	127.00
26	LA	610	C	OP1-P-OP2	-6.20	110.30	119.60
26	LA	2148	G	N9-C1'-C2'	-6.20	105.18	112.00
26	LA	2226	C	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	2730	C	C6-N1-C2	-6.20	117.82	120.30
2	SA	61	G	C5'-C4'-C3'	6.20	125.92	116.00
2	SA	1377	A	O3'-P-O5'	-6.20	92.22	104.00
13	SM	97	ARG	CG-CD-NE	-6.20	98.79	111.80
26	LA	428	A	C5-N7-C8	-6.20	100.80	103.90
26	LA	823	C	O4'-C1'-N1	6.20	113.16	108.20
26	LA	2288	A	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	2679	A	O4'-C1'-C2'	6.20	113.18	107.60
2	SA	80	A	N1-C2-N3	-6.20	126.20	129.30
2	SA	230	G	C4-C5-N7	-6.20	108.32	110.80
2	SA	420	U	N3-C2-O2	6.20	126.54	122.20
3	S1	42	U	N1-C2-N3	-6.20	111.18	114.90
25	LB	44	G	C5'-C4'-O4'	6.20	116.53	109.10
26	LA	85	G	C5-C6-O6	6.20	132.32	128.60
26	LA	282	A	P-O5'-C5'	-6.20	110.99	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	310	A	C1'-O4'-C4'	-6.20	104.94	109.90
26	LA	432	A	C3'-C2'-C1'	-6.20	96.54	101.50
26	LA	517	C	C5'-C4'-C3'	-6.20	106.09	116.00
26	LA	573	U	C5'-C4'-O4'	6.20	116.53	109.10
26	LA	730	A	C2-N3-C4	6.20	113.70	110.60
26	LA	978	G	N3-C2-N2	6.20	124.24	119.90
26	LA	984	A	C6-N1-C2	-6.20	114.88	118.60
26	LA	1151	A	C4'-C3'-C2'	-6.20	96.41	102.60
26	LA	1250	G	N7-C8-N9	6.20	116.20	113.10
26	LA	1691	C	C2-N3-C4	-6.20	116.80	119.90
26	LA	1713	A	N9-C1'-C2'	-6.20	105.19	112.00
26	LA	2054	A	N7-C8-N9	6.20	116.90	113.80
57	LS	3	VAL	CG1-CB-CG2	-6.20	100.99	110.90
2	SA	62	U	C6-N1-C2	-6.19	117.28	121.00
2	SA	131	A	N9-C4-C5	6.19	108.28	105.80
2	SA	131	A	C4'-C3'-C2'	-6.19	96.41	102.60
2	SA	975	A	C2-N3-C4	-6.19	107.50	110.60
26	LA	605	G	C3'-C2'-C1'	-6.19	96.55	101.50
26	LA	659	G	C5-C6-O6	6.19	132.32	128.60
58	LT	83	TYR	CB-CG-CD2	6.19	124.72	121.00
2	SA	170	U	P-O3'-C3'	-6.19	112.27	119.70
2	SA	178	C	C4'-C3'-C2'	-6.19	96.41	102.60
2	SA	1487	G	O5'-P-OP2	6.19	118.13	110.70
3	S1	54	U	N1-C2-N3	6.19	118.62	114.90
26	LA	653	U	O4'-C1'-C2'	6.19	113.17	107.60
26	LA	703	U	O4'-C1'-N1	6.19	113.15	108.20
26	LA	748	G	C2-N3-C4	6.19	115.00	111.90
26	LA	1107	G	O5'-P-OP2	6.19	118.13	110.70
26	LA	1695	G	C6-C5-N7	-6.19	126.68	130.40
26	LA	2379	G	P-O3'-C3'	6.19	127.13	119.70
26	LA	2465	C	O4'-C1'-C2'	6.19	113.17	107.60
26	LA	2541	A	C5'-C4'-O4'	6.19	116.53	109.10
30	LW	93	ARG	NH1-CZ-NH2	-6.19	112.59	119.40
48	LN	81	ASP	C-N-CA	6.19	137.18	121.70
2	SA	110	C	C5-C4-N4	-6.19	115.87	120.20
2	SA	1101	A	N7-C8-N9	-6.19	110.70	113.80
3	S1	55	A	C8-N9-C4	-6.19	103.32	105.80
25	LB	111	U	N1-C2-N3	-6.19	111.19	114.90
26	LA	195	A	C4-C5-C6	-6.19	113.91	117.00
26	LA	444	C	P-O5'-C5'	-6.19	110.99	120.90
26	LA	910	A	C3'-C2'-C1'	6.19	106.45	101.50
26	LA	1334	G	N1-C2-N3	-6.19	120.19	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1794	A	N3-C4-C5	6.19	131.13	126.80
26	LA	1845	G	C5'-C4'-C3'	6.19	125.91	116.00
26	LA	2125	G	C2-N3-C4	-6.19	108.80	111.90
26	LA	2669	G	C5'-C4'-O4'	-6.19	101.67	109.10
26	LA	2686	G	C5-N7-C8	-6.19	101.20	104.30
26	LA	2720	U	C2-N3-C4	-6.19	123.28	127.00
2	SA	575	G	C4-C5-N7	-6.19	108.32	110.80
2	SA	829	G	C1'-O4'-C4'	-6.19	104.95	109.90
3	S1	32	U	P-O3'-C3'	6.19	127.13	119.70
26	LA	818	G	O5'-P-OP2	6.19	118.13	110.70
26	LA	1026	G	O3'-P-O5'	-6.19	92.24	104.00
26	LA	1935	G	N3-C4-C5	6.19	131.69	128.60
26	LA	2458	G	C4-C5-C6	6.19	122.51	118.80
26	LA	2662	A	C5-N7-C8	-6.19	100.81	103.90
2	SA	363	A	N1-C2-N3	6.19	132.39	129.30
2	SA	441	A	N3-C4-C5	-6.19	122.47	126.80
2	SA	517	G	C5'-C4'-O4'	6.19	116.53	109.10
2	SA	1205	U	O4'-C4'-C3'	6.19	111.05	106.10
4	S2	20	G	N3-C4-N9	6.19	129.71	126.00
4	S2	36	A	C1'-O4'-C4'	6.19	114.85	109.90
10	SJ	16	ARG	CD-NE-CZ	6.19	132.26	123.60
25	LB	44	G	C5-N7-C8	6.19	107.39	104.30
26	LA	976	G	O4'-C1'-N9	6.19	113.15	108.20
26	LA	1266	G	C2'-C3'-O3'	6.19	123.60	113.70
26	LA	1975	G	N3-C4-C5	6.19	131.69	128.60
26	LA	2114	A	O5'-P-OP2	6.19	118.12	110.70
26	LA	2598	A	N9-C4-C5	-6.19	103.33	105.80
2	SA	1047	G	O4'-C1'-N9	6.19	113.15	108.20
26	LA	227	A	C2-N3-C4	6.19	113.69	110.60
26	LA	790	U	N3-C2-O2	-6.19	117.87	122.20
26	LA	1075	C	C6-N1-C2	-6.19	117.83	120.30
26	LA	1393	A	C3'-C2'-C1'	6.19	106.45	101.50
26	LA	2834	G	C8-N9-C4	-6.19	103.92	106.40
1	SS	6	LYS	O-C-N	-6.18	112.69	123.20
2	SA	347	G	N1-C2-N2	-6.18	110.64	116.20
2	SA	929	G	C5-C6-N1	6.18	114.59	111.50
2	SA	943	U	C5-C6-N1	6.18	125.79	122.70
2	SA	1026	G	C8-N9-C4	-6.18	103.93	106.40
2	SA	1279	G	N3-C4-C5	6.18	131.69	128.60
2	SA	1452	C	N3-C4-C5	-6.18	119.43	121.90
13	SM	10	ASP	CB-CG-OD1	6.18	123.87	118.30
26	LA	463	G	N1-C2-N2	-6.18	110.63	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	854	C	P-O5'-C5'	-6.18	111.00	120.90
26	LA	1147	A	P-O3'-C3'	6.18	127.12	119.70
26	LA	1215	G	OP1-P-OP2	-6.18	110.32	119.60
26	LA	1467	U	O4'-C1'-N1	6.18	113.15	108.20
26	LA	2360	G	C2-N3-C4	-6.18	108.81	111.90
26	LA	2552	U	P-O5'-C5'	-6.18	111.00	120.90
26	LA	2717	C	N1-C2-O2	-6.18	115.19	118.90
26	LA	2836	U	N1-C1'-C2'	-6.18	105.20	112.00
29	LV	29	THR	CA-CB-CG2	6.18	121.06	112.40
1	SS	6	LYS	CA-C-O	6.18	133.08	120.10
2	SA	185	U	C5-C4-O4	6.18	129.61	125.90
2	SA	537	G	P-O5'-C5'	6.18	130.79	120.90
2	SA	1076	U	O4'-C1'-C2'	6.18	113.17	107.60
26	LA	376	G	C6-N1-C2	-6.18	121.39	125.10
26	LA	566	U	C5'-C4'-O4'	-6.18	101.68	109.10
26	LA	1264	A	C2-N3-C4	-6.18	107.51	110.60
26	LA	1494	A	C6-N1-C2	-6.18	114.89	118.60
26	LA	1634	A	N1-C2-N3	6.18	132.39	129.30
26	LA	1721	G	C5'-C4'-C3'	-6.18	106.11	116.00
26	LA	1886	U	N1-C2-N3	6.18	118.61	114.90
26	LA	2459	A	C1'-O4'-C4'	-6.18	104.95	109.90
35	L1	54	VAL	CB-CA-C	-6.18	99.65	111.40
2	SA	440	C	C5-C6-N1	-6.18	117.91	121.00
2	SA	541	G	C5'-C4'-O4'	6.18	116.52	109.10
2	SA	663	A	P-O3'-C3'	-6.18	112.28	119.70
2	SA	781	A	C8-N9-C4	-6.18	103.33	105.80
26	LA	111	A	N1-C6-N6	6.18	122.31	118.60
26	LA	2120	G	C8-N9-C4	6.18	108.87	106.40
26	LA	2376	A	O4'-C1'-N9	6.18	113.14	108.20
26	LA	2615	U	N3-C4-C5	-6.18	110.89	114.60
2	SA	187	G	C5-N7-C8	-6.18	101.21	104.30
2	SA	360	G	C4'-C3'-C2'	-6.18	96.42	102.60
2	SA	693	G	C5-C6-O6	-6.18	124.89	128.60
2	SA	828	U	C1'-O4'-C4'	-6.18	104.96	109.90
2	SA	1060	U	C6-N1-C1'	6.18	129.85	121.20
2	SA	1102	A	C6-N1-C2	6.18	122.31	118.60
2	SA	1125	U	C5'-C4'-O4'	6.18	116.52	109.10
2	SA	1156	G	C6-N1-C2	6.18	128.81	125.10
2	SA	1166	G	N9-C4-C5	-6.18	102.93	105.40
2	SA	1298	U	P-O5'-C5'	6.18	130.79	120.90
2	SA	1426	G	C5-C6-O6	-6.18	124.89	128.60
17	SQ	69	THR	N-CA-CB	6.18	122.04	110.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	SF	86	ARG	NE-CZ-NH1	-6.18	117.21	120.30
26	LA	98	G	P-O3'-C3'	6.18	127.12	119.70
26	LA	336	C	N3-C4-C5	6.18	124.37	121.90
26	LA	410	G	N7-C8-N9	-6.18	110.01	113.10
26	LA	630	G	C4'-C3'-C2'	-6.18	96.42	102.60
26	LA	812	C	C4'-C3'-C2'	-6.18	96.42	102.60
26	LA	977	G	N3-C2-N2	6.18	124.23	119.90
26	LA	1186	G	C6-N1-C2	6.18	128.81	125.10
26	LA	1292	G	C4-C5-N7	6.18	113.27	110.80
26	LA	1426	G	C4-C5-N7	-6.18	108.33	110.80
26	LA	1494	A	C5-C6-N1	6.18	120.79	117.70
26	LA	1530	G	C4-C5-N7	6.18	113.27	110.80
26	LA	2669	G	C2-N3-C4	6.18	114.99	111.90
26	LA	2753	A	N3-C4-C5	6.18	131.13	126.80
26	LA	2771	C	C4-C5-C6	-6.18	114.31	117.40
37	LC	179	ASP	CB-CG-OD1	6.18	123.86	118.30
2	SA	1424	U	C6-N1-C2	6.18	124.71	121.00
16	SP	2	VAL	CA-CB-CG2	-6.18	101.63	110.90
23	SR	37	LYS	N-CA-CB	6.18	121.72	110.60
26	LA	498	G	C5-C6-N1	6.18	114.59	111.50
26	LA	850	U	N3-C2-O2	6.18	126.52	122.20
26	LA	1792	G	C1'-O4'-C4'	6.18	114.84	109.90
26	LA	2235	G	C3'-C2'-C1'	-6.18	96.56	101.50
26	LA	2451	A	N3-C4-N9	-6.18	122.46	127.40
2	SA	1286	U	C2'-C3'-O3'	6.18	123.58	113.70
4	S2	21	U	C2'-C3'-O3'	6.18	123.58	113.70
25	LB	24	G	C5'-C4'-O4'	6.18	116.51	109.10
25	LB	75	G	P-O5'-C5'	6.18	130.78	120.90
26	LA	50	U	C6-N1-C1'	-6.18	112.55	121.20
26	LA	110	G	C1'-O4'-C4'	-6.18	104.96	109.90
26	LA	111	A	C5-N7-C8	6.18	106.99	103.90
26	LA	384	A	C8-N9-C4	-6.18	103.33	105.80
26	LA	1458	U	C1'-O4'-C4'	-6.18	104.96	109.90
26	LA	2063	C	C5'-C4'-O4'	6.18	116.51	109.10
26	LA	2406	A	P-O3'-C3'	6.18	127.11	119.70
26	LA	2578	G	O4'-C1'-N9	6.18	113.14	108.20
27	LD	47	ARG	NE-CZ-NH2	-6.18	117.21	120.30
2	SA	98	A	N7-C8-N9	-6.17	110.71	113.80
2	SA	566	G	N1-C6-O6	6.17	123.60	119.90
2	SA	622	A	P-O3'-C3'	6.17	127.11	119.70
2	SA	1357	A	C8-N9-C4	-6.17	103.33	105.80
25	LB	23	G	N3-C2-N2	6.17	124.22	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	219	A	C1'-O4'-C4'	-6.17	104.96	109.90
26	LA	367	G	N9-C4-C5	6.17	107.87	105.40
26	LA	533	G	C2-N3-C4	6.17	114.99	111.90
26	LA	627	A	C1'-O4'-C4'	-6.17	104.96	109.90
26	LA	660	C	O4'-C1'-N1	6.17	113.14	108.20
26	LA	912	C	N3-C4-N4	-6.17	113.68	118.00
26	LA	1405	U	O4'-C1'-N1	6.17	113.14	108.20
26	LA	1465	G	C8-N9-C4	6.17	108.87	106.40
26	LA	1659	G	N9-C4-C5	6.17	107.87	105.40
26	LA	2222	C	P-O3'-C3'	-6.17	112.29	119.70
26	LA	2287	A	N9-C4-C5	-6.17	103.33	105.80
26	LA	2438	U	C3'-C2'-C1'	6.17	106.44	101.50
2	SA	597	G	C3'-C2'-C1'	-6.17	96.56	101.50
2	SA	1162	C	C2-N3-C4	-6.17	116.81	119.90
2	SA	1254	A	P-O3'-C3'	6.17	127.11	119.70
26	LA	973	A	C5'-C4'-C3'	-6.17	106.12	116.00
26	LA	1129	A	C5'-C4'-C3'	-6.17	106.12	116.00
26	LA	1141	U	O4'-C1'-N1	6.17	113.14	108.20
26	LA	1744	A	O4'-C1'-N9	6.17	113.14	108.20
26	LA	1779	U	N3-C2-O2	6.17	126.52	122.20
28	LU	6	LYS	N-CA-CB	6.17	121.71	110.60
2	SA	423	G	C4'-C3'-C2'	-6.17	96.43	102.60
3	S1	37	G	C4'-C3'-C2'	-6.17	96.43	102.60
25	LB	97	C	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	1245	G	P-O5'-C5'	-6.17	111.03	120.90
26	LA	2043	C	O4'-C1'-N1	6.17	113.14	108.20
26	LA	2121	G	C6-C5-N7	-6.17	126.70	130.40
26	LA	2302	U	O4'-C1'-N1	6.17	113.14	108.20
26	LA	2816	G	C4-C5-N7	6.17	113.27	110.80
30	LW	84	PHE	CB-CG-CD1	-6.17	116.48	120.80
46	LH	156	TYR	CD1-CE1-CZ	-6.17	114.25	119.80
2	SA	744	C	N3-C4-C5	6.17	124.37	121.90
2	SA	922	G	C5-N7-C8	-6.17	101.22	104.30
26	LA	817	C	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	983	A	C6-C5-N7	-6.17	127.98	132.30
26	LA	1343	G	C4-C5-N7	6.17	113.27	110.80
26	LA	2038	G	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	2127	G	N9-C4-C5	-6.17	102.93	105.40
2	SA	255	G	N1-C6-O6	6.17	123.60	119.90
2	SA	451	A	N3-C4-C5	6.17	131.12	126.80
2	SA	937	A	C4-C5-N7	-6.17	107.62	110.70
2	SA	960	U	C5'-C4'-C3'	6.17	125.87	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	988	G	C5'-C4'-O4'	6.17	116.50	109.10
2	SA	1519	A	C2-N3-C4	-6.17	107.52	110.60
4	S2	59	A	O5'-C5'-C4'	6.17	123.42	111.70
26	LA	77	G	C5-C6-N1	6.17	114.58	111.50
26	LA	626	A	C1'-O4'-C4'	-6.17	104.97	109.90
26	LA	1087	G	N1-C6-O6	6.17	123.60	119.90
26	LA	1140	C	N3-C4-N4	-6.17	113.68	118.00
26	LA	1299	G	C8-N9-C1'	6.17	135.02	127.00
26	LA	1499	C	C5'-C4'-C3'	-6.17	106.13	116.00
26	LA	2035	G	P-O5'-C5'	-6.17	111.03	120.90
26	LA	2186	G	N3-C4-C5	-6.17	125.52	128.60
26	LA	2223	G	C8-N9-C4	-6.17	103.93	106.40
26	LA	2422	C	N1-C2-N3	6.17	123.52	119.20
26	LA	2737	G	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	2823	A	C5-C6-N1	6.17	120.78	117.70
2	SA	260	G	C6-N1-C2	-6.17	121.40	125.10
2	SA	990	C	N1-C2-N3	6.17	123.52	119.20
2	SA	1037	C	C6-N1-C2	-6.17	117.83	120.30
2	SA	1094	G	C5-N7-C8	-6.17	101.22	104.30
2	SA	1338	G	C4'-C3'-C2'	-6.17	96.43	102.60
26	LA	19	A	C5-C6-N6	-6.17	118.77	123.70
26	LA	70	G	N3-C4-C5	6.17	131.68	128.60
26	LA	589	U	C5-C4-O4	6.17	129.60	125.90
26	LA	1077	A	O4'-C4'-C3'	-6.17	97.83	104.00
26	LA	1599	U	C6-N1-C2	-6.17	117.30	121.00
26	LA	2136	G	N9-C1'-C2'	-6.17	105.22	112.00
2	SA	855	U	C6-N1-C2	6.17	124.70	121.00
3	S1	40	G	C5'-C4'-O4'	6.17	116.50	109.10
21	SE	67	ARG	NE-CZ-NH1	6.17	123.38	120.30
26	LA	1688	U	P-O5'-C5'	6.17	130.76	120.90
26	LA	2335	A	C8-N9-C4	6.17	108.27	105.80
26	LA	2360	G	C8-N9-C4	-6.17	103.93	106.40
38	LE	82	PHE	CB-CA-C	-6.17	98.07	110.40
2	SA	38	G	N9-C4-C5	6.16	107.87	105.40
2	SA	506	G	N1-C6-O6	6.16	123.60	119.90
2	SA	774	G	OP1-P-OP2	-6.16	110.36	119.60
2	SA	1004	A	C5'-C4'-C3'	-6.16	106.14	116.00
2	SA	1189	U	C3'-C2'-C1'	6.16	106.43	101.50
2	SA	1199	U	C3'-C2'-C1'	6.16	106.43	101.50
26	LA	181	A	N1-C6-N6	6.16	122.30	118.60
26	LA	545	U	N3-C2-O2	-6.16	117.89	122.20
26	LA	763	G	C6-C5-N7	-6.16	126.70	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	812	C	P-O3'-C3'	-6.16	112.30	119.70
26	LA	1561	C	N3-C4-C5	6.16	124.36	121.90
26	LA	2230	G	N9-C1'-C2'	6.16	122.01	114.00
26	LA	2546	U	N1-C2-O2	-6.16	118.49	122.80
26	LA	2867	G	O4'-C1'-N9	6.16	113.13	108.20
2	SA	389	A	C5-C6-N6	6.16	128.63	123.70
2	SA	847	G	C4-C5-C6	6.16	122.50	118.80
2	SA	1138	G	P-O3'-C3'	6.16	127.09	119.70
26	LA	295	G	C5-C6-N1	6.16	114.58	111.50
26	LA	816	C	C3'-C2'-C1'	-6.16	96.57	101.50
26	LA	827	U	N1-C1'-C2'	6.16	122.01	114.00
26	LA	1280	G	C5'-C4'-O4'	6.16	116.49	109.10
26	LA	2102	G	C4'-C3'-C2'	-6.16	96.44	102.60
58	LT	13	ARG	CD-NE-CZ	-6.16	114.97	123.60
2	SA	7	A	N7-C8-N9	6.16	116.88	113.80
2	SA	192	A	C6-C5-N7	-6.16	127.99	132.30
2	SA	747	A	C5-N7-C8	-6.16	100.82	103.90
2	SA	960	U	C4'-C3'-C2'	6.16	108.76	102.60
2	SA	1077	G	C5-N7-C8	6.16	107.38	104.30
2	SA	1221	G	C4-N9-C1'	-6.16	118.49	126.50
4	S2	49	C	N3-C4-N4	6.16	122.31	118.00
25	LB	19	C	C5-C6-N1	-6.16	117.92	121.00
25	LB	63	C	C1'-O4'-C4'	-6.16	104.97	109.90
26	LA	134	G	C5-C6-O6	6.16	132.30	128.60
26	LA	1391	U	C5-C4-O4	6.16	129.60	125.90
26	LA	1733	G	P-O3'-C3'	6.16	127.09	119.70
26	LA	2168	G	P-O5'-C5'	-6.16	111.04	120.90
26	LA	2721	A	N3-C4-C5	6.16	131.11	126.80
26	LA	2858	C	N3-C4-N4	6.16	122.31	118.00
2	SA	603	U	N3-C4-C5	-6.16	110.91	114.60
2	SA	895	G	O3'-P-O5'	-6.16	92.30	104.00
2	SA	935	A	C2-N3-C4	6.16	113.68	110.60
2	SA	1041	G	C5-C6-N1	6.16	114.58	111.50
3	S1	20	G	C5-C6-N1	6.16	114.58	111.50
26	LA	675	A	O4'-C1'-C2'	6.16	113.14	107.60
26	LA	955	U	C5-C4-O4	6.16	129.60	125.90
26	LA	1812	U	N3-C4-C5	-6.16	110.91	114.60
26	LA	2219	U	C3'-C2'-C1'	6.16	106.43	101.50
26	LA	2668	G	O4'-C1'-N9	6.16	113.13	108.20
2	SA	237	G	C4-C5-C6	6.16	122.49	118.80
2	SA	301	G	N7-C8-N9	6.16	116.18	113.10
2	SA	971	G	C3'-C2'-C1'	-6.16	96.58	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	SK	104	PHE	CZ-CE2-CD2	-6.16	112.71	120.10
24	S3	139	PHE	CB-CG-CD1	-6.16	116.49	120.80
26	LA	24	G	P-O5'-C5'	-6.16	111.05	120.90
26	LA	198	C	C6-N1-C2	-6.16	117.84	120.30
26	LA	955	U	P-O3'-C3'	6.16	127.09	119.70
26	LA	1011	G	N3-C4-N9	-6.16	122.31	126.00
26	LA	1558	C	C6-N1-C1'	-6.16	113.41	120.80
26	LA	1663	G	O3'-P-O5'	-6.16	92.30	104.00
26	LA	2170	A	C2-N3-C4	-6.16	107.52	110.60
1	SS	77	ARG	NE-CZ-NH2	6.16	123.38	120.30
2	SA	73	C	N1-C2-N3	6.16	123.51	119.20
2	SA	687	A	N3-C4-C5	-6.16	122.49	126.80
2	SA	700	G	C1'-O4'-C4'	-6.16	104.98	109.90
2	SA	876	C	C5-C4-N4	-6.16	115.89	120.20
2	SA	972	C	N3-C4-C5	-6.16	119.44	121.90
2	SA	1500	A	C1'-O4'-C4'	-6.16	104.98	109.90
20	SD	110	ARG	NE-CZ-NH2	6.16	123.38	120.30
26	LA	187	G	C2-N3-C4	-6.16	108.82	111.90
26	LA	761	A	P-O3'-C3'	6.16	127.09	119.70
26	LA	836	G	C5'-C4'-O4'	6.16	116.49	109.10
26	LA	855	G	C4'-C3'-C2'	-6.16	96.44	102.60
26	LA	908	C	O4'-C1'-C2'	6.16	113.14	107.60
26	LA	1420	A	C3'-C2'-C1'	6.16	106.42	101.50
26	LA	1754	A	N3-C4-C5	-6.16	122.49	126.80
26	LA	1836	C	C2-N3-C4	-6.16	116.82	119.90
26	LA	1955	U	N3-C2-O2	-6.16	117.89	122.20
26	LA	2129	C	C5-C6-N1	6.16	124.08	121.00
26	LA	2451	A	OP2-P-O3'	6.16	118.74	105.20
26	LA	2685	G	C4-N9-C1'	6.16	134.50	126.50
2	SA	423	G	N9-C1'-C2'	-6.15	105.23	112.00
2	SA	749	A	C5-N7-C8	-6.15	100.82	103.90
3	S1	26	U	C1'-O4'-C4'	-6.15	104.98	109.90
13	SM	100	ARG	NE-CZ-NH1	6.15	123.38	120.30
2	SA	917	G	C5-N7-C8	6.15	107.38	104.30
26	LA	298	G	N1-C2-N2	-6.15	110.66	116.20
26	LA	1803	A	C5-C6-N6	-6.15	118.78	123.70
26	LA	2164	C	C6-N1-C2	-6.15	117.84	120.30
26	LA	2521	C	N3-C4-C5	6.15	124.36	121.90
2	SA	614	C	N3-C2-O2	-6.15	117.59	121.90
26	LA	26	G	C5-N7-C8	6.15	107.38	104.30
26	LA	571	U	C5-C4-O4	6.15	129.59	125.90
26	LA	1103	A	C4-N9-C1'	6.15	137.37	126.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1993	U	C4-C5-C6	-6.15	116.01	119.70
26	LA	2148	G	O4'-C4'-C3'	-6.15	97.85	104.00
26	LA	2230	G	N1-C2-N2	-6.15	110.67	116.20
50	LL	21	THR	OG1-CB-CG2	-6.15	95.85	110.00
53	LP	71	ARG	NE-CZ-NH2	-6.15	117.22	120.30
2	SA	987	G	C5-N7-C8	-6.15	101.22	104.30
26	LA	1143	A	N3-C4-N9	6.15	132.32	127.40
26	LA	2285	C	C2-N3-C4	6.15	122.97	119.90
26	LA	2806	C	C5-C6-N1	-6.15	117.93	121.00
2	SA	108	G	N1-C6-O6	6.15	123.59	119.90
2	SA	186	C	C5-C4-N4	6.15	124.50	120.20
2	SA	237	G	C4-N9-C1'	-6.15	118.51	126.50
2	SA	1181	G	C1'-O4'-C4'	-6.15	104.98	109.90
24	S3	514	TYR	CA-CB-CG	6.15	125.08	113.40
26	LA	718	A	O4'-C1'-N9	6.15	113.12	108.20
26	LA	1860	G	OP1-P-OP2	-6.15	110.38	119.60
26	LA	2008	C	C4-C5-C6	6.15	120.47	117.40
26	LA	2102	G	N3-C2-N2	6.15	124.20	119.90
26	LA	2379	G	O4'-C1'-N9	6.15	113.12	108.20
26	LA	2625	G	O4'-C1'-N9	6.15	113.12	108.20
45	LG	143	ASP	CB-CG-OD1	-6.15	112.77	118.30
24	S3	604	PHE	CB-CG-CD1	6.15	125.10	120.80
26	LA	323	C	P-O3'-C3'	-6.15	112.33	119.70
26	LA	541	A	O4'-C1'-N9	6.15	113.12	108.20
26	LA	1342	A	N7-C8-N9	-6.15	110.73	113.80
26	LA	1417	C	N3-C4-N4	6.15	122.30	118.00
26	LA	2135	A	N1-C2-N3	-6.15	126.23	129.30
26	LA	2772	C	C6-N1-C2	-6.15	117.84	120.30
29	LV	95	PHE	CB-CG-CD2	-6.15	116.50	120.80
50	LL	141	ASP	CB-CG-OD2	6.15	123.83	118.30
2	SA	1228	C	OP1-P-OP2	-6.14	110.38	119.60
4	S2	14	A	C8-N9-C4	-6.14	103.34	105.80
26	LA	630	G	N1-C6-O6	6.14	123.59	119.90
26	LA	938	G	N9-C4-C5	6.14	107.86	105.40
26	LA	1190	G	C4-C5-N7	-6.14	108.34	110.80
26	LA	1833	C	C5'-C4'-O4'	6.14	116.47	109.10
26	LA	1869	G	OP2-P-O3'	6.14	118.72	105.20
2	SA	90	C	O4'-C1'-N1	6.14	113.11	108.20
2	SA	427	U	C1'-O4'-C4'	6.14	114.81	109.90
2	SA	430	A	N3-C4-N9	-6.14	122.49	127.40
2	SA	564	C	C4'-C3'-C2'	6.14	108.74	102.60
2	SA	691	G	P-O5'-C5'	6.14	130.73	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	706	A	C5'-C4'-O4'	6.14	116.47	109.10
2	SA	721	G	C6-N1-C2	-6.14	121.41	125.10
2	SA	1131	G	N9-C4-C5	6.14	107.86	105.40
2	SA	1187	G	O4'-C1'-N9	6.14	113.11	108.20
2	SA	1364	U	N3-C4-O4	6.14	123.70	119.40
3	S1	55	A	O4'-C1'-N9	6.14	113.11	108.20
26	LA	864	G	N3-C4-C5	6.14	131.67	128.60
26	LA	865	C	C2-N1-C1'	6.14	125.56	118.80
26	LA	994	C	C5'-C4'-O4'	6.14	116.47	109.10
26	LA	1040	A	P-O3'-C3'	-6.14	112.33	119.70
26	LA	1086	A	N1-C6-N6	-6.14	114.92	118.60
26	LA	1096	A	C5-C6-N6	-6.14	118.79	123.70
26	LA	1349	C	C5-C4-N4	-6.14	115.90	120.20
26	LA	1412	U	O4'-C4'-C3'	-6.14	97.86	104.00
26	LA	1528	A	C4'-C3'-C2'	-6.14	96.46	102.60
26	LA	1694	C	C5'-C4'-O4'	6.14	116.47	109.10
26	LA	1898	U	O3'-P-O5'	-6.14	92.33	104.00
26	LA	2172	U	P-O5'-C5'	6.14	130.73	120.90
26	LA	2542	A	C8-N9-C4	-6.14	103.34	105.80
26	LA	2681	C	C6-N1-C1'	-6.14	113.43	120.80
2	SA	75	G	C5-C6-N1	-6.14	108.43	111.50
12	SL	22	ALA	C-N-CA	6.14	137.05	121.70
26	LA	473	G	C5-C6-N1	6.14	114.57	111.50
26	LA	1833	C	O4'-C4'-C3'	6.14	111.01	106.10
26	LA	2460	U	N3-C4-C5	-6.14	110.92	114.60
9	SI	118	ARG	CD-NE-CZ	6.14	132.19	123.60
12	SL	47	ALA	N-CA-CB	6.14	118.69	110.10
26	LA	659	G	O4'-C1'-C2'	6.14	113.12	107.60
26	LA	774	G	C2-N3-C4	-6.14	108.83	111.90
26	LA	849	A	C4'-C3'-C2'	-6.14	96.46	102.60
26	LA	871	U	O4'-C1'-N1	6.14	113.11	108.20
26	LA	2076	U	P-O5'-C5'	-6.14	111.08	120.90
26	LA	2755	C	C5-C6-N1	-6.14	117.93	121.00
26	LA	2837	A	C8-N9-C4	6.14	108.26	105.80
28	LU	82	MET	CB-CA-C	6.14	122.68	110.40
2	SA	2	A	C2-N3-C4	-6.14	107.53	110.60
2	SA	56	U	C6-N1-C2	-6.14	117.32	121.00
2	SA	99	C	C2'-C3'-O3'	6.14	123.52	113.70
2	SA	636	U	N1-C2-N3	-6.14	111.22	114.90
2	SA	816	A	C2-N3-C4	-6.14	107.53	110.60
2	SA	1406	U	O5'-P-OP2	-6.14	100.17	105.70
24	S3	400	ASP	CB-CG-OD1	6.14	123.82	118.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	488	G	C6-C5-N7	-6.14	126.72	130.40
26	LA	1117	C	C4-C5-C6	6.14	120.47	117.40
26	LA	1917	U	P-O3'-C3'	6.14	127.07	119.70
26	LA	2200	C	O4'-C1'-N1	6.14	113.11	108.20
2	SA	88	U	P-O5'-C5'	6.14	130.72	120.90
2	SA	380	G	C4'-C3'-C2'	-6.14	96.46	102.60
2	SA	1470	U	OP2-P-O3'	6.14	118.70	105.20
26	LA	203	A	C4'-C3'-C2'	-6.14	96.46	102.60
26	LA	874	G	N7-C8-N9	-6.14	110.03	113.10
26	LA	900	A	N9-C4-C5	-6.14	103.34	105.80
26	LA	1257	C	N3-C4-N4	6.14	122.30	118.00
26	LA	1303	G	OP1-P-OP2	-6.14	110.39	119.60
26	LA	1752	C	P-O3'-C3'	-6.14	112.34	119.70
26	LA	2265	U	N3-C4-O4	-6.14	115.11	119.40
53	LP	102	PHE	CB-CG-CD2	6.14	125.10	120.80
2	SA	271	C	N1-C2-N3	6.13	123.50	119.20
2	SA	834	U	C5'-C4'-O4'	6.13	116.46	109.10
2	SA	945	G	P-O3'-C3'	-6.13	112.34	119.70
2	SA	975	A	N1-C2-N3	6.13	132.37	129.30
2	SA	1110	A	C5-C6-N1	6.13	120.77	117.70
25	LB	98	G	C6-C5-N7	-6.13	126.72	130.40
26	LA	50	U	C4'-C3'-C2'	-6.13	96.47	102.60
26	LA	114	U	P-O3'-C3'	6.13	127.06	119.70
26	LA	424	G	C5-N7-C8	-6.13	101.23	104.30
26	LA	516	C	C4-C5-C6	-6.13	114.33	117.40
26	LA	950	G	C6-C5-N7	-6.13	126.72	130.40
26	LA	1055	G	C5'-C4'-C3'	6.13	125.81	116.00
26	LA	1253	A	N3-C4-C5	6.13	131.09	126.80
26	LA	1982	U	N3-C2-O2	-6.13	117.91	122.20
42	L6	7	ARG	NE-CZ-NH1	6.13	123.37	120.30
2	SA	186	C	O4'-C1'-N1	6.13	113.11	108.20
2	SA	785	G	C1'-O4'-C4'	-6.13	104.99	109.90
2	SA	1354	U	C1'-O4'-C4'	-6.13	104.99	109.90
26	LA	63	A	N7-C8-N9	6.13	116.87	113.80
26	LA	915	C	C1'-O4'-C4'	-6.13	104.99	109.90
26	LA	1331	G	C5'-C4'-C3'	-6.13	106.19	116.00
26	LA	2247	A	O4'-C1'-N9	6.13	113.11	108.20
26	LA	2451	A	O5'-C5'-C4'	6.13	123.35	111.70
2	SA	44	A	C8-N9-C4	-6.13	103.35	105.80
2	SA	369	G	N1-C6-O6	6.13	123.58	119.90
2	SA	484	G	C4-C5-N7	6.13	113.25	110.80
2	SA	1152	A	C4'-C3'-C2'	-6.13	96.47	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1210	C	C5'-C4'-O4'	-6.13	101.74	109.10
2	SA	1405	G	N1-C2-N2	-6.13	110.68	116.20
2	SA	1473	G	N1-C6-O6	-6.13	116.22	119.90
2	SA	1513	A	C8-N9-C4	-6.13	103.35	105.80
24	S3	169	GLN	CB-CA-C	-6.13	98.14	110.40
26	LA	57	C	N3-C4-N4	6.13	122.29	118.00
26	LA	751	A	P-O5'-C5'	-6.13	111.09	120.90
26	LA	759	G	N1-C2-N3	6.13	127.58	123.90
26	LA	962	G	C4-C5-N7	6.13	113.25	110.80
26	LA	1558	C	O4'-C1'-N1	6.13	113.11	108.20
26	LA	1904	G	N1-C2-N3	-6.13	120.22	123.90
26	LA	2183	A	N7-C8-N9	6.13	116.87	113.80
26	LA	2333	A	N1-C6-N6	-6.13	114.92	118.60
26	LA	2359	C	C2-N1-C1'	-6.13	112.06	118.80
41	L5	10	LEU	CB-CG-CD1	6.13	121.42	111.00
2	SA	922	G	N9-C4-C5	6.13	107.85	105.40
26	LA	317	G	O4'-C1'-N9	6.13	113.10	108.20
26	LA	384	A	N9-C4-C5	6.13	108.25	105.80
27	LD	13	ARG	O-C-N	-6.13	112.89	122.70
2	SA	497	G	C8-N9-C4	-6.13	103.95	106.40
2	SA	1043	G	C6-C5-N7	6.13	134.08	130.40
26	LA	16	C	C4-C5-C6	-6.13	114.34	117.40
26	LA	99	U	C1'-O4'-C4'	-6.13	105.00	109.90
26	LA	137	U	N1-C2-N3	-6.13	111.22	114.90
26	LA	215	G	N1-C6-O6	6.13	123.58	119.90
26	LA	572	A	N7-C8-N9	6.13	116.86	113.80
26	LA	1169	A	C5-C6-N1	6.13	120.77	117.70
26	LA	1182	G	O4'-C1'-N9	6.13	113.10	108.20
2	SA	536	C	N3-C4-C5	-6.13	119.45	121.90
2	SA	1139	G	C2-N3-C4	6.13	114.96	111.90
2	SA	1383	C	N3-C2-O2	-6.13	117.61	121.90
2	SA	1437	A	C4-C5-N7	-6.13	107.64	110.70
21	SE	148	SER	N-CA-C	6.13	127.54	111.00
25	LB	7	G	C4-N9-C1'	-6.13	118.54	126.50
26	LA	613	A	C4-C5-C6	6.13	120.06	117.00
26	LA	638	G	C2-N3-C4	6.13	114.96	111.90
26	LA	1266	G	C3'-C2'-C1'	-6.13	96.60	101.50
26	LA	1307	A	N9-C4-C5	-6.13	103.35	105.80
26	LA	1802	A	O3'-P-O5'	6.13	115.64	104.00
26	LA	1900	A	C5-N7-C8	6.13	106.96	103.90
26	LA	2212	A	C6-N1-C2	-6.13	114.92	118.60
26	LA	2652	C	O4'-C4'-C3'	-6.13	97.87	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	57	G	C4-C5-C6	6.12	122.47	118.80
2	SA	841	C	C4-C5-C6	6.12	120.46	117.40
2	SA	1196	A	N9-C4-C5	-6.12	103.35	105.80
26	LA	1116	G	C5-C6-N1	6.12	114.56	111.50
26	LA	2550	G	C5'-C4'-O4'	6.12	116.45	109.10
26	LA	2862	G	C2-N3-C4	6.12	114.96	111.90
2	SA	424	G	N1-C2-N3	-6.12	120.23	123.90
4	S2	26	C	C5'-C4'-C3'	-6.12	106.20	116.00
15	SO	56	LEU	N-CA-CB	6.12	122.65	110.40
20	SD	25	ARG	O-C-N	-6.12	112.90	122.70
26	LA	19	A	C2-N3-C4	-6.12	107.54	110.60
26	LA	603	A	C5'-C4'-C3'	-6.12	106.20	116.00
26	LA	753	A	C5'-C4'-C3'	-6.12	106.20	116.00
26	LA	1279	G	C6-N1-C2	-6.12	121.43	125.10
26	LA	2266	A	O4'-C1'-N9	6.12	113.10	108.20
26	LA	2499	C	N3-C4-N4	6.12	122.29	118.00
26	LA	2517	C	N3-C4-C5	6.12	124.35	121.90
26	LA	2589	A	C2-N3-C4	-6.12	107.54	110.60
26	LA	2625	G	C2-N3-C4	6.12	114.96	111.90
26	LA	2797	U	C5-C6-N1	-6.12	119.64	122.70
26	LA	2900	A	C3'-C2'-C1'	-6.12	96.60	101.50
45	LG	132	ARG	NE-CZ-NH2	6.12	123.36	120.30
2	SA	21	G	N3-C2-N2	-6.12	115.62	119.90
2	SA	22	G	C4'-C3'-C2'	-6.12	96.48	102.60
2	SA	502	A	C4-C5-C6	-6.12	113.94	117.00
2	SA	1015	G	N1-C2-N3	6.12	127.57	123.90
2	SA	1044	A	C4-C5-C6	-6.12	113.94	117.00
2	SA	1122	U	C5-C4-O4	6.12	129.57	125.90
2	SA	1426	G	C4-C5-C6	6.12	122.47	118.80
3	S1	19	A	N9-C4-C5	6.12	108.25	105.80
20	SD	145	ARG	NE-CZ-NH2	-6.12	117.24	120.30
24	S3	87	ASP	CB-CA-C	-6.12	98.16	110.40
25	LB	109	A	P-O5'-C5'	-6.12	111.10	120.90
26	LA	491	G	C3'-C2'-C1'	-6.12	96.60	101.50
26	LA	702	U	C1'-O4'-C4'	-6.12	105.00	109.90
26	LA	744	U	N3-C4-O4	6.12	123.69	119.40
26	LA	1016	G	N7-C8-N9	-6.12	110.04	113.10
26	LA	1146	C	N1-C2-O2	-6.12	115.23	118.90
26	LA	1669	A	C8-N9-C4	-6.12	103.35	105.80
26	LA	1692	U	N3-C4-O4	6.12	123.69	119.40
26	LA	1897	G	C4-C5-C6	6.12	122.47	118.80
26	LA	2121	G	C5-C6-O6	-6.12	124.93	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2141	G	N1-C6-O6	6.12	123.57	119.90
26	LA	2902	C	C6-N1-C2	-6.12	117.85	120.30
53	LP	17	ARG	N-CA-CB	-6.12	99.58	110.60
2	SA	359	G	O4'-C1'-N9	6.12	113.10	108.20
2	SA	515	G	C4-C5-N7	-6.12	108.35	110.80
2	SA	722	G	C4-C5-N7	6.12	113.25	110.80
2	SA	1154	G	C4'-C3'-C2'	-6.12	96.48	102.60
26	LA	575	A	C2-N3-C4	-6.12	107.54	110.60
26	LA	717	C	C4-C5-C6	-6.12	114.34	117.40
26	LA	1189	A	C5-N7-C8	-6.12	100.84	103.90
26	LA	1759	A	C4-C5-N7	6.12	113.76	110.70
26	LA	2471	A	C1'-O4'-C4'	-6.12	105.00	109.90
26	LA	2606	C	C2-N3-C4	-6.12	116.84	119.90
26	LA	2830	C	O4'-C1'-N1	6.12	113.10	108.20
2	SA	1055	A	C4-C5-N7	-6.12	107.64	110.70
2	SA	1136	C	C2-N3-C4	-6.12	116.84	119.90
4	S2	39	A	P-O5'-C5'	6.12	130.69	120.90
26	LA	23	G	N1-C2-N3	-6.12	120.23	123.90
26	LA	277	G	P-O5'-C5'	6.12	130.69	120.90
26	LA	1649	G	C5-N7-C8	-6.12	101.24	104.30
26	LA	1680	U	C5'-C4'-C3'	6.12	125.79	116.00
26	LA	2385	C	N1-C2-N3	-6.12	114.92	119.20
26	LA	2532	G	N7-C8-N9	6.12	116.16	113.10
26	LA	2746	U	C2-N3-C4	6.12	130.67	127.00
26	LA	2818	U	C2-N3-C4	6.12	130.67	127.00
26	LA	2841	C	C1'-O4'-C4'	-6.12	105.00	109.90
48	LN	47	ARG	NH1-CZ-NH2	6.12	126.13	119.40
26	LA	389	G	C2-N3-C4	-6.12	108.84	111.90
26	LA	640	C	N3-C4-N4	6.12	122.28	118.00
26	LA	998	C	N1-C2-O2	-6.12	115.23	118.90
26	LA	1085	A	C5-C6-N1	-6.12	114.64	117.70
26	LA	1246	A	C8-N9-C4	-6.12	103.35	105.80
26	LA	2147	A	N1-C6-N6	-6.12	114.93	118.60
26	LA	2371	G	N3-C4-N9	-6.12	122.33	126.00
26	LA	2501	C	N1-C2-O2	-6.12	115.23	118.90
26	LA	2877	G	N3-C4-N9	6.12	129.67	126.00
46	LH	68	ARG	NE-CZ-NH1	6.12	123.36	120.30
2	SA	652	U	C5-C4-O4	6.12	129.57	125.90
2	SA	775	G	N1-C2-N2	-6.12	110.70	116.20
2	SA	903	G	C5-C6-N1	6.12	114.56	111.50
2	SA	951	G	N1-C2-N3	6.12	127.57	123.90
2	SA	983	A	N1-C6-N6	-6.12	114.93	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	2	G	N3-C4-C5	-6.12	125.54	128.60
5	ST	62	ALA	N-CA-CB	-6.12	101.54	110.10
8	SH	85	TYR	CA-CB-CG	-6.12	101.78	113.40
26	LA	308	G	C4-C5-C6	-6.12	115.13	118.80
26	LA	523	C	C5-C6-N1	6.12	124.06	121.00
26	LA	1022	G	C1'-O4'-C4'	-6.12	105.01	109.90
26	LA	1345	C	OP1-P-O3'	6.12	118.65	105.20
26	LA	1483	G	C4-C5-N7	6.12	113.25	110.80
26	LA	1664	A	C5'-C4'-C3'	-6.12	106.22	116.00
26	LA	2353	G	N9-C4-C5	-6.12	102.95	105.40
26	LA	2495	G	O4'-C1'-N9	6.12	113.09	108.20
2	SA	152	A	C2-N3-C4	-6.11	107.54	110.60
2	SA	336	A	C4-C5-N7	6.11	113.76	110.70
2	SA	1021	A	C4-C5-C6	6.11	120.06	117.00
2	SA	1158	C	C6-N1-C2	-6.11	117.86	120.30
2	SA	1340	A	N1-C2-N3	-6.11	126.24	129.30
24	S3	336	ARG	NH1-CZ-NH2	-6.11	112.68	119.40
26	LA	43	G	C3'-C2'-C1'	-6.11	96.61	101.50
26	LA	468	G	N7-C8-N9	6.11	116.16	113.10
26	LA	494	G	C6-C5-N7	6.11	134.07	130.40
26	LA	532	A	C2-N3-C4	-6.11	107.54	110.60
26	LA	996	A	O4'-C1'-N9	6.11	113.09	108.20
26	LA	1111	A	N1-C6-N6	6.11	122.27	118.60
26	LA	1607	C	C5-C6-N1	-6.11	117.94	121.00
26	LA	2750	A	C2-N3-C4	6.11	113.66	110.60
31	LX	72	VAL	CA-CB-CG1	6.11	120.07	110.90
2	SA	412	A	C1'-O4'-C4'	-6.11	105.01	109.90
2	SA	847	G	P-O5'-C5'	-6.11	111.12	120.90
2	SA	1020	G	N1-C2-N2	6.11	121.70	116.20
26	LA	25	U	N1-C2-O2	-6.11	118.52	122.80
26	LA	470	A	N1-C6-N6	6.11	122.27	118.60
26	LA	619	G	N9-C4-C5	-6.11	102.95	105.40
26	LA	741	U	N3-C2-O2	-6.11	117.92	122.20
26	LA	2632	A	N1-C2-N3	6.11	132.36	129.30
1	SS	54	ARG	CD-NE-CZ	6.11	132.16	123.60
2	SA	451	A	C1'-O4'-C4'	-6.11	105.01	109.90
2	SA	700	G	C5-N7-C8	-6.11	101.25	104.30
23	SR	6	ARG	NE-CZ-NH2	-6.11	117.25	120.30
26	LA	57	C	P-O3'-C3'	6.11	127.03	119.70
26	LA	593	U	C6-N1-C1'	6.11	129.75	121.20
26	LA	768	G	N1-C6-O6	6.11	123.57	119.90
26	LA	1133	A	C5-N7-C8	-6.11	100.84	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1435	G	C5-N7-C8	-6.11	101.25	104.30
26	LA	1657	U	O4'-C1'-N1	6.11	113.09	108.20
26	LA	2454	G	C5-N7-C8	-6.11	101.25	104.30
46	LH	165	ASP	CB-CG-OD2	6.11	123.80	118.30
2	SA	935	A	C4-C5-C6	6.11	120.06	117.00
26	LA	380	G	C6-C5-N7	-6.11	126.73	130.40
26	LA	769	U	N1-C2-O2	6.11	127.08	122.80
26	LA	1445	G	O4'-C1'-N9	6.11	113.09	108.20
26	LA	1655	A	N1-C6-N6	6.11	122.27	118.60
26	LA	2613	U	C5'-C4'-C3'	6.11	125.78	116.00
2	SA	441	A	OP1-P-OP2	-6.11	110.44	119.60
3	S1	18	A	N9-C4-C5	-6.11	103.36	105.80
4	S2	44	A	N3-C4-C5	-6.11	122.53	126.80
25	LB	106	G	C5'-C4'-O4'	6.11	116.43	109.10
26	LA	443	A	C5'-C4'-C3'	-6.11	106.23	116.00
26	LA	491	G	C5-C6-N1	6.11	114.55	111.50
26	LA	787	C	C6-N1-C2	-6.11	117.86	120.30
26	LA	821	A	C3'-C2'-C1'	6.11	106.39	101.50
26	LA	954	G	C5-C6-O6	-6.11	124.94	128.60
26	LA	1358	G	N1-C2-N2	-6.11	110.70	116.20
26	LA	1718	G	C4-C5-C6	6.11	122.47	118.80
26	LA	1859	U	P-O5'-C5'	6.11	130.67	120.90
26	LA	2253	G	C6-N1-C2	-6.11	121.44	125.10
26	LA	2530	A	N1-C6-N6	6.11	122.27	118.60
26	LA	2692	G	C5-C6-N1	6.11	114.55	111.50
49	LK	10	LEU	CB-CA-C	6.11	121.80	110.20
2	SA	941	G	C4-C5-N7	-6.11	108.36	110.80
2	SA	950	U	C6-N1-C2	-6.11	117.34	121.00
2	SA	1278	G	C6-C5-N7	-6.11	126.74	130.40
3	S1	45	G	N1-C2-N2	-6.11	110.70	116.20
20	SD	49	ASP	N-CA-CB	-6.11	99.61	110.60
26	LA	164	C	C2-N3-C4	6.11	122.95	119.90
26	LA	180	G	C5'-C4'-C3'	6.11	125.77	116.00
26	LA	213	A	C6-C5-N7	6.11	136.57	132.30
26	LA	770	G	C1'-O4'-C4'	-6.11	105.02	109.90
26	LA	903	C	P-O5'-C5'	6.11	130.67	120.90
26	LA	1311	G	C1'-O4'-C4'	6.11	114.78	109.90
26	LA	1726	C	O4'-C1'-N1	6.11	113.08	108.20
26	LA	1989	G	C4-N9-C1'	-6.11	118.56	126.50
26	LA	2202	U	O4'-C1'-N1	6.11	113.08	108.20
26	LA	2531	A	C4-C5-C6	6.11	120.05	117.00
26	LA	2719	G	C5-C6-O6	-6.11	124.94	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2886	A	N3-C4-C5	-6.11	122.53	126.80
49	LK	124	MET	CA-CB-CG	-6.11	102.92	113.30
50	LL	37	ARG	NH1-CZ-NH2	-6.11	112.68	119.40
2	SA	458	U	C6-N1-C2	-6.10	117.34	121.00
2	SA	761	G	N1-C6-O6	6.10	123.56	119.90
4	S2	12	G	C6-N1-C2	-6.10	121.44	125.10
24	S3	91	ALA	CB-CA-C	6.10	119.26	110.10
25	LB	68	C	N1-C2-N3	6.10	123.47	119.20
25	LB	109	A	C4-C5-N7	-6.10	107.65	110.70
26	LA	336	C	C2-N3-C4	-6.10	116.85	119.90
26	LA	384	A	C5-C6-N6	-6.10	118.82	123.70
26	LA	524	G	N3-C4-C5	-6.10	125.55	128.60
26	LA	1204	A	P-O5'-C5'	-6.10	111.13	120.90
26	LA	1818	U	C1'-O4'-C4'	6.10	114.78	109.90
26	LA	1907	G	N7-C8-N9	-6.10	110.05	113.10
2	SA	34	C	O3'-P-O5'	-6.10	92.40	104.00
2	SA	80	A	C8-N9-C4	-6.10	103.36	105.80
2	SA	94	G	P-O3'-C3'	-6.10	112.38	119.70
2	SA	1131	G	C6-N1-C2	-6.10	121.44	125.10
2	SA	1352	C	N3-C4-C5	6.10	124.34	121.90
25	LB	59	A	C4-C5-N7	6.10	113.75	110.70
26	LA	204	A	C1'-O4'-C4'	-6.10	105.02	109.90
26	LA	223	A	N1-C6-N6	-6.10	114.94	118.60
26	LA	728	G	N3-C4-C5	-6.10	125.55	128.60
26	LA	978	G	N7-C8-N9	-6.10	110.05	113.10
26	LA	1113	U	O4'-C1'-N1	6.10	113.08	108.20
26	LA	1261	C	C3'-C2'-C1'	6.10	106.38	101.50
26	LA	1708	C	P-O5'-C5'	6.10	130.66	120.90
26	LA	1896	G	N3-C4-C5	-6.10	125.55	128.60
26	LA	2111	U	N3-C4-C5	6.10	118.26	114.60
26	LA	2599	G	C4-N9-C1'	-6.10	118.57	126.50
26	LA	2760	C	C4'-C3'-C2'	-6.10	96.50	102.60
26	LA	2808	G	C6-N1-C2	-6.10	121.44	125.10
45	LG	148	VAL	CB-CA-C	6.10	123.00	111.40
2	SA	163	C	C6-N1-C2	6.10	122.74	120.30
2	SA	341	C	C5'-C4'-C3'	-6.10	106.24	116.00
2	SA	761	G	P-O3'-C3'	6.10	127.02	119.70
2	SA	1389	C	C2-N3-C4	-6.10	116.85	119.90
26	LA	1594	U	C6-N1-C2	-6.10	117.34	121.00
26	LA	1889	A	C4'-C3'-C2'	-6.10	96.50	102.60
26	LA	2336	A	C5-N7-C8	6.10	106.95	103.90
26	LA	2476	A	C6-C5-N7	-6.10	128.03	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2580	U	O4'-C1'-N1	6.10	113.08	108.20
2	SA	137	U	O5'-P-OP2	-6.10	100.21	105.70
26	LA	173	A	C4-C5-C6	-6.10	113.95	117.00
26	LA	1154	G	P-O5'-C5'	-6.10	111.14	120.90
26	LA	2310	C	N1-C2-O2	6.10	122.56	118.90
26	LA	2685	G	C5-C6-N1	6.10	114.55	111.50
26	LA	2890	G	N3-C2-N2	6.10	124.17	119.90
47	LJ	128	LEU	CB-CG-CD2	6.10	121.37	111.00
2	SA	107	G	C4'-C3'-C2'	-6.10	96.50	102.60
2	SA	131	A	O4'-C1'-N9	6.10	113.08	108.20
2	SA	182	A	C3'-C2'-C1'	-6.10	96.62	101.50
2	SA	211	G	C1'-O4'-C4'	-6.10	105.02	109.90
2	SA	551	U	P-O5'-C5'	6.10	130.66	120.90
2	SA	785	G	C3'-C2'-C1'	-6.10	96.62	101.50
2	SA	966	G	N3-C2-N2	-6.10	115.63	119.90
2	SA	1238	A	C4-C5-C6	6.10	120.05	117.00
15	SO	77	TYR	CG-CD2-CE2	6.10	126.18	121.30
26	LA	513	A	N9-C1'-C2'	6.10	121.93	114.00
26	LA	1485	U	C4-C5-C6	-6.10	116.04	119.70
26	LA	1670	C	C1'-O4'-C4'	-6.10	105.02	109.90
26	LA	1707	G	C5-N7-C8	-6.10	101.25	104.30
26	LA	1867	G	N1-C2-N3	-6.10	120.24	123.90
26	LA	1960	A	C3'-C2'-C1'	6.10	106.38	101.50
26	LA	2023	C	C2-N1-C1'	-6.10	112.09	118.80
26	LA	2196	C	C1'-O4'-C4'	-6.10	105.02	109.90
26	LA	2239	G	C4-C5-C6	6.10	122.46	118.80
26	LA	2463	C	C2-N3-C4	-6.10	116.85	119.90
26	LA	2774	C	C4-C5-C6	-6.10	114.35	117.40
29	LV	3	ARG	CB-CA-C	6.10	122.60	110.40
45	LG	96	TRP	CE3-CZ3-CH2	6.10	127.91	121.20
53	LP	46	ARG	NE-CZ-NH2	-6.10	117.25	120.30
2	SA	218	U	C4-C5-C6	-6.10	116.04	119.70
2	SA	1419	G	N1-C2-N3	-6.10	120.24	123.90
26	LA	1412	U	P-O3'-C3'	-6.10	112.39	119.70
26	LA	1918	A	C4-C5-N7	6.10	113.75	110.70
26	LA	1972	G	N1-C6-O6	-6.10	116.24	119.90
2	SA	1130	A	N1-C6-N6	6.09	122.26	118.60
2	SA	1466	C	C6-N1-C1'	-6.09	113.49	120.80
2	SA	1533	C	N1-C2-O2	-6.09	115.24	118.90
3	S1	13	A	N7-C8-N9	-6.09	110.75	113.80
12	SL	88	ASP	CB-CG-OD1	6.09	123.78	118.30
26	LA	434	U	C5'-C4'-O4'	6.09	116.41	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	467	G	C4-N9-C1'	-6.09	118.58	126.50
26	LA	877	A	O4'-C1'-N9	6.09	113.08	108.20
26	LA	907	G	C6-C5-N7	6.09	134.06	130.40
26	LA	1380	G	C5-C6-N1	6.09	114.55	111.50
26	LA	2676	C	C1'-O4'-C4'	-6.09	105.02	109.90
39	L3	48	TYR	CB-CG-CD1	-6.09	117.34	121.00
2	SA	1174	G	C8-N9-C4	-6.09	103.96	106.40
26	LA	274	C	C6-N1-C2	-6.09	117.86	120.30
26	LA	499	U	OP1-P-OP2	-6.09	110.46	119.60
26	LA	2252	G	O4'-C1'-N9	6.09	113.07	108.20
26	LA	2418	A	C5-N7-C8	-6.09	100.85	103.90
26	LA	2640	G	C5-C6-N1	-6.09	108.45	111.50
2	SA	96	U	C2-N1-C1'	-6.09	110.39	117.70
2	SA	500	G	C8-N9-C4	-6.09	103.96	106.40
2	SA	1190	G	C5'-C4'-O4'	6.09	116.41	109.10
26	LA	137	U	C3'-C2'-C1'	-6.09	96.63	101.50
26	LA	603	A	N7-C8-N9	6.09	116.85	113.80
26	LA	604	G	O5'-P-OP2	6.09	118.01	110.70
26	LA	693	A	OP1-P-OP2	-6.09	110.46	119.60
26	LA	1095	A	O4'-C1'-N9	6.09	113.07	108.20
26	LA	1339	G	C4-C5-N7	6.09	113.24	110.80
26	LA	1755	A	N7-C8-N9	-6.09	110.75	113.80
26	LA	1846	G	N1-C6-O6	6.09	123.56	119.90
26	LA	1859	U	N1-C2-O2	6.09	127.06	122.80
26	LA	2341	G	C2-N3-C4	-6.09	108.85	111.90
26	LA	2867	G	N3-C2-N2	6.09	124.17	119.90
50	LL	6	ALA	N-CA-CB	6.09	118.63	110.10
50	LL	34	ARG	CB-CA-C	6.09	122.58	110.40
2	SA	351	G	O3'-P-O5'	-6.09	92.43	104.00
2	SA	351	G	C4-C5-N7	6.09	113.24	110.80
2	SA	1082	A	C6-N1-C2	-6.09	114.95	118.60
2	SA	1116	U	O4'-C1'-N1	6.09	113.07	108.20
2	SA	1159	U	P-O5'-C5'	6.09	130.64	120.90
2	SA	1303	C	C2-N1-C1'	6.09	125.50	118.80
2	SA	1516	G	P-O3'-C3'	-6.09	112.39	119.70
4	S2	56	U	C4'-C3'-C2'	-6.09	96.51	102.60
25	LB	110	C	O4'-C1'-N1	6.09	113.07	108.20
26	LA	136	G	C4-C5-C6	6.09	122.45	118.80
26	LA	446	G	C8-N9-C4	-6.09	103.96	106.40
26	LA	1013	C	C6-N1-C2	-6.09	117.86	120.30
26	LA	1252	G	C4-C5-N7	6.09	113.24	110.80
26	LA	1557	C	N3-C4-N4	6.09	122.26	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2007	U	O4'-C4'-C3'	6.09	110.97	106.10
26	LA	2523	G	C4-C5-N7	6.09	113.24	110.80
30	LW	95	PHE	CB-CA-C	-6.09	98.22	110.40
31	LX	91	PHE	CB-CG-CD2	6.09	125.06	120.80
2	SA	774	G	N1-C6-O6	6.09	123.55	119.90
2	SA	860	A	N1-C2-N3	6.09	132.34	129.30
24	S3	199	VAL	CA-CB-CG1	6.09	120.03	110.90
26	LA	23	G	C8-N9-C4	-6.09	103.97	106.40
26	LA	891	G	C4-C5-C6	-6.09	115.15	118.80
26	LA	1050	A	N1-C6-N6	6.09	122.25	118.60
26	LA	2232	C	C5-C4-N4	-6.09	115.94	120.20
26	LA	2247	A	C5-N7-C8	-6.09	100.86	103.90
26	LA	2379	G	C6-C5-N7	6.09	134.05	130.40
26	LA	2848	G	O4'-C1'-N9	6.09	113.07	108.20
37	LC	71	ARG	NE-CZ-NH2	-6.09	117.26	120.30
2	SA	403	C	N3-C4-N4	-6.09	113.74	118.00
2	SA	1006	G	O4'-C1'-N9	6.09	113.07	108.20
2	SA	1307	U	O4'-C1'-N1	6.09	113.07	108.20
2	SA	1433	A	O4'-C1'-N9	6.09	113.07	108.20
20	SD	145	ARG	CG-CD-NE	-6.09	99.02	111.80
25	LB	38	C	O4'-C1'-N1	6.09	113.07	108.20
26	LA	51	G	C6-N1-C2	-6.09	121.45	125.10
26	LA	421	C	N1-C2-O2	6.09	122.55	118.90
26	LA	488	G	C6-N1-C2	-6.09	121.45	125.10
26	LA	500	G	N1-C2-N2	-6.09	110.72	116.20
26	LA	945	A	N7-C8-N9	6.09	116.84	113.80
26	LA	954	G	C4-C5-N7	6.09	113.23	110.80
26	LA	1394	U	N3-C2-O2	-6.09	117.94	122.20
26	LA	1876	A	O4'-C1'-N9	6.09	113.07	108.20
26	LA	1970	A	N9-C1'-C2'	6.09	121.91	114.00
26	LA	2869	G	C8-N9-C4	-6.09	103.97	106.40
2	SA	731	G	C8-N9-C4	-6.08	103.97	106.40
26	LA	224	U	C4-C5-C6	-6.08	116.05	119.70
26	LA	704	G	C5-C6-N1	-6.08	108.46	111.50
26	LA	1634	A	N3-C4-C5	6.08	131.06	126.80
26	LA	2020	A	N1-C6-N6	-6.08	114.95	118.60
26	LA	2064	C	N3-C2-O2	-6.08	117.64	121.90
26	LA	2255	G	C5-N7-C8	6.08	107.34	104.30
26	LA	2876	G	N9-C1'-C2'	-6.08	105.31	112.00
2	SA	251	G	N3-C4-C5	-6.08	125.56	128.60
2	SA	412	A	P-O5'-C5'	6.08	130.63	120.90
2	SA	939	G	O4'-C4'-C3'	6.08	110.97	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1227	A	C8-N9-C4	6.08	108.23	105.80
26	LA	625	G	C5-C6-O6	-6.08	124.95	128.60
26	LA	856	G	C5-C6-O6	6.08	132.25	128.60
26	LA	1178	C	C6-N1-C2	-6.08	117.87	120.30
26	LA	1458	U	C2-N1-C1'	6.08	125.00	117.70
26	LA	2488	G	P-O5'-C5'	-6.08	111.17	120.90
26	LA	2659	G	C4-N9-C1'	-6.08	118.59	126.50
26	LA	2785	C	C6-N1-C2	-6.08	117.87	120.30
2	SA	34	C	P-O3'-C3'	6.08	127.00	119.70
2	SA	450	G	N9-C1'-C2'	-6.08	105.31	112.00
2	SA	520	A	N1-C6-N6	6.08	122.25	118.60
2	SA	522	C	C5-C6-N1	6.08	124.04	121.00
2	SA	1092	A	C8-N9-C4	6.08	108.23	105.80
2	SA	1324	A	N1-C6-N6	-6.08	114.95	118.60
24	S3	104	VAL	CA-CB-CG2	-6.08	101.78	110.90
25	LB	88	C	C5-C6-N1	6.08	124.04	121.00
26	LA	358	U	C5'-C4'-O4'	6.08	116.40	109.10
26	LA	398	C	N3-C4-C5	-6.08	119.47	121.90
26	LA	490	C	C5-C4-N4	-6.08	115.94	120.20
26	LA	919	U	C2'-C3'-O3'	6.08	123.43	113.70
26	LA	972	A	N3-C4-N9	-6.08	122.54	127.40
26	LA	1151	A	O4'-C1'-N9	6.08	113.06	108.20
26	LA	1202	G	N9-C4-C5	6.08	107.83	105.40
26	LA	1369	G	C4-N9-C1'	6.08	134.41	126.50
26	LA	1742	U	N3-C4-O4	6.08	123.66	119.40
26	LA	1914	C	P-O5'-C5'	-6.08	111.17	120.90
26	LA	2711	A	C2-N3-C4	-6.08	107.56	110.60
26	LA	2777	G	C1'-O4'-C4'	6.08	114.77	109.90
50	LL	74	TYR	CD1-CG-CD2	-6.08	111.21	117.90
50	LL	78	THR	CA-CB-CG2	-6.08	103.89	112.40
2	SA	361	G	C4'-C3'-C2'	-6.08	96.52	102.60
2	SA	617	G	C8-N9-C4	-6.08	103.97	106.40
2	SA	1002	G	C4-C5-C6	-6.08	115.15	118.80
2	SA	1120	C	N3-C4-N4	6.08	122.26	118.00
26	LA	538	A	C2-N3-C4	-6.08	107.56	110.60
26	LA	2803	G	C2'-C3'-O3'	6.08	123.43	113.70
57	LS	27	ARG	NE-CZ-NH1	-6.08	117.26	120.30
2	SA	102	G	C5-C6-O6	-6.08	124.95	128.60
2	SA	109	A	P-O3'-C3'	-6.08	112.41	119.70
2	SA	391	G	N3-C4-C5	-6.08	125.56	128.60
2	SA	414	A	O4'-C1'-C2'	6.08	113.07	107.60
2	SA	729	A	C5'-C4'-O4'	6.08	116.39	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	S1	40	G	C2-N3-C4	6.08	114.94	111.90
25	LB	78	A	C1'-O4'-C4'	-6.08	105.04	109.90
26	LA	174	U	C6-N1-C2	6.08	124.65	121.00
26	LA	295	G	C5'-C4'-C3'	-6.08	106.27	116.00
26	LA	356	G	P-O5'-C5'	-6.08	111.17	120.90
26	LA	771	G	N9-C4-C5	6.08	107.83	105.40
26	LA	1292	G	N3-C2-N2	-6.08	115.64	119.90
26	LA	2016	U	P-O3'-C3'	-6.08	112.41	119.70
26	LA	2064	C	OP1-P-OP2	-6.08	110.48	119.60
26	LA	2747	G	C5-N7-C8	-6.08	101.26	104.30
2	SA	152	A	C5-C6-N6	6.08	128.56	123.70
2	SA	493	A	C5-C6-N6	-6.08	118.84	123.70
2	SA	568	G	C4-C5-C6	-6.08	115.15	118.80
2	SA	978	A	C5-N7-C8	-6.08	100.86	103.90
2	SA	983	A	N3-C4-C5	6.08	131.05	126.80
2	SA	1139	G	N1-C6-O6	6.08	123.55	119.90
2	SA	1206	G	O4'-C1'-C2'	6.08	113.07	107.60
21	SE	139	THR	CA-CB-CG2	-6.08	103.89	112.40
26	LA	467	G	C5-N7-C8	-6.08	101.26	104.30
26	LA	718	A	C3'-C2'-C1'	-6.08	96.64	101.50
26	LA	1538	G	C8-N9-C4	6.08	108.83	106.40
26	LA	2095	A	C2-N3-C4	6.08	113.64	110.60
26	LA	2270	A	P-O3'-C3'	-6.08	112.41	119.70
2	SA	371	A	C1'-O4'-C4'	-6.08	105.04	109.90
2	SA	802	A	C5-C6-N1	6.08	120.74	117.70
2	SA	816	A	C6-N1-C2	-6.08	114.95	118.60
2	SA	963	G	P-O3'-C3'	6.08	126.99	119.70
5	ST	28	ARG	NE-CZ-NH1	6.08	123.34	120.30
12	SL	8	ARG	NE-CZ-NH1	-6.08	117.26	120.30
25	LB	47	C	O4'-C1'-N1	6.08	113.06	108.20
25	LB	116	G	O4'-C1'-N9	6.08	113.06	108.20
26	LA	234	U	C5-C4-O4	-6.08	122.25	125.90
26	LA	622	G	C8-N9-C4	-6.08	103.97	106.40
26	LA	678	C	C2-N3-C4	-6.08	116.86	119.90
26	LA	1633	G	N3-C2-N2	6.08	124.15	119.90
26	LA	2019	A	N1-C2-N3	6.08	132.34	129.30
26	LA	2267	A	N7-C8-N9	-6.08	110.76	113.80
26	LA	2525	G	C4-C5-N7	-6.08	108.37	110.80
32	LY	12	GLY	O-C-N	-6.08	112.98	122.70
2	SA	203	G	C4-C5-N7	6.07	113.23	110.80
2	SA	1023	U	C5'-C4'-C3'	-6.07	106.28	116.00
2	SA	1050	G	C5'-C4'-C3'	6.07	125.72	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1167	A	P-O3'-C3'	6.07	126.99	119.70
2	SA	1321	U	C5'-C4'-C3'	6.07	125.72	116.00
2	SA	1427	C	C2'-C3'-O3'	6.07	123.42	113.70
2	SA	1491	G	C5-N7-C8	6.07	107.34	104.30
26	LA	1826	G	N3-C4-C5	-6.07	125.56	128.60
26	LA	1844	C	C5'-C4'-O4'	6.07	116.39	109.10
26	LA	2149	U	OP1-P-OP2	-6.07	110.49	119.60
26	LA	2317	A	C4'-C3'-C2'	-6.07	96.53	102.60
26	LA	2679	A	N3-C4-C5	6.07	131.05	126.80
26	LA	2880	C	C5-C6-N1	6.07	124.04	121.00
26	LA	2904	U	OP1-P-OP2	-6.07	110.49	119.60
2	SA	399	G	O4'-C1'-N9	6.07	113.06	108.20
2	SA	1174	G	C6-C5-N7	6.07	134.04	130.40
26	LA	191	A	O4'-C1'-N9	6.07	113.06	108.20
26	LA	1153	C	C5'-C4'-C3'	-6.07	106.28	116.00
26	LA	2150	C	C2-N1-C1'	6.07	125.48	118.80
26	LA	2777	G	C6-C5-N7	-6.07	126.76	130.40
44	LF	145	ASP	N-CA-CB	6.07	121.53	110.60
2	SA	359	G	C6-C5-N7	-6.07	126.76	130.40
2	SA	423	G	N3-C4-C5	-6.07	125.56	128.60
2	SA	582	C	N3-C2-O2	-6.07	117.65	121.90
2	SA	743	A	C4-C5-C6	6.07	120.03	117.00
2	SA	1058	G	P-O3'-C3'	-6.07	112.41	119.70
26	LA	568	U	N1-C2-N3	6.07	118.54	114.90
26	LA	882	G	N9-C4-C5	-6.07	102.97	105.40
26	LA	1247	A	C6-N1-C2	-6.07	114.96	118.60
26	LA	2325	G	P-O3'-C3'	6.07	126.99	119.70
26	LA	2433	A	C6-N1-C2	-6.07	114.96	118.60
2	SA	856	C	C4-C5-C6	6.07	120.43	117.40
2	SA	1043	G	N1-C6-O6	6.07	123.54	119.90
2	SA	1278	G	C4-C5-N7	6.07	113.23	110.80
6	SU	37	TYR	CZ-CE2-CD2	-6.07	114.34	119.80
19	SC	168	ARG	NE-CZ-NH1	6.07	123.33	120.30
24	S3	112	TYR	CA-CB-CG	-6.07	101.87	113.40
26	LA	210	C	P-O5'-C5'	6.07	130.61	120.90
26	LA	1484	U	N1-C2-N3	6.07	118.54	114.90
26	LA	2097	A	C6-N1-C2	-6.07	114.96	118.60
2	SA	353	A	C5-N7-C8	6.07	106.93	103.90
2	SA	810	C	C6-N1-C2	-6.07	117.87	120.30
2	SA	973	G	C4-C5-N7	-6.07	108.37	110.80
2	SA	1290	G	N1-C6-O6	6.07	123.54	119.90
2	SA	1300	G	OP1-P-O3'	6.07	118.55	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	100	U	N1-C2-N3	6.07	118.54	114.90
26	LA	375	G	C8-N9-C4	-6.07	103.97	106.40
26	LA	808	G	C6-N1-C2	-6.07	121.46	125.10
26	LA	1122	G	P-O3'-C3'	6.07	126.98	119.70
26	LA	2462	C	N1-C2-N3	6.07	123.45	119.20
26	LA	2583	G	O4'-C1'-C2'	6.07	113.06	107.60
2	SA	446	G	C4-C5-C6	-6.07	115.16	118.80
2	SA	745	G	C5-C6-O6	-6.07	124.96	128.60
2	SA	1006	G	C4-C5-N7	-6.07	108.37	110.80
4	S2	32	G	N3-C4-N9	-6.07	122.36	126.00
4	S2	41	C	N3-C4-N4	6.07	122.25	118.00
10	SJ	91	ASP	C-N-CA	6.07	136.86	121.70
26	LA	461	C	O4'-C1'-N1	6.07	113.05	108.20
26	LA	639	U	N3-C4-C5	-6.07	110.96	114.60
26	LA	881	G	N3-C2-N2	6.07	124.14	119.90
26	LA	1022	G	C6-N1-C2	-6.07	121.46	125.10
26	LA	1106	G	C5'-C4'-C3'	-6.07	106.30	116.00
26	LA	1730	C	O4'-C1'-N1	6.07	113.05	108.20
26	LA	1799	G	N1-C2-N2	-6.07	110.74	116.20
26	LA	2111	U	N1-C2-O2	-6.07	118.55	122.80
26	LA	2118	U	C6-N1-C1'	-6.07	112.71	121.20
26	LA	2325	G	OP1-P-OP2	-6.07	110.50	119.60
26	LA	2501	C	O3'-P-O5'	6.07	115.52	104.00
26	LA	2507	C	C6-N1-C2	-6.07	117.87	120.30
26	LA	2553	G	O4'-C1'-N9	6.07	113.05	108.20
26	LA	2666	C	C4-C5-C6	6.07	120.43	117.40
26	LA	2710	C	C5-C6-N1	-6.07	117.97	121.00
26	LA	2889	C	N3-C4-C5	-6.07	119.47	121.90
57	LS	91	ARG	NE-CZ-NH2	-6.07	117.27	120.30
2	SA	37	U	O4'-C1'-N1	6.06	113.05	108.20
25	LB	84	G	C5-C6-O6	-6.06	124.96	128.60
26	LA	672	C	C6-N1-C2	-6.06	117.88	120.30
26	LA	1031	G	C5'-C4'-O4'	6.06	116.38	109.10
26	LA	2339	C	C5-C6-N1	-6.06	117.97	121.00
26	LA	2353	G	C4-C5-C6	-6.06	115.16	118.80
26	LA	2477	U	C6-N1-C1'	-6.06	112.71	121.20
50	LL	100	VAL	CA-CB-CG2	-6.06	101.80	110.90
2	SA	21	G	N7-C8-N9	6.06	116.13	113.10
2	SA	28	A	C4'-C3'-C2'	-6.06	96.54	102.60
2	SA	292	G	C2-N3-C4	-6.06	108.87	111.90
2	SA	450	G	C4'-C3'-C2'	-6.06	96.54	102.60
2	SA	1209	C	C5'-C4'-O4'	6.06	116.37	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1536	C	C2-N3-C4	6.06	122.93	119.90
15	SO	21	THR	CA-CB-CG2	-6.06	103.91	112.40
26	LA	102	U	C2-N1-C1'	6.06	124.98	117.70
26	LA	241	A	O3'-P-O5'	-6.06	92.48	104.00
26	LA	430	A	C2'-C3'-O3'	6.06	123.40	113.70
26	LA	782	A	O4'-C1'-C2'	6.06	113.06	107.60
26	LA	1636	U	C6-N1-C2	-6.06	117.36	121.00
26	LA	1735	A	C6-N1-C2	-6.06	114.96	118.60
26	LA	1789	A	O3'-P-O5'	-6.06	92.48	104.00
26	LA	2708	G	P-O3'-C3'	-6.06	112.42	119.70
29	LV	62	VAL	CB-CA-C	-6.06	99.88	111.40
2	SA	11	G	N9-C4-C5	-6.06	102.98	105.40
2	SA	683	G	C4-C5-N7	6.06	113.22	110.80
2	SA	739	C	O4'-C1'-N1	6.06	113.05	108.20
2	SA	845	A	O4'-C1'-N9	6.06	113.05	108.20
2	SA	1021	A	C5-C6-N1	-6.06	114.67	117.70
25	LB	90	C	N3-C4-N4	6.06	122.24	118.00
26	LA	1741	C	C5'-C4'-C3'	-6.06	106.30	116.00
26	LA	2246	G	N1-C6-O6	6.06	123.54	119.90
2	SA	78	A	P-O5'-C5'	6.06	130.60	120.90
2	SA	330	C	C6-N1-C2	-6.06	117.88	120.30
2	SA	368	U	O3'-P-O5'	-6.06	92.49	104.00
2	SA	647	C	O4'-C4'-C3'	6.06	110.95	106.10
7	SG	95	ARG	NE-CZ-NH2	6.06	123.33	120.30
23	SR	31	TYR	CB-CG-CD2	-6.06	117.36	121.00
26	LA	305	C	O4'-C1'-N1	6.06	113.05	108.20
26	LA	382	A	C4-C5-N7	6.06	113.73	110.70
26	LA	467	G	C8-N9-C4	6.06	108.82	106.40
26	LA	584	C	P-O3'-C3'	6.06	126.97	119.70
26	LA	648	G	C6-C5-N7	-6.06	126.76	130.40
26	LA	973	A	C3'-C2'-C1'	6.06	106.35	101.50
26	LA	992	C	N1-C2-O2	6.06	122.53	118.90
26	LA	2683	C	C4-C5-C6	6.06	120.43	117.40
2	SA	66	A	O4'-C1'-N9	6.06	113.05	108.20
2	SA	747	A	O4'-C1'-N9	6.06	113.05	108.20
2	SA	1057	G	N1-C2-N3	6.06	127.53	123.90
2	SA	1057	G	C5-C6-O6	-6.06	124.97	128.60
2	SA	1181	G	N1-C2-N2	6.06	121.65	116.20
3	S1	56	G	N1-C2-N2	6.06	121.65	116.20
4	S2	5	G	P-O3'-C3'	-6.06	112.43	119.70
12	SL	120	ARG	NE-CZ-NH2	-6.06	117.27	120.30
18	SB	21	TYR	CA-CB-CG	6.06	124.91	113.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	40	U	C2-N3-C4	-6.06	123.36	127.00
26	LA	44	A	P-O3'-C3'	-6.06	112.43	119.70
26	LA	196	A	C8-N9-C1'	-6.06	116.80	127.70
26	LA	243	U	C6-N1-C2	-6.06	117.36	121.00
26	LA	425	G	N3-C4-N9	6.06	129.63	126.00
26	LA	879	G	N1-C2-N2	-6.06	110.75	116.20
26	LA	1424	G	C4-N9-C1'	-6.06	118.62	126.50
26	LA	1449	G	N9-C4-C5	-6.06	102.98	105.40
26	LA	1550	C	N3-C4-C5	6.06	124.32	121.90
26	LA	2061	G	P-O3'-C3'	6.06	126.97	119.70
26	LA	2189	U	O4'-C1'-N1	6.06	113.05	108.20
2	SA	1088	G	N9-C4-C5	-6.06	102.98	105.40
26	LA	30	G	N3-C2-N2	6.06	124.14	119.90
26	LA	237	C	C4'-C3'-C2'	-6.06	96.54	102.60
26	LA	1211	C	O4'-C1'-N1	6.06	113.05	108.20
26	LA	1499	C	N3-C4-N4	6.06	122.24	118.00
26	LA	1640	A	C3'-C2'-C1'	6.06	106.34	101.50
26	LA	2023	C	C5-C4-N4	-6.06	115.96	120.20
26	LA	2764	A	N9-C1'-C2'	-6.06	105.34	112.00
2	SA	143	A	O3'-P-O5'	-6.05	92.50	104.00
2	SA	386	C	C2-N1-C1'	-6.05	112.14	118.80
2	SA	434	U	C6-N1-C2	-6.05	117.37	121.00
2	SA	1096	C	C5'-C4'-O4'	6.05	116.37	109.10
2	SA	1261	A	C3'-C2'-C1'	6.05	106.34	101.50
2	SA	1281	C	C6-N1-C1'	6.05	128.07	120.80
2	SA	1290	G	OP1-P-OP2	-6.05	110.52	119.60
2	SA	1424	U	C5'-C4'-O4'	-6.05	101.83	109.10
2	SA	1457	G	N1-C6-O6	6.05	123.53	119.90
25	LB	25	U	N1-C2-N3	6.05	118.53	114.90
26	LA	13	A	C6-N1-C2	6.05	122.23	118.60
26	LA	136	G	C6-C5-N7	-6.05	126.77	130.40
26	LA	175	G	O4'-C1'-N9	6.05	113.04	108.20
26	LA	198	C	P-O3'-C3'	-6.05	112.44	119.70
26	LA	713	G	C4'-C3'-C2'	-6.05	96.55	102.60
26	LA	764	A	N1-C6-N6	-6.05	114.97	118.60
26	LA	971	G	P-O5'-C5'	6.05	130.59	120.90
26	LA	1573	G	N7-C8-N9	6.05	116.13	113.10
26	LA	1666	G	O3'-P-O5'	6.05	115.50	104.00
26	LA	1858	A	C6-N1-C2	6.05	122.23	118.60
26	LA	2739	U	O5'-C5'-C4'	6.05	123.20	111.70
2	SA	232	G	O4'-C1'-N9	6.05	113.04	108.20
2	SA	712	A	C5-C6-N1	6.05	120.73	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	S1	51	C	P-O5'-C5'	6.05	130.58	120.90
4	S2	35	C	C5-C4-N4	-6.05	115.96	120.20
8	SH	76	ARG	NH1-CZ-NH2	-6.05	112.74	119.40
26	LA	1304	A	OP1-P-OP2	-6.05	110.52	119.60
26	LA	1631	G	N3-C4-N9	-6.05	122.37	126.00
26	LA	1723	G	C2'-C3'-O3'	6.05	123.39	113.70
26	LA	2600	A	C6-C5-N7	-6.05	128.06	132.30
26	LA	2773	C	N3-C4-N4	6.05	122.24	118.00
2	SA	236	A	P-O3'-C3'	-6.05	112.44	119.70
2	SA	262	A	C1'-O4'-C4'	-6.05	105.06	109.90
2	SA	355	C	N3-C4-N4	-6.05	113.76	118.00
2	SA	445	G	C2-N3-C4	6.05	114.92	111.90
2	SA	629	A	C5-C6-N6	-6.05	118.86	123.70
2	SA	678	U	C5'-C4'-C3'	6.05	125.68	116.00
2	SA	929	G	N1-C2-N3	6.05	127.53	123.90
2	SA	1406	U	C2-N3-C4	-6.05	123.37	127.00
26	LA	77	G	C8-N9-C4	6.05	108.82	106.40
26	LA	176	A	N3-C4-N9	-6.05	122.56	127.40
26	LA	1103	A	C5-C6-N6	6.05	128.54	123.70
26	LA	1177	G	C4'-C3'-C2'	-6.05	96.55	102.60
26	LA	1207	C	N1-C1'-C2'	-6.05	105.34	112.00
26	LA	1417	C	C5-C4-N4	-6.05	115.96	120.20
26	LA	1652	A	C5'-C4'-C3'	-6.05	106.32	116.00
26	LA	2531	A	N7-C8-N9	6.05	116.83	113.80
26	LA	2574	G	OP1-P-OP2	-6.05	110.52	119.60
28	LU	2	GLU	N-CA-CB	6.05	121.49	110.60
2	SA	334	C	N3-C4-C5	-6.05	119.48	121.90
2	SA	824	G	N3-C4-C5	-6.05	125.58	128.60
2	SA	886	G	N1-C6-O6	-6.05	116.27	119.90
18	SB	225	SER	N-CA-CB	6.05	119.58	110.50
26	LA	210	C	C4-C5-C6	-6.05	114.38	117.40
26	LA	250	G	C5'-C4'-O4'	6.05	116.36	109.10
26	LA	380	G	N9-C1'-C2'	-6.05	105.35	112.00
26	LA	727	A	N1-C6-N6	-6.05	114.97	118.60
26	LA	907	G	N9-C1'-C2'	-6.05	105.34	112.00
26	LA	1054	A	P-O5'-C5'	-6.05	111.22	120.90
26	LA	1146	C	O4'-C1'-N1	6.05	113.04	108.20
26	LA	1467	U	N3-C4-C5	-6.05	110.97	114.60
26	LA	1836	C	C5-C6-N1	6.05	124.03	121.00
26	LA	1987	A	N3-C4-C5	-6.05	122.56	126.80
26	LA	2232	C	N3-C4-C5	-6.05	119.48	121.90
26	LA	2560	A	O4'-C1'-N9	6.05	113.04	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2746	U	O4'-C1'-N1	6.05	113.04	108.20
38	LE	13	ARG	NE-CZ-NH2	-6.05	117.28	120.30
38	LE	128	ARG	NE-CZ-NH1	6.05	123.33	120.30
2	SA	124	C	O4'-C4'-C3'	6.05	110.94	106.10
2	SA	129	A	C8-N9-C4	6.05	108.22	105.80
2	SA	538	G	O4'-C1'-N9	6.05	113.04	108.20
2	SA	806	C	C3'-C2'-C1'	-6.05	96.66	101.50
2	SA	849	G	C5'-C4'-C3'	6.05	125.68	116.00
26	LA	418	C	C5'-C4'-C3'	-6.05	106.32	116.00
26	LA	643	A	N9-C1'-C2'	-6.05	105.35	112.00
26	LA	877	A	C2-N3-C4	-6.05	107.58	110.60
26	LA	1779	U	C1'-O4'-C4'	-6.05	105.06	109.90
26	LA	1912	A	N9-C4-C5	6.05	108.22	105.80
26	LA	2709	G	C5-C6-O6	-6.05	124.97	128.60
49	LK	111	THR	N-CA-CB	6.05	121.79	110.30
2	SA	122	G	C1'-O4'-C4'	-6.05	105.06	109.90
2	SA	760	G	C5-N7-C8	6.05	107.32	104.30
2	SA	1498	U	C5'-C4'-C3'	-6.05	106.32	116.00
25	LB	33	G	C4-C5-C6	6.05	122.43	118.80
25	LB	118	C	N1-C2-O2	-6.05	115.27	118.90
26	LA	881	G	C5-C6-O6	-6.05	124.97	128.60
26	LA	1024	G	N1-C6-O6	-6.05	116.27	119.90
26	LA	1088	A	P-O5'-C5'	6.05	130.58	120.90
26	LA	1110	G	C5-C6-O6	-6.05	124.97	128.60
26	LA	1144	A	C5'-C4'-O4'	-6.05	101.84	109.10
26	LA	1343	G	O4'-C4'-C3'	6.05	110.94	106.10
26	LA	1502	A	N7-C8-N9	-6.05	110.78	113.80
26	LA	2790	U	N3-C4-O4	6.05	123.63	119.40
2	SA	364	A	N1-C6-N6	6.04	122.23	118.60
2	SA	1241	G	C5-N7-C8	-6.04	101.28	104.30
26	LA	718	A	C4-N9-C1'	6.04	137.18	126.30
26	LA	897	C	C5-C6-N1	-6.04	117.98	121.00
26	LA	1107	G	N1-C6-O6	-6.04	116.27	119.90
26	LA	1433	A	C5-N7-C8	6.04	106.92	103.90
2	SA	174	A	C4'-C3'-C2'	-6.04	96.56	102.60
2	SA	410	G	N7-C8-N9	-6.04	110.08	113.10
2	SA	721	G	N3-C2-N2	6.04	124.13	119.90
2	SA	1349	A	C5'-C4'-C3'	-6.04	106.33	116.00
2	SA	1363	A	P-O3'-C3'	6.04	126.95	119.70
2	SA	1402	C	N3-C4-C5	6.04	124.32	121.90
4	S2	15	G	O4'-C1'-N9	6.04	113.03	108.20
4	S2	46	G	N1-C6-O6	6.04	123.53	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	74	A	C5'-C4'-C3'	-6.04	106.33	116.00
19	SC	32	LEU	O-C-N	-6.04	113.03	122.70
25	LB	107	G	C5-C6-O6	-6.04	124.97	128.60
26	LA	443	A	C4-C5-N7	6.04	113.72	110.70
26	LA	896	A	C2-N3-C4	6.04	113.62	110.60
26	LA	1428	C	P-O5'-C5'	6.04	130.57	120.90
26	LA	1995	U	N3-C4-O4	6.04	123.63	119.40
26	LA	2439	A	C6-N1-C2	6.04	122.23	118.60
26	LA	2495	G	P-O5'-C5'	6.04	130.57	120.90
38	LE	68	PHE	CB-CG-CD2	-6.04	116.57	120.80
41	L5	41	ARG	NH1-CZ-NH2	-6.04	112.75	119.40
55	LQ	34	HIS	CA-CB-CG	6.04	123.87	113.60
2	SA	905	U	N3-C4-C5	6.04	118.22	114.60
2	SA	1200	C	C5-C6-N1	-6.04	117.98	121.00
2	SA	1270	G	C6-C5-N7	-6.04	126.78	130.40
26	LA	136	G	N3-C4-N9	6.04	129.62	126.00
26	LA	479	A	O4'-C1'-N9	-6.04	103.37	108.20
26	LA	733	G	N3-C2-N2	6.04	124.13	119.90
26	LA	843	G	N1-C6-O6	6.04	123.52	119.90
26	LA	997	G	O4'-C1'-N9	6.04	113.03	108.20
26	LA	1089	A	N7-C8-N9	6.04	116.82	113.80
26	LA	1834	U	OP1-P-OP2	-6.04	110.54	119.60
26	LA	2379	G	N7-C8-N9	6.04	116.12	113.10
26	LA	2540	C	C5'-C4'-O4'	6.04	116.35	109.10
26	LA	2576	G	C2-N3-C4	6.04	114.92	111.90
26	LA	2640	G	C6-C5-N7	-6.04	126.78	130.40
2	SA	735	C	O4'-C1'-N1	6.04	113.03	108.20
2	SA	1063	C	C6-N1-C2	-6.04	117.88	120.30
4	S2	53	G	N9-C4-C5	-6.04	102.98	105.40
25	LB	116	G	C6-C5-N7	-6.04	126.78	130.40
26	LA	2380	C	N3-C2-O2	-6.04	117.67	121.90
54	LM	71	ARG	NE-CZ-NH1	6.04	123.32	120.30
7	SG	134	VAL	CG1-CB-CG2	-6.04	101.24	110.90
25	LB	41	G	N3-C2-N2	-6.04	115.67	119.90
26	LA	99	U	C3'-C2'-C1'	-6.04	96.67	101.50
26	LA	270	A	C6-C5-N7	-6.04	128.07	132.30
26	LA	412	A	N3-C4-C5	-6.04	122.57	126.80
26	LA	577	G	O4'-C1'-N9	6.04	113.03	108.20
26	LA	588	U	N1-C2-O2	-6.04	118.57	122.80
26	LA	1059	G	C6-N1-C2	6.04	128.72	125.10
26	LA	2626	C	P-O3'-C3'	-6.04	112.45	119.70
26	LA	2678	C	C5-C6-N1	-6.04	117.98	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2904	U	C3'-C2'-C1'	6.04	106.33	101.50
2	SA	761	G	N1-C2-N3	-6.04	120.28	123.90
2	SA	1515	G	O4'-C1'-N9	6.04	113.03	108.20
4	S2	20	G	C6-C5-N7	-6.04	126.78	130.40
26	LA	2791	G	C1'-O4'-C4'	-6.04	105.07	109.90
2	SA	303	A	C6-C5-N7	-6.04	128.07	132.30
2	SA	674	G	C3'-C2'-C1'	6.04	106.33	101.50
2	SA	838	G	O4'-C1'-C2'	6.04	113.03	107.60
2	SA	1417	G	C2'-C3'-O3'	6.04	123.36	113.70
3	S1	29	G	N7-C8-N9	6.04	116.12	113.10
4	S2	73	A	C1'-O4'-C4'	-6.04	105.07	109.90
26	LA	786	C	C5'-C4'-O4'	6.04	116.34	109.10
26	LA	799	G	C5-C6-O6	-6.04	124.98	128.60
26	LA	1519	G	C2-N3-C4	-6.04	108.88	111.90
26	LA	1645	G	N1-C6-O6	6.04	123.52	119.90
26	LA	1677	A	C5-C6-N6	-6.04	118.87	123.70
26	LA	2066	C	P-O5'-C5'	-6.04	111.24	120.90
26	LA	2305	U	C2-N3-C4	-6.04	123.38	127.00
46	LH	151	ARG	N-CA-CB	6.04	121.46	110.60
2	SA	38	G	C8-N9-C4	-6.03	103.99	106.40
2	SA	144	G	C3'-C2'-C1'	-6.03	96.67	101.50
2	SA	213	G	C4-N9-C1'	6.03	134.34	126.50
2	SA	846	G	N1-C2-N3	6.03	127.52	123.90
2	SA	1048	G	P-O3'-C3'	-6.03	112.46	119.70
2	SA	1053	G	O5'-P-OP2	-6.03	100.27	105.70
2	SA	1150	A	C3'-C2'-C1'	6.03	106.33	101.50
2	SA	1345	U	N3-C4-O4	6.03	123.62	119.40
24	S3	489	TYR	CB-CG-CD2	-6.03	117.38	121.00
25	LB	79	G	O4'-C1'-N9	6.03	113.03	108.20
26	LA	60	G	C5-N7-C8	-6.03	101.28	104.30
26	LA	90	U	C3'-C2'-C1'	6.03	106.33	101.50
26	LA	253	C	N3-C2-O2	-6.03	117.68	121.90
26	LA	379	G	C8-N9-C4	-6.03	103.99	106.40
26	LA	391	A	C5-C6-N6	-6.03	118.87	123.70
26	LA	656	G	N1-C2-N2	6.03	121.63	116.20
26	LA	958	U	N1-C2-N3	-6.03	111.28	114.90
26	LA	1656	C	C5-C6-N1	6.03	124.02	121.00
26	LA	1909	C	O4'-C1'-N1	6.03	113.03	108.20
26	LA	2201	G	C4-N9-C1'	-6.03	118.66	126.50
26	LA	2537	U	C2-N3-C4	-6.03	123.38	127.00
26	LA	2574	G	C5-C6-O6	-6.03	124.98	128.60
26	LA	2634	A	C8-N9-C4	-6.03	103.39	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	764	C	C2-N3-C4	-6.03	116.88	119.90
2	SA	1053	G	O4'-C1'-N9	6.03	113.03	108.20
2	SA	1077	G	N1-C2-N2	-6.03	110.77	116.20
2	SA	1194	U	C4-C5-C6	-6.03	116.08	119.70
26	LA	729	G	N9-C4-C5	-6.03	102.99	105.40
26	LA	1441	G	C5-C6-O6	6.03	132.22	128.60
26	LA	2739	U	C2-N1-C1'	-6.03	110.46	117.70
2	SA	643	C	C5-C4-N4	6.03	124.42	120.20
2	SA	678	U	N1-C2-O2	6.03	127.02	122.80
2	SA	852	G	N3-C4-C5	-6.03	125.58	128.60
2	SA	900	A	O5'-P-OP2	6.03	117.94	110.70
2	SA	915	A	C5-C6-N1	6.03	120.72	117.70
2	SA	1206	G	C8-N9-C4	-6.03	103.99	106.40
2	SA	1470	U	P-O5'-C5'	-6.03	111.25	120.90
5	ST	45	ALA	CB-CA-C	-6.03	101.05	110.10
26	LA	631	A	P-O3'-C3'	-6.03	112.46	119.70
26	LA	931	U	C6-N1-C1'	-6.03	112.76	121.20
26	LA	945	A	N9-C4-C5	6.03	108.21	105.80
26	LA	974	G	P-O5'-C5'	-6.03	111.25	120.90
26	LA	1024	G	P-O3'-C3'	6.03	126.94	119.70
26	LA	1045	C	C2-N3-C4	-6.03	116.89	119.90
26	LA	1622	G	O4'-C1'-N9	6.03	113.03	108.20
26	LA	1654	A	O3'-P-O5'	6.03	115.46	104.00
26	LA	2131	U	C3'-C2'-C1'	-6.03	96.67	101.50
26	LA	2356	U	C4-C5-C6	-6.03	116.08	119.70
35	L1	33	HIS	N-CA-C	-6.03	94.72	111.00
38	LE	33	ARG	NH1-CZ-NH2	6.03	126.03	119.40
2	SA	1371	G	N7-C8-N9	-6.03	110.09	113.10
26	LA	1101	U	O4'-C4'-C3'	-6.03	97.97	104.00
26	LA	1283	G	P-O5'-C5'	-6.03	111.25	120.90
26	LA	2533	U	C4'-C3'-C2'	-6.03	96.57	102.60
2	SA	433	G	N1-C2-N3	-6.03	120.28	123.90
2	SA	656	G	N3-C2-N2	6.03	124.12	119.90
2	SA	843	U	N1-C1'-C2'	6.03	121.84	114.00
2	SA	1346	A	C6-N1-C2	6.03	122.22	118.60
4	S2	32	G	C2-N3-C4	6.03	114.91	111.90
26	LA	248	G	N1-C6-O6	6.03	123.52	119.90
26	LA	624	C	C2-N3-C4	-6.03	116.89	119.90
26	LA	1125	G	N1-C6-O6	6.03	123.52	119.90
26	LA	1139	G	C4-N9-C1'	-6.03	118.66	126.50
26	LA	1157	G	C8-N9-C1'	-6.03	119.16	127.00
26	LA	1221	C	N3-C4-C5	-6.03	119.49	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1250	G	P-O3'-C3'	-6.03	112.47	119.70
26	LA	1318	U	P-O5'-C5'	-6.03	111.25	120.90
26	LA	2155	U	C2'-C3'-O3'	6.03	123.34	113.70
2	SA	198	G	C5-N7-C8	6.03	107.31	104.30
2	SA	249	U	C4-C5-C6	-6.03	116.08	119.70
2	SA	392	C	O4'-C1'-N1	6.03	113.02	108.20
2	SA	460	A	C4'-C3'-C2'	-6.03	96.58	102.60
2	SA	1017	U	C4-C5-C6	-6.03	116.08	119.70
2	SA	1089	G	C4-C5-N7	-6.03	108.39	110.80
2	SA	1408	A	OP1-P-OP2	-6.03	110.56	119.60
2	SA	1441	A	N7-C8-N9	-6.03	110.79	113.80
2	SA	1519	A	OP1-P-OP2	-6.03	110.56	119.60
12	SL	82	ARG	NH1-CZ-NH2	-6.03	112.77	119.40
26	LA	388	G	O4'-C1'-C2'	6.03	113.02	107.60
26	LA	466	A	OP1-P-OP2	-6.03	110.56	119.60
26	LA	757	G	P-O5'-C5'	6.03	130.54	120.90
26	LA	1648	U	P-O5'-C5'	6.03	130.54	120.90
26	LA	1969	A	C5-C6-N1	6.03	120.71	117.70
26	LA	2084	C	C6-N1-C2	6.03	122.71	120.30
26	LA	2720	U	P-O5'-C5'	-6.03	111.26	120.90
26	LA	1372	U	C4'-C3'-C2'	-6.02	96.58	102.60
26	LA	1893	C	C1'-O4'-C4'	6.02	114.72	109.90
26	LA	2108	A	C5-C6-N1	6.02	120.71	117.70
26	LA	2543	G	N7-C8-N9	6.02	116.11	113.10
26	LA	2723	C	N3-C4-N4	6.02	122.22	118.00
2	SA	154	U	C5-C6-N1	-6.02	119.69	122.70
2	SA	843	U	C4-C5-C6	6.02	123.31	119.70
2	SA	1485	U	C4-C5-C6	6.02	123.31	119.70
4	S2	32	G	N3-C4-C5	-6.02	125.59	128.60
26	LA	142	A	C8-N9-C4	6.02	108.21	105.80
26	LA	310	A	C6-N1-C2	-6.02	114.99	118.60
26	LA	384	A	C6-C5-N7	6.02	136.52	132.30
26	LA	509	C	C2-N3-C4	-6.02	116.89	119.90
26	LA	826	U	C6-N1-C2	-6.02	117.39	121.00
26	LA	937	C	N1-C2-N3	6.02	123.42	119.20
26	LA	1465	G	C1'-O4'-C4'	-6.02	105.08	109.90
26	LA	1927	A	C2'-C3'-O3'	6.02	123.34	113.70
2	SA	591	U	C2-N3-C4	6.02	130.61	127.00
2	SA	651	C	C4-C5-C6	-6.02	114.39	117.40
26	LA	830	G	P-O3'-C3'	-6.02	112.47	119.70
26	LA	1372	U	C5'-C4'-C3'	-6.02	106.37	116.00
26	LA	1451	C	C5-C6-N1	-6.02	117.99	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2584	U	N3-C2-O2	-6.02	117.99	122.20
50	LL	44	TYR	CB-CG-CD2	-6.02	117.39	121.00
2	SA	750	C	C1'-O4'-C4'	-6.02	105.08	109.90
2	SA	1094	G	OP1-P-OP2	-6.02	110.57	119.60
12	SL	116	TYR	CA-CB-CG	6.02	124.84	113.40
25	LB	41	G	N3-C4-N9	-6.02	122.39	126.00
25	LB	107	G	C6-C5-N7	-6.02	126.79	130.40
26	LA	119	A	O4'-C1'-N9	6.02	113.02	108.20
26	LA	444	C	C2-N3-C4	-6.02	116.89	119.90
26	LA	1053	C	C5-C6-N1	6.02	124.01	121.00
26	LA	1182	G	C5-C6-N1	-6.02	108.49	111.50
26	LA	2739	U	N3-C2-O2	-6.02	117.99	122.20
26	LA	2831	G	O5'-C5'-C4'	-6.02	100.26	111.70
2	SA	688	G	C8-N9-C4	-6.02	103.99	106.40
3	S1	13	A	C5-C6-N1	6.02	120.71	117.70
23	SR	48	ALA	CB-CA-C	-6.02	101.07	110.10
26	LA	137	U	C4-C5-C6	-6.02	116.09	119.70
26	LA	557	C	C5'-C4'-C3'	6.02	125.63	116.00
26	LA	796	C	N1-C2-O2	-6.02	115.29	118.90
26	LA	848	C	P-O5'-C5'	-6.02	111.27	120.90
26	LA	861	A	OP2-P-O3'	6.02	118.44	105.20
26	LA	1707	G	O4'-C1'-N9	6.02	113.02	108.20
26	LA	1912	A	C5'-C4'-O4'	6.02	116.32	109.10
26	LA	2114	A	P-O5'-C5'	6.02	130.53	120.90
26	LA	2385	C	C4-C5-C6	-6.02	114.39	117.40
26	LA	2666	C	C6-N1-C1'	-6.02	113.58	120.80
26	LA	2822	G	N9-C1'-C2'	-6.02	105.38	112.00
26	LA	2826	A	P-O3'-C3'	6.02	126.92	119.70
26	LA	2851	A	OP1-P-OP2	-6.02	110.57	119.60
48	LN	55	MET	CG-SD-CE	6.02	109.83	100.20
2	SA	93	U	O4'-C1'-N1	6.02	113.01	108.20
2	SA	637	C	N3-C4-C5	-6.02	119.49	121.90
2	SA	1280	A	C4-C5-C6	-6.02	113.99	117.00
26	LA	1921	G	N7-C8-N9	-6.02	110.09	113.10
26	LA	2237	G	C8-N9-C4	-6.02	103.99	106.40
51	LI	89	LYS	C-N-CA	6.02	136.74	121.70
2	SA	16	A	C5-C6-N6	-6.01	118.89	123.70
2	SA	168	G	C6-N1-C2	-6.01	121.49	125.10
2	SA	386	C	C6-N1-C2	-6.01	117.89	120.30
2	SA	580	C	C5-C4-N4	-6.01	115.99	120.20
2	SA	638	U	OP1-P-OP2	-6.01	110.58	119.60
2	SA	1243	C	P-O3'-C3'	-6.01	112.48	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1366	C	O5'-P-OP2	-6.01	100.29	105.70
2	SA	1468	A	C1'-O4'-C4'	-6.01	105.09	109.90
2	SA	1509	C	N3-C4-C5	-6.01	119.49	121.90
19	SC	25	THR	N-CA-CB	6.01	121.73	110.30
26	LA	69	C	C1'-O4'-C4'	-6.01	105.09	109.90
26	LA	833	A	C8-N9-C4	-6.01	103.39	105.80
26	LA	938	G	N7-C8-N9	-6.01	110.09	113.10
26	LA	1741	C	O4'-C1'-N1	6.01	113.01	108.20
26	LA	2498	C	C2-N3-C4	-6.01	116.89	119.90
26	LA	2645	G	N3-C2-N2	6.01	124.11	119.90
38	LE	127	PHE	CB-CG-CD1	-6.01	116.59	120.80
2	SA	1056	U	C6-N1-C2	6.01	124.61	121.00
2	SA	1417	G	C5-C6-N1	-6.01	108.49	111.50
2	SA	1510	C	C5'-C4'-O4'	6.01	116.31	109.10
12	SL	74	GLN	N-CA-CB	6.01	121.42	110.60
26	LA	254	G	O4'-C4'-C3'	-6.01	97.99	104.00
26	LA	780	G	N3-C4-C5	-6.01	125.59	128.60
2	SA	159	G	C2-N3-C4	6.01	114.91	111.90
2	SA	197	A	C5'-C4'-C3'	-6.01	106.38	116.00
2	SA	1002	G	C5'-C4'-C3'	-6.01	106.38	116.00
14	SN	74	ARG	NH1-CZ-NH2	-6.01	112.79	119.40
26	LA	286	U	N3-C2-O2	6.01	126.41	122.20
26	LA	487	C	N3-C2-O2	-6.01	117.69	121.90
26	LA	773	U	N3-C4-C5	6.01	118.21	114.60
26	LA	991	C	N1-C2-O2	-6.01	115.29	118.90
26	LA	1598	A	C5'-C4'-C3'	-6.01	106.38	116.00
26	LA	1644	C	P-O3'-C3'	-6.01	112.48	119.70
26	LA	1759	A	C6-N1-C2	-6.01	114.99	118.60
26	LA	2468	A	C2-N3-C4	-6.01	107.59	110.60
58	LT	21	ARG	NE-CZ-NH1	6.01	123.31	120.30
2	SA	775	G	C4-C5-N7	-6.01	108.40	110.80
2	SA	913	A	C5'-C4'-O4'	6.01	116.31	109.10
2	SA	1142	G	C6-C5-N7	-6.01	126.80	130.40
4	S2	66	C	N3-C4-C5	6.01	124.30	121.90
25	LB	78	A	O4'-C1'-N9	6.01	113.01	108.20
26	LA	32	C	O4'-C1'-N1	6.01	113.01	108.20
26	LA	110	G	N7-C8-N9	6.01	116.11	113.10
26	LA	170	U	C5'-C4'-O4'	6.01	116.31	109.10
26	LA	364	C	C2'-C3'-O3'	6.01	123.32	113.70
26	LA	374	A	O4'-C1'-N9	6.01	113.01	108.20
26	LA	453	A	P-O3'-C3'	6.01	126.91	119.70
26	LA	598	U	O4'-C1'-N1	6.01	113.01	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1171	G	O4'-C1'-N9	6.01	113.01	108.20
26	LA	1709	U	N3-C2-O2	-6.01	117.99	122.20
26	LA	1733	G	N1-C2-N3	-6.01	120.29	123.90
26	LA	1826	G	O5'-P-OP2	6.01	117.91	110.70
26	LA	2388	A	C4'-C3'-C2'	-6.01	96.59	102.60
26	LA	2633	G	N1-C2-N3	6.01	127.51	123.90
2	SA	842	U	C3'-C2'-C1'	-6.01	96.69	101.50
2	SA	993	G	C8-N9-C1'	-6.01	119.19	127.00
4	S2	61	U	C1'-O4'-C4'	-6.01	105.09	109.90
26	LA	460	A	C5-C6-N6	-6.01	118.89	123.70
26	LA	782	A	P-O3'-C3'	6.01	126.91	119.70
26	LA	1723	G	N7-C8-N9	6.01	116.10	113.10
26	LA	2896	C	C5-C6-N1	6.01	124.00	121.00
55	LQ	13	ARG	NE-CZ-NH1	-6.01	117.30	120.30
2	SA	421	U	C4-C5-C6	6.01	123.30	119.70
2	SA	452	A	N9-C1'-C2'	-6.01	105.39	112.00
2	SA	636	U	N1-C2-O2	6.01	127.00	122.80
2	SA	742	G	C8-N9-C4	-6.01	104.00	106.40
2	SA	1044	A	O4'-C1'-C2'	-6.01	99.79	105.80
2	SA	1201	A	C5'-C4'-O4'	6.01	116.31	109.10
2	SA	1329	A	N9-C4-C5	-6.01	103.40	105.80
3	S1	42	U	N3-C2-O2	6.01	126.41	122.20
21	SE	163	ILE	CG1-CB-CG2	6.01	124.61	111.40
26	LA	88	G	C8-N9-C4	-6.01	104.00	106.40
26	LA	274	C	N1-C2-N3	6.01	123.41	119.20
26	LA	401	A	N1-C2-N3	6.01	132.30	129.30
26	LA	576	U	N1-C2-N3	6.01	118.50	114.90
26	LA	1104	C	O4'-C1'-N1	6.01	113.01	108.20
26	LA	1447	C	O4'-C1'-N1	6.01	113.00	108.20
26	LA	1449	G	C2-N3-C4	-6.01	108.90	111.90
26	LA	1473	G	C5-C6-O6	-6.01	125.00	128.60
26	LA	1595	C	C5-C6-N1	6.01	124.00	121.00
26	LA	1820	U	O4'-C1'-N1	6.01	113.00	108.20
26	LA	1891	G	N1-C6-O6	-6.01	116.30	119.90
26	LA	2052	A	O4'-C1'-N9	6.01	113.01	108.20
26	LA	2904	U	N1-C2-N3	6.01	118.50	114.90
43	L7	24	ARG	CD-NE-CZ	6.01	132.01	123.60
2	SA	281	G	C4-C5-N7	6.00	113.20	110.80
2	SA	327	A	N3-C4-N9	6.00	132.20	127.40
2	SA	333	U	N3-C4-C5	6.00	118.20	114.60
26	LA	131	A	N3-C4-C5	-6.00	122.60	126.80
26	LA	681	G	C3'-C2'-C1'	6.00	106.30	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1987	A	C6-C5-N7	-6.00	128.10	132.30
26	LA	2583	G	C8-N9-C4	6.00	108.80	106.40
26	LA	2724	U	O5'-P-OP1	-6.00	100.30	105.70
26	LA	2807	U	N1-C2-O2	6.00	127.00	122.80
2	SA	74	A	N1-C6-N6	6.00	122.20	118.60
2	SA	135	C	O4'-C1'-N1	6.00	113.00	108.20
2	SA	147	G	N3-C4-C5	6.00	131.60	128.60
2	SA	661	G	C5-C6-O6	-6.00	125.00	128.60
2	SA	892	A	N1-C6-N6	6.00	122.20	118.60
26	LA	253	C	OP1-P-OP2	-6.00	110.59	119.60
26	LA	558	U	O4'-C1'-N1	6.00	113.00	108.20
26	LA	1005	C	N1-C2-N3	6.00	123.40	119.20
26	LA	1197	G	N1-C6-O6	6.00	123.50	119.90
26	LA	2195	U	P-O3'-C3'	-6.00	112.50	119.70
26	LA	2353	G	C5'-C4'-C3'	6.00	125.61	116.00
26	LA	2390	U	C5'-C4'-O4'	6.00	116.30	109.10
2	SA	45	G	N1-C6-O6	6.00	123.50	119.90
2	SA	1075	U	C5'-C4'-C3'	-6.00	106.40	116.00
2	SA	1203	C	N3-C4-N4	6.00	122.20	118.00
2	SA	1225	A	N1-C6-N6	6.00	122.20	118.60
10	SJ	37	ARG	NE-CZ-NH2	6.00	123.30	120.30
25	LB	60	C	N3-C4-N4	-6.00	113.80	118.00
25	LB	87	U	C4'-C3'-C2'	6.00	108.60	102.60
25	LB	104	A	C1'-O4'-C4'	-6.00	105.10	109.90
26	LA	36	G	C5-C6-O6	6.00	132.20	128.60
26	LA	431	U	C2-N3-C4	6.00	130.60	127.00
26	LA	743	A	C4-C5-N7	6.00	113.70	110.70
26	LA	921	C	N1-C2-N3	6.00	123.40	119.20
26	LA	2178	C	N3-C4-N4	6.00	122.20	118.00
26	LA	2211	A	N9-C4-C5	-6.00	103.40	105.80
26	LA	2676	C	C4-C5-C6	6.00	120.40	117.40
26	LA	2800	A	OP1-P-OP2	-6.00	110.60	119.60
44	LF	188	MET	CG-SD-CE	6.00	109.80	100.20
2	SA	46	G	C6-N1-C2	-6.00	121.50	125.10
2	SA	674	G	P-O3'-C3'	-6.00	112.50	119.70
19	SC	36	PHE	CB-CG-CD2	6.00	125.00	120.80
26	LA	1101	U	P-O5'-C5'	6.00	130.50	120.90
26	LA	1968	G	O4'-C1'-N9	6.00	113.00	108.20
26	LA	2808	G	C5-C6-O6	-6.00	125.00	128.60
26	LA	2852	G	C5-C6-O6	-6.00	125.00	128.60
2	SA	91	U	C1'-O4'-C4'	-6.00	105.10	109.90
2	SA	279	A	N1-C2-N3	6.00	132.30	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	851	G	N3-C4-N9	-6.00	122.40	126.00
2	SA	943	U	O4'-C1'-N1	6.00	113.00	108.20
2	SA	1023	U	O4'-C1'-N1	6.00	113.00	108.20
2	SA	1069	C	O4'-C1'-N1	6.00	113.00	108.20
2	SA	1221	G	C5'-C4'-O4'	6.00	116.30	109.10
2	SA	1236	A	OP1-P-OP2	-6.00	110.60	119.60
2	SA	1286	U	C5'-C4'-O4'	6.00	116.30	109.10
7	SG	151	ALA	N-CA-CB	6.00	118.50	110.10
26	LA	15	G	N1-C2-N2	-6.00	110.80	116.20
26	LA	207	A	N1-C6-N6	-6.00	115.00	118.60
26	LA	618	G	C8-N9-C4	6.00	108.80	106.40
26	LA	799	G	C4'-C3'-C2'	-6.00	96.60	102.60
26	LA	1350	C	O4'-C1'-N1	6.00	113.00	108.20
26	LA	1616	A	N3-C4-C5	-6.00	122.60	126.80
26	LA	2360	G	C5-C6-O6	-6.00	125.00	128.60
27	LD	160	TYR	CB-CG-CD1	6.00	124.60	121.00
2	SA	95	C	N3-C4-C5	-6.00	119.50	121.90
2	SA	460	A	C6-C5-N7	6.00	136.50	132.30
2	SA	494	G	OP1-P-OP2	-6.00	110.60	119.60
2	SA	846	G	C6-N1-C2	-6.00	121.50	125.10
2	SA	1455	G	C5'-C4'-C3'	-6.00	106.41	116.00
11	SK	16	SER	N-CA-CB	6.00	119.50	110.50
26	LA	37	C	N1-C2-N3	6.00	123.40	119.20
26	LA	73	A	P-O5'-C5'	6.00	130.49	120.90
26	LA	820	A	C8-N9-C4	-6.00	103.40	105.80
26	LA	843	G	N3-C4-C5	-6.00	125.60	128.60
26	LA	931	U	P-O5'-C5'	-6.00	111.31	120.90
26	LA	1119	U	N3-C2-O2	-6.00	118.00	122.20
26	LA	1434	A	O4'-C1'-N9	6.00	113.00	108.20
26	LA	1759	A	C1'-O4'-C4'	-6.00	105.10	109.90
26	LA	2132	U	O5'-P-OP2	6.00	117.89	110.70
26	LA	2389	G	C4-C5-C6	6.00	122.40	118.80
26	LA	2628	C	C2-N3-C4	6.00	122.90	119.90
26	LA	2641	G	C4-C5-N7	-6.00	108.40	110.80
26	LA	2707	U	C3'-C2'-C1'	6.00	106.30	101.50
2	SA	162	A	P-O5'-C5'	6.00	130.49	120.90
2	SA	374	A	P-O3'-C3'	-6.00	112.51	119.70
2	SA	993	G	O4'-C1'-N9	6.00	113.00	108.20
2	SA	1018	G	C1'-O4'-C4'	-6.00	105.10	109.90
2	SA	1400	C	C5'-C4'-O4'	6.00	116.29	109.10
26	LA	450	G	C2-N3-C4	-6.00	108.90	111.90
26	LA	1502	A	N1-C6-N6	-6.00	115.00	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	35	G	C1'-O4'-C4'	-5.99	105.11	109.90
2	SA	84	U	N3-C4-C5	-5.99	111.00	114.60
2	SA	219	U	C6-N1-C2	-5.99	117.40	121.00
2	SA	244	U	P-O3'-C3'	-5.99	112.51	119.70
2	SA	244	U	N3-C4-O4	-5.99	115.20	119.40
2	SA	276	G	C4-C5-N7	5.99	113.20	110.80
2	SA	290	C	N1-C2-N3	5.99	123.40	119.20
20	SD	62	ARG	NH1-CZ-NH2	-5.99	112.81	119.40
26	LA	26	G	C5'-C4'-C3'	5.99	125.59	116.00
26	LA	37	C	C5-C4-N4	-5.99	116.00	120.20
26	LA	169	G	C4-C5-N7	-5.99	108.40	110.80
26	LA	1385	A	N9-C4-C5	5.99	108.20	105.80
26	LA	1434	A	C5'-C4'-C3'	5.99	125.59	116.00
26	LA	1613	G	C4-C5-C6	5.99	122.40	118.80
26	LA	1712	U	N1-C2-O2	5.99	127.00	122.80
26	LA	1740	G	O5'-C5'-C4'	-5.99	100.31	111.70
26	LA	2095	A	P-O5'-C5'	5.99	130.49	120.90
26	LA	2249	U	C2-N3-C4	5.99	130.60	127.00
26	LA	2404	U	N1-C2-N3	5.99	118.50	114.90
50	LL	74	TYR	CG-CD2-CE2	5.99	126.09	121.30
2	SA	548	G	C5-C6-N1	5.99	114.50	111.50
2	SA	730	G	C5'-C4'-C3'	-5.99	106.41	116.00
2	SA	746	A	C1'-O4'-C4'	-5.99	105.11	109.90
2	SA	1117	A	N1-C6-N6	-5.99	115.00	118.60
4	S2	10	G	C4-C5-N7	5.99	113.20	110.80
26	LA	638	G	N3-C4-C5	-5.99	125.60	128.60
26	LA	1680	U	N1-C2-N3	5.99	118.50	114.90
2	SA	100	G	C5'-C4'-C3'	-5.99	106.41	116.00
2	SA	440	C	C5-C4-N4	-5.99	116.01	120.20
2	SA	946	A	C1'-O4'-C4'	-5.99	105.11	109.90
2	SA	1098	C	O4'-C1'-N1	5.99	112.99	108.20
2	SA	1341	U	O4'-C1'-N1	5.99	112.99	108.20
2	SA	1497	G	C4'-C3'-C2'	-5.99	96.61	102.60
17	SQ	10	ARG	NE-CZ-NH1	5.99	123.30	120.30
25	LB	101	A	N1-C2-N3	-5.99	126.31	129.30
26	LA	198	C	C4-C5-C6	-5.99	114.41	117.40
26	LA	486	C	C6-N1-C1'	5.99	127.99	120.80
26	LA	844	A	C5-C6-N6	-5.99	118.91	123.70
26	LA	1140	C	C2-N3-C4	-5.99	116.90	119.90
26	LA	1216	G	P-O3'-C3'	-5.99	112.51	119.70
26	LA	1301	A	C3'-C2'-C1'	-5.99	96.71	101.50
26	LA	2064	C	N1-C2-O2	5.99	122.50	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	L1	37	ARG	NE-CZ-NH1	5.99	123.30	120.30
45	LG	166	ARG	NE-CZ-NH2	-5.99	117.31	120.30
53	LP	41	ALA	N-CA-CB	5.99	118.49	110.10
2	SA	61	G	O4'-C1'-N9	5.99	112.99	108.20
2	SA	693	G	C8-N9-C1'	-5.99	119.22	127.00
2	SA	806	C	OP1-P-OP2	-5.99	110.62	119.60
2	SA	966	G	C5-C6-N1	5.99	114.49	111.50
26	LA	272	A	O3'-P-O5'	-5.99	92.62	104.00
26	LA	663	G	N1-C6-O6	5.99	123.49	119.90
26	LA	842	U	O5'-P-OP2	-5.99	100.31	105.70
26	LA	1020	A	N1-C2-N3	5.99	132.29	129.30
26	LA	1430	G	C4'-C3'-C2'	-5.99	96.61	102.60
26	LA	1979	U	C2-N1-C1'	-5.99	110.51	117.70
26	LA	2067	G	P-O3'-C3'	-5.99	112.51	119.70
26	LA	2167	U	OP1-P-OP2	-5.99	110.62	119.60
26	LA	2216	G	C5-C6-O6	-5.99	125.01	128.60
26	LA	2681	C	C3'-C2'-C1'	-5.99	96.71	101.50
26	LA	2695	U	C2-N3-C4	5.99	130.59	127.00
26	LA	2747	G	N9-C1'-C2'	-5.99	105.41	112.00
40	L4	27	ARG	N-CA-CB	-5.99	99.82	110.60
2	SA	1100	C	OP1-P-OP2	-5.99	110.62	119.60
2	SA	1483	A	C5-C6-N6	-5.99	118.91	123.70
18	SB	29	PHE	CB-CG-CD1	-5.99	116.61	120.80
26	LA	1805	A	C6-C5-N7	-5.99	128.11	132.30
26	LA	2775	G	N3-C4-C5	5.99	131.59	128.60
2	SA	233	C	C2-N3-C4	-5.99	116.91	119.90
2	SA	762	U	N1-C1'-C2'	-5.99	105.42	112.00
2	SA	868	C	N1-C2-O2	5.99	122.49	118.90
2	SA	947	G	N1-C6-O6	5.99	123.49	119.90
2	SA	1223	C	C5-C6-N1	-5.99	118.01	121.00
2	SA	1337	G	N3-C4-C5	5.99	131.59	128.60
25	LB	74	U	C5-C6-N1	-5.99	119.71	122.70
26	LA	107	G	C4'-C3'-C2'	-5.99	96.61	102.60
26	LA	125	A	C1'-O4'-C4'	-5.99	105.11	109.90
26	LA	665	U	C3'-C2'-C1'	5.99	106.29	101.50
26	LA	806	C	P-O3'-C3'	-5.99	112.52	119.70
26	LA	975	A	C5-N7-C8	-5.99	100.91	103.90
26	LA	1158	C	C5-C6-N1	5.99	123.99	121.00
26	LA	1359	A	C8-N9-C4	-5.99	103.41	105.80
26	LA	1380	G	C6-N1-C2	-5.99	121.51	125.10
26	LA	1431	A	C5-N7-C8	-5.99	100.91	103.90
26	LA	1502	A	C5'-C4'-C3'	-5.99	106.42	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1890	A	C8-N9-C1'	5.99	138.47	127.70
26	LA	1911	U	O3'-P-O5'	5.99	115.37	104.00
26	LA	2282	G	N3-C4-C5	-5.99	125.61	128.60
26	LA	2342	C	C4-C5-C6	-5.99	114.41	117.40
26	LA	2493	U	O4'-C1'-N1	5.99	112.99	108.20
26	LA	2575	C	C4-C5-C6	-5.99	114.41	117.40
2	SA	810	C	O3'-P-O5'	5.98	115.37	104.00
2	SA	1284	C	C4'-C3'-C2'	-5.98	96.62	102.60
26	LA	371	A	N9-C4-C5	5.98	108.19	105.80
26	LA	487	C	C6-N1-C2	-5.98	117.91	120.30
26	LA	1047	G	N7-C8-N9	5.98	116.09	113.10
26	LA	1205	A	C4-C5-N7	5.98	113.69	110.70
26	LA	1306	C	C6-N1-C2	-5.98	117.91	120.30
26	LA	1613	G	N1-C6-O6	5.98	123.49	119.90
26	LA	1652	A	O4'-C1'-N9	5.98	112.99	108.20
26	LA	1989	G	C5'-C4'-C3'	5.98	125.57	116.00
26	LA	2085	U	C5'-C4'-O4'	5.98	116.28	109.10
26	LA	2259	U	C6-N1-C1'	5.98	129.58	121.20
26	LA	2405	G	C2-N3-C4	-5.98	108.91	111.90
2	SA	174	A	C5'-C4'-O4'	5.98	116.28	109.10
2	SA	529	G	C4-N9-C1'	5.98	134.28	126.50
2	SA	612	C	N1-C2-O2	-5.98	115.31	118.90
2	SA	789	U	C3'-C2'-C1'	5.98	106.29	101.50
2	SA	939	G	C5'-C4'-C3'	-5.98	106.43	116.00
2	SA	939	G	C6-C5-N7	-5.98	126.81	130.40
2	SA	1155	A	N3-C4-N9	-5.98	122.61	127.40
2	SA	1178	G	C1'-O4'-C4'	-5.98	105.11	109.90
2	SA	1229	A	N3-C4-C5	-5.98	122.61	126.80
2	SA	1305	G	C5-C6-O6	-5.98	125.01	128.60
26	LA	359	G	C1'-O4'-C4'	-5.98	105.11	109.90
26	LA	411	G	N3-C4-N9	5.98	129.59	126.00
26	LA	704	G	C4'-C3'-C2'	5.98	108.58	102.60
26	LA	1005	C	O4'-C1'-N1	5.98	112.99	108.20
26	LA	1096	A	O4'-C1'-N9	5.98	112.99	108.20
26	LA	1324	G	N1-C2-N3	5.98	127.49	123.90
26	LA	2166	U	N1-C2-O2	5.98	126.99	122.80
26	LA	2234	G	C4'-C3'-C2'	-5.98	96.62	102.60
26	LA	2455	G	C2-N3-C4	5.98	114.89	111.90
26	LA	2472	G	C4-N9-C1'	5.98	134.28	126.50
58	LT	5	PHE	CB-CG-CD1	-5.98	116.61	120.80
2	SA	68	G	C3'-C2'-C1'	-5.98	96.72	101.50
2	SA	391	G	N1-C2-N2	-5.98	110.82	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	563	A	C5-N7-C8	-5.98	100.91	103.90
2	SA	756	C	C6-N1-C1'	5.98	127.98	120.80
2	SA	873	A	C5-C6-N6	-5.98	118.92	123.70
2	SA	886	G	C6-C5-N7	-5.98	126.81	130.40
2	SA	1353	G	O4'-C4'-C3'	-5.98	98.02	104.00
26	LA	42	A	P-O3'-C3'	5.98	126.88	119.70
26	LA	176	A	N7-C8-N9	5.98	116.79	113.80
26	LA	582	A	OP1-P-OP2	-5.98	110.63	119.60
26	LA	762	U	C5-C4-O4	-5.98	122.31	125.90
26	LA	963	U	N3-C2-O2	-5.98	118.01	122.20
26	LA	1285	A	C4'-C3'-C2'	-5.98	96.62	102.60
26	LA	1292	G	C1'-O4'-C4'	-5.98	105.12	109.90
26	LA	1596	A	N3-C4-C5	-5.98	122.61	126.80
2	SA	174	A	C5'-C4'-C3'	-5.98	106.43	116.00
2	SA	496	A	N3-C4-N9	-5.98	122.62	127.40
2	SA	1048	G	N3-C2-N2	5.98	124.08	119.90
2	SA	1318	A	C4'-C3'-C2'	5.98	108.58	102.60
2	SA	1531	A	O4'-C1'-N9	5.98	112.98	108.20
26	LA	729	G	C1'-O4'-C4'	-5.98	105.12	109.90
26	LA	1620	G	C5-C6-O6	-5.98	125.01	128.60
26	LA	2222	C	C5'-C4'-C3'	-5.98	106.43	116.00
26	LA	2676	C	O4'-C1'-C2'	5.98	112.98	107.60
2	SA	97	G	N3-C4-N9	-5.98	122.41	126.00
2	SA	324	G	C5-C6-N1	5.98	114.49	111.50
2	SA	720	C	C6-N1-C1'	-5.98	113.63	120.80
2	SA	1092	A	C5-N7-C8	5.98	106.89	103.90
2	SA	1131	G	C3'-C2'-C1'	-5.98	96.72	101.50
15	SO	83	ARG	NE-CZ-NH1	-5.98	117.31	120.30
20	SD	20	LEU	CB-CG-CD2	5.98	121.16	111.00
23	SR	33	THR	CA-CB-CG2	-5.98	104.03	112.40
26	LA	128	C	C2-N3-C4	-5.98	116.91	119.90
26	LA	1426	G	O4'-C4'-C3'	-5.98	98.02	104.00
26	LA	1462	C	P-O3'-C3'	-5.98	112.53	119.70
26	LA	1545	A	C5-C6-N1	5.98	120.69	117.70
26	LA	1970	A	N7-C8-N9	5.98	116.79	113.80
26	LA	2293	G	C4-N9-C1'	-5.98	118.73	126.50
26	LA	2365	G	C5'-C4'-C3'	-5.98	106.44	116.00
33	LZ	26	ARG	NE-CZ-NH2	-5.98	117.31	120.30
39	L3	41	HIS	CA-CB-CG	-5.98	103.44	113.60
2	SA	88	U	N1-C2-N3	-5.98	111.31	114.90
2	SA	562	U	N3-C2-O2	5.98	126.38	122.20
2	SA	831	A	C2-N3-C4	5.98	113.59	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	965	U	C3'-C2'-C1'	5.98	106.28	101.50
2	SA	1054	C	C5-C4-N4	-5.98	116.02	120.20
2	SA	1349	A	C6-N1-C2	5.98	122.19	118.60
4	S2	4	G	N1-C6-O6	5.98	123.49	119.90
25	LB	113	C	C1'-O4'-C4'	-5.98	105.12	109.90
26	LA	107	G	N9-C1'-C2'	-5.98	105.43	112.00
26	LA	115	C	N3-C2-O2	-5.98	117.72	121.90
26	LA	1262	A	C2-N3-C4	-5.98	107.61	110.60
26	LA	2313	C	P-O3'-C3'	-5.98	112.53	119.70
26	LA	2416	C	N1-C2-N3	5.98	123.38	119.20
2	SA	406	G	C5-C6-O6	-5.97	125.02	128.60
2	SA	846	G	C5-C6-O6	-5.97	125.02	128.60
13	SM	44	ILE	C-N-CA	5.97	136.64	121.70
26	LA	572	A	N1-C6-N6	5.97	122.19	118.60
26	LA	1099	G	C5'-C4'-O4'	5.97	116.27	109.10
26	LA	1192	G	OP1-P-OP2	-5.97	110.64	119.60
26	LA	1675	C	N1-C2-O2	-5.97	115.31	118.90
26	LA	1721	G	C8-N9-C4	-5.97	104.01	106.40
26	LA	2017	U	N3-C4-O4	5.97	123.58	119.40
26	LA	2193	G	O4'-C1'-N9	5.97	112.98	108.20
26	LA	2380	C	OP2-P-O3'	5.97	118.34	105.20
33	LZ	58	ILE	CA-CB-CG1	5.97	122.35	111.00
2	SA	510	A	C4-C5-N7	-5.97	107.71	110.70
2	SA	771	G	C8-N9-C1'	-5.97	119.24	127.00
2	SA	959	A	N7-C8-N9	-5.97	110.81	113.80
2	SA	1148	U	P-O3'-C3'	5.97	126.87	119.70
25	LB	7	G	OP1-P-OP2	-5.97	110.64	119.60
25	LB	54	G	C8-N9-C4	5.97	108.79	106.40
26	LA	51	G	N9-C1'-C2'	-5.97	105.43	112.00
26	LA	916	G	N3-C4-C5	-5.97	125.61	128.60
26	LA	2346	A	O4'-C1'-N9	5.97	112.98	108.20
26	LA	2460	U	O4'-C1'-N1	5.97	112.98	108.20
26	LA	2472	G	C6-C5-N7	-5.97	126.82	130.40
26	LA	2576	G	C6-C5-N7	5.97	133.98	130.40
26	LA	2724	U	C2-N3-C4	-5.97	123.42	127.00
26	LA	2893	A	C3'-C2'-C1'	-5.97	96.72	101.50
2	SA	663	A	N3-C4-N9	-5.97	122.62	127.40
2	SA	955	U	C5-C4-O4	-5.97	122.32	125.90
2	SA	1311	A	C4-N9-C1'	-5.97	115.55	126.30
19	SC	164	THR	CA-CB-CG2	5.97	120.76	112.40
26	LA	371	A	C2-N3-C4	5.97	113.59	110.60
2	SA	229	U	O4'-C1'-N1	5.97	112.97	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	257	G	OP2-P-O3'	5.97	118.33	105.20
2	SA	548	G	P-O5'-C5'	5.97	130.45	120.90
26	LA	2	G	C8-N9-C4	5.97	108.79	106.40
26	LA	514	A	C4-C5-C6	-5.97	114.02	117.00
26	LA	683	U	O4'-C1'-N1	5.97	112.98	108.20
26	LA	940	G	C5-C6-O6	-5.97	125.02	128.60
26	LA	964	C	C6-N1-C2	-5.97	117.91	120.30
26	LA	1358	G	N3-C2-N2	5.97	124.08	119.90
26	LA	1807	G	C5'-C4'-C3'	5.97	125.55	116.00
26	LA	2186	G	C5-C6-O6	5.97	132.18	128.60
26	LA	2607	G	C8-N9-C4	-5.97	104.01	106.40
26	LA	2886	A	C4-C5-C6	5.97	119.98	117.00
37	LC	9	ARG	NE-CZ-NH1	5.97	123.28	120.30
2	SA	555	U	N3-C2-O2	5.97	126.38	122.20
2	SA	1187	G	C6-N1-C2	-5.97	121.52	125.10
2	SA	1379	G	C4'-C3'-C2'	-5.97	96.63	102.60
26	LA	1954	G	C6-N1-C2	-5.97	121.52	125.10
26	LA	2202	U	C5-C6-N1	-5.97	119.72	122.70
26	LA	2387	U	P-O3'-C3'	5.97	126.86	119.70
2	SA	617	G	N7-C8-N9	5.97	116.08	113.10
2	SA	654	G	C4-C5-N7	-5.97	108.41	110.80
2	SA	697	U	N1-C2-N3	5.97	118.48	114.90
2	SA	786	G	C5'-C4'-C3'	-5.97	106.45	116.00
2	SA	1031	C	OP1-P-OP2	-5.97	110.65	119.60
2	SA	1328	C	C6-N1-C2	-5.97	117.91	120.30
14	SN	58	ARG	CG-CD-NE	-5.97	99.27	111.80
18	SB	239	ALA	CA-C-O	5.97	132.63	120.10
26	LA	1202	G	C6-N1-C2	-5.97	121.52	125.10
26	LA	1495	A	N7-C8-N9	5.97	116.78	113.80
26	LA	1525	A	C1'-O4'-C4'	5.97	114.67	109.90
26	LA	1690	A	C6-C5-N7	-5.97	128.12	132.30
26	LA	2366	A	N1-C6-N6	-5.97	115.02	118.60
26	LA	2578	G	C2'-C3'-O3'	5.97	123.25	113.70
26	LA	2727	A	O4'-C1'-N9	5.97	112.97	108.20
2	SA	260	G	C5-C6-N1	5.96	114.48	111.50
2	SA	1225	A	P-O5'-C5'	5.96	130.44	120.90
2	SA	1361	G	O3'-P-O5'	-5.96	92.67	104.00
3	S1	45	G	N3-C4-N9	5.96	129.58	126.00
26	LA	396	G	N1-C2-N2	-5.96	110.83	116.20
26	LA	544	C	N1-C2-O2	5.96	122.48	118.90
26	LA	561	G	O4'-C4'-C3'	-5.96	98.04	104.00
26	LA	1147	A	O4'-C1'-N9	5.96	112.97	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1834	U	C5'-C4'-O4'	5.96	116.26	109.10
26	LA	1969	A	C4-C5-C6	-5.96	114.02	117.00
26	LA	2044	C	C5'-C4'-O4'	-5.96	101.94	109.10
26	LA	2078	C	O4'-C1'-N1	5.96	112.97	108.20
26	LA	2309	A	P-O3'-C3'	5.96	126.86	119.70
26	LA	2445	G	C6-N1-C2	-5.96	121.52	125.10
26	LA	2470	G	N3-C4-N9	-5.96	122.42	126.00
26	LA	2697	G	C2-N3-C4	-5.96	108.92	111.90
26	LA	2872	A	C5'-C4'-C3'	-5.96	106.46	116.00
2	SA	1005	A	C4-C5-C6	5.96	119.98	117.00
2	SA	1425	U	C5-C6-N1	5.96	125.68	122.70
26	LA	2118	U	O4'-C1'-C2'	-5.96	99.84	105.80
26	LA	2793	C	C5-C4-N4	-5.96	116.03	120.20
45	LG	77	LYS	C-N-CA	5.96	136.61	121.70
2	SA	176	C	N3-C2-O2	-5.96	117.73	121.90
2	SA	456	A	O4'-C1'-N9	5.96	112.97	108.20
2	SA	667	G	N9-C4-C5	-5.96	103.02	105.40
2	SA	795	C	OP1-P-OP2	-5.96	110.66	119.60
2	SA	1024	G	O4'-C1'-N9	5.96	112.97	108.20
2	SA	1162	C	N3-C4-C5	5.96	124.28	121.90
2	SA	1339	A	C8-N9-C4	5.96	108.19	105.80
2	SA	1396	A	C5-C6-N6	-5.96	118.93	123.70
7	SG	9	ARG	NE-CZ-NH1	5.96	123.28	120.30
26	LA	437	U	O4'-C1'-N1	5.96	112.97	108.20
26	LA	566	U	C4'-C3'-C2'	-5.96	96.64	102.60
26	LA	1419	A	C2-N3-C4	-5.96	107.62	110.60
26	LA	2148	G	O5'-P-OP1	-5.96	100.33	105.70
26	LA	2520	C	O4'-C1'-N1	5.96	112.97	108.20
27	LD	17	LYS	N-CA-CB	5.96	121.33	110.60
2	SA	465	A	C6-N1-C2	5.96	122.18	118.60
2	SA	673	A	P-O5'-C5'	5.96	130.44	120.90
26	LA	2239	G	C6-C5-N7	-5.96	126.82	130.40
26	LA	2524	G	C4-C5-C6	-5.96	115.22	118.80
58	LT	4	VAL	O-C-N	-5.96	113.16	122.70
2	SA	5	U	O4'-C1'-N1	5.96	112.97	108.20
2	SA	623	C	N3-C4-C5	5.96	124.28	121.90
2	SA	764	C	C1'-O4'-C4'	-5.96	105.13	109.90
2	SA	1531	A	C6-C5-N7	-5.96	128.13	132.30
26	LA	954	G	N1-C2-N3	5.96	127.47	123.90
26	LA	1161	C	C5'-C4'-O4'	5.96	116.25	109.10
26	LA	1437	C	O4'-C1'-N1	5.96	112.97	108.20
26	LA	2088	A	N1-C6-N6	5.96	122.17	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2161	C	O4'-C1'-N1	5.96	112.97	108.20
26	LA	2186	G	N9-C4-C5	5.96	107.78	105.40
26	LA	2343	U	N1-C2-O2	5.96	126.97	122.80
26	LA	2692	G	C1'-O4'-C4'	-5.96	105.13	109.90
33	LZ	77	TYR	CB-CG-CD2	5.96	124.58	121.00
2	SA	7	A	P-O5'-C5'	5.96	130.43	120.90
2	SA	46	G	C2-N3-C4	-5.96	108.92	111.90
2	SA	99	C	N1-C2-N3	5.96	123.37	119.20
2	SA	454	G	OP1-P-OP2	-5.96	110.67	119.60
2	SA	616	G	P-O3'-C3'	5.96	126.85	119.70
2	SA	1373	G	N3-C2-N2	-5.96	115.73	119.90
25	LB	118	C	N1-C1'-C2'	-5.96	105.45	112.00
26	LA	115	C	N3-C4-N4	-5.96	113.83	118.00
26	LA	2017	U	C4'-C3'-C2'	-5.96	96.64	102.60
26	LA	2115	G	C8-N9-C1'	5.96	134.74	127.00
26	LA	2609	U	N1-C1'-C2'	5.96	121.75	114.00
53	LP	64	ARG	NE-CZ-NH1	5.96	123.28	120.30
2	SA	663	A	C6-N1-C2	-5.96	115.03	118.60
2	SA	671	G	C4-C5-N7	5.96	113.18	110.80
2	SA	880	C	O5'-C5'-C4'	-5.96	100.39	111.70
2	SA	1379	G	C5'-C4'-C3'	5.96	125.53	116.00
24	S3	100	ARG	NH1-CZ-NH2	5.96	125.95	119.40
26	LA	107	G	N1-C6-O6	-5.96	116.33	119.90
26	LA	168	G	C1'-O4'-C4'	-5.96	105.14	109.90
26	LA	279	A	C8-N9-C4	-5.96	103.42	105.80
26	LA	1168	G	O3'-P-O5'	-5.96	92.69	104.00
26	LA	1849	G	O3'-P-O5'	-5.96	92.69	104.00
2	SA	466	A	C5-C6-N6	-5.95	118.94	123.70
2	SA	490	C	C1'-O4'-C4'	-5.95	105.14	109.90
2	SA	933	G	N1-C2-N3	-5.95	120.33	123.90
2	SA	946	A	C4'-C3'-C2'	-5.95	96.65	102.60
3	S1	44	U	C4-C5-C6	-5.95	116.13	119.70
25	LB	22	U	C5-C4-O4	5.95	129.47	125.90
26	LA	908	C	C1'-O4'-C4'	-5.95	105.14	109.90
26	LA	1014	A	N7-C8-N9	5.95	116.78	113.80
26	LA	1790	C	C4-C5-C6	-5.95	114.42	117.40
26	LA	1856	U	C2'-C3'-O3'	5.95	123.23	113.70
26	LA	1979	U	N1-C2-O2	-5.95	118.63	122.80
26	LA	1989	G	N3-C4-C5	5.95	131.58	128.60
26	LA	2024	G	O4'-C1'-N9	5.95	112.96	108.20
26	LA	2151	U	N3-C4-O4	5.95	123.57	119.40
26	LA	2414	G	P-O3'-C3'	-5.95	112.56	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2819	G	C5-N7-C8	-5.95	101.32	104.30
2	SA	643	C	N3-C2-O2	-5.95	117.73	121.90
26	LA	1006	C	O4'-C1'-N1	5.95	112.96	108.20
26	LA	1042	G	O4'-C1'-N9	5.95	112.96	108.20
26	LA	1111	A	C2-N3-C4	5.95	113.58	110.60
26	LA	1676	A	C5-N7-C8	5.95	106.88	103.90
26	LA	1853	A	C3'-C2'-C1'	5.95	106.26	101.50
26	LA	1919	A	C2-N3-C4	-5.95	107.62	110.60
26	LA	2317	A	C2-N3-C4	5.95	113.58	110.60
26	LA	2427	C	C5-C4-N4	-5.95	116.03	120.20
26	LA	2445	G	N9-C4-C5	5.95	107.78	105.40
26	LA	2672	U	OP1-P-OP2	-5.95	110.67	119.60
2	SA	173	U	C1'-O4'-C4'	-5.95	105.14	109.90
2	SA	374	A	O4'-C1'-N9	5.95	112.96	108.20
2	SA	382	A	C3'-C2'-C1'	5.95	106.26	101.50
2	SA	418	C	C4-C5-C6	-5.95	114.42	117.40
2	SA	764	C	N3-C4-C5	5.95	124.28	121.90
2	SA	1290	G	P-O3'-C3'	-5.95	112.56	119.70
2	SA	1424	U	C5'-C4'-C3'	5.95	125.52	116.00
24	S3	364	GLN	O-C-N	-5.95	113.18	122.70
26	LA	1351	C	N3-C4-C5	5.95	124.28	121.90
26	LA	1471	G	N1-C6-O6	5.95	123.47	119.90
26	LA	1637	A	N3-C4-N9	-5.95	122.64	127.40
26	LA	2150	C	C6-N1-C1'	-5.95	113.66	120.80
26	LA	2191	A	N1-C6-N6	5.95	122.17	118.60
26	LA	2400	G	C4-C5-C6	-5.95	115.23	118.80
26	LA	2818	U	O4'-C1'-N1	5.95	112.96	108.20
2	SA	248	C	P-O5'-C5'	-5.95	111.38	120.90
2	SA	376	G	C4-N9-C1'	-5.95	118.77	126.50
2	SA	430	A	C5-N7-C8	-5.95	100.93	103.90
2	SA	482	A	O4'-C1'-N9	5.95	112.96	108.20
2	SA	665	A	N1-C2-N3	-5.95	126.33	129.30
2	SA	714	G	C6-N1-C2	-5.95	121.53	125.10
2	SA	721	G	N9-C1'-C2'	-5.95	105.46	112.00
26	LA	471	A	O4'-C1'-N9	5.95	112.96	108.20
26	LA	1216	G	C6-N1-C2	5.95	128.67	125.10
26	LA	1312	U	C2-N3-C4	-5.95	123.43	127.00
26	LA	2341	G	C5'-C4'-O4'	5.95	116.24	109.10
26	LA	2442	C	C5'-C4'-C3'	-5.95	106.48	116.00
2	SA	1185	G	C2-N3-C4	5.95	114.87	111.90
2	SA	1477	U	OP1-P-OP2	-5.95	110.68	119.60
16	SP	43	ALA	N-CA-CB	-5.95	101.77	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	259	G	C6-N1-C2	-5.95	121.53	125.10
26	LA	1117	C	C4'-C3'-C2'	-5.95	96.65	102.60
26	LA	1824	G	C4'-C3'-C2'	-5.95	96.65	102.60
26	LA	1880	U	P-O5'-C5'	5.95	130.41	120.90
26	LA	1904	G	C5-C6-N1	5.95	114.47	111.50
41	L5	43	THR	C-N-CA	5.95	136.57	121.70
2	SA	240	G	N1-C6-O6	5.95	123.47	119.90
2	SA	304	U	O4'-C1'-N1	5.95	112.96	108.20
2	SA	720	C	C5'-C4'-O4'	5.95	116.23	109.10
2	SA	1312	G	N3-C4-C5	-5.95	125.63	128.60
2	SA	1344	C	N3-C4-N4	-5.95	113.84	118.00
2	SA	1384	C	N3-C4-N4	-5.95	113.84	118.00
2	SA	1486	G	N7-C8-N9	5.95	116.07	113.10
26	LA	687	C	N3-C4-N4	5.95	122.16	118.00
26	LA	1014	A	N1-C6-N6	-5.95	115.03	118.60
26	LA	1261	C	C5-C6-N1	-5.95	118.03	121.00
26	LA	1435	G	C8-N9-C4	5.95	108.78	106.40
26	LA	1531	C	N1-C2-O2	5.95	122.47	118.90
26	LA	2124	G	N1-C2-N2	-5.95	110.85	116.20
26	LA	2261	C	C5'-C4'-O4'	5.95	116.23	109.10
26	LA	2399	G	C4'-C3'-C2'	-5.95	96.66	102.60
26	LA	2683	C	N1-C2-O2	-5.95	115.33	118.90
26	LA	2834	G	C5'-C4'-C3'	-5.95	106.49	116.00
2	SA	251	G	C5-C6-N1	-5.94	108.53	111.50
2	SA	375	U	C6-N1-C2	-5.94	117.43	121.00
2	SA	1402	C	C2-N1-C1'	5.94	125.34	118.80
2	SA	1489	G	O4'-C1'-N9	5.94	112.95	108.20
26	LA	181	A	C5-C6-N1	-5.94	114.73	117.70
26	LA	1094	U	P-O3'-C3'	-5.94	112.57	119.70
26	LA	1097	U	O5'-C5'-C4'	5.94	122.99	111.70
26	LA	1558	C	P-O3'-C3'	-5.94	112.57	119.70
26	LA	2096	C	O4'-C4'-C3'	-5.94	98.06	104.00
26	LA	2337	G	C6-N1-C2	5.94	128.67	125.10
26	LA	2494	G	C4-C5-N7	5.94	113.18	110.80
26	LA	2783	U	C5'-C4'-O4'	5.94	116.23	109.10
2	SA	363	A	C6-C5-N7	-5.94	128.14	132.30
2	SA	844	G	N1-C2-N2	5.94	121.55	116.20
13	SM	104	ASN	CB-CA-C	-5.94	98.51	110.40
25	LB	120	U	C5-C4-O4	5.94	129.47	125.90
26	LA	339	U	O4'-C1'-N1	5.94	112.95	108.20
26	LA	473	G	O4'-C1'-N9	5.94	112.95	108.20
26	LA	621	A	N1-C6-N6	5.94	122.17	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	641	U	O3'-P-O5'	5.94	115.29	104.00
26	LA	974	G	N9-C4-C5	5.94	107.78	105.40
26	LA	1096	A	N1-C6-N6	5.94	122.17	118.60
26	LA	1102	C	O4'-C1'-N1	5.94	112.95	108.20
26	LA	1119	U	C5'-C4'-C3'	-5.94	106.49	116.00
26	LA	1374	G	N3-C4-N9	5.94	129.57	126.00
26	LA	1397	U	C5-C4-O4	5.94	129.47	125.90
26	LA	1571	A	C5-C6-N6	-5.94	118.95	123.70
26	LA	1819	A	C5'-C4'-C3'	-5.94	106.49	116.00
26	LA	1836	C	C4'-C3'-C2'	-5.94	96.66	102.60
26	LA	2369	A	C6-C5-N7	5.94	136.46	132.30
26	LA	2563	U	C5'-C4'-O4'	5.94	116.23	109.10
26	LA	2633	G	O4'-C1'-N9	5.94	112.95	108.20
53	LP	91	ALA	CB-CA-C	5.94	119.01	110.10
2	SA	69	G	C4-C5-N7	-5.94	108.42	110.80
2	SA	712	A	C8-N9-C4	-5.94	103.42	105.80
2	SA	789	U	C4-C5-C6	-5.94	116.14	119.70
2	SA	897	C	O4'-C1'-N1	5.94	112.95	108.20
2	SA	1281	C	N3-C2-O2	-5.94	117.74	121.90
4	S2	21	U	N3-C4-C5	-5.94	111.04	114.60
21	SE	137	ARG	CG-CD-NE	-5.94	99.33	111.80
26	LA	342	A	C5-C6-N1	-5.94	114.73	117.70
26	LA	442	G	N3-C2-N2	5.94	124.06	119.90
26	LA	768	G	N9-C4-C5	-5.94	103.02	105.40
26	LA	842	U	N3-C4-C5	-5.94	111.04	114.60
26	LA	968	C	N1-C2-O2	5.94	122.46	118.90
26	LA	1180	U	P-O5'-C5'	5.94	130.41	120.90
26	LA	1297	C	N3-C4-C5	-5.94	119.52	121.90
26	LA	2055	C	C6-N1-C2	5.94	122.68	120.30
26	LA	2704	C	C6-N1-C2	-5.94	117.92	120.30
26	LA	2714	G	C4-C5-N7	5.94	113.18	110.80
50	LL	3	THR	CA-CB-OG1	5.94	121.47	109.00
2	SA	1408	A	C5-C6-N1	5.94	120.67	117.70
25	LB	100	G	C5-N7-C8	-5.94	101.33	104.30
26	LA	236	C	N1-C2-N3	5.94	123.36	119.20
26	LA	1022	G	C5-N7-C8	-5.94	101.33	104.30
26	LA	2615	U	C6-N1-C2	-5.94	117.44	121.00
26	LA	2645	G	C4-N9-C1'	-5.94	118.78	126.50
37	LC	1	MET	O-C-N	-5.94	113.20	122.70
1	SS	54	ARG	NH1-CZ-NH2	-5.94	112.87	119.40
2	SA	1029	U	C6-N1-C2	5.94	124.56	121.00
2	SA	1509	C	C4'-C3'-C2'	-5.94	96.66	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1542	A	O4'-C1'-N9	5.94	112.95	108.20
3	S1	38	G	C5-C6-N1	5.94	114.47	111.50
19	SC	183	TYR	N-CA-CB	-5.94	99.91	110.60
26	LA	90	U	N1-C2-N3	5.94	118.46	114.90
26	LA	673	C	O4'-C1'-C2'	5.94	112.94	107.60
26	LA	697	G	OP2-P-O3'	5.94	118.26	105.20
26	LA	857	G	C6-N1-C2	-5.94	121.54	125.10
26	LA	1356	G	C4-C5-N7	5.94	113.17	110.80
26	LA	1982	U	C5-C4-O4	5.94	129.46	125.90
26	LA	2268	A	OP1-P-O3'	5.94	118.26	105.20
26	LA	2641	G	P-O5'-C5'	-5.94	111.40	120.90
26	LA	2844	G	O5'-P-OP2	5.94	117.83	110.70
26	LA	2879	A	C6-C5-N7	-5.94	128.14	132.30
2	SA	444	G	C6-C5-N7	5.94	133.96	130.40
26	LA	147	C	O4'-C1'-N1	5.94	112.95	108.20
26	LA	1984	G	C5'-C4'-O4'	5.94	116.22	109.10
26	LA	2224	G	C2'-C3'-O3'	5.94	123.20	113.70
44	LF	17	THR	CA-CB-OG1	5.94	121.47	109.00
2	SA	484	G	C2-N3-C4	5.93	114.87	111.90
2	SA	1131	G	N1-C2-N2	-5.93	110.86	116.20
2	SA	1532	U	O5'-P-OP2	-5.93	100.36	105.70
20	SD	71	PHE	CB-CG-CD2	5.93	124.95	120.80
26	LA	550	C	O4'-C1'-N1	5.93	112.95	108.20
26	LA	943	A	N1-C2-N3	-5.93	126.33	129.30
26	LA	1191	G	N1-C6-O6	-5.93	116.34	119.90
26	LA	1260	A	N1-C6-N6	5.93	122.16	118.60
26	LA	1541	C	C5-C4-N4	5.93	124.35	120.20
26	LA	2131	U	O4'-C4'-C3'	-5.93	98.06	104.00
26	LA	2221	G	N7-C8-N9	-5.93	110.13	113.10
26	LA	2319	G	C4-C5-N7	-5.93	108.43	110.80
26	LA	2711	A	OP1-P-OP2	-5.93	110.70	119.60
2	SA	127	G	C8-N9-C1'	5.93	134.71	127.00
2	SA	615	G	C5-N7-C8	5.93	107.27	104.30
2	SA	667	G	N3-C2-N2	5.93	124.05	119.90
2	SA	1139	G	N1-C2-N3	-5.93	120.34	123.90
26	LA	92	U	C5'-C4'-C3'	5.93	125.49	116.00
26	LA	132	G	O4'-C1'-N9	5.93	112.95	108.20
26	LA	200	U	C5-C4-O4	-5.93	122.34	125.90
26	LA	579	G	C1'-O4'-C4'	-5.93	105.15	109.90
26	LA	634	C	C1'-O4'-C4'	-5.93	105.16	109.90
26	LA	1195	G	N9-C1'-C2'	-5.93	105.47	112.00
26	LA	1517	G	C5'-C4'-O4'	5.93	116.22	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1634	A	C5-N7-C8	-5.93	100.93	103.90
26	LA	1715	G	N1-C6-O6	-5.93	116.34	119.90
26	LA	1993	U	N3-C4-O4	5.93	123.55	119.40
26	LA	2006	C	C1'-O4'-C4'	-5.93	105.15	109.90
26	LA	2132	U	N3-C2-O2	-5.93	118.05	122.20
26	LA	2213	U	N3-C4-C5	5.93	118.16	114.60
26	LA	2363	G	C2-N3-C4	5.93	114.87	111.90
26	LA	2413	G	C8-N9-C4	5.93	108.77	106.40
26	LA	2520	C	C2-N3-C4	-5.93	116.93	119.90
26	LA	2728	U	N3-C4-O4	5.93	123.55	119.40
26	LA	2817	U	C4'-C3'-C2'	-5.93	96.67	102.60
26	LA	2830	C	C1'-O4'-C4'	-5.93	105.16	109.90
2	SA	376	G	O3'-P-O5'	5.93	115.27	104.00
2	SA	473	U	C2-N1-C1'	5.93	124.82	117.70
2	SA	653	U	O4'-C1'-N1	5.93	112.94	108.20
2	SA	676	A	P-O3'-C3'	-5.93	112.58	119.70
2	SA	1482	G	N1-C6-O6	5.93	123.46	119.90
26	LA	1794	A	C5-C6-N1	-5.93	114.73	117.70
26	LA	2175	C	C5-C4-N4	-5.93	116.05	120.20
2	SA	969	A	P-O5'-C5'	-5.93	111.41	120.90
2	SA	1031	C	C1'-O4'-C4'	-5.93	105.16	109.90
4	S2	61	U	P-O3'-C3'	-5.93	112.59	119.70
26	LA	432	A	O4'-C1'-N9	5.93	112.94	108.20
26	LA	552	U	OP1-P-OP2	-5.93	110.71	119.60
26	LA	629	G	C2-N3-C4	5.93	114.86	111.90
26	LA	1106	G	C5-C6-N1	5.93	114.47	111.50
26	LA	1404	C	P-O5'-C5'	-5.93	111.41	120.90
26	LA	2779	U	N1-C2-N3	5.93	118.46	114.90
26	LA	2846	G	C4'-C3'-C2'	-5.93	96.67	102.60
32	LY	40	ARG	NE-CZ-NH2	-5.93	117.33	120.30
2	SA	215	C	O5'-P-OP2	-5.93	100.36	105.70
2	SA	597	G	C8-N9-C4	-5.93	104.03	106.40
2	SA	889	A	OP1-P-OP2	-5.93	110.71	119.60
3	S1	56	G	N3-C2-N2	-5.93	115.75	119.90
4	S2	31	G	N1-C6-O6	5.93	123.46	119.90
10	SJ	71	LEU	CB-CA-C	-5.93	98.94	110.20
26	LA	264	C	N3-C4-N4	5.93	122.15	118.00
26	LA	1573	G	C5-C6-N1	5.93	114.46	111.50
26	LA	2450	A	N9-C1'-C2'	5.93	121.71	114.00
2	SA	149	A	P-O5'-C5'	-5.93	111.42	120.90
2	SA	219	U	N3-C4-O4	-5.93	115.25	119.40
2	SA	687	A	O5'-P-OP2	-5.93	100.36	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1094	G	C4-C5-C6	-5.93	115.24	118.80
2	SA	1276	G	C8-N9-C4	-5.93	104.03	106.40
2	SA	1513	A	O4'-C1'-N9	5.93	112.94	108.20
3	S1	43	U	C5'-C4'-C3'	5.93	125.48	116.00
4	S2	46	G	N3-C4-C5	-5.93	125.64	128.60
5	ST	31	ILE	CA-CB-CG1	-5.93	99.74	111.00
25	LB	101	A	C5-N7-C8	-5.93	100.94	103.90
26	LA	42	A	C6-N1-C2	-5.93	115.05	118.60
26	LA	224	U	N1-C2-N3	5.93	118.46	114.90
26	LA	337	C	C2-N3-C4	-5.93	116.94	119.90
26	LA	729	G	C5-C6-N1	5.93	114.46	111.50
26	LA	749	A	C4-C5-C6	5.93	119.96	117.00
26	LA	828	U	N1-C2-N3	5.93	118.45	114.90
26	LA	935	C	N1-C2-O2	5.93	122.46	118.90
26	LA	1445	G	N1-C2-N2	-5.93	110.86	116.20
26	LA	1876	A	C5-C6-N1	-5.93	114.74	117.70
26	LA	2686	G	C8-N9-C4	-5.93	104.03	106.40
47	LJ	2	LEU	CB-CG-CD1	-5.93	100.92	111.00
2	SA	97	G	N7-C8-N9	-5.92	110.14	113.10
2	SA	99	C	C2-N3-C4	-5.92	116.94	119.90
2	SA	228	A	C8-N9-C4	-5.92	103.43	105.80
2	SA	492	C	C6-N1-C2	-5.92	117.93	120.30
2	SA	570	G	N9-C4-C5	-5.92	103.03	105.40
2	SA	1004	A	C2'-C3'-O3'	5.92	123.18	113.70
2	SA	1447	A	C8-N9-C1'	5.92	138.36	127.70
24	S3	98	VAL	CA-CB-CG2	-5.92	102.01	110.90
26	LA	95	A	C8-N9-C4	5.92	108.17	105.80
26	LA	165	A	O4'-C1'-N9	5.92	112.94	108.20
26	LA	229	C	O4'-C1'-N1	5.92	112.94	108.20
26	LA	353	C	C5-C4-N4	-5.92	116.05	120.20
26	LA	469	G	C6-C5-N7	-5.92	126.84	130.40
26	LA	642	U	N3-C4-O4	5.92	123.55	119.40
26	LA	754	U	O3'-P-O5'	5.92	115.26	104.00
26	LA	1650	A	C5-C6-N1	-5.92	114.74	117.70
26	LA	1930	G	C6-N1-C2	5.92	128.65	125.10
26	LA	2009	A	C5-C6-N1	5.92	120.66	117.70
26	LA	2262	U	P-O5'-C5'	-5.92	111.42	120.90
26	LA	2291	U	C2'-C3'-O3'	5.92	123.18	113.70
24	S3	535	PHE	CB-CG-CD2	5.92	124.95	120.80
26	LA	627	A	C5-N7-C8	-5.92	100.94	103.90
26	LA	2151	U	C6-N1-C2	-5.92	117.45	121.00
26	LA	2247	A	OP1-P-OP2	-5.92	110.72	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	LS	101	ASP	CB-CG-OD2	5.92	123.63	118.30
2	SA	100	G	O4'-C1'-N9	5.92	112.94	108.20
2	SA	523	A	C4'-C3'-C2'	5.92	108.52	102.60
2	SA	542	G	C4-N9-C1'	-5.92	118.80	126.50
2	SA	753	A	C5'-C4'-O4'	5.92	116.21	109.10
2	SA	1067	A	N3-C4-C5	-5.92	122.66	126.80
26	LA	51	G	OP1-P-O3'	5.92	118.23	105.20
26	LA	403	U	N3-C2-O2	5.92	126.34	122.20
26	LA	694	U	O4'-C1'-N1	5.92	112.94	108.20
26	LA	710	U	C2-N3-C4	-5.92	123.45	127.00
26	LA	723	C	OP1-P-OP2	-5.92	110.72	119.60
26	LA	771	G	N1-C2-N3	5.92	127.45	123.90
26	LA	1171	G	N1-C2-N2	-5.92	110.87	116.20
26	LA	1912	A	C1'-O4'-C4'	-5.92	105.16	109.90
26	LA	2412	A	C4'-C3'-C2'	-5.92	96.68	102.60
26	LA	2626	C	N1-C2-O2	5.92	122.45	118.90
26	LA	2725	A	N1-C2-N3	-5.92	126.34	129.30
26	LA	2849	U	C5-C6-N1	-5.92	119.74	122.70
42	L6	9	ALA	N-CA-CB	-5.92	101.81	110.10
2	SA	136	C	C5-C4-N4	5.92	124.34	120.20
2	SA	738	C	C4-C5-C6	-5.92	114.44	117.40
3	S1	26	U	C6-N1-C1'	-5.92	112.91	121.20
26	LA	315	G	C4-C5-C6	-5.92	115.25	118.80
26	LA	953	G	C6-N1-C2	-5.92	121.55	125.10
26	LA	1964	G	C4-N9-C1'	-5.92	118.80	126.50
26	LA	2579	C	O3'-P-O5'	-5.92	92.75	104.00
2	SA	27	G	C8-N9-C1'	-5.92	119.31	127.00
2	SA	198	G	C5-C6-N1	5.92	114.46	111.50
2	SA	321	A	C2-N3-C4	5.92	113.56	110.60
2	SA	572	A	C8-N9-C4	5.92	108.17	105.80
2	SA	885	G	C2-N3-C4	-5.92	108.94	111.90
2	SA	1242	G	N3-C4-C5	-5.92	125.64	128.60
2	SA	1251	A	N1-C2-N3	5.92	132.26	129.30
4	S2	15	G	P-O3'-C3'	5.92	126.80	119.70
26	LA	789	A	C5'-C4'-O4'	5.92	116.20	109.10
26	LA	2080	A	C5-N7-C8	-5.92	100.94	103.90
26	LA	2138	G	O3'-P-O5'	-5.92	92.75	104.00
26	LA	2286	G	N9-C4-C5	-5.92	103.03	105.40
2	SA	558	G	N3-C4-N9	5.92	129.55	126.00
2	SA	591	U	O4'-C4'-C3'	5.92	110.83	106.10
2	SA	629	A	C4'-C3'-C2'	-5.92	96.68	102.60
2	SA	1081	A	O4'-C4'-C3'	5.92	110.83	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	35	C	O4'-C1'-N1	5.92	112.93	108.20
25	LB	76	G	N1-C2-N2	-5.92	110.88	116.20
25	LB	101	A	N7-C8-N9	5.92	116.76	113.80
26	LA	421	C	C5'-C4'-O4'	5.92	116.20	109.10
26	LA	681	G	C5-C6-N1	5.92	114.46	111.50
26	LA	800	A	O4'-C1'-N9	5.92	112.93	108.20
26	LA	1136	G	N3-C2-N2	5.92	124.04	119.90
26	LA	1253	A	C3'-C2'-C1'	-5.92	96.77	101.50
26	LA	1488	C	C6-N1-C1'	5.92	127.90	120.80
26	LA	2247	A	P-O3'-C3'	5.92	126.80	119.70
26	LA	2272	U	C4-C5-C6	-5.92	116.15	119.70
26	LA	2322	A	N1-C2-N3	-5.92	126.34	129.30
26	LA	2342	C	P-O5'-C5'	5.92	130.37	120.90
26	LA	2516	A	C6-N1-C2	-5.92	115.05	118.60
37	LC	78	PHE	CB-CG-CD1	-5.92	116.66	120.80
47	LJ	119	ALA	CB-CA-C	5.92	118.97	110.10
2	SA	227	G	C4-N9-C1'	-5.92	118.81	126.50
2	SA	556	C	C3'-C2'-C1'	5.92	106.23	101.50
2	SA	699	C	O5'-P-OP2	-5.92	100.38	105.70
24	S3	417	ILE	CA-CB-CG2	-5.92	99.07	110.90
26	LA	45	G	N7-C8-N9	-5.92	110.14	113.10
26	LA	136	G	C5-C6-O6	-5.92	125.05	128.60
26	LA	2009	A	C5-N7-C8	-5.92	100.94	103.90
26	LA	2585	U	C1'-O4'-C4'	5.92	114.63	109.90
26	LA	2602	A	N3-C4-N9	5.92	132.13	127.40
26	LA	2722	G	C4-C5-C6	-5.92	115.25	118.80
2	SA	557	G	C6-C5-N7	-5.91	126.85	130.40
2	SA	1033	G	C8-N9-C1'	5.91	134.69	127.00
2	SA	1233	G	C5-N7-C8	5.91	107.26	104.30
2	SA	1280	A	C8-N9-C4	-5.91	103.44	105.80
25	LB	117	G	C5-C6-O6	-5.91	125.05	128.60
26	LA	368	A	N1-C6-N6	5.91	122.15	118.60
26	LA	698	C	C6-N1-C2	-5.91	117.93	120.30
26	LA	1272	A	C3'-C2'-C1'	5.91	106.23	101.50
26	LA	1319	C	C5-C6-N1	5.91	123.96	121.00
26	LA	2067	G	N9-C1'-C2'	-5.91	105.50	112.00
26	LA	2223	G	C2-N3-C4	5.91	114.86	111.90
26	LA	2348	U	O4'-C1'-N1	5.91	112.93	108.20
26	LA	2393	U	P-O3'-C3'	-5.91	112.60	119.70
26	LA	2635	A	C8-N9-C4	5.91	108.17	105.80
47	LJ	93	ARG	NE-CZ-NH2	5.91	123.26	120.30
53	LP	112	TYR	CZ-CE2-CD2	-5.91	114.48	119.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	LQ	10	ARG	CG-CD-NE	-5.91	99.38	111.80
2	SA	667	G	N3-C4-C5	5.91	131.56	128.60
2	SA	838	G	C4-N9-C1'	-5.91	118.81	126.50
2	SA	1483	A	P-O5'-C5'	5.91	130.36	120.90
24	S3	69	ALA	N-CA-CB	-5.91	101.82	110.10
26	LA	1357	C	O4'-C1'-N1	5.91	112.93	108.20
26	LA	2492	U	N3-C2-O2	-5.91	118.06	122.20
46	LH	165	ASP	N-CA-CB	5.91	121.24	110.60
2	SA	30	U	O3'-P-O5'	-5.91	92.77	104.00
2	SA	267	C	N3-C2-O2	-5.91	117.76	121.90
2	SA	493	A	C4-C5-C6	-5.91	114.05	117.00
2	SA	569	C	N1-C2-N3	5.91	123.34	119.20
2	SA	878	A	O3'-P-O5'	-5.91	92.77	104.00
2	SA	1335	U	C1'-O4'-C4'	-5.91	105.17	109.90
24	S3	44	ASP	N-CA-CB	5.91	121.24	110.60
26	LA	437	U	C4-C5-C6	-5.91	116.15	119.70
26	LA	442	G	O4'-C1'-C2'	5.91	112.92	107.60
26	LA	588	U	C5-C4-O4	-5.91	122.35	125.90
26	LA	1421	G	O5'-P-OP2	-5.91	100.38	105.70
26	LA	1630	A	N3-C4-N9	-5.91	122.67	127.40
