



Full wwPDB EM Validation Report ⓘ

May 5, 2024 – 07:20 PM EDT

PDB ID : 4V6O
EMDB ID : EMD-5359
Title : Structural characterization of mRNA-tRNA translocation intermediates (class 4a of the six classes)
Authors : Agirrezabala, X.; Liao, H.; Schreiner, E.; Fu, J.; Ortiz-Meoz, R.F.; Schulten, K.; Green, R.; Frank, J.
Deposited on : 2011-12-07
Resolution : 14.70 Å (reported)
Based on initial model : 2I2U

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

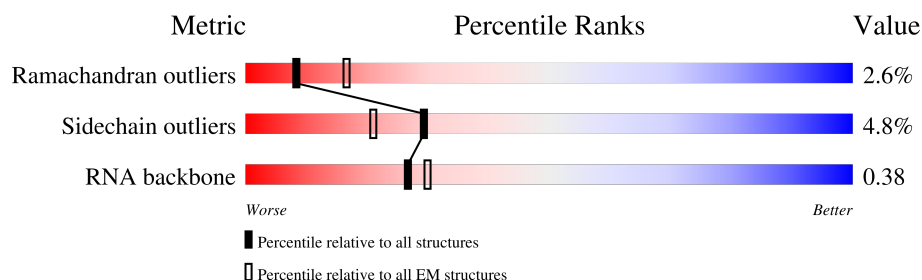
EMDB validation analysis : 0.0.1.dev92
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36.2

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 14.70 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.














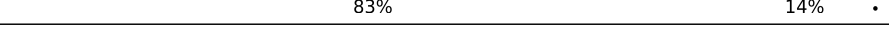







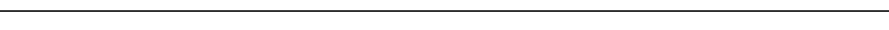

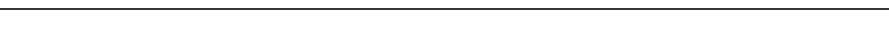
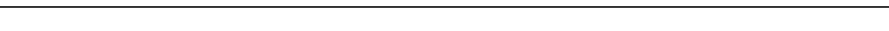


Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	1542	
2	AB	76	
3	AC	47	
4	AD	77	
5	AE	240	
6	AF	232	
7	AG	205	
8	AH	166	







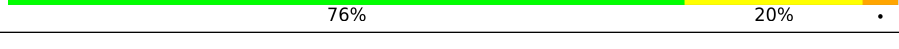
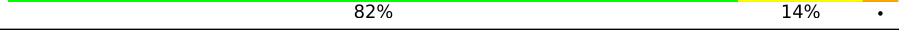
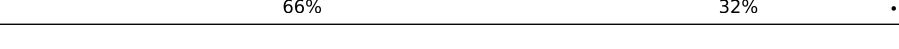
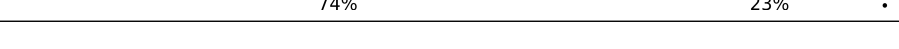
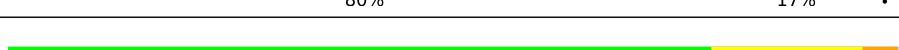

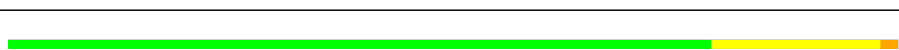

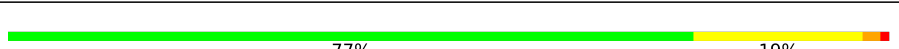





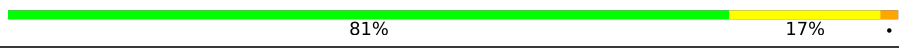
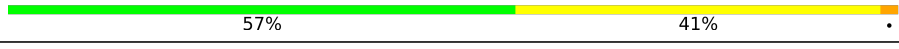



Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
9	AI	135	 70%22%7%
10	AJ	178	 73%25%. .
11	AK	129	 74%23%. .
12	AL	129	 75%22%..
13	AM	103	 70%24%6%
14	AN	128	 74%23%. .
15	AO	123	 72%26%. .
16	AP	117	 81%15%..
17	AQ	100	 75%22%. .
18	AR	88	 77%23%
19	AS	82	 77%20%. .
20	AT	83	 83%14%. .
21	AU	74	 59%36%. .
22	AV	91	 82%11%7%
23	AW	86	 87%12%. .
24	AX	70	 71%24%. .
25	BA	120	 34%52%13%
26	BB	2904	 34%54%13%
27	BC	234	 9%81%17%. .
28	BD	272	 75%23%. .
29	BE	209	 78%17%5%
30	BF	201	 75%21%. .
31	BG	178	 71%24%6%
32	BH	176	 75%22%. .
33	BI	149	 10%79%19%. .

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
34	BJ	164	
35	BK	141	
36	BL	142	
37	BM	123	
38	BN	144	
39	BO	136	
40	BP	127	
41	BQ	117	
42	BR	114	
43	BS	117	
44	BT	103	
45	BU	110	
46	BV	100	
47	BW	103	
48	BX	94	
49	BY	84	
50	BZ	77	
51	B0	63	
52	B1	58	
53	B2	70	
54	B3	56	
55	B4	54	
56	B5	46	
57	B6	64	
58	B7	38	

2 Entry composition [i](#)

There are 60 unique types of molecules in this entry. The entry contains 152351 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 RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AA	1542	Total	C	N	O	P	0	0
			33089	14767	6064	10717	1541		

- Molecule 2 is a RNA chain called A site tRNA.

Mol	Chain	Residues	Atoms						AltConf	Trace
2	AB	76	Total	C	N	O	P	S	0	0
			1627	731	287	532	75	2		

- Molecule 3 is a RNA chain called mRNA.

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

- Molecule 4 is a RNA chain called P site tRNA.

Mol	Chain	Residues	Atoms						AltConf	Trace
4	AD	77	Total	C	N	O	P	S	0	0
			1641	734	297	533	76	1		

- Molecule 5 is a protein called 30S ribosomal protein S2.

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

- Molecule 6 is a protein called 30S ribosomal protein S3.

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

- Molecule 7 is a protein called 30S ribosomal protein S4.

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

- Molecule 8 is a protein called 30S ribosomal protein S5.

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

- Molecule 9 is a protein called 30S ribosomal protein S6.

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

- Molecule 10 is a protein called 30S ribosomal protein S7.

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

- Molecule 11 is a protein called 30S ribosomal protein S8.

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

- Molecule 12 is a protein called 30S ribosomal protein S9.

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

- Molecule 13 is a protein called 30S ribosomal protein S10.

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

- Molecule 14 is a protein called 30S ribosomal protein S11.

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

- Molecule 15 is a protein called 30S ribosomal protein S12.

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

- Molecule 16 is a protein called 30S ribosomal protein S13.

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

- Molecule 17 is a protein called 30S ribosomal protein S14.

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

- Molecule 18 is a protein called 30S ribosomal protein S15.

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

- Molecule 19 is a protein called 30S ribosomal protein S16.

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

- Molecule 20 is a protein called 30S ribosomal protein S17.

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

- Molecule 21 is a protein called 30S ribosomal protein S18.

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

- Molecule 22 is a protein called 30S ribosomal protein S19.

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

- Molecule 23 is a protein called 30S ribosomal protein S20.

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

- Molecule 24 is a protein called 30S ribosomal protein S21.

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

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

Mol	Chain	Residues	Atoms					AltConf	Trace
25	BA	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	BB	2904	Total	C	N	O	P	0	0
			62351	27824	11469	20155	2903		

- Molecule 27 is a protein called 50S ribosomal protein L1.

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

- Molecule 28 is a protein called 50S ribosomal protein L2.

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

- Molecule 29 is a protein called 50S ribosomal protein L3.

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

- Molecule 30 is a protein called 50S ribosomal protein L4.

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

- Molecule 31 is a protein called 50S ribosomal protein L5.

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

- Molecule 32 is a protein called 50S ribosomal protein L6.

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

- Molecule 33 is a protein called 50S ribosomal protein L9.

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

- Molecule 34 is a protein called 50S ribosomal protein L10.

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

- Molecule 35 is a protein called 50S ribosomal protein L11.

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

- Molecule 36 is a protein called 50S ribosomal protein L13.

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

- Molecule 37 is a protein called 50S ribosomal protein L14.

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

- Molecule 38 is a protein called 50S ribosomal protein L15.

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

- Molecule 39 is a protein called 50S ribosomal protein L16.

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

- Molecule 40 is a protein called 50S ribosomal protein L17.

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

- Molecule 41 is a protein called 50S ribosomal protein L18.

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

- Molecule 42 is a protein called 50S ribosomal protein L19.

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

- Molecule 43 is a protein called 50S ribosomal protein L20.

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

- Molecule 44 is a protein called 50S ribosomal protein L21.

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

- Molecule 45 is a protein called 50S ribosomal protein L22.

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

- Molecule 46 is a protein called 50S ribosomal protein L23.

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

- Molecule 47 is a protein called 50S ribosomal protein L24.

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

- Molecule 48 is a protein called 50S ribosomal protein L25.

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

- Molecule 49 is a protein called 50S ribosomal protein L27.

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

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

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

- Molecule 51 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	B0	63	Total	C	N	O	S	0	0
			509	313	99	95	2		

- Molecule 52 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	B1	58	Total	C	N	O	S	0	0
			449	281	87	79	2		

- Molecule 53 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	B2	70	Total	C	N	O	S	0	0
			549	339	104	100	6		

- Molecule 54 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	B3	56	Total	C	N	O	S	0	0
			444	269	94	80	1		

- Molecule 55 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				AltConf	Trace
55	B4	54	Total	C	N	O	0	0
			441	284	81	76		

- Molecule 56 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	B5	46	Total	C	N	O	S	0	0
			377	228	90	57	2		

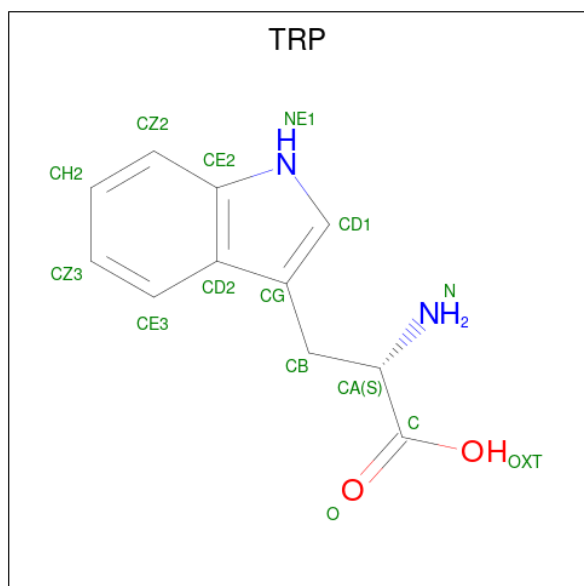
- Molecule 57 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	B6	64	Total	C	N	O	S	0	0
			504	323	105	74	2		

- Molecule 58 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	B7	38	Total	C	N	O	S	0	0
			302	185	65	48	4		

- Molecule 59 is TRYPTOPHAN (three-letter code: TRP) (formula: $C_{11}H_{12}N_2O_2$).



Mol	Chain	Residues	Atoms				AltConf
59	AB	1	Total	C	N	O	0
			14	11	2	1	

- Molecule 60 is N-FORMYLMETHIONINE (three-letter code: FME) (formula: $C_6H_{11}NO_3S$).

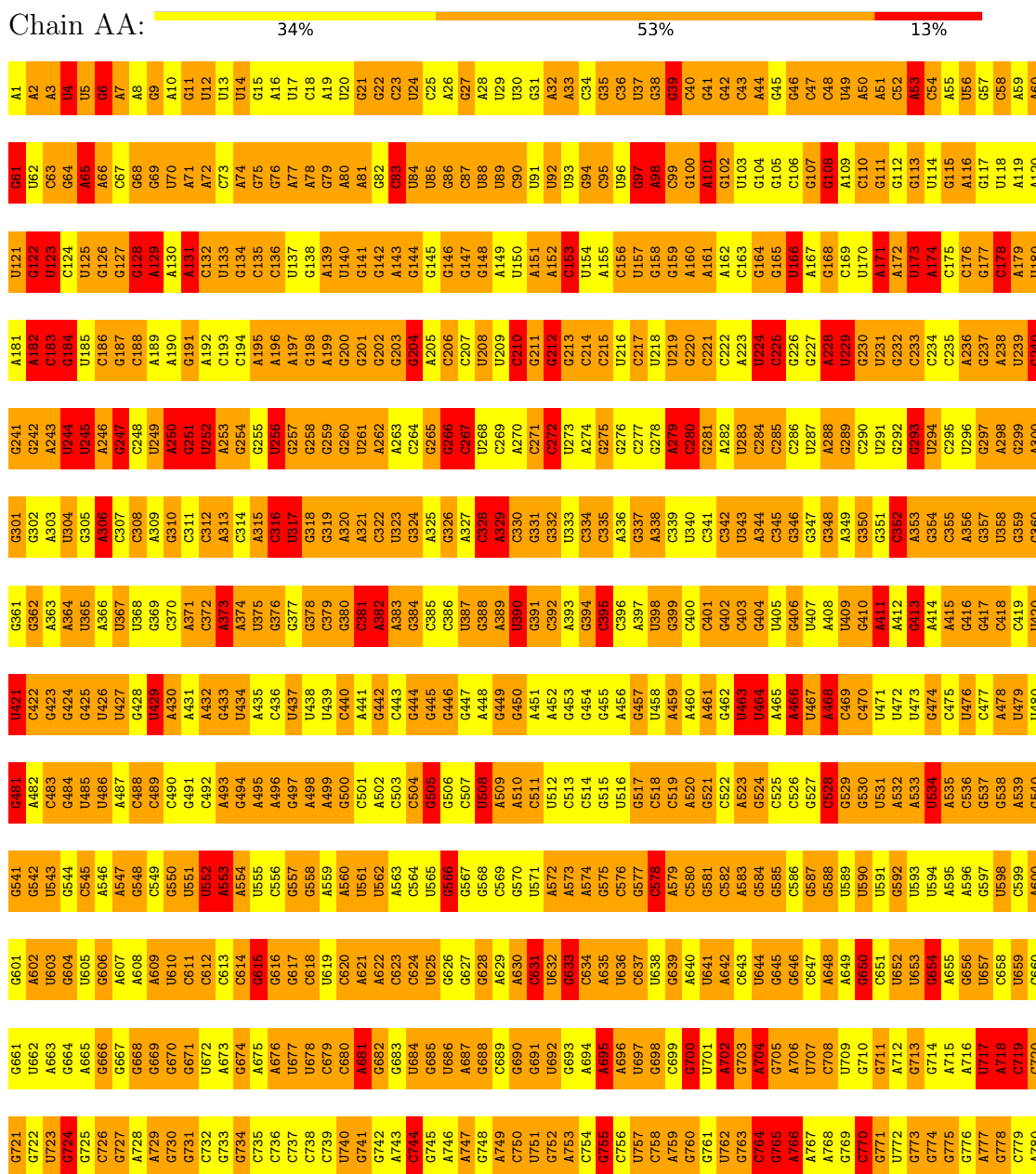


Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	S	
60	BB	1	10	6	1	2	1	0

3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. 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. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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: 16S ribosomal RNA

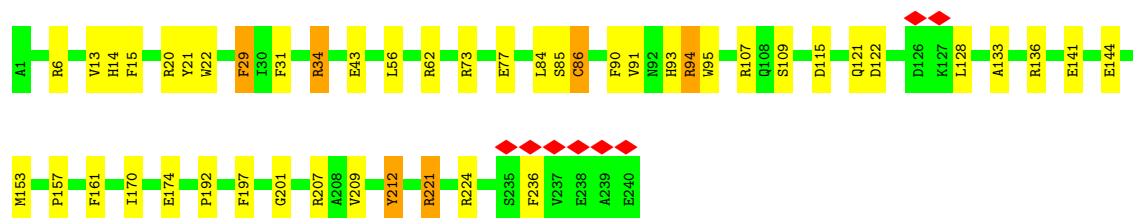
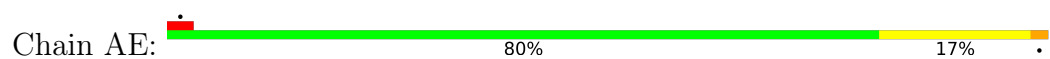




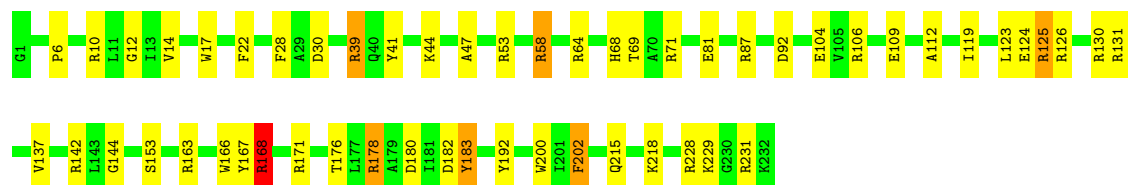
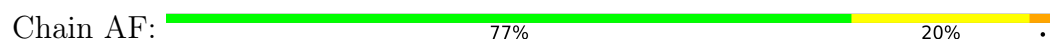
- Molecule 4: P site tRNA



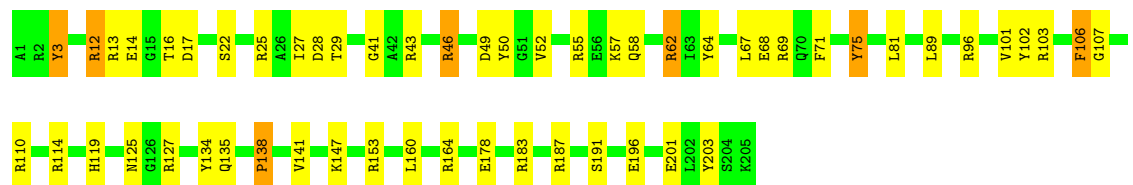
- Molecule 5: 30S ribosomal protein S2



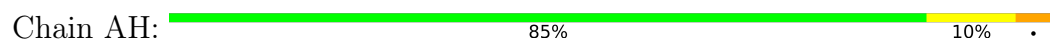
- Molecule 6: 30S ribosomal protein S3

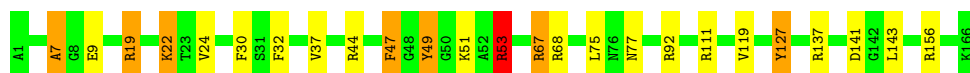


- Molecule 7: 30S ribosomal protein S4



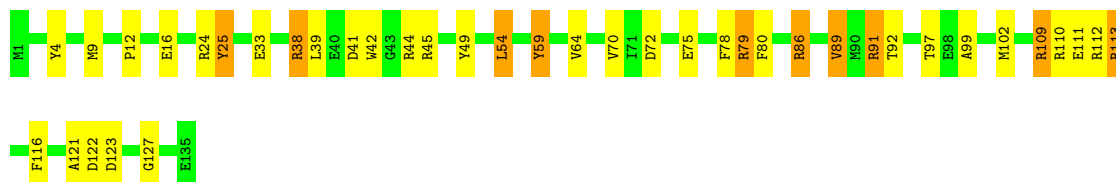
- Molecule 8: 30S ribosomal protein S5





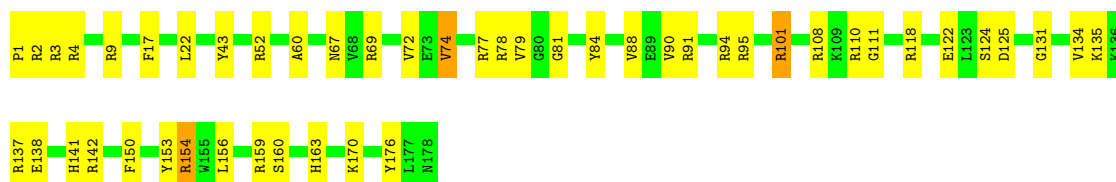
- Molecule 9: 30S ribosomal protein S6

Chain AI: 70% 22% 7%



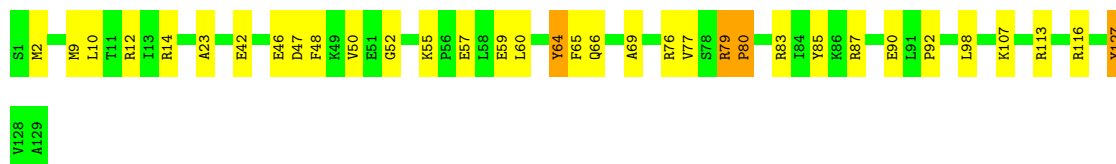
- Molecule 10: 30S ribosomal protein S7

Chain AJ: 73% 25% 2%



- Molecule 11: 30S ribosomal protein S8

Chain AK: 74% 23% 3%



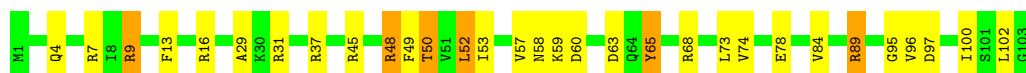
- Molecule 12: 30S ribosomal protein S9

Chain AL: 75% 22% 3%




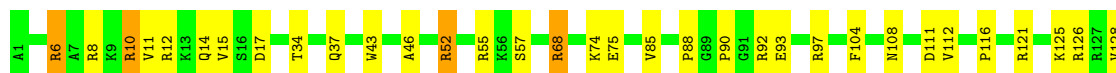
- Molecule 13: 30S ribosomal protein S10

Chain AM: 70% 24% 6%



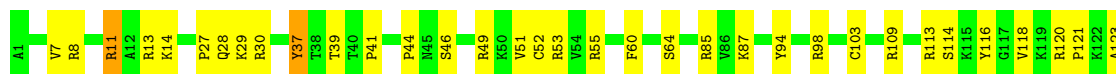
- Molecule 14: 30S ribosomal protein S11

Chain AN:  74% 23% .




- Molecule 15: 30S ribosomal protein S12

Chain AO:  72% 26% .




- Molecule 16: 30S ribosomal protein S13

Chain AP:  81% 15% . .




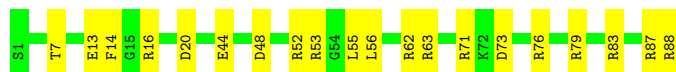
- Molecule 17: 30S ribosomal protein S14

Chain AQ:  75% 22% .




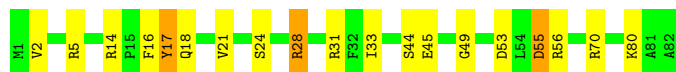
- Molecule 18: 30S ribosomal protein S15

Chain AR:  77% 23%




- Molecule 19: 30S ribosomal protein S16

Chain AS:  77% 20% .



- Molecule 20: 30S ribosomal protein S17

Chain AT:  83% 14% .




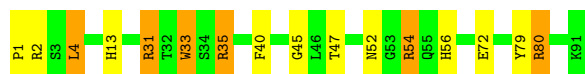
- Molecule 21: 30S ribosomal protein S18

Chain AU:  59% 36% .



- Molecule 22: 30S ribosomal protein S19

Chain AV:  82% 11% 7%



- Molecule 23: 30S ribosomal protein S20

Chain AW:  87% 12% .



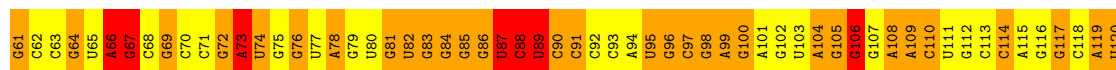
- Molecule 24: 30S ribosomal protein S21

Chain AX:  71% 24% .