26	LA	1662	U	O4'-C1'-N1	5.91	112.93	108.20
26	LA	1786	A	N1-C6-N6	-5.91	115.05	118.60
26	LA	1889	A	OP1-P-O3'	5.91	118.20	105.20
26	LA	2287	A	N3-C4-N9	5.91	132.13	127.40
26	LA	2353	G	C1'-O4'-C4'	-5.91	105.17	109.90
26	LA	2470	G	N1-C6-O6	5.91	123.45	119.90
26	LA	2570	G	C5'-C4'-O4'	5.91	116.19	109.10
26	LA	2823	A	C5'-C4'-O4'	5.91	116.19	109.10
26	LA	2859	G	O4'-C1'-N9	5.91	112.93	108.20
50	LL	120	ARG	NE-CZ-NH1	5.91	123.25	120.30
2	SA	79	G	C5-N7-C8	5.91	107.25	104.30
2	SA	317	U	C6-N1-C2	-5.91	117.45	121.00
2	SA	1507	A	C4'-C3'-C2'	-5.91	96.69	102.60
25	LB	29	A	N1-C2-N3	-5.91	126.35	129.30
26	LA	468	G	N3-C4-C5	-5.91	125.64	128.60
26	LA	700	G	C4'-C3'-C2'	-5.91	96.69	102.60
26	LA	837	C	C3'-C2'-C1'	5.91	106.23	101.50
26	LA	939	G	P-O5'-C5'	-5.91	111.45	120.90
26	LA	961	C	O4'-C1'-N1	5.91	112.93	108.20
26	LA	1496	A	C5-C6-N1	-5.91	114.75	117.70
26	LA	2065	C	C5-C4-N4	-5.91	116.06	120.20
26	LA	2374	C	N3-C2-O2	-5.91	117.76	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2456	C	C5-C4-N4	-5.91	116.06	120.20
26	LA	2539	C	C4'-C3'-C2'	-5.91	96.69	102.60
38	LE	82	PHE	N-CA-CB	5.91	121.24	110.60
2	SA	191	G	O4'-C1'-N9	5.91	112.93	108.20
26	LA	561	G	O4'-C1'-N9	5.91	112.92	108.20
26	LA	621	A	OP1-P-OP2	-5.91	110.74	119.60
26	LA	959	A	C4-C5-C6	-5.91	114.05	117.00
26	LA	1693	U	C5'-C4'-O4'	5.91	116.19	109.10
26	LA	1963	U	P-O5'-C5'	5.91	130.35	120.90
26	LA	2761	A	C8-N9-C4	-5.91	103.44	105.80
47	LJ	137	ARG	NE-CZ-NH1	5.91	123.25	120.30
2	SA	46	G	N1-C2-N3	5.91	127.44	123.90
2	SA	1196	A	C4-C5-C6	-5.91	114.05	117.00
2	SA	1502	A	N9-C4-C5	-5.91	103.44	105.80
4	S2	21	U	P-O3'-C3'	-5.91	112.61	119.70
25	LB	39	A	C8-N9-C4	-5.91	103.44	105.80
26	LA	100	U	OP1-P-OP2	-5.91	110.74	119.60
26	LA	102	U	C5-C6-N1	5.91	125.65	122.70
26	LA	262	A	C6-C5-N7	-5.91	128.16	132.30
26	LA	389	G	C4-C5-N7	5.91	113.16	110.80
26	LA	813	U	O4'-C1'-N1	5.91	112.92	108.20
26	LA	928	A	N1-C6-N6	5.91	122.14	118.60
26	LA	1022	G	N3-C4-C5	5.91	131.55	128.60
26	LA	1041	G	C5-C6-N1	5.91	114.45	111.50
26	LA	1241	A	C4'-C3'-C2'	5.91	108.51	102.60
26	LA	1405	U	N3-C4-C5	-5.91	111.06	114.60
26	LA	2364	C	P-O3'-C3'	-5.91	112.61	119.70
26	LA	2368	C	C5-C6-N1	-5.91	118.05	121.00
28	LU	18	ARG	NE-CZ-NH2	-5.91	117.35	120.30
51	LI	35	LYS	O-C-N	-5.91	113.25	122.70
55	LQ	31	THR	CA-CB-OG1	5.91	121.40	109.00
2	SA	52	C	C4'-C3'-C2'	-5.90	96.70	102.60
2	SA	299	G	O4'-C1'-N9	5.90	112.92	108.20
2	SA	420	U	N1-C2-O2	-5.90	118.67	122.80
2	SA	624	C	C2-N3-C4	-5.90	116.95	119.90
2	SA	818	G	N3-C2-N2	-5.90	115.77	119.90
2	SA	1325	C	C4-C5-C6	5.90	120.35	117.40
26	LA	106	C	C6-N1-C1'	-5.90	113.72	120.80
26	LA	844	A	C4-C5-C6	-5.90	114.05	117.00
26	LA	947	A	C8-N9-C4	-5.90	103.44	105.80
26	LA	1028	A	N9-C4-C5	-5.90	103.44	105.80
26	LA	1190	G	C5-C6-O6	-5.90	125.06	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2217	G	C8-N9-C1'	5.90	134.68	127.00
2	SA	67	C	C5-C6-N1	5.90	123.95	121.00
2	SA	965	U	O4'-C1'-C2'	5.90	112.91	107.60
2	SA	1406	U	C1'-O4'-C4'	-5.90	105.18	109.90
2	SA	1419	G	C4-C5-N7	5.90	113.16	110.80
2	SA	1475	G	C5'-C4'-O4'	5.90	116.18	109.10
2	SA	1501	C	O4'-C1'-N1	5.90	112.92	108.20
4	S2	61	U	O4'-C1'-N1	5.90	112.92	108.20
26	LA	712	G	P-O3'-C3'	5.90	126.78	119.70
26	LA	1129	A	O4'-C1'-N9	5.90	112.92	108.20
26	LA	1733	G	C5'-C4'-O4'	5.90	116.18	109.10
26	LA	2319	G	N1-C6-O6	5.90	123.44	119.90
26	LA	2477	U	N3-C2-O2	-5.90	118.07	122.20
2	SA	3	A	C5'-C4'-O4'	5.90	116.18	109.10
2	SA	8	A	P-O5'-C5'	-5.90	111.46	120.90
2	SA	299	G	OP1-P-OP2	-5.90	110.75	119.60
2	SA	400	C	C5-C4-N4	-5.90	116.07	120.20
2	SA	1136	C	C5'-C4'-O4'	5.90	116.18	109.10
2	SA	1312	G	C5-C6-N1	5.90	114.45	111.50
2	SA	1386	G	C5-C6-O6	-5.90	125.06	128.60
25	LB	62	C	C4'-C3'-C2'	5.90	108.50	102.60
26	LA	90	U	C5'-C4'-O4'	5.90	116.18	109.10
26	LA	304	U	C2-N1-C1'	-5.90	110.62	117.70
26	LA	489	G	N1-C2-N3	5.90	127.44	123.90
26	LA	745	G	C6-C5-N7	-5.90	126.86	130.40
26	LA	763	G	C6-N1-C2	-5.90	121.56	125.10
26	LA	972	A	C8-N9-C4	-5.90	103.44	105.80
26	LA	1152	C	N3-C4-C5	5.90	124.26	121.90
26	LA	1510	G	C6-N1-C2	-5.90	121.56	125.10
26	LA	1596	A	O3'-P-O5'	5.90	115.21	104.00
26	LA	1651	G	C4-C5-N7	5.90	113.16	110.80
26	LA	1791	A	C5-N7-C8	-5.90	100.95	103.90
26	LA	2413	G	P-O3'-C3'	-5.90	112.62	119.70
26	LA	2732	G	C5-C6-N1	5.90	114.45	111.50
26	LA	2894	G	N7-C8-N9	5.90	116.05	113.10
2	SA	243	A	C5'-C4'-C3'	-5.90	106.56	116.00
2	SA	506	G	C5'-C4'-C3'	-5.90	106.56	116.00
2	SA	1287	A	N3-C4-C5	5.90	130.93	126.80
26	LA	125	A	P-O5'-C5'	5.90	130.34	120.90
26	LA	1202	G	C8-N9-C4	-5.90	104.04	106.40
26	LA	1349	C	C2-N1-C1'	5.90	125.29	118.80
26	LA	1500	G	C5'-C4'-O4'	5.90	116.18	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2148	G	N7-C8-N9	5.90	116.05	113.10
45	LG	27	VAL	CA-CB-CG1	5.90	119.75	110.90
2	SA	496	A	C4-C5-C6	-5.90	114.05	117.00
2	SA	941	G	C2-N3-C4	-5.90	108.95	111.90
2	SA	997	U	N3-C4-C5	-5.90	111.06	114.60
25	LB	106	G	C2-N3-C4	5.90	114.85	111.90
26	LA	220	G	C3'-C2'-C1'	5.90	106.22	101.50
26	LA	1060	U	C2-N3-C4	-5.90	123.46	127.00
26	LA	1339	G	OP1-P-OP2	-5.90	110.75	119.60
26	LA	1341	G	O4'-C4'-C3'	5.90	110.82	106.10
26	LA	1418	G	N3-C4-N9	5.90	129.54	126.00
26	LA	1649	G	C3'-C2'-C1'	-5.90	96.78	101.50
26	LA	2291	U	O4'-C4'-C3'	5.90	110.82	106.10
26	LA	2613	U	C5'-C4'-O4'	-5.90	102.02	109.10
26	LA	2830	C	N1-C2-O2	-5.90	115.36	118.90
27	LD	82	TYR	CB-CG-CD1	-5.90	117.46	121.00
54	LM	31	ARG	NE-CZ-NH2	-5.90	117.35	120.30
2	SA	871	U	O4'-C4'-C3'	5.90	110.82	106.10
2	SA	1427	C	N3-C4-C5	5.90	124.26	121.90
26	LA	729	G	N3-C2-N2	5.90	124.03	119.90
26	LA	2056	G	C5'-C4'-O4'	5.90	116.17	109.10
2	SA	412	A	N9-C4-C5	-5.89	103.44	105.80
2	SA	420	U	C6-N1-C2	5.89	124.54	121.00
2	SA	914	A	C4'-C3'-C2'	-5.89	96.70	102.60
4	S2	19	G	C4-C5-N7	5.89	113.16	110.80
10	SJ	57	VAL	CA-CB-CG1	5.89	119.74	110.90
24	S3	492	THR	O-C-N	-5.89	113.27	122.70
26	LA	251	A	OP1-P-OP2	-5.89	110.76	119.60
26	LA	516	C	C6-N1-C2	-5.89	117.94	120.30
26	LA	1161	C	N3-C4-N4	-5.89	113.87	118.00
26	LA	1420	A	C5-N7-C8	-5.89	100.95	103.90
26	LA	1907	G	C8-N9-C1'	5.89	134.66	127.00
26	LA	2105	U	C3'-C2'-C1'	-5.89	96.78	101.50
26	LA	2298	A	C6-N1-C2	-5.89	115.06	118.60
26	LA	2620	C	N3-C2-O2	-5.89	117.77	121.90
53	LP	94	TYR	CZ-CE2-CD2	-5.89	114.50	119.80
2	SA	46	G	C5'-C4'-O4'	5.89	116.17	109.10
2	SA	350	G	O5'-P-OP1	5.89	117.77	110.70
2	SA	361	G	P-O3'-C3'	-5.89	112.63	119.70
2	SA	567	G	C5-C6-N1	5.89	114.45	111.50
2	SA	742	G	N1-C2-N3	5.89	127.44	123.90
2	SA	968	A	N7-C8-N9	-5.89	110.85	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	73	A	N9-C4-C5	-5.89	103.44	105.80
21	SE	55	VAL	CA-CB-CG2	-5.89	102.06	110.90
22	SF	1	MET	CG-SD-CE	-5.89	90.77	100.20
26	LA	2	G	N1-C2-N3	-5.89	120.36	123.90
26	LA	22	C	C5-C6-N1	-5.89	118.05	121.00
26	LA	135	U	C1'-O4'-C4'	-5.89	105.19	109.90
26	LA	217	A	C2-N3-C4	5.89	113.55	110.60
26	LA	309	A	C4-C5-C6	5.89	119.95	117.00
26	LA	492	A	N1-C2-N3	5.89	132.25	129.30
26	LA	503	A	N1-C2-N3	5.89	132.25	129.30
26	LA	561	G	C5-C6-N1	5.89	114.45	111.50
26	LA	1690	A	C5-N7-C8	-5.89	100.95	103.90
26	LA	1965	C	N3-C2-O2	5.89	126.03	121.90
26	LA	2106	U	C5'-C4'-O4'	5.89	116.17	109.10
26	LA	2390	U	C2-N1-C1'	-5.89	110.63	117.70
26	LA	2726	A	O5'-P-OP1	-5.89	100.40	105.70
2	SA	614	C	C4'-C3'-C2'	-5.89	96.71	102.60
2	SA	726	C	N3-C4-C5	5.89	124.26	121.90
2	SA	887	G	C5-C6-O6	-5.89	125.06	128.60
2	SA	1290	G	C2-N3-C4	-5.89	108.95	111.90
4	S2	68	C	C4-C5-C6	5.89	120.34	117.40
26	LA	730	A	N3-C4-C5	-5.89	122.68	126.80
26	LA	2381	A	C5-N7-C8	-5.89	100.95	103.90
26	LA	2453	A	C4-C5-C6	5.89	119.95	117.00
1	SS	75	PRO	N-CA-C	5.89	127.41	112.10
2	SA	67	C	C6-N1-C2	-5.89	117.94	120.30
2	SA	580	C	O4'-C1'-N1	5.89	112.91	108.20
2	SA	857	C	N3-C4-N4	5.89	122.12	118.00
2	SA	876	C	C2-N3-C4	-5.89	116.95	119.90
2	SA	1022	A	P-O3'-C3'	-5.89	112.63	119.70
2	SA	1234	C	N1-C2-N3	5.89	123.32	119.20
2	SA	1282	C	C2-N1-C1'	5.89	125.28	118.80
2	SA	1498	U	N3-C4-C5	-5.89	111.07	114.60
3	S1	14	G	P-O5'-C5'	5.89	130.32	120.90
26	LA	29	U	C1'-O4'-C4'	-5.89	105.19	109.90
26	LA	38	A	C5'-C4'-C3'	-5.89	106.58	116.00
26	LA	518	G	C3'-C2'-C1'	5.89	106.21	101.50
26	LA	1300	G	C5'-C4'-C3'	-5.89	106.58	116.00
26	LA	1623	G	OP1-P-OP2	-5.89	110.77	119.60
26	LA	1629	U	OP1-P-OP2	-5.89	110.77	119.60
26	LA	1674	G	C5-N7-C8	5.89	107.25	104.30
26	LA	1775	U	C3'-C2'-C1'	5.89	106.21	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1891	G	C5'-C4'-O4'	5.89	116.17	109.10
26	LA	2451	A	N7-C8-N9	-5.89	110.86	113.80
28	LU	96	ILE	CB-CA-C	-5.89	99.82	111.60
2	SA	249	U	C5-C6-N1	5.89	125.64	122.70
26	LA	659	G	C4-C5-C6	-5.89	115.27	118.80
26	LA	1418	G	N3-C4-C5	-5.89	125.66	128.60
2	SA	350	G	C2-N3-C4	-5.89	108.96	111.90
2	SA	354	G	C6-N1-C2	-5.89	121.57	125.10
2	SA	975	A	P-O3'-C3'	5.89	126.76	119.70
2	SA	1255	G	C2-N3-C4	-5.89	108.96	111.90
2	SA	1270	G	N1-C2-N3	-5.89	120.37	123.90
2	SA	1521	C	P-O3'-C3'	-5.89	112.64	119.70
26	LA	1017	G	C2-N3-C4	-5.89	108.96	111.90
26	LA	1308	A	C5'-C4'-C3'	-5.89	106.58	116.00
26	LA	1357	C	N3-C4-C5	-5.89	119.55	121.90
26	LA	1411	U	C5'-C4'-O4'	5.89	116.17	109.10
26	LA	1514	G	N3-C2-N2	5.89	124.02	119.90
26	LA	1859	U	N1-C2-N3	-5.89	111.37	114.90
26	LA	2054	A	OP1-P-OP2	-5.89	110.77	119.60
26	LA	2106	U	C2-N3-C4	5.89	130.53	127.00
26	LA	2332	C	P-O5'-C5'	5.89	130.32	120.90
26	LA	2354	C	O4'-C1'-N1	5.89	112.91	108.20
26	LA	2852	G	O4'-C1'-N9	5.89	112.91	108.20
38	LE	180	VAL	CA-CB-CG1	5.89	119.73	110.90
2	SA	114	U	C4-C5-C6	5.88	123.23	119.70
2	SA	782	A	C5-C6-N6	5.88	128.41	123.70
2	SA	1047	G	C5'-C4'-C3'	5.88	125.41	116.00
2	SA	1315	U	N1-C1'-C2'	-5.88	105.53	112.00
2	SA	1447	A	C8-N9-C4	5.88	108.15	105.80
4	S2	67	C	P-O5'-C5'	5.88	130.31	120.90
10	SJ	45	ARG	NH1-CZ-NH2	5.88	125.87	119.40
26	LA	699	A	N9-C1'-C2'	-5.88	105.53	112.00
26	LA	748	G	OP2-P-O3'	5.88	118.14	105.20
26	LA	1078	U	C1'-O4'-C4'	-5.88	105.19	109.90
26	LA	1396	U	OP1-P-OP2	-5.88	110.77	119.60
26	LA	1474	U	N3-C4-O4	5.88	123.52	119.40
26	LA	1653	G	OP1-P-O3'	5.88	118.14	105.20
26	LA	2103	C	O4'-C1'-N1	5.88	112.91	108.20
28	LU	63	GLY	O-C-N	-5.88	113.28	122.70
2	SA	343	U	C3'-C2'-C1'	5.88	106.21	101.50
2	SA	878	A	O4'-C1'-N9	5.88	112.91	108.20
9	SI	98	ARG	NE-CZ-NH2	5.88	123.24	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	102	U	C4'-C3'-C2'	5.88	108.48	102.60
26	LA	1097	U	C2-N3-C4	-5.88	123.47	127.00
26	LA	1206	G	C4-C5-N7	-5.88	108.45	110.80
26	LA	1641	A	P-O5'-C5'	-5.88	111.49	120.90
2	SA	127	G	P-O3'-C3'	-5.88	112.64	119.70
2	SA	725	G	C4-C5-C6	-5.88	115.27	118.80
2	SA	852	G	C4-C5-C6	-5.88	115.27	118.80
2	SA	1053	G	C5-C6-O6	-5.88	125.07	128.60
26	LA	71	A	N1-C2-N3	5.88	132.24	129.30
26	LA	454	A	C6-C5-N7	5.88	136.42	132.30
26	LA	505	A	C4-C5-C6	-5.88	114.06	117.00
26	LA	774	G	N7-C8-N9	-5.88	110.16	113.10
26	LA	1238	G	C5-C6-O6	-5.88	125.07	128.60
26	LA	1265	A	C6-N1-C2	-5.88	115.07	118.60
26	LA	1912	A	C4-C5-C6	5.88	119.94	117.00
26	LA	2274	A	N3-C4-C5	-5.88	122.68	126.80
26	LA	2873	A	O4'-C1'-C2'	-5.88	99.92	105.80
44	LF	183	PHE	CB-CG-CD1	-5.88	116.68	120.80
2	SA	615	G	N3-C4-C5	-5.88	125.66	128.60
2	SA	716	A	C4'-C3'-C2'	-5.88	96.72	102.60
2	SA	1067	A	C8-N9-C4	5.88	108.15	105.80
26	LA	69	C	C5'-C4'-O4'	5.88	116.16	109.10
26	LA	397	U	N1-C2-N3	-5.88	111.37	114.90
26	LA	809	G	C2-N3-C4	5.88	114.84	111.90
26	LA	915	C	N3-C4-C5	-5.88	119.55	121.90
26	LA	939	G	OP1-P-OP2	-5.88	110.78	119.60
47	LJ	61	ARG	NE-CZ-NH1	5.88	123.24	120.30
2	SA	779	C	P-O3'-C3'	-5.88	112.64	119.70
26	LA	799	G	N1-C2-N3	-5.88	120.37	123.90
26	LA	1046	A	N1-C2-N3	5.88	132.24	129.30
26	LA	1491	G	N1-C2-N2	-5.88	110.91	116.20
26	LA	1886	U	N3-C4-O4	5.88	123.52	119.40
26	LA	1983	G	C8-N9-C4	-5.88	104.05	106.40
26	LA	1989	G	N1-C2-N3	-5.88	120.37	123.90
26	LA	2311	A	C8-N9-C4	-5.88	103.45	105.80
26	LA	2902	C	N3-C4-N4	-5.88	113.89	118.00
2	SA	243	A	C5-C6-N1	-5.88	114.76	117.70
2	SA	248	C	C2-N3-C4	5.88	122.84	119.90
2	SA	781	A	N7-C8-N9	5.88	116.74	113.80
2	SA	1277	C	N3-C2-O2	-5.88	117.79	121.90
2	SA	1286	U	C5'-C4'-C3'	5.88	125.40	116.00
2	SA	1363	A	C5-C6-N1	5.88	120.64	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1494	G	C6-N1-C2	5.88	128.62	125.10
2	SA	1495	U	C4'-C3'-C2'	-5.88	96.72	102.60
4	S2	36	A	C5-C6-N6	-5.88	119.00	123.70
10	SJ	101	SER	N-CA-CB	5.88	119.32	110.50
23	SR	2	ARG	NH1-CZ-NH2	-5.88	112.94	119.40
26	LA	90	U	C5'-C4'-C3'	-5.88	106.60	116.00
26	LA	703	U	N1-C2-N3	-5.88	111.37	114.90
26	LA	968	C	C6-N1-C2	5.88	122.65	120.30
26	LA	1372	U	O4'-C1'-N1	5.88	112.90	108.20
26	LA	1568	G	C5'-C4'-O4'	5.88	116.15	109.10
26	LA	1744	A	N9-C4-C5	-5.88	103.45	105.80
26	LA	1869	G	C5'-C4'-C3'	-5.88	106.60	116.00
26	LA	2816	G	C2-N3-C4	-5.88	108.96	111.90
36	L2	14	ALA	N-CA-CB	5.88	118.33	110.10
44	LF	145	ASP	CB-CG-OD2	-5.88	113.01	118.30
49	LK	45	THR	CA-CB-CG2	-5.88	104.17	112.40
2	SA	321	A	N3-C4-C5	-5.88	122.69	126.80
2	SA	384	G	C4'-C3'-C2'	-5.88	96.72	102.60
2	SA	568	G	C5-C6-N1	5.88	114.44	111.50
2	SA	588	G	C6-C5-N7	-5.88	126.88	130.40
2	SA	937	A	N7-C8-N9	-5.88	110.86	113.80
2	SA	1227	A	C4-C5-C6	5.88	119.94	117.00
21	SE	42	ASN	CB-CA-C	-5.88	98.65	110.40
26	LA	1	G	O4'-C1'-N9	5.88	112.90	108.20
26	LA	349	U	N3-C4-C5	-5.88	111.08	114.60
26	LA	368	A	C2'-C3'-O3'	5.88	123.10	113.70
26	LA	665	U	C5-C4-O4	-5.88	122.38	125.90
26	LA	2475	C	O4'-C1'-N1	5.88	112.90	108.20
2	SA	65	A	C6-N1-C2	-5.87	115.08	118.60
2	SA	563	A	C5'-C4'-O4'	5.87	116.15	109.10
2	SA	585	G	O4'-C1'-N9	5.87	112.90	108.20
2	SA	640	A	C5'-C4'-O4'	5.87	116.15	109.10
2	SA	819	A	P-O5'-C5'	5.87	130.30	120.90
2	SA	1400	C	C2-N1-C1'	5.87	125.26	118.80
2	SA	1409	C	C5'-C4'-C3'	-5.87	106.60	116.00
2	SA	1413	A	C4'-C3'-C2'	-5.87	96.73	102.60
2	SA	1496	C	C2'-C3'-O3'	5.87	123.10	113.70
9	SI	94	ARG	CD-NE-CZ	5.87	131.82	123.60
18	SB	184	ALA	N-CA-CB	5.87	118.32	110.10
25	LB	2	G	C6-C5-N7	-5.87	126.88	130.40
25	LB	87	U	P-O5'-C5'	5.87	130.30	120.90
26	LA	183	C	C4-C5-C6	5.87	120.34	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	913	U	OP1-P-OP2	-5.87	110.79	119.60
26	LA	915	C	C5'-C4'-O4'	5.87	116.15	109.10
26	LA	1193	G	C5-C6-N1	5.87	114.44	111.50
26	LA	1310	G	C2-N3-C4	5.87	114.84	111.90
26	LA	1725	U	O4'-C1'-N1	5.87	112.90	108.20
26	LA	2048	G	C5-N7-C8	-5.87	101.36	104.30
26	LA	2072	C	N3-C4-N4	5.87	122.11	118.00
26	LA	2524	G	N7-C8-N9	5.87	116.04	113.10
2	SA	298	A	P-O3'-C3'	-5.87	112.65	119.70
2	SA	335	C	C6-N1-C2	-5.87	117.95	120.30
2	SA	450	G	N1-C6-O6	5.87	123.42	119.90
2	SA	650	G	C5'-C4'-C3'	-5.87	106.61	116.00
2	SA	878	A	C5'-C4'-C3'	-5.87	106.61	116.00
2	SA	945	G	O4'-C1'-N9	5.87	112.90	108.20
2	SA	1020	G	N9-C4-C5	5.87	107.75	105.40
24	S3	19	ASP	CB-CG-OD2	5.87	123.58	118.30
25	LB	40	U	C5'-C4'-O4'	5.87	116.14	109.10
26	LA	21	A	N1-C2-N3	5.87	132.24	129.30
26	LA	444	C	C4-C5-C6	5.87	120.34	117.40
26	LA	1017	G	N3-C2-N2	-5.87	115.79	119.90
26	LA	2485	G	C6-N1-C2	-5.87	121.58	125.10
2	SA	447	G	N3-C4-C5	-5.87	125.67	128.60
2	SA	1431	A	C3'-C2'-C1'	5.87	106.20	101.50
26	LA	734	A	C4-C5-C6	5.87	119.94	117.00
26	LA	949	G	C2-N3-C4	-5.87	108.97	111.90
26	LA	1570	A	C2-N3-C4	5.87	113.53	110.60
26	LA	1828	G	O3'-P-O5'	-5.87	92.85	104.00
26	LA	2025	C	N3-C4-N4	5.87	122.11	118.00
26	LA	2330	G	C5-C6-N1	-5.87	108.56	111.50
27	LD	265	PHE	CB-CA-C	-5.87	98.66	110.40
2	SA	4	U	N3-C2-O2	-5.87	118.09	122.20
2	SA	103	U	C2-N3-C4	5.87	130.52	127.00
2	SA	251	G	OP1-P-O3'	5.87	118.11	105.20
2	SA	484	G	OP1-P-OP2	-5.87	110.80	119.60
2	SA	703	G	P-O3'-C3'	5.87	126.74	119.70
2	SA	1076	U	C5-C4-O4	5.87	129.42	125.90
2	SA	1162	C	C5'-C4'-O4'	5.87	116.14	109.10
25	LB	39	A	C6-N1-C2	-5.87	115.08	118.60
26	LA	389	G	C6-N1-C2	-5.87	121.58	125.10
26	LA	430	A	C6-N1-C2	-5.87	115.08	118.60
26	LA	463	G	C4-C5-N7	5.87	113.15	110.80
26	LA	507	A	C6-C5-N7	-5.87	128.19	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	857	G	C8-N9-C4	-5.87	104.05	106.40
26	LA	914	G	N3-C4-C5	-5.87	125.67	128.60
26	LA	976	G	C5-N7-C8	-5.87	101.37	104.30
26	LA	1308	A	P-O5'-C5'	-5.87	111.51	120.90
26	LA	1533	C	N3-C4-N4	-5.87	113.89	118.00
26	LA	2375	G	N1-C6-O6	5.87	123.42	119.90
26	LA	2437	G	N9-C4-C5	5.87	107.75	105.40
26	LA	2467	C	OP1-P-OP2	-5.87	110.80	119.60
26	LA	2477	U	C1'-O4'-C4'	-5.87	105.20	109.90
26	LA	2830	C	P-O3'-C3'	-5.87	112.66	119.70
44	LF	36	ALA	O-C-N	-5.87	113.31	122.70
2	SA	792	A	P-O3'-C3'	5.87	126.74	119.70
26	LA	148	U	P-O5'-C5'	5.87	130.29	120.90
26	LA	997	G	C1'-O4'-C4'	-5.87	105.21	109.90
32	LY	55	ASP	C-N-CA	5.87	136.37	121.70
2	SA	266	G	N1-C6-O6	5.87	123.42	119.90
2	SA	292	G	C5-N7-C8	-5.87	101.37	104.30
2	SA	822	U	N3-C4-C5	5.87	118.12	114.60
6	SU	16	ARG	CD-NE-CZ	5.87	131.81	123.60
26	LA	627	A	N1-C2-N3	-5.87	126.37	129.30
26	LA	934	U	N1-C2-O2	-5.87	118.69	122.80
26	LA	1101	U	C5'-C4'-C3'	5.87	125.39	116.00
26	LA	1663	G	C5-C6-O6	-5.87	125.08	128.60
26	LA	1927	A	C5-C6-N6	-5.87	119.01	123.70
26	LA	2284	A	O4'-C4'-C3'	-5.87	98.13	104.00
26	LA	2345	G	C4-C5-C6	5.87	122.32	118.80
26	LA	2581	G	C5-C6-O6	-5.87	125.08	128.60
2	SA	44	A	C6-N1-C2	5.86	122.12	118.60
2	SA	168	G	P-O3'-C3'	5.86	126.74	119.70
2	SA	190	A	C6-N1-C2	5.86	122.12	118.60
2	SA	340	U	C5'-C4'-C3'	5.86	125.38	116.00
2	SA	674	G	C5'-C4'-C3'	-5.86	106.62	116.00
2	SA	1501	C	O3'-P-O5'	-5.86	92.86	104.00
4	S2	69	C	C6-N1-C2	-5.86	117.95	120.30
26	LA	164	C	N3-C2-O2	-5.86	117.80	121.90
26	LA	198	C	P-O5'-C5'	5.86	130.28	120.90
26	LA	245	G	C4-C5-N7	-5.86	108.45	110.80
26	LA	628	G	N7-C8-N9	-5.86	110.17	113.10
26	LA	651	G	OP1-P-OP2	-5.86	110.80	119.60
26	LA	654	A	N1-C2-N3	-5.86	126.37	129.30
26	LA	1281	G	C6-C5-N7	-5.86	126.88	130.40
26	LA	1718	G	C1'-O4'-C4'	-5.86	105.21	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2368	C	C5'-C4'-C3'	-5.86	106.62	116.00
2	SA	717	U	C2'-C3'-O3'	5.86	123.08	113.70
2	SA	924	C	C5'-C4'-C3'	-5.86	106.62	116.00
2	SA	933	G	C5-C6-N1	5.86	114.43	111.50
2	SA	1479	C	C6-N1-C2	-5.86	117.95	120.30
2	SA	1534	A	C5-N7-C8	-5.86	100.97	103.90
22	SF	96	VAL	CA-CB-CG2	-5.86	102.11	110.90
26	LA	482	A	O4'-C1'-N9	-5.86	103.51	108.20
26	LA	829	A	C5-C6-N1	5.86	120.63	117.70
26	LA	1831	G	C4-C5-N7	-5.86	108.45	110.80
26	LA	1889	A	C8-N9-C4	-5.86	103.45	105.80
26	LA	1911	U	P-O5'-C5'	5.86	130.28	120.90
26	LA	2038	G	O4'-C1'-N9	5.86	112.89	108.20
26	LA	2258	C	C5'-C4'-C3'	5.86	125.38	116.00
26	LA	2271	G	C5-N7-C8	-5.86	101.37	104.30
26	LA	2465	C	O4'-C1'-N1	5.86	112.89	108.20
26	LA	2762	C	C5-C6-N1	-5.86	118.07	121.00
26	LA	2877	G	N3-C2-N2	5.86	124.00	119.90
53	LP	74	GLU	O-C-N	-5.86	113.32	122.70
2	SA	36	C	C6-N1-C2	5.86	122.64	120.30
2	SA	609	A	P-O3'-C3'	5.86	126.73	119.70
2	SA	628	G	C2-N3-C4	-5.86	108.97	111.90
2	SA	1122	U	O4'-C4'-C3'	-5.86	98.14	104.00
2	SA	1156	G	C5-C6-N1	-5.86	108.57	111.50
2	SA	1415	G	O4'-C1'-N9	5.86	112.89	108.20
7	SG	137	ARG	NE-CZ-NH2	-5.86	117.37	120.30
25	LB	2	G	C4'-C3'-C2'	-5.86	96.74	102.60
25	LB	33	G	N1-C2-N3	-5.86	120.38	123.90
26	LA	347	A	N7-C8-N9	5.86	116.73	113.80
26	LA	716	A	N1-C2-N3	-5.86	126.37	129.30
26	LA	1605	C	O4'-C1'-N1	5.86	112.89	108.20
26	LA	1703	G	N1-C2-N2	-5.86	110.93	116.20
26	LA	1963	U	C6-N1-C2	5.86	124.52	121.00
26	LA	2389	G	C1'-O4'-C4'	-5.86	105.21	109.90
26	LA	2721	A	N3-C4-N9	-5.86	122.71	127.40
26	LA	2833	U	C2-N3-C4	5.86	130.52	127.00
2	SA	356	A	C8-N9-C4	-5.86	103.46	105.80
2	SA	740	U	P-O3'-C3'	-5.86	112.67	119.70
2	SA	875	U	O4'-C1'-C2'	5.86	112.87	107.60
2	SA	934	C	O5'-C5'-C4'	5.86	122.83	111.70
26	LA	982	C	C5'-C4'-C3'	5.86	125.38	116.00
26	LA	1270	C	N3-C4-C5	5.86	124.24	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1777	U	N3-C2-O2	-5.86	118.10	122.20
26	LA	1918	A	N7-C8-N9	-5.86	110.87	113.80
26	LA	2216	G	N7-C8-N9	5.86	116.03	113.10
26	LA	2294	G	P-O5'-C5'	-5.86	111.53	120.90
26	LA	2795	C	C5-C6-N1	-5.86	118.07	121.00
35	L1	15	ARG	NE-CZ-NH1	5.86	123.23	120.30
2	SA	244	U	C2-N3-C4	-5.86	123.49	127.00
2	SA	393	A	C2-N3-C4	-5.86	107.67	110.60
2	SA	803	G	C5'-C4'-O4'	5.86	116.13	109.10
2	SA	935	A	C5-C6-N6	5.86	128.39	123.70
26	LA	105	C	P-O3'-C3'	5.86	126.73	119.70
26	LA	783	A	C5'-C4'-O4'	-5.86	102.07	109.10
26	LA	1421	G	N3-C2-N2	5.86	124.00	119.90
26	LA	1513	U	C5'-C4'-O4'	5.86	116.13	109.10
26	LA	1698	A	OP1-P-OP2	-5.86	110.81	119.60
26	LA	1894	C	N1-C2-O2	5.86	122.41	118.90
26	LA	2354	C	C5-C6-N1	5.86	123.93	121.00
37	LC	3	LYS	N-CA-CB	5.86	121.14	110.60
47	LJ	63	VAL	CG1-CB-CG2	-5.86	101.53	110.90
2	SA	82	G	C4-C5-N7	5.86	113.14	110.80
2	SA	247	G	C5-N7-C8	-5.86	101.37	104.30
2	SA	488	C	C5'-C4'-O4'	5.86	116.13	109.10
2	SA	691	G	C4-C5-N7	-5.86	108.46	110.80
2	SA	1088	G	C2-N3-C4	5.86	114.83	111.90
2	SA	1483	A	C2-N3-C4	-5.86	107.67	110.60
26	LA	411	G	C6-N1-C2	-5.86	121.59	125.10
26	LA	527	C	C6-N1-C1'	-5.86	113.77	120.80
26	LA	976	G	C8-N9-C4	-5.86	104.06	106.40
26	LA	1218	G	C4'-C3'-C2'	-5.86	96.74	102.60
26	LA	1248	G	C6-C5-N7	-5.86	126.89	130.40
26	LA	1798	U	O4'-C1'-N1	5.86	112.88	108.20
26	LA	1851	U	P-O5'-C5'	-5.86	111.53	120.90
26	LA	2027	G	N3-C2-N2	5.86	124.00	119.90
26	LA	2416	C	C5-C6-N1	-5.86	118.07	121.00
26	LA	2564	A	C4-C5-C6	-5.86	114.07	117.00
26	LA	2773	C	C4-C5-C6	5.86	120.33	117.40
26	LA	2837	A	O4'-C1'-C2'	5.86	112.87	107.60
27	LD	9	SER	N-CA-C	-5.86	95.19	111.00
26	LA	466	A	N9-C4-C5	5.85	108.14	105.80
26	LA	584	C	O4'-C1'-N1	5.85	112.88	108.20
26	LA	825	A	N9-C4-C5	5.85	108.14	105.80
26	LA	2238	G	O4'-C1'-N9	5.85	112.88	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	297	G	N3-C2-N2	5.85	124.00	119.90
2	SA	724	G	C5-C6-O6	5.85	132.11	128.60
2	SA	818	G	N1-C2-N2	5.85	121.47	116.20
2	SA	1051	C	P-O3'-C3'	-5.85	112.68	119.70
2	SA	1474	U	C3'-C2'-C1'	5.85	106.18	101.50
25	LB	103	U	C4'-C3'-C2'	-5.85	96.75	102.60
26	LA	513	A	C3'-C2'-C1'	5.85	106.18	101.50
26	LA	546	U	N1-C2-O2	-5.85	118.70	122.80
26	LA	677	A	C1'-O4'-C4'	-5.85	105.22	109.90
26	LA	726	G	C8-N9-C4	5.85	108.74	106.40
26	LA	1022	G	C3'-C2'-C1'	-5.85	96.82	101.50
26	LA	1026	G	O4'-C1'-N9	5.85	112.88	108.20
26	LA	1270	C	O4'-C1'-N1	5.85	112.88	108.20
26	LA	1552	A	N1-C2-N3	-5.85	126.37	129.30
26	LA	1558	C	C2-N1-C1'	5.85	125.24	118.80
26	LA	2061	G	C2'-C3'-O3'	5.85	123.06	113.70
26	LA	2365	G	C6-C5-N7	-5.85	126.89	130.40
37	LC	42	VAL	CA-CB-CG1	-5.85	102.12	110.90
37	LC	113	VAL	CG1-CB-CG2	5.85	120.27	110.90
38	LE	79	LEU	CB-CG-CD2	5.85	120.95	111.00
56	LR	38	ARG	NE-CZ-NH1	-5.85	117.37	120.30
2	SA	227	G	C2-N3-C4	5.85	114.83	111.90
2	SA	752	G	C8-N9-C1'	-5.85	119.39	127.00
25	LB	70	C	P-O5'-C5'	-5.85	111.54	120.90
26	LA	801	G	C8-N9-C1'	5.85	134.61	127.00
26	LA	1110	G	C6-C5-N7	-5.85	126.89	130.40
26	LA	1165	A	C5-N7-C8	-5.85	100.97	103.90
26	LA	1304	A	P-O5'-C5'	-5.85	111.54	120.90
2	SA	43	C	N3-C2-O2	-5.85	117.81	121.90
2	SA	670	G	C4-N9-C1'	5.85	134.10	126.50
2	SA	831	A	N7-C8-N9	-5.85	110.88	113.80
2	SA	1104	G	C6-N1-C2	-5.85	121.59	125.10
2	SA	1266	G	N3-C2-N2	-5.85	115.81	119.90
2	SA	1347	G	N1-C2-N3	-5.85	120.39	123.90
2	SA	1531	A	N1-C6-N6	5.85	122.11	118.60
5	ST	59	ARG	NH1-CZ-NH2	-5.85	112.97	119.40
14	SN	1	ALA	CB-CA-C	-5.85	101.33	110.10
26	LA	196	A	C5-N7-C8	5.85	106.83	103.90
26	LA	731	C	N3-C4-N4	5.85	122.09	118.00
26	LA	844	A	C5'-C4'-O4'	5.85	116.12	109.10
26	LA	1022	G	O4'-C1'-C2'	-5.85	99.95	105.80
26	LA	1458	U	C6-N1-C1'	-5.85	113.01	121.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2317	A	N9-C1'-C2'	-5.85	105.56	112.00
26	LA	2365	G	C2-N3-C4	-5.85	108.97	111.90
26	LA	2479	U	C6-N1-C1'	-5.85	113.01	121.20
27	LD	132	ARG	NH1-CZ-NH2	-5.85	112.97	119.40
2	SA	46	G	C8-N9-C4	5.85	108.74	106.40
2	SA	238	A	C6-C5-N7	-5.85	128.21	132.30
2	SA	246	A	C5-C6-N6	5.85	128.38	123.70
2	SA	359	G	C8-N9-C1'	5.85	134.60	127.00
2	SA	526	C	O4'-C1'-N1	5.85	112.88	108.20
2	SA	619	U	C2-N3-C4	-5.85	123.49	127.00
2	SA	664	G	C4'-C3'-C2'	-5.85	96.75	102.60
2	SA	944	G	P-O3'-C3'	5.85	126.72	119.70
23	SR	62	ARG	O-C-N	-5.85	113.34	122.70
25	LB	98	G	O4'-C4'-C3'	-5.85	98.15	104.00
26	LA	124	G	C4'-C3'-C2'	5.85	108.45	102.60
26	LA	1110	G	C6-N1-C2	-5.85	121.59	125.10
26	LA	1697	G	O4'-C1'-N9	5.85	112.88	108.20
26	LA	1868	C	OP1-P-OP2	-5.85	110.83	119.60
26	LA	2346	A	C5-N7-C8	-5.85	100.98	103.90
26	LA	2371	G	C4-C5-N7	5.85	113.14	110.80
26	LA	2624	G	N9-C4-C5	-5.85	103.06	105.40
26	LA	2765	A	O5'-P-OP1	5.85	117.72	110.70
2	SA	878	A	N3-C4-N9	-5.85	122.72	127.40
2	SA	1449	C	O4'-C1'-N1	5.85	112.88	108.20
26	LA	254	G	C8-N9-C4	5.85	108.74	106.40
26	LA	408	G	C4-C5-C6	-5.85	115.29	118.80
26	LA	692	C	C4'-C3'-C2'	-5.85	96.75	102.60
26	LA	1685	C	N3-C2-O2	-5.85	117.81	121.90
26	LA	2048	G	C5-C6-O6	5.85	132.11	128.60
26	LA	2304	G	C5'-C4'-C3'	-5.85	106.65	116.00
2	SA	730	G	C6-N1-C2	-5.84	121.59	125.10
2	SA	828	U	C2-N3-C4	5.84	130.51	127.00
25	LB	1	U	N1-C2-N3	5.84	118.41	114.90
25	LB	79	G	O5'-P-OP1	5.84	117.72	110.70
25	LB	105	G	O4'-C1'-N9	5.84	112.88	108.20
26	LA	52	A	N9-C4-C5	5.84	108.14	105.80
26	LA	794	A	C5-N7-C8	-5.84	100.98	103.90
26	LA	831	G	N9-C4-C5	5.84	107.74	105.40
26	LA	943	A	C5-N7-C8	-5.84	100.98	103.90
26	LA	1356	G	N1-C6-O6	5.84	123.41	119.90
26	LA	1482	G	C5'-C4'-C3'	-5.84	106.65	116.00
26	LA	1808	A	N9-C4-C5	-5.84	103.46	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	LC	41	SER	CB-CA-C	-5.84	98.99	110.10
2	SA	591	U	C1'-O4'-C4'	-5.84	105.22	109.90
2	SA	1251	A	OP2-P-O3'	5.84	118.06	105.20
2	SA	1305	G	N1-C2-N2	-5.84	110.94	116.20
26	LA	133	U	O4'-C1'-N1	5.84	112.88	108.20
26	LA	554	U	C5'-C4'-C3'	-5.84	106.65	116.00
26	LA	970	U	C5-C6-N1	5.84	125.62	122.70
2	SA	21	G	N1-C6-O6	5.84	123.40	119.90
2	SA	364	A	C3'-C2'-C1'	5.84	106.17	101.50
2	SA	405	U	C4'-C3'-C2'	5.84	108.44	102.60
2	SA	1298	U	C5-C6-N1	-5.84	119.78	122.70
4	S2	4	G	P-O3'-C3'	-5.84	112.69	119.70
26	LA	127	A	C4'-C3'-C2'	5.84	108.44	102.60
26	LA	217	A	N1-C2-N3	-5.84	126.38	129.30
26	LA	710	U	C4-C5-C6	-5.84	116.19	119.70
26	LA	1381	G	N1-C2-N2	-5.84	110.94	116.20
26	LA	1518	C	C5'-C4'-O4'	5.84	116.11	109.10
26	LA	2119	A	C4-C5-N7	5.84	113.62	110.70
26	LA	2196	C	C2-N1-C1'	5.84	125.22	118.80
26	LA	2885	G	N7-C8-N9	5.84	116.02	113.10
2	SA	121	U	O5'-C5'-C4'	5.84	122.80	111.70
2	SA	305	G	N7-C8-N9	-5.84	110.18	113.10
2	SA	575	G	C5-C6-N1	-5.84	108.58	111.50
2	SA	759	A	C2-N3-C4	-5.84	107.68	110.60
2	SA	1039	G	N7-C8-N9	5.84	116.02	113.10
26	LA	41	C	C2-N3-C4	5.84	122.82	119.90
26	LA	468	G	O4'-C1'-N9	5.84	112.87	108.20
26	LA	830	G	N1-C2-N2	-5.84	110.94	116.20
26	LA	1168	G	O4'-C1'-N9	5.84	112.87	108.20
26	LA	1188	U	N1-C2-N3	5.84	118.40	114.90
26	LA	1302	A	O4'-C1'-C2'	5.84	112.86	107.60
26	LA	1684	G	C5-C6-N1	5.84	114.42	111.50
26	LA	2022	U	O3'-P-O5'	5.84	115.09	104.00
26	LA	2423	U	C5-C4-O4	5.84	129.40	125.90
26	LA	2489	U	O4'-C1'-C2'	5.84	112.86	107.60
38	LE	104	VAL	CG1-CB-CG2	5.84	120.24	110.90
48	LN	60	ARG	NE-CZ-NH1	5.84	123.22	120.30
2	SA	311	C	O5'-P-OP2	5.84	117.71	110.70
2	SA	390	U	C5-C6-N1	-5.84	119.78	122.70
2	SA	754	C	N3-C4-C5	5.84	124.23	121.90
26	LA	123	G	OP1-P-OP2	-5.84	110.84	119.60
26	LA	521	U	C5-C4-O4	5.84	129.40	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	977	G	N1-C2-N3	5.84	127.40	123.90
26	LA	2345	G	O4'-C1'-N9	5.84	112.87	108.20
26	LA	2775	G	C4-C5-N7	5.84	113.14	110.80
2	SA	29	U	P-O3'-C3'	-5.84	112.69	119.70
2	SA	325	A	OP1-P-OP2	-5.84	110.85	119.60
2	SA	435	A	C6-N1-C2	5.84	122.10	118.60
2	SA	478	A	C6-N1-C2	5.84	122.10	118.60
2	SA	591	U	C4'-C3'-C2'	-5.84	96.76	102.60
2	SA	717	U	OP1-P-OP2	-5.84	110.84	119.60
2	SA	1169	A	N3-C4-C5	5.84	130.89	126.80
25	LB	32	U	C2-N3-C4	-5.84	123.50	127.00
26	LA	459	U	N3-C4-O4	-5.84	115.31	119.40
26	LA	901	C	N1-C2-O2	-5.84	115.40	118.90
26	LA	956	G	C3'-C2'-C1'	5.84	106.17	101.50
26	LA	1268	A	C4-C5-N7	5.84	113.62	110.70
26	LA	1982	U	C6-N1-C2	-5.84	117.50	121.00
26	LA	2333	A	C6-N1-C2	-5.84	115.10	118.60
26	LA	2752	C	C3'-C2'-C1'	-5.84	96.83	101.50
38	LE	28	GLU	OE1-CD-OE2	-5.84	116.30	123.30
2	SA	196	A	C2-N3-C4	-5.83	107.68	110.60
2	SA	776	G	O4'-C1'-N9	5.83	112.87	108.20
24	S3	539	ILE	CA-CB-CG1	5.83	122.09	111.00
26	LA	785	G	C4-C5-N7	5.83	113.13	110.80
26	LA	802	A	P-O3'-C3'	-5.83	112.70	119.70
26	LA	1058	U	C2'-C3'-O3'	5.83	123.04	113.70
26	LA	1636	U	C5'-C4'-C3'	-5.83	106.66	116.00
26	LA	2035	G	C5'-C4'-C3'	5.83	125.34	116.00
26	LA	2251	U	N3-C4-O4	-5.83	115.32	119.40
26	LA	2618	G	N3-C4-N9	5.83	129.50	126.00
52	LO	117	PHE	CB-CG-CD1	5.83	124.89	120.80
2	SA	238	A	C5'-C4'-C3'	5.83	125.33	116.00
2	SA	532	A	C6-C5-N7	-5.83	128.22	132.30
2	SA	543	U	N3-C4-C5	5.83	118.10	114.60
2	SA	1180	A	N1-C6-N6	-5.83	115.10	118.60
26	LA	221	A	C8-N9-C4	-5.83	103.47	105.80
26	LA	287	G	P-O3'-C3'	5.83	126.70	119.70
26	LA	1109	C	O4'-C1'-N1	5.83	112.87	108.20
26	LA	2028	U	N1-C2-O2	5.83	126.88	122.80
26	LA	2095	A	C4-C5-C6	-5.83	114.08	117.00
26	LA	2434	A	N1-C6-N6	5.83	122.10	118.60
26	LA	2879	A	C4-C5-C6	5.83	119.92	117.00
2	SA	44	A	O4'-C1'-N9	5.83	112.87	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	129	A	N1-C6-N6	5.83	122.10	118.60
2	SA	448	A	C2-N3-C4	5.83	113.52	110.60
2	SA	702	A	C6-C5-N7	-5.83	128.22	132.30
2	SA	839	C	C5'-C4'-O4'	5.83	116.10	109.10
2	SA	1034	G	C4-N9-C1'	-5.83	118.92	126.50
2	SA	1320	C	N3-C2-O2	-5.83	117.82	121.90
4	S2	47	A	C5-C6-N1	5.83	120.62	117.70
26	LA	438	G	C5'-C4'-C3'	-5.83	106.67	116.00
26	LA	670	A	O4'-C1'-N9	5.83	112.86	108.20
26	LA	699	A	C4'-C3'-C2'	-5.83	96.77	102.60
26	LA	935	C	N1-C1'-C2'	-5.83	105.59	112.00
26	LA	1143	A	C5-N7-C8	-5.83	100.98	103.90
26	LA	1216	G	N1-C2-N2	5.83	121.45	116.20
26	LA	1298	C	C5'-C4'-O4'	5.83	116.10	109.10
26	LA	1338	G	C5-N7-C8	-5.83	101.39	104.30
26	LA	1650	A	C5-N7-C8	-5.83	100.98	103.90
26	LA	1771	C	N1-C2-N3	5.83	123.28	119.20
26	LA	2138	G	P-O5'-C5'	-5.83	111.57	120.90
26	LA	2297	A	C6-N1-C2	5.83	122.10	118.60
26	LA	2329	U	OP1-P-OP2	-5.83	110.85	119.60
26	LA	2495	G	C4-C5-N7	5.83	113.13	110.80
26	LA	2778	A	C5'-C4'-O4'	5.83	116.10	109.10
2	SA	479	U	C5'-C4'-O4'	5.83	116.10	109.10
2	SA	697	U	C5'-C4'-C3'	-5.83	106.67	116.00
2	SA	1107	C	N1-C2-O2	-5.83	115.40	118.90
26	LA	99	U	C2-N3-C4	-5.83	123.50	127.00
26	LA	768	G	C6-C5-N7	-5.83	126.90	130.40
26	LA	2382	G	C5'-C4'-O4'	5.83	116.10	109.10
39	L3	22	THR	N-CA-CB	5.83	121.38	110.30
2	SA	423	G	N7-C8-N9	5.83	116.01	113.10
2	SA	539	A	O5'-P-OP2	-5.83	100.45	105.70
2	SA	928	G	C5-C6-O6	-5.83	125.10	128.60
2	SA	1032	G	P-O5'-C5'	-5.83	111.57	120.90
2	SA	1265	C	C2-N3-C4	5.83	122.81	119.90
2	SA	1295	U	P-O5'-C5'	5.83	130.22	120.90
2	SA	1360	A	C6-N1-C2	-5.83	115.10	118.60
2	SA	1422	G	N1-C6-O6	5.83	123.40	119.90
26	LA	50	U	C5'-C4'-O4'	5.83	116.09	109.10
26	LA	276	U	N3-C4-C5	-5.83	111.10	114.60
26	LA	906	U	C4'-C3'-C2'	-5.83	96.77	102.60
26	LA	1277	G	C6-N1-C2	5.83	128.60	125.10
26	LA	1316	U	C6-N1-C2	-5.83	117.50	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1397	U	C4-C5-C6	-5.83	116.20	119.70
26	LA	1554	U	P-O3'-C3'	5.83	126.69	119.70
26	LA	1651	G	N1-C2-N2	-5.83	110.95	116.20
26	LA	1791	A	N9-C4-C5	5.83	108.13	105.80
26	LA	2059	A	C6-C5-N7	5.83	136.38	132.30
26	LA	2087	G	O4'-C1'-N9	5.83	112.86	108.20
26	LA	2767	C	N3-C2-O2	-5.83	117.82	121.90
26	LA	2865	U	C5-C4-O4	5.83	129.40	125.90
2	SA	694	A	C2-N3-C4	5.83	113.51	110.60
2	SA	1493	A	C2'-C3'-O3'	5.83	123.02	113.70
26	LA	624	C	C5'-C4'-O4'	5.83	116.09	109.10
26	LA	632	A	OP1-P-OP2	-5.83	110.86	119.60
26	LA	721	A	C5-N7-C8	-5.83	100.99	103.90
26	LA	1096	A	N9-C4-C5	-5.83	103.47	105.80
26	LA	1141	U	N3-C2-O2	5.83	126.28	122.20
26	LA	1536	C	O5'-C5'-C4'	5.83	122.77	111.70
26	LA	1651	G	N3-C4-N9	5.83	129.50	126.00
26	LA	1873	G	C1'-O4'-C4'	-5.83	105.24	109.90
26	LA	1992	G	O4'-C1'-N9	5.83	112.86	108.20
26	LA	2048	G	C4-C5-N7	5.83	113.13	110.80
38	LE	124	ARG	CG-CD-NE	-5.83	99.56	111.80
2	SA	513	C	OP1-P-OP2	-5.83	110.86	119.60
2	SA	797	C	P-O5'-C5'	-5.83	111.58	120.90
2	SA	826	C	P-O5'-C5'	-5.83	111.58	120.90
2	SA	885	G	C5'-C4'-C3'	5.83	125.32	116.00
2	SA	1077	G	C4-C5-C6	5.83	122.30	118.80
2	SA	1205	U	N3-C4-O4	-5.83	115.32	119.40
4	S2	7	G	N1-C6-O6	5.83	123.40	119.90
18	SB	94	ARG	NE-CZ-NH1	5.83	123.21	120.30
26	LA	133	U	C6-N1-C2	5.83	124.50	121.00
26	LA	745	G	C2-N3-C4	-5.83	108.99	111.90
26	LA	750	A	C3'-C2'-C1'	5.83	106.16	101.50
26	LA	1295	C	O4'-C1'-N1	5.83	112.86	108.20
26	LA	1346	G	C5'-C4'-O4'	5.83	116.09	109.10
26	LA	2315	G	O4'-C1'-N9	5.83	112.86	108.20
26	LA	2644	G	N3-C4-C5	-5.83	125.69	128.60
26	LA	2695	U	N1-C2-O2	5.83	126.88	122.80
46	LH	93	TYR	CA-CB-CG	5.83	124.47	113.40
57	LS	24	TYR	CB-CG-CD2	5.83	124.50	121.00
2	SA	39	G	N3-C2-N2	-5.82	115.82	119.90
3	S1	20	G	C6-N1-C2	-5.82	121.61	125.10
4	S2	58	A	C8-N9-C4	-5.82	103.47	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	58	G	P-O3'-C3'	5.82	126.69	119.70
26	LA	279	A	C4'-C3'-C2'	-5.82	96.78	102.60
26	LA	376	G	N1-C2-N3	5.82	127.39	123.90
26	LA	469	G	C5'-C4'-C3'	-5.82	106.68	116.00
26	LA	861	A	C2-N3-C4	5.82	113.51	110.60
26	LA	888	C	C3'-C2'-C1'	5.82	106.16	101.50
26	LA	1343	G	N3-C4-C5	5.82	131.51	128.60
26	LA	1796	U	O4'-C1'-N1	5.82	112.86	108.20
26	LA	1978	A	C5-C6-N1	-5.82	114.79	117.70
2	SA	619	U	O4'-C1'-N1	5.82	112.86	108.20
2	SA	938	A	C1'-O4'-C4'	-5.82	105.24	109.90
25	LB	84	G	P-O3'-C3'	5.82	126.69	119.70
26	LA	376	G	N1-C6-O6	5.82	123.39	119.90
26	LA	1139	G	N1-C2-N2	-5.82	110.96	116.20
26	LA	2439	A	C5'-C4'-O4'	5.82	116.09	109.10
45	LG	82	TYR	CB-CG-CD1	-5.82	117.51	121.00
2	SA	208	U	P-O3'-C3'	5.82	126.69	119.70
2	SA	240	G	O4'-C1'-N9	5.82	112.86	108.20
2	SA	1257	A	N1-C2-N3	-5.82	126.39	129.30
2	SA	1320	C	P-O3'-C3'	-5.82	112.71	119.70
26	LA	323	C	C4-C5-C6	5.82	120.31	117.40
26	LA	484	C	C3'-C2'-C1'	5.82	106.16	101.50
26	LA	567	U	C6-N1-C2	-5.82	117.51	121.00
26	LA	717	C	C5'-C4'-C3'	5.82	125.31	116.00
26	LA	1007	C	P-O5'-C5'	-5.82	111.59	120.90
26	LA	1609	A	C8-N9-C4	5.82	108.13	105.80
26	LA	2576	G	C4-C5-N7	-5.82	108.47	110.80
26	LA	2679	A	C4'-C3'-C2'	5.82	108.42	102.60
26	LA	2790	U	C1'-O4'-C4'	-5.82	105.24	109.90
26	LA	2798	U	P-O5'-C5'	5.82	130.21	120.90
2	SA	817	C	P-O5'-C5'	-5.82	111.59	120.90
26	LA	970	U	N1-C2-N3	5.82	118.39	114.90
26	LA	1583	A	N3-C4-C5	5.82	130.87	126.80
26	LA	2811	G	N3-C4-N9	5.82	129.49	126.00
2	SA	532	A	N9-C4-C5	-5.82	103.47	105.80
2	SA	863	U	C6-N1-C2	5.82	124.49	121.00
2	SA	1034	G	N1-C2-N3	-5.82	120.41	123.90
2	SA	1251	A	C5'-C4'-O4'	5.82	116.08	109.10
2	SA	1291	U	N1-C2-N3	5.82	118.39	114.90
4	S2	77	A	N1-C6-N6	-5.82	115.11	118.60
25	LB	81	G	C5-C6-N1	5.82	114.41	111.50
26	LA	298	G	N3-C4-C5	5.82	131.51	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	420	C	N3-C4-N4	5.82	122.07	118.00
26	LA	693	A	C5'-C4'-C3'	-5.82	106.69	116.00
26	LA	953	G	C5'-C4'-C3'	5.82	125.31	116.00
26	LA	1385	A	P-O5'-C5'	5.82	130.21	120.90
26	LA	1838	C	C5-C6-N1	-5.82	118.09	121.00
26	LA	1871	A	C5'-C4'-O4'	5.82	116.08	109.10
26	LA	1886	U	C4'-C3'-C2'	-5.82	96.78	102.60
26	LA	1893	C	C4-C5-C6	-5.82	114.49	117.40
26	LA	2401	U	N3-C2-O2	-5.82	118.13	122.20
26	LA	2444	G	N9-C4-C5	-5.82	103.07	105.40
2	SA	939	G	N1-C2-N2	-5.82	110.97	116.20
2	SA	1232	U	OP1-P-OP2	-5.82	110.88	119.60
2	SA	1326	U	N3-C2-O2	-5.82	118.13	122.20
2	SA	1414	U	C5-C4-O4	5.82	129.39	125.90
2	SA	1422	G	OP1-P-OP2	-5.82	110.88	119.60
14	SN	13	VAL	CA-CB-CG1	-5.82	102.18	110.90
26	LA	722	A	O4'-C1'-N9	5.82	112.85	108.20
26	LA	808	G	C5'-C4'-O4'	5.82	116.08	109.10
26	LA	825	A	N3-C4-N9	-5.82	122.75	127.40
26	LA	1227	G	N3-C2-N2	5.82	123.97	119.90
26	LA	2717	C	C4-C5-C6	-5.82	114.49	117.40
27	LD	51	ARG	CD-NE-CZ	5.82	131.74	123.60
37	LC	186	LYS	N-CA-C	5.82	126.70	111.00
56	LR	58	PHE	O-C-N	-5.82	113.40	122.70
2	SA	78	A	N7-C8-N9	5.81	116.71	113.80
2	SA	458	U	C1'-O4'-C4'	-5.81	105.25	109.90
2	SA	701	U	OP1-P-OP2	-5.81	110.88	119.60
2	SA	871	U	C2-N3-C4	-5.81	123.51	127.00
2	SA	901	A	N9-C4-C5	5.81	108.12	105.80
25	LB	17	C	N3-C2-O2	-5.81	117.83	121.90
26	LA	28	A	C5-C6-N1	5.81	120.61	117.70
26	LA	103	A	N1-C6-N6	5.81	122.09	118.60
26	LA	2798	U	C4'-C3'-C2'	-5.81	96.79	102.60
54	LM	17	ARG	NE-CZ-NH2	5.81	123.21	120.30
2	SA	421	U	C2-N1-C1'	5.81	124.67	117.70
2	SA	822	U	C2-N1-C1'	-5.81	110.72	117.70
2	SA	1007	U	C5'-C4'-O4'	5.81	116.08	109.10
2	SA	1434	A	C5-C6-N6	-5.81	119.05	123.70
26	LA	1177	G	C5-C6-O6	-5.81	125.11	128.60
26	LA	1484	U	P-O5'-C5'	-5.81	111.60	120.90
26	LA	1807	G	C5-C6-O6	-5.81	125.11	128.60
26	LA	2277	G	O5'-P-OP2	5.81	117.67	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2547	A	P-O3'-C3'	-5.81	112.72	119.70
26	LA	2822	G	C1'-O4'-C4'	5.81	114.55	109.90
2	SA	74	A	C2-N3-C4	5.81	113.50	110.60
2	SA	91	U	C4'-C3'-C2'	-5.81	96.79	102.60
2	SA	134	G	N7-C8-N9	5.81	116.00	113.10
2	SA	1438	G	C5-C6-N1	5.81	114.41	111.50
26	LA	979	A	N1-C2-N3	5.81	132.21	129.30
26	LA	1676	A	C5-C6-N6	5.81	128.35	123.70
26	LA	1805	A	C5-N7-C8	-5.81	100.99	103.90
26	LA	2164	C	C1'-O4'-C4'	-5.81	105.25	109.90
26	LA	2337	G	N3-C4-C5	-5.81	125.69	128.60
26	LA	2832	U	C4'-C3'-C2'	-5.81	96.79	102.60
26	LA	2843	G	N9-C4-C5	5.81	107.72	105.40
2	SA	121	U	OP1-P-OP2	-5.81	110.88	119.60
2	SA	560	A	N1-C2-N3	5.81	132.21	129.30
2	SA	847	G	C6-N1-C2	-5.81	121.61	125.10
2	SA	1303	C	C1'-O4'-C4'	-5.81	105.25	109.90
4	S2	56	U	C5'-C4'-C3'	-5.81	106.71	116.00
26	LA	663	G	C4-C5-N7	5.81	113.12	110.80
26	LA	1065	U	C3'-C2'-C1'	-5.81	96.85	101.50
26	LA	1342	A	N1-C2-N3	-5.81	126.40	129.30
26	LA	1408	G	N1-C2-N3	5.81	127.39	123.90
26	LA	1807	G	C8-N9-C4	5.81	108.72	106.40
26	LA	2112	G	C3'-C2'-C1'	-5.81	96.85	101.50
26	LA	2420	C	C4'-C3'-C2'	-5.81	96.79	102.60
2	SA	15	G	N9-C1'-C2'	5.81	121.55	114.00
2	SA	126	G	N1-C6-O6	5.81	123.39	119.90
2	SA	433	G	N9-C4-C5	5.81	107.72	105.40
2	SA	985	C	N3-C2-O2	-5.81	117.83	121.90
2	SA	998	C	C5-C6-N1	-5.81	118.10	121.00
2	SA	1114	C	C4'-C3'-C2'	-5.81	96.79	102.60
3	S1	18	A	N1-C2-N3	-5.81	126.40	129.30
4	S2	58	A	C5-C6-N1	-5.81	114.80	117.70
4	S2	69	C	C5-C6-N1	5.81	123.90	121.00
24	S3	416	SER	CB-CA-C	-5.81	99.06	110.10
26	LA	308	G	P-O5'-C5'	-5.81	111.61	120.90
26	LA	528	A	O4'-C4'-C3'	-5.81	98.19	104.00
26	LA	549	G	C1'-O4'-C4'	-5.81	105.25	109.90
26	LA	586	A	N1-C6-N6	-5.81	115.12	118.60
26	LA	968	C	C4-C5-C6	5.81	120.30	117.40
26	LA	973	A	C5'-C4'-O4'	5.81	116.07	109.10
26	LA	2040	G	O5'-P-OP2	-5.81	100.47	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2363	G	C8-N9-C4	5.81	108.72	106.40
26	LA	2858	C	C3'-C2'-C1'	5.81	106.14	101.50
46	LH	49	LEU	CB-CG-CD2	5.81	120.87	111.00
53	LP	80	PHE	CB-CG-CD1	-5.81	116.73	120.80
2	SA	1312	G	N3-C2-N2	5.81	123.96	119.90
2	SA	1471	U	OP2-P-O3'	5.81	117.97	105.20
26	LA	333	G	C4-C5-C6	5.81	122.28	118.80
26	LA	541	A	C4-C5-N7	-5.81	107.80	110.70
26	LA	794	A	N9-C4-C5	-5.81	103.48	105.80
26	LA	1071	G	N3-C2-N2	5.81	123.96	119.90
26	LA	1349	C	N3-C4-N4	5.81	122.06	118.00
26	LA	1885	A	N1-C2-N3	5.81	132.20	129.30
26	LA	2436	G	C5-C6-N1	-5.81	108.60	111.50
26	LA	2694	G	C4-C5-C6	-5.81	115.32	118.80
2	SA	113	G	C5-C6-N1	-5.80	108.60	111.50
2	SA	993	G	O5'-P-OP1	5.80	117.67	110.70
2	SA	1330	U	C2'-C3'-O3'	5.80	122.99	113.70
3	S1	13	A	C5-N7-C8	5.80	106.80	103.90
18	SB	77	GLU	OE1-CD-OE2	-5.80	116.33	123.30
26	LA	327	G	C5-C6-N1	-5.80	108.60	111.50
26	LA	374	A	C4-C5-N7	5.80	113.60	110.70
26	LA	516	C	N3-C4-N4	-5.80	113.94	118.00
26	LA	634	C	N1-C2-N3	-5.80	115.14	119.20
26	LA	748	G	C8-N9-C1'	-5.80	119.45	127.00
26	LA	1380	G	C5-C6-O6	5.80	132.08	128.60
26	LA	1748	C	C5-C4-N4	-5.80	116.14	120.20
26	LA	2543	G	C4-N9-C1'	5.80	134.04	126.50
26	LA	2574	G	C4'-C3'-O3'	5.80	124.61	113.00
26	LA	2749	A	C4-C5-N7	5.80	113.60	110.70
48	LN	48	ARG	N-CA-CB	5.80	121.05	110.60
2	SA	253	A	N1-C6-N6	5.80	122.08	118.60
2	SA	1160	G	P-O3'-C3'	-5.80	112.74	119.70
26	LA	20	C	N1-C2-N3	5.80	123.26	119.20
26	LA	266	G	C6-N1-C2	5.80	128.58	125.10
26	LA	756	A	C1'-O4'-C4'	-5.80	105.26	109.90
26	LA	1292	G	C8-N9-C4	-5.80	104.08	106.40
26	LA	1459	G	C8-N9-C4	5.80	108.72	106.40
26	LA	1516	G	N7-C8-N9	-5.80	110.20	113.10
2	SA	2	A	O4'-C1'-N9	5.80	112.84	108.20
2	SA	282	A	N7-C8-N9	5.80	116.70	113.80
2	SA	819	A	C5'-C4'-O4'	5.80	116.06	109.10
4	S2	15	G	N1-C2-N2	5.80	121.42	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1	G	C4-N9-C1'	5.80	134.04	126.50
26	LA	56	A	C4-C5-N7	5.80	113.60	110.70
26	LA	650	C	O4'-C1'-N1	5.80	112.84	108.20
26	LA	998	C	N3-C4-C5	-5.80	119.58	121.90
26	LA	1071	G	C1'-O4'-C4'	-5.80	105.26	109.90
26	LA	1182	G	C5-C6-O6	5.80	132.08	128.60
26	LA	2283	C	C1'-O4'-C4'	-5.80	105.26	109.90
26	LA	2399	G	N1-C2-N2	-5.80	110.98	116.20
26	LA	2606	C	O5'-P-OP1	5.80	117.66	110.70
57	LS	78	PHE	CB-CG-CD1	-5.80	116.74	120.80
2	SA	155	A	C5-C6-N6	5.80	128.34	123.70
2	SA	257	G	O4'-C1'-N9	5.80	112.84	108.20
2	SA	331	G	O4'-C1'-C2'	5.80	112.82	107.60
2	SA	360	G	P-O3'-C3'	-5.80	112.74	119.70
2	SA	782	A	C4'-C3'-C2'	-5.80	96.80	102.60
2	SA	799	G	C4-C5-C6	-5.80	115.32	118.80
2	SA	818	G	C4-C5-N7	5.80	113.12	110.80
2	SA	854	U	C2-N3-C4	5.80	130.48	127.00
2	SA	926	G	C2-N3-C4	-5.80	109.00	111.90
2	SA	966	G	C6-N1-C2	-5.80	121.62	125.10
2	SA	1331	G	P-O3'-C3'	5.80	126.66	119.70
5	ST	50	PHE	CB-CG-CD2	5.80	124.86	120.80
25	LB	25	U	C4-C5-C6	-5.80	116.22	119.70
25	LB	66	A	O4'-C1'-N9	-5.80	103.56	108.20
26	LA	119	A	N1-C6-N6	5.80	122.08	118.60
26	LA	637	A	N7-C8-N9	-5.80	110.90	113.80
26	LA	1037	G	N3-C2-N2	5.80	123.96	119.90
26	LA	1321	A	C6-C5-N7	5.80	136.36	132.30
26	LA	1916	A	C4'-C3'-C2'	-5.80	96.80	102.60
26	LA	1982	U	N1-C2-O2	5.80	126.86	122.80
26	LA	2082	A	C8-N9-C4	-5.80	103.48	105.80
26	LA	2396	G	C1'-O4'-C4'	-5.80	105.26	109.90
38	LE	90	PHE	CB-CG-CD1	5.80	124.86	120.80
2	SA	975	A	C1'-O4'-C4'	-5.80	105.26	109.90
2	SA	1259	C	C5'-C4'-O4'	5.80	116.06	109.10
26	LA	436	C	C6-N1-C2	-5.80	117.98	120.30
26	LA	1230	A	N9-C4-C5	5.80	108.12	105.80
26	LA	1757	A	C4-C5-N7	5.80	113.60	110.70
26	LA	1889	A	C2-N3-C4	-5.80	107.70	110.60
26	LA	2545	G	N3-C4-C5	5.80	131.50	128.60
26	LA	2579	C	C5'-C4'-O4'	5.80	116.06	109.10
45	LG	26	GLN	N-CA-CB	5.80	121.04	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	386	C	C3'-C2'-C1'	-5.80	96.86	101.50
2	SA	441	A	P-O3'-C3'	-5.80	112.74	119.70
2	SA	659	U	C2'-C3'-O3'	5.80	122.97	113.70
2	SA	881	G	O3'-P-O5'	-5.80	92.99	104.00
2	SA	1089	G	C5-C6-N1	5.80	114.40	111.50
2	SA	1443	C	O4'-C1'-N1	5.80	112.84	108.20
26	LA	43	G	C5-N7-C8	-5.80	101.40	104.30
26	LA	212	G	N9-C4-C5	5.80	107.72	105.40
26	LA	327	G	C6-N1-C2	5.80	128.58	125.10
26	LA	994	C	C2-N1-C1'	5.80	125.17	118.80
26	LA	1632	A	O4'-C4'-C3'	-5.80	98.20	104.00
26	LA	1676	A	O3'-P-O5'	5.80	115.01	104.00
26	LA	2237	G	C5'-C4'-O4'	5.80	116.06	109.10
26	LA	2615	U	O5'-P-OP1	5.80	117.66	110.70
2	SA	687	A	C6-N1-C2	5.79	122.08	118.60
26	LA	811	U	N3-C4-C5	5.79	118.08	114.60
26	LA	1530	G	C5'-C4'-O4'	5.79	116.05	109.10
26	LA	1552	A	C4-N9-C1'	5.79	136.73	126.30
26	LA	1652	A	C5-N7-C8	5.79	106.80	103.90
2	SA	831	A	N1-C2-N3	-5.79	126.40	129.30
2	SA	1072	G	C6-N1-C2	-5.79	121.62	125.10
2	SA	1127	G	N3-C4-N9	5.79	129.48	126.00
2	SA	1172	C	N3-C4-N4	5.79	122.06	118.00
26	LA	394	C	N1-C2-N3	5.79	123.25	119.20
26	LA	431	U	N3-C4-O4	5.79	123.46	119.40
26	LA	978	G	N3-C4-N9	5.79	129.48	126.00
26	LA	1191	G	C5-C6-N1	5.79	114.40	111.50
26	LA	1619	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	1622	G	N1-C6-O6	5.79	123.38	119.90
26	LA	1880	U	OP2-P-O3'	5.79	117.95	105.20
26	LA	2221	G	C5-C6-N1	5.79	114.40	111.50
26	LA	2545	G	N9-C4-C5	-5.79	103.08	105.40
44	LF	64	GLY	N-CA-C	-5.79	98.62	113.10
2	SA	39	G	C5'-C4'-C3'	5.79	125.27	116.00
2	SA	172	A	N1-C2-N3	-5.79	126.40	129.30
2	SA	205	A	N1-C2-N3	-5.79	126.40	129.30
2	SA	550	G	C3'-C2'-C1'	5.79	106.13	101.50
2	SA	913	A	P-O3'-C3'	-5.79	112.75	119.70
2	SA	1145	A	O3'-P-O5'	-5.79	93.00	104.00
2	SA	1188	A	C6-N1-C2	-5.79	115.12	118.60
26	LA	320	A	P-O3'-C3'	-5.79	112.75	119.70
26	LA	363	G	N9-C4-C5	5.79	107.72	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	604	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	693	A	C2-N3-C4	5.79	113.50	110.60
26	LA	753	A	C8-N9-C4	-5.79	103.48	105.80
26	LA	882	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	1163	G	N3-C2-N2	5.79	123.95	119.90
26	LA	1356	G	N7-C8-N9	5.79	116.00	113.10
26	LA	1843	C	C5'-C4'-C3'	-5.79	106.73	116.00
26	LA	2117	A	C4-C5-N7	5.79	113.60	110.70
26	LA	2125	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	2133	G	OP1-P-OP2	-5.79	110.91	119.60
26	LA	2595	G	N9-C1'-C2'	-5.79	105.63	112.00
26	LA	2601	C	C4-C5-C6	5.79	120.30	117.40
2	SA	77	A	N7-C8-N9	5.79	116.69	113.80
26	LA	1071	G	C4-N9-C1'	-5.79	118.97	126.50
26	LA	2512	C	C6-N1-C2	-5.79	117.98	120.30
26	LA	2696	U	P-O3'-C3'	5.79	126.65	119.70
26	LA	2736	A	C6-N1-C2	-5.79	115.13	118.60
2	SA	236	A	N1-C6-N6	-5.79	115.13	118.60
2	SA	409	U	C5-C6-N1	5.79	125.59	122.70
2	SA	515	G	N3-C4-N9	5.79	129.47	126.00
2	SA	524	G	N7-C8-N9	-5.79	110.20	113.10
2	SA	861	G	N3-C4-C5	-5.79	125.71	128.60
2	SA	1190	G	C5-C6-N1	5.79	114.39	111.50
2	SA	1417	G	N3-C4-C5	5.79	131.49	128.60
26	LA	39	G	N1-C6-O6	-5.79	116.43	119.90
26	LA	118	A	C3'-C2'-C1'	5.79	106.13	101.50
26	LA	227	A	P-O3'-C3'	5.79	126.65	119.70
26	LA	345	A	C8-N9-C4	5.79	108.11	105.80
26	LA	410	G	N3-C4-C5	-5.79	125.71	128.60
26	LA	701	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	863	A	O4'-C1'-N9	5.79	112.83	108.20
26	LA	1405	U	C5'-C4'-C3'	-5.79	106.74	116.00
26	LA	1447	C	C5-C6-N1	-5.79	118.11	121.00
26	LA	1568	G	O4'-C1'-N9	5.79	112.83	108.20
26	LA	2554	U	C4-C5-C6	5.79	123.17	119.70
26	LA	2838	G	N1-C2-N2	-5.79	110.99	116.20
28	LU	22	ASP	CA-C-N	5.79	129.93	117.20
2	SA	749	A	N7-C8-N9	5.79	116.69	113.80
2	SA	756	C	N3-C4-C5	5.79	124.22	121.90
2	SA	982	U	N3-C4-C5	5.79	118.07	114.60
26	LA	813	U	C5'-C4'-O4'	5.79	116.04	109.10
26	LA	1166	G	N9-C4-C5	5.79	107.72	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2075	U	C2-N3-C4	-5.79	123.53	127.00
37	LC	149	VAL	CA-CB-CG2	-5.79	102.22	110.90
2	SA	1061	G	C4'-C3'-C2'	-5.79	96.81	102.60
2	SA	1261	A	C5-N7-C8	-5.79	101.01	103.90
4	S2	12	G	C4-C5-N7	5.79	113.11	110.80
26	LA	24	G	O4'-C4'-C3'	-5.79	98.22	104.00
26	LA	644	A	C1'-O4'-C4'	-5.79	105.27	109.90
26	LA	1374	G	C6-C5-N7	-5.79	126.93	130.40
26	LA	1423	G	C4-C5-N7	-5.79	108.49	110.80
26	LA	1520	U	N1-C2-N3	5.79	118.37	114.90
26	LA	1775	U	O4'-C1'-N1	5.79	112.83	108.20
26	LA	1863	G	C8-N9-C1'	-5.79	119.48	127.00
26	LA	1975	G	C5-C6-N1	5.79	114.39	111.50
26	LA	2333	A	C5'-C4'-O4'	5.79	116.04	109.10
26	LA	2462	C	C5-C6-N1	5.79	123.89	121.00
26	LA	2558	C	O4'-C1'-N1	5.79	112.83	108.20
56	LR	58	PHE	CB-CG-CD2	-5.79	116.75	120.80
58	LT	9	GLY	O-C-N	-5.79	113.44	122.70
2	SA	402	G	N7-C8-N9	5.78	115.99	113.10
2	SA	405	U	N1-C1'-C2'	-5.78	105.64	112.00
2	SA	477	C	C2-N3-C4	-5.78	117.01	119.90
2	SA	1362	A	C5-C6-N6	5.78	128.33	123.70
2	SA	1507	A	N9-C4-C5	5.78	108.11	105.80
26	LA	417	C	C3'-C2'-C1'	5.78	106.13	101.50
26	LA	521	U	N1-C2-O2	-5.78	118.75	122.80
26	LA	752	A	C5-N7-C8	-5.78	101.01	103.90
26	LA	1592	C	N3-C2-O2	-5.78	117.85	121.90
26	LA	1612	C	C4-C5-C6	-5.78	114.51	117.40
26	LA	2530	A	C6-N1-C2	-5.78	115.13	118.60
26	LA	2536	G	C4'-C3'-C2'	-5.78	96.82	102.60
26	LA	2563	U	C4-C5-C6	-5.78	116.23	119.70
45	LG	11	VAL	CA-CB-CG1	5.78	119.58	110.90
2	SA	212	G	C5-C6-N1	5.78	114.39	111.50
26	LA	257	C	N3-C4-C5	5.78	124.21	121.90
26	LA	529	A	C5-C6-N1	5.78	120.59	117.70
26	LA	2772	C	N3-C4-C5	5.78	124.21	121.90
2	SA	721	G	N1-C6-O6	-5.78	116.43	119.90
2	SA	1055	A	C2-N3-C4	-5.78	107.71	110.60
2	SA	1364	U	C6-N1-C1'	5.78	129.29	121.20
21	SE	30	PHE	CZ-CE2-CD2	-5.78	113.16	120.10
26	LA	95	A	C5'-C4'-C3'	-5.78	106.75	116.00
26	LA	463	G	N7-C8-N9	5.78	115.99	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	829	A	P-O5'-C5'	-5.78	111.65	120.90
26	LA	1603	A	C5-C6-N1	5.78	120.59	117.70
26	LA	1743	G	C2'-C3'-O3'	5.78	122.95	113.70
26	LA	1747	U	C5'-C4'-C3'	-5.78	106.75	116.00
26	LA	1771	C	OP1-P-OP2	-5.78	110.93	119.60
26	LA	1782	U	N3-C4-C5	-5.78	111.13	114.60
26	LA	2146	C	C1'-O4'-C4'	5.78	114.53	109.90
26	LA	2598	A	C5-N7-C8	-5.78	101.01	103.90
2	SA	602	A	N1-C6-N6	5.78	122.07	118.60
26	LA	161	A	O4'-C1'-C2'	5.78	112.80	107.60
26	LA	283	G	P-O3'-C3'	5.78	126.64	119.70
26	LA	588	U	O4'-C1'-C2'	5.78	112.80	107.60
26	LA	1767	G	C8-N9-C4	5.78	108.71	106.40
26	LA	2101	A	C4-N9-C1'	-5.78	115.90	126.30
26	LA	2116	G	C5-C6-N1	-5.78	108.61	111.50
26	LA	2259	U	C3'-C2'-C1'	5.78	106.12	101.50
26	LA	2614	A	C5-C6-N6	5.78	128.32	123.70
2	SA	542	G	C5'-C4'-C3'	-5.78	106.76	116.00
2	SA	1114	C	O4'-C1'-N1	5.78	112.82	108.20
2	SA	1322	C	C6-N1-C2	5.78	122.61	120.30
2	SA	1461	G	N9-C4-C5	5.78	107.71	105.40
3	S1	19	A	OP1-P-OP2	-5.78	110.93	119.60
26	LA	938	G	C5'-C4'-O4'	5.78	116.03	109.10
26	LA	1059	G	C4'-C3'-C2'	-5.78	96.82	102.60
26	LA	1161	C	C5-C4-N4	5.78	124.24	120.20
26	LA	1372	U	P-O5'-C5'	5.78	130.14	120.90
26	LA	2387	U	OP1-P-OP2	-5.78	110.93	119.60
26	LA	2509	G	C2-N3-C4	-5.78	109.01	111.90
26	LA	2589	A	C6-C5-N7	-5.78	128.26	132.30
26	LA	2599	G	N1-C6-O6	-5.78	116.43	119.90
58	LT	78	ARG	NE-CZ-NH2	5.78	123.19	120.30
2	SA	96	U	P-O5'-C5'	-5.78	111.66	120.90
2	SA	193	C	O4'-C1'-N1	5.78	112.82	108.20
2	SA	207	C	C1'-O4'-C4'	-5.78	105.28	109.90
2	SA	321	A	C8-N9-C4	-5.78	103.49	105.80
2	SA	578	C	C1'-O4'-C4'	-5.78	105.28	109.90
2	SA	595	A	C4'-C3'-C2'	5.78	108.38	102.60
4	S2	6	G	OP1-P-OP2	-5.78	110.94	119.60
26	LA	372	G	P-O3'-C3'	5.78	126.63	119.70
26	LA	385	C	O3'-P-O5'	-5.78	93.03	104.00
26	LA	482	A	C5-N7-C8	5.78	106.79	103.90
26	LA	800	A	C5-C6-N1	-5.78	114.81	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1852	U	P-O3'-C3'	5.78	126.63	119.70
26	LA	2000	C	N3-C4-C5	5.78	124.21	121.90
26	LA	2150	C	C5-C4-N4	-5.78	116.16	120.20
26	LA	2447	G	C8-N9-C1'	-5.78	119.49	127.00
26	LA	2529	G	O4'-C1'-C2'	-5.78	100.03	105.80
2	SA	1047	G	N1-C6-O6	5.77	123.36	119.90
2	SA	1101	A	O4'-C1'-N9	5.77	112.82	108.20
2	SA	1410	A	N3-C4-N9	5.77	132.02	127.40
4	S2	31	G	P-O5'-C5'	5.77	130.14	120.90
26	LA	58	G	C5'-C4'-O4'	-5.77	102.17	109.10
26	LA	702	U	C5-C4-O4	5.77	129.36	125.90
26	LA	2013	A	C8-N9-C4	-5.77	103.49	105.80
26	LA	2259	U	C5-C4-O4	-5.77	122.44	125.90
26	LA	2790	U	C2-N3-C4	-5.77	123.53	127.00
26	LA	2797	U	C2-N3-C4	-5.77	123.54	127.00
26	LA	2842	G	C6-C5-N7	-5.77	126.94	130.40
2	SA	73	C	N3-C4-C5	5.77	124.21	121.90
2	SA	940	C	P-O3'-C3'	-5.77	112.77	119.70
2	SA	1054	C	N3-C4-C5	5.77	124.21	121.90
2	SA	1458	G	N1-C2-N3	5.77	127.36	123.90
24	S3	28	ARG	NE-CZ-NH2	5.77	123.19	120.30
25	LB	61	G	N1-C6-O6	5.77	123.36	119.90
26	LA	18	U	C5'-C4'-O4'	5.77	116.03	109.10
26	LA	135	U	C4'-C3'-C2'	-5.77	96.83	102.60
26	LA	376	G	N9-C4-C5	5.77	107.71	105.40
26	LA	379	G	O4'-C4'-C3'	-5.77	98.23	104.00
26	LA	411	G	C5-N7-C8	5.77	107.19	104.30
26	LA	530	G	N1-C2-N3	5.77	127.36	123.90
26	LA	543	G	O4'-C1'-C2'	5.77	112.80	107.60
26	LA	665	U	N3-C4-O4	5.77	123.44	119.40
26	LA	1013	C	C5-C6-N1	5.77	123.89	121.00
26	LA	1084	A	O4'-C1'-N9	5.77	112.82	108.20
26	LA	1151	A	C5-N7-C8	-5.77	101.01	103.90
26	LA	1218	G	OP2-P-O3'	5.77	117.90	105.20
26	LA	1357	C	N1-C2-O2	5.77	122.36	118.90
26	LA	2265	U	N1-C2-N3	5.77	118.36	114.90
26	LA	2487	G	C6-N1-C2	-5.77	121.64	125.10
26	LA	2510	C	N3-C2-O2	-5.77	117.86	121.90
26	LA	2828	G	C4-C5-N7	5.77	113.11	110.80
26	LA	2876	G	P-O5'-C5'	-5.77	111.66	120.90
2	SA	16	A	N7-C8-N9	-5.77	110.92	113.80
2	SA	734	G	N1-C6-O6	5.77	123.36	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1205	U	N1-C2-O2	-5.77	118.76	122.80
15	SO	68	TYR	CG-CD2-CE2	5.77	125.92	121.30
26	LA	1174	U	O5'-P-OP1	5.77	117.62	110.70
26	LA	1885	A	C5-N7-C8	5.77	106.79	103.90
26	LA	2002	G	C3'-C2'-C1'	5.77	106.12	101.50
26	LA	2008	C	C5-C6-N1	-5.77	118.11	121.00
2	SA	38	G	C4-C5-N7	-5.77	108.49	110.80
2	SA	49	U	C5'-C4'-O4'	5.77	116.02	109.10
2	SA	295	C	C5'-C4'-O4'	5.77	116.02	109.10
2	SA	426	U	C2-N3-C4	5.77	130.46	127.00
2	SA	1112	C	C5-C4-N4	-5.77	116.16	120.20
2	SA	1332	A	C5'-C4'-C3'	-5.77	106.77	116.00
2	SA	1339	A	N9-C4-C5	-5.77	103.49	105.80
2	SA	1443	C	C4-C5-C6	5.77	120.28	117.40
4	S2	11	A	C3'-C2'-C1'	-5.77	96.89	101.50
26	LA	962	G	N9-C4-C5	-5.77	103.09	105.40
26	LA	1229	C	C5-C4-N4	5.77	124.24	120.20
26	LA	1300	G	O4'-C4'-C3'	5.77	110.72	106.10
26	LA	1370	C	C6-N1-C2	5.77	122.61	120.30
26	LA	1383	A	N3-C4-N9	5.77	132.01	127.40
26	LA	1934	C	C2-N1-C1'	5.77	125.15	118.80
26	LA	2577	A	C4-C5-C6	5.77	119.88	117.00
26	LA	2697	G	N3-C4-N9	-5.77	122.54	126.00
26	LA	2899	A	C8-N9-C4	5.77	108.11	105.80
45	LG	113	PHE	CB-CG-CD1	-5.77	116.76	120.80
2	SA	314	C	C6-N1-C2	-5.77	117.99	120.30
2	SA	440	C	C4-C5-C6	5.77	120.28	117.40
2	SA	444	G	O4'-C1'-N9	5.77	112.81	108.20
2	SA	597	G	C5-C6-O6	5.77	132.06	128.60
2	SA	639	G	N1-C2-N3	5.77	127.36	123.90
2	SA	675	A	O4'-C4'-C3'	-5.77	98.23	104.00
2	SA	792	A	C8-N9-C4	5.77	108.11	105.80
2	SA	816	A	O4'-C1'-C2'	-5.77	100.03	105.80
2	SA	1035	A	C2-N3-C4	-5.77	107.72	110.60
5	ST	42	ASP	CB-CG-OD2	5.77	123.49	118.30
26	LA	167	A	C6-C5-N7	-5.77	128.26	132.30
26	LA	419	U	C4-C5-C6	5.77	123.16	119.70
26	LA	676	A	C2-N3-C4	-5.77	107.72	110.60
26	LA	808	G	C5-C6-O6	-5.77	125.14	128.60
26	LA	1121	C	N1-C2-O2	5.77	122.36	118.90
26	LA	1220	G	C8-N9-C4	-5.77	104.09	106.40
26	LA	1309	G	N1-C2-N3	-5.77	120.44	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1634	A	C6-C5-N7	-5.77	128.26	132.30
26	LA	1972	G	P-O3'-C3'	-5.77	112.78	119.70
26	LA	2404	U	C6-N1-C1'	5.77	129.28	121.20
26	LA	2660	A	N7-C8-N9	-5.77	110.92	113.80
2	SA	51	A	C8-N9-C4	5.77	108.11	105.80
2	SA	510	A	P-O3'-C3'	-5.77	112.78	119.70
4	S2	1	C	P-O3'-C3'	5.77	126.62	119.70
26	LA	348	A	C1'-O4'-C4'	-5.77	105.29	109.90
2	SA	432	A	C5-N7-C8	-5.76	101.02	103.90
2	SA	611	C	P-O3'-C3'	-5.76	112.78	119.70
2	SA	622	A	P-O5'-C5'	-5.76	111.68	120.90
2	SA	630	A	N1-C2-N3	5.76	132.18	129.30
2	SA	837	U	OP1-P-OP2	-5.76	110.95	119.60
26	LA	656	G	C5-N7-C8	-5.76	101.42	104.30
26	LA	748	G	N1-C6-O6	5.76	123.36	119.90
26	LA	1034	G	N3-C2-N2	5.76	123.94	119.90
26	LA	1118	C	N1-C1'-C2'	-5.76	105.66	112.00
26	LA	1135	C	O5'-C5'-C4'	5.76	122.65	111.70
26	LA	1435	G	C4'-C3'-C2'	-5.76	96.83	102.60
26	LA	1478	G	N1-C6-O6	-5.76	116.44	119.90
26	LA	1510	G	N9-C1'-C2'	5.76	121.49	114.00
26	LA	1722	A	C6-N1-C2	-5.76	115.14	118.60
26	LA	1744	A	C2-N3-C4	5.76	113.48	110.60
26	LA	2163	A	C4-N9-C1'	5.76	136.68	126.30
26	LA	2273	A	C3'-C2'-C1'	-5.76	96.89	101.50
26	LA	2753	A	C8-N9-C4	-5.76	103.49	105.80
2	SA	454	G	N1-C2-N3	5.76	127.36	123.90
2	SA	568	G	P-O5'-C5'	-5.76	111.68	120.90
2	SA	647	C	C4'-C3'-C2'	-5.76	96.84	102.60
16	SP	18	GLN	N-CA-CB	5.76	120.97	110.60
25	LB	118	C	P-O3'-C3'	-5.76	112.78	119.70
26	LA	172	A	C5-C6-N6	-5.76	119.09	123.70
26	LA	1353	A	N9-C4-C5	-5.76	103.50	105.80
26	LA	1539	U	O5'-P-OP2	5.76	117.62	110.70
26	LA	1914	C	C5-C6-N1	5.76	123.88	121.00
26	LA	2669	G	OP1-P-OP2	-5.76	110.96	119.60
26	LA	2784	U	C5'-C4'-C3'	-5.76	106.78	116.00
2	SA	331	G	C2-N3-C4	-5.76	109.02	111.90
2	SA	709	U	C4'-C3'-C2'	-5.76	96.84	102.60
2	SA	979	C	N3-C4-N4	-5.76	113.97	118.00
2	SA	1025	U	O5'-P-OP2	-5.76	100.51	105.70
2	SA	1512	U	N3-C2-O2	-5.76	118.17	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	SK	126	ARG	C-N-CA	5.76	136.10	121.70
14	SN	76	PHE	CB-CG-CD1	5.76	124.83	120.80
26	LA	496	G	C5-N7-C8	-5.76	101.42	104.30
26	LA	605	G	C4-C5-C6	5.76	122.26	118.80
26	LA	1545	A	N1-C2-N3	5.76	132.18	129.30
26	LA	2171	A	C4'-C3'-C2'	-5.76	96.84	102.60
26	LA	2463	C	C6-N1-C2	-5.76	118.00	120.30
26	LA	2791	G	N9-C4-C5	5.76	107.70	105.40
46	LH	150	TYR	CG-CD2-CE2	-5.76	116.69	121.30
49	LK	17	ALA	N-CA-CB	5.76	118.17	110.10
53	LP	80	PHE	N-CA-CB	5.76	120.97	110.60
2	SA	8	A	O4'-C1'-N9	5.76	112.81	108.20
2	SA	1127	G	C4'-C3'-C2'	5.76	108.36	102.60
2	SA	1328	C	C1'-O4'-C4'	-5.76	105.29	109.90
3	S1	25	U	C2-N3-C4	-5.76	123.55	127.00
24	S3	663	PHE	CA-CB-CG	-5.76	100.08	113.90
26	LA	147	C	C6-N1-C2	-5.76	118.00	120.30
26	LA	1053	C	P-O5'-C5'	5.76	130.12	120.90
26	LA	1206	G	N1-C6-O6	-5.76	116.44	119.90
26	LA	1251	C	C4-C5-C6	5.76	120.28	117.40
26	LA	2246	G	N7-C8-N9	-5.76	110.22	113.10
26	LA	2313	C	N3-C4-C5	5.76	124.20	121.90
26	LA	2348	U	C6-N1-C2	-5.76	117.54	121.00
26	LA	2490	G	N3-C2-N2	5.76	123.93	119.90
48	LN	33	ARG	NE-CZ-NH2	5.76	123.18	120.30
2	SA	1514	G	N3-C2-N2	5.76	123.93	119.90
4	S2	3	C	N3-C2-O2	-5.76	117.87	121.90
26	LA	1282	U	OP1-P-OP2	-5.76	110.96	119.60
26	LA	1609	A	OP1-P-OP2	-5.76	110.96	119.60
26	LA	2177	C	C2-N3-C4	-5.76	117.02	119.90
26	LA	2326	C	C5-C6-N1	-5.76	118.12	121.00
26	LA	2726	A	N9-C4-C5	-5.76	103.50	105.80
2	SA	225	C	C5'-C4'-C3'	-5.76	106.79	116.00
2	SA	302	G	C2-N3-C4	-5.76	109.02	111.90
25	LB	31	C	C6-N1-C2	-5.76	118.00	120.30
26	LA	407	G	C4-C5-N7	-5.76	108.50	110.80
26	LA	1177	G	OP1-P-OP2	-5.76	110.97	119.60
26	LA	1348	C	C2-N1-C1'	5.76	125.13	118.80
26	LA	2282	G	N9-C4-C5	5.76	107.70	105.40
26	LA	2477	U	N3-C4-O4	5.76	123.43	119.40
2	SA	160	A	P-O3'-C3'	5.75	126.61	119.70
2	SA	729	A	C5-C6-N6	-5.75	119.10	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	SN	44	VAL	CA-CB-CG1	-5.75	102.27	110.90
26	LA	104	A	N1-C6-N6	5.75	122.05	118.60
26	LA	1073	A	C5-C6-N6	-5.75	119.10	123.70
26	LA	2147	A	P-O3'-C3'	5.75	126.61	119.70
26	LA	2407	A	C5'-C4'-O4'	5.75	116.01	109.10
2	SA	12	U	C5'-C4'-O4'	5.75	116.00	109.10
2	SA	151	A	N1-C6-N6	-5.75	115.15	118.60
2	SA	560	A	C4-C5-N7	-5.75	107.82	110.70
2	SA	565	U	C5'-C4'-O4'	-5.75	102.20	109.10
2	SA	672	U	N3-C2-O2	-5.75	118.17	122.20
2	SA	756	C	O4'-C1'-N1	5.75	112.80	108.20
2	SA	1120	C	C5-C4-N4	-5.75	116.17	120.20
26	LA	43	G	N9-C1'-C2'	5.75	121.48	114.00
26	LA	377	G	O4'-C1'-N9	5.75	112.80	108.20
26	LA	471	A	C3'-C2'-C1'	5.75	106.10	101.50
26	LA	592	A	N7-C8-N9	-5.75	110.92	113.80
26	LA	1191	G	N7-C8-N9	5.75	115.98	113.10
26	LA	2147	A	N9-C4-C5	-5.75	103.50	105.80
26	LA	2686	G	N1-C2-N2	-5.75	111.02	116.20
33	LZ	26	ARG	O-C-N	-5.75	113.50	122.70
46	LH	43	LYS	CB-CA-C	5.75	121.91	110.40
2	SA	128	G	N3-C4-C5	5.75	131.48	128.60
2	SA	681	A	C1'-O4'-C4'	-5.75	105.30	109.90
2	SA	888	G	N9-C4-C5	-5.75	103.10	105.40
2	SA	1193	G	C5-C6-O6	-5.75	125.15	128.60
2	SA	1230	C	C5-C4-N4	-5.75	116.17	120.20
2	SA	1322	C	O4'-C4'-C3'	5.75	110.70	106.10
26	LA	67	U	P-O3'-C3'	5.75	126.60	119.70
26	LA	555	G	P-O3'-C3'	5.75	126.60	119.70
26	LA	654	A	N1-C6-N6	-5.75	115.15	118.60
26	LA	663	G	N1-C2-N3	-5.75	120.45	123.90
26	LA	675	A	C5'-C4'-O4'	5.75	116.00	109.10
26	LA	718	A	C8-N9-C1'	-5.75	117.35	127.70
26	LA	1278	C	N3-C2-O2	5.75	125.93	121.90
26	LA	1355	G	O4'-C1'-N9	5.75	112.80	108.20
26	LA	1929	G	C5-C6-O6	-5.75	125.15	128.60
26	LA	2660	A	O5'-C5'-C4'	5.75	122.63	111.70
35	L1	49	ALA	CB-CA-C	5.75	118.73	110.10
2	SA	568	G	P-O3'-C3'	5.75	126.60	119.70
2	SA	1062	U	N1-C2-N3	5.75	118.35	114.90
2	SA	1145	A	C6-N1-C2	5.75	122.05	118.60
3	S1	30	U	O4'-C1'-N1	5.75	112.80	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	97	C	O5'-P-OP1	5.75	117.60	110.70
26	LA	95	A	C1'-O4'-C4'	-5.75	105.30	109.90
26	LA	1308	A	C1'-O4'-C4'	-5.75	105.30	109.90
26	LA	1650	A	N7-C8-N9	5.75	116.67	113.80
26	LA	1919	A	C6-C5-N7	5.75	136.32	132.30
26	LA	2551	C	P-O3'-C3'	-5.75	112.80	119.70
2	SA	1015	G	C4-C5-N7	-5.75	108.50	110.80
2	SA	1081	A	P-O3'-C3'	-5.75	112.80	119.70
2	SA	1337	G	N1-C6-O6	5.75	123.35	119.90
26	LA	30	G	N3-C4-C5	-5.75	125.72	128.60
26	LA	146	A	N7-C8-N9	5.75	116.67	113.80
26	LA	465	G	C4'-C3'-C2'	5.75	108.35	102.60
26	LA	1663	G	C4-C5-N7	5.75	113.10	110.80
26	LA	1783	A	C2-N3-C4	-5.75	107.73	110.60
26	LA	2354	C	C2-N3-C4	5.75	122.78	119.90
26	LA	2435	A	C5-N7-C8	-5.75	101.03	103.90
26	LA	2494	G	O4'-C1'-N9	5.75	112.80	108.20
26	LA	2618	G	C5'-C4'-O4'	5.75	116.00	109.10
26	LA	2819	G	C5'-C4'-C3'	-5.75	106.80	116.00
2	SA	18	C	N1-C2-N3	5.75	123.22	119.20
2	SA	97	G	P-O5'-C5'	5.75	130.09	120.90
2	SA	165	G	N9-C4-C5	5.75	107.70	105.40
2	SA	180	U	O4'-C1'-C2'	5.75	112.77	107.60
2	SA	585	G	C5'-C4'-O4'	5.75	116.00	109.10
2	SA	635	A	N1-C6-N6	5.75	122.05	118.60
2	SA	771	G	N9-C1'-C2'	-5.75	105.68	112.00
2	SA	965	U	C2-N1-C1'	5.75	124.60	117.70
2	SA	1024	G	N1-C6-O6	5.75	123.35	119.90
2	SA	1274	A	C6-N1-C2	5.75	122.05	118.60
2	SA	1393	U	C2-N3-C4	-5.75	123.55	127.00
4	S2	13	C	P-O5'-C5'	5.75	130.09	120.90
4	S2	58	A	C2'-C3'-O3'	5.75	122.89	113.70
25	LB	113	C	N3-C4-C5	-5.75	119.60	121.90
26	LA	681	G	C4'-C3'-C2'	-5.75	96.85	102.60
26	LA	1099	G	C5-N7-C8	-5.75	101.43	104.30
26	LA	1349	C	N1-C2-N3	5.75	123.22	119.20
26	LA	1433	A	C8-N9-C4	5.75	108.10	105.80
26	LA	1788	C	C4-C5-C6	5.75	120.27	117.40
26	LA	2178	C	P-O3'-C3'	-5.75	112.80	119.70
26	LA	2395	C	C6-N1-C2	-5.75	118.00	120.30
55	LQ	55	GLU	O-C-N	-5.75	113.51	122.70
2	SA	1262	C	C5-C6-N1	5.75	123.87	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	17	G	C4-C5-N7	5.75	113.10	110.80
26	LA	588	U	N1-C2-N3	5.75	118.35	114.90
26	LA	632	A	C6-N1-C2	-5.75	115.15	118.60
26	LA	1317	G	O4'-C1'-C2'	5.75	112.77	107.60
26	LA	2586	U	P-O5'-C5'	-5.75	111.71	120.90
26	LA	2803	G	N3-C4-C5	5.75	131.47	128.60
2	SA	741	G	C2-N3-C4	5.74	114.77	111.90
2	SA	944	G	C3'-C2'-C1'	-5.74	96.91	101.50
2	SA	1027	C	N3-C2-O2	-5.74	117.88	121.90
2	SA	1048	G	C4-C5-N7	-5.74	108.50	110.80
2	SA	1140	C	C5-C4-N4	-5.74	116.18	120.20
2	SA	1372	U	C5-C4-O4	-5.74	122.45	125.90
2	SA	1425	U	C4-C5-C6	-5.74	116.25	119.70
5	ST	78	LEU	CB-CG-CD2	-5.74	101.23	111.00
16	SP	65	ALA	O-C-N	-5.74	113.51	122.70
19	SC	35	ASP	N-CA-CB	-5.74	100.26	110.60
25	LB	100	G	C1'-O4'-C4'	-5.74	105.30	109.90
26	LA	360	U	N3-C4-O4	5.74	123.42	119.40
26	LA	365	U	OP2-P-O3'	5.74	117.84	105.20
26	LA	536	G	O4'-C1'-N9	5.74	112.79	108.20
26	LA	750	A	C5'-C4'-C3'	-5.74	106.81	116.00
26	LA	1201	U	OP1-P-OP2	-5.74	110.98	119.60
26	LA	1400	U	C5-C6-N1	-5.74	119.83	122.70
26	LA	1694	C	C2-N1-C1'	5.74	125.12	118.80
2	SA	66	A	N1-C2-N3	-5.74	126.43	129.30
2	SA	366	A	C5-N7-C8	5.74	106.77	103.90
26	LA	1031	G	C8-N9-C4	5.74	108.70	106.40
26	LA	2582	G	O5'-C5'-C4'	5.74	122.61	111.70
2	SA	251	G	N3-C2-N2	5.74	123.92	119.90
2	SA	352	C	P-O3'-C3'	5.74	126.59	119.70
2	SA	484	G	C4-N9-C1'	5.74	133.96	126.50
2	SA	604	G	C5'-C4'-C3'	-5.74	106.82	116.00
2	SA	629	A	N1-C2-N3	-5.74	126.43	129.30
2	SA	711	G	O4'-C1'-N9	5.74	112.79	108.20
2	SA	1124	G	P-O3'-C3'	-5.74	112.81	119.70
2	SA	1344	C	C5-C4-N4	5.74	124.22	120.20
25	LB	44	G	C8-N9-C4	-5.74	104.10	106.40
26	LA	159	G	C2'-C3'-O3'	5.74	122.89	113.70
26	LA	173	A	N7-C8-N9	5.74	116.67	113.80
26	LA	455	C	N1-C2-O2	-5.74	115.45	118.90
26	LA	704	G	N1-C2-N2	-5.74	111.03	116.20
26	LA	1063	G	C5'-C4'-C3'	5.74	125.19	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1526	C	O4'-C1'-N1	5.74	112.79	108.20
26	LA	1699	G	N3-C4-C5	5.74	131.47	128.60
26	LA	2216	G	C5'-C4'-C3'	-5.74	106.82	116.00
45	LG	82	TYR	CB-CG-CD2	5.74	124.44	121.00
2	SA	172	A	P-O3'-C3'	5.74	126.59	119.70
2	SA	210	C	OP1-P-O3'	5.74	117.83	105.20
2	SA	442	G	N1-C6-O6	-5.74	116.46	119.90
2	SA	904	U	C6-N1-C2	-5.74	117.56	121.00
4	S2	53	G	P-O5'-C5'	5.74	130.08	120.90
9	SI	109	GLN	N-CA-CB	5.74	120.93	110.60
26	LA	339	U	C4'-C3'-C2'	-5.74	96.86	102.60
26	LA	514	A	N9-C4-C5	5.74	108.09	105.80
26	LA	1190	G	O4'-C1'-N9	5.74	112.79	108.20
26	LA	1627	G	O4'-C1'-N9	5.74	112.79	108.20
26	LA	1744	A	N7-C8-N9	-5.74	110.93	113.80
26	LA	1789	A	P-O3'-C3'	5.74	126.59	119.70
26	LA	1828	G	N3-C2-N2	5.74	123.92	119.90
26	LA	2251	U	N3-C4-C5	5.74	118.04	114.60
26	LA	2707	U	P-O5'-C5'	5.74	130.08	120.90
26	LA	2708	G	C4'-C3'-C2'	-5.74	96.86	102.60
3	S1	53	G	N3-C2-N2	-5.74	115.88	119.90
22	SF	64	VAL	CA-CB-CG1	5.74	119.51	110.90
22	SF	116	PHE	CB-CG-CD2	-5.74	116.78	120.80
26	LA	333	G	N3-C4-C5	-5.74	125.73	128.60
26	LA	732	C	C4-C5-C6	-5.74	114.53	117.40
26	LA	1416	G	C8-N9-C1'	5.74	134.46	127.00
26	LA	1723	G	C5'-C4'-C3'	-5.74	106.82	116.00
26	LA	2568	U	C5-C6-N1	-5.74	119.83	122.70
26	LA	2580	U	O4'-C4'-C3'	5.74	110.69	106.10
26	LA	2780	G	C5-N7-C8	5.74	107.17	104.30
26	LA	2820	A	N1-C6-N6	-5.74	115.16	118.60
2	SA	1085	U	C3'-C2'-C1'	-5.74	96.91	101.50
2	SA	1193	G	N7-C8-N9	-5.74	110.23	113.10
2	SA	1314	C	O3'-P-O5'	-5.74	93.10	104.00
2	SA	1511	G	C4-C5-N7	5.74	113.09	110.80
4	S2	37	U	C6-N1-C2	-5.74	117.56	121.00
24	S3	106	ASP	CB-CG-OD2	5.74	123.46	118.30
26	LA	829	A	P-O3'-C3'	-5.74	112.82	119.70
26	LA	1072	C	O4'-C1'-N1	5.74	112.79	108.20
26	LA	1637	A	O4'-C4'-C3'	5.74	110.69	106.10
26	LA	2198	A	O5'-P-OP1	5.74	117.58	110.70
26	LA	2744	G	O3'-P-O5'	5.74	114.90	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2881	U	N1-C2-O2	5.74	126.81	122.80
2	SA	353	A	C1'-O4'-C4'	-5.73	105.31	109.90
2	SA	628	G	O4'-C1'-N9	5.73	112.79	108.20
2	SA	1359	C	N1-C2-O2	5.73	122.34	118.90
25	LB	13	G	C6-C5-N7	5.73	133.84	130.40
26	LA	1117	C	N3-C4-N4	5.73	122.01	118.00
26	LA	1587	G	C5'-C4'-O4'	5.73	115.98	109.10
26	LA	1665	A	C4-C5-C6	5.73	119.87	117.00
26	LA	1795	C	N3-C4-C5	5.73	124.19	121.90
49	LK	56	VAL	CG1-CB-CG2	-5.73	101.72	110.90
2	SA	14	U	C6-N1-C2	-5.73	117.56	121.00
2	SA	143	A	C3'-C2'-C1'	-5.73	96.91	101.50
2	SA	391	G	O4'-C1'-N9	5.73	112.79	108.20
2	SA	545	C	P-O5'-C5'	5.73	130.07	120.90
2	SA	681	A	N9-C4-C5	5.73	108.09	105.80
2	SA	1102	A	OP1-P-OP2	-5.73	111.00	119.60
2	SA	1325	C	N3-C2-O2	-5.73	117.89	121.90
26	LA	328	U	C6-N1-C2	-5.73	117.56	121.00
26	LA	581	C	C2-N3-C4	-5.73	117.03	119.90
26	LA	615	U	OP1-P-OP2	-5.73	111.00	119.60
26	LA	805	G	P-O5'-C5'	-5.73	111.73	120.90
26	LA	989	G	O5'-C5'-C4'	5.73	122.59	111.70
26	LA	1102	C	N3-C4-C5	-5.73	119.61	121.90
26	LA	1103	A	C8-N9-C1'	-5.73	117.38	127.70
26	LA	1163	G	N1-C6-O6	5.73	123.34	119.90
26	LA	1421	G	O4'-C1'-N9	5.73	112.79	108.20
26	LA	1837	C	O4'-C4'-C3'	-5.73	98.27	104.00
26	LA	2009	A	N7-C8-N9	5.73	116.67	113.80
26	LA	2286	G	N3-C2-N2	5.73	123.91	119.90
26	LA	2347	C	N3-C4-N4	5.73	122.01	118.00
30	LW	52	ASN	C-N-CA	5.73	136.03	121.70
38	LE	95	SER	N-CA-CB	5.73	119.10	110.50
46	LH	82	PHE	CB-CG-CD1	-5.73	116.79	120.80
50	LL	114	LEU	CB-CG-CD1	5.73	120.75	111.00
2	SA	54	C	N3-C4-C5	-5.73	119.61	121.90
2	SA	458	U	OP1-P-OP2	-5.73	111.00	119.60
2	SA	802	A	C4-C5-C6	5.73	119.86	117.00
2	SA	1528	U	C2-N3-C4	-5.73	123.56	127.00
26	LA	193	U	O4'-C1'-N1	5.73	112.78	108.20
26	LA	360	U	C2-N3-C4	5.73	130.44	127.00
26	LA	871	U	N3-C4-C5	-5.73	111.16	114.60
26	LA	914	G	N9-C4-C5	-5.73	103.11	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1469	A	N3-C4-C5	-5.73	122.79	126.80
26	LA	1482	G	C5-C6-O6	5.73	132.04	128.60
26	LA	1780	A	N7-C8-N9	5.73	116.67	113.80
26	LA	1821	A	N3-C4-N9	-5.73	122.82	127.40
26	LA	1974	C	C5'-C4'-C3'	5.73	125.17	116.00
26	LA	2019	A	C4'-C3'-C2'	-5.73	96.87	102.60
26	LA	2038	G	C4-C5-N7	5.73	113.09	110.80
26	LA	2326	C	N3-C2-O2	-5.73	117.89	121.90
26	LA	2469	A	OP1-P-OP2	-5.73	111.00	119.60
26	LA	2553	G	C4-C5-N7	-5.73	108.51	110.80
26	LA	2606	C	N3-C2-O2	-5.73	117.89	121.90
41	L5	14	ARG	CB-CG-CD	5.73	126.50	111.60
2	SA	198	G	N1-C6-O6	-5.73	116.46	119.90
2	SA	466	A	C5-N7-C8	5.73	106.77	103.90
11	SK	32	THR	CA-CB-CG2	-5.73	104.38	112.40
26	LA	356	G	N9-C4-C5	5.73	107.69	105.40
26	LA	562	U	C2-N3-C4	-5.73	123.56	127.00
26	LA	871	U	P-O5'-C5'	5.73	130.07	120.90
26	LA	2457	U	C4'-C3'-C2'	-5.73	96.87	102.60
26	LA	2630	G	C4'-C3'-C2'	-5.73	96.87	102.60
1	SS	4	LEU	CB-CG-CD2	-5.73	101.26	111.00
2	SA	179	A	N9-C4-C5	5.73	108.09	105.80
2	SA	366	A	C8-N9-C4	5.73	108.09	105.80
2	SA	776	G	N9-C4-C5	-5.73	103.11	105.40
2	SA	832	G	N1-C6-O6	-5.73	116.46	119.90
2	SA	891	U	C5'-C4'-O4'	5.73	115.97	109.10
2	SA	1163	A	N9-C4-C5	-5.73	103.51	105.80
2	SA	1412	C	O5'-P-OP1	5.73	117.57	110.70
25	LB	37	C	N3-C4-C5	-5.73	119.61	121.90
26	LA	895	U	N3-C2-O2	-5.73	118.19	122.20
26	LA	1150	C	C5-C4-N4	5.73	124.21	120.20
26	LA	1322	A	C4-C5-N7	5.73	113.56	110.70
26	LA	1408	G	C2-N3-C4	-5.73	109.04	111.90
44	LF	103	GLY	O-C-N	-5.73	113.53	122.70
2	SA	1159	U	N1-C2-O2	5.73	126.81	122.80
2	SA	1267	C	C5'-C4'-O4'	5.73	115.97	109.10
2	SA	1519	A	P-O3'-C3'	5.73	126.57	119.70
26	LA	136	G	C2-N3-C4	5.73	114.76	111.90
26	LA	1698	A	P-O5'-C5'	5.73	130.06	120.90
2	SA	36	C	C5'-C4'-O4'	5.72	115.97	109.10
2	SA	175	C	C4'-C3'-C2'	-5.72	96.88	102.60
2	SA	454	G	O5'-P-OP1	5.72	117.57	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	800	G	N9-C4-C5	5.72	107.69	105.40
2	SA	993	G	N1-C6-O6	5.72	123.33	119.90
2	SA	1466	C	N3-C4-C5	-5.72	119.61	121.90
26	LA	266	G	C8-N9-C4	-5.72	104.11	106.40
26	LA	458	G	N7-C8-N9	-5.72	110.24	113.10
26	LA	634	C	N3-C2-O2	5.72	125.91	121.90
26	LA	1139	G	O4'-C1'-N9	5.72	112.78	108.20
26	LA	1267	U	C5'-C4'-O4'	-5.72	102.23	109.10
26	LA	1488	C	N3-C4-C5	5.72	124.19	121.90
26	LA	1726	C	N3-C2-O2	-5.72	117.89	121.90
26	LA	1766	G	C4'-C3'-C2'	-5.72	96.88	102.60
26	LA	2325	G	C6-N1-C2	-5.72	121.67	125.10
26	LA	2417	C	C6-N1-C2	-5.72	118.01	120.30
2	SA	244	U	OP1-P-OP2	-5.72	111.02	119.60
2	SA	695	A	C1'-O4'-C4'	-5.72	105.32	109.90
2	SA	817	C	C5'-C4'-O4'	5.72	115.97	109.10
2	SA	1355	G	C5-C6-N1	-5.72	108.64	111.50
26	LA	547	A	C5-C6-N1	5.72	120.56	117.70
26	LA	845	A	C5-C6-N6	5.72	128.28	123.70
26	LA	1777	U	C5'-C4'-C3'	5.72	125.16	116.00
26	LA	1976	U	C5'-C4'-O4'	5.72	115.97	109.10
26	LA	2105	U	N1-C2-N3	5.72	118.33	114.90
26	LA	2523	G	C6-C5-N7	-5.72	126.97	130.40
26	LA	2751	G	C5-N7-C8	5.72	107.16	104.30
26	LA	2794	C	O4'-C1'-N1	5.72	112.78	108.20
35	L1	3	THR	CA-CB-CG2	-5.72	104.39	112.40
2	SA	72	A	P-O3'-C3'	5.72	126.56	119.70
2	SA	247	G	N9-C1'-C2'	-5.72	105.71	112.00
2	SA	460	A	C5-N7-C8	5.72	106.76	103.90
25	LB	120	U	C2-N1-C1'	5.72	124.56	117.70
26	LA	973	A	C4'-C3'-C2'	-5.72	96.88	102.60
26	LA	1437	C	N3-C2-O2	-5.72	117.89	121.90
26	LA	2102	G	C1'-O4'-C4'	-5.72	105.32	109.90
2	SA	552	U	N3-C2-O2	-5.72	118.20	122.20
2	SA	1479	C	N3-C2-O2	-5.72	117.90	121.90
18	SB	202	ASN	C-N-CA	5.72	136.00	121.70
25	LB	35	C	N3-C4-N4	5.72	122.00	118.00
26	LA	249	C	C4-C5-C6	-5.72	114.54	117.40
26	LA	468	G	N1-C2-N3	5.72	127.33	123.90
26	LA	487	C	O4'-C1'-N1	5.72	112.78	108.20
26	LA	625	G	C6-C5-N7	-5.72	126.97	130.40
26	LA	645	C	P-O5'-C5'	5.72	130.05	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1660	G	C8-N9-C4	5.72	108.69	106.40
26	LA	1840	G	C2'-C3'-O3'	5.72	122.85	113.70
26	LA	1853	A	C4'-C3'-C2'	-5.72	96.88	102.60
26	LA	2597	G	C2-N3-C4	-5.72	109.04	111.90
31	LX	76	ASP	CB-CG-OD2	5.72	123.45	118.30
2	SA	400	C	C5'-C4'-O4'	5.72	115.96	109.10
2	SA	1174	G	O4'-C4'-C3'	-5.72	98.28	104.00
2	SA	1208	C	O4'-C1'-N1	5.72	112.77	108.20
26	LA	102	U	N1-C2-O2	-5.72	118.80	122.80
26	LA	1144	A	O4'-C1'-N9	5.72	112.77	108.20
26	LA	1810	A	C5-C6-N1	5.72	120.56	117.70
26	LA	1937	A	C5-C6-N1	5.72	120.56	117.70
26	LA	2370	G	N9-C4-C5	5.72	107.69	105.40
2	SA	153	C	C5-C6-N1	5.72	123.86	121.00
2	SA	212	G	C4-N9-C1'	-5.72	119.07	126.50
2	SA	848	C	P-O3'-C3'	-5.72	112.84	119.70
2	SA	1007	U	OP2-P-O3'	5.72	117.78	105.20
4	S2	16	C	C4'-C3'-C2'	-5.72	96.88	102.60
25	LB	80	U	OP1-P-OP2	-5.72	111.03	119.60
26	LA	185	G	C5-N7-C8	5.72	107.16	104.30
26	LA	531	C	C5-C4-N4	5.72	124.20	120.20
26	LA	858	G	N3-C2-N2	5.72	123.90	119.90
26	LA	1586	A	P-O3'-C3'	-5.72	112.84	119.70
26	LA	1712	U	C4'-C3'-C2'	5.72	108.32	102.60
26	LA	1882	U	C5-C6-N1	5.72	125.56	122.70
26	LA	2452	C	O4'-C1'-N1	5.72	112.77	108.20
26	LA	2512	C	N1-C2-O2	-5.72	115.47	118.90
26	LA	2549	G	C8-N9-C4	-5.72	104.11	106.40
26	LA	2858	C	OP1-P-OP2	-5.72	111.03	119.60
2	SA	389	A	C5'-C4'-C3'	-5.71	106.86	116.00
2	SA	952	U	O3'-P-O5'	-5.71	93.14	104.00
2	SA	962	C	C5'-C4'-O4'	5.71	115.96	109.10
25	LB	22	U	O4'-C1'-N1	5.71	112.77	108.20
26	LA	450	G	C8-N9-C4	5.71	108.69	106.40
26	LA	541	A	N9-C1'-C2'	-5.71	105.71	112.00
26	LA	1166	G	C2-N3-C4	-5.71	109.04	111.90
26	LA	1686	C	C5-C6-N1	5.71	123.86	121.00
26	LA	1848	A	OP2-P-O3'	5.71	117.77	105.20
26	LA	1903	G	C5-N7-C8	5.71	107.16	104.30
26	LA	2142	A	C5'-C4'-C3'	-5.71	106.86	116.00
26	LA	2430	A	N3-C4-C5	-5.71	122.80	126.80
26	LA	2535	G	N1-C2-N2	-5.71	111.06	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2693	G	C2'-C3'-O3'	5.71	122.84	113.70
2	SA	844	G	P-O3'-C3'	5.71	126.56	119.70
3	S1	43	U	C6-N1-C2	5.71	124.43	121.00
26	LA	620	G	N3-C2-N2	-5.71	115.90	119.90
26	LA	1375	U	P-O3'-C3'	5.71	126.56	119.70
26	LA	1568	G	O4'-C4'-C3'	5.71	110.67	106.10
26	LA	1782	U	P-O5'-C5'	-5.71	111.76	120.90
26	LA	1924	C	C2-N1-C1'	5.71	125.08	118.80
26	LA	2280	G	C5-C6-N1	-5.71	108.64	111.50
26	LA	2363	G	P-O5'-C5'	-5.71	111.76	120.90
26	LA	2551	C	C6-N1-C2	5.71	122.58	120.30
26	LA	2628	C	N3-C2-O2	5.71	125.90	121.90
2	SA	82	G	N3-C2-N2	5.71	123.90	119.90
2	SA	142	G	N7-C8-N9	-5.71	110.24	113.10
2	SA	628	G	N1-C6-O6	5.71	123.33	119.90
2	SA	684	U	C4-C5-C6	5.71	123.13	119.70
2	SA	711	G	N9-C1'-C2'	-5.71	105.72	112.00
2	SA	764	C	C3'-C2'-C1'	-5.71	96.93	101.50
2	SA	1127	G	C1'-O4'-C4'	-5.71	105.33	109.90
2	SA	1471	U	O4'-C1'-N1	5.71	112.77	108.20
20	SD	96	ARG	NE-CZ-NH2	-5.71	117.44	120.30
25	LB	8	C	N1-C2-N3	5.71	123.20	119.20
26	LA	467	G	C4-C5-N7	5.71	113.08	110.80
26	LA	1022	G	C5'-C4'-O4'	5.71	115.95	109.10
26	LA	1739	A	O4'-C1'-N9	-5.71	103.63	108.20
26	LA	1740	G	C5'-C4'-O4'	5.71	115.95	109.10
26	LA	1795	C	C2-N3-C4	-5.71	117.04	119.90
26	LA	1953	A	OP2-P-O3'	5.71	117.76	105.20
26	LA	2102	G	C5-C6-N1	5.71	114.36	111.50
26	LA	2299	U	N1-C2-O2	5.71	126.80	122.80
26	LA	2585	U	P-O5'-C5'	-5.71	111.76	120.90
2	SA	537	G	C8-N9-C4	-5.71	104.12	106.40
2	SA	1280	A	C5-C6-N1	5.71	120.56	117.70
4	S2	37	U	O4'-C1'-N1	5.71	112.77	108.20
26	LA	526	A	C5'-C4'-C3'	-5.71	106.86	116.00
26	LA	1273	U	O4'-C1'-C2'	5.71	112.74	107.60
26	LA	1809	A	C6-N1-C2	-5.71	115.17	118.60
26	LA	2819	G	N7-C8-N9	5.71	115.95	113.10
2	SA	357	G	C5-N7-C8	-5.71	101.45	104.30
2	SA	656	G	N9-C4-C5	5.71	107.68	105.40
2	SA	974	A	N3-C4-C5	-5.71	122.80	126.80
2	SA	1141	C	N3-C2-O2	-5.71	117.90	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	SK	27	ASN	CA-CB-CG	-5.71	100.84	113.40
25	LB	41	G	C5-C6-O6	-5.71	125.17	128.60
26	LA	209	C	N1-C2-O2	5.71	122.33	118.90
26	LA	635	C	C5-C6-N1	-5.71	118.15	121.00
26	LA	1020	A	C4'-C3'-C2'	-5.71	96.89	102.60
26	LA	1050	A	C2-N3-C4	5.71	113.45	110.60
26	LA	1413	A	N3-C4-C5	5.71	130.80	126.80
26	LA	1457	U	P-O5'-C5'	5.71	130.03	120.90
26	LA	2489	U	N3-C2-O2	-5.71	118.20	122.20
26	LA	2614	A	O3'-P-O5'	-5.71	93.15	104.00
49	LK	7	TYR	CZ-CE2-CD2	-5.71	114.66	119.80
2	SA	65	A	P-O5'-C5'	-5.71	111.77	120.90
2	SA	113	G	P-O3'-C3'	5.71	126.55	119.70
2	SA	287	U	P-O5'-C5'	5.71	130.03	120.90
2	SA	656	G	C2-N3-C4	5.71	114.75	111.90
2	SA	1180	A	C2-N3-C4	-5.71	107.75	110.60
2	SA	1371	G	P-O3'-C3'	5.71	126.55	119.70
25	LB	7	G	C6-N1-C2	-5.71	121.68	125.10
26	LA	423	A	P-O5'-C5'	5.71	130.03	120.90
26	LA	443	A	N7-C8-N9	5.71	116.65	113.80
26	LA	534	U	N1-C2-O2	5.71	126.80	122.80
26	LA	995	C	C1'-O4'-C4'	5.71	114.47	109.90
26	LA	1082	U	N3-C4-O4	5.71	123.39	119.40
26	LA	1469	A	C8-N9-C4	-5.71	103.52	105.80
26	LA	2007	U	C6-N1-C2	-5.71	117.58	121.00
26	LA	2218	G	C4-C5-C6	-5.71	115.38	118.80
26	LA	2274	A	O4'-C1'-N9	5.71	112.76	108.20
36	L2	39	LYS	O-C-N	-5.71	113.57	122.70
26	LA	624	C	C2-N1-C1'	5.71	125.08	118.80
26	LA	1153	C	C6-N1-C2	5.71	122.58	120.30
26	LA	1632	A	O4'-C1'-N9	5.71	112.76	108.20
26	LA	1856	U	C2-N1-C1'	-5.71	110.85	117.70
2	SA	250	A	C6-N1-C2	-5.70	115.18	118.60
2	SA	308	C	C5-C4-N4	5.70	124.19	120.20
2	SA	550	G	P-O3'-C3'	5.70	126.55	119.70
2	SA	687	A	C5-C6-N1	-5.70	114.85	117.70
2	SA	980	C	C2-N1-C1'	-5.70	112.53	118.80
2	SA	1004	A	C1'-O4'-C4'	-5.70	105.34	109.90
2	SA	1041	G	C6-C5-N7	5.70	133.82	130.40
2	SA	1466	C	N1-C2-N3	-5.70	115.21	119.20
3	S1	29	G	C5'-C4'-O4'	5.70	115.94	109.10
4	S2	35	C	C5'-C4'-O4'	5.70	115.94	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	72	G	OP1-P-OP2	-5.70	111.05	119.60
26	LA	17	G	C2'-C3'-O3'	5.70	122.83	113.70
26	LA	38	A	N1-C6-N6	5.70	122.02	118.60
26	LA	149	A	N1-C6-N6	-5.70	115.18	118.60
26	LA	399	U	N3-C2-O2	-5.70	118.21	122.20
26	LA	1173	U	C4'-C3'-C2'	-5.70	96.90	102.60
26	LA	2219	U	N3-C4-C5	-5.70	111.18	114.60
26	LA	2500	U	C4-C5-C6	5.70	123.12	119.70
26	LA	2587	A	C6-C5-N7	5.70	136.29	132.30
31	LX	56	PHE	CB-CG-CD2	5.70	124.79	120.80
54	LM	114	LYS	CB-CA-C	-5.70	98.99	110.40
2	SA	246	A	C4'-C3'-C2'	-5.70	96.90	102.60
2	SA	742	G	O4'-C1'-N9	5.70	112.76	108.20
2	SA	851	G	C3'-C2'-C1'	-5.70	96.94	101.50
2	SA	1329	A	C4-C5-N7	5.70	113.55	110.70
2	SA	1349	A	C5-C6-N1	-5.70	114.85	117.70
26	LA	990	A	C2-N3-C4	-5.70	107.75	110.60
26	LA	1132	U	C5-C6-N1	-5.70	119.85	122.70
26	LA	1822	C	C6-N1-C2	-5.70	118.02	120.30
26	LA	1870	C	C6-N1-C2	-5.70	118.02	120.30
26	LA	2047	C	N1-C2-O2	5.70	122.32	118.90
26	LA	2257	U	C5-C6-N1	-5.70	119.85	122.70
2	SA	43	C	C6-N1-C2	5.70	122.58	120.30
2	SA	247	G	N1-C6-O6	-5.70	116.48	119.90
2	SA	504	C	N1-C2-O2	-5.70	115.48	118.90
2	SA	741	G	N7-C8-N9	5.70	115.95	113.10
2	SA	765	G	P-O5'-C5'	5.70	130.02	120.90
2	SA	1011	C	C6-N1-C2	5.70	122.58	120.30
2	SA	1327	C	OP1-P-OP2	-5.70	111.05	119.60
2	SA	1362	A	N9-C1'-C2'	-5.70	105.73	112.00
6	SU	65	ARG	NE-CZ-NH1	5.70	123.15	120.30
26	LA	113	U	C5-C4-O4	-5.70	122.48	125.90
26	LA	265	A	C5'-C4'-C3'	5.70	125.12	116.00
26	LA	508	A	C4-C5-N7	5.70	113.55	110.70
26	LA	1565	C	O4'-C1'-N1	5.70	112.76	108.20
26	LA	1612	C	N3-C4-C5	5.70	124.18	121.90
26	LA	1853	A	C6-N1-C2	-5.70	115.18	118.60
26	LA	1974	C	C2-N3-C4	-5.70	117.05	119.90
26	LA	2318	G	N3-C4-N9	-5.70	122.58	126.00
26	LA	2761	A	C6-C5-N7	-5.70	128.31	132.30
2	SA	94	G	N1-C6-O6	5.70	123.32	119.90
2	SA	358	U	C5'-C4'-C3'	5.70	125.12	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	681	A	N1-C2-N3	-5.70	126.45	129.30
2	SA	1103	C	O4'-C1'-N1	5.70	112.76	108.20
2	SA	1196	A	O4'-C1'-N9	5.70	112.76	108.20
2	SA	1336	C	O4'-C1'-C2'	-5.70	100.10	105.80
26	LA	464	U	C5-C4-O4	5.70	129.32	125.90
26	LA	472	A	C4'-C3'-C2'	-5.70	96.90	102.60
26	LA	1330	C	C2-N3-C4	-5.70	117.05	119.90
26	LA	1845	G	N3-C4-C5	5.70	131.45	128.60
26	LA	1904	G	N3-C2-N2	5.70	123.89	119.90
26	LA	2134	A	C5-N7-C8	5.70	106.75	103.90
37	LC	226	GLN	C-N-CA	5.70	135.95	121.70
2	SA	691	G	C8-N9-C4	-5.70	104.12	106.40
2	SA	898	G	C4-N9-C1'	-5.70	119.09	126.50
2	SA	1036	A	P-O3'-C3'	5.70	126.54	119.70
26	LA	1803	A	C5-N7-C8	-5.70	101.05	103.90
26	LA	2005	A	N9-C4-C5	5.70	108.08	105.80
26	LA	2145	C	O4'-C1'-N1	5.70	112.76	108.20
26	LA	2890	G	P-O3'-C3'	5.70	126.54	119.70
2	SA	614	C	OP1-P-OP2	-5.70	111.06	119.60
2	SA	1162	C	N3-C4-N4	-5.70	114.01	118.00
2	SA	1259	C	N3-C4-C5	5.70	124.18	121.90
2	SA	1464	U	C5'-C4'-C3'	5.70	125.11	116.00
26	LA	24	G	C6-N1-C2	-5.70	121.68	125.10
26	LA	45	G	O4'-C1'-N9	5.70	112.76	108.20
26	LA	510	C	C2-N1-C1'	-5.70	112.53	118.80
26	LA	516	C	O5'-P-OP1	5.70	117.53	110.70
26	LA	517	C	N3-C4-N4	-5.70	114.01	118.00
26	LA	696	G	O4'-C1'-N9	5.70	112.76	108.20
26	LA	711	G	N3-C2-N2	5.70	123.89	119.90
26	LA	887	U	C5-C4-O4	5.70	129.32	125.90
26	LA	906	U	C1'-O4'-C4'	-5.70	105.34	109.90
26	LA	970	U	N3-C4-C5	5.70	118.02	114.60
26	LA	1001	A	N9-C4-C5	-5.70	103.52	105.80
26	LA	1815	A	O5'-P-OP2	5.70	117.53	110.70
26	LA	1891	G	P-O3'-C3'	-5.70	112.87	119.70
26	LA	2224	G	C4-C5-C6	-5.70	115.38	118.80
26	LA	2248	C	N3-C4-N4	-5.70	114.01	118.00
26	LA	2363	G	C8-N9-C1'	5.70	134.40	127.00
26	LA	2892	G	C2-N3-C4	-5.70	109.05	111.90
56	LR	88	ARG	NH1-CZ-NH2	-5.70	113.14	119.40
2	SA	160	A	P-O5'-C5'	-5.69	111.79	120.90
2	SA	283	U	C5-C4-O4	-5.69	122.48	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	443	C	N3-C4-C5	5.69	124.18	121.90
2	SA	527	G	N3-C4-C5	5.69	131.45	128.60
2	SA	729	A	OP1-P-OP2	-5.69	111.06	119.60
3	S1	50	U	N1-C2-N3	-5.69	111.48	114.90
26	LA	834	G	P-O3'-C3'	-5.69	112.87	119.70
26	LA	2569	G	C8-N9-C4	5.69	108.68	106.40
26	LA	2725	A	OP1-P-O3'	5.69	117.73	105.20
50	LL	69	ARG	NE-CZ-NH1	-5.69	117.45	120.30
1	SS	68	HIS	CA-CB-CG	5.69	123.28	113.60
2	SA	338	A	C5-C6-N1	5.69	120.55	117.70
2	SA	448	A	C5-C6-N6	-5.69	119.15	123.70
2	SA	506	G	C3'-C2'-C1'	-5.69	96.94	101.50
2	SA	611	C	N3-C4-N4	5.69	121.98	118.00
2	SA	772	U	OP1-P-OP2	-5.69	111.06	119.60
2	SA	802	A	N7-C8-N9	5.69	116.65	113.80
2	SA	1077	G	O4'-C1'-N9	5.69	112.75	108.20
9	SI	89	TYR	CB-CG-CD1	5.69	124.42	121.00
26	LA	57	C	N3-C2-O2	-5.69	117.92	121.90
26	LA	734	A	C6-N1-C2	5.69	122.02	118.60
26	LA	899	A	C5'-C4'-C3'	5.69	125.11	116.00
26	LA	1407	G	N7-C8-N9	-5.69	110.25	113.10
26	LA	1553	A	C1'-O4'-C4'	-5.69	105.35	109.90
26	LA	2284	A	P-O3'-C3'	-5.69	112.87	119.70
26	LA	2432	A	N7-C8-N9	-5.69	110.95	113.80
26	LA	2445	G	O5'-P-OP1	5.69	117.53	110.70
2	SA	1098	C	O3'-P-O5'	-5.69	93.19	104.00
19	SC	192	TYR	CB-CG-CD1	-5.69	117.58	121.00
24	S3	161	LEU	CB-CA-C	5.69	121.01	110.20
25	LB	38	C	N3-C4-N4	5.69	121.98	118.00
25	LB	73	A	N7-C8-N9	5.69	116.64	113.80
26	LA	62	U	O3'-P-O5'	-5.69	93.19	104.00
26	LA	132	G	OP1-P-OP2	-5.69	111.06	119.60
26	LA	285	G	N1-C2-N3	5.69	127.31	123.90
26	LA	367	G	O4'-C1'-N9	5.69	112.75	108.20
26	LA	464	U	P-O5'-C5'	-5.69	111.79	120.90
26	LA	907	G	OP1-P-OP2	-5.69	111.06	119.60
26	LA	1644	C	N3-C4-C5	-5.69	119.62	121.90
26	LA	2013	A	C3'-C2'-C1'	-5.69	96.95	101.50
26	LA	2485	G	P-O3'-C3'	5.69	126.53	119.70
2	SA	449	G	C5-N7-C8	-5.69	101.46	104.30
2	SA	907	A	C5'-C4'-O4'	5.69	115.93	109.10
2	SA	1175	G	C4'-C3'-C2'	-5.69	96.91	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1441	G	O4'-C1'-N9	5.69	112.75	108.20
26	LA	1670	C	C5-C6-N1	5.69	123.84	121.00
26	LA	2625	G	N7-C8-N9	-5.69	110.26	113.10
26	LA	2757	A	O4'-C1'-N9	5.69	112.75	108.20
2	SA	146	G	C3'-C2'-C1'	-5.69	96.95	101.50
2	SA	368	U	OP1-P-O3'	5.69	117.71	105.20
2	SA	528	C	C5'-C4'-O4'	5.69	115.92	109.10
2	SA	1478	U	P-O5'-C5'	5.69	130.00	120.90
2	SA	1492	A	C6-C5-N7	-5.69	128.32	132.30
2	SA	1533	C	N3-C4-C5	-5.69	119.62	121.90
26	LA	210	C	C1'-O4'-C4'	-5.69	105.35	109.90
26	LA	481	G	N7-C8-N9	-5.69	110.26	113.10
26	LA	624	C	C5-C6-N1	-5.69	118.16	121.00
26	LA	772	C	O4'-C1'-N1	5.69	112.75	108.20
26	LA	878	A	C4'-C3'-C2'	-5.69	96.91	102.60
26	LA	914	G	C5'-C4'-O4'	5.69	115.93	109.10
26	LA	1142	A	C5-C6-N1	5.69	120.54	117.70
26	LA	1274	A	C4-C5-N7	-5.69	107.86	110.70
26	LA	2454	G	C6-C5-N7	-5.69	126.99	130.40
26	LA	2515	C	O3'-P-O5'	-5.69	93.19	104.00
26	LA	2558	C	C5-C6-N1	5.69	123.84	121.00
26	LA	2634	A	C3'-C2'-C1'	-5.69	96.95	101.50
43	L7	22	VAL	O-C-N	-5.69	113.60	122.70
2	SA	268	U	C6-N1-C2	5.69	124.41	121.00
2	SA	1040	U	C5'-C4'-C3'	5.69	125.10	116.00
2	SA	1399	C	C4-C5-C6	5.69	120.24	117.40
24	S3	576	ARG	NE-CZ-NH2	5.69	123.14	120.30
26	LA	313	G	N3-C4-C5	-5.69	125.76	128.60
26	LA	1051	G	C6-C5-N7	5.69	133.81	130.40
26	LA	1221	C	C6-N1-C2	-5.69	118.03	120.30
26	LA	2561	U	OP1-P-OP2	-5.69	111.07	119.60
2	SA	168	G	N1-C6-O6	5.68	123.31	119.90
2	SA	188	C	C5'-C4'-O4'	5.68	115.92	109.10
2	SA	266	G	C4'-C3'-C2'	-5.68	96.92	102.60
2	SA	960	U	C5-C6-N1	-5.68	119.86	122.70
2	SA	1030	U	C5'-C4'-O4'	5.68	115.92	109.10
2	SA	1350	A	C4-C5-C6	5.68	119.84	117.00
2	SA	1457	G	N3-C2-N2	-5.68	115.92	119.90
2	SA	1486	G	C4-N9-C1'	5.68	133.89	126.50
2	SA	1518	A	C6-C5-N7	-5.68	128.32	132.30
4	S2	45	A	N1-C2-N3	5.68	132.14	129.30
13	SM	69	ARG	CD-NE-CZ	5.68	131.56	123.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	96	C	P-O5'-C5'	-5.68	111.81	120.90
26	LA	496	G	C6-N1-C2	-5.68	121.69	125.10
26	LA	805	G	N9-C4-C5	-5.68	103.13	105.40
26	LA	904	G	C6-N1-C2	5.68	128.51	125.10
26	LA	1166	G	C4-C5-N7	-5.68	108.53	110.80
26	LA	2345	G	C5-C6-O6	5.68	132.01	128.60
26	LA	2607	G	N1-C2-N2	5.68	121.31	116.20
26	LA	2607	G	N3-C2-N2	-5.68	115.92	119.90
2	SA	27	G	C5'-C4'-O4'	5.68	115.92	109.10
2	SA	631	C	N3-C4-C5	5.68	124.17	121.90
2	SA	972	C	C4'-C3'-C2'	-5.68	96.92	102.60
19	SC	114	LEU	CB-CG-CD2	5.68	120.66	111.00
26	LA	232	G	C5-C6-O6	-5.68	125.19	128.60
26	LA	657	U	OP1-P-OP2	-5.68	111.08	119.60
26	LA	978	G	C5-N7-C8	5.68	107.14	104.30
26	LA	1834	U	C4-C5-C6	-5.68	116.29	119.70
26	LA	2209	G	C2-N3-C4	-5.68	109.06	111.90
26	LA	2864	G	C5'-C4'-C3'	-5.68	106.91	116.00
51	LI	116	ARG	NE-CZ-NH1	5.68	123.14	120.30
2	SA	274	A	C3'-C2'-C1'	-5.68	96.95	101.50
2	SA	349	A	O5'-P-OP2	-5.68	100.59	105.70
2	SA	889	A	C6-C5-N7	5.68	136.28	132.30
2	SA	1377	A	C4-C5-N7	-5.68	107.86	110.70
6	SU	34	ARG	NE-CZ-NH2	5.68	123.14	120.30
26	LA	45	G	C1'-O4'-C4'	-5.68	105.36	109.90
26	LA	504	A	C5'-C4'-O4'	5.68	115.92	109.10
26	LA	1754	A	C2-N3-C4	5.68	113.44	110.60
26	LA	1754	A	OP1-P-OP2	-5.68	111.08	119.60
26	LA	2131	U	C4-C5-C6	5.68	123.11	119.70
2	SA	55	A	C8-N9-C4	5.68	108.07	105.80
2	SA	82	G	C5-N7-C8	-5.68	101.46	104.30
2	SA	562	U	N1-C2-O2	-5.68	118.82	122.80
2	SA	568	G	O4'-C1'-N9	5.68	112.74	108.20
2	SA	967	C	C2-N3-C4	5.68	122.74	119.90
2	SA	1447	A	O4'-C1'-N9	5.68	112.74	108.20
13	SM	68	LEU	CB-CG-CD1	5.68	120.66	111.00
18	SB	6	ARG	CG-CD-NE	-5.68	99.87	111.80
25	LB	72	G	P-O5'-C5'	-5.68	111.81	120.90
26	LA	833	A	C4-N9-C1'	5.68	136.52	126.30
26	LA	1195	G	C2-N3-C4	5.68	114.74	111.90
26	LA	1625	C	N3-C2-O2	-5.68	117.92	121.90
26	LA	1828	G	C5'-C4'-O4'	5.68	115.92	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2049	G	N3-C2-N2	-5.68	115.92	119.90
26	LA	2138	G	C4-C5-N7	5.68	113.07	110.80
26	LA	2272	U	O5'-C5'-C4'	5.68	122.49	111.70
26	LA	2407	A	N1-C6-N6	5.68	122.01	118.60
54	LM	49	ARG	NE-CZ-NH1	5.68	123.14	120.30
2	SA	659	U	C4-C5-C6	5.68	123.11	119.70
2	SA	743	A	C4-C5-N7	5.68	113.54	110.70
2	SA	1253	G	N3-C4-C5	-5.68	125.76	128.60
19	SC	58	ARG	NE-CZ-NH2	-5.68	117.46	120.30
26	LA	394	C	O4'-C1'-N1	5.68	112.74	108.20
26	LA	2034	U	N3-C2-O2	-5.68	118.22	122.20
26	LA	2134	A	C8-N9-C4	-5.68	103.53	105.80
26	LA	2703	C	C3'-C2'-C1'	-5.68	96.96	101.50
26	LA	2721	A	O4'-C1'-N9	5.68	112.74	108.20
56	LR	74	GLN	CB-CA-C	-5.68	99.05	110.40
2	SA	913	A	C5'-C4'-C3'	-5.68	106.92	116.00
2	SA	956	U	O4'-C1'-N1	5.68	112.74	108.20
2	SA	1022	A	N7-C8-N9	-5.68	110.96	113.80
7	SG	78	ARG	N-CA-C	5.68	126.33	111.00
25	LB	93	C	C3'-C2'-C1'	5.68	106.04	101.50
26	LA	224	U	C4'-C3'-C2'	-5.68	96.92	102.60
26	LA	1119	U	C2-N1-C1'	-5.68	110.89	117.70
26	LA	1806	C	N3-C2-O2	5.68	125.87	121.90
26	LA	1896	G	C4-C5-C6	5.68	122.21	118.80
26	LA	2151	U	C6-N1-C1'	5.68	129.15	121.20
26	LA	2480	C	N3-C4-N4	-5.68	114.03	118.00
26	LA	2767	C	C2-N3-C4	-5.68	117.06	119.90
41	L5	35	ARG	NE-CZ-NH2	5.68	123.14	120.30
2	SA	208	U	N3-C4-O4	5.67	123.37	119.40
2	SA	301	G	C5-N7-C8	-5.67	101.46	104.30
2	SA	747	A	C5'-C4'-O4'	5.67	115.91	109.10
2	SA	885	G	OP1-P-OP2	-5.67	111.09	119.60
2	SA	1284	C	C5-C4-N4	5.67	124.17	120.20
2	SA	1408	A	C4-C5-C6	-5.67	114.16	117.00
2	SA	1454	G	C4'-C3'-C2'	-5.67	96.93	102.60
2	SA	1526	G	N9-C4-C5	5.67	107.67	105.40
10	SJ	5	ARG	CB-CG-CD	5.67	126.35	111.60
26	LA	118	A	C1'-O4'-C4'	-5.67	105.36	109.90
26	LA	225	C	O4'-C1'-N1	5.67	112.74	108.20
26	LA	520	G	C8-N9-C1'	-5.67	119.62	127.00
26	LA	772	C	C4-C5-C6	-5.67	114.56	117.40
26	LA	1377	G	N3-C4-N9	-5.67	122.59	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1410	G	C5-C6-O6	5.67	132.00	128.60
26	LA	2303	G	N3-C4-N9	-5.67	122.60	126.00
26	LA	2644	G	C5-C6-O6	-5.67	125.19	128.60
33	LZ	15	ASN	O-C-N	-5.67	113.62	122.70
52	LO	26	VAL	CA-CB-CG2	-5.67	102.39	110.90
2	SA	46	G	N7-C8-N9	-5.67	110.26	113.10
2	SA	328	C	N1-C2-N3	-5.67	115.23	119.20
2	SA	726	C	P-O3'-C3'	-5.67	112.89	119.70
2	SA	1356	G	P-O5'-C5'	-5.67	111.82	120.90
7	SG	43	TYR	CG-CD2-CE2	-5.67	116.76	121.30
26	LA	1816	C	N3-C2-O2	-5.67	117.93	121.90
26	LA	1940	U	C2-N1-C1'	5.67	124.51	117.70
2	SA	844	G	C1'-O4'-C4'	-5.67	105.36	109.90
2	SA	1013	G	C4-C5-N7	5.67	113.07	110.80
2	SA	1376	U	P-O5'-C5'	-5.67	111.83	120.90
16	SP	8	ARG	NE-CZ-NH2	-5.67	117.46	120.30
25	LB	70	C	C4'-C3'-C2'	-5.67	96.93	102.60
26	LA	155	A	C6-N1-C2	5.67	122.00	118.60
26	LA	470	A	C4-C5-N7	5.67	113.54	110.70
26	LA	652	U	O4'-C1'-N1	5.67	112.74	108.20
26	LA	1182	G	N7-C8-N9	5.67	115.94	113.10
26	LA	1244	A	C5-N7-C8	-5.67	101.06	103.90
26	LA	1324	G	C4-C5-N7	5.67	113.07	110.80
26	LA	1410	G	C6-C5-N7	-5.67	127.00	130.40
26	LA	1713	A	O4'-C1'-N9	5.67	112.74	108.20
26	LA	1954	G	N3-C2-N2	5.67	123.87	119.90
26	LA	2275	C	C5'-C4'-O4'	-5.67	102.30	109.10
26	LA	2380	C	C2-N3-C4	-5.67	117.06	119.90
2	SA	537	G	C5-N7-C8	5.67	107.14	104.30
2	SA	684	U	O4'-C1'-N1	5.67	112.74	108.20
26	LA	446	G	N3-C2-N2	5.67	123.87	119.90
26	LA	462	C	P-O3'-C3'	5.67	126.50	119.70
26	LA	470	A	N3-C4-C5	5.67	130.77	126.80
26	LA	1301	A	C2-N3-C4	-5.67	107.77	110.60
26	LA	1415	U	P-O3'-C3'	5.67	126.50	119.70
26	LA	1782	U	C5-C6-N1	5.67	125.53	122.70
26	LA	1835	G	P-O3'-C3'	5.67	126.50	119.70
2	SA	93	U	C4-C5-C6	5.67	123.10	119.70
2	SA	288	A	C5-C6-N1	5.67	120.53	117.70
2	SA	765	G	C2'-C3'-O3'	5.67	122.77	113.70
2	SA	1105	A	O4'-C1'-N9	5.67	112.73	108.20
2	SA	1423	G	N7-C8-N9	-5.67	110.27	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	364	C	OP1-P-OP2	-5.67	111.10	119.60
26	LA	630	G	N3-C4-N9	-5.67	122.60	126.00
26	LA	725	G	C5-C6-N1	5.67	114.33	111.50
26	LA	1061	U	C5-C4-O4	-5.67	122.50	125.90
26	LA	1844	C	N3-C4-N4	5.67	121.97	118.00
26	LA	2392	A	O4'-C1'-N9	5.67	112.73	108.20
26	LA	2430	A	C1'-O4'-C4'	-5.67	105.36	109.90
26	LA	2492	U	N1-C1'-C2'	-5.67	105.77	112.00
26	LA	2511	U	C5'-C4'-O4'	5.67	115.90	109.10
26	LA	2595	G	P-O5'-C5'	5.67	129.97	120.90
2	SA	343	U	N1-C2-N3	5.67	118.30	114.90
2	SA	820	U	P-O3'-C3'	-5.67	112.90	119.70
2	SA	1343	G	N1-C2-N3	-5.67	120.50	123.90
2	SA	1492	A	N9-C4-C5	-5.67	103.53	105.80
20	SD	67	LEU	CB-CG-CD1	-5.67	101.37	111.00
25	LB	106	G	P-O3'-C3'	-5.67	112.90	119.70
26	LA	234	U	C4'-C3'-C2'	-5.67	96.93	102.60
26	LA	859	G	N1-C6-O6	-5.67	116.50	119.90
26	LA	1012	U	OP1-P-OP2	-5.67	111.10	119.60
26	LA	1029	A	P-O5'-C5'	5.67	129.97	120.90
26	LA	1106	G	O4'-C1'-N9	5.67	112.73	108.20
26	LA	1524	G	C6-N1-C2	5.67	128.50	125.10
26	LA	1671	U	P-O5'-C5'	5.67	129.97	120.90
26	LA	1948	G	C5-C6-N1	5.67	114.33	111.50
26	LA	1987	A	N9-C4-C5	5.67	108.07	105.80
26	LA	2410	G	N9-C4-C5	5.67	107.67	105.40
26	LA	2415	G	C6-N1-C2	5.67	128.50	125.10
26	LA	2836	U	C6-N1-C1'	5.67	129.13	121.20
2	SA	424	G	C4-N9-C1'	-5.67	119.14	126.50
26	LA	741	U	N1-C2-N3	5.67	118.30	114.90
26	LA	1366	A	C4-C5-C6	-5.67	114.17	117.00
26	LA	1495	A	N3-C4-C5	-5.67	122.83	126.80
26	LA	1558	C	N3-C4-N4	5.67	121.97	118.00
26	LA	2672	U	C1'-O4'-C4'	5.67	114.43	109.90
26	LA	2903	U	N3-C4-O4	5.67	123.36	119.40
32	LY	14	ASP	CB-CG-OD2	5.67	123.40	118.30
2	SA	491	G	O4'-C1'-C2'	5.66	112.70	107.60
2	SA	553	A	C4-C5-C6	5.66	119.83	117.00
2	SA	1040	U	C6-N1-C1'	-5.66	113.27	121.20
2	SA	1244	G	C5'-C4'-O4'	5.66	115.90	109.10
26	LA	958	U	C6-N1-C2	5.66	124.40	121.00
26	LA	1071	G	C5'-C4'-O4'	5.66	115.90	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1293	C	C5'-C4'-C3'	-5.66	106.94	116.00
26	LA	1298	C	C6-N1-C2	-5.66	118.03	120.30
26	LA	1595	C	N1-C2-N3	5.66	123.17	119.20
26	LA	1698	A	O5'-P-OP1	5.66	117.50	110.70
26	LA	2152	G	O5'-P-OP1	5.66	117.50	110.70
26	LA	2576	G	N9-C4-C5	5.66	107.67	105.40
47	LJ	52	ARG	CG-CD-NE	-5.66	99.91	111.80
51	LI	27	ARG	NE-CZ-NH2	5.66	123.13	120.30
2	SA	635	A	O4'-C1'-N9	5.66	112.73	108.20
2	SA	1123	U	C4-C5-C6	5.66	123.10	119.70
4	S2	59	A	P-O3'-C3'	-5.66	112.91	119.70
9	SI	18	VAL	CB-CA-C	-5.66	100.64	111.40
26	LA	279	A	N1-C6-N6	5.66	122.00	118.60
26	LA	767	U	O4'-C1'-N1	5.66	112.73	108.20
26	LA	1728	C	N3-C4-N4	-5.66	114.04	118.00
26	LA	2028	U	C5'-C4'-O4'	5.66	115.89	109.10
26	LA	2654	A	C4-C5-N7	-5.66	107.87	110.70
2	SA	158	G	C5-C6-N1	5.66	114.33	111.50
2	SA	324	G	C4-C5-C6	-5.66	115.40	118.80
2	SA	371	A	N1-C2-N3	5.66	132.13	129.30
2	SA	804	U	P-O5'-C5'	-5.66	111.84	120.90
2	SA	1102	A	C5'-C4'-O4'	5.66	115.89	109.10
2	SA	1178	G	C4-C5-N7	5.66	113.06	110.80
26	LA	1137	G	P-O5'-C5'	-5.66	111.84	120.90
26	LA	1213	A	C1'-O4'-C4'	-5.66	105.37	109.90
26	LA	1465	G	N3-C2-N2	5.66	123.86	119.90
26	LA	1810	A	O4'-C4'-C3'	-5.66	98.34	104.00
26	LA	2193	G	C2-N3-C4	5.66	114.73	111.90
26	LA	2267	A	N1-C2-N3	-5.66	126.47	129.30
44	LF	153	LEU	CB-CG-CD2	5.66	120.62	111.00
2	SA	1219	A	C6-N1-C2	-5.66	115.20	118.60
2	SA	1396	A	C3'-C2'-C1'	5.66	106.03	101.50
3	S1	16	A	O4'-C1'-N9	5.66	112.73	108.20
21	SE	75	LEU	CA-C-O	5.66	131.99	120.10
24	S3	283	ASP	N-CA-CB	-5.66	100.41	110.60
26	LA	649	G	P-O3'-C3'	5.66	126.49	119.70
26	LA	1155	A	N7-C8-N9	-5.66	110.97	113.80
26	LA	1157	G	C3'-C2'-C1'	5.66	106.03	101.50
26	LA	1531	C	N3-C2-O2	-5.66	117.94	121.90
26	LA	1733	G	C1'-O4'-C4'	-5.66	105.37	109.90
26	LA	1846	G	C8-N9-C4	-5.66	104.14	106.40
26	LA	1943	U	N1-C2-O2	5.66	126.76	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2567	G	N9-C4-C5	5.66	107.66	105.40
2	SA	331	G	C4-C5-N7	-5.66	108.54	110.80
2	SA	1494	G	O3'-P-O5'	-5.66	93.25	104.00
26	LA	60	G	C2-N3-C4	5.66	114.73	111.90
26	LA	547	A	N3-C4-N9	5.66	131.93	127.40
26	LA	1071	G	C2-N3-C4	-5.66	109.07	111.90
26	LA	1455	G	C6-N1-C2	-5.66	121.71	125.10
26	LA	1514	G	C6-N1-C2	-5.66	121.71	125.10
26	LA	1779	U	C2-N3-C4	5.66	130.39	127.00
26	LA	2208	C	N3-C4-N4	5.66	121.96	118.00
26	LA	2548	U	O3'-P-O5'	-5.66	93.25	104.00
46	LH	82	PHE	N-CA-C	5.66	126.27	111.00
57	LS	52	ARG	NE-CZ-NH2	-5.66	117.47	120.30
2	SA	651	C	C5-C6-N1	5.66	123.83	121.00
2	SA	786	G	C8-N9-C4	-5.66	104.14	106.40
2	SA	891	U	O4'-C1'-N1	5.66	112.72	108.20
2	SA	942	G	N1-C2-N2	-5.66	111.11	116.20
2	SA	1210	C	P-O5'-C5'	5.66	129.95	120.90
2	SA	1242	G	N1-C6-O6	5.66	123.29	119.90
2	SA	1435	G	C6-N1-C2	-5.66	121.71	125.10
24	S3	383	ALA	N-CA-CB	5.66	118.02	110.10
26	LA	1478	G	C4'-C3'-C2'	-5.66	96.94	102.60
26	LA	1866	A	O4'-C1'-N9	5.66	112.72	108.20
26	LA	1884	G	C8-N9-C4	-5.66	104.14	106.40
26	LA	1911	U	N1-C2-O2	5.66	126.76	122.80
26	LA	1998	A	N9-C4-C5	-5.66	103.54	105.80
26	LA	2121	G	C5-C6-N1	-5.66	108.67	111.50
26	LA	2286	G	P-O3'-C3'	5.66	126.49	119.70
26	LA	2442	C	N3-C4-C5	-5.66	119.64	121.90
26	LA	2704	C	P-O3'-C3'	-5.66	112.91	119.70
26	LA	2806	C	P-O3'-C3'	5.66	126.49	119.70
26	LA	2850	A	N7-C8-N9	-5.66	110.97	113.80
28	LU	100	THR	CA-CB-OG1	5.66	120.88	109.00
2	SA	291	U	P-O3'-C3'	-5.65	112.92	119.70
2	SA	362	G	P-O3'-C3'	5.65	126.48	119.70
2	SA	614	C	P-O3'-C3'	-5.65	112.92	119.70
9	SI	118	ARG	NH1-CZ-NH2	-5.65	113.18	119.40
26	LA	1240	U	C6-N1-C1'	5.65	129.12	121.20
26	LA	1311	G	N3-C4-N9	-5.65	122.61	126.00
49	LK	95	ASP	CB-CG-OD2	-5.65	113.21	118.30
2	SA	291	U	N1-C2-N3	5.65	118.29	114.90
2	SA	424	G	P-O3'-C3'	5.65	126.48	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	720	C	C2-N3-C4	-5.65	117.07	119.90
2	SA	909	A	N1-C6-N6	-5.65	115.21	118.60
2	SA	1201	A	P-O3'-C3'	5.65	126.48	119.70
2	SA	1214	C	C4'-C3'-C2'	5.65	108.25	102.60
2	SA	1242	G	C5'-C4'-O4'	5.65	115.88	109.10
2	SA	1255	G	C5-C6-O6	-5.65	125.21	128.60
2	SA	1367	C	N1-C2-O2	-5.65	115.51	118.90
18	SB	21	TYR	CZ-CE2-CD2	-5.65	114.71	119.80
24	S3	571	VAL	CG1-CB-CG2	-5.65	101.86	110.90
25	LB	6	G	N9-C1'-C2'	-5.65	105.78	112.00
25	LB	16	G	C8-N9-C4	-5.65	104.14	106.40
26	LA	614	A	C3'-C2'-C1'	-5.65	96.98	101.50
26	LA	1640	A	C6-C5-N7	5.65	136.26	132.30
26	LA	1911	U	C2-N3-C4	5.65	130.39	127.00
26	LA	2145	C	C2-N3-C4	5.65	122.73	119.90
2	SA	266	G	N3-C4-N9	-5.65	122.61	126.00
2	SA	346	G	P-O3'-C3'	5.65	126.48	119.70
2	SA	382	A	P-O3'-C3'	5.65	126.48	119.70
2	SA	548	G	N3-C4-N9	-5.65	122.61	126.00
2	SA	1133	G	C5-C6-O6	-5.65	125.21	128.60
2	SA	1162	C	N1-C2-N3	5.65	123.16	119.20
26	LA	161	A	C5'-C4'-C3'	-5.65	106.96	116.00
26	LA	204	A	C4'-C3'-C2'	-5.65	96.95	102.60
26	LA	294	A	P-O3'-C3'	5.65	126.48	119.70
26	LA	324	A	C8-N9-C4	-5.65	103.54	105.80
26	LA	506	G	C2-N3-C4	-5.65	109.08	111.90
26	LA	830	G	N7-C8-N9	5.65	115.92	113.10
26	LA	1547	C	N1-C2-O2	5.65	122.29	118.90
26	LA	1699	G	C4'-C3'-C2'	-5.65	96.95	102.60
26	LA	1870	C	O4'-C1'-C2'	5.65	112.69	107.60
26	LA	2238	G	O4'-C4'-C3'	5.65	110.62	106.10
58	LT	82	HIS	O-C-N	-5.65	113.66	122.70
2	SA	42	G	N3-C4-C5	-5.65	125.78	128.60
2	SA	790	A	N3-C4-N9	5.65	131.92	127.40
2	SA	817	C	OP1-P-OP2	-5.65	111.13	119.60
26	LA	1164	C	C5-C4-N4	5.65	124.15	120.20
26	LA	1300	G	P-O5'-C5'	-5.65	111.86	120.90
26	LA	1577	C	C5-C4-N4	-5.65	116.25	120.20
26	LA	2550	G	C1'-O4'-C4'	-5.65	105.38	109.90
2	SA	8	A	O5'-P-OP1	-5.65	100.62	105.70
2	SA	1023	U	C1'-O4'-C4'	-5.65	105.38	109.90
2	SA	1092	A	C5-C6-N6	-5.65	119.18	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	1	C	C5'-C4'-C3'	-5.65	106.96	116.00
26	LA	183	C	C4'-C3'-C2'	-5.65	96.95	102.60
26	LA	370	G	C1'-O4'-C4'	-5.65	105.38	109.90
26	LA	470	A	C5'-C4'-O4'	5.65	115.88	109.10
26	LA	780	G	O4'-C1'-N9	5.65	112.72	108.20
26	LA	791	C	P-O3'-C3'	-5.65	112.92	119.70
26	LA	1215	G	C5-N7-C8	-5.65	101.48	104.30
26	LA	1219	U	N1-C2-N3	-5.65	111.51	114.90
26	LA	1523	U	C4-C5-C6	-5.65	116.31	119.70
26	LA	1579	A	C2-N3-C4	-5.65	107.78	110.60
26	LA	1623	G	N1-C2-N3	5.65	127.29	123.90
26	LA	1857	G	C5-C6-N1	-5.65	108.68	111.50
26	LA	2318	G	N1-C6-O6	-5.65	116.51	119.90
26	LA	2542	A	C5'-C4'-C3'	-5.65	106.96	116.00
46	LH	29	ASN	N-CA-CB	5.65	120.77	110.60
2	SA	282	A	OP1-P-OP2	-5.65	111.13	119.60
2	SA	1358	U	N3-C4-O4	5.65	123.35	119.40
4	S2	30	G	N9-C1'-C2'	-5.65	105.79	112.00
26	LA	68	G	C3'-C2'-C1'	5.65	106.02	101.50
26	LA	520	G	O4'-C1'-N9	5.65	112.72	108.20
26	LA	823	C	C6-N1-C2	-5.65	118.04	120.30
26	LA	1431	A	N3-C4-C5	5.65	130.75	126.80
26	LA	1435	G	C1'-O4'-C4'	-5.65	105.38	109.90
26	LA	2216	G	C8-N9-C4	-5.65	104.14	106.40
26	LA	2268	A	OP1-P-OP2	-5.65	111.13	119.60
26	LA	2480	C	C5-C4-N4	5.65	124.15	120.20
26	LA	2819	G	OP1-P-OP2	-5.65	111.13	119.60
44	LF	54	GLY	C-N-CA	5.65	135.82	121.70
2	SA	335	C	N1-C2-O2	-5.64	115.51	118.90
2	SA	829	G	C4-C5-C6	-5.64	115.41	118.80
2	SA	1087	G	N1-C2-N3	-5.64	120.51	123.90
2	SA	1141	C	C1'-O4'-C4'	-5.64	105.39	109.90
2	SA	1322	C	P-O3'-C3'	5.64	126.47	119.70
4	S2	31	G	N9-C4-C5	5.64	107.66	105.40
19	SC	125	ARG	NE-CZ-NH2	-5.64	117.48	120.30
26	LA	931	U	C4'-C3'-C2'	5.64	108.24	102.60
26	LA	1026	G	N9-C4-C5	5.64	107.66	105.40
26	LA	1092	C	N3-C4-C5	5.64	124.16	121.90
26	LA	1118	C	C2-N1-C1'	-5.64	112.59	118.80
26	LA	1568	G	C8-N9-C4	-5.64	104.14	106.40
26	LA	1753	G	C5-C6-N1	-5.64	108.68	111.50
2	SA	904	U	O4'-C1'-N1	5.64	112.71	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1380	U	N3-C4-O4	5.64	123.35	119.40
2	SA	1496	C	N1-C2-O2	5.64	122.29	118.90
2	SA	1513	A	C3'-C2'-C1'	5.64	106.02	101.50
26	LA	591	U	C6-N1-C2	-5.64	117.61	121.00
26	LA	780	G	C4-C5-N7	-5.64	108.54	110.80
26	LA	994	C	C6-N1-C1'	-5.64	114.03	120.80
26	LA	1056	G	N1-C2-N3	-5.64	120.52	123.90
26	LA	1163	G	C5-C6-O6	-5.64	125.22	128.60
26	LA	1362	C	C5-C6-N1	-5.64	118.18	121.00
26	LA	1748	C	N3-C4-C5	-5.64	119.64	121.90
26	LA	1789	A	C5-C6-N1	5.64	120.52	117.70
26	LA	1923	U	O4'-C1'-N1	5.64	112.71	108.20
26	LA	2014	A	N9-C4-C5	-5.64	103.54	105.80
26	LA	2219	U	C5'-C4'-C3'	-5.64	106.97	116.00
26	LA	2518	A	C8-N9-C1'	-5.64	117.54	127.70
27	LD	237	ARG	CG-CD-NE	-5.64	99.95	111.80
2	SA	40	C	C5-C6-N1	-5.64	118.18	121.00
2	SA	128	G	C2'-C3'-O3'	5.64	122.72	113.70
2	SA	278	G	N9-C4-C5	5.64	107.66	105.40
2	SA	776	G	N1-C2-N3	5.64	127.28	123.90
2	SA	812	G	C8-N9-C1'	-5.64	119.67	127.00
2	SA	1071	C	N3-C4-C5	-5.64	119.64	121.90
26	LA	1279	G	C6-C5-N7	-5.64	127.02	130.40
26	LA	2709	G	N7-C8-N9	5.64	115.92	113.10
26	LA	2845	U	C5-C6-N1	-5.64	119.88	122.70
26	LA	2857	G	N1-C2-N2	-5.64	111.12	116.20
2	SA	312	C	O4'-C1'-C2'	5.64	112.67	107.60
2	SA	518	C	N3-C4-N4	5.64	121.95	118.00
2	SA	568	G	C2-N3-C4	5.64	114.72	111.90
2	SA	783	C	C5-C6-N1	-5.64	118.18	121.00
2	SA	1051	C	C2-N1-C1'	5.64	125.00	118.80
2	SA	1124	G	C5'-C4'-C3'	-5.64	106.98	116.00
2	SA	1159	U	N3-C4-C5	5.64	117.98	114.60
2	SA	1269	A	C4-N9-C1'	-5.64	116.15	126.30
2	SA	1389	C	C3'-C2'-C1'	5.64	106.01	101.50
3	S1	53	G	C5-N7-C8	-5.64	101.48	104.30
24	S3	518	VAL	CA-CB-CG1	5.64	119.36	110.90
24	S3	548	TYR	CG-CD1-CE1	-5.64	116.79	121.30
25	LB	44	G	C4-C5-C6	5.64	122.18	118.80
26	LA	264	C	N3-C2-O2	-5.64	117.95	121.90
26	LA	493	G	C4-C5-C6	-5.64	115.42	118.80
26	LA	596	U	C2-N1-C1'	-5.64	110.93	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	736	C	P-O5'-C5'	-5.64	111.88	120.90
26	LA	1139	G	N9-C4-C5	-5.64	103.14	105.40
26	LA	1842	G	P-O3'-C3'	-5.64	112.93	119.70
26	LA	1872	A	N9-C4-C5	5.64	108.06	105.80
26	LA	1983	G	N1-C6-O6	-5.64	116.52	119.90
26	LA	2023	C	N1-C2-O2	5.64	122.28	118.90
26	LA	2079	U	O4'-C1'-N1	5.64	112.71	108.20
26	LA	2144	G	C6-N1-C2	5.64	128.48	125.10
26	LA	2242	G	C2'-C3'-O3'	5.64	122.72	113.70
26	LA	2268	A	C5'-C4'-O4'	5.64	115.87	109.10
26	LA	2579	C	O5'-P-OP2	-5.64	100.62	105.70
32	LY	44	PHE	CZ-CE2-CD2	5.64	126.87	120.10
49	LK	4	VAL	O-C-N	-5.64	113.67	122.70
3	S1	44	U	C5-C4-O4	-5.64	122.52	125.90
12	SL	120	ARG	CG-CD-NE	-5.64	99.96	111.80
26	LA	46	G	C5-C6-N1	5.64	114.32	111.50
26	LA	202	U	C4-C5-C6	5.64	123.08	119.70
26	LA	1206	G	N3-C4-N9	5.64	129.38	126.00
26	LA	1948	G	C5-C6-O6	-5.64	125.22	128.60
26	LA	2114	A	N9-C4-C5	-5.64	103.55	105.80