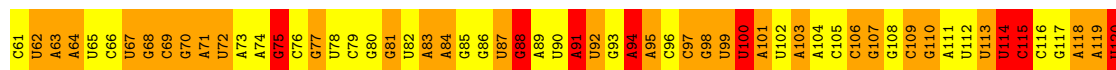
- Molecule 25: 5S ribosomal RNA

Chain BA:  34% 52% 13%



- Molecule 26: 23S ribosomal RNA

Chain BB:  34% 54% 13%



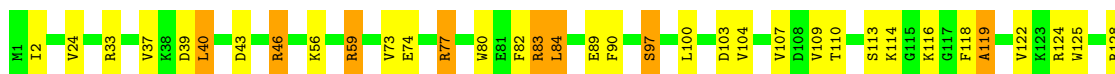
C1261	U1201	U1141	U1081	A1021	C901	G841	A781	A721	A661	C601	A541	C481	C421	G361	G301	A241
A1262	G1202	A1142	U1082	G1022	C902	U842	A782	A722	G662	A602	C542	A482	A422	A362	C302	G242
A1263	U1203	A1143	U1083	U1023	C903	G843	A783	A723	G663	A603	C543	A483	A423	A363	C303	G243
A1264	A1204	A1144	A1084	G1024	C904	A844	G784	U724	G664	G604	C544	A484	G424	C364	U304	U244
A1265	A1205	G1025	A1085	G1025	C905	A845	G785	G725	U665	U605	C545	A485	G425	U365	U305	G245
A1266	G1206	C1146	A1086	G1026	U906	U846	G786	G726	A666	U606	C546	A486	G426	C366	U306	G246
U1267	C1207	A1147	G1087	A1027	G907	U847	C787	A727	U667	U607	C547	A487	U427	G367	G307	G247
A1268	C1208	U1148	A1088	A1028	C908	C848	A788	G728	A668	A608	C548	A488	A428	A368	G308	G248
A1269	U1209	G1149	G989	A1029	A909	G849	A789	G729	G669	A609	C549	A489	A429	U369	A309	C249
C1270	G1210	A1150	A1090	G1030	A910	C850	U790	A730	C670	C610	C550	A490	A430	G370	A310	G250
C1271	C1211	A1151	G1091	G1031	A911	C851	G791	A731	A671	C611	C551	A491	A431	A371	A311	A251
A1272	G1212	C1152	C1092	A1032	G912	U852	A792	G732	C672	G612	C552	A492	A432	U372	G312	G252
A1273	A1213	C1153	G1093	U1033	G913	C853	A793	G733	C673	A613	C553	A493	C433	U373	G313	C253
A1274	A1214	G1154	U1094	G1034	G914	C854	A794	A734	G674	A614	C554	A494	U434	A374	C314	G254
A1275	G1215	A1155	A1095	U1035	C915	G855	C795	A735	A675	U615	C555	A495	C435	G375	G315	A255
A1276	G1216	A1156	A1096	G1036	G916	C856	G796	C736	A676	A616	C556	A496	C436	G376	C316	A256
A1277	U1217	G1157	U1097	G1037	A917	C857	G797	A737	A677	G617	C557	A497	U437	G377	G317	C257
C1278	G1218	C1158	A1098	G1038	A918	C858	G798	G738	C678	G618	C558	A498	U438	G378	G318	G258
G1279	U1219	U1159	G1099	A1039	U919	G859	G799	A739	C679	G619	C559	A499	A439	G379	G319	G259
G1280	G1220	G1160	C1100	A1040	A920	U860	A800	C740	C680	G620	C560	A500	C440	G380	A320	G260
G1281	C1221	A1161	U1101	G1041	A921	C861	G801	U741	G681	A621	C561	A501	U441	G381	U321	G261
U1282	U1222	G1162	C1102	G1042	C922	A862	A802	A742	G682	G622	C562	A502	A442	A382	A322	A262
G1283	G1223	G1163	A1103	C1043	G923	A863	U803	A743	U683	C623	A563	A503	A443	C383	C323	G263
A1284	U1224	C1164	C1104	A1044	G924	C864	A804	U744	G684	C624	C564	A504	C444	A384	A324	C264
A1285	G1225	A1165	U1105	C1045	A925	C865	G805	G745	A685	G625	C565	A505	C445	C385	G325	A265
A1286	A1226	G1166	G1106	A1046	G926	A866	C806	U746	U686	A626	C566	A506	C446	G386	G326	G266
A1287	G1227	C1167	U1107	G1047	A927	C867	U807	U747	C687	A627	C567	A507	A447	U387	G327	C267
G1288	G1228	G1168	U1108	A1048	A928	U868	G808	G748	U688	G628	C568	A508	U448	G388	U328	C268
C1289	C1229	A1169	C1109	G1049	U929	C869	G809	A749	A689	G629	C569	A509	A449	C389	G329	C269
C1290	A1230	C1170	G1110	A1050	G930	U870	U810	A750	C690	G630	C570	A510	C450	U390	A330	A270
C1291	U1231	G1171	A1111	G1051	U931	U871	U811	A751	C691	A631	C571	A511	U451	A391	C331	G271
G1292	C1232	C1172	G1112	C1052	U932	U872	C812	A752	C692	A632	C572	A512	C452	U392	A332	A272
C1293	U1233	A1173	U1113	G1053	A933	C873	U813	A753	A693	A633	C573	A513	A453	C393	G333	G273
C1294	G1234	U1174	C1114	A1054	U934	G874	C814	U754	U694	C634	A574	A514	C454	C394	C334	C274
C1295	G1235	A1175	G1115	G1055	C935	C875	C815	U755	G695	C635	A575	A515	C455	U395	C335	C275
G1296	G1236	U1176	G1116	G1056	A936	C876	C816	A756	G696	C636	U576	C516	C456	G396	C336	U276
C1297	A1237	G1177	C1117	A1057	C937	A877	C817	G757	G697	A637	G577	C517	A457	U397	C337	G277
C1298	G1238	C1178	C1118	U1058	G938	A878	C818	C758	C698	G638	G578	A518	C458	C398	G338	A278
G1299	G1239	G1179	U1119	G1059	G939	G879	A819	G759	A699	U639	G579	U519	U459	U399	U339	A279
G1300	U1240	U1180	C1120	U1060	G940	C880	A820	G760	C700	C640	U580	G520	A460	G400	A340	U280
A1301	A1241	U1181	C1121	U1061	A941	C881	A821	A761	G701	U641	C581	U521	C461	A401	C341	C281
A1302	U1242	G1182	G1122	G1062	G942	C882	C822	U762	U702	U642	A582	A522	C462	A402	A342	A282
G1303	C1243	U1183	C1123	G1063	A943	G883	C823	G763	U703	A643	G583	C523	U463	U403	C343	G283
A1304	A1244	G1184	G1124	C1064	C944	U884	U824	A764	G704	A644	C584	G524	U464	A404	A344	U284
C1305	G1245	G1185	G1125	U1065	A945	C885	A825	C765	A705	C645	G585	U525	C465	U405	A345	G285
C1306	A1246	G1186	A1126	U1066	C946	A886	U826	U766	A706	U646	A586	A526	A466	G406	A346	U286
A1307	C1247	U1187	C1127	A1067	A947	U887	U827	U767	G707	G647	C587	C527	G467	G287	A347	G287
G1308	G1248	U1188	G1128	G1068	C948	C888	U828	G768	G708	G648	U588	A528	G468	G408	A348	U288
G1309	U1249	A1189	A1129	A1069	G949	C889	A829	U769	U709	G649	U589	A529	G469	G409	U349	G289
G1310	G1250	G1190	U1130	A1070	G950	C890	G830	G770	U710	C650	A590	G530	A470	G410	G350	U290
G1311	C1251	G1191	G1131	G1071	C951	G891	G831	G771	G711	G651	U591	C531	A471	G411	C351	G291
G1312	G1252	G1192	U1132	C1072	G952	A892	U832	G772	G712	U652	A592	A532	A472	A412	A352	U292
A1313	A1253	G1193	C1133	A1073	G953	C893	A833	G773	G713	U653	U593	C533	G473	G413	C353	U293
A1314	A1254	A1194	A1134	G1074	G954	U894	G834	G774	U714	A654	U594	A534	G474	C414	A354	A294
C1315	U1255	G1195	G1135	C1075	U955	U895	C835	G775	A715	A655	C595	G535	C475	A415	U355	G295
A1316	G1256	C1196	G1136	G1076	G956	A896	G836	G776	A716	G656	U596	G536	G476	U416	G356	U296
G1317	C1257	G1197	G1137	A1077	C957	C897	C837	G777	C717	U657	G597	G537	A477	C417	C357	G297
A1318	U1258	U1198	G1138	U1078	U958	C898	C838	G778	A718	U658	U598	A538	A478	C418	U358	G298
C1319	G1259	A1199	U1019	C1079	A959	A899	U839	U779	A719	G659	A599	G539	A479	U419	A359	A299
C1320	A1260	C1200	A1020	A1080	A960	A900	C840	G780	U720	C660	G600	C540	A480	C420	U360	A300

A2281	G2221	A2101	U2041	A1981	G1921	G1861	A1801	G1741	G1681	U1621	C1561	G1501	G1441	G1381	A1321
G2282	C2222	G2102	A2042	U1982	G1922	G1862	A1802	U1742	G1682	G1622	C1562	A1502	U1442	G1382	A1322
G2283	G2223	A2103	A2043	G1983	G1923	G1863	A1803	G1743	U1683	U1623	C1563	A1503	U1443	A1383	G1323
A2284	G2224	C2104	C2044	G1984	G1924	U1864	C1804	A1744	G1684	G1624	C1564	A1504	G1444	A1384	G1324
G2285	A2225	C2105	C2045	C1985	G1925	U1865	A1805	A1745	C1685	C1625	C1565	A1505	G1445	A1385	U1325
G2286	C2226	U2106	G2046	C1986	G1926	A1866	C1806	A1746	G1686	G1626	C1566	U1506	G1446	A1386	U1326
A2287	A2227	G2107	C2047	A1987	G1927	G1867	G1807	U1747	G1687	G1627	C1567	U1507	C1447	A1387	A1327
G2288	G2228	A2108	G2048	G1988	A1928	C1868	A1808	C1748	U1688	G1628	C1568	A1508	G1448	G1388	A1328
G2289	U2229	U2109	G2049	G1989	G1929	G1869	A1809	A1749	U1689	U1629	C1569	A1509	G1449	G1389	U1329
G2290	G2230	G2110	C2050	C1990	G1930	A1870	A1810	G1750	A1690	A1630	A1570	G1510	G1450	U1390	G1330
U2291	A2211	A2171	A2051	U1991	G1931	C1871	A1811	G1751	C1691	G1631	A1571	G1511	C1451	U1391	G1331
U2292	C2232	G2112	A2052	G1992	A1932	A1872	A1812	G1752	U1692	A1632	A1572	C1512	G1452	A1392	G1332
G2293	U2173	G2113	C2053	U1993	G1933	G1873	G1813	G1753	U1693	G1633	G1573	G1513	A1453	A1393	G1333
G2294	C2174	A2114	A2054	C1994	C1934	C1874	G1814	A1754	C1694	A1634	C1574	G1514	C1454	U1394	G1334
G2295	G2235	G2115	C2055	U1995	G1935	A1875	A1815	A1755	G1695	A1635	C1575	A1515	G1455	A1395	G1335
U2296	U2236	G2116	A2056	C1996	A1936	A1876	C1816	G1756	G1696	G1636	U1576	G1516	G1456	A1396	A1336
A2297	G2237	A2117	G2057	C1997	A1937	G1878	G1817	A1757	G1697	A1637	U1577	G1517	U1457	U1397	G1337
G2298	G2238	U2118	A2058	A1998	A1938	G1878	A1818	U1758	A1698	C1638	U1578	G1518	U1458	G1398	G1338
U2299	G2239	A2119	A2059	C1999	U1939	C1879	A1819	A1759	G1699	C1639	A1579	G1519	G1459	C1399	G1339
C2300	U2240	G2120	A2060	C2000	U1940	U1880	U1820	C1760	A1700	A1640	A1580	U1520	U1460	U1400	U1340
U2302	G2242	U2122	A2062	G2002	C1942	U1882	C1822	C1762	G1702	G1642	C1582	A1522	C1462	U1402	A1342
G2303	U2243	G2123	C2063	A2003	U1943	U1883	G1823	G1763	G1703	G1643	A1583	U1523	C1463	A1403	G1343
G2304	U2244	A2124	C2064	G2004	U1944	G1884	G1824	G1764	C1704	C1644	U1584	G1524	G1464	A1404	U1344
G2305	U2245	G2125	C2065	A2005	G1945	A1885	U1825	U1765	A1705	G1645	C1585	A1525	G1465	U1405	G1345
C2306	G2246	A2126	C2066	C2006	U1946	U1886	G1826	G1766	G1706	C1646	A1586	C1526	U1466	U1406	G1346
G2307	A2247	G2127	G2067	U2007	G1947	G1887	G1827	G1767	G1707	U1647	G1587	G1527	U1467	G1407	A1347
G2308	G2248	G2128	U2068	C2008	G1948	G1888	G1828	G1768	C1708	U1648	U1588	A1528	U1468	G1408	G1348
A2309	U2249	A2129	G2069	A2009	G1949	A1889	A1829	G1769	U1709	G1649	A1589	G1529	A1469	U1409	C1349
C2310	G2250	U2130	A2070	G2010	G1950	A1890	C1830	G1770	G1710	A1650	A1590	G1530	A1470	G1410	C1350
A2311	G2251	U2131	A2071	U2011	U1951	G1891	G1831	G1771	U1711	G1651	A1591	G1531	G1471	U1411	C1351
U2312	G2252	U2132	C2072	G2012	A1952	C1892	C1832	A1772	U1712	A1652	C1592	A1532	C1472	U1412	U1352
G2313	G2253	G2133	A2073	A2013	A1953	C1893	C1833	A1773	A1713	G1653	A1593	G1533	C1473	A1413	A1353
G2314	C2254	A2134	U2074	A2014	G1954	A1894	U1834	U1774	G1714	A1654	C1594	U1534	U1474	C1414	A1354
G2315	G2255	A2135	U2075	A2015	U1955	C1895	G1835	U1775	G1715	A1655	C1595	A1535	G1475	U1415	G1355
G2316	G2256	G2136	U2076	U2016	U1956	G1896	C1836	G1776	U1716	C1656	A1596	C1536	U1476	G1416	G1356
A2317	U2257	U2137	A2077	U2017	G1957	G1897	C1837	U1777	U1717	U1657	A1597	G1537	A1477	G1417	C1357
G2318	C2258	G2138	C2078	G2018	C1958	U1898	C1838	U1778	G1718	C1658	A1598	G1538	G1478	G1418	G1358
G2319	U2259	U2139	U2079	A2019	G1959	A1899	G1839	U1779	U1719	G1659	U1599	U1539	G1479	A1419	A1359
U2320	C2260	G2140	A2080	A2020	A1960	A1900	A1840	U1780	U1720	G1660	C1600	G1540	G1479	A1420	G1360
U2321	G2261	G2141	U2081	C2021	C1961	A1901	U1841	U1781	G1721	G1661	G1601	C1541	U1481	G1421	G1361
A2322	U2262	A2142	A2082	U2022	C1962	C1902	G1842	U1782	A1722	U1662	U1602	U1542	G1482	G1422	C1362
G2323	C2263	G2143	G2083	C2023	U1963	G1903	C1843	A1783	G1723	G1663	A1603	G1543	G1483	G1423	G1363
U2324	G2264	G2144	C2084	G2024	G1964	G1904	A1844	A1784	G1724	A1664	C1604	A1544	U1484	G1424	G1364
G2325	U2265	C2145	U2085	C2025	C1965	C1905	G1845	A1785	U1725	A1665	C1605	A1545	U1485	G1425	A1365
C2326	A2266	G2146	U2086	U2026	A1966	G1906	G1846	A1786	C1726	G1666	C1606	G1546	U1486	G1426	A1366
A2327	G2267	A2147	G2087	G2027	C1967	G1907	A1847	U1787	C1727	G1667	C1607	C1547	U1487	A1427	A1367
A2328	A2268	G2148	A2088	U2028	G1968	C1908	A1848	C1788	G1728	A1668	A1608	A1548	C1488	G1428	G1368
U2329	G2269	U2149	C2089	G2029	A1969	C1909	G1849	U1789	U1729	A1669	A1609	A1549	C1489	G1429	G1369
G2330	A2270	G2150	A2090	A2030	U1970	G1910	G1850	C1790	C1730	C1670	A1610	C1550	A1490	G1430	C1370
G2331	G2271	U2151	C2091	A2031	U1971	U1911	U1851	A1791	G1731	U1671	C1611	A1551	G1491	A1431	G1371
C2332	U2272	G2152	U2092	G2032	G1972	A1912	A1852	G1792	C1732	A1672	C1612	A1552	G1492	G1432	U1372
A2333	A2273	C2153	G2093	A2033	G1973	A1913	A1853	G1793	G1733	G1673	C1613	A1553	C1493	A1433	A1373
U2334	A2274	A2154	A2094	U2034	C1974	C1914	A1854	G1794	G1734	G1674	A1614	U1554	A1494	A1434	G1374
G2335	C2275	U2155	A2095	G2035	G1975	3TD1915	U1855	G1795	A1735	C1675	C1615	G1555	A1495	G1435	U1375
A2336	G2276	G2156	C2096	C2036	U1976	A1916	U1856	U1796	U1736	A1676	A1616	C1556	A1496	G1436	C1376
G2337	G2277	G2157	A2097	A2037	A1977	U1917	G1857	G1797	G1737	A1677	C1617	C1557	U1497	C1437	G1377
C2338	A2278	A2158	U2098	G2038	A1978	A1918	A1858	U1798	G1738	A1678	A1618	C1558	U1498	U1438	A1378
G2339	G2279	G2159	U2099	U2039	U1979	A1919	A1859	U1799	A1739	A1679	G1619	C1559	C1499	U1439	U1379
A2340	G2280	C2160	G2100	G2040	G1980	C1920	G1860	C1800	G1740	U1680	G1620	G1560	U1500	U1440	G1380