26	LA	2257	U	C4-C5-C6	5.64	123.08	119.70
26	LA	2294	G	C2-N3-C4	5.64	114.72	111.90
26	LA	2394	C	C6-N1-C1'	-5.64	114.03	120.80
37	LC	64	VAL	CA-CB-CG1	5.64	119.36	110.90
2	SA	1108	G	C4-C5-N7	5.64	113.05	110.80
2	SA	1127	G	C3'-C2'-C1'	-5.64	96.99	101.50
2	SA	1149	C	O4'-C1'-N1	5.64	112.71	108.20
4	S2	46	G	O4'-C4'-C3'	5.64	110.61	106.10
24	S3	367	ALA	CB-CA-C	5.64	118.56	110.10
26	LA	435	C	O4'-C1'-N1	5.64	112.71	108.20
26	LA	597	G	C5-C6-O6	-5.64	125.22	128.60
26	LA	724	U	O4'-C1'-C2'	5.64	112.67	107.60
26	LA	1842	G	C6-N1-C2	-5.64	121.72	125.10
26	LA	1966	A	C4-C5-C6	-5.64	114.18	117.00
26	LA	2006	C	N3-C4-N4	5.64	121.94	118.00
26	LA	2117	A	C5-N7-C8	-5.64	101.08	103.90
26	LA	2382	G	O4'-C1'-N9	5.64	112.71	108.20
2	SA	92	U	P-O5'-C5'	5.63	129.92	120.90
2	SA	103	U	N1-C2-N3	-5.63	111.52	114.90
2	SA	511	C	C2-N3-C4	-5.63	117.08	119.90
2	SA	688	G	C4'-C3'-C2'	-5.63	96.97	102.60
2	SA	1006	G	N3-C4-N9	5.63	129.38	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1158	C	O5'-P-OP2	5.63	117.46	110.70
25	LB	51	G	N3-C2-N2	5.63	123.84	119.90
25	LB	92	C	P-O5'-C5'	5.63	129.91	120.90
25	LB	113	C	O4'-C1'-N1	5.63	112.71	108.20
26	LA	385	C	C5-C6-N1	-5.63	118.18	121.00
26	LA	792	A	N7-C8-N9	5.63	116.62	113.80
26	LA	905	A	O4'-C1'-N9	5.63	112.71	108.20
26	LA	917	A	C3'-C2'-C1'	-5.63	96.99	101.50
26	LA	1529	G	C4-C5-N7	-5.63	108.55	110.80
26	LA	1854	A	C4-C5-N7	5.63	113.52	110.70
26	LA	2529	G	N1-C6-O6	-5.63	116.52	119.90
26	LA	2713	U	N1-C2-N3	-5.63	111.52	114.90
2	SA	172	A	C4-C5-N7	5.63	113.52	110.70
2	SA	319	G	N1-C2-N2	-5.63	111.13	116.20
2	SA	466	A	C2-N3-C4	5.63	113.42	110.60
4	S2	36	A	C5'-C4'-O4'	5.63	115.86	109.10
8	SH	14	ARG	O-C-N	-5.63	113.69	122.70
9	SI	34	LEU	CB-CA-C	5.63	120.90	110.20
18	SB	138	ARG	CG-CD-NE	-5.63	99.97	111.80
25	LB	46	A	O4'-C1'-C2'	5.63	112.67	107.60
26	LA	56	A	C3'-C2'-C1'	-5.63	96.99	101.50
26	LA	685	A	C4-C5-C6	5.63	119.82	117.00
26	LA	1921	G	C5'-C4'-C3'	5.63	125.01	116.00
26	LA	2079	U	C5'-C4'-O4'	5.63	115.86	109.10
2	SA	353	A	C5-C6-N1	-5.63	114.89	117.70
2	SA	492	C	N3-C2-O2	-5.63	117.96	121.90
2	SA	742	G	N1-C2-N2	-5.63	111.13	116.20
2	SA	1072	G	P-O3'-C3'	-5.63	112.94	119.70
2	SA	1526	G	C8-N9-C4	-5.63	104.15	106.40
4	S2	55	U	C3'-C2'-C1'	-5.63	97.00	101.50
26	LA	23	G	C2-N3-C4	5.63	114.72	111.90
26	LA	116	C	N3-C4-C5	5.63	124.15	121.90
26	LA	369	U	OP1-P-OP2	-5.63	111.15	119.60
26	LA	678	C	P-O3'-C3'	5.63	126.46	119.70
26	LA	1170	C	C4-C5-C6	-5.63	114.58	117.40
26	LA	1778	U	OP1-P-OP2	-5.63	111.15	119.60
26	LA	2242	G	N7-C8-N9	5.63	115.92	113.10
26	LA	2413	G	C4'-C3'-C2'	-5.63	96.97	102.60
26	LA	985	C	C5'-C4'-O4'	5.63	115.86	109.10
26	LA	1040	A	N1-C2-N3	5.63	132.12	129.30
26	LA	1569	A	C5'-C4'-O4'	5.63	115.86	109.10
26	LA	1688	U	O4'-C1'-N1	5.63	112.70	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2014	A	C3'-C2'-C1'	5.63	106.00	101.50
26	LA	2107	G	C4'-C3'-C2'	-5.63	96.97	102.60
26	LA	2298	A	C5-C6-N1	5.63	120.52	117.70
2	SA	260	G	C5-C6-O6	-5.63	125.22	128.60
2	SA	653	U	P-O3'-C3'	-5.63	112.95	119.70
2	SA	1036	A	C2-N3-C4	-5.63	107.79	110.60
2	SA	1384	C	C1'-O4'-C4'	-5.63	105.40	109.90
18	SB	109	SER	N-CA-CB	5.63	118.94	110.50
25	LB	17	C	OP2-P-O3'	5.63	117.58	105.20
26	LA	316	C	P-O3'-C3'	-5.63	112.95	119.70
26	LA	496	G	C4'-C3'-C2'	-5.63	96.97	102.60
26	LA	502	A	C5-C6-N6	-5.63	119.20	123.70
26	LA	965	C	C6-N1-C1'	5.63	127.55	120.80
26	LA	1050	A	C4'-C3'-C2'	-5.63	96.97	102.60
26	LA	1129	A	O5'-C5'-C4'	-5.63	101.00	111.70
26	LA	1867	G	N3-C2-N2	5.63	123.84	119.90
26	LA	2519	U	O4'-C1'-N1	5.63	112.70	108.20
26	LA	2640	G	N7-C8-N9	-5.63	110.28	113.10
26	LA	2674	G	C5-C6-O6	-5.63	125.22	128.60
26	LA	2879	A	C3'-C2'-C1'	-5.63	97.00	101.50
46	LH	57	TYR	CB-CG-CD2	-5.63	117.62	121.00
2	SA	131	A	C4-C5-C6	5.63	119.81	117.00
2	SA	300	A	C5-N7-C8	5.63	106.71	103.90
2	SA	978	A	C5-C6-N6	-5.63	119.20	123.70
2	SA	1082	A	N1-C2-N3	5.63	132.11	129.30
4	S2	4	G	N1-C2-N2	-5.63	111.14	116.20
26	LA	168	G	N9-C4-C5	-5.63	103.15	105.40
26	LA	428	A	O4'-C1'-N9	5.63	112.70	108.20
26	LA	775	G	O4'-C1'-N9	-5.63	103.70	108.20
26	LA	839	U	C5'-C4'-C3'	-5.63	107.00	116.00
26	LA	1725	U	OP2-P-O3'	5.63	117.58	105.20
26	LA	2004	G	C4'-C3'-C2'	5.63	108.23	102.60
2	SA	230	G	N9-C4-C5	5.62	107.65	105.40
2	SA	443	C	C5-C4-N4	-5.62	116.26	120.20
2	SA	1034	G	N3-C4-C5	5.62	131.41	128.60
4	S2	22	A	C5-N7-C8	-5.62	101.09	103.90
26	LA	64	A	C4-C5-N7	-5.62	107.89	110.70
26	LA	1174	U	C4'-C3'-C2'	-5.62	96.97	102.60
2	SA	9	G	C5-C6-O6	-5.62	125.23	128.60
2	SA	160	A	C2-N3-C4	5.62	113.41	110.60
2	SA	195	A	N1-C2-N3	-5.62	126.49	129.30
2	SA	306	A	C5-C6-N1	5.62	120.51	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	734	G	C4-C5-N7	5.62	113.05	110.80
2	SA	824	G	N7-C8-N9	-5.62	110.29	113.10
2	SA	935	A	C1'-O4'-C4'	-5.62	105.40	109.90
2	SA	1059	C	N3-C4-C5	5.62	124.15	121.90
2	SA	1177	G	P-O5'-C5'	5.62	129.90	120.90
26	LA	435	C	P-O3'-C3'	-5.62	112.95	119.70
26	LA	826	U	OP1-P-OP2	-5.62	111.16	119.60
26	LA	1029	A	P-O3'-C3'	5.62	126.45	119.70
26	LA	1108	U	P-O5'-C5'	-5.62	111.90	120.90
26	LA	1314	C	C2-N1-C1'	5.62	124.98	118.80
26	LA	1375	U	N3-C4-C5	5.62	117.97	114.60
26	LA	1587	G	C1'-O4'-C4'	-5.62	105.40	109.90
26	LA	2141	G	C5-C6-O6	-5.62	125.23	128.60
26	LA	2391	G	C4'-C3'-C2'	-5.62	96.98	102.60
26	LA	2782	G	O5'-P-OP2	5.62	117.45	110.70
46	LH	94	ARG	NE-CZ-NH1	5.62	123.11	120.30
2	SA	34	C	N1-C2-O2	-5.62	115.53	118.90
2	SA	394	G	O3'-P-O5'	-5.62	93.32	104.00
2	SA	1215	G	C8-N9-C4	-5.62	104.15	106.40
2	SA	1254	A	C4-C5-C6	5.62	119.81	117.00
26	LA	186	G	C4'-C3'-C2'	-5.62	96.98	102.60
26	LA	516	C	O4'-C1'-N1	5.62	112.70	108.20
26	LA	690	G	N1-C2-N2	-5.62	111.14	116.20
26	LA	941	A	N9-C1'-C2'	-5.62	105.82	112.00
26	LA	1075	C	N3-C4-N4	5.62	121.94	118.00
26	LA	1234	U	N3-C4-O4	5.62	123.34	119.40
26	LA	1528	A	N3-C4-N9	-5.62	122.90	127.40
26	LA	2529	G	C5-C6-O6	5.62	131.97	128.60
26	LA	2597	G	C5-N7-C8	-5.62	101.49	104.30
26	LA	2773	C	O4'-C1'-N1	5.62	112.70	108.20
26	LA	2851	A	N9-C4-C5	5.62	108.05	105.80
37	LC	229	LEU	CB-CG-CD1	-5.62	101.44	111.00
2	SA	155	A	C5'-C4'-O4'	-5.62	102.36	109.10
2	SA	285	C	O4'-C1'-C2'	5.62	112.66	107.60
2	SA	920	U	C5-C6-N1	-5.62	119.89	122.70
16	SP	60	TRP	CB-CG-CD1	5.62	134.31	127.00
26	LA	2008	C	C4'-C3'-C2'	-5.62	96.98	102.60
26	LA	2114	A	P-O3'-C3'	-5.62	112.95	119.70
2	SA	567	G	C3'-C2'-C1'	5.62	106.00	101.50
2	SA	897	C	C6-N1-C1'	-5.62	114.06	120.80
2	SA	1399	C	C3'-C2'-C1'	-5.62	97.01	101.50
24	S3	505	ALA	CB-CA-C	5.62	118.53	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2	G	N1-C6-O6	5.62	123.27	119.90
26	LA	268	C	P-O5'-C5'	5.62	129.89	120.90
26	LA	962	G	O3'-P-O5'	-5.62	93.32	104.00
26	LA	1390	U	N1-C2-N3	5.62	118.27	114.90
26	LA	1426	G	C4-C5-C6	5.62	122.17	118.80
26	LA	1596	A	P-O3'-C3'	-5.62	112.96	119.70
26	LA	1802	A	C2-N3-C4	-5.62	107.79	110.60
26	LA	1911	U	N1-C2-N3	-5.62	111.53	114.90
26	LA	1912	A	C2-N3-C4	5.62	113.41	110.60
26	LA	2124	G	O3'-P-O5'	5.62	114.68	104.00
26	LA	2471	A	C5'-C4'-C3'	-5.62	107.01	116.00
26	LA	2600	A	C5'-C4'-C3'	-5.62	107.01	116.00
26	LA	2711	A	O4'-C1'-N9	5.62	112.69	108.20
26	LA	2819	G	C6-N1-C2	-5.62	121.73	125.10
2	SA	69	G	P-O3'-C3'	-5.62	112.96	119.70
2	SA	628	G	C6-C5-N7	-5.62	127.03	130.40
2	SA	966	G	P-O3'-C3'	5.62	126.44	119.70
2	SA	966	G	C8-N9-C4	-5.62	104.15	106.40
18	SB	208	ALA	CB-CA-C	-5.62	101.67	110.10
26	LA	303	G	C5-C6-O6	-5.62	125.23	128.60
26	LA	1566	A	C5'-C4'-O4'	5.62	115.84	109.10
26	LA	1937	A	P-O3'-C3'	5.62	126.44	119.70
26	LA	2421	G	C5-N7-C8	-5.62	101.49	104.30
26	LA	2657	A	N1-C6-N6	-5.62	115.23	118.60
26	LA	2723	C	N3-C4-C5	-5.62	119.65	121.90
41	L5	24	THR	N-CA-CB	5.62	120.97	110.30
2	SA	17	U	N3-C4-O4	5.62	123.33	119.40
2	SA	305	G	C8-N9-C1'	-5.62	119.70	127.00
2	SA	450	G	C5-C6-N1	-5.62	108.69	111.50
11	SK	58	THR	CB-CA-C	-5.62	96.44	111.60
19	SC	227	GLN	CA-CB-CG	5.62	125.75	113.40
25	LB	101	A	OP1-P-OP2	-5.62	111.18	119.60
26	LA	223	A	O4'-C1'-N9	5.62	112.69	108.20
26	LA	422	A	O4'-C1'-N9	5.62	112.69	108.20
26	LA	785	G	C5'-C4'-O4'	5.62	115.84	109.10
26	LA	892	A	C1'-O4'-C4'	5.62	114.39	109.90
26	LA	1394	U	C2-N3-C4	-5.62	123.63	127.00
26	LA	1571	A	C3'-C2'-C1'	-5.62	97.01	101.50
26	LA	1757	A	N1-C6-N6	-5.62	115.23	118.60
26	LA	1959	G	P-O3'-C3'	5.62	126.44	119.70
26	LA	2575	C	C2'-C3'-O3'	5.62	122.69	113.70
51	LI	3	VAL	CA-CB-CG1	-5.62	102.48	110.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	345	C	C1'-O4'-C4'	-5.61	105.41	109.90
2	SA	516	U	O4'-C1'-N1	5.61	112.69	108.20
2	SA	531	U	N3-C2-O2	-5.61	118.27	122.20
2	SA	561	U	C2-N3-C4	-5.61	123.63	127.00
2	SA	1116	U	C5'-C4'-C3'	-5.61	107.02	116.00
2	SA	1143	G	O4'-C1'-N9	5.61	112.69	108.20
26	LA	190	A	C5'-C4'-C3'	-5.61	107.02	116.00
26	LA	987	C	P-O3'-C3'	5.61	126.44	119.70
26	LA	1187	G	C1'-O4'-C4'	-5.61	105.41	109.90
26	LA	1396	U	N1-C2-O2	-5.61	118.87	122.80
26	LA	1552	A	P-O3'-C3'	5.61	126.44	119.70
26	LA	1643	G	C1'-O4'-C4'	5.61	114.39	109.90
26	LA	1680	U	C6-N1-C2	-5.61	117.63	121.00
26	LA	2816	G	N7-C8-N9	-5.61	110.29	113.10
2	SA	694	A	N7-C8-N9	-5.61	110.99	113.80
2	SA	908	A	C6-C5-N7	-5.61	128.37	132.30
2	SA	1319	A	P-O5'-C5'	5.61	129.88	120.90
2	SA	1363	A	C4-C5-C6	-5.61	114.19	117.00
26	LA	104	A	C4-C5-C6	5.61	119.81	117.00
26	LA	483	A	N3-C4-N9	-5.61	122.91	127.40
26	LA	848	C	N1-C1'-C2'	-5.61	105.83	112.00
26	LA	954	G	C6-C5-N7	-5.61	127.03	130.40
26	LA	2598	A	C8-N9-C4	5.61	108.05	105.80
48	LN	111	ILE	CA-CB-CG2	-5.61	99.68	110.90
2	SA	53	A	C1'-O4'-C4'	-5.61	105.41	109.90
2	SA	263	A	N1-C2-N3	-5.61	126.49	129.30
2	SA	878	A	P-O5'-C5'	5.61	129.88	120.90
2	SA	998	C	C3'-C2'-C1'	5.61	105.99	101.50
2	SA	1228	C	C4'-C3'-C2'	-5.61	96.99	102.60
3	S1	40	G	C5'-C4'-C3'	-5.61	107.02	116.00
25	LB	15	A	C4-C5-N7	5.61	113.51	110.70
26	LA	285	G	C3'-C2'-C1'	-5.61	97.01	101.50
26	LA	360	U	O5'-P-OP2	-5.61	100.65	105.70
26	LA	557	C	C3'-C2'-C1'	5.61	105.99	101.50
26	LA	560	C	C6-N1-C2	5.61	122.54	120.30
26	LA	612	G	O4'-C1'-N9	5.61	112.69	108.20
26	LA	984	A	N1-C2-N3	5.61	132.10	129.30
26	LA	1193	G	C4-C5-N7	5.61	113.05	110.80
26	LA	1372	U	N3-C4-O4	5.61	123.33	119.40
26	LA	1449	G	N7-C8-N9	-5.61	110.30	113.10
26	LA	1492	G	N1-C6-O6	5.61	123.27	119.90
26	LA	1537	G	O4'-C1'-N9	5.61	112.69	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1675	C	C2-N3-C4	-5.61	117.09	119.90
26	LA	1746	A	C6-N1-C2	-5.61	115.23	118.60
26	LA	1848	A	C5'-C4'-C3'	5.61	124.97	116.00
26	LA	1950	G	C5-C6-O6	-5.61	125.23	128.60
26	LA	2017	U	C5-C6-N1	-5.61	119.89	122.70
26	LA	2137	U	N3-C4-C5	5.61	117.97	114.60
26	LA	2345	G	C5'-C4'-O4'	5.61	115.83	109.10
45	LG	168	LEU	CB-CG-CD2	5.61	120.54	111.00
53	LP	20	MET	CG-SD-CE	-5.61	91.22	100.20
2	SA	347	G	O4'-C1'-N9	5.61	112.69	108.20
2	SA	567	G	C4-N9-C1'	5.61	133.79	126.50
2	SA	1429	A	N3-C4-N9	-5.61	122.91	127.40
2	SA	1535	C	C5-C6-N1	5.61	123.80	121.00
26	LA	12	U	C5'-C4'-C3'	-5.61	107.03	116.00
26	LA	190	A	C5'-C4'-O4'	5.61	115.83	109.10
26	LA	875	G	C4-C5-C6	5.61	122.17	118.80
26	LA	1011	G	N9-C4-C5	5.61	107.64	105.40
26	LA	1050	A	C4-C5-C6	-5.61	114.19	117.00
26	LA	1370	C	N3-C2-O2	-5.61	117.97	121.90
26	LA	2078	C	N3-C4-C5	5.61	124.14	121.90
2	SA	39	G	N7-C8-N9	-5.61	110.30	113.10
2	SA	152	A	N9-C4-C5	-5.61	103.56	105.80
2	SA	337	G	P-O3'-C3'	-5.61	112.97	119.70
2	SA	645	G	C5-C6-O6	5.61	131.96	128.60
2	SA	901	A	C6-N1-C2	-5.61	115.24	118.60
2	SA	1088	G	C6-N1-C2	-5.61	121.74	125.10
2	SA	1179	A	C8-N9-C4	5.61	108.04	105.80
2	SA	1314	C	C5-C4-N4	5.61	124.12	120.20
4	S2	62	C	C5-C4-N4	-5.61	116.28	120.20
22	SF	2	ARG	NE-CZ-NH1	5.61	123.10	120.30
26	LA	304	U	C5-C4-O4	-5.61	122.54	125.90
26	LA	345	A	N9-C4-C5	-5.61	103.56	105.80
26	LA	471	A	O5'-C5'-C4'	-5.61	101.05	111.70
26	LA	1048	A	P-O5'-C5'	5.61	129.87	120.90
26	LA	1181	U	P-O3'-C3'	-5.61	112.97	119.70
26	LA	1628	G	OP1-P-OP2	-5.61	111.19	119.60
26	LA	1663	G	O4'-C1'-N9	5.61	112.69	108.20
26	LA	1740	G	C5-C6-N1	-5.61	108.70	111.50
26	LA	2308	G	C6-N1-C2	-5.61	121.74	125.10
26	LA	2396	G	O4'-C1'-N9	5.61	112.69	108.20
26	LA	2396	G	N9-C4-C5	-5.61	103.16	105.40
26	LA	2566	A	O4'-C4'-C3'	-5.61	98.39	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	186	C	C2-N3-C4	-5.61	117.10	119.90
2	SA	302	G	C5-C6-N1	-5.61	108.70	111.50
2	SA	356	A	N3-C4-N9	-5.61	122.92	127.40
2	SA	395	C	C5'-C4'-O4'	5.61	115.83	109.10
2	SA	625	U	N3-C4-O4	5.61	123.32	119.40
2	SA	706	A	C3'-C2'-C1'	-5.61	97.02	101.50
2	SA	718	A	C4-C5-N7	5.61	113.50	110.70
2	SA	1334	G	C5'-C4'-O4'	5.61	115.83	109.10
11	SK	31	VAL	CA-CB-CG2	-5.61	102.49	110.90
15	SO	71	ARG	NE-CZ-NH1	5.61	123.10	120.30
18	SB	222	GLU	OE1-CD-OE2	-5.61	116.57	123.30
26	LA	326	G	C5-C6-N1	5.61	114.30	111.50
26	LA	331	C	N1-C1'-C2'	5.61	121.29	114.00
26	LA	347	A	C5'-C4'-O4'	5.61	115.83	109.10
26	LA	1036	G	C6-C5-N7	-5.61	127.04	130.40
26	LA	1707	G	C6-N1-C2	5.61	128.46	125.10
26	LA	1900	A	C1'-O4'-C4'	-5.61	105.42	109.90
26	LA	1949	G	N1-C6-O6	-5.61	116.54	119.90
26	LA	2197	U	C6-N1-C2	-5.61	117.64	121.00
26	LA	2269	G	C8-N9-C4	5.61	108.64	106.40
26	LA	2673	G	N3-C4-C5	-5.61	125.80	128.60
26	LA	2756	U	C3'-C2'-C1'	-5.61	97.02	101.50
15	SO	16	ARG	CD-NE-CZ	5.60	131.45	123.60
26	LA	657	U	O4'-C1'-N1	5.60	112.68	108.20
26	LA	1059	G	N3-C2-N2	5.60	123.82	119.90
26	LA	1261	C	O4'-C1'-N1	5.60	112.68	108.20
26	LA	1452	G	O4'-C1'-C2'	5.60	112.64	107.60
26	LA	2335	A	C6-N1-C2	-5.60	115.24	118.60
2	SA	366	A	C6-N1-C2	-5.60	115.24	118.60
4	S2	17	C	C2'-C3'-O3'	5.60	122.67	113.70
16	SP	70	ARG	NE-CZ-NH1	5.60	123.10	120.30
26	LA	208	C	C5-C4-N4	-5.60	116.28	120.20
26	LA	362	A	O4'-C1'-N9	-5.60	103.72	108.20
26	LA	605	G	C8-N9-C4	-5.60	104.16	106.40
26	LA	739	A	C4-C5-N7	5.60	113.50	110.70
26	LA	1236	G	C8-N9-C4	-5.60	104.16	106.40
26	LA	1299	G	C6-N1-C2	-5.60	121.74	125.10
26	LA	1500	G	C6-N1-C2	-5.60	121.74	125.10
26	LA	1531	C	C5'-C4'-O4'	-5.60	102.38	109.10
26	LA	1617	C	OP1-P-OP2	-5.60	111.20	119.60
26	LA	1743	G	C5-N7-C8	-5.60	101.50	104.30
26	LA	1904	G	C8-N9-C1'	5.60	134.28	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1906	G	N7-C8-N9	5.60	115.90	113.10
26	LA	2031	A	C8-N9-C4	5.60	108.04	105.80
26	LA	2032	G	C2-N3-C4	-5.60	109.10	111.90
26	LA	2193	G	O5'-C5'-C4'	5.60	122.34	111.70
26	LA	2369	A	N1-C2-N3	5.60	132.10	129.30
26	LA	2751	G	C1'-O4'-C4'	-5.60	105.42	109.90
26	LA	2772	C	N1-C2-N3	5.60	123.12	119.20
41	L5	41	ARG	NE-CZ-NH1	5.60	123.10	120.30
47	LJ	94	LEU	N-CA-CB	-5.60	99.20	110.40
2	SA	213	G	C8-N9-C1'	-5.60	119.72	127.00
2	SA	937	A	C4'-C3'-C2'	-5.60	97.00	102.60
2	SA	1219	A	C5'-C4'-C3'	-5.60	107.04	116.00
26	LA	242	G	C5'-C4'-O4'	5.60	115.82	109.10
26	LA	440	C	N3-C2-O2	-5.60	117.98	121.90
26	LA	507	A	C8-N9-C4	5.60	108.04	105.80
26	LA	772	C	C6-N1-C2	-5.60	118.06	120.30
26	LA	1279	G	C5'-C4'-C3'	-5.60	107.04	116.00
26	LA	2049	G	P-O3'-C3'	5.60	126.42	119.70
26	LA	2826	A	OP1-P-OP2	-5.60	111.20	119.60
2	SA	741	G	N9-C1'-C2'	-5.60	105.84	112.00
26	LA	424	G	C4-N9-C1'	-5.60	119.22	126.50
26	LA	879	G	C4'-C3'-C2'	-5.60	97.00	102.60
26	LA	1006	C	N3-C4-N4	5.60	121.92	118.00
26	LA	1168	G	C2-N3-C4	5.60	114.70	111.90
26	LA	1654	A	O5'-C5'-C4'	5.60	122.34	111.70
26	LA	1830	C	C6-N1-C2	5.60	122.54	120.30
26	LA	2289	G	N7-C8-N9	5.60	115.90	113.10
26	LA	2476	A	O4'-C1'-C2'	5.60	112.64	107.60
26	LA	2534	A	N3-C4-N9	-5.60	122.92	127.40
26	LA	2565	A	C8-N9-C4	-5.60	103.56	105.80
37	LC	5	THR	CA-CB-CG2	-5.60	104.56	112.40
2	SA	275	G	OP1-P-OP2	-5.60	111.20	119.60
2	SA	1443	C	C5-C6-N1	-5.60	118.20	121.00
2	SA	1508	A	C4'-C3'-C2'	-5.60	97.00	102.60
26	LA	241	A	C4-C5-N7	5.60	113.50	110.70
26	LA	345	A	C5'-C4'-O4'	5.60	115.82	109.10
26	LA	356	G	N1-C2-N3	-5.60	120.54	123.90
26	LA	708	G	N3-C2-N2	5.60	123.82	119.90
26	LA	1318	U	C4'-C3'-C2'	-5.60	97.00	102.60
26	LA	1376	C	C5'-C4'-C3'	5.60	124.96	116.00
26	LA	1391	U	C6-N1-C2	-5.60	117.64	121.00
26	LA	1555	G	C2-N3-C4	5.60	114.70	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2536	G	C5'-C4'-C3'	-5.60	107.04	116.00
26	LA	2874	C	C5'-C4'-C3'	-5.60	107.04	116.00
37	LC	148	ASN	O-C-N	-5.60	113.74	122.70
38	LE	95	SER	C-N-CA	5.60	135.69	121.70
2	SA	1127	G	C6-C5-N7	-5.60	127.04	130.40
2	SA	1283	U	C5-C4-O4	5.60	129.26	125.90
26	LA	781	A	C4-C5-N7	-5.60	107.90	110.70
26	LA	1102	C	C5-C4-N4	5.60	124.12	120.20
26	LA	1104	C	N3-C4-C5	-5.60	119.66	121.90
26	LA	1174	U	OP1-P-OP2	-5.60	111.21	119.60
26	LA	1435	G	O4'-C1'-N9	5.60	112.68	108.20
26	LA	1875	G	O3'-P-O5'	-5.60	93.37	104.00
26	LA	2213	U	C2-N3-C4	-5.60	123.64	127.00
26	LA	2619	C	C4'-C3'-C2'	-5.60	97.00	102.60
26	LA	2813	A	N3-C4-C5	-5.60	122.88	126.80
2	SA	83	C	C6-N1-C1'	-5.59	114.09	120.80
2	SA	209	U	C5-C4-O4	-5.59	122.54	125.90
2	SA	670	G	N9-C4-C5	5.59	107.64	105.40
2	SA	968	A	C8-N9-C4	5.59	108.04	105.80
2	SA	1451	U	C2-N3-C4	-5.59	123.64	127.00
4	S2	71	G	C4'-C3'-C2'	-5.59	97.00	102.60
26	LA	147	C	N3-C4-C5	-5.59	119.66	121.90
26	LA	578	G	OP1-P-OP2	-5.59	111.21	119.60
26	LA	730	A	C4-C5-C6	5.59	119.80	117.00
26	LA	772	C	P-O3'-C3'	5.59	126.41	119.70
26	LA	953	G	C8-N9-C1'	5.59	134.27	127.00
26	LA	1015	U	C5'-C4'-O4'	5.59	115.81	109.10
26	LA	1086	A	N7-C8-N9	-5.59	111.00	113.80
26	LA	1136	G	C5-N7-C8	-5.59	101.50	104.30
26	LA	1628	G	C5'-C4'-O4'	5.59	115.81	109.10
26	LA	1658	C	O4'-C1'-N1	5.59	112.67	108.20
26	LA	1962	C	C6-N1-C2	5.59	122.54	120.30
26	LA	2276	G	C6-N1-C2	-5.59	121.74	125.10
26	LA	2881	U	C5'-C4'-O4'	5.59	115.81	109.10
45	LG	113	PHE	CB-CG-CD2	-5.59	116.88	120.80
1	SS	43	MET	CG-SD-CE	5.59	109.15	100.20
2	SA	4	U	N1-C2-N3	5.59	118.26	114.90
2	SA	50	A	C5-N7-C8	-5.59	101.10	103.90
26	LA	332	A	O3'-P-O5'	-5.59	93.37	104.00
26	LA	1037	G	C1'-O4'-C4'	-5.59	105.42	109.90
26	LA	1127	A	O5'-C5'-C4'	5.59	122.33	111.70
26	LA	2020	A	N3-C4-N9	-5.59	122.92	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2428	G	C2-N3-C4	-5.59	109.10	111.90
26	LA	2829	A	N1-C2-N3	-5.59	126.50	129.30
2	SA	261	U	O3'-P-O5'	5.59	114.62	104.00
2	SA	302	G	C5-C6-O6	-5.59	125.25	128.60
2	SA	369	G	P-O5'-C5'	-5.59	111.95	120.90
2	SA	535	A	N3-C4-N9	-5.59	122.93	127.40
2	SA	538	G	C4'-C3'-C2'	5.59	108.19	102.60
2	SA	965	U	C2'-C3'-O3'	5.59	122.65	113.70
4	S2	47	A	C6-N1-C2	-5.59	115.25	118.60
26	LA	104	A	C4-C5-N7	-5.59	107.90	110.70
26	LA	194	G	N9-C4-C5	-5.59	103.16	105.40
26	LA	314	C	C5'-C4'-O4'	5.59	115.81	109.10
26	LA	558	U	C4'-C3'-C2'	-5.59	97.01	102.60
26	LA	1043	C	C1'-O4'-C4'	5.59	114.37	109.90
26	LA	1584	U	C1'-O4'-C4'	-5.59	105.43	109.90
26	LA	2375	G	C1'-O4'-C4'	-5.59	105.43	109.90
26	LA	2458	G	C3'-C2'-C1'	-5.59	97.03	101.50
26	LA	2614	A	C3'-C2'-C1'	-5.59	97.03	101.50
26	LA	2640	G	C5-N7-C8	5.59	107.10	104.30
26	LA	2674	G	N1-C6-O6	5.59	123.25	119.90
34	L0	3	ALA	N-CA-CB	-5.59	102.27	110.10
48	LN	97	ALA	O-C-N	-5.59	113.75	122.70
2	SA	124	C	C5'-C4'-C3'	-5.59	107.06	116.00
2	SA	424	G	C4-C5-N7	5.59	113.04	110.80
2	SA	687	A	N7-C8-N9	5.59	116.59	113.80
2	SA	1226	C	P-O5'-C5'	-5.59	111.96	120.90
2	SA	1510	C	C5'-C4'-C3'	-5.59	107.06	116.00
10	SJ	12	ALA	CB-CA-C	-5.59	101.72	110.10
16	SP	39	PHE	O-C-N	-5.59	113.76	122.70
26	LA	834	G	C4-C5-N7	5.59	113.04	110.80
26	LA	1360	G	C4'-C3'-C2'	-5.59	97.01	102.60
26	LA	1546	G	N3-C4-C5	5.59	131.40	128.60
26	LA	1632	A	N7-C8-N9	5.59	116.59	113.80
26	LA	1635	A	N7-C8-N9	5.59	116.59	113.80
26	LA	2230	G	N1-C2-N3	5.59	127.25	123.90
26	LA	2719	G	OP1-P-OP2	-5.59	111.22	119.60
2	SA	221	C	C5-C4-N4	-5.59	116.29	120.20
2	SA	425	G	N3-C4-C5	-5.59	125.81	128.60
26	LA	162	U	C2-N1-C1'	5.59	124.41	117.70
26	LA	536	G	C6-C5-N7	5.59	133.75	130.40
26	LA	612	G	N3-C4-C5	5.59	131.39	128.60
26	LA	1310	G	O4'-C1'-N9	5.59	112.67	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	185	U	C2-N1-C1'	-5.59	111.00	117.70
2	SA	209	U	N3-C4-O4	5.59	123.31	119.40
2	SA	388	G	N3-C2-N2	5.59	123.81	119.90
2	SA	676	A	C8-N9-C4	5.59	108.03	105.80
2	SA	765	G	P-O3'-C3'	-5.59	113.00	119.70
2	SA	853	C	P-O3'-C3'	5.59	126.40	119.70
2	SA	930	C	N1-C2-N3	5.59	123.11	119.20
2	SA	951	G	C5-C6-O6	-5.59	125.25	128.60
4	S2	19	G	C3'-C2'-C1'	5.59	105.97	101.50
17	SQ	64	ARG	NE-CZ-NH2	-5.59	117.51	120.30
24	S3	552	VAL	CB-CA-C	-5.59	100.79	111.40
26	LA	40	U	O5'-C5'-C4'	5.59	122.31	111.70
26	LA	437	U	OP2-P-O3'	5.59	117.49	105.20
26	LA	918	A	P-O3'-C3'	5.59	126.40	119.70
26	LA	1026	G	OP1-P-OP2	-5.59	111.22	119.60
26	LA	1081	U	P-O3'-C3'	-5.59	113.00	119.70
26	LA	2125	G	N9-C4-C5	-5.59	103.17	105.40
26	LA	2226	C	O4'-C4'-C3'	5.59	110.57	106.10
26	LA	2410	G	C5'-C4'-C3'	5.59	124.94	116.00
26	LA	2443	C	O5'-C5'-C4'	-5.59	101.09	111.70
26	LA	2464	G	C5'-C4'-C3'	5.59	124.94	116.00
26	LA	2550	G	N9-C4-C5	-5.59	103.17	105.40
26	LA	2667	C	N3-C2-O2	-5.59	117.99	121.90
51	LI	97	ARG	NH1-CZ-NH2	5.59	125.55	119.40
2	SA	657	U	N3-C4-C5	5.58	117.95	114.60
2	SA	896	C	C2-N3-C4	-5.58	117.11	119.90
2	SA	1028	C	N1-C2-N3	5.58	123.11	119.20
26	LA	80	G	C4-C5-N7	5.58	113.03	110.80
26	LA	729	G	P-O3'-C3'	-5.58	113.00	119.70
26	LA	1489	C	O4'-C1'-C2'	5.58	112.63	107.60
26	LA	1927	A	N7-C8-N9	5.58	116.59	113.80
2	SA	337	G	OP2-P-O3'	5.58	117.48	105.20
2	SA	449	G	C5-C6-N1	5.58	114.29	111.50
2	SA	477	C	C2'-C3'-O3'	5.58	122.63	113.70
2	SA	753	A	C4-C5-N7	5.58	113.49	110.70
7	SG	86	VAL	CG1-CB-CG2	5.58	119.83	110.90
26	LA	420	C	N3-C4-C5	-5.58	119.67	121.90
26	LA	613	A	C4-C5-N7	-5.58	107.91	110.70
26	LA	732	C	C5'-C4'-O4'	5.58	115.80	109.10
26	LA	1149	G	O4'-C1'-C2'	5.58	112.63	107.60
26	LA	1163	G	C3'-C2'-C1'	-5.58	97.03	101.50
26	LA	1619	G	C5-C6-O6	-5.58	125.25	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1660	G	C5-C6-N1	5.58	114.29	111.50
26	LA	2070	A	C4-C5-C6	-5.58	114.21	117.00
26	LA	2229	U	OP1-P-OP2	-5.58	111.22	119.60
26	LA	2624	G	C4'-C3'-C2'	-5.58	97.02	102.60
26	LA	2784	U	C5-C6-N1	-5.58	119.91	122.70
57	LS	63	ARG	CA-CB-CG	5.58	125.69	113.40
2	SA	1313	U	P-O5'-C5'	-5.58	111.97	120.90
2	SA	1447	A	OP2-P-O3'	5.58	117.48	105.20
25	LB	66	A	C5'-C4'-C3'	5.58	124.93	116.00
26	LA	329	G	C2-N3-C4	5.58	114.69	111.90
26	LA	531	C	OP1-P-OP2	-5.58	111.23	119.60
26	LA	2505	G	C3'-C2'-C1'	5.58	105.97	101.50
26	LA	2849	U	C5-C4-O4	5.58	129.25	125.90
26	LA	2855	C	C4'-C3'-C2'	-5.58	97.02	102.60
55	LQ	102	ARG	NE-CZ-NH2	-5.58	117.51	120.30
2	SA	129	A	N7-C8-N9	-5.58	111.01	113.80
2	SA	198	G	N9-C4-C5	5.58	107.63	105.40
2	SA	306	A	C3'-C2'-C1'	-5.58	97.04	101.50
2	SA	417	G	C5'-C4'-O4'	5.58	115.80	109.10
2	SA	503	C	C2-N3-C4	-5.58	117.11	119.90
2	SA	701	U	P-O3'-C3'	-5.58	113.00	119.70
2	SA	1023	U	C5-C6-N1	-5.58	119.91	122.70
2	SA	1076	U	N3-C2-O2	-5.58	118.29	122.20
19	SC	135	ARG	NE-CZ-NH2	-5.58	117.51	120.30
26	LA	185	G	C4'-C3'-C2'	-5.58	97.02	102.60
26	LA	352	A	O5'-P-OP1	5.58	117.40	110.70
26	LA	364	C	O4'-C1'-N1	5.58	112.66	108.20
2	SA	62	U	O4'-C1'-N1	5.58	112.66	108.20
2	SA	379	C	O5'-P-OP2	-5.58	100.68	105.70
2	SA	428	G	C4-N9-C1'	5.58	133.75	126.50
2	SA	504	C	P-O3'-C3'	-5.58	113.01	119.70
26	LA	58	G	C5'-C4'-C3'	5.58	124.92	116.00
26	LA	95	A	O4'-C4'-C3'	5.58	110.56	106.10
26	LA	119	A	N9-C4-C5	5.58	108.03	105.80
26	LA	1000	A	C5'-C4'-O4'	5.58	115.80	109.10
26	LA	1092	C	C2-N3-C4	-5.58	117.11	119.90
26	LA	1143	A	C4-N9-C1'	-5.58	116.26	126.30
26	LA	1354	A	C4-C5-N7	5.58	113.49	110.70
26	LA	1515	A	O4'-C1'-N9	5.58	112.66	108.20
26	LA	1965	C	OP1-P-OP2	-5.58	111.23	119.60
26	LA	2273	A	N1-C6-N6	5.58	121.95	118.60
57	LS	66	ALA	N-CA-CB	-5.58	102.29	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	906	A	C8-N9-C4	5.58	108.03	105.80
2	SA	990	C	O5'-P-OP1	5.58	117.39	110.70
26	LA	221	A	P-O3'-C3'	-5.58	113.01	119.70
26	LA	1975	G	C8-N9-C4	5.58	108.63	106.40
26	LA	1981	A	C2-N3-C4	-5.58	107.81	110.60
26	LA	2433	A	C5'-C4'-O4'	5.58	115.79	109.10
2	SA	54	C	C5'-C4'-C3'	-5.58	107.08	116.00
2	SA	147	G	C4-C5-N7	5.58	113.03	110.80
2	SA	233	C	C5-C4-N4	-5.58	116.30	120.20
2	SA	543	U	C6-N1-C2	-5.58	117.66	121.00
2	SA	952	U	N3-C4-C5	-5.58	111.25	114.60
2	SA	1316	G	N1-C6-O6	5.58	123.25	119.90
2	SA	1355	G	C4'-C3'-C2'	-5.58	97.02	102.60
24	S3	207	PRO	N-CA-C	5.58	126.60	112.10
26	LA	523	C	N1-C2-N3	5.58	123.10	119.20
26	LA	862	G	C5-C6-N1	5.58	114.29	111.50
26	LA	1087	G	C4'-C3'-C2'	-5.58	97.03	102.60
26	LA	1313	U	C5-C4-O4	-5.58	122.55	125.90
26	LA	1596	A	C5'-C4'-C3'	5.58	124.92	116.00
26	LA	1763	G	C2'-C3'-O3'	5.58	122.62	113.70
26	LA	2077	A	C5-C6-N6	5.58	128.16	123.70
26	LA	2389	G	C5'-C4'-O4'	5.58	115.79	109.10
26	LA	2618	G	C5-C6-N1	5.58	114.29	111.50
26	LA	2828	G	C8-N9-C4	-5.58	104.17	106.40
26	LA	2840	C	C2-N3-C4	-5.58	117.11	119.90
26	LA	2864	G	OP1-P-OP2	-5.58	111.24	119.60
2	SA	61	G	C5-C6-O6	-5.57	125.26	128.60
2	SA	268	U	C3'-C2'-C1'	5.57	105.96	101.50
2	SA	282	A	P-O3'-C3'	5.57	126.39	119.70
2	SA	447	G	P-O5'-C5'	5.57	129.82	120.90
2	SA	601	G	C5'-C4'-C3'	5.57	124.92	116.00
2	SA	892	A	C3'-C2'-C1'	5.57	105.96	101.50
2	SA	1181	G	C6-C5-N7	5.57	133.75	130.40
2	SA	1211	U	C5-C4-O4	-5.57	122.56	125.90
3	S1	34	U	C5-C6-N1	5.57	125.49	122.70
24	S3	160	ARG	CG-CD-NE	-5.57	100.10	111.80
26	LA	159	G	O4'-C4'-C3'	5.57	110.56	106.10
26	LA	271	G	C5'-C4'-O4'	5.57	115.79	109.10
26	LA	664	G	N9-C1'-C2'	-5.57	105.87	112.00
26	LA	844	A	N1-C6-N6	5.57	121.94	118.60
26	LA	930	G	N3-C2-N2	-5.57	116.00	119.90
26	LA	996	A	C4-C5-C6	5.57	119.79	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1117	C	N3-C2-O2	-5.57	118.00	121.90
26	LA	1319	C	N3-C4-N4	-5.57	114.10	118.00
26	LA	1480	C	N3-C4-C5	5.57	124.13	121.90
26	LA	1637	A	C5'-C4'-C3'	-5.57	107.08	116.00
26	LA	1715	G	O5'-C5'-C4'	5.57	122.29	111.70
26	LA	2169	A	C3'-C2'-C1'	5.57	105.96	101.50
26	LA	2428	G	O5'-P-OP2	-5.57	100.68	105.70
26	LA	2522	U	C5-C4-O4	-5.57	122.56	125.90
26	LA	2755	C	P-O3'-C3'	-5.57	113.01	119.70
27	LD	160	TYR	CB-CG-CD2	-5.57	117.66	121.00
58	LT	68	ARG	NE-CZ-NH2	5.57	123.09	120.30
2	SA	1246	A	C5'-C4'-O4'	5.57	115.79	109.10
2	SA	1290	G	C5'-C4'-O4'	5.57	115.79	109.10
26	LA	200	U	N1-C1'-C2'	-5.57	105.87	112.00
26	LA	811	U	C4-C5-C6	-5.57	116.36	119.70
26	LA	856	G	N9-C1'-C2'	-5.57	105.87	112.00
26	LA	1361	G	N1-C2-N3	-5.57	120.56	123.90
26	LA	1363	C	C5'-C4'-O4'	5.57	115.79	109.10
26	LA	2078	C	N1-C2-N3	5.57	123.10	119.20
26	LA	2736	A	C3'-C2'-C1'	-5.57	97.04	101.50
27	LD	167	ASP	CB-CG-OD1	-5.57	113.28	118.30
2	SA	35	G	N1-C6-O6	-5.57	116.56	119.90
2	SA	41	G	O4'-C1'-N9	5.57	112.66	108.20
2	SA	230	G	C8-N9-C1'	5.57	134.24	127.00
2	SA	430	A	C2-N3-C4	-5.57	107.81	110.60
19	SC	126	ARG	N-CA-CB	5.57	120.62	110.60
25	LB	105	G	C8-N9-C1'	5.57	134.24	127.00
26	LA	685	A	N9-C4-C5	5.57	108.03	105.80
26	LA	1231	U	C4-C5-C6	5.57	123.04	119.70
26	LA	1944	U	P-O5'-C5'	-5.57	111.99	120.90
26	LA	1995	U	OP1-P-OP2	-5.57	111.24	119.60
26	LA	2896	C	P-O3'-C3'	-5.57	113.02	119.70
44	LF	121	VAL	CA-CB-CG2	-5.57	102.55	110.90
2	SA	475	C	C5'-C4'-O4'	5.57	115.78	109.10
2	SA	525	C	N1-C2-O2	-5.57	115.56	118.90
2	SA	1057	G	C6-C5-N7	5.57	133.74	130.40
2	SA	1325	C	C5'-C4'-C3'	-5.57	107.09	116.00
26	LA	2291	U	C5-C6-N1	-5.57	119.92	122.70
26	LA	2555	U	P-O3'-C3'	5.57	126.38	119.70
26	LA	2830	C	C5-C6-N1	-5.57	118.22	121.00
27	LD	88	ALA	CB-CA-C	-5.57	101.75	110.10
2	SA	73	C	N1-C2-O2	-5.57	115.56	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	111	G	C5-C6-N1	-5.57	108.72	111.50
2	SA	767	A	N3-C4-N9	5.57	131.85	127.40
2	SA	883	C	C2-N3-C4	-5.57	117.12	119.90
2	SA	969	A	N9-C4-C5	-5.57	103.57	105.80
2	SA	1003	G	C4-C5-C6	-5.57	115.46	118.80
2	SA	1241	G	C5'-C4'-O4'	5.57	115.78	109.10
18	SB	31	PHE	CB-CG-CD1	-5.57	116.90	120.80
24	S3	127	ARG	NE-CZ-NH1	-5.57	117.52	120.30
25	LB	97	C	OP1-P-OP2	-5.57	111.25	119.60
25	LB	112	G	N9-C4-C5	5.57	107.63	105.40
26	LA	262	A	P-O3'-C3'	5.57	126.38	119.70
26	LA	323	C	N1-C2-O2	5.57	122.24	118.90
26	LA	1046	A	N3-C4-C5	-5.57	122.90	126.80
26	LA	1065	U	C4-C5-C6	-5.57	116.36	119.70
26	LA	1067	A	C5-C6-N1	5.57	120.48	117.70
26	LA	1654	A	O4'-C1'-N9	5.57	112.65	108.20
26	LA	2375	G	N1-C2-N3	-5.57	120.56	123.90
26	LA	2382	G	O3'-P-O5'	-5.57	93.42	104.00
26	LA	2475	C	C5-C4-N4	5.57	124.10	120.20
26	LA	2599	G	C8-N9-C4	5.57	108.63	106.40
26	LA	2672	U	N1-C1'-C2'	-5.57	105.88	112.00
26	LA	2681	C	N1-C2-O2	-5.57	115.56	118.90
26	LA	2681	C	C6-N1-C2	-5.57	118.07	120.30
2	SA	357	G	C5'-C4'-O4'	5.57	115.78	109.10
2	SA	494	G	N9-C4-C5	5.57	107.63	105.40
2	SA	965	U	N3-C2-O2	-5.57	118.30	122.20
2	SA	1143	G	P-O3'-C3'	-5.57	113.02	119.70
2	SA	1208	C	N3-C4-C5	-5.57	119.67	121.90
2	SA	1281	C	C5-C6-N1	5.57	123.78	121.00
2	SA	1500	A	C5-C6-N1	-5.57	114.92	117.70
26	LA	52	A	N7-C8-N9	5.57	116.58	113.80
26	LA	159	G	C5'-C4'-O4'	5.57	115.78	109.10
26	LA	390	U	C6-N1-C1'	-5.57	113.41	121.20
26	LA	443	A	C5'-C4'-O4'	5.57	115.78	109.10
26	LA	621	A	C4'-C3'-C2'	-5.57	97.03	102.60
26	LA	1020	A	C5-C6-N6	-5.57	119.25	123.70
26	LA	1022	G	P-O5'-C5'	5.57	129.80	120.90
26	LA	1309	G	C4-C5-N7	-5.57	108.57	110.80
26	LA	1334	G	O4'-C1'-C2'	5.57	112.61	107.60
26	LA	1371	G	N9-C4-C5	-5.57	103.17	105.40
26	LA	1426	G	N9-C4-C5	5.57	107.63	105.40
26	LA	1731	G	C5'-C4'-O4'	5.57	115.78	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	69	G	C5'-C4'-C3'	-5.56	107.10	116.00
26	LA	469	G	O4'-C1'-N9	5.56	112.65	108.20
26	LA	968	C	N1-C1'-C2'	-5.56	105.88	112.00
26	LA	1038	G	C6-N1-C2	-5.56	121.76	125.10
26	LA	1170	C	N3-C4-C5	5.56	124.12	121.90
26	LA	1943	U	C5'-C4'-C3'	-5.56	107.10	116.00
26	LA	1980	G	C4-N9-C1'	5.56	133.73	126.50
26	LA	2146	C	C6-N1-C1'	-5.56	114.12	120.80
26	LA	2575	C	O4'-C1'-N1	5.56	112.65	108.20
26	LA	2837	A	C4'-C3'-C2'	-5.56	97.04	102.60
26	LA	2895	G	C5-C6-N1	5.56	114.28	111.50
47	LJ	34	VAL	CG1-CB-CG2	-5.56	102.00	110.90
2	SA	144	G	P-O5'-C5'	5.56	129.80	120.90
2	SA	1222	G	C3'-C2'-C1'	-5.56	97.05	101.50
2	SA	1260	G	O4'-C4'-C3'	-5.56	98.44	104.00
2	SA	1294	G	C5-C6-O6	-5.56	125.26	128.60
3	S1	16	A	C5-N7-C8	-5.56	101.12	103.90
4	S2	47	A	C6-C5-N7	5.56	136.19	132.30
26	LA	379	G	N3-C4-C5	-5.56	125.82	128.60
26	LA	1099	G	C6-N1-C2	5.56	128.44	125.10
26	LA	1269	A	C5-N7-C8	5.56	106.68	103.90
26	LA	1524	G	C1'-O4'-C4'	-5.56	105.45	109.90
26	LA	1723	G	C5'-C4'-O4'	5.56	115.78	109.10
26	LA	2322	A	O4'-C1'-N9	5.56	112.65	108.20
26	LA	2461	A	C2'-C3'-O3'	5.56	122.60	113.70
26	LA	2554	U	N3-C4-O4	5.56	123.29	119.40
26	LA	2597	G	N1-C2-N2	-5.56	111.19	116.20
55	LQ	36	TYR	CB-CG-CD1	5.56	124.34	121.00
2	SA	97	G	O4'-C1'-C2'	-5.56	100.24	105.80
2	SA	98	A	C5-C6-N1	5.56	120.48	117.70
2	SA	1157	A	N9-C1'-C2'	-5.56	105.88	112.00
26	LA	43	G	C6-C5-N7	-5.56	127.06	130.40
26	LA	108	G	C1'-O4'-C4'	-5.56	105.45	109.90
26	LA	499	U	C4-C5-C6	-5.56	116.36	119.70
26	LA	1299	G	C4-C5-N7	-5.56	108.58	110.80
26	LA	1570	A	O5'-C5'-C4'	5.56	122.27	111.70
26	LA	1685	C	N1-C2-N3	5.56	123.09	119.20
26	LA	2515	C	C6-N1-C2	-5.56	118.08	120.30
26	LA	2675	A	C5-N7-C8	-5.56	101.12	103.90
33	LZ	58	ILE	O-C-N	-5.56	113.80	122.70
46	LH	126	THR	N-CA-CB	5.56	120.87	110.30
2	SA	232	G	N1-C6-O6	5.56	123.24	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	446	G	C5-C6-N1	5.56	114.28	111.50
2	SA	1108	G	C5-N7-C8	5.56	107.08	104.30
2	SA	1317	C	C4'-C3'-C2'	-5.56	97.04	102.60
2	SA	1334	G	C5-C6-N1	5.56	114.28	111.50
26	LA	7	G	N7-C8-N9	-5.56	110.32	113.10
26	LA	60	G	P-O3'-C3'	5.56	126.37	119.70
26	LA	373	U	O4'-C4'-C3'	5.56	110.55	106.10
26	LA	664	G	N3-C4-N9	5.56	129.34	126.00
26	LA	666	A	N9-C4-C5	-5.56	103.58	105.80
26	LA	809	G	C5'-C4'-O4'	-5.56	102.43	109.10
26	LA	872	U	C4-C5-C6	5.56	123.03	119.70
26	LA	1131	G	C4-C5-N7	5.56	113.02	110.80
26	LA	1346	G	N3-C2-N2	-5.56	116.01	119.90
26	LA	1454	C	N1-C2-O2	-5.56	115.56	118.90
26	LA	1506	U	O3'-P-O5'	5.56	114.56	104.00
26	LA	1963	U	O4'-C1'-N1	5.56	112.65	108.20
26	LA	2144	G	O4'-C1'-N9	5.56	112.65	108.20
26	LA	2418	A	C5-C6-N1	5.56	120.48	117.70
26	LA	2777	G	P-O3'-C3'	5.56	126.37	119.70
26	LA	2820	A	C5-C6-N6	5.56	128.15	123.70
26	LA	2901	C	C1'-O4'-C4'	-5.56	105.45	109.90
44	LF	134	LEU	CB-CG-CD1	5.56	120.45	111.00
2	SA	143	A	P-O3'-C3'	-5.56	113.03	119.70
2	SA	338	A	N1-C6-N6	-5.56	115.27	118.60
2	SA	1152	A	N7-C8-N9	-5.56	111.02	113.80
2	SA	1313	U	P-O3'-C3'	-5.56	113.03	119.70
2	SA	1457	G	N9-C1'-C2'	-5.56	105.89	112.00
2	SA	1519	A	C6-N1-C2	-5.56	115.27	118.60
25	LB	84	G	O4'-C1'-N9	5.56	112.65	108.20
26	LA	457	A	O4'-C1'-N9	5.56	112.64	108.20
26	LA	498	G	O4'-C1'-N9	5.56	112.65	108.20
26	LA	666	A	N1-C2-N3	5.56	132.08	129.30
26	LA	979	A	O4'-C1'-N9	5.56	112.65	108.20
26	LA	1519	G	C5'-C4'-O4'	5.56	115.77	109.10
26	LA	1533	C	C5'-C4'-C3'	-5.56	107.11	116.00
26	LA	1641	A	C1'-O4'-C4'	5.56	114.35	109.90
26	LA	1702	G	N1-C2-N2	-5.56	111.20	116.20
26	LA	1747	U	C5-C4-O4	-5.56	122.57	125.90
26	LA	2604	U	P-O5'-C5'	5.56	129.79	120.90
26	LA	2641	G	N1-C2-N3	5.56	127.23	123.90
26	LA	2646	C	C6-N1-C2	-5.56	118.08	120.30
26	LA	2668	G	C5-N7-C8	5.56	107.08	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2716	C	N3-C4-N4	-5.56	114.11	118.00
2	SA	279	A	C5-C6-N1	-5.56	114.92	117.70
2	SA	753	A	O5'-P-OP1	5.56	117.37	110.70
2	SA	1099	G	C5'-C4'-C3'	-5.56	107.11	116.00
2	SA	1103	C	C6-N1-C2	-5.56	118.08	120.30
2	SA	1533	C	N3-C2-O2	5.56	125.79	121.90
26	LA	251	A	P-O3'-C3'	5.56	126.37	119.70
26	LA	510	C	N1-C1'-C2'	-5.56	105.89	112.00
26	LA	1311	G	O4'-C1'-N9	5.56	112.64	108.20
26	LA	1511	G	C5-N7-C8	5.56	107.08	104.30
26	LA	2476	A	N1-C6-N6	-5.56	115.27	118.60
2	SA	125	U	O5'-C5'-C4'	5.55	122.25	111.70
2	SA	282	A	N9-C4-C5	5.55	108.02	105.80
2	SA	518	C	C6-N1-C2	-5.55	118.08	120.30
2	SA	1150	A	C6-C5-N7	5.55	136.19	132.30
2	SA	1155	A	P-O5'-C5'	5.55	129.79	120.90
2	SA	1233	G	N3-C4-C5	-5.55	125.82	128.60
10	SJ	89	ARG	NE-CZ-NH1	5.55	123.08	120.30
12	SL	113	ARG	NH1-CZ-NH2	-5.55	113.29	119.40
13	SM	70	ARG	NH1-CZ-NH2	5.55	125.51	119.40
26	LA	560	C	OP1-P-OP2	-5.55	111.27	119.60
26	LA	585	G	N7-C8-N9	-5.55	110.32	113.10
26	LA	703	U	P-O3'-C3'	5.55	126.37	119.70
26	LA	1231	U	N3-C4-O4	5.55	123.29	119.40
26	LA	1390	U	O4'-C1'-N1	5.55	112.64	108.20
26	LA	1400	U	O4'-C1'-N1	5.55	112.64	108.20
26	LA	1820	U	N1-C2-N3	5.55	118.23	114.90
26	LA	2227	A	N9-C4-C5	5.55	108.02	105.80
26	LA	2316	G	N1-C2-N2	5.55	121.20	116.20
26	LA	2328	A	C2-N3-C4	5.55	113.38	110.60
26	LA	2406	A	P-O5'-C5'	-5.55	112.01	120.90
26	LA	2495	G	C4'-C3'-C2'	-5.55	97.05	102.60
26	LA	2544	G	O4'-C1'-C2'	5.55	112.60	107.60
26	LA	2574	G	N9-C4-C5	-5.55	103.18	105.40
26	LA	2818	U	C1'-O4'-C4'	-5.55	105.46	109.90
26	LA	2861	U	O4'-C1'-N1	5.55	112.64	108.20
2	SA	272	C	N1-C2-N3	-5.55	115.31	119.20
2	SA	1515	G	C2-N3-C4	5.55	114.68	111.90
26	LA	135	U	C5'-C4'-O4'	5.55	115.76	109.10
2	SA	28	A	C5-N7-C8	-5.55	101.12	103.90
2	SA	42	G	P-O3'-C3'	-5.55	113.04	119.70
2	SA	961	U	N3-C2-O2	5.55	126.08	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1172	C	P-O3'-C3'	-5.55	113.04	119.70
2	SA	1270	G	P-O5'-C5'	-5.55	112.02	120.90
3	S1	35	G	N1-C2-N2	-5.55	111.20	116.20
8	SH	79	ARG	CD-NE-CZ	5.55	131.37	123.60
9	SI	65	THR	CA-CB-CG2	-5.55	104.63	112.40
26	LA	361	G	C8-N9-C4	5.55	108.62	106.40
26	LA	696	G	C4'-C3'-C2'	-5.55	97.05	102.60
26	LA	757	G	C8-N9-C4	-5.55	104.18	106.40
26	LA	1396	U	C5-C6-N1	-5.55	119.92	122.70
26	LA	1506	U	P-O5'-C5'	5.55	129.78	120.90
26	LA	1570	A	C5-C6-N6	5.55	128.14	123.70
26	LA	1730	C	N3-C4-C5	-5.55	119.68	121.90
26	LA	1779	U	P-O3'-C3'	5.55	126.36	119.70
26	LA	1882	U	C4-C5-C6	5.55	123.03	119.70
26	LA	2267	A	C4-N9-C1'	-5.55	116.31	126.30
26	LA	2659	G	C3'-C2'-C1'	-5.55	97.06	101.50
2	SA	10	A	C5'-C4'-C3'	-5.55	107.12	116.00
2	SA	354	G	N3-C2-N2	5.55	123.78	119.90
2	SA	714	G	C8-N9-C1'	-5.55	119.79	127.00
2	SA	1079	G	N3-C4-C5	-5.55	125.83	128.60
2	SA	1092	A	C2'-C3'-O3'	5.55	122.58	113.70
2	SA	1166	G	N1-C2-N2	-5.55	111.21	116.20
25	LB	61	G	P-O3'-C3'	-5.55	113.04	119.70
26	LA	203	A	N1-C2-N3	-5.55	126.53	129.30
26	LA	500	G	C1'-O4'-C4'	-5.55	105.46	109.90
26	LA	612	G	P-O3'-C3'	5.55	126.36	119.70
26	LA	761	A	N1-C2-N3	-5.55	126.53	129.30
26	LA	1042	G	C5-N7-C8	-5.55	101.53	104.30
26	LA	1141	U	P-O3'-C3'	5.55	126.36	119.70
26	LA	1734	G	C4-C5-N7	5.55	113.02	110.80
26	LA	2099	U	C2-N3-C4	-5.55	123.67	127.00
26	LA	2322	A	N1-C6-N6	-5.55	115.27	118.60
2	SA	1291	U	O4'-C1'-N1	5.55	112.64	108.20
26	LA	412	A	C4-C5-C6	5.55	119.77	117.00
26	LA	929	U	O4'-C1'-N1	5.55	112.64	108.20
26	LA	944	C	C5-C6-N1	5.55	123.77	121.00
26	LA	1038	G	N3-C2-N2	-5.55	116.02	119.90
26	LA	1517	G	N3-C2-N2	5.55	123.78	119.90
26	LA	2517	C	N1-C2-N3	5.55	123.08	119.20
2	SA	172	A	C4-C5-C6	-5.55	114.23	117.00
2	SA	587	G	C4'-C3'-C2'	-5.55	97.05	102.60
7	SG	114	SER	N-CA-C	5.55	125.98	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	98	G	C2'-C3'-O3'	5.55	122.57	113.70
26	LA	515	A	N3-C4-C5	5.55	130.68	126.80
26	LA	1031	G	N3-C2-N2	5.55	123.78	119.90
26	LA	2473	U	C6-N1-C2	-5.55	117.67	121.00
26	LA	2643	G	N1-C6-O6	-5.55	116.57	119.90
26	LA	2886	A	C6-C5-N7	-5.55	128.42	132.30
2	SA	24	U	C5-C6-N1	5.54	125.47	122.70
2	SA	109	A	N9-C4-C5	-5.54	103.58	105.80
2	SA	169	C	C1'-O4'-C4'	-5.54	105.46	109.90
2	SA	858	G	N1-C6-O6	5.54	123.23	119.90
2	SA	1226	C	P-O3'-C3'	5.54	126.35	119.70
2	SA	1396	A	C5'-C4'-O4'	5.54	115.75	109.10
26	LA	70	G	N7-C8-N9	5.54	115.87	113.10
26	LA	115	C	C5-C4-N4	5.54	124.08	120.20
26	LA	1550	C	O4'-C1'-N1	5.54	112.64	108.20
26	LA	1727	C	P-O5'-C5'	-5.54	112.03	120.90
26	LA	2433	A	C4-N9-C1'	5.54	136.28	126.30
26	LA	2712	C	C3'-C2'-C1'	5.54	105.94	101.50
2	SA	16	A	C3'-C2'-C1'	5.54	105.94	101.50
2	SA	141	G	C4-N9-C1'	-5.54	119.29	126.50
2	SA	432	A	N7-C8-N9	5.54	116.57	113.80
2	SA	694	A	N3-C4-C5	-5.54	122.92	126.80
2	SA	733	G	C5-C6-N1	-5.54	108.73	111.50
2	SA	1102	A	C8-N9-C4	5.54	108.02	105.80
2	SA	1131	G	N1-C2-N3	5.54	127.23	123.90
4	S2	27	G	N1-C2-N3	-5.54	120.57	123.90
20	SD	75	TYR	CB-CG-CD1	5.54	124.33	121.00
25	LB	11	C	C5-C6-N1	5.54	123.77	121.00
26	LA	246	C	C5-C4-N4	-5.54	116.32	120.20
26	LA	629	G	N1-C2-N3	-5.54	120.57	123.90
26	LA	1185	G	N1-C2-N3	5.54	127.23	123.90
26	LA	1274	A	C4-N9-C1'	5.54	136.28	126.30
26	LA	1672	A	OP1-P-OP2	-5.54	111.28	119.60
26	LA	1773	A	C5'-C4'-O4'	5.54	115.75	109.10
26	LA	2458	G	C2-N3-C4	5.54	114.67	111.90
26	LA	2497	A	OP1-P-OP2	-5.54	111.28	119.60
45	LG	166	ARG	CG-CD-NE	-5.54	100.16	111.80
46	LH	57	TYR	N-CA-CB	5.54	120.58	110.60
2	SA	145	G	C5'-C4'-C3'	-5.54	107.13	116.00
2	SA	184	G	O4'-C1'-N9	5.54	112.63	108.20
2	SA	234	C	N1-C2-N3	5.54	123.08	119.20
2	SA	273	U	O4'-C1'-C2'	5.54	112.59	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	574	A	N7-C8-N9	-5.54	111.03	113.80
2	SA	741	G	C5-N7-C8	-5.54	101.53	104.30
2	SA	902	G	N3-C2-N2	5.54	123.78	119.90
2	SA	1330	U	P-O3'-C3'	5.54	126.35	119.70
2	SA	1480	A	C5-C6-N1	-5.54	114.93	117.70
18	SB	183	PHE	CB-CG-CD2	5.54	124.68	120.80
25	LB	60	C	P-O5'-C5'	5.54	129.77	120.90
26	LA	94	A	C5-C6-N1	5.54	120.47	117.70
26	LA	214	G	C5-C6-O6	-5.54	125.28	128.60
26	LA	404	A	N1-C6-N6	-5.54	115.28	118.60
26	LA	515	A	N1-C6-N6	5.54	121.92	118.60
26	LA	648	G	C2-N3-C4	-5.54	109.13	111.90
26	LA	1398	C	N3-C4-N4	-5.54	114.12	118.00
26	LA	1918	A	C5-C6-N6	5.54	128.13	123.70
38	LE	154	LYS	N-CA-C	-5.54	96.04	111.00
54	LM	32	TYR	N-CA-CB	-5.54	100.62	110.60
2	SA	153	C	N3-C4-N4	5.54	121.88	118.00
26	LA	473	G	N1-C2-N2	5.54	121.19	116.20
26	LA	904	G	N1-C2-N3	-5.54	120.58	123.90
26	LA	982	C	C5'-C4'-O4'	5.54	115.75	109.10
26	LA	1049	C	N1-C2-O2	5.54	122.22	118.90
26	LA	1637	A	C5-C6-N1	5.54	120.47	117.70
26	LA	1756	G	C8-N9-C1'	5.54	134.20	127.00
26	LA	2037	A	N1-C2-N3	5.54	132.07	129.30
26	LA	2587	A	C8-N9-C4	-5.54	103.58	105.80
26	LA	2588	G	C6-N1-C2	-5.54	121.78	125.10
26	LA	2674	G	N3-C2-N2	5.54	123.78	119.90
26	LA	2821	A	N1-C2-N3	-5.54	126.53	129.30
2	SA	410	G	C8-N9-C1'	5.54	134.20	127.00
2	SA	563	A	C4'-C3'-C2'	5.54	108.14	102.60
2	SA	788	U	C4'-C3'-C2'	5.54	108.14	102.60
2	SA	948	C	C6-N1-C2	-5.54	118.08	120.30
2	SA	966	G	N1-C2-N3	5.54	127.22	123.90
20	SD	157	ALA	CB-CA-C	-5.54	101.79	110.10
26	LA	140	C	O4'-C4'-C3'	-5.54	98.46	104.00
26	LA	211	C	P-O3'-C3'	5.54	126.35	119.70
26	LA	514	A	C5-C6-N1	5.54	120.47	117.70
26	LA	1027	A	C6-N1-C2	-5.54	115.28	118.60
26	LA	1139	G	N7-C8-N9	-5.54	110.33	113.10
26	LA	1896	G	P-O3'-C3'	-5.54	113.05	119.70
26	LA	1910	G	N1-C6-O6	-5.54	116.58	119.90
26	LA	2134	A	C6-N1-C2	-5.54	115.28	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2458	G	C1'-O4'-C4'	-5.54	105.47	109.90
26	LA	2560	A	C1'-O4'-C4'	-5.54	105.47	109.90
26	LA	2597	G	N3-C4-N9	5.54	129.32	126.00
26	LA	2902	C	C4'-C3'-C2'	5.54	108.14	102.60
49	LK	117	THR	CA-C-N	-5.54	105.12	116.20
2	SA	423	G	C6-N1-C2	5.54	128.42	125.10
2	SA	436	C	N3-C4-C5	5.54	124.11	121.90
2	SA	983	A	C5-C6-N1	-5.54	114.93	117.70
2	SA	1329	A	C5'-C4'-O4'	5.54	115.75	109.10
26	LA	532	A	O4'-C1'-N9	5.54	112.63	108.20
26	LA	1404	C	N1-C2-N3	5.54	123.08	119.20
26	LA	1789	A	C6-N1-C2	-5.54	115.28	118.60
26	LA	1831	G	O4'-C1'-C2'	-5.54	100.26	105.80
26	LA	2516	A	P-O3'-C3'	-5.54	113.06	119.70
57	LS	86	SER	N-CA-CB	5.54	118.81	110.50
2	SA	166	U	O4'-C1'-C2'	5.54	112.58	107.60
2	SA	670	G	C4-C5-C6	5.54	122.12	118.80
2	SA	685	G	C1'-O4'-C4'	-5.54	105.47	109.90
2	SA	688	G	N3-C2-N2	-5.54	116.03	119.90
2	SA	1294	G	C3'-C2'-C1'	-5.54	97.07	101.50
13	SM	78	ARG	NE-CZ-NH1	-5.54	117.53	120.30
18	SB	85	SER	CA-C-O	5.54	131.72	120.10
24	S3	136	ARG	NE-CZ-NH2	-5.54	117.53	120.30
26	LA	401	A	C1'-O4'-C4'	-5.54	105.47	109.90
26	LA	706	A	C5'-C4'-C3'	-5.54	107.14	116.00
26	LA	1030	C	C4'-C3'-C2'	-5.54	97.06	102.60
26	LA	1080	A	C6-N1-C2	-5.54	115.28	118.60
26	LA	1226	A	C3'-C2'-C1'	5.54	105.93	101.50
26	LA	1774	C	C2-N3-C4	-5.54	117.13	119.90
26	LA	2063	C	O4'-C4'-C3'	5.54	110.53	106.10
26	LA	2085	U	N3-C4-C5	-5.54	111.28	114.60
26	LA	2336	A	C8-N9-C4	-5.54	103.59	105.80
26	LA	2440	C	C5-C6-N1	5.54	123.77	121.00
53	LP	74	GLU	N-CA-CB	5.54	120.56	110.60
2	SA	215	C	C4-C5-C6	-5.53	114.63	117.40
2	SA	744	C	OP1-P-OP2	-5.53	111.30	119.60
2	SA	939	G	C2'-C3'-O3'	5.53	122.55	113.70
2	SA	1408	A	N9-C1'-C2'	-5.53	105.91	112.00
4	S2	27	G	N9-C1'-C2'	-5.53	105.91	112.00
25	LB	66	A	C4-C5-N7	5.53	113.47	110.70
26	LA	121	G	C5'-C4'-O4'	5.53	115.74	109.10
26	LA	224	U	P-O5'-C5'	-5.53	112.05	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	370	G	C5-C6-N1	5.53	114.27	111.50
26	LA	750	A	N1-C2-N3	-5.53	126.53	129.30
26	LA	889	C	C3'-C2'-C1'	5.53	105.93	101.50
26	LA	889	C	O5'-C5'-C4'	5.53	122.22	111.70
26	LA	1058	U	C3'-C2'-C1'	5.53	105.93	101.50
26	LA	1903	G	N7-C8-N9	-5.53	110.33	113.10
26	LA	2060	A	C5'-C4'-O4'	5.53	115.74	109.10
26	LA	2447	G	C6-C5-N7	-5.53	127.08	130.40
44	LF	35	TYR	CB-CG-CD1	-5.53	117.68	121.00
2	SA	1408	A	N1-C2-N3	5.53	132.07	129.30
25	LB	62	C	C5-C4-N4	5.53	124.07	120.20
26	LA	2562	U	OP1-P-OP2	-5.53	111.30	119.60
2	SA	651	C	N1-C1'-C2'	5.53	121.19	114.00
2	SA	1312	G	C1'-O4'-C4'	-5.53	105.47	109.90
2	SA	1457	G	N7-C8-N9	5.53	115.86	113.10
24	S3	452	SER	N-CA-CB	5.53	118.79	110.50
24	S3	579	PHE	CB-CG-CD1	5.53	124.67	120.80
26	LA	220	G	N7-C8-N9	5.53	115.86	113.10
26	LA	291	G	C5-C6-N1	5.53	114.27	111.50
26	LA	765	C	C4'-C3'-C2'	-5.53	97.07	102.60
26	LA	869	G	N9-C1'-C2'	-5.53	105.92	112.00
26	LA	933	A	O4'-C1'-N9	5.53	112.62	108.20
26	LA	1131	G	N9-C4-C5	-5.53	103.19	105.40
26	LA	1331	G	N7-C8-N9	-5.53	110.33	113.10
26	LA	1339	G	C5-C6-O6	-5.53	125.28	128.60
26	LA	1610	A	C4'-C3'-C2'	-5.53	97.07	102.60
26	LA	1882	U	C5'-C4'-O4'	5.53	115.74	109.10
26	LA	2828	G	N3-C4-C5	-5.53	125.83	128.60
26	LA	2843	G	N7-C8-N9	-5.53	110.33	113.10
2	SA	1227	A	N9-C1'-C2'	-5.53	105.92	112.00
2	SA	1229	A	C5-N7-C8	5.53	106.67	103.90
4	S2	45	A	C2-N3-C4	-5.53	107.84	110.60
26	LA	2256	G	N3-C4-C5	-5.53	125.83	128.60
26	LA	2326	C	C2-N1-C1'	-5.53	112.72	118.80
34	L0	48	ARG	CD-NE-CZ	-5.53	115.86	123.60
2	SA	329	A	C5-C6-N1	5.53	120.46	117.70
2	SA	630	A	O5'-C5'-C4'	-5.53	101.20	111.70
2	SA	751	U	C6-N1-C2	-5.53	117.68	121.00
2	SA	852	G	P-O3'-C3'	5.53	126.33	119.70
2	SA	967	C	N1-C2-O2	5.53	122.22	118.90
2	SA	1279	G	OP1-P-OP2	-5.53	111.31	119.60
2	SA	1514	G	C5-C6-O6	-5.53	125.28	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	S3	389	ASP	CB-CG-OD1	5.53	123.28	118.30
25	LB	62	C	O4'-C1'-N1	5.53	112.62	108.20
26	LA	483	A	C5-C6-N1	-5.53	114.94	117.70
26	LA	702	U	C4'-C3'-C2'	-5.53	97.07	102.60
26	LA	789	A	OP1-P-OP2	-5.53	111.31	119.60
26	LA	1050	A	C4-N9-C1'	-5.53	116.35	126.30
26	LA	1087	G	O4'-C4'-C3'	5.53	110.52	106.10
26	LA	1122	G	C8-N9-C4	5.53	108.61	106.40
26	LA	1290	C	C4-C5-C6	-5.53	114.64	117.40
26	LA	1309	G	N3-C4-N9	5.53	129.32	126.00
26	LA	1511	G	C2-N3-C4	5.53	114.66	111.90
26	LA	1582	C	N3-C2-O2	-5.53	118.03	121.90
26	LA	1873	G	N3-C2-N2	5.53	123.77	119.90
26	LA	2765	A	P-O5'-C5'	-5.53	112.06	120.90
26	LA	2884	U	P-O3'-C3'	-5.53	113.07	119.70
2	SA	114	U	N3-C4-C5	-5.53	111.28	114.60
2	SA	194	C	C1'-O4'-C4'	-5.53	105.48	109.90
2	SA	474	G	O4'-C1'-N9	5.53	112.62	108.20
2	SA	635	A	N9-C1'-C2'	-5.53	105.92	112.00
2	SA	893	C	C6-N1-C2	-5.53	118.09	120.30
2	SA	1182	G	C5-N7-C8	5.53	107.06	104.30
2	SA	1235	U	N1-C1'-C2'	-5.53	105.92	112.00
2	SA	1339	A	C2-N3-C4	-5.53	107.84	110.60
2	SA	1460	C	N1-C2-O2	5.53	122.22	118.90
24	S3	356	ARG	CD-NE-CZ	5.53	131.34	123.60
25	LB	107	G	O4'-C1'-N9	5.53	112.62	108.20
26	LA	520	G	C4-N9-C1'	5.53	133.68	126.50
26	LA	523	C	O4'-C1'-N1	5.53	112.62	108.20
26	LA	594	U	OP1-P-OP2	-5.53	111.31	119.60
26	LA	836	G	N1-C6-O6	5.53	123.22	119.90
26	LA	885	C	N1-C1'-C2'	-5.53	105.92	112.00
26	LA	970	U	C4'-C3'-C2'	-5.53	97.07	102.60
26	LA	1139	G	N3-C2-N2	5.53	123.77	119.90
26	LA	1418	G	C5'-C4'-C3'	-5.53	107.16	116.00
26	LA	1429	G	N9-C4-C5	5.53	107.61	105.40
26	LA	1568	G	C1'-O4'-C4'	-5.53	105.48	109.90
26	LA	1801	A	C5-N7-C8	5.53	106.66	103.90
26	LA	1802	A	N1-C2-N3	5.53	132.06	129.30
26	LA	1904	G	P-O3'-C3'	-5.53	113.07	119.70
26	LA	1934	C	P-O5'-C5'	-5.53	112.06	120.90
26	LA	2033	A	C8-N9-C4	-5.53	103.59	105.80
26	LA	2191	A	C5-N7-C8	5.53	106.66	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2268	A	P-O3'-C3'	-5.53	113.07	119.70
26	LA	2440	C	N1-C2-N3	5.53	123.07	119.20
26	LA	2683	C	N1-C1'-C2'	-5.53	105.92	112.00
26	LA	2803	G	N9-C4-C5	-5.53	103.19	105.40
26	LA	2832	U	C5-C4-O4	-5.53	122.58	125.90
30	LW	17	ASP	CB-CG-OD1	-5.53	113.33	118.30
34	L0	49	ASP	CA-CB-CG	-5.53	101.24	113.40
2	SA	253	A	C5-C6-N1	-5.52	114.94	117.70
2	SA	397	A	N7-C8-N9	-5.52	111.04	113.80
2	SA	1090	U	C5'-C4'-C3'	-5.52	107.16	116.00
2	SA	1279	G	N3-C2-N2	5.52	123.77	119.90
2	SA	1284	C	C6-N1-C2	-5.52	118.09	120.30
2	SA	1455	G	C5-C6-O6	-5.52	125.29	128.60
26	LA	401	A	P-O3'-C3'	-5.52	113.07	119.70
26	LA	565	C	C4'-C3'-C2'	-5.52	97.08	102.60
26	LA	841	G	O4'-C1'-N9	5.52	112.62	108.20
26	LA	937	C	C4'-C3'-C2'	-5.52	97.08	102.60
26	LA	1720	U	O4'-C1'-N1	5.52	112.62	108.20
26	LA	2431	U	C5'-C4'-O4'	5.52	115.73	109.10
2	SA	178	C	C5'-C4'-C3'	-5.52	107.16	116.00
2	SA	938	A	N3-C4-N9	-5.52	122.98	127.40
2	SA	1219	A	OP1-P-OP2	-5.52	111.32	119.60
2	SA	1428	A	C5'-C4'-C3'	5.52	124.84	116.00
2	SA	1434	A	C4-C5-C6	5.52	119.76	117.00
2	SA	1452	C	C5-C4-N4	5.52	124.07	120.20
2	SA	1480	A	C1'-O4'-C4'	-5.52	105.48	109.90
4	S2	6	G	C1'-O4'-C4'	-5.52	105.48	109.90
12	SL	65	TYR	CB-CG-CD1	5.52	124.31	121.00
14	SN	100	TRP	CB-CG-CD2	-5.52	119.42	126.60
26	LA	149	A	P-O5'-C5'	-5.52	112.06	120.90
26	LA	359	G	N7-C8-N9	5.52	115.86	113.10
26	LA	386	G	C4-C5-C6	-5.52	115.49	118.80
26	LA	612	G	N3-C2-N2	-5.52	116.03	119.90
26	LA	675	A	C6-N1-C2	-5.52	115.29	118.60
26	LA	946	C	N3-C2-O2	-5.52	118.03	121.90
26	LA	1378	A	C4-C5-N7	5.52	113.46	110.70
26	LA	1878	G	N9-C4-C5	5.52	107.61	105.40
26	LA	1983	G	C5-C6-N1	-5.52	108.74	111.50
26	LA	2238	G	N7-C8-N9	-5.52	110.34	113.10
26	LA	2383	G	C5'-C4'-O4'	5.52	115.73	109.10
26	LA	2390	U	C6-N1-C1'	5.52	128.93	121.20
26	LA	2831	G	C5'-C4'-O4'	5.52	115.73	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	LU	77	ASP	CB-CA-C	-5.52	99.36	110.40
41	L5	4	THR	CB-CA-C	-5.52	96.69	111.60
2	SA	176	C	N3-C4-N4	-5.52	114.14	118.00
2	SA	552	U	C2-N3-C4	5.52	130.31	127.00
2	SA	690	G	C5'-C4'-C3'	-5.52	107.17	116.00
2	SA	799	G	C5-C6-O6	-5.52	125.29	128.60
2	SA	1030	U	C5-C4-O4	5.52	129.21	125.90
26	LA	666	A	C4-C5-N7	5.52	113.46	110.70
26	LA	1525	A	N9-C4-C5	5.52	108.01	105.80
26	LA	1842	G	C5-N7-C8	-5.52	101.54	104.30
26	LA	1972	G	O4'-C1'-N9	5.52	112.62	108.20
26	LA	2074	U	N3-C4-O4	5.52	123.26	119.40
26	LA	2634	A	C6-N1-C2	5.52	121.91	118.60
26	LA	2727	A	C6-N1-C2	-5.52	115.29	118.60
29	LV	25	GLU	CB-CA-C	5.52	121.44	110.40
31	LX	85	LYS	N-CA-C	5.52	125.91	111.00
41	L5	4	THR	OG1-CB-CG2	-5.52	97.30	110.00
2	SA	455	G	C8-N9-C4	-5.52	104.19	106.40
2	SA	602	A	C6-N1-C2	-5.52	115.29	118.60
2	SA	655	A	P-O3'-C3'	-5.52	113.08	119.70
2	SA	1430	A	O4'-C1'-N9	5.52	112.61	108.20
3	S1	14	G	C5-N7-C8	-5.52	101.54	104.30
24	S3	447	TRP	CA-CB-CG	5.52	124.19	113.70
26	LA	173	A	N9-C4-C5	-5.52	103.59	105.80
26	LA	558	U	C4-C5-C6	-5.52	116.39	119.70
26	LA	860	U	C2-N3-C4	-5.52	123.69	127.00
26	LA	1067	A	O4'-C1'-N9	5.52	112.62	108.20
26	LA	1327	A	C5-N7-C8	-5.52	101.14	103.90
26	LA	1415	U	N1-C2-N3	5.52	118.21	114.90
26	LA	2093	G	N9-C4-C5	-5.52	103.19	105.40
26	LA	2382	G	N1-C6-O6	-5.52	116.59	119.90
26	LA	2761	A	OP1-P-OP2	-5.52	111.32	119.60
1	SS	16	LYS	CA-CB-CG	5.52	125.54	113.40
2	SA	103	U	P-O3'-C3'	-5.52	113.08	119.70
2	SA	739	C	P-O3'-C3'	-5.52	113.08	119.70
2	SA	793	U	O4'-C4'-C3'	-5.52	98.48	104.00
2	SA	1260	G	C5'-C4'-O4'	5.52	115.72	109.10
3	S1	49	U	C5'-C4'-C3'	5.52	124.83	116.00
25	LB	33	G	C6-N1-C2	5.52	128.41	125.10
25	LB	73	A	N3-C4-C5	-5.52	122.94	126.80
25	LB	100	G	C8-N9-C4	-5.52	104.19	106.40
26	LA	1259	G	C6-N1-C2	-5.52	121.79	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1759	A	C5-N7-C8	-5.52	101.14	103.90
26	LA	1774	C	C6-N1-C2	5.52	122.51	120.30
26	LA	1884	G	C6-N1-C2	-5.52	121.79	125.10
26	LA	2007	U	P-O5'-C5'	5.52	129.73	120.90
26	LA	2090	A	C6-N1-C2	-5.52	115.29	118.60
26	LA	2130	U	C5-C4-O4	-5.52	122.59	125.90
26	LA	2893	A	N1-C6-N6	5.52	121.91	118.60
44	LF	79	ARG	NE-CZ-NH2	-5.52	117.54	120.30
2	SA	489	C	P-O3'-C3'	-5.52	113.08	119.70
2	SA	987	G	C4'-C3'-C2'	-5.52	97.08	102.60
2	SA	1114	C	C6-N1-C2	-5.52	118.09	120.30
2	SA	1537	U	O4'-C1'-N1	5.52	112.61	108.20
4	S2	4	G	C5-N7-C8	-5.52	101.54	104.30
4	S2	76	C	OP1-P-OP2	-5.52	111.33	119.60
26	LA	557	C	N1-C2-O2	-5.52	115.59	118.90
26	LA	1070	A	N7-C8-N9	5.52	116.56	113.80
26	LA	1348	C	O4'-C1'-N1	5.52	112.61	108.20
26	LA	1663	G	C5'-C4'-C3'	-5.52	107.17	116.00
26	LA	1749	A	C8-N9-C1'	5.52	137.63	127.70
26	LA	1965	C	N1-C1'-C2'	5.52	121.17	114.00
26	LA	2575	C	N1-C2-N3	-5.52	115.34	119.20
26	LA	2864	G	P-O5'-C5'	5.52	129.72	120.90
26	LA	2896	C	C4'-C3'-C2'	5.52	108.12	102.60
2	SA	650	G	N7-C8-N9	-5.51	110.34	113.10
2	SA	750	C	C5'-C4'-O4'	5.51	115.72	109.10
2	SA	974	A	C1'-O4'-C4'	-5.51	105.49	109.90
2	SA	1114	C	P-O3'-C3'	5.51	126.32	119.70
2	SA	1145	A	C5-N7-C8	-5.51	101.14	103.90
2	SA	1158	C	O4'-C1'-N1	5.51	112.61	108.20
2	SA	1219	A	O4'-C4'-C3'	5.51	110.51	106.10
2	SA	1248	A	O4'-C1'-N9	5.51	112.61	108.20
6	SU	12	ASP	N-CA-C	5.51	125.89	111.00
26	LA	42	A	C8-N9-C1'	5.51	137.63	127.70
26	LA	244	A	C5'-C4'-C3'	-5.51	107.18	116.00
26	LA	260	G	N3-C4-C5	-5.51	125.84	128.60
26	LA	495	G	N7-C8-N9	-5.51	110.34	113.10
26	LA	644	A	C5-C6-N1	-5.51	114.94	117.70
26	LA	1072	C	C5'-C4'-C3'	-5.51	107.18	116.00
26	LA	1121	C	N3-C4-C5	-5.51	119.69	121.90
26	LA	1169	A	N3-C4-N9	5.51	131.81	127.40
26	LA	1217	U	N3-C2-O2	5.51	126.06	122.20
26	LA	1541	C	C2-N3-C4	-5.51	117.14	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1881	C	P-O5'-C5'	5.51	129.72	120.90
26	LA	1915	C	C2-N3-C4	-5.51	117.14	119.90
26	LA	2617	U	C4-C5-C6	5.51	123.01	119.70
29	LV	80	TRP	N-CA-CB	5.51	120.53	110.60
2	SA	397	A	C6-N1-C2	-5.51	115.29	118.60
2	SA	606	G	N3-C4-C5	-5.51	125.84	128.60
2	SA	1175	G	C6-N1-C2	-5.51	121.79	125.10
2	SA	1222	G	N9-C4-C5	-5.51	103.19	105.40
26	LA	412	A	O5'-P-OP1	-5.51	100.74	105.70
26	LA	654	A	C1'-O4'-C4'	-5.51	105.49	109.90
26	LA	779	U	C2-N1-C1'	-5.51	111.08	117.70
26	LA	1027	A	P-O5'-C5'	5.51	129.72	120.90
26	LA	2104	C	O4'-C1'-N1	5.51	112.61	108.20
26	LA	2268	A	O5'-P-OP1	5.51	117.32	110.70
26	LA	2439	A	C5-N7-C8	5.51	106.66	103.90
44	LF	30	GLN	O-C-N	-5.51	113.88	122.70
2	SA	174	A	P-O3'-C3'	-5.51	113.08	119.70
2	SA	442	G	N3-C2-N2	5.51	123.76	119.90
2	SA	659	U	P-O5'-C5'	5.51	129.72	120.90
2	SA	782	A	C6-C5-N7	-5.51	128.44	132.30
2	SA	820	U	OP1-P-OP2	-5.51	111.33	119.60
2	SA	911	U	O4'-C1'-N1	5.51	112.61	108.20
2	SA	972	C	C2-N1-C1'	5.51	124.86	118.80
2	SA	991	U	N3-C4-C5	5.51	117.91	114.60
26	LA	464	U	O4'-C1'-N1	5.51	112.61	108.20
26	LA	949	G	C5'-C4'-C3'	-5.51	107.18	116.00
26	LA	1254	A	C4'-C3'-C2'	5.51	108.11	102.60
26	LA	1681	G	C8-N9-C1'	-5.51	119.83	127.00
26	LA	1814	G	P-O3'-C3'	5.51	126.31	119.70
26	LA	1875	G	P-O5'-C5'	5.51	129.72	120.90
26	LA	2140	G	C8-N9-C4	-5.51	104.20	106.40
26	LA	2425	A	O4'-C1'-N9	5.51	112.61	108.20
26	LA	2525	G	N3-C4-N9	-5.51	122.69	126.00
26	LA	2897	U	C2-N1-C1'	-5.51	111.09	117.70
2	SA	90	C	C5'-C4'-O4'	5.51	115.71	109.10
2	SA	229	U	N1-C2-O2	-5.51	118.94	122.80
2	SA	1127	G	C8-N9-C4	-5.51	104.20	106.40
2	SA	1358	U	C2-N1-C1'	-5.51	111.09	117.70
4	S2	57	C	C5-C4-N4	5.51	124.06	120.20
26	LA	400	G	C1'-O4'-C4'	-5.51	105.49	109.90
26	LA	760	G	N1-C2-N3	-5.51	120.59	123.90
26	LA	1208	C	C3'-C2'-C1'	-5.51	97.09	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1468	U	N3-C4-O4	5.51	123.26	119.40
26	LA	1752	C	N1-C2-N3	5.51	123.06	119.20
26	LA	1899	A	OP1-P-OP2	-5.51	111.33	119.60
26	LA	2007	U	C5'-C4'-O4'	5.51	115.71	109.10
26	LA	2496	C	C3'-C2'-C1'	5.51	105.91	101.50
26	LA	2551	C	C4'-C3'-C2'	-5.51	97.09	102.60
26	LA	2594	C	P-O3'-C3'	-5.51	113.09	119.70
26	LA	2718	G	P-O3'-C3'	-5.51	113.09	119.70
26	LA	2857	G	OP1-P-OP2	-5.51	111.34	119.60
26	LA	2880	C	C5'-C4'-C3'	5.51	124.81	116.00
41	L5	4	THR	CA-CB-CG2	-5.51	104.69	112.40
2	SA	528	C	O4'-C1'-N1	5.51	112.61	108.20
2	SA	932	C	C3'-C2'-C1'	5.51	105.91	101.50
2	SA	1064	G	C6-N1-C2	-5.51	121.80	125.10
2	SA	1426	G	C2-N3-C4	5.51	114.65	111.90
26	LA	101	A	C5'-C4'-O4'	5.51	115.71	109.10
26	LA	756	A	O4'-C1'-N9	5.51	112.61	108.20
26	LA	2127	G	O3'-P-O5'	-5.51	93.54	104.00
26	LA	2495	G	N7-C8-N9	-5.51	110.35	113.10
2	SA	204	G	C8-N9-C1'	-5.51	119.84	127.00
2	SA	730	G	O4'-C1'-N9	5.51	112.61	108.20
2	SA	1090	U	P-O3'-C3'	-5.51	113.09	119.70
2	SA	1331	G	C6-C5-N7	-5.51	127.10	130.40
2	SA	1401	G	C6-N1-C2	-5.51	121.80	125.10
3	S1	16	A	C4-C5-C6	-5.51	114.25	117.00
4	S2	43	G	C6-C5-N7	-5.51	127.10	130.40
24	S3	105	LEU	CA-CB-CG	-5.51	102.64	115.30
25	LB	81	G	N3-C4-N9	5.51	129.30	126.00
26	LA	120	U	C4-C5-C6	-5.51	116.40	119.70
26	LA	289	G	C5-C6-N1	5.51	114.25	111.50
26	LA	411	G	N1-C2-N3	5.51	127.20	123.90
26	LA	795	C	C4'-C3'-C2'	-5.51	97.09	102.60
26	LA	936	A	C5-N7-C8	-5.51	101.15	103.90
26	LA	1236	G	O4'-C1'-N9	5.51	112.61	108.20
26	LA	1595	C	C1'-O4'-C4'	-5.51	105.50	109.90
26	LA	1884	G	C4-C5-N7	5.51	113.00	110.80
26	LA	1943	U	C5'-C4'-O4'	5.51	115.71	109.10
26	LA	2013	A	OP1-P-O3'	5.51	117.32	105.20
26	LA	2082	A	N7-C8-N9	5.51	116.55	113.80
26	LA	2205	A	C5'-C4'-O4'	5.51	115.71	109.10
44	LF	162	ARG	NE-CZ-NH1	-5.51	117.55	120.30
2	SA	185	U	C5'-C4'-O4'	5.50	115.71	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	S3	51	TRP	CE2-CD2-CE3	5.50	125.31	118.70
26	LA	1096	A	C6-N1-C2	-5.50	115.30	118.60
26	LA	1190	G	N9-C4-C5	5.50	107.60	105.40
26	LA	1275	A	C4-N9-C1'	5.50	136.21	126.30
26	LA	1479	G	N7-C8-N9	-5.50	110.35	113.10
2	SA	95	C	C6-N1-C1'	5.50	127.41	120.80
2	SA	581	G	N1-C2-N2	5.50	121.15	116.20
2	SA	670	G	C3'-C2'-C1'	5.50	105.90	101.50
2	SA	719	C	OP1-P-OP2	-5.50	111.34	119.60
4	S2	23	G	C4'-C3'-C2'	-5.50	97.10	102.60
21	SE	135	VAL	CA-CB-CG2	-5.50	102.64	110.90
25	LB	54	G	O4'-C1'-N9	5.50	112.60	108.20
26	LA	68	G	N9-C4-C5	5.50	107.60	105.40
26	LA	86	G	C4-N9-C1'	-5.50	119.35	126.50
26	LA	1128	G	C5'-C4'-O4'	5.50	115.70	109.10
26	LA	1444	G	C6-C5-N7	-5.50	127.10	130.40
26	LA	1546	G	C5-N7-C8	5.50	107.05	104.30
26	LA	1720	U	C6-N1-C2	-5.50	117.70	121.00
26	LA	1738	G	N1-C2-N2	-5.50	111.25	116.20
26	LA	1758	U	C6-N1-C2	-5.50	117.70	121.00
26	LA	2003	A	N7-C8-N9	-5.50	111.05	113.80
26	LA	2286	G	C5-C6-O6	-5.50	125.30	128.60
2	SA	186	C	N1-C2-N3	5.50	123.05	119.20
2	SA	282	A	C1'-O4'-C4'	5.50	114.30	109.90
2	SA	399	G	N3-C2-N2	5.50	123.75	119.90
2	SA	912	C	C5'-C4'-O4'	5.50	115.70	109.10
2	SA	1024	G	C2-N3-C4	5.50	114.65	111.90
2	SA	1062	U	C4'-C3'-C2'	-5.50	97.10	102.60
2	SA	1534	A	N1-C2-N3	5.50	132.05	129.30
24	S3	447	TRP	CD1-CG-CD2	-5.50	101.90	106.30
26	LA	97	C	C4'-C3'-C2'	5.50	108.10	102.60
26	LA	113	U	O3'-P-O5'	5.50	114.45	104.00
26	LA	226	A	N1-C2-N3	5.50	132.05	129.30
26	LA	740	C	C5'-C4'-O4'	5.50	115.70	109.10
26	LA	1008	A	C4-C5-C6	-5.50	114.25	117.00
26	LA	1453	A	C4-C5-C6	-5.50	114.25	117.00
26	LA	2470	G	N7-C8-N9	-5.50	110.35	113.10
45	LG	170	ALA	N-CA-CB	-5.50	102.40	110.10
2	SA	537	G	C5-C6-O6	-5.50	125.30	128.60
2	SA	1523	G	N7-C8-N9	5.50	115.85	113.10
26	LA	625	G	N1-C6-O6	5.50	123.20	119.90
26	LA	1470	A	N7-C8-N9	5.50	116.55	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	LS	42	GLY	O-C-N	-5.50	113.90	122.70
2	SA	173	U	C5'-C4'-C3'	-5.50	107.20	116.00
2	SA	387	U	C5-C4-O4	-5.50	122.60	125.90
2	SA	586	C	C2-N1-C1'	-5.50	112.75	118.80
2	SA	766	A	N7-C8-N9	5.50	116.55	113.80
2	SA	941	G	C4-C5-C6	-5.50	115.50	118.80
2	SA	1018	G	O4'-C4'-C3'	5.50	110.50	106.10
19	SC	183	TYR	CB-CG-CD2	-5.50	117.70	121.00
24	S3	686	TYR	CA-CB-CG	-5.50	102.95	113.40
26	LA	566	U	P-O5'-C5'	-5.50	112.10	120.90
26	LA	747	U	C6-N1-C1'	-5.50	113.50	121.20
26	LA	856	G	C4-C5-N7	-5.50	108.60	110.80
26	LA	971	G	C6-C5-N7	-5.50	127.10	130.40
26	LA	1058	U	P-O3'-C3'	-5.50	113.10	119.70
26	LA	1212	G	N1-C6-O6	-5.50	116.60	119.90
26	LA	1530	G	N3-C2-N2	5.50	123.75	119.90
26	LA	1741	C	C5'-C4'-O4'	5.50	115.70	109.10
26	LA	2215	C	C5-C4-N4	5.50	124.05	120.20
26	LA	2568	U	C3'-C2'-C1'	-5.50	97.10	101.50
26	LA	2869	G	C5-C6-N1	5.50	114.25	111.50
2	SA	206	C	C4'-C3'-C2'	-5.50	97.10	102.60
2	SA	375	U	C5-C6-N1	5.50	125.45	122.70
2	SA	956	U	C2-N1-C1'	-5.50	111.10	117.70
2	SA	1066	C	C2-N3-C4	-5.50	117.15	119.90
2	SA	1074	G	C4-C5-N7	5.50	113.00	110.80
2	SA	1124	G	N9-C4-C5	-5.50	103.20	105.40
7	SG	78	ARG	C-N-CA	5.50	135.44	121.70
25	LB	104	A	O4'-C1'-N9	5.50	112.60	108.20
26	LA	174	U	C2-N3-C4	-5.50	123.70	127.00
26	LA	346	A	O4'-C1'-N9	5.50	112.60	108.20
26	LA	814	C	OP1-P-OP2	-5.50	111.36	119.60
26	LA	1598	A	N9-C4-C5	-5.50	103.60	105.80
26	LA	1615	C	C5-C6-N1	5.50	123.75	121.00
26	LA	1774	C	N1-C2-O2	5.50	122.20	118.90
26	LA	1875	G	C5'-C4'-C3'	5.50	124.79	116.00
26	LA	1882	U	N3-C4-O4	5.50	123.25	119.40
26	LA	1986	C	C4-C5-C6	-5.50	114.65	117.40
26	LA	2114	A	C4-C5-N7	5.50	113.45	110.70
26	LA	2739	U	P-O3'-C3'	-5.50	113.10	119.70
26	LA	2762	C	C4-C5-C6	5.50	120.15	117.40
32	LY	54	ARG	NE-CZ-NH1	5.50	123.05	120.30
38	LE	155	VAL	CA-CB-CG2	-5.50	102.66	110.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	LI	12	LEU	C-N-CA	5.50	133.84	122.30
2	SA	320	A	C1'-O4'-C4'	-5.50	105.50	109.90
2	SA	375	U	C6-N1-C1'	5.50	128.89	121.20
2	SA	1350	A	N3-C4-C5	-5.50	122.95	126.80
2	SA	1468	A	N3-C4-C5	5.50	130.65	126.80
26	LA	348	A	C5-N7-C8	-5.50	101.15	103.90
26	LA	370	G	C6-N1-C2	-5.50	121.80	125.10
26	LA	447	A	C6-N1-C2	-5.50	115.30	118.60
26	LA	604	G	C5'-C4'-O4'	5.50	115.69	109.10
26	LA	1095	A	C5-N7-C8	-5.50	101.15	103.90
26	LA	1886	U	N3-C4-C5	5.50	117.90	114.60
2	SA	130	A	N3-C4-C5	5.49	130.65	126.80
2	SA	311	C	O4'-C1'-N1	5.49	112.59	108.20
2	SA	630	A	C5'-C4'-O4'	5.49	115.69	109.10
2	SA	719	C	N1-C2-O2	-5.49	115.60	118.90
2	SA	906	A	C5-C6-N6	5.49	128.09	123.70
2	SA	1241	G	N7-C8-N9	5.49	115.85	113.10
3	S1	27	A	C1'-O4'-C4'	-5.49	105.50	109.90
4	S2	20	G	N1-C2-N2	-5.49	111.25	116.20
9	SI	87	MET	CA-CB-CG	5.49	122.64	113.30
26	LA	86	G	P-O3'-C3'	-5.49	113.11	119.70
26	LA	163	C	C6-N1-C1'	-5.49	114.21	120.80
26	LA	544	C	P-O5'-C5'	5.49	129.69	120.90
26	LA	878	A	OP1-P-OP2	-5.49	111.36	119.60
26	LA	1044	C	C5'-C4'-O4'	5.49	115.69	109.10
26	LA	1669	A	C5-C6-N1	5.49	120.45	117.70
26	LA	1881	C	O5'-P-OP1	-5.49	100.75	105.70
26	LA	1942	C	C5'-C4'-C3'	-5.49	107.21	116.00
26	LA	2362	C	C1'-O4'-C4'	-5.49	105.50	109.90
26	LA	2447	G	C6-N1-C2	5.49	128.40	125.10
2	SA	514	C	C1'-O4'-C4'	5.49	114.29	109.90
2	SA	1046	A	C8-N9-C4	5.49	108.00	105.80
26	LA	213	A	C4-C5-C6	-5.49	114.25	117.00
26	LA	945	A	C5-N7-C8	-5.49	101.15	103.90
26	LA	1249	U	C3'-C2'-C1'	5.49	105.89	101.50
26	LA	2059	A	N7-C8-N9	-5.49	111.05	113.80
26	LA	2152	G	C5-C6-O6	-5.49	125.31	128.60
26	LA	2268	A	C8-N9-C4	-5.49	103.60	105.80
26	LA	2310	C	C6-N1-C2	-5.49	118.10	120.30
2	SA	193	C	C2-N3-C4	-5.49	117.16	119.90
2	SA	724	G	N1-C6-O6	-5.49	116.61	119.90
2	SA	817	C	C6-N1-C2	5.49	122.50	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1490	U	C6-N1-C2	5.49	124.30	121.00
4	S2	6	G	C4'-C3'-C2'	-5.49	97.11	102.60
8	SH	24	VAL	CA-CB-CG1	-5.49	102.67	110.90
26	LA	262	A	N1-C6-N6	5.49	121.89	118.60
26	LA	547	A	N9-C4-C5	-5.49	103.60	105.80
26	LA	744	U	O4'-C1'-C2'	-5.49	100.31	105.80
26	LA	769	U	C6-N1-C2	5.49	124.30	121.00
26	LA	1142	A	O5'-C5'-C4'	5.49	122.13	111.70
26	LA	1206	G	C4-C5-C6	5.49	122.09	118.80
26	LA	1274	A	C8-N9-C1'	-5.49	117.82	127.70
26	LA	1310	G	N1-C6-O6	-5.49	116.61	119.90
26	LA	1328	A	N1-C6-N6	-5.49	115.31	118.60
26	LA	1803	A	OP1-P-OP2	-5.49	111.36	119.60
26	LA	1867	G	N7-C8-N9	5.49	115.85	113.10
26	LA	2046	G	N1-C2-N3	5.49	127.19	123.90
26	LA	2187	U	C2-N3-C4	5.49	130.29	127.00
26	LA	2288	A	C5-C6-N6	5.49	128.09	123.70
26	LA	2463	C	N1-C2-N3	5.49	123.04	119.20
26	LA	2719	G	C1'-O4'-C4'	-5.49	105.51	109.90
2	SA	122	G	C8-N9-C1'	-5.49	119.86	127.00
2	SA	329	A	N3-C4-C5	-5.49	122.96	126.80
2	SA	866	C	C6-N1-C2	5.49	122.50	120.30
2	SA	932	C	O4'-C1'-N1	5.49	112.59	108.20
2	SA	994	A	C8-N9-C1'	5.49	137.58	127.70
2	SA	1086	U	P-O5'-C5'	5.49	129.68	120.90
2	SA	1290	G	C6-N1-C2	-5.49	121.81	125.10
3	S1	28	U	N1-C2-N3	-5.49	111.61	114.90
26	LA	841	G	OP2-P-O3'	5.49	117.27	105.20
26	LA	1099	G	C3'-C2'-C1'	-5.49	97.11	101.50
26	LA	1143	A	C8-N9-C1'	5.49	137.58	127.70
26	LA	1229	C	C4-C5-C6	-5.49	114.66	117.40
26	LA	1279	G	N7-C8-N9	5.49	115.84	113.10
26	LA	1383	A	C2-N3-C4	-5.49	107.86	110.60
26	LA	1447	C	C5'-C4'-O4'	5.49	115.69	109.10
26	LA	1524	G	N9-C4-C5	5.49	107.60	105.40
26	LA	1543	G	N7-C8-N9	-5.49	110.36	113.10
26	LA	1753	G	C6-N1-C2	5.49	128.39	125.10
26	LA	1943	U	N3-C2-O2	-5.49	118.36	122.20
26	LA	2004	G	N1-C6-O6	5.49	123.19	119.90
26	LA	2535	G	C4'-C3'-C2'	-5.49	97.11	102.60
26	LA	2650	U	P-O3'-C3'	-5.49	113.11	119.70
26	LA	2772	C	C4-C5-C6	-5.49	114.66	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2890	G	N1-C2-N2	-5.49	111.26	116.20
2	SA	145	G	C4-N9-C1'	-5.49	119.37	126.50
2	SA	239	U	C2'-C3'-O3'	5.49	122.48	113.70
2	SA	790	A	C4-N9-C1'	5.49	136.18	126.30
21	SE	140	ILE	C-N-CA	5.49	135.42	121.70
26	LA	133	U	P-O3'-C3'	-5.49	113.11	119.70
26	LA	529	A	O5'-P-OP2	-5.49	100.76	105.70
26	LA	1283	G	C4'-C3'-C2'	-5.49	97.11	102.60
26	LA	1484	U	C4-C5-C6	5.49	122.99	119.70
26	LA	1514	G	C1'-O4'-C4'	-5.49	105.51	109.90
26	LA	2421	G	N3-C4-N9	5.49	129.29	126.00
26	LA	2623	G	C5'-C4'-C3'	5.49	124.78	116.00
44	LF	45	ALA	CB-CA-C	-5.49	101.87	110.10
2	SA	86	G	C6-C5-N7	5.49	133.69	130.40
2	SA	487	A	C5'-C4'-O4'	-5.49	102.52	109.10
2	SA	729	A	C2-N3-C4	5.49	113.34	110.60
2	SA	817	C	C5-C4-N4	-5.49	116.36	120.20
2	SA	890	G	C4-C5-N7	-5.49	108.61	110.80
2	SA	1072	G	O4'-C1'-N9	5.49	112.59	108.20
2	SA	1461	G	N3-C4-N9	-5.49	122.71	126.00
3	S1	14	G	C4'-C3'-C2'	-5.49	97.11	102.60
25	LB	105	G	N1-C2-N3	-5.49	120.61	123.90
26	LA	142	A	C2-N3-C4	-5.49	107.86	110.60
26	LA	380	G	N7-C8-N9	-5.49	110.36	113.10
26	LA	607	U	N1-C2-N3	5.49	118.19	114.90
26	LA	798	G	N3-C4-N9	5.49	129.29	126.00
26	LA	1704	C	P-O5'-C5'	5.49	129.68	120.90
26	LA	1932	A	C1'-O4'-C4'	-5.49	105.51	109.90
26	LA	2776	A	C2-N3-C4	-5.49	107.86	110.60
2	SA	592	G	C6-N1-C2	-5.48	121.81	125.10
2	SA	1117	A	O4'-C1'-N9	5.48	112.59	108.20
26	LA	265	A	C6-C5-N7	-5.48	128.46	132.30
26	LA	1658	C	C6-N1-C1'	5.48	127.38	120.80
26	LA	1702	G	C5'-C4'-C3'	-5.48	107.22	116.00
26	LA	2235	G	C2-N3-C4	-5.48	109.16	111.90
26	LA	2439	A	C4-N9-C1'	5.48	136.17	126.30
26	LA	2590	A	P-O5'-C5'	-5.48	112.13	120.90
26	LA	2734	A	C5-N7-C8	5.48	106.64	103.90
32	LY	61	LYS	O-C-N	-5.48	113.93	122.70
2	SA	409	U	C1'-O4'-C4'	-5.48	105.51	109.90
2	SA	547	A	C5-C6-N1	-5.48	114.96	117.70
2	SA	618	C	P-O5'-C5'	5.48	129.67	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	679	C	N3-C2-O2	-5.48	118.06	121.90
2	SA	723	U	N3-C4-C5	5.48	117.89	114.60
2	SA	808	C	N1-C2-O2	5.48	122.19	118.90
2	SA	1370	G	OP1-P-OP2	-5.48	111.38	119.60
18	SB	22	TRP	CD2-CE2-CZ2	-5.48	115.72	122.30
18	SB	227	ASP	CB-CG-OD1	5.48	123.23	118.30
24	S3	115	VAL	CA-CB-CG1	-5.48	102.67	110.90
24	S3	367	ALA	O-C-N	-5.48	113.93	122.70
25	LB	40	U	C5-C6-N1	5.48	125.44	122.70
26	LA	263	G	O4'-C4'-C3'	-5.48	98.52	104.00
26	LA	722	A	C4-C5-N7	5.48	113.44	110.70
26	LA	1165	A	C8-N9-C4	5.48	107.99	105.80
26	LA	1622	G	N1-C2-N2	-5.48	111.27	116.20
26	LA	1846	G	N1-C2-N2	5.48	121.13	116.20
26	LA	1898	U	OP2-P-O3'	5.48	117.26	105.20
26	LA	2702	G	C5-N7-C8	5.48	107.04	104.30
26	LA	2765	A	C2'-C3'-O3'	5.48	122.47	113.70
52	LO	73	ILE	O-C-N	5.48	131.47	122.70
2	SA	406	G	OP1-P-OP2	-5.48	111.38	119.60
2	SA	544	G	C4-C5-C6	-5.48	115.51	118.80
2	SA	766	A	P-O3'-C3'	5.48	126.28	119.70
2	SA	833	G	P-O3'-C3'	5.48	126.28	119.70
2	SA	977	A	C4-C5-N7	5.48	113.44	110.70
2	SA	1253	G	N3-C2-N2	-5.48	116.06	119.90
2	SA	1271	A	C8-N9-C4	-5.48	103.61	105.80
2	SA	1325	C	N3-C4-C5	-5.48	119.71	121.90
2	SA	1458	G	C6-N1-C2	-5.48	121.81	125.10
13	SM	21	ILE	C-N-CA	5.48	135.40	121.70
25	LB	18	G	N3-C4-N9	5.48	129.29	126.00
25	LB	67	G	OP2-P-O3'	5.48	117.26	105.20
26	LA	176	A	N3-C4-C5	5.48	130.64	126.80
26	LA	1715	G	C1'-O4'-C4'	-5.48	105.52	109.90
26	LA	1790	C	C5'-C4'-C3'	-5.48	107.23	116.00
26	LA	1948	G	N7-C8-N9	-5.48	110.36	113.10
26	LA	2016	U	N1-C2-O2	5.48	126.64	122.80
26	LA	2407	A	C8-N9-C4	-5.48	103.61	105.80
26	LA	2541	A	O4'-C1'-N9	5.48	112.58	108.20
26	LA	2615	U	C2-N3-C4	-5.48	123.71	127.00
26	LA	2668	G	N9-C4-C5	5.48	107.59	105.40
29	LV	67	VAL	CG1-CB-CG2	-5.48	102.13	110.90
53	LP	67	PHE	CB-CG-CD1	5.48	124.64	120.80
2	SA	1357	A	C2-N3-C4	-5.48	107.86	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1458	G	N1-C2-N2	-5.48	111.27	116.20
25	LB	108	A	C4-C5-C6	-5.48	114.26	117.00
26	LA	435	C	N3-C4-N4	5.48	121.83	118.00
26	LA	876	C	C6-N1-C2	-5.48	118.11	120.30
26	LA	904	G	N7-C8-N9	5.48	115.84	113.10
26	LA	987	C	C2-N1-C1'	-5.48	112.77	118.80
26	LA	1053	C	OP1-P-OP2	-5.48	111.38	119.60
26	LA	1206	G	OP1-P-OP2	-5.48	111.38	119.60
26	LA	1407	G	C2'-C3'-O3'	5.48	122.47	113.70
26	LA	1943	U	C5-C4-O4	-5.48	122.61	125.90
26	LA	2309	A	C5-C6-N1	5.48	120.44	117.70
2	SA	719	C	C4-C5-C6	-5.48	114.66	117.40
2	SA	1062	U	P-O5'-C5'	5.48	129.66	120.90
2	SA	1427	C	C4-C5-C6	-5.48	114.66	117.40
4	S2	57	C	C5-C6-N1	5.48	123.74	121.00
15	SO	36	ASN	O-C-N	-5.48	113.94	122.70
20	SD	106	PHE	CD1-CE1-CZ	5.48	126.67	120.10
24	S3	680	THR	N-CA-CB	5.48	120.71	110.30
26	LA	181	A	C4'-C3'-C2'	-5.48	97.12	102.60
26	LA	229	C	C4-C5-C6	5.48	120.14	117.40
26	LA	379	G	N1-C2-N3	-5.48	120.61	123.90
26	LA	716	A	O4'-C1'-N9	5.48	112.58	108.20
26	LA	891	G	N3-C4-N9	5.48	129.29	126.00
26	LA	922	C	C4-C5-C6	-5.48	114.66	117.40
26	LA	1032	A	C5-C6-N1	-5.48	114.96	117.70
26	LA	1655	A	C5'-C4'-O4'	5.48	115.67	109.10
26	LA	1655	A	O4'-C1'-N9	5.48	112.58	108.20
26	LA	2114	A	O4'-C1'-N9	5.48	112.58	108.20
26	LA	2298	A	N9-C4-C5	-5.48	103.61	105.80
26	LA	2472	G	N3-C4-N9	5.48	129.29	126.00
26	LA	2634	A	N7-C8-N9	5.48	116.54	113.80
26	LA	2884	U	C1'-O4'-C4'	-5.48	105.52	109.90
26	LA	2885	G	N1-C2-N3	5.48	127.19	123.90
47	LJ	153	THR	N-CA-CB	5.48	120.71	110.30
4	S2	29	C	O4'-C1'-N1	5.48	112.58	108.20
14	SN	8	ARG	CG-CD-NE	-5.48	100.30	111.80
25	LB	20	G	C8-N9-C4	5.48	108.59	106.40
26	LA	958	U	C2-N3-C4	5.48	130.28	127.00
26	LA	1423	G	N3-C4-C5	-5.48	125.86	128.60
26	LA	1753	G	P-O5'-C5'	-5.48	112.14	120.90
26	LA	1964	G	C6-C5-N7	-5.48	127.11	130.40
26	LA	2338	C	C3'-C2'-C1'	-5.48	97.12	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2583	G	C4'-C3'-C2'	5.48	108.08	102.60
54	LM	11	ALA	O-C-N	-5.48	113.94	122.70
2	SA	108	G	N3-C2-N2	5.47	123.73	119.90
2	SA	194	C	O4'-C1'-N1	5.47	112.58	108.20
2	SA	344	A	C3'-C2'-C1'	5.47	105.88	101.50
2	SA	503	C	C5-C4-N4	-5.47	116.37	120.20
2	SA	950	U	C1'-O4'-C4'	-5.47	105.52	109.90
2	SA	1398	A	C5'-C4'-O4'	5.47	115.67	109.10
4	S2	58	A	N9-C4-C5	5.47	107.99	105.80
26	LA	116	C	C5-C6-N1	5.47	123.74	121.00
26	LA	539	G	C5-N7-C8	-5.47	101.56	104.30
26	LA	665	U	OP1-P-OP2	-5.47	111.39	119.60
26	LA	1220	G	N9-C4-C5	5.47	107.59	105.40
26	LA	1611	C	C4-C5-C6	-5.47	114.66	117.40
26	LA	2158	A	C5-C6-N6	5.47	128.08	123.70
54	LM	63	VAL	CB-CA-C	-5.47	101.00	111.40
2	SA	106	C	C2-N3-C4	-5.47	117.16	119.90
2	SA	484	G	C5-C6-O6	-5.47	125.32	128.60
2	SA	573	A	O3'-P-O5'	-5.47	93.60	104.00
2	SA	770	C	C5-C6-N1	5.47	123.74	121.00
2	SA	1216	A	C5-C6-N6	5.47	128.08	123.70
2	SA	1282	C	O4'-C1'-N1	5.47	112.58	108.20
18	SB	135	MET	O-C-N	-5.47	113.94	122.70
21	SE	110	MET	C-N-CA	5.47	135.38	121.70
25	LB	95	U	O4'-C1'-N1	5.47	112.58	108.20
26	LA	71	A	C6-N1-C2	-5.47	115.32	118.60
26	LA	281	C	C6-N1-C2	-5.47	118.11	120.30
26	LA	368	A	C5'-C4'-O4'	5.47	115.67	109.10
26	LA	907	G	O5'-C5'-C4'	5.47	122.10	111.70
26	LA	1094	U	C6-N1-C2	-5.47	117.72	121.00
26	LA	1505	A	P-O3'-C3'	5.47	126.27	119.70
44	LF	101	TYR	CB-CG-CD1	-5.47	117.72	121.00
54	LM	105	ARG	O-C-N	-5.47	113.94	122.70
2	SA	128	G	C5'-C4'-O4'	5.47	115.67	109.10
2	SA	548	G	C6-N1-C2	-5.47	121.82	125.10
26	LA	1384	A	C5-C6-N1	-5.47	114.97	117.70
26	LA	1448	G	N7-C8-N9	5.47	115.84	113.10
26	LA	2872	A	N1-C2-N3	-5.47	126.56	129.30
2	SA	2	A	N1-C6-N6	-5.47	115.32	118.60
2	SA	169	C	N1-C2-N3	5.47	123.03	119.20
2	SA	291	U	N3-C2-O2	-5.47	118.37	122.20
2	SA	700	G	C5'-C4'-O4'	5.47	115.66	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1094	G	C4'-C3'-C2'	-5.47	97.13	102.60
2	SA	1358	U	N1-C2-N3	-5.47	111.62	114.90
2	SA	1405	G	C5'-C4'-O4'	-5.47	102.54	109.10
4	S2	65	G	N7-C8-N9	-5.47	110.36	113.10
24	S3	687	ASP	CB-CG-OD2	5.47	123.22	118.30
26	LA	48	G	N1-C2-N3	-5.47	120.62	123.90
26	LA	210	C	P-O3'-C3'	5.47	126.26	119.70
26	LA	621	A	C5-C6-N1	-5.47	114.97	117.70
26	LA	833	A	N1-C6-N6	-5.47	115.32	118.60
26	LA	837	C	C2'-C3'-O3'	5.47	122.45	113.70
26	LA	1288	G	OP1-P-OP2	-5.47	111.39	119.60
26	LA	1303	G	C2-N3-C4	-5.47	109.17	111.90
26	LA	1311	G	N3-C2-N2	5.47	123.73	119.90
26	LA	1709	U	O4'-C1'-N1	5.47	112.58	108.20
26	LA	1730	C	C3'-C2'-C1'	5.47	105.88	101.50
26	LA	1950	G	O4'-C1'-C2'	5.47	112.52	107.60
26	LA	2509	G	C5-C6-N1	-5.47	108.77	111.50
2	SA	289	G	C8-N9-C1'	5.47	134.11	127.00
2	SA	1071	C	C1'-O4'-C4'	-5.47	105.53	109.90
4	S2	70	C	O4'-C1'-N1	5.47	112.57	108.20
26	LA	320	A	N1-C2-N3	5.47	132.03	129.30
26	LA	2782	G	C6-N1-C2	-5.47	121.82	125.10
2	SA	249	U	C1'-O4'-C4'	-5.47	105.53	109.90
2	SA	732	C	N1-C2-N3	5.47	123.03	119.20
2	SA	1232	U	O3'-P-O5'	5.47	114.39	104.00
2	SA	1534	A	N9-C4-C5	5.47	107.99	105.80
3	S1	28	U	N1-C2-O2	5.47	126.63	122.80
4	S2	44	A	N9-C1'-C2'	-5.47	105.99	112.00
26	LA	599	A	C5'-C4'-O4'	5.47	115.66	109.10
26	LA	617	G	C4'-C3'-C2'	-5.47	97.13	102.60
26	LA	905	A	C4'-C3'-C2'	-5.47	97.13	102.60
26	LA	1064	C	C6-N1-C1'	5.47	127.36	120.80
26	LA	1144	A	C4-C5-N7	-5.47	107.97	110.70
26	LA	1160	G	C4'-C3'-C2'	-5.47	97.13	102.60
26	LA	1480	C	N3-C2-O2	-5.47	118.07	121.90
26	LA	2065	C	N1-C2-O2	-5.47	115.62	118.90
26	LA	2199	A	C5-N7-C8	-5.47	101.17	103.90
26	LA	2472	G	C2-N3-C4	-5.47	109.17	111.90
26	LA	2864	G	C8-N9-C1'	5.47	134.11	127.00
55	LQ	117	PHE	CB-CG-CD1	5.47	124.63	120.80
2	SA	222	C	N3-C4-N4	-5.46	114.17	118.00
2	SA	259	G	O4'-C1'-N9	5.46	112.57	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	700	G	P-O5'-C5'	5.46	129.64	120.90
2	SA	1134	G	C5-C6-N1	5.46	114.23	111.50
2	SA	1454	G	N7-C8-N9	-5.46	110.37	113.10
2	SA	1485	U	C2-N3-C4	-5.46	123.72	127.00
2	SA	1496	C	C2-N3-C4	-5.46	117.17	119.90
26	LA	131	A	OP2-P-O3'	5.46	117.22	105.20
26	LA	391	A	C5-C6-N1	-5.46	114.97	117.70
26	LA	633	A	N7-C8-N9	-5.46	111.07	113.80
26	LA	667	U	P-O3'-C3'	-5.46	113.14	119.70
26	LA	793	A	C5-C6-N1	-5.46	114.97	117.70
26	LA	795	C	P-O3'-C3'	5.46	126.26	119.70
26	LA	2101	A	C8-N9-C1'	5.46	137.54	127.70
26	LA	2128	G	O4'-C4'-C3'	5.46	110.47	106.10
26	LA	2130	U	C2-N1-C1'	5.46	124.26	117.70
26	LA	2331	G	C5-C6-O6	-5.46	125.32	128.60
26	LA	2777	G	P-O5'-C5'	5.46	129.64	120.90
47	LJ	57	THR	CA-CB-CG2	-5.46	104.75	112.40
56	LR	99	LEU	CB-CG-CD2	5.46	120.29	111.00
2	SA	15	G	N3-C4-C5	-5.46	125.87	128.60
2	SA	400	C	C2-N3-C4	5.46	122.63	119.90
2	SA	716	A	P-O3'-C3'	-5.46	113.14	119.70
19	SC	41	TYR	CB-CG-CD1	5.46	124.28	121.00
26	LA	221	A	C5-C6-N6	-5.46	119.33	123.70
26	LA	348	A	C5-C6-N6	-5.46	119.33	123.70
26	LA	662	G	O4'-C1'-N9	5.46	112.57	108.20
26	LA	899	A	C5-C6-N1	5.46	120.43	117.70
47	LJ	137	ARG	CG-CD-NE	-5.46	100.33	111.80
2	SA	464	U	C6-N1-C2	-5.46	117.72	121.00
2	SA	1009	U	N1-C1'-C2'	-5.46	105.99	112.00
2	SA	1277	C	P-O3'-C3'	-5.46	113.15	119.70
4	S2	45	A	C4-C5-C6	-5.46	114.27	117.00
4	S2	49	C	C5-C4-N4	-5.46	116.38	120.20
7	SG	73	GLU	O-C-N	-5.46	113.96	122.70
8	SH	48	PHE	CB-CG-CD2	-5.46	116.98	120.80
26	LA	84	A	N7-C8-N9	5.46	116.53	113.80
26	LA	100	U	C3'-C2'-C1'	-5.46	97.13	101.50
26	LA	204	A	C8-N9-C4	5.46	107.98	105.80
26	LA	985	C	N3-C4-C5	-5.46	119.72	121.90
26	LA	1021	A	C8-N9-C1'	5.46	137.53	127.70
26	LA	1233	C	N1-C2-O2	-5.46	115.62	118.90
26	LA	1275	A	C8-N9-C1'	-5.46	117.87	127.70
26	LA	1388	G	N1-C2-N3	5.46	127.18	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1599	U	C5'-C4'-C3'	5.46	124.74	116.00
26	LA	2033	A	N7-C8-N9	5.46	116.53	113.80
26	LA	2042	A	C5-C6-N1	-5.46	114.97	117.70
2	SA	100	G	N1-C6-O6	5.46	123.18	119.90
2	SA	729	A	C5-C6-N1	5.46	120.43	117.70
26	LA	398	C	N3-C4-N4	5.46	121.82	118.00
26	LA	1239	G	C1'-O4'-C4'	-5.46	105.53	109.90
26	LA	1565	C	C4-C5-C6	-5.46	114.67	117.40
26	LA	2374	C	N1-C2-N3	5.46	123.02	119.20
26	LA	2725	A	N1-C6-N6	5.46	121.88	118.60
2	SA	97	G	C6-N1-C2	-5.46	121.83	125.10
2	SA	734	G	C3'-C2'-C1'	5.46	105.87	101.50
2	SA	845	A	C6-N1-C2	5.46	121.88	118.60
2	SA	953	G	N9-C4-C5	5.46	107.58	105.40
2	SA	1118	U	N3-C4-C5	-5.46	111.33	114.60
2	SA	1279	G	C5-C6-N1	5.46	114.23	111.50
2	SA	1377	A	C5'-C4'-O4'	5.46	115.65	109.10
2	SA	1513	A	N1-C2-N3	5.46	132.03	129.30
4	S2	23	G	C5-C6-O6	-5.46	125.33	128.60
4	S2	48	U	N1-C2-N3	5.46	118.17	114.90
25	LB	25	U	C1'-O4'-C4'	-5.46	105.53	109.90
26	LA	9	G	OP2-P-O3'	5.46	117.21	105.20
26	LA	230	G	C2-N3-C4	-5.46	109.17	111.90
26	LA	588	U	C3'-C2'-C1'	-5.46	97.13	101.50
26	LA	629	G	N7-C8-N9	-5.46	110.37	113.10
26	LA	788	A	C5-C6-N1	5.46	120.43	117.70
26	LA	857	G	C2-N3-C4	-5.46	109.17	111.90
26	LA	1055	G	C4-C5-N7	-5.46	108.62	110.80
26	LA	1084	A	N9-C4-C5	5.46	107.98	105.80
26	LA	1118	C	O5'-C5'-C4'	-5.46	101.33	111.70
26	LA	1872	A	N7-C8-N9	5.46	116.53	113.80
26	LA	1900	A	P-O3'-C3'	-5.46	113.15	119.70
26	LA	2184	A	P-O3'-C3'	-5.46	113.15	119.70
26	LA	2189	U	C3'-C2'-C1'	5.46	105.87	101.50
28	LU	88	ARG	NE-CZ-NH1	-5.46	117.57	120.30
2	SA	100	G	N9-C4-C5	5.46	107.58	105.40
2	SA	475	C	C5'-C4'-C3'	-5.46	107.27	116.00
2	SA	492	C	N3-C4-C5	-5.46	119.72	121.90
2	SA	642	A	C4-C5-C6	5.46	119.73	117.00
2	SA	1147	C	O4'-C4'-C3'	-5.46	98.54	104.00
2	SA	1205	U	C2-N3-C4	-5.46	123.73	127.00
26	LA	621	A	N9-C4-C5	5.46	107.98	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1073	A	N7-C8-N9	5.46	116.53	113.80
26	LA	1108	U	OP2-P-O3'	5.46	117.20	105.20
26	LA	1850	G	P-O5'-C5'	5.46	129.63	120.90
26	LA	2120	G	C5-N7-C8	-5.46	101.57	104.30
26	LA	2141	G	C4-C5-N7	-5.46	108.62	110.80
26	LA	2313	C	N1-C2-N3	-5.46	115.38	119.20
26	LA	2791	G	C5-C6-N1	-5.46	108.77	111.50
34	L0	36	GLN	N-CA-CB	5.46	120.42	110.60
2	SA	82	G	N1-C6-O6	5.46	123.17	119.90
2	SA	246	A	C5-C6-N1	-5.46	114.97	117.70
26	LA	1330	C	C3'-C2'-C1'	-5.46	97.14	101.50
26	LA	1520	U	C5'-C4'-O4'	5.46	115.65	109.10
26	LA	1677	A	N1-C2-N3	-5.46	126.57	129.30
26	LA	1858	A	C8-N9-C4	5.46	107.98	105.80
26	LA	2561	U	C4'-C3'-C2'	-5.46	97.14	102.60
26	LA	2723	C	OP2-P-O3'	5.46	117.20	105.20
2	SA	629	A	N1-C6-N6	5.45	121.87	118.60
2	SA	744	C	N3-C2-O2	5.45	125.72	121.90
2	SA	788	U	C1'-O4'-C4'	-5.45	105.54	109.90
2	SA	789	U	O4'-C1'-N1	5.45	112.56	108.20
2	SA	1513	A	C4'-C3'-C2'	-5.45	97.15	102.60
16	SP	51	ARG	NH1-CZ-NH2	-5.45	113.40	119.40
25	LB	71	C	N3-C4-C5	5.45	124.08	121.90
25	LB	96	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	LA	72	U	C6-N1-C1'	-5.45	113.56	121.20
26	LA	1105	U	C5'-C4'-C3'	-5.45	107.27	116.00
26	LA	1729	U	C1'-O4'-C4'	-5.45	105.54	109.90
26	LA	1755	A	N1-C6-N6	5.45	121.87	118.60
26	LA	2183	A	C2-N3-C4	-5.45	107.87	110.60
26	LA	2234	G	C5'-C4'-O4'	5.45	115.64	109.10
26	LA	2417	C	O4'-C1'-N1	5.45	112.56	108.20
2	SA	1294	G	O4'-C1'-C2'	5.45	112.51	107.60
7	SG	139	ASP	O-C-N	-5.45	113.98	122.70
25	LB	57	A	P-O3'-C3'	5.45	126.24	119.70
26	LA	509	C	O4'-C1'-N1	5.45	112.56	108.20
26	LA	1801	A	C5'-C4'-C3'	-5.45	107.28	116.00
26	LA	1838	C	O4'-C1'-N1	5.45	112.56	108.20
26	LA	2048	G	OP1-P-OP2	-5.45	111.42	119.60
26	LA	2431	U	O5'-P-OP1	5.45	117.24	110.70
2	SA	699	C	C6-N1-C1'	5.45	127.34	120.80
2	SA	724	G	P-O5'-C5'	5.45	129.62	120.90
2	SA	1000	A	N3-C4-C5	-5.45	122.98	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1139	G	O5'-C5'-C4'	5.45	122.06	111.70
2	SA	1253	G	C3'-C2'-C1'	-5.45	97.14	101.50
2	SA	1329	A	N1-C2-N3	-5.45	126.57	129.30
4	S2	40	C	N3-C4-C5	-5.45	119.72	121.90
26	LA	42	A	N1-C2-N3	5.45	132.03	129.30
26	LA	411	G	O4'-C1'-N9	5.45	112.56	108.20
26	LA	583	G	N3-C2-N2	5.45	123.72	119.90
26	LA	1339	G	O4'-C4'-C3'	-5.45	98.55	104.00
26	LA	1420	A	P-O5'-C5'	5.45	129.62	120.90
26	LA	1777	U	O4'-C1'-C2'	5.45	112.50	107.60
26	LA	1839	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	LA	2583	G	O4'-C1'-N9	5.45	112.56	108.20
26	LA	2673	G	P-O3'-C3'	5.45	126.24	119.70
2	SA	472	U	C5'-C4'-C3'	-5.45	107.28	116.00
2	SA	685	G	P-O3'-C3'	-5.45	113.16	119.70
2	SA	885	G	C6-N1-C2	-5.45	121.83	125.10
2	SA	886	G	C3'-C2'-C1'	5.45	105.86	101.50
2	SA	1157	A	C6-N1-C2	-5.45	115.33	118.60
2	SA	1346	A	C4'-C3'-C2'	-5.45	97.15	102.60
20	SD	183	ARG	NE-CZ-NH2	5.45	123.03	120.30
25	LB	89	U	C4-C5-C6	-5.45	116.43	119.70
26	LA	32	C	C1'-O4'-C4'	5.45	114.26	109.90
26	LA	290	U	C5'-C4'-C3'	-5.45	107.28	116.00
26	LA	294	A	N3-C4-C5	5.45	130.61	126.80
26	LA	466	A	P-O3'-C3'	5.45	126.24	119.70
26	LA	769	U	OP1-P-OP2	-5.45	111.43	119.60
26	LA	872	U	N3-C4-C5	-5.45	111.33	114.60
26	LA	1121	C	O3'-P-O5'	5.45	114.35	104.00
26	LA	1330	C	P-O3'-C3'	-5.45	113.16	119.70
26	LA	1369	G	C8-N9-C4	-5.45	104.22	106.40
26	LA	1452	G	C5'-C4'-C3'	-5.45	107.28	116.00
26	LA	1460	U	C5-C6-N1	-5.45	119.98	122.70
26	LA	1543	G	C5-C6-O6	-5.45	125.33	128.60
26	LA	1834	U	N1-C2-O2	-5.45	118.99	122.80
26	LA	2002	G	N3-C4-C5	-5.45	125.88	128.60
26	LA	2121	G	C8-N9-C4	-5.45	104.22	106.40
26	LA	2184	A	C4-C5-N7	5.45	113.42	110.70
26	LA	2229	U	C4-C5-C6	-5.45	116.43	119.70
26	LA	2326	C	N1-C2-O2	5.45	122.17	118.90
26	LA	2431	U	N1-C2-O2	-5.45	118.99	122.80
31	LX	57	TYR	CZ-CE2-CD2	-5.45	114.90	119.80
2	SA	262	A	O4'-C4'-C3'	5.45	110.46	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	326	G	C4'-C3'-C2'	5.45	108.05	102.60
2	SA	1225	A	N9-C4-C5	-5.45	103.62	105.80
2	SA	1518	A	P-O3'-C3'	5.45	126.24	119.70
26	LA	182	A	C4-C5-N7	-5.45	107.98	110.70
26	LA	1165	A	C4-C5-C6	-5.45	114.28	117.00
26	LA	2004	G	C5-C6-O6	-5.45	125.33	128.60
26	LA	2197	U	C1'-O4'-C4'	-5.45	105.54	109.90
26	LA	2376	A	C4-C5-C6	-5.45	114.28	117.00
26	LA	2391	G	C6-N1-C2	5.45	128.37	125.10
33	LZ	22	ASN	N-CA-CB	5.45	120.41	110.60
43	L7	8	LYS	N-CA-CB	5.45	120.41	110.60
2	SA	355	C	P-O3'-C3'	-5.45	113.17	119.70
2	SA	625	U	C6-N1-C1'	5.45	128.82	121.20
2	SA	1042	A	N3-C4-C5	5.45	130.61	126.80
2	SA	1133	G	N1-C2-N2	-5.45	111.30	116.20
2	SA	1465	A	N9-C4-C5	5.45	107.98	105.80
26	LA	708	G	C4-C5-C6	5.45	122.07	118.80
26	LA	1068	G	C5-N7-C8	-5.45	101.58	104.30
26	LA	1602	U	C5'-C4'-O4'	5.45	115.64	109.10
26	LA	1658	C	C6-N1-C2	-5.45	118.12	120.30
26	LA	1661	G	C5-N7-C8	5.45	107.02	104.30
26	LA	1791	A	O4'-C1'-C2'	5.45	112.50	107.60
26	LA	1973	G	N9-C4-C5	5.45	107.58	105.40
26	LA	2093	G	C3'-C2'-C1'	-5.45	97.14	101.50
26	LA	2167	U	O5'-C5'-C4'	5.45	122.05	111.70
26	LA	2219	U	C6-N1-C2	5.45	124.27	121.00
54	LM	71	ARG	NE-CZ-NH2	-5.45	117.58	120.30
2	SA	1352	C	N3-C2-O2	-5.44	118.09	121.90
26	LA	302	C	C5'-C4'-C3'	-5.44	107.29	116.00
26	LA	930	G	N3-C4-N9	5.44	129.27	126.00
26	LA	1456	G	N3-C4-C5	-5.44	125.88	128.60
26	LA	2631	G	C4'-C3'-C2'	-5.44	97.16	102.60
26	LA	2755	C	C6-N1-C2	5.44	122.48	120.30
2	SA	102	G	C3'-C2'-C1'	-5.44	97.14	101.50
2	SA	164	G	N9-C4-C5	5.44	107.58	105.40
2	SA	229	U	C4-C5-C6	5.44	122.97	119.70
2	SA	353	A	C8-N9-C4	5.44	107.98	105.80
2	SA	362	G	N7-C8-N9	-5.44	110.38	113.10
2	SA	362	G	N1-C2-N3	5.44	127.17	123.90
2	SA	448	A	O4'-C1'-N9	5.44	112.56	108.20
2	SA	592	G	C4-C5-C6	-5.44	115.53	118.80
2	SA	814	A	N1-C6-N6	-5.44	115.33	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1513	A	O4'-C1'-C2'	-5.44	100.36	105.80
2	SA	1517	G	P-O3'-C3'	5.44	126.23	119.70
25	LB	73	A	N9-C4-C5	5.44	107.98	105.80
26	LA	921	C	N3-C2-O2	-5.44	118.09	121.90
26	LA	1368	G	N9-C1'-C2'	-5.44	106.01	112.00
26	LA	1416	G	O5'-C5'-C4'	-5.44	101.36	111.70
26	LA	1765	U	N3-C4-C5	-5.44	111.33	114.60
26	LA	2675	A	N9-C1'-C2'	-5.44	106.01	112.00
26	LA	2875	C	C5'-C4'-C3'	-5.44	107.29	116.00
49	LK	120	ASP	N-CA-CB	5.44	120.39	110.60
2	SA	665	A	N9-C1'-C2'	-5.44	106.02	112.00
2	SA	1041	G	C4'-C3'-C2'	-5.44	97.16	102.60
2	SA	1444	U	C2-N3-C4	-5.44	123.73	127.00
26	LA	52	A	C4'-C3'-C2'	5.44	108.04	102.60
26	LA	244	A	N9-C4-C5	-5.44	103.62	105.80
26	LA	506	G	N1-C2-N3	5.44	127.16	123.90
26	LA	1088	A	C1'-O4'-C4'	-5.44	105.55	109.90
26	LA	1132	U	C5-C4-O4	5.44	129.16	125.90
26	LA	1244	A	N1-C6-N6	5.44	121.86	118.60
26	LA	1712	U	C2-N3-C4	5.44	130.26	127.00
26	LA	2078	C	N3-C2-O2	-5.44	118.09	121.90
26	LA	2343	U	N3-C4-O4	5.44	123.21	119.40
26	LA	2394	C	O4'-C1'-N1	-5.44	103.85	108.20
26	LA	2698	U	P-O3'-C3'	-5.44	113.17	119.70
26	LA	2726	A	C5-N7-C8	5.44	106.62	103.90
26	LA	2762	C	P-O3'-C3'	-5.44	113.17	119.70
2	SA	416	G	C5-C6-N1	-5.44	108.78	111.50
2	SA	688	G	O5'-P-OP1	5.44	117.23	110.70
2	SA	1064	G	C5-C6-O6	-5.44	125.34	128.60
2	SA	1166	G	C5-C6-O6	5.44	131.86	128.60
26	LA	411	G	P-O3'-C3'	5.44	126.23	119.70
26	LA	754	U	O4'-C4'-C3'	-5.44	98.56	104.00
26	LA	1344	U	C5-C4-O4	-5.44	122.64	125.90
26	LA	1645	G	C8-N9-C1'	-5.44	119.93	127.00
26	LA	2031	A	N1-C2-N3	-5.44	126.58	129.30
41	L5	12	ARG	NE-CZ-NH1	-5.44	117.58	120.30
2	SA	453	G	P-O5'-C5'	-5.44	112.20	120.90
2	SA	844	G	C2-N3-C4	5.44	114.62	111.90
2	SA	884	U	C4-C5-C6	-5.44	116.44	119.70
2	SA	928	G	O5'-C5'-C4'	5.44	122.03	111.70
2	SA	1017	U	C1'-O4'-C4'	-5.44	105.55	109.90
2	SA	1300	G	P-O3'-C3'	-5.44	113.18	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1530	G	OP1-P-OP2	-5.44	111.44	119.60
25	LB	50	A	N1-C2-N3	-5.44	126.58	129.30
26	LA	175	G	N3-C4-N9	5.44	129.26	126.00
26	LA	227	A	N1-C6-N6	-5.44	115.34	118.60
26	LA	488	G	C5-C6-O6	-5.44	125.34	128.60
26	LA	689	A	N9-C1'-C2'	-5.44	106.02	112.00
26	LA	929	U	OP1-P-OP2	-5.44	111.44	119.60
26	LA	1350	C	C5-C4-N4	5.44	124.01	120.20
26	LA	1625	C	OP1-P-OP2	-5.44	111.44	119.60
26	LA	2258	C	C6-N1-C2	-5.44	118.12	120.30
26	LA	2268	A	N1-C6-N6	-5.44	115.34	118.60
26	LA	2332	C	C3'-C2'-C1'	5.44	105.85	101.50
26	LA	2385	C	C5'-C4'-O4'	5.44	115.63	109.10
26	LA	2428	G	N9-C4-C5	5.44	107.58	105.40
26	LA	2569	G	C4-C5-C6	-5.44	115.54	118.80
26	LA	2665	A	N1-C2-N3	-5.44	126.58	129.30
26	LA	2671	G	C4'-C3'-C2'	5.44	108.04	102.60
26	LA	2800	A	P-O3'-C3'	-5.44	113.17	119.70
2	SA	353	A	N3-C4-C5	5.44	130.61	126.80
13	SM	52	ILE	N-CA-C	5.44	125.68	111.00
19	SC	14	VAL	CB-CA-C	5.44	121.73	111.40
25	LB	86	G	C6-N1-C2	5.44	128.36	125.10
26	LA	977	G	C4-N9-C1'	-5.44	119.43	126.50
26	LA	1125	G	P-O5'-C5'	-5.44	112.20	120.90
26	LA	1363	C	C4-C5-C6	5.44	120.12	117.40
26	LA	1709	U	C6-N1-C2	-5.44	117.74	121.00
26	LA	2440	C	C1'-O4'-C4'	-5.44	105.55	109.90
26	LA	2622	U	P-O5'-C5'	-5.44	112.20	120.90
52	LO	6	ARG	N-CA-CB	5.44	120.39	110.60
57	LS	21	LYS	O-C-N	-5.44	113.96	123.20
2	SA	452	A	C5-N7-C8	-5.43	101.18	103.90
2	SA	842	U	C5-C4-O4	5.43	129.16	125.90
2	SA	1224	U	C2-N1-C1'	5.43	124.22	117.70
2	SA	1358	U	C2-N3-C4	5.43	130.26	127.00
2	SA	1391	U	C6-N1-C1'	5.43	128.81	121.20
2	SA	1393	U	P-O3'-C3'	-5.43	113.18	119.70
7	SG	3	ARG	NE-CZ-NH2	-5.43	117.58	120.30
11	SK	31	VAL	CA-CB-CG1	5.43	119.05	110.90
14	SN	100	TRP	N-CA-CB	5.43	120.38	110.60
26	LA	67	U	N3-C2-O2	5.43	126.00	122.20
26	LA	131	A	C4-C5-C6	5.43	119.72	117.00
26	LA	169	G	N1-C2-N3	-5.43	120.64	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	266	G	C4-C5-C6	-5.43	115.54	118.80
26	LA	385	C	P-O3'-C3'	5.43	126.22	119.70
26	LA	551	G	C5'-C4'-O4'	-5.43	102.58	109.10
26	LA	759	G	C5-N7-C8	5.43	107.02	104.30
26	LA	822	G	C4-C5-N7	5.43	112.97	110.80
26	LA	889	C	N1-C2-N3	5.43	123.00	119.20
26	LA	963	U	C5-C4-O4	-5.43	122.64	125.90
26	LA	1247	A	C5'-C4'-C3'	5.43	124.70	116.00
26	LA	2057	G	C8-N9-C1'	-5.43	119.93	127.00
26	LA	2103	C	C2-N1-C1'	-5.43	112.82	118.80
2	SA	94	G	C6-C5-N7	-5.43	127.14	130.40
2	SA	167	A	N1-C6-N6	5.43	121.86	118.60
2	SA	191	G	C6-C5-N7	5.43	133.66	130.40
2	SA	378	G	C5'-C4'-C3'	-5.43	107.31	116.00
2	SA	496	A	P-O3'-C3'	5.43	126.22	119.70
2	SA	606	G	N3-C4-N9	5.43	129.26	126.00
2	SA	626	G	C8-N9-C4	-5.43	104.23	106.40
2	SA	774	G	C5-N7-C8	-5.43	101.58	104.30
2	SA	1212	U	OP1-P-OP2	-5.43	111.45	119.60
2	SA	1312	G	C8-N9-C4	-5.43	104.23	106.40
25	LB	56	G	N3-C4-N9	-5.43	122.74	126.00
26	LA	23	G	OP1-P-OP2	-5.43	111.45	119.60
26	LA	367	G	C6-N1-C2	-5.43	121.84	125.10
26	LA	535	G	N9-C4-C5	5.43	107.57	105.40
26	LA	577	G	OP1-P-OP2	-5.43	111.45	119.60
26	LA	1016	G	C4'-C3'-C2'	-5.43	97.17	102.60
26	LA	1122	G	N1-C6-O6	5.43	123.16	119.90
26	LA	1474	U	C5'-C4'-O4'	5.43	115.62	109.10
26	LA	1555	G	N3-C4-C5	-5.43	125.88	128.60
26	LA	1652	A	C3'-C2'-C1'	5.43	105.84	101.50
26	LA	1801	A	C6-N1-C2	5.43	121.86	118.60
26	LA	1841	U	C6-N1-C1'	5.43	128.81	121.20
26	LA	1950	G	C5-C6-N1	5.43	114.22	111.50
26	LA	2048	G	C6-C5-N7	-5.43	127.14	130.40
26	LA	2165	C	O4'-C1'-N1	5.43	112.55	108.20
26	LA	2191	A	C6-N1-C2	-5.43	115.34	118.60
26	LA	2224	G	N3-C2-N2	5.43	123.70	119.90
26	LA	2397	G	C1'-O4'-C4'	-5.43	105.55	109.90
26	LA	2679	A	C6-C5-N7	-5.43	128.50	132.30
32	LY	44	PHE	CG-CD2-CE2	-5.43	114.82	120.80
49	LK	126	ARG	NH1-CZ-NH2	-5.43	113.42	119.40
2	SA	399	G	N7-C8-N9	5.43	115.81	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	859	G	P-O3'-C3'	5.43	126.22	119.70
2	SA	1349	A	O4'-C1'-N9	5.43	112.55	108.20
3	S1	45	G	C8-N9-C4	5.43	108.57	106.40
18	SB	62	ARG	NE-CZ-NH2	-5.43	117.58	120.30
18	SB	159	ALA	N-CA-CB	5.43	117.70	110.10
26	LA	443	A	C6-C5-N7	-5.43	128.50	132.30
26	LA	942	G	N1-C2-N2	-5.43	111.31	116.20
26	LA	1381	G	O5'-P-OP1	5.43	117.22	110.70
26	LA	1623	G	C4'-C3'-C2'	-5.43	97.17	102.60
26	LA	1697	G	C5-C6-N1	5.43	114.22	111.50
26	LA	1734	G	C5'-C4'-O4'	5.43	115.62	109.10
26	LA	2250	G	C4-N9-C1'	-5.43	119.44	126.50
26	LA	2502	G	P-O5'-C5'	5.43	129.59	120.90
26	LA	2661	G	N3-C4-N9	-5.43	122.74	126.00
26	LA	2713	U	C5'-C4'-C3'	-5.43	107.31	116.00
26	LA	2904	U	C4'-C3'-C2'	-5.43	97.17	102.60
48	LN	47	ARG	N-CA-CB	-5.43	100.82	110.60
2	SA	222	C	P-O3'-C3'	-5.43	113.19	119.70
2	SA	283	U	N3-C2-O2	5.43	126.00	122.20
2	SA	356	A	C4-C5-C6	-5.43	114.29	117.00
2	SA	359	G	C8-N9-C4	-5.43	104.23	106.40
2	SA	506	G	N3-C2-N2	5.43	123.70	119.90
2	SA	625	U	C6-N1-C2	-5.43	117.74	121.00
2	SA	817	C	N3-C4-N4	5.43	121.80	118.00
2	SA	1053	G	C6-N1-C2	5.43	128.36	125.10
2	SA	1365	G	N1-C2-N3	5.43	127.16	123.90
2	SA	1416	G	N3-C2-N2	5.43	123.70	119.90
2	SA	1471	U	C2-N3-C4	-5.43	123.74	127.00
2	SA	1523	G	C1'-O4'-C4'	-5.43	105.56	109.90
6	SU	51	ALA	CB-CA-C	-5.43	101.95	110.10
13	SM	47	LEU	CB-CA-C	5.43	120.52	110.20
26	LA	104	A	N1-C2-N3	-5.43	126.58	129.30
26	LA	463	G	C5'-C4'-C3'	-5.43	107.31	116.00
26	LA	1015	U	OP1-P-OP2	-5.43	111.46	119.60
26	LA	1484	U	O4'-C1'-N1	5.43	112.54	108.20
26	LA	1500	G	C5-N7-C8	-5.43	101.58	104.30
26	LA	2014	A	O4'-C4'-C3'	5.43	110.44	106.10
26	LA	2020	A	O4'-C4'-C3'	-5.43	98.57	104.00
26	LA	2278	A	C6-N1-C2	-5.43	115.34	118.60
26	LA	2323	G	O4'-C1'-N9	5.43	112.54	108.20
26	LA	2328	A	C4-C5-C6	-5.43	114.29	117.00
26	LA	2699	C	O4'-C1'-N1	5.43	112.54	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	233	C	C5'-C4'-O4'	5.43	115.61	109.10
26	LA	446	G	C5-C6-O6	-5.43	125.34	128.60
26	LA	1399	C	C4-C5-C6	5.43	120.11	117.40
26	LA	2293	G	C4'-C3'-C2'	-5.43	97.17	102.60
42	L6	22	LYS	CA-CB-CG	5.43	125.34	113.40
45	LG	122	ASP	CB-CG-OD1	5.43	123.19	118.30
2	SA	151	A	C1'-O4'-C4'	-5.43	105.56	109.90
2	SA	604	G	C6-C5-N7	-5.43	127.14	130.40
2	SA	877	G	N1-C6-O6	5.43	123.16	119.90
2	SA	1018	G	C4-C5-N7	-5.43	108.63	110.80
2	SA	1243	C	OP1-P-OP2	-5.43	111.46	119.60
2	SA	1411	C	C4-C5-C6	-5.43	114.69	117.40
2	SA	1437	A	N3-C4-N9	-5.43	123.06	127.40
2	SA	1541	U	C5-C4-O4	5.43	129.16	125.90
25	LB	6	G	N9-C4-C5	-5.43	103.23	105.40
25	LB	93	C	O4'-C1'-N1	5.43	112.54	108.20
26	LA	30	G	C4'-C3'-C2'	-5.43	97.17	102.60
26	LA	82	U	N3-C2-O2	5.43	126.00	122.20
26	LA	289	G	N3-C2-N2	5.43	123.70	119.90
26	LA	432	A	C1'-O4'-C4'	-5.43	105.56	109.90
26	LA	1767	G	O4'-C1'-N9	5.43	112.54	108.20
26	LA	2019	A	C2'-C3'-O3'	5.43	122.38	113.70
26	LA	2719	G	C8-N9-C4	5.43	108.57	106.40
26	LA	2766	A	N1-C2-N3	-5.43	126.59	129.30
2	SA	199	A	C6-N1-C2	5.42	121.86	118.60
2	SA	290	C	C2-N3-C4	-5.42	117.19	119.90
2	SA	415	A	N3-C4-N9	5.42	131.74	127.40
2	SA	566	G	O4'-C1'-C2'	5.42	112.48	107.60
2	SA	1169	A	C5-C6-N1	5.42	120.41	117.70
2	SA	1216	A	O4'-C4'-C3'	5.42	110.44	106.10
2	SA	1240	U	O4'-C1'-N1	5.42	112.54	108.20
2	SA	1374	A	C4'-C3'-C2'	-5.42	97.17	102.60
4	S2	48	U	C4'-C3'-C2'	-5.42	97.17	102.60
18	SB	191	ASP	CB-CG-OD1	-5.42	113.42	118.30
26	LA	34	U	C1'-O4'-C4'	-5.42	105.56	109.90
26	LA	166	U	C5-C4-O4	-5.42	122.65	125.90
26	LA	225	C	O4'-C4'-C3'	-5.42	98.58	104.00
26	LA	284	U	P-O3'-C3'	-5.42	113.19	119.70
26	LA	823	C	OP1-P-O3'	5.42	117.13	105.20
26	LA	1246	A	C4-C5-N7	5.42	113.41	110.70
26	LA	1380	G	C3'-C2'-C1'	-5.42	97.16	101.50
26	LA	1675	C	C5-C6-N1	-5.42	118.29	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2169	A	C5-N7-C8	5.42	106.61	103.90
26	LA	2204	G	N3-C4-C5	-5.42	125.89	128.60
26	LA	2318	G	C5-C6-N1	5.42	114.21	111.50
26	LA	2556	C	C4-C5-C6	5.42	120.11	117.40
26	LA	2825	G	C6-C5-N7	-5.42	127.14	130.40
26	LA	2839	G	C4'-C3'-C2'	-5.42	97.17	102.60
2	SA	565	U	C3'-C2'-C1'	5.42	105.84	101.50
2	SA	582	C	C6-N1-C2	-5.42	118.13	120.30
2	SA	1165	U	C5-C4-O4	5.42	129.15	125.90
20	SD	22	SER	CB-CA-C	-5.42	99.80	110.10
26	LA	368	A	N9-C4-C5	-5.42	103.63	105.80
26	LA	762	U	N3-C4-O4	5.42	123.20	119.40
26	LA	2087	G	OP1-P-OP2	-5.42	111.47	119.60
2	SA	185	U	C2'-C3'-O3'	5.42	122.37	113.70
2	SA	458	U	C5'-C4'-O4'	5.42	115.61	109.10
2	SA	501	C	N3-C4-C5	-5.42	119.73	121.90
2	SA	624	C	N1-C2-N3	5.42	123.00	119.20
2	SA	651	C	N3-C4-N4	-5.42	114.20	118.00
2	SA	1299	A	N3-C4-N9	5.42	131.74	127.40
2	SA	1484	C	N1-C2-O2	-5.42	115.65	118.90
7	SG	159	ARG	NE-CZ-NH2	5.42	123.01	120.30
25	LB	16	G	C4-N9-C1'	5.42	133.55	126.50
26	LA	921	C	C5-C4-N4	-5.42	116.41	120.20
26	LA	1349	C	P-O5'-C5'	-5.42	112.22	120.90
26	LA	1645	G	N3-C4-C5	-5.42	125.89	128.60
26	LA	1671	U	C4'-C3'-C2'	-5.42	97.18	102.60
26	LA	2225	A	C4'-C3'-C2'	-5.42	97.18	102.60
26	LA	2394	C	P-O5'-C5'	5.42	129.57	120.90
26	LA	2429	G	N3-C4-C5	-5.42	125.89	128.60
26	LA	2446	G	C4-N9-C1'	5.42	133.55	126.50
26	LA	2504	U	N3-C4-C5	-5.42	111.35	114.60
26	LA	2632	A	C6-N1-C2	-5.42	115.35	118.60
44	LF	175	ILE	O-C-N	-5.42	114.03	122.70
54	LM	61	VAL	CB-CA-C	-5.42	101.10	111.40
2	SA	330	C	C5-C4-N4	5.42	123.99	120.20
2	SA	1383	C	C5-C6-N1	5.42	123.71	121.00
3	S1	48	C	C2-N3-C4	5.42	122.61	119.90
4	S2	64	G	N7-C8-N9	5.42	115.81	113.10
9	SI	123	ARG	NH1-CZ-NH2	-5.42	113.44	119.40
26	LA	595	C	O4'-C1'-C2'	5.42	112.48	107.60
26	LA	1978	A	N3-C4-N9	-5.42	123.06	127.40
2	SA	560	A	C5-C6-N1	-5.42	114.99	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	596	A	C4-C5-C6	5.42	119.71	117.00
2	SA	795	C	C4'-C3'-C2'	-5.42	97.18	102.60
2	SA	888	G	C5-C6-N1	5.42	114.21	111.50
2	SA	1093	A	C4'-C3'-C2'	-5.42	97.18	102.60
2	SA	1249	C	O4'-C1'-N1	5.42	112.53	108.20
2	SA	1252	A	C6-C5-N7	-5.42	128.51	132.30
2	SA	1518	A	C6-N1-C2	5.42	121.85	118.60
2	SA	1526	G	C1'-O4'-C4'	-5.42	105.57	109.90
3	S1	22	G	C4-C5-N7	5.42	112.97	110.80
9	SI	17	ARG	NE-CZ-NH2	-5.42	117.59	120.30
10	SJ	63	ASP	C-N-CA	5.42	135.25	121.70
26	LA	74	A	OP1-P-OP2	-5.42	111.47	119.60
26	LA	390	U	N1-C2-N3	-5.42	111.65	114.90
26	LA	1527	G	C2-N3-C4	-5.42	109.19	111.90
26	LA	2319	G	O4'-C1'-N9	5.42	112.53	108.20
26	LA	2764	A	O4'-C1'-N9	5.42	112.53	108.20
2	SA	163	C	C4'-C3'-C2'	-5.42	97.18	102.60
2	SA	444	G	C4-C5-C6	-5.42	115.55	118.80
2	SA	716	A	N1-C2-N3	-5.42	126.59	129.30
2	SA	1055	A	C4-C5-C6	-5.42	114.29	117.00
2	SA	1244	G	N1-C2-N3	-5.42	120.65	123.90
24	S3	32	TYR	CB-CA-C	-5.42	99.57	110.40
24	S3	487	VAL	CA-CB-CG1	-5.42	102.77	110.90
26	LA	302	C	OP1-P-OP2	-5.42	111.47	119.60
26	LA	406	G	N3-C4-C5	5.42	131.31	128.60
26	LA	428	A	N1-C2-N3	-5.42	126.59	129.30
26	LA	657	U	C5'-C4'-C3'	5.42	124.67	116.00
26	LA	727	A	C4-C5-N7	5.42	113.41	110.70
26	LA	857	G	C4-C5-N7	-5.42	108.63	110.80
26	LA	1283	G	C8-N9-C4	-5.42	104.23	106.40
26	LA	1327	A	N1-C2-N3	5.42	132.01	129.30
26	LA	1348	C	N3-C4-C5	-5.42	119.73	121.90
26	LA	1587	G	C4'-C3'-C2'	-5.42	97.18	102.60
26	LA	2481	G	C5-C6-O6	-5.42	125.35	128.60
26	LA	2895	G	N3-C4-C5	-5.42	125.89	128.60
49	LK	137	LEU	CB-CG-CD1	5.42	120.21	111.00
1	SS	11	ASP	N-CA-C	5.42	125.62	111.00
2	SA	665	A	N1-C6-N6	-5.42	115.35	118.60
2	SA	1533	C	N3-C4-N4	5.42	121.79	118.00
21	SE	13	LYS	N-CA-CB	-5.42	100.85	110.60
26	LA	20	C	N1-C2-O2	5.42	122.15	118.90
26	LA	157	C	C2-N3-C4	-5.42	117.19	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	233	A	C2-N3-C4	5.42	113.31	110.60
26	LA	660	C	N3-C4-N4	5.42	121.79	118.00
26	LA	1427	A	C5'-C4'-C3'	-5.42	107.34	116.00
26	LA	1590	A	C8-N9-C4	5.42	107.97	105.80
26	LA	1783	A	C1'-O4'-C4'	5.42	114.23	109.90
26	LA	1878	G	C6-N1-C2	-5.42	121.85	125.10
26	LA	2694	G	P-O3'-C3'	-5.42	113.20	119.70
2	SA	385	C	O4'-C4'-C3'	5.41	110.43	106.10
2	SA	533	A	N9-C1'-C2'	-5.41	106.05	112.00
2	SA	748	G	N9-C1'-C2'	-5.41	106.05	112.00
2	SA	1336	C	C3'-C2'-C1'	-5.41	97.17	101.50
4	S2	38	A	C6-N1-C2	5.41	121.85	118.60
18	SB	49	PHE	CB-CG-CD2	5.41	124.59	120.80
26	LA	126	A	O5'-P-OP2	-5.41	100.83	105.70
26	LA	251	A	OP2-P-O3'	5.41	117.11	105.20
26	LA	293	U	N3-C2-O2	-5.41	118.41	122.20
26	LA	570	G	O5'-C5'-C4'	5.41	121.98	111.70
26	LA	807	U	C5'-C4'-C3'	5.41	124.66	116.00
26	LA	989	G	C1'-O4'-C4'	-5.41	105.57	109.90
26	LA	1017	G	C4-N9-C1'	-5.41	119.46	126.50
26	LA	1202	G	P-O5'-C5'	-5.41	112.24	120.90
26	LA	2012	G	C6-C5-N7	-5.41	127.15	130.40
26	LA	2021	C	N3-C4-C5	-5.41	119.73	121.90
26	LA	2094	A	O5'-P-OP2	-5.41	100.83	105.70
26	LA	2333	A	C4-C5-N7	5.41	113.41	110.70
26	LA	2376	A	C5-C6-N1	5.41	120.41	117.70
26	LA	2422	C	C5-C4-N4	-5.41	116.41	120.20
26	LA	2445	G	C8-N9-C4	-5.41	104.23	106.40
26	LA	2726	A	O4'-C4'-C3'	5.41	110.43	106.10
26	LA	2892	G	N3-C2-N2	5.41	123.69	119.90
2	SA	89	U	O4'-C4'-C3'	-5.41	98.59	104.00
2	SA	791	G	P-O3'-C3'	5.41	126.19	119.70
2	SA	803	G	O4'-C1'-N9	5.41	112.53	108.20
2	SA	1507	A	C5-N7-C8	5.41	106.61	103.90
26	LA	51	G	O3'-P-O5'	-5.41	93.72	104.00
26	LA	422	A	N3-C4-N9	-5.41	123.07	127.40
26	LA	974	G	C4-C5-C6	5.41	122.05	118.80
26	LA	1027	A	C1'-O4'-C4'	-5.41	105.57	109.90
26	LA	1416	G	C8-N9-C4	5.41	108.56	106.40
26	LA	1867	G	C1'-O4'-C4'	-5.41	105.57	109.90
26	LA	1980	G	P-O3'-C3'	-5.41	113.21	119.70
26	LA	2802	G	C6-C5-N7	5.41	133.65	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2866	U	C6-N1-C2	-5.41	117.75	121.00
2	SA	159	G	C4-N9-C1'	-5.41	119.47	126.50
2	SA	230	G	C3'-C2'-C1'	5.41	105.83	101.50
2	SA	451	A	C5-C6-N6	-5.41	119.37	123.70
2	SA	537	G	N3-C4-C5	-5.41	125.89	128.60
2	SA	696	A	N3-C4-C5	-5.41	123.01	126.80
2	SA	944	G	C5'-C4'-C3'	-5.41	107.34	116.00
2	SA	1024	G	N1-C2-N3	-5.41	120.65	123.90
2	SA	1328	C	C5'-C4'-C3'	-5.41	107.34	116.00
14	SN	89	ARG	NH1-CZ-NH2	-5.41	113.45	119.40
26	LA	31	C	OP1-P-OP2	-5.41	111.49	119.60
26	LA	354	A	C6-N1-C2	-5.41	115.35	118.60
26	LA	669	G	O4'-C4'-C3'	-5.41	98.59	104.00
26	LA	968	C	C5-C6-N1	-5.41	118.30	121.00
26	LA	1135	C	C2'-C3'-O3'	5.41	122.36	113.70
26	LA	1200	C	N3-C4-N4	5.41	121.79	118.00
26	LA	1788	C	C3'-C2'-C1'	-5.41	97.17	101.50
26	LA	2495	G	N1-C6-O6	-5.41	116.65	119.90
26	LA	2629	U	C4'-C3'-C2'	5.41	108.01	102.60
26	LA	2630	G	C8-N9-C1'	-5.41	119.97	127.00
29	LV	1	MET	CG-SD-CE	-5.41	91.54	100.20
2	SA	195	A	N7-C8-N9	-5.41	111.10	113.80
2	SA	273	U	N1-C1'-C2'	-5.41	106.05	112.00
2	SA	1193	G	C4-N9-C1'	-5.41	119.47	126.50
2	SA	1314	C	C6-N1-C2	-5.41	118.14	120.30
2	SA	1433	A	C2'-C3'-O3'	5.41	122.35	113.70
2	SA	1467	C	C6-N1-C2	-5.41	118.14	120.30
4	S2	45	A	P-O5'-C5'	5.41	129.55	120.90
13	SM	20	SER	N-CA-CB	5.41	118.61	110.50
25	LB	57	A	C1'-O4'-C4'	-5.41	105.57	109.90
26	LA	1002	G	C5-C6-O6	5.41	131.84	128.60
26	LA	1337	G	N1-C2-N2	-5.41	111.33	116.20
26	LA	1383	A	N1-C2-N3	5.41	132.00	129.30
26	LA	1979	U	OP1-P-OP2	-5.41	111.49	119.60
26	LA	2178	C	N1-C1'-C2'	-5.41	106.05	112.00
26	LA	2231	U	N3-C4-C5	-5.41	111.36	114.60
26	LA	2361	G	N3-C2-N2	5.41	123.69	119.90
26	LA	2630	G	N1-C6-O6	5.41	123.14	119.90
26	LA	2801	G	C6-N1-C2	-5.41	121.85	125.10
26	LA	2874	C	C2-N3-C4	-5.41	117.19	119.90
26	LA	2888	C	C5-C6-N1	-5.41	118.30	121.00
33	LZ	22	ASN	CB-CA-C	-5.41	99.58	110.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	176	C	C5-C4-N4	5.41	123.98	120.20
2	SA	196	A	C5-C6-N6	5.41	128.03	123.70
2	SA	822	U	N3-C2-O2	-5.41	118.42	122.20
25	LB	87	U	C5-C4-O4	-5.41	122.66	125.90
26	LA	754	U	C5'-C4'-C3'	5.41	124.65	116.00
26	LA	863	A	C6-C5-N7	-5.41	128.51	132.30
26	LA	1146	C	N3-C4-C5	5.41	124.06	121.90
26	LA	1884	G	P-O5'-C5'	-5.41	112.25	120.90
26	LA	2800	A	C5'-C4'-O4'	5.41	115.59	109.10
2	SA	224	U	C5-C4-O4	-5.41	122.66	125.90
2	SA	304	U	C4'-C3'-C2'	5.41	108.01	102.60
2	SA	682	G	N1-C2-N3	5.41	127.14	123.90
2	SA	929	G	P-O3'-C3'	-5.41	113.21	119.70
4	S2	53	G	N1-C6-O6	-5.41	116.66	119.90
24	S3	602	GLU	OE1-CD-OE2	-5.41	116.81	123.30
26	LA	101	A	C2'-C3'-O3'	5.41	122.35	113.70
26	LA	1125	G	C4-C5-N7	-5.41	108.64	110.80
26	LA	1169	A	C5-C6-N6	-5.41	119.38	123.70
26	LA	1500	G	C1'-O4'-C4'	-5.41	105.58	109.90
26	LA	1721	G	OP1-P-OP2	-5.41	111.49	119.60
26	LA	1760	C	OP1-P-OP2	-5.41	111.49	119.60
26	LA	2278	A	N1-C2-N3	5.41	132.00	129.30
26	LA	2492	U	C5-C6-N1	-5.41	120.00	122.70
26	LA	2892	G	N3-C4-N9	-5.41	122.76	126.00
56	LR	24	THR	N-CA-CB	5.41	120.57	110.30
26	LA	878	A	N9-C4-C5	-5.40	103.64	105.80
26	LA	1084	A	C4'-C3'-C2'	-5.40	97.20	102.60
26	LA	1416	G	C4'-C3'-C2'	-5.40	97.20	102.60
26	LA	1483	G	N3-C2-N2	-5.40	116.12	119.90
26	LA	1737	G	C4-C5-N7	5.40	112.96	110.80
26	LA	2306	C	C3'-C2'-C1'	5.40	105.82	101.50
26	LA	2379	G	C4-C5-C6	-5.40	115.56	118.80
26	LA	2655	G	OP1-P-OP2	-5.40	111.49	119.60
2	SA	496	A	N1-C2-N3	-5.40	126.60	129.30
2	SA	744	C	C5'-C4'-O4'	5.40	115.58	109.10
2	SA	976	G	N3-C2-N2	5.40	123.68	119.90
2	SA	1005	A	C2-N3-C4	5.40	113.30	110.60
2	SA	1295	U	O4'-C1'-C2'	5.40	112.46	107.60
2	SA	1300	G	N3-C2-N2	-5.40	116.12	119.90
26	LA	1118	C	O4'-C1'-N1	5.40	112.52	108.20
26	LA	1125	G	P-O3'-C3'	5.40	126.18	119.70
26	LA	1330	C	OP1-P-OP2	-5.40	111.50	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1920	C	OP2-P-O3'	5.40	117.08	105.20
26	LA	2054	A	C3'-C2'-C1'	5.40	105.82	101.50
26	LA	2401	U	C6-N1-C2	-5.40	117.76	121.00
26	LA	2531	A	N9-C4-C5	5.40	107.96	105.80
26	LA	2549	G	C5-C6-O6	5.40	131.84	128.60
26	LA	2551	C	N3-C2-O2	-5.40	118.12	121.90
26	LA	2575	C	C6-N1-C1'	-5.40	114.32	120.80
26	LA	2576	G	C8-N9-C1'	-5.40	119.98	127.00
48	LN	143	GLU	N-CA-CB	-5.40	100.87	110.60
2	SA	83	C	N3-C4-N4	5.40	121.78	118.00
2	SA	136	C	C5-C6-N1	-5.40	118.30	121.00
2	SA	578	C	C2-N3-C4	-5.40	117.20	119.90