- Molecule 29: 50S ribosomal protein L3

Chain BE: 78% 17% 5%



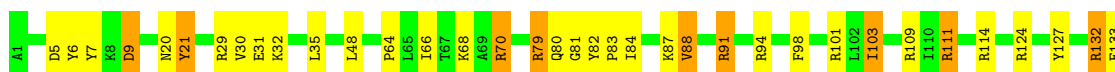
- Molecule 30: 50S ribosomal protein L4

Chain BF: 75% 21% 4%



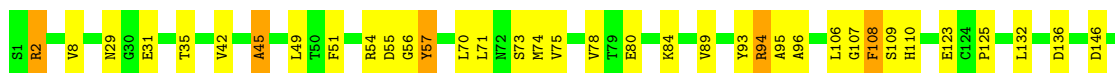
- Molecule 31: 50S ribosomal protein L5

Chain BG: 71% 24% 5%



- Molecule 32: 50S ribosomal protein L6

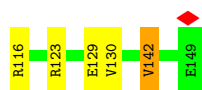
Chain BH: 75% 22% 3%



- Molecule 33: 50S ribosomal protein L9

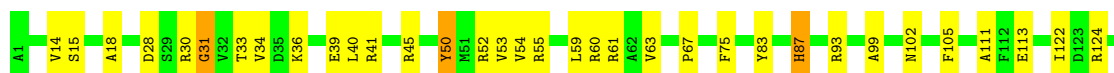
Chain BI: 10% 79% 19%





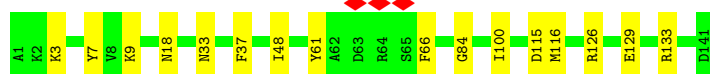
- Molecule 34: 50S ribosomal protein L10

Chain BJ: 74% 23%



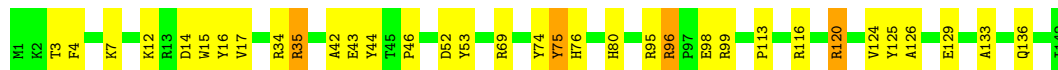
- Molecule 35: 50S ribosomal protein L11

Chain BK: 89% 11%



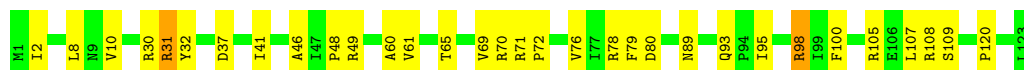
- Molecule 36: 50S ribosomal protein L13

Chain BL: 76% 21%



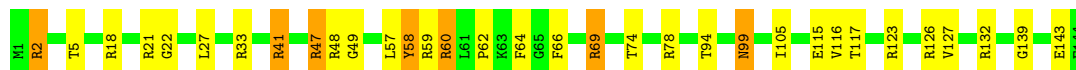
- Molecule 37: 50S ribosomal protein L14

Chain BM: 74% 24%



- Molecule 38: 50S ribosomal protein L15

Chain BN: 77% 18% 5%




- Molecule 39: 50S ribosomal protein L16

Chain BO: 78% 19%




- Molecule 40: 50S ribosomal protein L17

Chain BP:  76% 20% .



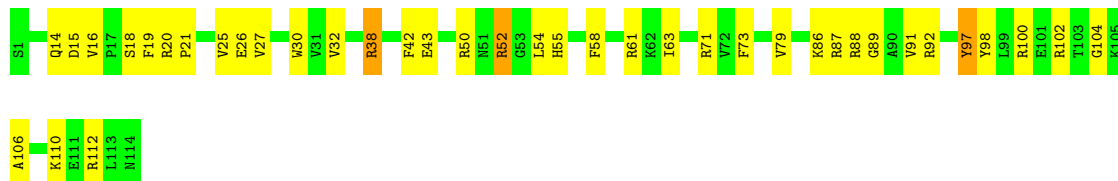
- Molecule 41: 50S ribosomal protein L18

Chain BQ:  82% 14% .



- Molecule 42: 50S ribosomal protein L19

Chain BR:  66% 32% .




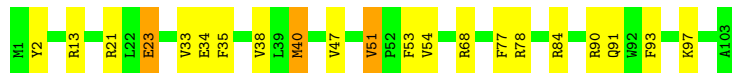
- Molecule 43: 50S ribosomal protein L20

Chain BS:  74% 23% .




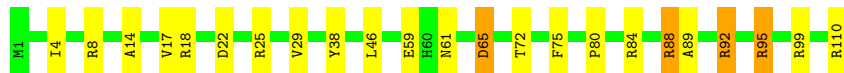
- Molecule 44: 50S ribosomal protein L21

Chain BT:  80% 17% .




- Molecule 45: 50S ribosomal protein L22

Chain BU:  79% 17% .

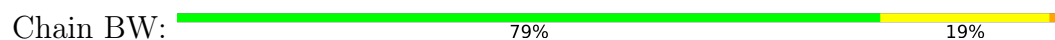


- Molecule 46: 50S ribosomal protein L23

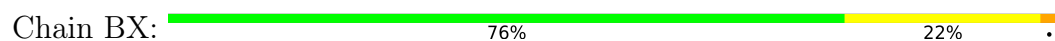
Chain BV:  79% 21% .



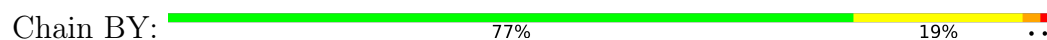
- Molecule 47: 50S ribosomal protein L24



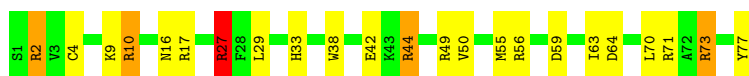
- Molecule 48: 50S ribosomal protein L25



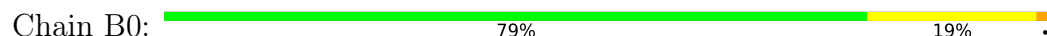
- Molecule 49: 50S ribosomal protein L27



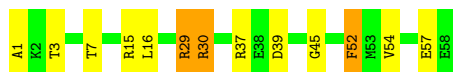
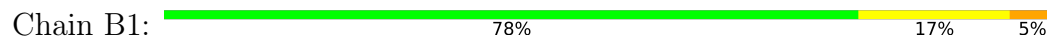
- Molecule 50: 50S ribosomal protein L28



- Molecule 51: 50S ribosomal protein L29

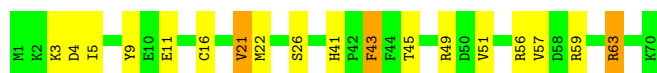


- Molecule 52: 50S ribosomal protein L30

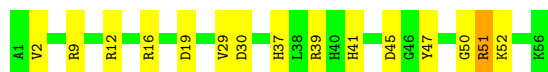
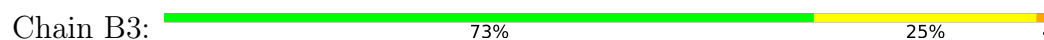


- Molecule 53: 50S ribosomal protein L31

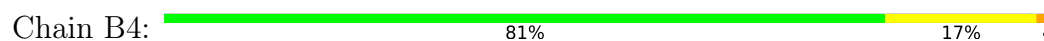




- Molecule 54: 50S ribosomal protein L32



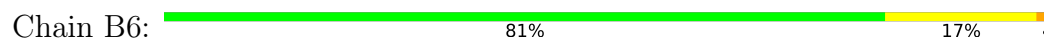
- Molecule 55: 50S ribosomal protein L33



- Molecule 56: 50S ribosomal protein L34



- Molecule 57: 50S ribosomal protein L35



- Molecule 58: 50S ribosomal protein L36



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	21000	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Volumes were CTF-corrected in defocus groups	Depositor
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	25	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	58269	Depositor
Image detector	TVIPS TEMCAM-F415 (4k x 4k)	Depositor
Maximum map value	1.422	Depositor
Minimum map value	-0.460	Depositor
Average map value	0.029	Depositor
Map value standard deviation	0.195	Depositor
Recommended contour level	0.1	Depositor
Map size (Å)	375.0, 375.0, 375.0	wwPDB
Map dimensions	250, 250, 250	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.5, 1.5, 1.5	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: OMG, CH, 4SU, 5MU, UR3, OMU, 1MG, PSU, 5MC, OMC, H2U, 4OC, MIA, FME, 7MG, 6MZ, 2MA, MA6, 2MG, 3TD

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 > 5$	RMSZ	# $ Z > 5$
1	AA	3.08	3882/36769 (10.6%)	3.52	8356/57354 (14.6%)
2	AB	3.05	161/1600 (10.1%)	3.56	386/2492 (15.5%)
3	AC	3.23	133/1108 (12.0%)	3.55	250/1724 (14.5%)
4	AD	3.02	174/1721 (10.1%)	3.61	441/2683 (16.4%)
5	AE	1.50	9/1904 (0.5%)	1.89	37/2565 (1.4%)
6	AF	1.54	11/1852 (0.6%)	2.09	63/2490 (2.5%)
7	AG	1.51	9/1665 (0.5%)	1.95	48/2227 (2.2%)
8	AH	1.48	1/1239 (0.1%)	1.94	30/1664 (1.8%)
9	AI	1.57	5/1121 (0.4%)	2.07	36/1509 (2.4%)
10	AJ	1.54	9/1422 (0.6%)	2.04	43/1908 (2.3%)
11	AK	1.56	5/989 (0.5%)	1.94	28/1326 (2.1%)
12	AL	1.54	2/1048 (0.2%)	2.06	39/1394 (2.8%)
13	AM	1.43	1/835 (0.1%)	2.03	27/1127 (2.4%)
14	AN	1.53	5/982 (0.5%)	1.98	26/1323 (2.0%)
15	AO	1.52	2/969 (0.2%)	2.34	41/1300 (3.2%)
16	AP	1.47	2/919 (0.2%)	2.23	25/1226 (2.0%)
17	AQ	1.48	1/817 (0.1%)	2.06	30/1088 (2.8%)
18	AR	1.52	0/724	2.00	27/966 (2.8%)
19	AS	1.54	4/659 (0.6%)	2.11	21/884 (2.4%)
20	AT	1.56	2/681 (0.3%)	1.87	11/913 (1.2%)
21	AU	1.61	2/637 (0.3%)	2.24	27/851 (3.2%)
22	AV	1.45	4/744 (0.5%)	1.88	16/995 (1.6%)
23	AW	1.41	2/676 (0.3%)	1.66	7/895 (0.8%)
24	AX	1.56	2/598 (0.3%)	2.09	22/792 (2.8%)
25	BA	3.06	310/2869 (10.8%)	3.49	627/4474 (14.0%)
26	BB	3.07	7266/69257 (10.5%)	3.53	15668/108040 (14.5%)
27	BC	1.46	6/1748 (0.3%)	1.80	32/2355 (1.4%)
28	BD	1.54	14/2131 (0.7%)	1.94	53/2863 (1.9%)
29	BE	1.53	3/1586 (0.2%)	1.90	32/2134 (1.5%)
30	BF	1.46	7/1571 (0.4%)	2.00	43/2113 (2.0%)
31	BG	1.53	5/1444 (0.3%)	1.95	36/1937 (1.9%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
32	BH	1.45	3/1343 (0.2%)	1.88	31/1816 (1.7%)
33	BI	1.49	0/1122	1.97	30/1515 (2.0%)
34	BJ	1.53	6/1247 (0.5%)	1.94	35/1679 (2.1%)
35	BK	1.44	1/1046 (0.1%)	1.79	14/1410 (1.0%)
36	BL	1.54	6/1152 (0.5%)	1.93	29/1551 (1.9%)
37	BM	1.48	4/956 (0.4%)	1.93	27/1279 (2.1%)
38	BN	1.58	5/1062 (0.5%)	2.01	28/1413 (2.0%)
39	BO	1.54	4/1093 (0.4%)	2.04	35/1460 (2.4%)
40	BP	1.51	4/1021 (0.4%)	1.90	23/1364 (1.7%)
41	BQ	1.55	4/910 (0.4%)	2.05	22/1219 (1.8%)
42	BR	1.55	3/929 (0.3%)	2.15	32/1242 (2.6%)
43	BS	1.53	5/960 (0.5%)	2.10	34/1278 (2.7%)
44	BT	1.56	3/829 (0.4%)	1.93	17/1107 (1.5%)
45	BU	1.40	1/864 (0.1%)	1.89	21/1156 (1.8%)
46	BV	1.55	3/794 (0.4%)	2.06	19/1060 (1.8%)
47	BW	1.51	4/797 (0.5%)	1.86	18/1062 (1.7%)
48	BX	1.49	4/766 (0.5%)	1.82	17/1025 (1.7%)
49	BY	1.54	3/642 (0.5%)	1.90	17/848 (2.0%)
50	BZ	1.49	0/635	2.10	24/848 (2.8%)
51	B0	1.49	1/510 (0.2%)	1.95	10/677 (1.5%)
52	B1	1.46	3/453 (0.7%)	1.77	12/605 (2.0%)
53	B2	1.56	4/559 (0.7%)	1.96	10/745 (1.3%)
54	B3	1.53	2/450 (0.4%)	2.12	19/599 (3.2%)
55	B4	1.49	1/448 (0.2%)	1.90	7/594 (1.2%)
56	B5	1.52	1/380 (0.3%)	2.36	24/498 (4.8%)
57	B6	1.52	3/513 (0.6%)	1.68	6/676 (0.9%)
58	B7	1.41	2/303 (0.7%)	2.14	10/397 (2.5%)
All	All	2.69	12119/164069 (7.4%)	3.18	27099/244735 (11.1%)

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	AA	0	888
2	AB	0	39
3	AC	0	23
4	AD	0	34
5	AE	0	6
6	AF	0	8
7	AG	0	11

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
8	AH	0	5
9	AI	0	11
10	AJ	0	6
11	AK	0	3
12	AL	0	5
13	AM	0	4
14	AN	0	5
15	AO	0	2
16	AP	0	3
17	AQ	0	1
19	AS	0	3
20	AT	0	1
21	AU	0	6
23	AW	0	2
24	AX	0	1
25	BA	0	71
26	BB	0	1680
27	BC	0	4
28	BD	0	11
29	BE	0	7
30	BF	0	6
31	BG	0	8
32	BH	0	3
34	BJ	0	6
36	BL	0	6
37	BM	0	3
38	BN	0	3
39	BO	0	2
40	BP	0	6
41	BQ	0	4
42	BR	0	4
43	BS	0	5
44	BT	0	1
45	BU	0	3
47	BW	0	2
48	BX	0	3
49	BY	0	5
50	BZ	0	4
51	B0	0	2
52	B1	0	2
53	B2	0	1
55	B4	0	3