2	SA	958	A	O4'-C1'-N9	-5.40	103.88	108.20
2	SA	1000	A	C8-N9-C4	-5.40	103.64	105.80
2	SA	1186	G	C5'-C4'-C3'	-5.40	107.36	116.00
2	SA	1479	C	O4'-C1'-N1	5.40	112.52	108.20
2	SA	1518	A	N1-C2-N3	-5.40	126.60	129.30
19	SC	11	LEU	O-C-N	-5.40	114.02	123.20
20	SD	31	CYS	CB-CA-C	-5.40	99.60	110.40
25	LB	83	G	C6-C5-N7	-5.40	127.16	130.40
26	LA	83	A	N9-C4-C5	-5.40	103.64	105.80
26	LA	654	A	N9-C4-C5	5.40	107.96	105.80
26	LA	961	C	N3-C4-N4	5.40	121.78	118.00
26	LA	1104	C	C6-N1-C2	5.40	122.46	120.30
26	LA	1162	G	C4'-C3'-C2'	-5.40	97.20	102.60
26	LA	1470	A	C6-C5-N7	-5.40	128.52	132.30
26	LA	1906	G	C5'-C4'-C3'	-5.40	107.36	116.00
26	LA	2006	C	C4'-C3'-C2'	-5.40	97.20	102.60
26	LA	2040	G	N1-C2-N3	-5.40	120.66	123.90
26	LA	2066	C	N3-C4-C5	5.40	124.06	121.90
26	LA	2229	U	O4'-C1'-N1	5.40	112.52	108.20
26	LA	2331	G	P-O3'-C3'	5.40	126.18	119.70
26	LA	2898	U	C4-C5-C6	-5.40	116.46	119.70
38	LE	123	LYS	CB-CA-C	-5.40	99.60	110.40
2	SA	768	A	C6-N1-C2	-5.40	115.36	118.60
2	SA	816	A	C5-N7-C8	5.40	106.60	103.90
7	SG	17	PHE	CB-CG-CD2	-5.40	117.02	120.80
26	LA	1086	A	C5-N7-C8	5.40	106.60	103.90
26	LA	2473	U	O4'-C1'-N1	5.40	112.52	108.20
29	LV	62	VAL	CG1-CB-CG2	5.40	119.54	110.90
50	LL	16	TYR	CB-CG-CD2	-5.40	117.76	121.00
2	SA	180	U	O4'-C1'-N1	5.40	112.52	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	582	C	N3-C4-C5	-5.40	119.74	121.90
2	SA	794	A	OP1-P-OP2	-5.40	111.50	119.60
2	SA	865	A	C5-C6-N1	5.40	120.40	117.70
2	SA	929	G	C6-N1-C2	-5.40	121.86	125.10
2	SA	1108	G	N1-C6-O6	5.40	123.14	119.90
2	SA	1272	G	N3-C2-N2	-5.40	116.12	119.90
2	SA	1365	G	C8-N9-C4	-5.40	104.24	106.40
25	LB	100	G	P-O3'-C3'	5.40	126.18	119.70
26	LA	824	U	OP1-P-OP2	-5.40	111.50	119.60
26	LA	952	G	C3'-C2'-C1'	5.40	105.82	101.50
26	LA	1645	G	C6-C5-N7	-5.40	127.16	130.40
26	LA	1924	C	C2-N3-C4	-5.40	117.20	119.90
26	LA	1997	C	N1-C2-O2	5.40	122.14	118.90
26	LA	2194	U	O4'-C1'-N1	5.40	112.52	108.20
26	LA	2317	A	N3-C4-N9	5.40	131.72	127.40
26	LA	2467	C	C2-N3-C4	-5.40	117.20	119.90
26	LA	2656	U	C5-C4-O4	-5.40	122.66	125.90
26	LA	2782	G	N3-C4-C5	-5.40	125.90	128.60
2	SA	658	C	N3-C4-C5	-5.40	119.74	121.90
16	SP	35	ARG	NH1-CZ-NH2	-5.40	113.46	119.40
22	SF	99	ALA	O-C-N	-5.40	114.07	122.70
26	LA	415	A	C5-C6-N6	-5.40	119.38	123.70
26	LA	1578	U	O5'-C5'-C4'	5.40	121.95	111.70
2	SA	64	G	C8-N9-C4	-5.39	104.24	106.40
2	SA	65	A	OP1-P-OP2	-5.39	111.51	119.60
2	SA	1020	G	O3'-P-O5'	5.39	114.25	104.00
4	S2	21	U	C6-N1-C2	-5.39	117.76	121.00
26	LA	70	G	N1-C6-O6	5.39	123.14	119.90
26	LA	341	C	C5'-C4'-O4'	5.39	115.58	109.10
26	LA	451	U	O3'-P-O5'	-5.39	93.75	104.00
26	LA	453	A	C4-C5-C6	-5.39	114.30	117.00
26	LA	571	U	C5'-C4'-C3'	-5.39	107.37	116.00
26	LA	584	C	O5'-P-OP2	-5.39	100.84	105.70
26	LA	613	A	C4-N9-C1'	5.39	136.01	126.30
26	LA	1070	A	OP2-P-O3'	5.39	117.07	105.20
26	LA	1078	U	C6-N1-C2	-5.39	117.76	121.00
26	LA	1357	C	N3-C2-O2	-5.39	118.12	121.90
26	LA	1622	G	P-O5'-C5'	-5.39	112.27	120.90
26	LA	1748	C	C2-N3-C4	5.39	122.60	119.90
26	LA	1866	A	N1-C2-N3	5.39	132.00	129.30
26	LA	1922	G	O4'-C1'-C2'	5.39	112.45	107.60
26	LA	1998	A	C4-C5-N7	5.39	113.40	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	67	C	C1'-O4'-C4'	-5.39	105.59	109.90
2	SA	835	U	C4'-C3'-C2'	-5.39	97.21	102.60
2	SA	845	A	N1-C6-N6	-5.39	115.36	118.60
2	SA	953	G	N9-C1'-C2'	-5.39	106.07	112.00
2	SA	995	C	C5'-C4'-C3'	5.39	124.63	116.00
2	SA	1142	G	N9-C1'-C2'	-5.39	106.07	112.00
2	SA	1531	A	C3'-C2'-C1'	5.39	105.81	101.50
24	S3	194	ASP	CB-CG-OD1	5.39	123.15	118.30
24	S3	548	TYR	CD1-CE1-CZ	5.39	124.65	119.80
25	LB	24	G	C5-N7-C8	5.39	107.00	104.30
26	LA	24	G	C5'-C4'-C3'	5.39	124.63	116.00
26	LA	320	A	C1'-O4'-C4'	5.39	114.21	109.90
26	LA	359	G	C4-C5-N7	-5.39	108.64	110.80
26	LA	390	U	C1'-O4'-C4'	-5.39	105.59	109.90
26	LA	522	A	C1'-O4'-C4'	-5.39	105.59	109.90
26	LA	1017	G	N9-C4-C5	-5.39	103.24	105.40
26	LA	1090	A	N1-C2-N3	-5.39	126.60	129.30
26	LA	1205	A	C2-N3-C4	-5.39	107.90	110.60
26	LA	1591	A	O4'-C1'-C2'	5.39	112.45	107.60
26	LA	1894	C	O4'-C1'-N1	5.39	112.51	108.20
26	LA	2187	U	N1-C2-N3	-5.39	111.66	114.90
26	LA	2783	U	N1-C2-O2	-5.39	119.03	122.80
26	LA	2849	U	N3-C4-C5	-5.39	111.36	114.60
46	LH	150	TYR	CB-CG-CD1	-5.39	117.76	121.00
2	SA	969	A	N9-C1'-C2'	-5.39	106.07	112.00
2	SA	1278	G	C5'-C4'-O4'	5.39	115.57	109.10
26	LA	797	G	C4'-C3'-C2'	-5.39	97.21	102.60
26	LA	827	U	C6-N1-C1'	-5.39	113.65	121.20
26	LA	940	G	C4-C5-C6	-5.39	115.57	118.80
26	LA	2321	U	N3-C4-C5	-5.39	111.37	114.60
2	SA	48	C	N3-C4-C5	-5.39	119.74	121.90
2	SA	208	U	C3'-C2'-C1'	-5.39	97.19	101.50
2	SA	567	G	N3-C4-N9	-5.39	122.77	126.00
2	SA	574	A	P-O3'-C3'	-5.39	113.23	119.70
2	SA	721	G	N7-C8-N9	5.39	115.79	113.10
2	SA	816	A	O5'-P-OP1	5.39	117.17	110.70
2	SA	1115	U	N3-C4-O4	5.39	123.17	119.40
2	SA	1539	C	C3'-C2'-C1'	-5.39	97.19	101.50
3	S1	25	U	P-O3'-C3'	-5.39	113.23	119.70
26	LA	64	A	C1'-O4'-C4'	-5.39	105.59	109.90
26	LA	489	G	N1-C2-N2	-5.39	111.35	116.20
26	LA	573	U	C2'-C3'-O3'	5.39	122.32	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	822	G	N3-C4-N9	5.39	129.23	126.00
26	LA	1369	G	C8-N9-C1'	-5.39	119.99	127.00
26	LA	1586	A	C6-C5-N7	-5.39	128.53	132.30
26	LA	1624	U	C6-N1-C1'	5.39	128.75	121.20
26	LA	1878	G	C2-N3-C4	5.39	114.59	111.90
26	LA	1950	G	N3-C2-N2	-5.39	116.13	119.90
26	LA	2197	U	O4'-C1'-C2'	5.39	112.45	107.60
27	LD	211	ARG	NE-CZ-NH1	-5.39	117.61	120.30
2	SA	789	U	C5-C6-N1	5.39	125.39	122.70
2	SA	842	U	C1'-O4'-C4'	-5.39	105.59	109.90
2	SA	988	G	C2-N3-C4	-5.39	109.21	111.90
2	SA	1092	A	C1'-O4'-C4'	-5.39	105.59	109.90
2	SA	1174	G	C5'-C4'-C3'	5.39	124.62	116.00
2	SA	1406	U	O4'-C1'-N1	5.39	112.51	108.20
2	SA	1525	G	N9-C4-C5	-5.39	103.25	105.40
26	LA	43	G	N7-C8-N9	5.39	115.79	113.10
26	LA	372	G	C6-N1-C2	5.39	128.33	125.10
26	LA	1974	C	C3'-C2'-C1'	-5.39	97.19	101.50
26	LA	2461	A	N1-C6-N6	5.39	121.83	118.60
26	LA	2577	A	C2-N3-C4	-5.39	107.91	110.60
26	LA	2747	G	C5'-C4'-O4'	5.39	115.56	109.10
26	LA	2899	A	O4'-C1'-N9	5.39	112.51	108.20
47	LJ	99	ALA	CB-CA-C	5.39	118.18	110.10
2	SA	281	G	N9-C1'-C2'	-5.39	106.08	112.00
2	SA	520	A	C6-C5-N7	-5.39	128.53	132.30
2	SA	554	A	O4'-C1'-N9	5.39	112.51	108.20
2	SA	560	A	N1-C6-N6	5.39	121.83	118.60
2	SA	715	A	P-O3'-C3'	5.39	126.16	119.70
2	SA	775	G	C8-N9-C4	5.39	108.56	106.40
2	SA	968	A	C6-N1-C2	5.39	121.83	118.60
2	SA	1325	C	C6-N1-C1'	5.39	127.26	120.80
2	SA	1365	G	C5-C6-N1	-5.39	108.81	111.50
2	SA	1480	A	OP1-P-OP2	-5.39	111.52	119.60
2	SA	1502	A	N1-C6-N6	-5.39	115.37	118.60
4	S2	45	A	N7-C8-N9	5.39	116.49	113.80
15	SO	83	ARG	NE-CZ-NH2	-5.39	117.61	120.30
26	LA	443	A	O4'-C1'-C2'	-5.39	100.41	105.80
26	LA	2087	G	C6-N1-C2	-5.39	121.87	125.10
2	SA	132	C	C4-C5-C6	-5.38	114.71	117.40
2	SA	722	G	C4-N9-C1'	5.38	133.50	126.50
2	SA	1042	A	P-O5'-C5'	5.38	129.51	120.90
2	SA	1166	G	P-O3'-C3'	5.38	126.16	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1500	A	P-O5'-C5'	5.38	129.52	120.90
4	S2	9	G	O4'-C1'-N9	5.38	112.51	108.20
22	SF	25	TYR	CD1-CE1-CZ	-5.38	114.95	119.80
26	LA	162	U	C5-C6-N1	-5.38	120.01	122.70
26	LA	362	A	P-O5'-C5'	5.38	129.51	120.90
26	LA	392	U	C5-C4-O4	-5.38	122.67	125.90
26	LA	618	G	C1'-O4'-C4'	-5.38	105.59	109.90
26	LA	1096	A	OP2-P-O3'	5.38	117.05	105.20
26	LA	1117	C	C5'-C4'-C3'	-5.38	107.38	116.00
26	LA	1329	U	C1'-O4'-C4'	-5.38	105.59	109.90
26	LA	1996	C	C3'-C2'-C1'	5.38	105.81	101.50
45	LG	113	PHE	CD1-CG-CD2	5.38	125.30	118.30
2	SA	464	U	N1-C2-N3	5.38	118.13	114.90
2	SA	519	C	O4'-C1'-N1	5.38	112.51	108.20
2	SA	1211	U	N1-C2-N3	5.38	118.13	114.90
26	LA	541	A	O4'-C4'-C3'	-5.38	98.62	104.00
26	LA	1137	G	N7-C8-N9	5.38	115.79	113.10
26	LA	1565	C	N1-C2-N3	-5.38	115.43	119.20
26	LA	1585	C	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	2064	C	C6-N1-C2	-5.38	118.15	120.30
26	LA	2507	C	N1-C2-N3	5.38	122.97	119.20
26	LA	2805	C	C5-C4-N4	-5.38	116.43	120.20
2	SA	91	U	N1-C2-O2	-5.38	119.03	122.80
2	SA	131	A	N1-C6-N6	5.38	121.83	118.60
2	SA	314	C	N3-C2-O2	-5.38	118.13	121.90
2	SA	354	G	P-O5'-C5'	5.38	129.51	120.90
2	SA	437	U	O4'-C1'-C2'	5.38	112.44	107.60
2	SA	472	U	C3'-C2'-C1'	5.38	105.81	101.50
2	SA	880	C	O4'-C1'-C2'	5.38	112.44	107.60
3	S1	38	G	N3-C4-N9	5.38	129.23	126.00
4	S2	9	G	C8-N9-C4	5.38	108.55	106.40
4	S2	10	G	C4'-C3'-C2'	-5.38	97.22	102.60
10	SJ	23	ALA	N-CA-CB	-5.38	102.57	110.10
24	S3	144	ASP	CB-CG-OD2	5.38	123.14	118.30
25	LB	14	U	C1'-O4'-C4'	-5.38	105.59	109.90
25	LB	50	A	O4'-C1'-N9	5.38	112.50	108.20
25	LB	59	A	C2-N3-C4	5.38	113.29	110.60
25	LB	83	G	C6-N1-C2	-5.38	121.87	125.10
26	LA	377	G	C5-N7-C8	5.38	106.99	104.30
26	LA	1029	A	C5-C6-N6	-5.38	119.39	123.70
26	LA	1390	U	P-O3'-C3'	5.38	126.16	119.70
26	LA	1736	U	N1-C2-N3	5.38	118.13	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1797	G	N1-C2-N2	-5.38	111.36	116.20
26	LA	2290	G	N7-C8-N9	-5.38	110.41	113.10
26	LA	2655	G	P-O3'-C3'	-5.38	113.24	119.70
26	LA	2868	A	C6-C5-N7	-5.38	128.53	132.30
56	LR	64	SER	CB-CA-C	5.38	120.33	110.10
58	LT	74	ILE	CB-CA-C	-5.38	100.84	111.60
2	SA	420	U	C5-C6-N1	-5.38	120.01	122.70
2	SA	724	G	O4'-C1'-N9	5.38	112.50	108.20
2	SA	1023	U	N3-C4-O4	5.38	123.17	119.40
2	SA	1393	U	C4'-C3'-C2'	-5.38	97.22	102.60
2	SA	1512	U	N1-C2-N3	5.38	118.13	114.90
8	SH	127	TYR	CZ-CE2-CD2	-5.38	114.96	119.80
26	LA	98	G	P-O5'-C5'	-5.38	112.29	120.90
26	LA	131	A	C5-C6-N6	-5.38	119.40	123.70
26	LA	1437	C	OP1-P-OP2	-5.38	111.53	119.60
26	LA	1572	A	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	1622	G	N1-C2-N3	5.38	127.13	123.90
26	LA	1715	G	N1-C2-N2	5.38	121.04	116.20
26	LA	2193	G	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	2833	U	C4'-C3'-C2'	-5.38	97.22	102.60
2	SA	331	G	N7-C8-N9	-5.38	110.41	113.10
2	SA	371	A	C8-N9-C4	-5.38	103.65	105.80
2	SA	763	G	OP1-P-OP2	-5.38	111.53	119.60
2	SA	865	A	C2-N3-C4	-5.38	107.91	110.60
2	SA	1233	G	O4'-C1'-N9	5.38	112.50	108.20
2	SA	1270	G	C4-C5-N7	5.38	112.95	110.80
2	SA	1296	C	N3-C2-O2	-5.38	118.14	121.90
2	SA	1446	A	N9-C1'-C2'	-5.38	106.08	112.00
4	S2	33	C	P-O3'-C3'	5.38	126.15	119.70
4	S2	48	U	C2-N3-C4	-5.38	123.77	127.00
21	SE	37	VAL	CA-CB-CG1	-5.38	102.83	110.90
26	LA	328	U	N3-C2-O2	-5.38	118.44	122.20
26	LA	908	C	C4-C5-C6	-5.38	114.71	117.40
26	LA	1228	G	C2-N3-C4	-5.38	109.21	111.90
26	LA	1250	G	C8-N9-C4	-5.38	104.25	106.40
26	LA	1699	G	O4'-C4'-C3'	5.38	110.40	106.10
26	LA	1708	C	O3'-P-O5'	5.38	114.22	104.00
26	LA	1752	C	OP1-P-OP2	-5.38	111.53	119.60
26	LA	1903	G	C5-C6-O6	-5.38	125.37	128.60
26	LA	2186	G	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	2201	G	N3-C4-C5	5.38	131.29	128.60
26	LA	2687	U	C5'-C4'-O4'	5.38	115.55	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2883	A	C1'-O4'-C4'	5.38	114.20	109.90
51	LI	29	PHE	CB-CG-CD2	-5.38	117.04	120.80
2	SA	3	A	N9-C4-C5	5.38	107.95	105.80
2	SA	294	U	C5'-C4'-O4'	5.38	115.55	109.10
2	SA	546	A	N7-C8-N9	5.38	116.49	113.80
2	SA	780	A	C6-C5-N7	-5.38	128.54	132.30
9	SI	123	ARG	NE-CZ-NH1	5.38	122.99	120.30
18	SB	73	ARG	NE-CZ-NH1	5.38	122.99	120.30
25	LB	49	C	N3-C2-O2	-5.38	118.14	121.90
25	LB	107	G	N3-C4-N9	-5.38	122.77	126.00
26	LA	954	G	OP1-P-OP2	-5.38	111.54	119.60
26	LA	1174	U	P-O5'-C5'	-5.38	112.30	120.90
26	LA	1286	A	C1'-O4'-C4'	-5.38	105.60	109.90
26	LA	1538	G	C5-N7-C8	5.38	106.99	104.30
26	LA	1653	G	N3-C2-N2	5.38	123.66	119.90
26	LA	1671	U	O4'-C1'-N1	5.38	112.50	108.20
26	LA	1859	U	N3-C4-C5	5.38	117.83	114.60
26	LA	1907	G	C1'-O4'-C4'	-5.38	105.60	109.90
26	LA	2809	A	N1-C6-N6	5.38	121.83	118.60
2	SA	74	A	C5'-C4'-O4'	5.38	115.55	109.10
25	LB	11	C	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	141	G	C4-C5-N7	-5.38	108.65	110.80
26	LA	260	G	P-O5'-C5'	-5.38	112.30	120.90
26	LA	406	G	P-O5'-C5'	5.38	129.50	120.90
26	LA	950	G	O4'-C1'-N9	5.38	112.50	108.20
26	LA	1393	A	C8-N9-C4	-5.38	103.65	105.80
26	LA	2248	C	C4'-C3'-C2'	-5.38	97.22	102.60
26	LA	2430	A	N7-C8-N9	5.38	116.49	113.80
26	LA	2671	G	P-O5'-C5'	5.38	129.50	120.90
2	SA	378	G	P-O5'-C5'	-5.37	112.30	120.90
2	SA	549	C	P-O3'-C3'	5.37	126.15	119.70
2	SA	726	C	N3-C2-O2	-5.37	118.14	121.90
2	SA	787	A	O3'-P-O5'	5.37	114.21	104.00
2	SA	1102	A	C2-N3-C4	5.37	113.29	110.60
2	SA	1326	U	N3-C4-C5	-5.37	111.38	114.60
2	SA	1358	U	C6-N1-C2	5.37	124.22	121.00
4	S2	27	G	N3-C4-C5	-5.37	125.91	128.60
26	LA	98	G	C8-N9-C4	-5.37	104.25	106.40
26	LA	452	G	P-O3'-C3'	5.37	126.15	119.70
26	LA	797	G	OP1-P-OP2	-5.37	111.54	119.60
26	LA	1121	C	C2-N3-C4	5.37	122.59	119.90
26	LA	1581	G	N1-C2-N2	-5.37	111.36	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1606	C	P-O3'-C3'	5.37	126.15	119.70
26	LA	2139	U	N3-C2-O2	-5.37	118.44	122.20
26	LA	2204	G	N3-C4-N9	5.37	129.22	126.00
26	LA	2236	U	N3-C2-O2	-5.37	118.44	122.20
26	LA	2544	G	N3-C4-C5	-5.37	125.91	128.60
26	LA	2615	U	N3-C4-O4	5.37	123.16	119.40
26	LA	2749	A	O4'-C1'-N9	5.37	112.50	108.20
44	LF	138	LEU	CB-CG-CD2	5.37	120.14	111.00
2	SA	1259	C	N1-C2-O2	5.37	122.12	118.90
2	SA	1421	G	O4'-C1'-N9	5.37	112.50	108.20
4	S2	15	G	N9-C1'-C2'	5.37	120.98	114.00
4	S2	17	C	C2-N3-C4	5.37	122.59	119.90
24	S3	385	ILE	CA-CB-CG1	5.37	121.21	111.00
26	LA	32	C	C5'-C4'-C3'	-5.37	107.41	116.00
26	LA	755	U	C2-N3-C4	-5.37	123.78	127.00
26	LA	1133	A	N1-C6-N6	-5.37	115.38	118.60
26	LA	1416	G	O4'-C4'-C3'	5.37	110.40	106.10
26	LA	1708	C	N1-C2-N3	5.37	122.96	119.20
26	LA	1751	U	C5'-C4'-O4'	5.37	115.55	109.10
26	LA	2125	G	C5-C6-N1	5.37	114.19	111.50
26	LA	2723	C	C4-C5-C6	5.37	120.09	117.40
26	LA	2828	G	C1'-O4'-C4'	-5.37	105.60	109.90
57	LS	103	VAL	O-C-N	-5.37	114.10	122.70
2	SA	161	A	C6-N1-C2	-5.37	115.38	118.60
2	SA	204	G	N1-C2-N3	5.37	127.12	123.90
2	SA	225	C	O5'-P-OP2	-5.37	100.87	105.70
2	SA	783	C	O4'-C1'-N1	5.37	112.50	108.20
2	SA	1003	G	C5-C6-O6	-5.37	125.38	128.60
26	LA	818	G	C4-C5-N7	5.37	112.95	110.80
26	LA	966	G	O4'-C1'-N9	5.37	112.50	108.20
26	LA	1059	G	C5'-C4'-O4'	5.37	115.54	109.10
26	LA	1381	G	P-O3'-C3'	-5.37	113.26	119.70
26	LA	2814	A	N3-C4-C5	5.37	130.56	126.80
55	LQ	25	ARG	NE-CZ-NH2	-5.37	117.61	120.30
2	SA	178	C	P-O5'-C5'	-5.37	112.31	120.90
2	SA	535	A	C4-C5-C6	5.37	119.68	117.00
2	SA	551	U	P-O3'-C3'	-5.37	113.26	119.70
2	SA	866	C	C3'-C2'-C1'	5.37	105.80	101.50
2	SA	1035	A	N3-C4-C5	5.37	130.56	126.80
2	SA	1125	U	C2-N3-C4	-5.37	123.78	127.00
2	SA	1152	A	O5'-C5'-C4'	5.37	121.90	111.70
2	SA	1520	C	C3'-C2'-C1'	-5.37	97.20	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	S1	45	G	C6-N1-C2	-5.37	121.88	125.10
5	ST	9	ARG	NH1-CZ-NH2	-5.37	113.49	119.40
25	LB	67	G	C1'-O4'-C4'	-5.37	105.61	109.90
26	LA	239	C	N1-C2-N3	5.37	122.96	119.20
26	LA	369	U	C2-N3-C4	-5.37	123.78	127.00
26	LA	370	G	C3'-C2'-C1'	-5.37	97.20	101.50
26	LA	480	A	C5'-C4'-O4'	5.37	115.54	109.10
26	LA	507	A	O4'-C1'-N9	5.37	112.49	108.20
26	LA	980	A	OP1-P-OP2	-5.37	111.55	119.60
26	LA	1018	U	C2-N1-C1'	-5.37	111.26	117.70
26	LA	1027	A	C4-C5-N7	5.37	113.38	110.70
26	LA	1104	C	C2-N3-C4	5.37	122.58	119.90
26	LA	1180	U	N3-C4-O4	5.37	123.16	119.40
26	LA	1384	A	C2-N3-C4	-5.37	107.92	110.60
26	LA	1848	A	N9-C1'-C2'	-5.37	106.09	112.00
26	LA	1972	G	C4-C5-N7	5.37	112.95	110.80
26	LA	2034	U	N3-C4-O4	5.37	123.16	119.40
26	LA	2059	A	C6-N1-C2	-5.37	115.38	118.60
26	LA	2209	G	C6-C5-N7	-5.37	127.18	130.40
26	LA	2467	C	C3'-C2'-C1'	5.37	105.80	101.50
2	SA	52	C	C5-C6-N1	-5.37	118.32	121.00
2	SA	327	A	C4'-C3'-C2'	-5.37	97.23	102.60
2	SA	950	U	P-O3'-C3'	5.37	126.14	119.70
2	SA	1147	C	C2-N3-C4	-5.37	117.22	119.90
2	SA	1159	U	O5'-C5'-C4'	-5.37	101.50	111.70
3	S1	53	G	C4-C5-N7	5.37	112.95	110.80
26	LA	1513	U	C6-N1-C2	-5.37	117.78	121.00
26	LA	1568	G	C4-N9-C1'	5.37	133.48	126.50
26	LA	2358	A	C5'-C4'-O4'	5.37	115.54	109.10
26	LA	2575	C	C2-N1-C1'	5.37	124.70	118.80
57	LS	31	TYR	CG-CD1-CE1	-5.37	117.01	121.30
2	SA	51	A	N7-C8-N9	-5.37	111.12	113.80
2	SA	915	A	N9-C4-C5	5.37	107.95	105.80
2	SA	1288	A	C4'-C3'-C2'	-5.37	97.23	102.60
11	SK	109	ILE	O-C-N	-5.37	114.12	122.70
25	LB	85	G	O4'-C1'-C2'	5.37	112.43	107.60
26	LA	228	C	OP1-P-OP2	-5.37	111.55	119.60
26	LA	407	G	N9-C4-C5	5.37	107.55	105.40
26	LA	571	U	C4-C5-C6	5.37	122.92	119.70
26	LA	716	A	C5'-C4'-O4'	5.37	115.54	109.10
26	LA	917	A	O4'-C1'-N9	5.37	112.49	108.20
26	LA	1444	G	C5-C6-N1	-5.37	108.82	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1449	G	C8-N9-C1'	5.37	133.97	127.00
26	LA	1604	C	N3-C4-N4	5.37	121.76	118.00
26	LA	1606	C	N3-C2-O2	-5.37	118.14	121.90
26	LA	1667	G	O5'-P-OP2	-5.37	100.87	105.70
26	LA	1878	G	C8-N9-C1'	5.37	133.97	127.00
26	LA	1998	A	N1-C6-N6	5.37	121.82	118.60
26	LA	2160	C	O4'-C4'-C3'	-5.37	98.63	104.00
26	LA	2376	A	C4-N9-C1'	5.37	135.96	126.30
26	LA	2680	U	C5-C6-N1	5.37	125.38	122.70
37	LC	205	LYS	CB-CA-C	5.37	121.13	110.40
2	SA	12	U	N1-C2-N3	-5.36	111.68	114.90
2	SA	27	G	C1'-O4'-C4'	-5.36	105.61	109.90
2	SA	128	G	N9-C1'-C2'	-5.36	106.10	112.00
2	SA	348	G	C4'-C3'-C2'	-5.36	97.24	102.60
2	SA	754	C	C2-N1-C1'	5.36	124.70	118.80
2	SA	816	A	N1-C6-N6	-5.36	115.38	118.60
2	SA	1012	A	C6-N1-C2	5.36	121.82	118.60
2	SA	1067	A	C5-N7-C8	5.36	106.58	103.90
2	SA	1332	A	C1'-O4'-C4'	-5.36	105.61	109.90
2	SA	1445	U	N3-C4-O4	5.36	123.16	119.40
22	SF	78	PHE	CB-CA-C	-5.36	99.67	110.40
25	LB	23	G	C5-C6-N1	5.36	114.18	111.50
26	LA	32	C	C3'-C2'-C1'	5.36	105.79	101.50
26	LA	33	C	N3-C4-N4	5.36	121.75	118.00
26	LA	381	G	C5-C6-N1	5.36	114.18	111.50
26	LA	957	C	N3-C4-N4	5.36	121.75	118.00
26	LA	1128	G	C5-C6-N1	5.36	114.18	111.50
26	LA	1378	A	C8-N9-C4	-5.36	103.66	105.80
26	LA	1723	G	N3-C4-C5	-5.36	125.92	128.60
26	LA	2024	G	N9-C4-C5	5.36	107.55	105.40
26	LA	2243	U	P-O5'-C5'	5.36	129.48	120.90
26	LA	2329	U	P-O3'-C3'	5.36	126.14	119.70
26	LA	2355	G	P-O5'-C5'	5.36	129.48	120.90
26	LA	2397	G	C2-N3-C4	5.36	114.58	111.90
26	LA	2450	A	O4'-C4'-C3'	-5.36	98.64	104.00
26	LA	2588	G	C1'-O4'-C4'	-5.36	105.61	109.90
26	LA	2639	A	N9-C4-C5	-5.36	103.66	105.80
26	LA	2805	C	C3'-C2'-C1'	-5.36	97.21	101.50
2	SA	753	A	OP1-P-O3'	5.36	117.00	105.20
26	LA	252	G	C5-N7-C8	-5.36	101.62	104.30
26	LA	907	G	N1-C6-O6	-5.36	116.68	119.90
26	LA	1361	G	C4-C5-N7	-5.36	108.66	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1372	U	N1-C2-N3	5.36	118.12	114.90
26	LA	1440	U	N1-C2-N3	5.36	118.12	114.90
26	LA	1976	U	C1'-O4'-C4'	-5.36	105.61	109.90
26	LA	2257	U	C2-N3-C4	5.36	130.22	127.00
26	LA	2748	A	C4'-C3'-C2'	-5.36	97.24	102.60
2	SA	396	C	OP1-P-OP2	-5.36	111.56	119.60
2	SA	490	C	N3-C2-O2	-5.36	118.15	121.90
2	SA	576	C	C5-C4-N4	-5.36	116.45	120.20
2	SA	1015	G	C4-C5-C6	5.36	122.02	118.80
2	SA	1428	A	N1-C6-N6	-5.36	115.38	118.60
2	SA	1449	C	C5'-C4'-O4'	5.36	115.53	109.10
16	SP	34	GLU	N-CA-CB	5.36	120.25	110.60
18	SB	4	SER	CB-CA-C	-5.36	99.92	110.10
19	SC	142	ARG	NE-CZ-NH1	-5.36	117.62	120.30
22	SF	42	TRP	CE2-CD2-CE3	5.36	125.13	118.70
26	LA	459	U	C2-N3-C4	5.36	130.22	127.00
26	LA	764	A	C4'-C3'-C2'	5.36	107.96	102.60
26	LA	1202	G	N1-C6-O6	5.36	123.12	119.90
26	LA	1314	C	OP1-P-O3'	5.36	116.99	105.20
26	LA	1486	U	C3'-C2'-C1'	5.36	105.79	101.50
26	LA	1860	G	O4'-C4'-C3'	5.36	110.39	106.10
26	LA	2055	C	C4'-C3'-C2'	-5.36	97.24	102.60
26	LA	2118	U	N3-C2-O2	-5.36	118.45	122.20
26	LA	2201	G	C8-N9-C1'	5.36	133.97	127.00
26	LA	2327	A	C6-C5-N7	-5.36	128.55	132.30
26	LA	2412	A	C4-C5-C6	5.36	119.68	117.00
37	LC	44	VAL	CG1-CB-CG2	-5.36	102.32	110.90
40	L4	38	PHE	CB-CG-CD2	-5.36	117.05	120.80
2	SA	857	C	C5-C4-N4	-5.36	116.45	120.20
2	SA	909	A	C5-C6-N1	5.36	120.38	117.70
2	SA	1141	C	OP1-P-OP2	-5.36	111.56	119.60
2	SA	1481	U	OP1-P-OP2	-5.36	111.56	119.60
5	ST	35	TYR	CZ-CE2-CD2	5.36	124.62	119.80
26	LA	131	A	C3'-C2'-C1'	5.36	105.79	101.50
26	LA	1347	A	C1'-O4'-C4'	-5.36	105.61	109.90
26	LA	1904	G	N3-C4-N9	5.36	129.22	126.00
26	LA	2112	G	C4'-C3'-C2'	-5.36	97.24	102.60
26	LA	2866	U	C2-N3-C4	5.36	130.22	127.00
2	SA	452	A	C5-C6-N1	5.36	120.38	117.70
2	SA	528	C	C6-N1-C2	-5.36	118.16	120.30
2	SA	937	A	C5'-C4'-O4'	5.36	115.53	109.10
2	SA	1213	A	C5-C6-N6	5.36	127.99	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1487	G	C2-N3-C4	-5.36	109.22	111.90
3	S1	31	U	N3-C4-O4	-5.36	115.65	119.40
25	LB	45	A	C5-C6-N6	-5.36	119.41	123.70
26	LA	105	C	N1-C1'-C2'	-5.36	106.11	112.00
26	LA	278	A	C5'-C4'-O4'	5.36	115.53	109.10
26	LA	326	G	N1-C6-O6	5.36	123.11	119.90
26	LA	748	G	P-O3'-C3'	5.36	126.13	119.70
26	LA	1000	A	P-O3'-C3'	5.36	126.13	119.70
26	LA	1051	G	N3-C4-C5	-5.36	125.92	128.60
26	LA	1066	U	C4'-C3'-C2'	-5.36	97.24	102.60
26	LA	1181	U	C2-N1-C1'	-5.36	111.27	117.70
26	LA	1369	G	N9-C4-C5	5.36	107.54	105.40
26	LA	1681	G	C4-N9-C1'	5.36	133.46	126.50
26	LA	1857	G	N3-C4-C5	5.36	131.28	128.60
26	LA	1913	A	N3-C4-C5	-5.36	123.05	126.80
26	LA	2619	C	C5'-C4'-C3'	5.36	124.57	116.00
26	LA	2831	G	N9-C1'-C2'	-5.36	106.11	112.00
2	SA	495	A	N7-C8-N9	5.36	116.48	113.80
2	SA	636	U	C6-N1-C2	5.36	124.21	121.00
2	SA	787	A	C1'-O4'-C4'	-5.36	105.62	109.90
2	SA	895	G	C5-N7-C8	5.36	106.98	104.30
2	SA	901	A	N7-C8-N9	-5.36	111.12	113.80
2	SA	1401	G	OP1-P-OP2	-5.36	111.57	119.60
2	SA	1541	U	P-O3'-C3'	5.36	126.13	119.70
26	LA	768	G	N3-C4-N9	5.36	129.21	126.00
26	LA	841	G	C4-N9-C1'	-5.36	119.54	126.50
26	LA	1139	G	C8-N9-C1'	5.36	133.96	127.00
26	LA	1634	A	C2'-C3'-O3'	5.36	122.27	113.70
26	LA	2290	G	N3-C4-C5	-5.36	125.92	128.60
26	LA	2332	C	P-O3'-C3'	5.36	126.13	119.70
26	LA	2656	U	C5'-C4'-O4'	5.36	115.53	109.10
26	LA	2661	G	N7-C8-N9	-5.36	110.42	113.10
26	LA	2702	G	N3-C4-N9	5.36	129.21	126.00
27	LD	174	ARG	NH1-CZ-NH2	-5.36	113.51	119.40
44	LF	92	HIS	CA-CB-CG	-5.36	104.50	113.60
55	LQ	1	MET	CA-CB-CG	5.36	122.40	113.30
2	SA	651	C	P-O5'-C5'	-5.35	112.33	120.90
26	LA	595	C	OP1-P-OP2	-5.35	111.57	119.60
26	LA	779	U	OP1-P-OP2	-5.35	111.57	119.60
26	LA	999	U	P-O3'-C3'	5.35	126.12	119.70
26	LA	1175	A	C4-C5-N7	5.35	113.38	110.70
26	LA	1280	G	C5-N7-C8	-5.35	101.62	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1694	C	C6-N1-C2	-5.35	118.16	120.30
26	LA	1823	G	C8-N9-C4	-5.35	104.26	106.40
26	LA	2121	G	C5'-C4'-C3'	5.35	124.57	116.00
26	LA	2524	G	C2-N3-C4	5.35	114.58	111.90
2	SA	174	A	C6-N1-C2	-5.35	115.39	118.60
2	SA	338	A	O5'-P-OP2	-5.35	100.88	105.70
2	SA	616	G	N3-C4-N9	5.35	129.21	126.00
2	SA	803	G	C2-N3-C4	5.35	114.58	111.90
2	SA	1269	A	N7-C8-N9	-5.35	111.12	113.80
2	SA	1280	A	N7-C8-N9	5.35	116.48	113.80
26	LA	484	C	C4-C5-C6	-5.35	114.72	117.40
26	LA	677	A	C5-N7-C8	5.35	106.58	103.90
26	LA	1099	G	C1'-O4'-C4'	-5.35	105.62	109.90
26	LA	1369	G	O4'-C4'-C3'	5.35	110.38	106.10
26	LA	1580	A	N1-C6-N6	5.35	121.81	118.60
26	LA	1767	G	C6-C5-N7	-5.35	127.19	130.40
26	LA	2146	C	N1-C2-N3	5.35	122.95	119.20
26	LA	2181	U	P-O5'-C5'	-5.35	112.33	120.90
26	LA	2316	G	O4'-C1'-N9	5.35	112.48	108.20
26	LA	2669	G	C5-N7-C8	-5.35	101.62	104.30
26	LA	2708	G	O4'-C1'-N9	5.35	112.48	108.20
26	LA	2711	A	OP1-P-O3'	5.35	116.97	105.20
26	LA	2779	U	C4'-C3'-C2'	-5.35	97.25	102.60
47	LJ	95	PHE	N-CA-C	5.35	125.45	111.00
56	LR	57	ALA	C-N-CA	5.35	135.08	121.70
2	SA	146	G	N3-C2-N2	-5.35	116.15	119.90
2	SA	404	G	C1'-O4'-C4'	5.35	114.18	109.90
2	SA	971	G	C6-N1-C2	5.35	128.31	125.10
2	SA	1048	G	O4'-C4'-C3'	-5.35	98.65	104.00
26	LA	414	C	N1-C2-O2	-5.35	115.69	118.90
26	LA	669	G	C2'-C3'-O3'	5.35	122.26	113.70
26	LA	1242	U	N3-C4-C5	5.35	117.81	114.60
26	LA	1303	G	C5-C6-O6	-5.35	125.39	128.60
26	LA	2146	C	N3-C4-N4	-5.35	114.25	118.00
26	LA	2217	G	O4'-C1'-N9	5.35	112.48	108.20
26	LA	2643	G	N1-C2-N3	5.35	127.11	123.90
2	SA	21	G	C8-N9-C1'	5.35	133.96	127.00
2	SA	292	G	C6-N1-C2	-5.35	121.89	125.10
2	SA	761	G	C5-N7-C8	5.35	106.97	104.30
2	SA	945	G	C4-N9-C1'	5.35	133.45	126.50
2	SA	1023	U	C2-N1-C1'	-5.35	111.28	117.70
26	LA	97	C	C2'-C3'-O3'	5.35	122.26	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	367	G	C5'-C4'-C3'	-5.35	107.44	116.00
26	LA	617	G	C8-N9-C4	-5.35	104.26	106.40
26	LA	627	A	C4'-C3'-C2'	-5.35	97.25	102.60
26	LA	682	G	N3-C2-N2	5.35	123.64	119.90
26	LA	821	A	C5-N7-C8	-5.35	101.22	103.90
26	LA	1017	G	P-O3'-C3'	-5.35	113.28	119.70
26	LA	1036	G	P-O5'-C5'	5.35	129.46	120.90
26	LA	1139	G	C5'-C4'-C3'	5.35	124.56	116.00
26	LA	1538	G	C1'-O4'-C4'	-5.35	105.62	109.90
26	LA	1832	C	C2-N3-C4	5.35	122.58	119.90
26	LA	2364	C	C4'-C3'-C2'	-5.35	97.25	102.60
26	LA	2590	A	N3-C4-C5	-5.35	123.06	126.80
26	LA	2626	C	N3-C4-C5	5.35	124.04	121.90
1	SS	68	HIS	CB-CA-C	-5.35	99.71	110.40
2	SA	350	G	N7-C8-N9	-5.35	110.43	113.10
2	SA	567	G	C2-N3-C4	5.35	114.57	111.90
2	SA	1178	G	N7-C8-N9	-5.35	110.43	113.10
2	SA	1364	U	C1'-O4'-C4'	5.35	114.18	109.90
14	SN	39	ASP	CB-CG-OD2	-5.35	113.49	118.30
26	LA	235	U	C4'-C3'-C2'	-5.35	97.25	102.60
26	LA	271	G	O3'-P-O5'	-5.35	93.84	104.00
26	LA	370	G	O3'-P-O5'	5.35	114.16	104.00
26	LA	411	G	C1'-O4'-C4'	-5.35	105.62	109.90
26	LA	452	G	O4'-C1'-N9	5.35	112.48	108.20
26	LA	650	C	C6-N1-C2	-5.35	118.16	120.30
26	LA	848	C	N3-C4-N4	5.35	121.74	118.00
26	LA	1616	A	C2-N3-C4	5.35	113.27	110.60
26	LA	2165	C	C5-C6-N1	-5.35	118.33	121.00
26	LA	2271	G	C8-N9-C1'	5.35	133.95	127.00
26	LA	2369	A	N3-C4-N9	-5.35	123.12	127.40
26	LA	2519	U	O3'-P-O5'	-5.35	93.84	104.00
26	LA	2618	G	N7-C8-N9	-5.35	110.43	113.10
26	LA	2886	A	C5-C6-N6	-5.35	119.42	123.70
50	LL	116	ARG	NH1-CZ-NH2	-5.35	113.52	119.40
56	LR	80	VAL	CA-CB-CG2	-5.35	102.88	110.90
2	SA	52	C	C5-C4-N4	5.35	123.94	120.20
2	SA	276	G	N1-C2-N3	-5.35	120.69	123.90
2	SA	755	G	C2-N3-C4	5.35	114.57	111.90
2	SA	938	A	N3-C4-C5	5.35	130.54	126.80
22	SF	16	GLU	OE1-CD-OE2	5.35	129.72	123.30
25	LB	100	G	C5'-C4'-O4'	5.35	115.52	109.10
26	LA	301	G	C4-C5-N7	5.35	112.94	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1060	U	O4'-C1'-N1	5.35	112.48	108.20
26	LA	1813	G	C8-N9-C4	-5.35	104.26	106.40
26	LA	2803	G	C6-C5-N7	5.35	133.61	130.40
27	LD	62	ARG	NE-CZ-NH1	5.35	122.97	120.30
2	SA	24	U	C2-N3-C4	-5.34	123.79	127.00
2	SA	411	A	O4'-C4'-C3'	-5.34	98.66	104.00
2	SA	1130	A	P-O3'-C3'	-5.34	113.29	119.70
2	SA	1251	A	C5-C6-N1	5.34	120.37	117.70
2	SA	1280	A	C5'-C4'-C3'	-5.34	107.45	116.00
2	SA	1432	G	N3-C4-C5	-5.34	125.93	128.60
3	S1	23	C	O4'-C1'-N1	5.34	112.47	108.20
3	S1	23	C	C2'-C3'-O3'	5.34	122.25	113.70
24	S3	407	ARG	CG-CD-NE	-5.34	100.58	111.80
25	LB	45	A	C4-C5-N7	5.34	113.37	110.70
26	LA	121	G	C6-N1-C2	-5.34	121.89	125.10
26	LA	200	U	C2-N1-C1'	-5.34	111.29	117.70
26	LA	287	G	C2-N3-C4	-5.34	109.23	111.90
26	LA	289	G	C1'-O4'-C4'	-5.34	105.62	109.90
26	LA	420	C	C5'-C4'-C3'	-5.34	107.45	116.00
26	LA	490	C	C4-C5-C6	5.34	120.07	117.40
26	LA	636	G	C1'-O4'-C4'	-5.34	105.62	109.90
26	LA	643	A	C4-C5-N7	-5.34	108.03	110.70
26	LA	737	C	N1-C2-N3	5.34	122.94	119.20
26	LA	1369	G	N3-C4-C5	-5.34	125.93	128.60
26	LA	1482	G	P-O3'-C3'	-5.34	113.29	119.70
26	LA	1708	C	N3-C2-O2	-5.34	118.16	121.90
26	LA	1720	U	N3-C4-O4	-5.34	115.66	119.40
26	LA	1982	U	C2-N3-C4	5.34	130.21	127.00
26	LA	2024	G	C5'-C4'-O4'	5.34	115.51	109.10
26	LA	2063	C	C4'-C3'-C2'	-5.34	97.25	102.60
37	LC	222	VAL	C-N-CA	5.34	135.06	121.70
56	LR	13	LYS	N-CA-CB	5.34	120.22	110.60
2	SA	18	C	C6-N1-C2	-5.34	118.16	120.30
2	SA	1519	A	O4'-C1'-N9	5.34	112.47	108.20
4	S2	44	A	O4'-C1'-C2'	5.34	112.41	107.60
26	LA	56	A	O4'-C1'-N9	5.34	112.47	108.20
26	LA	875	G	N3-C4-C5	-5.34	125.93	128.60
26	LA	1788	C	P-O5'-C5'	-5.34	112.35	120.90
26	LA	2018	G	C5-N7-C8	-5.34	101.63	104.30
26	LA	2205	A	N7-C8-N9	-5.34	111.13	113.80
26	LA	2224	G	N1-C6-O6	-5.34	116.69	119.90
26	LA	2274	A	O3'-P-O5'	-5.34	93.85	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2752	C	N1-C2-O2	-5.34	115.69	118.90
2	SA	146	G	C4'-C3'-C2'	-5.34	97.26	102.60
2	SA	202	G	C5-N7-C8	-5.34	101.63	104.30
2	SA	209	U	N1-C2-N3	-5.34	111.69	114.90
2	SA	237	G	N7-C8-N9	-5.34	110.43	113.10
2	SA	546	A	C8-N9-C4	-5.34	103.66	105.80
2	SA	853	C	C4-C5-C6	5.34	120.07	117.40
2	SA	912	C	O4'-C1'-N1	5.34	112.47	108.20
2	SA	1467	C	N1-C2-O2	-5.34	115.69	118.90
2	SA	1508	A	C3'-C2'-C1'	-5.34	97.23	101.50
17	SQ	11	VAL	CA-CB-CG2	-5.34	102.89	110.90
25	LB	58	A	C5-C6-N1	-5.34	115.03	117.70
26	LA	203	A	C5-N7-C8	-5.34	101.23	103.90
26	LA	422	A	C5-N7-C8	5.34	106.57	103.90
26	LA	497	A	C5-N7-C8	-5.34	101.23	103.90
26	LA	968	C	C4'-C3'-C2'	-5.34	97.26	102.60
26	LA	994	C	C3'-C2'-C1'	5.34	105.77	101.50
26	LA	1220	G	C3'-C2'-C1'	5.34	105.77	101.50
26	LA	1393	A	C5-C6-N6	-5.34	119.43	123.70
26	LA	1949	G	O3'-P-O5'	5.34	114.15	104.00
26	LA	2028	U	N3-C2-O2	-5.34	118.46	122.20
26	LA	2301	C	C2'-C3'-O3'	5.34	122.25	113.70
26	LA	2593	U	OP1-P-OP2	-5.34	111.59	119.60
38	LE	170	VAL	CA-CB-CG1	5.34	118.91	110.90
38	LE	188	LEU	CB-CG-CD2	-5.34	101.92	111.00
2	SA	11	G	C4'-C3'-C2'	-5.34	97.26	102.60
2	SA	98	A	C4-N9-C1'	-5.34	116.69	126.30
2	SA	786	G	C4'-C3'-C2'	-5.34	97.26	102.60
2	SA	1363	A	OP2-P-O3'	5.34	116.94	105.20
26	LA	153	U	C2-N3-C4	-5.34	123.80	127.00
26	LA	178	G	P-O5'-C5'	-5.34	112.36	120.90
26	LA	455	C	C5-C4-N4	5.34	123.94	120.20
26	LA	869	G	P-O5'-C5'	5.34	129.44	120.90
26	LA	912	C	N3-C2-O2	-5.34	118.16	121.90
26	LA	1081	U	C4-C5-C6	-5.34	116.50	119.70
26	LA	1136	G	C6-N1-C2	-5.34	121.90	125.10
26	LA	1794	A	C6-N1-C2	5.34	121.80	118.60
26	LA	2318	G	OP1-P-OP2	-5.34	111.59	119.60
26	LA	2321	U	C1'-O4'-C4'	5.34	114.17	109.90
26	LA	2573	C	C4'-C3'-C2'	-5.34	97.26	102.60
26	LA	2788	C	C2-N1-C1'	5.34	124.67	118.80
46	LH	121	THR	CA-CB-CG2	5.34	119.87	112.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	264	C	C4'-C3'-C2'	-5.34	97.26	102.60
26	LA	263	G	P-O5'-C5'	5.34	129.44	120.90
26	LA	656	G	C4-N9-C1'	5.34	133.44	126.50
26	LA	985	C	C6-N1-C1'	-5.34	114.39	120.80
26	LA	1410	G	N3-C4-N9	5.34	129.20	126.00
26	LA	1439	A	C8-N9-C4	5.34	107.94	105.80
26	LA	1547	C	P-O5'-C5'	5.34	129.44	120.90
26	LA	1768	C	C4-C5-C6	5.34	120.07	117.40
26	LA	2025	C	O5'-C5'-C4'	5.34	121.84	111.70
2	SA	722	G	N1-C6-O6	-5.34	116.70	119.90
2	SA	751	U	N1-C2-O2	-5.34	119.06	122.80
2	SA	836	G	N1-C6-O6	-5.34	116.70	119.90
3	S1	45	G	N3-C4-C5	-5.34	125.93	128.60
25	LB	20	G	C4-N9-C1'	-5.34	119.56	126.50
25	LB	48	U	C5'-C4'-C3'	5.34	124.54	116.00
26	LA	39	G	C5-C6-O6	5.34	131.80	128.60
26	LA	256	A	C2-N3-C4	-5.34	107.93	110.60
26	LA	418	C	C2-N3-C4	5.34	122.57	119.90
26	LA	1471	G	N7-C8-N9	-5.34	110.43	113.10
26	LA	2033	A	C2'-C3'-O3'	5.34	122.24	113.70
26	LA	2429	G	C3'-C2'-C1'	5.34	105.77	101.50
2	SA	577	G	C8-N9-C4	-5.33	104.27	106.40
2	SA	1353	G	O4'-C1'-N9	5.33	112.47	108.20
2	SA	1407	C	N1-C2-O2	-5.33	115.70	118.90
26	LA	124	G	N1-C2-N3	5.33	127.10	123.90
26	LA	230	G	N3-C4-C5	5.33	131.27	128.60
26	LA	1120	G	P-O3'-C3'	-5.33	113.30	119.70
26	LA	1224	U	N1-C2-O2	-5.33	119.07	122.80
26	LA	1397	U	N1-C2-O2	-5.33	119.06	122.80
26	LA	1556	C	P-O5'-C5'	5.33	129.44	120.90
26	LA	1772	A	P-O3'-C3'	-5.33	113.30	119.70
26	LA	2610	C	O3'-P-O5'	-5.33	93.86	104.00
26	LA	2844	G	N7-C8-N9	5.33	115.77	113.10
38	LE	80	TRP	CH2-CZ2-CE2	5.33	122.73	117.40
2	SA	39	G	C6-N1-C2	-5.33	121.90	125.10
2	SA	173	U	C2-N3-C4	5.33	130.20	127.00
2	SA	231	U	C4'-C3'-C2'	-5.33	97.27	102.60
2	SA	378	G	C3'-C2'-C1'	-5.33	97.23	101.50
2	SA	898	G	C8-N9-C1'	5.33	133.94	127.00
2	SA	913	A	O4'-C1'-C2'	-5.33	100.47	105.80
2	SA	1280	A	O4'-C1'-C2'	5.33	112.40	107.60
2	SA	1284	C	N1-C2-O2	5.33	122.10	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1338	G	N1-C6-O6	-5.33	116.70	119.90
3	S1	21	U	C5'-C4'-C3'	5.33	124.53	116.00
4	S2	5	G	N3-C4-C5	5.33	131.27	128.60
4	S2	18	U	O3'-P-O5'	-5.33	93.87	104.00
11	SK	65	ALA	O-C-N	-5.33	114.17	122.70
26	LA	924	G	C4-C5-N7	-5.33	108.67	110.80
26	LA	1044	C	P-O5'-C5'	-5.33	112.36	120.90
26	LA	1073	A	O5'-P-OP1	-5.33	100.90	105.70
26	LA	1453	A	P-O5'-C5'	5.33	129.43	120.90
26	LA	1627	G	N3-C2-N2	5.33	123.63	119.90
26	LA	1628	G	P-O3'-C3'	-5.33	113.30	119.70
26	LA	1647	U	C5-C6-N1	5.33	125.37	122.70
26	LA	1711	A	N3-C4-N9	5.33	131.67	127.40
26	LA	1855	U	C6-N1-C2	-5.33	117.80	121.00
26	LA	2011	U	C4-C5-C6	-5.33	116.50	119.70
26	LA	2752	C	O3'-P-O5'	5.33	114.13	104.00
2	SA	397	A	N3-C4-C5	5.33	130.53	126.80
2	SA	430	A	C4-C5-N7	5.33	113.36	110.70
2	SA	674	G	N3-C4-C5	-5.33	125.93	128.60
2	SA	1185	G	C5-C6-O6	-5.33	125.40	128.60
2	SA	1226	C	C6-N1-C1'	-5.33	114.40	120.80
2	SA	1356	G	O4'-C1'-N9	5.33	112.47	108.20
2	SA	1366	C	O4'-C1'-N1	5.33	112.46	108.20
3	S1	20	G	C4-C5-C6	-5.33	115.60	118.80
14	SN	13	VAL	CG1-CB-CG2	5.33	119.43	110.90
15	SO	88	ARG	NE-CZ-NH2	5.33	122.97	120.30
26	LA	602	A	OP1-P-OP2	-5.33	111.60	119.60
26	LA	655	A	C6-N1-C2	-5.33	115.40	118.60
26	LA	767	U	OP2-P-O3'	5.33	116.93	105.20
26	LA	892	A	C5-C6-N6	5.33	127.97	123.70
26	LA	1545	A	N1-C6-N6	-5.33	115.40	118.60
26	LA	1893	C	P-O3'-C3'	5.33	126.10	119.70
26	LA	1968	G	P-O5'-C5'	-5.33	112.37	120.90
26	LA	2271	G	P-O5'-C5'	-5.33	112.37	120.90
26	LA	2381	A	N9-C4-C5	5.33	107.93	105.80
26	LA	2448	A	C5'-C4'-C3'	5.33	124.53	116.00
30	LW	38	ILE	O-C-N	-5.33	114.17	122.70
2	SA	194	C	C4-C5-C6	-5.33	114.73	117.40
2	SA	811	C	C5'-C4'-C3'	5.33	124.53	116.00
2	SA	1394	A	C8-N9-C1'	-5.33	118.11	127.70
24	S3	584	ASP	CB-CG-OD1	-5.33	113.50	118.30
25	LB	93	C	C4'-C3'-C2'	-5.33	97.27	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	458	G	N3-C2-N2	5.33	123.63	119.90
26	LA	748	G	P-O5'-C5'	-5.33	112.37	120.90
26	LA	1015	U	C2-N1-C1'	-5.33	111.30	117.70
26	LA	1256	G	N7-C8-N9	-5.33	110.44	113.10
26	LA	1776	G	P-O3'-C3'	5.33	126.10	119.70
26	LA	1916	A	C6-N1-C2	5.33	121.80	118.60
26	LA	2163	A	C3'-C2'-C1'	-5.33	97.24	101.50
26	LA	2174	C	C5-C6-N1	-5.33	118.33	121.00
26	LA	2308	G	C6-C5-N7	-5.33	127.20	130.40
26	LA	2391	G	C5'-C4'-O4'	5.33	115.50	109.10
2	SA	166	U	C5'-C4'-O4'	5.33	115.49	109.10
2	SA	473	U	C5'-C4'-O4'	5.33	115.49	109.10
2	SA	765	G	OP1-P-O3'	5.33	116.92	105.20
2	SA	958	A	C6-C5-N7	-5.33	128.57	132.30
3	S1	38	G	P-O3'-C3'	5.33	126.09	119.70
26	LA	204	A	OP1-P-OP2	-5.33	111.61	119.60
26	LA	500	G	C2-N3-C4	5.33	114.56	111.90
26	LA	510	C	O4'-C1'-N1	5.33	112.46	108.20
26	LA	1397	U	C1'-O4'-C4'	-5.33	105.64	109.90
26	LA	1515	A	N3-C4-N9	5.33	131.66	127.40
26	LA	1553	A	N9-C1'-C2'	-5.33	106.14	112.00
26	LA	1653	G	P-O5'-C5'	5.33	129.43	120.90
26	LA	1826	G	C4'-C3'-C2'	-5.33	97.27	102.60
26	LA	2249	U	C5'-C4'-C3'	5.33	124.52	116.00
26	LA	2457	U	O4'-C1'-C2'	5.33	112.39	107.60
32	LY	76	ARG	NH1-CZ-NH2	-5.33	113.54	119.40
38	LE	163	GLY	C-N-CA	5.33	135.02	121.70
44	LF	102	ARG	CG-CD-NE	-5.33	100.61	111.80
54	LM	61	VAL	O-C-N	-5.33	114.18	122.70
2	SA	49	U	N3-C4-O4	5.33	123.13	119.40
2	SA	124	C	N3-C4-C5	-5.33	119.77	121.90
2	SA	324	G	C6-N1-C2	-5.33	121.90	125.10
2	SA	1207	G	C6-N1-C2	5.33	128.30	125.10
4	S2	64	G	C4-C5-N7	5.33	112.93	110.80
26	LA	27	G	N9-C4-C5	5.33	107.53	105.40
26	LA	759	G	C5'-C4'-O4'	5.33	115.49	109.10
26	LA	797	G	C4-C5-N7	-5.33	108.67	110.80
26	LA	809	G	C5'-C4'-C3'	5.33	124.52	116.00
26	LA	876	C	O5'-P-OP2	5.33	117.09	110.70
26	LA	1870	C	C2-N3-C4	-5.33	117.24	119.90
26	LA	2360	G	OP1-P-OP2	-5.33	111.61	119.60
26	LA	2401	U	O4'-C1'-C2'	-5.33	100.47	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	L0	50	VAL	CG1-CB-CG2	-5.33	102.38	110.90
2	SA	45	G	C1'-O4'-C4'	-5.33	105.64	109.90
2	SA	208	U	N1-C2-O2	-5.33	119.07	122.80
2	SA	209	U	OP2-P-O3'	5.33	116.92	105.20
2	SA	743	A	C2-N3-C4	5.33	113.26	110.60
2	SA	822	U	C6-N1-C1'	5.33	128.66	121.20
2	SA	1358	U	C1'-O4'-C4'	5.33	114.16	109.90
4	S2	10	G	N1-C2-N3	-5.33	120.70	123.90
26	LA	100	U	C2-N3-C4	-5.33	123.80	127.00
26	LA	414	C	P-O5'-C5'	-5.33	112.38	120.90
26	LA	752	A	N1-C2-N3	-5.33	126.64	129.30
26	LA	890	C	C5'-C4'-C3'	5.33	124.52	116.00
26	LA	970	U	N3-C4-O4	-5.33	115.67	119.40
26	LA	1107	G	C5-C6-N1	5.33	114.16	111.50
26	LA	1136	G	C5-C6-N1	5.33	114.16	111.50
26	LA	1142	A	C5-N7-C8	-5.33	101.24	103.90
26	LA	1272	A	N1-C2-N3	-5.33	126.64	129.30
26	LA	1340	U	N3-C2-O2	-5.33	118.47	122.20
26	LA	1470	A	C2-N3-C4	-5.33	107.94	110.60
26	LA	1844	C	C2-N3-C4	5.33	122.56	119.90
26	LA	2376	A	C8-N9-C1'	-5.33	118.11	127.70
46	LH	167	VAL	CA-CB-CG1	5.33	118.89	110.90
54	LM	107	LEU	C-N-CA	5.33	135.01	121.70
2	SA	344	A	C4-C5-C6	5.32	119.66	117.00
2	SA	385	C	C4'-C3'-C2'	-5.32	97.28	102.60
2	SA	442	G	C8-N9-C4	5.32	108.53	106.40
2	SA	586	C	O4'-C1'-N1	5.32	112.46	108.20
2	SA	725	G	N3-C4-N9	-5.32	122.81	126.00
2	SA	950	U	O4'-C1'-N1	5.32	112.46	108.20
7	SG	150	PHE	CB-CG-CD1	5.32	124.53	120.80
26	LA	18	U	C4-C5-C6	-5.32	116.51	119.70
26	LA	269	C	P-O5'-C5'	5.32	129.42	120.90
26	LA	503	A	O4'-C1'-N9	5.32	112.46	108.20
26	LA	579	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	695	G	C3'-C2'-C1'	5.32	105.76	101.50
26	LA	813	U	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	1112	G	C5-N7-C8	-5.32	101.64	104.30
26	LA	1271	G	C4-N9-C1'	-5.32	119.58	126.50
26	LA	1378	A	C5-C6-N6	5.32	127.96	123.70
26	LA	1445	G	P-O5'-C5'	5.32	129.42	120.90
26	LA	1702	G	C6-N1-C2	-5.32	121.91	125.10
26	LA	1833	C	C4-C5-C6	5.32	120.06	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2059	A	N1-C6-N6	-5.32	115.41	118.60
26	LA	2389	G	O4'-C1'-C2'	5.32	112.39	107.60
26	LA	2400	G	C4-N9-C1'	-5.32	119.58	126.50
26	LA	2542	A	N7-C8-N9	5.32	116.46	113.80
26	LA	2839	G	N3-C2-N2	5.32	123.63	119.90
54	LM	94	PRO	N-CA-C	5.32	125.94	112.10
2	SA	117	G	C6-C5-N7	-5.32	127.21	130.40
2	SA	131	A	C5'-C4'-C3'	-5.32	107.49	116.00
2	SA	358	U	O4'-C1'-N1	5.32	112.46	108.20
2	SA	438	U	N1-C2-O2	5.32	126.53	122.80
2	SA	466	A	C1'-O4'-C4'	5.32	114.16	109.90
2	SA	724	G	O4'-C4'-C3'	5.32	110.36	106.10
26	LA	768	G	OP1-P-OP2	-5.32	111.62	119.60
26	LA	1040	A	C4-C5-C6	-5.32	114.34	117.00
26	LA	1459	G	N3-C4-C5	-5.32	125.94	128.60
26	LA	1829	A	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	1948	G	N9-C4-C5	5.32	107.53	105.40
26	LA	1962	C	C5'-C4'-O4'	5.32	115.49	109.10
26	LA	2011	U	O4'-C1'-N1	5.32	112.46	108.20
26	LA	2281	A	C4-C5-N7	-5.32	108.04	110.70
2	SA	115	G	C4-C5-N7	-5.32	108.67	110.80
2	SA	202	G	C3'-C2'-C1'	5.32	105.76	101.50
2	SA	248	C	N1-C1'-C2'	-5.32	106.15	112.00
2	SA	351	G	N9-C4-C5	-5.32	103.27	105.40
2	SA	462	G	C4-C5-N7	-5.32	108.67	110.80
2	SA	835	U	N3-C4-O4	-5.32	115.67	119.40
2	SA	881	G	C4-C5-N7	-5.32	108.67	110.80
2	SA	949	A	O3'-P-O5'	5.32	114.11	104.00
2	SA	1507	A	N1-C2-N3	-5.32	126.64	129.30
13	SM	67	ASP	CB-CG-OD2	-5.32	113.51	118.30
24	S3	368	ASN	N-CA-CB	5.32	120.18	110.60
25	LB	13	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	48	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	87	U	P-O5'-C5'	5.32	129.41	120.90
26	LA	307	G	O4'-C1'-N9	5.32	112.46	108.20
26	LA	540	C	C5-C6-N1	-5.32	118.34	121.00
26	LA	585	G	OP1-P-OP2	-5.32	111.62	119.60
26	LA	701	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	LA	812	C	C6-N1-C2	-5.32	118.17	120.30
26	LA	835	C	N1-C1'-C2'	-5.32	106.15	112.00
26	LA	1030	C	O4'-C1'-N1	5.32	112.46	108.20
26	LA	2338	C	C5-C4-N4	5.32	123.92	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2429	G	P-O3'-C3'	-5.32	113.32	119.70
26	LA	2613	U	O4'-C1'-N1	5.32	112.46	108.20
49	LK	7	TYR	CG-CD2-CE2	5.32	125.56	121.30
50	LL	122	LEU	O-C-N	-5.32	114.19	122.70
2	SA	127	G	C4-N9-C1'	-5.32	119.59	126.50
26	LA	2381	A	O4'-C1'-N9	5.32	112.45	108.20
26	LA	2505	G	C6-N1-C2	5.32	128.29	125.10
27	LD	245	THR	N-CA-CB	5.32	120.41	110.30
48	LN	76	GLU	OE1-CD-OE2	-5.32	116.92	123.30
2	SA	195	A	OP2-P-O3'	5.32	116.90	105.20
2	SA	744	C	C6-N1-C2	5.32	122.43	120.30
2	SA	815	A	C1'-O4'-C4'	-5.32	105.65	109.90
2	SA	861	G	N1-C2-N3	-5.32	120.71	123.90
2	SA	1266	G	C5'-C4'-O4'	5.32	115.48	109.10
15	SO	62	ARG	CG-CD-NE	-5.32	100.63	111.80
25	LB	109	A	C3'-C2'-C1'	5.32	105.75	101.50
26	LA	310	A	C5-C6-N1	5.32	120.36	117.70
26	LA	370	G	O4'-C1'-C2'	5.32	112.39	107.60
26	LA	760	G	N9-C4-C5	5.32	107.53	105.40
26	LA	1197	G	O4'-C1'-N9	5.32	112.45	108.20
26	LA	1625	C	N3-C4-C5	-5.32	119.77	121.90
26	LA	2232	C	N3-C2-O2	-5.32	118.18	121.90
26	LA	2253	G	C6-C5-N7	5.32	133.59	130.40
26	LA	2645	G	C5-N7-C8	-5.32	101.64	104.30
27	LD	136	VAL	CA-CB-CG1	5.32	118.88	110.90
2	SA	370	C	C6-N1-C2	-5.32	118.17	120.30
2	SA	477	C	C6-N1-C2	5.32	122.43	120.30
2	SA	593	U	C1'-O4'-C4'	5.32	114.15	109.90
2	SA	1101	A	C5'-C4'-C3'	5.32	124.50	116.00
2	SA	1133	G	O4'-C1'-N9	5.32	112.45	108.20
10	SJ	61	ALA	N-CA-CB	-5.32	102.66	110.10
26	LA	58	G	O4'-C1'-N9	-5.32	103.95	108.20
26	LA	245	G	N3-C4-C5	-5.32	125.94	128.60
26	LA	837	C	C5-C6-N1	-5.32	118.34	121.00
26	LA	851	C	O4'-C1'-N1	5.32	112.45	108.20
26	LA	980	A	N3-C4-C5	-5.32	123.08	126.80
26	LA	1097	U	O4'-C1'-C2'	-5.32	100.48	105.80
26	LA	1558	C	N1-C2-O2	-5.32	115.71	118.90
26	LA	1595	C	C3'-C2'-C1'	-5.32	97.25	101.50
26	LA	2183	A	C8-N9-C4	-5.32	103.67	105.80
26	LA	2189	U	P-O3'-C3'	-5.32	113.32	119.70
26	LA	2535	G	C6-C5-N7	-5.32	127.21	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	LT	5	PHE	CB-CG-CD2	5.32	124.52	120.80
2	SA	171	A	C5'-C4'-O4'	5.31	115.48	109.10
2	SA	359	G	C5-C6-O6	5.31	131.79	128.60
2	SA	478	A	N7-C8-N9	-5.31	111.14	113.80
2	SA	595	A	N9-C4-C5	-5.31	103.67	105.80
2	SA	819	A	C5-N7-C8	-5.31	101.24	103.90
2	SA	928	G	N1-C2-N2	-5.31	111.42	116.20
2	SA	1198	G	C4-N9-C1'	-5.31	119.59	126.50
25	LB	16	G	C6-C5-N7	-5.31	127.21	130.40
26	LA	148	U	C5-C4-O4	-5.31	122.71	125.90
26	LA	631	A	C8-N9-C4	5.31	107.93	105.80
26	LA	976	G	N9-C4-C5	-5.31	103.28	105.40
26	LA	1041	G	C6-N1-C2	-5.31	121.91	125.10
26	LA	1686	C	O4'-C1'-N1	5.31	112.45	108.20
26	LA	2084	C	N3-C4-C5	-5.31	119.77	121.90
26	LA	2241	A	P-O3'-C3'	-5.31	113.32	119.70
26	LA	2431	U	C4-C5-C6	5.31	122.89	119.70
32	LY	44	PHE	CD1-CE1-CZ	-5.31	113.72	120.10
45	LG	143	ASP	CB-CG-OD2	5.31	123.08	118.30
46	LH	2	ARG	N-CA-C	5.31	125.35	111.00
50	LL	60	ASP	CB-CG-OD2	5.31	123.08	118.30
2	SA	360	G	O4'-C1'-N9	5.31	112.45	108.20
2	SA	482	A	P-O3'-C3'	5.31	126.08	119.70
2	SA	602	A	P-O5'-C5'	-5.31	112.40	120.90
2	SA	1133	G	C4'-C3'-C2'	-5.31	97.29	102.60
12	SL	60	PHE	CB-CG-CD1	5.31	124.52	120.80
26	LA	73	A	C4'-C3'-C2'	-5.31	97.29	102.60
26	LA	296	U	C5'-C4'-C3'	-5.31	107.50	116.00
26	LA	777	G	N3-C2-N2	-5.31	116.18	119.90
26	LA	906	U	N3-C4-O4	-5.31	115.68	119.40
26	LA	1107	G	N3-C2-N2	5.31	123.62	119.90
26	LA	1427	A	P-O5'-C5'	5.31	129.40	120.90
26	LA	1738	G	C6-C5-N7	5.31	133.59	130.40
26	LA	1804	C	C6-N1-C1'	5.31	127.17	120.80
26	LA	1831	G	C5'-C4'-O4'	5.31	115.47	109.10
26	LA	2741	A	C4'-C3'-C2'	-5.31	97.29	102.60
44	LF	170	ARG	NE-CZ-NH2	5.31	122.96	120.30
47	LJ	26	VAL	CA-CB-CG1	-5.31	102.93	110.90
2	SA	159	G	N7-C8-N9	-5.31	110.44	113.10
2	SA	1391	U	C2-N1-C1'	-5.31	111.33	117.70
3	S1	59	A	O4'-C1'-N9	5.31	112.45	108.20
24	S3	495	GLN	C-N-CA	5.31	134.98	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	107	G	OP1-P-OP2	-5.31	111.63	119.60
26	LA	847	U	C6-N1-C1'	5.31	128.64	121.20
26	LA	1093	G	C8-N9-C1'	-5.31	120.10	127.00
26	LA	1542	U	C5'-C4'-O4'	5.31	115.47	109.10
26	LA	2595	G	C6-N1-C2	-5.31	121.91	125.10
26	LA	2820	A	O4'-C1'-N9	5.31	112.45	108.20
2	SA	332	G	N3-C4-N9	5.31	129.19	126.00
2	SA	408	A	P-O5'-C5'	-5.31	112.41	120.90
2	SA	978	A	C2'-C3'-O3'	5.31	122.19	113.70
2	SA	996	A	N7-C8-N9	5.31	116.45	113.80
2	SA	1146	A	P-O3'-C3'	5.31	126.07	119.70
2	SA	1285	A	N9-C4-C5	5.31	107.92	105.80
2	SA	1485	U	N3-C2-O2	-5.31	118.48	122.20
10	SJ	9	ARG	NE-CZ-NH2	-5.31	117.64	120.30
26	LA	506	G	P-O3'-C3'	5.31	126.07	119.70
26	LA	536	G	N1-C6-O6	5.31	123.09	119.90
26	LA	537	G	C8-N9-C4	5.31	108.52	106.40
26	LA	647	G	P-O5'-C5'	-5.31	112.41	120.90
26	LA	1434	A	C5-C6-N1	5.31	120.36	117.70
26	LA	1910	G	O4'-C4'-C3'	-5.31	98.69	104.00
26	LA	1921	G	C5-C6-O6	5.31	131.78	128.60
26	LA	2055	C	C5'-C4'-O4'	5.31	115.47	109.10
26	LA	2079	U	C2-N3-C4	-5.31	123.81	127.00
26	LA	2132	U	OP1-P-OP2	-5.31	111.64	119.60
26	LA	2266	A	C5'-C4'-C3'	-5.31	107.50	116.00
26	LA	2560	A	C5'-C4'-O4'	5.31	115.47	109.10
27	LD	175	LEU	CB-CG-CD1	-5.31	101.97	111.00
2	SA	141	G	C2'-C3'-O3'	5.31	122.19	113.70
2	SA	381	C	P-O3'-C3'	-5.31	113.33	119.70
2	SA	916	U	N3-C4-C5	-5.31	111.42	114.60
2	SA	1253	G	C4-N9-C1'	-5.31	119.60	126.50
2	SA	1361	G	N3-C4-N9	5.31	129.18	126.00
25	LB	45	A	C4'-C3'-C2'	-5.31	97.29	102.60
25	LB	68	C	C5-C6-N1	5.31	123.65	121.00
26	LA	60	G	N7-C8-N9	-5.31	110.45	113.10
26	LA	96	C	OP1-P-OP2	-5.31	111.64	119.60
26	LA	143	C	C3'-C2'-C1'	-5.31	97.25	101.50
26	LA	328	U	C1'-O4'-C4'	-5.31	105.65	109.90
26	LA	578	G	C4-C5-N7	5.31	112.92	110.80
26	LA	621	A	C5-N7-C8	5.31	106.55	103.90
26	LA	891	G	N1-C6-O6	5.31	123.08	119.90
26	LA	972	A	C5-C6-N1	5.31	120.35	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1100	C	N1-C2-N3	5.31	122.92	119.20
26	LA	1233	C	C2-N3-C4	5.31	122.55	119.90
26	LA	1235	G	C4'-C3'-C2'	-5.31	97.29	102.60
26	LA	1382	G	C1'-O4'-C4'	-5.31	105.65	109.90
26	LA	1593	A	N9-C4-C5	5.31	107.92	105.80
26	LA	2022	U	O4'-C1'-N1	5.31	112.45	108.20
26	LA	2026	U	C2-N3-C4	-5.31	123.81	127.00
26	LA	2050	C	O4'-C1'-C2'	5.31	112.38	107.60
26	LA	2184	A	C5'-C4'-O4'	5.31	115.47	109.10
26	LA	2412	A	N1-C2-N3	-5.31	126.65	129.30
26	LA	2502	G	C4-N9-C1'	5.31	133.40	126.50
45	LG	86	CYS	CB-CA-C	-5.31	99.78	110.40
50	LL	5	THR	O-C-N	-5.31	114.21	122.70
2	SA	119	A	C4-C5-N7	5.31	113.35	110.70
2	SA	1139	G	C3'-C2'-C1'	-5.31	97.25	101.50
2	SA	1223	C	O5'-C5'-C4'	5.31	121.78	111.70
2	SA	1465	A	O4'-C4'-C3'	-5.31	98.69	104.00
2	SA	1533	C	O5'-P-OP1	5.31	117.07	110.70
3	S1	53	G	N1-C2-N2	5.31	120.97	116.20
24	S3	352	VAL	CA-CB-CG2	-5.31	102.94	110.90
26	LA	29	U	N1-C2-N3	-5.31	111.72	114.90
26	LA	833	A	C8-N9-C1'	-5.31	118.15	127.70
26	LA	1103	A	C6-N1-C2	5.31	121.78	118.60
26	LA	2239	G	C4-C5-N7	-5.31	108.68	110.80
26	LA	2474	U	C4'-C3'-C2'	-5.31	97.29	102.60
26	LA	2620	C	C3'-C2'-C1'	5.31	105.75	101.50
2	SA	55	A	P-O3'-C3'	-5.30	113.33	119.70
2	SA	525	C	N1-C2-N3	5.30	122.91	119.20
2	SA	637	C	C2-N1-C1'	5.30	124.64	118.80
2	SA	843	U	C3'-C2'-C1'	5.30	105.74	101.50
2	SA	1079	G	N7-C8-N9	-5.30	110.45	113.10
18	SB	103	TRP	CE3-CZ3-CH2	-5.30	115.36	121.20
20	SD	193	ASP	CB-CG-OD1	5.30	123.07	118.30
25	LB	86	G	OP1-P-OP2	-5.30	111.64	119.60
26	LA	65	U	N1-C2-O2	-5.30	119.09	122.80
26	LA	126	A	P-O5'-C5'	5.30	129.39	120.90
26	LA	352	A	N9-C4-C5	-5.30	103.68	105.80
26	LA	668	A	O4'-C1'-C2'	5.30	112.37	107.60
26	LA	1243	C	C2-N3-C4	-5.30	117.25	119.90
26	LA	1243	C	C5'-C4'-O4'	5.30	115.47	109.10
26	LA	1252	G	O4'-C1'-N9	5.30	112.44	108.20
26	LA	1449	G	O4'-C1'-C2'	5.30	112.37	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1685	C	N3-C4-C5	-5.30	119.78	121.90
26	LA	1688	U	C5-C6-N1	-5.30	120.05	122.70
26	LA	1745	A	P-O5'-C5'	5.30	129.39	120.90
26	LA	1873	G	N1-C2-N2	-5.30	111.43	116.20
26	LA	2050	C	C2-N3-C4	-5.30	117.25	119.90
2	SA	303	A	C8-N9-C4	-5.30	103.68	105.80
2	SA	828	U	C4'-C3'-C2'	-5.30	97.30	102.60
2	SA	1509	C	N3-C2-O2	-5.30	118.19	121.90
12	SL	30	ARG	CA-C-N	5.30	126.81	116.20
20	SD	97	LEU	CB-CA-C	-5.30	100.12	110.20
26	LA	106	C	C4'-C3'-C2'	5.30	107.90	102.60
26	LA	152	A	C5'-C4'-O4'	5.30	115.46	109.10
26	LA	949	G	C4'-C3'-C2'	-5.30	97.30	102.60
26	LA	2132	U	C5'-C4'-O4'	5.30	115.46	109.10
2	SA	90	C	C2-N3-C4	5.30	122.55	119.90
2	SA	158	G	N9-C4-C5	5.30	107.52	105.40
2	SA	704	A	C2-N3-C4	-5.30	107.95	110.60
2	SA	1216	A	C1'-O4'-C4'	-5.30	105.66	109.90
7	SG	126	ALA	N-CA-CB	-5.30	102.68	110.10
25	LB	79	G	C1'-O4'-C4'	-5.30	105.66	109.90
26	LA	86	G	C8-N9-C1'	5.30	133.89	127.00
26	LA	814	C	C5'-C4'-O4'	5.30	115.46	109.10
26	LA	1494	A	O4'-C1'-N9	5.30	112.44	108.20
26	LA	1555	G	C5'-C4'-O4'	5.30	115.46	109.10
26	LA	1639	C	C5-C6-N1	5.30	123.65	121.00
26	LA	1770	G	N1-C6-O6	5.30	123.08	119.90
26	LA	1816	C	C6-N1-C1'	-5.30	114.44	120.80
26	LA	1818	U	C5-C6-N1	-5.30	120.05	122.70
26	LA	1956	U	N3-C2-O2	-5.30	118.49	122.20
26	LA	2255	G	C8-N9-C1'	5.30	133.89	127.00
26	LA	2651	C	OP1-P-OP2	-5.30	111.65	119.60
26	LA	2677	G	O4'-C1'-N9	5.30	112.44	108.20
26	LA	2741	A	C6-N1-C2	-5.30	115.42	118.60
31	LX	65	VAL	CA-CB-CG2	-5.30	102.95	110.90
2	SA	624	C	O4'-C1'-C2'	5.30	112.37	107.60
2	SA	1033	G	C6-N1-C2	-5.30	121.92	125.10
25	LB	53	A	C5-C6-N6	5.30	127.94	123.70
26	LA	126	A	O5'-C5'-C4'	5.30	121.77	111.70
26	LA	180	G	C6-N1-C2	-5.30	121.92	125.10
26	LA	241	A	C4-C5-C6	5.30	119.65	117.00
26	LA	830	G	P-O5'-C5'	5.30	129.38	120.90
26	LA	1034	G	P-O5'-C5'	-5.30	112.42	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1127	A	C1'-O4'-C4'	-5.30	105.66	109.90
26	LA	1194	A	C4'-C3'-C2'	-5.30	97.30	102.60
26	LA	1296	G	C4-C5-N7	5.30	112.92	110.80
26	LA	1301	A	C5'-C4'-O4'	5.30	115.46	109.10
26	LA	1545	A	C6-N1-C2	-5.30	115.42	118.60
26	LA	1714	U	O4'-C1'-N1	5.30	112.44	108.20
26	LA	1865	U	O4'-C1'-N1	5.30	112.44	108.20
26	LA	2073	C	C4'-C3'-C2'	-5.30	97.30	102.60
26	LA	2234	G	C1'-O4'-C4'	-5.30	105.66	109.90
26	LA	2452	C	C4'-C3'-C2'	-5.30	97.30	102.60
26	LA	2572	A	C8-N9-C1'	-5.30	118.16	127.70
26	LA	2781	A	O4'-C4'-C3'	5.30	110.34	106.10
29	LV	54	GLU	O-C-N	-5.30	114.22	122.70
38	LE	163	GLY	N-CA-C	5.30	126.35	113.10
48	LN	75	ALA	N-CA-CB	5.30	117.52	110.10
2	SA	45	G	N7-C8-N9	-5.30	110.45	113.10
2	SA	425	G	C5'-C4'-O4'	5.30	115.46	109.10
2	SA	449	G	C8-N9-C1'	5.30	133.89	127.00
2	SA	939	G	C5'-C4'-O4'	5.30	115.46	109.10
24	S3	474	ARG	CB-CA-C	-5.30	99.80	110.40
26	LA	898	C	C5-C6-N1	-5.30	118.35	121.00
26	LA	2702	G	N3-C2-N2	5.30	123.61	119.90
2	SA	120	A	C2-N3-C4	5.30	113.25	110.60
2	SA	277	C	N3-C4-N4	-5.30	114.29	118.00
2	SA	373	A	C4'-C3'-C2'	-5.30	97.30	102.60
2	SA	555	U	C4-C5-C6	-5.30	116.52	119.70
2	SA	1037	C	N3-C2-O2	-5.30	118.19	121.90
2	SA	1500	A	O4'-C1'-C2'	5.30	112.37	107.60
2	SA	1533	C	C4'-C3'-C2'	5.30	107.90	102.60
3	S1	41	A	C5'-C4'-C3'	-5.30	107.53	116.00
17	SQ	50	ASN	N-CA-CB	5.30	120.14	110.60
26	LA	197	A	C4-C5-N7	-5.30	108.05	110.70
26	LA	217	A	N1-C6-N6	-5.30	115.42	118.60
26	LA	518	G	C6-N1-C2	-5.30	121.92	125.10
26	LA	1059	G	O4'-C1'-N9	5.30	112.44	108.20
26	LA	1097	U	N3-C4-O4	-5.30	115.69	119.40
26	LA	1152	C	C2-N3-C4	-5.30	117.25	119.90
26	LA	1356	G	C1'-O4'-C4'	-5.30	105.66	109.90
26	LA	1432	G	C3'-C2'-C1'	5.30	105.74	101.50
26	LA	1586	A	P-O5'-C5'	5.30	129.37	120.90
26	LA	1694	C	C6-N1-C1'	-5.30	114.44	120.80
26	LA	1831	G	C8-N9-C1'	-5.30	120.11	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1960	A	O4'-C1'-N9	5.30	112.44	108.20
26	LA	2454	G	C8-N9-C4	5.30	108.52	106.40
53	LP	31	HIS	CA-CB-CG	-5.30	104.60	113.60
2	SA	575	G	N3-C2-N2	-5.29	116.19	119.90
2	SA	743	A	C1'-O4'-C4'	-5.29	105.66	109.90
25	LB	107	G	N3-C4-C5	5.29	131.25	128.60
26	LA	19	A	C4-C5-N7	5.29	113.35	110.70
26	LA	193	U	N1-C2-O2	-5.29	119.09	122.80
26	LA	389	G	N1-C2-N2	-5.29	111.44	116.20
26	LA	1289	C	N3-C4-C5	-5.29	119.78	121.90
26	LA	2577	A	C6-C5-N7	-5.29	128.59	132.30
26	LA	2584	U	P-O3'-C3'	-5.29	113.35	119.70
2	SA	1	A	N9-C4-C5	-5.29	103.68	105.80
2	SA	138	G	C5-C6-N1	-5.29	108.85	111.50
2	SA	152	A	C5-C6-N1	-5.29	115.05	117.70
2	SA	179	A	C5-C6-N1	5.29	120.35	117.70
2	SA	327	A	C8-N9-C1'	5.29	137.23	127.70
2	SA	604	G	O4'-C1'-N9	5.29	112.44	108.20
2	SA	852	G	N1-C6-O6	5.29	123.08	119.90
2	SA	1082	A	C8-N9-C4	-5.29	103.68	105.80
4	S2	23	G	C3'-C2'-C1'	5.29	105.73	101.50
18	SB	49	PHE	CG-CD2-CE2	5.29	126.62	120.80
26	LA	184	C	N3-C4-N4	-5.29	114.30	118.00
26	LA	204	A	N3-C4-N9	5.29	131.63	127.40
26	LA	259	G	C5-C6-O6	-5.29	125.42	128.60
26	LA	361	G	N3-C4-N9	5.29	129.18	126.00
26	LA	521	U	N3-C4-O4	-5.29	115.69	119.40
26	LA	789	A	C2-N3-C4	-5.29	107.95	110.60
26	LA	1229	C	C5-C6-N1	5.29	123.65	121.00
26	LA	1862	G	N3-C2-N2	-5.29	116.19	119.90
26	LA	2089	C	O4'-C1'-N1	5.29	112.44	108.20
26	LA	2134	A	C4'-C3'-C2'	-5.29	97.31	102.60
26	LA	2316	G	C2'-C3'-O3'	5.29	122.17	113.70
26	LA	2362	C	C4'-C3'-C2'	-5.29	97.31	102.60
26	LA	2405	G	C1'-O4'-C4'	5.29	114.14	109.90
26	LA	2431	U	C6-N1-C2	-5.29	117.82	121.00
2	SA	127	G	N3-C2-N2	5.29	123.60	119.90
2	SA	193	C	O4'-C1'-C2'	5.29	112.36	107.60
2	SA	314	C	C2-N3-C4	-5.29	117.25	119.90
2	SA	823	C	C4-C5-C6	5.29	120.05	117.40
2	SA	1231	G	P-O5'-C5'	5.29	129.37	120.90
2	SA	1502	A	C4-C5-C6	-5.29	114.35	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	3	C	P-O5'-C5'	5.29	129.37	120.90
11	SK	11	VAL	CB-CA-C	-5.29	101.34	111.40
18	SB	190	SER	O-C-N	-5.29	114.23	122.70
21	SE	87	VAL	CG1-CB-CG2	-5.29	102.43	110.90
25	LB	51	G	O5'-C5'-C4'	5.29	121.75	111.70
26	LA	201	C	N3-C4-N4	-5.29	114.30	118.00
26	LA	226	A	C8-N9-C4	-5.29	103.68	105.80
26	LA	452	G	N3-C4-N9	5.29	129.18	126.00
26	LA	796	C	N3-C4-N4	5.29	121.70	118.00
26	LA	1386	C	C2'-C3'-O3'	5.29	122.17	113.70
26	LA	1538	G	C5'-C4'-C3'	5.29	124.47	116.00
26	LA	1570	A	C3'-C2'-C1'	5.29	105.73	101.50
26	LA	1892	C	N3-C4-N4	-5.29	114.30	118.00
26	LA	2085	U	P-O3'-C3'	-5.29	113.35	119.70
26	LA	2430	A	C4-N9-C1'	5.29	135.82	126.30
26	LA	2498	C	N3-C2-O2	-5.29	118.20	121.90
26	LA	2508	G	C6-N1-C2	-5.29	121.92	125.10
26	LA	2668	G	C5'-C4'-C3'	5.29	124.47	116.00
26	LA	2778	A	C5-N7-C8	-5.29	101.25	103.90
27	LD	102	TYR	N-CA-CB	-5.29	101.08	110.60
2	SA	1027	C	C5'-C4'-C3'	-5.29	107.54	116.00
2	SA	1178	G	C4'-C3'-C2'	-5.29	97.31	102.60
25	LB	119	A	P-O5'-C5'	-5.29	112.44	120.90
26	LA	22	C	C5-C4-N4	-5.29	116.50	120.20
26	LA	43	G	N3-C4-C5	-5.29	125.95	128.60
26	LA	1098	A	O4'-C1'-N9	5.29	112.43	108.20
26	LA	1318	U	C5-C6-N1	5.29	125.34	122.70
26	LA	1427	A	C4-C5-N7	5.29	113.34	110.70
26	LA	1520	U	OP1-P-OP2	-5.29	111.67	119.60
26	LA	2535	G	C8-N9-C1'	5.29	133.88	127.00
2	SA	11	G	C5-N7-C8	-5.29	101.66	104.30
2	SA	116	A	N1-C2-N3	-5.29	126.66	129.30
2	SA	150	U	O4'-C1'-N1	5.29	112.43	108.20
2	SA	742	G	C5'-C4'-O4'	5.29	115.45	109.10
2	SA	787	A	C4'-C3'-C2'	-5.29	97.31	102.60
2	SA	855	U	C5-C6-N1	-5.29	120.06	122.70
2	SA	1206	G	C5-C6-O6	-5.29	125.43	128.60
2	SA	1251	A	N9-C4-C5	5.29	107.92	105.80
2	SA	1266	G	C4-C5-C6	5.29	121.97	118.80
9	SI	99	LYS	O-C-N	-5.29	114.24	122.70
12	SL	109	ARG	N-CA-CB	5.29	120.12	110.60
13	SM	40	GLU	O-C-N	-5.29	114.24	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	21	G	C5'-C4'-O4'	5.29	115.45	109.10
26	LA	108	G	N1-C2-N2	-5.29	111.44	116.20
26	LA	112	U	C4'-C3'-C2'	-5.29	97.31	102.60
26	LA	339	U	C2-N3-C4	-5.29	123.83	127.00
26	LA	562	U	C3'-C2'-C1'	-5.29	97.27	101.50
26	LA	579	G	OP1-P-OP2	-5.29	111.67	119.60
26	LA	641	U	C5'-C4'-O4'	5.29	115.45	109.10
26	LA	750	A	C4-C5-N7	-5.29	108.06	110.70
26	LA	825	A	C5-C6-N1	-5.29	115.06	117.70
26	LA	946	C	C1'-O4'-C4'	-5.29	105.67	109.90
26	LA	1209	U	O4'-C1'-N1	5.29	112.43	108.20
26	LA	1446	C	OP2-P-O3'	5.29	116.84	105.20
26	LA	1576	U	N3-C4-C5	-5.29	111.43	114.60
26	LA	1650	A	OP1-P-OP2	-5.29	111.67	119.60
26	LA	2157	G	C3'-C2'-C1'	-5.29	97.27	101.50
26	LA	2246	G	C5-N7-C8	5.29	106.94	104.30
26	LA	2475	C	C5'-C4'-C3'	-5.29	107.54	116.00
26	LA	2549	G	P-O3'-C3'	-5.29	113.35	119.70
26	LA	2713	U	C5'-C4'-O4'	5.29	115.45	109.10
47	LJ	100	LYS	N-CA-CB	-5.29	101.08	110.60
2	SA	392	C	C2-N3-C4	5.29	122.54	119.90
2	SA	620	C	C5-C6-N1	5.29	123.64	121.00
2	SA	804	U	C4'-C3'-C2'	-5.29	97.31	102.60
2	SA	1039	G	N9-C4-C5	5.29	107.52	105.40
2	SA	1319	A	C4-C5-N7	5.29	113.34	110.70
26	LA	74	A	C6-N1-C2	-5.29	115.43	118.60
26	LA	191	A	C6-N1-C2	-5.29	115.43	118.60
26	LA	955	U	C5-C6-N1	-5.29	120.06	122.70
26	LA	997	G	C2-N3-C4	5.29	114.54	111.90
26	LA	1319	C	OP1-P-O3'	5.29	116.83	105.20
26	LA	1319	C	C2-N3-C4	-5.29	117.26	119.90
26	LA	1409	U	C4-C5-C6	-5.29	116.53	119.70
26	LA	2261	C	C5'-C4'-C3'	-5.29	107.54	116.00
2	SA	203	G	C5-C6-N1	-5.29	108.86	111.50
2	SA	231	U	C1'-O4'-C4'	-5.29	105.67	109.90
2	SA	336	A	P-O5'-C5'	-5.29	112.44	120.90
2	SA	471	U	N3-C4-C5	-5.29	111.43	114.60
2	SA	650	G	N3-C2-N2	-5.29	116.20	119.90
2	SA	826	C	C5-C4-N4	5.29	123.90	120.20
2	SA	1075	U	C5-C6-N1	5.29	125.34	122.70
2	SA	1472	U	C5'-C4'-O4'	5.29	115.44	109.10
8	SH	127	TYR	N-CA-CB	5.29	120.11	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	SJ	5	ARG	NE-CZ-NH2	5.29	122.94	120.30
25	LB	28	C	C4-C5-C6	-5.29	114.76	117.40
26	LA	396	G	C8-N9-C4	-5.29	104.29	106.40
26	LA	624	C	C6-N1-C1'	-5.29	114.46	120.80
26	LA	989	G	C6-N1-C2	5.29	128.27	125.10
26	LA	1087	G	C5-C6-O6	-5.29	125.43	128.60
26	LA	1237	A	C5'-C4'-C3'	-5.29	107.54	116.00
26	LA	1320	C	C5-C4-N4	-5.29	116.50	120.20
26	LA	1430	G	C5-N7-C8	5.29	106.94	104.30
26	LA	2502	G	O4'-C1'-N9	5.29	112.43	108.20
31	LX	2	PHE	CB-CG-CD1	-5.29	117.10	120.80
33	LZ	56	ARG	O-C-N	-5.29	114.24	122.70
36	L2	49	ARG	NE-CZ-NH1	-5.29	117.66	120.30
53	LP	120	GLU	N-CA-C	5.29	125.27	111.00
2	SA	120	A	C1'-O4'-C4'	5.28	114.13	109.90
2	SA	122	G	C6-C5-N7	-5.28	127.23	130.40
2	SA	584	G	C5'-C4'-C3'	-5.28	107.55	116.00
2	SA	707	U	C5'-C4'-C3'	-5.28	107.55	116.00
2	SA	1003	G	O4'-C1'-N9	5.28	112.43	108.20
2	SA	1167	A	P-O5'-C5'	-5.28	112.45	120.90
2	SA	1347	G	N7-C8-N9	-5.28	110.46	113.10
2	SA	1476	A	P-O3'-C3'	5.28	126.04	119.70
25	LB	113	C	N3-C2-O2	-5.28	118.20	121.90
26	LA	461	C	C3'-C2'-C1'	5.28	105.73	101.50
26	LA	777	G	OP1-P-OP2	-5.28	111.67	119.60
26	LA	790	U	P-O5'-C5'	5.28	129.35	120.90
26	LA	875	G	C6-N1-C2	-5.28	121.93	125.10
26	LA	1084	A	N3-C4-C5	-5.28	123.10	126.80
26	LA	1636	U	N1-C2-O2	-5.28	119.10	122.80
26	LA	2061	G	P-O5'-C5'	5.28	129.35	120.90
26	LA	2280	G	O3'-P-O5'	5.28	114.04	104.00
26	LA	2462	C	P-O3'-C3'	5.28	126.04	119.70
26	LA	2492	U	C4-C5-C6	5.28	122.87	119.70
26	LA	2779	U	N1-C2-O2	-5.28	119.10	122.80
51	LI	17	ASP	CB-CG-OD1	-5.28	113.55	118.30
2	SA	424	G	C3'-C2'-C1'	-5.28	97.27	101.50
2	SA	752	G	N7-C8-N9	-5.28	110.46	113.10
3	S1	46	C	N3-C4-C5	-5.28	119.79	121.90
25	LB	77	U	OP2-P-O3'	5.28	116.82	105.20
26	LA	532	A	N9-C1'-C2'	-5.28	106.19	112.00
26	LA	810	U	C5-C4-O4	-5.28	122.73	125.90
26	LA	818	G	C4-N9-C1'	5.28	133.37	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	999	U	N3-C4-C5	-5.28	111.43	114.60
26	LA	1012	U	P-O3'-C3'	5.28	126.04	119.70
26	LA	1254	A	N1-C6-N6	-5.28	115.43	118.60
26	LA	1339	G	N7-C8-N9	-5.28	110.46	113.10
27	LD	47	ARG	O-C-N	-5.28	114.25	122.70
47	LJ	30	ARG	NH1-CZ-NH2	-5.28	113.59	119.40
2	SA	82	G	N9-C1'-C2'	-5.28	106.19	112.00
2	SA	141	G	N1-C2-N3	5.28	127.07	123.90
2	SA	203	G	C8-N9-C1'	5.28	133.87	127.00
2	SA	667	G	N1-C2-N2	-5.28	111.45	116.20
2	SA	697	U	C4'-C3'-C2'	5.28	107.88	102.60
2	SA	892	A	C1'-O4'-C4'	-5.28	105.67	109.90
2	SA	1531	A	OP1-P-OP2	-5.28	111.68	119.60
4	S2	53	G	N1-C2-N3	-5.28	120.73	123.90
13	SM	69	ARG	NE-CZ-NH1	5.28	122.94	120.30
24	S3	467	ILE	CB-CA-C	5.28	122.16	111.60
25	LB	14	U	N3-C4-C5	5.28	117.77	114.60
25	LB	64	G	N3-C4-N9	-5.28	122.83	126.00
26	LA	159	G	OP1-P-O3'	5.28	116.82	105.20
26	LA	512	G	C4-C5-N7	-5.28	108.69	110.80
26	LA	689	A	O4'-C1'-N9	5.28	112.42	108.20
26	LA	689	A	C3'-C2'-C1'	5.28	105.72	101.50
26	LA	705	A	C3'-C2'-C1'	5.28	105.72	101.50
26	LA	757	G	C4-C5-C6	-5.28	115.63	118.80
26	LA	1661	G	C4-C5-C6	5.28	121.97	118.80
26	LA	2147	A	O4'-C1'-N9	5.28	112.42	108.20
26	LA	2334	U	C5-C6-N1	-5.28	120.06	122.70
26	LA	2688	G	C2-N3-C4	-5.28	109.26	111.90
2	SA	528	C	P-O3'-C3'	5.28	126.03	119.70
2	SA	907	A	C6-N1-C2	5.28	121.77	118.60
2	SA	1003	G	C5-C6-N1	5.28	114.14	111.50
2	SA	1104	G	C4-N9-C1'	-5.28	119.64	126.50
2	SA	1274	A	C5-C6-N1	-5.28	115.06	117.70
26	LA	1266	G	C2-N3-C4	5.28	114.54	111.90
26	LA	1585	C	C5-C6-N1	5.28	123.64	121.00
26	LA	2263	C	N3-C4-N4	5.28	121.69	118.00
2	SA	300	A	C6-N1-C2	-5.28	115.43	118.60
2	SA	1333	A	O4'-C1'-N9	5.28	112.42	108.20
2	SA	1405	G	C2-N3-C4	5.28	114.54	111.90
2	SA	1506	U	N3-C4-O4	5.28	123.09	119.40
2	SA	1510	C	N3-C4-C5	5.28	124.01	121.90
12	SL	109	ARG	NE-CZ-NH2	-5.28	117.66	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	SB	21	TYR	CB-CG-CD2	-5.28	117.83	121.00
26	LA	555	G	O5'-C5'-C4'	-5.28	101.67	111.70
26	LA	606	U	N3-C4-C5	5.28	117.77	114.60
26	LA	691	C	C6-N1-C2	-5.28	118.19	120.30
26	LA	780	G	O4'-C1'-C2'	-5.28	100.52	105.80
26	LA	1206	G	C5-C6-O6	5.28	131.77	128.60
26	LA	2094	A	P-O5'-C5'	5.28	129.34	120.90
26	LA	2400	G	OP2-P-O3'	5.28	116.81	105.20
26	LA	2416	C	N3-C2-O2	-5.28	118.21	121.90
26	LA	2425	A	C2-N3-C4	-5.28	107.96	110.60
26	LA	2481	G	O3'-P-O5'	-5.28	93.97	104.00
26	LA	2641	G	C5-C6-O6	5.28	131.77	128.60
26	LA	2651	C	C6-N1-C2	-5.28	118.19	120.30
38	LE	15	PHE	CG-CD2-CE2	5.28	126.60	120.80
2	SA	430	A	C3'-C2'-C1'	-5.28	97.28	101.50
2	SA	464	U	C3'-C2'-C1'	5.28	105.72	101.50
2	SA	803	G	C5-C6-O6	-5.28	125.44	128.60
2	SA	1074	G	N7-C8-N9	-5.28	110.46	113.10
2	SA	1129	C	P-O5'-C5'	-5.28	112.46	120.90
2	SA	1376	U	P-O3'-C3'	5.28	126.03	119.70
2	SA	1480	A	C5'-C4'-C3'	5.28	124.44	116.00
4	S2	55	U	N3-C4-O4	5.28	123.09	119.40
26	LA	42	A	N9-C4-C5	5.28	107.91	105.80
26	LA	818	G	C5-C6-N1	5.28	114.14	111.50
26	LA	912	C	C5-C6-N1	-5.28	118.36	121.00
26	LA	1180	U	C2-N3-C4	5.28	130.16	127.00
26	LA	2520	C	OP1-P-OP2	-5.28	111.69	119.60
26	LA	2674	G	C8-N9-C4	5.28	108.51	106.40
38	LE	90	PHE	CA-CB-CG	-5.28	101.24	113.90
2	SA	247	G	C4'-C3'-C2'	-5.27	97.33	102.60
26	LA	141	G	N1-C2-N3	-5.27	120.74	123.90
26	LA	291	G	N1-C6-O6	5.27	123.06	119.90
26	LA	525	U	C3'-C2'-C1'	5.27	105.72	101.50
26	LA	618	G	C5-N7-C8	-5.27	101.66	104.30
26	LA	684	G	C5-C6-O6	-5.27	125.44	128.60
26	LA	783	A	P-O3'-C3'	-5.27	113.37	119.70
26	LA	1197	G	O4'-C1'-C2'	5.27	112.35	107.60
26	LA	1266	G	N3-C4-C5	-5.27	125.96	128.60
26	LA	1704	C	N3-C4-N4	5.27	121.69	118.00
26	LA	2388	A	C2-N3-C4	5.27	113.24	110.60
33	LZ	18	SER	C-N-CA	5.27	134.88	121.70
2	SA	493	A	C4-N9-C1'	5.27	135.79	126.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	639	G	N1-C6-O6	5.27	123.06	119.90
2	SA	921	U	C3'-C2'-C1'	5.27	105.72	101.50
4	S2	17	C	OP1-P-OP2	-5.27	111.69	119.60
4	S2	72	C	C4'-C3'-C2'	-5.27	97.33	102.60
18	SB	27	LYS	N-CA-C	5.27	125.24	111.00
19	SC	23	ALA	N-CA-CB	5.27	117.48	110.10
24	S3	225	ALA	N-CA-CB	5.27	117.48	110.10
25	LB	115	A	C4-C5-C6	-5.27	114.36	117.00
26	LA	194	G	N3-C2-N2	5.27	123.59	119.90
26	LA	201	C	N3-C4-C5	5.27	124.01	121.90
26	LA	399	U	N1-C2-O2	5.27	126.49	122.80
26	LA	419	U	C3'-C2'-C1'	5.27	105.72	101.50
26	LA	813	U	O3'-P-O5'	5.27	114.02	104.00
26	LA	1083	U	C5'-C4'-C3'	-5.27	107.56	116.00
26	LA	1128	G	C8-N9-C4	-5.27	104.29	106.40
26	LA	1467	U	N1-C1'-C2'	-5.27	106.20	112.00
26	LA	1524	G	N3-C4-N9	-5.27	122.84	126.00
26	LA	2666	C	P-O3'-C3'	-5.27	113.37	119.70
31	LX	42	LEU	CB-CG-CD1	-5.27	102.04	111.00
2	SA	675	A	C5'-C4'-O4'	5.27	115.43	109.10
2	SA	1110	A	C4-C5-C6	-5.27	114.36	117.00
2	SA	1465	A	C5-N7-C8	5.27	106.53	103.90
25	LB	20	G	O4'-C1'-N9	5.27	112.42	108.20
26	LA	262	A	C6-N1-C2	5.27	121.76	118.60
26	LA	2679	A	C6-N1-C2	-5.27	115.44	118.60
2	SA	241	G	P-O3'-C3'	5.27	126.02	119.70
2	SA	258	G	N3-C4-N9	-5.27	122.84	126.00
2	SA	342	C	N3-C2-O2	-5.27	118.21	121.90
2	SA	409	U	N3-C4-O4	-5.27	115.71	119.40
2	SA	534	U	N3-C2-O2	-5.27	118.51	122.20
2	SA	580	C	C6-N1-C2	-5.27	118.19	120.30
2	SA	771	G	C6-N1-C2	-5.27	121.94	125.10
2	SA	841	C	P-O5'-C5'	5.27	129.33	120.90
2	SA	1001	C	N1-C2-N3	-5.27	115.51	119.20
2	SA	1100	C	C5'-C4'-C3'	5.27	124.43	116.00
2	SA	1122	U	P-O5'-C5'	5.27	129.33	120.90
2	SA	1427	C	C4'-C3'-C2'	-5.27	97.33	102.60
2	SA	1445	U	C6-N1-C2	-5.27	117.84	121.00
2	SA	1504	G	C3'-C2'-C1'	-5.27	97.28	101.50
4	S2	24	C	C5'-C4'-O4'	5.27	115.42	109.10
26	LA	446	G	N1-C6-O6	5.27	123.06	119.90
26	LA	523	C	OP1-P-OP2	-5.27	111.69	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	701	G	C8-N9-C4	5.27	108.51	106.40
26	LA	801	G	P-O5'-C5'	5.27	129.33	120.90
26	LA	1136	G	N7-C8-N9	5.27	115.73	113.10
26	LA	1159	U	O4'-C1'-N1	5.27	112.42	108.20
26	LA	1444	G	C2-N3-C4	-5.27	109.27	111.90
26	LA	1732	C	C5'-C4'-C3'	-5.27	107.57	116.00
26	LA	2383	G	N9-C4-C5	-5.27	103.29	105.40
26	LA	2392	A	C4-C5-C6	-5.27	114.37	117.00
26	LA	2612	C	C2-N3-C4	-5.27	117.27	119.90
37	LC	16	ASP	CB-CG-OD2	-5.27	113.56	118.30
47	LJ	21	ALA	N-CA-CB	-5.27	102.72	110.10
53	LP	69	ARG	NE-CZ-NH1	5.27	122.93	120.30
53	LP	122	ALA	N-CA-C	5.27	125.23	111.00
2	SA	254	G	C2'-C3'-O3'	5.27	122.13	113.70
2	SA	491	G	O4'-C1'-N9	5.27	112.41	108.20
2	SA	667	G	C6-N1-C2	-5.27	121.94	125.10
2	SA	804	U	O4'-C4'-C3'	5.27	110.31	106.10
2	SA	954	G	N3-C4-N9	5.27	129.16	126.00
4	S2	43	G	O5'-P-OP2	-5.27	100.96	105.70
25	LB	7	G	N1-C6-O6	-5.27	116.74	119.90
26	LA	21	A	C2-N3-C4	-5.27	107.97	110.60
26	LA	174	U	C5'-C4'-O4'	5.27	115.42	109.10
26	LA	310	A	C2-N3-C4	5.27	113.23	110.60
26	LA	559	G	C2-N3-C4	5.27	114.53	111.90
26	LA	964	C	C5-C6-N1	-5.27	118.37	121.00
26	LA	1054	A	C4-C5-C6	5.27	119.63	117.00
26	LA	1096	A	N3-C4-C5	5.27	130.49	126.80
26	LA	1209	U	O3'-P-O5'	5.27	114.01	104.00
26	LA	1642	G	C6-N1-C2	-5.27	121.94	125.10
26	LA	1773	A	C4-N9-C1'	5.27	135.78	126.30
26	LA	1891	G	C6-C5-N7	-5.27	127.24	130.40
26	LA	2771	C	N3-C4-N4	-5.27	114.31	118.00
38	LE	33	ARG	CD-NE-CZ	5.27	130.97	123.60
2	SA	2	A	C3'-C2'-C1'	5.27	105.71	101.50
2	SA	282	A	N1-C6-N6	5.27	121.76	118.60
2	SA	440	C	P-O5'-C5'	-5.27	112.47	120.90
2	SA	790	A	N1-C6-N6	5.27	121.76	118.60
2	SA	886	G	C8-N9-C4	5.27	108.51	106.40
2	SA	1133	G	C8-N9-C1'	5.27	133.85	127.00
26	LA	377	G	C2-N3-C4	5.27	114.53	111.90
26	LA	585	G	C8-N9-C4	5.27	108.51	106.40
26	LA	1047	G	C5'-C4'-O4'	5.27	115.42	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1599	U	C6-N1-C1'	5.27	128.57	121.20
26	LA	1766	G	C4-C5-C6	-5.27	115.64	118.80
26	LA	2776	A	C4'-C3'-C2'	-5.27	97.33	102.60
2	SA	146	G	N3-C4-N9	5.26	129.16	126.00
2	SA	158	G	N1-C2-N2	-5.26	111.46	116.20
2	SA	339	C	O4'-C1'-N1	5.26	112.41	108.20
2	SA	581	G	N1-C2-N3	-5.26	120.74	123.90
2	SA	931	C	N1-C2-N3	5.26	122.89	119.20
2	SA	1144	G	O4'-C1'-N9	5.26	112.41	108.20
3	S1	15	G	C2-N3-C4	5.26	114.53	111.90
17	SQ	23	ALA	N-CA-CB	-5.26	102.73	110.10
26	LA	308	G	C8-N9-C4	-5.26	104.29	106.40
26	LA	384	A	N3-C4-N9	-5.26	123.19	127.40
26	LA	612	G	C5-C6-O6	5.26	131.76	128.60
26	LA	787	C	N3-C4-C5	-5.26	119.79	121.90
26	LA	794	A	C2-N3-C4	5.26	113.23	110.60
26	LA	848	C	OP1-P-OP2	-5.26	111.70	119.60
26	LA	1128	G	O3'-P-O5'	-5.26	94.00	104.00
26	LA	1193	G	OP1-P-OP2	-5.26	111.70	119.60
26	LA	1310	G	C1'-O4'-C4'	5.26	114.11	109.90
26	LA	1806	C	C6-N1-C2	5.26	122.41	120.30
26	LA	1880	U	C5-C6-N1	5.26	125.33	122.70
26	LA	2751	G	N7-C8-N9	-5.26	110.47	113.10
28	LU	68	ASP	CB-CG-OD1	5.26	123.04	118.30
40	L4	33	LEU	CB-CG-CD1	-5.26	102.05	111.00
2	SA	59	A	C4'-C3'-C2'	-5.26	97.34	102.60
2	SA	1111	A	P-O5'-C5'	-5.26	112.48	120.90
2	SA	1117	A	OP2-P-O3'	5.26	116.78	105.20
2	SA	1438	G	C4-C5-C6	-5.26	115.64	118.80
2	SA	1511	G	N1-C2-N2	-5.26	111.46	116.20
5	ST	79	THR	CA-CB-CG2	5.26	119.77	112.40
25	LB	51	G	O4'-C1'-N9	5.26	112.41	108.20
26	LA	168	G	C4-C5-C6	-5.26	115.64	118.80
26	LA	396	G	N3-C4-C5	-5.26	125.97	128.60
26	LA	858	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	LA	1035	U	O4'-C1'-N1	5.26	112.41	108.20
26	LA	1202	G	O5'-P-OP2	5.26	117.02	110.70
26	LA	1304	A	C5-C6-N1	5.26	120.33	117.70
26	LA	1343	G	N1-C2-N2	-5.26	111.46	116.20
26	LA	1345	C	O4'-C1'-N1	5.26	112.41	108.20
26	LA	1448	G	P-O5'-C5'	-5.26	112.48	120.90
26	LA	1931	U	C6-N1-C2	-5.26	117.84	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2090	A	C4-C5-C6	-5.26	114.37	117.00
26	LA	2222	C	C4'-C3'-C2'	-5.26	97.34	102.60
26	LA	2446	G	N3-C2-N2	5.26	123.58	119.90
26	LA	2596	U	N3-C4-C5	-5.26	111.44	114.60
27	LD	128	THR	CA-CB-OG1	5.26	120.05	109.00
2	SA	86	G	N3-C2-N2	-5.26	116.22	119.90
2	SA	266	G	C8-N9-C1'	5.26	133.84	127.00
2	SA	771	G	OP1-P-OP2	-5.26	111.71	119.60
2	SA	1416	G	N7-C8-N9	-5.26	110.47	113.10
2	SA	1479	C	C5-C6-N1	5.26	123.63	121.00
24	S3	283	ASP	CB-CA-C	5.26	120.92	110.40
25	LB	21	G	N3-C4-N9	5.26	129.16	126.00
25	LB	47	C	C5'-C4'-C3'	5.26	124.42	116.00
26	LA	519	U	N1-C2-N3	5.26	118.06	114.90
26	LA	674	G	O4'-C1'-N9	5.26	112.41	108.20
26	LA	913	U	O4'-C1'-N1	5.26	112.41	108.20
26	LA	942	G	C6-N1-C2	-5.26	121.94	125.10
26	LA	2059	A	C5-C6-N1	5.26	120.33	117.70
26	LA	2146	C	C5'-C4'-O4'	5.26	115.41	109.10
26	LA	2375	G	C5'-C4'-O4'	5.26	115.41	109.10
45	LG	173	ASP	O-C-N	-5.26	114.28	122.70
2	SA	59	A	P-O3'-C3'	-5.26	113.39	119.70
2	SA	403	C	C5'-C4'-C3'	-5.26	107.58	116.00
2	SA	425	G	N1-C6-O6	-5.26	116.74	119.90
2	SA	640	A	C5-C6-N6	5.26	127.91	123.70
2	SA	686	U	OP2-P-O3'	5.26	116.77	105.20
2	SA	749	A	C8-N9-C4	-5.26	103.70	105.80
2	SA	892	A	C5'-C4'-O4'	5.26	115.41	109.10
2	SA	1303	C	O3'-P-O5'	-5.26	94.00	104.00
4	S2	19	G	C5-C6-N1	-5.26	108.87	111.50
4	S2	20	G	C4-C5-N7	5.26	112.90	110.80
7	SG	55	LYS	N-CA-CB	-5.26	101.13	110.60
25	LB	79	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	LA	200	U	OP1-P-OP2	-5.26	111.71	119.60
26	LA	273	G	C5'-C4'-O4'	5.26	115.41	109.10
26	LA	310	A	N1-C2-N3	-5.26	126.67	129.30
26	LA	798	G	C4-C5-C6	5.26	121.96	118.80
26	LA	855	G	C5'-C4'-C3'	-5.26	107.58	116.00
26	LA	895	U	N1-C2-N3	5.26	118.06	114.90
26	LA	1383	A	C1'-O4'-C4'	-5.26	105.69	109.90
26	LA	1399	C	C6-N1-C1'	-5.26	114.49	120.80
26	LA	2491	U	P-O3'-C3'	-5.26	113.39	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2511	U	N3-C4-O4	5.26	123.08	119.40
38	LE	129	THR	CA-CB-CG2	-5.26	105.04	112.40
2	SA	156	C	C4-C5-C6	5.26	120.03	117.40
2	SA	1009	U	C1'-O4'-C4'	-5.26	105.69	109.90
2	SA	1068	G	N1-C6-O6	-5.26	116.75	119.90
2	SA	1102	A	C4-C5-C6	5.26	119.63	117.00
2	SA	1520	C	C4-C5-C6	5.26	120.03	117.40
4	S2	39	A	C5'-C4'-O4'	5.26	115.41	109.10
26	LA	334	C	C6-N1-C1'	5.26	127.11	120.80
26	LA	1835	G	C5-C6-O6	-5.26	125.44	128.60
26	LA	2764	A	OP1-P-OP2	-5.26	111.71	119.60
26	LA	2792	A	C6-N1-C2	5.26	121.75	118.60
26	LA	2878	U	C2-N3-C4	5.26	130.16	127.00
56	LR	97	TYR	N-CA-C	5.26	125.20	111.00
2	SA	34	C	P-O5'-C5'	-5.26	112.49	120.90
2	SA	414	A	O4'-C4'-C3'	5.26	110.31	106.10
2	SA	432	A	N1-C2-N3	-5.26	126.67	129.30
2	SA	460	A	O4'-C1'-N9	5.26	112.41	108.20
2	SA	838	G	C1'-O4'-C4'	-5.26	105.69	109.90
2	SA	1248	A	OP2-P-O3'	5.26	116.77	105.20
2	SA	1423	G	N3-C4-N9	5.26	129.15	126.00
25	LB	2	G	C4-C5-C6	5.26	121.95	118.80
26	LA	169	G	OP1-P-OP2	-5.26	111.71	119.60
26	LA	244	A	N1-C6-N6	5.26	121.75	118.60
26	LA	560	C	C6-N1-C1'	-5.26	114.49	120.80
26	LA	804	A	C5'-C4'-O4'	5.26	115.41	109.10
26	LA	1314	C	C5-C6-N1	5.26	123.63	121.00
26	LA	1501	G	C2-N3-C4	-5.26	109.27	111.90
26	LA	1810	A	C4-C5-C6	-5.26	114.37	117.00
26	LA	2451	A	O4'-C1'-C2'	5.26	112.33	107.60
26	LA	2524	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	LA	2529	G	N1-C2-N2	-5.26	111.47	116.20
26	LA	2590	A	N1-C2-N3	-5.26	126.67	129.30
26	LA	2800	A	N9-C4-C5	5.26	107.90	105.80
41	L5	23	ALA	N-CA-C	5.26	125.19	111.00
49	LK	113	ALA	N-CA-CB	5.26	117.46	110.10
55	LQ	51	ALA	N-CA-CB	-5.26	102.74	110.10
2	SA	1162	C	C5'-C4'-C3'	-5.25	107.59	116.00
2	SA	1251	A	O4'-C1'-N9	5.25	112.40	108.20
26	LA	333	G	C8-N9-C4	-5.25	104.30	106.40
26	LA	412	A	OP1-P-OP2	-5.25	111.72	119.60
26	LA	433	C	O4'-C1'-C2'	5.25	112.33	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	762	U	OP1-P-OP2	-5.25	111.72	119.60
26	LA	788	A	C4-C5-C6	-5.25	114.37	117.00
26	LA	1086	A	N3-C4-C5	-5.25	123.12	126.80
26	LA	1137	G	C3'-C2'-C1'	5.25	105.70	101.50
26	LA	1246	A	C5-N7-C8	-5.25	101.27	103.90
26	LA	1448	G	OP1-P-O3'	5.25	116.76	105.20
26	LA	1820	U	OP1-P-OP2	-5.25	111.72	119.60
51	LI	121	VAL	C-N-CA	5.25	134.84	121.70
2	SA	86	G	C5-N7-C8	-5.25	101.67	104.30
2	SA	258	G	C4'-C3'-C2'	-5.25	97.35	102.60
2	SA	749	A	C5-C6-N6	-5.25	119.50	123.70
2	SA	1196	A	P-O3'-C3'	-5.25	113.39	119.70
2	SA	1499	A	N7-C8-N9	-5.25	111.17	113.80
25	LB	85	G	C5'-C4'-C3'	5.25	124.41	116.00
26	LA	44	A	O4'-C1'-N9	5.25	112.40	108.20
26	LA	631	A	C5'-C4'-C3'	-5.25	107.59	116.00
26	LA	987	C	N3-C2-O2	-5.25	118.22	121.90
26	LA	1581	G	C4-N9-C1'	-5.25	119.67	126.50
26	LA	1931	U	C5-C6-N1	5.25	125.33	122.70
26	LA	2263	C	C5'-C4'-O4'	5.25	115.40	109.10
26	LA	2659	G	C8-N9-C1'	5.25	133.83	127.00
27	LD	12	ARG	NE-CZ-NH1	-5.25	117.67	120.30
47	LJ	41	ARG	NH1-CZ-NH2	-5.25	113.62	119.40
2	SA	312	C	OP1-P-OP2	-5.25	111.72	119.60
2	SA	364	A	C6-N1-C2	5.25	121.75	118.60
2	SA	508	U	P-O3'-C3'	-5.25	113.40	119.70
2	SA	690	G	C8-N9-C4	-5.25	104.30	106.40
9	SI	32	ARG	N-CA-C	-5.25	96.82	111.00
13	SM	53	ASP	CB-CG-OD2	5.25	123.03	118.30
22	SF	116	PHE	CB-CG-CD1	5.25	124.48	120.80
26	LA	912	C	C6-N1-C1'	-5.25	114.50	120.80
26	LA	1112	G	OP1-P-OP2	-5.25	111.72	119.60
26	LA	1338	G	C5'-C4'-O4'	5.25	115.40	109.10
26	LA	1780	A	C4-C5-N7	5.25	113.33	110.70
26	LA	2092	U	N1-C2-N3	5.25	118.05	114.90
26	LA	2124	G	O4'-C1'-N9	5.25	112.40	108.20
26	LA	2178	C	OP1-P-OP2	-5.25	111.72	119.60
26	LA	2213	U	C6-N1-C1'	-5.25	113.85	121.20
26	LA	2451	A	C1'-O4'-C4'	-5.25	105.70	109.90
26	LA	2496	C	OP1-P-OP2	-5.25	111.72	119.60
26	LA	2587	A	C5-C6-N1	5.25	120.33	117.70
26	LA	2592	G	C4-C5-C6	5.25	121.95	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2666	C	C5'-C4'-O4'	5.25	115.40	109.10
37	LC	164	ARG	NE-CZ-NH2	5.25	122.93	120.30
2	SA	269	C	C5'-C4'-O4'	5.25	115.40	109.10
2	SA	342	C	C5'-C4'-C3'	5.25	124.40	116.00
2	SA	567	G	C4-C5-N7	-5.25	108.70	110.80
2	SA	889	A	C4-C5-N7	-5.25	108.08	110.70
2	SA	954	G	C5-C6-O6	-5.25	125.45	128.60
2	SA	977	A	C8-N9-C4	5.25	107.90	105.80
2	SA	1074	G	O4'-C1'-N9	5.25	112.40	108.20
2	SA	1355	G	N7-C8-N9	-5.25	110.47	113.10
26	LA	1005	C	OP2-P-O3'	5.25	116.75	105.20
26	LA	1381	G	C4-C5-N7	5.25	112.90	110.80
26	LA	1954	G	N3-C4-N9	5.25	129.15	126.00
2	SA	29	U	C2'-C3'-O3'	5.25	122.10	113.70
2	SA	538	G	O4'-C1'-C2'	5.25	112.32	107.60
2	SA	602	A	C8-N9-C4	5.25	107.90	105.80
2	SA	1074	G	C4'-C3'-C2'	-5.25	97.35	102.60
2	SA	1376	U	C6-N1-C2	5.25	124.15	121.00
18	SB	38	HIS	C-N-CA	5.25	134.82	121.70
26	LA	54	G	C2-N3-C4	-5.25	109.28	111.90
26	LA	569	U	C5'-C4'-O4'	5.25	115.40	109.10
26	LA	722	A	N1-C6-N6	5.25	121.75	118.60
26	LA	926	G	O4'-C1'-N9	5.25	112.40	108.20
26	LA	1258	U	C2-N3-C4	-5.25	123.85	127.00
26	LA	1815	A	P-O3'-C3'	-5.25	113.40	119.70
26	LA	1843	C	O5'-C5'-C4'	-5.25	101.73	111.70
26	LA	2163	A	O5'-C5'-C4'	5.25	121.67	111.70
26	LA	2352	A	C5'-C4'-C3'	-5.25	107.60	116.00
26	LA	2772	C	P-O3'-C3'	5.25	126.00	119.70
2	SA	12	U	O3'-P-O5'	-5.25	94.03	104.00
2	SA	561	U	C4-C5-C6	-5.25	116.55	119.70
2	SA	1245	C	C4-C5-C6	-5.25	114.78	117.40
2	SA	1274	A	C8-N9-C4	-5.25	103.70	105.80
4	S2	34	U	C3'-C2'-C1'	5.25	105.70	101.50
26	LA	754	U	OP1-P-OP2	-5.25	111.73	119.60
26	LA	1047	G	C5-C6-O6	-5.25	125.45	128.60
26	LA	1321	A	C4-C5-C6	-5.25	114.38	117.00
26	LA	1446	C	N3-C4-C5	-5.25	119.80	121.90
26	LA	1461	C	N3-C4-N4	-5.25	114.33	118.00
26	LA	1617	C	P-O3'-C3'	-5.25	113.41	119.70
26	LA	1835	G	O4'-C1'-N9	5.25	112.40	108.20
26	LA	1870	C	O4'-C4'-C3'	5.25	110.30	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1899	A	O4'-C1'-N9	5.25	112.40	108.20
26	LA	2085	U	C5-C4-O4	5.25	129.05	125.90
26	LA	2094	A	C4'-C3'-C2'	-5.25	97.35	102.60
26	LA	2171	A	C5'-C4'-C3'	-5.25	107.61	116.00
26	LA	2254	C	N3-C4-C5	-5.25	119.80	121.90
26	LA	2293	G	C8-N9-C1'	5.25	133.82	127.00
26	LA	2391	G	O4'-C1'-C2'	-5.25	100.55	105.80
26	LA	2700	A	C6-N1-C2	-5.25	115.45	118.60
41	L5	12	ARG	NE-CZ-NH2	5.25	122.92	120.30
45	LG	94	ARG	CG-CD-NE	-5.25	100.78	111.80
45	LG	177	ARG	NE-CZ-NH1	5.25	122.92	120.30
47	LJ	33	THR	O-C-N	-5.25	114.31	122.70
2	SA	1244	G	C4-C5-N7	5.25	112.90	110.80
25	LB	20	G	C5'-C4'-C3'	-5.25	107.61	116.00
26	LA	410	G	C5-C6-N1	-5.25	108.88	111.50
26	LA	983	A	N9-C4-C5	5.25	107.90	105.80
26	LA	1426	G	N1-C6-O6	5.25	123.05	119.90
26	LA	2518	A	C4-N9-C1'	5.25	135.74	126.30
44	LF	114	ARG	NE-CZ-NH2	-5.25	117.68	120.30
2	SA	120	A	C8-N9-C4	-5.24	103.70	105.80
2	SA	903	G	C2-N3-C4	5.24	114.52	111.90
2	SA	1142	G	C8-N9-C4	-5.24	104.30	106.40
2	SA	1310	G	C4'-C3'-C2'	-5.24	97.36	102.60
2	SA	1509	C	C6-N1-C2	-5.24	118.20	120.30
25	LB	68	C	OP1-P-OP2	-5.24	111.73	119.60
25	LB	120	U	C2-N3-C4	5.24	130.15	127.00
26	LA	51	G	C5-C6-O6	-5.24	125.45	128.60
26	LA	360	U	N3-C2-O2	5.24	125.87	122.20
26	LA	1035	U	C3'-C2'-C1'	-5.24	97.30	101.50
26	LA	1076	C	C6-N1-C2	-5.24	118.20	120.30
26	LA	1191	G	OP1-P-OP2	-5.24	111.73	119.60
26	LA	1218	G	C5-C6-N1	5.24	114.12	111.50
26	LA	1567	G	C5'-C4'-O4'	5.24	115.39	109.10
26	LA	1754	A	C8-N9-C4	-5.24	103.70	105.80
26	LA	1781	U	OP1-P-O3'	5.24	116.74	105.20
26	LA	2421	G	OP2-P-O3'	5.24	116.73	105.20
26	LA	2426	A	C5'-C4'-C3'	5.24	124.39	116.00
26	LA	2645	G	C4-C5-N7	5.24	112.90	110.80
26	LA	2702	G	N1-C6-O6	5.24	123.05	119.90
46	LH	103	ASN	CA-CB-CG	-5.24	101.86	113.40
4	S2	56	U	O4'-C4'-C3'	5.24	110.29	106.10
24	S3	27	GLU	O-C-N	-5.24	114.31	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	S3	304	THR	N-CA-CB	5.24	120.26	110.30
26	LA	652	U	O5'-C5'-C4'	5.24	121.66	111.70
26	LA	749	A	C6-C5-N7	-5.24	128.63	132.30
26	LA	776	G	O4'-C4'-C3'	-5.24	98.76	104.00
26	LA	1387	A	C4-C5-C6	-5.24	114.38	117.00
26	LA	1486	U	OP1-P-OP2	-5.24	111.74	119.60
26	LA	1958	C	C2-N3-C4	-5.24	117.28	119.90
26	LA	2212	A	O5'-C5'-C4'	-5.24	101.74	111.70
41	L5	34	ARG	NH1-CZ-NH2	-5.24	113.63	119.40
2	SA	59	A	N9-C4-C5	-5.24	103.70	105.80
2	SA	203	G	N9-C1'-C2'	-5.24	106.23	112.00
2	SA	362	G	C4-N9-C1'	-5.24	119.69	126.50
2	SA	438	U	N1-C2-N3	-5.24	111.76	114.90
2	SA	712	A	C4-C5-C6	-5.24	114.38	117.00
2	SA	933	G	C2-N3-C4	5.24	114.52	111.90
2	SA	1125	U	C5-C4-O4	-5.24	122.76	125.90
3	S1	36	U	P-O5'-C5'	5.24	129.29	120.90
26	LA	77	G	C2-N3-C4	-5.24	109.28	111.90
26	LA	125	A	C5'-C4'-C3'	-5.24	107.61	116.00
26	LA	171	U	N1-C2-N3	-5.24	111.75	114.90
26	LA	527	C	C4'-C3'-C2'	-5.24	97.36	102.60
26	LA	769	U	N1-C2-N3	-5.24	111.76	114.90
26	LA	1288	G	C8-N9-C4	-5.24	104.30	106.40
26	LA	1399	C	C1'-O4'-C4'	-5.24	105.71	109.90
26	LA	1874	C	C4'-C3'-C2'	-5.24	97.36	102.60
26	LA	1922	G	N9-C4-C5	-5.24	103.30	105.40
26	LA	1929	G	OP1-P-OP2	-5.24	111.74	119.60
26	LA	2153	C	P-O3'-C3'	-5.24	113.41	119.70
26	LA	2765	A	C5'-C4'-C3'	5.24	124.39	116.00
41	L5	41	ARG	CG-CD-NE	-5.24	100.80	111.80
49	LK	120	ASP	CB-CG-OD1	5.24	123.02	118.30
2	SA	783	C	C5'-C4'-O4'	5.24	115.39	109.10
2	SA	878	A	C5-N7-C8	5.24	106.52	103.90
2	SA	973	G	O3'-P-O5'	5.24	113.95	104.00
2	SA	1204	A	C1'-O4'-C4'	-5.24	105.71	109.90
2	SA	1513	A	C6-N1-C2	-5.24	115.46	118.60
26	LA	56	A	N1-C6-N6	-5.24	115.46	118.60
26	LA	367	G	C5'-C4'-O4'	5.24	115.39	109.10
26	LA	859	G	C8-N9-C4	-5.24	104.31	106.40
26	LA	964	C	C5-C4-N4	-5.24	116.53	120.20
26	LA	1383	A	C6-C5-N7	-5.24	128.63	132.30
26	LA	1640	A	O4'-C4'-C3'	-5.24	98.76	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1778	U	C5'-C4'-O4'	5.24	115.39	109.10
26	LA	1849	G	O4'-C1'-N9	5.24	112.39	108.20
26	LA	1882	U	C6-N1-C2	-5.24	117.86	121.00
26	LA	1979	U	C6-N1-C2	-5.24	117.86	121.00
26	LA	2329	U	C5-C4-O4	-5.24	122.76	125.90
26	LA	2837	A	O5'-P-OP2	-5.24	100.98	105.70
45	LG	21	TYR	CZ-CE2-CD2	5.24	124.52	119.80
46	LH	31	GLU	CA-CB-CG	5.24	124.93	113.40
2	SA	866	C	O4'-C1'-N1	5.24	112.39	108.20
2	SA	1324	A	C6-N1-C2	-5.24	115.46	118.60
2	SA	1337	G	P-O5'-C5'	-5.24	112.52	120.90
14	SN	83	VAL	CG1-CB-CG2	-5.24	102.52	110.90
26	LA	304	U	C4'-C3'-C2'	-5.24	97.36	102.60
26	LA	847	U	O4'-C1'-N1	5.24	112.39	108.20
26	LA	1289	C	O4'-C1'-N1	5.24	112.39	108.20
26	LA	2295	C	C5-C6-N1	5.24	123.62	121.00
26	LA	2602	A	N3-C4-C5	-5.24	123.13	126.80
2	SA	16	A	N1-C6-N6	5.24	121.74	118.60
2	SA	522	C	C4'-C3'-C2'	-5.24	97.36	102.60
2	SA	535	A	C4'-C3'-C2'	5.24	107.84	102.60
2	SA	545	C	C6-N1-C2	5.24	122.39	120.30
2	SA	767	A	OP1-P-OP2	-5.24	111.75	119.60
2	SA	900	A	C2-N3-C4	-5.24	107.98	110.60
2	SA	1041	G	N3-C4-C5	5.24	131.22	128.60
24	S3	127	ARG	NE-CZ-NH2	5.24	122.92	120.30
26	LA	132	G	C4-C5-C6	-5.24	115.66	118.80
26	LA	246	C	C1'-O4'-C4'	-5.24	105.71	109.90
26	LA	619	G	C3'-C2'-C1'	5.24	105.69	101.50
26	LA	921	C	C5'-C4'-C3'	5.24	124.38	116.00
26	LA	976	G	O4'-C4'-C3'	5.24	110.29	106.10
26	LA	1120	G	C4-C5-N7	-5.24	108.70	110.80
26	LA	1227	G	O5'-C5'-C4'	5.24	121.65	111.70
26	LA	1437	C	C5-C4-N4	5.24	123.86	120.20
26	LA	1632	A	C2-N3-C4	-5.24	107.98	110.60
26	LA	2165	C	C2-N1-C1'	5.24	124.56	118.80
26	LA	2242	G	N3-C4-C5	-5.24	125.98	128.60
26	LA	2559	C	C2'-C3'-O3'	5.24	122.08	113.70
26	LA	2730	C	C5'-C4'-C3'	-5.24	107.62	116.00
2	SA	129	A	C5-C6-N6	-5.23	119.51	123.70
2	SA	138	G	C2-N3-C4	-5.23	109.28	111.90
2	SA	416	G	N3-C4-C5	-5.23	125.98	128.60
2	SA	1001	C	C4-C5-C6	5.23	120.02	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	SE	112	ALA	O-C-N	-5.23	114.33	122.70
25	LB	49	C	C5-C4-N4	-5.23	116.54	120.20
26	LA	55	G	O4'-C1'-N9	5.23	112.39	108.20
26	LA	1030	C	C3'-C2'-C1'	5.23	105.69	101.50
26	LA	1110	G	C5-N7-C8	5.23	106.92	104.30
26	LA	1576	U	C2-N3-C4	5.23	130.14	127.00
26	LA	1750	G	N1-C2-N3	-5.23	120.76	123.90
26	LA	2375	G	C6-C5-N7	-5.23	127.26	130.40
2	SA	68	G	C8-N9-C1'	5.23	133.80	127.00
2	SA	263	A	C4-C5-N7	5.23	113.32	110.70
2	SA	623	C	C1'-O4'-C4'	-5.23	105.71	109.90
2	SA	940	C	N3-C2-O2	-5.23	118.24	121.90
24	S3	279	ASP	N-CA-CB	-5.23	101.18	110.60
26	LA	114	U	C2-N3-C4	5.23	130.14	127.00
26	LA	162	U	C1'-O4'-C4'	-5.23	105.71	109.90
26	LA	194	G	N3-C4-N9	5.23	129.14	126.00
26	LA	262	A	O4'-C1'-N9	5.23	112.39	108.20
26	LA	308	G	C5'-C4'-C3'	-5.23	107.63	116.00
26	LA	458	G	C4-C5-C6	-5.23	115.66	118.80
26	LA	647	G	C6-N1-C2	-5.23	121.96	125.10
26	LA	1012	U	P-O5'-C5'	-5.23	112.53	120.90
26	LA	1531	C	C5-C6-N1	5.23	123.62	121.00
26	LA	1670	C	OP2-P-O3'	5.23	116.71	105.20
26	LA	1873	G	C5-C6-O6	-5.23	125.46	128.60
26	LA	1947	C	C5-C4-N4	-5.23	116.54	120.20
26	LA	2165	C	N3-C4-C5	-5.23	119.81	121.90
26	LA	2247	A	N3-C4-C5	5.23	130.46	126.80
2	SA	251	G	P-O3'-C3'	5.23	125.98	119.70
2	SA	506	G	C5-C6-N1	-5.23	108.89	111.50
2	SA	1006	G	P-O3'-C3'	-5.23	113.42	119.70
2	SA	1302	C	OP1-P-OP2	-5.23	111.75	119.60
2	SA	1511	G	C1'-O4'-C4'	-5.23	105.72	109.90
3	S1	40	G	C4-N9-C1'	5.23	133.30	126.50
10	SJ	36	VAL	CB-CA-C	-5.23	101.46	111.40
24	S3	263	VAL	O-C-N	-5.23	114.33	122.70
26	LA	502	A	C1'-O4'-C4'	-5.23	105.72	109.90
26	LA	520	G	C2-N3-C4	5.23	114.52	111.90
26	LA	589	U	N1-C2-N3	-5.23	111.76	114.90
26	LA	822	G	C5'-C4'-C3'	-5.23	107.63	116.00
26	LA	1116	G	C6-C5-N7	5.23	133.54	130.40
26	LA	1189	A	O4'-C4'-C3'	5.23	110.28	106.10
26	LA	1264	A	N1-C6-N6	5.23	121.74	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1720	U	OP1-P-O3'	5.23	116.71	105.20
26	LA	1888	G	C4-N9-C1'	5.23	133.30	126.50
26	LA	2059	A	C5'-C4'-C3'	5.23	124.37	116.00
26	LA	2139	U	C2'-C3'-O3'	5.23	122.07	113.70
26	LA	2336	A	N1-C2-N3	-5.23	126.69	129.30
26	LA	2396	G	N7-C8-N9	-5.23	110.48	113.10
26	LA	2743	U	P-O5'-C5'	5.23	129.27	120.90
47	LJ	68	PHE	CG-CD2-CE2	5.23	126.55	120.80
2	SA	541	G	C5-C6-O6	5.23	131.74	128.60
2	SA	569	C	O4'-C4'-C3'	5.23	110.28	106.10
2	SA	882	C	N1-C2-N3	5.23	122.86	119.20
7	SG	78	ARG	CD-NE-CZ	5.23	130.92	123.60
18	SB	63	LYS	N-CA-CB	5.23	120.01	110.60
26	LA	9	G	C3'-C2'-C1'	5.23	105.68	101.50
26	LA	95	A	OP1-P-OP2	-5.23	111.76	119.60
26	LA	379	G	C3'-C2'-C1'	-5.23	97.32	101.50
26	LA	669	G	C6-N1-C2	-5.23	121.96	125.10
26	LA	1128	G	C5'-C4'-C3'	-5.23	107.63	116.00
26	LA	1709	U	C3'-C2'-C1'	5.23	105.68	101.50
26	LA	1819	A	C5-C6-N6	5.23	127.88	123.70
26	LA	1949	G	C5'-C4'-O4'	5.23	115.38	109.10
38	LE	122	VAL	N-CA-CB	5.23	123.00	111.50
2	SA	244	U	C3'-C2'-C1'	-5.23	97.32	101.50
2	SA	606	G	N3-C2-N2	5.23	123.56	119.90
2	SA	742	G	N9-C1'-C2'	-5.23	106.25	112.00
2	SA	1284	C	N3-C4-C5	-5.23	119.81	121.90
3	S1	22	G	N3-C4-C5	-5.23	125.99	128.60
22	SF	72	ASP	CB-CG-OD2	-5.23	113.59	118.30
24	S3	137	ILE	O-C-N	-5.23	114.34	122.70
26	LA	46	G	O4'-C4'-C3'	5.23	110.28	106.10
26	LA	470	A	C2-N3-C4	-5.23	107.99	110.60
26	LA	743	A	P-O3'-C3'	5.23	125.97	119.70
26	LA	743	A	P-O5'-C5'	5.23	129.26	120.90
26	LA	1145	C	C5'-C4'-C3'	-5.23	107.64	116.00
26	LA	1252	G	C4'-C3'-C2'	-5.23	97.37	102.60
26	LA	1552	A	C4'-C3'-C2'	-5.23	97.37	102.60
26	LA	1629	U	N3-C2-O2	-5.23	118.54	122.20
26	LA	1686	C	C4'-C3'-C2'	-5.23	97.37	102.60
26	LA	2673	G	N3-C4-N9	5.23	129.14	126.00
26	LA	2689	U	N1-C2-O2	-5.23	119.14	122.80
26	LA	2817	U	C4-C5-C6	-5.23	116.56	119.70
2	SA	899	C	C4-C5-C6	5.23	120.01	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	248	G	OP1-P-OP2	-5.23	111.76	119.60
26	LA	250	G	N9-C4-C5	-5.23	103.31	105.40
26	LA	1050	A	C5'-C4'-C3'	-5.23	107.64	116.00
26	LA	1904	G	N1-C6-O6	5.23	123.03	119.90
26	LA	1924	C	O4'-C1'-C2'	-5.23	100.57	105.80
26	LA	2375	G	C5-C6-O6	-5.23	125.47	128.60
45	LG	121	PHE	CB-CG-CD2	-5.23	117.14	120.80
2	SA	5	U	C2'-C3'-O3'	5.22	122.06	113.70
2	SA	192	A	N3-C4-C5	-5.22	123.14	126.80
2	SA	283	U	N1-C2-O2	-5.22	119.14	122.80
2	SA	1095	U	C1'-O4'-C4'	-5.22	105.72	109.90
2	SA	1340	A	C5-C6-N6	5.22	127.88	123.70
3	S1	18	A	N7-C8-N9	5.22	116.41	113.80
26	LA	127	A	C5-C6-N1	5.22	120.31	117.70
26	LA	217	A	C4-C5-N7	5.22	113.31	110.70
26	LA	479	A	C2-N3-C4	-5.22	107.99	110.60
26	LA	481	G	C6-N1-C2	-5.22	121.97	125.10
26	LA	505	A	O4'-C1'-N9	5.22	112.38	108.20
26	LA	537	G	C5-C6-N1	5.22	114.11	111.50
26	LA	670	A	O5'-P-OP1	5.22	116.97	110.70
26	LA	765	C	C1'-O4'-C4'	-5.22	105.72	109.90
26	LA	828	U	OP1-P-OP2	-5.22	111.76	119.60
26	LA	1046	A	N7-C8-N9	5.22	116.41	113.80
26	LA	1264	A	O4'-C1'-N9	-5.22	104.02	108.20
26	LA	1598	A	N7-C8-N9	-5.22	111.19	113.80
26	LA	1693	U	C5'-C4'-C3'	-5.22	107.64	116.00
26	LA	1717	A	C1'-O4'-C4'	-5.22	105.72	109.90
26	LA	1956	U	C5'-C4'-O4'	5.22	115.37	109.10
26	LA	1975	G	C1'-O4'-C4'	-5.22	105.72	109.90
26	LA	2362	C	N3-C4-N4	5.22	121.66	118.00
26	LA	2573	C	C5'-C4'-O4'	5.22	115.37	109.10
26	LA	2589	A	OP2-P-O3'	5.22	116.69	105.20
26	LA	2617	U	N3-C4-C5	-5.22	111.47	114.60
26	LA	2626	C	C2-N1-C1'	-5.22	113.05	118.80
42	L6	21	PHE	CB-CG-CD1	5.22	124.46	120.80
2	SA	722	G	C5-N7-C8	-5.22	101.69	104.30
2	SA	848	C	C1'-O4'-C4'	-5.22	105.72	109.90
2	SA	1087	G	C4-N9-C1'	5.22	133.29	126.50
2	SA	1177	G	C3'-C2'-C1'	5.22	105.68	101.50
2	SA	1218	C	C2-N3-C4	-5.22	117.29	119.90
2	SA	1293	C	C2-N1-C1'	5.22	124.55	118.80
2	SA	1515	G	O3'-P-O5'	-5.22	94.08	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	SM	52	ILE	CA-CB-CG2	-5.22	100.45	110.90
26	LA	284	U	C6-N1-C2	-5.22	117.87	121.00
26	LA	414	C	C6-N1-C2	-5.22	118.21	120.30
26	LA	518	G	C5-C6-N1	5.22	114.11	111.50
26	LA	772	C	N3-C4-N4	5.22	121.66	118.00
26	LA	782	A	C4-C5-C6	5.22	119.61	117.00
26	LA	970	U	C5'-C4'-C3'	5.22	124.36	116.00
26	LA	1198	U	C1'-O4'-C4'	-5.22	105.72	109.90
26	LA	1715	G	C5-C6-N1	-5.22	108.89	111.50
26	LA	2199	A	C5'-C4'-C3'	-5.22	107.64	116.00
2	SA	1097	C	C5'-C4'-C3'	5.22	124.35	116.00
2	SA	1366	C	N3-C2-O2	-5.22	118.25	121.90
3	S1	15	G	C1'-O4'-C4'	-5.22	105.72	109.90
3	S1	55	A	C6-N1-C2	5.22	121.73	118.60
18	SB	106	VAL	CA-CB-CG2	-5.22	103.07	110.90
26	LA	460	A	C5-C6-N1	-5.22	115.09	117.70
26	LA	1677	A	C3'-C2'-C1'	5.22	105.68	101.50
26	LA	2515	C	OP1-P-OP2	-5.22	111.77	119.60
2	SA	114	U	O5'-C5'-C4'	-5.22	101.78	111.70
2	SA	401	C	OP1-P-OP2	-5.22	111.77	119.60
2	SA	421	U	N1-C2-O2	-5.22	119.15	122.80
2	SA	598	U	O4'-C1'-N1	5.22	112.38	108.20
2	SA	713	G	N7-C8-N9	5.22	115.71	113.10
2	SA	1147	C	O5'-P-OP1	5.22	116.96	110.70
2	SA	1488	G	C1'-O4'-C4'	-5.22	105.72	109.90
4	S2	13	C	C6-N1-C1'	5.22	127.06	120.80
26	LA	433	C	C5-C4-N4	-5.22	116.55	120.20
26	LA	473	G	N3-C4-C5	5.22	131.21	128.60
26	LA	600	G	P-O5'-C5'	-5.22	112.55	120.90
26	LA	1173	U	N1-C2-O2	5.22	126.45	122.80
26	LA	1244	A	N1-C2-N3	-5.22	126.69	129.30
26	LA	1331	G	C6-C5-N7	-5.22	127.27	130.40
26	LA	1572	A	O5'-P-OP2	-5.22	101.00	105.70
26	LA	1965	C	O4'-C1'-C2'	-5.22	100.58	105.80
26	LA	2505	G	N9-C4-C5	5.22	107.49	105.40
26	LA	2808	G	N9-C4-C5	5.22	107.49	105.40
2	SA	262	A	O5'-P-OP1	-5.22	101.00	105.70
2	SA	1377	A	C4'-C3'-C2'	-5.22	97.38	102.60
25	LB	46	A	C5-C6-N1	-5.22	115.09	117.70
25	LB	60	C	C6-N1-C1'	-5.22	114.54	120.80
26	LA	362	A	C5-C6-N6	-5.22	119.53	123.70
26	LA	464	U	N3-C2-O2	-5.22	118.55	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	939	G	N1-C2-N2	-5.22	111.50	116.20
26	LA	971	G	N1-C6-O6	5.22	123.03	119.90
26	LA	1117	C	P-O3'-C3'	5.22	125.96	119.70
26	LA	1958	C	N3-C2-O2	-5.22	118.25	121.90
26	LA	2603	G	C6-C5-N7	-5.22	127.27	130.40
2	SA	565	U	N1-C2-N3	5.22	118.03	114.90
2	SA	652	U	OP1-P-OP2	-5.22	111.78	119.60
2	SA	1243	C	C2-N1-C1'	-5.22	113.06	118.80
4	S2	32	G	OP2-P-O3'	5.22	116.68	105.20
25	LB	21	G	C5-N7-C8	-5.22	101.69	104.30
26	LA	151	C	C5'-C4'-C3'	-5.22	107.65	116.00
26	LA	197	A	O4'-C4'-C3'	5.22	110.27	106.10
26	LA	1385	A	C4'-C3'-C2'	-5.22	97.38	102.60
26	LA	1392	A	O4'-C1'-C2'	5.22	112.30	107.60
26	LA	2047	C	C5-C4-N4	-5.22	116.55	120.20
26	LA	2090	A	C2-N3-C4	5.22	113.21	110.60
26	LA	2108	A	C5-C6-N6	-5.22	119.53	123.70
26	LA	2138	G	C5-N7-C8	-5.22	101.69	104.30
26	LA	2247	A	C5'-C4'-C3'	-5.22	107.65	116.00
26	LA	2367	G	C5-N7-C8	-5.22	101.69	104.30
26	LA	2429	G	N9-C4-C5	5.22	107.49	105.40
26	LA	2752	C	C4'-C3'-C2'	-5.22	97.38	102.60
27	LD	225	ASN	O-C-N	-5.22	111.19	121.10
38	LE	9	VAL	CA-C-N	5.22	126.63	116.20
45	LG	21	TYR	CG-CD2-CE2	-5.22	117.13	121.30
46	LH	9	VAL	CA-CB-CG2	5.22	118.72	110.90
56	LR	46	VAL	CG1-CB-CG2	-5.22	102.56	110.90
2	SA	47	C	C4'-C3'-C2'	-5.21	97.39	102.60
2	SA	75	G	C5-N7-C8	-5.21	101.69	104.30
2	SA	333	U	C5-C6-N1	5.21	125.31	122.70
2	SA	647	C	OP2-P-O3'	5.21	116.67	105.20
2	SA	668	G	O4'-C1'-N9	5.21	112.37	108.20
2	SA	688	G	P-O5'-C5'	5.21	129.24	120.90
2	SA	1178	G	N1-C2-N2	-5.21	111.51	116.20
2	SA	1183	U	N3-C4-C5	5.21	117.73	114.60
4	S2	10	G	C5'-C4'-O4'	5.21	115.36	109.10
24	S3	110	MET	CG-SD-CE	-5.21	91.86	100.20
26	LA	206	U	C1'-O4'-C4'	5.21	114.07	109.90
26	LA	481	G	O5'-P-OP1	5.21	116.96	110.70
26	LA	534	U	C6-N1-C1'	-5.21	113.90	121.20
26	LA	620	G	N1-C2-N2	5.21	120.89	116.20
26	LA	879	G	C6-N1-C2	-5.21	121.97	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2369	A	C5-C6-N6	-5.21	119.53	123.70
26	LA	2751	G	O3'-P-O5'	-5.21	94.09	104.00
46	LH	137	LYS	O-C-N	-5.21	114.36	122.70
46	LH	148	ARG	CG-CD-NE	-5.21	100.85	111.80
50	LL	16	TYR	CB-CA-C	-5.21	99.97	110.40
2	SA	236	A	P-O5'-C5'	5.21	129.24	120.90
2	SA	267	C	O5'-C5'-C4'	5.21	121.61	111.70
2	SA	474	G	C5-C6-N1	5.21	114.11	111.50
2	SA	1109	C	O4'-C4'-C3'	5.21	110.27	106.10
2	SA	1233	G	C4'-C3'-C2'	-5.21	97.39	102.60
10	SJ	48	ARG	NH1-CZ-NH2	-5.21	113.67	119.40
25	LB	112	G	C4-C5-N7	-5.21	108.72	110.80
26	LA	514	A	O4'-C1'-N9	5.21	112.37	108.20
26	LA	1119	U	O4'-C1'-N1	5.21	112.37	108.20
26	LA	1702	G	O4'-C1'-N9	5.21	112.37	108.20
26	LA	2026	U	C1'-O4'-C4'	5.21	114.07	109.90
26	LA	2190	G	P-O3'-C3'	-5.21	113.44	119.70
34	L0	8	GLU	O-C-N	-5.21	114.36	122.70
2	SA	57	G	N3-C2-N2	5.21	123.55	119.90
2	SA	185	U	C5'-C4'-C3'	-5.21	107.66	116.00
2	SA	344	A	N3-C4-C5	-5.21	123.15	126.80
2	SA	378	G	N3-C4-C5	-5.21	126.00	128.60
2	SA	403	C	P-O5'-C5'	-5.21	112.56	120.90
2	SA	506	G	C4-C5-N7	-5.21	108.72	110.80
2	SA	1366	C	C5'-C4'-O4'	5.21	115.36	109.10
3	S1	58	C	C5'-C4'-O4'	5.21	115.35	109.10
4	S2	32	G	O5'-P-OP2	-5.21	101.01	105.70
25	LB	70	C	OP1-P-OP2	-5.21	111.78	119.60
26	LA	221	A	N9-C4-C5	5.21	107.89	105.80
26	LA	1167	C	C5'-C4'-O4'	5.21	115.36	109.10
26	LA	1411	U	C3'-C2'-C1'	5.21	105.67	101.50
26	LA	1685	C	O4'-C1'-N1	5.21	112.37	108.20
33	LZ	27	ARG	NH1-CZ-NH2	-5.21	113.67	119.40
34	L0	58	ASN	CB-CG-OD1	5.21	132.02	121.60
54	LM	75	SER	N-CA-C	-5.21	96.93	111.00
2	SA	183	C	C5-C6-N1	-5.21	118.39	121.00
2	SA	1324	A	C4-C5-N7	5.21	113.31	110.70
4	S2	67	C	C2-N1-C1'	-5.21	113.07	118.80
26	LA	126	A	O4'-C1'-C2'	-5.21	100.59	105.80
26	LA	589	U	C5'-C4'-O4'	5.21	115.35	109.10
26	LA	914	G	C6-C5-N7	-5.21	127.27	130.40
26	LA	1019	U	C3'-C2'-C1'	5.21	105.67	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1362	C	C1'-O4'-C4'	-5.21	105.73	109.90
26	LA	1577	C	O4'-C1'-N1	5.21	112.37	108.20
26	LA	2332	C	C6-N1-C1'	-5.21	114.55	120.80
26	LA	2369	A	P-O5'-C5'	-5.21	112.56	120.90
37	LC	71	ARG	NE-CZ-NH1	5.21	122.91	120.30
2	SA	81	A	P-O5'-C5'	5.21	129.23	120.90
2	SA	557	G	C5-C6-N1	-5.21	108.90	111.50
2	SA	712	A	OP1-P-OP2	-5.21	111.79	119.60
2	SA	944	G	N7-C8-N9	5.21	115.70	113.10
2	SA	1025	U	C5'-C4'-C3'	-5.21	107.67	116.00
2	SA	1149	C	P-O5'-C5'	-5.21	112.57	120.90
8	SH	124	ILE	O-C-N	-5.21	114.37	122.70
26	LA	391	A	N7-C8-N9	5.21	116.40	113.80
26	LA	473	G	C5'-C4'-C3'	-5.21	107.67	116.00
26	LA	536	G	P-O3'-C3'	-5.21	113.45	119.70
26	LA	893	C	C4'-C3'-C2'	-5.21	97.39	102.60
26	LA	1034	G	O4'-C1'-N9	5.21	112.37	108.20
26	LA	1065	U	C2-N3-C4	5.21	130.12	127.00
26	LA	1102	C	C2-N1-C1'	-5.21	113.07	118.80
26	LA	1107	G	C4-N9-C1'	-5.21	119.73	126.50
26	LA	1145	C	C1'-O4'-C4'	-5.21	105.73	109.90
26	LA	1441	G	OP1-P-OP2	-5.21	111.79	119.60
26	LA	1511	G	N9-C1'-C2'	-5.21	106.27	112.00
26	LA	1521	G	O4'-C1'-N9	5.21	112.37	108.20
26	LA	1646	C	C5'-C4'-C3'	-5.21	107.67	116.00
26	LA	1721	G	O4'-C1'-N9	5.21	112.37	108.20
26	LA	2239	G	C5-N7-C8	5.21	106.91	104.30
26	LA	2788	C	C1'-O4'-C4'	-5.21	105.73	109.90
56	LR	20	ARG	O-C-N	-5.21	111.20	121.10
2	SA	1380	U	C4-C5-C6	-5.21	116.58	119.70
2	SA	1485	U	C5-C6-N1	-5.21	120.10	122.70
4	S2	60	A	C4-C5-N7	5.21	113.30	110.70
25	LB	87	U	N1-C2-N3	-5.21	111.78	114.90
25	LB	105	G	N9-C4-C5	5.21	107.48	105.40
26	LA	442	G	N3-C4-C5	-5.21	126.00	128.60
26	LA	489	G	C6-N1-C2	-5.21	121.98	125.10
26	LA	749	A	C1'-O4'-C4'	5.21	114.06	109.90
26	LA	931	U	O5'-P-OP2	5.21	116.95	110.70
26	LA	1032	A	C5-C6-N6	5.21	127.86	123.70
26	LA	1118	C	C2-N3-C4	-5.21	117.30	119.90
26	LA	1518	C	C5'-C4'-C3'	-5.21	107.67	116.00
26	LA	1787	A	C5-N7-C8	-5.21	101.30	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1837	C	N3-C4-N4	5.21	121.64	118.00
26	LA	2345	G	N3-C4-C5	-5.21	126.00	128.60
26	LA	2549	G	P-O5'-C5'	5.21	129.23	120.90
26	LA	2555	U	C2-N1-C1'	5.21	123.95	117.70
2	SA	174	A	C4-C5-C6	-5.21	114.40	117.00
3	S1	41	A	N1-C6-N6	5.21	121.72	118.60
22	SF	42	TRP	CE2-CD2-CG	-5.21	103.14	107.30
26	LA	353	C	C4-C5-C6	-5.21	114.80	117.40
26	LA	735	A	C5-C6-N1	5.21	120.30	117.70
26	LA	1242	U	C5'-C4'-O4'	5.21	115.34	109.10
26	LA	1635	A	N3-C4-N9	-5.21	123.24	127.40
26	LA	1730	C	N3-C2-O2	-5.21	118.26	121.90
26	LA	2499	C	C6-N1-C1'	-5.21	114.55	120.80
26	LA	2750	A	N3-C4-C5	-5.21	123.16	126.80
30	LW	102	ILE	CA-CB-CG1	5.21	120.89	111.00
2	SA	509	A	P-O3'-C3'	-5.20	113.46	119.70
2	SA	600	A	C6-N1-C2	-5.20	115.48	118.60
2	SA	941	G	C5-N7-C8	5.20	106.90	104.30
2	SA	1418	A	C8-N9-C4	-5.20	103.72	105.80
10	SJ	31	ARG	NE-CZ-NH1	-5.20	117.70	120.30
19	SC	188	ALA	O-C-N	-5.20	114.38	122.70
25	LB	106	G	N1-C2-N2	5.20	120.88	116.20
26	LA	332	A	O4'-C1'-N9	5.20	112.36	108.20
26	LA	449	A	C5'-C4'-C3'	-5.20	107.67	116.00
26	LA	614	A	C8-N9-C4	5.20	107.88	105.80
26	LA	733	G	C6-N1-C2	-5.20	121.98	125.10
26	LA	845	A	OP2-P-O3'	5.20	116.65	105.20
26	LA	1166	G	C6-N1-C2	5.20	128.22	125.10
26	LA	1475	G	C5'-C4'-C3'	-5.20	107.68	116.00
26	LA	1676	A	C4-C5-N7	-5.20	108.10	110.70
26	LA	2193	G	N1-C2-N2	-5.20	111.52	116.20
26	LA	2228	G	N1-C2-N3	-5.20	120.78	123.90
26	LA	2345	G	C4-N9-C1'	5.20	133.26	126.50
26	LA	2436	G	N3-C4-C5	5.20	131.20	128.60
26	LA	2588	G	C8-N9-C4	-5.20	104.32	106.40
26	LA	2661	G	C5-C6-O6	-5.20	125.48	128.60
26	LA	2699	C	N3-C4-C5	5.20	123.98	121.90
26	LA	2881	U	P-O3'-C3'	5.20	125.94	119.70
42	L6	53	ASP	CA-CB-CG	-5.20	101.95	113.40
45	LG	99	PHE	CB-CG-CD1	-5.20	117.16	120.80
58	LT	37	GLU	O-C-N	-5.20	114.37	122.70
2	SA	240	G	C6-N1-C2	-5.20	121.98	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	269	C	N3-C2-O2	-5.20	118.26	121.90
26	LA	782	A	N9-C4-C5	5.20	107.88	105.80
26	LA	1852	U	O4'-C1'-N1	-5.20	104.04	108.20
26	LA	1966	A	O3'-P-O5'	5.20	113.88	104.00
26	LA	2811	G	O4'-C1'-N9	5.20	112.36	108.20
2	SA	79	G	N1-C2-N2	-5.20	111.52	116.20
2	SA	83	C	C2-N1-C1'	5.20	124.52	118.80
2	SA	114	U	C5'-C4'-C3'	5.20	124.32	116.00
2	SA	362	G	C5'-C4'-O4'	5.20	115.34	109.10
2	SA	465	A	N1-C2-N3	5.20	131.90	129.30
2	SA	498	A	C4-C5-N7	5.20	113.30	110.70
2	SA	542	G	C6-N1-C2	-5.20	121.98	125.10
2	SA	679	C	C2-N1-C1'	5.20	124.52	118.80
2	SA	753	A	N9-C4-C5	-5.20	103.72	105.80
2	SA	1033	G	C4-N9-C1'	-5.20	119.74	126.50
2	SA	1057	G	C6-N1-C2	-5.20	121.98	125.10
2	SA	1197	A	P-O3'-C3'	5.20	125.94	119.70
3	S1	24	A	C4-C5-N7	5.20	113.30	110.70
26	LA	93	G	C8-N9-C4	-5.20	104.32	106.40
26	LA	767	U	N3-C2-O2	5.20	125.84	122.20
26	LA	959	A	O4'-C1'-N9	5.20	112.36	108.20
26	LA	1349	C	C5-C6-N1	5.20	123.60	121.00
26	LA	1571	A	N1-C2-N3	5.20	131.90	129.30
26	LA	2194	U	C5-C6-N1	5.20	125.30	122.70
26	LA	2412	A	C5-C6-N6	5.20	127.86	123.70
26	LA	2610	C	O4'-C1'-N1	5.20	112.36	108.20
36	L2	9	TYR	CZ-CE2-CD2	-5.20	115.12	119.80
51	LI	27	ARG	NE-CZ-NH1	-5.20	117.70	120.30
2	SA	216	U	C5-C4-O4	-5.20	122.78	125.90
2	SA	412	A	C2-N3-C4	-5.20	108.00	110.60
2	SA	505	G	C6-N1-C2	-5.20	121.98	125.10
2	SA	848	C	P-O5'-C5'	5.20	129.22	120.90
2	SA	1148	U	C3'-C2'-C1'	5.20	105.66	101.50
2	SA	1420	U	N3-C2-O2	-5.20	118.56	122.20
2	SA	1428	A	C4-C5-C6	-5.20	114.40	117.00
2	SA	1536	C	N3-C4-N4	5.20	121.64	118.00
3	S1	35	G	C6-N1-C2	-5.20	121.98	125.10
25	LB	97	C	N1-C1'-C2'	-5.20	106.28	112.00
25	LB	106	G	C4-N9-C1'	-5.20	119.74	126.50
26	LA	385	C	O4'-C1'-C2'	5.20	112.28	107.60
26	LA	733	G	C1'-O4'-C4'	-5.20	105.74	109.90
26	LA	835	C	O4'-C1'-N1	5.20	112.36	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1570	A	C8-N9-C4	-5.20	103.72	105.80
26	LA	1774	C	P-O5'-C5'	5.20	129.22	120.90
26	LA	2131	U	N3-C4-O4	5.20	123.04	119.40
26	LA	2380	C	C1'-O4'-C4'	-5.20	105.74	109.90
45	LG	31	GLU	OE1-CD-OE2	-5.20	117.06	123.30
51	LI	101	ASP	CB-CG-OD2	5.20	122.98	118.30
57	LS	52	ARG	O-C-N	-5.20	114.38	122.70
2	SA	166	U	N3-C2-O2	-5.20	118.56	122.20
2	SA	632	U	C4'-C3'-C2'	-5.20	97.40	102.60
2	SA	1273	C	N3-C4-C5	5.20	123.98	121.90
2	SA	1439	G	N3-C4-C5	-5.20	126.00	128.60
26	LA	389	G	C5'-C4'-C3'	5.20	124.31	116.00
26	LA	460	A	C4'-C3'-C2'	-5.20	97.40	102.60
26	LA	882	G	C5'-C4'-O4'	-5.20	102.86	109.10
26	LA	889	C	C4'-C3'-C2'	-5.20	97.40	102.60
26	LA	1421	G	C6-C5-N7	-5.20	127.28	130.40
26	LA	1653	G	C8-N9-C4	5.20	108.48	106.40
26	LA	1802	A	C4-C5-N7	-5.20	108.10	110.70
26	LA	2640	G	C4-C5-C6	5.20	121.92	118.80
2	SA	629	A	P-O3'-C3'	5.20	125.93	119.70
2	SA	1534	A	N7-C8-N9	5.20	116.40	113.80
26	LA	86	G	O4'-C1'-N9	5.20	112.36	108.20
26	LA	1532	A	O4'-C1'-N9	5.20	112.36	108.20
26	LA	1719	G	N3-C2-N2	5.20	123.54	119.90
26	LA	1947	C	C3'-C2'-C1'	5.20	105.66	101.50
26	LA	2153	C	C6-N1-C2	-5.20	118.22	120.30
26	LA	2179	C	N1-C2-N3	-5.20	115.56	119.20
26	LA	2318	G	N9-C4-C5	5.20	107.48	105.40
26	LA	2785	C	OP2-P-O3'	5.20	116.63	105.20
57	LS	105	PHE	CA-CB-CG	-5.20	101.43	113.90
2	SA	137	U	C5'-C4'-C3'	-5.19	107.69	116.00
4	S2	62	C	N1-C2-O2	-5.19	115.78	118.90
26	LA	463	G	N9-C4-C5	5.19	107.48	105.40
26	LA	1588	G	C2'-C3'-O3'	5.19	122.01	113.70
26	LA	2297	A	C5-C6-N6	5.19	127.86	123.70
26	LA	2471	A	C5-N7-C8	-5.19	101.30	103.90
26	LA	2783	U	N3-C4-O4	5.19	123.04	119.40
26	LA	2869	G	C8-N9-C1'	5.19	133.75	127.00
26	LA	2893	A	O5'-P-OP2	-5.19	101.03	105.70
2	SA	187	G	C5'-C4'-O4'	5.19	115.33	109.10
2	SA	229	U	C4'-C3'-C2'	-5.19	97.41	102.60
2	SA	246	A	C6-N1-C2	5.19	121.72	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	786	G	C5-C6-O6	-5.19	125.48	128.60
2	SA	804	U	C5'-C4'-C3'	-5.19	107.69	116.00
2	SA	986	U	N1-C2-O2	-5.19	119.17	122.80
2	SA	1278	G	P-O3'-C3'	-5.19	113.47	119.70
2	SA	1475	G	C1'-O4'-C4'	5.19	114.05	109.90
2	SA	1542	A	C5-N7-C8	5.19	106.50	103.90
4	S2	36	A	N3-C4-C5	5.19	130.43	126.80
8	SH	55	LYS	N-CA-CB	5.19	119.95	110.60
19	SC	65	VAL	CB-CA-C	-5.19	101.53	111.40
26	LA	335	C	C2-N3-C4	-5.19	117.30	119.90
26	LA	354	A	C4'-C3'-C2'	-5.19	97.41	102.60
26	LA	694	U	OP1-P-OP2	-5.19	111.81	119.60
26	LA	791	C	N3-C4-N4	5.19	121.64	118.00
26	LA	1210	G	N7-C8-N9	5.19	115.70	113.10
26	LA	1626	A	N3-C4-N9	-5.19	123.25	127.40
26	LA	1827	U	C6-N1-C2	-5.19	117.89	121.00
26	LA	1942	C	P-O5'-C5'	-5.19	112.59	120.90
26	LA	2142	A	C5'-C4'-O4'	5.19	115.33	109.10
26	LA	2156	G	C6-C5-N7	5.19	133.51	130.40
50	LL	46	PRO	N-CA-CB	-5.19	96.89	102.60
2	SA	344	A	N9-C4-C5	5.19	107.88	105.80
2	SA	529	G	N7-C8-N9	5.19	115.69	113.10
2	SA	539	A	C2-N3-C4	-5.19	108.00	110.60
2	SA	778	G	C8-N9-C4	-5.19	104.32	106.40
2	SA	780	A	N9-C1'-C2'	-5.19	106.29	112.00
10	SJ	65	TYR	CG-CD2-CE2	-5.19	117.15	121.30
17	SQ	21	VAL	CA-CB-CG2	-5.19	103.11	110.90
19	SC	64	ARG	NE-CZ-NH1	5.19	122.89	120.30
22	SF	110	ARG	N-CA-CB	-5.19	101.26	110.60
26	LA	339	U	P-O5'-C5'	5.19	129.21	120.90
26	LA	343	C	N3-C4-N4	5.19	121.63	118.00
26	LA	502	A	C4'-C3'-C2'	5.19	107.79	102.60
26	LA	668	A	C4-C5-N7	5.19	113.30	110.70
26	LA	1851	U	C5'-C4'-C3'	-5.19	107.69	116.00
26	LA	1860	G	C6-N1-C2	-5.19	121.99	125.10
26	LA	2432	A	C6-N1-C2	5.19	121.72	118.60
49	LK	36	GLU	N-CA-CB	5.19	119.94	110.60
51	LI	45	GLU	N-CA-CB	-5.19	101.26	110.60
2	SA	1143	G	N7-C8-N9	-5.19	110.51	113.10
2	SA	1271	A	P-O5'-C5'	-5.19	112.60	120.90
26	LA	289	G	N7-C8-N9	5.19	115.69	113.10