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
56	B5	0	1
57	B6	0	3
58	B7	0	1
All	All	0	2927

All (12119) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1076	U	C2-N3	18.65	1.50	1.37
26	BB	757	G	P-O5'	16.91	1.76	1.59
25	BA	50	A	N7-C5	16.16	1.49	1.39
26	BB	2569	G	P-O5'	16.09	1.75	1.59
26	BB	1039	A	N7-C5	-15.99	1.29	1.39
26	BB	2611	C	N1-C6	15.92	1.46	1.37
1	AA	911	U	C2-N3	15.66	1.48	1.37
1	AA	1466	C	P-O5'	15.52	1.75	1.59
26	BB	1746	A	N3-C4	15.26	1.44	1.34
1	AA	1446	A	N3-C4	15.20	1.44	1.34
26	BB	2527	C	N1-C6	15.20	1.46	1.37
26	BB	2867	G	N3-C4	15.07	1.46	1.35
26	BB	2785	C	N1-C6	14.76	1.46	1.37
26	BB	2397	G	N7-C5	14.76	1.48	1.39
26	BB	785	G	P-O5'	14.73	1.74	1.59
1	AA	698	G	N7-C5	-14.65	1.30	1.39
26	BB	6	A	N9-C4	14.62	1.46	1.37
1	AA	395	C	P-O5'	14.55	1.74	1.59
1	AA	1219	A	N7-C5	-14.44	1.30	1.39
26	BB	511	U	C2-N3	14.41	1.47	1.37
26	BB	2700	A	N3-C4	14.36	1.43	1.34
26	BB	1691	C	N1-C6	14.35	1.45	1.37
1	AA	970	C	N1-C6	14.24	1.45	1.37
26	BB	235	U	C2-N3	14.20	1.47	1.37
26	BB	980	A	N7-C5	-14.14	1.30	1.39
1	AA	572	A	N3-C4	14.10	1.43	1.34
26	BB	1167	C	N1-C6	14.05	1.45	1.37
26	BB	428	A	N3-C4	14.03	1.43	1.34
1	AA	320	A	N3-C4	14.02	1.43	1.34
26	BB	472	A	N3-C4	13.86	1.43	1.34
1	AA	949	A	N9-C4	13.70	1.46	1.37
26	BB	637	A	N9-C4	-13.65	1.29	1.37
1	AA	1236	A	N3-C4	13.63	1.43	1.34
1	AA	1068	G	N7-C5	-13.56	1.31	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1133	A	N3-C4	13.50	1.43	1.34
1	AA	506	G	N7-C5	13.47	1.47	1.39
1	AA	600	A	N9-C4	13.45	1.46	1.37
4	AD	12	G	N3-C4	13.40	1.44	1.35
26	BB	1182	G	C8-N7	-13.38	1.23	1.30
26	BB	1280	G	C6-N1	13.38	1.49	1.39
26	BB	2322	A	P-O5'	13.35	1.73	1.59
26	BB	2302	U	P-O5'	13.33	1.73	1.59
26	BB	1151	A	P-O5'	13.18	1.73	1.59
26	BB	1558	C	P-O5'	13.18	1.73	1.59
26	BB	1376	C	P-O5'	13.15	1.73	1.59
26	BB	2408	U	P-O5'	13.15	1.73	1.59
26	BB	800	A	P-O5'	13.13	1.72	1.59
26	BB	1654	A	N3-C4	13.11	1.42	1.34
26	BB	2593	U	C2-N3	13.10	1.47	1.37
2	AB	27	C	N1-C6	13.07	1.45	1.37
26	BB	579	G	N3-C4	13.06	1.44	1.35
26	BB	798	G	P-O5'	13.04	1.72	1.59
26	BB	826	U	C2-N3	13.04	1.46	1.37
1	AA	1204	A	N3-C4	13.02	1.42	1.34
1	AA	676	A	N9-C4	13.01	1.45	1.37
26	BB	2751	G	P-O5'	13.01	1.72	1.59
1	AA	842	U	C4-C5	13.00	1.55	1.43
26	BB	109	C	N1-C6	12.99	1.45	1.37
26	BB	2700	A	N7-C5	12.99	1.47	1.39
26	BB	357	C	N1-C6	12.96	1.45	1.37
1	AA	303	A	P-O5'	12.91	1.72	1.59
26	BB	2276	G	C6-N1	12.89	1.48	1.39
1	AA	1368	A	P-O5'	12.89	1.72	1.59
26	BB	822	G	P-O5'	12.88	1.72	1.59
26	BB	643	A	N7-C5	12.84	1.47	1.39
1	AA	366	A	N9-C4	-12.83	1.30	1.37
1	AA	1081	A	N3-C4	12.83	1.42	1.34
26	BB	2758	A	P-O5'	12.83	1.72	1.59
1	AA	124	C	N3-C4	12.80	1.43	1.33
1	AA	866	C	N1-C6	12.78	1.44	1.37
26	BB	1614	A	O3'-P	12.75	1.76	1.61
26	BB	2708	G	P-O5'	12.73	1.72	1.59
2	AB	68	C	N1-C6	12.71	1.44	1.37
26	BB	14	A	N9-C4	-12.64	1.30	1.37
1	AA	49	U	P-O5'	12.63	1.72	1.59
1	AA	719	C	C4-C5	12.63	1.53	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	732	C	N1-C6	12.56	1.44	1.37
26	BB	1387	A	N3-C4	12.55	1.42	1.34
26	BB	1641	A	C5'-C4'	12.48	1.66	1.51
1	AA	134	G	P-O5'	12.47	1.72	1.59
26	BB	2388	A	N3-C4	-12.46	1.27	1.34
26	BB	1912	A	N3-C4	12.38	1.42	1.34
1	AA	1260	G	C5-C4	12.32	1.47	1.38
25	BA	12	C	C4-C5	12.29	1.52	1.43
26	BB	251	A	C8-N7	-12.23	1.23	1.31
1	AA	305	G	C6-N1	12.23	1.48	1.39
26	BB	1722	A	N9-C4	12.21	1.45	1.37
1	AA	86	G	N7-C5	12.20	1.46	1.39
1	AA	66	A	N3-C4	12.19	1.42	1.34
26	BB	1543	G	N3-C4	12.16	1.44	1.35
1	AA	1412	C	N3-C4	12.14	1.42	1.33
26	BB	321	U	P-O5'	12.14	1.71	1.59
26	BB	589	U	C2-N3	12.11	1.46	1.37
1	AA	1350	A	N3-C4	12.10	1.42	1.34
1	AA	1394	A	N3-C4	12.09	1.42	1.34
26	BB	1070	A	N7-C5	12.09	1.46	1.39
26	BB	1890	A	N3-C4	12.08	1.42	1.34
26	BB	317	G	N1-C2	12.07	1.47	1.37
26	BB	2274	A	N3-C4	12.06	1.42	1.34
26	BB	2709	G	C8-N7	-12.05	1.23	1.30
26	BB	569	U	N1-C2	12.05	1.49	1.38
26	BB	2126	A	N7-C5	-12.02	1.32	1.39
1	AA	535	A	N3-C4	12.01	1.42	1.34
1	AA	1517	G	P-O5'	12.01	1.71	1.59
26	BB	896	A	N3-C4	12.01	1.42	1.34
26	BB	2082	A	N3-C4	11.99	1.42	1.34
26	BB	2882	A	N9-C4	11.99	1.45	1.37
26	BB	995	C	C5-C6	11.97	1.44	1.34
26	BB	30	G	N7-C5	11.97	1.46	1.39
1	AA	1201	A	N3-C4	11.97	1.42	1.34
26	BB	2112	G	N7-C5	11.94	1.46	1.39
1	AA	1420	U	C2-N3	11.93	1.46	1.37
1	AA	313	A	C2'-C1'	-11.92	1.40	1.53
26	BB	112	U	P-O5'	11.92	1.71	1.59
1	AA	1094	G	N3-C4	11.91	1.43	1.35
26	BB	1134	A	N3-C4	11.91	1.42	1.34
26	BB	2616	C	N1-C6	11.89	1.44	1.37
26	BB	348	A	N3-C4	11.88	1.42	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	28	A	N3-C4	11.88	1.42	1.34
1	AA	1443	C	C4-C5	11.84	1.52	1.43
1	AA	961	U	P-O5'	11.83	1.71	1.59
26	BB	711	G	N7-C5	11.82	1.46	1.39
26	BB	1868	C	N3-C4	11.82	1.42	1.33
26	BB	210	C	C4-C5	11.80	1.52	1.43
1	AA	1275	A	N3-C4	11.80	1.42	1.34
26	BB	313	G	N9-C8	11.80	1.46	1.37
26	BB	1022	G	P-O5'	11.80	1.71	1.59
26	BB	830	G	N3-C4	11.78	1.43	1.35
26	BB	330	A	N7-C5	11.77	1.46	1.39
1	AA	1183	U	P-O5'	11.75	1.71	1.59
26	BB	1410	G	P-O5'	11.74	1.71	1.59
26	BB	1195	G	C2-N3	11.74	1.42	1.32
26	BB	1474	U	C2-N3	11.71	1.46	1.37
26	BB	2310	C	P-O5'	11.71	1.71	1.59
26	BB	2613	U	P-O5'	11.71	1.71	1.59
1	AA	370	C	C2-N3	11.70	1.45	1.35
26	BB	1699	G	C8-N7	-11.69	1.24	1.30
26	BB	1512	C	N1-C6	11.66	1.44	1.37
26	BB	2572	A	N9-C4	11.66	1.44	1.37
26	BB	1292	G	P-O5'	11.65	1.71	1.59
26	BB	1195	G	N3-C4	11.64	1.43	1.35
26	BB	1275	A	N7-C5	-11.64	1.32	1.39
1	AA	250	A	N3-C4	11.64	1.41	1.34
1	AA	583	A	P-O5'	11.63	1.71	1.59
1	AA	313	A	N3-C4	11.62	1.41	1.34
26	BB	2827	C	N1-C6	11.62	1.44	1.37
1	AA	548	G	C6-N1	11.61	1.47	1.39
26	BB	2786	U	C2-N3	11.60	1.45	1.37
26	BB	142	A	N3-C4	11.59	1.41	1.34
26	BB	1496	A	N7-C5	11.58	1.46	1.39
26	BB	1630	A	C5-C4	-11.58	1.30	1.38
26	BB	1151	A	N9-C4	11.55	1.44	1.37
26	BB	1550	C	C4-C5	11.55	1.52	1.43
26	BB	1812	U	P-O5'	11.54	1.71	1.59
26	BB	2021	C	C2-N3	11.54	1.45	1.35
3	AC	37	G	C6-N1	11.52	1.47	1.39
26	BB	2331	G	N7-C5	11.52	1.46	1.39
26	BB	2773	C	N1-C6	11.52	1.44	1.37
26	BB	2042	A	P-O5'	11.51	1.71	1.59
1	AA	765	G	C8-N7	11.50	1.37	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1846	G	P-O5'	11.50	1.71	1.59
26	BB	2834	G	N3-C4	11.50	1.43	1.35
1	AA	710	G	O3'-P	11.48	1.75	1.61
3	AC	19	A	C6-N6	-11.48	1.24	1.33
26	BB	2860	A	P-O5'	11.46	1.71	1.59
26	BB	2475	C	N1-C6	11.46	1.44	1.37
26	BB	1762	A	N3-C4	11.45	1.41	1.34
26	BB	1808	A	P-O5'	11.45	1.71	1.59
26	BB	574	A	P-O5'	11.45	1.71	1.59
26	BB	944	C	N1-C6	11.44	1.44	1.37
26	BB	271	G	C8-N7	11.42	1.37	1.30
26	BB	2086	U	C4-C5	11.42	1.53	1.43
26	BB	124	G	P-O5'	11.41	1.71	1.59
26	BB	1655	A	N3-C4	11.40	1.41	1.34
1	AA	793	U	N1-C2	11.39	1.48	1.38
26	BB	743	A	N9-C4	-11.39	1.31	1.37
1	AA	439	U	C2-N3	11.37	1.45	1.37
26	BB	198	C	N3-C4	11.37	1.42	1.33
2	AB	40	C	C4-C5	11.34	1.52	1.43
1	AA	738	C	N1-C6	11.33	1.44	1.37
1	AA	1417	G	P-O5'	11.28	1.71	1.59
26	BB	2280	G	N7-C5	11.27	1.46	1.39
26	BB	2455	G	P-O5'	11.26	1.71	1.59
26	BB	1981	A	N9-C4	11.26	1.44	1.37
1	AA	1360	A	O3'-P	11.25	1.74	1.61
1	AA	444	G	P-O5'	11.25	1.71	1.59
1	AA	453	G	C2-N3	11.24	1.41	1.32
1	AA	651	C	P-O5'	11.24	1.71	1.59
1	AA	6	G	C2-N3	11.24	1.41	1.32
1	AA	698	G	N3-C4	11.24	1.43	1.35
26	BB	1326	U	C2-N3	11.23	1.45	1.37
26	BB	2584	U	C2-N3	11.21	1.45	1.37
1	AA	1520	C	N3-C4	11.21	1.41	1.33
26	BB	1160	G	P-O5'	11.21	1.71	1.59
26	BB	1423	G	C8-N7	11.21	1.37	1.30
26	BB	481	G	P-O5'	11.17	1.71	1.59
26	BB	230	G	P-O5'	11.15	1.71	1.59
26	BB	380	G	N3-C4	11.15	1.43	1.35
26	BB	52	A	N7-C5	-11.14	1.32	1.39
26	BB	2564	A	C5-C4	-11.14	1.30	1.38
26	BB	2754	U	C2-N3	11.13	1.45	1.37
25	BA	102	G	N3-C4	11.13	1.43	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	918	A	P-O5'	11.13	1.70	1.59
1	AA	1236	A	C5'-C4'	11.12	1.64	1.51
26	BB	2079	U	C4'-O4'	-11.11	1.31	1.45
26	BB	584	C	P-O5'	11.10	1.70	1.59
26	BB	2496	C	C2-N3	11.10	1.44	1.35
26	BB	2729	G	C6-N1	11.10	1.47	1.39
26	BB	2525	G	C8-N7	11.10	1.37	1.30
4	AD	74	A	C8-N7	-11.09	1.23	1.31
26	BB	1546	G	N7-C5	11.09	1.46	1.39
1	AA	1007	U	N1-C6	11.08	1.48	1.38
1	AA	850	U	P-O5'	11.07	1.70	1.59
26	BB	762	U	C4-C5	11.04	1.53	1.43
25	BA	67	G	P-O5'	11.03	1.70	1.59
1	AA	707	U	C2-N3	11.03	1.45	1.37
1	AA	576	C	N3-C4	11.02	1.41	1.33
26	BB	113	U	N3-C4	11.02	1.48	1.38
26	BB	1444	G	C2-N3	11.01	1.41	1.32
26	BB	880	G	O3'-P	10.99	1.74	1.61
1	AA	1476	A	N7-C5	10.98	1.45	1.39
26	BB	1352	U	P-O5'	10.98	1.70	1.59
26	BB	1149	G	C6-N1	10.97	1.47	1.39
1	AA	272	C	N1-C6	10.96	1.43	1.37
26	BB	2751	G	N3-C4	10.96	1.43	1.35
1	AA	382	A	N7-C5	-10.95	1.32	1.39
1	AA	665	A	N7-C5	10.94	1.45	1.39
26	BB	1651	G	P-O5'	10.94	1.70	1.59
25	BA	64	G	P-O5'	10.93	1.70	1.59
26	BB	944	C	P-O5'	10.93	1.70	1.59
1	AA	84	U	C2-N3	10.93	1.45	1.37
1	AA	852	G	N7-C5	10.93	1.45	1.39
1	AA	461	A	N9-C4	10.92	1.44	1.37
26	BB	186	G	N1-C2	10.92	1.46	1.37
26	BB	1262	A	P-O5'	10.92	1.70	1.59
26	BB	2540	C	C2-N3	10.92	1.44	1.35
1	AA	1066	C	N1-C6	10.91	1.43	1.37
1	AA	1353	G	P-O5'	10.91	1.70	1.59
25	BA	75	G	N3-C4	10.91	1.43	1.35
26	BB	257	C	P-O5'	10.90	1.70	1.59
26	BB	1180	U	C2-N3	10.89	1.45	1.37
1	AA	996	A	C6-N1	10.89	1.43	1.35
25	BA	108	A	N3-C4	10.88	1.41	1.34
26	BB	1782	U	P-O5'	10.88	1.70	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	21	G	C2-N3	10.87	1.41	1.32
26	BB	2136	G	N3-C4	10.87	1.43	1.35
1	AA	1137	C	N1-C6	10.87	1.43	1.37
1	AA	1177	G	C8-N7	-10.87	1.24	1.30
26	BB	1955	U	C2-N3	10.87	1.45	1.37
26	BB	900	A	N3-C4	10.86	1.41	1.34
1	AA	1339	A	N3-C4	10.85	1.41	1.34
26	BB	1706	C	N1-C6	10.85	1.43	1.37
4	AD	66	C	N1-C6	10.85	1.43	1.37
1	AA	1531	A	P-O5'	10.85	1.70	1.59
26	BB	759	G	N3-C4	10.84	1.43	1.35
26	BB	1232	G	P-O5'	10.84	1.70	1.59
26	BB	528	A	N7-C5	-10.84	1.32	1.39
26	BB	1317	G	N3-C4	10.84	1.43	1.35
26	BB	1494	A	N3-C4	10.84	1.41	1.34
26	BB	920	A	N3-C4	10.83	1.41	1.34
26	BB	1486	U	P-O5'	10.83	1.70	1.59
26	BB	530	G	P-O5'	10.82	1.70	1.59
26	BB	1046	A	N9-C4	-10.81	1.31	1.37
26	BB	1307	A	N9-C4	10.80	1.44	1.37
26	BB	1930	G	O3'-P	10.79	1.74	1.61
1	AA	1385	G	P-O5'	10.79	1.70	1.59
1	AA	631	C	N1-C6	10.78	1.43	1.37
1	AA	774	G	P-O5'	10.77	1.70	1.59
26	BB	599	A	C5-C4	-10.77	1.31	1.38
25	BA	92	C	N1-C6	10.77	1.43	1.37
26	BB	2782	G	N7-C5	10.77	1.45	1.39
26	BB	2619	C	N1-C6	10.76	1.43	1.37
1	AA	1457	G	P-O5'	10.75	1.70	1.59
26	BB	90	U	P-O5'	-10.75	1.49	1.59
26	BB	224	U	C2-N3	10.74	1.45	1.37
26	BB	177	G	C8-N7	-10.74	1.24	1.30
26	BB	1644	C	N3-C4	10.74	1.41	1.33
26	BB	1090	A	C5-C4	-10.74	1.31	1.38
1	AA	1217	C	P-O5'	10.73	1.70	1.59
26	BB	396	G	P-O5'	10.73	1.70	1.59
26	BB	2046	G	N9-C4	-10.72	1.29	1.38
26	BB	1651	G	C2-N3	10.71	1.41	1.32
26	BB	900	A	C5-C6	10.71	1.50	1.41
26	BB	2426	A	N7-C5	-10.71	1.32	1.39
26	BB	2705	A	N3-C4	10.70	1.41	1.34
1	AA	76	G	N7-C5	10.70	1.45	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	783	A	N9-C4	10.70	1.44	1.37
1	AA	1535	C	N3-C4	10.69	1.41	1.33
26	BB	482	A	C8-N7	-10.69	1.24	1.31
1	AA	466	A	N9-C4	10.68	1.44	1.37
26	BB	2043	C	N1-C6	10.68	1.43	1.37
1	AA	433	G	C8-N7	-10.68	1.24	1.30
1	AA	1050	G	P-O5'	10.68	1.70	1.59
26	BB	2822	G	N7-C5	10.68	1.45	1.39
1	AA	254	G	O3'-P	10.68	1.74	1.61
4	AD	5	G	N1-C2	10.68	1.46	1.37
26	BB	404	A	C4'-C3'	10.67	1.64	1.53
25	BA	25	U	P-O5'	10.67	1.70	1.59
26	BB	920	A	N9-C4	-10.66	1.31	1.37
26	BB	82	U	C2-N3	10.66	1.45	1.37
1	AA	556	C	N1-C6	10.65	1.43	1.37
26	BB	435	C	N1-C6	10.65	1.43	1.37
26	BB	101	A	N3-C4	10.64	1.41	1.34
26	BB	285	G	N3-C4	10.63	1.42	1.35
1	AA	803	G	P-O5'	10.63	1.70	1.59
26	BB	86	G	C2-N3	10.62	1.41	1.32
26	BB	2841	C	C4-C5	10.62	1.51	1.43
1	AA	506	G	N1-C2	10.61	1.46	1.37
1	AA	412	A	N3-C4	10.61	1.41	1.34
26	BB	1046	A	P-O5'	10.59	1.70	1.59
26	BB	1478	G	N7-C5	10.59	1.45	1.39
1	AA	1508	A	N3-C4	10.59	1.41	1.34
1	AA	1349	A	C6-N1	-10.57	1.28	1.35
26	BB	2380	C	N3-C4	10.57	1.41	1.33
1	AA	1318	A	N7-C5	10.56	1.45	1.39
26	BB	926	G	P-O5'	10.56	1.70	1.59
2	AB	73	G	C8-N7	-10.56	1.24	1.30
26	BB	791	C	P-O5'	10.56	1.70	1.59
1	AA	1431	A	P-O5'	10.54	1.70	1.59
26	BB	724	U	P-O5'	10.54	1.70	1.59
1	AA	1329	A	N9-C4	10.53	1.44	1.37
1	AA	457	G	N7-C5	-10.52	1.32	1.39
26	BB	2585	U	C4-C5	10.51	1.53	1.43
26	BB	2569	G	C2-N3	10.51	1.41	1.32
1	AA	1042	A	N3-C4	10.51	1.41	1.34
26	BB	159	G	C8-N7	-10.50	1.24	1.30
26	BB	1356	G	N3-C4	10.50	1.42	1.35
1	AA	232	G	C2-N3	10.49	1.41	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	388	G	N7-C5	10.49	1.45	1.39
1	AA	585	G	N7-C5	10.49	1.45	1.39
26	BB	1577	C	N1-C6	10.49	1.43	1.37
26	BB	2677	G	N7-C5	-10.48	1.32	1.39
26	BB	604	G	C2-N3	10.48	1.41	1.32
26	BB	294	A	N9-C4	-10.48	1.31	1.37
26	BB	1226	A	P-O5'	10.48	1.70	1.59
1	AA	42	G	P-O5'	10.47	1.70	1.59
26	BB	2617	U	C2-N3	10.47	1.45	1.37
1	AA	471	U	C5-C6	10.47	1.43	1.34
1	AA	832	G	N3-C4	10.46	1.42	1.35
26	BB	204	A	N3-C4	10.46	1.41	1.34
26	BB	1171	G	C8-N7	10.46	1.37	1.30
1	AA	380	G	P-O5'	10.46	1.70	1.59
26	BB	990	A	C2-N3	10.45	1.43	1.33
26	BB	2530	A	N3-C4	10.45	1.41	1.34
26	BB	773	U	P-O5'	10.44	1.70	1.59
1	AA	711	G	C2-N3	10.44	1.41	1.32
1	AA	123	U	P-O5'	10.43	1.70	1.59
1	AA	1369	C	C4-C5	10.43	1.51	1.43
26	BB	905	A	N3-C4	10.43	1.41	1.34
26	BB	2513	A	C6-N1	10.43	1.42	1.35
1	AA	1197	A	P-O5'	10.43	1.70	1.59
1	AA	1186	G	N7-C5	10.41	1.45	1.39
26	BB	248	G	N3-C4	10.41	1.42	1.35
26	BB	227	A	N9-C4	10.41	1.44	1.37
26	BB	503	A	N3-C4	10.41	1.41	1.34
26	BB	2831	G	N7-C5	-10.40	1.33	1.39
26	BB	2177	C	C4-C5	10.39	1.51	1.43
1	AA	1259	C	P-O5'	10.39	1.70	1.59
2	AB	23	A	N7-C5	10.39	1.45	1.39
26	BB	1285	A	N3-C4	10.39	1.41	1.34
4	AD	67	C	P-O5'	10.38	1.70	1.59
26	BB	1285	A	C5-C4	-10.38	1.31	1.38
26	BB	1903	G	C6-N1	10.39	1.46	1.39
26	BB	1933	G	P-O5'	10.38	1.70	1.59
26	BB	1653	G	N7-C5	-10.38	1.33	1.39
1	AA	1505	G	P-O5'	10.38	1.70	1.59
26	BB	1096	A	N7-C5	10.38	1.45	1.39
26	BB	455	C	C5-C6	10.37	1.42	1.34
1	AA	302	G	N7-C5	-10.37	1.33	1.39
1	AA	567	G	C8-N7	-10.36	1.24	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1525	G	N9-C8	10.36	1.45	1.37
26	BB	709	U	P-O5'	10.36	1.70	1.59
26	BB	2158	A	C6-N1	10.36	1.42	1.35
1	AA	442	G	C2-N3	10.35	1.41	1.32
1	AA	724	G	N7-C5	-10.35	1.33	1.39
26	BB	2851	A	N3-C4	10.35	1.41	1.34
26	BB	1836	C	N1-C6	10.34	1.43	1.37
1	AA	273	U	C2-N3	10.32	1.45	1.37
25	BA	81	G	P-O5'	10.32	1.70	1.59
1	AA	468	A	N9-C4	10.32	1.44	1.37
1	AA	1293	C	P-O5'	10.32	1.70	1.59
26	BB	1711	A	N9-C4	10.32	1.44	1.37
26	BB	523	C	C4-C5	10.31	1.51	1.43
1	AA	1527	U	C2-N3	10.30	1.45	1.37
26	BB	998	C	N1-C6	10.28	1.43	1.37
26	BB	2711	A	P-O5'	10.28	1.70	1.59
1	AA	35	G	N9-C8	-10.27	1.30	1.37
26	BB	1227	G	N3-C4	10.27	1.42	1.35
26	BB	1703	G	C2-N3	10.27	1.41	1.32
26	BB	1231	U	C2-N3	10.25	1.45	1.37
26	BB	2820	A	N9-C4	-10.25	1.31	1.37
26	BB	11	C	N1-C6	10.24	1.43	1.37
1	AA	923	A	N9-C4	-10.23	1.31	1.37
26	BB	927	A	C6-N6	10.23	1.42	1.33
26	BB	2129	C	P-O5'	10.23	1.70	1.59
1	AA	1469	C	N1-C6	10.22	1.43	1.37
26	BB	425	G	N7-C5	10.22	1.45	1.39
26	BB	2177	C	C5-C6	10.22	1.42	1.34
26	BB	1803	A	P-O5'	10.21	1.70	1.59
1	AA	190	A	N7-C5	-10.21	1.33	1.39
26	BB	1587	G	N7-C5	10.21	1.45	1.39
1	AA	611	C	N1-C6	10.21	1.43	1.37
1	AA	444	G	N7-C5	-10.21	1.33	1.39
26	BB	1971	U	C2-N3	10.21	1.44	1.37
1	AA	1286	U	P-O5'	10.20	1.70	1.59
26	BB	2057	G	N3-C4	10.20	1.42	1.35
1	AA	632	U	P-O5'	10.19	1.70	1.59
26	BB	2641	G	N7-C5	10.19	1.45	1.39
26	BB	1187	G	C8-N7	-10.19	1.24	1.30
26	BB	7	G	P-O5'	10.19	1.70	1.59