26	LA	515	A	C4-C5-C6	-5.19	114.41	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	845	A	P-O5'-C5'	5.19	129.20	120.90
26	LA	1034	G	N9-C4-C5	-5.19	103.33	105.40
26	LA	1537	G	N9-C4-C5	5.19	107.48	105.40
26	LA	1727	C	P-O3'-C3'	5.19	125.93	119.70
26	LA	1764	C	P-O5'-C5'	-5.19	112.60	120.90
26	LA	1821	A	C6-N1-C2	-5.19	115.49	118.60
26	LA	1888	G	C2-N3-C4	-5.19	109.31	111.90
26	LA	1983	G	C2-N3-C4	5.19	114.49	111.90
26	LA	2292	U	P-O3'-C3'	-5.19	113.47	119.70
26	LA	2594	C	C5'-C4'-C3'	-5.19	107.70	116.00
2	SA	201	G	C2-N3-C4	-5.19	109.31	111.90
2	SA	382	A	C6-C5-N7	-5.19	128.67	132.30
2	SA	660	C	C5'-C4'-C3'	-5.19	107.70	116.00
2	SA	862	C	C4'-C3'-C2'	-5.19	97.41	102.60
2	SA	1153	G	C4-N9-C1'	-5.19	119.76	126.50
2	SA	1163	A	C4'-C3'-C2'	-5.19	97.41	102.60
2	SA	1277	C	N1-C2-N3	5.19	122.83	119.20
2	SA	1446	A	P-O5'-C5'	-5.19	112.60	120.90
3	S1	19	A	N7-C8-N9	5.19	116.39	113.80
4	S2	48	U	O3'-P-O5'	-5.19	94.14	104.00
17	SQ	33	TYR	CB-CG-CD2	-5.19	117.89	121.00
23	SR	60	ARG	N-CA-CB	5.19	119.94	110.60
26	LA	621	A	C6-N1-C2	5.19	121.71	118.60
26	LA	637	A	C8-N9-C4	5.19	107.88	105.80
26	LA	1070	A	O4'-C1'-N9	5.19	112.35	108.20
26	LA	1217	U	P-O3'-C3'	5.19	125.92	119.70
26	LA	1541	C	N3-C2-O2	-5.19	118.27	121.90
26	LA	1840	G	OP1-P-OP2	-5.19	111.82	119.60
26	LA	1908	C	C5'-C4'-C3'	-5.19	107.70	116.00
26	LA	2531	A	C5-C6-N1	-5.19	115.11	117.70
27	LD	147	PRO	N-CA-C	5.19	125.59	112.10
2	SA	2	A	C8-N9-C4	5.19	107.88	105.80
2	SA	215	C	N1-C2-O2	-5.19	115.79	118.90
2	SA	248	C	C6-N1-C2	-5.19	118.23	120.30
2	SA	354	G	C3'-C2'-C1'	-5.19	97.35	101.50
2	SA	1073	U	C4'-C3'-C2'	-5.19	97.41	102.60
2	SA	1217	C	N3-C2-O2	-5.19	118.27	121.90
6	SU	18	PHE	C-N-CA	5.19	134.67	121.70
22	SF	84	VAL	CG1-CB-CG2	-5.19	102.60	110.90
25	LB	73	A	C4-C5-C6	5.19	119.59	117.00
26	LA	450	G	P-O5'-C5'	5.19	129.20	120.90
26	LA	1192	G	O4'-C1'-N9	5.19	112.35	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1755	A	C8-N9-C4	5.19	107.88	105.80
26	LA	1938	A	O4'-C1'-N9	5.19	112.35	108.20
58	LT	37	GLU	OE1-CD-OE2	-5.19	117.08	123.30
2	SA	149	A	O4'-C1'-N9	5.18	112.35	108.20
2	SA	358	U	C5'-C4'-O4'	5.18	115.32	109.10
2	SA	1081	A	C4-C5-N7	-5.18	108.11	110.70
2	SA	1197	A	C5'-C4'-C3'	-5.18	107.70	116.00
2	SA	1330	U	O4'-C1'-N1	5.18	112.35	108.20
2	SA	1458	G	C5-C6-N1	5.18	114.09	111.50
25	LB	26	C	P-O3'-C3'	-5.18	113.48	119.70
26	LA	177	G	C4-N9-C1'	5.18	133.24	126.50
26	LA	219	A	C5-C6-N1	-5.18	115.11	117.70
26	LA	546	U	O4'-C4'-C3'	-5.18	98.81	104.00
26	LA	617	G	N9-C4-C5	5.18	107.47	105.40
26	LA	742	A	C8-N9-C4	-5.18	103.73	105.80
26	LA	819	A	C5-N7-C8	-5.18	101.31	103.90
26	LA	1007	C	N3-C4-N4	-5.18	114.37	118.00
26	LA	1247	A	P-O3'-C3'	5.18	125.92	119.70
26	LA	1674	G	C1'-O4'-C4'	5.18	114.05	109.90
26	LA	1681	G	N1-C2-N3	5.18	127.01	123.90
26	LA	1738	G	C5-C6-N1	5.18	114.09	111.50
26	LA	1787	A	N3-C4-C5	-5.18	123.17	126.80
26	LA	2037	A	C5'-C4'-C3'	-5.18	107.71	116.00
26	LA	2389	G	P-O5'-C5'	-5.18	112.60	120.90
26	LA	2489	U	C2-N1-C1'	5.18	123.92	117.70
26	LA	2801	G	C3'-C2'-C1'	5.18	105.65	101.50
45	LG	174	PHE	N-CA-CB	-5.18	101.27	110.60
2	SA	25	C	N3-C2-O2	-5.18	118.27	121.90
2	SA	554	A	N7-C8-N9	-5.18	111.21	113.80
2	SA	1207	G	P-O5'-C5'	-5.18	112.61	120.90
2	SA	1260	G	N7-C8-N9	5.18	115.69	113.10
2	SA	1332	A	N1-C2-N3	5.18	131.89	129.30
2	SA	1435	G	P-O3'-C3'	5.18	125.92	119.70
4	S2	26	C	C6-N1-C2	-5.18	118.23	120.30
24	S3	38	LYS	N-CA-CB	5.18	119.93	110.60
24	S3	186	LYS	O-C-N	-5.18	114.41	122.70
25	LB	27	C	O4'-C1'-N1	5.18	112.35	108.20
26	LA	184	C	C6-N1-C1'	5.18	127.02	120.80
26	LA	192	C	OP1-P-OP2	-5.18	111.83	119.60
26	LA	203	A	C2-N3-C4	5.18	113.19	110.60
26	LA	325	G	C8-N9-C4	-5.18	104.33	106.40
26	LA	1092	C	C3'-C2'-C1'	-5.18	97.35	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1308	A	O5'-P-OP2	5.18	116.92	110.70
26	LA	1816	C	O3'-P-O5'	5.18	113.84	104.00
26	LA	2198	A	C4-C5-N7	-5.18	108.11	110.70
26	LA	2313	C	C1'-O4'-C4'	-5.18	105.75	109.90
26	LA	2336	A	OP1-P-OP2	-5.18	111.83	119.60
26	LA	2465	C	C5-C4-N4	-5.18	116.57	120.20
26	LA	2495	G	C1'-O4'-C4'	-5.18	105.75	109.90
26	LA	2764	A	N1-C2-N3	-5.18	126.71	129.30
26	LA	2785	C	C5-C4-N4	-5.18	116.57	120.20
26	LA	2857	G	N3-C4-C5	5.18	131.19	128.60
27	LD	65	ASP	CB-CG-OD1	-5.18	113.64	118.30
31	LX	18	ARG	NH1-CZ-NH2	-5.18	113.70	119.40
32	LY	67	LYS	O-C-N	-5.18	114.41	122.70
38	LE	189	VAL	CA-C-O	5.18	130.99	120.10
51	LI	99	ILE	CG1-CB-CG2	-5.18	100.00	111.40
2	SA	1423	G	C5-C6-O6	-5.18	125.49	128.60
24	S3	4	THR	N-CA-C	-5.18	97.01	111.00
26	LA	865	C	P-O3'-C3'	-5.18	113.48	119.70
26	LA	1079	C	N3-C4-C5	-5.18	119.83	121.90
26	LA	1150	C	N1-C2-N3	5.18	122.83	119.20
26	LA	1718	G	C5-N7-C8	5.18	106.89	104.30
26	LA	2558	C	P-O5'-C5'	5.18	129.19	120.90
26	LA	2709	G	OP1-P-O3'	5.18	116.60	105.20
2	SA	618	C	C6-N1-C2	-5.18	118.23	120.30
2	SA	738	C	O4'-C1'-N1	5.18	112.34	108.20
2	SA	914	A	C6-N1-C2	5.18	121.71	118.60
11	SK	4	PRO	C-N-CA	5.18	134.65	121.70
25	LB	75	G	O4'-C1'-C2'	5.18	112.26	107.60
26	LA	196	A	OP1-P-OP2	-5.18	111.83	119.60
26	LA	205	G	O4'-C1'-N9	5.18	112.34	108.20
26	LA	989	G	N1-C2-N2	-5.18	111.54	116.20
26	LA	1238	G	O5'-C5'-C4'	5.18	121.54	111.70
26	LA	2017	U	C5'-C4'-O4'	5.18	115.31	109.10
26	LA	2219	U	C6-N1-C1'	-5.18	113.95	121.20
26	LA	2367	G	N3-C2-N2	5.18	123.53	119.90
26	LA	2409	G	C4-C5-N7	5.18	112.87	110.80
26	LA	2528	U	OP1-P-OP2	-5.18	111.83	119.60
26	LA	2805	C	C4-C5-C6	-5.18	114.81	117.40
34	L0	3	ALA	CB-CA-C	-5.18	102.33	110.10
2	SA	89	U	C5-C6-N1	-5.18	120.11	122.70
2	SA	173	U	N1-C2-N3	-5.18	111.79	114.90
2	SA	382	A	C4-C5-N7	5.18	113.29	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	730	G	C8-N9-C4	-5.18	104.33	106.40
2	SA	1237	C	C2'-C3'-O3'	5.18	121.98	113.70
25	LB	90	C	C5-C4-N4	-5.18	116.58	120.20
26	LA	950	G	C5-C6-O6	-5.18	125.49	128.60
26	LA	1840	G	N1-C2-N2	-5.18	111.54	116.20
26	LA	2398	U	P-O3'-C3'	-5.18	113.49	119.70
26	LA	2624	G	C4-C5-N7	5.18	112.87	110.80
2	SA	57	G	N1-C2-N3	-5.18	120.79	123.90
2	SA	71	A	C5-C6-N6	5.18	127.84	123.70
2	SA	1096	C	N3-C2-O2	-5.18	118.28	121.90
2	SA	1140	C	N3-C4-N4	5.18	121.62	118.00
2	SA	1274	A	C5-C6-N6	5.18	127.84	123.70
20	SD	116	LEU	CB-CA-C	5.18	120.04	110.20
26	LA	215	G	C6-N1-C2	-5.18	121.99	125.10
26	LA	284	U	O5'-P-OP1	5.18	116.91	110.70
26	LA	613	A	C5-N7-C8	5.18	106.49	103.90
26	LA	757	G	C5'-C4'-C3'	5.18	124.28	116.00
26	LA	937	C	C2-N3-C4	-5.18	117.31	119.90
26	LA	1017	G	C8-N9-C4	5.18	108.47	106.40
26	LA	1200	C	N3-C4-C5	-5.18	119.83	121.90
26	LA	1410	G	N1-C6-O6	-5.18	116.79	119.90
26	LA	1633	G	C8-N9-C4	-5.18	104.33	106.40
26	LA	1637	A	C3'-C2'-C1'	5.18	105.64	101.50
26	LA	1853	A	N1-C6-N6	5.18	121.71	118.60
26	LA	1902	C	C2-N1-C1'	-5.18	113.11	118.80
26	LA	1970	A	N1-C6-N6	5.18	121.70	118.60
26	LA	2069	G	C2'-C3'-O3'	5.18	121.98	113.70
26	LA	2089	C	C3'-C2'-C1'	5.18	105.64	101.50
26	LA	2226	C	N3-C4-N4	5.18	121.62	118.00
26	LA	2543	G	C5-N7-C8	-5.18	101.71	104.30
2	SA	521	G	O4'-C1'-C2'	5.17	112.26	107.60
2	SA	522	C	C2-N1-C1'	5.17	124.49	118.80
2	SA	661	G	O4'-C1'-N9	5.17	112.34	108.20
2	SA	1186	G	N9-C1'-C2'	-5.17	106.31	112.00
2	SA	1519	A	C5-C6-N1	5.17	120.29	117.70
4	S2	36	A	OP2-P-O3'	5.17	116.58	105.20
20	SD	50	TYR	CG-CD2-CE2	5.17	125.44	121.30
25	LB	65	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	LA	286	U	C5'-C4'-C3'	5.17	124.28	116.00
26	LA	539	G	N3-C2-N2	5.17	123.52	119.90
26	LA	556	A	O5'-C5'-C4'	5.17	121.53	111.70
26	LA	884	U	C1'-O4'-C4'	-5.17	105.76	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	989	G	C2-N3-C4	-5.17	109.31	111.90
26	LA	1150	C	C4-C5-C6	5.17	119.99	117.40
26	LA	1594	U	C5-C4-O4	5.17	129.00	125.90
26	LA	1853	A	O5'-C5'-C4'	5.17	121.53	111.70
26	LA	2318	G	N1-C2-N2	-5.17	111.54	116.20
26	LA	2357	G	C2'-C3'-O3'	5.17	121.98	113.70
26	LA	2524	G	OP1-P-OP2	-5.17	111.84	119.60
26	LA	2891	U	C6-N1-C1'	-5.17	113.95	121.20
30	LW	78	LYS	C-N-CA	5.17	134.64	121.70
34	L0	7	ARG	NE-CZ-NH2	-5.17	117.71	120.30
36	L2	17	SER	O-C-N	-5.17	114.42	122.70
2	SA	173	U	C5-C4-O4	5.17	129.00	125.90
2	SA	298	A	N3-C4-C5	-5.17	123.18	126.80
2	SA	494	G	P-O5'-C5'	-5.17	112.62	120.90
2	SA	518	C	C6-N1-C1'	-5.17	114.59	120.80
2	SA	604	G	P-O5'-C5'	-5.17	112.62	120.90
2	SA	713	G	O4'-C4'-C3'	-5.17	98.83	104.00
2	SA	976	G	C5-C6-N1	5.17	114.09	111.50
26	LA	334	C	C2-N1-C1'	-5.17	113.11	118.80
26	LA	974	G	O5'-P-OP1	-5.17	101.04	105.70
26	LA	1019	U	N3-C4-C5	5.17	117.70	114.60
26	LA	1704	C	C5'-C4'-O4'	5.17	115.31	109.10
26	LA	1905	C	O4'-C1'-N1	5.17	112.34	108.20
26	LA	2687	U	O4'-C1'-C2'	5.17	112.26	107.60
2	SA	60	A	N9-C4-C5	-5.17	103.73	105.80
2	SA	240	G	C4'-C3'-C2'	-5.17	97.43	102.60
2	SA	666	G	C8-N9-C1'	5.17	133.72	127.00
2	SA	1063	C	N3-C4-N4	5.17	121.62	118.00
2	SA	1203	C	C1'-O4'-C4'	-5.17	105.76	109.90
19	SC	46	LEU	CB-CG-CD2	-5.17	102.21	111.00
24	S3	233	MET	CG-SD-CE	-5.17	91.93	100.20
24	S3	300	ASP	CB-CG-OD1	5.17	122.95	118.30
26	LA	812	C	O4'-C1'-N1	5.17	112.34	108.20
26	LA	814	C	OP2-P-O3'	5.17	116.58	105.20
26	LA	979	A	C4'-C3'-C2'	-5.17	97.43	102.60
26	LA	1355	G	C6-C5-N7	-5.17	127.30	130.40
26	LA	1549	A	C1'-O4'-C4'	-5.17	105.76	109.90
26	LA	2237	G	C3'-C2'-C1'	5.17	105.64	101.50
26	LA	2323	G	C1'-O4'-C4'	5.17	114.04	109.90
26	LA	2432	A	P-O5'-C5'	-5.17	112.62	120.90
26	LA	2492	U	N3-C4-C5	-5.17	111.50	114.60
26	LA	2493	U	P-O3'-C3'	-5.17	113.49	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	LG	46	LYS	O-C-N	-5.17	114.43	122.70
2	SA	1026	G	C5-N7-C8	-5.17	101.72	104.30
3	S1	18	A	C1'-O4'-C4'	-5.17	105.76	109.90
13	SM	19	THR	N-CA-CB	5.17	120.12	110.30
26	LA	163	C	N1-C2-N3	5.17	122.82	119.20
26	LA	607	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	LA	792	A	C6-N1-C2	-5.17	115.50	118.60
26	LA	841	G	N1-C6-O6	5.17	123.00	119.90
26	LA	2144	G	O5'-P-OP1	-5.17	101.05	105.70
26	LA	2539	C	N1-C1'-C2'	-5.17	106.31	112.00
26	LA	2828	G	P-O3'-C3'	-5.17	113.50	119.70
41	L5	3	ARG	NE-CZ-NH1	-5.17	117.72	120.30
2	SA	296	U	N3-C4-C5	5.17	117.70	114.60
2	SA	587	G	N7-C8-N9	-5.17	110.52	113.10
2	SA	1010	U	C5'-C4'-C3'	-5.17	107.73	116.00
2	SA	1045	C	C2-N3-C4	-5.17	117.31	119.90
2	SA	1067	A	P-O3'-C3'	5.17	125.90	119.70
2	SA	1180	A	C5-C6-N6	5.17	127.83	123.70
2	SA	1412	C	C3'-C2'-C1'	5.17	105.64	101.50
26	LA	10	A	C4-C5-C6	-5.17	114.42	117.00
26	LA	528	A	N1-C2-N3	-5.17	126.72	129.30
26	LA	820	A	N3-C4-N9	-5.17	123.27	127.40
26	LA	989	G	N3-C4-N9	-5.17	122.90	126.00
26	LA	1545	A	OP2-P-O3'	5.17	116.57	105.20
26	LA	1603	A	C6-C5-N7	5.17	135.92	132.30
26	LA	1604	C	P-O5'-C5'	-5.17	112.63	120.90
26	LA	1831	G	C4-N9-C1'	5.17	133.22	126.50
26	LA	2167	U	N3-C4-O4	-5.17	115.78	119.40
26	LA	2209	G	N1-C2-N3	5.17	127.00	123.90
26	LA	2326	C	C5-C4-N4	5.17	123.82	120.20
26	LA	2338	C	C5'-C4'-O4'	5.17	115.30	109.10
26	LA	2550	G	O4'-C1'-C2'	5.17	112.25	107.60
28	LU	109	ASP	CB-CG-OD1	-5.17	113.65	118.30
48	LN	81	ASP	CB-CG-OD2	-5.17	113.65	118.30
2	SA	109	A	C5-C6-N6	-5.17	119.57	123.70
2	SA	346	G	N1-C6-O6	-5.17	116.80	119.90
2	SA	518	C	C3'-C2'-C1'	5.17	105.63	101.50
2	SA	663	A	P-O5'-C5'	5.17	129.17	120.90
2	SA	720	C	C2-N1-C1'	5.17	124.48	118.80
2	SA	739	C	N1-C2-O2	-5.17	115.80	118.90
2	SA	743	A	C5'-C4'-C3'	-5.17	107.73	116.00
2	SA	786	G	N1-C2-N2	-5.17	111.55	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	842	U	O4'-C1'-N1	5.17	112.33	108.20
2	SA	878	A	C5-C6-N6	-5.17	119.57	123.70
2	SA	963	G	N1-C6-O6	5.17	123.00	119.90
2	SA	1153	G	N9-C4-C5	-5.17	103.33	105.40
2	SA	1344	C	C2'-C3'-O3'	5.17	121.97	113.70
2	SA	1424	U	C2-N3-C4	-5.17	123.90	127.00
2	SA	1455	G	C4'-C3'-C2'	-5.17	97.43	102.60
22	SF	89	VAL	CG1-CB-CG2	-5.17	102.63	110.90
25	LB	2	G	C5-C6-O6	5.17	131.70	128.60
25	LB	60	C	C2-N1-C1'	5.17	124.48	118.80
26	LA	35	G	N9-C4-C5	-5.17	103.33	105.40
26	LA	168	G	N7-C8-N9	-5.17	110.52	113.10
26	LA	449	A	N1-C2-N3	5.17	131.88	129.30
26	LA	551	G	C4-C5-N7	-5.17	108.73	110.80
26	LA	671	C	C1'-O4'-C4'	5.17	114.03	109.90
26	LA	821	A	C5'-C4'-O4'	5.17	115.30	109.10
26	LA	832	U	OP2-P-O3'	5.17	116.56	105.20
26	LA	1007	C	C4'-C3'-C2'	-5.17	97.43	102.60
26	LA	1395	A	N1-C6-N6	-5.17	115.50	118.60
26	LA	1591	A	C5-N7-C8	-5.17	101.32	103.90
26	LA	1657	U	O3'-P-O5'	-5.17	94.18	104.00
26	LA	2020	A	O4'-C1'-N9	5.17	112.33	108.20
26	LA	2258	C	N1-C2-N3	5.17	122.82	119.20
26	LA	2882	A	O4'-C1'-C2'	5.17	112.25	107.60
27	LD	251	THR	N-CA-CB	5.17	120.12	110.30
37	LC	25	GLU	OE1-CD-OE2	-5.17	117.10	123.30
38	LE	141	ARG	CG-CD-NE	-5.17	100.95	111.80
2	SA	226	G	N3-C4-N9	5.17	129.10	126.00
25	LB	44	G	P-O3'-C3'	5.17	125.90	119.70
26	LA	43	G	O4'-C1'-C2'	5.17	112.25	107.60
26	LA	201	C	N1-C2-O2	-5.17	115.80	118.90
26	LA	531	C	O4'-C1'-C2'	-5.17	100.64	105.80
26	LA	803	U	P-O3'-C3'	5.17	125.90	119.70
26	LA	1241	A	C5'-C4'-C3'	-5.17	107.74	116.00
26	LA	2171	A	C2-N3-C4	5.17	113.18	110.60
26	LA	2682	A	C4-N9-C1'	5.17	135.60	126.30
2	SA	176	C	C4'-C3'-C2'	-5.16	97.44	102.60
2	SA	209	U	C5'-C4'-O4'	5.16	115.30	109.10
2	SA	403	C	C5'-C4'-O4'	5.16	115.30	109.10
2	SA	439	U	C6-N1-C2	-5.16	117.90	121.00
2	SA	1012	A	C8-N9-C1'	5.16	137.00	127.70
2	SA	1111	A	C5-C6-N1	5.16	120.28	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1526	G	C2-N3-C4	-5.16	109.32	111.90
4	S2	2	G	C4-C5-N7	-5.16	108.73	110.80
24	S3	108	ALA	CB-CA-C	5.16	117.85	110.10
26	LA	171	U	P-O3'-C3'	-5.16	113.50	119.70
26	LA	990	A	O3'-P-O5'	-5.16	94.19	104.00
26	LA	1210	G	N3-C4-C5	-5.16	126.02	128.60
26	LA	1453	A	C5-C6-N1	5.16	120.28	117.70
26	LA	1673	G	OP1-P-OP2	-5.16	111.85	119.60
26	LA	2804	U	O4'-C1'-N1	5.16	112.33	108.20
26	LA	2867	G	O3'-P-O5'	5.16	113.81	104.00
2	SA	444	G	N1-C6-O6	5.16	123.00	119.90
2	SA	765	G	C8-N9-C4	5.16	108.47	106.40
2	SA	977	A	C5-C6-N1	-5.16	115.12	117.70
2	SA	1063	C	N3-C4-C5	5.16	123.97	121.90
2	SA	1376	U	C3'-C2'-C1'	5.16	105.63	101.50
26	LA	610	C	C4-C5-C6	-5.16	114.82	117.40
26	LA	1803	A	C6-N1-C2	-5.16	115.50	118.60
26	LA	1847	A	C8-N9-C1'	-5.16	118.41	127.70
26	LA	2061	G	C1'-O4'-C4'	-5.16	105.77	109.90
26	LA	2212	A	P-O3'-C3'	5.16	125.89	119.70
26	LA	2775	G	N9-C1'-C2'	-5.16	106.32	112.00
51	LI	97	ARG	CG-CD-NE	-5.16	100.96	111.80
1	SS	2	ARG	NE-CZ-NH1	-5.16	117.72	120.30
2	SA	368	U	C1'-O4'-C4'	-5.16	105.77	109.90
2	SA	449	G	C2-N3-C4	5.16	114.48	111.90
2	SA	866	C	C5-C6-N1	-5.16	118.42	121.00
2	SA	1031	C	C4-C5-C6	5.16	119.98	117.40
4	S2	4	G	N9-C4-C5	5.16	107.46	105.40
4	S2	61	U	C6-N1-C1'	5.16	128.42	121.20
26	LA	108	G	N7-C8-N9	-5.16	110.52	113.10
26	LA	367	G	N3-C2-N2	-5.16	116.29	119.90
26	LA	755	U	C5'-C4'-O4'	5.16	115.29	109.10
26	LA	756	A	C6-N1-C2	-5.16	115.50	118.60
26	LA	775	G	O3'-P-O5'	5.16	113.81	104.00
26	LA	946	C	C6-N1-C2	-5.16	118.24	120.30
26	LA	1028	A	N1-C2-N3	5.16	131.88	129.30
26	LA	1327	A	C8-N9-C4	5.16	107.86	105.80
26	LA	1363	C	N3-C2-O2	-5.16	118.29	121.90
26	LA	1664	A	N1-C2-N3	-5.16	126.72	129.30
26	LA	1758	U	N3-C2-O2	-5.16	118.59	122.20
26	LA	1999	C	C5'-C4'-C3'	-5.16	107.74	116.00
26	LA	2124	G	C5-C6-O6	-5.16	125.50	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2530	A	C1'-O4'-C4'	-5.16	105.77	109.90
26	LA	2675	A	C6-C5-N7	-5.16	128.69	132.30
27	LD	155	ARG	NE-CZ-NH1	5.16	122.88	120.30
29	LV	55	VAL	CA-C-O	5.16	130.94	120.10
38	LE	96	ILE	N-CA-CB	5.16	122.67	110.80
2	SA	141	G	C8-N9-C1'	5.16	133.71	127.00
2	SA	1395	C	N3-C4-N4	-5.16	114.39	118.00
2	SA	1515	G	N7-C8-N9	5.16	115.68	113.10
26	LA	212	G	O4'-C1'-N9	5.16	112.33	108.20
26	LA	833	A	P-O5'-C5'	-5.16	112.65	120.90
26	LA	862	G	N7-C8-N9	5.16	115.68	113.10
26	LA	1007	C	N3-C2-O2	-5.16	118.29	121.90
26	LA	1281	G	N1-C2-N3	-5.16	120.81	123.90
26	LA	1347	A	N1-C2-N3	5.16	131.88	129.30
26	LA	1537	G	N9-C1'-C2'	-5.16	106.33	112.00
26	LA	1757	A	C3'-C2'-C1'	-5.16	97.37	101.50
26	LA	1929	G	P-O5'-C5'	-5.16	112.65	120.90
26	LA	2398	U	C5-C4-O4	-5.16	122.80	125.90
26	LA	2576	G	P-O3'-C3'	-5.16	113.51	119.70
26	LA	2623	G	C1'-O4'-C4'	-5.16	105.77	109.90
58	LT	78	ARG	NE-CZ-NH1	-5.16	117.72	120.30
2	SA	174	A	O4'-C1'-N9	5.16	112.33	108.20
2	SA	265	G	P-O5'-C5'	5.16	129.15	120.90
2	SA	597	G	C2-N3-C4	-5.16	109.32	111.90
2	SA	997	U	C5'-C4'-O4'	5.16	115.29	109.10
2	SA	1028	C	OP2-P-O3'	5.16	116.55	105.20
2	SA	1320	C	O3'-P-O5'	5.16	113.80	104.00
18	SB	10	LYS	CA-CB-CG	5.16	124.75	113.40
25	LB	105	G	N3-C4-C5	-5.16	126.02	128.60
26	LA	86	G	N3-C4-C5	-5.16	126.02	128.60
26	LA	750	A	C2'-C3'-O3'	5.16	121.95	113.70
26	LA	1460	U	O5'-C5'-C4'	5.16	121.50	111.70
26	LA	2031	A	N3-C4-C5	-5.16	123.19	126.80
2	SA	182	A	N9-C4-C5	-5.16	103.74	105.80
2	SA	332	G	O3'-P-O5'	-5.16	94.20	104.00
2	SA	642	A	C8-N9-C4	-5.16	103.74	105.80
2	SA	712	A	C4-C5-N7	5.16	113.28	110.70
2	SA	770	C	O4'-C1'-N1	5.16	112.32	108.20
2	SA	868	C	C2-N3-C4	-5.16	117.32	119.90
2	SA	1035	A	C4-C5-N7	5.16	113.28	110.70
2	SA	1133	G	N3-C4-C5	5.16	131.18	128.60
4	S2	4	G	C3'-C2'-C1'	5.16	105.62	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	65	G	C6-N1-C2	-5.16	122.01	125.10
26	LA	322	A	C5-C6-N1	5.16	120.28	117.70
26	LA	677	A	N1-C6-N6	5.16	121.69	118.60
26	LA	737	C	N1-C2-O2	-5.16	115.81	118.90
26	LA	1162	G	C2'-C3'-O3'	5.16	121.95	113.70
26	LA	1524	G	C5-N7-C8	-5.16	101.72	104.30
26	LA	2223	G	C5'-C4'-C3'	5.16	124.25	116.00
38	LE	74	GLU	CB-CA-C	-5.16	100.09	110.40
44	LF	186	VAL	CA-CB-CG1	5.16	118.63	110.90
49	LK	37	PHE	CB-CA-C	-5.16	100.09	110.40
2	SA	332	G	N3-C4-C5	-5.15	126.02	128.60
2	SA	1174	G	C4-C5-C6	-5.15	115.71	118.80
2	SA	1450	U	N3-C4-O4	5.15	123.01	119.40
2	SA	1524	C	C5-C4-N4	-5.15	116.59	120.20
26	LA	472	A	O4'-C4'-C3'	-5.15	98.85	104.00
26	LA	692	C	O3'-P-O5'	-5.15	94.21	104.00
26	LA	2414	G	C4'-C3'-C2'	-5.15	97.45	102.60
26	LA	2426	A	N1-C2-N3	5.15	131.88	129.30
50	LL	53	TYR	N-CA-CB	5.15	119.88	110.60
2	SA	599	C	C2-N3-C4	-5.15	117.32	119.90
2	SA	1175	G	C5-C6-N1	5.15	114.08	111.50
2	SA	1202	U	O5'-P-OP1	-5.15	101.06	105.70
2	SA	1310	G	C8-N9-C4	-5.15	104.34	106.40
2	SA	1400	C	C4'-C3'-C2'	-5.15	97.45	102.60
26	LA	575	A	C4-N9-C1'	-5.15	117.03	126.30
26	LA	659	G	O4'-C1'-N9	5.15	112.32	108.20
26	LA	667	U	C4'-C3'-C2'	5.15	107.75	102.60
26	LA	954	G	P-O5'-C5'	-5.15	112.66	120.90
26	LA	1070	A	O3'-P-O5'	-5.15	94.21	104.00
26	LA	1092	C	O4'-C4'-C3'	-5.15	98.85	104.00
26	LA	1215	G	C1'-O4'-C4'	-5.15	105.78	109.90
26	LA	1402	U	O3'-P-O5'	5.15	113.79	104.00
26	LA	1402	U	N3-C4-C5	-5.15	111.51	114.60
26	LA	1435	G	N1-C2-N3	-5.15	120.81	123.90
26	LA	1485	U	P-O5'-C5'	5.15	129.14	120.90
26	LA	1506	U	C5-C4-O4	-5.15	122.81	125.90
26	LA	1616	A	N1-C2-N3	-5.15	126.72	129.30
26	LA	2156	G	C8-N9-C1'	5.15	133.70	127.00
26	LA	2476	A	C4-C5-N7	5.15	113.28	110.70
26	LA	2497	A	N1-C6-N6	5.15	121.69	118.60
26	LA	2579	C	O4'-C4'-C3'	-5.15	98.85	104.00
26	LA	2630	G	N9-C4-C5	-5.15	103.34	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2640	G	C8-N9-C1'	5.15	133.70	127.00
37	LC	111	PHE	C-N-CA	5.15	134.58	121.70
49	LK	117	THR	CA-CB-CG2	-5.15	105.19	112.40
54	LM	98	ARG	NE-CZ-NH2	-5.15	117.72	120.30
2	SA	122	G	C5-C6-O6	-5.15	125.51	128.60
2	SA	203	G	C2-N3-C4	-5.15	109.33	111.90
2	SA	461	A	C5-N7-C8	-5.15	101.33	103.90
2	SA	500	G	C2'-C3'-O3'	5.15	121.94	113.70
2	SA	651	C	O4'-C1'-N1	5.15	112.32	108.20
2	SA	651	C	N3-C4-C5	5.15	123.96	121.90
2	SA	1033	G	O4'-C1'-N9	5.15	112.32	108.20
2	SA	1057	G	N7-C8-N9	5.15	115.68	113.10
2	SA	1127	G	C6-N1-C2	5.15	128.19	125.10
2	SA	1167	A	C5-C6-N6	-5.15	119.58	123.70
2	SA	1245	C	N1-C2-O2	5.15	121.99	118.90
2	SA	1325	C	C5'-C4'-O4'	5.15	115.28	109.10
4	S2	3	C	C5-C4-N4	-5.15	116.59	120.20
18	SB	114	LYS	N-CA-CB	5.15	119.87	110.60
24	S3	183	ASP	CA-CB-CG	-5.15	102.07	113.40
26	LA	278	A	OP1-P-OP2	-5.15	111.87	119.60
26	LA	1024	G	O4'-C1'-N9	5.15	112.32	108.20
26	LA	1455	G	C8-N9-C1'	-5.15	120.31	127.00
26	LA	1782	U	C5-C4-O4	5.15	128.99	125.90
26	LA	1906	G	C5-N7-C8	-5.15	101.72	104.30
26	LA	2010	G	N3-C2-N2	5.15	123.51	119.90
26	LA	2471	A	C4'-C3'-C2'	-5.15	97.45	102.60
26	LA	2757	A	C5'-C4'-O4'	5.15	115.28	109.10
37	LC	166	ASP	CB-CA-C	5.15	120.70	110.40
37	LC	203	GLN	CB-CA-C	-5.15	100.10	110.40
2	SA	64	G	C6-N1-C2	5.15	128.19	125.10
2	SA	124	C	N1-C2-O2	5.15	121.99	118.90
2	SA	677	U	N1-C2-O2	5.15	126.40	122.80
26	LA	944	C	P-O5'-C5'	-5.15	112.66	120.90
26	LA	1356	G	C5'-C4'-C3'	-5.15	107.76	116.00
26	LA	1543	G	C1'-O4'-C4'	-5.15	105.78	109.90
26	LA	2631	G	N1-C2-N3	5.15	126.99	123.90
26	LA	2814	A	C6-C5-N7	5.15	135.90	132.30
2	SA	1	A	C6-C5-N7	-5.15	128.70	132.30
2	SA	278	G	N3-C4-N9	-5.15	122.91	126.00
2	SA	1014	A	C5-N7-C8	5.15	106.47	103.90
2	SA	1153	G	N1-C2-N3	5.15	126.99	123.90
2	SA	1190	G	C4-C5-N7	-5.15	108.74	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1260	G	N9-C1'-C2'	-5.15	106.34	112.00
2	SA	1279	G	C4-C5-C6	-5.15	115.71	118.80
2	SA	1499	A	C2-N3-C4	5.15	113.17	110.60
12	SL	49	ARG	NE-CZ-NH1	-5.15	117.73	120.30
15	SO	56	LEU	CB-CG-CD1	5.15	119.75	111.00
24	S3	582	TYR	CD1-CE1-CZ	5.15	124.43	119.80
25	LB	83	G	P-O3'-C3'	-5.15	113.52	119.70
25	LB	92	C	C2'-C3'-O3'	5.15	121.94	113.70
26	LA	162	U	C6-N1-C1'	-5.15	113.99	121.20
26	LA	204	A	O4'-C1'-N9	5.15	112.32	108.20
26	LA	849	A	O5'-P-OP1	-5.15	101.07	105.70
26	LA	862	G	C5'-C4'-C3'	-5.15	107.76	116.00
26	LA	925	A	N7-C8-N9	-5.15	111.23	113.80
26	LA	1084	A	C2-N3-C4	5.15	113.17	110.60
26	LA	1086	A	C5'-C4'-C3'	5.15	124.24	116.00
26	LA	1131	G	N3-C4-C5	5.15	131.17	128.60
26	LA	1265	A	C8-N9-C4	5.15	107.86	105.80
26	LA	1490	A	O4'-C1'-N9	-5.15	104.08	108.20
26	LA	1528	A	C4-C5-C6	-5.15	114.43	117.00
26	LA	2754	U	C3'-C2'-C1'	-5.15	97.38	101.50
2	SA	794	A	C2-N3-C4	-5.15	108.03	110.60
2	SA	805	C	O4'-C1'-N1	5.15	112.32	108.20
10	SJ	6	ILE	CA-CB-CG2	5.15	121.19	110.90
25	LB	96	G	OP1-P-OP2	-5.15	111.88	119.60
26	LA	187	G	C5'-C4'-C3'	-5.15	107.77	116.00
26	LA	287	G	C5'-C4'-C3'	5.15	124.23	116.00
26	LA	1300	G	N1-C2-N3	-5.15	120.81	123.90
26	LA	2590	A	C5-C6-N6	-5.15	119.58	123.70
2	SA	15	G	P-O5'-C5'	-5.14	112.67	120.90
2	SA	777	A	P-O5'-C5'	-5.14	112.67	120.90
2	SA	1068	G	C5-C6-O6	5.14	131.69	128.60
2	SA	1291	U	C2'-C3'-O3'	5.14	121.93	113.70
2	SA	1315	U	C5'-C4'-O4'	5.14	115.27	109.10
26	LA	605	G	N7-C8-N9	5.14	115.67	113.10
26	LA	618	G	P-O3'-C3'	5.14	125.87	119.70
26	LA	685	A	C3'-C2'-C1'	-5.14	97.38	101.50
26	LA	718	A	N1-C2-N3	5.14	131.87	129.30
26	LA	847	U	C2-N3-C4	-5.14	123.91	127.00
26	LA	928	A	C5-C6-N6	-5.14	119.58	123.70
26	LA	1054	A	N9-C4-C5	5.14	107.86	105.80
26	LA	1679	A	C8-N9-C4	-5.14	103.74	105.80
26	LA	2204	G	O4'-C1'-N9	5.14	112.31	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2261	C	O4'-C4'-C3'	-5.14	98.86	104.00
26	LA	2550	G	C5'-C4'-C3'	-5.14	107.77	116.00
26	LA	2783	U	C5-C4-O4	-5.14	122.81	125.90
26	LA	2856	A	C3'-C2'-C1'	-5.14	97.38	101.50
2	SA	63	C	C5'-C4'-O4'	5.14	115.27	109.10
2	SA	281	G	OP1-P-O3'	5.14	116.51	105.20
2	SA	305	G	P-O5'-C5'	5.14	129.13	120.90
2	SA	760	G	C2-N3-C4	-5.14	109.33	111.90
2	SA	768	A	N7-C8-N9	5.14	116.37	113.80
2	SA	993	G	C5-C6-O6	-5.14	125.51	128.60
2	SA	1020	G	N1-C6-O6	-5.14	116.81	119.90
2	SA	1088	G	C5-N7-C8	-5.14	101.73	104.30
2	SA	1182	G	C4-C5-C6	-5.14	115.72	118.80
2	SA	1293	C	C2-N3-C4	5.14	122.47	119.90
2	SA	1488	G	C6-N1-C2	5.14	128.19	125.10
8	SH	113	ARG	NE-CZ-NH1	5.14	122.87	120.30
13	SM	86	ARG	NE-CZ-NH2	5.14	122.87	120.30
24	S3	392	THR	OG1-CB-CG2	-5.14	98.17	110.00
25	LB	82	U	N1-C2-O2	-5.14	119.20	122.80
26	LA	683	U	C5-C4-O4	-5.14	122.81	125.90
26	LA	845	A	O5'-P-OP2	-5.14	101.07	105.70
26	LA	1292	G	C3'-C2'-C1'	-5.14	97.39	101.50
26	LA	1768	C	C2-N3-C4	-5.14	117.33	119.90
26	LA	2127	G	O4'-C4'-C3'	-5.14	98.86	104.00
26	LA	2859	G	N1-C2-N3	5.14	126.98	123.90
46	LH	168	VAL	CA-CB-CG1	-5.14	103.19	110.90
49	LK	63	ASP	CB-CG-OD2	5.14	122.93	118.30
57	LS	45	ALA	CB-CA-C	5.14	117.81	110.10
2	SA	307	C	O3'-P-O5'	-5.14	94.23	104.00
2	SA	1077	G	OP2-P-O3'	5.14	116.51	105.20
2	SA	1437	A	C2-N3-C4	5.14	113.17	110.60
26	LA	669	G	C8-N9-C4	-5.14	104.34	106.40
26	LA	692	C	OP2-P-O3'	5.14	116.51	105.20
26	LA	1112	G	C4'-C3'-C2'	-5.14	97.46	102.60
26	LA	1623	G	N1-C6-O6	5.14	122.98	119.90
2	SA	108	G	N9-C4-C5	5.14	107.46	105.40
2	SA	508	U	C5'-C4'-C3'	-5.14	107.78	116.00
2	SA	518	C	C2-N1-C1'	5.14	124.45	118.80
2	SA	527	G	N7-C8-N9	-5.14	110.53	113.10
2	SA	838	G	O4'-C1'-N9	5.14	112.31	108.20
2	SA	846	G	C5-C6-N1	5.14	114.07	111.50
2	SA	907	A	C4'-C3'-C2'	-5.14	97.46	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	913	A	C8-N9-C4	5.14	107.86	105.80
2	SA	1070	U	N1-C1'-C2'	-5.14	106.35	112.00
2	SA	1396	A	N1-C2-N3	5.14	131.87	129.30
2	SA	1505	G	N9-C4-C5	5.14	107.46	105.40
25	LB	26	C	C6-N1-C2	-5.14	118.24	120.30
26	LA	334	C	C4-C5-C6	-5.14	114.83	117.40
26	LA	517	C	C4-C5-C6	-5.14	114.83	117.40
26	LA	832	U	P-O5'-C5'	-5.14	112.68	120.90
26	LA	1396	U	C2-N3-C4	-5.14	123.92	127.00
26	LA	1414	C	C4'-C3'-C2'	-5.14	97.46	102.60
26	LA	1574	C	O3'-P-O5'	-5.14	94.23	104.00
26	LA	1871	A	C4-C5-C6	-5.14	114.43	117.00
26	LA	1998	A	N3-C4-C5	5.14	130.40	126.80
26	LA	2058	A	N3-C4-C5	5.14	130.40	126.80
26	LA	2180	U	C3'-C2'-C1'	-5.14	97.39	101.50
26	LA	2316	G	P-O3'-C3'	-5.14	113.53	119.70
26	LA	2735	G	N1-C6-O6	-5.14	116.82	119.90
27	LD	267	VAL	O-C-N	-5.14	114.48	122.70
2	SA	333	U	P-O3'-C3'	5.14	125.87	119.70
2	SA	801	U	C2-N1-C1'	-5.14	111.53	117.70
2	SA	986	U	O4'-C1'-N1	5.14	112.31	108.20
2	SA	1260	G	N1-C2-N3	-5.14	120.82	123.90
24	S3	678	SER	CB-CA-C	5.14	119.86	110.10
26	LA	533	G	C6-C5-N7	5.14	133.48	130.40
26	LA	740	C	P-O5'-C5'	-5.14	112.68	120.90
26	LA	1042	G	C6-N1-C2	-5.14	122.02	125.10
26	LA	1347	A	N1-C6-N6	-5.14	115.52	118.60
26	LA	1834	U	N3-C4-O4	-5.14	115.80	119.40
26	LA	2129	C	P-O5'-C5'	-5.14	112.68	120.90
26	LA	2176	A	C4'-C3'-C2'	-5.14	97.46	102.60
2	SA	219	U	P-O5'-C5'	5.14	129.12	120.90
2	SA	429	U	O4'-C1'-C2'	-5.14	100.66	105.80
2	SA	476	U	C4'-C3'-C2'	-5.14	97.46	102.60
2	SA	496	A	O4'-C4'-C3'	-5.14	98.86	104.00
2	SA	602	A	N9-C4-C5	-5.14	103.75	105.80
2	SA	887	G	N9-C1'-C2'	-5.14	106.35	112.00
2	SA	1158	C	N3-C2-O2	-5.14	118.31	121.90
4	S2	43	G	C6-N1-C2	5.14	128.18	125.10
26	LA	127	A	C6-N1-C2	-5.14	115.52	118.60
26	LA	460	A	C8-N9-C1'	-5.14	118.45	127.70
26	LA	601	C	C5'-C4'-O4'	5.14	115.26	109.10
26	LA	664	G	N7-C8-N9	-5.14	110.53	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	835	C	C2-N3-C4	5.14	122.47	119.90
26	LA	1072	C	OP1-P-O3'	5.14	116.50	105.20
26	LA	1081	U	N3-C2-O2	5.14	125.80	122.20
26	LA	1403	A	N9-C1'-C2'	-5.14	106.35	112.00
26	LA	1743	G	N9-C4-C5	-5.14	103.34	105.40
26	LA	1981	A	C1'-O4'-C4'	5.14	114.01	109.90
26	LA	2136	G	C2-N3-C4	-5.14	109.33	111.90
26	LA	2200	C	N1-C2-O2	5.14	121.98	118.90
26	LA	2522	U	P-O5'-C5'	5.14	129.12	120.90
26	LA	2552	U	N1-C2-N3	5.14	117.98	114.90
26	LA	2766	A	N1-C6-N6	5.14	121.68	118.60
26	LA	2796	U	O4'-C1'-N1	5.14	112.31	108.20
31	LX	7	GLU	CB-CG-CD	-5.14	100.33	114.20
46	LH	93	TYR	CD1-CE1-CZ	5.14	124.42	119.80
49	LK	35	MET	CG-SD-CE	-5.14	91.98	100.20
2	SA	55	A	C4-C5-C6	-5.13	114.43	117.00
2	SA	124	C	C1'-O4'-C4'	-5.13	105.79	109.90
2	SA	1081	A	O5'-C5'-C4'	-5.13	101.94	111.70
2	SA	1121	U	C5'-C4'-O4'	5.13	115.26	109.10
10	SJ	65	TYR	CB-CG-CD2	-5.13	117.92	121.00
15	SO	68	TYR	CG-CD1-CE1	-5.13	117.19	121.30
26	LA	167	A	C1'-O4'-C4'	-5.13	105.79	109.90
26	LA	220	G	C6-N1-C2	5.13	128.18	125.10
26	LA	457	A	OP1-P-OP2	-5.13	111.90	119.60
26	LA	649	G	N9-C1'-C2'	-5.13	106.35	112.00
26	LA	788	A	C2-N3-C4	-5.13	108.03	110.60
26	LA	1555	G	C5-C6-O6	5.13	131.68	128.60
26	LA	1567	G	N9-C4-C5	5.13	107.45	105.40
26	LA	1650	A	C5'-C4'-C3'	-5.13	107.79	116.00
26	LA	1857	G	N3-C4-N9	-5.13	122.92	126.00
26	LA	1967	C	N3-C4-C5	-5.13	119.85	121.90
26	LA	2221	G	C1'-O4'-C4'	-5.13	105.79	109.90
26	LA	2235	G	C5-C6-N1	5.13	114.07	111.50
26	LA	2331	G	C6-N1-C2	-5.13	122.02	125.10
26	LA	2540	C	O4'-C1'-N1	5.13	112.31	108.20
26	LA	2640	G	P-O3'-C3'	-5.13	113.54	119.70
26	LA	2673	G	C5-C6-O6	-5.13	125.52	128.60
2	SA	147	G	C4-C5-C6	-5.13	115.72	118.80
2	SA	322	C	N1-C1'-C2'	-5.13	106.35	112.00
2	SA	1093	A	N1-C2-N3	-5.13	126.73	129.30
2	SA	1095	U	C4'-C3'-C2'	-5.13	97.47	102.60
2	SA	1456	A	P-O3'-C3'	-5.13	113.54	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1475	G	C5-C6-O6	-5.13	125.52	128.60
4	S2	43	G	N3-C4-C5	-5.13	126.03	128.60
26	LA	733	G	N9-C1'-C2'	-5.13	106.35	112.00
26	LA	772	C	N1-C2-N3	5.13	122.79	119.20
26	LA	981	A	C4-C5-C6	-5.13	114.43	117.00
26	LA	1190	G	O3'-P-O5'	5.13	113.75	104.00
26	LA	1281	G	N7-C8-N9	-5.13	110.53	113.10
26	LA	1668	A	O5'-P-OP1	5.13	116.86	110.70
26	LA	1702	G	C2-N3-C4	5.13	114.47	111.90
26	LA	2043	C	O3'-P-O5'	-5.13	94.25	104.00
26	LA	2766	A	O5'-P-OP1	5.13	116.86	110.70
2	SA	402	G	C2-N3-C4	5.13	114.47	111.90
2	SA	490	C	C2-N1-C1'	5.13	124.45	118.80
2	SA	746	A	N1-C2-N3	-5.13	126.73	129.30
2	SA	876	C	N3-C4-N4	5.13	121.59	118.00
2	SA	971	G	C5'-C4'-O4'	5.13	115.26	109.10
2	SA	1026	G	C8-N9-C1'	5.13	133.67	127.00
2	SA	1189	U	P-O3'-C3'	-5.13	113.54	119.70
2	SA	1199	U	N1-C2-O2	5.13	126.39	122.80
2	SA	1214	C	N1-C1'-C2'	-5.13	106.36	112.00
2	SA	1392	G	N7-C8-N9	5.13	115.67	113.10
4	S2	41	C	N3-C4-C5	-5.13	119.85	121.90
4	S2	55	U	C4-C5-C6	-5.13	116.62	119.70
6	SU	30	GLU	OE1-CD-OE2	-5.13	117.14	123.30
26	LA	167	A	OP1-P-OP2	-5.13	111.90	119.60
26	LA	905	A	N9-C1'-C2'	-5.13	106.35	112.00
26	LA	1093	G	C5'-C4'-C3'	-5.13	107.79	116.00
26	LA	1444	G	C8-N9-C1'	5.13	133.67	127.00
26	LA	1711	A	C5-C6-N1	5.13	120.27	117.70
26	LA	2368	C	N3-C4-C5	-5.13	119.85	121.90
26	LA	2463	C	O3'-P-O5'	5.13	113.75	104.00
26	LA	2512	C	C3'-C2'-C1'	-5.13	97.39	101.50
27	LD	164	VAL	CG1-CB-CG2	-5.13	102.69	110.90
35	L1	29	ARG	NH1-CZ-NH2	-5.13	113.75	119.40
38	LE	150	GLN	CB-CA-C	-5.13	100.14	110.40
2	SA	1180	A	C5'-C4'-C3'	-5.13	107.79	116.00
2	SA	1266	G	N3-C4-N9	-5.13	122.92	126.00
2	SA	1459	G	C2-N3-C4	-5.13	109.33	111.90
4	S2	69	C	C2-N3-C4	5.13	122.47	119.90
26	LA	580	U	N1-C2-O2	5.13	126.39	122.80
26	LA	893	C	C4-C5-C6	5.13	119.97	117.40
26	LA	1052	C	N1-C1'-C2'	-5.13	106.36	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1569	A	O4'-C4'-C3'	-5.13	98.87	104.00
29	LV	51	PHE	CB-CG-CD2	-5.13	117.21	120.80
58	LT	8	GLY	N-CA-C	-5.13	100.27	113.10
2	SA	200	G	C8-N9-C4	-5.13	104.35	106.40
2	SA	712	A	C5'-C4'-C3'	5.13	124.21	116.00
2	SA	890	G	C5-C6-O6	-5.13	125.52	128.60
2	SA	954	G	O5'-C5'-C4'	5.13	121.44	111.70
2	SA	958	A	C5'-C4'-C3'	-5.13	107.79	116.00
2	SA	1213	A	C5-N7-C8	5.13	106.46	103.90
16	SP	51	ARG	CB-CA-C	-5.13	100.14	110.40
26	LA	121	G	C4-C5-N7	5.13	112.85	110.80
26	LA	379	G	C4-C5-N7	-5.13	108.75	110.80
26	LA	536	G	N9-C1'-C2'	-5.13	106.36	112.00
26	LA	625	G	C8-N9-C1'	5.13	133.67	127.00
26	LA	643	A	OP1-P-OP2	-5.13	111.91	119.60
26	LA	852	U	P-O5'-C5'	-5.13	112.69	120.90
26	LA	899	A	C4-C5-C6	-5.13	114.44	117.00
26	LA	1090	A	N1-C6-N6	5.13	121.68	118.60
26	LA	1091	G	C5-C6-O6	-5.13	125.52	128.60
26	LA	1110	G	N9-C4-C5	-5.13	103.35	105.40
26	LA	1136	G	O4'-C1'-N9	5.13	112.30	108.20
26	LA	1149	G	C8-N9-C1'	5.13	133.67	127.00
26	LA	1164	C	N3-C4-C5	-5.13	119.85	121.90
26	LA	1223	G	C4-N9-C1'	-5.13	119.83	126.50
26	LA	1562	U	N3-C2-O2	-5.13	118.61	122.20
26	LA	1767	G	OP1-P-OP2	-5.13	111.91	119.60
26	LA	1897	G	N3-C4-N9	5.13	129.08	126.00
26	LA	2029	G	N1-C2-N3	5.13	126.98	123.90
26	LA	2042	A	C6-N1-C2	5.13	121.68	118.60
26	LA	2475	C	O3'-P-O5'	5.13	113.74	104.00
26	LA	2774	C	N1-C2-O2	5.13	121.98	118.90
26	LA	2836	U	C5-C6-N1	5.13	125.27	122.70
47	LJ	6	ASP	N-CA-CB	5.13	119.83	110.60
56	LR	25	VAL	O-C-N	-5.13	114.49	122.70
58	LT	47	VAL	O-C-N	-5.13	114.49	122.70
2	SA	406	G	C8-N9-C4	5.13	108.45	106.40
2	SA	481	G	N1-C2-N3	-5.13	120.83	123.90
2	SA	768	A	C5-N7-C8	-5.13	101.34	103.90
2	SA	1133	G	O3'-P-O5'	-5.13	94.26	104.00
2	SA	1530	G	C5-N7-C8	-5.13	101.74	104.30
22	SF	79	ARG	CB-CG-CD	5.13	124.93	111.60
26	LA	149	A	N1-C2-N3	5.13	131.86	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	722	A	C6-C5-N7	-5.13	128.71	132.30
26	LA	822	G	C5-N7-C8	-5.13	101.74	104.30
26	LA	1023	U	O5'-P-OP2	5.13	116.85	110.70
26	LA	1206	G	O4'-C1'-N9	5.13	112.30	108.20
26	LA	1623	G	C5-C6-O6	-5.13	125.52	128.60
26	LA	2279	G	N1-C6-O6	5.13	122.97	119.90
26	LA	2403	C	N3-C4-C5	-5.13	119.85	121.90
48	LN	2	ARG	N-CA-CB	5.13	119.83	110.60
55	LQ	108	ASP	CB-CG-OD1	-5.13	113.69	118.30
2	SA	493	A	C8-N9-C1'	-5.12	118.47	127.70
2	SA	817	C	C4'-C3'-C2'	-5.12	97.47	102.60
2	SA	872	A	N9-C1'-C2'	-5.12	106.36	112.00
2	SA	1073	U	N1-C2-N3	5.12	117.97	114.90
2	SA	1191	A	C4'-C3'-C2'	5.12	107.72	102.60
2	SA	1318	A	N1-C6-N6	5.12	121.67	118.60
6	SU	68	ARG	NE-CZ-NH2	-5.12	117.74	120.30
25	LB	25	U	P-O3'-C3'	5.12	125.85	119.70
26	LA	570	G	C5'-C4'-C3'	-5.12	107.80	116.00
26	LA	695	G	N9-C4-C5	-5.12	103.35	105.40
26	LA	1012	U	N3-C2-O2	5.12	125.79	122.20
26	LA	1327	A	O4'-C1'-N9	5.12	112.30	108.20
26	LA	2032	G	N3-C2-N2	5.12	123.49	119.90
26	LA	2185	U	C5'-C4'-O4'	5.12	115.25	109.10
26	LA	2543	G	C6-N1-C2	-5.12	122.03	125.10
31	LX	93	ARG	NE-CZ-NH2	-5.12	117.74	120.30
2	SA	643	C	C2-N3-C4	5.12	122.46	119.90
2	SA	920	U	C5'-C4'-C3'	-5.12	107.80	116.00
2	SA	924	C	C5-C6-N1	5.12	123.56	121.00
2	SA	978	A	C8-N9-C4	5.12	107.85	105.80
2	SA	1384	C	C2-N3-C4	-5.12	117.34	119.90
2	SA	1400	C	C6-N1-C1'	-5.12	114.65	120.80
2	SA	1533	C	C5'-C4'-O4'	5.12	115.25	109.10
7	SG	47	GLU	O-C-N	-5.12	114.50	122.70
20	SD	17	ASP	N-CA-C	5.12	124.83	111.00
26	LA	161	A	C5-C6-N1	5.12	120.26	117.70
26	LA	195	A	P-O5'-C5'	5.12	129.10	120.90
26	LA	243	U	N1-C2-N3	5.12	117.97	114.90
26	LA	425	G	C4-N9-C1'	-5.12	119.84	126.50
26	LA	581	C	C5-C4-N4	-5.12	116.61	120.20
26	LA	1029	A	C1'-O4'-C4'	-5.12	105.80	109.90
26	LA	1969	A	N3-C4-C5	5.12	130.39	126.80
26	LA	2039	U	O4'-C1'-N1	5.12	112.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2245	U	N1-C2-N3	5.12	117.97	114.90
26	LA	2381	A	C4'-C3'-C2'	-5.12	97.48	102.60
26	LA	2498	C	P-O3'-C3'	-5.12	113.55	119.70
26	LA	2579	C	N3-C4-N4	5.12	121.59	118.00
26	LA	2741	A	O4'-C1'-N9	-5.12	104.10	108.20
48	LN	58	TYR	CB-CG-CD2	5.12	124.07	121.00
2	SA	109	A	C4-C5-C6	-5.12	114.44	117.00
2	SA	535	A	C8-N9-C4	-5.12	103.75	105.80
2	SA	603	U	C4'-C3'-C2'	-5.12	97.48	102.60
2	SA	781	A	C3'-C2'-C1'	5.12	105.60	101.50
2	SA	807	A	C5-C6-N6	5.12	127.80	123.70
2	SA	972	C	N1-C2-N3	5.12	122.78	119.20
2	SA	1520	C	C5'-C4'-O4'	5.12	115.25	109.10
8	SH	10	LEU	CB-CA-C	-5.12	100.47	110.20
26	LA	248	G	O5'-P-OP1	5.12	116.85	110.70
26	LA	285	G	O4'-C1'-N9	5.12	112.30	108.20
26	LA	1511	G	C6-C5-N7	5.12	133.47	130.40
26	LA	1573	G	O4'-C1'-N9	5.12	112.30	108.20
26	LA	1857	G	C5'-C4'-C3'	-5.12	107.81	116.00
26	LA	1916	A	OP2-P-O3'	5.12	116.47	105.20
26	LA	2274	A	C4-C5-C6	5.12	119.56	117.00
26	LA	2280	G	O4'-C1'-N9	5.12	112.30	108.20
26	LA	2296	U	P-O5'-C5'	5.12	129.09	120.90
26	LA	2445	G	C6-C5-N7	-5.12	127.33	130.40
26	LA	2756	U	C2'-C3'-O3'	5.12	121.89	113.70
33	LZ	77	TYR	CG-CD2-CE2	-5.12	117.20	121.30
55	LQ	90	VAL	CB-CA-C	-5.12	101.67	111.40
2	SA	92	U	N3-C2-O2	-5.12	118.62	122.20
2	SA	192	A	C8-N9-C1'	5.12	136.92	127.70
2	SA	282	A	N1-C2-N3	5.12	131.86	129.30
26	LA	29	U	C2'-C3'-O3'	5.12	121.89	113.70
26	LA	114	U	OP1-P-OP2	-5.12	111.92	119.60
26	LA	354	A	N7-C8-N9	5.12	116.36	113.80
26	LA	629	G	O4'-C1'-N9	5.12	112.30	108.20
26	LA	806	C	C3'-C2'-C1'	5.12	105.60	101.50
26	LA	1221	C	C5-C6-N1	5.12	123.56	121.00
26	LA	1676	A	N1-C6-N6	-5.12	115.53	118.60
26	LA	1687	G	C6-N1-C2	-5.12	122.03	125.10
2	SA	118	U	C3'-C2'-C1'	5.12	105.59	101.50
2	SA	412	A	O4'-C4'-C3'	-5.12	98.88	104.00
2	SA	560	A	O4'-C1'-N9	-5.12	104.11	108.20
2	SA	830	G	OP1-P-OP2	-5.12	111.92	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	993	G	N3-C4-N9	-5.12	122.93	126.00
2	SA	1280	A	C6-N1-C2	-5.12	115.53	118.60
2	SA	1330	U	C6-N1-C2	-5.12	117.93	121.00
13	SM	28	ARG	NE-CZ-NH1	5.12	122.86	120.30
21	SE	32	PHE	CB-CG-CD1	-5.12	117.22	120.80
26	LA	89	A	C5'-C4'-C3'	-5.12	107.81	116.00
26	LA	117	G	C6-C5-N7	-5.12	127.33	130.40
26	LA	288	U	C3'-C2'-C1'	5.12	105.59	101.50
26	LA	828	U	C5-C6-N1	5.12	125.26	122.70
26	LA	1128	G	N1-C6-O6	5.12	122.97	119.90
26	LA	1302	A	P-O5'-C5'	-5.12	112.71	120.90
26	LA	1416	G	C4-C5-C6	-5.12	115.73	118.80
26	LA	1598	A	C1'-O4'-C4'	-5.12	105.81	109.90
26	LA	1757	A	O4'-C4'-C3'	5.12	110.20	106.10
26	LA	1770	G	C5'-C4'-C3'	5.12	124.19	116.00
26	LA	1959	G	C5-C6-O6	-5.12	125.53	128.60
26	LA	2205	A	P-O3'-C3'	-5.12	113.56	119.70
26	LA	2250	G	C4'-C3'-C2'	-5.12	97.48	102.60
26	LA	2635	A	N9-C4-C5	-5.12	103.75	105.80
58	LT	77	PHE	CG-CD1-CE1	5.12	126.43	120.80
2	SA	3	A	C5-N7-C8	5.12	106.46	103.90
2	SA	268	U	C5-C6-N1	-5.12	120.14	122.70
2	SA	365	U	C6-N1-C2	-5.12	117.93	121.00
26	LA	768	G	C5-C6-N1	-5.12	108.94	111.50
26	LA	972	A	O4'-C1'-N9	5.12	112.29	108.20
26	LA	1030	C	OP2-P-O3'	5.12	116.46	105.20
26	LA	1969	A	O4'-C1'-C2'	5.12	112.20	107.60
26	LA	2243	U	OP1-P-OP2	-5.12	111.92	119.60
26	LA	2255	G	C8-N9-C4	-5.12	104.35	106.40
26	LA	2427	C	O5'-C5'-C4'	5.12	121.42	111.70
26	LA	2572	A	C3'-C2'-C1'	-5.12	97.41	101.50
2	SA	157	U	C2-N1-C1'	-5.12	111.56	117.70
2	SA	258	G	C4-N9-C1'	-5.12	119.85	126.50
2	SA	398	U	C2-N3-C4	-5.12	123.93	127.00
2	SA	1515	G	C5-C6-N1	5.12	114.06	111.50
2	SA	1524	C	C5-C6-N1	5.12	123.56	121.00
2	SA	1536	C	N3-C2-O2	-5.12	118.32	121.90
3	S1	38	G	C4'-C3'-C2'	-5.12	97.48	102.60
8	SH	118	ALA	N-CA-CB	-5.12	102.94	110.10
24	S3	78	TYR	CB-CA-C	5.12	120.63	110.40
24	S3	564	PRO	N-CA-C	5.12	125.40	112.10
25	LB	111	U	O5'-P-OP2	-5.12	101.10	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	13	A	C2-N3-C4	5.12	113.16	110.60
26	LA	751	A	C3'-C2'-C1'	5.12	105.59	101.50
26	LA	986	C	N3-C4-C5	5.12	123.95	121.90
26	LA	1178	C	N1-C1'-C2'	-5.12	106.37	112.00
26	LA	1664	A	N9-C1'-C2'	5.12	120.65	114.00
26	LA	1963	U	C3'-C2'-C1'	-5.12	97.41	101.50
26	LA	2008	C	C6-N1-C2	5.12	122.35	120.30
26	LA	2576	G	OP1-P-O3'	5.12	116.45	105.20
26	LA	2768	U	C6-N1-C1'	5.12	128.36	121.20
26	LA	2841	C	O4'-C1'-C2'	5.12	112.20	107.60
1	SS	29	PRO	C-N-CA	-5.11	108.92	121.70
2	SA	136	C	P-O5'-C5'	5.11	129.08	120.90
2	SA	1045	C	O4'-C1'-N1	5.11	112.29	108.20
2	SA	1377	A	N3-C4-C5	-5.11	123.22	126.80
2	SA	1389	C	O4'-C1'-N1	5.11	112.29	108.20
2	SA	1396	A	N1-C6-N6	5.11	121.67	118.60
2	SA	1481	U	O4'-C1'-C2'	5.11	112.20	107.60
23	SR	71	ASP	CB-CG-OD1	-5.11	113.70	118.30
24	S3	71	TRP	CE3-CZ3-CH2	5.11	126.83	121.20
26	LA	121	G	P-O3'-C3'	-5.11	113.56	119.70
26	LA	349	U	C5'-C4'-C3'	-5.11	107.82	116.00
26	LA	571	U	C6-N1-C1'	5.11	128.36	121.20
26	LA	575	A	C6-C5-N7	-5.11	128.72	132.30
26	LA	784	G	N3-C4-N9	5.11	129.07	126.00
26	LA	900	A	N3-C4-C5	5.11	130.38	126.80
26	LA	1161	C	C4-C5-C6	-5.11	114.84	117.40
26	LA	1267	U	C5-C4-O4	-5.11	122.83	125.90
26	LA	1387	A	C1'-O4'-C4'	-5.11	105.81	109.90
26	LA	1444	G	C4-N9-C1'	-5.11	119.85	126.50
26	LA	1591	A	N3-C4-C5	5.11	130.38	126.80
26	LA	1885	A	C4-C5-C6	5.11	119.56	117.00
26	LA	2165	C	O4'-C1'-C2'	-5.11	100.69	105.80
26	LA	2494	G	C5'-C4'-O4'	5.11	115.24	109.10
26	LA	2631	G	C5-C6-O6	-5.11	125.53	128.60
26	LA	2661	G	P-O5'-C5'	5.11	129.08	120.90
26	LA	2779	U	C5-C4-O4	5.11	128.97	125.90
2	SA	1358	U	C5-C6-N1	-5.11	120.14	122.70
25	LB	12	C	N3-C2-O2	-5.11	118.32	121.90
25	LB	26	C	C5-C6-N1	5.11	123.56	121.00
26	LA	578	G	O4'-C1'-N9	5.11	112.29	108.20
26	LA	587	C	C2-N3-C4	-5.11	117.34	119.90
26	LA	742	A	N9-C4-C5	5.11	107.84	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1328	A	C5-C6-N1	-5.11	115.14	117.70
26	LA	1637	A	N3-C4-C5	5.11	130.38	126.80
26	LA	1898	U	C6-N1-C2	-5.11	117.93	121.00
26	LA	2129	C	N1-C2-O2	5.11	121.97	118.90
2	SA	241	G	C8-N9-C4	-5.11	104.36	106.40
2	SA	314	C	C2-N1-C1'	5.11	124.42	118.80
2	SA	484	G	P-O5'-C5'	5.11	129.08	120.90
2	SA	1056	U	C5'-C4'-O4'	5.11	115.23	109.10
2	SA	1083	U	C2-N1-C1'	-5.11	111.57	117.70
2	SA	1107	C	O4'-C1'-N1	5.11	112.29	108.20
2	SA	1339	A	C5'-C4'-O4'	-5.11	102.97	109.10
4	S2	15	G	C8-N9-C4	-5.11	104.36	106.40
4	S2	37	U	C2-N3-C4	-5.11	123.93	127.00
26	LA	252	G	OP1-P-OP2	-5.11	111.93	119.60
26	LA	295	G	C1'-O4'-C4'	-5.11	105.81	109.90
26	LA	400	G	C4-C5-N7	5.11	112.84	110.80
26	LA	704	G	P-O5'-C5'	5.11	129.08	120.90
26	LA	1066	U	N3-C4-C5	5.11	117.67	114.60
26	LA	1668	A	OP1-P-OP2	-5.11	111.93	119.60
26	LA	1980	G	P-O5'-C5'	-5.11	112.72	120.90
26	LA	2213	U	C5'-C4'-O4'	5.11	115.23	109.10
26	LA	2400	G	P-O3'-C3'	5.11	125.83	119.70
47	LJ	53	VAL	CB-CA-C	-5.11	101.69	111.40
2	SA	1152	A	O5'-P-OP1	5.11	116.83	110.70
2	SA	1188	A	C4-C5-N7	-5.11	108.15	110.70
20	SD	110	ARG	CG-CD-NE	-5.11	101.07	111.80
26	LA	54	G	O4'-C1'-N9	5.11	112.29	108.20
26	LA	428	A	C6-N1-C2	5.11	121.67	118.60
26	LA	776	G	P-O5'-C5'	5.11	129.07	120.90
26	LA	938	G	C4-C5-N7	-5.11	108.76	110.80
26	LA	971	G	C8-N9-C1'	5.11	133.64	127.00
26	LA	1156	A	C5'-C4'-O4'	5.11	115.23	109.10
26	LA	1315	C	N1-C2-O2	5.11	121.97	118.90
26	LA	1440	U	C1'-O4'-C4'	-5.11	105.81	109.90
57	LS	110	GLU	O-C-N	-5.11	114.53	122.70
2	SA	386	C	C5-C6-N1	5.11	123.55	121.00
2	SA	517	G	C8-N9-C4	-5.11	104.36	106.40
2	SA	682	G	OP1-P-OP2	-5.11	111.94	119.60
2	SA	759	A	C5-C6-N1	-5.11	115.15	117.70
2	SA	763	G	C4-C5-C6	-5.11	115.74	118.80
2	SA	1295	U	C4'-C3'-C2'	5.11	107.71	102.60
2	SA	1348	U	C5-C6-N1	-5.11	120.15	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1495	U	N1-C2-N3	5.11	117.97	114.90
2	SA	1538	C	C2-N1-C1'	5.11	124.42	118.80
6	SU	11	PHE	CB-CG-CD1	-5.11	117.22	120.80
21	SE	82	HIS	N-CA-CB	5.11	119.79	110.60
26	LA	50	U	C5-C6-N1	5.11	125.25	122.70
26	LA	317	G	C2-N3-C4	5.11	114.45	111.90
26	LA	321	U	OP2-P-O3'	5.11	116.44	105.20
26	LA	384	A	N1-C6-N6	5.11	121.67	118.60
26	LA	463	G	C5-N7-C8	-5.11	101.75	104.30
26	LA	815	C	C2-N3-C4	-5.11	117.35	119.90
26	LA	926	G	N1-C2-N3	-5.11	120.84	123.90
26	LA	984	A	C4-C5-N7	5.11	113.25	110.70
26	LA	990	A	N1-C6-N6	-5.11	115.54	118.60
26	LA	1316	U	C4'-C3'-C2'	-5.11	97.49	102.60
26	LA	1660	G	OP1-P-OP2	-5.11	111.94	119.60
26	LA	1672	A	C6-N1-C2	5.11	121.67	118.60
26	LA	1864	U	C6-N1-C2	5.11	124.06	121.00
26	LA	1899	A	C5'-C4'-C3'	-5.11	107.83	116.00
26	LA	2133	G	C4-C5-N7	5.11	112.84	110.80
26	LA	2245	U	C6-N1-C2	-5.11	117.94	121.00
26	LA	2561	U	C3'-C2'-C1'	5.11	105.59	101.50
26	LA	2664	G	P-O3'-C3'	-5.11	113.57	119.70
37	LC	162	ARG	NH1-CZ-NH2	-5.11	113.78	119.40
2	SA	42	G	O4'-C4'-C3'	-5.11	98.89	104.00
2	SA	139	A	N7-C8-N9	-5.11	111.25	113.80
2	SA	407	U	C1'-O4'-C4'	-5.11	105.81	109.90
2	SA	429	U	N1-C1'-C2'	5.11	120.64	114.00
2	SA	492	C	C1'-O4'-C4'	-5.11	105.81	109.90
2	SA	1003	G	C3'-C2'-C1'	5.11	105.58	101.50
2	SA	1450	U	C6-N1-C2	5.11	124.06	121.00
2	SA	1471	U	N3-C2-O2	-5.11	118.63	122.20
2	SA	1514	G	C4'-C3'-C2'	-5.11	97.49	102.60
3	S1	21	U	O4'-C4'-C3'	-5.11	98.89	104.00
25	LB	35	C	C4'-C3'-C2'	5.11	107.71	102.60
26	LA	42	A	N7-C8-N9	5.11	116.35	113.80
26	LA	195	A	P-O3'-C3'	5.11	125.83	119.70
26	LA	301	G	O4'-C4'-C3'	5.11	110.18	106.10
26	LA	390	U	C5'-C4'-C3'	-5.11	107.83	116.00
26	LA	468	G	C3'-C2'-C1'	5.11	105.58	101.50
26	LA	939	G	N1-C6-O6	5.11	122.96	119.90
26	LA	944	C	N1-C2-N3	5.11	122.77	119.20
26	LA	1012	U	O5'-C5'-C4'	5.11	121.40	111.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1157	G	C5'-C4'-C3'	-5.11	107.83	116.00
26	LA	1271	G	O5'-P-OP1	5.11	116.83	110.70
26	LA	1410	G	P-O3'-C3'	-5.11	113.57	119.70
26	LA	1865	U	C6-N1-C2	5.11	124.06	121.00
26	LA	2127	G	N3-C4-N9	5.11	129.06	126.00
26	LA	2192	U	O4'-C1'-N1	5.11	112.28	108.20
26	LA	2413	G	C5-C6-O6	-5.11	125.54	128.60
26	LA	2592	G	OP1-P-OP2	-5.11	111.94	119.60
26	LA	2776	A	C6-N1-C2	-5.11	115.54	118.60
26	LA	2844	G	C6-C5-N7	-5.11	127.34	130.40
38	LE	46	ARG	NE-CZ-NH2	-5.11	117.75	120.30
39	L3	47	TYR	CD1-CE1-CZ	-5.11	115.21	119.80
53	LP	22	ARG	CD-NE-CZ	5.11	130.75	123.60
1	SS	40	PHE	CB-CA-C	5.10	120.61	110.40
2	SA	568	G	N1-C2-N3	-5.10	120.84	123.90
2	SA	755	G	OP1-P-OP2	-5.10	111.94	119.60
2	SA	846	G	O4'-C1'-C2'	5.10	112.19	107.60
2	SA	955	U	C5'-C4'-O4'	5.10	115.22	109.10
9	SI	125	GLN	N-CA-CB	5.10	119.79	110.60
11	SK	55	ARG	NE-CZ-NH2	-5.10	117.75	120.30
14	SN	84	ARG	CG-CD-NE	-5.10	101.08	111.80
26	LA	267	C	N3-C2-O2	-5.10	118.33	121.90
26	LA	730	A	P-O3'-C3'	-5.10	113.58	119.70
26	LA	1366	A	C6-C5-N7	5.10	135.87	132.30
26	LA	1468	U	C2-N3-C4	-5.10	123.94	127.00
26	LA	2086	U	N3-C2-O2	-5.10	118.63	122.20
26	LA	2092	U	C6-N1-C2	-5.10	117.94	121.00
2	SA	190	A	N1-C6-N6	5.10	121.66	118.60
2	SA	275	G	N3-C4-C5	-5.10	126.05	128.60
2	SA	699	C	O4'-C1'-N1	5.10	112.28	108.20
2	SA	903	G	C3'-C2'-C1'	5.10	105.58	101.50
2	SA	1335	U	C2-N3-C4	-5.10	123.94	127.00
13	SM	103	THR	N-CA-CB	5.10	120.00	110.30
14	SN	72	PHE	CG-CD2-CE2	5.10	126.41	120.80
26	LA	111	A	C5-C6-N6	-5.10	119.62	123.70
26	LA	294	A	C3'-C2'-C1'	5.10	105.58	101.50
26	LA	587	C	N1-C1'-C2'	-5.10	106.39	112.00
26	LA	607	U	C6-N1-C2	-5.10	117.94	121.00
26	LA	688	U	O4'-C1'-C2'	5.10	112.19	107.60
26	LA	824	U	C3'-C2'-C1'	5.10	105.58	101.50
26	LA	982	C	OP1-P-OP2	-5.10	111.95	119.60
26	LA	1151	A	P-O5'-C5'	-5.10	112.74	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1161	C	O4'-C1'-C2'	-5.10	100.70	105.80
26	LA	1252	G	C5-C6-N1	5.10	114.05	111.50
26	LA	1562	U	N1-C2-N3	5.10	117.96	114.90
26	LA	1588	G	N1-C2-N3	5.10	126.96	123.90
26	LA	1851	U	N3-C4-O4	5.10	122.97	119.40
26	LA	1855	U	N1-C2-N3	5.10	117.96	114.90
26	LA	1890	A	OP1-P-OP2	-5.10	111.95	119.60
26	LA	1912	A	C6-N1-C2	5.10	121.66	118.60
26	LA	2151	U	C5-C4-O4	-5.10	122.84	125.90
26	LA	2242	G	O3'-P-O5'	-5.10	94.31	104.00
26	LA	2257	U	O4'-C1'-N1	5.10	112.28	108.20
26	LA	2485	G	O4'-C1'-N9	5.10	112.28	108.20
26	LA	2496	C	C2-N3-C4	5.10	122.45	119.90
2	SA	923	A	C2-N3-C4	5.10	113.15	110.60
2	SA	1088	G	O4'-C1'-N9	5.10	112.28	108.20
26	LA	260	G	OP1-P-OP2	-5.10	111.95	119.60
26	LA	423	A	C2-N3-C4	-5.10	108.05	110.60
26	LA	1089	A	C2-N3-C4	5.10	113.15	110.60
26	LA	1413	A	C2-N3-C4	-5.10	108.05	110.60
26	LA	1469	A	C6-N1-C2	5.10	121.66	118.60
26	LA	1788	C	C2-N3-C4	-5.10	117.35	119.90
26	LA	1811	G	N1-C6-O6	5.10	122.96	119.90
26	LA	1993	U	C3'-C2'-C1'	5.10	105.58	101.50
26	LA	2817	U	C1'-O4'-C4'	-5.10	105.82	109.90
29	LV	31	VAL	CG1-CB-CG2	-5.10	102.74	110.90
38	LE	9	VAL	O-C-N	-5.10	114.53	123.20
42	L6	21	PHE	CB-CG-CD2	-5.10	117.23	120.80
46	LH	59	ASP	C-N-CA	5.10	133.01	122.30
52	LO	54	THR	N-CA-CB	5.10	119.99	110.30
2	SA	11	G	C3'-C2'-C1'	5.10	105.58	101.50
2	SA	108	G	O4'-C4'-C3'	5.10	110.18	106.10
2	SA	536	C	OP2-P-O3'	5.10	116.42	105.20
2	SA	987	G	C3'-C2'-C1'	-5.10	97.42	101.50
2	SA	1364	U	O3'-P-O5'	5.10	113.69	104.00
2	SA	1387	G	C5'-C4'-O4'	5.10	115.22	109.10
2	SA	1417	G	C1'-O4'-C4'	-5.10	105.82	109.90
2	SA	1461	G	N1-C2-N3	-5.10	120.84	123.90
4	S2	58	A	N7-C8-N9	5.10	116.35	113.80
11	SK	121	ARG	NE-CZ-NH2	5.10	122.85	120.30
26	LA	134	G	OP1-P-OP2	-5.10	111.95	119.60
26	LA	229	C	N3-C2-O2	-5.10	118.33	121.90
26	LA	581	C	N3-C2-O2	5.10	125.47	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	629	G	C6-N1-C2	5.10	128.16	125.10
26	LA	1027	A	N1-C6-N6	-5.10	115.54	118.60
26	LA	1233	C	O4'-C1'-N1	5.10	112.28	108.20
26	LA	1785	A	N9-C4-C5	-5.10	103.76	105.80
26	LA	2075	U	N3-C2-O2	-5.10	118.63	122.20
26	LA	2095	A	C5-N7-C8	5.10	106.45	103.90
26	LA	2357	G	N9-C1'-C2'	-5.10	106.39	112.00
26	LA	2397	G	C5-N7-C8	-5.10	101.75	104.30
26	LA	2409	G	C6-C5-N7	-5.10	127.34	130.40
26	LA	2476	A	C8-N9-C4	5.10	107.84	105.80
26	LA	2571	U	C4'-C3'-C2'	-5.10	97.50	102.60
26	LA	2873	A	C6-N1-C2	5.10	121.66	118.60
51	LI	32	PRO	O-C-N	5.10	130.86	122.70
56	LR	28	LYS	CB-CA-C	-5.10	100.20	110.40
2	SA	185	U	N3-C4-O4	-5.10	115.83	119.40
2	SA	363	A	C8-N9-C4	-5.10	103.76	105.80
2	SA	1412	C	P-O5'-C5'	5.10	129.06	120.90
26	LA	26	G	O4'-C1'-C2'	5.10	112.19	107.60
26	LA	117	G	C8-N9-C4	5.10	108.44	106.40
26	LA	134	G	C8-N9-C1'	5.10	133.63	127.00
26	LA	137	U	C5'-C4'-O4'	5.10	115.22	109.10
26	LA	191	A	C4-C5-C6	5.10	119.55	117.00
26	LA	547	A	C4-C5-C6	-5.10	114.45	117.00
26	LA	594	U	C5-C6-N1	-5.10	120.15	122.70
26	LA	622	G	N3-C2-N2	5.10	123.47	119.90
26	LA	678	C	OP1-P-OP2	-5.10	111.95	119.60
26	LA	971	G	C5'-C4'-C3'	5.10	124.16	116.00
26	LA	1090	A	C5-N7-C8	-5.10	101.35	103.90
26	LA	1258	U	OP1-P-OP2	-5.10	111.95	119.60
26	LA	1809	A	P-O5'-C5'	-5.10	112.75	120.90
26	LA	1815	A	OP2-P-O3'	5.10	116.42	105.20
26	LA	2372	U	OP2-P-O3'	5.10	116.42	105.20
26	LA	2501	C	C6-N1-C1'	5.10	126.92	120.80
26	LA	2861	U	OP1-P-OP2	-5.10	111.95	119.60
34	L0	55	THR	N-CA-C	5.10	124.77	111.00
2	SA	671	G	C2'-C3'-O3'	5.10	121.85	113.70
2	SA	920	U	C4'-C3'-C2'	5.10	107.70	102.60
2	SA	1225	A	C5-N7-C8	5.10	106.45	103.90
26	LA	467	G	C6-C5-N7	-5.10	127.34	130.40
26	LA	882	G	C3'-C2'-C1'	5.10	105.58	101.50
26	LA	1583	A	N1-C6-N6	5.10	121.66	118.60
26	LA	1651	G	C2-N3-C4	-5.10	109.35	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1869	G	N1-C2-N3	-5.10	120.84	123.90
26	LA	2606	C	OP1-P-OP2	-5.10	111.96	119.60
35	L1	46	MET	O-C-N	-5.10	114.55	122.70
38	LE	55	LYS	N-CA-CB	5.10	119.77	110.60
55	LQ	11	ALA	O-C-N	-5.10	114.55	122.70
2	SA	433	G	C5-N7-C8	-5.09	101.75	104.30
2	SA	556	C	N3-C2-O2	-5.09	118.33	121.90
2	SA	587	G	C2-N3-C4	-5.09	109.35	111.90
2	SA	665	A	N7-C8-N9	-5.09	111.25	113.80
2	SA	1183	U	C4-C5-C6	-5.09	116.64	119.70
2	SA	1298	U	P-O3'-C3'	-5.09	113.59	119.70
2	SA	1316	G	C4-N9-C1'	-5.09	119.88	126.50
8	SH	106	SER	N-CA-CB	5.09	118.14	110.50
26	LA	177	G	C5'-C4'-C3'	-5.09	107.85	116.00
26	LA	631	A	OP2-P-O3'	5.09	116.41	105.20
26	LA	794	A	C5-C6-N1	5.09	120.25	117.70
26	LA	817	C	N3-C4-C5	-5.09	119.86	121.90
26	LA	1142	A	O4'-C1'-N9	5.09	112.28	108.20
26	LA	1182	G	N3-C4-N9	-5.09	122.94	126.00
26	LA	1214	A	O4'-C4'-C3'	-5.09	98.91	104.00
26	LA	1304	A	P-O3'-C3'	5.09	125.81	119.70
26	LA	1358	G	C2'-C3'-O3'	5.09	121.85	113.70
26	LA	1470	A	P-O3'-C3'	-5.09	113.59	119.70
26	LA	1679	A	C4'-C3'-C2'	-5.09	97.50	102.60
26	LA	1679	A	C5'-C4'-O4'	5.09	115.21	109.10
26	LA	1692	U	N3-C4-C5	-5.09	111.54	114.60
26	LA	1704	C	C5'-C4'-C3'	-5.09	107.85	116.00
26	LA	1851	U	N3-C4-C5	-5.09	111.54	114.60
26	LA	2191	A	N1-C2-N3	5.09	131.85	129.30
26	LA	2684	U	N1-C1'-C2'	-5.09	106.40	112.00
26	LA	2706	A	C5-C6-N1	-5.09	115.15	117.70
29	LV	77	ARG	N-CA-CB	5.09	119.77	110.60
2	SA	60	A	C5-C6-N1	-5.09	115.15	117.70
2	SA	127	G	O4'-C1'-N9	5.09	112.27	108.20
2	SA	514	C	O4'-C1'-N1	5.09	112.28	108.20
2	SA	1042	A	N7-C8-N9	5.09	116.35	113.80
2	SA	1436	U	N1-C2-O2	5.09	126.36	122.80
22	SF	4	TYR	N-CA-CB	-5.09	101.43	110.60
26	LA	1603	A	C4-C5-C6	-5.09	114.45	117.00
26	LA	1756	G	C2-N3-C4	5.09	114.45	111.90
26	LA	1985	C	C2-N1-C1'	5.09	124.40	118.80
26	LA	2748	A	O4'-C4'-C3'	5.09	110.17	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	144	G	C5-C6-N1	5.09	114.05	111.50
2	SA	378	G	C5-C6-O6	5.09	131.66	128.60
2	SA	383	A	C5'-C4'-O4'	5.09	115.21	109.10
2	SA	755	G	N7-C8-N9	-5.09	110.55	113.10
2	SA	1403	C	P-O5'-C5'	5.09	129.05	120.90
4	S2	44	A	C5'-C4'-O4'	5.09	115.21	109.10
26	LA	114	U	C2-N1-C1'	-5.09	111.59	117.70
26	LA	116	C	C2-N3-C4	-5.09	117.35	119.90
26	LA	526	A	O5'-P-OP1	5.09	116.81	110.70
26	LA	907	G	C4-C5-N7	-5.09	108.76	110.80
26	LA	1006	C	N3-C2-O2	-5.09	118.34	121.90
26	LA	1102	C	N1-C2-O2	5.09	121.95	118.90
26	LA	1783	A	OP2-P-O3'	5.09	116.40	105.20
26	LA	2040	G	N1-C2-N2	5.09	120.78	116.20
26	LA	2377	A	P-O3'-C3'	-5.09	113.59	119.70
26	LA	2398	U	C1'-O4'-C4'	-5.09	105.83	109.90
26	LA	2534	A	C3'-C2'-C1'	-5.09	97.43	101.50
26	LA	2575	C	C4'-C3'-C2'	-5.09	97.51	102.60
26	LA	2894	G	C5-N7-C8	-5.09	101.75	104.30
47	LJ	24	ALA	CB-CA-C	-5.09	102.46	110.10
2	SA	140	U	O4'-C1'-C2'	-5.09	100.71	105.80
2	SA	256	U	C5-C6-N1	5.09	125.25	122.70
2	SA	404	G	O5'-P-OP1	5.09	116.81	110.70
2	SA	498	A	C6-N1-C2	-5.09	115.55	118.60
2	SA	778	G	C1'-O4'-C4'	-5.09	105.83	109.90
2	SA	868	C	N3-C4-C5	5.09	123.94	121.90
2	SA	920	U	P-O5'-C5'	5.09	129.04	120.90
2	SA	946	A	P-O5'-C5'	5.09	129.04	120.90
2	SA	1011	C	P-O3'-C3'	-5.09	113.59	119.70
2	SA	1024	G	N7-C8-N9	-5.09	110.56	113.10
2	SA	1229	A	C4'-C3'-C2'	-5.09	97.51	102.60
2	SA	1280	A	C4-C5-N7	5.09	113.25	110.70
2	SA	1328	C	N3-C2-O2	-5.09	118.34	121.90
26	LA	440	C	C5'-C4'-O4'	5.09	115.21	109.10
26	LA	460	A	OP1-P-OP2	-5.09	111.97	119.60
26	LA	559	G	C5-N7-C8	5.09	106.84	104.30
26	LA	1630	A	C6-N1-C2	-5.09	115.55	118.60
26	LA	1848	A	N1-C2-N3	-5.09	126.75	129.30
26	LA	1908	C	C2-N3-C4	-5.09	117.36	119.90
26	LA	2304	G	C5-C6-O6	5.09	131.65	128.60
26	LA	2435	A	C4-C5-N7	5.09	113.25	110.70
26	LA	2778	A	C6-C5-N7	-5.09	128.74	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	LR	57	ALA	N-CA-CB	5.09	117.23	110.10
2	SA	489	C	C5'-C4'-O4'	5.09	115.21	109.10
2	SA	1085	U	C5-C6-N1	-5.09	120.16	122.70
2	SA	1394	A	P-O3'-C3'	5.09	125.81	119.70
25	LB	33	G	C5-N7-C8	-5.09	101.76	104.30
26	LA	616	A	C4-C5-N7	-5.09	108.16	110.70
26	LA	1825	U	C5-C4-O4	-5.09	122.85	125.90
26	LA	1980	G	C1'-O4'-C4'	-5.09	105.83	109.90
26	LA	2680	U	O4'-C4'-C3'	5.09	110.17	106.10
26	LA	2823	A	N3-C4-N9	5.09	131.47	127.40
2	SA	284	C	P-O3'-C3'	5.09	125.80	119.70
2	SA	301	G	C3'-C2'-C1'	-5.09	97.43	101.50
2	SA	422	C	C3'-C2'-C1'	-5.09	97.43	101.50
2	SA	492	C	O4'-C1'-N1	5.09	112.27	108.20
2	SA	913	A	C3'-C2'-C1'	5.09	105.57	101.50
2	SA	1177	G	N3-C4-N9	-5.09	122.95	126.00
2	SA	1355	G	P-O5'-C5'	5.09	129.04	120.90
26	LA	405	U	C6-N1-C1'	-5.09	114.08	121.20
26	LA	666	A	N7-C8-N9	-5.09	111.26	113.80
26	LA	780	G	C6-C5-N7	-5.09	127.35	130.40
26	LA	786	C	O4'-C1'-N1	5.09	112.27	108.20
26	LA	1185	G	N3-C4-C5	5.09	131.14	128.60
26	LA	1305	C	C2-N1-C1'	-5.09	113.20	118.80
26	LA	1685	C	C4-C5-C6	5.09	119.94	117.40
26	LA	1811	G	N7-C8-N9	-5.09	110.56	113.10
26	LA	1903	G	N1-C6-O6	5.09	122.95	119.90
26	LA	2148	G	C3'-C2'-C1'	5.09	105.57	101.50
26	LA	2718	G	O5'-P-OP2	-5.09	101.12	105.70
26	LA	2759	G	P-O5'-C5'	-5.09	112.76	120.90
26	LA	2859	G	P-O3'-C3'	-5.09	113.60	119.70
58	LT	68	ARG	NE-CZ-NH1	5.09	122.84	120.30
2	SA	78	A	C4-C5-N7	-5.08	108.16	110.70
2	SA	755	G	C2'-C3'-O3'	5.08	121.84	113.70
26	LA	902	C	C5-C6-N1	-5.08	118.46	121.00
26	LA	1151	A	N1-C2-N3	-5.08	126.76	129.30
26	LA	2280	G	N1-C6-O6	5.08	122.95	119.90
26	LA	2804	U	C1'-O4'-C4'	-5.08	105.83	109.90
35	L1	38	GLU	OE1-CD-OE2	-5.08	117.20	123.30
41	L5	29	GLN	O-C-N	-5.08	114.56	122.70
47	LJ	163	ALA	CB-CA-C	-5.08	102.47	110.10
53	LP	8	ARG	N-CA-CB	-5.08	101.45	110.60
2	SA	290	C	C4'-C3'-C2'	-5.08	97.52	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	326	G	O3'-P-O5'	-5.08	94.34	104.00
2	SA	377	G	N9-C1'-C2'	-5.08	106.41	112.00
2	SA	687	A	C4-C5-N7	-5.08	108.16	110.70
2	SA	836	G	N3-C4-N9	-5.08	122.95	126.00
2	SA	931	C	O4'-C1'-N1	5.08	112.27	108.20
2	SA	995	C	C1'-O4'-C4'	-5.08	105.83	109.90
2	SA	1009	U	C5-C4-O4	-5.08	122.85	125.90
2	SA	1019	A	N3-C4-N9	5.08	131.47	127.40
2	SA	1082	A	C4-C5-N7	5.08	113.24	110.70
2	SA	1228	C	C1'-O4'-C4'	-5.08	105.83	109.90
25	LB	1	U	N3-C2-O2	-5.08	118.64	122.20
26	LA	77	G	C6-N1-C2	-5.08	122.05	125.10
26	LA	374	A	C5-N7-C8	-5.08	101.36	103.90
26	LA	818	G	N9-C4-C5	-5.08	103.37	105.40
26	LA	1071	G	N1-C2-N2	-5.08	111.62	116.20
26	LA	1208	C	C1'-O4'-C4'	-5.08	105.83	109.90
26	LA	1439	A	C4-C5-C6	5.08	119.54	117.00
26	LA	1699	G	C2-N3-C4	-5.08	109.36	111.90
26	LA	2067	G	N3-C2-N2	5.08	123.46	119.90
26	LA	2353	G	P-O3'-C3'	5.08	125.80	119.70
26	LA	2726	A	N7-C8-N9	-5.08	111.26	113.80
26	LA	2860	A	C5-C6-N6	5.08	127.77	123.70
27	LD	215	VAL	CG1-CB-CG2	-5.08	102.77	110.90
46	LH	48	THR	CA-CB-CG2	-5.08	105.28	112.40
50	LL	91	GLU	N-CA-CB	5.08	119.75	110.60
2	SA	61	G	N1-C6-O6	5.08	122.95	119.90
2	SA	234	C	C2-N3-C4	-5.08	117.36	119.90
2	SA	399	G	N3-C4-C5	-5.08	126.06	128.60
2	SA	576	C	N3-C4-C5	-5.08	119.87	121.90
2	SA	908	A	C1'-O4'-C4'	-5.08	105.83	109.90
2	SA	1285	A	C6-N1-C2	5.08	121.65	118.60
2	SA	1334	G	N9-C4-C5	5.08	107.43	105.40
4	S2	10	G	C6-N1-C2	5.08	128.15	125.10
26	LA	965	C	N3-C4-N4	5.08	121.56	118.00
26	LA	1206	G	C3'-C2'-C1'	-5.08	97.43	101.50
26	LA	1389	G	C5-C6-N1	5.08	114.04	111.50
26	LA	1776	G	OP1-P-OP2	-5.08	111.98	119.60
26	LA	1780	A	C1'-O4'-C4'	-5.08	105.83	109.90
26	LA	1841	U	C5-C6-N1	-5.08	120.16	122.70
26	LA	2098	U	C6-N1-C2	-5.08	117.95	121.00
26	LA	2098	U	N1-C2-O2	-5.08	119.24	122.80
26	LA	2139	U	N1-C2-N3	5.08	117.95	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2215	C	N3-C4-N4	-5.08	114.44	118.00
26	LA	2315	G	C5-C6-N1	5.08	114.04	111.50
26	LA	2329	U	C5'-C4'-C3'	-5.08	107.87	116.00
26	LA	2496	C	P-O3'-C3'	5.08	125.80	119.70
26	LA	2628	C	N1-C2-N3	-5.08	115.64	119.20
26	LA	2629	U	C5'-C4'-O4'	5.08	115.20	109.10
26	LA	2717	C	C3'-C2'-C1'	5.08	105.57	101.50
26	LA	2771	C	C5'-C4'-C3'	-5.08	107.87	116.00
2	SA	164	G	C5-C6-N1	5.08	114.04	111.50
2	SA	488	C	C5-C6-N1	-5.08	118.46	121.00
2	SA	690	G	N3-C4-C5	-5.08	126.06	128.60
25	LB	53	A	C6-N1-C2	5.08	121.65	118.60
26	LA	649	G	OP1-P-OP2	-5.08	111.98	119.60
26	LA	1602	U	C5'-C4'-C3'	-5.08	107.87	116.00
26	LA	1621	U	C2-N1-C1'	5.08	123.80	117.70
26	LA	1824	G	C8-N9-C4	-5.08	104.37	106.40
26	LA	2307	G	C3'-C2'-C1'	5.08	105.56	101.50
26	LA	2705	A	N1-C6-N6	5.08	121.65	118.60
2	SA	30	U	C5-C4-O4	5.08	128.95	125.90
2	SA	51	A	OP1-P-OP2	-5.08	111.98	119.60
2	SA	302	G	C6-C5-N7	5.08	133.45	130.40
2	SA	320	A	N1-C2-N3	-5.08	126.76	129.30
2	SA	332	G	OP1-P-OP2	-5.08	111.98	119.60
2	SA	625	U	O4'-C1'-N1	5.08	112.26	108.20
2	SA	643	C	N1-C2-N3	5.08	122.75	119.20
2	SA	731	G	C5'-C4'-C3'	5.08	124.12	116.00
2	SA	847	G	OP1-P-OP2	-5.08	111.98	119.60
2	SA	888	G	O4'-C1'-N9	5.08	112.26	108.20
2	SA	1093	A	N9-C4-C5	5.08	107.83	105.80
2	SA	1530	G	C2-N3-C4	5.08	114.44	111.90
12	SL	106	VAL	CA-CB-CG2	-5.08	103.28	110.90
25	LB	42	C	N3-C2-O2	-5.08	118.34	121.90
26	LA	165	A	C4-C5-N7	5.08	113.24	110.70
26	LA	277	G	C4-C5-N7	5.08	112.83	110.80
26	LA	395	U	N1-C2-O2	5.08	126.36	122.80
26	LA	400	G	C2'-C3'-O3'	5.08	121.83	113.70
26	LA	433	C	N3-C4-N4	5.08	121.56	118.00
26	LA	447	A	C8-N9-C4	5.08	107.83	105.80
26	LA	792	A	C5-C6-N6	-5.08	119.64	123.70
26	LA	1237	A	OP1-P-O3'	5.08	116.37	105.20
26	LA	1306	C	C5-C4-N4	5.08	123.75	120.20
26	LA	1482	G	C5-N7-C8	5.08	106.84	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1684	G	O4'-C1'-N9	5.08	112.26	108.20
26	LA	1886	U	C5-C6-N1	-5.08	120.16	122.70
26	LA	2174	C	P-O5'-C5'	-5.08	112.78	120.90
26	LA	2250	G	C4-C5-C6	-5.08	115.75	118.80
26	LA	2272	U	N1-C2-O2	-5.08	119.25	122.80
26	LA	2387	U	N3-C2-O2	-5.08	118.64	122.20
26	LA	2477	U	C5'-C4'-O4'	5.08	115.19	109.10
26	LA	2853	C	C2-N3-C4	-5.08	117.36	119.90
2	SA	447	G	N9-C4-C5	-5.08	103.37	105.40
2	SA	596	A	N1-C2-N3	5.08	131.84	129.30
2	SA	1409	C	P-O3'-C3'	-5.08	113.61	119.70
2	SA	1529	G	C5-N7-C8	5.08	106.84	104.30
26	LA	61	C	C5-C4-N4	-5.08	116.65	120.20
26	LA	1156	A	N1-C6-N6	5.08	121.65	118.60
2	SA	384	G	C2-N3-C4	5.08	114.44	111.90
2	SA	453	G	C8-N9-C4	5.08	108.43	106.40
2	SA	594	U	O4'-C1'-N1	5.08	112.26	108.20
2	SA	642	A	C2-N3-C4	5.08	113.14	110.60
2	SA	774	G	O4'-C1'-N9	5.08	112.26	108.20
2	SA	1054	C	C2'-C3'-O3'	5.08	121.82	113.70
11	SK	108	ASN	CA-CB-CG	-5.08	102.23	113.40
13	SM	71	GLU	OE1-CD-OE2	-5.08	117.21	123.30
19	SC	128	MET	N-CA-C	5.08	124.70	111.00
26	LA	35	G	P-O3'-C3'	-5.08	113.61	119.70
26	LA	87	U	OP1-P-OP2	-5.08	111.99	119.60
26	LA	636	G	C5-C6-O6	5.08	131.65	128.60
26	LA	977	G	C8-N9-C4	5.08	108.43	106.40
26	LA	1534	U	OP1-P-OP2	-5.08	111.98	119.60
26	LA	1613	G	C5-N7-C8	-5.08	101.76	104.30
26	LA	1658	C	C5'-C4'-O4'	5.08	115.19	109.10
26	LA	1854	A	C6-N1-C2	-5.08	115.55	118.60
26	LA	1862	G	C4-N9-C1'	-5.08	119.90	126.50
26	LA	2268	A	P-O5'-C5'	-5.08	112.78	120.90
26	LA	2391	G	N1-C2-N2	5.08	120.77	116.20
26	LA	2445	G	OP1-P-OP2	-5.08	111.99	119.60
2	SA	292	G	N1-C6-O6	5.07	122.94	119.90
2	SA	440	C	C3'-C2'-C1'	5.07	105.56	101.50
2	SA	497	G	C4-C5-C6	-5.07	115.76	118.80
2	SA	724	G	C8-N9-C4	5.07	108.43	106.40
2	SA	1339	A	C5'-C4'-C3'	5.07	124.12	116.00
8	SH	15	ASN	O-C-N	-5.07	114.58	123.20
21	SE	47	PHE	CB-CG-CD1	-5.07	117.25	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	S3	432	LEU	CB-CG-CD2	-5.07	102.37	111.00
25	LB	100	G	C5-C6-O6	5.07	131.64	128.60
26	LA	110	G	N1-C6-O6	-5.07	116.86	119.90
26	LA	138	U	O3'-P-O5'	-5.07	94.36	104.00
26	LA	252	G	P-O3'-C3'	-5.07	113.61	119.70
26	LA	294	A	O4'-C1'-N9	5.07	112.26	108.20
26	LA	496	G	O4'-C1'-N9	5.07	112.26	108.20
26	LA	631	A	O4'-C1'-N9	5.07	112.26	108.20
26	LA	707	G	N1-C2-N3	5.07	126.94	123.90
26	LA	1283	G	C4-C5-N7	-5.07	108.77	110.80
26	LA	1294	U	N3-C2-O2	-5.07	118.65	122.20
26	LA	1493	C	C3'-C2'-C1'	-5.07	97.44	101.50
26	LA	1624	U	C6-N1-C2	-5.07	117.95	121.00
26	LA	2366	A	C4'-C3'-C2'	-5.07	97.53	102.60
26	LA	2614	A	C5-C6-N1	-5.07	115.16	117.70
26	LA	2751	G	C2-N3-C4	5.07	114.44	111.90
27	LD	146	LYS	CA-C-N	5.07	131.31	117.10
2	SA	319	G	C6-C5-N7	5.07	133.44	130.40
2	SA	380	G	N3-C2-N2	5.07	123.45	119.90
2	SA	795	C	N1-C1'-C2'	-5.07	106.42	112.00
2	SA	858	G	C4-C5-C6	-5.07	115.76	118.80
24	S3	76	LYS	C-N-CA	5.07	134.38	121.70
26	LA	308	G	C5-C6-N1	5.07	114.04	111.50
26	LA	376	G	OP1-P-OP2	-5.07	111.99	119.60
26	LA	421	C	C6-N1-C2	5.07	122.33	120.30
26	LA	761	A	C2-N3-C4	5.07	113.14	110.60
26	LA	953	G	O4'-C4'-C3'	-5.07	98.93	104.00
26	LA	1733	G	O3'-P-O5'	5.07	113.64	104.00
26	LA	2253	G	C4-N9-C1'	-5.07	119.91	126.50
26	LA	2764	A	O3'-P-O5'	-5.07	94.36	104.00
1	SS	20	LYS	CB-CA-C	-5.07	100.26	110.40
2	SA	633	G	C5'-C4'-O4'	5.07	115.19	109.10
2	SA	1142	G	C4-C5-C6	5.07	121.84	118.80
2	SA	1350	A	C6-N1-C2	-5.07	115.56	118.60
7	SG	40	SER	N-CA-CB	5.07	118.11	110.50
18	SB	219	THR	CA-CB-CG2	-5.07	105.30	112.40
24	S3	94	PHE	O-C-N	-5.07	114.59	122.70
26	LA	130	C	C4'-C3'-C2'	-5.07	97.53	102.60
26	LA	335	C	C6-N1-C2	-5.07	118.27	120.30
26	LA	607	U	C4-C5-C6	-5.07	116.66	119.70
26	LA	674	G	C5-N7-C8	-5.07	101.77	104.30
26	LA	855	G	P-O5'-C5'	-5.07	112.79	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1232	G	C8-N9-C1'	5.07	133.59	127.00
26	LA	1378	A	OP1-P-OP2	-5.07	112.00	119.60
26	LA	1380	G	O5'-P-OP2	5.07	116.78	110.70
26	LA	1462	C	N1-C2-N3	5.07	122.75	119.20
26	LA	1497	U	N3-C2-O2	-5.07	118.65	122.20
26	LA	1692	U	N1-C2-O2	-5.07	119.25	122.80
26	LA	1708	C	C5'-C4'-C3'	5.07	124.11	116.00
26	LA	1818	U	C4'-C3'-C2'	5.07	107.67	102.60
26	LA	2478	A	N7-C8-N9	5.07	116.33	113.80
50	LL	105	VAL	CA-CB-CG1	5.07	118.51	110.90
2	SA	319	G	N1-C6-O6	5.07	122.94	119.90
2	SA	541	G	P-O3'-C3'	-5.07	113.62	119.70
26	LA	226	A	N9-C4-C5	5.07	107.83	105.80
26	LA	277	G	C4-N9-C1'	5.07	133.09	126.50
26	LA	562	U	N1-C2-O2	-5.07	119.25	122.80
26	LA	600	G	C4'-C3'-C2'	-5.07	97.53	102.60
26	LA	682	G	N1-C2-N2	-5.07	111.64	116.20
26	LA	1656	C	C1'-O4'-C4'	-5.07	105.84	109.90
2	SA	199	A	OP1-P-O3'	5.07	116.35	105.20
2	SA	217	C	C2-N3-C4	5.07	122.43	119.90
2	SA	533	A	C6-N1-C2	-5.07	115.56	118.60
2	SA	829	G	C3'-C2'-C1'	-5.07	97.45	101.50
2	SA	1145	A	N1-C6-N6	5.07	121.64	118.60
2	SA	1216	A	OP1-P-OP2	-5.07	112.00	119.60
2	SA	1427	C	C2-N1-C1'	-5.07	113.23	118.80
25	LB	60	C	C5'-C4'-O4'	5.07	115.18	109.10
26	LA	28	A	P-O5'-C5'	-5.07	112.79	120.90
26	LA	130	C	C5'-C4'-C3'	-5.07	107.89	116.00
26	LA	577	G	C5-C6-N1	5.07	114.03	111.50
26	LA	640	C	C1'-O4'-C4'	5.07	113.95	109.90
26	LA	1012	U	C6-N1-C2	-5.07	117.96	121.00
26	LA	1701	A	P-O3'-C3'	-5.07	113.62	119.70
26	LA	1784	A	C2-N3-C4	-5.07	108.07	110.60
26	LA	2016	U	O4'-C4'-C3'	5.07	110.15	106.10
26	LA	2317	A	C6-C5-N7	-5.07	128.75	132.30
26	LA	2411	A	N1-C6-N6	5.07	121.64	118.60
26	LA	2669	G	C4-C5-N7	5.07	112.83	110.80
52	LO	91	TYR	CB-CA-C	5.07	120.53	110.40
2	SA	52	C	C2-N3-C4	-5.07	117.37	119.90
2	SA	135	C	C4'-C3'-C2'	-5.07	97.53	102.60
2	SA	410	G	O4'-C1'-N9	5.07	112.25	108.20
2	SA	820	U	N1-C2-O2	-5.07	119.25	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	S2	41	C	C6-N1-C2	-5.07	118.27	120.30
18	SB	22	TRP	CE2-CD2-CE3	5.07	124.78	118.70
18	SB	178	LEU	O-C-N	-5.07	114.59	123.20
26	LA	17	G	C5'-C4'-C3'	-5.07	107.90	116.00
26	LA	456	C	OP1-P-O3'	5.07	116.34	105.20
26	LA	698	C	OP1-P-OP2	-5.07	112.00	119.60
26	LA	794	A	N7-C8-N9	5.07	116.33	113.80
26	LA	1034	G	C5-C6-O6	-5.07	125.56	128.60
26	LA	1178	C	P-O5'-C5'	5.07	129.00	120.90
26	LA	1532	A	C8-N9-C4	-5.07	103.77	105.80
26	LA	1846	G	C5'-C4'-O4'	5.07	115.18	109.10
26	LA	1967	C	O4'-C4'-C3'	-5.07	98.94	104.00
26	LA	2051	A	N1-C2-N3	-5.07	126.77	129.30
58	LT	95	ASP	CB-CG-OD2	-5.07	113.74	118.30
2	SA	105	G	C5'-C4'-C3'	5.06	124.10	116.00
2	SA	352	C	O5'-C5'-C4'	5.06	121.32	111.70
2	SA	627	G	N1-C2-N3	-5.06	120.86	123.90
2	SA	1115	U	P-O5'-C5'	5.06	129.00	120.90
2	SA	1383	C	C5'-C4'-O4'	5.06	115.18	109.10
18	SB	46	VAL	O-C-N	-5.06	111.48	121.10
25	LB	49	C	C4-C5-C6	5.06	119.93	117.40
26	LA	53	A	C2-N3-C4	5.06	113.13	110.60
26	LA	1194	A	P-O3'-C3'	-5.06	113.62	119.70
26	LA	1724	G	N1-C6-O6	-5.06	116.86	119.90
26	LA	1805	A	C4'-C3'-C2'	-5.06	97.54	102.60
26	LA	2439	A	C8-N9-C1'	-5.06	118.58	127.70
26	LA	2623	G	C8-N9-C4	5.06	108.42	106.40
31	LX	74	ALA	CB-CA-C	-5.06	102.50	110.10
38	LE	199	SER	CB-CA-C	-5.06	100.48	110.10
2	SA	60	A	C3'-C2'-C1'	-5.06	97.45	101.50
2	SA	122	G	N7-C8-N9	-5.06	110.57	113.10
2	SA	486	U	C1'-O4'-C4'	-5.06	105.85	109.90
2	SA	563	A	C6-C5-N7	-5.06	128.76	132.30
2	SA	622	A	C5'-C4'-O4'	5.06	115.18	109.10
2	SA	946	A	P-O3'-C3'	-5.06	113.63	119.70
2	SA	1028	C	C4'-C3'-C2'	-5.06	97.54	102.60
2	SA	1143	G	C4-C5-C6	-5.06	115.76	118.80
2	SA	1224	U	C1'-O4'-C4'	-5.06	105.85	109.90
2	SA	1327	C	C5-C6-N1	-5.06	118.47	121.00
2	SA	1358	U	C4-C5-C6	5.06	122.74	119.70
3	S1	40	G	C8-N9-C1'	-5.06	120.42	127.00
18	SB	187	ASP	N-CA-CB	-5.06	101.49	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	S3	533	TYR	N-CA-C	-5.06	97.33	111.00
26	LA	27	G	C4-N9-C1'	5.06	133.08	126.50
26	LA	78	U	O5'-P-OP2	-5.06	101.14	105.70
26	LA	222	A	N7-C8-N9	-5.06	111.27	113.80
26	LA	573	U	O4'-C1'-C2'	-5.06	100.74	105.80
26	LA	876	C	O3'-P-O5'	-5.06	94.38	104.00
26	LA	918	A	N9-C4-C5	5.06	107.83	105.80
26	LA	1110	G	C4-C5-C6	5.06	121.84	118.80
26	LA	1372	U	N1-C2-O2	-5.06	119.26	122.80
26	LA	1612	C	N1-C2-N3	5.06	122.74	119.20
26	LA	1646	C	OP1-P-O3'	5.06	116.34	105.20
26	LA	1869	G	C4'-C3'-C2'	-5.06	97.54	102.60
26	LA	1884	G	C2-N3-C4	-5.06	109.37	111.90
26	LA	1954	G	OP1-P-OP2	-5.06	112.01	119.60
26	LA	2345	G	C5-N7-C8	5.06	106.83	104.30
26	LA	2606	C	P-O5'-C5'	5.06	129.00	120.90
26	LA	2830	C	C6-N1-C2	-5.06	118.28	120.30
26	LA	2865	U	N1-C2-O2	-5.06	119.26	122.80
40	L4	7	LYS	CB-CA-C	-5.06	100.27	110.40
51	LI	116	ARG	CG-CD-NE	-5.06	101.17	111.80
2	SA	842	U	C4-C5-C6	5.06	122.74	119.70
2	SA	1183	U	N3-C4-O4	-5.06	115.86	119.40
2	SA	1453	G	N1-C2-N2	-5.06	111.64	116.20
3	S1	32	U	O5'-C5'-C4'	5.06	121.32	111.70
26	LA	118	A	N1-C2-N3	-5.06	126.77	129.30
26	LA	905	A	P-O3'-C3'	5.06	125.77	119.70
26	LA	2012	G	N1-C2-N3	-5.06	120.86	123.90
26	LA	2031	A	C5-C6-N6	-5.06	119.65	123.70
26	LA	2050	C	N3-C4-C5	5.06	123.92	121.90
26	LA	2175	C	O4'-C4'-C3'	-5.06	98.94	104.00
41	L5	32	ALA	CB-CA-C	-5.06	102.51	110.10
2	SA	66	A	C4'-C3'-C2'	5.06	107.66	102.60
2	SA	96	U	C1'-O4'-C4'	-5.06	105.85	109.90
2	SA	196	A	N1-C6-N6	-5.06	115.56	118.60
2	SA	375	U	C2-N3-C4	-5.06	123.96	127.00
2	SA	401	C	C4'-C3'-C2'	-5.06	97.54	102.60
2	SA	701	U	C2-N3-C4	-5.06	123.96	127.00
2	SA	827	U	N3-C4-C5	5.06	117.64	114.60
2	SA	1071	C	N3-C4-N4	5.06	121.54	118.00
2	SA	1094	G	N1-C6-O6	-5.06	116.86	119.90
2	SA	1412	C	C5'-C4'-O4'	5.06	115.17	109.10
2	SA	1523	G	C6-N1-C2	5.06	128.14	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	26	G	C2-N3-C4	-5.06	109.37	111.90
26	LA	177	G	C5'-C4'-O4'	5.06	115.17	109.10
26	LA	218	A	N1-C6-N6	-5.06	115.56	118.60
26	LA	233	A	N3-C4-C5	-5.06	123.26	126.80
26	LA	368	A	C6-N1-C2	5.06	121.64	118.60
26	LA	576	U	C2-N3-C4	-5.06	123.96	127.00
26	LA	1085	A	N3-C4-N9	-5.06	123.35	127.40
26	LA	1595	C	C5'-C4'-C3'	5.06	124.10	116.00
26	LA	2175	C	C2-N3-C4	-5.06	117.37	119.90
26	LA	2195	U	C5'-C4'-O4'	5.06	115.17	109.10
26	LA	2204	G	C4-C5-N7	-5.06	108.78	110.80
26	LA	2234	G	C6-N1-C2	-5.06	122.06	125.10
26	LA	2578	G	OP2-P-O3'	5.06	116.33	105.20
26	LA	2868	A	C6-N1-C2	-5.06	115.56	118.60
2	SA	233	C	C6-N1-C2	5.06	122.32	120.30
2	SA	826	C	C6-N1-C2	-5.06	118.28	120.30
2	SA	1158	C	C5-C6-N1	5.06	123.53	121.00
26	LA	245	G	N3-C2-N2	5.06	123.44	119.90
26	LA	646	U	N3-C4-O4	5.06	122.94	119.40
26	LA	675	A	C4-C5-N7	-5.06	108.17	110.70
26	LA	858	G	N3-C4-N9	5.06	129.03	126.00
26	LA	935	C	C2-N1-C1'	-5.06	113.24	118.80
26	LA	1632	A	C8-N9-C4	-5.06	103.78	105.80
26	LA	1993	U	P-O3'-C3'	5.06	125.77	119.70
26	LA	2024	G	C5-C6-N1	5.06	114.03	111.50
26	LA	2168	G	C8-N9-C4	5.06	108.42	106.40
26	LA	2218	G	P-O5'-C5'	-5.06	112.81	120.90
26	LA	2512	C	C2-N3-C4	-5.06	117.37	119.90
26	LA	2632	A	C5'-C4'-C3'	-5.06	107.91	116.00
26	LA	2724	U	C1'-O4'-C4'	5.06	113.95	109.90
29	LV	16	VAL	O-C-N	-5.06	114.61	122.70
57	LS	60	TRP	O-C-N	-5.06	114.61	122.70
2	SA	1027	C	C5-C4-N4	-5.06	116.66	120.20
25	LB	84	G	C4'-C3'-C2'	-5.06	97.54	102.60
26	LA	759	G	N9-C1'-C2'	-5.06	106.44	112.00
26	LA	1183	U	N1-C2-O2	5.06	126.34	122.80
26	LA	1283	G	N3-C4-C5	-5.06	126.07	128.60
26	LA	1330	C	N1-C2-N3	5.06	122.74	119.20
26	LA	2113	U	C2'-C3'-O3'	5.06	121.79	113.70
26	LA	2475	C	N3-C4-C5	-5.06	119.88	121.90
26	LA	2547	A	N3-C4-N9	5.06	131.44	127.40
26	LA	2661	G	O4'-C4'-C3'	5.06	110.14	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2829	A	P-O5'-C5'	5.06	128.99	120.90
28	LU	95	ARG	NE-CZ-NH2	5.06	122.83	120.30
49	LK	86	LYS	C-N-CA	5.06	134.34	121.70
52	LO	94	ALA	O-C-N	-5.06	114.61	122.70
2	SA	410	G	C4-N9-C1'	-5.05	119.93	126.50
2	SA	657	U	C2-N3-C4	-5.05	123.97	127.00
2	SA	1157	A	C2-N3-C4	5.05	113.13	110.60
2	SA	1253	G	C1'-O4'-C4'	-5.05	105.86	109.90
7	SG	74	VAL	CA-CB-CG1	-5.05	103.32	110.90
26	LA	83	A	N7-C8-N9	5.05	116.33	113.80
26	LA	411	G	O5'-P-OP2	-5.05	101.15	105.70
26	LA	423	A	C6-N1-C2	-5.05	115.57	118.60
26	LA	818	G	P-O5'-C5'	5.05	128.99	120.90
26	LA	998	C	P-O3'-C3'	5.05	125.77	119.70
26	LA	1437	C	C6-N1-C2	-5.05	118.28	120.30
26	LA	1627	G	P-O5'-C5'	-5.05	112.81	120.90
26	LA	1819	A	C5'-C4'-O4'	5.05	115.17	109.10
26	LA	1955	U	C5-C6-N1	5.05	125.23	122.70
26	LA	2427	C	P-O3'-C3'	5.05	125.77	119.70
26	LA	2682	A	C3'-C2'-C1'	5.05	105.54	101.50
2	SA	589	U	N3-C4-O4	5.05	122.94	119.40
2	SA	829	G	C6-N1-C2	-5.05	122.07	125.10
2	SA	854	U	N1-C2-N3	-5.05	111.87	114.90
2	SA	1063	C	P-O3'-C3'	5.05	125.76	119.70
26	LA	58	G	C3'-C2'-C1'	5.05	105.54	101.50
26	LA	411	G	OP1-P-O3'	5.05	116.32	105.20
26	LA	525	U	N3-C2-O2	-5.05	118.66	122.20
26	LA	602	A	C4'-C3'-C2'	-5.05	97.55	102.60
26	LA	1043	C	N1-C2-O2	5.05	121.93	118.90
26	LA	1175	A	C5'-C4'-O4'	-5.05	103.04	109.10
26	LA	1242	U	N1-C2-N3	5.05	117.93	114.90
26	LA	2117	A	C5'-C4'-O4'	-5.05	103.04	109.10
35	L1	42	ALA	N-CA-CB	5.05	117.17	110.10
2	SA	111	G	C5-N7-C8	5.05	106.83	104.30
2	SA	145	G	C5-C6-N1	5.05	114.03	111.50
2	SA	251	G	C6-N1-C2	5.05	128.13	125.10
2	SA	345	C	C5-C6-N1	-5.05	118.47	121.00
2	SA	601	G	C6-N1-C2	-5.05	122.07	125.10
2	SA	1363	A	C2-N3-C4	-5.05	108.07	110.60
13	SM	6	ILE	O-C-N	-5.05	114.62	122.70
15	SO	82	GLU	CA-CB-CG	5.05	124.51	113.40
24	S3	503	LYS	N-CA-CB	5.05	119.69	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	LB	29	A	O4'-C1'-N9	5.05	112.24	108.20
25	LB	82	U	C6-N1-C2	-5.05	117.97	121.00
26	LA	44	A	C5'-C4'-O4'	5.05	115.16	109.10
26	LA	135	U	N3-C4-O4	-5.05	115.86	119.40
26	LA	333	G	C6-C5-N7	-5.05	127.37	130.40
26	LA	561	G	C1'-O4'-C4'	-5.05	105.86	109.90
26	LA	1025	G	OP1-P-O3'	5.05	116.31	105.20
26	LA	1257	C	C5-C6-N1	-5.05	118.47	121.00
26	LA	1580	A	C4'-C3'-C2'	-5.05	97.55	102.60
26	LA	2015	A	O4'-C1'-N9	5.05	112.24	108.20
26	LA	2273	A	C5-C6-N1	5.05	120.23	117.70
26	LA	2321	U	P-O3'-C3'	5.05	125.76	119.70
26	LA	2486	C	N1-C2-O2	5.05	121.93	118.90
26	LA	2779	U	C5'-C4'-O4'	5.05	115.16	109.10
28	LU	63	GLY	CA-C-O	5.05	129.69	120.60
36	L2	63	ARG	NE-CZ-NH1	5.05	122.83	120.30
44	LF	36	ALA	N-CA-CB	5.05	117.17	110.10
2	SA	406	G	C8-N9-C1'	5.05	133.56	127.00
2	SA	508	U	OP1-P-O3'	5.05	116.31	105.20
2	SA	628	G	C8-N9-C4	-5.05	104.38	106.40
2	SA	661	G	P-O5'-C5'	-5.05	112.82	120.90
2	SA	811	C	C5-C6-N1	5.05	123.52	121.00
2	SA	1003	G	C2-N3-C4	5.05	114.42	111.90
2	SA	1078	U	C4'-C3'-C2'	-5.05	97.55	102.60
2	SA	1459	G	N3-C4-C5	5.05	131.12	128.60
25	LB	31	C	C5-C6-N1	5.05	123.53	121.00
25	LB	45	A	N9-C4-C5	5.05	107.82	105.80
25	LB	104	A	C4-C5-C6	5.05	119.53	117.00
26	LA	253	C	N1-C2-O2	5.05	121.93	118.90
26	LA	368	A	C5-C6-N1	-5.05	115.17	117.70
26	LA	521	U	C6-N1-C2	-5.05	117.97	121.00
26	LA	603	A	N9-C4-C5	5.05	107.82	105.80
26	LA	862	G	C6-C5-N7	-5.05	127.37	130.40
26	LA	907	G	C5'-C4'-C3'	5.05	124.08	116.00
26	LA	1330	C	O4'-C4'-C3'	-5.05	98.95	104.00
26	LA	1404	C	C4'-C3'-C2'	-5.05	97.55	102.60
26	LA	1684	G	C6-C5-N7	5.05	133.43	130.40
26	LA	2166	U	C5-C4-O4	-5.05	122.87	125.90
26	LA	2210	U	C4-C5-C6	-5.05	116.67	119.70
26	LA	2302	U	OP1-P-OP2	-5.05	112.03	119.60
26	LA	2437	G	N3-C4-N9	-5.05	122.97	126.00
26	LA	2661	G	C3'-C2'-C1'	5.05	105.54	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2720	U	P-O3'-C3'	-5.05	113.64	119.70
26	LA	2770	G	C8-N9-C4	-5.05	104.38	106.40
26	LA	2806	C	C2'-C3'-O3'	5.05	121.78	113.70
47	LJ	34	VAL	O-C-N	-5.05	114.62	122.70
55	LQ	69	ASP	CA-CB-CG	-5.05	102.29	113.40
2	SA	333	U	C4-C5-C6	-5.05	116.67	119.70
2	SA	1181	G	O4'-C1'-C2'	-5.05	100.75	105.80
5	ST	30	PHE	CB-CA-C	5.05	120.50	110.40
26	LA	93	G	O4'-C1'-C2'	-5.05	100.75	105.80
26	LA	236	C	C2-N3-C4	-5.05	117.38	119.90
26	LA	400	G	C4-N9-C1'	5.05	133.06	126.50
26	LA	465	G	C5'-C4'-C3'	5.05	124.08	116.00
26	LA	480	A	C5-C6-N1	5.05	120.22	117.70
26	LA	676	A	C6-N1-C2	-5.05	115.57	118.60
26	LA	1038	G	O4'-C1'-N9	5.05	112.24	108.20
26	LA	2561	U	P-O5'-C5'	5.05	128.98	120.90
2	SA	483	C	C5-C6-N1	-5.05	118.48	121.00
2	SA	558	G	O4'-C1'-N9	5.05	112.24	108.20
2	SA	854	U	N3-C4-C5	-5.05	111.57	114.60
2	SA	1188	A	C5-C6-N6	-5.05	119.66	123.70
2	SA	1333	A	N7-C8-N9	-5.05	111.28	113.80
2	SA	1344	C	C5'-C4'-O4'	-5.05	103.04	109.10
18	SB	139	GLU	OE1-CD-OE2	-5.05	117.25	123.30
26	LA	70	G	C8-N9-C4	-5.05	104.38	106.40
26	LA	120	U	P-O3'-C3'	5.05	125.75	119.70
26	LA	269	C	C3'-C2'-C1'	-5.05	97.46	101.50
26	LA	671	C	C5'-C4'-C3'	5.05	124.08	116.00
26	LA	752	A	C4-N9-C1'	5.05	135.38	126.30
26	LA	850	U	OP2-P-O3'	5.05	116.30	105.20
26	LA	1373	A	C5-N7-C8	5.05	106.42	103.90
26	LA	1403	A	P-O5'-C5'	-5.05	112.82	120.90
26	LA	1435	G	O3'-P-O5'	5.05	113.59	104.00
26	LA	1455	G	O4'-C1'-N9	5.05	112.24	108.20
26	LA	1518	C	C4-C5-C6	5.05	119.92	117.40
26	LA	1721	G	C5-N7-C8	-5.05	101.78	104.30
26	LA	1938	A	C2'-C3'-O3'	5.05	121.78	113.70
26	LA	2125	G	OP1-P-OP2	-5.05	112.03	119.60
26	LA	2881	U	C5'-C4'-C3'	-5.05	107.93	116.00
33	LZ	61	LYS	O-C-N	-5.05	114.62	123.20
2	SA	223	A	P-O3'-C3'	-5.04	113.65	119.70
2	SA	821	G	N3-C4-N9	-5.04	122.97	126.00
2	SA	863	U	P-O5'-C5'	5.04	128.97	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	1215	G	O4'-C1'-N9	5.04	112.24	108.20
2	SA	1265	C	OP1-P-OP2	-5.04	112.03	119.60
2	SA	1449	C	C1'-O4'-C4'	-5.04	105.86	109.90
11	SK	55	ARG	CG-CD-NE	-5.04	101.21	111.80
26	LA	1148	U	P-O3'-C3'	5.04	125.75	119.70
26	LA	1581	G	C6-N1-C2	-5.04	122.07	125.10
26	LA	2404	U	C6-N1-C2	-5.04	117.97	121.00
2	SA	40	C	OP1-P-OP2	-5.04	112.03	119.60
2	SA	208	U	OP2-P-O3'	5.04	116.30	105.20
2	SA	728	A	C5-N7-C8	5.04	106.42	103.90
2	SA	747	A	C4'-C3'-C2'	-5.04	97.56	102.60
2	SA	770	C	N3-C4-N4	5.04	121.53	118.00
2	SA	1014	A	O3'-P-O5'	-5.04	94.42	104.00
2	SA	1099	G	P-O5'-C5'	-5.04	112.83	120.90
2	SA	1295	U	O4'-C1'-N1	5.04	112.23	108.20
2	SA	1394	A	P-O5'-C5'	5.04	128.97	120.90
2	SA	1527	U	C2'-C3'-O3'	5.04	121.77	113.70
20	SD	48	SER	N-CA-C	-5.04	97.38	111.00
25	LB	111	U	C4'-C3'-C2'	-5.04	97.56	102.60
26	LA	55	G	N7-C8-N9	-5.04	110.58	113.10
26	LA	374	A	O4'-C4'-C3'	-5.04	98.96	104.00
26	LA	392	U	C5-C6-N1	-5.04	120.18	122.70
26	LA	429	A	O5'-C5'-C4'	5.04	121.28	111.70
26	LA	482	A	N1-C6-N6	-5.04	115.57	118.60
26	LA	899	A	P-O3'-C3'	-5.04	113.65	119.70
26	LA	929	U	C5'-C4'-O4'	5.04	115.15	109.10
26	LA	962	G	C5-C6-N1	5.04	114.02	111.50
26	LA	976	G	C5'-C4'-O4'	5.04	115.15	109.10
26	LA	1127	A	N1-C6-N6	5.04	121.63	118.60
26	LA	1296	G	N7-C8-N9	-5.04	110.58	113.10
26	LA	1341	G	C5-C6-N1	5.04	114.02	111.50
26	LA	1409	U	N1-C2-N3	5.04	117.93	114.90
26	LA	1661	G	P-O5'-C5'	-5.04	112.83	120.90
26	LA	1753	G	N7-C8-N9	-5.04	110.58	113.10
26	LA	1791	A	N7-C8-N9	5.04	116.32	113.80
26	LA	2084	C	P-O3'-C3'	5.04	125.75	119.70
26	LA	2192	U	C5'-C4'-O4'	5.04	115.15	109.10
58	LT	50	GLY	O-C-N	-5.04	114.63	122.70
2	SA	301	G	OP1-P-OP2	-5.04	112.04	119.60
2	SA	532	A	C4-C5-N7	5.04	113.22	110.70
2	SA	609	A	C5-N7-C8	-5.04	101.38	103.90
2	SA	648	A	C4-C5-C6	-5.04	114.48	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	815	A	O5'-C5'-C4'	-5.04	102.12	111.70
2	SA	906	A	N1-C6-N6	-5.04	115.58	118.60
2	SA	1306	A	C8-N9-C4	-5.04	103.78	105.80
25	LB	15	A	C5-C6-N1	5.04	120.22	117.70
25	LB	46	A	O4'-C1'-N9	5.04	112.23	108.20
26	LA	348	A	C4-C5-N7	5.04	113.22	110.70
26	LA	1088	A	N9-C4-C5	-5.04	103.78	105.80
26	LA	1147	A	N7-C8-N9	5.04	116.32	113.80
26	LA	1219	U	C5-C4-O4	5.04	128.93	125.90
26	LA	2191	A	O4'-C1'-N9	5.04	112.23	108.20
26	LA	2376	A	P-O5'-C5'	-5.04	112.83	120.90
26	LA	2391	G	C6-C5-N7	-5.04	127.38	130.40
26	LA	2501	C	N1-C2-N3	5.04	122.73	119.20
29	LV	54	GLU	OE1-CD-OE2	-5.04	117.25	123.30
2	SA	230	G	P-O5'-C5'	-5.04	112.84	120.90
2	SA	419	C	N3-C2-O2	-5.04	118.37	121.90
2	SA	725	G	C8-N9-C4	-5.04	104.38	106.40
2	SA	1184	G	N9-C4-C5	5.04	107.42	105.40
9	SI	111	GLU	OE1-CD-OE2	-5.04	117.25	123.30
25	LB	36	C	C5-C4-N4	-5.04	116.67	120.20
26	LA	1574	C	P-O3'-C3'	5.04	125.75	119.70
26	LA	1798	U	N1-C2-N3	5.04	117.92	114.90
26	LA	2021	C	C2'-C3'-O3'	5.04	121.76	113.70
26	LA	2038	G	C5'-C4'-C3'	-5.04	107.94	116.00
26	LA	2356	U	N1-C1'-C2'	-5.04	106.46	112.00
26	LA	2563	U	P-O3'-C3'	-5.04	113.65	119.70
26	LA	2850	A	C6-C5-N7	5.04	135.83	132.30
50	LL	119	PHE	CB-CG-CD1	5.04	124.33	120.80
2	SA	63	C	P-O3'-C3'	5.04	125.75	119.70
2	SA	263	A	C5-C6-N1	-5.04	115.18	117.70
2	SA	586	C	N1-C2-O2	5.04	121.92	118.90
4	S2	45	A	C5-C6-N1	5.04	120.22	117.70
17	SQ	39	ARG	NH1-CZ-NH2	-5.04	113.86	119.40
20	SD	17	ASP	CB-CG-OD1	5.04	122.83	118.30
25	LB	1	U	C5-C4-O4	5.04	128.92	125.90
25	LB	2	G	N3-C4-N9	-5.04	122.98	126.00
26	LA	362	A	C2-N3-C4	-5.04	108.08	110.60
26	LA	426	C	C1'-O4'-C4'	-5.04	105.87	109.90
26	LA	528	A	C4-C5-C6	-5.04	114.48	117.00
26	LA	741	U	O4'-C1'-N1	5.04	112.23	108.20
26	LA	824	U	C5'-C4'-C3'	-5.04	107.94	116.00
26	LA	893	C	C2-N3-C4	-5.04	117.38	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1003	G	C5'-C4'-C3'	5.04	124.06	116.00
26	LA	1125	G	OP1-P-OP2	-5.04	112.04	119.60
26	LA	1155	A	OP2-P-O3'	5.04	116.28	105.20
26	LA	1628	G	C4-N9-C1'	5.04	133.05	126.50
26	LA	1751	U	O4'-C1'-N1	5.04	112.23	108.20
26	LA	2468	A	P-O3'-C3'	5.04	125.75	119.70
26	LA	2474	U	OP1-P-OP2	-5.04	112.04	119.60
26	LA	2640	G	C5'-C4'-O4'	5.04	115.15	109.10
26	LA	2819	G	N3-C2-N2	5.04	123.43	119.90
45	LG	170	ALA	CB-CA-C	5.04	117.66	110.10
50	LL	88	THR	N-CA-CB	5.04	119.87	110.30
51	LI	34	GLY	N-CA-C	5.04	125.70	113.10
51	LI	59	ALA	CB-CA-C	-5.04	102.54	110.10
2	SA	563	A	N3-C4-N9	5.04	131.43	127.40
2	SA	724	G	C2-N3-C4	5.04	114.42	111.90
4	S2	32	G	N7-C8-N9	-5.04	110.58	113.10
25	LB	29	A	N1-C6-N6	-5.04	115.58	118.60
26	LA	232	G	OP1-P-OP2	-5.04	112.05	119.60
26	LA	323	C	C2-N1-C1'	5.04	124.34	118.80
26	LA	592	A	C5-C6-N6	-5.04	119.67	123.70
26	LA	636	G	C4-C5-C6	5.04	121.82	118.80
26	LA	695	G	C8-N9-C1'	5.04	133.55	127.00
26	LA	1393	A	N1-C2-N3	-5.04	126.78	129.30
26	LA	2102	G	N1-C2-N3	-5.04	120.88	123.90
26	LA	2490	G	C5'-C4'-O4'	5.04	115.14	109.10
57	LS	87	VAL	CB-CA-C	5.04	120.97	111.40
1	SS	80	ARG	CD-NE-CZ	-5.04	116.55	123.60
2	SA	298	A	C5-C6-N6	-5.04	119.67	123.70
2	SA	327	A	C6-N1-C2	5.04	121.62	118.60
2	SA	407	U	N1-C1'-C2'	-5.04	106.46	112.00
2	SA	921	U	N1-C2-N3	-5.04	111.88	114.90
2	SA	1023	U	C6-N1-C1'	5.04	128.25	121.20
2	SA	1108	G	C5-C6-O6	-5.04	125.58	128.60
2	SA	1185	G	C6-N1-C2	-5.04	122.08	125.10
2	SA	1323	G	C6-N1-C2	-5.04	122.08	125.10
2	SA	1399	C	N1-C2-N3	5.04	122.72	119.20
2	SA	1405	G	O4'-C1'-N9	5.04	112.23	108.20
2	SA	1526	G	C4-C5-C6	5.04	121.82	118.80
2	SA	1542	A	C4-C5-C6	5.04	119.52	117.00
9	SI	19	PHE	CG-CD1-CE1	-5.04	115.26	120.80
10	SJ	67	ILE	CA-CB-CG1	5.04	120.57	111.00
26	LA	266	G	C4'-C3'-C2'	-5.04	97.56	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	948	C	C5'-C4'-C3'	5.04	124.06	116.00
26	LA	1060	U	C5-C6-N1	-5.04	120.18	122.70
26	LA	1389	G	N1-C2-N3	-5.04	120.88	123.90
26	LA	1422	G	P-O5'-C5'	-5.04	112.84	120.90
26	LA	1448	G	N3-C4-N9	5.04	129.02	126.00
26	LA	1743	G	C1'-O4'-C4'	-5.04	105.87	109.90
26	LA	2145	C	N3-C4-N4	-5.04	114.47	118.00
26	LA	2196	C	P-O3'-C3'	5.04	125.74	119.70
26	LA	2388	A	N3-C4-N9	5.04	131.43	127.40
26	LA	2733	A	P-O3'-C3'	5.04	125.74	119.70
26	LA	2733	A	C3'-C2'-C1'	-5.04	97.47	101.50
38	LE	59	ARG	NE-CZ-NH2	5.04	122.82	120.30
2	SA	147	G	P-O5'-C5'	5.03	128.95	120.90
2	SA	202	G	N3-C2-N2	-5.03	116.38	119.90
2	SA	901	A	N1-C6-N6	5.03	121.62	118.60
2	SA	924	C	C4'-C3'-C2'	-5.03	97.57	102.60
2	SA	1082	A	O4'-C1'-N9	5.03	112.23	108.20
2	SA	1384	C	C5'-C4'-O4'	5.03	115.14	109.10
2	SA	1407	C	C2-N3-C4	-5.03	117.38	119.90
2	SA	1410	A	N3-C4-C5	-5.03	123.28	126.80
25	LB	31	C	N3-C2-O2	-5.03	118.38	121.90
25	LB	113	C	C5-C6-N1	-5.03	118.48	121.00
26	LA	42	A	C1'-O4'-C4'	5.03	113.93	109.90
26	LA	86	G	C2-N3-C4	5.03	114.42	111.90
26	LA	210	C	C5'-C4'-C3'	-5.03	107.95	116.00
26	LA	282	A	C4'-C3'-C2'	-5.03	97.57	102.60
26	LA	431	U	N3-C4-C5	-5.03	111.58	114.60
26	LA	581	C	C6-N1-C2	-5.03	118.29	120.30
26	LA	791	C	C5'-C4'-O4'	5.03	115.14	109.10
26	LA	909	A	C4-C5-C6	-5.03	114.48	117.00
26	LA	1016	G	C6-N1-C2	5.03	128.12	125.10
26	LA	1133	A	C6-C5-N7	-5.03	128.78	132.30
26	LA	1203	U	C5'-C4'-C3'	-5.03	107.95	116.00
26	LA	1565	C	OP1-P-OP2	-5.03	112.05	119.60
26	LA	1842	G	C5-C6-O6	-5.03	125.58	128.60
26	LA	1861	G	N1-C6-O6	-5.03	116.88	119.90
26	LA	2171	A	C6-N1-C2	-5.03	115.58	118.60
26	LA	2216	G	C2-N3-C4	5.03	114.42	111.90
26	LA	2262	U	O4'-C4'-C3'	5.03	110.13	106.10
26	LA	2737	G	N7-C8-N9	5.03	115.62	113.10
26	LA	2815	C	C2-N1-C1'	5.03	124.34	118.80
44	LF	47	LYS	N-CA-CB	5.03	119.66	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
48	LN	93	ASN	O-C-N	-5.03	114.65	122.70
2	SA	350	G	O4'-C1'-N9	5.03	112.23	108.20
2	SA	439	U	C2-N1-C1'	5.03	123.74	117.70
2	SA	626	G	P-O5'-C5'	5.03	128.95	120.90
2	SA	1436	U	C4'-C3'-C2'	-5.03	97.57	102.60
26	LA	172	A	C6-N1-C2	-5.03	115.58	118.60
26	LA	843	G	O4'-C1'-N9	5.03	112.22	108.20
26	LA	1199	U	C6-N1-C2	-5.03	117.98	121.00
26	LA	1290	C	C2-N1-C1'	5.03	124.33	118.80
26	LA	1318	U	C4-C5-C6	-5.03	116.68	119.70
26	LA	1662	U	C6-N1-C2	-5.03	117.98	121.00
26	LA	1901	A	C4'-C3'-C2'	-5.03	97.57	102.60
26	LA	2685	G	O3'-P-O5'	-5.03	94.44	104.00
2	SA	113	G	C4-C5-C6	5.03	121.82	118.80
2	SA	426	U	N1-C2-O2	5.03	126.32	122.80
2	SA	617	G	N9-C4-C5	5.03	107.41	105.40
2	SA	827	U	P-O5'-C5'	5.03	128.95	120.90
2	SA	828	U	C6-N1-C2	5.03	124.02	121.00
2	SA	1420	U	N1-C2-O2	5.03	126.32	122.80
4	S2	14	A	C6-N1-C2	-5.03	115.58	118.60
11	SK	117	HIS	O-C-N	-5.03	114.65	122.70
25	LB	16	G	C4-C5-C6	5.03	121.82	118.80
26	LA	450	G	N9-C4-C5	-5.03	103.39	105.40
26	LA	478	A	N1-C2-N3	-5.03	126.78	129.30
26	LA	529	A	P-O5'-C5'	5.03	128.95	120.90
26	LA	594	U	P-O5'-C5'	5.03	128.95	120.90
26	LA	818	G	N7-C8-N9	5.03	115.61	113.10
26	LA	1406	U	P-O3'-C3'	-5.03	113.66	119.70
26	LA	1447	C	C6-N1-C2	5.03	122.31	120.30
26	LA	1519	G	C5-C6-N1	5.03	114.02	111.50
26	LA	1656	C	C2-N3-C4	5.03	122.42	119.90
26	LA	1872	A	C5-C6-N1	5.03	120.22	117.70
26	LA	1965	C	O5'-C5'-C4'	-5.03	102.14	111.70
26	LA	2063	C	C6-N1-C2	-5.03	118.29	120.30
26	LA	2339	C	O4'-C1'-N1	5.03	112.22	108.20
26	LA	2524	G	C8-N9-C4	-5.03	104.39	106.40
26	LA	2546	U	C3'-C2'-C1'	5.03	105.52	101.50
26	LA	2740	A	O4'-C1'-N9	5.03	112.22	108.20
26	LA	2748	A	C4-C5-N7	-5.03	108.18	110.70
29	LV	91	GLN	CG-CD-OE1	5.03	131.66	121.60
2	SA	798	U	OP2-P-O3'	5.03	116.27	105.20
2	SA	1398	A	C5-N7-C8	-5.03	101.39	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	SP	66	THR	CA-CB-CG2	-5.03	105.36	112.40
26	LA	611	C	OP1-P-OP2	-5.03	112.06	119.60
26	LA	2733	A	C5-C6-N1	-5.03	115.19	117.70
2	SA	264	C	C4-C5-C6	-5.03	114.89	117.40
2	SA	623	C	O4'-C1'-N1	5.03	112.22	108.20
2	SA	991	U	C4-C5-C6	-5.03	116.68	119.70
2	SA	1166	G	C2'-C3'-O3'	5.03	121.75	113.70
2	SA	1315	U	C5-C6-N1	-5.03	120.19	122.70
2	SA	1368	A	C5-C6-N1	5.03	120.21	117.70
2	SA	1499	A	O4'-C1'-N9	5.03	112.22	108.20
4	S2	75	C	N1-C2-O2	5.03	121.92	118.90
18	SB	170	ILE	O-C-N	-5.03	114.66	122.70
25	LB	87	U	O4'-C4'-C3'	-5.03	98.97	104.00
26	LA	13	A	C5-N7-C8	5.03	106.41	103.90
26	LA	35	G	C4-C5-C6	-5.03	115.78	118.80
26	LA	301	G	C4-C5-C6	-5.03	115.78	118.80
26	LA	409	G	N9-C4-C5	-5.03	103.39	105.40
26	LA	427	U	N1-C2-O2	5.03	126.32	122.80
26	LA	1075	C	C5'-C4'-C3'	5.03	124.04	116.00
26	LA	1122	G	C5-C6-N1	5.03	114.01	111.50
26	LA	1271	G	OP1-P-OP2	-5.03	112.06	119.60
26	LA	1631	G	O4'-C1'-N9	5.03	112.22	108.20
26	LA	1761	C	P-O5'-C5'	5.03	128.94	120.90
26	LA	1804	C	C4'-C3'-C2'	-5.03	97.57	102.60
26	LA	2197	U	N3-C4-O4	5.03	122.92	119.40
26	LA	2209	G	C8-N9-C4	5.03	108.41	106.40
26	LA	2607	G	C5'-C4'-C3'	-5.03	107.96	116.00
27	LD	196	ASN	O-C-N	-5.03	114.66	122.70
36	L2	32	LEU	CB-CA-C	5.03	119.75	110.20
44	LF	193	VAL	CB-CA-C	-5.03	101.85	111.40
2	SA	93	U	P-O3'-C3'	5.03	125.73	119.70
2	SA	134	G	OP1-P-OP2	-5.03	112.06	119.60
2	SA	257	G	C4-N9-C1'	-5.03	119.97	126.50
2	SA	519	C	C5-C4-N4	-5.03	116.68	120.20
2	SA	565	U	C4-C5-C6	5.03	122.72	119.70
2	SA	782	A	OP1-P-OP2	-5.03	112.06	119.60
2	SA	804	U	C6-N1-C2	5.03	124.02	121.00
2	SA	853	C	P-O5'-C5'	5.03	128.94	120.90
2	SA	1235	U	O4'-C1'-N1	5.03	112.22	108.20
2	SA	1499	A	O5'-C5'-C4'	-5.03	102.15	111.70
19	SC	131	ARG	NH1-CZ-NH2	-5.03	113.87	119.40
25	LB	115	A	C2'-C3'-O3'	5.03	121.74	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	45	G	C4-C5-N7	5.03	112.81	110.80
26	LA	272	A	N7-C8-N9	-5.03	111.29	113.80
26	LA	300	A	C8-N9-C4	5.03	107.81	105.80
26	LA	487	C	N1-C2-N3	5.03	122.72	119.20
26	LA	794	A	N1-C2-N3	-5.03	126.79	129.30
26	LA	1416	G	N1-C2-N3	5.03	126.92	123.90
26	LA	1548	A	C8-N9-C1'	5.03	136.75	127.70
26	LA	1869	G	N9-C4-C5	5.03	107.41	105.40
26	LA	1933	G	N3-C4-C5	-5.03	126.09	128.60
26	LA	2428	G	N3-C4-C5	5.03	131.11	128.60
26	LA	2503	A	C5-N7-C8	-5.03	101.39	103.90
26	LA	2630	G	C4-N9-C1'	5.03	133.03	126.50
26	LA	2857	G	C6-N1-C2	5.03	128.12	125.10
26	LA	2879	A	C6-N1-C2	5.03	121.62	118.60
2	SA	113	G	C1'-O4'-C4'	-5.02	105.88	109.90
2	SA	696	A	C8-N9-C4	-5.02	103.79	105.80
2	SA	980	C	C6-N1-C1'	5.02	126.83	120.80
2	SA	1015	G	C5-N7-C8	5.02	106.81	104.30
2	SA	1144	G	C4-C5-N7	5.02	112.81	110.80
2	SA	1216	A	C5'-C4'-C3'	-5.02	107.96	116.00
26	LA	265	A	N3-C4-C5	-5.02	123.28	126.80
26	LA	604	G	C5-C6-N1	5.02	114.01	111.50
26	LA	759	G	N3-C4-N9	5.02	129.01	126.00
26	LA	949	G	C8-N9-C4	-5.02	104.39	106.40
26	LA	955	U	O4'-C1'-N1	5.02	112.22	108.20
26	LA	1624	U	C5'-C4'-C3'	-5.02	107.96	116.00
26	LA	1847	A	C4'-C3'-C2'	-5.02	97.58	102.60
26	LA	2343	U	C5-C4-O4	-5.02	122.89	125.90
26	LA	2455	G	C4-C5-N7	5.02	112.81	110.80
26	LA	2524	G	O4'-C1'-N9	5.02	112.22	108.20
26	LA	2546	U	C5-C4-O4	5.02	128.91	125.90
48	LN	69	ARG	N-CA-CB	5.02	119.64	110.60
2	SA	234	C	O4'-C1'-N1	5.02	112.22	108.20
2	SA	336	A	C8-N9-C4	5.02	107.81	105.80
2	SA	801	U	C2-N3-C4	5.02	130.01	127.00
2	SA	827	U	C1'-O4'-C4'	-5.02	105.88	109.90
2	SA	886	G	O4'-C1'-N9	5.02	112.22	108.20
23	SR	19	GLU	OE1-CD-OE2	-5.02	117.27	123.30
26	LA	27	G	C6-N1-C2	-5.02	122.09	125.10
26	LA	206	U	C5-C4-O4	-5.02	122.89	125.90
26	LA	743	A	N9-C4-C5	-5.02	103.79	105.80
26	LA	833	A	OP1-P-OP2	-5.02	112.07	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1114	C	N3-C4-C5	-5.02	119.89	121.90
26	LA	1385	A	C5-C6-N1	5.02	120.21	117.70
26	LA	1541	C	C4'-C3'-C2'	-5.02	97.58	102.60
26	LA	1944	U	C6-N1-C2	5.02	124.01	121.00
26	LA	2249	U	N3-C4-O4	5.02	122.92	119.40
26	LA	2535	G	N1-C6-O6	-5.02	116.89	119.90
26	LA	2785	C	C5'-C4'-C3'	5.02	124.04	116.00
46	LH	2	ARG	O-C-N	-5.02	114.66	122.70
2	SA	272	C	N1-C2-O2	5.02	121.91	118.90
2	SA	777	A	C8-N9-C4	5.02	107.81	105.80
2	SA	1029	U	C5-C4-O4	-5.02	122.89	125.90
2	SA	1167	A	C2'-C3'-O3'	5.02	121.73	113.70
26	LA	663	G	C5-N7-C8	-5.02	101.79	104.30
26	LA	728	G	N9-C4-C5	-5.02	103.39	105.40
26	LA	793	A	N1-C2-N3	5.02	131.81	129.30
26	LA	1315	C	C2-N3-C4	-5.02	117.39	119.90
47	LJ	113	GLU	CB-CA-C	5.02	120.44	110.40
2	SA	22	G	N9-C4-C5	5.02	107.41	105.40
2	SA	198	G	P-O5'-C5'	5.02	128.93	120.90
2	SA	318	G	N7-C8-N9	-5.02	110.59	113.10
2	SA	764	C	C4-C5-C6	-5.02	114.89	117.40
2	SA	1013	G	C2'-C3'-O3'	5.02	121.73	113.70
2	SA	1074	G	N1-C2-N2	-5.02	111.68	116.20
2	SA	1209	C	O4'-C1'-C2'	5.02	112.12	107.60
3	S1	30	U	O4'-C1'-C2'	5.02	112.12	107.60
4	S2	11	A	C5'-C4'-C3'	-5.02	107.97	116.00
4	S2	44	A	OP2-P-O3'	5.02	116.24	105.20
25	LB	120	U	C6-N1-C1'	-5.02	114.17	121.20
26	LA	3	U	C5-C4-O4	5.02	128.91	125.90
26	LA	13	A	OP1-P-OP2	-5.02	112.07	119.60
26	LA	344	A	N1-C6-N6	-5.02	115.59	118.60
26	LA	405	U	C5-C4-O4	5.02	128.91	125.90
26	LA	647	G	C5-C6-O6	-5.02	125.59	128.60
26	LA	651	G	C8-N9-C1'	-5.02	120.47	127.00
26	LA	807	U	N1-C2-O2	-5.02	119.29	122.80
26	LA	834	G	C4-N9-C1'	5.02	133.02	126.50
26	LA	1263	U	O4'-C1'-C2'	5.02	112.12	107.60
26	LA	1649	G	C5'-C4'-C3'	5.02	124.03	116.00
26	LA	1941	C	O5'-C5'-C4'	5.02	121.24	111.70
26	LA	1988	G	OP2-P-O3'	5.02	116.24	105.20
26	LA	2041	U	P-O3'-C3'	5.02	125.72	119.70
26	LA	2318	G	N1-C2-N3	5.02	126.91	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	LG	29	ARG	NE-CZ-NH1	-5.02	117.79	120.30
2	SA	122	G	N3-C2-N2	-5.02	116.39	119.90
2	SA	382	A	N7-C8-N9	-5.02	111.29	113.80
2	SA	1048	G	N1-C2-N2	-5.02	111.68	116.20
2	SA	1238	A	N1-C6-N6	-5.02	115.59	118.60
3	S1	49	U	OP1-P-OP2	-5.02	112.07	119.60
7	SG	153	TYR	N-CA-CB	-5.02	101.57	110.60
26	LA	312	G	C2'-C3'-O3'	5.02	121.73	113.70
26	LA	716	A	C5-N7-C8	-5.02	101.39	103.90
26	LA	845	A	C4-C5-C6	-5.02	114.49	117.00
26	LA	1407	G	C5-N7-C8	5.02	106.81	104.30
26	LA	1450	G	C5-C6-O6	-5.02	125.59	128.60
26	LA	1860	G	C5'-C4'-O4'	5.02	115.12	109.10
26	LA	1951	U	C2-N3-C4	-5.02	123.99	127.00
26	LA	2061	G	OP1-P-O3'	5.02	116.24	105.20
26	LA	2090	A	C5-N7-C8	-5.02	101.39	103.90
26	LA	2116	G	C8-N9-C4	-5.02	104.39	106.40
26	LA	2902	C	P-O5'-C5'	5.02	128.93	120.90
39	L3	29	VAL	CA-CB-CG2	5.02	118.43	110.90
57	LS	97	ILE	O-C-N	-5.02	114.67	122.70
2	SA	339	C	C2-N3-C4	-5.02	117.39	119.90
2	SA	346	G	C5-C6-N1	5.02	114.01	111.50
2	SA	564	C	P-O5'-C5'	5.02	128.93	120.90
2	SA	840	C	C1'-O4'-C4'	-5.02	105.89	109.90
2	SA	1193	G	C8-N9-C4	5.02	108.41	106.40
2	SA	1202	U	C5-C4-O4	-5.02	122.89	125.90
25	LB	112	G	P-O5'-C5'	5.02	128.93	120.90
26	LA	207	A	P-O5'-C5'	5.02	128.93	120.90
26	LA	737	C	C3'-C2'-C1'	5.02	105.51	101.50
26	LA	1247	A	O4'-C1'-N9	5.02	112.21	108.20
26	LA	1297	C	C2-N3-C4	-5.02	117.39	119.90
26	LA	1407	G	N9-C4-C5	5.02	107.41	105.40
26	LA	1487	U	P-O5'-C5'	5.02	128.93	120.90
26	LA	1574	C	O4'-C4'-C3'	5.02	110.11	106.10
26	LA	1972	G	OP1-P-OP2	-5.02	112.08	119.60
26	LA	2056	G	N9-C4-C5	5.02	107.41	105.40
26	LA	2299	U	C2-N3-C4	5.02	130.01	127.00
26	LA	2724	U	OP1-P-OP2	-5.02	112.08	119.60
26	LA	2739	U	C5-C6-N1	-5.02	120.19	122.70
2	SA	4	U	O4'-C1'-N1	5.01	112.21	108.20
2	SA	221	C	C4'-C3'-C2'	-5.01	97.59	102.60
2	SA	243	A	N9-C1'-C2'	5.01	120.52	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	SA	302	G	C4-C5-N7	-5.01	108.79	110.80
2	SA	710	G	N7-C8-N9	-5.01	110.59	113.10
2	SA	888	G	C4'-C3'-C2'	-5.01	97.59	102.60
2	SA	1036	A	C5-C6-N6	5.01	127.71	123.70
2	SA	1256	A	C4-C5-C6	5.01	119.51	117.00
20	SD	46	ARG	CD-NE-CZ	5.01	130.62	123.60
25	LB	88	C	N1-C2-O2	-5.01	115.89	118.90
26	LA	79	C	O4'-C1'-N1	5.01	112.21	108.20
26	LA	101	A	C2-N3-C4	-5.01	108.09	110.60
26	LA	385	C	N1-C2-O2	5.01	121.91	118.90
26	LA	516	C	O3'-P-O5'	-5.01	94.47	104.00
26	LA	596	U	C4'-C3'-C2'	-5.01	97.59	102.60
26	LA	597	G	P-O5'-C5'	-5.01	112.88	120.90
26	LA	763	G	O5'-P-OP1	5.01	116.72	110.70
26	LA	771	G	P-O3'-C3'	5.01	125.72	119.70
26	LA	1292	G	OP2-P-O3'	5.01	116.23	105.20
26	LA	1369	G	P-O3'-C3'	-5.01	113.68	119.70
26	LA	1764	C	O5'-P-OP1	5.01	116.72	110.70
26	LA	1854	A	C2'-C3'-O3'	5.01	121.72	113.70
26	LA	1911	U	C4'-C3'-C2'	5.01	107.61	102.60
26	LA	2042	A	C8-N9-C4	5.01	107.81	105.80
26	LA	2553	G	N3-C4-C5	-5.01	126.09	128.60
38	LE	4	LEU	CB-CG-CD2	5.01	119.52	111.00
38	LE	125	TRP	O-C-N	-5.01	114.68	122.70
2	SA	279	A	C2-N3-C4	-5.01	108.09	110.60
2	SA	500	G	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	779	C	N3-C4-C5	5.01	123.91	121.90
2	SA	884	U	C4'-C3'-C2'	-5.01	97.59	102.60
2	SA	1042	A	C2-N3-C4	-5.01	108.09	110.60
3	S1	59	A	N7-C8-N9	5.01	116.31	113.80
8	SH	48	PHE	CB-CG-CD1	5.01	124.31	120.80
26	LA	389	G	C5'-C4'-O4'	5.01	115.11	109.10
26	LA	543	G	P-O5'-C5'	5.01	128.92	120.90
26	LA	835	C	N3-C4-N4	5.01	121.51	118.00
26	LA	932	U	C4'-C3'-C2'	-5.01	97.59	102.60
26	LA	1133	A	OP1-P-OP2	-5.01	112.08	119.60
26	LA	1288	G	C4-C5-N7	-5.01	108.80	110.80
26	LA	1481	U	N3-C4-C5	5.01	117.61	114.60
26	LA	1627	G	C5-C6-O6	-5.01	125.59	128.60
26	LA	2110	G	C4-N9-C1'	-5.01	119.98	126.50
26	LA	2128	G	C4-N9-C1'	-5.01	119.98	126.50
31	LX	63	ILE	CB-CA-C	-5.01	101.57	111.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	LK	55	PRO	N-CD-CG	5.01	110.72	103.20
2	SA	507	C	N3-C4-N4	5.01	121.51	118.00
2	SA	973	G	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	1515	G	N3-C2-N2	5.01	123.41	119.90
19	SC	180	ASP	CB-CG-OD2	5.01	122.81	118.30
25	LB	76	G	C5-C6-O6	-5.01	125.59	128.60
25	LB	91	C	C2-N1-C1'	-5.01	113.29	118.80
26	LA	265	A	C2'-C3'-O3'	5.01	121.72	113.70
26	LA	376	G	C4-C5-N7	-5.01	108.80	110.80
26	LA	940	G	C8-N9-C4	-5.01	104.39	106.40
26	LA	1021	A	C6-C5-N7	5.01	135.81	132.30
26	LA	1232	G	C6-C5-N7	5.01	133.41	130.40
26	LA	1380	G	C1'-O4'-C4'	-5.01	105.89	109.90
26	LA	1494	A	C5-N7-C8	5.01	106.41	103.90
26	LA	1635	A	C5-N7-C8	-5.01	101.39	103.90
26	LA	1824	G	P-O3'-C3'	5.01	125.71	119.70
26	LA	1846	G	C2-N3-C4	-5.01	109.39	111.90
26	LA	1905	C	C2-N3-C4	5.01	122.41	119.90
26	LA	2198	A	P-O5'-C5'	5.01	128.92	120.90
26	LA	2372	U	P-O3'-C3'	-5.01	113.69	119.70
26	LA	2414	G	N3-C2-N2	-5.01	116.39	119.90
26	LA	2431	U	P-O5'-C5'	5.01	128.92	120.90
26	LA	2435	A	N1-C2-N3	5.01	131.81	129.30
26	LA	2526	G	C5'-C4'-O4'	5.01	115.11	109.10
26	LA	2564	A	C6-C5-N7	5.01	135.81	132.30
26	LA	2822	G	OP1-P-OP2	-5.01	112.08	119.60
2	SA	67	C	N1-C1'-C2'	-5.01	106.49	112.00
2	SA	184	G	C4'-C3'-C2'	-5.01	97.59	102.60
2	SA	426	U	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	477	C	C5-C6-N1	-5.01	118.50	121.00
2	SA	620	C	C1'-O4'-C4'	-5.01	105.89	109.90
2	SA	819	A	C8-N9-C4	-5.01	103.80	105.80
2	SA	953	G	C5'-C4'-O4'	5.01	115.11	109.10
2	SA	1368	A	C4-C5-C6	-5.01	114.50	117.00
2	SA	1369	C	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	1436	U	N3-C4-C5	-5.01	111.59	114.60
2	SA	1522	U	C1'-O4'-C4'	-5.01	105.89	109.90
14	SN	74	ARG	NE-CZ-NH2	5.01	122.80	120.30
26	LA	585	G	N3-C4-N9	5.01	129.01	126.00
26	LA	820	A	C5-N7-C8	-5.01	101.39	103.90
26	LA	878	A	C2'-C3'-O3'	5.01	121.72	113.70
26	LA	1452	G	C5'-C4'-O4'	5.01	115.11	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1529	G	OP1-P-OP2	-5.01	112.08	119.60
26	LA	1534	U	N1-C2-N3	-5.01	111.89	114.90
26	LA	1697	G	N9-C4-C5	5.01	107.40	105.40
26	LA	1872	A	C5'-C4'-C3'	-5.01	107.99	116.00
26	LA	2567	G	N7-C8-N9	5.01	115.61	113.10
26	LA	2677	G	N9-C4-C5	-5.01	103.40	105.40
34	L0	23	ARG	CA-C-N	-5.01	106.18	117.20
37	LC	78	PHE	CB-CG-CD2	5.01	124.31	120.80
38	LE	207	VAL	C-N-CA	5.01	134.22	121.70
45	LG	52	ALA	N-CA-CB	-5.01	103.09	110.10
56	LR	58	PHE	CA-C-N	5.01	128.22	117.20
2	SA	995	C	C6-N1-C2	-5.01	118.30	120.30
8	SH	10	LEU	O-C-N	-5.01	114.69	122.70
14	SN	12	ARG	O-C-N	-5.01	114.69	122.70
24	S3	32	TYR	CG-CD2-CE2	-5.01	117.29	121.30
26	LA	299	A	C4-N9-C1'	-5.01	117.29	126.30
26	LA	1829	A	C6-C5-N7	-5.01	128.79	132.30
26	LA	2014	A	O4'-C1'-N9	5.01	112.21	108.20
29	LV	6	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
44	LF	114	ARG	NE-CZ-NH1	5.01	122.80	120.30
44	LF	196	VAL	CA-CB-CG2	-5.01	103.39	110.90
51	LI	128	HIS	N-CA-CB	5.01	119.61	110.60
2	SA	143	A	C5-C6-N1	5.01	120.20	117.70
2	SA	423	G	O5'-P-OP2	5.01	116.71	110.70
2	SA	888	G	N1-C6-O6	5.01	122.90	119.90
2	SA	917	G	C4'-C3'-C2'	5.01	107.61	102.60
2	SA	943	U	C3'-C2'-C1'	5.01	105.51	101.50
2	SA	1099	G	N9-C4-C5	5.01	107.40	105.40
3	S1	22	G	OP1-P-OP2	-5.01	112.09	119.60
3	S1	31	U	N1-C2-O2	5.01	126.30	122.80
9	SI	79	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
18	SB	198	VAL	CA-CB-CG2	5.01	118.41	110.90
26	LA	59	U	O4'-C1'-N1	5.01	112.21	108.20
26	LA	363	G	N1-C2-N3	-5.01	120.90	123.90
26	LA	391	A	P-O5'-C5'	5.01	128.91	120.90
26	LA	565	C	N3-C2-O2	-5.01	118.39	121.90
26	LA	1126	A	C6-N1-C2	-5.01	115.60	118.60
26	LA	1581	G	P-O3'-C3'	5.01	125.71	119.70
26	LA	1668	A	O4'-C4'-C3'	5.01	110.11	106.10
26	LA	1743	G	C6-C5-N7	-5.01	127.40	130.40
26	LA	2310	C	C1'-O4'-C4'	-5.01	105.89	109.90
26	LA	2567	G	C5-N7-C8	-5.01	101.80	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	2599	G	N7-C8-N9	-5.01	110.60	113.10
54	LM	30	ARG	CB-CA-C	-5.01	100.39	110.40
2	SA	48	C	P-O3'-C3'	5.00	125.71	119.70
2	SA	205	A	C2'-C3'-O3'	5.00	121.71	113.70
2	SA	232	G	C4-C5-N7	-5.00	108.80	110.80
2	SA	749	A	C2-N3-C4	5.00	113.10	110.60
2	SA	812	G	N1-C6-O6	5.00	122.90	119.90
2	SA	812	G	C5'-C4'-C3'	-5.00	107.99	116.00
2	SA	1083	U	N1-C2-O2	5.00	126.30	122.80
2	SA	1116	U	C5'-C4'-O4'	5.00	115.11	109.10
3	S1	35	G	C5-C6-O6	-5.00	125.60	128.60
4	S2	34	U	OP1-P-OP2	-5.00	112.09	119.60
24	S3	484	LYS	N-CA-CB	5.00	119.61	110.60
26	LA	8	C	C5'-C4'-O4'	5.00	115.11	109.10
26	LA	18	U	O4'-C1'-C2'	-5.00	100.80	105.80
26	LA	775	G	C5'-C4'-C3'	-5.00	107.99	116.00
26	LA	856	G	N7-C8-N9	-5.00	110.60	113.10
26	LA	1315	C	C6-N1-C2	-5.00	118.30	120.30
26	LA	1609	A	N7-C8-N9	-5.00	111.30	113.80
26	LA	2000	C	C5-C6-N1	-5.00	118.50	121.00
26	LA	2074	U	C5'-C4'-C3'	-5.00	107.99	116.00
26	LA	2377	A	OP1-P-OP2	-5.00	112.09	119.60
26	LA	2673	G	N9-C1'-C2'	-5.00	106.49	112.00
26	LA	2812	G	C5-C6-N1	5.00	114.00	111.50
2	SA	201	G	O4'-C1'-N9	5.00	112.20	108.20
2	SA	261	U	C4'-C3'-C2'	-5.00	97.60	102.60
2	SA	275	G	N1-C2-N3	-5.00	120.90	123.90
2	SA	894	G	C5'-C4'-C3'	-5.00	107.99	116.00
2	SA	913	A	N1-C6-N6	-5.00	115.60	118.60
2	SA	1351	U	C5'-C4'-C3'	5.00	124.00	116.00
2	SA	1408	A	N3-C4-C5	5.00	130.30	126.80
5	ST	68	LYS	N-CA-CB	-5.00	101.59	110.60
10	SJ	72	ARG	O-C-N	-5.00	114.69	122.70
24	S3	323	ILE	N-CA-C	-5.00	97.49	111.00
25	LB	103	U	OP2-P-O3'	5.00	116.21	105.20
25	LB	105	G	N3-C2-N2	5.00	123.40	119.90
26	LA	87	U	C5'-C4'-O4'	5.00	115.11	109.10
26	LA	739	A	C4-C5-C6	-5.00	114.50	117.00
26	LA	884	U	OP1-P-OP2	-5.00	112.10	119.60
26	LA	951	C	N3-C4-N4	5.00	121.50	118.00
26	LA	1156	A	C5-C6-N1	5.00	120.20	117.70
26	LA	1214	A	C5-N7-C8	-5.00	101.40	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	LA	1361	G	P-O3'-C3'	-5.00	113.70	119.70
26	LA	1510	G	N7-C8-N9	5.00	115.60	113.10
26	LA	1908	C	O4'-C1'-N1	5.00	112.20	108.20
26	LA	1929	G	N3-C2-N2	-5.00	116.40	119.90
26	LA	2266	A	C4-C5-N7	5.00	113.20	110.70
26	LA	2339	C	C5'-C4'-C3'	-5.00	107.99	116.00
26	LA	2483	C	C5'-C4'-O4'	5.00	115.10	109.10
26	LA	2840	C	C5-C6-N1	5.00	123.50	121.00
26	LA	2872	A	C2-N3-C4	5.00	113.10	110.60
32	LY	44	PHE	CB-CA-C	-5.00	100.39	110.40
50	LL	119	PHE	CB-CA-C	5.00	120.41	110.40
2	SA	813	U	C5-C6-N1	5.00	125.20	122.70
2	SA	954	G	N1-C2-N2	-5.00	111.70	116.20
3	S1	33	A	OP1-P-O3'	5.00	116.20	105.20
4	S2	9	G	C4-N9-C1'	5.00	133.00	126.50
25	LB	13	G	C6-N1-C2	5.00	128.10	125.10
25	LB	109	A	O3'-P-O5'	-5.00	94.50	104.00
26	LA	47	C	C4-C5-C6	-5.00	114.90	117.40
26	LA	133	U	O5'-C5'-C4'	-5.00	102.20	111.70
26	LA	317	G	C5-N7-C8	5.00	106.80	104.30
26	LA	442	G	O5'-P-OP1	-5.00	101.20	105.70
26	LA	471	A	C2'-C3'-O3'	5.00	121.70	113.70
26	LA	675	A	C5-N7-C8	5.00	106.40	103.90
26	LA	753	A	N7-C8-N9	5.00	116.30	113.80
26	LA	886	A	P-O5'-C5'	5.00	128.90	120.90
26	LA	1527	G	OP1-P-OP2	-5.00	112.10	119.60
26	LA	1625	C	C5'-C4'-C3'	-5.00	108.00	116.00
26	LA	1876	A	C1'-O4'-C4'	-5.00	105.90	109.90
26	LA	1990	C	N3-C2-O2	-5.00	118.40	121.90
26	LA	2769	U	C5'-C4'-O4'	5.00	115.10	109.10
26	LA	2795	C	C2-N1-C1'	-5.00	113.30	118.80
26	LA	2903	U	N1-C2-N3	5.00	117.90	114.90
44	LF	40	ARG	NE-CZ-NH1	5.00	122.80	120.30
55	LQ	9	ARG	NE-CZ-NH1	5.00	122.80	120.30
58	LT	37	GLU	CA-C-O	5.00	130.60	120.10