26	BB	661	A	N3-C4	10.18	1.41	1.34
1	AA	167	A	N7-C5	10.18	1.45	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	580	C	C4'-O4'	-10.18	1.32	1.45
1	AA	1366	C	C5-C6	10.18	1.42	1.34
26	BB	2299	U	P-O5'	10.17	1.70	1.59
26	BB	358	U	C5-C6	10.15	1.43	1.34
26	BB	2375	G	N7-C5	-10.15	1.33	1.39
26	BB	999	U	C4'-O4'	-10.15	1.32	1.45
26	BB	1885	A	N3-C4	10.15	1.41	1.34
1	AA	1194	U	P-O5'	10.14	1.69	1.59
3	AC	38	G	N3-C4	10.14	1.42	1.35
26	BB	1938	A	N3-C4	10.14	1.41	1.34
1	AA	1105	A	N9-C4	10.13	1.44	1.37
1	AA	1216	A	N3-C4	10.13	1.41	1.34
26	BB	1268	A	N3-C4	10.13	1.41	1.34
26	BB	1206	G	N7-C5	10.13	1.45	1.39
26	BB	2154	A	P-O5'	10.12	1.69	1.59
26	BB	488	G	N3-C4	10.12	1.42	1.35
26	BB	2696	U	C2-N3	10.12	1.44	1.37
25	BA	43	C	C2-N3	10.11	1.43	1.35
26	BB	1746	A	P-O5'	10.11	1.69	1.59
1	AA	1146	A	N3-C4	10.11	1.41	1.34
26	BB	1342	A	C6-N1	-10.11	1.28	1.35
26	BB	919	U	P-O5'	10.11	1.69	1.59
1	AA	314	C	C2-N3	10.10	1.43	1.35
1	AA	1270	G	N9-C8	-10.10	1.30	1.37
26	BB	1787	A	N3-C4	10.10	1.41	1.34
1	AA	281	G	N9-C8	-10.10	1.30	1.37
26	BB	2664	G	N1-C2	10.09	1.45	1.37
1	AA	485	U	C2-N3	10.08	1.44	1.37
26	BB	2354	C	P-O5'	10.08	1.69	1.59
26	BB	1517	G	C3'-C2'	10.08	1.64	1.52
26	BB	2392	A	C4'-C3'	10.08	1.64	1.53
1	AA	800	G	N9-C8	10.08	1.45	1.37
26	BB	2405	G	C8-N7	-10.07	1.25	1.30
1	AA	415	A	N7-C5	-10.07	1.33	1.39
26	BB	755	U	C2-N3	10.07	1.44	1.37
26	BB	2259	U	N1-C2	10.07	1.47	1.38
1	AA	1541	U	C2-N3	10.06	1.44	1.37
1	AA	180	U	P-O5'	-10.06	1.49	1.59
1	AA	562	U	C2-N3	10.05	1.44	1.37
26	BB	2208	C	C2-N3	10.05	1.43	1.35
26	BB	2348	U	C2-N3	10.05	1.44	1.37
26	BB	2625	G	C8-N7	-10.04	1.25	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	366	A	N9-C8	10.04	1.45	1.37
3	AC	36	U	C2-N3	10.04	1.44	1.37
26	BB	111	A	N9-C4	10.03	1.43	1.37
26	BB	1688	U	C4-C5	10.02	1.52	1.43
26	BB	1729	U	C2-N3	10.02	1.44	1.37
1	AA	396	C	O3'-P	10.02	1.73	1.61
1	AA	521	G	C6-N1	10.02	1.46	1.39
26	BB	350	G	N3-C4	10.02	1.42	1.35
26	BB	628	G	N1-C2	10.02	1.45	1.37
26	BB	2134	A	N3-C4	10.02	1.40	1.34
26	BB	1418	G	C6-N1	-10.01	1.32	1.39
1	AA	1466	C	C4-C5	10.01	1.50	1.43
26	BB	578	G	N7-C5	10.01	1.45	1.39
1	AA	14	U	C2-N3	10.00	1.44	1.37
1	AA	410	G	C2-N3	10.00	1.40	1.32
26	BB	608	A	N3-C4	10.00	1.40	1.34
25	BA	78	A	C8-N7	-10.00	1.24	1.31
26	BB	1644	C	N1-C6	10.00	1.43	1.37
1	AA	274	A	N3-C4	10.00	1.40	1.34
1	AA	229	U	C4-C5	9.99	1.52	1.43
26	BB	524	G	C8-N7	-9.99	1.25	1.30
26	BB	1948	G	P-O5'	9.99	1.69	1.59
1	AA	1252	A	P-O5'	9.99	1.69	1.59
26	BB	1448	G	P-O5'	9.98	1.69	1.59
1	AA	595	A	N7-C5	9.98	1.45	1.39
26	BB	2412	A	N3-C4	9.97	1.40	1.34
26	BB	1881	C	C2-N3	9.97	1.43	1.35
26	BB	2474	U	C2-N3	9.97	1.44	1.37
1	AA	815	A	C3'-C2'	9.96	1.64	1.52
26	BB	2190	G	C2-N3	9.96	1.40	1.32
4	AD	29	C	C4-C5	9.96	1.50	1.43
26	BB	111	A	O3'-P	9.96	1.73	1.61
1	AA	1377	A	N7-C5	-9.95	1.33	1.39
1	AA	8	A	P-O5'	9.95	1.69	1.59
1	AA	382	A	N3-C4	9.95	1.40	1.34
26	BB	677	A	N7-C5	9.95	1.45	1.39
26	BB	1022	G	C2-N3	9.95	1.40	1.32
1	AA	453	G	C6-N1	9.94	1.46	1.39
1	AA	1199	U	C2-N3	9.94	1.44	1.37
26	BB	328	U	P-O5'	9.94	1.69	1.59
1	AA	1106	G	P-O5'	9.94	1.69	1.59
26	BB	107	G	P-O5'	9.93	1.69	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1113	U	P-O5'	9.93	1.69	1.59
1	AA	825	A	C8-N7	-9.93	1.24	1.31
26	BB	2229	U	P-O5'	9.93	1.69	1.59
26	BB	201	C	N1-C6	9.92	1.43	1.37
26	BB	670	A	N9-C4	-9.92	1.31	1.37
26	BB	1902	C	P-O5'	9.92	1.69	1.59
26	BB	263	G	C2-N3	9.92	1.40	1.32
26	BB	2250	G	C2-N3	9.92	1.40	1.32
3	AC	29	G	C6-N1	-9.91	1.32	1.39
26	BB	1948	G	C2'-C1'	9.90	1.64	1.53
26	BB	2822	G	N9-C4	9.90	1.45	1.38
26	BB	561	G	C2-N3	9.90	1.40	1.32
26	BB	2346	A	N3-C4	9.90	1.40	1.34
26	BB	150	U	O3'-P	9.90	1.73	1.61
26	BB	883	G	N1-C2	9.90	1.45	1.37
26	BB	1932	A	N3-C4	9.90	1.40	1.34
3	AC	43	U	P-O5'	9.90	1.69	1.59
26	BB	2433	A	P-O5'	9.90	1.69	1.59
26	BB	1527	G	C3'-C2'	9.89	1.63	1.52
26	BB	253	C	N3-C4	9.89	1.40	1.33
26	BB	604	G	C8-N7	-9.89	1.25	1.30
4	AD	38	A	C6-N1	9.88	1.42	1.35
1	AA	877	G	P-O5'	9.87	1.69	1.59
26	BB	1847	A	N7-C5	-9.87	1.33	1.39
3	AC	45	G	C2-N3	9.86	1.40	1.32
1	AA	648	A	N3-C4	-9.86	1.28	1.34
26	BB	513	A	N3-C4	9.86	1.40	1.34
26	BB	411	G	P-O5'	9.86	1.69	1.59
1	AA	68	G	C8-N7	-9.86	1.25	1.30
26	BB	2461	A	N9-C8	9.85	1.45	1.37
26	BB	400	G	C2-N3	9.85	1.40	1.32
3	AC	25	U	C2-N3	9.85	1.44	1.37
1	AA	258	G	N7-C5	9.85	1.45	1.39
26	BB	299	A	N3-C4	9.84	1.40	1.34
26	BB	2127	G	P-O5'	9.84	1.69	1.59
26	BB	1588	G	N7-C5	-9.84	1.33	1.39
1	AA	495	A	N3-C4	9.83	1.40	1.34
26	BB	261	G	C2-N3	9.83	1.40	1.32
1	AA	1357	A	N3-C4	9.83	1.40	1.34
26	BB	2573	C	O3'-P	9.82	1.73	1.61
1	AA	281	G	N3-C4	9.82	1.42	1.35
26	BB	2461	A	N9-C4	-9.82	1.31	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	829	G	N7-C5	-9.82	1.33	1.39
1	AA	741	G	C5-C4	-9.81	1.31	1.38
4	AD	54	G	N7-C5	9.81	1.45	1.39
26	BB	1546	G	P-O5'	9.81	1.69	1.59
26	BB	978	G	C5-C4	-9.81	1.31	1.38
1	AA	1149	C	C4-C5	9.79	1.50	1.43
26	BB	284	U	O3'-P	9.79	1.72	1.61
26	BB	2430	A	N9-C4	9.79	1.43	1.37
1	AA	278	G	C5-C6	9.78	1.52	1.42
26	BB	1806	C	N1-C6	9.78	1.43	1.37
26	BB	502	A	N3-C4	9.78	1.40	1.34
26	BB	2524	G	P-O5'	9.78	1.69	1.59
1	AA	1311	A	N3-C4	9.77	1.40	1.34
26	BB	403	U	C2-N3	9.77	1.44	1.37
1	AA	177	G	N1-C2	9.76	1.45	1.37
1	AA	872	A	N9-C4	9.76	1.43	1.37
26	BB	91	A	P-O5'	9.75	1.69	1.59
26	BB	177	G	C2-N3	9.75	1.40	1.32
1	AA	958	A	N7-C5	-9.74	1.33	1.39
26	BB	308	G	N1-C2	9.74	1.45	1.37
1	AA	1216	A	O3'-P	9.74	1.72	1.61
1	AA	582	C	N1-C6	9.74	1.43	1.37
1	AA	1440	U	C4-C5	9.74	1.52	1.43
26	BB	1626	A	N9-C4	-9.74	1.32	1.37
26	BB	1448	G	N7-C5	9.74	1.45	1.39
26	BB	1839	G	N1-C2	9.74	1.45	1.37
1	AA	289	G	C2-N3	9.73	1.40	1.32
26	BB	2088	A	N9-C4	9.73	1.43	1.37
26	BB	2597	G	C8-N7	-9.73	1.25	1.30
26	BB	44	A	N3-C4	9.72	1.40	1.34
26	BB	533	G	N1-C2	9.72	1.45	1.37
26	BB	1014	A	N3-C4	9.72	1.40	1.34
26	BB	981	A	C5-C6	9.72	1.49	1.41
1	AA	1210	C	C2-O2	-9.72	1.15	1.24
1	AA	558	G	N3-C4	9.72	1.42	1.35
1	AA	919	A	C8-N7	9.71	1.38	1.31
1	AA	764	C	N3-C4	9.71	1.40	1.33
26	BB	1069	A	N3-C4	9.71	1.40	1.34
26	BB	1090	A	N7-C5	-9.71	1.33	1.39
26	BB	585	G	C5-C4	-9.70	1.31	1.38
2	AB	62	U	C2-N3	9.70	1.44	1.37
26	BB	1765	U	C2-N3	9.69	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	165	G	O3'-P	9.69	1.72	1.61
1	AA	1219	A	C6-N1	9.69	1.42	1.35
26	BB	2651	C	N1-C6	9.69	1.43	1.37
26	BB	2303	G	C2-N3	9.68	1.40	1.32
26	BB	681	G	C8-N7	-9.68	1.25	1.30
26	BB	971	G	C6-N1	9.68	1.46	1.39
26	BB	993	G	N9-C8	-9.68	1.31	1.37
1	AA	376	G	N3-C4	9.67	1.42	1.35
26	BB	1327	A	P-O5'	9.67	1.69	1.59
1	AA	1218	C	C5-C6	9.67	1.42	1.34
26	BB	947	A	N3-C4	9.67	1.40	1.34
1	AA	102	G	C5'-C4'	9.67	1.62	1.51
25	BA	89	U	C5'-C4'	9.67	1.62	1.51
26	BB	1766	G	N3-C4	9.67	1.42	1.35
1	AA	866	C	C2'-O2'	9.66	1.54	1.41
1	AA	1434	A	N9-C4	-9.66	1.32	1.37
26	BB	1531	C	C4-C5	9.66	1.50	1.43
26	BB	1579	A	N3-C4	9.66	1.40	1.34
26	BB	2623	G	C6-N1	9.66	1.46	1.39
26	BB	1331	G	C5-C4	9.66	1.45	1.38
2	AB	67	G	N7-C5	-9.65	1.33	1.39
26	BB	2056	G	N3-C4	9.65	1.42	1.35
26	BB	1294	U	P-O5'	9.65	1.69	1.59
1	AA	1160	G	P-O5'	9.65	1.69	1.59
26	BB	416	U	N1-C2	9.65	1.47	1.38
26	BB	445	C	O3'-P	9.65	1.72	1.61
1	AA	272	C	P-O5'	9.64	1.69	1.59
26	BB	2128	G	P-O5'	9.64	1.69	1.59
1	AA	1185	G	C2-N3	9.63	1.40	1.32
26	BB	2170	A	N9-C4	9.63	1.43	1.37
1	AA	540	G	C2-N2	-9.63	1.25	1.34
26	BB	365	U	P-O5'	9.63	1.69	1.59
26	BB	1159	U	C2-N3	9.63	1.44	1.37
25	BA	10	G	C6-N1	9.62	1.46	1.39
26	BB	1138	G	C6-N1	9.62	1.46	1.39
1	AA	237	G	N7-C5	9.62	1.45	1.39
1	AA	968	A	C4'-O4'	-9.62	1.33	1.45
1	AA	71	A	N3-C4	9.62	1.40	1.34
26	BB	1776	G	C6-N1	9.62	1.46	1.39
26	BB	727	A	P-O5'	9.62	1.69	1.59