All (5) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
26	LA	2451	A	C1'
26	LA	2503	A	C2'
26	LA	2504	U	C2',C3'

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atom
26	LA	2575	C	C4'

All (3608) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
34	L0	52	ARG	Sidechain
34	L0	7	ARG	Sidechain
35	L1	15	ARG	Sidechain
35	L1	33	HIS	Sidechain
35	L1	44	ARG	Sidechain
36	L2	19	GLY	Peptide
36	L2	24	ILE	Peptide
36	L2	41	HIS	Sidechain
36	L2	43	PHE	Peptide
36	L2	49	ARG	Sidechain
36	L2	51	VAL	Peptide
36	L2	56	ARG	Sidechain
36	L2	63	ARG	Sidechain
36	L2	9	TYR	Sidechain
39	L3	15	ARG	Sidechain
39	L3	36	LYS	Mainchain
39	L3	40	HIS	Sidechain
39	L3	47	TYR	Sidechain
39	L3	49	ARG	Sidechain
40	L4	20	TYR	Sidechain
40	L4	27	ARG	Sidechain
40	L4	49	LYS	Peptide
40	L4	50	GLU	Peptide
41	L5	19	ARG	Sidechain
41	L5	28	ARG	Sidechain
41	L5	3	ARG	Sidechain
41	L5	34	ARG	Sidechain
41	L5	35	ARG	Sidechain
41	L5	39	ARG	Sidechain
41	L5	6	GLN	Peptide
42	L6	31	ILE	Peptide
42	L6	7	ARG	Sidechain
43	L7	12	ARG	Sidechain
43	L7	19	ARG	Sidechain
43	L7	31	PRO	Peptide
43	L7	36	ARG	Sidechain
26	LA	10	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1000	A	Sidechain
26	LA	1001	A	Sidechain
26	LA	1002	G	Sidechain
26	LA	1003	G	Sidechain
26	LA	1004	U	Sidechain
26	LA	1005	C	Sidechain
26	LA	1006	C	Sidechain
26	LA	1007	C	Sidechain
26	LA	1008	A	Sidechain
26	LA	1009	A	Sidechain
26	LA	101	A	Sidechain
26	LA	1010	A	Sidechain
26	LA	1011	G	Sidechain
26	LA	1012	U	Sidechain
26	LA	1013	C	Sidechain
26	LA	1016	G	Sidechain
26	LA	1017	G	Sidechain
26	LA	1019	U	Sidechain
26	LA	1021	A	Sidechain
26	LA	1022	G	Sidechain
26	LA	1023	U	Sidechain
26	LA	1024	G	Sidechain
26	LA	1025	G	Sidechain
26	LA	1026	G	Sidechain
26	LA	1027	A	Sidechain
26	LA	1028	A	Sidechain
26	LA	1029	A	Sidechain
26	LA	1030	C	Sidechain
26	LA	1031	G	Sidechain
26	LA	1032	A	Sidechain
26	LA	1033	U	Sidechain
26	LA	1034	G	Sidechain
26	LA	1035	U	Sidechain
26	LA	1036	G	Sidechain
26	LA	1037	G	Sidechain
26	LA	104	A	Sidechain
26	LA	1044	C	Sidechain
26	LA	1045	C	Sidechain
26	LA	1046	A	Sidechain
26	LA	1047	G	Sidechain
26	LA	1048	A	Sidechain
26	LA	1049	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1051	G	Sidechain
26	LA	1052	C	Sidechain
26	LA	1054	A	Sidechain
26	LA	1055	G	Sidechain
26	LA	1056	G	Sidechain
26	LA	1057	A	Sidechain
26	LA	1058	U	Sidechain
26	LA	1059	G	Sidechain
26	LA	106	C	Sidechain
26	LA	1060	U	Sidechain
26	LA	1061	U	Sidechain
26	LA	1063	G	Sidechain
26	LA	1065	U	Sidechain
26	LA	1066	U	Sidechain
26	LA	1068	G	Sidechain
26	LA	1072	C	Sidechain
26	LA	1074	G	Sidechain
26	LA	1076	C	Sidechain
26	LA	1077	A	Sidechain
26	LA	1080	A	Sidechain
26	LA	1082	U	Sidechain
26	LA	1083	U	Sidechain
26	LA	1084	A	Sidechain
26	LA	1085	A	Sidechain
26	LA	1086	A	Sidechain
26	LA	1087	G	Sidechain
26	LA	1090	A	Sidechain
26	LA	1091	G	Sidechain
26	LA	1094	U	Sidechain
26	LA	1095	A	Sidechain
26	LA	1096	A	Sidechain
26	LA	1097	U	Sidechain
26	LA	1099	G	Sidechain
26	LA	11	C	Sidechain
26	LA	110	G	Sidechain
26	LA	1101	U	Sidechain
26	LA	1104	C	Sidechain
26	LA	1105	U	Sidechain
26	LA	1107	G	Sidechain
26	LA	1109	C	Sidechain
26	LA	1110	G	Sidechain
26	LA	1112	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1114	C	Sidechain
26	LA	1116	G	Sidechain
26	LA	1117	C	Sidechain
26	LA	1118	C	Sidechain
26	LA	112	U	Sidechain
26	LA	1123	C	Sidechain
26	LA	1125	G	Sidechain
26	LA	1126	A	Sidechain
26	LA	1128	G	Sidechain
26	LA	113	U	Sidechain
26	LA	1131	G	Sidechain
26	LA	1132	U	Sidechain
26	LA	1134	A	Sidechain
26	LA	1135	C	Sidechain
26	LA	1136	G	Sidechain
26	LA	1137	G	Sidechain
26	LA	1138	G	Sidechain
26	LA	1139	G	Sidechain
26	LA	114	U	Sidechain
26	LA	1140	C	Sidechain
26	LA	1141	U	Sidechain
26	LA	1143	A	Sidechain
26	LA	1144	A	Sidechain
26	LA	1147	A	Sidechain
26	LA	1148	U	Sidechain
26	LA	115	C	Sidechain
26	LA	1150	C	Sidechain
26	LA	1152	C	Sidechain
26	LA	1154	G	Sidechain
26	LA	1155	A	Sidechain
26	LA	1158	C	Sidechain
26	LA	1159	U	Sidechain
26	LA	1162	G	Sidechain
26	LA	1163	G	Sidechain
26	LA	1164	C	Sidechain
26	LA	1165	A	Sidechain
26	LA	1166	G	Sidechain
26	LA	1169	A	Sidechain
26	LA	117	G	Sidechain
26	LA	1171	G	Sidechain
26	LA	1172	C	Sidechain
26	LA	1173	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1174	U	Sidechain
26	LA	1177	G	Sidechain
26	LA	118	A	Sidechain
26	LA	1180	U	Sidechain
26	LA	1182	G	Sidechain
26	LA	1183	U	Sidechain
26	LA	1184	U	Sidechain
26	LA	1186	G	Sidechain
26	LA	1188	U	Sidechain
26	LA	1189	A	Sidechain
26	LA	1191	G	Sidechain
26	LA	1192	G	Sidechain
26	LA	1193	G	Sidechain
26	LA	1194	A	Sidechain
26	LA	1195	G	Sidechain
26	LA	1197	G	Sidechain
26	LA	1198	U	Sidechain
26	LA	1199	U	Sidechain
26	LA	12	U	Sidechain
26	LA	120	U	Sidechain
26	LA	1201	U	Sidechain
26	LA	1202	G	Sidechain
26	LA	1203	U	Sidechain
26	LA	1204	A	Sidechain
26	LA	1206	G	Sidechain
26	LA	1207	C	Sidechain
26	LA	1209	U	Sidechain
26	LA	121	G	Sidechain
26	LA	1210	G	Sidechain
26	LA	1211	C	Sidechain
26	LA	1212	G	Sidechain
26	LA	1213	A	Sidechain
26	LA	1214	A	Sidechain
26	LA	1215	G	Sidechain
26	LA	1216	G	Sidechain
26	LA	1217	U	Sidechain
26	LA	122	G	Sidechain
26	LA	1222	U	Sidechain
26	LA	1223	G	Sidechain
26	LA	1224	U	Sidechain
26	LA	1225	G	Sidechain
26	LA	1227	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1229	C	Sidechain
26	LA	1231	U	Sidechain
26	LA	1232	G	Sidechain
26	LA	1233	C	Sidechain
26	LA	1234	U	Sidechain
26	LA	1235	G	Sidechain
26	LA	124	G	Sidechain
26	LA	1240	U	Sidechain
26	LA	1241	A	Sidechain
26	LA	1242	U	Sidechain
26	LA	1243	C	Sidechain
26	LA	1245	G	Sidechain
26	LA	1247	A	Sidechain
26	LA	1249	U	Sidechain
26	LA	125	A	Sidechain
26	LA	1250	G	Sidechain
26	LA	1251	C	Sidechain
26	LA	1252	G	Sidechain
26	LA	1253	A	Sidechain
26	LA	1257	C	Sidechain
26	LA	1258	U	Sidechain
26	LA	1259	G	Sidechain
26	LA	126	A	Sidechain
26	LA	1260	A	Sidechain
26	LA	1261	C	Sidechain
26	LA	1262	A	Sidechain
26	LA	1265	A	Sidechain
26	LA	1267	U	Sidechain
26	LA	1268	A	Sidechain
26	LA	1269	A	Sidechain
26	LA	1270	C	Sidechain
26	LA	1271	G	Sidechain
26	LA	1273	U	Sidechain
26	LA	1274	A	Sidechain
26	LA	1275	A	Sidechain
26	LA	1276	A	Sidechain
26	LA	1277	G	Sidechain
26	LA	1278	C	Sidechain
26	LA	1280	G	Sidechain
26	LA	1281	G	Sidechain
26	LA	1282	U	Sidechain
26	LA	1284	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1285	A	Sidechain
26	LA	1286	A	Sidechain
26	LA	1288	G	Sidechain
26	LA	1289	C	Sidechain
26	LA	129	C	Sidechain
26	LA	1291	C	Sidechain
26	LA	1292	G	Sidechain
26	LA	1293	C	Sidechain
26	LA	1294	U	Sidechain
26	LA	1295	C	Sidechain
26	LA	1296	G	Sidechain
26	LA	1298	C	Sidechain
26	LA	1299	G	Sidechain
26	LA	13	A	Sidechain
26	LA	1302	A	Sidechain
26	LA	1304	A	Sidechain
26	LA	1307	A	Sidechain
26	LA	1310	G	Sidechain
26	LA	1311	G	Sidechain
26	LA	1312	U	Sidechain
26	LA	1315	C	Sidechain
26	LA	132	G	Sidechain
26	LA	1322	A	Sidechain
26	LA	1323	C	Sidechain
26	LA	1324	G	Sidechain
26	LA	1325	U	Sidechain
26	LA	1326	U	Sidechain
26	LA	1327	A	Sidechain
26	LA	1329	U	Sidechain
26	LA	133	U	Sidechain
26	LA	1330	C	Sidechain
26	LA	1331	G	Sidechain
26	LA	1332	G	Sidechain
26	LA	1335	C	Sidechain
26	LA	1337	G	Sidechain
26	LA	1339	G	Sidechain
26	LA	134	G	Sidechain
26	LA	1342	A	Sidechain
26	LA	1343	G	Sidechain
26	LA	1344	U	Sidechain
26	LA	1346	G	Sidechain
26	LA	1349	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	135	U	Sidechain
26	LA	1350	C	Sidechain
26	LA	1351	C	Sidechain
26	LA	1352	U	Sidechain
26	LA	1353	A	Sidechain
26	LA	1354	A	Sidechain
26	LA	1355	G	Sidechain
26	LA	1357	C	Sidechain
26	LA	1358	G	Sidechain
26	LA	136	G	Sidechain
26	LA	1360	G	Sidechain
26	LA	1361	G	Sidechain
26	LA	1362	C	Sidechain
26	LA	1363	C	Sidechain
26	LA	1364	G	Sidechain
26	LA	1366	A	Sidechain
26	LA	1368	G	Sidechain
26	LA	1371	G	Sidechain
26	LA	1372	U	Sidechain
26	LA	1373	A	Sidechain
26	LA	1374	G	Sidechain
26	LA	1376	C	Sidechain
26	LA	1377	G	Sidechain
26	LA	1378	A	Sidechain
26	LA	1379	U	Sidechain
26	LA	138	U	Sidechain
26	LA	1380	G	Sidechain
26	LA	1381	G	Sidechain
26	LA	1383	A	Sidechain
26	LA	1384	A	Sidechain
26	LA	1385	A	Sidechain
26	LA	1387	A	Sidechain
26	LA	1388	G	Sidechain
26	LA	1389	G	Sidechain
26	LA	139	U	Sidechain
26	LA	1390	U	Sidechain
26	LA	1393	A	Sidechain
26	LA	1394	U	Sidechain
26	LA	1399	C	Sidechain
26	LA	14	A	Sidechain
26	LA	140	C	Sidechain
26	LA	1402	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1405	U	Sidechain
26	LA	1406	U	Sidechain
26	LA	1407	G	Sidechain
26	LA	1408	G	Sidechain
26	LA	1409	U	Sidechain
26	LA	141	G	Sidechain
26	LA	1410	G	Sidechain
26	LA	1411	U	Sidechain
26	LA	1413	A	Sidechain
26	LA	1415	U	Sidechain
26	LA	1418	G	Sidechain
26	LA	1419	A	Sidechain
26	LA	142	A	Sidechain
26	LA	1421	G	Sidechain
26	LA	1422	G	Sidechain
26	LA	1423	G	Sidechain
26	LA	1424	G	Sidechain
26	LA	1425	G	Sidechain
26	LA	1426	G	Sidechain
26	LA	1427	A	Sidechain
26	LA	1429	G	Sidechain
26	LA	1432	G	Sidechain
26	LA	1433	A	Sidechain
26	LA	1434	A	Sidechain
26	LA	1435	G	Sidechain
26	LA	1436	G	Sidechain
26	LA	1438	U	Sidechain
26	LA	1439	A	Sidechain
26	LA	144	A	Sidechain
26	LA	1440	U	Sidechain
26	LA	1441	G	Sidechain
26	LA	1442	U	Sidechain
26	LA	1443	U	Sidechain
26	LA	1445	G	Sidechain
26	LA	1447	C	Sidechain
26	LA	1448	G	Sidechain
26	LA	1450	G	Sidechain
26	LA	1452	G	Sidechain
26	LA	1453	A	Sidechain
26	LA	1454	C	Sidechain
26	LA	1455	G	Sidechain
26	LA	1456	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1457	U	Sidechain
26	LA	1458	U	Sidechain
26	LA	1459	G	Sidechain
26	LA	146	A	Sidechain
26	LA	1461	C	Sidechain
26	LA	1463	C	Sidechain
26	LA	1464	G	Sidechain
26	LA	1465	G	Sidechain
26	LA	1467	U	Sidechain
26	LA	1469	A	Sidechain
26	LA	1471	G	Sidechain
26	LA	1473	G	Sidechain
26	LA	1474	U	Sidechain
26	LA	1475	G	Sidechain
26	LA	1476	U	Sidechain
26	LA	1477	A	Sidechain
26	LA	1483	G	Sidechain
26	LA	1484	U	Sidechain
26	LA	1485	U	Sidechain
26	LA	1487	U	Sidechain
26	LA	1489	C	Sidechain
26	LA	1490	A	Sidechain
26	LA	1491	G	Sidechain
26	LA	1495	A	Sidechain
26	LA	1498	C	Sidechain
26	LA	15	G	Sidechain
26	LA	1500	G	Sidechain
26	LA	1502	A	Sidechain
26	LA	1503	A	Sidechain
26	LA	1505	A	Sidechain
26	LA	1509	A	Sidechain
26	LA	1510	G	Sidechain
26	LA	1511	G	Sidechain
26	LA	1513	U	Sidechain
26	LA	1514	G	Sidechain
26	LA	1515	A	Sidechain
26	LA	1516	G	Sidechain
26	LA	152	A	Sidechain
26	LA	1520	U	Sidechain
26	LA	1521	G	Sidechain
26	LA	1522	A	Sidechain
26	LA	1528	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	153	U	Sidechain
26	LA	1530	G	Sidechain
26	LA	1531	C	Sidechain
26	LA	1532	A	Sidechain
26	LA	1534	U	Sidechain
26	LA	1535	A	Sidechain
26	LA	1537	G	Sidechain
26	LA	1538	G	Sidechain
26	LA	1539	U	Sidechain
26	LA	154	U	Sidechain
26	LA	1540	G	Sidechain
26	LA	1541	C	Sidechain
26	LA	1542	U	Sidechain
26	LA	1544	A	Sidechain
26	LA	1545	A	Sidechain
26	LA	1546	G	Sidechain
26	LA	1548	A	Sidechain
26	LA	155	A	Sidechain
26	LA	1550	C	Sidechain
26	LA	1552	A	Sidechain
26	LA	1554	U	Sidechain
26	LA	1555	G	Sidechain
26	LA	1557	C	Sidechain
26	LA	1558	C	Sidechain
26	LA	1559	U	Sidechain
26	LA	1560	G	Sidechain
26	LA	1562	U	Sidechain
26	LA	1564	C	Sidechain
26	LA	1565	C	Sidechain
26	LA	1567	G	Sidechain
26	LA	1568	G	Sidechain
26	LA	1569	A	Sidechain
26	LA	157	C	Sidechain
26	LA	1571	A	Sidechain
26	LA	1573	G	Sidechain
26	LA	1574	C	Sidechain
26	LA	1576	U	Sidechain
26	LA	1577	C	Sidechain
26	LA	158	U	Sidechain
26	LA	1580	A	Sidechain
26	LA	1582	C	Sidechain
26	LA	1587	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1588	G	Sidechain
26	LA	159	G	Sidechain
26	LA	1590	A	Sidechain
26	LA	1594	U	Sidechain
26	LA	1595	C	Sidechain
26	LA	1597	A	Sidechain
26	LA	160	A	Sidechain
26	LA	1603	A	Sidechain
26	LA	1607	C	Sidechain
26	LA	1608	A	Sidechain
26	LA	161	A	Sidechain
26	LA	1610	A	Sidechain
26	LA	1612	C	Sidechain
26	LA	1613	G	Sidechain
26	LA	1618	C	Sidechain
26	LA	162	U	Sidechain
26	LA	1620	G	Sidechain
26	LA	1623	G	Sidechain
26	LA	1627	G	Sidechain
26	LA	1628	G	Sidechain
26	LA	1629	U	Sidechain
26	LA	1630	A	Sidechain
26	LA	1631	G	Sidechain
26	LA	1632	A	Sidechain
26	LA	1633	G	Sidechain
26	LA	1634	A	Sidechain
26	LA	1636	U	Sidechain
26	LA	1638	C	Sidechain
26	LA	1639	C	Sidechain
26	LA	1641	A	Sidechain
26	LA	1642	G	Sidechain
26	LA	1643	G	Sidechain
26	LA	1644	C	Sidechain
26	LA	1646	C	Sidechain
26	LA	1647	U	Sidechain
26	LA	1648	U	Sidechain
26	LA	1649	G	Sidechain
26	LA	1651	G	Sidechain
26	LA	1653	G	Sidechain
26	LA	1654	A	Sidechain
26	LA	1655	A	Sidechain
26	LA	1656	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1658	C	Sidechain
26	LA	1659	G	Sidechain
26	LA	166	U	Sidechain
26	LA	1660	G	Sidechain
26	LA	1661	G	Sidechain
26	LA	1662	U	Sidechain
26	LA	1663	G	Sidechain
26	LA	1664	A	Sidechain
26	LA	1666	G	Sidechain
26	LA	1667	G	Sidechain
26	LA	1668	A	Sidechain
26	LA	167	A	Sidechain
26	LA	1671	U	Sidechain
26	LA	1674	G	Sidechain
26	LA	1675	C	Sidechain
26	LA	1676	A	Sidechain
26	LA	1677	A	Sidechain
26	LA	1678	A	Sidechain
26	LA	1680	U	Sidechain
26	LA	1681	G	Sidechain
26	LA	1683	U	Sidechain
26	LA	1685	C	Sidechain
26	LA	1686	C	Sidechain
26	LA	1687	G	Sidechain
26	LA	1688	U	Sidechain
26	LA	1689	A	Sidechain
26	LA	1692	U	Sidechain
26	LA	1694	C	Sidechain
26	LA	1695	G	Sidechain
26	LA	1696	G	Sidechain
26	LA	1697	G	Sidechain
26	LA	1698	A	Sidechain
26	LA	1699	G	Sidechain
26	LA	17	G	Sidechain
26	LA	170	U	Sidechain
26	LA	1701	A	Sidechain
26	LA	1702	G	Sidechain
26	LA	1703	G	Sidechain
26	LA	1705	A	Sidechain
26	LA	1706	C	Sidechain
26	LA	1707	G	Sidechain
26	LA	1708	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1709	U	Sidechain
26	LA	171	U	Sidechain
26	LA	1710	G	Sidechain
26	LA	1711	A	Sidechain
26	LA	1713	A	Sidechain
26	LA	1714	U	Sidechain
26	LA	1715	G	Sidechain
26	LA	1717	A	Sidechain
26	LA	1718	G	Sidechain
26	LA	1719	G	Sidechain
26	LA	1720	U	Sidechain
26	LA	1723	G	Sidechain
26	LA	1724	G	Sidechain
26	LA	1726	C	Sidechain
26	LA	1727	C	Sidechain
26	LA	173	A	Sidechain
26	LA	1730	C	Sidechain
26	LA	1731	G	Sidechain
26	LA	1732	C	Sidechain
26	LA	1736	U	Sidechain
26	LA	1737	G	Sidechain
26	LA	1738	G	Sidechain
26	LA	174	U	Sidechain
26	LA	1741	C	Sidechain
26	LA	1742	U	Sidechain
26	LA	1743	G	Sidechain
26	LA	1744	A	Sidechain
26	LA	1745	A	Sidechain
26	LA	1746	A	Sidechain
26	LA	1747	U	Sidechain
26	LA	1748	C	Sidechain
26	LA	1751	U	Sidechain
26	LA	1752	C	Sidechain
26	LA	1753	G	Sidechain
26	LA	1754	A	Sidechain
26	LA	1755	A	Sidechain
26	LA	1758	U	Sidechain
26	LA	1759	A	Sidechain
26	LA	176	A	Sidechain
26	LA	1760	C	Sidechain
26	LA	1762	A	Sidechain
26	LA	1763	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1765	U	Sidechain
26	LA	1766	G	Sidechain
26	LA	1768	C	Sidechain
26	LA	1769	U	Sidechain
26	LA	1770	G	Sidechain
26	LA	1771	C	Sidechain
26	LA	1775	U	Sidechain
26	LA	1776	G	Sidechain
26	LA	1777	U	Sidechain
26	LA	1779	U	Sidechain
26	LA	178	G	Sidechain
26	LA	1781	U	Sidechain
26	LA	1782	U	Sidechain
26	LA	1783	A	Sidechain
26	LA	1784	A	Sidechain
26	LA	1785	A	Sidechain
26	LA	1786	A	Sidechain
26	LA	1787	A	Sidechain
26	LA	179	C	Sidechain
26	LA	1790	C	Sidechain
26	LA	1791	A	Sidechain
26	LA	1792	G	Sidechain
26	LA	1794	A	Sidechain
26	LA	1796	U	Sidechain
26	LA	1798	U	Sidechain
26	LA	1799	G	Sidechain
26	LA	180	G	Sidechain
26	LA	1800	C	Sidechain
26	LA	1802	A	Sidechain
26	LA	1804	C	Sidechain
26	LA	1805	A	Sidechain
26	LA	1807	G	Sidechain
26	LA	1808	A	Sidechain
26	LA	1809	A	Sidechain
26	LA	181	A	Sidechain
26	LA	1810	A	Sidechain
26	LA	1811	G	Sidechain
26	LA	1812	U	Sidechain
26	LA	1813	G	Sidechain
26	LA	1814	G	Sidechain
26	LA	1816	C	Sidechain
26	LA	1817	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1818	U	Sidechain
26	LA	1819	A	Sidechain
26	LA	182	A	Sidechain
26	LA	1821	A	Sidechain
26	LA	1822	C	Sidechain
26	LA	1824	G	Sidechain
26	LA	1825	U	Sidechain
26	LA	1826	G	Sidechain
26	LA	1827	U	Sidechain
26	LA	1828	G	Sidechain
26	LA	1829	A	Sidechain
26	LA	183	C	Sidechain
26	LA	1830	C	Sidechain
26	LA	1831	G	Sidechain
26	LA	1833	C	Sidechain
26	LA	1834	U	Sidechain
26	LA	1835	G	Sidechain
26	LA	1836	C	Sidechain
26	LA	1837	C	Sidechain
26	LA	1838	C	Sidechain
26	LA	1839	G	Sidechain
26	LA	1840	G	Sidechain
26	LA	1841	U	Sidechain
26	LA	1845	G	Sidechain
26	LA	1846	G	Sidechain
26	LA	1847	A	Sidechain
26	LA	1848	A	Sidechain
26	LA	1849	G	Sidechain
26	LA	185	G	Sidechain
26	LA	1850	G	Sidechain
26	LA	1851	U	Sidechain
26	LA	1852	U	Sidechain
26	LA	1853	A	Sidechain
26	LA	1854	A	Sidechain
26	LA	1855	U	Sidechain
26	LA	1856	U	Sidechain
26	LA	1857	G	Sidechain
26	LA	1859	U	Sidechain
26	LA	186	G	Sidechain
26	LA	1861	G	Sidechain
26	LA	1863	G	Sidechain
26	LA	1864	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1865	U	Sidechain
26	LA	1866	A	Sidechain
26	LA	1867	G	Sidechain
26	LA	1869	G	Sidechain
26	LA	1872	A	Sidechain
26	LA	1873	G	Sidechain
26	LA	1875	G	Sidechain
26	LA	1876	A	Sidechain
26	LA	1878	G	Sidechain
26	LA	188	G	Sidechain
26	LA	1881	C	Sidechain
26	LA	1882	U	Sidechain
26	LA	1883	U	Sidechain
26	LA	1884	G	Sidechain
26	LA	1885	A	Sidechain
26	LA	1886	U	Sidechain
26	LA	1888	G	Sidechain
26	LA	1889	A	Sidechain
26	LA	189	G	Sidechain
26	LA	1890	A	Sidechain
26	LA	1891	G	Sidechain
26	LA	1893	C	Sidechain
26	LA	1894	C	Sidechain
26	LA	1896	G	Sidechain
26	LA	1897	G	Sidechain
26	LA	1898	U	Sidechain
26	LA	1899	A	Sidechain
26	LA	19	A	Sidechain
26	LA	190	A	Sidechain
26	LA	1900	A	Sidechain
26	LA	1902	C	Sidechain
26	LA	1904	G	Sidechain
26	LA	1906	G	Sidechain
26	LA	1907	G	Sidechain
26	LA	1909	C	Sidechain
26	LA	191	A	Sidechain
26	LA	1910	G	Sidechain
26	LA	1914	C	Sidechain
26	LA	1915	C	Sidechain
26	LA	1916	A	Sidechain
26	LA	1917	U	Sidechain
26	LA	1919	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	192	C	Sidechain
26	LA	1921	G	Sidechain
26	LA	1922	G	Sidechain
26	LA	1923	U	Sidechain
26	LA	1924	C	Sidechain
26	LA	1926	U	Sidechain
26	LA	1927	A	Sidechain
26	LA	1928	A	Sidechain
26	LA	1929	G	Sidechain
26	LA	193	U	Sidechain
26	LA	1930	G	Sidechain
26	LA	1931	U	Sidechain
26	LA	1932	A	Sidechain
26	LA	1933	G	Sidechain
26	LA	1935	G	Sidechain
26	LA	1936	A	Sidechain
26	LA	1939	U	Sidechain
26	LA	194	G	Sidechain
26	LA	1941	C	Sidechain
26	LA	1945	G	Sidechain
26	LA	1946	U	Sidechain
26	LA	1947	C	Sidechain
26	LA	1948	G	Sidechain
26	LA	1949	G	Sidechain
26	LA	195	A	Sidechain
26	LA	1950	G	Sidechain
26	LA	1951	U	Sidechain
26	LA	1952	A	Sidechain
26	LA	1953	A	Sidechain
26	LA	1954	G	Sidechain
26	LA	1955	U	Sidechain
26	LA	1956	U	Sidechain
26	LA	1957	C	Sidechain
26	LA	196	A	Sidechain
26	LA	1960	A	Sidechain
26	LA	1961	C	Sidechain
26	LA	1962	C	Sidechain
26	LA	1963	U	Sidechain
26	LA	1964	G	Sidechain
26	LA	1966	A	Sidechain
26	LA	1968	G	Sidechain
26	LA	197	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	1971	U	Sidechain
26	LA	1972	G	Sidechain
26	LA	1973	G	Sidechain
26	LA	1975	G	Sidechain
26	LA	1976	U	Sidechain
26	LA	1977	A	Sidechain
26	LA	1978	A	Sidechain
26	LA	1979	U	Sidechain
26	LA	198	C	Sidechain
26	LA	1981	A	Sidechain
26	LA	1982	U	Sidechain
26	LA	1983	G	Sidechain
26	LA	1984	G	Sidechain
26	LA	1985	C	Sidechain
26	LA	1988	G	Sidechain
26	LA	1990	C	Sidechain
26	LA	1992	G	Sidechain
26	LA	1993	U	Sidechain
26	LA	1996	C	Sidechain
26	LA	1997	C	Sidechain
26	LA	1998	A	Sidechain
26	LA	1999	C	Sidechain
26	LA	2	G	Sidechain
26	LA	200	U	Sidechain
26	LA	2000	C	Sidechain
26	LA	2001	C	Sidechain
26	LA	2004	G	Sidechain
26	LA	2005	A	Sidechain
26	LA	2006	C	Sidechain
26	LA	2008	C	Sidechain
26	LA	2010	G	Sidechain
26	LA	2011	U	Sidechain
26	LA	2014	A	Sidechain
26	LA	2015	A	Sidechain
26	LA	2016	U	Sidechain
26	LA	2017	U	Sidechain
26	LA	2018	G	Sidechain
26	LA	2019	A	Sidechain
26	LA	202	U	Sidechain
26	LA	2022	U	Sidechain
26	LA	2023	C	Sidechain
26	LA	2024	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2025	C	Sidechain
26	LA	2030	U	Sidechain
26	LA	2031	A	Sidechain
26	LA	2032	G	Sidechain
26	LA	2033	A	Sidechain
26	LA	2034	U	Sidechain
26	LA	2035	G	Sidechain
26	LA	2036	C	Sidechain
26	LA	2037	A	Sidechain
26	LA	2038	G	Sidechain
26	LA	2039	U	Sidechain
26	LA	204	A	Sidechain
26	LA	2041	U	Sidechain
26	LA	2042	A	Sidechain
26	LA	2044	C	Sidechain
26	LA	2045	C	Sidechain
26	LA	2046	G	Sidechain
26	LA	2047	C	Sidechain
26	LA	2048	G	Sidechain
26	LA	2049	G	Sidechain
26	LA	205	G	Sidechain
26	LA	2050	C	Sidechain
26	LA	2053	G	Sidechain
26	LA	2055	C	Sidechain
26	LA	2056	G	Sidechain
26	LA	2057	G	Sidechain
26	LA	2059	A	Sidechain
26	LA	206	U	Sidechain
26	LA	2060	A	Sidechain
26	LA	2061	G	Sidechain
26	LA	2062	A	Sidechain
26	LA	2064	C	Sidechain
26	LA	2065	C	Sidechain
26	LA	2066	C	Sidechain
26	LA	2068	U	Sidechain
26	LA	2070	A	Sidechain
26	LA	2071	A	Sidechain
26	LA	2072	C	Sidechain
26	LA	2074	U	Sidechain
26	LA	2077	A	Sidechain
26	LA	2079	U	Sidechain
26	LA	2083	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2084	C	Sidechain
26	LA	2085	U	Sidechain
26	LA	2086	U	Sidechain
26	LA	2087	G	Sidechain
26	LA	2088	A	Sidechain
26	LA	2089	C	Sidechain
26	LA	209	C	Sidechain
26	LA	2090	A	Sidechain
26	LA	2091	C	Sidechain
26	LA	2093	G	Sidechain
26	LA	2094	A	Sidechain
26	LA	2096	C	Sidechain
26	LA	2097	A	Sidechain
26	LA	2098	U	Sidechain
26	LA	2099	U	Sidechain
26	LA	2100	G	Sidechain
26	LA	2107	G	Sidechain
26	LA	2108	A	Sidechain
26	LA	211	C	Sidechain
26	LA	2110	G	Sidechain
26	LA	2111	U	Sidechain
26	LA	2112	G	Sidechain
26	LA	2115	G	Sidechain
26	LA	2116	G	Sidechain
26	LA	2117	A	Sidechain
26	LA	2118	U	Sidechain
26	LA	2119	A	Sidechain
26	LA	212	G	Sidechain
26	LA	2120	G	Sidechain
26	LA	2122	U	Sidechain
26	LA	2123	G	Sidechain
26	LA	2124	G	Sidechain
26	LA	2125	G	Sidechain
26	LA	2127	G	Sidechain
26	LA	2128	G	Sidechain
26	LA	2129	C	Sidechain
26	LA	213	A	Sidechain
26	LA	2130	U	Sidechain
26	LA	2131	U	Sidechain
26	LA	2132	U	Sidechain
26	LA	2133	G	Sidechain
26	LA	2135	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2136	G	Sidechain
26	LA	2138	G	Sidechain
26	LA	2139	U	Sidechain
26	LA	214	G	Sidechain
26	LA	2140	G	Sidechain
26	LA	2141	G	Sidechain
26	LA	2142	A	Sidechain
26	LA	2143	C	Sidechain
26	LA	2144	G	Sidechain
26	LA	2145	C	Sidechain
26	LA	2146	C	Sidechain
26	LA	2147	A	Sidechain
26	LA	2148	G	Sidechain
26	LA	2149	U	Sidechain
26	LA	215	G	Sidechain
26	LA	2151	U	Sidechain
26	LA	2152	G	Sidechain
26	LA	2154	A	Sidechain
26	LA	2156	G	Sidechain
26	LA	2159	G	Sidechain
26	LA	216	A	Sidechain
26	LA	2160	C	Sidechain
26	LA	2161	C	Sidechain
26	LA	2164	C	Sidechain
26	LA	2165	C	Sidechain
26	LA	2168	G	Sidechain
26	LA	2169	A	Sidechain
26	LA	2171	A	Sidechain
26	LA	2172	U	Sidechain
26	LA	2173	A	Sidechain
26	LA	2174	C	Sidechain
26	LA	2175	C	Sidechain
26	LA	2179	C	Sidechain
26	LA	218	A	Sidechain
26	LA	2182	U	Sidechain
26	LA	2183	A	Sidechain
26	LA	2184	A	Sidechain
26	LA	2185	U	Sidechain
26	LA	2186	G	Sidechain
26	LA	2187	U	Sidechain
26	LA	2188	U	Sidechain
26	LA	219	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2190	G	Sidechain
26	LA	2192	U	Sidechain
26	LA	2193	G	Sidechain
26	LA	2194	U	Sidechain
26	LA	2195	U	Sidechain
26	LA	2197	U	Sidechain
26	LA	2198	A	Sidechain
26	LA	2199	A	Sidechain
26	LA	22	C	Sidechain
26	LA	220	G	Sidechain
26	LA	2200	C	Sidechain
26	LA	2201	G	Sidechain
26	LA	2202	U	Sidechain
26	LA	2204	G	Sidechain
26	LA	2208	C	Sidechain
26	LA	2210	U	Sidechain
26	LA	2211	A	Sidechain
26	LA	2212	A	Sidechain
26	LA	2213	U	Sidechain
26	LA	2219	U	Sidechain
26	LA	222	A	Sidechain
26	LA	2220	U	Sidechain
26	LA	2221	G	Sidechain
26	LA	2222	C	Sidechain
26	LA	2223	G	Sidechain
26	LA	2224	G	Sidechain
26	LA	2226	C	Sidechain
26	LA	2227	A	Sidechain
26	LA	2228	G	Sidechain
26	LA	2229	U	Sidechain
26	LA	2230	G	Sidechain
26	LA	2231	U	Sidechain
26	LA	2233	U	Sidechain
26	LA	2234	G	Sidechain
26	LA	2235	G	Sidechain
26	LA	2236	U	Sidechain
26	LA	2238	G	Sidechain
26	LA	2239	G	Sidechain
26	LA	224	U	Sidechain
26	LA	2241	A	Sidechain
26	LA	2242	G	Sidechain
26	LA	2244	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2245	U	Sidechain
26	LA	2247	A	Sidechain
26	LA	225	C	Sidechain
26	LA	2250	G	Sidechain
26	LA	2251	U	Sidechain
26	LA	2252	G	Sidechain
26	LA	2253	G	Sidechain
26	LA	2254	C	Sidechain
26	LA	2255	G	Sidechain
26	LA	2256	G	Sidechain
26	LA	2259	U	Sidechain
26	LA	226	A	Sidechain
26	LA	2262	U	Sidechain
26	LA	2264	C	Sidechain
26	LA	2266	A	Sidechain
26	LA	2267	A	Sidechain
26	LA	2269	G	Sidechain
26	LA	227	A	Sidechain
26	LA	2270	A	Sidechain
26	LA	2271	G	Sidechain
26	LA	2272	U	Sidechain
26	LA	2273	A	Sidechain
26	LA	2274	A	Sidechain
26	LA	2275	C	Sidechain
26	LA	2277	G	Sidechain
26	LA	2278	A	Sidechain
26	LA	2280	G	Sidechain
26	LA	2281	A	Sidechain
26	LA	2282	G	Sidechain
26	LA	2283	C	Sidechain
26	LA	2287	A	Sidechain
26	LA	2288	A	Sidechain
26	LA	2289	G	Sidechain
26	LA	229	C	Sidechain
26	LA	2290	G	Sidechain
26	LA	2291	U	Sidechain
26	LA	2292	U	Sidechain
26	LA	2293	G	Sidechain
26	LA	2294	G	Sidechain
26	LA	2295	C	Sidechain
26	LA	2296	U	Sidechain
26	LA	2297	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	230	G	Sidechain
26	LA	2300	C	Sidechain
26	LA	2301	C	Sidechain
26	LA	2302	U	Sidechain
26	LA	2303	G	Sidechain
26	LA	2304	G	Sidechain
26	LA	2305	U	Sidechain
26	LA	2306	C	Sidechain
26	LA	2307	G	Sidechain
26	LA	2308	G	Sidechain
26	LA	2309	A	Sidechain
26	LA	2311	A	Sidechain
26	LA	2312	U	Sidechain
26	LA	2314	A	Sidechain
26	LA	2315	G	Sidechain
26	LA	2316	G	Sidechain
26	LA	2318	G	Sidechain
26	LA	2319	G	Sidechain
26	LA	2321	U	Sidechain
26	LA	2322	A	Sidechain
26	LA	2325	G	Sidechain
26	LA	2326	C	Sidechain
26	LA	2327	A	Sidechain
26	LA	2328	A	Sidechain
26	LA	2329	U	Sidechain
26	LA	2331	G	Sidechain
26	LA	2332	C	Sidechain
26	LA	2333	A	Sidechain
26	LA	2335	A	Sidechain
26	LA	2336	A	Sidechain
26	LA	2337	G	Sidechain
26	LA	234	U	Sidechain
26	LA	2340	A	Sidechain
26	LA	2343	U	Sidechain
26	LA	2344	U	Sidechain
26	LA	2345	G	Sidechain
26	LA	2346	A	Sidechain
26	LA	2349	G	Sidechain
26	LA	235	U	Sidechain
26	LA	2353	G	Sidechain
26	LA	2355	G	Sidechain
26	LA	2356	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2357	G	Sidechain
26	LA	2358	A	Sidechain
26	LA	236	C	Sidechain
26	LA	2360	G	Sidechain
26	LA	2361	G	Sidechain
26	LA	2362	C	Sidechain
26	LA	2363	G	Sidechain
26	LA	2364	C	Sidechain
26	LA	2365	G	Sidechain
26	LA	2367	G	Sidechain
26	LA	2368	C	Sidechain
26	LA	2369	A	Sidechain
26	LA	237	C	Sidechain
26	LA	2370	G	Sidechain
26	LA	2371	G	Sidechain
26	LA	2375	G	Sidechain
26	LA	2377	A	Sidechain
26	LA	2378	A	Sidechain
26	LA	2379	G	Sidechain
26	LA	238	C	Sidechain
26	LA	2380	C	Sidechain
26	LA	2381	A	Sidechain
26	LA	2382	G	Sidechain
26	LA	2383	G	Sidechain
26	LA	2385	C	Sidechain
26	LA	2386	A	Sidechain
26	LA	2387	U	Sidechain
26	LA	2389	G	Sidechain
26	LA	239	C	Sidechain
26	LA	2390	U	Sidechain
26	LA	2391	G	Sidechain
26	LA	2392	A	Sidechain
26	LA	2393	U	Sidechain
26	LA	2395	C	Sidechain
26	LA	2396	G	Sidechain
26	LA	2398	U	Sidechain
26	LA	24	G	Sidechain
26	LA	2401	U	Sidechain
26	LA	2404	U	Sidechain
26	LA	2405	G	Sidechain
26	LA	2407	A	Sidechain
26	LA	2410	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2411	A	Sidechain
26	LA	2412	A	Sidechain
26	LA	2415	G	Sidechain
26	LA	2417	C	Sidechain
26	LA	2419	U	Sidechain
26	LA	242	G	Sidechain
26	LA	2420	C	Sidechain
26	LA	2421	G	Sidechain
26	LA	2422	C	Sidechain
26	LA	2423	U	Sidechain
26	LA	2424	C	Sidechain
26	LA	2425	A	Sidechain
26	LA	2426	A	Sidechain
26	LA	2427	C	Sidechain
26	LA	2429	G	Sidechain
26	LA	243	U	Sidechain
26	LA	2430	A	Sidechain
26	LA	2433	A	Sidechain
26	LA	2435	A	Sidechain
26	LA	2436	G	Sidechain
26	LA	2437	G	Sidechain
26	LA	2438	U	Sidechain
26	LA	2441	U	Sidechain
26	LA	2443	C	Sidechain
26	LA	2444	G	Sidechain
26	LA	2445	G	Sidechain
26	LA	2446	G	Sidechain
26	LA	2447	G	Sidechain
26	LA	2448	A	Sidechain
26	LA	2449	U	Sidechain
26	LA	245	G	Sidechain
26	LA	2450	A	Sidechain
26	LA	2451	A	Sidechain
26	LA	2453	A	Sidechain
26	LA	2454	G	Sidechain
26	LA	2455	G	Sidechain
26	LA	2456	C	Sidechain
26	LA	2457	U	Sidechain
26	LA	246	C	Sidechain
26	LA	2460	U	Sidechain
26	LA	2461	A	Sidechain
26	LA	2464	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2465	C	Sidechain
26	LA	2466	C	Sidechain
26	LA	2469	A	Sidechain
26	LA	247	G	Sidechain
26	LA	2470	G	Sidechain
26	LA	2471	A	Sidechain
26	LA	2472	G	Sidechain
26	LA	2473	U	Sidechain
26	LA	2474	U	Sidechain
26	LA	2477	U	Sidechain
26	LA	2478	A	Sidechain
26	LA	2479	U	Sidechain
26	LA	248	G	Sidechain
26	LA	2480	C	Sidechain
26	LA	2481	G	Sidechain
26	LA	2482	A	Sidechain
26	LA	2483	C	Sidechain
26	LA	2486	C	Sidechain
26	LA	2487	G	Sidechain
26	LA	2489	U	Sidechain
26	LA	2490	G	Sidechain
26	LA	2494	G	Sidechain
26	LA	2495	G	Sidechain
26	LA	2499	C	Sidechain
26	LA	25	U	Sidechain
26	LA	250	G	Sidechain
26	LA	2502	G	Sidechain
26	LA	2503	A	Sidechain
26	LA	2504	U	Sidechain
26	LA	2505	G	Sidechain
26	LA	2506	U	Sidechain
26	LA	2508	G	Sidechain
26	LA	2509	G	Sidechain
26	LA	251	A	Sidechain
26	LA	2512	C	Sidechain
26	LA	2513	A	Sidechain
26	LA	2517	C	Sidechain
26	LA	2518	A	Sidechain
26	LA	2519	U	Sidechain
26	LA	252	G	Sidechain
26	LA	2520	C	Sidechain
26	LA	2521	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2523	G	Sidechain
26	LA	2524	G	Sidechain
26	LA	2525	G	Sidechain
26	LA	2526	G	Sidechain
26	LA	2528	U	Sidechain
26	LA	2529	G	Sidechain
26	LA	2531	A	Sidechain
26	LA	2532	G	Sidechain
26	LA	2536	G	Sidechain
26	LA	2537	U	Sidechain
26	LA	2538	C	Sidechain
26	LA	2539	C	Sidechain
26	LA	254	G	Sidechain
26	LA	2542	A	Sidechain
26	LA	2544	G	Sidechain
26	LA	2545	G	Sidechain
26	LA	2546	U	Sidechain
26	LA	2547	A	Sidechain
26	LA	2551	C	Sidechain
26	LA	2552	U	Sidechain
26	LA	2553	G	Sidechain
26	LA	2554	U	Sidechain
26	LA	2555	U	Sidechain
26	LA	2556	C	Sidechain
26	LA	2557	G	Sidechain
26	LA	2559	C	Sidechain
26	LA	2561	U	Sidechain
26	LA	2562	U	Sidechain
26	LA	2563	U	Sidechain
26	LA	2567	G	Sidechain
26	LA	2568	U	Sidechain
26	LA	2569	G	Sidechain
26	LA	257	C	Sidechain
26	LA	2570	G	Sidechain
26	LA	2571	U	Sidechain
26	LA	2572	A	Sidechain
26	LA	2574	G	Sidechain
26	LA	2575	C	Sidechain
26	LA	2577	A	Sidechain
26	LA	2578	G	Sidechain
26	LA	2579	C	Sidechain
26	LA	2580	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2581	G	Sidechain
26	LA	2582	G	Sidechain
26	LA	2583	G	Sidechain
26	LA	2584	U	Sidechain
26	LA	2585	U	Sidechain
26	LA	2587	A	Sidechain
26	LA	2588	G	Sidechain
26	LA	2589	A	Sidechain
26	LA	259	G	Sidechain
26	LA	2591	C	Sidechain
26	LA	2592	G	Sidechain
26	LA	2593	U	Sidechain
26	LA	2595	G	Sidechain
26	LA	2596	U	Sidechain
26	LA	2597	G	Sidechain
26	LA	2598	A	Sidechain
26	LA	260	G	Sidechain
26	LA	2600	A	Sidechain
26	LA	2603	G	Sidechain
26	LA	2604	U	Sidechain
26	LA	2606	C	Sidechain
26	LA	2607	G	Sidechain
26	LA	2608	G	Sidechain
26	LA	261	G	Sidechain
26	LA	2610	C	Sidechain
26	LA	2612	C	Sidechain
26	LA	2613	U	Sidechain
26	LA	2615	U	Sidechain
26	LA	2616	C	Sidechain
26	LA	2617	U	Sidechain
26	LA	2618	G	Sidechain
26	LA	262	A	Sidechain
26	LA	2620	C	Sidechain
26	LA	2621	G	Sidechain
26	LA	2622	U	Sidechain
26	LA	2623	G	Sidechain
26	LA	2624	G	Sidechain
26	LA	2626	C	Sidechain
26	LA	2627	G	Sidechain
26	LA	2628	C	Sidechain
26	LA	2633	G	Sidechain
26	LA	2635	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2637	U	Sidechain
26	LA	2638	G	Sidechain
26	LA	2639	A	Sidechain
26	LA	264	C	Sidechain
26	LA	2640	G	Sidechain
26	LA	2641	G	Sidechain
26	LA	2642	G	Sidechain
26	LA	2643	G	Sidechain
26	LA	2644	G	Sidechain
26	LA	2645	G	Sidechain
26	LA	2646	C	Sidechain
26	LA	2647	U	Sidechain
26	LA	2648	G	Sidechain
26	LA	265	A	Sidechain
26	LA	2650	U	Sidechain
26	LA	2651	C	Sidechain
26	LA	2652	C	Sidechain
26	LA	2653	U	Sidechain
26	LA	2654	A	Sidechain
26	LA	2655	G	Sidechain
26	LA	2656	U	Sidechain
26	LA	2657	A	Sidechain
26	LA	2658	C	Sidechain
26	LA	2659	G	Sidechain
26	LA	2660	A	Sidechain
26	LA	2661	G	Sidechain
26	LA	2662	A	Sidechain
26	LA	2663	G	Sidechain
26	LA	2664	G	Sidechain
26	LA	2665	A	Sidechain
26	LA	2666	C	Sidechain
26	LA	2667	C	Sidechain
26	LA	2668	G	Sidechain
26	LA	2669	G	Sidechain
26	LA	267	C	Sidechain
26	LA	2670	A	Sidechain
26	LA	2672	U	Sidechain
26	LA	2673	G	Sidechain
26	LA	2674	G	Sidechain
26	LA	2675	A	Sidechain
26	LA	2677	G	Sidechain
26	LA	2679	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	268	C	Sidechain
26	LA	2680	U	Sidechain
26	LA	2681	C	Sidechain
26	LA	2682	A	Sidechain
26	LA	2683	C	Sidechain
26	LA	2686	G	Sidechain
26	LA	2688	G	Sidechain
26	LA	2689	U	Sidechain
26	LA	2690	U	Sidechain
26	LA	2691	C	Sidechain
26	LA	2692	G	Sidechain
26	LA	2694	G	Sidechain
26	LA	2695	U	Sidechain
26	LA	2696	U	Sidechain
26	LA	2698	U	Sidechain
26	LA	2699	C	Sidechain
26	LA	27	G	Sidechain
26	LA	270	A	Sidechain
26	LA	2701	U	Sidechain
26	LA	2702	G	Sidechain
26	LA	2704	C	Sidechain
26	LA	2705	A	Sidechain
26	LA	2707	U	Sidechain
26	LA	2708	G	Sidechain
26	LA	2709	G	Sidechain
26	LA	2710	C	Sidechain
26	LA	2711	A	Sidechain
26	LA	2712	C	Sidechain
26	LA	2713	U	Sidechain
26	LA	2714	G	Sidechain
26	LA	2718	G	Sidechain
26	LA	2719	G	Sidechain
26	LA	2720	U	Sidechain
26	LA	2722	G	Sidechain
26	LA	2724	U	Sidechain
26	LA	2725	A	Sidechain
26	LA	2726	A	Sidechain
26	LA	2727	A	Sidechain
26	LA	2728	U	Sidechain
26	LA	2729	G	Sidechain
26	LA	2731	G	Sidechain
26	LA	2733	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2736	A	Sidechain
26	LA	2737	G	Sidechain
26	LA	2738	A	Sidechain
26	LA	2739	U	Sidechain
26	LA	2740	A	Sidechain
26	LA	2741	A	Sidechain
26	LA	2742	G	Sidechain
26	LA	2746	U	Sidechain
26	LA	275	C	Sidechain
26	LA	2750	A	Sidechain
26	LA	2751	G	Sidechain
26	LA	2752	C	Sidechain
26	LA	2754	U	Sidechain
26	LA	2755	C	Sidechain
26	LA	2756	U	Sidechain
26	LA	2758	A	Sidechain
26	LA	276	U	Sidechain
26	LA	2760	C	Sidechain
26	LA	2763	G	Sidechain
26	LA	2764	A	Sidechain
26	LA	2765	A	Sidechain
26	LA	2766	A	Sidechain
26	LA	2767	C	Sidechain
26	LA	2768	U	Sidechain
26	LA	2769	U	Sidechain
26	LA	2772	C	Sidechain
26	LA	2778	A	Sidechain
26	LA	2779	U	Sidechain
26	LA	278	A	Sidechain
26	LA	2780	G	Sidechain
26	LA	2781	A	Sidechain
26	LA	2782	G	Sidechain
26	LA	2783	U	Sidechain
26	LA	2784	U	Sidechain
26	LA	2785	C	Sidechain
26	LA	2787	C	Sidechain
26	LA	2789	C	Sidechain
26	LA	279	A	Sidechain
26	LA	2790	U	Sidechain
26	LA	2791	G	Sidechain
26	LA	2793	C	Sidechain
26	LA	2794	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2796	U	Sidechain
26	LA	2797	U	Sidechain
26	LA	2798	U	Sidechain
26	LA	2799	A	Sidechain
26	LA	280	U	Sidechain
26	LA	2800	A	Sidechain
26	LA	2802	G	Sidechain
26	LA	2803	G	Sidechain
26	LA	2804	U	Sidechain
26	LA	2806	C	Sidechain
26	LA	2807	U	Sidechain
26	LA	2808	G	Sidechain
26	LA	2809	A	Sidechain
26	LA	281	C	Sidechain
26	LA	2812	G	Sidechain
26	LA	2813	A	Sidechain
26	LA	2815	C	Sidechain
26	LA	2816	G	Sidechain
26	LA	2817	U	Sidechain
26	LA	2819	G	Sidechain
26	LA	2820	A	Sidechain
26	LA	2822	G	Sidechain
26	LA	2823	A	Sidechain
26	LA	2826	A	Sidechain
26	LA	2831	G	Sidechain
26	LA	2832	U	Sidechain
26	LA	2833	U	Sidechain
26	LA	2834	G	Sidechain
26	LA	2838	G	Sidechain
26	LA	2839	G	Sidechain
26	LA	2843	G	Sidechain
26	LA	2844	G	Sidechain
26	LA	2845	U	Sidechain
26	LA	2847	U	Sidechain
26	LA	2848	G	Sidechain
26	LA	2849	U	Sidechain
26	LA	2850	A	Sidechain
26	LA	2852	G	Sidechain
26	LA	2854	G	Sidechain
26	LA	2859	G	Sidechain
26	LA	2860	A	Sidechain
26	LA	2861	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	2862	G	Sidechain
26	LA	2864	G	Sidechain
26	LA	2865	U	Sidechain
26	LA	2866	U	Sidechain
26	LA	2867	G	Sidechain
26	LA	2868	A	Sidechain
26	LA	2869	G	Sidechain
26	LA	287	G	Sidechain
26	LA	2871	U	Sidechain
26	LA	2872	A	Sidechain
26	LA	2874	C	Sidechain
26	LA	2875	C	Sidechain
26	LA	2876	G	Sidechain
26	LA	2877	G	Sidechain
26	LA	2878	U	Sidechain
26	LA	2879	A	Sidechain
26	LA	288	U	Sidechain
26	LA	2880	C	Sidechain
26	LA	2881	U	Sidechain
26	LA	2882	A	Sidechain
26	LA	2884	U	Sidechain
26	LA	2885	G	Sidechain
26	LA	2886	A	Sidechain
26	LA	289	G	Sidechain
26	LA	2892	G	Sidechain
26	LA	2893	A	Sidechain
26	LA	2894	G	Sidechain
26	LA	2895	G	Sidechain
26	LA	2896	C	Sidechain
26	LA	2897	U	Sidechain
26	LA	2899	A	Sidechain
26	LA	29	U	Sidechain
26	LA	290	U	Sidechain
26	LA	2900	A	Sidechain
26	LA	2901	C	Sidechain
26	LA	2902	C	Sidechain
26	LA	2903	U	Sidechain
26	LA	291	G	Sidechain
26	LA	292	U	Sidechain
26	LA	293	U	Sidechain
26	LA	294	A	Sidechain
26	LA	296	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	298	G	Sidechain
26	LA	299	A	Sidechain
26	LA	300	A	Sidechain
26	LA	303	G	Sidechain
26	LA	305	C	Sidechain
26	LA	306	U	Sidechain
26	LA	307	G	Sidechain
26	LA	308	G	Sidechain
26	LA	31	C	Sidechain
26	LA	310	A	Sidechain
26	LA	311	A	Sidechain
26	LA	312	G	Sidechain
26	LA	317	G	Sidechain
26	LA	319	G	Sidechain
26	LA	321	U	Sidechain
26	LA	325	G	Sidechain
26	LA	326	G	Sidechain
26	LA	328	U	Sidechain
26	LA	329	G	Sidechain
26	LA	33	C	Sidechain
26	LA	330	A	Sidechain
26	LA	333	G	Sidechain
26	LA	335	C	Sidechain
26	LA	336	C	Sidechain
26	LA	337	C	Sidechain
26	LA	339	U	Sidechain
26	LA	34	U	Sidechain
26	LA	340	A	Sidechain
26	LA	345	A	Sidechain
26	LA	347	A	Sidechain
26	LA	348	A	Sidechain
26	LA	349	U	Sidechain
26	LA	35	G	Sidechain
26	LA	350	G	Sidechain
26	LA	352	A	Sidechain
26	LA	353	C	Sidechain
26	LA	354	A	Sidechain
26	LA	356	G	Sidechain
26	LA	359	G	Sidechain
26	LA	36	G	Sidechain
26	LA	360	U	Sidechain
26	LA	361	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	362	A	Sidechain
26	LA	363	G	Sidechain
26	LA	364	C	Sidechain
26	LA	365	U	Sidechain
26	LA	366	C	Sidechain
26	LA	368	A	Sidechain
26	LA	369	U	Sidechain
26	LA	37	C	Sidechain
26	LA	370	G	Sidechain
26	LA	371	A	Sidechain
26	LA	372	G	Sidechain
26	LA	373	U	Sidechain
26	LA	375	G	Sidechain
26	LA	377	G	Sidechain
26	LA	379	G	Sidechain
26	LA	382	A	Sidechain
26	LA	383	C	Sidechain
26	LA	386	G	Sidechain
26	LA	388	G	Sidechain
26	LA	389	G	Sidechain
26	LA	39	G	Sidechain
26	LA	390	U	Sidechain
26	LA	392	U	Sidechain
26	LA	393	C	Sidechain
26	LA	395	U	Sidechain
26	LA	397	U	Sidechain
26	LA	398	C	Sidechain
26	LA	399	U	Sidechain
26	LA	4	U	Sidechain
26	LA	40	U	Sidechain
26	LA	400	G	Sidechain
26	LA	403	U	Sidechain
26	LA	404	A	Sidechain
26	LA	405	U	Sidechain
26	LA	407	G	Sidechain
26	LA	410	G	Sidechain
26	LA	411	G	Sidechain
26	LA	414	C	Sidechain
26	LA	415	A	Sidechain
26	LA	417	C	Sidechain
26	LA	418	C	Sidechain
26	LA	420	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	423	A	Sidechain
26	LA	424	G	Sidechain
26	LA	426	C	Sidechain
26	LA	427	U	Sidechain
26	LA	430	A	Sidechain
26	LA	431	U	Sidechain
26	LA	432	A	Sidechain
26	LA	433	C	Sidechain
26	LA	434	U	Sidechain
26	LA	435	C	Sidechain
26	LA	437	U	Sidechain
26	LA	442	G	Sidechain
26	LA	443	A	Sidechain
26	LA	445	C	Sidechain
26	LA	446	G	Sidechain
26	LA	447	A	Sidechain
26	LA	448	U	Sidechain
26	LA	449	A	Sidechain
26	LA	451	U	Sidechain
26	LA	452	G	Sidechain
26	LA	453	A	Sidechain
26	LA	454	A	Sidechain
26	LA	455	C	Sidechain
26	LA	458	G	Sidechain
26	LA	459	U	Sidechain
26	LA	46	G	Sidechain
26	LA	460	A	Sidechain
26	LA	461	C	Sidechain
26	LA	463	G	Sidechain
26	LA	464	U	Sidechain
26	LA	465	G	Sidechain
26	LA	467	G	Sidechain
26	LA	468	G	Sidechain
26	LA	471	A	Sidechain
26	LA	472	A	Sidechain
26	LA	473	G	Sidechain
26	LA	474	G	Sidechain
26	LA	475	C	Sidechain
26	LA	476	G	Sidechain
26	LA	479	A	Sidechain
26	LA	48	G	Sidechain
26	LA	481	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	482	A	Sidechain
26	LA	483	A	Sidechain
26	LA	485	C	Sidechain
26	LA	487	C	Sidechain
26	LA	488	G	Sidechain
26	LA	489	G	Sidechain
26	LA	49	A	Sidechain
26	LA	491	G	Sidechain
26	LA	492	A	Sidechain
26	LA	493	G	Sidechain
26	LA	495	G	Sidechain
26	LA	496	G	Sidechain
26	LA	497	A	Sidechain
26	LA	499	U	Sidechain
26	LA	50	U	Sidechain
26	LA	500	G	Sidechain
26	LA	501	A	Sidechain
26	LA	504	A	Sidechain
26	LA	506	G	Sidechain
26	LA	507	A	Sidechain
26	LA	508	A	Sidechain
26	LA	509	C	Sidechain
26	LA	51	G	Sidechain
26	LA	510	C	Sidechain
26	LA	511	U	Sidechain
26	LA	512	G	Sidechain
26	LA	513	A	Sidechain
26	LA	514	A	Sidechain
26	LA	516	C	Sidechain
26	LA	517	C	Sidechain
26	LA	518	G	Sidechain
26	LA	52	A	Sidechain
26	LA	521	U	Sidechain
26	LA	525	U	Sidechain
26	LA	528	A	Sidechain
26	LA	530	G	Sidechain
26	LA	533	G	Sidechain
26	LA	536	G	Sidechain
26	LA	538	A	Sidechain
26	LA	539	G	Sidechain
26	LA	54	G	Sidechain
26	LA	541	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	543	G	Sidechain
26	LA	546	U	Sidechain
26	LA	547	A	Sidechain
26	LA	548	G	Sidechain
26	LA	549	G	Sidechain
26	LA	550	C	Sidechain
26	LA	551	G	Sidechain
26	LA	552	U	Sidechain
26	LA	555	G	Sidechain
26	LA	556	A	Sidechain
26	LA	561	G	Sidechain
26	LA	562	U	Sidechain
26	LA	563	A	Sidechain
26	LA	564	C	Sidechain
26	LA	565	C	Sidechain
26	LA	566	U	Sidechain
26	LA	567	U	Sidechain
26	LA	568	U	Sidechain
26	LA	569	U	Sidechain
26	LA	57	C	Sidechain
26	LA	570	G	Sidechain
26	LA	571	U	Sidechain
26	LA	572	A	Sidechain
26	LA	573	U	Sidechain
26	LA	574	A	Sidechain
26	LA	575	A	Sidechain
26	LA	576	U	Sidechain
26	LA	577	G	Sidechain
26	LA	578	G	Sidechain
26	LA	579	G	Sidechain
26	LA	58	G	Sidechain
26	LA	580	U	Sidechain
26	LA	581	C	Sidechain
26	LA	582	A	Sidechain
26	LA	584	C	Sidechain
26	LA	585	G	Sidechain
26	LA	587	C	Sidechain
26	LA	588	U	Sidechain
26	LA	591	U	Sidechain
26	LA	592	A	Sidechain
26	LA	593	U	Sidechain
26	LA	594	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	595	C	Sidechain
26	LA	596	U	Sidechain
26	LA	597	G	Sidechain
26	LA	598	U	Sidechain
26	LA	599	A	Sidechain
26	LA	6	A	Sidechain
26	LA	60	G	Sidechain
26	LA	600	G	Sidechain
26	LA	602	A	Sidechain
26	LA	603	A	Sidechain
26	LA	605	G	Sidechain
26	LA	606	U	Sidechain
26	LA	608	A	Sidechain
26	LA	609	A	Sidechain
26	LA	611	C	Sidechain
26	LA	612	G	Sidechain
26	LA	613	A	Sidechain
26	LA	614	A	Sidechain
26	LA	615	U	Sidechain
26	LA	616	A	Sidechain
26	LA	617	G	Sidechain
26	LA	618	G	Sidechain
26	LA	619	G	Sidechain
26	LA	62	U	Sidechain
26	LA	621	A	Sidechain
26	LA	623	C	Sidechain
26	LA	624	C	Sidechain
26	LA	625	G	Sidechain
26	LA	627	A	Sidechain
26	LA	63	A	Sidechain
26	LA	630	G	Sidechain
26	LA	633	A	Sidechain
26	LA	634	C	Sidechain
26	LA	635	C	Sidechain
26	LA	636	G	Sidechain
26	LA	640	C	Sidechain
26	LA	642	U	Sidechain
26	LA	644	A	Sidechain
26	LA	646	U	Sidechain
26	LA	648	G	Sidechain
26	LA	649	G	Sidechain
26	LA	65	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	651	G	Sidechain
26	LA	652	U	Sidechain
26	LA	654	A	Sidechain
26	LA	655	A	Sidechain
26	LA	656	G	Sidechain
26	LA	662	G	Sidechain
26	LA	664	G	Sidechain
26	LA	665	U	Sidechain
26	LA	667	U	Sidechain
26	LA	668	A	Sidechain
26	LA	669	G	Sidechain
26	LA	670	A	Sidechain
26	LA	675	A	Sidechain
26	LA	676	A	Sidechain
26	LA	679	C	Sidechain
26	LA	680	C	Sidechain
26	LA	681	G	Sidechain
26	LA	682	G	Sidechain
26	LA	686	U	Sidechain
26	LA	687	C	Sidechain
26	LA	688	U	Sidechain
26	LA	69	C	Sidechain
26	LA	690	G	Sidechain
26	LA	692	C	Sidechain
26	LA	695	G	Sidechain
26	LA	698	C	Sidechain
26	LA	699	A	Sidechain
26	LA	7	G	Sidechain
26	LA	700	G	Sidechain
26	LA	701	G	Sidechain
26	LA	703	U	Sidechain
26	LA	704	G	Sidechain
26	LA	705	A	Sidechain
26	LA	706	A	Sidechain
26	LA	707	G	Sidechain
26	LA	709	U	Sidechain
26	LA	71	A	Sidechain
26	LA	710	U	Sidechain
26	LA	711	G	Sidechain
26	LA	712	G	Sidechain
26	LA	713	G	Sidechain
26	LA	715	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	717	C	Sidechain
26	LA	718	A	Sidechain
26	LA	719	C	Sidechain
26	LA	72	U	Sidechain
26	LA	721	A	Sidechain
26	LA	723	C	Sidechain
26	LA	724	U	Sidechain
26	LA	725	G	Sidechain
26	LA	726	G	Sidechain
26	LA	727	A	Sidechain
26	LA	728	G	Sidechain
26	LA	729	G	Sidechain
26	LA	730	A	Sidechain
26	LA	732	C	Sidechain
26	LA	733	G	Sidechain
26	LA	734	A	Sidechain
26	LA	736	C	Sidechain
26	LA	738	G	Sidechain
26	LA	739	A	Sidechain
26	LA	74	A	Sidechain
26	LA	741	U	Sidechain
26	LA	742	A	Sidechain
26	LA	745	G	Sidechain
26	LA	746	U	Sidechain
26	LA	747	U	Sidechain
26	LA	748	G	Sidechain
26	LA	749	A	Sidechain
26	LA	75	G	Sidechain
26	LA	750	A	Sidechain
26	LA	751	A	Sidechain
26	LA	753	A	Sidechain
26	LA	754	U	Sidechain
26	LA	755	U	Sidechain
26	LA	756	A	Sidechain
26	LA	757	G	Sidechain
26	LA	758	C	Sidechain
26	LA	759	G	Sidechain
26	LA	76	C	Sidechain
26	LA	761	A	Sidechain
26	LA	762	U	Sidechain
26	LA	763	G	Sidechain
26	LA	764	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	765	C	Sidechain
26	LA	766	U	Sidechain
26	LA	768	G	Sidechain
26	LA	77	G	Sidechain
26	LA	771	G	Sidechain
26	LA	772	C	Sidechain
26	LA	773	U	Sidechain
26	LA	774	G	Sidechain
26	LA	776	G	Sidechain
26	LA	777	G	Sidechain
26	LA	778	G	Sidechain
26	LA	779	U	Sidechain
26	LA	78	U	Sidechain
26	LA	780	G	Sidechain
26	LA	781	A	Sidechain
26	LA	783	A	Sidechain
26	LA	784	G	Sidechain
26	LA	785	G	Sidechain
26	LA	787	C	Sidechain
26	LA	788	A	Sidechain
26	LA	789	A	Sidechain
26	LA	79	C	Sidechain
26	LA	790	U	Sidechain
26	LA	792	A	Sidechain
26	LA	793	A	Sidechain
26	LA	795	C	Sidechain
26	LA	797	G	Sidechain
26	LA	798	G	Sidechain
26	LA	799	G	Sidechain
26	LA	80	G	Sidechain
26	LA	800	A	Sidechain
26	LA	801	G	Sidechain
26	LA	802	A	Sidechain
26	LA	803	U	Sidechain
26	LA	804	A	Sidechain
26	LA	805	G	Sidechain
26	LA	808	G	Sidechain
26	LA	810	U	Sidechain
26	LA	813	U	Sidechain
26	LA	814	C	Sidechain
26	LA	816	C	Sidechain
26	LA	818	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	819	A	Sidechain
26	LA	820	A	Sidechain
26	LA	824	U	Sidechain
26	LA	826	U	Sidechain
26	LA	827	U	Sidechain
26	LA	828	U	Sidechain
26	LA	829	A	Sidechain
26	LA	83	A	Sidechain
26	LA	831	G	Sidechain
26	LA	832	U	Sidechain
26	LA	833	A	Sidechain
26	LA	834	G	Sidechain
26	LA	835	C	Sidechain
26	LA	837	C	Sidechain
26	LA	838	C	Sidechain
26	LA	839	U	Sidechain
26	LA	84	A	Sidechain
26	LA	840	C	Sidechain
26	LA	841	G	Sidechain
26	LA	842	U	Sidechain
26	LA	844	A	Sidechain
26	LA	847	U	Sidechain
26	LA	849	A	Sidechain
26	LA	85	G	Sidechain
26	LA	850	U	Sidechain
26	LA	851	C	Sidechain
26	LA	853	C	Sidechain
26	LA	856	G	Sidechain
26	LA	858	G	Sidechain
26	LA	859	G	Sidechain
26	LA	86	G	Sidechain
26	LA	860	U	Sidechain
26	LA	861	A	Sidechain
26	LA	862	G	Sidechain
26	LA	864	G	Sidechain
26	LA	866	A	Sidechain
26	LA	868	U	Sidechain
26	LA	869	G	Sidechain
26	LA	870	U	Sidechain
26	LA	872	U	Sidechain
26	LA	874	G	Sidechain
26	LA	875	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	877	A	Sidechain
26	LA	88	G	Sidechain
26	LA	880	G	Sidechain
26	LA	881	G	Sidechain
26	LA	882	G	Sidechain
26	LA	884	U	Sidechain
26	LA	885	C	Sidechain
26	LA	89	A	Sidechain
26	LA	891	G	Sidechain
26	LA	892	A	Sidechain
26	LA	893	C	Sidechain
26	LA	894	U	Sidechain
26	LA	895	U	Sidechain
26	LA	896	A	Sidechain
26	LA	899	A	Sidechain
26	LA	90	U	Sidechain
26	LA	900	A	Sidechain
26	LA	901	C	Sidechain
26	LA	902	C	Sidechain
26	LA	904	G	Sidechain
26	LA	906	U	Sidechain
26	LA	907	G	Sidechain
26	LA	908	C	Sidechain
26	LA	909	A	Sidechain
26	LA	91	A	Sidechain
26	LA	911	A	Sidechain
26	LA	912	C	Sidechain
26	LA	913	U	Sidechain
26	LA	914	G	Sidechain
26	LA	915	C	Sidechain
26	LA	916	G	Sidechain
26	LA	917	A	Sidechain
26	LA	919	U	Sidechain
26	LA	92	U	Sidechain
26	LA	920	A	Sidechain
26	LA	922	C	Sidechain
26	LA	923	G	Sidechain
26	LA	924	G	Sidechain
26	LA	925	A	Sidechain
26	LA	926	G	Sidechain
26	LA	927	A	Sidechain
26	LA	929	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	930	G	Sidechain
26	LA	932	U	Sidechain
26	LA	933	A	Sidechain
26	LA	934	U	Sidechain
26	LA	935	C	Sidechain
26	LA	936	A	Sidechain
26	LA	938	G	Sidechain
26	LA	939	G	Sidechain
26	LA	94	A	Sidechain
26	LA	940	G	Sidechain
26	LA	941	A	Sidechain
26	LA	942	G	Sidechain
26	LA	944	C	Sidechain
26	LA	945	A	Sidechain
26	LA	946	C	Sidechain
26	LA	947	A	Sidechain
26	LA	948	C	Sidechain
26	LA	949	G	Sidechain
26	LA	950	G	Sidechain
26	LA	951	C	Sidechain
26	LA	952	G	Sidechain
26	LA	953	G	Sidechain
26	LA	954	G	Sidechain
26	LA	955	U	Sidechain
26	LA	956	G	Sidechain
26	LA	957	C	Sidechain
26	LA	958	U	Sidechain
26	LA	959	A	Sidechain
26	LA	960	A	Sidechain
26	LA	962	G	Sidechain
26	LA	963	U	Sidechain
26	LA	966	G	Sidechain
26	LA	967	U	Sidechain
26	LA	968	C	Sidechain
26	LA	969	G	Sidechain
26	LA	970	U	Sidechain
26	LA	973	A	Sidechain
26	LA	975	A	Sidechain
26	LA	976	G	Sidechain
26	LA	977	G	Sidechain
26	LA	98	G	Sidechain
26	LA	980	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	LA	982	C	Sidechain
26	LA	983	A	Sidechain
26	LA	984	A	Sidechain
26	LA	985	C	Sidechain
26	LA	988	A	Sidechain
26	LA	989	G	Sidechain
26	LA	99	U	Sidechain
26	LA	991	C	Sidechain
26	LA	992	C	Sidechain
26	LA	993	G	Sidechain
26	LA	994	C	Sidechain
26	LA	995	C	Sidechain
26	LA	997	G	Sidechain
26	LA	998	C	Sidechain
26	LA	999	U	Sidechain
25	LB	10	G	Sidechain
25	LB	100	G	Sidechain
25	LB	102	G	Sidechain
25	LB	105	G	Sidechain
25	LB	106	G	Sidechain
25	LB	108	A	Sidechain
25	LB	109	A	Sidechain
25	LB	11	C	Sidechain
25	LB	111	U	Sidechain
25	LB	114	C	Sidechain
25	LB	116	G	Sidechain
25	LB	117	G	Sidechain
25	LB	119	A	Sidechain
25	LB	15	A	Sidechain
25	LB	17	C	Sidechain
25	LB	18	G	Sidechain
25	LB	19	C	Sidechain
25	LB	2	G	Sidechain
25	LB	21	G	Sidechain
25	LB	22	U	Sidechain
25	LB	23	G	Sidechain
25	LB	25	U	Sidechain
25	LB	26	C	Sidechain
25	LB	27	C	Sidechain
25	LB	3	C	Sidechain
25	LB	32	U	Sidechain
25	LB	33	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
25	LB	34	A	Sidechain
25	LB	38	C	Sidechain
25	LB	42	C	Sidechain
25	LB	43	C	Sidechain
25	LB	45	A	Sidechain
25	LB	47	C	Sidechain
25	LB	49	C	Sidechain
25	LB	50	A	Sidechain
25	LB	52	A	Sidechain
25	LB	53	A	Sidechain
25	LB	54	G	Sidechain
25	LB	58	A	Sidechain
25	LB	6	G	Sidechain
25	LB	60	C	Sidechain
25	LB	61	G	Sidechain
25	LB	62	C	Sidechain
25	LB	64	G	Sidechain
25	LB	65	U	Sidechain
25	LB	66	A	Sidechain
25	LB	67	G	Sidechain
25	LB	7	G	Sidechain
25	LB	73	A	Sidechain
25	LB	74	U	Sidechain
25	LB	75	G	Sidechain
25	LB	77	U	Sidechain
25	LB	79	G	Sidechain
25	LB	80	U	Sidechain
25	LB	81	G	Sidechain
25	LB	82	U	Sidechain
25	LB	83	G	Sidechain
25	LB	84	G	Sidechain
25	LB	85	G	Sidechain
25	LB	89	U	Sidechain
25	LB	9	G	Sidechain
25	LB	90	C	Sidechain
25	LB	92	C	Sidechain
25	LB	94	A	Sidechain
25	LB	95	U	Sidechain
25	LB	97	C	Sidechain
25	LB	98	G	Sidechain
25	LB	99	A	Sidechain
37	LC	12	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
37	LC	131	LEU	Peptide
37	LC	132	GLY	Peptide
37	LC	134	ARG	Sidechain
37	LC	162	ARG	Sidechain
37	LC	163	TYR	Sidechain
37	LC	172	HIS	Sidechain
37	LC	208	TYR	Sidechain
37	LC	21	TYR	Sidechain
37	LC	228	GLY	Peptide
37	LC	231	ALA	Peptide
37	LC	37	LYS	Peptide
37	LC	49	GLY	Peptide
37	LC	53	ARG	Sidechain
37	LC	7	ARG	Sidechain
37	LC	73	VAL	Peptide
37	LC	75	VAL	Peptide
27	LD	10	PRO	Peptide
27	LD	111	ALA	Peptide
27	LD	14	HIS	Sidechain
27	LD	160	TYR	Sidechain
27	LD	170	TYR	Sidechain
27	LD	176	ARG	Sidechain
27	LD	184	GLU	Peptide
27	LD	188	ARG	Sidechain
27	LD	199	HIS	Sidechain
27	LD	20	ASN	Peptide
27	LD	211	ARG	Sidechain
27	LD	213	ARG	Sidechain
27	LD	237	ARG	Sidechain
27	LD	252	LYS	Peptide
27	LD	258	SER	Peptide
27	LD	27	LYS	Peptide
27	LD	270	ARG	Sidechain
27	LD	47	ARG	Sidechain
27	LD	50	THR	Peptide
27	LD	6	LYS	Peptide
27	LD	62	ARG	Sidechain
27	LD	68	ARG	Sidechain
27	LD	86	ARG	Sidechain
27	LD	92	LEU	Peptide
38	LE	118	PHE	Sidechain
38	LE	128	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
38	LE	13	ARG	Sidechain
38	LE	140	HIS	Sidechain
38	LE	151	THR	Peptide
38	LE	163	GLY	Peptide
38	LE	173	GLN	Peptide
38	LE	184	ARG	Sidechain
38	LE	38	LYS	Peptide
38	LE	41	ALA	Peptide
38	LE	45	TYR	Sidechain
38	LE	46	ARG	Sidechain
38	LE	59	ARG	Peptide
38	LE	83	ARG	Sidechain
38	LE	90	PHE	Sidechain
44	LF	102	ARG	Sidechain
44	LF	117	ARG	Sidechain
44	LF	162	ARG	Sidechain
44	LF	166	LYS	Peptide
44	LF	23	PHE	Sidechain
44	LF	40	ARG	Sidechain
44	LF	44	ARG	Sidechain
44	LF	45	ALA	Peptide
44	LF	67	ARG	Sidechain
44	LF	88	ARG	Sidechain
45	LG	101	ARG	Sidechain
45	LG	103	ILE	Peptide
45	LG	111	ARG	Sidechain
45	LG	120	SER	Peptide
45	LG	127	TYR	Sidechain
45	LG	142	TYR	Sidechain
45	LG	166	ARG	Sidechain
45	LG	25	MET	Peptide
45	LG	29	ARG	Sidechain
45	LG	71	LYS	Peptide
45	LG	74	ALA	Peptide
45	LG	85	GLY	Peptide
45	LG	91	ARG	Sidechain
45	LG	94	ARG	Sidechain
45	LG	99	PHE	Sidechain
46	LH	113	ASP	Peptide
46	LH	148	ARG	Sidechain
46	LH	151	ARG	Sidechain
46	LH	152	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
46	LH	162	ARG	Sidechain
46	LH	19	ASN	Peptide
46	LH	28	LYS	Peptide
46	LH	34	ARG	Sidechain
46	LH	6	ALA	Peptide
46	LH	68	ARG	Sidechain
46	LH	92	GLY	Peptide
46	LH	93	TYR	Sidechain
46	LH	94	ARG	Sidechain
51	LI	22	LYS	Peptide
51	LI	29	PHE	Sidechain
51	LI	47	PHE	Sidechain
51	LI	50	ARG	Sidechain
51	LI	51	ARG	Sidechain
51	LI	70	GLU	Peptide
51	LI	97	ARG	Sidechain
47	LJ	105	PHE	Peptide
47	LJ	106	GLU	Peptide
47	LJ	22	LEU	Peptide
47	LJ	41	ARG	Sidechain
47	LJ	45	ARG	Sidechain
47	LJ	52	ARG	Sidechain
47	LJ	55	ARG	Sidechain
47	LJ	72	LYS	Peptide
47	LJ	87	HIS	Peptide
47	LJ	98	PHE	Sidechain
49	LK	11	GLN	Peptide
49	LK	126	ARG	Sidechain
49	LK	128	ILE	Mainchain
49	LK	133	ARG	Sidechain
49	LK	139	VAL	Peptide
49	LK	20	SER	Peptide
49	LK	53	PRO	Peptide
49	LK	62	ALA	Peptide
49	LK	66	PHE	Peptide
49	LK	7	TYR	Sidechain
50	LL	20	ALA	Peptide
50	LL	34	ARG	Sidechain
50	LL	7	LYS	Peptide
50	LL	74	TYR	Sidechain
50	LL	75	TYR	Sidechain
54	LM	100	PHE	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
54	LM	105	ARG	Sidechain
54	LM	112	PHE	Sidechain
54	LM	18	ARG	Sidechain
54	LM	2	ILE	Peptide
54	LM	32	TYR	Sidechain
54	LM	47	ILE	Peptide
54	LM	49	ARG	Sidechain
54	LM	64	ARG	Sidechain
48	LN	104	GLN	Peptide
48	LN	107	PHE	Sidechain
48	LN	123	ARG	Sidechain
48	LN	125	LEU	Peptide
48	LN	132	ARG	Sidechain
48	LN	2	ARG	Sidechain,Peptide
48	LN	4	ASN	Peptide
48	LN	51	GLU	Peptide
48	LN	52	GLY	Peptide
48	LN	67	THR	Peptide
48	LN	8	PRO	Peptide
52	LO	114	ARG	Sidechain
52	LO	16	ARG	Sidechain
52	LO	24	THR	Peptide
52	LO	40	ARG	Sidechain
52	LO	44	ARG	Sidechain
52	LO	55	ARG	Sidechain
52	LO	6	ARG	Sidechain
52	LO	70	ASP	Peptide
53	LP	103	ARG	Sidechain
53	LP	112	TYR	Sidechain
53	LP	17	ARG	Sidechain
53	LP	2	ARG	Sidechain
53	LP	30	ARG	Sidechain
53	LP	45	ARG	Sidechain
53	LP	67	PHE	Sidechain
53	LP	71	ARG	Sidechain
53	LP	80	PHE	Sidechain
53	LP	96	ARG	Sidechain
55	LQ	100	HIS	Sidechain
55	LQ	102	ARG	Sidechain
55	LQ	115	LEU	Peptide
55	LQ	15	ARG	Sidechain
55	LQ	16	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
55	LQ	2	ASP	Peptide
55	LQ	25	ARG	Sidechain
55	LQ	30	ARG	Sidechain
55	LQ	33	ARG	Sidechain
55	LQ	41	ALA	Peptide
55	LQ	64	TYR	Peptide
55	LQ	70	ALA	Mainchain
55	LQ	86	GLY	Peptide
55	LQ	9	ARG	Sidechain
56	LR	102	ARG	Sidechain
56	LR	108	ARG	Peptide
56	LR	110	LYS	Peptide
56	LR	112	ARG	Sidechain,Peptide
56	LR	19	PHE	Sidechain
56	LR	50	ARG	Peptide
56	LR	52	ARG	Sidechain
56	LR	61	ARG	Sidechain
56	LR	71	ARG	Sidechain
56	LR	98	TYR	Sidechain
57	LS	10	ARG	Sidechain
57	LS	100	PHE	Sidechain
57	LS	24	TYR	Sidechain
57	LS	29	ARG	Sidechain
57	LS	35	PHE	Sidechain
57	LS	44	TYR	Sidechain
57	LS	46	TYR	Sidechain
57	LS	54	ARG	Sidechain
57	LS	56	PHE	Sidechain
57	LS	57	ARG	Sidechain
57	LS	75	TYR	Sidechain
57	LS	91	ARG	Sidechain
58	LT	13	ARG	Sidechain
58	LT	2	TYR	Sidechain,Peptide
58	LT	21	ARG	Sidechain
58	LT	49	ILE	Peptide
58	LT	78	ARG	Sidechain
58	LT	79	ARG	Sidechain
58	LT	84	ARG	Sidechain
28	LU	102	HIS	Sidechain
28	LU	60	HIS	Sidechain,Peptide
28	LU	8	ARG	Sidechain
28	LU	88	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
28	LU	9	HIS	Sidechain
28	LU	92	ARG	Sidechain
28	LU	95	ARG	Sidechain
29	LV	13	ALA	Peptide
29	LV	3	ARG	Sidechain
29	LV	6	ARG	Sidechain
29	LV	69	ARG	Sidechain
29	LV	84	TYR	Sidechain
30	LW	2	ALA	Peptide
30	LW	48	VAL	Peptide
30	LW	63	ALA	Peptide
30	LW	80	ASP	Peptide
30	LW	81	ARG	Peptide
30	LW	84	PHE	Sidechain
30	LW	85	ARG	Sidechain
30	LW	93	ARG	Sidechain
31	LX	31	TYR	Sidechain
31	LX	80	HIS	Peptide
31	LX	83	LYS	Peptide
31	LX	9	ARG	Sidechain
31	LX	93	ARG	Peptide
32	LY	13	ARG	Sidechain
32	LY	23	LYS	Peptide
32	LY	25	PHE	Sidechain
32	LY	38	ARG	Sidechain
32	LY	39	GLN	Peptide
32	LY	44	PHE	Sidechain
32	LY	76	ARG	Sidechain
32	LY	78	PHE	Sidechain
33	LZ	10	ARG	Sidechain
33	LZ	17	ARG	Peptide
33	LZ	19	HIS	Sidechain
33	LZ	27	ARG	Sidechain
33	LZ	28	PHE	Sidechain
33	LZ	44	ARG	Sidechain
33	LZ	77	TYR	Sidechain
3	S1	14	G	Sidechain
3	S1	16	A	Sidechain
3	S1	17	U	Sidechain
3	S1	18	A	Sidechain
3	S1	19	A	Sidechain
3	S1	20	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
3	S1	23	C	Sidechain
3	S1	25	U	Sidechain
3	S1	27	A	Sidechain
3	S1	28	U	Sidechain
3	S1	29	G	Sidechain
3	S1	30	U	Sidechain
3	S1	31	U	Sidechain
3	S1	32	U	Sidechain
3	S1	34	U	Sidechain
3	S1	35	G	Sidechain
3	S1	36	U	Sidechain
3	S1	37	G	Sidechain
3	S1	38	G	Sidechain
3	S1	39	U	Sidechain
3	S1	40	G	Sidechain
3	S1	41	A	Sidechain
3	S1	42	U	Sidechain
3	S1	44	U	Sidechain
3	S1	45	G	Sidechain
3	S1	46	C	Sidechain
3	S1	47	C	Sidechain
3	S1	49	U	Sidechain
3	S1	50	U	Sidechain
3	S1	52	U	Sidechain
3	S1	53	G	Sidechain
3	S1	54	U	Sidechain
3	S1	55	A	Sidechain
3	S1	56	G	Sidechain
3	S1	58	C	Sidechain
3	S1	59	A	Sidechain
4	S2	10	G	Sidechain
4	S2	11	A	Sidechain
4	S2	12	G	Sidechain
4	S2	14	A	Sidechain
4	S2	15	G	Sidechain
4	S2	2	G	Sidechain
4	S2	20	G	Sidechain
4	S2	21	U	Sidechain
4	S2	25	U	Sidechain
4	S2	3	C	Sidechain
4	S2	30	G	Sidechain
4	S2	32	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
4	S2	34	U	Sidechain
4	S2	35	C	Sidechain
4	S2	38	A	Sidechain
4	S2	39	A	Sidechain
4	S2	4	G	Sidechain
4	S2	40	C	Sidechain
4	S2	41	C	Sidechain
4	S2	42	C	Sidechain
4	S2	44	A	Sidechain
4	S2	46	G	Sidechain
4	S2	47	A	Sidechain
4	S2	48	U	Sidechain
4	S2	5	G	Sidechain
4	S2	50	G	Sidechain
4	S2	51	U	Sidechain
4	S2	52	C	Sidechain
4	S2	53	G	Sidechain
4	S2	54	G	Sidechain
4	S2	57	C	Sidechain
4	S2	58	A	Sidechain
4	S2	60	A	Sidechain
4	S2	61	U	Sidechain
4	S2	64	G	Sidechain
4	S2	65	G	Sidechain
4	S2	66	C	Sidechain
4	S2	67	C	Sidechain
4	S2	68	C	Sidechain
4	S2	70	C	Sidechain
4	S2	71	G	Sidechain
4	S2	73	A	Sidechain
4	S2	74	A	Sidechain
4	S2	75	C	Sidechain
4	S2	76	C	Sidechain
4	S2	77	A	Sidechain
4	S2	8	U	Sidechain
4	S2	9	G	Sidechain
24	S3	10	ARG	Sidechain
24	S3	103	ARG	Sidechain
24	S3	136	ARG	Sidechain
24	S3	145	ARG	Sidechain
24	S3	18	ILE	Peptide
24	S3	199	VAL	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
24	S3	2	ARG	Peptide
24	S3	201	PHE	Sidechain
24	S3	252	ARG	Sidechain
24	S3	28	ARG	Sidechain
24	S3	283	ASP	Peptide
24	S3	290	ASP	Peptide
24	S3	3	THR	Peptide
24	S3	308	ARG	Peptide
24	S3	326	ASP	Peptide
24	S3	33	THR	Peptide
24	S3	334	PHE	Sidechain
24	S3	338	TYR	Sidechain
24	S3	346	ASP	Peptide
24	S3	358	ARG	Sidechain
24	S3	359	PHE	Sidechain
24	S3	361	ARG	Mainchain
24	S3	401	ALA	Peptide
24	S3	407	ARG	Sidechain
24	S3	448	THR	Peptide
24	S3	490	ARG	Sidechain
24	S3	496	LYS	Peptide
24	S3	499	ASP	Peptide
24	S3	524	LEU	Peptide
24	S3	543	VAL	Peptide
24	S3	548	TYR	Sidechain
24	S3	568	TYR	Sidechain
24	S3	576	ARG	Sidechain
24	S3	604	PHE	Sidechain
24	S3	665	TYR	Sidechain
24	S3	683	PHE	Sidechain
24	S3	686	TYR	Sidechain
24	S3	78	TYR	Sidechain
2	SA	1	A	Sidechain
2	SA	1000	A	Sidechain
2	SA	1002	G	Sidechain
2	SA	1004	A	Sidechain
2	SA	1007	U	Sidechain
2	SA	1009	U	Sidechain
2	SA	101	A	Sidechain
2	SA	1010	U	Sidechain
2	SA	1012	A	Sidechain
2	SA	1013	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1017	U	Sidechain
2	SA	1018	G	Sidechain
2	SA	102	G	Sidechain
2	SA	1020	G	Sidechain
2	SA	1021	A	Sidechain
2	SA	1022	A	Sidechain
2	SA	1023	U	Sidechain
2	SA	1024	G	Sidechain
2	SA	1027	C	Sidechain
2	SA	1028	C	Sidechain
2	SA	1029	U	Sidechain
2	SA	1030	U	Sidechain
2	SA	1033	G	Sidechain
2	SA	1034	G	Sidechain
2	SA	1035	A	Sidechain
2	SA	1036	A	Sidechain
2	SA	1037	C	Sidechain
2	SA	1039	G	Sidechain
2	SA	104	G	Sidechain
2	SA	1040	U	Sidechain
2	SA	1042	A	Sidechain
2	SA	1044	A	Sidechain
2	SA	1045	C	Sidechain
2	SA	1047	G	Sidechain
2	SA	105	G	Sidechain
2	SA	1050	G	Sidechain
2	SA	1051	C	Sidechain
2	SA	1052	U	Sidechain
2	SA	1057	G	Sidechain
2	SA	1058	G	Sidechain
2	SA	106	C	Sidechain
2	SA	1060	U	Sidechain
2	SA	1062	U	Sidechain
2	SA	1064	G	Sidechain
2	SA	1065	U	Sidechain
2	SA	1066	C	Sidechain
2	SA	107	G	Sidechain
2	SA	1071	C	Sidechain
2	SA	1072	G	Sidechain
2	SA	1073	U	Sidechain
2	SA	1076	U	Sidechain
2	SA	1077	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	108	G	Sidechain
2	SA	1080	A	Sidechain
2	SA	1081	A	Sidechain
2	SA	1082	A	Sidechain
2	SA	1084	G	Sidechain
2	SA	1085	U	Sidechain
2	SA	1086	U	Sidechain
2	SA	1089	G	Sidechain
2	SA	109	A	Sidechain
2	SA	1090	U	Sidechain
2	SA	1091	U	Sidechain
2	SA	1092	A	Sidechain
2	SA	1094	G	Sidechain
2	SA	1095	U	Sidechain
2	SA	1097	C	Sidechain
2	SA	1098	C	Sidechain
2	SA	1099	G	Sidechain
2	SA	11	G	Sidechain
2	SA	110	C	Sidechain
2	SA	1101	A	Sidechain
2	SA	1102	A	Sidechain
2	SA	1103	C	Sidechain
2	SA	1104	G	Sidechain
2	SA	1106	G	Sidechain
2	SA	1108	G	Sidechain
2	SA	111	G	Sidechain
2	SA	1111	A	Sidechain
2	SA	1112	C	Sidechain
2	SA	1113	C	Sidechain
2	SA	1115	U	Sidechain
2	SA	1116	U	Sidechain
2	SA	1117	A	Sidechain
2	SA	1118	U	Sidechain
2	SA	1119	C	Sidechain
2	SA	1120	C	Sidechain
2	SA	1122	U	Sidechain
2	SA	1123	U	Sidechain
2	SA	1124	G	Sidechain
2	SA	1126	U	Sidechain
2	SA	1131	G	Sidechain
2	SA	1132	C	Sidechain
2	SA	1133	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1134	G	Sidechain
2	SA	1137	C	Sidechain
2	SA	1138	G	Sidechain
2	SA	1140	C	Sidechain
2	SA	1141	C	Sidechain
2	SA	1142	G	Sidechain
2	SA	1143	G	Sidechain
2	SA	1144	G	Sidechain
2	SA	1148	U	Sidechain
2	SA	115	G	Sidechain
2	SA	1152	A	Sidechain
2	SA	1153	G	Sidechain
2	SA	1154	G	Sidechain
2	SA	1155	A	Sidechain
2	SA	1156	G	Sidechain
2	SA	1157	A	Sidechain
2	SA	1158	C	Sidechain
2	SA	1161	C	Sidechain
2	SA	1162	C	Sidechain
2	SA	1163	A	Sidechain
2	SA	1168	U	Sidechain
2	SA	1169	A	Sidechain
2	SA	117	G	Sidechain
2	SA	1170	A	Sidechain
2	SA	1174	G	Sidechain
2	SA	1175	G	Sidechain
2	SA	1177	G	Sidechain
2	SA	1178	G	Sidechain
2	SA	118	U	Sidechain
2	SA	1180	A	Sidechain
2	SA	1181	G	Sidechain
2	SA	1182	G	Sidechain
2	SA	1184	G	Sidechain
2	SA	1185	G	Sidechain
2	SA	1186	G	Sidechain
2	SA	1187	G	Sidechain
2	SA	1188	A	Sidechain
2	SA	119	A	Sidechain
2	SA	1190	G	Sidechain
2	SA	1191	A	Sidechain
2	SA	1192	C	Sidechain
2	SA	1193	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1194	U	Sidechain
2	SA	1195	C	Sidechain
2	SA	1196	A	Sidechain
2	SA	12	U	Sidechain
2	SA	120	A	Sidechain
2	SA	1200	C	Sidechain
2	SA	1201	A	Sidechain
2	SA	1203	C	Sidechain
2	SA	1204	A	Sidechain
2	SA	1205	U	Sidechain
2	SA	1207	G	Sidechain
2	SA	1208	C	Sidechain
2	SA	1209	C	Sidechain
2	SA	1210	C	Sidechain
2	SA	1211	U	Sidechain
2	SA	1212	U	Sidechain
2	SA	1213	A	Sidechain
2	SA	1216	A	Sidechain
2	SA	1217	C	Sidechain
2	SA	1218	C	Sidechain
2	SA	1220	G	Sidechain
2	SA	1221	G	Sidechain
2	SA	1222	G	Sidechain
2	SA	1223	C	Sidechain
2	SA	1225	A	Sidechain
2	SA	1227	A	Sidechain
2	SA	1230	C	Sidechain
2	SA	1231	G	Sidechain
2	SA	1234	C	Sidechain
2	SA	1236	A	Sidechain
2	SA	1238	A	Sidechain
2	SA	1240	U	Sidechain
2	SA	1241	G	Sidechain
2	SA	1242	G	Sidechain
2	SA	1244	G	Sidechain
2	SA	1246	A	Sidechain
2	SA	1248	A	Sidechain
2	SA	1249	C	Sidechain
2	SA	1250	A	Sidechain
2	SA	1251	A	Sidechain
2	SA	1253	G	Sidechain
2	SA	1255	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1256	A	Sidechain
2	SA	1258	G	Sidechain
2	SA	1260	G	Sidechain
2	SA	1261	A	Sidechain
2	SA	1262	C	Sidechain
2	SA	1263	C	Sidechain
2	SA	1264	U	Sidechain
2	SA	1266	G	Sidechain
2	SA	1267	C	Sidechain
2	SA	1268	G	Sidechain
2	SA	1269	A	Sidechain
2	SA	127	G	Sidechain
2	SA	1271	A	Sidechain
2	SA	1272	G	Sidechain
2	SA	1273	C	Sidechain
2	SA	1274	A	Sidechain
2	SA	1275	A	Sidechain
2	SA	1277	C	Sidechain
2	SA	1278	G	Sidechain
2	SA	1279	G	Sidechain
2	SA	1280	A	Sidechain
2	SA	1282	C	Sidechain
2	SA	1283	U	Sidechain
2	SA	1284	C	Sidechain
2	SA	1285	A	Sidechain
2	SA	1287	A	Sidechain
2	SA	1289	A	Sidechain
2	SA	129	A	Sidechain
2	SA	1293	C	Sidechain
2	SA	1294	G	Sidechain
2	SA	1297	G	Sidechain
2	SA	1298	U	Sidechain
2	SA	1299	A	Sidechain
2	SA	13	U	Sidechain
2	SA	130	A	Sidechain
2	SA	1300	G	Sidechain
2	SA	1302	C	Sidechain
2	SA	1303	C	Sidechain
2	SA	1304	G	Sidechain
2	SA	1305	G	Sidechain
2	SA	1306	A	Sidechain
2	SA	1307	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1308	U	Sidechain
2	SA	1310	G	Sidechain
2	SA	1311	A	Sidechain
2	SA	1312	G	Sidechain
2	SA	1313	U	Sidechain
2	SA	1315	U	Sidechain
2	SA	1316	G	Sidechain
2	SA	1317	C	Sidechain
2	SA	1318	A	Sidechain
2	SA	1320	C	Sidechain
2	SA	1321	U	Sidechain
2	SA	1322	C	Sidechain
2	SA	1323	G	Sidechain
2	SA	1326	U	Sidechain
2	SA	1327	C	Sidechain
2	SA	1328	C	Sidechain
2	SA	1329	A	Sidechain
2	SA	1332	A	Sidechain
2	SA	1334	G	Sidechain
2	SA	1335	U	Sidechain
2	SA	1336	C	Sidechain
2	SA	1337	G	Sidechain
2	SA	1338	G	Sidechain
2	SA	1339	A	Sidechain
2	SA	134	G	Sidechain
2	SA	1340	A	Sidechain
2	SA	1343	G	Sidechain
2	SA	1344	C	Sidechain
2	SA	1345	U	Sidechain
2	SA	1346	A	Sidechain
2	SA	1348	U	Sidechain
2	SA	1349	A	Sidechain
2	SA	135	C	Sidechain
2	SA	1350	A	Sidechain
2	SA	1351	U	Sidechain
2	SA	1352	C	Sidechain
2	SA	1353	G	Sidechain
2	SA	1357	A	Sidechain
2	SA	1358	U	Sidechain
2	SA	1359	C	Sidechain
2	SA	1360	A	Sidechain
2	SA	1362	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1363	A	Sidechain
2	SA	1365	G	Sidechain
2	SA	1366	C	Sidechain
2	SA	1367	C	Sidechain
2	SA	1368	A	Sidechain
2	SA	1370	G	Sidechain
2	SA	1371	G	Sidechain
2	SA	1372	U	Sidechain
2	SA	1374	A	Sidechain
2	SA	1375	A	Sidechain
2	SA	1378	C	Sidechain
2	SA	1379	G	Sidechain
2	SA	1380	U	Sidechain
2	SA	1381	U	Sidechain
2	SA	1382	C	Sidechain
2	SA	1384	C	Sidechain
2	SA	1385	G	Sidechain
2	SA	1386	G	Sidechain
2	SA	1387	G	Sidechain
2	SA	1388	C	Sidechain
2	SA	139	A	Sidechain
2	SA	1390	U	Sidechain
2	SA	1393	U	Sidechain
2	SA	1395	C	Sidechain
2	SA	1396	A	Sidechain
2	SA	1399	C	Sidechain
2	SA	14	U	Sidechain
2	SA	1400	C	Sidechain
2	SA	1401	G	Sidechain
2	SA	1403	C	Sidechain
2	SA	1405	G	Sidechain
2	SA	1406	U	Sidechain
2	SA	1407	C	Sidechain
2	SA	141	G	Sidechain
2	SA	1411	C	Sidechain
2	SA	1412	C	Sidechain
2	SA	1413	A	Sidechain
2	SA	1416	G	Sidechain
2	SA	1417	G	Sidechain
2	SA	1418	A	Sidechain
2	SA	142	G	Sidechain
2	SA	1420	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1422	G	Sidechain
2	SA	1423	G	Sidechain
2	SA	1424	U	Sidechain
2	SA	1425	U	Sidechain
2	SA	1429	A	Sidechain
2	SA	1430	A	Sidechain
2	SA	1431	A	Sidechain
2	SA	1432	G	Sidechain
2	SA	1433	A	Sidechain
2	SA	1434	A	Sidechain
2	SA	1435	G	Sidechain
2	SA	1436	U	Sidechain
2	SA	1437	A	Sidechain
2	SA	1439	G	Sidechain
2	SA	144	G	Sidechain
2	SA	1440	U	Sidechain
2	SA	1441	A	Sidechain
2	SA	1442	G	Sidechain
2	SA	1444	U	Sidechain
2	SA	1445	U	Sidechain
2	SA	1447	A	Sidechain
2	SA	1448	C	Sidechain
2	SA	1449	C	Sidechain
2	SA	145	G	Sidechain
2	SA	1450	U	Sidechain
2	SA	1451	U	Sidechain
2	SA	1453	G	Sidechain
2	SA	1454	G	Sidechain
2	SA	1455	G	Sidechain
2	SA	1456	A	Sidechain
2	SA	1459	G	Sidechain
2	SA	1463	U	Sidechain
2	SA	1464	U	Sidechain
2	SA	1465	A	Sidechain
2	SA	1467	C	Sidechain
2	SA	1469	C	Sidechain
2	SA	147	G	Sidechain
2	SA	1471	U	Sidechain
2	SA	1472	U	Sidechain
2	SA	1473	G	Sidechain
2	SA	1474	U	Sidechain
2	SA	1476	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1477	U	Sidechain
2	SA	148	G	Sidechain
2	SA	1480	A	Sidechain
2	SA	1482	G	Sidechain
2	SA	1485	U	Sidechain
2	SA	1486	G	Sidechain
2	SA	1487	G	Sidechain
2	SA	1488	G	Sidechain
2	SA	1489	G	Sidechain
2	SA	1491	G	Sidechain
2	SA	1492	A	Sidechain
2	SA	1493	A	Sidechain
2	SA	1494	G	Sidechain
2	SA	1495	U	Sidechain
2	SA	1496	C	Sidechain
2	SA	1497	G	Sidechain
2	SA	1498	U	Sidechain
2	SA	1500	A	Sidechain
2	SA	1501	C	Sidechain
2	SA	1502	A	Sidechain
2	SA	1504	G	Sidechain
2	SA	1505	G	Sidechain
2	SA	1508	A	Sidechain
2	SA	151	A	Sidechain
2	SA	1511	G	Sidechain
2	SA	1512	U	Sidechain
2	SA	1513	A	Sidechain
2	SA	1514	G	Sidechain
2	SA	1515	G	Sidechain
2	SA	1516	G	Sidechain
2	SA	1518	A	Sidechain
2	SA	1519	A	Sidechain
2	SA	152	A	Sidechain
2	SA	1521	C	Sidechain
2	SA	1522	U	Sidechain
2	SA	1524	C	Sidechain
2	SA	1525	G	Sidechain
2	SA	1528	U	Sidechain
2	SA	1529	G	Sidechain
2	SA	153	C	Sidechain
2	SA	1531	A	Sidechain
2	SA	1532	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	1533	C	Sidechain
2	SA	1537	U	Sidechain
2	SA	154	U	Sidechain
2	SA	1540	U	Sidechain
2	SA	158	G	Sidechain
2	SA	159	G	Sidechain
2	SA	16	A	Sidechain
2	SA	160	A	Sidechain
2	SA	162	A	Sidechain
2	SA	164	G	Sidechain
2	SA	165	G	Sidechain
2	SA	167	A	Sidechain
2	SA	168	G	Sidechain
2	SA	17	U	Sidechain
2	SA	170	U	Sidechain
2	SA	171	A	Sidechain
2	SA	175	C	Sidechain
2	SA	176	C	Sidechain
2	SA	177	G	Sidechain
2	SA	178	C	Sidechain
2	SA	18	C	Sidechain
2	SA	180	U	Sidechain
2	SA	181	A	Sidechain
2	SA	182	A	Sidechain
2	SA	184	G	Sidechain
2	SA	186	C	Sidechain
2	SA	187	G	Sidechain
2	SA	189	A	Sidechain
2	SA	19	A	Sidechain
2	SA	192	A	Sidechain
2	SA	193	C	Sidechain
2	SA	194	C	Sidechain
2	SA	195	A	Sidechain
2	SA	196	A	Sidechain
2	SA	197	A	Sidechain
2	SA	200	G	Sidechain
2	SA	205	A	Sidechain
2	SA	207	C	Sidechain
2	SA	208	U	Sidechain
2	SA	209	U	Sidechain
2	SA	21	G	Sidechain
2	SA	211	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	213	G	Sidechain
2	SA	214	C	Sidechain
2	SA	217	C	Sidechain
2	SA	219	U	Sidechain
2	SA	220	G	Sidechain
2	SA	222	C	Sidechain
2	SA	223	A	Sidechain
2	SA	224	U	Sidechain
2	SA	225	C	Sidechain
2	SA	226	G	Sidechain
2	SA	227	G	Sidechain
2	SA	229	U	Sidechain
2	SA	230	G	Sidechain
2	SA	231	U	Sidechain
2	SA	234	C	Sidechain
2	SA	235	C	Sidechain
2	SA	239	U	Sidechain
2	SA	24	U	Sidechain
2	SA	240	G	Sidechain
2	SA	241	G	Sidechain
2	SA	243	A	Sidechain
2	SA	244	U	Sidechain
2	SA	247	G	Sidechain
2	SA	249	U	Sidechain
2	SA	250	A	Sidechain
2	SA	253	A	Sidechain
2	SA	254	G	Sidechain
2	SA	255	G	Sidechain
2	SA	256	U	Sidechain
2	SA	258	G	Sidechain
2	SA	26	A	Sidechain
2	SA	261	U	Sidechain
2	SA	262	A	Sidechain
2	SA	264	C	Sidechain
2	SA	266	G	Sidechain
2	SA	267	C	Sidechain
2	SA	268	U	Sidechain
2	SA	270	A	Sidechain
2	SA	271	C	Sidechain
2	SA	274	A	Sidechain
2	SA	276	G	Sidechain
2	SA	277	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	279	A	Sidechain
2	SA	280	C	Sidechain
2	SA	281	G	Sidechain
2	SA	288	A	Sidechain
2	SA	289	G	Sidechain
2	SA	29	U	Sidechain
2	SA	293	G	Sidechain
2	SA	297	G	Sidechain
2	SA	299	G	Sidechain
2	SA	300	A	Sidechain
2	SA	302	G	Sidechain
2	SA	304	U	Sidechain
2	SA	305	G	Sidechain
2	SA	306	A	Sidechain
2	SA	307	C	Sidechain
2	SA	310	G	Sidechain
2	SA	311	C	Sidechain
2	SA	313	A	Sidechain
2	SA	317	U	Sidechain
2	SA	318	G	Sidechain
2	SA	32	A	Sidechain
2	SA	320	A	Sidechain
2	SA	321	A	Sidechain
2	SA	322	C	Sidechain
2	SA	324	G	Sidechain
2	SA	326	G	Sidechain
2	SA	327	A	Sidechain
2	SA	33	A	Sidechain
2	SA	331	G	Sidechain
2	SA	332	G	Sidechain
2	SA	335	C	Sidechain
2	SA	336	A	Sidechain
2	SA	337	G	Sidechain
2	SA	338	A	Sidechain
2	SA	339	C	Sidechain
2	SA	340	U	Sidechain
2	SA	341	C	Sidechain
2	SA	343	U	Sidechain
2	SA	344	A	Sidechain
2	SA	345	C	Sidechain
2	SA	346	G	Sidechain
2	SA	347	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	348	G	Sidechain
2	SA	349	A	Sidechain
2	SA	35	G	Sidechain
2	SA	350	G	Sidechain
2	SA	352	C	Sidechain
2	SA	353	A	Sidechain
2	SA	354	G	Sidechain
2	SA	355	C	Sidechain
2	SA	356	A	Sidechain
2	SA	357	G	Sidechain
2	SA	358	U	Sidechain
2	SA	359	G	Sidechain
2	SA	360	G	Sidechain
2	SA	361	G	Sidechain
2	SA	362	G	Sidechain
2	SA	363	A	Sidechain
2	SA	364	A	Sidechain
2	SA	365	U	Sidechain
2	SA	366	A	Sidechain
2	SA	367	U	Sidechain
2	SA	368	U	Sidechain
2	SA	37	U	Sidechain
2	SA	371	A	Sidechain
2	SA	372	C	Sidechain
2	SA	373	A	Sidechain
2	SA	374	A	Sidechain
2	SA	375	U	Sidechain
2	SA	376	G	Sidechain
2	SA	380	G	Sidechain
2	SA	382	A	Sidechain
2	SA	384	G	Sidechain
2	SA	386	C	Sidechain
2	SA	388	G	Sidechain
2	SA	389	A	Sidechain
2	SA	39	G	Sidechain
2	SA	390	U	Sidechain
2	SA	391	G	Sidechain
2	SA	394	G	Sidechain
2	SA	398	U	Sidechain
2	SA	399	G	Sidechain
2	SA	4	U	Sidechain
2	SA	40	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	402	G	Sidechain
2	SA	405	U	Sidechain
2	SA	406	G	Sidechain
2	SA	409	U	Sidechain
2	SA	41	G	Sidechain
2	SA	411	A	Sidechain
2	SA	414	A	Sidechain
2	SA	416	G	Sidechain
2	SA	42	G	Sidechain
2	SA	420	U	Sidechain
2	SA	421	U	Sidechain
2	SA	423	G	Sidechain
2	SA	424	G	Sidechain
2	SA	425	G	Sidechain
2	SA	426	U	Sidechain
2	SA	427	U	Sidechain
2	SA	428	G	Sidechain
2	SA	429	U	Sidechain
2	SA	430	A	Sidechain
2	SA	432	A	Sidechain
2	SA	433	G	Sidechain
2	SA	434	U	Sidechain
2	SA	437	U	Sidechain
2	SA	440	C	Sidechain
2	SA	441	A	Sidechain
2	SA	442	G	Sidechain
2	SA	444	G	Sidechain
2	SA	445	G	Sidechain
2	SA	446	G	Sidechain
2	SA	448	A	Sidechain
2	SA	449	G	Sidechain
2	SA	45	G	Sidechain
2	SA	450	G	Sidechain
2	SA	451	A	Sidechain
2	SA	452	A	Sidechain
2	SA	453	G	Sidechain
2	SA	454	G	Sidechain
2	SA	458	U	Sidechain
2	SA	459	A	Sidechain
2	SA	46	G	Sidechain
2	SA	460	A	Sidechain
2	SA	461	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	462	G	Sidechain
2	SA	463	U	Sidechain
2	SA	464	U	Sidechain
2	SA	465	A	Sidechain
2	SA	466	A	Sidechain
2	SA	468	A	Sidechain
2	SA	469	C	Sidechain
2	SA	47	C	Sidechain
2	SA	471	U	Sidechain
2	SA	473	U	Sidechain
2	SA	474	G	Sidechain
2	SA	476	U	Sidechain
2	SA	478	A	Sidechain
2	SA	479	U	Sidechain
2	SA	48	C	Sidechain
2	SA	480	U	Sidechain
2	SA	481	G	Sidechain
2	SA	483	C	Sidechain
2	SA	484	G	Sidechain
2	SA	485	U	Sidechain
2	SA	486	U	Sidechain
2	SA	487	A	Sidechain
2	SA	488	C	Sidechain
2	SA	489	C	Sidechain
2	SA	49	U	Sidechain
2	SA	490	C	Sidechain
2	SA	491	G	Sidechain
2	SA	493	A	Sidechain
2	SA	494	G	Sidechain
2	SA	495	A	Sidechain
2	SA	497	G	Sidechain
2	SA	499	A	Sidechain
2	SA	5	U	Sidechain
2	SA	501	C	Sidechain
2	SA	502	A	Sidechain
2	SA	503	C	Sidechain
2	SA	504	C	Sidechain
2	SA	505	G	Sidechain
2	SA	506	G	Sidechain
2	SA	51	A	Sidechain
2	SA	510	A	Sidechain
2	SA	511	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	513	C	Sidechain
2	SA	515	G	Sidechain
2	SA	516	U	Sidechain
2	SA	517	G	Sidechain
2	SA	518	C	Sidechain
2	SA	519	C	Sidechain
2	SA	52	C	Sidechain
2	SA	521	G	Sidechain
2	SA	522	C	Sidechain
2	SA	523	A	Sidechain
2	SA	524	G	Sidechain
2	SA	527	G	Sidechain
2	SA	528	C	Sidechain
2	SA	53	A	Sidechain
2	SA	531	U	Sidechain
2	SA	532	A	Sidechain
2	SA	533	A	Sidechain
2	SA	534	U	Sidechain
2	SA	54	C	Sidechain
2	SA	541	G	Sidechain
2	SA	544	G	Sidechain
2	SA	546	A	Sidechain
2	SA	549	C	Sidechain
2	SA	55	A	Sidechain
2	SA	550	G	Sidechain
2	SA	551	U	Sidechain
2	SA	552	U	Sidechain
2	SA	553	A	Sidechain
2	SA	556	C	Sidechain
2	SA	557	G	Sidechain
2	SA	558	G	Sidechain
2	SA	559	A	Sidechain
2	SA	56	U	Sidechain
2	SA	560	A	Sidechain
2	SA	561	U	Sidechain
2	SA	562	U	Sidechain
2	SA	563	A	Sidechain
2	SA	564	C	Sidechain
2	SA	565	U	Sidechain
2	SA	566	G	Sidechain
2	SA	568	G	Sidechain
2	SA	57	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	570	G	Sidechain
2	SA	571	U	Sidechain
2	SA	572	A	Sidechain
2	SA	573	A	Sidechain
2	SA	575	G	Sidechain
2	SA	577	G	Sidechain
2	SA	578	C	Sidechain
2	SA	579	A	Sidechain
2	SA	58	C	Sidechain
2	SA	581	G	Sidechain
2	SA	583	A	Sidechain
2	SA	585	G	Sidechain
2	SA	593	U	Sidechain
2	SA	594	U	Sidechain
2	SA	596	A	Sidechain
2	SA	597	G	Sidechain
2	SA	6	G	Sidechain
2	SA	60	A	Sidechain
2	SA	602	A	Sidechain
2	SA	605	U	Sidechain
2	SA	606	G	Sidechain
2	SA	609	A	Sidechain
2	SA	61	G	Sidechain
2	SA	610	U	Sidechain
2	SA	611	C	Sidechain
2	SA	616	G	Sidechain
2	SA	617	G	Sidechain
2	SA	619	U	Sidechain
2	SA	62	U	Sidechain
2	SA	623	C	Sidechain
2	SA	624	C	Sidechain
2	SA	625	U	Sidechain
2	SA	626	G	Sidechain
2	SA	630	A	Sidechain
2	SA	632	U	Sidechain
2	SA	635	A	Sidechain
2	SA	636	U	Sidechain
2	SA	638	U	Sidechain
2	SA	64	G	Sidechain
2	SA	640	A	Sidechain
2	SA	641	U	Sidechain
2	SA	642	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	644	U	Sidechain
2	SA	645	G	Sidechain
2	SA	646	G	Sidechain
2	SA	649	A	Sidechain
2	SA	65	A	Sidechain
2	SA	650	G	Sidechain
2	SA	651	C	Sidechain
2	SA	652	U	Sidechain
2	SA	653	U	Sidechain
2	SA	654	G	Sidechain
2	SA	655	A	Sidechain
2	SA	659	U	Sidechain
2	SA	66	A	Sidechain
2	SA	660	C	Sidechain
2	SA	661	G	Sidechain
2	SA	663	A	Sidechain
2	SA	665	A	Sidechain
2	SA	666	G	Sidechain
2	SA	670	G	Sidechain
2	SA	671	G	Sidechain
2	SA	672	U	Sidechain
2	SA	673	A	Sidechain
2	SA	674	G	Sidechain
2	SA	676	A	Sidechain
2	SA	678	U	Sidechain
2	SA	68	G	Sidechain
2	SA	680	C	Sidechain
2	SA	682	G	Sidechain
2	SA	683	G	Sidechain
2	SA	685	G	Sidechain
2	SA	686	U	Sidechain
2	SA	687	A	Sidechain
2	SA	688	G	Sidechain
2	SA	689	C	Sidechain
2	SA	690	G	Sidechain
2	SA	691	G	Sidechain
2	SA	692	U	Sidechain
2	SA	693	G	Sidechain
2	SA	694	A	Sidechain
2	SA	695	A	Sidechain
2	SA	696	A	Sidechain
2	SA	697	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	699	C	Sidechain
2	SA	7	A	Sidechain
2	SA	701	U	Sidechain
2	SA	703	G	Sidechain
2	SA	704	A	Sidechain
2	SA	705	G	Sidechain
2	SA	707	U	Sidechain
2	SA	711	G	Sidechain
2	SA	712	A	Sidechain
2	SA	714	G	Sidechain
2	SA	715	A	Sidechain
2	SA	716	A	Sidechain
2	SA	717	U	Sidechain
2	SA	719	C	Sidechain
2	SA	72	A	Sidechain
2	SA	721	G	Sidechain
2	SA	722	G	Sidechain
2	SA	723	U	Sidechain
2	SA	725	G	Sidechain
2	SA	727	G	Sidechain
2	SA	729	A	Sidechain
2	SA	73	C	Sidechain
2	SA	730	G	Sidechain
2	SA	731	G	Sidechain
2	SA	733	G	Sidechain
2	SA	734	G	Sidechain
2	SA	735	C	Sidechain
2	SA	740	U	Sidechain
2	SA	742	G	Sidechain
2	SA	743	A	Sidechain
2	SA	745	G	Sidechain
2	SA	746	A	Sidechain
2	SA	747	A	Sidechain
2	SA	749	A	Sidechain
2	SA	75	G	Sidechain
2	SA	750	C	Sidechain
2	SA	751	U	Sidechain
2	SA	752	G	Sidechain
2	SA	754	C	Sidechain
2	SA	755	G	Sidechain
2	SA	757	U	Sidechain
2	SA	76	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	761	G	Sidechain
2	SA	762	U	Sidechain
2	SA	763	G	Sidechain
2	SA	764	C	Sidechain
2	SA	765	G	Sidechain
2	SA	766	A	Sidechain
2	SA	768	A	Sidechain
2	SA	769	G	Sidechain
2	SA	771	G	Sidechain
2	SA	772	U	Sidechain
2	SA	773	G	Sidechain
2	SA	778	G	Sidechain
2	SA	780	A	Sidechain
2	SA	782	A	Sidechain
2	SA	785	G	Sidechain
2	SA	786	G	Sidechain
2	SA	787	A	Sidechain
2	SA	79	G	Sidechain
2	SA	791	G	Sidechain
2	SA	792	A	Sidechain
2	SA	793	U	Sidechain
2	SA	794	A	Sidechain
2	SA	795	C	Sidechain
2	SA	798	U	Sidechain
2	SA	799	G	Sidechain
2	SA	80	A	Sidechain
2	SA	800	G	Sidechain
2	SA	803	G	Sidechain
2	SA	806	C	Sidechain
2	SA	808	C	Sidechain
2	SA	81	A	Sidechain
2	SA	810	C	Sidechain
2	SA	811	C	Sidechain
2	SA	812	G	Sidechain
2	SA	813	U	Sidechain
2	SA	814	A	Sidechain
2	SA	815	A	Sidechain
2	SA	816	A	Sidechain
2	SA	818	G	Sidechain
2	SA	819	A	Sidechain
2	SA	820	U	Sidechain
2	SA	821	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	822	U	Sidechain
2	SA	823	C	Sidechain
2	SA	824	G	Sidechain
2	SA	825	A	Sidechain
2	SA	826	C	Sidechain
2	SA	827	U	Sidechain
2	SA	830	G	Sidechain
2	SA	832	G	Sidechain
2	SA	833	G	Sidechain
2	SA	834	U	Sidechain
2	SA	835	U	Sidechain
2	SA	837	U	Sidechain
2	SA	838	G	Sidechain
2	SA	84	U	Sidechain
2	SA	841	C	Sidechain
2	SA	843	U	Sidechain
2	SA	844	G	Sidechain
2	SA	845	A	Sidechain
2	SA	846	G	Sidechain
2	SA	847	G	Sidechain
2	SA	848	C	Sidechain
2	SA	849	G	Sidechain
2	SA	85	U	Sidechain
2	SA	850	U	Sidechain
2	SA	851	G	Sidechain
2	SA	852	G	Sidechain
2	SA	855	U	Sidechain
2	SA	856	C	Sidechain
2	SA	857	C	Sidechain
2	SA	858	G	Sidechain
2	SA	859	G	Sidechain
2	SA	86	G	Sidechain
2	SA	861	G	Sidechain
2	SA	862	C	Sidechain
2	SA	864	A	Sidechain
2	SA	865	A	Sidechain
2	SA	867	G	Sidechain
2	SA	87	C	Sidechain
2	SA	873	A	Sidechain
2	SA	877	G	Sidechain
2	SA	878	A	Sidechain
2	SA	879	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	88	U	Sidechain
2	SA	880	C	Sidechain
2	SA	883	C	Sidechain
2	SA	884	U	Sidechain
2	SA	885	G	Sidechain
2	SA	888	G	Sidechain
2	SA	890	G	Sidechain
2	SA	891	U	Sidechain
2	SA	892	A	Sidechain
2	SA	894	G	Sidechain
2	SA	898	G	Sidechain
2	SA	899	C	Sidechain
2	SA	90	C	Sidechain
2	SA	900	A	Sidechain
2	SA	901	A	Sidechain
2	SA	902	G	Sidechain
2	SA	904	U	Sidechain
2	SA	908	A	Sidechain
2	SA	909	A	Sidechain
2	SA	91	U	Sidechain
2	SA	910	C	Sidechain
2	SA	911	U	Sidechain
2	SA	912	C	Sidechain
2	SA	913	A	Sidechain
2	SA	914	A	Sidechain
2	SA	917	G	Sidechain
2	SA	918	A	Sidechain
2	SA	920	U	Sidechain
2	SA	921	U	Sidechain
2	SA	922	G	Sidechain
2	SA	924	C	Sidechain
2	SA	925	G	Sidechain
2	SA	926	G	Sidechain
2	SA	927	G	Sidechain
2	SA	928	G	Sidechain
2	SA	930	C	Sidechain
2	SA	933	G	Sidechain
2	SA	935	A	Sidechain
2	SA	939	G	Sidechain
2	SA	94	G	Sidechain
2	SA	941	G	Sidechain
2	SA	942	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	943	U	Sidechain
2	SA	944	G	Sidechain
2	SA	945	G	Sidechain
2	SA	946	A	Sidechain
2	SA	947	G	Sidechain
2	SA	95	C	Sidechain
2	SA	950	U	Sidechain
2	SA	951	G	Sidechain
2	SA	952	U	Sidechain
2	SA	953	G	Sidechain
2	SA	954	G	Sidechain
2	SA	956	U	Sidechain
2	SA	958	A	Sidechain
2	SA	959	A	Sidechain
2	SA	96	U	Sidechain
2	SA	960	U	Sidechain
2	SA	961	U	Sidechain
2	SA	962	C	Sidechain
2	SA	963	G	Sidechain
2	SA	964	A	Sidechain
2	SA	965	U	Sidechain
2	SA	966	G	Sidechain
2	SA	967	C	Sidechain
2	SA	969	A	Sidechain
2	SA	97	G	Sidechain
2	SA	970	C	Sidechain
2	SA	971	G	Sidechain
2	SA	973	G	Sidechain
2	SA	975	A	Sidechain
2	SA	976	G	Sidechain
2	SA	977	A	Sidechain
2	SA	978	A	Sidechain
2	SA	98	A	Sidechain
2	SA	983	A	Sidechain
2	SA	984	C	Sidechain
2	SA	986	U	Sidechain
2	SA	987	G	Sidechain
2	SA	988	G	Sidechain
2	SA	99	C	Sidechain
2	SA	992	U	Sidechain
2	SA	993	G	Sidechain
2	SA	994	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	SA	995	C	Sidechain
2	SA	996	A	Sidechain
2	SA	999	C	Sidechain
18	SB	136	ARG	Sidechain
18	SB	14	HIS	Sidechain
18	SB	158	ASP	Peptide
18	SB	183	PHE	Sidechain
18	SB	207	ARG	Sidechain
18	SB	21	TYR	Sidechain
18	SB	212	TYR	Sidechain
18	SB	221	ARG	Sidechain
18	SB	224	ARG	Sidechain
18	SB	29	PHE	Peptide
18	SB	3	VAL	Peptide
18	SB	44	LYS	Peptide
18	SB	94	ARG	Sidechain
19	SC	126	ARG	Peptide
19	SC	142	ARG	Sidechain
19	SC	155	ARG	Sidechain
19	SC	158	GLY	Peptide
19	SC	160	GLU	Peptide
19	SC	168	ARG	Sidechain
19	SC	206	ILE	Peptide
19	SC	228	ARG	Sidechain
19	SC	41	TYR	Peptide
19	SC	5	HIS	Peptide
19	SC	96	VAL	Peptide
20	SD	106	PHE	Peptide
20	SD	110	ARG	Sidechain
20	SD	12	ARG	Sidechain
20	SD	13	ARG	Sidechain
20	SD	134	TYR	Sidechain
20	SD	14	GLU	Peptide
20	SD	169	TRP	Peptide
20	SD	185	PRO	Peptide
20	SD	187	ARG	Sidechain
20	SD	2	ARG	Peptide
20	SD	24	VAL	Peptide
20	SD	31	CYS	Peptide
20	SD	46	ARG	Sidechain
20	SD	55	ARG	Sidechain
20	SD	61	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
20	SD	64	TYR	Sidechain
20	SD	75	TYR	Sidechain
20	SD	80	ARG	Sidechain
21	SE	120	HIS	Sidechain
21	SE	122	VAL	Peptide
21	SE	127	TYR	Sidechain
21	SE	147	ASN	Peptide
21	SE	162	GLU	Peptide
21	SE	20	VAL	Peptide
21	SE	30	PHE	Sidechain
21	SE	43	GLY	Peptide
21	SE	78	GLY	Peptide
21	SE	92	ARG	Sidechain,Peptide
22	SF	101	PRO	Peptide
22	SF	116	PHE	Sidechain
22	SF	119	GLU	Peptide
22	SF	24	ARG	Sidechain
22	SF	25	TYR	Sidechain
22	SF	44	ARG	Sidechain
22	SF	49	TYR	Sidechain
22	SF	58	HIS	Peptide
22	SF	59	TYR	Sidechain
22	SF	64	VAL	Peptide
22	SF	78	PHE	Sidechain
22	SF	8	PHE	Sidechain
7	SG	1	PRO	Peptide
7	SG	108	ARG	Sidechain
7	SG	110	ARG	Sidechain
7	SG	133	ALA	Peptide
7	SG	137	ARG	Sidechain
7	SG	146	ALA	Peptide
7	SG	150	PHE	Sidechain
7	SG	154	ARG	Sidechain
7	SG	163	HIS	Sidechain
7	SG	2	ARG	Sidechain
7	SG	25	PHE	Sidechain
7	SG	3	ARG	Sidechain
7	SG	4	ARG	Sidechain
7	SG	69	ARG	Sidechain
7	SG	72	VAL	Peptide
7	SG	77	ARG	Sidechain,Peptide
7	SG	84	TYR	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
7	SG	9	ARG	Sidechain
8	SH	127	TYR	Sidechain
8	SH	44	PHE	Sidechain
8	SH	50	VAL	Peptide
8	SH	54	THR	Peptide
8	SH	71	VAL	Peptide
8	SH	73	SER	Peptide
8	SH	78	SER	Peptide
8	SH	83	ARG	Sidechain
8	SH	87	ARG	Sidechain
8	SH	91	LEU	Peptide
9	SI	112	ARG	Sidechain
9	SI	121	ARG	Sidechain
9	SI	44	ARG	Sidechain
9	SI	6	TYR	Sidechain
9	SI	89	TYR	Sidechain,Peptide
9	SI	93	LEU	Mainchain
10	SJ	31	ARG	Sidechain
10	SJ	45	ARG	Sidechain
10	SJ	5	ARG	Sidechain
10	SJ	62	ARG	Sidechain
10	SJ	63	ASP	Peptide
10	SJ	72	ARG	Sidechain
10	SJ	74	VAL	Peptide
10	SJ	9	ARG	Sidechain
10	SJ	93	ALA	Peptide
11	SK	10	ARG	Sidechain
11	SK	12	ARG	Sidechain
11	SK	126	ARG	Sidechain
11	SK	52	ARG	Sidechain
11	SK	58	THR	Peptide
11	SK	76	TYR	Sidechain
11	SK	97	ARG	Sidechain
12	SL	11	ARG	Sidechain
12	SL	121	PRO	Peptide
12	SL	49	ARG	Sidechain
12	SL	53	ARG	Sidechain
12	SL	65	TYR	Sidechain
12	SL	8	ARG	Sidechain
12	SL	85	ARG	Peptide
12	SL	9	LYS	Peptide
12	SL	94	TYR	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	SL	98	ARG	Sidechain
13	SM	106	ARG	Sidechain
13	SM	111	PRO	Peptide
13	SM	2	ARG	Sidechain
13	SM	70	ARG	Sidechain
13	SM	78	ARG	Sidechain
13	SM	85	TYR	Sidechain
13	SM	89	ARG	Sidechain
13	SM	90	HIS	Sidechain
14	SN	19	TYR	Sidechain
14	SN	23	ARG	Sidechain
14	SN	52	ARG	Sidechain
14	SN	58	ARG	Sidechain
14	SN	60	ARG	Sidechain
14	SN	62	ARG	Sidechain
14	SN	74	ARG	Sidechain
14	SN	76	PHE	Sidechain
14	SN	80	ARG	Sidechain
14	SN	89	ARG	Sidechain
14	SN	97	LYS	Peptide
15	SO	16	ARG	Sidechain
15	SO	45	HIS	Peptide
15	SO	62	ARG	Sidechain
15	SO	63	ARG	Sidechain
15	SO	77	TYR	Sidechain
15	SO	83	ARG	Sidechain
15	SO	88	ARG	Sidechain
16	SP	13	LYS	Peptide
16	SP	14	ARG	Sidechain
16	SP	17	TYR	Sidechain
16	SP	28	ARG	Sidechain
16	SP	29	ASN	Peptide
16	SP	35	ARG	Sidechain
16	SP	5	ARG	Sidechain
16	SP	56	ARG	Sidechain
16	SP	59	HIS	Sidechain
17	SQ	10	ARG	Sidechain
17	SQ	18	LYS	Peptide
17	SQ	39	ARG	Sidechain
17	SQ	5	ARG	Sidechain
17	SQ	64	ARG	Sidechain
17	SQ	76	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
23	SR	22	TYR	Sidechain
23	SR	3	TYR	Sidechain
23	SR	31	TYR	Sidechain
23	SR	5	ARG	Sidechain
23	SR	50	TYR	Sidechain
23	SR	56	ARG	Sidechain
23	SR	63	TYR	Sidechain
23	SR	69	TYR	Sidechain
23	SR	72	ARG	Sidechain
1	SS	1	PRO	Peptide
1	SS	10	ILE	Peptide
1	SS	13	HIS	Sidechain
1	SS	2	ARG	Sidechain
1	SS	21	ALA	Peptide
1	SS	28	LYS	Peptide
1	SS	3	SER	Peptide
1	SS	36	ARG	Sidechain
1	SS	56	HIS	Sidechain
1	SS	67	GLY	Peptide
1	SS	8	PRO	Peptide
5	ST	28	ARG	Sidechain
5	ST	30	PHE	Sidechain
5	ST	40	ALA	Peptide
5	ST	73	ARG	Sidechain
5	ST	85	LEU	Peptide
6	SU	11	PHE	Peptide
6	SU	17	ARG	Sidechain
6	SU	26	GLY	Peptide
6	SU	34	ARG	Sidechain
6	SU	35	GLU	Peptide
6	SU	44	ARG	Sidechain
6	SU	6	ARG	Sidechain
6	SU	65	ARG	Sidechain
6	SU	68	ARG	Sidechain
6	SU	69	LEU	Peptide
6	SU	70	TYR	Sidechain

5.2 Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within

the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	SS	727	0	769	10	0
2	SA	33076	0	16190	637	0
3	S1	993	0	496	16	0
4	S2	1639	0	816	32	0
5	ST	670	0	722	2	0
6	SU	590	0	631	6	0
7	SG	1400	0	1449	13	0
8	SH	979	0	1034	5	0
9	SI	1036	0	1084	9	0
10	SJ	825	0	865	9	0
11	SK	965	0	997	13	0
12	SL	955	0	1019	10	0
13	SM	910	0	981	9	0
14	SN	805	0	847	5	0
15	SO	716	0	742	4	0
16	SP	649	0	666	3	0
17	SQ	672	0	716	2	0
18	SB	1872	0	1885	15	0
19	SC	1822	0	1913	13	0
20	SD	1643	0	1710	21	0
21	SE	1225	0	1273	18	0
22	SF	1101	0	1050	11	0
23	SR	626	0	651	6	0
24	S3	5431	0	5403	46	0
25	LB	2566	0	1269	48	0
26	LA	62330	0	30424	1516	0
27	LD	2092	0	2170	21	0
28	LU	857	0	922	5	0
29	LV	787	0	846	5	0
30	LW	789	0	847	9	0
31	LX	753	0	780	4	0
32	LY	634	0	655	16	0
33	LZ	625	0	655	2	0
34	L0	509	0	543	5	0
35	L1	449	0	491	3	0
36	L2	549	0	552	5	0
37	LC	1733	0	1824	19	0
38	LE	1565	0	1616	21	0
39	L3	444	0	461	8	0
40	L4	441	0	485	4	0
41	L5	377	0	418	7	0
42	L6	504	0	574	3	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	L7	302	0	343	3	0
44	LF	1552	0	1619	18	0
45	LG	1420	0	1460	16	0
46	LH	1323	0	1374	6	0
47	LJ	1233	0	1283	6	0
48	LN	1053	0	1129	7	0
49	LK	1032	0	1088	3	0
50	LL	1129	0	1162	9	0
51	LI	1111	0	1148	6	0
52	LO	1074	0	1157	17	0
53	LP	1008	0	1045	10	0
54	LM	947	0	1023	6	0
55	LQ	900	0	935	9	0
56	LR	917	0	965	5	0
57	LS	947	0	1022	15	0
58	LT	816	0	839	7	0
59	S3	32	0	12	0	0
All	All	156127	0	107045	2623	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 10.

All (2623) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:SE:123:LEU:HD13	21:SE:124:ALA:H	1.44	0.83
2:SA:1381:U:H1'	7:SG:152:HIS:CE1	2.16	0.80
26:LA:1853:A:H61	26:LA:2087:G:H1'	1.47	0.80
26:LA:1965:C:C2	26:LA:1966:A:H2'	2.18	0.78
2:SA:803:G:C5	2:SA:804:U:C4	2.72	0.78
10:SJ:8:ILE:HG12	10:SJ:100:ILE:HG22	1.67	0.76
26:LA:877:A:H62	26:LA:900:A:H61	1.33	0.76
24:S3:583:HIS:CD2	24:S3:585:VAL:H	2.04	0.76
2:SA:900:A:C2	2:SA:901:A:C2	2.76	0.74
26:LA:1570:A:H2'	26:LA:1571:A:C8	2.25	0.72
50:LL:35:ARG:HA	50:LL:40:HIS:CE1	2.25	0.72
26:LA:190:A:C4	26:LA:207:A:C2	2.78	0.71
26:LA:250:G:C6	26:LA:251:A:C2	2.77	0.71
25:LB:78:A:C2	25:LB:99:A:C4	2.78	0.71
24:S3:362:ILE:H	24:S3:362:ILE:HD13	1.55	0.71
2:SA:998:C:H42	2:SA:1043:G:H1	1.39	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1226:C:H5'	13:SM:92:ARG:HH22	1.55	0.71
26:LA:2809:A:C2	26:LA:2810:A:C4	2.78	0.71
26:LA:45:G:H4'	26:LA:46:G:H5'	1.73	0.70
26:LA:513:A:C6	26:LA:514:A:C6	2.80	0.69
26:LA:948:C:C2	26:LA:984:A:C2	2.80	0.69
26:LA:1689:A:C6	26:LA:1700:A:C2	2.80	0.69
18:SB:14:HIS:CD2	18:SB:202:ASN:HD22	2.11	0.69
26:LA:2210:U:C6	26:LA:2212:A:C2	2.80	0.68
26:LA:1707:G:C5	26:LA:1756:G:C6	2.81	0.68
26:LA:2816:G:C4	26:LA:2817:U:C5	2.81	0.68
26:LA:2210:U:C5	26:LA:2212:A:C2	2.82	0.68
4:S2:1:C:C2	4:S2:75:C:C6	2.82	0.68
26:LA:910:A:C5	52:LO:13:HIS:CD2	2.82	0.68
26:LA:2502:G:H3'	26:LA:2503:A:H5'	1.76	0.67
27:LD:115:ILE:HD13	27:LD:116:GLN:H	1.60	0.67
45:LG:130:GLY:HA2	45:LG:152:ASP:HA	1.75	0.67
26:LA:2657:A:C8	26:LA:2658:C:C6	2.81	0.67
26:LA:2233:U:H2'	26:LA:2234:G:C8	2.30	0.67
26:LA:1544:A:C5	26:LA:1545:A:C5	2.83	0.67
26:LA:196:A:C6	26:LA:805:G:C6	2.83	0.67
2:SA:726:C:H2'	2:SA:727:G:C8	2.30	0.67
26:LA:544:C:H3'	26:LA:545:U:H5'	1.76	0.67
26:LA:1770:G:C6	26:LA:1983:G:C6	2.83	0.67
26:LA:1378:A:C5	26:LA:1380:G:C5	2.83	0.66
26:LA:2214:C:C5	26:LA:2215:C:C5	2.82	0.66
26:LA:1851:U:C5	26:LA:1852:U:C4	2.83	0.66
26:LA:2249:U:H3'	26:LA:2250:G:C5'	2.24	0.66
26:LA:747:U:C5	26:LA:2613:U:C5	2.84	0.66
26:LA:2437:G:C5	26:LA:2438:U:C5	2.84	0.66
26:LA:455:C:C4	26:LA:472:A:C5	2.83	0.66
26:LA:1977:A:C6	26:LA:1978:A:C5	2.83	0.66
26:LA:1825:U:H2'	26:LA:1826:G:C8	2.31	0.66
48:LN:123:ARG:NH1	48:LN:144:GLU:H	1.94	0.66
26:LA:1276:A:C2	26:LA:1277:G:C5	2.84	0.66
2:SA:718:A:C8	2:SA:719:C:C5	2.84	0.65
26:LA:1550:C:H2'	26:LA:1551:A:C8	2.31	0.65
2:SA:842:U:C4	2:SA:846:G:C4	2.84	0.65
26:LA:123:G:C6	26:LA:124:G:C5	2.85	0.65
26:LA:81:G:C6	26:LA:82:U:C2	2.84	0.65
26:LA:2468:A:C2	26:LA:2481:G:C2	2.85	0.65
26:LA:811:U:C5	26:LA:1251:C:C5	2.85	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:990:C:H2'	2:SA:991:U:C6	2.31	0.64
4:S2:2:G:C5	4:S2:73:A:C2	2.86	0.64
30:LW:85:ARG:HE	30:LW:86:PHE:H	1.45	0.64
26:LA:1916:A:C5	26:LA:1917:U:H6	2.15	0.64
32:LY:45:HIS:CE1	32:LY:49:ASN:HB3	2.32	0.64
26:LA:2869:G:C5	26:LA:2870:C:C4	2.85	0.64
26:LA:1022:G:C6	26:LA:1141:U:C5	2.86	0.64
26:LA:774:G:H5''	27:LD:47:ARG:HH22	1.62	0.64
2:SA:500:G:C6	2:SA:501:C:C4	2.86	0.64
26:LA:2551:C:C5	26:LA:2552:U:C4	2.85	0.63
26:LA:85:G:C6	26:LA:86:G:C5	2.86	0.63
2:SA:730:G:N2	2:SA:765:G:H5''	2.12	0.63
2:SA:367:U:H5''	2:SA:394:G:H21	1.63	0.63
26:LA:1312:U:C2	26:LA:1603:A:C2	2.86	0.63
26:LA:136:G:C6	26:LA:137:U:C4	2.87	0.63
26:LA:199:A:C4	26:LA:2433:A:N1	2.66	0.63
2:SA:704:A:C4	2:SA:705:G:C8	2.87	0.63
26:LA:2063:C:C5	26:LA:2064:C:C5	2.87	0.63
26:LA:1144:A:C5	26:LA:1145:C:C5	2.87	0.63
26:LA:1965:C:H6	26:LA:1965:C:H5''	1.64	0.62
26:LA:457:A:H61	26:LA:470:A:H3'	1.64	0.62
2:SA:1225:A:H2'	2:SA:1226:C:C5	2.34	0.62
26:LA:2004:G:C6	26:LA:2005:A:C4	2.87	0.62
2:SA:826:C:C2	2:SA:827:U:C5	2.87	0.62
5:ST:67:HIS:CG	5:ST:68:LYS:H	2.15	0.62
2:SA:690:G:C5	2:SA:691:G:C5	2.86	0.62
26:LA:2273:A:C2	26:LA:2274:A:C6	2.87	0.62
56:LR:63:ILE:HG22	56:LR:68:GLY:H	1.65	0.62
2:SA:1219:A:H2'	2:SA:1220:G:C8	2.33	0.62
26:LA:647:G:C6	26:LA:648:G:C5	2.88	0.62
26:LA:659:G:H2'	26:LA:660:C:C6	2.35	0.62
26:LA:1213:A:C2	26:LA:1214:A:C4	2.87	0.62
26:LA:83:A:C5	26:LA:101:A:C5	2.87	0.62
26:LA:2251:U:C5	26:LA:2252:G:C5	2.88	0.62
26:LA:2339:C:H2'	26:LA:2340:A:C8	2.35	0.62
26:LA:792:A:H1'	26:LA:793:A:C2	2.35	0.62
26:LA:2249:U:H3'	26:LA:2250:G:H5''	1.82	0.62
2:SA:11:G:C5	2:SA:12:U:C5	2.87	0.62
57:LS:60:TRP:CE2	57:LS:93:ILE:HD13	2.35	0.62
2:SA:1518:A:H2'	2:SA:1519:A:C8	2.35	0.61
26:LA:2209:G:C5	26:LA:2210:U:C4	2.88	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:SJ:42:LEU:HD12	10:SJ:73:LEU:HD11	1.81	0.61
2:SA:892:A:C6	2:SA:907:A:C8	2.88	0.61
26:LA:1773:A:C2	26:LA:1829:A:C2	2.88	0.61
19:SC:173:PRO:HD2	19:SC:202:PHE:CE1	2.35	0.61
26:LA:72:U:C4	26:LA:112:U:H4'	2.36	0.61
26:LA:2674:G:C6	26:LA:2675:A:C5	2.89	0.61
2:SA:1391:U:H2'	2:SA:1392:G:C8	2.35	0.61
26:LA:1507:C:H2'	26:LA:1508:A:H5''	1.81	0.61
26:LA:1365:A:C2	26:LA:1366:A:C4	2.89	0.61
2:SA:642:A:C5	2:SA:643:C:C5	2.89	0.61
2:SA:76:G:C2	2:SA:77:A:H1'	2.36	0.61
26:LA:604:G:C6	26:LA:605:G:C6	2.88	0.61
26:LA:2868:A:C4	26:LA:2869:G:C8	2.89	0.61
26:LA:1978:A:C8	26:LA:1979:U:C5	2.89	0.61
26:LA:28:A:C5	26:LA:29:U:C5	2.88	0.61
26:LA:2532:G:C5	26:LA:2533:U:C2	2.89	0.61
2:SA:439:U:C5	2:SA:440:C:C5	2.89	0.61
26:LA:1924:C:C5	26:LA:1925:C:C5	2.88	0.61
53:LP:38:LEU:HB3	53:LP:39:PRO:HD3	1.83	0.61
26:LA:1453:A:H1'	53:LP:77:ALA:HB2	1.82	0.60
26:LA:2516:A:H2'	26:LA:2517:C:C6	2.35	0.60
24:S3:647:GLU:HG2	24:S3:648:VAL:H	1.66	0.60
26:LA:470:A:H2'	26:LA:471:A:C8	2.36	0.60
26:LA:1274:A:C6	26:LA:1302:A:C2	2.90	0.60
26:LA:563:A:C5	26:LA:564:C:C5	2.89	0.60
44:LF:84:THR:HG23	44:LF:85:PHE:CD2	2.35	0.60
38:LE:24:VAL:HG11	38:LE:188:LEU:HD23	1.81	0.60
4:S2:2:G:C6	4:S2:73:A:C2	2.90	0.60
4:S2:59:A:C2	4:S2:62:C:C6	2.89	0.60
2:SA:629:A:C2	2:SA:630:A:C4	2.90	0.60
2:SA:359:G:C6	2:SA:360:G:C5	2.90	0.60
26:LA:1684:G:C2	26:LA:1705:A:C2	2.89	0.60
18:SB:67:LEU:HD11	18:SB:91:VAL:HG23	1.84	0.60
27:LD:209:ALA:HA	27:LD:212:TRP:CE2	2.36	0.60
2:SA:406:G:C8	2:SA:495:A:C4	2.89	0.60
26:LA:2443:C:H2'	26:LA:2444:G:C8	2.36	0.60
9:SI:29:ILE:HD11	9:SI:66:VAL:HG11	1.84	0.60
4:S2:19:G:H1	4:S2:56:U:H3	1.48	0.60
2:SA:1371:G:C5	2:SA:1372:U:C4	2.89	0.60
26:LA:2235:G:C6	26:LA:2236:U:C4	2.89	0.60
26:LA:2829:A:C5	26:LA:2830:C:C5	2.90	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:22:G:C5	2:SA:23:C:C5	2.89	0.60
38:LE:4:LEU:HD12	38:LE:101:PHE:CE1	2.37	0.60
26:LA:2488:G:C4	26:LA:2489:U:C5	2.90	0.60
2:SA:781:A:C5	2:SA:802:A:C2	2.90	0.60
26:LA:1915:C:H2'	26:LA:1916:A:C8	2.37	0.60
26:LA:470:A:H2'	26:LA:471:A:H8	1.67	0.60
26:LA:2080:A:H2'	26:LA:2081:U:H6	1.67	0.60
26:LA:717:C:H3'	26:LA:718:A:H5''	1.82	0.60
26:LA:1028:A:C2	26:LA:1029:A:C5	2.90	0.60
26:LA:355:U:H2'	26:LA:356:G:C8	2.37	0.60
26:LA:2683:C:C5	26:LA:2684:U:C5	2.90	0.59
26:LA:719:C:C5	26:LA:720:U:C5	2.90	0.59
25:LB:30:C:C6	25:LB:31:C:C6	2.90	0.59
26:LA:796:C:H2'	26:LA:797:G:C8	2.38	0.59
2:SA:1517:G:C6	2:SA:1518:A:C5	2.90	0.59
26:LA:2493:U:C5	26:LA:2494:G:C8	2.90	0.59
26:LA:2120:G:H2'	26:LA:2121:G:C8	2.36	0.59
26:LA:2100:G:C5	26:LA:2190:G:C2	2.90	0.59
2:SA:1394:A:C2	2:SA:1501:C:H4'	2.38	0.59
12:SL:97:VAL:HG23	12:SL:100:ALA:HB3	1.85	0.59
26:LA:1779:U:C4	26:LA:1783:A:C8	2.90	0.59
2:SA:17:U:H2'	2:SA:18:C:C6	2.37	0.59
26:LA:1783:A:C2	26:LA:2587:A:N7	2.71	0.59
25:LB:30:C:C6	25:LB:31:C:C5	2.90	0.59
26:LA:1689:A:C5	26:LA:1700:A:C2	2.90	0.59
26:LA:2209:G:C5	26:LA:2210:U:C5	2.91	0.59
26:LA:470:A:C2	26:LA:471:A:C4	2.91	0.59
26:LA:10:A:C2	26:LA:2800:A:H5'	2.37	0.59
4:S2:57:C:C5	26:LA:2169:A:C8	2.90	0.59
2:SA:730:G:H21	2:SA:765:G:H5''	1.67	0.59
26:LA:2450:A:C6	26:LA:2451:A:C2	2.90	0.59
55:LQ:62:LEU:H	55:LQ:62:LEU:HD22	1.67	0.59
25:LB:39:A:C2	25:LB:44:G:C2	2.90	0.59
26:LA:2519:U:C4	26:LA:2542:A:C5	2.91	0.59
2:SA:5:U:H4'	2:SA:7:A:H61	1.67	0.59
26:LA:1055:G:H4'	47:LJ:33:THR:HA	1.85	0.59
57:LS:60:TRP:CZ3	57:LS:93:ILE:HB	2.38	0.59
26:LA:948:C:O2	26:LA:984:A:C4	2.55	0.58
2:SA:718:A:C5	11:SK:117:HIS:CD2	2.91	0.58
26:LA:1107:G:C6	26:LA:1108:U:C4	2.91	0.58
2:SA:1117:A:C2	2:SA:1184:G:C6	2.91	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2575:C:H2'	38:LE:149:ASN:OD1	2.03	0.58
2:SA:611:C:C5	2:SA:612:C:C5	2.91	0.58
2:SA:255:G:C5	2:SA:256:U:C5	2.92	0.58
26:LA:2126:A:C6	26:LA:2173:A:C6	2.91	0.58
2:SA:399:G:C6	2:SA:400:C:C4	2.90	0.58
26:LA:1055:G:C6	26:LA:1056:G:C4	2.91	0.58
45:LG:77:LYS:HB3	45:LG:78:ILE:HG23	1.84	0.58
26:LA:753:A:C2	26:LA:754:U:C2	2.91	0.58
26:LA:1431:A:C2	26:LA:1432:G:C4	2.91	0.58
26:LA:188:G:C6	26:LA:189:G:C4	2.92	0.58
2:SA:573:A:C6	2:SA:574:A:N1	2.71	0.58
26:LA:1242:U:C4	26:LA:1243:C:C4	2.91	0.58
26:LA:2197:U:C6	26:LA:2224:G:C6	2.91	0.58
3:S1:43:U:H3'	3:S1:45:G:H1	1.68	0.58
26:LA:1797:G:C6	26:LA:1798:U:C4	2.91	0.58
26:LA:877:A:N6	26:LA:900:A:H61	1.99	0.58
26:LA:878:A:C2	26:LA:879:G:C4	2.92	0.58
26:LA:346:A:C6	26:LA:347:A:C4	2.92	0.58
2:SA:1153:G:H1'	19:SC:218:LYS:HE2	1.84	0.58
26:LA:1505:A:H2'	26:LA:1506:U:C6	2.38	0.58
25:LB:78:A:C2	25:LB:99:A:C5	2.92	0.58
26:LA:1871:A:H2'	26:LA:1872:A:C8	2.39	0.58
26:LA:825:A:C2	26:LA:833:A:C2	2.92	0.58
18:SB:37:VAL:HG12	18:SB:38:HIS:H	1.68	0.58
26:LA:878:A:C2	26:LA:900:A:C6	2.92	0.58
45:LG:73:VAL:HG23	45:LG:74:ALA:H	1.68	0.58
2:SA:474:G:C5	2:SA:475:C:C4	2.90	0.58
8:SH:63:LYS:HE2	8:SH:70:VAL:HG11	1.86	0.58
26:LA:182:A:C2	26:LA:183:C:C2	2.92	0.57
2:SA:1004:A:C2	2:SA:1005:A:C4	2.91	0.57
2:SA:160:A:C6	2:SA:344:A:H1'	2.39	0.57
26:LA:2568:U:C2	26:LA:2569:G:C8	2.92	0.57
2:SA:213:G:C2	2:SA:214:C:H1'	2.39	0.57
26:LA:544:C:H3'	26:LA:545:U:C5'	2.34	0.57
25:LB:39:A:C2	25:LB:40:U:O4	2.57	0.57
2:SA:608:A:C6	2:SA:609:A:C5	2.91	0.57
26:LA:1928:A:C5	26:LA:1929:G:C5	2.91	0.57
26:LA:532:A:H2'	26:LA:532:A:N3	2.18	0.57
26:LA:2124:G:C5	26:LA:2125:G:H1'	2.39	0.57
2:SA:666:G:C5	2:SA:741:G:C6	2.91	0.57
26:LA:1338:G:C4	26:LA:1339:G:C8	2.92	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1005:A:C5	2:SA:1006:G:H1'	2.39	0.57
37:LC:40:GLU:O	37:LC:178:VAL:HG13	2.03	0.57
26:LA:322:A:H5'	26:LA:340:A:H1'	1.84	0.57
2:SA:1313:U:C4	2:SA:1314:C:C5	2.92	0.57
26:LA:2097:A:H2'	26:LA:2098:U:C6	2.40	0.57
27:LD:209:ALA:HA	27:LD:212:TRP:CD2	2.40	0.57
26:LA:819:A:C6	26:LA:820:A:C5	2.91	0.57
26:LA:1284:A:C6	26:LA:1285:A:C6	2.92	0.57
2:SA:389:A:C6	2:SA:390:U:H1'	2.39	0.57
26:LA:2415:G:C6	26:LA:2416:C:C4	2.92	0.57
2:SA:1417:G:C5	2:SA:1482:G:C6	2.93	0.57
26:LA:1973:G:C6	26:LA:1974:C:C4	2.93	0.57
2:SA:550:G:C6	2:SA:551:U:C4	2.93	0.57
26:LA:1202:G:C5	26:LA:1203:U:C5	2.93	0.57
26:LA:2702:G:C5	26:LA:2703:C:C5	2.92	0.57
2:SA:587:G:C6	2:SA:755:G:C6	2.92	0.57
2:SA:1501:C:C5	2:SA:1504:G:C5	2.93	0.57
2:SA:513:C:C4	2:SA:514:C:C4	2.93	0.57
26:LA:447:A:C5	26:LA:473:G:C5	2.93	0.57
26:LA:58:G:C6	26:LA:59:U:C4	2.92	0.57
26:LA:1933:G:C6	26:LA:1934:C:C4	2.92	0.57
26:LA:2248:C:H2'	26:LA:2249:U:H5'	1.85	0.57
44:LF:5:LEU:HD11	44:LF:12:LEU:HD22	1.86	0.57
26:LA:1654:A:H4'	38:LE:118:PHE:CZ	2.40	0.57
26:LA:1866:A:C4	26:LA:1876:A:C5	2.93	0.57
26:LA:2721:A:C2	26:LA:2873:A:C6	2.92	0.57
26:LA:877:A:H62	26:LA:900:A:N6	2.01	0.57
26:LA:2004:G:C6	26:LA:2005:A:C5	2.93	0.57
2:SA:690:G:C6	2:SA:691:G:C6	2.93	0.57
2:SA:46:G:C5	2:SA:366:A:C2	2.92	0.57
2:SA:49:U:C4	2:SA:364:A:C6	2.92	0.57
2:SA:803:G:C5	2:SA:804:U:C5	2.93	0.56
26:LA:2415:G:C5	26:LA:2416:C:C5	2.93	0.56
2:SA:46:G:C6	2:SA:366:A:H2	2.22	0.56
26:LA:627:A:C2	26:LA:637:A:C4	2.92	0.56
52:LO:111:GLU:H	52:LO:111:GLU:CD	2.09	0.56
2:SA:552:U:H4'	12:SL:83:GLY:O	2.04	0.56
26:LA:2104:C:C2	26:LA:2186:G:C2	2.93	0.56
26:LA:1242:U:C5	26:LA:1243:C:C5	2.93	0.56
26:LA:1897:G:C2	26:LA:1898:U:C2	2.92	0.56
36:L2:11:GLU:CD	36:L2:11:GLU:H	2.08	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1027:A:C5	26:LA:1126:A:C2	2.93	0.56
26:LA:322:A:C5	26:LA:340:A:C2	2.93	0.56
57:LS:91:ARG:NH2	58:LT:11:GLN:H	2.03	0.56
25:LB:7:G:C5	25:LB:8:C:C5	2.93	0.56
26:LA:2209:G:C6	26:LA:2210:U:C4	2.93	0.56
7:SG:17:PHE:CZ	7:SG:57:GLU:HB2	2.40	0.56
2:SA:706:A:C6	2:SA:707:U:C4	2.94	0.56
26:LA:2133:G:H3'	26:LA:2134:A:H4'	1.87	0.56
2:SA:815:A:C2	2:SA:1529:G:C8	2.94	0.56
26:LA:1763:G:H3'	26:LA:1764:C:H5''	1.86	0.56
26:LA:2718:G:C6	26:LA:2719:G:C4	2.93	0.56
2:SA:693:G:C5	2:SA:694:A:C8	2.93	0.56
26:LA:1378:A:C6	26:LA:1380:G:C4	2.93	0.56
26:LA:2644:G:C6	26:LA:2645:G:C2	2.94	0.56
26:LA:2788:C:H2'	26:LA:2789:C:C6	2.40	0.56
26:LA:780:G:C5	26:LA:782:A:C6	2.93	0.56
26:LA:989:G:C8	35:L1:13:ILE:HD11	2.40	0.56
26:LA:1911:U:C5	26:LA:1918:A:C6	2.93	0.56
2:SA:803:G:C6	2:SA:804:U:C4	2.93	0.56
26:LA:2657:A:H8	26:LA:2658:C:C6	2.19	0.56
2:SA:1004:A:C6	2:SA:1026:G:H1'	2.41	0.56
2:SA:622:A:C6	2:SA:623:C:H1'	2.40	0.56
26:LA:573:U:O2'	26:LA:574:A:H3'	2.06	0.56
26:LA:1268:A:C2	26:LA:2013:A:C5	2.94	0.56
39:L3:48:TYR:HB3	39:L3:53:VAL:HG21	1.88	0.56
26:LA:2631:G:C2	26:LA:2632:A:C4	2.94	0.56
26:LA:2469:A:C2	26:LA:2482:A:H1'	2.40	0.56
26:LA:572:A:C6	26:LA:573:U:C5	2.94	0.56
26:LA:651:G:H2'	26:LA:652:U:C5	2.41	0.56
26:LA:2478:A:C2	26:LA:2529:G:H2'	2.41	0.56
26:LA:2710:C:H2'	26:LA:2711:A:C8	2.41	0.56
26:LA:123:G:C6	26:LA:124:G:C6	2.94	0.56
26:LA:2520:C:C5	26:LA:2567:G:C5	2.94	0.56
2:SA:704:A:C6	2:SA:705:G:C4	2.94	0.56
26:LA:1430:G:C2	26:LA:1431:A:C4	2.94	0.56
26:LA:567:U:C5	26:LA:568:U:C2	2.94	0.56
36:L2:34:LEU:HG	36:L2:35:ASP:N	2.21	0.56
26:LA:311:A:C5	26:LA:328:U:O4	2.59	0.56
26:LA:362:A:C4	26:LA:363:G:C8	2.94	0.55
2:SA:171:A:H2'	2:SA:172:A:C8	2.41	0.55
13:SM:13:HIS:CD2	13:SM:15:VAL:HG12	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2180:U:C4	26:LA:2181:U:C4	2.94	0.55
2:SA:64:G:C5	2:SA:99:C:C4	2.94	0.55
2:SA:1142:G:C6	2:SA:1143:G:H1'	2.41	0.55
26:LA:705:A:C2	26:LA:706:A:C4	2.94	0.55
26:LA:17:G:C5	26:LA:18:U:C4	2.94	0.55
25:LB:34:A:C2	25:LB:49:C:C2	2.94	0.55
26:LA:55:G:H2'	26:LA:56:A:C8	2.41	0.55
2:SA:1251:A:H2'	2:SA:1252:A:C8	2.42	0.55
26:LA:152:A:H2'	26:LA:153:U:C6	2.41	0.55
2:SA:1514:G:C6	2:SA:1515:G:C5	2.93	0.55
26:LA:1191:G:C6	26:LA:1192:G:C5	2.93	0.55
2:SA:542:G:C2	2:SA:543:U:C5	2.94	0.55
26:LA:1486:U:H2'	26:LA:1487:U:C6	2.41	0.55
26:LA:485:C:H2'	26:LA:486:C:C6	2.42	0.55
27:LD:64:VAL:HG21	27:LD:90:ILE:HD12	1.87	0.55
2:SA:505:G:H2'	2:SA:506:G:C8	2.40	0.55
37:LC:27:ILE:HD13	37:LC:185:LEU:HD12	1.88	0.55
26:LA:666:A:C5	26:LA:667:U:C4	2.94	0.55
26:LA:77:G:C6	26:LA:78:U:C4	2.94	0.55
26:LA:2721:A:C2	26:LA:2873:A:C5	2.95	0.55
26:LA:1879:C:C4	26:LA:1880:U:C4	2.94	0.55
26:LA:2903:U:H3'	26:LA:2904:U:H5''	1.89	0.55
26:LA:2251:U:C5	26:LA:2252:G:C6	2.95	0.55
26:LA:1908:C:H2'	26:LA:1909:C:C6	2.42	0.55
26:LA:1654:A:H1'	38:LE:118:PHE:CD2	2.41	0.55
26:LA:2186:G:C6	26:LA:2187:U:C4	2.95	0.55
26:LA:464:U:O2	26:LA:788:A:C4	2.59	0.55
2:SA:184:G:C5	2:SA:185:U:C5	2.95	0.55
2:SA:35:G:C6	2:SA:36:C:C4	2.94	0.55
26:LA:1392:A:N7	26:LA:1393:A:C6	2.75	0.55
26:LA:2630:G:C5	26:LA:2894:G:C6	2.95	0.55
26:LA:1770:G:C5	26:LA:1983:G:C6	2.95	0.55
26:LA:1911:U:C6	26:LA:1918:A:C6	2.94	0.55
26:LA:2394:C:C5	26:LA:2395:C:C4	2.95	0.55
26:LA:1171:G:H2'	26:LA:1172:C:C6	2.42	0.55
26:LA:1741:C:H2'	26:LA:1742:U:C6	2.42	0.55
38:LE:5:VAL:HG21	38:LE:80:TRP:CE3	2.42	0.55
2:SA:354:G:C2	2:SA:355:C:C6	2.94	0.55
2:SA:1226:C:C5'	13:SM:92:ARG:HH22	2.20	0.55
25:LB:6:G:H2'	25:LB:7:G:C8	2.42	0.55
26:LA:2377:A:H2'	26:LA:2378:A:C8	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:174:A:C5	2:SA:175:C:C5	2.94	0.55
38:LE:2:ILE:H	38:LE:2:ILE:HD12	1.72	0.55
26:LA:729:G:C4	26:LA:1775:U:O2	2.60	0.55
26:LA:1777:U:C2	26:LA:1778:U:C5	2.95	0.55
22:SF:18:VAL:CG1	22:SF:126:ALA:HB2	2.37	0.55
26:LA:221:A:C2	26:LA:233:A:C5	2.95	0.55
26:LA:1365:A:C6	26:LA:1366:A:C5	2.94	0.54
26:LA:1241:A:C2	26:LA:1242:U:C4	2.95	0.54
26:LA:2069:G:C2	26:LA:2070:A:C8	2.95	0.54
26:LA:582:A:C6	26:LA:583:G:C6	2.95	0.54
26:LA:1202:G:C4	26:LA:1203:U:C5	2.96	0.54
26:LA:662:G:H2'	26:LA:663:G:C8	2.43	0.54
26:LA:1952:A:C6	26:LA:1953:A:N1	2.75	0.54
26:LA:1853:A:H61	26:LA:2087:G:C1'	2.16	0.54
2:SA:690:G:C6	2:SA:691:G:C5	2.96	0.54
26:LA:49:A:C5	26:LA:177:G:C6	2.95	0.54
26:LA:2047:C:H2'	26:LA:2048:G:C8	2.43	0.54
26:LA:1786:A:C5	26:LA:1938:A:C2	2.95	0.54
2:SA:299:G:C6	2:SA:300:A:C6	2.96	0.54
27:LD:34:GLU:HG2	27:LD:35:LYS:H	1.72	0.54
11:SK:32:THR:HG23	11:SK:43:TRP:HB3	1.90	0.54
26:LA:827:U:C5	26:LA:2430:A:C5	2.95	0.54
26:LA:954:G:C5	26:LA:955:U:C4	2.96	0.54
26:LA:10:A:N3	26:LA:2800:A:H5'	2.23	0.54
26:LA:2519:U:C5	26:LA:2542:A:C5	2.96	0.54
26:LA:105:C:H2'	26:LA:106:C:C5	2.43	0.54
6:SU:6:ARG:HD2	11:SK:96:ILE:HD11	1.90	0.54
24:S3:516:HIS:CE1	24:S3:579:PHE:CZ	2.95	0.54
26:LA:2352:A:C2	32:LY:30:VAL:HG11	2.43	0.54
18:SB:14:HIS:CE1	18:SB:202:ASN:HB2	2.43	0.54
2:SA:1154:G:N2	2:SA:1155:A:H1'	2.23	0.54
2:SA:344:A:H62	2:SA:347:G:N2	2.05	0.54
2:SA:299:G:C5	2:SA:300:A:C5	2.96	0.54
2:SA:523:A:C6	12:SL:86:VAL:CG2	2.91	0.54
2:SA:434:U:H2'	2:SA:435:A:C8	2.43	0.54
2:SA:1028:C:C4	2:SA:1029:U:C4	2.96	0.54
2:SA:310:G:C6	2:SA:311:C:C5	2.96	0.54
24:S3:464:HIS:CE1	24:S3:468:ILE:HG13	2.43	0.54
26:LA:910:A:C5	52:LO:13:HIS:NE2	2.76	0.54
2:SA:1143:G:C2	2:SA:1144:G:C5	2.96	0.54
2:SA:519:C:H2'	2:SA:520:A:C8	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2028:U:H2'	26:LA:2029:G:C8	2.43	0.54
26:LA:1658:C:OP1	38:LE:140:HIS:CE1	2.61	0.54
19:SC:11:LEU:HD22	19:SC:17:TRP:CD1	2.42	0.54
3:S1:54:U:H3'	3:S1:55:A:H5''	1.89	0.54
2:SA:696:A:C6	2:SA:697:U:O4	2.60	0.54
26:LA:242:G:H3'	42:L6:63:TYR:CD2	2.43	0.54
26:LA:1286:A:C5	26:LA:1329:U:C4	2.95	0.54
26:LA:1830:C:H2'	26:LA:1831:G:H8	1.73	0.54
2:SA:373:A:C6	2:SA:482:A:C4	2.96	0.54
26:LA:2796:U:C2'	26:LA:2798:U:H3	2.20	0.54
2:SA:56:U:H2'	2:SA:57:G:C8	2.43	0.54
26:LA:2570:G:C5	26:LA:2571:U:C5	2.95	0.54
26:LA:1689:A:C8	26:LA:1700:A:C6	2.95	0.54
26:LA:1851:U:C5	26:LA:1852:U:C5	2.96	0.54
26:LA:2513:A:C6	26:LA:2514:U:C4	2.96	0.54
2:SA:259:G:C6	2:SA:260:G:C5	2.96	0.54
11:SK:42:GLY:HA3	11:SK:76:TYR:CZ	2.43	0.54
20:SD:49:ASP:HA	20:SD:52:VAL:HG12	1.90	0.54
32:LY:33:GLY:H	32:LY:59:PHE:HA	1.73	0.54
26:LA:1638:C:C4	26:LA:1639:C:C5	2.96	0.54
26:LA:2214:C:C5	26:LA:2215:C:C4	2.96	0.54
26:LA:1550:C:H2'	26:LA:1551:A:H8	1.73	0.54
2:SA:693:G:C6	2:SA:694:A:C5	2.96	0.54
26:LA:1486:U:H2'	26:LA:1487:U:H6	1.72	0.54
20:SD:89:LEU:HD13	20:SD:199:ILE:HD11	1.90	0.54
2:SA:1312:G:C2	2:SA:1326:U:C4	2.96	0.54
26:LA:632:A:C2	26:LA:633:A:C4	2.96	0.54
26:LA:1570:A:H2'	26:LA:1571:A:H8	1.73	0.53
26:LA:1879:C:C6	26:LA:1880:U:C5	2.95	0.53
45:LG:43:ILE:HG22	45:LG:47:LYS:H	1.72	0.53
26:LA:1343:G:C4	26:LA:1344:U:C5	2.95	0.53
26:LA:1838:C:C5	26:LA:1899:A:N7	2.75	0.53
26:LA:2720:U:C2	26:LA:2872:A:C5	2.96	0.53
23:SR:70:THR:H	23:SR:73:HIS:CE1	2.25	0.53
7:SG:148:LYS:HB3	11:SK:60:PHE:CD2	2.43	0.53
26:LA:2544:G:C6	26:LA:2545:G:C5	2.95	0.53
26:LA:2864:G:C5	26:LA:2865:U:C4	2.96	0.53
26:LA:1965:C:HO2'	26:LA:1966:A:H2	1.55	0.53
26:LA:604:G:C6	26:LA:605:G:C5	2.96	0.53
2:SA:46:G:C6	2:SA:366:A:C2	2.96	0.53
26:LA:1355:G:C2	26:LA:1356:G:C5	2.97	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1535:C:C5	6:SU:50:SER:HA	2.42	0.53
26:LA:1000:A:H2'	26:LA:1001:A:C8	2.44	0.53
26:LA:657:U:H2'	26:LA:658:U:C6	2.43	0.53
26:LA:528:A:N7	26:LA:2042:A:C6	2.76	0.53
2:SA:88:U:C4	2:SA:89:U:C4	2.97	0.53
26:LA:1725:U:C5	26:LA:1726:C:H5	2.26	0.53
26:LA:639:U:H2'	26:LA:640:C:C6	2.43	0.53
26:LA:1725:U:C4	26:LA:1726:C:C5	2.97	0.53
26:LA:2839:G:C5	26:LA:2840:C:C5	2.96	0.53
26:LA:675:A:C5	26:LA:804:A:C2	2.96	0.53
2:SA:714:G:H2'	2:SA:715:A:C8	2.44	0.53
26:LA:1057:A:C6	26:LA:1086:A:C2	2.96	0.53
2:SA:822:U:C4	2:SA:823:C:C5	2.96	0.53
24:S3:583:HIS:CG	24:S3:584:ASP:N	2.77	0.53
24:S3:516:HIS:HE1	24:S3:579:PHE:CZ	2.26	0.53
2:SA:519:C:C4	2:SA:520:A:C6	2.96	0.53
26:LA:1057:A:C5	26:LA:1058:U:C5	2.97	0.53
2:SA:131:A:H2'	2:SA:132:C:C6	2.44	0.53
2:SA:1433:A:C4	2:SA:1468:A:C2	2.97	0.53
26:LA:2337:G:C6	26:LA:2338:C:C4	2.96	0.53
2:SA:210:C:C4'	2:SA:211:G:H21	2.22	0.53
26:LA:2214:C:C6	26:LA:2215:C:C5	2.97	0.53
2:SA:149:A:C2	2:SA:174:A:C2	2.97	0.53
26:LA:2024:G:C5	26:LA:2040:G:C2	2.97	0.53
2:SA:153:C:C4	2:SA:154:U:C4	2.97	0.53
26:LA:939:G:C6	26:LA:940:G:C5	2.97	0.53
2:SA:1255:G:C6	2:SA:1279:G:C8	2.97	0.53
26:LA:809:G:C6	26:LA:810:U:C4	2.97	0.53
2:SA:236:A:H2'	2:SA:237:G:C8	2.43	0.53
25:LB:97:C:H2'	25:LB:98:G:H5'	1.91	0.53
26:LA:199:A:C4	26:LA:2433:A:C2	2.97	0.53
2:SA:1501:C:C4	2:SA:1504:G:C5	2.97	0.53
27:LD:90:ILE:HG21	27:LD:102:TYR:CD2	2.44	0.53
2:SA:309:A:C2	2:SA:310:G:C5	2.96	0.53
26:LA:1166:G:C6	26:LA:1167:C:C4	2.96	0.53
55:LQ:56:LYS:HD3	55:LQ:56:LYS:H	1.73	0.53
26:LA:1821:A:C6	26:LA:1822:C:C4	2.97	0.53
24:S3:157:ILE:HA	24:S3:161:LEU:HD13	1.90	0.53
2:SA:476:U:H2'	2:SA:477:C:C6	2.44	0.53
2:SA:1501:C:C5	2:SA:1504:G:C4	2.97	0.53
46:LH:120:ILE:HD11	46:LH:143:VAL:HG21	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:96:C:H2'	26:LA:97:C:C6	2.43	0.53
26:LA:970:U:C2	26:LA:971:G:C8	2.97	0.53
4:S2:1:C:C6	4:S2:75:C:C5	2.97	0.53
26:LA:2097:A:C4	26:LA:2098:U:C5	2.96	0.53
26:LA:447:A:C4	26:LA:473:G:C8	2.96	0.53
26:LA:1879:C:C5	26:LA:1880:U:C4	2.96	0.53
26:LA:464:U:C4	26:LA:465:G:C5	2.97	0.53
2:SA:1508:A:C6	2:SA:1509:C:C4	2.97	0.53
26:LA:14:A:C5	26:LA:526:A:N1	2.77	0.53
55:LQ:35:ILE:H	55:LQ:53:THR:HG22	1.74	0.53
2:SA:1472:U:H2'	2:SA:1473:G:C8	2.43	0.53
26:LA:1048:A:C8	26:LA:1111:A:C6	2.97	0.53
26:LA:491:G:C6	26:LA:492:A:C5	2.97	0.53
10:SJ:100:ILE:HD13	10:SJ:100:ILE:H	1.74	0.52
26:LA:2495:G:C5	26:LA:2496:C:C5	2.97	0.52
26:LA:709:U:H2'	26:LA:710:U:C6	2.44	0.52
22:SF:8:PHE:CE1	22:SF:60:VAL:HG11	2.44	0.52
26:LA:961:C:H4'	26:LA:962:G:OP2	2.09	0.52
26:LA:2142:A:C8	26:LA:2143:C:C6	2.98	0.52
25:LB:102:G:C6	25:LB:103:U:C4	2.97	0.52
26:LA:819:A:C2	26:LA:820:A:C4	2.98	0.52
26:LA:1268:A:C2	26:LA:2013:A:C4	2.97	0.52
45:LG:116:LEU:HD23	45:LG:177:ARG:HG3	1.92	0.52
26:LA:2034:U:C5	26:LA:2035:G:N7	2.78	0.52
26:LA:2900:A:C5	26:LA:2901:C:C5	2.97	0.52
2:SA:113:G:C6	2:SA:114:U:C4	2.98	0.52
2:SA:1149:C:H2'	2:SA:1150:A:C8	2.44	0.52
26:LA:1467:U:C4	26:LA:1546:G:C2	2.98	0.52
26:LA:2588:G:C6	26:LA:2589:A:C5	2.98	0.52
26:LA:68:G:H2'	26:LA:69:C:H6	1.73	0.52
2:SA:1293:C:H2'	2:SA:1294:G:C8	2.44	0.52
26:LA:2051:A:C6	26:LA:2614:A:C5	2.98	0.52
26:LA:2051:A:C4	26:LA:2614:A:C6	2.97	0.52
2:SA:302:G:C6	2:SA:303:A:C5	2.97	0.52
26:LA:1247:A:C6	26:LA:1249:U:C4	2.97	0.52
26:LA:1910:G:C5	26:LA:1921:G:C2	2.97	0.52
26:LA:77:G:C5	26:LA:78:U:C4	2.97	0.52
3:S1:54:U:C1'	20:SD:103:ARG:HH11	2.22	0.52
26:LA:1821:A:H2'	26:LA:1822:C:C6	2.45	0.52
26:LA:2824:C:C4	26:LA:2825:G:C4	2.97	0.52
34:L0:21:LEU:C	34:L0:23:ARG:HA	2.29	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:105:G:C6	2:SA:106:C:C4	2.98	0.52
26:LA:1680:U:C4	26:LA:1681:G:C4	2.98	0.52
26:LA:415:A:C4	26:LA:416:U:C5	2.98	0.52
2:SA:260:G:H2'	2:SA:261:U:C6	2.45	0.52
26:LA:2358:A:H8	26:LA:2358:A:OP1	1.92	0.52
2:SA:269:C:H2'	2:SA:270:A:C8	2.44	0.52
40:L4:12:SER:HA	40:L4:48:TYR:HA	1.91	0.52
26:LA:1570:A:C2	26:LA:1571:A:C4	2.98	0.52
26:LA:45:G:C4'	26:LA:46:G:H5'	2.40	0.52
26:LA:1028:A:C2	26:LA:1029:A:C4	2.98	0.52
26:LA:1866:A:C6	26:LA:1876:A:C8	2.98	0.52
26:LA:870:U:C4	26:LA:871:U:C4	2.98	0.52
26:LA:2448:A:H3'	26:LA:2449:U:H2'	1.91	0.52
26:LA:646:U:C6	26:LA:647:G:C8	2.98	0.52
2:SA:1005:A:C6	2:SA:1006:G:H1'	2.45	0.52
26:LA:2414:G:C2	26:LA:2415:G:C8	2.98	0.52
26:LA:2014:A:C2	26:LA:2015:A:N1	2.78	0.52
26:LA:2709:G:C5	26:LA:2710:C:C5	2.98	0.52
26:LA:2027:G:C6	26:LA:2028:U:C4	2.98	0.52
26:LA:242:G:H3'	42:L6:63:TYR:CE2	2.45	0.52
2:SA:104:G:C2	2:SA:105:G:C8	2.98	0.52
50:LL:76:HIS:CE1	50:LL:85:LYS:HB2	2.44	0.52
2:SA:796:C:H4'	3:S1:30:U:H2'	1.92	0.52
26:LA:1998:A:C4	26:LA:1999:C:C5	2.98	0.52
24:S3:489:TYR:HB2	24:S3:568:TYR:CE1	2.45	0.52
26:LA:126:A:C5	41:L5:18:PHE:CE2	2.97	0.52
26:LA:401:A:C2	26:LA:402:A:C4	2.98	0.52
26:LA:319:G:C5	26:LA:320:A:C5	2.97	0.52
26:LA:1916:A:C5	26:LA:1917:U:C6	2.97	0.52
26:LA:1906:G:C8	26:LA:1929:G:C5	2.98	0.52
2:SA:81:A:C2	2:SA:89:U:O2	2.63	0.52
26:LA:2051:A:C5	26:LA:2614:A:C6	2.98	0.52
26:LA:2219:U:C4	26:LA:2220:U:C4	2.97	0.52
3:S1:24:A:H4'	6:SU:16:ARG:CZ	2.39	0.52
9:SI:51:LEU:HA	9:SI:54:VAL:HG22	1.92	0.52
50:LL:41:LYS:HZ3	50:LL:52:ASP:CG	2.14	0.52
2:SA:767:A:C2	2:SA:768:A:C4	2.98	0.52
26:LA:1787:A:C2	26:LA:1788:C:C6	2.98	0.52
4:S2:71:G:C5	4:S2:72:C:C5	2.98	0.52
2:SA:1144:G:N2	2:SA:1146:A:H62	2.07	0.52
26:LA:2766:A:C5	26:LA:2767:C:C5	2.98	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:LY:2:HIS:HB2	32:LY:3:LYS:HB3	1.92	0.52
24:S3:214:ALA:O	24:S3:218:HIS:HB2	2.10	0.52
11:SK:15:VAL:HG13	11:SK:17:ASP:H	1.74	0.52
26:LA:927:A:H2'	26:LA:928:A:C8	2.45	0.52
26:LA:2524:G:C6	26:LA:2525:G:C5	2.98	0.52
2:SA:803:G:C4	2:SA:804:U:C5	2.98	0.52
26:LA:1697:G:C6	26:LA:1698:A:C6	2.98	0.52
2:SA:1518:A:C2	2:SA:1519:A:C5	2.98	0.52
26:LA:2495:G:C4	26:LA:2496:C:C5	2.98	0.52
26:LA:464:U:C5	26:LA:465:G:C4	2.97	0.52
26:LA:2051:A:C5	26:LA:2614:A:C5	2.98	0.52
26:LA:2556:C:C4	26:LA:2557:G:C4	2.98	0.52
24:S3:642:LYS:HE2	24:S3:642:LYS:HA	1.92	0.52
2:SA:1163:A:C2	2:SA:1174:G:C2	2.97	0.52
26:LA:699:A:C6	26:LA:734:A:C8	2.98	0.52
26:LA:2499:C:C5	26:LA:2500:U:C4	2.98	0.52
26:LA:2158:A:O2'	26:LA:2159:G:H5'	2.10	0.52
26:LA:1410:G:C2	26:LA:1593:A:C4	2.98	0.52
2:SA:581:G:H1'	2:SA:761:G:H22	1.75	0.52
37:LC:43:ASP:O	37:LC:214:ILE:HA	2.10	0.52
26:LA:792:A:C6	26:LA:2440:C:C6	2.98	0.51
26:LA:2124:G:C4	26:LA:2125:G:H1'	2.45	0.51
26:LA:1467:U:C5	26:LA:1468:U:C4	2.99	0.51
2:SA:502:A:C6	2:SA:544:G:C6	2.98	0.51
26:LA:2731:G:C5	26:LA:2732:G:C6	2.98	0.51
22:SF:42:TRP:HE1	22:SF:106:LYS:HB2	1.75	0.51
26:LA:1364:G:C2	26:LA:1368:G:C5	2.98	0.51
26:LA:1936:A:C5	26:LA:1945:G:C2	2.99	0.51
39:L3:17:SER:OG	39:L3:18:HIS:CE1	2.63	0.51
26:LA:2277:G:C6	26:LA:2278:A:N7	2.78	0.51
2:SA:59:A:C4	2:SA:331:G:N2	2.78	0.51
26:LA:160:A:C8	26:LA:167:A:C2	2.98	0.51
2:SA:538:G:H2'	2:SA:539:A:C8	2.45	0.51
2:SA:754:C:C5'	15:SO:71:ARG:HH22	2.23	0.51
2:SA:1368:A:C5	2:SA:1369:C:C5	2.98	0.51
2:SA:192:A:C6	2:SA:193:C:C4	2.98	0.51
2:SA:872:A:C2	2:SA:874:G:C6	2.99	0.51
2:SA:785:G:C2	2:SA:786:G:C8	2.98	0.51
26:LA:255:A:C6	26:LA:256:A:C5	2.98	0.51
26:LA:2126:A:C2	26:LA:2173:A:C4	2.99	0.51
26:LA:188:G:C6	26:LA:189:G:C5	2.98	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1879:C:C5	26:LA:1880:U:C5	2.99	0.51
26:LA:2007:U:H4'	26:LA:2824:C:H4'	1.93	0.51
26:LA:288:U:C4	26:LA:289:G:N7	2.78	0.51
26:LA:2136:G:H2'	26:LA:2137:U:C6	2.44	0.51
2:SA:1476:A:C6	2:SA:1477:U:C4	2.98	0.51
51:LI:80:ILE:HG21	51:LI:94:ILE:HG12	1.92	0.51
2:SA:61:G:C5	2:SA:107:G:C2	2.97	0.51
26:LA:139:U:C6	26:LA:141:G:C8	2.98	0.51
26:LA:1891:G:C5	26:LA:1892:C:C5	2.98	0.51
26:LA:2100:G:C4	26:LA:2190:G:C2	2.98	0.51
26:LA:465:G:C2	26:LA:466:A:C6	2.99	0.51
26:LA:947:A:C2	26:LA:971:G:C2	2.98	0.51
2:SA:1442:G:H1	2:SA:1460:C:N4	2.07	0.51
25:LB:54:G:C5	25:LB:55:U:C5	2.99	0.51
26:LA:2328:A:H2'	26:LA:2329:U:C6	2.46	0.51
9:SI:20:ILE:HG22	9:SI:62:LEU:CD2	2.41	0.51
26:LA:1205:A:C6	44:LF:165:HIS:CE1	2.98	0.51
50:LL:3:THR:HG22	57:LS:60:TRP:HE1	1.76	0.51
2:SA:19:A:C2	2:SA:917:G:C6	2.98	0.51
26:LA:347:A:H2'	26:LA:348:A:C8	2.45	0.51
2:SA:372:C:H42	2:SA:389:A:H62	1.57	0.51
2:SA:59:A:C6	2:SA:354:G:C6	2.99	0.51
26:LA:2735:G:C6	26:LA:2736:A:C5	2.99	0.51
2:SA:32:A:C2	2:SA:553:A:C2	2.99	0.51
26:LA:92:U:C4	26:LA:93:G:C6	2.98	0.51
26:LA:2547:A:C2	26:LA:2562:U:C2	2.97	0.51
26:LA:1965:C:C6	26:LA:1965:C:OP1	2.63	0.51
26:LA:123:G:C5	26:LA:124:G:C5	2.99	0.51
26:LA:1897:G:C5	26:LA:1898:U:C4	2.99	0.51
6:SU:6:ARG:HA	6:SU:14:ALA:HB2	1.92	0.51
26:LA:969:G:C6	26:LA:970:U:C4	2.98	0.51
2:SA:1442:G:H1	2:SA:1460:C:H42	1.59	0.51
29:LV:72:GLN:HG2	29:LV:73:ARG:H	1.76	0.51
1:SS:80:ARG:NE	1:SS:80:ARG:H	2.09	0.51
24:S3:17:HIS:CD2	24:S3:122:SER:HA	2.46	0.51
16:SP:60:TRP:HA	16:SP:60:TRP:CE3	2.46	0.51
26:LA:847:U:C5	26:LA:848:C:C5	2.99	0.51
24:S3:10:ARG:HG3	24:S3:282:ILE:HA	1.92	0.51
2:SA:228:A:C2	2:SA:229:U:C2	2.99	0.51
26:LA:2248:C:C2'	26:LA:2249:U:H5'	2.40	0.51
26:LA:2868:A:C6	26:LA:2869:G:C6	2.99	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1274:A:C8	26:LA:1297:C:H1'	2.45	0.51
26:LA:1906:G:C6	26:LA:1907:G:N7	2.79	0.51
26:LA:1866:A:C2	26:LA:1876:A:C4	2.99	0.51
26:LA:1866:A:C4	26:LA:1876:A:C6	2.98	0.51
26:LA:809:G:C5	26:LA:810:U:C4	2.98	0.51
26:LA:26:G:C2	26:LA:27:G:N2	2.79	0.51
2:SA:967:C:C4	2:SA:968:A:C5	2.99	0.51
2:SA:718:A:C8	2:SA:719:C:C6	2.99	0.51
26:LA:28:A:C4	26:LA:29:U:C6	2.99	0.51
2:SA:174:A:C6	2:SA:175:C:C5	2.99	0.51
26:LA:2570:G:C5	26:LA:2571:U:C4	2.99	0.51
26:LA:1165:A:C2	26:LA:1185:G:C4	2.98	0.51
26:LA:1821:A:C5	26:LA:1822:C:C4	2.98	0.51
26:LA:1048:A:C5	26:LA:1049:C:C5	2.99	0.51
26:LA:157:C:H2'	26:LA:158:U:O4'	2.10	0.51
50:LL:28:LEU:HD23	50:LL:28:LEU:C	2.31	0.51
26:LA:863:A:C2	26:LA:864:G:C4	2.99	0.51
26:LA:1327:A:N6	26:LA:1328:A:C2	2.78	0.51
2:SA:1223:C:C5	2:SA:1224:U:C5	2.99	0.51
2:SA:1228:C:H2'	2:SA:1229:A:C8	2.45	0.51
26:LA:136:G:C5	26:LA:137:U:C5	2.98	0.51
26:LA:2100:G:C6	26:LA:2101:A:C4	2.99	0.51
26:LA:2100:G:C6	26:LA:2190:G:C4	2.98	0.51
26:LA:2113:U:O4	26:LA:2169:A:C5	2.64	0.51
26:LA:1190:G:C2	26:LA:1191:G:C5	2.99	0.51
26:LA:2796:U:H2'	26:LA:2798:U:H3	1.74	0.51
26:LA:68:G:N2	26:LA:74:A:C4	2.79	0.51
2:SA:966:G:C2	2:SA:967:C:C2	2.98	0.51
2:SA:332:G:C5	2:SA:333:U:C5	2.98	0.51
2:SA:242:G:C2	2:SA:245:U:C5	2.99	0.51
26:LA:463:G:C2	26:LA:467:G:C6	2.99	0.51
26:LA:1169:A:C6	26:LA:1170:C:C4	2.99	0.51
26:LA:959:A:C2	26:LA:960:A:C2	2.99	0.51
26:LA:959:A:C2	26:LA:960:A:N3	2.79	0.51
26:LA:778:G:C2	26:LA:787:C:C2	2.99	0.51
26:LA:2851:A:C4	26:LA:2852:G:C8	2.98	0.51
26:LA:2618:G:C6	26:LA:2619:C:C4	2.99	0.51
2:SA:219:U:H2'	2:SA:220:G:C8	2.46	0.51
26:LA:2080:A:H2'	26:LA:2081:U:C6	2.45	0.51
26:LA:1899:A:C2	26:LA:1903:G:C5	2.99	0.51
26:LA:2331:G:C5	26:LA:2332:C:C4	2.99	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1809:A:N7	26:LA:1810:A:C5	2.79	0.51
26:LA:1833:C:C4	26:LA:1834:U:C4	2.99	0.51
2:SA:670:G:C2	2:SA:671:G:C5	2.99	0.51
2:SA:950:U:H2'	2:SA:951:G:C8	2.46	0.51
26:LA:1077:A:H5''	49:LK:94:LYS:HD3	1.92	0.51
26:LA:980:A:N6	26:LA:981:A:C2	2.79	0.51
26:LA:2291:U:H2'	26:LA:2292:U:C6	2.46	0.50
2:SA:523:A:C6	12:SL:86:VAL:HG21	2.46	0.50
26:LA:2556:C:C5	26:LA:2557:G:C5	2.99	0.50
2:SA:926:G:C8	2:SA:1505:G:C2	2.98	0.50
26:LA:548:G:H4'	26:LA:549:G:H4'	1.94	0.50
7:SG:72:VAL:HG11	7:SG:144:ALA:HB2	1.92	0.50
26:LA:226:A:C6	26:LA:227:A:C6	3.00	0.50
26:LA:1867:G:H2'	26:LA:1868:C:C6	2.46	0.50
26:LA:131:A:H2'	26:LA:132:G:C8	2.46	0.50
2:SA:74:A:C2	2:SA:75:G:C4	2.98	0.50
2:SA:952:U:H2'	2:SA:953:G:C8	2.46	0.50
27:LD:65:ASP:CG	27:LD:101:ARG:HE	2.14	0.50
26:LA:2812:G:C6	26:LA:2813:A:C6	3.00	0.50
2:SA:782:A:C8	2:SA:783:C:C5	2.99	0.50
32:LY:37:VAL:HG13	32:LY:38:ARG:HG3	1.92	0.50
26:LA:2233:U:H2'	26:LA:2234:G:H8	1.76	0.50
26:LA:1684:G:H2'	26:LA:1685:C:C6	2.46	0.50
26:LA:2442:C:H2'	26:LA:2443:C:C6	2.46	0.50
26:LA:14:A:C6	26:LA:526:A:C2	3.00	0.50
26:LA:2705:A:C6	26:LA:2706:A:C5	2.99	0.50
24:S3:55:GLU:HG3	24:S3:61:THR:HA	1.93	0.50
26:LA:2064:C:H2'	26:LA:2065:C:C6	2.47	0.50
3:S1:45:G:H1'	21:SE:55:VAL:HG11	1.92	0.50
3:S1:23:C:H1'	3:S1:24:A:C5'	2.41	0.50
26:LA:2850:A:H2'	26:LA:2851:A:C8	2.46	0.50
56:LR:33:GLU:HG2	56:LR:34:GLY:H	1.76	0.50
26:LA:2453:A:H2'	26:LA:2454:G:C8	2.47	0.50
26:LA:1430:G:C4	26:LA:1431:A:C8	3.00	0.50
26:LA:1171:G:C2	26:LA:1179:G:C4	2.99	0.50
26:LA:2070:A:H2'	26:LA:2071:A:H8	1.76	0.50
2:SA:74:A:C2	2:SA:75:G:C5	2.99	0.50
26:LA:382:A:C6	26:LA:383:C:C5	3.00	0.50
44:LF:143:LEU:HD13	44:LF:146:VAL:HG11	1.93	0.50
2:SA:830:G:C6	2:SA:831:A:C5	3.00	0.50
26:LA:2230:G:C4	26:LA:2231:U:C5	3.00	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1014:A:H2'	2:SA:1015:G:C8	2.46	0.50
26:LA:687:C:C5	26:LA:688:U:C5	2.99	0.50
2:SA:215:C:C4	2:SA:216:U:C5	2.99	0.50
2:SA:1138:G:H2'	2:SA:1140:C:C6	2.46	0.50
26:LA:2209:G:C4	26:LA:2210:U:C5	2.99	0.50
2:SA:474:G:C6	2:SA:475:C:N3	2.80	0.50
3:S1:47:C:C2	20:SD:49:ASP:HB2	2.46	0.50
2:SA:113:G:H2'	2:SA:114:U:C6	2.47	0.50
26:LA:1540:G:C5	26:LA:1541:C:C5	3.00	0.50
42:L6:49:VAL:HG22	42:L6:50:SER:H	1.75	0.50
2:SA:722:G:C8	2:SA:724:G:H1'	2.47	0.50
24:S3:539:ILE:HD11	24:S3:549:ILE:HD11	1.93	0.50
45:LG:11:VAL:HG13	45:LG:15:LEU:HD13	1.94	0.50
26:LA:111:A:C2	26:LA:112:U:H1'	2.46	0.50
26:LA:1172:C:C4	26:LA:1173:U:C2	2.99	0.50
23:SR:70:THR:HG22	23:SR:73:HIS:CE1	2.46	0.50
26:LA:1247:A:C5	26:LA:1249:U:C4	3.00	0.50
2:SA:1083:U:C5	2:SA:1084:G:C5	3.00	0.50
2:SA:1288:A:C2	2:SA:1289:A:C4	3.00	0.50
27:LD:43:ASN:H	27:LD:49:THR:CG2	2.25	0.50
26:LA:1544:A:C6	26:LA:1545:A:C5	3.00	0.50
26:LA:2292:U:H2'	26:LA:2293:G:C8	2.47	0.50
2:SA:628:G:C6	2:SA:629:A:C6	3.00	0.50
26:LA:783:A:N6	26:LA:785:G:C5	2.79	0.50
26:LA:2824:C:C5	26:LA:2825:G:C4	3.00	0.50
26:LA:1159:U:H2'	26:LA:1160:G:H8	1.77	0.50
26:LA:2610:C:O2	26:LA:2610:C:H2'	2.11	0.50
26:LA:2119:A:C5	26:LA:2171:A:C2	2.99	0.50
2:SA:639:G:H2'	2:SA:640:A:C8	2.47	0.50
26:LA:533:G:C6	26:LA:561:G:C2	2.99	0.50
4:S2:21:U:H2'	4:S2:22:A:C5'	2.42	0.50
26:LA:1407:G:H2'	26:LA:1408:G:C8	2.46	0.50
26:LA:1573:G:C8	26:LA:1574:C:C5	2.99	0.50
26:LA:646:U:H6	26:LA:647:G:C8	2.29	0.50
26:LA:784:G:C2	26:LA:792:A:C6	3.00	0.50
26:LA:1786:A:C6	26:LA:1938:A:C2	2.99	0.50
26:LA:2041:U:H2'	26:LA:2042:A:C8	2.46	0.50
26:LA:2337:G:C5	26:LA:2338:C:C5	3.00	0.50
26:LA:1936:A:H8	26:LA:1961:C:H42	1.58	0.50
50:LL:15:TRP:CZ2	50:LL:53:TYR:CD2	2.99	0.50
2:SA:271:C:H3'	2:SA:272:C:H5''	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1395:A:H4'	26:LA:1397:U:C5	2.47	0.50
2:SA:934:C:C5	2:SA:1344:C:H3'	2.47	0.50
2:SA:942:G:C6	2:SA:943:U:C4	3.00	0.50
4:S2:72:C:C2	4:S2:73:A:C8	3.00	0.50
26:LA:1697:G:H4'	26:LA:1978:A:H5''	1.94	0.50
20:SD:94:GLU:CD	20:SD:103:ARG:HE	2.15	0.50
26:LA:2796:U:C4	26:LA:2798:U:C4	3.00	0.50
26:LA:415:A:C6	26:LA:416:U:C4	3.00	0.50
26:LA:1623:G:O6	26:LA:1624:U:C4	2.65	0.50
26:LA:1322:A:N3	26:LA:1322:A:H2'	2.27	0.50
2:SA:880:C:H2'	2:SA:881:G:H8	1.75	0.50
37:LC:113:VAL:HG22	37:LC:114:VAL:H	1.77	0.50
2:SA:777:A:C6	2:SA:778:G:C5	3.00	0.50
1:SS:32:THR:HG22	1:SS:51:HIS:H	1.77	0.49
26:LA:2186:G:C5	26:LA:2187:U:C5	3.00	0.49
2:SA:59:A:C5	2:SA:331:G:C2	3.00	0.49
2:SA:149:A:H2'	2:SA:150:U:C6	2.47	0.49
26:LA:2543:G:C2	26:LA:2544:G:C4	2.99	0.49
26:LA:1532:A:C2	26:LA:1540:G:C2	2.99	0.49
2:SA:792:A:C6	2:SA:794:A:C2	3.00	0.49
26:LA:975:A:C2	26:LA:990:A:C8	3.00	0.49
26:LA:920:A:C6	26:LA:921:C:C4	2.99	0.49
2:SA:765:G:N3	2:SA:812:G:C6	2.80	0.49
26:LA:1776:G:N2	26:LA:1789:A:H1'	2.26	0.49
26:LA:1830:C:H2'	26:LA:1831:G:C8	2.46	0.49
26:LA:640:C:H2'	26:LA:641:U:C5	2.48	0.49
26:LA:415:A:C5	26:LA:416:U:C5	3.00	0.49
26:LA:871:U:H4'	52:LO:68:PHE:CD1	2.46	0.49
26:LA:318:C:H2'	26:LA:319:G:H8	1.77	0.49
21:SE:73:VAL:HG21	21:SE:143:LEU:HD13	1.94	0.49
26:LA:452:G:C6	26:LA:453:A:C5	3.00	0.49
26:LA:1535:A:H3'	26:LA:1536:C:C6	2.47	0.49
26:LA:1441:G:C4	26:LA:1442:U:C5	3.00	0.49
26:LA:538:A:C6	26:LA:539:G:C5	3.00	0.49
48:LN:92:LEU:H	48:LN:92:LEU:HD23	1.77	0.49
30:LW:12:VAL:HA	30:LW:69:VAL:HG12	1.93	0.49
47:LJ:18:ALA:HB1	47:LJ:68:PHE:CG	2.47	0.49
26:LA:2271:G:N7	26:LA:2272:U:C2	2.80	0.49
26:LA:774:G:C5'	27:LD:47:ARG:HH22	2.23	0.49
26:LA:1274:A:C5	26:LA:1302:A:C2	3.01	0.49
26:LA:10:A:C2	26:LA:2799:A:H3'	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1159:U:H2'	26:LA:1160:G:C8	2.48	0.49
26:LA:536:G:C6	26:LA:537:G:C4	3.00	0.49
26:LA:557:C:H2'	26:LA:558:U:C6	2.47	0.49
24:S3:21:GLY:HA3	24:S3:141:ASN:HD22	1.77	0.49
58:LT:47:VAL:HG13	58:LT:49:ILE:H	1.75	0.49
26:LA:2884:U:O4	26:LA:2886:A:C4	2.65	0.49
26:LA:747:U:C5	26:LA:2613:U:C4	2.99	0.49
26:LA:85:G:C5	26:LA:98:G:C6	3.00	0.49
26:LA:460:A:C2	26:LA:470:A:C5	3.00	0.49
2:SA:474:G:C6	2:SA:475:C:C4	3.00	0.49
26:LA:1776:G:C4	26:LA:1777:U:C5	3.00	0.49
26:LA:160:A:C5	26:LA:167:A:C2	3.01	0.49
44:LF:119:ILE:HD12	44:LF:187:VAL:HA	1.94	0.49
2:SA:468:A:H3'	2:SA:469:C:C6	2.48	0.49
2:SA:286:C:H2'	2:SA:287:U:C6	2.48	0.49
4:S2:29:C:H2'	4:S2:30:G:C8	2.48	0.49
2:SA:391:G:C5	2:SA:392:C:C5	3.01	0.49
26:LA:952:G:C6	26:LA:953:G:C5	3.01	0.49
12:SL:36:VAL:HG22	12:SL:52:CYS:HB3	1.95	0.49
26:LA:1605:C:C5	26:LA:1606:C:C4	3.00	0.49
25:LB:5:U:O2'	25:LB:6:G:H5'	2.13	0.49
2:SA:1148:U:C5	2:SA:1149:C:C4	3.00	0.49
26:LA:1524:G:C6	26:LA:1525:A:C5	3.00	0.49
2:SA:1051:C:C2	2:SA:1052:U:C5	3.00	0.49
53:LP:21:PHE:CZ	53:LP:43:GLU:HB3	2.47	0.49
26:LA:186:G:C2	26:LA:211:C:C2	3.01	0.49
57:LS:98:ALA:HA	57:LS:105:PHE:HB2	1.93	0.49
26:LA:118:A:C8	26:LA:119:A:C8	3.01	0.49
26:LA:2254:C:H5	26:LA:2255:G:C4	2.30	0.49
2:SA:1309:G:C2	2:SA:1310:G:C4	3.01	0.49
43:L7:14:CYS:HG	43:L7:27:CYS:HG	1.60	0.49
26:LA:120:U:C5	26:LA:149:A:C2	3.00	0.49
2:SA:1527:U:C4	2:SA:1528:U:C4	3.01	0.49
26:LA:2841:C:H2'	26:LA:2842:G:C8	2.47	0.49
26:LA:491:G:C6	26:LA:492:A:C4	3.01	0.49
26:LA:126:A:C8	41:L5:18:PHE:CZ	3.00	0.49
26:LA:1893:C:C5	26:LA:1894:C:C5	3.00	0.49
26:LA:384:A:C5	26:LA:385:C:C5	3.01	0.49
10:SJ:53:ILE:HG21	10:SJ:63:ASP:HB3	1.94	0.49
2:SA:329:A:C5	2:SA:332:G:C6	3.01	0.49
26:LA:223:A:C6	26:LA:422:A:C5	3.01	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:371:A:H5'	26:LA:423:A:C2	2.48	0.49
26:LA:297:G:C2	26:LA:342:A:C2	3.01	0.49
26:LA:577:G:C2	26:LA:578:G:C5	3.00	0.49
25:LB:75:G:H21	31:LX:88:HIS:CE1	2.30	0.49
7:SG:159:ARG:O	7:SG:163:HIS:HB2	2.12	0.49
26:LA:2722:G:C6	26:LA:2723:C:C4	3.01	0.49
4:S2:2:G:C6	4:S2:73:A:C4	3.01	0.49
26:LA:2133:G:H3'	26:LA:2134:A:C4'	2.42	0.49
26:LA:622:G:C5	26:LA:623:C:C5	3.00	0.49
2:SA:27:G:C5	2:SA:557:G:N2	2.81	0.49
46:LH:51:PHE:HB2	46:LH:61:TRP:CD2	2.48	0.49
2:SA:402:G:C5	2:SA:403:C:C5	3.01	0.49
2:SA:1319:A:C2	2:SA:1323:G:H1'	2.48	0.49
26:LA:910:A:C4	52:LO:13:HIS:CE1	3.01	0.49
26:LA:2289:G:C6	26:LA:2290:G:C5	3.00	0.49
2:SA:1125:U:C5	2:SA:1127:G:C5	3.01	0.49
2:SA:540:G:C6	2:SA:541:G:C5	3.01	0.49
2:SA:148:G:C2	2:SA:149:A:C4	3.01	0.49
3:S1:47:C:C5	20:SD:49:ASP:O	2.66	0.49
26:LA:536:G:O6	26:LA:537:G:C4	2.66	0.49
4:S2:63:C:H2'	4:S2:64:G:C8	2.48	0.49
26:LA:1370:C:H2'	26:LA:1371:G:C8	2.48	0.49
9:SI:4:GLN:HE21	9:SI:4:GLN:HA	1.78	0.49
57:LS:46:TYR:CE1	57:LS:50:ARG:HD3	2.47	0.49
26:LA:738:G:N2	26:LA:759:G:C4	2.81	0.49
37:LC:44:VAL:HG21	37:LC:189:LEU:HD22	1.95	0.49
26:LA:300:A:P	30:LW:81:ARG:HH12	2.35	0.49
26:LA:2889:C:C4	26:LA:2890:G:C6	3.01	0.49
2:SA:907:A:C2	2:SA:908:A:C4	3.01	0.49
2:SA:1028:C:C5	2:SA:1029:U:C4	3.01	0.49
26:LA:1156:A:C8	57:LS:50:ARG:HB3	2.48	0.49
26:LA:2821:A:H5''	38:LE:115:GLY:HA3	1.94	0.49
26:LA:1445:G:C6	26:LA:1446:C:C4	3.01	0.49
26:LA:2686:G:C5	26:LA:2687:U:C4	3.01	0.49
26:LA:757:G:H2'	26:LA:758:C:H5'	1.94	0.49
2:SA:939:G:H2'	2:SA:940:C:C6	2.48	0.49
2:SA:582:C:C2	2:SA:760:G:N1	2.81	0.49
2:SA:1501:C:C4	2:SA:1504:G:C6	3.02	0.48
25:LB:39:A:H2'	25:LB:40:U:C6	2.48	0.48
26:LA:1444:G:H2'	26:LA:1445:G:C8	2.47	0.48
26:LA:2822:G:P	38:LE:117:GLY:H	2.36	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:64:A:H2'	26:LA:65:U:C6	2.48	0.48
20:SD:16:THR:HG23	20:SD:17:ASP:H	1.77	0.48
26:LA:2538:C:H2'	26:LA:2539:C:C6	2.48	0.48
26:LA:1186:G:C6	26:LA:1187:G:C4	3.00	0.48
26:LA:799:G:C6	26:LA:800:A:C6	3.01	0.48
26:LA:792:A:C6	26:LA:2440:C:C5	3.01	0.48
2:SA:59:A:C5	2:SA:354:G:C6	3.00	0.48
26:LA:2499:C:C5	26:LA:2500:U:C5	3.01	0.48
50:LL:15:TRP:CE2	50:LL:53:TYR:CD2	3.02	0.48
26:LA:1989:G:C8	26:LA:1990:C:C5	3.01	0.48
26:LA:2677:G:C2	26:LA:2678:C:C2	3.01	0.48
24:S3:545:PRO:HD3	24:S3:582:TYR:HB3	1.94	0.48
2:SA:399:G:C5	2:SA:400:C:C4	3.01	0.48
2:SA:373:A:C2	2:SA:482:A:C6	3.02	0.48
26:LA:529:A:C8	26:LA:2023:C:C4	3.01	0.48
26:LA:1862:G:C2	26:LA:1863:G:C5	3.01	0.48
26:LA:608:A:C6	26:LA:609:A:C6	3.01	0.48
26:LA:1570:A:C2	26:LA:1571:A:C5	3.02	0.48
26:LA:101:A:H1'	26:LA:102:U:H5'	1.94	0.48
26:LA:1924:C:C4	26:LA:1925:C:C4	3.01	0.48
26:LA:2488:G:C5	26:LA:2489:U:C5	3.02	0.48
26:LA:1906:G:C8	26:LA:1929:G:C6	3.01	0.48
26:LA:311:A:C6	26:LA:328:U:C4	3.01	0.48
26:LA:778:G:C6	26:LA:779:U:N3	2.81	0.48
13:SM:32:ILE:HD13	13:SM:62:PHE:CE1	2.48	0.48
26:LA:1281:G:C6	26:LA:1282:U:O4	2.66	0.48
2:SA:1270:G:C6	2:SA:1271:A:C5	3.02	0.48
26:LA:2318:G:C6	26:LA:2319:G:C6	3.01	0.48
34:L0:7:ARG:NH2	34:L0:56:LEU:H	2.11	0.48
2:SA:665:A:H2'	2:SA:732:C:O2	2.14	0.48
26:LA:1632:A:N7	26:LA:1633:G:C4	2.81	0.48
2:SA:898:G:N2	2:SA:902:G:C5	2.82	0.48
4:S2:75:C:C4	4:S2:76:C:N3	2.81	0.48
26:LA:124:G:C6	41:L5:19:ARG:NH1	2.81	0.48
26:LA:2293:G:C2	26:LA:2340:A:C2	3.01	0.48
57:LS:60:TRP:CH2	57:LS:93:ILE:HB	2.48	0.48
25:LB:30:C:H3'	25:LB:31:C:C6	2.48	0.48
26:LA:785:G:C4	26:LA:786:C:C5	3.02	0.48
26:LA:1899:A:C2	26:LA:1903:G:C6	3.02	0.48
26:LA:945:A:H1'	26:LA:2448:A:H2	1.78	0.48
26:LA:846:U:C2	26:LA:847:U:C5	3.02	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:623:C:C2	26:LA:624:C:C5	3.01	0.48
2:SA:978:A:C6	2:SA:1318:A:C5	3.02	0.48
21:SE:65:LYS:HA	21:SE:68:ARG:HE	1.79	0.48
44:LF:88:ARG:CB	44:LF:89:PRO:CD	2.92	0.48
2:SA:747:A:C5	2:SA:748:G:N7	2.81	0.48
26:LA:1589:U:H2'	26:LA:1590:A:C8	2.49	0.48
26:LA:410:G:H5''	26:LA:411:G:H5'	1.94	0.48
26:LA:1815:A:C5	26:LA:1817:G:C6	3.01	0.48
26:LA:2502:G:H3'	26:LA:2503:A:C5'	2.43	0.48
26:LA:1378:A:C2	26:LA:1380:G:C8	3.02	0.48
26:LA:85:G:O6	26:LA:86:G:C6	2.66	0.48
26:LA:2828:G:H2'	26:LA:2829:A:H8	1.78	0.48
26:LA:322:A:OP2	44:LF:163:ASN:HB2	2.13	0.48
25:LB:53:A:C2	25:LB:54:G:H1'	2.49	0.48
2:SA:78:A:O5'	2:SA:78:A:C8	2.66	0.48
26:LA:1177:G:C5	26:LA:1178:C:C2	3.01	0.48
26:LA:42:A:C2	26:LA:438:G:C2	3.02	0.48
18:SB:26:MET:SD	18:SB:188:THR:HA	2.54	0.48
26:LA:301:G:C6	26:LA:317:G:C5	3.02	0.48
26:LA:222:A:C6	26:LA:224:U:C2	3.02	0.48
4:S2:43:G:H2'	4:S2:44:A:C8	2.48	0.48
26:LA:948:C:H1'	26:LA:984:A:C6	2.48	0.48
26:LA:98:G:N7	26:LA:99:U:C5	2.81	0.48
26:LA:1927:A:N1	26:LA:1928:A:C2	2.82	0.48
2:SA:363:A:C5	2:SA:364:A:C5	3.02	0.48
26:LA:2134:A:C6	26:LA:2135:A:C5	3.02	0.48
2:SA:232:G:C5	2:SA:233:C:C5	3.02	0.48
2:SA:754:C:H5'	15:SO:71:ARG:HH22	1.79	0.48
2:SA:1014:A:C6	2:SA:1015:G:C6	3.01	0.48
2:SA:469:C:C4	2:SA:470:C:C4	3.01	0.48
24:S3:11:ASN:HD21	24:S3:381:ILE:CD1	2.27	0.48
26:LA:2820:A:C5	53:LP:4:ARG:HD3	2.49	0.48
20:SD:64:TYR:CE2	20:SD:93:LEU:HB3	2.49	0.48
26:LA:2661:G:H2'	26:LA:2662:A:C8	2.49	0.48
2:SA:989:U:H2'	2:SA:990:C:C6	2.49	0.48
26:LA:2450:A:C5	26:LA:2451:A:C2	3.02	0.48
57:LS:60:TRP:CZ2	57:LS:93:ILE:HD13	2.48	0.48
26:LA:2101:A:H2'	26:LA:2102:G:C8	2.49	0.48
2:SA:255:G:C6	2:SA:256:U:C4	3.02	0.48
26:LA:2795:C:C2	26:LA:2802:G:C2	3.01	0.48
2:SA:89:U:H3'	2:SA:89:U:C6	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:754:C:P	15:SO:71:ARG:HH12	2.36	0.48
9:SI:20:ILE:HG22	9:SI:62:LEU:HG	1.96	0.48
11:SK:78:ILE:CD1	11:SK:81:LEU:HD21	2.44	0.48
31:LX:2:PHE:HB2	31:LX:61:LEU:CD1	2.44	0.48
25:LB:21:G:C5	25:LB:22:U:C5	3.01	0.48
26:LA:917:A:C6	26:LA:918:A:C5	3.02	0.48
26:LA:856:G:H2'	26:LA:857:G:C8	2.49	0.48
26:LA:763:G:N3	26:LA:765:C:C2	2.82	0.48
26:LA:2107:G:C6	26:LA:2108:A:C6	3.02	0.48
26:LA:764:A:C2	26:LA:781:A:C2	3.02	0.48
26:LA:142:A:C6	26:LA:143:C:C4	3.02	0.48
26:LA:1505:A:H2'	26:LA:1506:U:H6	1.79	0.48
2:SA:1058:G:C5	2:SA:1059:C:C5	3.01	0.48
25:LB:42:C:C5	25:LB:43:C:C6	3.02	0.48
2:SA:1283:U:H2'	2:SA:1284:C:C6	2.48	0.48
2:SA:652:U:C5	2:SA:752:G:C4	3.02	0.48
26:LA:2391:G:N2	26:LA:2424:C:C2	2.81	0.48
26:LA:408:G:C2	26:LA:409:G:C4	3.01	0.48
26:LA:1494:A:C6	26:LA:1495:A:C5	3.01	0.48
2:SA:1218:C:H2'	2:SA:1219:A:C8	2.48	0.48
26:LA:782:A:H5'	26:LA:783:A:C2	2.49	0.48
26:LA:492:A:C6	26:LA:493:G:C4	3.01	0.48
3:S1:30:U:H4'	3:S1:31:U:OP2	2.13	0.48
26:LA:1787:A:C2	26:LA:1788:C:C2	3.02	0.48
26:LA:577:G:N1	26:LA:578:G:C6	2.81	0.48
26:LA:756:A:C2	26:LA:757:G:C4	3.02	0.48
2:SA:414:A:C5	2:SA:431:A:C2	3.02	0.48
2:SA:887:G:H2'	2:SA:888:G:H5'	1.96	0.48
26:LA:2373:G:C2	26:LA:2381:A:C2	3.01	0.48
26:LA:103:A:C5	26:LA:104:A:C8	3.01	0.48
2:SA:1382:C:H2'	2:SA:1383:C:C6	2.49	0.48
26:LA:2055:C:H5''	26:LA:2056:G:H5'	1.96	0.48
26:LA:1676:A:H2'	26:LA:1677:A:H4'	1.94	0.48
25:LB:110:C:C4	25:LB:111:U:C4	3.02	0.48
26:LA:1422:G:C2	26:LA:1423:G:C4	3.02	0.48
26:LA:1965:C:C6	26:LA:1966:A:H3'	2.49	0.47
26:LA:1770:G:C6	26:LA:1983:G:C5	3.02	0.47
26:LA:2290:G:C4	26:LA:2291:U:C5	3.01	0.47
26:LA:1654:A:H4'	38:LE:118:PHE:CE2	2.48	0.47
26:LA:2544:G:H2'	26:LA:2545:G:O4'	2.14	0.47
26:LA:2899:A:H2'	26:LA:2900:A:C8	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2119:A:C6	26:LA:2171:A:C6	3.02	0.47
26:LA:2271:G:C8	26:LA:2272:U:C2	3.02	0.47
26:LA:2060:A:OP1	44:LF:64:GLY:HA2	2.14	0.47
18:SB:100:LEU:CD2	18:SB:175:ALA:HA	2.44	0.47
26:LA:838:C:H2'	26:LA:839:U:C6	2.49	0.47
51:LI:119:ASN:HB3	51:LI:131:SER:H	1.79	0.47
4:S2:38:A:C2	4:S2:39:A:C4	3.02	0.47
39:L3:37:HIS:CD2	39:L3:43:THR:HG22	2.48	0.47
24:S3:184:LEU:HD21	24:S3:217:TRP:HB3	1.95	0.47
2:SA:312:C:H2'	2:SA:313:A:C8	2.49	0.47
26:LA:190:A:C5	26:LA:207:A:C2	3.02	0.47
32:LY:45:HIS:CE1	32:LY:49:ASN:CB	2.97	0.47
2:SA:778:G:C2	2:SA:779:C:C2	3.02	0.47
26:LA:2465:C:H2'	26:LA:2466:C:H6	1.78	0.47
37:LC:11:ILE:CG2	37:LC:220:ALA:HB2	2.45	0.47
20:SD:167:PRO:HG2	20:SD:170:LEU:HG	1.96	0.47
26:LA:1668:A:C5	26:LA:1674:G:C6	3.01	0.47
25:LB:18:G:C2	25:LB:67:G:C6	3.02	0.47
2:SA:679:C:C2	2:SA:680:C:C5	3.01	0.47
2:SA:771:G:C5	2:SA:772:U:C4	3.02	0.47
26:LA:1900:A:C8	26:LA:1970:A:H2'	2.49	0.47
2:SA:404:G:C6	2:SA:405:U:C4	3.02	0.47
10:SJ:100:ILE:H	10:SJ:100:ILE:CD1	2.27	0.47
26:LA:1139:G:C6	26:LA:1140:C:C5	3.01	0.47
26:LA:2413:G:C6	26:LA:2414:G:C5	3.03	0.47
26:LA:54:G:H2'	26:LA:55:G:O4'	2.15	0.47
26:LA:1343:G:H2'	26:LA:1343:G:N3	2.30	0.47
26:LA:6:A:H2'	26:LA:7:G:C8	2.49	0.47
26:LA:2704:C:C5	26:LA:2705:A:N7	2.82	0.47
26:LA:1441:G:C6	26:LA:1442:U:C4	3.02	0.47
26:LA:1675:C:H1'	26:LA:1676:A:N6	2.28	0.47
26:LA:168:G:C6	26:LA:169:G:C5	3.03	0.47
26:LA:197:A:C5	26:LA:198:C:C6	3.02	0.47
54:LM:21:CYS:SG	54:LM:39:ILE:HG23	2.53	0.47
26:LA:866:A:C6	26:LA:914:G:C8	3.03	0.47
26:LA:2663:G:C6	26:LA:2664:G:C5	3.02	0.47
26:LA:1216:G:C2	26:LA:1234:U:O2	2.66	0.47
26:LA:877:A:H3'	26:LA:878:A:C8	2.49	0.47
26:LA:2816:G:O4'	39:L3:40:HIS:CE1	2.67	0.47
2:SA:765:G:O4'	2:SA:812:G:C2	2.68	0.47
26:LA:1783:A:H2	26:LA:2587:A:N7	2.11	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:642:A:C4	2:SA:643:C:C6	3.03	0.47
23:SR:70:THR:N	23:SR:73:HIS:CE1	2.82	0.47
2:SA:872:A:C6	2:SA:874:G:C4	3.02	0.47
26:LA:2119:A:C2	26:LA:2170:A:C5	3.02	0.47
25:LB:109:A:C2	25:LB:110:C:N3	2.82	0.47
17:SQ:14:ASP:HA	17:SQ:20:ILE:HD12	1.96	0.47
2:SA:118:U:C4	2:SA:288:A:C2	3.02	0.47
26:LA:643:A:N7	26:LA:644:A:C5	2.82	0.47
26:LA:265:A:C8	26:LA:428:A:C6	3.03	0.47
26:LA:2064:C:H1'	26:LA:2450:A:C6	2.49	0.47
26:LA:2488:G:C6	26:LA:2489:U:C4	3.02	0.47
2:SA:46:G:C5	2:SA:366:A:H2	2.32	0.47
26:LA:662:G:H5''	48:LN:16:GLY:HA2	1.96	0.47
2:SA:521:G:N1	2:SA:522:C:C4	2.83	0.47
26:LA:2544:G:C2	26:LA:2545:G:C4	3.02	0.47
2:SA:153:C:C5	2:SA:154:U:C4	3.02	0.47
2:SA:153:C:C5	2:SA:154:U:C5	3.02	0.47
26:LA:14:A:C6	26:LA:526:A:N1	2.82	0.47
26:LA:952:G:C6	26:LA:966:G:C6	3.02	0.47
26:LA:757:G:H2'	26:LA:758:C:C5'	2.44	0.47
26:LA:1495:A:C6	26:LA:1496:A:C5	3.02	0.47
26:LA:1677:A:H2'	26:LA:1678:A:C5	2.49	0.47
2:SA:1063:C:H3'	2:SA:1064:G:C8	2.49	0.47
26:LA:1091:G:H1'	43:L7:12:ARG:HE	1.80	0.47
26:LA:2761:A:C6	26:LA:2762:C:C5	3.02	0.47
26:LA:1305:C:C4	26:LA:1306:C:C5	3.03	0.47
12:SL:93:ARG:HB2	12:SL:94:TYR:CE1	2.49	0.47
26:LA:1723:G:H3'	26:LA:1724:G:H8	1.80	0.47
26:LA:1965:C:N3	26:LA:1966:A:H2'	2.29	0.47
26:LA:2815:C:O2	39:L3:40:HIS:HE1	1.97	0.47
26:LA:1024:G:C6	26:LA:1025:G:C6	3.03	0.47
26:LA:2519:U:O4	26:LA:2542:A:C4	2.68	0.47
2:SA:621:A:C6	2:SA:622:A:C5	3.02	0.47
26:LA:2630:G:C4	26:LA:2894:G:C6	3.02	0.47
2:SA:59:A:C5	2:SA:354:G:C5	3.02	0.47
2:SA:152:A:C8	2:SA:153:C:C5	3.03	0.47
26:LA:1456:G:C5	26:LA:1457:U:C4	3.02	0.47
26:LA:2283:C:C2	26:LA:2389:G:C2	3.03	0.47
2:SA:713:G:C8	2:SA:713:G:H3'	2.50	0.47
24:S3:119:GLN:OE1	24:S3:121:GLN:HB3	2.14	0.47
26:LA:541:A:C2	26:LA:553:G:C2	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1439:G:C2	2:SA:1463:U:O2	2.67	0.47
2:SA:53:A:C2	2:SA:54:C:H1'	2.50	0.47
2:SA:1108:G:H2'	2:SA:1109:C:C6	2.50	0.47
26:LA:900:A:N6	26:LA:901:C:C4	2.82	0.47
2:SA:769:G:C5	2:SA:770:C:C5	3.03	0.47
26:LA:1850:G:N7	26:LA:1851:U:C4	2.82	0.47
30:LW:85:ARG:HE	30:LW:86:PHE:N	2.10	0.47
2:SA:892:A:C4	2:SA:907:A:C5	3.03	0.47
2:SA:907:A:C6	2:SA:908:A:C6	3.03	0.47
26:LA:604:G:O6	26:LA:605:G:C6	2.67	0.47
4:S2:19:G:C5	4:S2:58:A:C2	3.03	0.47
26:LA:2121:G:C5	26:LA:2122:U:C5	3.02	0.47
26:LA:2823:A:OP2	38:LE:118:PHE:CD2	2.68	0.47
26:LA:675:A:H2'	26:LA:676:A:C8	2.49	0.47
2:SA:126:G:C2	2:SA:236:A:C2	3.03	0.47
26:LA:969:G:C5	26:LA:970:U:C5	3.03	0.47
26:LA:2142:A:C8	26:LA:2143:C:C5	3.03	0.47
26:LA:1469:A:H2'	26:LA:1470:A:C8	2.50	0.47
26:LA:126:A:C8	41:L5:18:PHE:CE1	3.03	0.47
2:SA:241:G:C2	2:SA:242:G:C5	3.03	0.47
26:LA:2453:A:C2	26:LA:2454:G:C5	3.03	0.47
26:LA:1361:G:C6	26:LA:1371:G:C2	3.03	0.47
2:SA:886:G:C6	2:SA:887:G:C4	3.03	0.47
38:LE:186:LEU:HD21	56:LR:3:ILE:HG21	1.96	0.47
26:LA:831:G:C5	26:LA:832:U:C5	3.02	0.47
26:LA:1036:G:C6	26:LA:1120:G:C6	3.02	0.47
26:LA:2092:U:H4'	26:LA:2093:G:H5'	1.96	0.47
26:LA:2282:G:H3'	40:L4:2:LYS:HZ3	1.79	0.47
26:LA:524:G:H2'	26:LA:525:U:H6	1.80	0.47
20:SD:101:VAL:HG23	20:SD:113:ALA:HB1	1.97	0.47
13:SM:115:ILE:HG23	13:SM:117:LYS:H	1.78	0.47
14:SN:30:ILE:HD12	14:SN:30:ILE:HA	1.86	0.47
26:LA:2123:G:C2	26:LA:2176:A:H1'	2.50	0.47
26:LA:1208:C:C2	26:LA:1239:G:C2	3.03	0.47
26:LA:2510:C:C4	26:LA:2511:U:C4	3.02	0.47
2:SA:858:G:O6	2:SA:869:G:C8	2.68	0.47
26:LA:324:A:C6	26:LA:325:G:C4	3.03	0.47
26:LA:45:G:H5'	26:LA:46:G:C5'	2.44	0.47
26:LA:10:A:C4	26:LA:2799:A:C8	3.03	0.47
26:LA:1107:G:H4'	47:LJ:78:PRO:HA	1.96	0.47
26:LA:2903:U:C3'	26:LA:2904:U:H5''	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1789:A:H2'	26:LA:1790:C:C6	2.50	0.47
26:LA:1952:A:C5	26:LA:1953:A:N1	2.82	0.47
3:S1:54:U:H3'	3:S1:55:A:C5'	2.44	0.47
26:LA:1419:A:N6	26:LA:1494:A:H62	2.13	0.47
2:SA:507:C:C2	2:SA:508:U:H5	2.33	0.47
26:LA:1620:G:C5	26:LA:1621:U:C5	3.03	0.47
26:LA:1530:G:C2	26:LA:1542:U:O2	2.67	0.47
26:LA:1628:G:C5	26:LA:1629:U:C4	3.02	0.47
25:LB:47:C:C5	25:LB:48:U:C5	3.03	0.47
26:LA:1040:A:C2	26:LA:1116:G:C2	3.03	0.47
18:SB:59:ILE:HD12	18:SB:183:PHE:CZ	2.49	0.47
26:LA:715:A:H2'	26:LA:716:A:O4'	2.14	0.47
26:LA:1906:G:N1	26:LA:1907:G:C5	2.83	0.47
25:LB:6:G:H1	25:LB:114:C:H42	1.62	0.47
26:LA:846:U:C2	26:LA:847:U:C6	3.03	0.47
21:SE:73:VAL:CG2	21:SE:143:LEU:HD13	2.45	0.47
26:LA:2536:G:C6	26:LA:2537:U:C4	3.03	0.47
26:LA:857:G:C6	26:LA:858:G:C6	3.03	0.47
26:LA:406:G:C2	26:LA:407:G:C4	3.03	0.47
2:SA:1382:C:H2'	2:SA:1383:C:H6	1.80	0.47
48:LN:48:ARG:H	48:LN:48:ARG:HD3	1.80	0.47
26:LA:1270:C:H5''	26:LA:1271:G:H5'	1.96	0.47
2:SA:1449:C:C2	2:SA:1455:G:C2	3.03	0.47
29:LV:12:ARG:HE	29:LV:35:ALA:HB2	1.80	0.47
26:LA:1331:G:C6	26:LA:1333:G:C5	3.02	0.47
26:LA:123:G:N1	26:LA:124:G:C4	2.83	0.47
2:SA:363:A:C4	12:SL:26:CYS:SG	3.07	0.47
26:LA:2336:A:H3'	26:LA:2337:G:H8	1.81	0.47
26:LA:244:A:C2	26:LA:255:A:C4	3.03	0.47
2:SA:777:A:C6	2:SA:778:G:C4	3.03	0.47
2:SA:556:C:H2'	2:SA:557:G:O4'	2.15	0.47
2:SA:313:A:C5	2:SA:314:C:C5	3.03	0.47
2:SA:1063:C:C4	2:SA:1064:G:C5	3.03	0.47
26:LA:1433:A:H2'	26:LA:1434:A:H1'	1.97	0.47
26:LA:2314:A:C6	26:LA:2315:G:C5	3.03	0.47
26:LA:2239:G:C6	26:LA:2240:U:C5	3.03	0.47
2:SA:253:A:N6	2:SA:254:G:C6	2.83	0.47
26:LA:593:U:H2'	26:LA:594:U:C6	2.49	0.47
26:LA:2540:C:C4	26:LA:2541:A:C5	3.03	0.47
26:LA:627:A:C4	26:LA:637:A:C5	3.03	0.46
23:SR:70:THR:HG22	23:SR:73:HIS:HE1	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2838:G:C6	26:LA:2839:G:C5	3.03	0.46
26:LA:1247:A:C4	26:LA:1249:U:C5	3.02	0.46
26:LA:868:U:C4	26:LA:869:G:N7	2.84	0.46
9:SI:20:ILE:HG22	9:SI:62:LEU:CG	2.45	0.46
2:SA:1012:A:N6	2:SA:1013:G:C6	2.83	0.46
2:SA:1288:A:H2'	2:SA:1289:A:C8	2.50	0.46
26:LA:765:C:C4	26:LA:766:U:C5	3.03	0.46
56:LR:30:TRP:CE2	56:LR:32:VAL:HA	2.49	0.46
26:LA:875:G:C5	26:LA:876:C:C4	3.04	0.46
26:LA:1916:A:C6	26:LA:1917:U:C6	3.03	0.46
26:LA:684:G:N1	26:LA:774:G:C2	2.83	0.46
2:SA:18:C:H2'	2:SA:19:A:O4'	2.15	0.46
26:LA:346:A:N1	26:LA:347:A:C5	2.83	0.46
26:LA:2133:G:OP1	26:LA:2134:A:H1'	2.15	0.46
2:SA:1142:G:C5	2:SA:1143:G:H1'	2.50	0.46
26:LA:2071:A:C2	26:LA:2072:C:C2	3.03	0.46
26:LA:2024:G:C6	26:LA:2025:C:C4	3.03	0.46
26:LA:639:U:C4	26:LA:640:C:N4	2.83	0.46
26:LA:2007:U:H2'	26:LA:2008:C:C6	2.50	0.46
26:LA:2824:C:C4	26:LA:2825:G:C5	3.03	0.46
2:SA:158:G:C4	2:SA:159:G:C8	3.02	0.46
2:SA:374:A:C5	2:SA:375:U:C5	3.03	0.46
2:SA:382:A:H2'	2:SA:383:A:C8	2.49	0.46
3:S1:59:A:C2	20:SD:24:VAL:HA	2.50	0.46
26:LA:2665:A:H2'	26:LA:2666:C:H5'	1.98	0.46
26:LA:2273:A:C2	26:LA:2274:A:C5	3.03	0.46
2:SA:76:G:C6	2:SA:77:A:C4	3.04	0.46
26:LA:1268:A:N1	26:LA:2013:A:C8	2.84	0.46
26:LA:1179:G:C6	26:LA:1180:U:C4	3.03	0.46
2:SA:715:A:H2'	2:SA:716:A:C8	2.50	0.46
26:LA:569:U:O4	26:LA:570:G:C5	2.68	0.46
2:SA:537:G:C2	2:SA:538:G:C5	3.04	0.46
26:LA:974:G:C4	26:LA:1186:G:C2	3.03	0.46
26:LA:1036:G:C2	26:LA:1120:G:C4	3.03	0.46
26:LA:2835:A:C6	26:LA:2879:A:C4	3.03	0.46
26:LA:316:C:H6	26:LA:316:C:O5'	1.98	0.46
2:SA:1077:G:N2	2:SA:1081:A:C4	2.83	0.46
26:LA:1383:A:C8	26:LA:1384:A:C4	3.03	0.46
2:SA:1157:A:C4	2:SA:1181:G:C6	3.03	0.46
26:LA:432:A:C5	26:LA:433:C:C5	3.04	0.46
26:LA:1635:A:C6	26:LA:1636:U:C2	3.04	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1827:U:P	27:LD:220:ARG:HH21	2.37	0.46
2:SA:842:U:C2	2:SA:846:G:C2	3.04	0.46
26:LA:1284:A:H2'	26:LA:1285:A:C8	2.50	0.46
2:SA:1147:C:H2'	2:SA:1148:U:C6	2.51	0.46
26:LA:2571:U:C4	26:LA:2574:G:C8	3.03	0.46
26:LA:945:A:H1'	26:LA:2448:A:C2	2.49	0.46
2:SA:538:G:H2'	2:SA:539:A:H8	1.80	0.46
26:LA:384:A:C6	26:LA:385:C:C4	3.03	0.46
2:SA:1422:G:N2	2:SA:1423:G:C4	2.83	0.46
26:LA:38:A:C2	26:LA:442:G:C2	3.04	0.46
24:S3:114:ALA:HA	24:S3:153:VAL:HG21	1.97	0.46
26:LA:217:A:H2'	26:LA:218:A:C8	2.51	0.46
26:LA:1599:U:C4	26:LA:1600:C:C4	3.04	0.46
3:S1:52:U:H3'	3:S1:53:G:H5''	1.98	0.46
26:LA:2803:G:C5	26:LA:2804:U:C5	3.03	0.46
24:S3:647:GLU:HG2	24:S3:648:VAL:N	2.30	0.46
26:LA:1204:A:N1	26:LA:1241:A:C2	2.83	0.46
26:LA:819:A:N1	26:LA:820:A:C4	2.83	0.46
26:LA:311:A:C5	26:LA:328:U:C4	3.03	0.46
2:SA:1133:G:N2	2:SA:1142:G:C4	2.83	0.46
26:LA:1467:U:C4	26:LA:1468:U:C4	3.04	0.46
26:LA:374:A:C2	26:LA:401:A:C2	3.04	0.46
26:LA:2171:A:O2'	26:LA:2172:U:C5	2.62	0.46
26:LA:422:A:C6	26:LA:423:A:C6	3.04	0.46
26:LA:1369:G:C5	26:LA:1370:C:C5	3.03	0.46
26:LA:1676:A:N6	26:LA:1677:A:C2	2.83	0.46
2:SA:790:A:O3'	2:SA:791:G:H4'	2.15	0.46
52:LO:96:ILE:HD12	52:LO:96:ILE:C	2.36	0.46
4:S2:48:U:H3'	4:S2:48:U:H6	1.80	0.46
26:LA:1082:U:H2'	26:LA:1083:U:H5'	1.96	0.46
2:SA:1513:A:C5	2:SA:1523:G:O6	2.69	0.46
2:SA:885:G:C2	2:SA:913:A:N1	2.84	0.46
2:SA:1130:A:H5'	9:SI:19:PHE:CD1	2.50	0.46
14:SN:31:SER:OG	14:SN:44:VAL:HG11	2.15	0.46
26:LA:1688:U:N3	26:LA:1698:A:C2	2.84	0.46
2:SA:704:A:C5	2:SA:705:G:C8	3.03	0.46
26:LA:964:C:O2'	26:LA:2273:A:H1'	2.15	0.46
26:LA:954:G:C6	26:LA:955:U:N3	2.84	0.46
26:LA:1429:G:H1'	26:LA:1568:G:H1'	1.97	0.46
26:LA:2789:C:C2	26:LA:2893:A:C8	3.03	0.46
26:LA:2889:C:H2'	26:LA:2890:G:C8	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:507:C:C2	2:SA:508:U:C5	3.04	0.46
2:SA:253:A:C6	2:SA:254:G:C5	3.04	0.46
24:S3:104:VAL:HG21	24:S3:321:PHE:CG	2.51	0.46
26:LA:930:G:H2'	26:LA:933:A:C2	2.50	0.46
26:LA:2323:G:C8	26:LA:2324:U:C5	3.04	0.46
26:LA:2333:A:C2	26:LA:2335:A:C6	3.04	0.46
2:SA:66:A:H4'	2:SA:173:U:C5	2.51	0.46
2:SA:584:G:C2	2:SA:585:G:C4	3.03	0.46
37:LC:67:HIS:CD2	37:LC:184:LYS:HG2	2.50	0.46
2:SA:993:G:C2	2:SA:1046:A:C2	3.04	0.46
26:LA:2592:G:C5	26:LA:2593:U:C5	3.04	0.46
26:LA:1826:G:C6	26:LA:1827:U:C4	3.04	0.46
26:LA:2235:G:C6	26:LA:2236:U:C5	3.04	0.46
2:SA:1254:A:C2	2:SA:1255:G:C4	3.04	0.46
26:LA:1681:G:C4	26:LA:1762:A:C8	3.04	0.46
2:SA:580:C:C5	2:SA:581:G:C5	3.03	0.46
26:LA:1157:G:N3	26:LA:1158:C:C6	2.84	0.46
26:LA:503:A:C6	26:LA:506:G:C6	3.04	0.46
26:LA:2178:C:O2	26:LA:2179:C:C5	2.69	0.46
26:LA:1966:A:H1'	26:LA:2593:U:H5'	1.97	0.46
26:LA:2868:A:C6	26:LA:2869:G:C5	3.04	0.46
26:LA:2080:A:C2	26:LA:2241:A:C2	3.04	0.46
26:LA:2394:C:H5	26:LA:2395:C:C4	2.34	0.46
2:SA:714:G:C6	2:SA:715:A:C6	3.04	0.46
26:LA:1815:A:C6	26:LA:1817:G:O6	2.68	0.46
26:LA:2373:G:C6	26:LA:2374:C:C4	3.03	0.46
26:LA:836:G:C8	26:LA:837:C:C5	3.04	0.46
26:LA:1483:G:C6	26:LA:1484:U:C4	3.04	0.46
26:LA:399:U:O4	26:LA:400:G:C6	2.69	0.46
26:LA:879:G:C6	26:LA:880:G:C4	3.03	0.46
26:LA:910:A:N7	52:LO:13:HIS:CD2	2.84	0.46
2:SA:763:G:C4	2:SA:764:C:C5	3.03	0.46
37:LC:34:ALA:HB1	37:LC:178:VAL:HG11	1.97	0.46
25:LB:33:G:C6	25:LB:34:A:C5	3.04	0.46
26:LA:2513:A:C5	26:LA:2574:G:C6	3.04	0.46
26:LA:2042:A:H4'	26:LA:2043:C:OP1	2.16	0.46
26:LA:2499:C:C4	26:LA:2500:U:C4	3.04	0.46
26:LA:301:G:C6	26:LA:317:G:C6	3.04	0.46
26:LA:1900:A:N7	26:LA:1970:A:C4	2.83	0.46
26:LA:822:G:C4	26:LA:823:C:C5	3.03	0.46
2:SA:13:U:C4	2:SA:916:U:O4	2.68	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:250:A:H1'	2:SA:252:U:C2	2.51	0.46
26:LA:2150:C:H4'	37:LC:3:LYS:HA	1.98	0.46
26:LA:2077:A:C8	26:LA:2435:A:C4	3.03	0.46
2:SA:866:C:H2'	2:SA:867:G:O4'	2.16	0.46
26:LA:1501:G:C2	26:LA:1502:A:C8	3.04	0.46
26:LA:1854:A:N6	26:LA:1888:G:C8	2.84	0.46
26:LA:1966:A:H1'	26:LA:2593:U:C5'	2.46	0.46
24:S3:362:ILE:H	24:S3:362:ILE:CD1	2.25	0.46
2:SA:255:G:C5	2:SA:256:U:C4	3.04	0.46
26:LA:2702:G:C5	26:LA:2703:C:C4	3.03	0.46
2:SA:621:A:C6	2:SA:622:A:C6	3.04	0.46
2:SA:97:G:C6	2:SA:98:A:H1'	2.50	0.46
26:LA:2903:U:H3'	26:LA:2904:U:C5'	2.45	0.46
26:LA:2352:A:N1	32:LY:30:VAL:HG11	2.31	0.46
26:LA:23:G:H2'	26:LA:24:G:C8	2.51	0.46
26:LA:1588:G:C5	26:LA:1589:U:C5	3.04	0.46
2:SA:1350:A:C2	2:SA:1351:U:C2	3.04	0.46
26:LA:828:U:H2'	26:LA:829:A:C8	2.51	0.46
2:SA:1431:A:C2	2:SA:1432:G:N2	2.84	0.46
19:SC:25:THR:HA	19:SC:28:PHE:HB2	1.98	0.46
24:S3:612:LEU:HD13	24:S3:686:TYR:HB3	1.97	0.46
35:L1:46:MET:O	35:L1:50:VAL:HG22	2.15	0.46
26:LA:1301:A:N3	26:LA:1301:A:H2'	2.31	0.46
36:L2:6:HIS:CD2	45:LG:62:GLN:HG3	2.51	0.46
26:LA:545:U:C5	26:LA:550:C:C2	3.03	0.45
26:LA:2468:A:C2	26:LA:2481:G:N3	2.84	0.45
26:LA:98:G:N7	26:LA:99:U:C6	2.84	0.45
26:LA:1924:C:C6	26:LA:1925:C:C5	3.03	0.45
26:LA:572:A:N6	26:LA:2033:A:C6	2.85	0.45
26:LA:1392:A:C5	29:LV:19:LYS:HD2	2.52	0.45
26:LA:2766:A:C6	26:LA:2767:C:C5	3.04	0.45
2:SA:131:A:H2'	2:SA:132:C:H6	1.82	0.45
2:SA:477:C:H2'	2:SA:478:A:C8	2.50	0.45
22:SF:8:PHE:HB2	22:SF:86:ARG:O	2.16	0.45
26:LA:452:G:C5	26:LA:453:A:N7	2.84	0.45
26:LA:2123:G:N1	26:LA:2176:A:H1'	2.31	0.45
35:L1:19:HIS:CD2	35:L1:19:HIS:N	2.83	0.45
26:LA:1727:C:C4	26:LA:1728:C:C4	3.03	0.45
24:S3:297:ILE:HB	24:S3:404:ILE:HG23	1.98	0.45
2:SA:615:G:C6	2:SA:616:G:C5	3.04	0.45
38:LE:106:LYS:HB2	38:LE:206:ALA:HB2	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:LF:84:THR:HG23	44:LF:85:PHE:CG	2.50	0.45
26:LA:716:A:H2'	26:LA:717:C:H5'	1.98	0.45
2:SA:1004:A:C2	2:SA:1026:G:N3	2.84	0.45
26:LA:2644:G:N2	26:LA:2733:A:H62	2.13	0.45
26:LA:785:G:C2	26:LA:786:C:C2	3.04	0.45
26:LA:2711:A:C4	26:LA:2714:G:H1'	2.51	0.45
2:SA:55:A:C5	2:SA:56:U:C6	3.04	0.45
26:LA:2543:G:C2	26:LA:2765:A:N7	2.84	0.45
26:LA:1057:A:H2'	26:LA:1057:A:N3	2.31	0.45
26:LA:415:A:C5	26:LA:416:U:C4	3.04	0.45
2:SA:1227:A:O2'	2:SA:1228:C:C6	2.69	0.45
45:LG:11:VAL:CG1	45:LG:15:LEU:HD13	2.46	0.45
2:SA:1322:C:H4'	2:SA:1323:G:OP1	2.17	0.45
26:LA:1494:A:C6	26:LA:1495:A:C6	3.04	0.45
26:LA:2640:G:C2	26:LA:2641:G:C8	3.04	0.45
2:SA:798:U:C4	2:SA:799:G:N7	2.85	0.45
2:SA:9:G:C2	2:SA:26:A:C2	3.04	0.45
26:LA:1855:U:H2'	26:LA:1856:U:C6	2.51	0.45
26:LA:852:U:C4	26:LA:853:C:C4	3.04	0.45
4:S2:77:A:H1'	26:LA:2432:A:N3	2.31	0.45
26:LA:2016:U:C5	26:LA:2017:U:C4	3.03	0.45
26:LA:89:A:C6	26:LA:90:U:O4	2.69	0.45
55:LQ:6:ALA:HB1	55:LQ:10:ARG:HH12	1.81	0.45
26:LA:1791:A:C8	26:LA:1792:G:C8	3.05	0.45
2:SA:725:G:C2	2:SA:726:C:C6	3.04	0.45
26:LA:2869:G:C6	26:LA:2870:C:C4	3.04	0.45
12:SL:97:VAL:CG2	12:SL:100:ALA:HB3	2.46	0.45
2:SA:717:U:H4'	11:SK:118:ASN:HD22	1.81	0.45
2:SA:151:A:C2	2:SA:152:A:H1'	2.51	0.45
26:LA:1169:A:C5	26:LA:1170:C:C4	3.05	0.45
2:SA:934:C:C4	2:SA:1345:U:C5	3.04	0.45
26:LA:539:G:C6	26:LA:540:C:C4	3.04	0.45
26:LA:822:G:C6	26:LA:823:C:C4	3.04	0.45
26:LA:2150:C:C5	26:LA:2151:U:C4	3.04	0.45
26:LA:2194:U:C2	26:LA:2195:U:C6	3.04	0.45
2:SA:602:A:C5	2:SA:603:U:C4	3.05	0.45
26:LA:360:U:H2'	26:LA:361:G:O4'	2.17	0.45
2:SA:1261:A:C5	2:SA:1262:C:C5	3.04	0.45
47:LJ:27:ALA:HB3	47:LJ:80:LEU:HD22	1.97	0.45
2:SA:1379:G:C6	2:SA:1380:U:C4	3.05	0.45
26:LA:201:C:C4	26:LA:202:U:C5	3.04	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1022:A:C5	2:SA:1023:U:C5	3.05	0.45
2:SA:949:A:C2	2:SA:1233:G:C2	3.05	0.45
26:LA:2162:G:H2'	26:LA:2163:A:H5'	1.97	0.45
26:LA:584:C:H2'	26:LA:585:G:C8	2.52	0.45
26:LA:28:A:C4	26:LA:29:U:C5	3.04	0.45
2:SA:550:G:C5	2:SA:551:U:C5	3.05	0.45
32:LY:30:VAL:HG22	32:LY:61:LYS:O	2.17	0.45
26:LA:2523:G:N3	26:LA:2765:A:C2	2.85	0.45
26:LA:1048:A:C5	26:LA:1111:A:C4	3.04	0.45
2:SA:1476:A:C5	2:SA:1477:U:C5	3.04	0.45
26:LA:2705:A:C6	26:LA:2706:A:C6	3.05	0.45
2:SA:1344:C:C2'	2:SA:1345:U:OP1	2.64	0.45
26:LA:2886:A:C6	26:LA:2887:A:C5	3.04	0.45
26:LA:2886:A:C4	26:LA:2887:A:C8	3.04	0.45
26:LA:2107:G:N1	26:LA:2108:A:C6	2.84	0.45
26:LA:2239:G:O6	26:LA:2240:U:C4	2.70	0.45
26:LA:2461:A:C2	26:LA:2462:C:C2	3.05	0.45
24:S3:695:GLN:NE2	24:S3:695:GLN:H	2.14	0.45
26:LA:1557:C:H2'	26:LA:1558:C:C5	2.52	0.45
25:LB:35:C:H2'	25:LB:36:C:C6	2.51	0.45
2:SA:164:G:H3'	2:SA:165:G:H8	1.81	0.45
26:LA:1839:G:C6	26:LA:1927:A:C5	3.04	0.45
26:LA:465:G:C2	26:LA:466:A:N1	2.85	0.45
26:LA:1680:U:C5	26:LA:1681:G:C5	3.04	0.45
26:LA:871:U:H4'	52:LO:68:PHE:CE1	2.52	0.45
26:LA:1532:A:N3	26:LA:1540:G:C2	2.84	0.45
26:LA:149:A:C2	26:LA:150:U:C2	3.04	0.45
2:SA:109:A:C5	2:SA:326:G:C5	3.04	0.45
26:LA:253:C:N4	26:LA:254:G:C5	2.85	0.45
25:LB:9:G:C2	25:LB:112:G:C5	3.04	0.45
26:LA:1262:A:C2	26:LA:1263:U:C2	3.04	0.45
2:SA:128:G:H2'	2:SA:129:A:C8	2.52	0.45
26:LA:513:A:C6	26:LA:514:A:C5	3.04	0.45
2:SA:1153:G:C2	2:SA:1154:G:H1'	2.52	0.45
26:LA:2394:C:H2'	26:LA:2395:C:C6	2.51	0.45
2:SA:175:C:C2	2:SA:176:C:C6	3.05	0.45
2:SA:298:A:H2'	2:SA:299:G:O4'	2.16	0.45
26:LA:1899:A:C2	26:LA:1902:C:N4	2.84	0.45
2:SA:1442:G:C6	2:SA:1443:C:C4	3.04	0.45
2:SA:1083:U:C5	2:SA:1084:G:C6	3.05	0.45
25:LB:75:G:H2'	25:LB:76:G:C8	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:63:A:H2'	26:LA:64:A:C8	2.51	0.45
26:LA:2663:G:H2'	26:LA:2664:G:H8	1.82	0.45
2:SA:118:U:H2'	2:SA:119:A:H5''	1.98	0.45
26:LA:1436:G:C6	26:LA:1437:C:C4	3.05	0.45
8:SH:85:TYR:N	8:SH:85:TYR:CD1	2.83	0.45
2:SA:1175:G:O6	2:SA:1176:A:C5	2.70	0.45
2:SA:570:G:C6	2:SA:873:A:N1	2.85	0.45
46:LH:152:ARG:HB3	46:LH:153:PRO:HD2	1.98	0.45
26:LA:1042:G:C6	26:LA:1043:C:C2	3.05	0.45
2:SA:1134:G:H2'	2:SA:1135:U:H5'	1.98	0.45
4:S2:4:G:C2	4:S2:5:G:C4	3.05	0.45
2:SA:781:A:C6	2:SA:802:A:N3	2.84	0.45
2:SA:1148:U:C4	2:SA:1149:C:C2	3.05	0.45
26:LA:661:A:C6	26:LA:662:G:C5	3.05	0.45
32:LY:40:ARG:NH1	32:LY:56:HIS:CE1	2.84	0.45
20:SD:64:TYR:CZ	20:SD:93:LEU:HB3	2.51	0.45
2:SA:992:U:H1'	2:SA:993:G:C2	2.51	0.45
2:SA:1267:C:H41	2:SA:1327:C:C1'	2.30	0.45
19:SC:27:GLU:H	19:SC:27:GLU:CD	2.20	0.45
26:LA:1374:G:C6	26:LA:1375:U:C4	3.05	0.45
26:LA:1206:G:C6	26:LA:1207:C:C4	3.04	0.45
2:SA:101:A:C6	2:SA:102:G:C5	3.04	0.45
3:S1:57:C:H42	20:SD:160:LEU:CD2	2.30	0.45
26:LA:875:G:C6	26:LA:876:C:C4	3.04	0.45
26:LA:910:A:C8	52:LO:13:HIS:CG	3.05	0.45
26:LA:1770:G:C2	26:LA:1983:G:C4	3.05	0.45
26:LA:1022:G:C5	26:LA:1140:C:C4	3.05	0.45
26:LA:362:A:C8	26:LA:362:A:H5''	2.51	0.45
26:LA:2040:G:C5	26:LA:2041:U:C4	3.04	0.45
26:LA:7:G:H2'	26:LA:8:C:C6	2.52	0.45
2:SA:272:C:H4'	2:SA:272:C:OP1	2.17	0.45
57:LS:50:ARG:HH11	57:LS:50:ARG:N	2.15	0.45
26:LA:2372:U:H3	26:LA:2381:A:H61	1.64	0.45
26:LA:2194:U:C2	26:LA:2195:U:C5	3.05	0.45
26:LA:2399:G:C4	26:LA:2418:A:C2	3.05	0.45
2:SA:1244:G:H2'	2:SA:1245:C:C6	2.52	0.45
26:LA:1930:G:HO2'	26:LA:1931:U:H6	1.63	0.45
26:LA:1307:A:C6	26:LA:1308:A:C5	3.05	0.45
2:SA:1213:A:C5	2:SA:1215:G:C4	3.05	0.45
26:LA:721:A:C5	26:LA:722:A:N7	2.85	0.45
21:SE:94:PHE:O	21:SE:124:ALA:HB3	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:LL:38:GLY:O	50:LL:40:HIS:N	2.50	0.45
26:LA:954:G:C6	26:LA:955:U:C4	3.05	0.45
26:LA:2236:U:C4	26:LA:2237:G:C5	3.05	0.45
26:LA:1028:A:C2	26:LA:1029:A:C6	3.05	0.45
2:SA:363:A:C6	2:SA:364:A:C6	3.05	0.45
2:SA:541:G:C6	2:SA:542:G:C5	3.04	0.45
26:LA:2513:A:C6	26:LA:2574:G:C6	3.05	0.45
2:SA:1255:G:C6	2:SA:1279:G:N7	2.85	0.45
26:LA:1165:A:H2'	26:LA:1166:G:C8	2.52	0.45
38:LE:115:GLY:O	53:LP:3:HIS:CE1	2.70	0.45
26:LA:1186:G:C6	26:LA:1187:G:C5	3.05	0.45
26:LA:1713:A:H1'	26:LA:1715:G:H4'	1.99	0.45
26:LA:2020:A:C6	26:LA:2022:U:C2	3.04	0.45
2:SA:293:G:C6	2:SA:294:U:C4	3.05	0.45
26:LA:2834:G:H21	26:LA:2883:A:H62	1.64	0.45
18:SB:70:GLY:CA	18:SB:163:ILE:HG22	2.47	0.45
26:LA:2090:A:C6	26:LA:2091:C:C4	3.05	0.45
26:LA:2657:A:C5	26:LA:2665:A:C2	3.05	0.45
32:LY:49:ASN:HD21	32:LY:81:ILE:N	2.15	0.45
26:LA:716:A:H2'	26:LA:717:C:C5'	2.47	0.45
26:LA:1107:G:C5	26:LA:1108:U:C4	3.04	0.45
18:SB:37:VAL:HG12	18:SB:38:HIS:N	2.30	0.45
26:LA:2702:G:C6	26:LA:2703:C:C4	3.05	0.45
2:SA:64:G:C8	2:SA:99:C:C5	3.05	0.45
26:LA:2589:A:C2	26:LA:2606:C:N4	2.84	0.45
26:LA:1761:C:C2	26:LA:1762:A:C2	3.05	0.45
2:SA:767:A:C6	2:SA:768:A:C5	3.05	0.45
51:LI:117:LEU:HD23	51:LI:131:SER:HB3	1.99	0.45
26:LA:1115:G:C2	26:LA:1116:G:C4	3.05	0.45
52:LO:14:LYS:HA	52:LO:14:LYS:HE2	1.98	0.45
21:SE:19:ARG:HB3	21:SE:32:PHE:CE2	2.52	0.45
2:SA:201:G:C6	2:SA:202:G:C4	3.05	0.45
32:LY:18:LYS:O	32:LY:19:ARG:HB2	2.16	0.45
26:LA:1318:U:H2'	26:LA:1319:C:C6	2.52	0.45
1:SS:65:MET:HA	1:SS:73:PHE:CZ	2.52	0.45
26:LA:2625:G:H2'	26:LA:2626:C:C6	2.52	0.45
2:SA:610:U:O2	2:SA:611:C:C5	2.70	0.44
2:SA:1313:U:C5	2:SA:1314:C:C5	3.04	0.44
26:LA:2412:A:C6	26:LA:2413:G:C4	3.05	0.44
2:SA:620:C:C2	2:SA:621:A:C8	3.05	0.44
26:LA:2631:G:N1	26:LA:2632:A:C5	2.85	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2040:G:H2'	26:LA:2041:U:C6	2.52	0.44
26:LA:2170:A:H2'	26:LA:2171:A:H5'	1.99	0.44
26:LA:2819:G:C6	26:LA:2821:A:C2	3.04	0.44
38:LE:115:GLY:O	53:LP:3:HIS:HE1	2.00	0.44
2:SA:721:G:C5	2:SA:733:G:C2	3.05	0.44
19:SC:178:ARG:HH21	19:SC:207:LEU:HG	1.82	0.44
2:SA:1416:G:C2	2:SA:1485:U:O2	2.70	0.44
26:LA:1218:G:C6	26:LA:1219:U:C4	3.05	0.44
25:LB:69:G:C5	25:LB:70:C:C6	3.04	0.44
2:SA:509:A:H3'	20:SD:46:ARG:HH21	1.82	0.44
26:LA:973:A:C4	26:LA:1188:U:O4	2.70	0.44
26:LA:2657:A:C4	26:LA:2665:A:C6	3.05	0.44
26:LA:792:A:H1'	26:LA:793:A:H2	1.80	0.44
26:LA:1776:G:C2	26:LA:1777:U:C4	3.05	0.44
26:LA:1283:G:N2	26:LA:1286:A:C8	2.86	0.44
26:LA:1842:G:C4	26:LA:1901:A:C2	3.06	0.44
2:SA:232:G:C5	2:SA:233:C:C6	3.06	0.44
26:LA:2332:C:H1'	26:LA:2336:A:N7	2.32	0.44
26:LA:1532:A:N1	26:LA:1533:C:C2	2.85	0.44
2:SA:1288:A:C2	2:SA:1289:A:C5	3.06	0.44
26:LA:2077:A:C4	26:LA:2435:A:C8	3.05	0.44
26:LA:812:C:H1'	26:LA:1250:G:C2	2.52	0.44
26:LA:2653:U:H5	26:LA:2654:A:HO2'	1.62	0.44
26:LA:1744:A:H2'	26:LA:1745:A:O4'	2.17	0.44
1:SS:64:GLU:HA	36:L2:37:CYS:SG	2.57	0.44
2:SA:1256:A:H4'	2:SA:1258:G:C8	2.52	0.44
26:LA:873:C:N3	26:LA:905:A:C2	2.85	0.44
1:SS:89:LYS:HD3	2:SA:958:A:OP2	2.17	0.44
26:LA:684:G:H5''	41:L5:16:HIS:HE1	1.82	0.44
2:SA:1125:U:C2	10:SJ:42:LEU:HD21	2.53	0.44
26:LA:796:C:H2'	26:LA:797:G:H8	1.82	0.44
26:LA:2415:G:C4	26:LA:2416:C:C6	3.05	0.44
26:LA:2796:U:C2	26:LA:2798:U:N3	2.85	0.44
26:LA:2331:G:H4'	32:LY:40:ARG:H	1.82	0.44
26:LA:1367:A:H2'	26:LA:1368:G:H5'	2.00	0.44
26:LA:2849:U:H4'	26:LA:2850:A:H5'	1.98	0.44
26:LA:1532:A:C2	26:LA:1533:C:C2	3.05	0.44
26:LA:1445:G:C5	26:LA:1446:C:C5	3.06	0.44
26:LA:1628:G:C6	26:LA:1629:U:C4	3.06	0.44
2:SA:947:G:H2'	2:SA:948:C:O4'	2.17	0.44
26:LA:253:C:C4	26:LA:254:G:C5	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1436:G:C6	26:LA:1437:C:C5	3.05	0.44
2:SA:262:A:H2'	2:SA:263:A:C8	2.53	0.44
26:LA:2037:A:H2'	26:LA:2038:G:C8	2.53	0.44
26:LA:649:G:C6	26:LA:650:C:N3	2.85	0.44
2:SA:1434:A:C6	2:SA:1435:G:C6	3.06	0.44
25:LB:2:G:C6	25:LB:3:C:C4	3.05	0.44
24:S3:344:SER:HB3	24:S3:361:ARG:HE	1.83	0.44
26:LA:2603:G:C5	26:LA:2604:U:C6	3.05	0.44
21:SE:123:LEU:HD13	21:SE:124:ALA:N	2.23	0.44
26:LA:2437:G:C4	26:LA:2438:U:C5	3.06	0.44
26:LA:1277:G:C5	26:LA:1278:C:C5	3.06	0.44
26:LA:1955:U:C5	26:LA:2552:U:H1'	2.52	0.44
2:SA:359:G:C6	2:SA:360:G:C4	3.06	0.44
26:LA:2829:A:C4	26:LA:2830:C:C6	3.06	0.44
25:LB:30:C:H1'	25:LB:57:A:H61	1.82	0.44
2:SA:260:G:C2	2:SA:261:U:C4	3.06	0.44
26:LA:1057:A:C4	26:LA:1058:U:C5	3.05	0.44
26:LA:1166:G:C5	26:LA:1167:C:C5	3.05	0.44
26:LA:1469:A:C2	26:LA:1470:A:C4	3.05	0.44
26:LA:61:C:C2	26:LA:94:A:C2	3.06	0.44
16:SP:21:VAL:HG21	16:SP:60:TRP:CD1	2.52	0.44
1:SS:33:TRP:CE2	2:SA:1014:A:C5	3.06	0.44
26:LA:559:G:H2'	26:LA:560:C:C6	2.53	0.44
2:SA:880:C:H2'	2:SA:881:G:C8	2.52	0.44
2:SA:881:G:C6	2:SA:882:C:C4	3.06	0.44
26:LA:756:A:C6	26:LA:757:G:C5	3.06	0.44
26:LA:222:A:C5	26:LA:224:U:C2	3.06	0.44
26:LA:2370:G:H2'	26:LA:2371:G:C8	2.52	0.44
26:LA:2092:U:H4'	26:LA:2093:G:C5'	2.47	0.44
26:LA:432:A:C6	26:LA:433:C:C4	3.06	0.44
20:SD:187:ARG:HE	20:SD:187:ARG:HA	1.83	0.44
37:LC:226:GLN:CD	37:LC:226:GLN:H	2.19	0.44
2:SA:265:G:C8	2:SA:267:C:C5	3.05	0.44
55:LQ:64:TYR:CG	55:LQ:65:THR:N	2.85	0.44
26:LA:1087:G:C5	26:LA:1089:A:C4	3.05	0.44
2:SA:1374:A:H2'	2:SA:1375:A:C8	2.52	0.44
2:SA:658:C:H2'	2:SA:659:U:C6	2.53	0.44
26:LA:2052:A:C4	26:LA:2053:G:C8	3.05	0.44
26:LA:495:G:C4	26:LA:496:G:C8	3.06	0.44
26:LA:2138:G:C6	26:LA:2154:A:N6	2.85	0.44
26:LA:2700:A:C2	26:LA:2708:G:C2	3.05	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2591:C:H2'	26:LA:2592:G:H8	1.82	0.44
10:SJ:6:ILE:HG23	10:SJ:8:ILE:H	1.83	0.44
26:LA:2121:G:C5	26:LA:2122:U:C4	3.05	0.44
26:LA:1910:G:C6	26:LA:1911:U:N3	2.85	0.44
2:SA:131:A:C2	2:SA:232:G:C4	3.06	0.44
26:LA:991:C:H1'	26:LA:1185:G:C2	2.53	0.44
26:LA:2588:G:C2	26:LA:2589:A:C8	3.06	0.44
2:SA:579:A:C2	2:SA:580:C:C2	3.05	0.44
2:SA:216:U:H1'	2:SA:465:A:C6	2.52	0.44
26:LA:974:G:C6	26:LA:1186:G:C5	3.06	0.44
26:LA:1069:A:C5	26:LA:1073:A:C2	3.05	0.44
26:LA:1805:A:C2	26:LA:1806:C:C2	3.05	0.44
19:SC:46:LEU:O	19:SC:46:LEU:HD12	2.18	0.44
18:SB:20:ARG:HB2	18:SB:22:TRP:CZ3	2.52	0.44
26:LA:477:A:C2	26:LA:478:A:C4	3.06	0.44
22:SF:90:MET:SD	23:SR:22:TYR:CE1	3.11	0.44
57:LS:63:ARG:HH21	57:LS:96:ASP:CG	2.21	0.44
18:SB:48:MET:O	18:SB:51:GLU:HB3	2.17	0.44
2:SA:931:C:H2'	2:SA:932:C:C6	2.53	0.44
26:LA:2343:U:H2'	26:LA:2344:U:C6	2.53	0.44
7:SG:158:LEU:HG	7:SG:158:LEU:O	2.16	0.44
20:SD:36:ALA:HB3	20:SD:41:GLY:HA2	2.00	0.44
2:SA:683:G:C5	2:SA:684:U:C5	3.06	0.44
26:LA:1414:C:C4	26:LA:1415:U:C5	3.06	0.44
2:SA:138:G:C5	2:SA:226:G:C2	3.06	0.44
19:SC:68:HIS:HB2	19:SC:103:ALA:HB3	1.99	0.44
26:LA:1513:U:H2'	26:LA:1514:G:C8	2.53	0.44
2:SA:1381:U:H1'	7:SG:152:HIS:NE2	2.33	0.44
2:SA:1371:G:C5	2:SA:1372:U:C5	3.05	0.44
2:SA:573:A:C5	2:SA:574:A:N1	2.85	0.44
2:SA:767:A:H2'	2:SA:768:A:O4'	2.18	0.44
2:SA:934:C:C5	2:SA:1345:U:C5	3.06	0.44
2:SA:27:G:C4	2:SA:557:G:N2	2.85	0.44
26:LA:855:G:O6	26:LA:856:G:C6	2.71	0.44
2:SA:1181:G:C2	2:SA:1182:G:C2	3.06	0.44
26:LA:851:C:H2'	26:LA:852:U:C6	2.53	0.44
26:LA:2038:G:C6	26:LA:2039:U:C4	3.06	0.44
2:SA:1236:A:H4'	2:SA:1304:G:H4'	1.99	0.44
38:LE:124:ARG:HD3	38:LE:162:ALA:O	2.16	0.44
30:LW:95:PHE:CZ	30:LW:102:ILE:HB	2.53	0.44
26:LA:743:A:H2'	26:LA:744:U:C6	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:3:U:C4	26:LA:4:U:C4	3.05	0.44
37:LC:96:GLY:O	37:LC:100:LEU:HD23	2.18	0.44
26:LA:85:G:C6	26:LA:98:G:O6	2.71	0.44
26:LA:2339:C:H2'	26:LA:2340:A:H8	1.82	0.44
26:LA:72:U:O4	26:LA:112:U:H4'	2.17	0.44
26:LA:2122:U:C4	37:LC:133:PRO:HG3	2.52	0.44
26:LA:1910:G:C4	26:LA:1921:G:C2	3.06	0.44
26:LA:572:A:C5	26:LA:573:U:C5	3.06	0.44
39:L3:53:VAL:HG11	53:LP:98:LEU:HG	1.99	0.44
2:SA:6:G:H2'	2:SA:298:A:H5'	2.00	0.44
26:LA:2040:G:C2	26:LA:2041:U:C2	3.05	0.44
26:LA:1057:A:C6	26:LA:1058:U:C4	3.06	0.44
26:LA:61:C:C4	26:LA:62:U:C4	3.05	0.44
26:LA:622:G:C6	26:LA:623:C:C4	3.05	0.44
26:LA:1444:G:C6	26:LA:1445:G:C6	3.06	0.44
26:LA:197:A:C4	26:LA:198:C:C6	3.05	0.44
26:LA:1383:A:N7	26:LA:1384:A:C6	2.86	0.44
2:SA:1160:G:C6	2:SA:1181:G:C6	3.05	0.44
26:LA:495:G:C5	26:LA:496:G:C8	3.05	0.44
26:LA:1252:G:C5	26:LA:1253:A:C6	3.06	0.44
26:LA:1350:C:C4	26:LA:1351:C:C5	3.06	0.44
26:LA:1265:A:C5	26:LA:1267:U:O4	2.70	0.44
26:LA:878:A:C6	26:LA:879:G:C6	3.06	0.44
26:LA:45:G:H5'	26:LA:46:G:H5'	2.00	0.44
30:LW:85:ARG:NE	30:LW:86:PHE:H	2.14	0.44
26:LA:134:G:H2'	26:LA:135:U:C6	2.53	0.44
26:LA:2567:G:H2'	26:LA:2568:U:C6	2.53	0.44
2:SA:514:C:H2'	2:SA:515:G:C8	2.53	0.44
2:SA:49:U:C4	2:SA:364:A:C5	3.05	0.44
26:LA:2692:G:C5	26:LA:2718:G:C2	3.06	0.44
26:LA:785:G:C6	26:LA:786:C:C4	3.06	0.44
2:SA:542:G:C4	2:SA:543:U:C5	3.06	0.44
26:LA:2336:A:H61	32:LY:40:ARG:HG2	1.83	0.44
26:LA:1663:G:N1	26:LA:1998:A:C6	2.86	0.44
26:LA:2557:G:C5	26:LA:2558:C:C4	3.05	0.44
26:LA:1410:G:N3	26:LA:1593:A:C2	2.86	0.44
26:LA:1406:U:H2'	26:LA:1407:G:C8	2.53	0.44
26:LA:1444:G:C2	26:LA:1548:A:C2	3.06	0.44
2:SA:1327:C:H2'	2:SA:1328:C:C6	2.53	0.44
26:LA:2397:G:C2	26:LA:2420:C:C2	3.05	0.44
26:LA:372:G:C8	33:LZ:56:ARG:HB3	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:444:G:C5	2:SA:491:G:C2	3.06	0.44
22:SF:78:PHE:HA	22:SF:81:ASN:HD22	1.83	0.44
26:LA:2403:C:H2'	26:LA:2404:U:C6	2.53	0.44
2:SA:282:A:N7	2:SA:283:U:C5	2.86	0.44
26:LA:2049:G:N2	26:LA:2620:C:C2	2.86	0.44
24:S3:673:THR:HG21	24:S3:677:ALA:HB2	1.99	0.44
26:LA:2140:G:C2	26:LA:2152:G:C8	3.06	0.44
26:LA:1019:U:H2'	26:LA:1020:A:H5'	2.00	0.44
2:SA:898:G:C2	2:SA:902:G:C6	3.06	0.44
25:LB:99:A:C4	25:LB:100:G:C8	3.05	0.44
26:LA:2809:A:H2'	26:LA:2810:A:C8	2.53	0.44
26:LA:811:U:H5	26:LA:1251:C:C5	2.32	0.44
55:LQ:27:VAL:HG21	55:LQ:40:ILE:HD11	1.98	0.44
26:LA:783:A:H3'	26:LA:783:A:C8	2.52	0.44
2:SA:670:G:C2	2:SA:671:G:C4	3.06	0.44
26:LA:560:C:H2'	26:LA:561:G:O4'	2.17	0.44
26:LA:407:G:C6	26:LA:408:G:N7	2.86	0.44
26:LA:1598:A:C6	26:LA:1599:U:C2	3.05	0.44
26:LA:2077:A:C2	26:LA:2078:C:C4	3.05	0.44
2:SA:234:C:H2'	2:SA:235:C:C6	2.53	0.44
26:LA:1451:C:N4	26:LA:1459:G:C8	2.86	0.44
26:LA:1439:A:N6	26:LA:1552:A:C8	2.86	0.44
2:SA:369:G:C2	2:SA:393:A:C2	3.06	0.44
26:LA:83:A:C6	26:LA:101:A:C4	3.06	0.43
10:SJ:40:ILE:HB	10:SJ:73:LEU:HD22	2.00	0.43
26:LA:1923:U:H2'	26:LA:1924:C:C6	2.53	0.43
26:LA:2631:G:C6	26:LA:2632:A:C5	3.06	0.43
26:LA:2393:U:C5	26:LA:2394:C:C4	3.06	0.43
26:LA:527:C:O4'	26:LA:528:A:C2	2.71	0.43
26:LA:2837:A:H2'	26:LA:2838:G:C8	2.54	0.43
26:LA:947:A:C2	26:LA:971:G:N2	2.86	0.43
26:LA:160:A:C6	26:LA:161:A:C6	3.06	0.43
2:SA:1013:G:C2	2:SA:1015:G:C8	3.06	0.43
50:LL:15:TRP:CD2	50:LL:135:GLN:HB3	2.53	0.43
25:LB:109:A:C2	25:LB:110:C:C4	3.06	0.43
26:LA:2162:G:H2'	26:LA:2163:A:C5'	2.47	0.43
26:LA:2654:A:H4'	26:LA:2655:G:H5'	2.00	0.43
26:LA:1067:A:N7	26:LA:1068:G:C6	2.86	0.43
33:LZ:19:HIS:CG	33:LZ:19:HIS:O	2.71	0.43
26:LA:358:U:H2'	26:LA:359:G:C8	2.53	0.43
26:LA:20:C:H2'	26:LA:21:A:C8	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LG:66:ILE:HD12	45:LG:83:PRO:HB3	2.00	0.43
24:S3:232:LEU:HD13	24:S3:250:ALA:HB2	1.99	0.43
2:SA:483:C:H2'	2:SA:484:G:C8	2.52	0.43
26:LA:950:G:C6	26:LA:951:C:C4	3.06	0.43
26:LA:1332:G:O6	26:LA:1616:A:C2	2.70	0.43
26:LA:1697:G:C6	26:LA:1698:A:C5	3.06	0.43
26:LA:123:G:H2'	26:LA:124:G:C8	2.53	0.43
26:LA:1907:G:C5	26:LA:1908:C:C5	3.06	0.43
26:LA:447:A:C4	26:LA:473:G:N7	2.87	0.43
26:LA:2134:A:C2	26:LA:2156:G:C2	3.06	0.43
22:SF:18:VAL:HG11	22:SF:126:ALA:HB2	1.99	0.43
26:LA:1937:A:H2'	26:LA:1938:A:H5'	2.00	0.43
26:LA:2795:C:H2'	26:LA:2796:U:C6	2.53	0.43
26:LA:2331:G:H2'	26:LA:2332:C:C6	2.53	0.43
26:LA:939:G:C6	26:LA:940:G:N7	2.86	0.43
26:LA:927:A:C6	26:LA:928:A:C6	3.06	0.43
26:LA:860:U:C4	26:LA:2268:A:C4	3.05	0.43
26:LA:1731:G:C6	26:LA:1733:G:C6	3.06	0.43
2:SA:948:C:H2'	2:SA:949:A:C8	2.53	0.43
11:SK:56:LYS:HA	11:SK:65:ALA:HB2	2.00	0.43
26:LA:310:A:C2	26:LA:330:A:C5	3.06	0.43
26:LA:1336:A:C4	26:LA:1337:G:C8	3.06	0.43
26:LA:1966:A:H8	26:LA:2592:G:HO2'	1.66	0.43
2:SA:892:A:C5	2:SA:907:A:N7	2.86	0.43
26:LA:1429:G:C2	26:LA:1430:G:C8	3.06	0.43
2:SA:98:A:C2	2:SA:99:C:C2	3.06	0.43
2:SA:1144:G:N2	2:SA:1147:C:H42	2.16	0.43
26:LA:1937:A:C2'	26:LA:1938:A:H5'	2.48	0.43
26:LA:2865:U:H3'	26:LA:2866:U:H2'	2.01	0.43
26:LA:1165:A:C2	26:LA:1185:G:C5	3.06	0.43
2:SA:767:A:C2	2:SA:768:A:N3	2.86	0.43
26:LA:2327:A:C2	26:LA:2328:A:C4	3.06	0.43
26:LA:1205:A:C5	44:LF:165:HIS:CE1	3.05	0.43
26:LA:980:A:N7	26:LA:981:A:C5	2.87	0.43
44:LF:88:ARG:HB2	44:LF:89:PRO:HD2	2.00	0.43
26:LA:1620:G:C5	26:LA:1621:U:C4	3.07	0.43
4:S2:77:A:H3'	4:S2:77:A:C8	2.53	0.43
26:LA:1711:A:C6	26:LA:1712:U:C4	3.06	0.43
26:LA:1935:G:H2'	26:LA:1935:G:N3	2.33	0.43
24:S3:70:PHE:CE1	24:S3:82:ARG:HB2	2.53	0.43
2:SA:646:G:C5	2:SA:647:C:C5	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:194:C:O2'	2:SA:195:A:H5'	2.18	0.43
2:SA:650:G:C5	2:SA:651:C:C5	3.06	0.43
2:SA:527:G:C5	2:SA:528:C:C5	3.07	0.43
26:LA:943:A:C2	26:LA:944:C:C2	3.06	0.43
26:LA:821:A:C8	26:LA:946:C:C5	3.07	0.43
27:LD:57:HIS:CD2	27:LD:58:LYS:H	2.35	0.43
2:SA:1035:A:C6	2:SA:1036:A:C5	3.06	0.43
12:SL:1:ALA:HB1	12:SL:5:GLN:OE1	2.18	0.43
26:LA:1793:C:H2'	26:LA:1794:A:C8	2.54	0.43
26:LA:899:A:C2	26:LA:900:A:N7	2.86	0.43
26:LA:98:G:H3'	26:LA:99:U:H5''	2.00	0.43
26:LA:1797:G:C5	26:LA:1798:U:C5	3.05	0.43
2:SA:1152:A:H2'	2:SA:1153:G:H8	1.83	0.43
2:SA:376:G:C2	2:SA:389:A:C2	3.07	0.43
26:LA:627:A:C6	48:LN:111:ILE:HD12	2.52	0.43
26:LA:2841:C:C2	26:LA:2877:G:N2	2.87	0.43
26:LA:96:C:H5'	34:L0:41:HIS:CD2	2.53	0.43
26:LA:847:U:C5	26:LA:848:C:C6	3.07	0.43
26:LA:2851:A:C5	26:LA:2852:G:C5	3.07	0.43
26:LA:131:A:C2	26:LA:132:G:C5	3.07	0.43
2:SA:830:G:C5	2:SA:831:A:C8	3.06	0.43
26:LA:2537:U:H2'	26:LA:2538:C:C6	2.53	0.43
26:LA:1419:A:C2	26:LA:1421:G:H1'	2.54	0.43
25:LB:15:A:C2	25:LB:109:A:C2	3.06	0.43
26:LA:1636:U:H2'	26:LA:1637:A:H8	1.83	0.43
2:SA:1260:G:HO2'	2:SA:1261:A:H8	1.62	0.43
2:SA:1379:G:C5	2:SA:1380:U:C5	3.07	0.43
26:LA:1553:A:C5	26:LA:1555:G:C5	3.06	0.43
2:SA:1412:C:H2'	2:SA:1413:A:C8	2.53	0.43
2:SA:411:A:C5	2:SA:429:U:C5	3.06	0.43
40:L4:4:ILE:CG2	40:L4:27:ARG:HG2	2.47	0.43
2:SA:144:G:C2	2:SA:179:A:C4	3.05	0.43
26:LA:1941:C:H41	26:LA:1965:C:C1'	2.31	0.43
26:LA:1571:A:H2'	26:LA:1572:A:C8	2.54	0.43
26:LA:2666:C:O2	26:LA:2667:C:C5	2.71	0.43
26:LA:2040:G:C6	26:LA:2041:U:C4	3.06	0.43
2:SA:153:C:C6	2:SA:154:U:C5	3.06	0.43
26:LA:1166:G:C5	26:LA:1167:C:C4	3.06	0.43
26:LA:2051:A:C6	26:LA:2614:A:C4	3.06	0.43
26:LA:570:G:H1	26:LA:2499:C:H5'	1.82	0.43
2:SA:679:C:N3	2:SA:680:C:C5	2.87	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:142:G:C2	2:SA:143:A:C4	3.07	0.43
14:SN:92:ILE:HG21	14:SN:95:LEU:HD22	2.00	0.43
26:LA:1845:G:C2	26:LA:1896:G:C6	3.06	0.43
2:SA:1480:A:C8	2:SA:1481:U:C5	3.06	0.43
20:SD:183:ARG:HH12	20:SD:189:ASP:CG	2.21	0.43
26:LA:1220:G:C6	26:LA:1230:A:C6	3.07	0.43
4:S2:9:G:C8	4:S2:46:G:C4	3.06	0.43
26:LA:190:A:C6	26:LA:207:A:N3	2.86	0.43
26:LA:85:G:C5	26:LA:98:G:O6	2.71	0.43
2:SA:687:A:C2	2:SA:704:A:C4	3.07	0.43
26:LA:460:A:C2	26:LA:470:A:C6	3.07	0.43
26:LA:868:U:C5	26:LA:869:G:N7	2.86	0.43
26:LA:845:A:C2	26:LA:847:U:C2	3.06	0.43
26:LA:1809:A:N6	26:LA:1810:A:N1	2.65	0.43
26:LA:197:A:C2	26:LA:198:C:H1'	2.54	0.43
54:LM:21:CYS:HA	54:LM:41:ILE:HD12	2.00	0.43
1:SS:10:ILE:HD13	1:SS:10:ILE:H	1.84	0.43
8:SH:45:ILE:HG23	8:SH:45:ILE:H	1.54	0.43
36:L2:56:ARG:NH1	36:L2:56:ARG:H	2.17	0.43
2:SA:975:A:H8	2:SA:1358:U:HO2'	1.65	0.43
26:LA:1194:A:C2	26:LA:1195:G:C4	3.06	0.43
26:LA:1651:G:H2'	26:LA:1652:A:C8	2.53	0.43
26:LA:2597:G:N7	26:LA:2598:A:C6	2.86	0.43
2:SA:1437:A:H2'	2:SA:1438:G:C8	2.53	0.43
18:SB:202:ASN:H	18:SB:212:TYR:HE2	1.60	0.43
26:LA:2828:G:C2	26:LA:2829:A:C8	3.06	0.43
4:S2:57:C:H5	26:LA:2169:A:C8	2.36	0.43
26:LA:1430:G:H2'	26:LA:1431:A:H8	1.84	0.43
26:LA:1468:U:HO2'	26:LA:1469:A:H8	1.67	0.43
26:LA:255:A:C4	26:LA:256:A:C8	3.06	0.43
26:LA:1169:A:C2	26:LA:1170:C:C2	3.07	0.43
26:LA:957:C:C4	26:LA:959:A:C5	3.07	0.43
26:LA:422:A:C2	26:LA:423:A:C4	3.06	0.43
2:SA:41:G:C2	2:SA:42:G:C4	3.07	0.43
26:LA:1361:G:H2'	26:LA:1362:C:C6	2.54	0.43
26:LA:1445:G:H2'	26:LA:1446:C:H6	1.84	0.43
26:LA:1587:G:C6	26:LA:1588:G:C5	3.06	0.43
26:LA:2107:G:C2	26:LA:2108:A:C4	3.06	0.43
26:LA:216:A:C4	26:LA:432:A:C2	3.06	0.43
26:LA:35:G:C4	26:LA:454:A:C2	3.07	0.43
44:LF:102:ARG:CZ	44:LF:102:ARG:HB3	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:1465:A:C2	2:SA:1466:C:C2	3.07	0.43
39:L3:29:VAL:HA	39:L3:36:LYS:HA	2.00	0.43
26:LA:497:A:C6	26:LA:498:G:C5	3.06	0.43
25:LB:23:G:N1	25:LB:61:G:C6	2.87	0.43
47:LJ:119:ALA:HA	47:LJ:122:ILE:HB	2.01	0.43
2:SA:1057:G:H5'	19:SC:154:GLY:HA3	2.00	0.43
26:LA:1959:G:C2	26:LA:1960:A:C4	3.07	0.43
2:SA:1209:C:H2'	2:SA:1210:C:C6	2.53	0.43
26:LA:1245:G:H4'	44:LF:33:VAL:HG23	2.00	0.43
26:LA:2627:G:C5	26:LA:2628:C:C5	3.07	0.43
2:SA:1039:G:H2'	2:SA:1040:U:C6	2.53	0.43
26:LA:1473:G:C5	26:LA:1519:G:C2	3.06	0.43
7:SG:77:ARG:HB3	7:SG:152:HIS:CE1	2.54	0.43
26:LA:2816:G:C4	26:LA:2817:U:C4	3.06	0.43
2:SA:500:G:H2'	2:SA:501:C:C6	2.54	0.43
26:LA:106:C:H2'	26:LA:107:G:C8	2.54	0.43
2:SA:364:A:C2	2:SA:365:U:O4	2.72	0.43
2:SA:1287:A:C6	2:SA:1288:A:C6	3.06	0.43
26:LA:1536:C:H4'	26:LA:1537:G:H5''	2.01	0.43
2:SA:41:G:C6	2:SA:402:G:C6	3.07	0.43
26:LA:2422:C:O2	26:LA:2424:C:C5	2.72	0.43
26:LA:2055:C:H5''	26:LA:2056:G:C5'	2.49	0.43
2:SA:720:C:N4	2:SA:721:G:C6	2.87	0.43
2:SA:645:G:C6	2:SA:646:G:N7	2.87	0.43
2:SA:415:A:H3'	2:SA:416:G:C8	2.54	0.43
38:LE:109:VAL:CG1	38:LE:201:LEU:HD22	2.49	0.43
26:LA:2217:G:C6	26:LA:2218:G:N7	2.87	0.43
26:LA:2862:G:H2'	26:LA:2863:C:C6	2.54	0.43
2:SA:1521:C:C4	2:SA:1522:U:C4	3.06	0.43
26:LA:2742:G:OP1	43:L7:36:ARG:NH1	2.51	0.43
26:LA:854:C:O2	26:LA:924:G:C2	2.71	0.43
26:LA:2423:U:O2	26:LA:2425:A:C5	2.71	0.43
18:SB:5:MET:SD	18:SB:46:VAL:HG21	2.58	0.43
26:LA:1224:U:C5	26:LA:1225:G:O6	2.72	0.43
21:SE:15:ILE:HG22	21:SE:35:LEU:O	2.18	0.43
26:LA:1152:C:H2'	26:LA:1153:C:C6	2.53	0.43
2:SA:900:A:N3	2:SA:901:A:C2	2.87	0.43
2:SA:704:A:C5	2:SA:705:G:C5	3.06	0.43
26:LA:2829:A:C6	26:LA:2830:C:C4	3.07	0.43
2:SA:22:G:C6	2:SA:23:C:C4	3.06	0.43
26:LA:2014:A:OP1	28:LU:95:ARG:NH2	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:77:G:C5	26:LA:78:U:C5	3.07	0.43
26:LA:1878:G:C6	26:LA:1879:C:C4	3.07	0.43
26:LA:1085:A:C4'	26:LA:1105:U:H4'	2.48	0.43
2:SA:126:G:C6	2:SA:127:G:C5	3.07	0.43
25:LB:52:A:C6	25:LB:53:A:C4	3.07	0.43
26:LA:1205:A:C5	44:LF:165:HIS:NE2	2.87	0.43
26:LA:2371:G:C6	26:LA:2372:U:C5	3.07	0.43
2:SA:1455:G:C5	2:SA:1456:A:C5	3.06	0.43
26:LA:1218:G:C5	26:LA:1219:U:C5	3.07	0.43
26:LA:649:G:C5	26:LA:650:C:C4	3.07	0.43
26:LA:2856:A:N6	26:LA:2857:G:C6	2.87	0.43
26:LA:2256:G:C2	26:LA:2257:U:H1'	2.53	0.43
44:LF:118:LEU:HD13	44:LF:186:VAL:HG13	1.99	0.43
26:LA:470:A:C4	26:LA:471:A:C8	3.07	0.43
26:LA:647:G:N1	26:LA:648:G:C4	2.87	0.43
26:LA:784:G:C2	26:LA:792:A:C5	3.06	0.43
26:LA:2459:A:N6	26:LA:2494:G:C2	2.87	0.43
26:LA:2124:G:N7	26:LA:2125:G:C4	2.86	0.43
2:SA:372:C:N4	2:SA:389:A:H62	2.16	0.43
26:LA:1973:G:C5	26:LA:1974:C:C4	3.06	0.43
25:LB:8:C:H5'	55:LQ:27:VAL:HG11	2.00	0.43
26:LA:2643:G:C2	26:LA:2772:C:C2	3.06	0.43
26:LA:1171:G:C6	26:LA:1179:G:C6	3.07	0.43
26:LA:1831:G:C4	26:LA:1832:C:C5	3.07	0.43
25:LB:97:C:C2'	25:LB:98:G:H5'	2.49	0.43
26:LA:68:G:C6	26:LA:69:C:C4	3.07	0.43
26:LA:869:G:C5	26:LA:870:U:C6	3.06	0.43
26:LA:287:G:C2	26:LA:288:U:N3	2.87	0.43
26:LA:2706:A:C2	26:LA:2707:U:C6	3.07	0.43
7:SG:72:VAL:CG1	7:SG:144:ALA:HB2	2.49	0.43
26:LA:2407:A:C6	26:LA:2408:U:C4	3.07	0.43
10:SJ:53:ILE:HG21	10:SJ:63:ASP:CB	2.48	0.43
26:LA:2803:G:C6	26:LA:2804:U:C4	3.07	0.43
2:SA:1267:C:C5	2:SA:1327:C:H4'	2.54	0.43
3:S1:57:C:H42	20:SD:160:LEU:HD23	1.83	0.43
26:LA:1188:U:C2	26:LA:1189:A:C8	3.07	0.43
26:LA:812:C:H4'	57:LS:12:ARG:NH2	2.33	0.43
3:S1:25:U:C6	7:SG:158:LEU:HD22	2.54	0.43
26:LA:3:U:H2'	26:LA:4:U:C6	2.53	0.43
26:LA:1439:A:C2	26:LA:1553:A:C5	3.07	0.43
26:LA:1711:A:C5	26:LA:1712:U:C5	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:449:A:C6	26:LA:450:G:C4	3.07	0.43
2:SA:424:G:H2'	2:SA:425:G:C8	2.54	0.43
51:LI:122:LEU:HD12	51:LI:122:LEU:H	1.84	0.43
49:LK:78:LEU:HA	49:LK:78:LEU:HD13	1.94	0.43
2:SA:1097:C:C5	2:SA:1098:C:C5	3.07	0.43
54:LM:19:VAL:HG12	54:LM:43:ILE:HA	2.01	0.43
24:S3:416:SER:HA	24:S3:458:ALA:HA	2.00	0.43
2:SA:1340:A:C2	2:SA:1341:U:H1'	2.54	0.43
37:LC:46:VAL:HA	37:LC:211:LYS:O	2.19	0.43
24:S3:430:MET:SD	24:S3:434:LEU:HD12	2.58	0.43
2:SA:1488:G:H2'	2:SA:1489:G:H8	1.84	0.43
26:LA:1299:G:H4'	26:LA:1300:G:H5'	2.01	0.43
11:SK:83:VAL:HG13	11:SK:109:ILE:HA	2.00	0.43
2:SA:15:G:H2'	2:SA:16:A:C8	2.54	0.43
26:LA:1707:G:C2	26:LA:1708:C:H1'	2.54	0.42
2:SA:19:A:C6	2:SA:20:U:C4	3.07	0.42
26:LA:2126:A:H2'	37:LC:111:PHE:CE1	2.54	0.42
26:LA:2033:A:C6	26:LA:2036:C:C2	3.07	0.42
26:LA:2048:G:C4	26:LA:2621:G:N2	2.87	0.42
2:SA:260:G:C6	2:SA:261:U:O4	2.72	0.42
26:LA:528:A:C8	26:LA:2042:A:N1	2.87	0.42
26:LA:1085:A:C4	26:LA:1086:A:N7	2.87	0.42
26:LA:1998:A:H2'	26:LA:1999:C:C6	2.54	0.42
26:LA:160:A:C4	26:LA:167:A:C2	3.07	0.42
2:SA:32:A:C2	2:SA:553:A:N1	2.86	0.42
26:LA:2547:A:C2	26:LA:2562:U:O2	2.72	0.42
2:SA:722:G:C5	2:SA:724:G:C4	3.07	0.42
2:SA:640:A:C6	2:SA:641:U:C4	3.06	0.42
2:SA:575:G:C6	2:SA:881:G:C6	3.07	0.42
2:SA:265:G:H3'	2:SA:267:C:H5	1.84	0.42
13:SM:102:LYS:HG2	13:SM:103:THR:H	1.84	0.42
26:LA:2308:G:N3	26:LA:2308:G:H2'	2.34	0.42
52:LO:33:LEU:HG	52:LO:128:THR:HB	2.01	0.42
26:LA:2128:G:H2'	26:LA:2129:C:C5	2.54	0.42
2:SA:613:C:H2'	2:SA:614:C:C6	2.53	0.42
26:LA:2895:G:C2	26:LA:2896:C:C2	3.07	0.42
2:SA:1207:G:H3'	2:SA:1208:C:C6	2.55	0.42
26:LA:1854:A:H2	26:LA:2087:G:HO2'	1.66	0.42
2:SA:764:C:C6	2:SA:812:G:O6	2.71	0.42
26:LA:1779:U:C2	26:LA:1783:A:C5	3.07	0.42
53:LP:74:GLU:O	53:LP:77:ALA:HB3	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2013:A:N6	26:LA:2014:A:C6	2.88	0.42
28:LU:95:ARG:HH21	28:LU:95:ARG:HG3	1.83	0.42
26:LA:2631:G:C4	26:LA:2632:A:C8	3.07	0.42
46:LH:51:PHE:HB2	46:LH:61:TRP:CE3	2.54	0.42
2:SA:1321:U:H6	2:SA:1322:C:H2'	1.84	0.42
26:LA:2659:G:N2	26:LA:2663:G:C6	2.87	0.42
26:LA:2700:A:C4	26:LA:2701:U:C5	3.07	0.42
26:LA:2740:A:C2	26:LA:2741:A:C4	3.07	0.42
37:LC:19:LYS:HG2	37:LC:20:GLN:H	1.84	0.42
21:SE:96:GLN:HA	21:SE:97:PRO:HD3	1.89	0.42
2:SA:854:U:H2'	2:SA:855:U:C6	2.55	0.42
57:LS:79:ILE:HA	57:LS:82:LEU:HG	2.01	0.42
24:S3:281:VAL:CG2	24:S3:285:LEU:HD12	2.49	0.42
26:LA:426:C:N3	26:LA:427:U:C5	2.88	0.42
26:LA:1779:U:N3	26:LA:1783:A:C8	2.87	0.42
2:SA:642:A:N7	2:SA:643:C:C5	2.87	0.42
2:SA:1370:G:O2'	2:SA:1371:G:H5'	2.19	0.42
26:LA:2080:A:C6	26:LA:2081:U:C4	3.06	0.42
2:SA:399:G:C5	2:SA:400:C:C5	3.08	0.42
26:LA:2520:C:C5	26:LA:2567:G:C4	3.07	0.42
2:SA:620:C:C4	2:SA:621:A:C5	3.07	0.42
26:LA:153:U:C5	26:LA:154:U:C5	3.06	0.42
26:LA:2048:G:C6	26:LA:2621:G:C2	3.07	0.42
26:LA:2513:A:C6	26:LA:2574:G:C5	3.07	0.42
26:LA:1468:U:O2	26:LA:1525:A:C2	2.72	0.42
26:LA:1410:G:C6	26:LA:1411:U:O4	2.72	0.42
26:LA:2730:C:H2'	26:LA:2731:G:C8	2.54	0.42
26:LA:1540:G:C5	26:LA:1541:C:C6	3.07	0.42
2:SA:777:A:C4	2:SA:778:G:C8	3.07	0.42
26:LA:1631:G:N2	26:LA:1633:G:C8	2.87	0.42
26:LA:1676:A:C8	26:LA:1676:A:H3'	2.55	0.42
26:LA:1087:G:C6	26:LA:1089:A:C2	3.08	0.42
26:LA:2423:U:O2	26:LA:2425:A:C4	2.72	0.42
37:LC:131:LEU:O	37:LC:135:GLY:HA2	2.20	0.42
44:LF:4:VAL:HG13	44:LF:4:VAL:O	2.19	0.42
26:LA:376:G:H2'	26:LA:377:G:H8	1.84	0.42
26:LA:2758:A:C5	26:LA:2759:G:C8	3.08	0.42
26:LA:2634:A:H2'	26:LA:2635:A:C8	2.54	0.42
26:LA:876:C:HO2'	26:LA:877:A:H8	1.62	0.42
26:LA:2657:A:C2	26:LA:2665:A:C5	3.06	0.42
26:LA:747:U:C4	26:LA:2613:U:C4	3.07	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1697:G:C5	26:LA:1698:A:C5	3.07	0.42
26:LA:2081:U:C4	26:LA:2237:G:C2	3.08	0.42
26:LA:2100:G:C6	26:LA:2190:G:C2	3.07	0.42
26:LA:1242:U:C4	26:LA:1243:C:C5	3.08	0.42
26:LA:627:A:C2	26:LA:637:A:C5	3.08	0.42
26:LA:2067:G:C2	26:LA:2069:G:C4	3.07	0.42
26:LA:2046:G:C5	26:LA:2047:C:C5	3.07	0.42
2:SA:300:A:H2'	2:SA:301:G:H5'	2.02	0.42
26:LA:60:G:C4	26:LA:74:A:C2	3.08	0.42
2:SA:1163:A:C2	2:SA:1174:G:N3	2.87	0.42
26:LA:777:G:N2	26:LA:778:G:C4	2.87	0.42
26:LA:2452:C:H2'	26:LA:2453:A:H8	1.85	0.42
26:LA:1488:C:C2	26:LA:1502:A:C2	3.07	0.42
2:SA:1430:A:C5	2:SA:1431:A:N7	2.87	0.42
26:LA:202:U:H2'	26:LA:203:A:C8	2.55	0.42
2:SA:1057:G:C4	2:SA:1204:A:C2	3.07	0.42
26:LA:2550:G:C2	26:LA:2559:C:O2	2.73	0.42
52:LO:65:ILE:HG22	52:LO:67:VAL:H	1.85	0.42
2:SA:1441:A:H61	2:SA:1461:G:C2'	2.32	0.42
41:L5:34:ARG:HE	41:L5:39:ARG:HD2	1.84	0.42
18:SB:213:LEU:O	18:SB:217:ALA:HB3	2.19	0.42
25:LB:92:C:H2'	25:LB:93:C:C6	2.55	0.42
26:LA:1851:U:C4	26:LA:1852:U:C4	3.07	0.42
26:LA:1914:C:H1'	26:LA:1915:C:N4	2.35	0.42
26:LA:954:G:N1	26:LA:964:C:C2	2.87	0.42
26:LA:1921:G:C6	26:LA:1922:G:C5	3.07	0.42
26:LA:528:A:C8	26:LA:2042:A:C6	3.07	0.42
26:LA:5:A:N1	26:LA:6:A:C5	2.88	0.42
26:LA:24:G:C6	26:LA:25:U:C4	3.08	0.42
26:LA:226:A:C5	26:LA:227:A:C5	3.07	0.42
2:SA:92:U:H2'	2:SA:93:U:H6	1.84	0.42
26:LA:2311:A:C8	45:LG:76:PHE:CE2	3.07	0.42
26:LA:280:U:C4	26:LA:281:C:C4	3.07	0.42
2:SA:565:U:O4	2:SA:566:G:C2	2.72	0.42
26:LA:1873:G:C5	26:LA:1874:C:C5	3.07	0.42
2:SA:877:G:H2'	2:SA:878:A:C8	2.54	0.42
26:LA:2455:G:H2'	26:LA:2456:C:C6	2.55	0.42
26:LA:875:G:C5	26:LA:876:C:C5	3.08	0.42
4:S2:2:G:C6	4:S2:73:A:N3	2.88	0.42
26:LA:1507:C:C2'	26:LA:1508:A:H5''	2.47	0.42
26:LA:2413:G:O6	26:LA:2414:G:C6	2.72	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:98:A:H2'	2:SA:99:C:C6	2.55	0.42
26:LA:1838:C:C5	26:LA:1899:A:C5	3.08	0.42
2:SA:942:G:H2'	2:SA:943:U:H6	1.84	0.42
25:LB:109:A:H2'	25:LB:110:C:C6	2.55	0.42
26:LA:1620:G:C6	26:LA:1621:U:C4	3.07	0.42
26:LA:822:G:C6	26:LA:836:G:C2	3.08	0.42
26:LA:721:A:C4	26:LA:722:A:C8	3.07	0.42
26:LA:1252:G:C2	26:LA:1253:A:C2	3.07	0.42
2:SA:246:A:C2	2:SA:282:A:C6	3.08	0.42
52:LO:33:LEU:HD12	52:LO:33:LEU:HA	1.77	0.42
54:LM:87:LEU:CD1	54:LM:94:PRO:HD3	2.49	0.42
24:S3:62:ILE:HD12	24:S3:63:THR:HB	2.02	0.42
21:SE:36:THR:HG21	21:SE:63:MET:HG2	2.01	0.42
2:SA:1286:U:H6	2:SA:1286:U:H3'	1.85	0.42
16:SP:51:ARG:C	16:SP:52:LEU:HG	2.39	0.42
26:LA:2776:A:C6	26:LA:2782:G:H1'	2.54	0.42
54:LM:12:ASP:CG	54:LM:14:SER:H	2.22	0.42
26:LA:1661:G:C5	26:LA:1662:U:C5	3.08	0.42
8:SH:44:PHE:CZ	8:SH:128:VAL:HG12	2.54	0.42
25:LB:115:A:H2'	25:LB:116:G:C8	2.54	0.42
26:LA:1310:G:N2	26:LA:1313:U:C5	2.88	0.42
2:SA:223:A:C5	2:SA:224:U:C5	3.07	0.42
26:LA:725:G:C5	26:LA:726:G:N1	2.88	0.42
26:LA:1061:U:C2	26:LA:1097:U:N3	2.87	0.42
26:LA:2249:U:H3'	26:LA:2250:G:H5'	1.97	0.42
25:LB:30:C:H3'	25:LB:31:C:H6	1.84	0.42
26:LA:2197:U:C5	26:LA:2224:G:C6	3.07	0.42
26:LA:96:C:H4'	34:L0:41:HIS:CG	2.54	0.42
11:SK:5:ILE:HG22	26:LA:2143:C:C6	2.54	0.42
26:LA:2825:G:C5	26:LA:2826:A:C4	3.08	0.42
26:LA:533:G:C4	26:LA:561:G:N2	2.88	0.42
26:LA:1187:G:H5''	58:LT:83:TYR:CZ	2.54	0.42
26:LA:1668:A:C4	26:LA:1674:G:O6	2.73	0.42
26:LA:195:A:C4	26:LA:198:C:N4	2.88	0.42
26:LA:1727:C:C2	26:LA:1734:G:C2	3.07	0.42
2:SA:616:G:H2'	2:SA:617:G:C8	2.54	0.42
26:LA:1744:A:H3'	26:LA:1745:A:C8	2.54	0.42
26:LA:2311:A:C8	45:LG:76:PHE:CD2	3.08	0.42
2:SA:560:A:N7	21:SE:127:TYR:CE1	2.88	0.42
26:LA:1012:U:N3	26:LA:1143:A:N7	2.67	0.42
26:LA:2147:A:H4'	26:LA:2148:G:C8	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2058:A:C6	26:LA:2059:A:N1	2.87	0.42
51:LI:144:VAL:HG12	51:LI:145:ASN:N	2.34	0.42
2:SA:994:A:C8	2:SA:1216:A:H4'	2.54	0.42
2:SA:83:C:HO2'	2:SA:84:U:H6	1.67	0.42
26:LA:1885:A:C8	26:LA:1886:U:C6	3.07	0.42
26:LA:1277:G:C6	26:LA:1278:C:C4	3.07	0.42
2:SA:1004:A:C2	2:SA:1005:A:C5	3.08	0.42
26:LA:2643:G:C6	26:LA:2644:G:N7	2.88	0.42
26:LA:2013:A:C6	26:LA:2014:A:C5	3.08	0.42
2:SA:1514:G:N1	2:SA:1515:G:C4	2.87	0.42
2:SA:540:G:C2	2:SA:541:G:C4	3.08	0.42
26:LA:1356:G:C5	26:LA:1357:C:C5	3.08	0.42
2:SA:80:A:C2	2:SA:81:A:C4	3.08	0.42
26:LA:777:G:H2'	26:LA:778:G:H8	1.85	0.42
26:LA:980:A:N7	26:LA:981:A:C6	2.87	0.42
26:LA:2407:A:C4	26:LA:2408:U:C5	3.08	0.42
2:SA:777:A:C5	2:SA:778:G:C5	3.08	0.42
26:LA:539:G:C5	26:LA:540:C:C5	3.07	0.42
26:LA:643:A:N7	26:LA:644:A:C4	2.88	0.42
2:SA:584:G:N2	2:SA:585:G:C4	2.87	0.42
2:SA:324:G:C2	2:SA:326:G:C8	3.08	0.42
26:LA:21:A:C2	26:LA:520:G:C2	3.08	0.42
26:LA:1332:G:C5	26:LA:1609:A:C8	3.08	0.42
26:LA:1336:A:N3	26:LA:1337:G:C8	2.88	0.42
2:SA:1421:G:C4	2:SA:1480:A:C2	3.07	0.42
2:SA:1480:A:N7	2:SA:1481:U:C5	2.88	0.42
21:SE:20:VAL:HG21	21:SE:51:LYS:HE2	2.02	0.42
26:LA:2286:G:H4'	26:LA:2287:A:C4	2.54	0.42
2:SA:1300:G:C6	2:SA:1334:G:C5	3.08	0.42
26:LA:2002:G:N1	26:LA:2003:A:C5	2.88	0.42
24:S3:465:LEU:HD23	24:S3:465:LEU:HA	1.93	0.42
2:SA:28:A:C5	2:SA:29:U:C5	3.08	0.42
24:S3:504:HIS:HB3	24:S3:515:GLY:H	1.84	0.42
2:SA:922:G:C2	2:SA:923:A:C4	3.07	0.42
21:SE:152:VAL:HG22	21:SE:153:ALA:H	1.85	0.42
26:LA:768:G:C6	26:LA:769:U:C4	3.08	0.42
31:LX:82:TYR:CD2	52:LO:36:VAL:HG13	2.55	0.42
26:LA:1050:A:H2'	26:LA:1051:G:H8	1.85	0.42
26:LA:1477:A:C2	26:LA:1515:A:C2	3.08	0.42
2:SA:901:A:C8	2:SA:902:G:H1'	2.55	0.42
26:LA:1570:A:N1	26:LA:1571:A:C6	2.87	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:1:C:C5	4:S2:73:A:N1	2.88	0.42
26:LA:2290:G:C5	26:LA:2291:U:C5	3.07	0.42
2:SA:642:A:C5	8:SH:106:SER:HA	2.55	0.42
37:LC:42:VAL:HG22	37:LC:178:VAL:HG12	2.01	0.42
52:LO:111:GLU:N	52:LO:111:GLU:CD	2.73	0.42
26:LA:2643:G:C4	26:LA:2644:G:C8	3.08	0.42
26:LA:2645:G:H4'	26:LA:2646:C:OP2	2.20	0.42
2:SA:59:A:C4	2:SA:354:G:C2	3.08	0.42
24:S3:516:HIS:CE1	24:S3:579:PHE:CE1	3.07	0.42
26:LA:1356:G:C2	26:LA:1376:C:O2	2.73	0.42
32:LY:55:ASP:O	32:LY:56:HIS:CG	2.73	0.42
26:LA:846:U:N3	26:LA:847:U:C5	2.88	0.42
26:LA:381:G:C2	26:LA:382:A:C8	3.08	0.42
26:LA:966:G:C6	26:LA:967:U:C4	3.07	0.42
26:LA:2509:G:C6	26:LA:2510:C:C5	3.07	0.42
26:LA:202:U:N3	26:LA:203:A:C5	2.88	0.42
26:LA:1067:A:C2'	26:LA:1068:G:OP1	2.67	0.42
26:LA:1710:G:N1	26:LA:1749:A:C2	2.88	0.42
26:LA:263:G:H2'	26:LA:264:C:O4'	2.20	0.42
26:LA:273:G:C6	26:LA:274:C:C4	3.07	0.42
2:SA:441:A:H61	2:SA:493:A:N6	2.18	0.42
26:LA:1820:U:OP1	27:LD:176:ARG:NE	2.53	0.42
22:SF:22:ILE:HG21	22:SF:125:GLU:O	2.20	0.42
26:LA:1002:G:C6	26:LA:1003:G:C5	3.08	0.42
26:LA:1471:G:C5	26:LA:1472:C:C4	3.08	0.42
2:SA:927:G:C2	2:SA:928:G:C8	3.08	0.42
13:SM:12:LYS:HD3	13:SM:16:ILE:HD11	2.01	0.42
2:SA:1306:A:C2	2:SA:1332:A:C4	3.07	0.42
26:LA:2087:G:C2	26:LA:2088:A:C5	3.08	0.42
2:SA:770:C:H4'	2:SA:900:A:H2	1.84	0.42
26:LA:1549:A:H2'	26:LA:1550:C:O4'	2.20	0.42
26:LA:1955:U:H5'	26:LA:1956:U:C5	2.54	0.42
26:LA:1797:G:C5	26:LA:1798:U:C4	3.07	0.42
26:LA:1392:A:N7	26:LA:1393:A:C5	2.88	0.42
26:LA:2377:A:C6	26:LA:2378:A:C6	3.08	0.42
26:LA:2801:G:C6	26:LA:2802:G:N7	2.88	0.42
26:LA:6:A:C2	26:LA:2898:U:O2	2.73	0.42
26:LA:374:A:C8	26:LA:375:G:C8	3.08	0.42
26:LA:25:U:C5	26:LA:26:G:C6	3.07	0.42
26:LA:149:A:C6	26:LA:150:U:C4	3.08	0.42
2:SA:887:G:C2'	2:SA:888:G:H5'	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:323:U:C4	2:SA:324:G:C5	3.08	0.42
26:LA:2554:U:H2'	26:LA:2555:U:C2	2.55	0.42
30:LW:4:ILE:HG22	30:LW:4:ILE:H	1.47	0.42
34:L0:31:GLN:HG3	34:L0:37:LEU:HB2	2.02	0.42
26:LA:31:C:H42	26:LA:474:G:H1	1.68	0.42
17:SQ:63:CYS:HB2	17:SQ:73:THR:HG22	2.02	0.42
26:LA:116:C:H2'	26:LA:117:G:C5'	2.50	0.42
57:LS:68:ALA:HB1	57:LS:73:ILE:HG23	2.02	0.42
26:LA:590:A:H2'	26:LA:591:U:C6	2.54	0.42
26:LA:1797:G:C4	26:LA:1798:U:C5	3.08	0.41
26:LA:2574:G:N3	26:LA:2574:G:H2'	2.34	0.41
26:LA:518:G:H2'	26:LA:519:U:C6	2.55	0.41
26:LA:1531:C:C2	26:LA:1532:A:C8	3.08	0.41
2:SA:575:G:C5	2:SA:881:G:C2	3.08	0.41
26:LA:2887:A:C5	26:LA:2888:C:C5	3.08	0.41
26:LA:838:C:C2	26:LA:839:U:C5	3.07	0.41
26:LA:1233:C:C4	26:LA:1234:U:C4	3.08	0.41
26:LA:1087:G:C5	26:LA:1089:A:C5	3.08	0.41
26:LA:1019:U:H4'	26:LA:1121:C:O2'	2.20	0.41
26:LA:617:G:N1	26:LA:618:G:C5	2.87	0.41
26:LA:1168:G:N2	26:LA:1182:G:H1'	2.35	0.41
26:LA:1460:U:H5''	26:LA:1460:U:C6	2.55	0.41
26:LA:1391:U:C6	26:LA:1391:U:H3'	2.55	0.41
21:SE:29:ILE:HG23	21:SE:29:ILE:O	2.20	0.41
2:SA:1079:G:C6	2:SA:1080:A:C6	3.07	0.41
26:LA:283:G:C5	26:LA:284:U:C2	3.08	0.41
2:SA:189:A:C6	2:SA:190:A:C6	3.08	0.41
2:SA:1285:A:N6	2:SA:1355:G:H4'	2.35	0.41
2:SA:112:G:C6	2:SA:330:C:C4	3.08	0.41
2:SA:1074:G:C2	2:SA:1102:A:C2	3.07	0.41
22:SF:2:ARG:HD2	22:SF:92:THR:HG21	2.02	0.41
26:LA:1813:G:O6	26:LA:1814:G:C2	2.73	0.41
30:LW:48:VAL:H	30:LW:53:GLN:HG3	1.85	0.41
26:LA:1323:C:OP2	28:LU:84:ARG:NH2	2.52	0.41
46:LH:25:ILE:HG21	46:LH:75:VAL:HA	2.02	0.41
58:LT:68:ARG:HD2	58:LT:92:TRP:CZ2	2.55	0.41
26:LA:1572:A:C2	26:LA:1573:G:C4	3.08	0.41
26:LA:1914:C:H1'	26:LA:1915:C:C4	2.55	0.41
26:LA:2532:G:C6	26:LA:2533:U:O2	2.73	0.41
2:SA:696:A:C5	2:SA:697:U:O4	2.74	0.41
26:LA:1936:A:C6	26:LA:1945:G:N2	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:61:G:C4	2:SA:107:G:N2	2.88	0.41
2:SA:204:G:O6	2:SA:468:A:C5	2.73	0.41
2:SA:1319:A:C8	2:SA:1319:A:H5''	2.56	0.41
26:LA:1413:A:C2	26:LA:1590:A:C2	3.08	0.41
26:LA:855:G:C6	26:LA:856:G:C5	3.07	0.41
26:LA:860:U:O4	26:LA:2268:A:C4	2.73	0.41
26:LA:1727:C:C5	26:LA:1728:C:C4	3.08	0.41
26:LA:1558:C:C5	26:LA:1560:G:C4	3.09	0.41
2:SA:1267:C:H41	2:SA:1327:C:H1'	1.85	0.41
26:LA:1324:G:OP2	28:LU:84:ARG:NH1	2.53	0.41
46:LH:35:THR:C	46:LH:36:LEU:HD12	2.40	0.41
24:S3:110:MET:HB3	24:S3:112:TYR:CE2	2.55	0.41
26:LA:1848:A:C8	26:LA:1848:A:H3'	2.55	0.41
19:SC:155:ARG:HH21	19:SC:160:GLU:CD	2.23	0.41
23:SR:20:ILE:HG13	23:SR:21:ASP:H	1.85	0.41
2:SA:773:G:C6	2:SA:774:G:C5	3.08	0.41
26:LA:144:A:C6	26:LA:145:C:C4	3.08	0.41
18:SB:14:HIS:CE1	18:SB:40:ILE:HG12	2.55	0.41
26:LA:2502:G:H8	26:LA:2502:G:H2'	1.74	0.41
26:LA:684:G:H5''	41:L5:16:HIS:CE1	2.54	0.41
26:LA:2126:A:C5	26:LA:2173:A:C6	3.08	0.41
2:SA:741:G:C6	2:SA:742:G:C5	3.08	0.41
2:SA:1417:G:C6	2:SA:1482:G:C6	3.08	0.41
26:LA:2395:C:H2'	26:LA:2396:G:C8	2.54	0.41
2:SA:55:A:C4	2:SA:56:U:C6	3.08	0.41
26:LA:2024:G:C6	26:LA:2040:G:N1	2.88	0.41
26:LA:1410:G:C5	26:LA:1411:U:C5	3.08	0.41
26:LA:2812:G:H2'	26:LA:2813:A:C8	2.55	0.41
24:S3:49:MET:HG2	24:S3:55:GLU:HG2	2.03	0.41
26:LA:858:G:C6	26:LA:2268:A:C2	3.09	0.41
26:LA:1678:A:C6	26:LA:1679:A:C2	3.08	0.41
26:LA:2656:U:C5	26:LA:2664:G:N1	2.89	0.41
2:SA:158:G:C6	2:SA:159:G:C5	3.08	0.41
26:LA:2559:C:H2'	26:LA:2560:A:C8	2.55	0.41
2:SA:1145:A:N7	19:SC:230:GLY:HA2	2.35	0.41
37:LC:146:THR:HG23	37:LC:152:ALA:HA	2.02	0.41
27:LD:103:ILE:O	27:LD:103:ILE:HG23	2.20	0.41
38:LE:96:ILE:HA	38:LE:99:GLU:OE1	2.20	0.41
2:SA:1088:G:C6	2:SA:1089:G:C5	3.09	0.41
15:SO:70:LYS:HB3	15:SO:77:TYR:CG	2.54	0.41
26:LA:1017:G:C6	26:LA:1018:U:C4	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:SA:919:A:C6	2:SA:920:U:C4	3.08	0.41
25:LB:11:C:C6	25:LB:12:C:C5	3.08	0.41
26:LA:2504:U:H3'	26:LA:2505:G:H5''	2.01	0.41
2:SA:1295:U:H2'	2:SA:1296:C:C6	2.54	0.41
26:LA:2145:C:H3'	26:LA:2146:C:H4'	2.01	0.41
2:SA:847:G:C6	2:SA:848:C:C4	3.08	0.41
24:S3:29:ILE:HG23	24:S3:278:LEU:HD11	2.03	0.41
55:LQ:11:ALA:HB1	55:LQ:15:ARG:HD2	2.02	0.41
26:LA:196:A:C5	26:LA:805:G:C6	3.09	0.41
26:LA:1978:A:N7	26:LA:1979:U:C5	2.88	0.41
26:LA:774:G:H5''	27:LD:47:ARG:NH2	2.31	0.41
26:LA:199:A:C2	26:LA:2434:A:C2	3.09	0.41
26:LA:1024:G:H21	26:LA:1144:A:C4'	2.34	0.41
26:LA:2443:C:H2'	26:LA:2444:G:H8	1.81	0.41
2:SA:572:A:H4'	2:SA:917:G:H5'	2.02	0.41
2:SA:457:G:O6	2:SA:475:C:N4	2.53	0.41
26:LA:2415:G:C6	26:LA:2416:C:C5	3.09	0.41
26:LA:1933:G:C5	26:LA:1934:C:C5	3.08	0.41
2:SA:1146:A:C6	2:SA:1147:C:C2	3.08	0.41
26:LA:1172:C:H6	26:LA:1172:C:O5'	2.03	0.41
26:LA:221:A:N1	26:LA:233:A:C5	2.88	0.41
26:LA:2351:G:HO2'	26:LA:2352:A:H8	1.66	0.41
2:SA:236:A:C5	2:SA:237:G:N7	2.88	0.41
26:LA:160:A:N9	26:LA:167:A:C2	2.89	0.41
26:LA:847:U:H5	26:LA:848:C:C5	2.38	0.41
1:SS:2:ARG:NH1	2:SA:1323:G:C8	2.89	0.41
26:LA:1989:G:C8	26:LA:1990:C:C6	3.09	0.41
31:LX:2:PHE:HB2	31:LX:61:LEU:HD12	2.01	0.41
2:SA:910:C:C2	2:SA:911:U:C5	3.08	0.41
26:LA:1042:G:N1	26:LA:1114:C:C2	2.89	0.41
44:LF:33:VAL:HG13	44:LF:34:ALA:N	2.36	0.41
52:LO:105:MET:SD	52:LO:117:PHE:CZ	3.14	0.41
26:LA:2476:A:C2	26:LA:2477:U:C2	3.08	0.41
26:LA:1452:G:H2'	26:LA:1452:G:H8	1.74	0.41
26:LA:1279:G:C4	26:LA:1280:G:C8	3.09	0.41
58:LT:9:GLY:O	58:LT:10:LYS:HG3	2.20	0.41
45:LG:128:SER:HB3	45:LG:154:THR:HG22	2.02	0.41
26:LA:2752:C:C4	26:LA:2753:A:C5	3.07	0.41
26:LA:2265:U:C5	26:LA:2266:A:C5	3.09	0.41
19:SC:56:ILE:HD11	19:SC:65:VAL:HG13	2.02	0.41
26:LA:123:G:C2	26:LA:124:G:C4	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:84:A:C2	26:LA:98:G:N3	2.88	0.41
26:LA:2516:A:C5	26:LA:2517:C:C4	3.09	0.41
25:LB:57:A:C2	45:LG:25:MET:HB3	2.54	0.41
2:SA:571:U:H3'	2:SA:572:A:H5''	2.02	0.41
2:SA:160:A:C2	2:SA:161:A:C4	3.09	0.41
26:LA:1907:G:C5	26:LA:1908:C:C6	3.09	0.41
39:L3:48:TYR:CG	39:L3:49:ARG:N	2.89	0.41
2:SA:502:A:N1	2:SA:544:G:C6	2.89	0.41
2:SA:1443:C:C5	2:SA:1444:U:C5	3.08	0.41
26:LA:131:A:H2'	26:LA:132:G:H8	1.85	0.41
26:LA:975:A:C4	26:LA:990:A:C5	3.08	0.41
26:LA:1455:G:C6	26:LA:1456:G:C5	3.08	0.41
26:LA:930:G:C2	26:LA:933:A:C6	3.09	0.41
26:LA:1263:U:C5	26:LA:1264:A:N6	2.88	0.41
26:LA:1939:U:H4'	26:LA:2603:G:H22	1.85	0.41
26:LA:2585:U:C6	26:LA:2585:U:OP1	2.74	0.41
26:LA:554:U:C4	26:LA:555:G:C6	3.08	0.41
2:SA:276:G:C6	2:SA:277:C:C4	3.09	0.41
2:SA:1329:A:H5''	13:SM:25:GLY:H	1.84	0.41
26:LA:1504:A:C2	26:LA:1505:A:C4	3.08	0.41
26:LA:2520:C:N3	26:LA:2521:C:C5	2.88	0.41
2:SA:815:A:N1	2:SA:1529:G:C8	2.89	0.41
26:LA:2789:C:C5	26:LA:2893:A:C6	3.08	0.41
26:LA:1901:A:C6	26:LA:1902:C:N4	2.88	0.41
26:LA:2024:G:C6	26:LA:2040:G:C6	3.09	0.41
26:LA:374:A:C6	26:LA:401:A:C8	3.09	0.41
26:LA:2547:A:N7	26:LA:2566:A:C8	2.89	0.41
26:LA:1395:A:C6	26:LA:1398:C:C2	3.08	0.41
26:LA:422:A:C6	26:LA:423:A:C5	3.09	0.41
26:LA:2722:G:C6	26:LA:2723:C:N3	2.89	0.41
25:LB:67:G:N2	25:LB:68:C:H1'	2.36	0.41
26:LA:1900:A:H1'	26:LA:1970:A:H2'	2.01	0.41
26:LA:2349:G:C6	26:LA:2369:A:C6	3.09	0.41
26:LA:524:G:C6	26:LA:525:U:C4	3.08	0.41
2:SA:282:A:C6	2:SA:283:U:C2	3.07	0.41
26:LA:2627:G:C8	26:LA:2628:C:C5	3.08	0.41
45:LG:76:PHE:CD2	45:LG:76:PHE:N	2.89	0.41
2:SA:1306:A:C6	2:SA:1307:U:C2	3.09	0.41
4:S2:67:C:N3	4:S2:68:C:C5	2.89	0.41
26:LA:164:C:C5	26:LA:165:A:C8	3.09	0.41
2:SA:1426:G:C6	2:SA:1427:C:C4	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:LV:50:LEU:HA	29:LV:50:LEU:HD12	1.99	0.41
2:SA:279:A:H5''	2:SA:280:C:H3'	2.02	0.41
58:LT:52:PRO:O	58:LT:53:PHE:CD1	2.74	0.41
2:SA:787:A:N6	2:SA:788:U:C2	2.89	0.41
26:LA:190:A:C6	26:LA:191:A:C6	3.09	0.41
26:LA:191:A:C2	26:LA:192:C:N3	2.89	0.41
26:LA:2121:G:C6	26:LA:2122:U:C4	3.09	0.41
26:LA:2416:C:N3	26:LA:2417:C:C5	2.89	0.41
2:SA:550:G:H2'	2:SA:551:U:C6	2.56	0.41
26:LA:2187:U:H2'	26:LA:2188:U:C6	2.56	0.41
26:LA:2718:G:C6	26:LA:2719:G:C5	3.09	0.41
2:SA:184:G:C5	2:SA:185:U:C4	3.09	0.41
24:S3:516:HIS:CD2	24:S3:516:HIS:O	2.74	0.41
26:LA:93:G:H2'	26:LA:94:A:O4'	2.21	0.41
26:LA:1369:G:C6	26:LA:1370:C:C4	3.08	0.41
2:SA:1261:A:C4	2:SA:1275:A:C2	3.08	0.41
26:LA:2058:A:C5	26:LA:2059:A:N1	2.88	0.41
19:SC:120:THR:CG2	19:SC:188:ALA:HB2	2.51	0.41
48:LN:121:THR:HA	48:LN:141:LYS:O	2.20	0.41
52:LO:115:GLU:OE2	52:LO:115:GLU:HA	2.21	0.41
2:SA:1530:G:O2'	2:SA:1531:A:H5'	2.20	0.41
20:SD:96:ARG:O	20:SD:100:VAL:HG23	2.21	0.41
53:LP:100:CYS:H	53:LP:111:ALA:HA	1.85	0.41
26:LA:1054:A:C2	26:LA:1106:G:C5	3.08	0.41
26:LA:843:G:H2'	26:LA:844:A:C8	2.56	0.41
21:SE:123:LEU:CD1	21:SE:124:ALA:H	2.24	0.41
26:LA:2665:A:C8	26:LA:2666:C:O4'	2.74	0.41
26:LA:1770:G:N1	26:LA:1983:G:C5	2.89	0.41
26:LA:1276:A:C2	26:LA:1277:G:C4	3.08	0.41
2:SA:500:G:C2	2:SA:501:C:C2	3.09	0.41
26:LA:1773:A:C4	26:LA:1829:A:C4	3.08	0.41
26:LA:1933:G:C5	26:LA:1934:C:C4	3.08	0.41
2:SA:1528:U:H4'	2:SA:1529:G:H5''	2.03	0.41
26:LA:1173:U:H2'	26:LA:1173:U:O2	2.20	0.41
26:LA:597:G:C2	26:LA:661:A:C2	3.08	0.41
45:LG:43:ILE:HG21	45:LG:43:ILE:HD13	1.80	0.41
26:LA:2840:C:H2'	26:LA:2841:C:C6	2.56	0.41
26:LA:1085:A:H4'	26:LA:1105:U:H4'	2.02	0.41
26:LA:570:G:C6	26:LA:2030:U:N3	2.89	0.41
26:LA:561:G:HO2'	26:LA:562:U:P	2.44	0.41
2:SA:391:G:C6	2:SA:392:C:C4	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1631:G:C2	26:LA:1633:G:C8	3.09	0.41
4:S2:38:A:H3'	4:S2:39:A:C8	2.56	0.41
2:SA:1063:C:C4	2:SA:1064:G:C6	3.09	0.41
2:SA:1422:G:C2	2:SA:1423:G:C5	3.08	0.41
26:LA:930:G:H2'	26:LA:933:A:H2	1.84	0.41
26:LA:253:C:C4	26:LA:254:G:C8	3.08	0.41
2:SA:179:A:C5	2:SA:180:U:C4	3.09	0.41
2:SA:1339:A:C8	2:SA:1340:A:C8	3.09	0.41
26:LA:2776:A:C5	26:LA:2782:G:C4	3.08	0.41
2:SA:1124:G:C4	2:SA:1145:A:H2	2.39	0.41
2:SA:787:A:H3'	2:SA:788:U:H5''	2.03	0.41
2:SA:945:G:H5'	2:SA:1338:G:H22	1.84	0.41
26:LA:1561:C:C2	26:LA:1562:U:C5	3.08	0.41
26:LA:387:U:C2	26:LA:388:G:C6	3.09	0.41
27:LD:260:LYS:HA	27:LD:263:ASP:HB2	2.02	0.41
2:SA:834:U:H2'	2:SA:835:U:C6	2.55	0.41
2:SA:1239:A:C5	2:SA:1298:U:C4	3.09	0.41
53:LP:14:SER:HA	53:LP:17:ARG:NH1	2.36	0.41
40:L4:36:LYS:HA	40:L4:47:ILE:HA	2.02	0.41
26:LA:2183:A:H2'	26:LA:2184:A:C8	2.55	0.41
26:LA:2592:G:H2'	26:LA:2593:U:H6	1.85	0.41
26:LA:1569:A:C2	26:LA:1570:A:C4	3.09	0.41
26:LA:2816:G:C2	26:LA:2831:G:C2	3.08	0.41
27:LD:115:ILE:CD1	27:LD:116:GLN:H	2.29	0.41
26:LA:774:G:C5'	27:LD:47:ARG:NH2	2.83	0.41
1:SS:51:HIS:CE1	2:SA:1220:G:H1'	2.56	0.41
26:LA:83:A:N7	26:LA:101:A:C6	2.89	0.41
2:SA:1501:C:C4	2:SA:1504:G:C4	3.09	0.41
26:LA:2519:U:C4	26:LA:2542:A:C4	3.09	0.41
2:SA:363:A:C5	2:SA:364:A:C6	3.08	0.41
26:LA:2135:A:H61	26:LA:2156:G:H1'	1.86	0.41
2:SA:693:G:C4	2:SA:694:A:C8	3.08	0.41
26:LA:1764:C:H2'	26:LA:1765:U:C6	2.55	0.41
26:LA:2692:G:C2	26:LA:2693:G:C4	3.08	0.41
26:LA:2789:C:C5	26:LA:2893:A:C5	3.09	0.41
26:LA:780:G:C4	26:LA:782:A:C6	3.09	0.41
26:LA:17:G:C6	26:LA:18:U:C4	3.09	0.41
26:LA:2796:U:C5	26:LA:2798:U:C4	3.09	0.41
26:LA:1638:C:C4	26:LA:1639:C:C4	3.09	0.41
26:LA:2767:C:C2	26:LA:2768:U:C5	3.09	0.41
26:LA:1057:A:N3	26:LA:1058:U:C6	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2842:G:C2	26:LA:2843:G:C4	3.09	0.41
26:LA:961:C:C2	26:LA:2031:A:C6	3.09	0.41
26:LA:734:A:C2	26:LA:735:A:N9	2.89	0.41
2:SA:192:A:C5	2:SA:193:C:C5	3.09	0.41
26:LA:244:A:C6	26:LA:255:A:C8	3.09	0.41
26:LA:23:G:C6	26:LA:518:G:C6	3.08	0.41
2:SA:669:G:C2	2:SA:670:G:C8	3.09	0.41
26:LA:227:A:C4	26:LA:2407:A:H1'	2.54	0.41
26:LA:2679:A:C2	26:LA:2729:G:C2	3.08	0.41
26:LA:301:G:C2	26:LA:302:C:C2	3.09	0.41
11:SK:78:ILE:C	11:SK:78:ILE:HD12	2.41	0.41
2:SA:53:A:C5	2:SA:54:C:C6	3.09	0.41
26:LA:524:G:C6	26:LA:525:U:O4	2.74	0.41
26:LA:1331:G:C2	26:LA:1333:G:C8	3.08	0.41
26:LA:2077:A:N7	26:LA:2435:A:C5	2.89	0.41
26:LA:1488:C:C2	26:LA:1502:A:N1	2.89	0.41
26:LA:1437:C:H2'	26:LA:1438:U:C6	2.56	0.41
26:LA:721:A:C5	26:LA:722:A:C8	3.09	0.41
26:LA:972:A:H3'	26:LA:973:A:H2'	2.02	0.41
25:LB:69:G:N7	25:LB:70:C:C5	2.89	0.41
26:LA:1195:G:C2	26:LA:1196:C:C6	3.09	0.41
26:LA:1959:G:C6	26:LA:1960:A:C5	3.09	0.41
2:SA:415:A:H3'	2:SA:416:G:H8	1.85	0.41
26:LA:1471:G:H2'	26:LA:1472:C:C6	2.56	0.41
2:SA:1231:G:C6	2:SA:1232:U:C4	3.09	0.41
22:SF:47:LEU:HD12	22:SF:55:HIS:O	2.20	0.41
2:SA:316:C:O2	2:SA:338:A:C2	2.74	0.41
55:LQ:80:GLU:OE2	55:LQ:80:GLU:HA	2.21	0.41
26:LA:462:C:C2	26:LA:468:G:N2	2.89	0.41
38:LE:49:GLN:HA	38:LE:81:GLU:HA	2.03	0.41
26:LA:689:A:C6	26:LA:690:G:C5	3.08	0.41
24:S3:641:LEU:HD23	24:S3:655:ALA:HB2	2.03	0.41
2:SA:410:G:OP2	20:SD:25:ARG:NH2	2.53	0.41
2:SA:1131:G:O6	2:SA:1132:C:C4	2.74	0.41
26:LA:332:A:C5	26:LA:335:C:C4	3.08	0.41
26:LA:1255:U:H3'	26:LA:1256:G:H5''	2.03	0.41
26:LA:1128:G:C4	26:LA:2518:A:C2	3.09	0.41
2:SA:499:A:C6	2:SA:547:A:C8	3.09	0.41
26:LA:2165:C:H2'	26:LA:2166:U:OP2	2.20	0.41
27:LD:51:ARG:O	27:LD:52:HIS:CD2	2.74	0.41
58:LT:22:LEU:HD23	58:LT:96:VAL:HG22	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2809:A:C6	26:LA:2810:A:C6	3.09	0.41
48:LN:123:ARG:HH12	48:LN:144:GLU:H	1.65	0.41
26:LA:83:A:C4	26:LA:101:A:C2	3.09	0.41
26:LA:2440:C:H5''	26:LA:2587:A:H4'	2.03	0.41
26:LA:2494:G:C4	26:LA:2495:G:C8	3.09	0.41
2:SA:621:A:N6	2:SA:622:A:C6	2.89	0.41
26:LA:1878:G:H2'	26:LA:1879:C:C6	2.56	0.41
2:SA:716:A:C6	2:SA:717:U:C4	3.08	0.41
26:LA:778:G:C2	26:LA:787:C:O2	2.74	0.41
26:LA:1405:U:H2'	26:LA:1406:U:C6	2.56	0.41
2:SA:286:C:C4	2:SA:287:U:C4	3.09	0.41
26:LA:1419:A:H2'	26:LA:1421:G:N7	2.35	0.41
2:SA:887:G:N2	2:SA:911:U:C2	2.89	0.41
26:LA:2056:G:N1	26:LA:2577:A:H1'	2.36	0.41
2:SA:158:G:C6	2:SA:159:G:C4	3.09	0.41
2:SA:958:A:C6	2:SA:959:A:C2	3.09	0.41
26:LA:1450:G:C6	26:LA:1451:C:N4	2.89	0.41
26:LA:1651:G:C2	26:LA:1652:A:C4	3.09	0.41
2:SA:928:G:C2	2:SA:1390:U:O2	2.74	0.41
2:SA:1078:U:O4	2:SA:1079:G:C2	2.75	0.41
26:LA:283:G:C6	26:LA:284:U:C2	3.08	0.41
26:LA:993:G:O6	26:LA:1161:C:N4	2.53	0.41
2:SA:636:U:H2'	2:SA:637:C:C6	2.56	0.41
4:S2:26:C:C4	4:S2:27:G:C5	3.09	0.41
2:SA:749:A:C2	2:SA:750:C:C2	3.09	0.41
2:SA:69:G:C6	2:SA:70:U:C4	3.09	0.41
2:SA:860:A:H2'	2:SA:861:G:O4'	2.21	0.41
27:LD:145:MET:SD	27:LD:153:LEU:HD11	2.60	0.41
26:LA:2636:C:H2'	26:LA:2637:U:C6	2.56	0.41
22:SF:35:LYS:CB	22:SF:37:HIS:CE1	3.04	0.41
26:LA:585:G:C5	26:LA:1251:C:C4	3.09	0.40
30:LW:86:PHE:CG	30:LW:87:GLU:N	2.88	0.40
2:SA:763:G:C5	2:SA:764:C:C5	3.08	0.40
26:LA:134:G:C6	26:LA:135:U:O4	2.74	0.40
26:LA:135:U:C2	26:LA:136:G:C8	3.10	0.40
26:LA:2532:G:C6	26:LA:2533:U:C2	3.08	0.40
2:SA:21:G:H2'	2:SA:22:G:C8	2.56	0.40
26:LA:2190:G:H2'	26:LA:2191:A:C8	2.56	0.40
2:SA:1269:A:C2	2:SA:1313:U:O4'	2.74	0.40
26:LA:2478:A:C5	26:LA:2529:G:C8	3.10	0.40
26:LA:1842:G:C2	26:LA:1843:C:C2	3.09	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:2024:G:O2'	26:LA:2025:C:H5'	2.21	0.40
26:LA:1725:U:C5	26:LA:1726:C:C5	3.07	0.40
2:SA:782:A:C6	2:SA:801:U:C2	3.09	0.40
2:SA:777:A:C2	2:SA:778:G:H1'	2.56	0.40
26:LA:535:G:C5	26:LA:536:G:C8	3.09	0.40
2:SA:27:G:C6	2:SA:557:G:C2	3.09	0.40
26:LA:2678:C:C4	26:LA:2679:A:N7	2.89	0.40
26:LA:607:U:C4	26:LA:608:A:N7	2.90	0.40
26:LA:1412:U:H2'	26:LA:1413:A:C8	2.57	0.40
26:LA:2322:A:C6	26:LA:2323:G:C5	3.10	0.40
26:LA:1439:A:C8	26:LA:1440:U:C6	3.09	0.40
26:LA:1061:U:C2	49:LK:9:LYS:HD2	2.56	0.40
13:SM:11:HIS:CG	13:SM:12:LYS:H	2.39	0.40
26:LA:2265:U:C6	26:LA:2266:A:C8	3.09	0.40
47:LJ:6:ASP:O	47:LJ:10:ILE:HB	2.22	0.40
9:SI:49:GLN:HB3	9:SI:50:PRO:HD3	2.03	0.40
26:LA:2246:G:H2'	26:LA:2247:A:H8	1.86	0.40
24:S3:20:ALA:HB3	24:S3:22:LYS:H	1.86	0.40
2:SA:675:A:N1	2:SA:676:A:C2	2.89	0.40
26:LA:313:G:H2'	26:LA:314:C:O4'	2.22	0.40
6:SU:3:ILE:HG22	6:SU:23:GLU:HB2	2.02	0.40
14:SN:41:TRP:CZ2	14:SN:47:LEU:HD11	2.56	0.40
26:LA:1916:A:C6	26:LA:1917:U:H6	2.39	0.40
26:LA:83:A:C5	26:LA:101:A:C4	3.09	0.40
26:LA:783:A:C3'	26:LA:783:A:C8	3.04	0.40
26:LA:2711:A:C8	26:LA:2714:G:O4'	2.74	0.40
26:LA:1286:A:C2	26:LA:1289:C:C5	3.09	0.40
26:LA:1057:A:H1'	26:LA:1086:A:C5	2.57	0.40
26:LA:7:G:C6	26:LA:8:C:C4	3.09	0.40
2:SA:105:G:C5	2:SA:106:C:C5	3.08	0.40
26:LA:2358:A:C8	26:LA:2358:A:OP1	2.71	0.40
2:SA:61:G:C4	2:SA:107:G:C2	3.09	0.40
26:LA:91:A:H4'	26:LA:92:U:H5'	2.03	0.40
2:SA:800:G:H2'	2:SA:801:U:C6	2.57	0.40
2:SA:942:G:H2'	2:SA:943:U:C6	2.56	0.40
2:SA:1323:G:H2'	2:SA:1324:A:C8	2.56	0.40
26:LA:1970:A:C8	26:LA:1972:G:C4	3.09	0.40
26:LA:1723:G:H3'	26:LA:1724:G:C8	2.56	0.40
2:SA:602:A:C6	2:SA:603:U:C4	3.09	0.40
2:SA:1022:A:C6	2:SA:1023:U:C5	3.09	0.40
26:LA:1794:A:N1	26:LA:1795:C:C4	2.90	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:LC:19:LYS:HG2	37:LC:20:GLN:N	2.36	0.40
54:LM:12:ASP:HB3	54:LM:99:ILE:HG22	2.02	0.40
2:SA:923:A:C2	2:SA:1395:C:O2	2.74	0.40
26:LA:1340:U:H3'	29:LV:61:LEU:CD1	2.52	0.40
44:LF:120:VAL:HG11	44:LF:193:VAL:HG21	2.01	0.40
26:LA:1071:G:N3	26:LA:1071:G:H2'	2.36	0.40
21:SE:105:ILE:HG12	21:SE:105:ILE:H	1.65	0.40
26:LA:2859:G:C6	26:LA:2860:A:N6	2.88	0.40
2:SA:824:G:C2	2:SA:825:A:C5	3.09	0.40
2:SA:1376:U:H3'	7:SG:8:GLN:HE22	1.86	0.40
2:SA:284:C:H2'	2:SA:285:C:C6	2.56	0.40
26:LA:1491:G:C6	26:LA:1500:G:C2	3.09	0.40
21:SE:95:MET:SD	21:SE:123:LEU:HD21	2.62	0.40
26:LA:2809:A:C2	26:LA:2810:A:N3	2.88	0.40
2:SA:729:A:H2'	2:SA:730:G:C8	2.56	0.40
26:LA:1025:G:H1'	26:LA:1135:C:H5'	2.03	0.40
26:LA:2575:C:H1'	26:LA:2576:G:OP2	2.21	0.40
2:SA:550:G:H2'	2:SA:551:U:H6	1.87	0.40
26:LA:729:G:C4	26:LA:1775:U:C2	3.09	0.40
26:LA:2068:U:H4'	26:LA:2069:G:OP2	2.20	0.40
26:LA:2365:G:H4'	32:LY:59:PHE:CE1	2.56	0.40
26:LA:68:G:C5	26:LA:69:C:C5	3.09	0.40
26:LA:734:A:C2	26:LA:735:A:C4	3.09	0.40
2:SA:40:C:H2'	2:SA:41:G:C8	2.55	0.40
2:SA:1271:A:H3'	2:SA:1272:G:H8	1.86	0.40
26:LA:762:U:C6	26:LA:763:G:C6	3.09	0.40
26:LA:1331:G:C5	26:LA:1333:G:N7	2.89	0.40
26:LA:2082:A:C2	26:LA:2239:G:N3	2.89	0.40
26:LA:1301:A:C2	26:LA:1303:G:C6	3.09	0.40
26:LA:812:C:H4'	57:LS:12:ARG:HH22	1.86	0.40
26:LA:1745:A:C2	26:LA:1746:A:C4	3.09	0.40
1:SS:54:ARG:HH21	2:SA:958:A:N6	2.19	0.40
2:SA:1421:G:C6	2:SA:1480:A:C6	3.10	0.40
27:LD:263:ASP:C	27:LD:265:PHE:H	2.24	0.40
2:SA:409:U:C4	2:SA:410:G:C5	3.10	0.40
2:SA:427:U:H2'	2:SA:428:G:N7	2.35	0.40
26:LA:2330:G:C2	26:LA:2386:A:C2	3.09	0.40
2:SA:533:A:C2	2:SA:536:C:C5	3.10	0.40
2:SA:463:U:C4	2:SA:464:U:O2	2.74	0.40
4:S2:14:A:C4	4:S2:23:G:C4	3.10	0.40
4:S2:14:A:C5	4:S2:23:G:C5	3.10	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:1946:U:C4	26:LA:1947:C:C4	3.09	0.40
25:LB:62:C:H2'	25:LB:63:C:C6	2.57	0.40
28:LU:6:LYS:HE3	28:LU:8:ARG:HD2	2.03	0.40
14:SN:20:PHE:CD1	14:SN:51:PRO:HB3	2.56	0.40
26:LA:1510:G:N2	26:LA:1511:G:C4	2.89	0.40
12:SL:115:LYS:O	12:SL:116:TYR:CD1	2.75	0.40
26:LA:2094:A:H5''	51:LI:25:TYR:CE1	2.57	0.40
4:S2:70:C:H2'	4:S2:71:G:C8	2.57	0.40
26:LA:2437:G:H2'	26:LA:2438:U:H6	1.87	0.40
26:LA:85:G:C6	26:LA:98:G:C6	3.09	0.40
2:SA:1517:G:C6	2:SA:1518:A:C4	3.09	0.40
26:LA:80:G:H5'	26:LA:346:A:H1'	2.03	0.40
26:LA:80:G:C2	26:LA:107:G:C2	3.10	0.40
26:LA:2788:C:H2'	26:LA:2789:C:H6	1.84	0.40
26:LA:1268:A:C6	26:LA:2013:A:C8	3.09	0.40
26:LA:362:A:C5	26:LA:363:G:N7	2.89	0.40
7:SG:148:LYS:HB3	11:SK:60:PHE:CG	2.56	0.40
26:LA:2765:A:H2'	26:LA:2766:A:H5'	2.04	0.40
26:LA:5:A:C2	26:LA:2899:A:C2	3.09	0.40
2:SA:241:G:H2'	2:SA:242:G:C8	2.56	0.40
26:LA:2706:A:H4'	26:LA:2851:A:H5''	2.03	0.40
26:LA:860:U:N3	26:LA:2268:A:C8	2.89	0.40
2:SA:909:A:C8	2:SA:910:C:C5	3.09	0.40
26:LA:1269:A:C8	26:LA:1270:C:H5	2.39	0.40
26:LA:1733:G:C2	26:LA:1734:G:C8	3.09	0.40
2:SA:647:C:H2'	2:SA:648:A:C8	2.57	0.40
2:SA:1480:A:C5	2:SA:1481:U:C5	3.10	0.40
2:SA:15:G:C6	2:SA:16:A:C6	3.10	0.40
2:SA:14:U:O2	2:SA:16:A:C8	2.74	0.40
2:SA:560:A:N6	2:SA:566:G:C8	2.89	0.40
20:SD:25:ARG:O	20:SD:29:THR:HB	2.21	0.40
26:LA:12:U:O4	26:LA:13:A:C5	2.74	0.40
26:LA:925:A:C2	26:LA:926:G:C4	3.10	0.40
2:SA:1458:G:H5''	5:ST:25:SER:HB3	2.04	0.40
56:LR:13:LYS:H	56:LR:76:HIS:CD2	2.39	0.40
26:LA:671:C:H2'	26:LA:672:C:C6	2.56	0.40
45:LG:169:LEU:N	45:LG:172:PHE:CE1	2.90	0.40
2:SA:445:G:C2	2:SA:490:C:C2	3.09	0.40
24:S3:544:ILE:HB	24:S3:548:TYR:HB2	2.04	0.40
32:LY:45:HIS:CE1	32:LY:51:GLY:N	2.90	0.40
2:SA:730:G:H21	2:SA:765:G:C5'	2.33	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:LA:199:A:C6	26:LA:2434:A:C5	3.09	0.40
26:LA:199:A:C6	26:LA:2434:A:C6	3.09	0.40
26:LA:1684:G:C6	26:LA:1685:C:C4	3.09	0.40
26:LA:1202:G:C6	26:LA:1203:U:C4	3.10	0.40
2:SA:522:C:H2'	2:SA:523:A:C8	2.56	0.40
2:SA:236:A:H2'	2:SA:237:G:H8	1.85	0.40
26:LA:2850:A:H2'	26:LA:2851:A:H8	1.87	0.40
26:LA:1623:G:C6	26:LA:1624:U:C4	3.09	0.40
26:LA:2254:C:C6	26:LA:2255:G:C8	3.10	0.40
26:LA:2536:G:C5	26:LA:2537:U:C5	3.09	0.40
26:LA:2678:C:H2'	26:LA:2679:A:C8	2.57	0.40
26:LA:644:A:H2	26:LA:2369:A:HO2'	1.66	0.40
26:LA:253:C:N4	26:LA:254:G:C6	2.90	0.40
2:SA:720:C:C2	2:SA:721:G:H2'	2.56	0.40
2:SA:878:A:H2'	2:SA:879:C:C6	2.57	0.40
2:SA:1376:U:H3'	7:SG:8:GLN:NE2	2.37	0.40
24:S3:548:TYR:O	24:S3:551:ALA:HB3	2.21	0.40
4:S2:65:G:C5	4:S2:66:C:C5	3.10	0.40
9:SI:40:ARG:HD2	9:SI:40:ARG:H	1.86	0.40
26:LA:2680:U:H5'	38:LE:194:PRO:HA	2.04	0.40
26:LA:353:C:H2'	26:LA:354:A:C8	2.57	0.40
6:SU:9:GLU:HB3	6:SU:10:PRO:HD3	2.02	0.40
2:SA:937:A:H2	2:SA:1377:A:HO2'	1.68	0.40
25:LB:81:G:H2'	25:LB:82:U:O4'	2.22	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	SS	89/91 (98%)	71 (80%)	13 (15%)	5 (6%)	2 26

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	ST	84/86 (98%)	77 (92%)	7 (8%)	0	100	100
6	SU	68/70 (97%)	46 (68%)	14 (21%)	8 (12%)	0	8
7	SG	176/178 (99%)	154 (88%)	14 (8%)	8 (4%)	3	31
8	SH	127/129 (98%)	103 (81%)	16 (13%)	8 (6%)	2	23
9	SI	127/129 (98%)	99 (78%)	22 (17%)	6 (5%)	3	30
10	SJ	101/103 (98%)	83 (82%)	11 (11%)	7 (7%)	1	20
11	SK	126/128 (98%)	102 (81%)	18 (14%)	6 (5%)	3	30
12	SL	121/123 (98%)	95 (78%)	14 (12%)	12 (10%)	1	12
13	SM	115/117 (98%)	97 (84%)	11 (10%)	7 (6%)	2	24
14	SN	98/100 (98%)	81 (83%)	12 (12%)	5 (5%)	2	28
15	SO	86/88 (98%)	76 (88%)	7 (8%)	3 (4%)	4	40
16	SP	80/82 (98%)	72 (90%)	4 (5%)	4 (5%)	3	29
17	SQ	81/83 (98%)	67 (83%)	9 (11%)	5 (6%)	2	24
18	SB	238/240 (99%)	212 (89%)	14 (6%)	12 (5%)	3	29
19	SC	230/232 (99%)	196 (85%)	18 (8%)	16 (7%)	1	20
20	SD	203/205 (99%)	166 (82%)	26 (13%)	11 (5%)	2	27
21	SE	164/166 (99%)	127 (77%)	24 (15%)	13 (8%)	1	16
22	SF	133/135 (98%)	114 (86%)	11 (8%)	8 (6%)	2	24
23	SR	72/74 (97%)	57 (79%)	10 (14%)	5 (7%)	1	20
24	S3	700/702 (100%)	611 (87%)	61 (9%)	28 (4%)	4	35
27	LD	270/272 (99%)	215 (80%)	42 (16%)	13 (5%)	3	30
28	LU	108/110 (98%)	95 (88%)	11 (10%)	2 (2%)	10	53
29	LV	98/100 (98%)	75 (76%)	13 (13%)	10 (10%)	1	11
30	LW	101/103 (98%)	84 (83%)	12 (12%)	5 (5%)	3	29
31	LX	92/94 (98%)	83 (90%)	5 (5%)	4 (4%)	3	33
32	LY	82/84 (98%)	57 (70%)	15 (18%)	10 (12%)	0	8
33	LZ	75/77 (97%)	63 (84%)	10 (13%)	2 (3%)	6	46
34	L0	61/63 (97%)	51 (84%)	8 (13%)	2 (3%)	5	41
35	L1	56/58 (97%)	45 (80%)	7 (12%)	4 (7%)	1	19
36	L2	68/70 (97%)	44 (65%)	15 (22%)	9 (13%)	0	6
37	LC	232/234 (99%)	192 (83%)	29 (12%)	11 (5%)	3	30

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
38	LE	207/209 (99%)	151 (73%)	34 (16%)	22 (11%)	0	10
39	L3	54/56 (96%)	40 (74%)	7 (13%)	7 (13%)	0	7
40	L4	52/54 (96%)	45 (86%)	5 (10%)	2 (4%)	4	37
41	L5	44/46 (96%)	34 (77%)	7 (16%)	3 (7%)	1	21
42	L6	62/64 (97%)	53 (86%)	8 (13%)	1 (2%)	12	56
43	L7	36/38 (95%)	26 (72%)	5 (14%)	5 (14%)	0	6
44	LF	199/201 (99%)	163 (82%)	21 (11%)	15 (8%)	1	17
45	LG	176/178 (99%)	133 (76%)	26 (15%)	17 (10%)	1	12
46	LH	174/176 (99%)	127 (73%)	29 (17%)	18 (10%)	1	11
47	LJ	162/164 (99%)	143 (88%)	11 (7%)	8 (5%)	3	29
48	LN	142/144 (99%)	116 (82%)	22 (16%)	4 (3%)	6	45
49	LK	139/141 (99%)	114 (82%)	17 (12%)	8 (6%)	2	25
50	LL	140/142 (99%)	116 (83%)	14 (10%)	10 (7%)	1	19
51	LI	147/149 (99%)	121 (82%)	16 (11%)	10 (7%)	1	21
52	LO	134/136 (98%)	111 (83%)	14 (10%)	9 (7%)	1	21
53	LP	125/127 (98%)	109 (87%)	10 (8%)	6 (5%)	3	30
54	LM	121/123 (98%)	91 (75%)	18 (15%)	12 (10%)	1	12
55	LQ	115/117 (98%)	108 (94%)	5 (4%)	2 (2%)	11	55
56	LR	112/114 (98%)	79 (70%)	17 (15%)	16 (14%)	0	5
57	LS	115/117 (98%)	104 (90%)	5 (4%)	6 (5%)	2	27
58	LT	101/103 (98%)	87 (86%)	11 (11%)	3 (3%)	5	44
All	All	7019/7125 (98%)	5781 (82%)	805 (12%)	433 (6%)	4	24

All (433) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	SS	11	ASP
1	SS	37	SER
1	SS	75	PRO
6	SU	10	PRO
6	SU	18	PHE
7	SG	78	ARG
7	SG	79	VAL
7	SG	114	SER
8	SH	74	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	SH	94	VAL
9	SI	14	SER
9	SI	110	VAL
10	SJ	4	GLN
10	SJ	59	LYS
10	SJ	62	ARG
11	SK	5	ILE
11	SK	52	ARG
11	SK	125	LYS
11	SK	127	ARG
12	SL	14	LYS
12	SL	74	GLN
12	SL	104	SER
13	SM	9	PRO
13	SM	22	TYR
13	SM	63	VAL
13	SM	115	ILE
15	SO	21	THR
16	SP	2	VAL
16	SP	12	LYS
17	SQ	82	VAL
18	SB	20	ARG
18	SB	39	ILE
18	SB	151	LYS
18	SB	190	SER
19	SC	50	SER
19	SC	126	ARG
20	SD	6	PRO
20	SD	191	SER
20	SD	192	ALA
21	SE	23	THR
21	SE	102	THR
21	SE	152	VAL
22	SF	84	VAL
22	SF	132	GLU
24	S3	76	LYS
24	S3	207	PRO
24	S3	401	ALA
24	S3	562	ALA
27	LD	38	LYS
27	LD	59	GLN
27	LD	94	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	LV	28	ASN
29	LV	37	ASP
30	LW	3	LYS
31	LX	2	PHE
31	LX	85	LYS
32	LY	19	ARG
32	LY	29	SER
32	LY	30	VAL
32	LY	37	VAL
32	LY	50	VAL
32	LY	56	HIS
33	LZ	19	HIS
36	L2	35	ASP
37	LC	112	ASP
37	LC	147	PRO
37	LC	166	ASP
38	LE	16	THR
38	LE	17	GLU
38	LE	97	SER
38	LE	119	ALA
38	LE	130	GLN
38	LE	152	PRO
38	LE	162	ALA
39	L3	27	LEU
39	L3	43	THR
40	L4	50	GLU
41	L5	41	ARG
41	L5	44	VAL
43	L7	30	GLU
44	LF	45	ALA
44	LF	88	ARG
45	LG	41	GLU
45	LG	43	ILE
45	LG	78	ILE
46	LH	8	VAL
46	LH	53	PRO
46	LH	175	LYS
47	LJ	86	GLU
49	LK	33	ASN
49	LK	120	ASP
50	LL	40	HIS
51	LI	20	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	LI	75	LEU
51	LI	121	VAL
52	LO	6	ARG
52	LO	58	LYS
52	LO	133	LYS
54	LM	3	GLN
54	LM	5	GLN
54	LM	79	PHE
54	LM	119	ALA
56	LR	5	LYS
56	LR	25	VAL
56	LR	69	VAL
56	LR	91	VAL
58	LT	79	ARG
1	SS	82	HIS
6	SU	8	ASN
6	SU	13	VAL
6	SU	20	ARG
7	SG	81	GLY
7	SG	149	ALA
7	SG	165	ALA
9	SI	115	VAL
10	SJ	57	VAL
11	SK	15	VAL
12	SL	22	ALA
12	SL	43	LYS
12	SL	117	GLY
14	SN	2	LYS
16	SP	25	ARG
17	SQ	35	LYS
18	SB	15	PHE
18	SB	128	LEU
19	SC	128	MET
19	SC	146	LYS
19	SC	227	GLN
20	SD	24	VAL
20	SD	28	ASP
20	SD	29	THR
20	SD	166	LYS
21	SE	9	GLU
21	SE	123	LEU
21	SE	126	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	SR	12	PHE
23	SR	20	ILE
24	S3	38	LYS
24	S3	45	GLY
24	S3	354	ALA
24	S3	409	GLU
24	S3	488	ALA
24	S3	496	LYS
24	S3	571	VAL
24	S3	690	PRO
28	LU	89	ALA
29	LV	2	ILE
29	LV	38	ALA
29	LV	52	GLU
29	LV	70	HIS
29	LV	78	SER
30	LW	36	GLU
30	LW	79	ALA
31	LX	71	LYS
32	LY	10	ARG
35	L1	30	ARG
36	L2	22	MET
36	L2	39	LYS
37	LC	121	MET
37	LC	226	GLN
37	LC	227	ALA
38	LE	32	ASN
38	LE	96	ILE
38	LE	118	PHE
38	LE	122	VAL
38	LE	127	PHE
38	LE	139	SER
38	LE	163	GLY
38	LE	208	LYS
39	L3	8	THR
39	L3	20	ALA
40	L4	16	THR
44	LF	65	THR
44	LF	68	ALA
45	LG	32	LYS
45	LG	62	GLN
45	LG	81	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	LG	87	LYS
45	LG	99	PHE
45	LG	176	PHE
46	LH	59	ASP
46	LH	151	ARG
47	LJ	21	ALA
47	LJ	55	ARG
47	LJ	72	LYS
48	LN	2	ARG
48	LN	113	ALA
48	LN	143	GLU
49	LK	87	SER
50	LL	65	THR
50	LL	120	ARG
51	LI	90	LEU
51	LI	122	LEU
52	LO	18	ARG
52	LO	87	GLY
52	LO	134	THR
53	LP	12	ARG
53	LP	59	SER
54	LM	44	LYS
56	LR	63	ILE
56	LR	96	LEU
56	LR	110	LYS
56	LR	111	GLU
57	LS	6	GLY
57	LS	85	ALA
57	LS	91	ARG
58	LT	29	THR
58	LT	49	ILE
6	SU	6	ARG
6	SU	68	ARG
7	SG	174	LEU
8	SH	22	ALA
8	SH	62	LEU
8	SH	82	LEU
9	SI	2	GLU
9	SI	114	LYS
10	SJ	14	ASP
12	SL	18	SER
12	SL	44	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	SL	71	HIS
14	SN	39	ASP
14	SN	62	ARG
15	SO	19	ASN
18	SB	70	GLY
18	SB	84	LEU
18	SB	127	LYS
18	SB	192	PRO
19	SC	25	THR
19	SC	60	ALA
19	SC	106	ARG
19	SC	162	ALA
19	SC	211	ALA
19	SC	216	PRO
20	SD	138	PRO
21	SE	22	LYS
21	SE	125	LYS
22	SF	116	PHE
23	SR	23	LYS
24	S3	44	ASP
24	S3	146	MET
24	S3	305	PRO
24	S3	310	ALA
24	S3	344	SER
24	S3	407	ARG
24	S3	452	SER
27	LD	7	PRO
27	LD	121	ALA
27	LD	270	ARG
29	LV	3	ARG
30	LW	30	SER
30	LW	53	GLN
32	LY	36	ILE
32	LY	75	ASN
33	LZ	76	LYS
35	L1	40	THR
36	L2	9	TYR
37	LC	38	PHE
37	LC	110	ASN
38	LE	113	SER
43	L7	31	PRO
44	LF	57	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	LF	62	GLN
45	LG	72	SER
45	LG	74	ALA
45	LG	112	ASP
45	LG	136	ILE
46	LH	6	ALA
46	LH	29	ASN
46	LH	47	ASN
46	LH	90	GLY
46	LH	111	PRO
46	LH	114	HIS
50	LL	79	GLY
50	LL	132	HIS
51	LI	93	SER
53	LP	10	LEU
53	LP	106	ASP
54	LM	45	GLU
54	LM	94	PRO
54	LM	104	THR
56	LR	51	ASN
57	LS	86	SER
8	SH	56	PRO
8	SH	83	ARG
8	SH	93	LYS
12	SL	23	LEU
14	SN	80	ARG
17	SQ	3	LYS
17	SQ	49	ASN
18	SB	156	LEU
19	SC	97	PRO
19	SC	226	GLN
20	SD	48	SER
21	SE	82	HIS
21	SE	105	ILE
22	SF	83	ALA
22	SF	95	ALA
22	SF	128	ASP
23	SR	33	THR
24	S3	543	VAL
27	LD	57	HIS
27	LD	97	ASP
27	LD	98	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	LD	148	GLY
28	LU	41	LYS
32	LY	48	ALA
35	L1	11	SER
35	L1	15	ARG
36	L2	10	GLU
36	L2	23	LYS
36	L2	41	HIS
36	L2	69	SER
37	LC	231	ALA
38	LE	18	ASP
43	L7	21	GLY
44	LF	55	SER
44	LF	120	VAL
44	LF	165	HIS
44	LF	171	ASP
45	LG	173	ASP
46	LH	7	PRO
46	LH	32	LEU
46	LH	38	ASP
47	LJ	2	LEU
47	LJ	113	GLU
49	LK	51	GLY
49	LK	93	ASN
50	LL	43	GLU
50	LL	66	GLY
51	LI	3	VAL
51	LI	10	ALA
51	LI	18	GLN
51	LI	115	VAL
52	LO	20	LEU
52	LO	135	VAL
53	LP	107	ASN
53	LP	108	ALA
54	LM	17	ARG
54	LM	67	LYS
54	LM	93	GLN
54	LM	101	GLY
55	LQ	24	THR
56	LR	65	ASN
56	LR	76	HIS
56	LR	92	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	SS	65	MET
7	SG	154	ARG
9	SI	127	SER
13	SM	112	ARG
14	SN	32	ASP
15	SO	17	ASP
17	SQ	2	ASP
20	SD	150	LYS
22	SF	91	ARG
23	SR	4	PHE
24	S3	78	TYR
24	S3	299	ASP
24	S3	408	MET
24	S3	442	PRO
24	S3	685	LYS
27	LD	150	GLY
27	LD	252	LYS
29	LV	35	ALA
34	L0	57	LEU
38	LE	36	GLN
38	LE	37	VAL
38	LE	95	SER
38	LE	153	GLY
39	L3	2	VAL
39	L3	22	THR
41	L5	8	SER
42	L6	27	ASN
43	L7	10	LEU
44	LF	188	MET
45	LG	37	MET
47	LJ	33	THR
47	LJ	76	VAL
48	LN	19	LEU
49	LK	65	SER
49	LK	73	PRO
56	LR	50	ARG
56	LR	94	ALA
57	LS	95	ALA
10	SJ	36	VAL
11	SK	10	ARG
12	SL	68	GLY
16	SP	27	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	SB	32	GLY
19	SC	13	ILE
19	SC	59	PRO
20	SD	3	TYR
21	SE	97	PRO
22	SF	52	ASN
24	S3	18	ILE
24	S3	608	LYS
34	L0	62	GLY
36	L2	27	THR
37	LC	17	ALA
43	L7	35	GLN
44	LF	11	ALA
44	LF	64	GLY
44	LF	85	PHE
45	LG	66	ILE
46	LH	14	VAL
46	LH	40	VAL
50	LL	23	LYS
55	LQ	62	LEU
56	LR	32	VAL
13	SM	96	VAL
19	SC	173	PRO
21	SE	43	GLY
44	LF	59	PRO
46	LH	9	VAL
57	LS	93	ILE
12	SL	27	PRO
24	S3	398	ASP
31	LX	81	PRO
38	LE	142	VAL
45	LG	84	ILE
50	LL	8	PRO
50	LL	127	GLY
56	LR	49	ILE
13	SM	114	PRO
29	LV	53	VAL
37	LC	91	GLY
49	LK	98	GLY
6	SU	2	VAL
10	SJ	40	ILE
27	LD	147	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	LO	69	PRO
39	L3	24	VAL
46	LH	167	VAL
21	SE	149	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	SS	78/78 (100%)	65 (83%)	13 (17%)	3	19
5	ST	65/65 (100%)	60 (92%)	5 (8%)	16	56
6	SU	60/60 (100%)	54 (90%)	6 (10%)	9	43
7	SG	146/146 (100%)	134 (92%)	12 (8%)	14	53
8	SH	104/104 (100%)	90 (86%)	14 (14%)	5	29
9	SI	106/106 (100%)	91 (86%)	15 (14%)	4	27
10	SJ	90/90 (100%)	80 (89%)	10 (11%)	8	38
11	SK	98/98 (100%)	90 (92%)	8 (8%)	14	53
12	SL	103/103 (100%)	97 (94%)	6 (6%)	25	66
13	SM	95/95 (100%)	81 (85%)	14 (15%)	4	25
14	SN	83/83 (100%)	78 (94%)	5 (6%)	24	65
15	SO	76/76 (100%)	69 (91%)	7 (9%)	11	48
16	SP	65/65 (100%)	58 (89%)	7 (11%)	8	40
17	SQ	77/77 (100%)	75 (97%)	2 (3%)	54	83
18	SB	198/198 (100%)	183 (92%)	15 (8%)	16	56
19	SC	189/189 (100%)	170 (90%)	19 (10%)	9	43
20	SD	172/172 (100%)	152 (88%)	20 (12%)	7	36
21	SE	125/125 (100%)	111 (89%)	14 (11%)	7	38
22	SF	116/116 (100%)	103 (89%)	13 (11%)	7	38
23	SR	64/64 (100%)	58 (91%)	6 (9%)	11	47

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
24	S3	575/575 (100%)	514 (89%)	61 (11%)	8	40
27	LD	217/217 (100%)	188 (87%)	29 (13%)	5	29
28	LU	93/93 (100%)	82 (88%)	11 (12%)	6	34
29	LV	84/84 (100%)	77 (92%)	7 (8%)	14	52
30	LW	84/84 (100%)	80 (95%)	4 (5%)	31	72
31	LX	78/78 (100%)	70 (90%)	8 (10%)	9	42
32	LY	62/62 (100%)	54 (87%)	8 (13%)	5	31
33	LZ	67/67 (100%)	55 (82%)	12 (18%)	2	15
34	L0	55/55 (100%)	49 (89%)	6 (11%)	8	39
35	L1	48/48 (100%)	39 (81%)	9 (19%)	2	13
36	L2	62/62 (100%)	52 (84%)	10 (16%)	3	21
37	LC	181/181 (100%)	164 (91%)	17 (9%)	11	47
38	LE	164/164 (100%)	143 (87%)	21 (13%)	5	31
39	L3	47/47 (100%)	43 (92%)	4 (8%)	13	52
40	L4	48/48 (100%)	44 (92%)	4 (8%)	14	52
41	L5	38/38 (100%)	35 (92%)	3 (8%)	15	54
42	L6	51/51 (100%)	48 (94%)	3 (6%)	24	66
43	L7	34/34 (100%)	32 (94%)	2 (6%)	24	66
44	LF	165/165 (100%)	153 (93%)	12 (7%)	17	58
45	LG	149/149 (100%)	133 (89%)	16 (11%)	8	40
46	LH	137/137 (100%)	119 (87%)	18 (13%)	5	30
47	LJ	122/122 (100%)	109 (89%)	13 (11%)	8	40
48	LN	103/103 (100%)	87 (84%)	16 (16%)	3	23
49	LK	109/109 (100%)	93 (85%)	16 (15%)	4	25
50	LL	116/116 (100%)	108 (93%)	8 (7%)	19	60
51	LI	114/114 (100%)	99 (87%)	15 (13%)	5	30
52	LO	109/109 (100%)	96 (88%)	13 (12%)	6	34
53	LP	103/103 (100%)	95 (92%)	8 (8%)	16	55
54	LM	104/104 (100%)	99 (95%)	5 (5%)	31	72
55	LQ	87/87 (100%)	80 (92%)	7 (8%)	15	54
56	LR	99/99 (100%)	87 (88%)	12 (12%)	6	33

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
57	LS	89/89 (100%)	78 (88%)	11 (12%)	6	32
58	LT	84/84 (100%)	78 (93%)	6 (7%)	18	59
All	All	5788/5788 (100%)	5182 (90%)	606 (10%)	13	41

All (606) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	SS	1	PRO
1	SS	4	LEU
1	SS	6	LYS
1	SS	9	PHE
1	SS	10	ILE
1	SS	11	ASP
1	SS	12	LEU
1	SS	15	LEU
1	SS	16	LYS
1	SS	31	ARG
1	SS	38	THR
1	SS	60	PHE
1	SS	80	ARG
5	ST	8	LYS
5	ST	17	ARG
5	ST	33	LYS
5	ST	58	ASP
5	ST	79	THR
6	SU	6	ARG
6	SU	16	ARG
6	SU	19	LYS
6	SU	35	GLU
6	SU	37	TYR
6	SU	43	GLU
7	SG	6	ILE
7	SG	25	PHE
7	SG	40	SER
7	SG	43	TYR
7	SG	52	ARG
7	SG	57	GLU
7	SG	61	PHE
7	SG	72	VAL
7	SG	104	VAL
7	SG	132	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	SG	155	TRP
7	SG	158	LEU
8	SH	2	MET
8	SH	9	MET
8	SH	17	GLN
8	SH	20	ASN
8	SH	24	VAL
8	SH	26	MET
8	SH	30	LYS
8	SH	57	GLU
8	SH	66	GLN
8	SH	68	LYS
8	SH	79	ARG
8	SH	107	LYS
8	SH	110	MET
8	SH	127	TYR
9	SI	4	GLN
9	SI	11	ARG
9	SI	26	LYS
9	SI	31	GLN
9	SI	45	MET
9	SI	79	ARG
9	SI	87	MET
9	SI	94	ARG
9	SI	96	GLU
9	SI	103	VAL
9	SI	105	ARG
9	SI	109	GLN
9	SI	124	PRO
9	SI	126	PHE
9	SI	129	ARG
10	SJ	5	ARG
10	SJ	35	GLN
10	SJ	40	ILE
10	SJ	44	THR
10	SJ	54	SER
10	SJ	64	GLN
10	SJ	89	ARG
10	SJ	97	ASP
10	SJ	99	GLN
10	SJ	100	ILE
11	SK	8	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	SK	11	VAL
11	SK	36	ARG
11	SK	63	GLN
11	SK	64	VAL
11	SK	93	GLU
11	SK	99	LEU
11	SK	107	THR
12	SL	17	LYS
12	SL	23	LEU
12	SL	39	THR
12	SL	50	LYS
12	SL	51	VAL
12	SL	72	ASN
13	SM	24	VAL
13	SM	26	LYS
13	SM	45	SER
13	SM	62	PHE
13	SM	64	VAL
13	SM	69	ARG
13	SM	78	ARG
13	SM	85	TYR
13	SM	86	ARG
13	SM	99	GLN
13	SM	100	ARG
13	SM	102	LYS
13	SM	115	ILE
13	SM	116	LYS
14	SN	3	GLN
14	SN	10	VAL
14	SN	34	ASN
14	SN	58	ARG
14	SN	63	CYS
15	SO	16	ARG
15	SO	20	ASP
15	SO	41	HIS
15	SO	42	PHE
15	SO	53	ARG
15	SO	70	LYS
15	SO	82	GLU
16	SP	14	ARG
16	SP	26	ASN
16	SP	28	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	SP	52	LEU
16	SP	56	ARG
16	SP	67	ILE
16	SP	78	VAL
17	SQ	18	LYS
17	SQ	64	ARG
18	SB	20	ARG
18	SB	24	PRO
18	SB	34	ARG
18	SB	49	PHE
18	SB	51	GLU
18	SB	63	LYS
18	SB	93	HIS
18	SB	109	SER
18	SB	112	ARG
18	SB	122	ASP
18	SB	150	ILE
18	SB	163	ILE
18	SB	187	ASP
18	SB	221	ARG
18	SB	238	GLU
19	SC	27	GLU
19	SC	35	ASP
19	SC	50	SER
19	SC	52	SER
19	SC	56	ILE
19	SC	67	ILE
19	SC	75	VAL
19	SC	105	VAL
19	SC	133	MET
19	SC	134	LYS
19	SC	138	GLN
19	SC	166	TRP
19	SC	167	TYR
19	SC	168	ARG
19	SC	172	VAL
19	SC	181	ILE
19	SC	200	TRP
19	SC	219	PRO
19	SC	227	GLN
20	SD	4	LEU
20	SD	13	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	SD	25	ARG
20	SD	47	LEU
20	SD	56	GLU
20	SD	99	ASN
20	SD	109	THR
20	SD	116	LEU
20	SD	119	HIS
20	SD	122	ILE
20	SD	123	MET
20	SD	128	VAL
20	SD	139	ASN
20	SD	143	SER
20	SD	146	GLU
20	SD	150	LYS
20	SD	169	TRP
20	SD	196	GLU
20	SD	197	HIS
20	SD	203	TYR
21	SE	15	ILE
21	SE	42	ASN
21	SE	44	ARG
21	SE	54	GLU
21	SE	56	PRO
21	SE	64	GLU
21	SE	68	ARG
21	SE	75	LEU
21	SE	82	HIS
21	SE	104	ILE
21	SE	111	ARG
21	SE	122	VAL
21	SE	125	LYS
21	SE	155	LYS
22	SF	3	HIS
22	SF	5	GLU
22	SF	9	MET
22	SF	12	PRO
22	SF	18	VAL
22	SF	41	ASP
22	SF	63	ASN
22	SF	68	GLN
22	SF	69	GLU
22	SF	102	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	SF	110	ARG
22	SF	112	ARG
22	SF	113	ARG
23	SR	4	PHE
23	SR	20	ILE
23	SR	23	LYS
23	SR	37	LYS
23	SR	59	LYS
23	SR	65	SER
24	S3	23	THR
24	S3	81	HIS
24	S3	83	ILE
24	S3	128	GLN
24	S3	136	ARG
24	S3	181	VAL
24	S3	196	ASP
24	S3	203	TYR
24	S3	207	PRO
24	S3	210	MET
24	S3	216	GLU
24	S3	217	TRP
24	S3	240	GLU
24	S3	252	ARG
24	S3	259	GLU
24	S3	278	LEU
24	S3	286	PRO
24	S3	288	PRO
24	S3	292	PRO
24	S3	298	LEU
24	S3	308	ARG
24	S3	312	ASP
24	S3	315	PRO
24	S3	326	ASP
24	S3	334	PHE
24	S3	336	ARG
24	S3	359	PHE
24	S3	361	ARG
24	S3	362	ILE
24	S3	373	ILE
24	S3	375	GLU
24	S3	377	ARG
24	S3	381	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	S3	388	LYS
24	S3	407	ARG
24	S3	415	ILE
24	S3	417	ILE
24	S3	423	THR
24	S3	442	PRO
24	S3	446	VAL
24	S3	453	ASN
24	S3	457	ILE
24	S3	487	VAL
24	S3	495	GLN
24	S3	498	THR
24	S3	501	GLU
24	S3	507	GLN
24	S3	514	TYR
24	S3	516	HIS
24	S3	522	TYR
24	S3	531	LYS
24	S3	534	GLU
24	S3	539	ILE
24	S3	561	LYS
24	S3	579	PHE
24	S3	613	GLU
24	S3	638	ARG
24	S3	682	GLU
24	S3	688	GLU
24	S3	695	GLN
24	S3	701	ARG
27	LD	22	GLU
27	LD	25	LYS
27	LD	42	ARG
27	LD	57	HIS
27	LD	67	LYS
27	LD	68	ARG
27	LD	79	ARG
27	LD	97	ASP
27	LD	102	TYR
27	LD	115	ILE
27	LD	116	GLN
27	LD	117	SER
27	LD	128	THR
27	LD	133	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	LD	142	ASN
27	LD	145	MET
27	LD	147	PRO
27	LD	173	LEU
27	LD	175	LEU
27	LD	184	GLU
27	LD	191	LEU
27	LD	212	TRP
27	LD	213	ARG
27	LD	227	VAL
27	LD	230	PRO
27	LD	235	GLU
27	LD	239	PHE
27	LD	241	LYS
27	LD	267	VAL
28	LU	11	ARG
28	LU	15	GLN
28	LU	22	ASP
28	LU	30	SER
28	LU	40	ASN
28	LU	42	LYS
28	LU	72	THR
28	LU	82	MET
28	LU	94	ASP
28	LU	95	ARG
28	LU	102	HIS
29	LV	3	ARG
29	LV	18	GLU
29	LV	32	LEU
29	LV	57	VAL
29	LV	72	GLN
29	LV	79	ASP
29	LV	93	LEU
30	LW	23	LYS
30	LW	81	ARG
30	LW	91	LYS
30	LW	103	LYS
31	LX	5	ASN
31	LX	10	LYS
31	LX	12	GLN
31	LX	29	ILE
31	LX	30	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	LX	51	GLN
31	LX	68	LYS
31	LX	88	HIS
32	LY	3	LYS
32	LY	23	LYS
32	LY	24	ARG
32	LY	25	PHE
32	LY	39	GLN
32	LY	40	ARG
32	LY	43	LYS
32	LY	66	VAL
33	LZ	7	THR
33	LZ	9	LYS
33	LZ	10	ARG
33	LZ	17	ARG
33	LZ	32	LEU
33	LZ	40	GLU
33	LZ	41	SER
33	LZ	59	ASP
33	LZ	60	LYS
33	LZ	63	ILE
33	LZ	64	ASP
33	LZ	73	ARG
34	L0	7	ARG
34	L0	9	LYS
34	L0	15	ASN
34	L0	18	LEU
34	L0	36	GLN
34	L0	40	SER
35	L1	8	GLN
35	L1	13	ILE
35	L1	23	LEU
35	L1	35	VAL
35	L1	41	PRO
35	L1	44	ARG
35	L1	47	ILE
35	L1	51	SER
35	L1	53	MET
36	L2	5	ILE
36	L2	12	ILE
36	L2	35	ASP
36	L2	38	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	L2	43	PHE
36	L2	45	THR
36	L2	49	ARG
36	L2	56	ARG
36	L2	59	ARG
36	L2	60	PHE
37	LC	4	LEU
37	LC	9	ARG
37	LC	12	ARG
37	LC	30	LEU
37	LC	79	THR
37	LC	108	GLU
37	LC	111	PHE
37	LC	137	MET
37	LC	144	THR
37	LC	154	LYS
37	LC	163	TYR
37	LC	164	ARG
37	LC	167	LYS
37	LC	192	LEU
37	LC	194	VAL
37	LC	208	TYR
37	LC	226	GLN
38	LE	1	MET
38	LE	2	ILE
38	LE	11	MET
38	LE	17	GLU
38	LE	18	ASP
38	LE	24	VAL
38	LE	32	ASN
38	LE	33	ARG
38	LE	35	THR
38	LE	42	ASN
38	LE	62	LYS
38	LE	70	LYS
38	LE	73	VAL
38	LE	79	LEU
38	LE	107	VAL
38	LE	118	PHE
38	LE	134	HIS
38	LE	149	ASN
38	LE	164	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	LE	176	ASP
38	LE	201	LEU
39	L3	2	VAL
39	L3	11	LYS
39	L3	21	LEU
39	L3	22	THR
40	L4	23	THR
40	L4	33	LEU
40	L4	37	LYS
40	L4	46	VAL
41	L5	2	LYS
41	L5	3	ARG
41	L5	4	THR
42	L6	15	LYS
42	L6	29	ARG
42	L6	39	ARG
43	L7	12	ARG
43	L7	19	ARG
44	LF	7	ASP
44	LF	47	LYS
44	LF	49	ARG
44	LF	67	ARG
44	LF	78	TRP
44	LF	85	PHE
44	LF	88	ARG
44	LF	124	PHE
44	LF	143	LEU
44	LF	152	GLU
44	LF	170	ARG
44	LF	191	ASP
45	LG	3	LEU
45	LG	10	GLU
45	LG	37	MET
45	LG	46	LYS
45	LG	55	ASP
45	LG	56	LEU
45	LG	65	LEU
45	LG	66	ILE
45	LG	77	LYS
45	LG	87	LYS
45	LG	127	TYR
45	LG	141	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	LG	146	ASP
45	LG	152	ASP
45	LG	158	THR
45	LG	172	PHE
46	LH	8	VAL
46	LH	33	THR
46	LH	34	ARG
46	LH	47	ASN
46	LH	49	LEU
46	LH	51	PHE
46	LH	59	ASP
46	LH	63	GLN
46	LH	68	ARG
46	LH	72	ASN
46	LH	78	VAL
46	LH	82	PHE
46	LH	93	TYR
46	LH	104	LEU
46	LH	106	LEU
46	LH	138	GLN
46	LH	148	ARG
46	LH	163	TYR
47	LJ	2	LEU
47	LJ	13	GLU
47	LJ	28	ASP
47	LJ	33	THR
47	LJ	41	ARG
47	LJ	42	LYS
47	LJ	51	MET
47	LJ	57	THR
47	LJ	58	LEU
47	LJ	67	PRO
47	LJ	83	TYR
47	LJ	87	HIS
47	LJ	96	LYS
48	LN	10	GLU
48	LN	21	ARG
48	LN	25	SER
48	LN	39	LYS
48	LN	48	ARG
48	LN	66	PHE
48	LN	80	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	LN	81	ASP
48	LN	91	ASP
48	LN	92	LEU
48	LN	104	GLN
48	LN	126	ARG
48	LN	129	LYS
48	LN	136	GLU
48	LN	142	ILE
48	LN	143	GLU
49	LK	4	VAL
49	LK	12	VAL
49	LK	29	GLN
49	LK	41	PHE
49	LK	44	LYS
49	LK	50	LYS
49	LK	55	PRO
49	LK	58	ILE
49	LK	61	TYR
49	LK	73	PRO
49	LK	94	LYS
49	LK	116	MET
49	LK	117	THR
49	LK	126	ARG
49	LK	127	SER
49	LK	133	ARG
50	LL	5	THR
50	LL	9	GLU
50	LL	30	THR
50	LL	41	LYS
50	LL	49	ASP
50	LL	75	TYR
50	LL	76	HIS
50	LL	99	ARG
51	LI	8	LYS
51	LI	9	VAL
51	LI	28	ASN
51	LI	60	GLU
51	LI	66	ASN
51	LI	72	ILE
51	LI	79	THR
51	LI	82	SER
51	LI	87	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	LI	97	ARG
51	LI	98	ASP
51	LI	116	ARG
51	LI	127	GLU
51	LI	132	PHE
51	LI	142	VAL
52	LO	1	MET
52	LO	2	LEU
52	LO	16	ARG
52	LO	22	GLN
52	LO	28	PHE
52	LO	38	ARG
52	LO	50	ARG
52	LO	53	MET
52	LO	59	ARG
52	LO	91	TYR
52	LO	96	ILE
52	LO	111	GLU
52	LO	125	PRO
53	LP	34	ILE
53	LP	40	LYS
53	LP	74	GLU
53	LP	75	ILE
53	LP	79	LEU
53	LP	90	ARG
53	LP	113	ILE
53	LP	119	SER
54	LM	3	GLN
54	LM	66	LYS
54	LM	84	CYS
54	LM	94	PRO
54	LM	114	LYS
55	LQ	8	ILE
55	LQ	30	ARG
55	LQ	31	THR
55	LQ	56	LYS
55	LQ	62	LEU
55	LQ	64	TYR
55	LQ	89	ASP
56	LR	19	PHE
56	LR	26	GLU
56	LR	29	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	LR	42	PHE
56	LR	50	ARG
56	LR	52	ARG
56	LR	55	HIS
56	LR	58	PHE
56	LR	88	ARG
56	LR	103	THR
56	LR	108	ARG
56	LR	112	ARG
57	LS	8	ILE
57	LS	32	ARG
57	LS	48	ASP
57	LS	50	ARG
57	LS	54	ARG
57	LS	63	ARG
57	LS	74	SER
57	LS	76	SER
57	LS	91	ARG
57	LS	92	LYS
57	LS	108	LEU
58	LT	6	GLN
58	LT	10	LYS
58	LT	11	GLN
58	LT	38	VAL
58	LT	40	MET
58	LT	55	ASP

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (41) such sidechains are listed below:

Mol	Chain	Res	Type
1	SS	56	HIS
5	ST	19	HIS
7	SG	8	GLN
7	SG	85	GLN
9	SI	4	GLN
12	SL	72	ASN
13	SM	13	HIS
19	SC	175	HIS
20	SD	35	GLN
20	SD	39	GLN
20	SD	119	HIS
22	SF	37	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	S3	54	GLN
24	S3	516	HIS
28	LU	7	HIS
31	LX	51	GLN
31	LX	75	GLN
31	LX	78	GLN
31	LX	87	GLN
31	LX	88	HIS
33	LZ	19	HIS
34	L0	31	GLN
36	L2	20	ASN
37	LC	67	HIS
37	LC	80	GLN
38	LE	32	ASN
38	LE	42	ASN
39	L3	18	HIS
44	LF	41	GLN
45	LG	20	ASN
45	LG	126	ASN
48	LN	38	GLN
50	LL	47	HIS
50	LL	77	HIS
51	LI	28	ASN
53	LP	3	HIS
53	LP	16	HIS
53	LP	107	ASN
54	LM	5	GLN
54	LM	29	HIS
57	LS	58	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	SA	1541/1542 (99%)	362 (23%)	122 (7%)
25	LB	119/120 (99%)	21 (17%)	9 (7%)
26	LA	2903/2904 (99%)	645 (22%)	221 (7%)
3	S1	46/47 (97%)	36 (78%)	12 (26%)
4	S2	77/77 (100%)	20 (25%)	10 (12%)
All	All	4686/4690 (99%)	1084 (23%)	374 (7%)

All (1084) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
2	SA	3	A
2	SA	4	U
2	SA	5	U
2	SA	8	A
2	SA	9	G
2	SA	31	G
2	SA	32	A
2	SA	36	C
2	SA	47	C
2	SA	48	C
2	SA	50	A
2	SA	51	A
2	SA	52	C
2	SA	54	C
2	SA	60	A
2	SA	61	G
2	SA	66	A
2	SA	83	C
2	SA	84	U
2	SA	85	U
2	SA	87	C
2	SA	95	C
2	SA	98	A
2	SA	108	G
2	SA	121	U
2	SA	122	G
2	SA	123	U
2	SA	129	A
2	SA	131	A
2	SA	135	C
2	SA	136	C
2	SA	153	C
2	SA	164	G
2	SA	166	U
2	SA	171	A
2	SA	174	A
2	SA	182	A
2	SA	184	G
2	SA	188	C
2	SA	197	A
2	SA	204	G
2	SA	205	A
2	SA	210	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	212	G
2	SA	225	C
2	SA	228	A
2	SA	239	U
2	SA	240	G
2	SA	244	U
2	SA	245	U
2	SA	247	G
2	SA	250	A
2	SA	251	G
2	SA	252	U
2	SA	261	U
2	SA	262	A
2	SA	266	G
2	SA	267	C
2	SA	272	C
2	SA	275	G
2	SA	280	C
2	SA	281	G
2	SA	289	G
2	SA	293	G
2	SA	298	A
2	SA	306	A
2	SA	307	C
2	SA	308	C
2	SA	316	C
2	SA	317	U
2	SA	319	G
2	SA	328	C
2	SA	329	A
2	SA	352	C
2	SA	354	G
2	SA	366	A
2	SA	372	C
2	SA	373	A
2	SA	374	A
2	SA	381	C
2	SA	382	A
2	SA	384	G
2	SA	389	A
2	SA	390	U
2	SA	392	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	395	C
2	SA	398	U
2	SA	404	G
2	SA	406	G
2	SA	411	A
2	SA	412	A
2	SA	413	G
2	SA	415	A
2	SA	422	C
2	SA	428	G
2	SA	429	U
2	SA	444	G
2	SA	453	G
2	SA	463	U
2	SA	464	U
2	SA	465	A
2	SA	467	U
2	SA	468	A
2	SA	479	U
2	SA	481	G
2	SA	485	U
2	SA	496	A
2	SA	498	A
2	SA	505	G
2	SA	508	U
2	SA	509	A
2	SA	518	C
2	SA	519	C
2	SA	524	G
2	SA	527	G
2	SA	528	C
2	SA	531	U
2	SA	532	A
2	SA	533	A
2	SA	547	A
2	SA	560	A
2	SA	561	U
2	SA	562	U
2	SA	566	G
2	SA	572	A
2	SA	573	A
2	SA	575	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	576	C
2	SA	577	G
2	SA	583	A
2	SA	609	A
2	SA	610	U
2	SA	615	G
2	SA	620	C
2	SA	631	C
2	SA	632	U
2	SA	633	G
2	SA	636	U
2	SA	641	U
2	SA	642	A
2	SA	650	G
2	SA	653	U
2	SA	676	A
2	SA	687	A
2	SA	688	G
2	SA	693	G
2	SA	694	A
2	SA	695	A
2	SA	701	U
2	SA	703	G
2	SA	718	A
2	SA	719	C
2	SA	720	C
2	SA	721	G
2	SA	723	U
2	SA	724	G
2	SA	729	A
2	SA	755	G
2	SA	760	G
2	SA	765	G
2	SA	766	A
2	SA	776	G
2	SA	777	A
2	SA	783	C
2	SA	788	U
2	SA	789	U
2	SA	790	A
2	SA	791	G
2	SA	792	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	793	U
2	SA	794	A
2	SA	805	C
2	SA	810	C
2	SA	811	C
2	SA	812	G
2	SA	816	A
2	SA	817	C
2	SA	819	A
2	SA	820	U
2	SA	821	G
2	SA	828	U
2	SA	829	G
2	SA	841	C
2	SA	842	U
2	SA	843	U
2	SA	844	G
2	SA	845	A
2	SA	870	U
2	SA	873	A
2	SA	874	G
2	SA	876	C
2	SA	885	G
2	SA	889	A
2	SA	890	G
2	SA	899	C
2	SA	900	A
2	SA	910	C
2	SA	913	A
2	SA	914	A
2	SA	926	G
2	SA	927	G
2	SA	933	G
2	SA	935	A
2	SA	938	A
2	SA	939	G
2	SA	945	G
2	SA	959	A
2	SA	960	U
2	SA	961	U
2	SA	962	C
2	SA	965	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	966	G
2	SA	967	C
2	SA	968	A
2	SA	969	A
2	SA	970	C
2	SA	973	G
2	SA	974	A
2	SA	975	A
2	SA	977	A
2	SA	978	A
2	SA	980	C
2	SA	981	U
2	SA	982	U
2	SA	983	A
2	SA	984	C
2	SA	993	G
2	SA	994	A
2	SA	995	C
2	SA	996	A
2	SA	1004	A
2	SA	1006	G
2	SA	1014	A
2	SA	1015	G
2	SA	1026	G
2	SA	1028	C
2	SA	1030	U
2	SA	1031	C
2	SA	1032	G
2	SA	1045	C
2	SA	1049	U
2	SA	1050	G
2	SA	1054	C
2	SA	1064	G
2	SA	1065	U
2	SA	1079	G
2	SA	1081	A
2	SA	1094	G
2	SA	1095	U
2	SA	1101	A
2	SA	1109	C
2	SA	1111	A
2	SA	1118	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	1130	A
2	SA	1136	C
2	SA	1137	C
2	SA	1139	G
2	SA	1148	U
2	SA	1149	C
2	SA	1152	A
2	SA	1154	G
2	SA	1159	U
2	SA	1167	A
2	SA	1168	U
2	SA	1181	G
2	SA	1182	G
2	SA	1189	U
2	SA	1190	G
2	SA	1191	A
2	SA	1196	A
2	SA	1197	A
2	SA	1198	G
2	SA	1200	C
2	SA	1201	A
2	SA	1202	U
2	SA	1208	C
2	SA	1212	U
2	SA	1213	A
2	SA	1214	C
2	SA	1215	G
2	SA	1223	C
2	SA	1224	U
2	SA	1226	C
2	SA	1227	A
2	SA	1228	C
2	SA	1238	A
2	SA	1240	U
2	SA	1241	G
2	SA	1250	A
2	SA	1253	G
2	SA	1254	A
2	SA	1256	A
2	SA	1258	G
2	SA	1264	U
2	SA	1270	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	1278	G
2	SA	1279	G
2	SA	1280	A
2	SA	1286	U
2	SA	1287	A
2	SA	1290	G
2	SA	1300	G
2	SA	1301	U
2	SA	1303	C
2	SA	1305	G
2	SA	1315	U
2	SA	1317	C
2	SA	1318	A
2	SA	1319	A
2	SA	1322	C
2	SA	1323	G
2	SA	1336	C
2	SA	1337	G
2	SA	1338	G
2	SA	1340	A
2	SA	1345	U
2	SA	1346	A
2	SA	1347	G
2	SA	1348	U
2	SA	1359	C
2	SA	1364	U
2	SA	1365	G
2	SA	1368	A
2	SA	1377	A
2	SA	1378	C
2	SA	1394	A
2	SA	1395	C
2	SA	1397	C
2	SA	1398	A
2	SA	1401	G
2	SA	1418	A
2	SA	1419	G
2	SA	1431	A
2	SA	1432	G
2	SA	1437	A
2	SA	1446	A
2	SA	1448	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	1451	U
2	SA	1452	C
2	SA	1453	G
2	SA	1454	G
2	SA	1466	C
2	SA	1490	U
2	SA	1492	A
2	SA	1493	A
2	SA	1494	G
2	SA	1502	A
2	SA	1503	A
2	SA	1506	U
2	SA	1517	G
2	SA	1520	C
2	SA	1529	G
2	SA	1530	G
2	SA	1533	C
2	SA	1534	A
2	SA	1535	C
2	SA	1536	C
2	SA	1537	U
2	SA	1539	C
2	SA	1540	U
2	SA	1541	U
2	SA	1542	A
3	S1	14	G
3	S1	15	G
3	S1	16	A
3	S1	18	A
3	S1	21	U
3	S1	22	G
3	S1	23	C
3	S1	24	A
3	S1	25	U
3	S1	26	U
3	S1	27	A
3	S1	28	U
3	S1	29	G
3	S1	30	U
3	S1	31	U
3	S1	34	U
3	S1	36	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	S1	37	G
3	S1	39	U
3	S1	40	G
3	S1	41	A
3	S1	42	U
3	S1	43	U
3	S1	44	U
3	S1	45	G
3	S1	46	C
3	S1	47	C
3	S1	48	C
3	S1	49	U
3	S1	50	U
3	S1	51	C
3	S1	53	G
3	S1	54	U
3	S1	55	A
3	S1	56	G
3	S1	57	C
4	S2	8	U
4	S2	9	G
4	S2	16	C
4	S2	17	C
4	S2	18	U
4	S2	19	G
4	S2	20	G
4	S2	21	U
4	S2	22	A
4	S2	38	A
4	S2	47	A
4	S2	48	U
4	S2	49	C
4	S2	50	G
4	S2	57	C
4	S2	58	A
4	S2	61	U
4	S2	73	A
4	S2	74	A
4	S2	77	A
25	LB	6	G
25	LB	9	G
25	LB	13	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	LB	14	U
25	LB	25	U
25	LB	26	C
25	LB	35	C
25	LB	41	G
25	LB	42	C
25	LB	43	C
25	LB	44	G
25	LB	51	G
25	LB	57	A
25	LB	58	A
25	LB	66	A
25	LB	67	G
25	LB	73	A
25	LB	87	U
25	LB	88	C
25	LB	89	U
25	LB	99	A
26	LA	13	A
26	LA	14	A
26	LA	18	U
26	LA	30	G
26	LA	34	U
26	LA	35	G
26	LA	42	A
26	LA	43	G
26	LA	46	G
26	LA	49	A
26	LA	50	U
26	LA	71	A
26	LA	72	U
26	LA	73	A
26	LA	74	A
26	LA	75	G
26	LA	92	U
26	LA	99	U
26	LA	100	U
26	LA	101	A
26	LA	102	U
26	LA	103	A
26	LA	113	U
26	LA	115	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	119	A
26	LA	120	U
26	LA	128	C
26	LA	139	U
26	LA	140	C
26	LA	155	A
26	LA	163	C
26	LA	181	A
26	LA	194	G
26	LA	195	A
26	LA	196	A
26	LA	199	A
26	LA	200	U
26	LA	204	A
26	LA	205	G
26	LA	215	G
26	LA	216	A
26	LA	218	A
26	LA	219	A
26	LA	222	A
26	LA	224	U
26	LA	225	C
26	LA	232	G
26	LA	242	G
26	LA	243	U
26	LA	248	G
26	LA	250	G
26	LA	255	A
26	LA	264	C
26	LA	265	A
26	LA	266	G
26	LA	271	G
26	LA	272	A
26	LA	277	G
26	LA	294	A
26	LA	295	G
26	LA	300	A
26	LA	324	A
26	LA	330	A
26	LA	338	G
26	LA	345	A
26	LA	346	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	367	G
26	LA	368	A
26	LA	369	U
26	LA	371	A
26	LA	372	G
26	LA	386	G
26	LA	387	U
26	LA	389	G
26	LA	390	U
26	LA	391	A
26	LA	405	U
26	LA	406	G
26	LA	411	G
26	LA	424	G
26	LA	428	A
26	LA	429	A
26	LA	431	U
26	LA	436	C
26	LA	443	A
26	LA	452	G
26	LA	454	A
26	LA	456	C
26	LA	470	A
26	LA	475	C
26	LA	479	A
26	LA	480	A
26	LA	481	G
26	LA	484	C
26	LA	489	G
26	LA	490	C
26	LA	491	G
26	LA	504	A
26	LA	505	A
26	LA	508	A
26	LA	513	A
26	LA	527	C
26	LA	529	A
26	LA	530	G
26	LA	531	C
26	LA	532	A
26	LA	545	U
26	LA	546	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	548	G
26	LA	549	G
26	LA	562	U
26	LA	563	A
26	LA	571	U
26	LA	572	A
26	LA	573	U
26	LA	574	A
26	LA	575	A
26	LA	603	A
26	LA	604	G
26	LA	612	G
26	LA	613	A
26	LA	614	A
26	LA	615	U
26	LA	621	A
26	LA	627	A
26	LA	637	A
26	LA	643	A
26	LA	644	A
26	LA	645	C
26	LA	646	U
26	LA	651	G
26	LA	654	A
26	LA	655	A
26	LA	670	A
26	LA	675	A
26	LA	677	A
26	LA	686	U
26	LA	696	G
26	LA	715	A
26	LA	717	C
26	LA	718	A
26	LA	719	C
26	LA	726	G
26	LA	728	G
26	LA	730	A
26	LA	732	C
26	LA	736	C
26	LA	747	U
26	LA	748	G
26	LA	751	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	762	U
26	LA	763	G
26	LA	764	A
26	LA	765	C
26	LA	775	G
26	LA	776	G
26	LA	777	G
26	LA	782	A
26	LA	784	G
26	LA	786	C
26	LA	789	A
26	LA	792	A
26	LA	793	A
26	LA	794	A
26	LA	802	A
26	LA	805	G
26	LA	812	C
26	LA	846	U
26	LA	847	U
26	LA	848	C
26	LA	857	G
26	LA	859	G
26	LA	870	U
26	LA	887	U
26	LA	888	C
26	LA	889	C
26	LA	890	C
26	LA	894	U
26	LA	896	A
26	LA	897	C
26	LA	901	C
26	LA	910	A
26	LA	911	A
26	LA	915	C
26	LA	925	A
26	LA	932	U
26	LA	938	G
26	LA	941	A
26	LA	945	A
26	LA	946	C
26	LA	961	C
26	LA	973	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	974	G
26	LA	985	C
26	LA	986	C
26	LA	995	C
26	LA	996	A
26	LA	1002	G
26	LA	1003	G
26	LA	1005	C
26	LA	1008	A
26	LA	1009	A
26	LA	1013	C
26	LA	1020	A
26	LA	1021	A
26	LA	1022	G
26	LA	1025	G
26	LA	1027	A
26	LA	1033	U
26	LA	1044	C
26	LA	1045	C
26	LA	1046	A
26	LA	1048	A
26	LA	1052	C
26	LA	1060	U
26	LA	1061	U
26	LA	1062	G
26	LA	1066	U
26	LA	1067	A
26	LA	1069	A
26	LA	1070	A
26	LA	1071	G
26	LA	1073	A
26	LA	1078	U
26	LA	1081	U
26	LA	1084	A
26	LA	1087	G
26	LA	1094	U
26	LA	1095	A
26	LA	1096	A
26	LA	1098	A
26	LA	1104	C
26	LA	1109	C
26	LA	1110	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	1112	G
26	LA	1123	C
26	LA	1127	A
26	LA	1128	G
26	LA	1129	A
26	LA	1130	U
26	LA	1132	U
26	LA	1133	A
26	LA	1134	A
26	LA	1143	A
26	LA	1155	A
26	LA	1173	U
26	LA	1175	A
26	LA	1177	G
26	LA	1178	C
26	LA	1184	U
26	LA	1204	A
26	LA	1205	A
26	LA	1206	G
26	LA	1211	C
26	LA	1212	G
26	LA	1225	G
26	LA	1227	G
26	LA	1236	G
26	LA	1237	A
26	LA	1238	G
26	LA	1241	A
26	LA	1242	U
26	LA	1253	A
26	LA	1255	U
26	LA	1256	G
26	LA	1266	G
26	LA	1272	A
26	LA	1273	U
26	LA	1274	A
26	LA	1275	A
26	LA	1283	G
26	LA	1286	A
26	LA	1287	A
26	LA	1300	G
26	LA	1301	A
26	LA	1302	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	1303	G
26	LA	1308	A
26	LA	1318	U
26	LA	1321	A
26	LA	1322	A
26	LA	1323	C
26	LA	1324	G
26	LA	1325	U
26	LA	1340	U
26	LA	1341	G
26	LA	1349	C
26	LA	1354	A
26	LA	1359	A
26	LA	1362	C
26	LA	1363	C
26	LA	1366	A
26	LA	1367	A
26	LA	1368	G
26	LA	1377	G
26	LA	1379	U
26	LA	1383	A
26	LA	1384	A
26	LA	1385	A
26	LA	1386	C
26	LA	1392	A
26	LA	1393	A
26	LA	1395	A
26	LA	1396	U
26	LA	1416	G
26	LA	1417	C
26	LA	1420	A
26	LA	1421	G
26	LA	1451	C
26	LA	1452	G
26	LA	1453	A
26	LA	1454	C
26	LA	1458	U
26	LA	1459	G
26	LA	1460	U
26	LA	1461	C
26	LA	1482	G
26	LA	1490	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	1491	G
26	LA	1493	C
26	LA	1494	A
26	LA	1495	A
26	LA	1508	A
26	LA	1509	A
26	LA	1514	G
26	LA	1522	A
26	LA	1523	U
26	LA	1524	G
26	LA	1535	A
26	LA	1536	C
26	LA	1552	A
26	LA	1558	C
26	LA	1559	U
26	LA	1565	C
26	LA	1566	A
26	LA	1567	G
26	LA	1568	G
26	LA	1569	A
26	LA	1578	U
26	LA	1579	A
26	LA	1583	A
26	LA	1584	U
26	LA	1608	A
26	LA	1609	A
26	LA	1612	C
26	LA	1616	A
26	LA	1618	C
26	LA	1633	G
26	LA	1634	A
26	LA	1635	A
26	LA	1648	U
26	LA	1649	G
26	LA	1653	G
26	LA	1669	A
26	LA	1673	G
26	LA	1674	G
26	LA	1675	C
26	LA	1676	A
26	LA	1677	A
26	LA	1678	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	1679	A
26	LA	1713	A
26	LA	1714	U
26	LA	1715	G
26	LA	1724	G
26	LA	1730	C
26	LA	1731	G
26	LA	1737	G
26	LA	1757	A
26	LA	1758	U
26	LA	1759	A
26	LA	1762	A
26	LA	1763	G
26	LA	1764	C
26	LA	1773	A
26	LA	1778	U
26	LA	1779	U
26	LA	1780	A
26	LA	1781	U
26	LA	1782	U
26	LA	1783	A
26	LA	1801	A
26	LA	1808	A
26	LA	1815	A
26	LA	1816	C
26	LA	1817	G
26	LA	1825	U
26	LA	1829	A
26	LA	1830	C
26	LA	1831	G
26	LA	1833	C
26	LA	1839	G
26	LA	1851	U
26	LA	1871	A
26	LA	1873	G
26	LA	1901	A
26	LA	1912	A
26	LA	1913	A
26	LA	1914	C
26	LA	1915	C
26	LA	1918	A
26	LA	1928	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	1930	G
26	LA	1938	A
26	LA	1940	U
26	LA	1943	U
26	LA	1952	A
26	LA	1953	A
26	LA	1954	G
26	LA	1955	U
26	LA	1956	U
26	LA	1963	U
26	LA	1964	G
26	LA	1965	C
26	LA	1966	A
26	LA	1967	C
26	LA	1968	G
26	LA	1970	A
26	LA	1971	U
26	LA	1972	G
26	LA	1982	U
26	LA	1993	U
26	LA	1996	C
26	LA	1997	C
26	LA	2004	G
26	LA	2012	G
26	LA	2015	A
26	LA	2020	A
26	LA	2021	C
26	LA	2022	U
26	LA	2023	C
26	LA	2028	U
26	LA	2030	U
26	LA	2031	A
26	LA	2032	G
26	LA	2034	U
26	LA	2040	G
26	LA	2043	C
26	LA	2056	G
26	LA	2059	A
26	LA	2061	G
26	LA	2062	A
26	LA	2069	G
26	LA	2077	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	2092	U
26	LA	2095	A
26	LA	2107	G
26	LA	2111	U
26	LA	2112	G
26	LA	2113	U
26	LA	2114	A
26	LA	2116	G
26	LA	2118	U
26	LA	2119	A
26	LA	2126	A
26	LA	2127	G
26	LA	2128	G
26	LA	2130	U
26	LA	2131	U
26	LA	2132	U
26	LA	2133	G
26	LA	2134	A
26	LA	2137	U
26	LA	2138	G
26	LA	2143	C
26	LA	2146	C
26	LA	2147	A
26	LA	2148	G
26	LA	2154	A
26	LA	2157	G
26	LA	2158	A
26	LA	2163	A
26	LA	2164	C
26	LA	2165	C
26	LA	2166	U
26	LA	2167	U
26	LA	2170	A
26	LA	2178	C
26	LA	2198	A
26	LA	2199	A
26	LA	2203	U
26	LA	2204	G
26	LA	2210	U
26	LA	2211	A
26	LA	2212	A
26	LA	2214	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	2215	C
26	LA	2224	G
26	LA	2225	A
26	LA	2237	G
26	LA	2238	G
26	LA	2239	G
26	LA	2246	G
26	LA	2250	G
26	LA	2253	G
26	LA	2254	C
26	LA	2266	A
26	LA	2272	U
26	LA	2283	C
26	LA	2287	A
26	LA	2288	A
26	LA	2298	A
26	LA	2305	U
26	LA	2306	C
26	LA	2307	G
26	LA	2308	G
26	LA	2309	A
26	LA	2310	C
26	LA	2311	A
26	LA	2312	U
26	LA	2322	A
26	LA	2325	G
26	LA	2327	A
26	LA	2328	A
26	LA	2333	A
26	LA	2334	U
26	LA	2335	A
26	LA	2337	G
26	LA	2340	A
26	LA	2345	G
26	LA	2346	A
26	LA	2347	C
26	LA	2350	C
26	LA	2354	C
26	LA	2358	A
26	LA	2381	A
26	LA	2383	G
26	LA	2385	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	2388	A
26	LA	2389	G
26	LA	2394	C
26	LA	2402	U
26	LA	2406	A
26	LA	2407	A
26	LA	2411	A
26	LA	2425	A
26	LA	2427	C
26	LA	2428	G
26	LA	2429	G
26	LA	2430	A
26	LA	2433	A
26	LA	2439	A
26	LA	2441	U
26	LA	2448	A
26	LA	2449	U
26	LA	2451	A
26	LA	2472	G
26	LA	2473	U
26	LA	2475	C
26	LA	2476	A
26	LA	2478	A
26	LA	2486	C
26	LA	2491	U
26	LA	2492	U
26	LA	2493	U
26	LA	2494	G
26	LA	2501	C
26	LA	2502	G
26	LA	2503	A
26	LA	2504	U
26	LA	2505	G
26	LA	2515	C
26	LA	2516	A
26	LA	2518	A
26	LA	2519	U
26	LA	2534	A
26	LA	2542	A
26	LA	2547	A
26	LA	2553	G
26	LA	2554	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	2556	C
26	LA	2566	A
26	LA	2567	G
26	LA	2572	A
26	LA	2573	C
26	LA	2574	G
26	LA	2575	C
26	LA	2576	G
26	LA	2582	G
26	LA	2585	U
26	LA	2586	U
26	LA	2587	A
26	LA	2596	U
26	LA	2597	G
26	LA	2599	G
26	LA	2602	A
26	LA	2609	U
26	LA	2610	C
26	LA	2613	U
26	LA	2616	C
26	LA	2627	G
26	LA	2629	U
26	LA	2646	C
26	LA	2654	A
26	LA	2655	G
26	LA	2656	U
26	LA	2660	A
26	LA	2664	G
26	LA	2665	A
26	LA	2685	G
26	LA	2689	U
26	LA	2690	U
26	LA	2713	U
26	LA	2714	G
26	LA	2726	A
26	LA	2737	G
26	LA	2739	U
26	LA	2742	G
26	LA	2744	G
26	LA	2756	U
26	LA	2757	A
26	LA	2765	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	2766	A
26	LA	2769	U
26	LA	2771	C
26	LA	2774	C
26	LA	2777	G
26	LA	2778	A
26	LA	2779	U
26	LA	2780	G
26	LA	2782	G
26	LA	2797	U
26	LA	2798	U
26	LA	2799	A
26	LA	2807	U
26	LA	2808	G
26	LA	2809	A
26	LA	2821	A
26	LA	2825	G
26	LA	2842	G
26	LA	2844	G
26	LA	2849	U
26	LA	2864	G
26	LA	2867	G
26	LA	2868	A
26	LA	2879	A
26	LA	2883	A
26	LA	2884	U
26	LA	2885	G
26	LA	2886	A
26	LA	2889	C
26	LA	2893	A
26	LA	2895	G
26	LA	2903	U
26	LA	2904	U

All (374) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
2	SA	2	A
2	SA	3	A
2	SA	4	U
2	SA	7	A
2	SA	8	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	39	G
2	SA	51	A
2	SA	52	C
2	SA	60	A
2	SA	94	G
2	SA	97	G
2	SA	121	U
2	SA	128	G
2	SA	135	C
2	SA	146	G
2	SA	173	U
2	SA	182	A
2	SA	183	C
2	SA	187	G
2	SA	204	G
2	SA	209	U
2	SA	224	U
2	SA	239	U
2	SA	243	A
2	SA	250	A
2	SA	251	G
2	SA	253	A
2	SA	275	G
2	SA	279	A
2	SA	280	C
2	SA	307	C
2	SA	328	C
2	SA	344	A
2	SA	372	C
2	SA	412	A
2	SA	462	G
2	SA	464	U
2	SA	497	G
2	SA	533	A
2	SA	560	A
2	SA	582	C
2	SA	622	A
2	SA	631	C
2	SA	682	G
2	SA	693	G
2	SA	700	G
2	SA	717	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	719	C
2	SA	727	G
2	SA	761	G
2	SA	764	C
2	SA	765	G
2	SA	776	G
2	SA	782	A
2	SA	788	U
2	SA	789	U
2	SA	793	U
2	SA	819	A
2	SA	841	C
2	SA	843	U
2	SA	870	U
2	SA	872	A
2	SA	890	G
2	SA	899	C
2	SA	907	A
2	SA	913	A
2	SA	926	G
2	SA	937	A
2	SA	944	G
2	SA	960	U
2	SA	975	A
2	SA	982	U
2	SA	987	G
2	SA	993	G
2	SA	1013	G
2	SA	1014	A
2	SA	1029	U
2	SA	1031	C
2	SA	1054	C
2	SA	1067	A
2	SA	1094	G
2	SA	1136	C
2	SA	1167	A
2	SA	1190	G
2	SA	1201	A
2	SA	1207	G
2	SA	1212	U
2	SA	1213	A
2	SA	1214	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	SA	1224	U
2	SA	1226	C
2	SA	1239	A
2	SA	1240	U
2	SA	1253	G
2	SA	1257	A
2	SA	1278	G
2	SA	1279	G
2	SA	1286	U
2	SA	1302	C
2	SA	1322	C
2	SA	1323	G
2	SA	1335	U
2	SA	1338	G
2	SA	1344	C
2	SA	1346	A
2	SA	1347	G
2	SA	1359	C
2	SA	1362	A
2	SA	1364	U
2	SA	1377	A
2	SA	1397	C
2	SA	1430	A
2	SA	1433	A
2	SA	1451	U
2	SA	1491	G
2	SA	1502	A
2	SA	1529	G
2	SA	1531	A
2	SA	1533	C
2	SA	1534	A
2	SA	1535	C
2	SA	1536	C
3	S1	15	G
3	S1	21	U
3	S1	22	G
3	S1	23	C
3	S1	29	G
3	S1	30	U
3	S1	39	U
3	S1	41	A
3	S1	44	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	S1	52	U
3	S1	53	G
3	S1	58	C
4	S2	1	C
4	S2	7	G
4	S2	9	G
4	S2	17	C
4	S2	20	G
4	S2	22	A
4	S2	57	C
4	S2	60	A
4	S2	73	A
4	S2	76	C
25	LB	12	C
25	LB	25	U
25	LB	34	A
25	LB	44	G
25	LB	57	A
25	LB	66	A
25	LB	86	G
25	LB	88	C
25	LB	90	C
26	LA	13	A
26	LA	27	G
26	LA	29	U
26	LA	34	U
26	LA	49	A
26	LA	71	A
26	LA	72	U
26	LA	73	A
26	LA	91	A
26	LA	98	G
26	LA	100	U
26	LA	101	A
26	LA	102	U
26	LA	112	U
26	LA	114	U
26	LA	139	U
26	LA	140	C
26	LA	196	A
26	LA	199	A
26	LA	217	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	218	A
26	LA	231	A
26	LA	242	G
26	LA	264	C
26	LA	265	A
26	LA	276	U
26	LA	321	U
26	LA	332	A
26	LA	345	A
26	LA	386	G
26	LA	389	G
26	LA	390	U
26	LA	428	A
26	LA	443	A
26	LA	451	U
26	LA	453	A
26	LA	455	C
26	LA	470	A
26	LA	479	A
26	LA	480	A
26	LA	490	C
26	LA	503	A
26	LA	512	G
26	LA	527	C
26	LA	546	U
26	LA	561	G
26	LA	567	U
26	LA	571	U
26	LA	574	A
26	LA	603	A
26	LA	611	C
26	LA	620	G
26	LA	626	A
26	LA	649	G
26	LA	653	U
26	LA	654	A
26	LA	669	G
26	LA	704	G
26	LA	748	G
26	LA	762	U
26	LA	775	G
26	LA	776	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	792	A
26	LA	805	G
26	LA	807	U
26	LA	827	U
26	LA	846	U
26	LA	847	U
26	LA	876	C
26	LA	893	C
26	LA	900	A
26	LA	910	A
26	LA	945	A
26	LA	958	U
26	LA	1012	U
26	LA	1020	A
26	LA	1043	C
26	LA	1045	C
26	LA	1061	U
26	LA	1066	U
26	LA	1069	A
26	LA	1070	A
26	LA	1127	A
26	LA	1128	G
26	LA	1129	A
26	LA	1133	A
26	LA	1142	A
26	LA	1176	U
26	LA	1204	A
26	LA	1205	A
26	LA	1210	G
26	LA	1211	C
26	LA	1275	A
26	LA	1282	U
26	LA	1285	A
26	LA	1286	A
26	LA	1288	G
26	LA	1307	A
26	LA	1321	A
26	LA	1322	A
26	LA	1323	C
26	LA	1329	U
26	LA	1339	G
26	LA	1348	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	1358	G
26	LA	1365	A
26	LA	1383	A
26	LA	1392	A
26	LA	1395	A
26	LA	1451	C
26	LA	1458	U
26	LA	1459	G
26	LA	1460	U
26	LA	1508	A
26	LA	1566	A
26	LA	1579	A
26	LA	1583	A
26	LA	1608	A
26	LA	1634	A
26	LA	1647	U
26	LA	1673	G
26	LA	1679	A
26	LA	1715	G
26	LA	1723	G
26	LA	1729	U
26	LA	1730	C
26	LA	1757	A
26	LA	1761	C
26	LA	1763	G
26	LA	1778	U
26	LA	1781	U
26	LA	1786	A
26	LA	1800	C
26	LA	1818	U
26	LA	1828	G
26	LA	1870	C
26	LA	1901	A
26	LA	1903	G
26	LA	1913	A
26	LA	1927	A
26	LA	1938	A
26	LA	1954	G
26	LA	1955	U
26	LA	1963	U
26	LA	2019	A
26	LA	2021	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	2022	U
26	LA	2042	A
26	LA	2068	U
26	LA	2069	G
26	LA	2076	U
26	LA	2079	U
26	LA	2106	U
26	LA	2111	U
26	LA	2113	U
26	LA	2116	G
26	LA	2118	U
26	LA	2126	A
26	LA	2127	G
26	LA	2130	U
26	LA	2132	U
26	LA	2136	G
26	LA	2143	C
26	LA	2163	A
26	LA	2165	C
26	LA	2223	G
26	LA	2225	A
26	LA	2236	U
26	LA	2238	G
26	LA	2249	U
26	LA	2282	G
26	LA	2287	A
26	LA	2304	G
26	LA	2310	C
26	LA	2311	A
26	LA	2327	A
26	LA	2333	A
26	LA	2358	A
26	LA	2381	A
26	LA	2385	C
26	LA	2402	U
26	LA	2406	A
26	LA	2422	C
26	LA	2429	G
26	LA	2432	A
26	LA	2439	A
26	LA	2440	C
26	LA	2447	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	LA	2448	A
26	LA	2451	A
26	LA	2504	U
26	LA	2515	C
26	LA	2547	A
26	LA	2553	G
26	LA	2554	U
26	LA	2571	U
26	LA	2572	A
26	LA	2573	C
26	LA	2574	G
26	LA	2575	C
26	LA	2581	G
26	LA	2596	U
26	LA	2602	A
26	LA	2609	U
26	LA	2616	C
26	LA	2628	C
26	LA	2645	G
26	LA	2655	G
26	LA	2663	G
26	LA	2690	U
26	LA	2713	U
26	LA	2756	U
26	LA	2765	A
26	LA	2791	G
26	LA	2798	U
26	LA	2802	G
26	LA	2806	C
26	LA	2808	G
26	LA	2818	U
26	LA	2867	G
26	LA	2879	A

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry

1 ligand is modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
59	GTP	S3	801	-	26,34,34	1.83	7 (26%)	29,54,54	2.56	8 (27%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	GTP	S3	801	-	-	0/18/38/38	0/3/3/3

All (7) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	S3	801	GTP	C8-N7	-4.38	1.26	1.34
59	S3	801	GTP	PG-O2G	-2.40	1.46	1.54
59	S3	801	GTP	C2-N2	-2.19	1.29	1.34
59	S3	801	GTP	PA-O2A	-2.09	1.46	1.55
59	S3	801	GTP	C6-C5	2.09	1.45	1.41
59	S3	801	GTP	O4'-C4'	2.25	1.50	1.45
59	S3	801	GTP	C6-N1	4.59	1.41	1.33

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	S3	801	GTP	C5-C6-N1	-8.14	112.88	123.52
59	S3	801	GTP	C6-C5-C4	-5.33	114.77	120.86
59	S3	801	GTP	O5'-PA-O1A	-3.14	96.38	109.21
59	S3	801	GTP	O4'-C4'-C3'	-2.74	99.61	105.16
59	S3	801	GTP	N3-C2-N1	-2.34	124.37	127.56
59	S3	801	GTP	C2'-C3'-C4'	2.19	107.12	102.64
59	S3	801	GTP	C4'-O4'-C1'	3.43	113.28	109.64

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	S3	801	GTP	C6-N1-C2	6.49	123.49	115.88

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.