26	BB	2720	U	C5-C6	9.62	1.42	1.34
26	BB	778	G	O3'-P	9.62	1.72	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1338	G	C8-N7	-9.61	1.25	1.30
26	BB	1776	G	P-O5'	9.62	1.69	1.59
26	BB	2112	G	C8-N7	-9.61	1.25	1.30
1	AA	1130	A	N3-C4	9.61	1.40	1.34
2	AB	53	G	P-O5'	9.61	1.69	1.59
26	BB	1135	C	P-O5'	9.61	1.69	1.59
26	BB	823	C	P-O5'	9.61	1.69	1.59
26	BB	1408	G	N3-C4	9.61	1.42	1.35
26	BB	1950	G	P-O5'	9.60	1.69	1.59
26	BB	29	U	C2-N3	9.60	1.44	1.37
26	BB	101	A	C4'-O4'	-9.59	1.33	1.45
26	BB	1257	C	N1-C6	-9.58	1.31	1.37
26	BB	1868	C	O3'-P	-9.57	1.49	1.61
1	AA	236	A	N3-C4	9.56	1.40	1.34
26	BB	110	G	C5-C4	-9.56	1.31	1.38
26	BB	155	A	P-O5'	9.56	1.69	1.59
26	BB	2405	G	N7-C5	9.56	1.45	1.39
26	BB	2323	G	N7-C5	-9.56	1.33	1.39
26	BB	2042	A	N9-C4	9.55	1.43	1.37
26	BB	2733	A	C8-N7	-9.54	1.24	1.31
26	BB	1422	G	P-O5'	9.54	1.69	1.59
26	BB	1260	A	N3-C4	9.54	1.40	1.34
26	BB	1500	G	N3-C4	9.54	1.42	1.35
26	BB	308	G	P-O5'	9.54	1.69	1.59
26	BB	2275	C	N3-C4	9.53	1.40	1.33
26	BB	1400	U	C2-N3	9.53	1.44	1.37
26	BB	2886	A	P-O5'	9.53	1.69	1.59
1	AA	785	G	N9-C8	-9.53	1.31	1.37
1	AA	1335	U	C4-C5	9.52	1.52	1.43
3	AC	15	G	N3-C4	9.52	1.42	1.35
26	BB	2339	C	N3-C4	9.52	1.40	1.33
26	BB	1044	C	N1-C6	9.52	1.42	1.37
26	BB	1785	A	C6-N6	9.52	1.41	1.33
26	BB	1990	C	P-O5'	9.52	1.69	1.59
26	BB	1261	C	C3'-C2'	-9.52	1.42	1.52
1	AA	30	U	C5'-C4'	9.52	1.62	1.51
1	AA	77	A	N9-C4	9.51	1.43	1.37
26	BB	1414	C	O3'-P	9.51	1.72	1.61
26	BB	2704	C	C2-N3	9.51	1.43	1.35
1	AA	829	G	C8-N7	-9.51	1.25	1.30
26	BB	20	C	C5-C6	9.51	1.42	1.34
26	BB	1124	G	N7-C5	9.50	1.45	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1086	U	P-O5'	9.50	1.69	1.59
3	AC	58	C	C4-C5	9.50	1.50	1.43
26	BB	2229	U	O3'-P	9.50	1.72	1.61
26	BB	2550	G	C8-N7	9.50	1.36	1.30
26	BB	2556	C	C2-N3	9.50	1.43	1.35
26	BB	2666	C	N1-C6	-9.50	1.31	1.37
26	BB	2171	A	C6-N1	9.49	1.42	1.35
1	AA	360	G	N7-C5	9.49	1.45	1.39
1	AA	1263	C	N1-C6	9.49	1.42	1.37
1	AA	1032	G	N9-C4	-9.48	1.30	1.38
26	BB	1603	A	C5'-C4'	9.48	1.62	1.51
26	BB	653	U	C2-N3	9.48	1.44	1.37
26	BB	1087	G	N1-C2	9.47	1.45	1.37
26	BB	449	A	P-O5'	9.47	1.69	1.59
26	BB	450	G	N7-C5	9.47	1.45	1.39
26	BB	2871	U	C2-N3	9.47	1.44	1.37
1	AA	796	C	N3-C4	9.47	1.40	1.33
26	BB	2004	G	C5-C4	-9.46	1.31	1.38
26	BB	2554	U	P-O5'	9.46	1.69	1.59
26	BB	282	A	N9-C4	9.46	1.43	1.37
26	BB	2737	G	P-O5'	9.46	1.69	1.59
26	BB	1840	G	C6-N1	9.46	1.46	1.39
1	AA	1484	C	C4-C5	9.45	1.50	1.43
26	BB	498	G	P-O5'	9.45	1.69	1.59
26	BB	1265	A	N7-C5	-9.45	1.33	1.39
26	BB	290	U	C2-N3	9.45	1.44	1.37
3	AC	40	G	C8-N7	9.44	1.36	1.30
26	BB	2802	G	C2-N3	9.44	1.40	1.32
26	BB	1600	C	N3-C4	9.44	1.40	1.33
26	BB	830	G	C5-C4	-9.44	1.31	1.38
1	AA	1384	C	N3-C4	9.43	1.40	1.33
2	AB	5	G	P-O5'	9.43	1.69	1.59
1	AA	48	C	O3'-P	9.43	1.72	1.61
26	BB	2511	U	N1-C2	9.43	1.47	1.38
1	AA	388	G	N9-C4	9.43	1.45	1.38
26	BB	266	G	C6-N1	-9.43	1.32	1.39
26	BB	682	G	P-O5'	9.43	1.69	1.59
1	AA	519	C	C4-C5	-9.42	1.35	1.43
26	BB	1239	G	C2-N3	9.42	1.40	1.32
25	BA	74	U	N3-C4	9.42	1.47	1.38
26	BB	299	A	P-O5'	9.42	1.69	1.59
26	BB	1649	G	N7-C5	-9.42	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	452	G	N3-C4	9.41	1.42	1.35
1	AA	1004	A	N7-C5	9.41	1.44	1.39
26	BB	2151	U	C4'-O4'	-9.41	1.33	1.45
1	AA	1105	A	N3-C4	9.41	1.40	1.34
25	BA	3	C	P-O5'	9.40	1.69	1.59
1	AA	986	U	C2-N3	9.40	1.44	1.37
26	BB	776	G	P-O5'	9.40	1.69	1.59
1	AA	1487	G	N3-C4	9.40	1.42	1.35
26	BB	1597	A	N3-C4	9.40	1.40	1.34
26	BB	2535	G	P-O5'	9.40	1.69	1.59
26	BB	2602	A	C5-C4	9.40	1.45	1.38
1	AA	122	G	N3-C4	9.40	1.42	1.35
26	BB	2842	G	N3-C4	9.40	1.42	1.35
26	BB	1192	G	C5-C4	9.39	1.45	1.38
3	AC	41	A	N7-C5	-9.39	1.33	1.39
3	AC	54	U	C2-N3	9.39	1.44	1.37
26	BB	2778	A	N7-C5	-9.39	1.33	1.39
26	BB	985	C	P-O5'	9.39	1.69	1.59
26	BB	1214	A	N3-C4	9.38	1.40	1.34
26	BB	2846	G	C8-N7	9.38	1.36	1.30
1	AA	395	C	N1-C6	9.38	1.42	1.37
1	AA	238	A	N3-C4	9.38	1.40	1.34
26	BB	1410	G	C3'-C2'	9.38	1.63	1.52
26	BB	2306	C	O3'-P	9.37	1.72	1.61
1	AA	436	C	P-O5'	9.36	1.69	1.59
2	AB	10	G	N9-C8	9.37	1.44	1.37
26	BB	1038	G	N7-C5	9.36	1.44	1.39
26	BB	2837	A	N7-C5	-9.36	1.33	1.39
1	AA	819	A	P-O5'	9.36	1.69	1.59
3	AC	24	A	N3-C4	9.35	1.40	1.34
26	BB	2891	U	P-O5'	9.34	1.69	1.59
26	BB	461	C	N1-C6	9.34	1.42	1.37
26	BB	1747	U	O3'-P	9.34	1.72	1.61
1	AA	705	G	C8-N7	9.32	1.36	1.30
26	BB	219	A	N3-C4	9.32	1.40	1.34
26	BB	2061	G	N7-C5	9.32	1.44	1.39
26	BB	841	G	C6-N1	9.32	1.46	1.39
26	BB	2370	G	C2-N3	9.32	1.40	1.32
26	BB	2592	G	C2-N3	9.32	1.40	1.32
26	BB	2636	C	C2-O2	-9.32	1.16	1.24
1	AA	764	C	P-O5'	9.32	1.69	1.59
1	AA	817	C	C2-N3	-9.32	1.28	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	75	G	O3'-P	9.32	1.72	1.61
26	BB	2330	G	P-O5'	9.32	1.69	1.59
26	BB	1437	C	C5'-C4'	9.31	1.62	1.51
1	AA	138	G	N7-C5	-9.31	1.33	1.39
1	AA	818	G	C8-N7	-9.31	1.25	1.30
1	AA	1172	C	C2-N3	9.31	1.43	1.35
26	BB	1987	A	N7-C5	-9.30	1.33	1.39
1	AA	154	U	N1-C2	9.30	1.47	1.38
26	BB	1002	G	C6-N1	9.30	1.46	1.39
26	BB	1308	A	N3-C4	9.30	1.40	1.34
26	BB	1503	A	N9-C4	-9.30	1.32	1.37
26	BB	176	A	N9-C4	9.29	1.43	1.37
1	AA	85	U	N1-C6	-9.29	1.29	1.38
26	BB	2545	G	C5-C4	-9.29	1.31	1.38
1	AA	9	G	N7-C5	9.29	1.44	1.39
1	AA	1395	C	C4-C5	9.29	1.50	1.43
26	BB	441	U	C5'-C4'	9.29	1.62	1.51
26	BB	1294	U	N1-C2	9.29	1.47	1.38
26	BB	2147	A	N7-C5	-9.29	1.33	1.39
26	BB	2857	G	N7-C5	-9.29	1.33	1.39
26	BB	2560	A	N3-C4	9.28	1.40	1.34
1	AA	156	C	N1-C6	9.28	1.42	1.37
26	BB	466	A	P-O5'	9.28	1.69	1.59
26	BB	900	A	C5'-C4'	9.28	1.62	1.51
26	BB	53	A	N7-C5	9.28	1.44	1.39
1	AA	1299	A	N3-C4	9.28	1.40	1.34
26	BB	118	A	N9-C4	9.28	1.43	1.37
26	BB	2322	A	C8-N7	-9.27	1.25	1.31
26	BB	219	A	C6-N1	-9.27	1.29	1.35
26	BB	2657	A	C5-C4	-9.27	1.32	1.38
26	BB	2864	G	O3'-P	9.26	1.72	1.61
1	AA	1226	C	C4'-O4'	-9.26	1.33	1.45
4	AD	67	C	C4'-C3'	9.26	1.63	1.53
26	BB	2826	A	N9-C4	9.26	1.43	1.37
26	BB	1455	G	C2-N3	9.26	1.40	1.32
26	BB	2221	G	C5-C4	-9.25	1.31	1.38
26	BB	2510	C	P-O5'	9.25	1.69	1.59
1	AA	524	G	N9-C8	9.25	1.44	1.37
26	BB	298	G	C2-N2	-9.25	1.25	1.34
26	BB	1249	U	C2-N3	9.24	1.44	1.37
25	BA	108	A	C8-N7	-9.24	1.25	1.31
26	BB	2674	G	P-O5'	9.24	1.69	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2470	G	N7-C5	9.24	1.44	1.39
1	AA	441	A	P-O5'	9.23	1.69	1.59
26	BB	1008	A	N7-C5	-9.23	1.33	1.39
1	AA	1298	U	P-O5'	9.23	1.69	1.59
26	BB	1161	C	P-O5'	9.23	1.69	1.59
26	BB	1737	G	C5'-C4'	9.23	1.62	1.51
1	AA	187	G	C8-N7	-9.23	1.25	1.30
1	AA	1541	U	C4-C5	9.23	1.51	1.43
26	BB	1022	G	C2'-C1'	9.23	1.63	1.53
26	BB	1471	G	N7-C5	9.23	1.44	1.39
26	BB	1564	C	C4-C5	9.23	1.50	1.43
26	BB	2560	A	C8-N7	-9.23	1.25	1.31
1	AA	1044	A	C2'-C1'	-9.22	1.43	1.53
25	BA	63	C	P-O5'	9.22	1.69	1.59
1	AA	805	C	C4-C5	9.22	1.50	1.43
26	BB	1039	A	N3-C4	9.21	1.40	1.34
1	AA	749	A	N9-C4	9.21	1.43	1.37
2	AB	19	G	N3-C4	9.21	1.41	1.35
25	BA	115	A	N7-C5	9.21	1.44	1.39
2	AB	69	C	C5'-C4'	9.21	1.62	1.51
26	BB	1506	U	P-O5'	9.21	1.69	1.59
1	AA	910	C	C4-C5	9.20	1.50	1.43
1	AA	104	G	N7-C5	9.20	1.44	1.39
1	AA	446	G	N3-C4	9.20	1.41	1.35
26	BB	1743	G	P-O5'	9.19	1.69	1.59
26	BB	1946	U	P-O5'	9.19	1.69	1.59
26	BB	2077	A	N3-C4	9.19	1.40	1.34
26	BB	2844	G	P-O5'	9.19	1.69	1.59
1	AA	846	G	C2-N3	9.19	1.40	1.32
1	AA	1175	G	N9-C8	9.19	1.44	1.37
26	BB	2247	A	N7-C5	-9.19	1.33	1.39
1	AA	83	C	N1-C6	9.18	1.42	1.37
1	AA	431	A	N7-C5	-9.18	1.33	1.39
26	BB	357	C	C4-C5	9.18	1.50	1.43
26	BB	408	G	N7-C5	9.18	1.44	1.39
26	BB	2799	A	C6-N1	9.18	1.42	1.35
1	AA	853	C	C2-N3	9.18	1.43	1.35
26	BB	600	G	C2-N3	9.18	1.40	1.32
26	BB	1981	A	C5-C4	-9.18	1.32	1.38
1	AA	653	U	C2-N3	9.17	1.44	1.37
26	BB	139	U	C2'-C1'	9.17	1.63	1.53
26	BB	1663	G	C8-N7	-9.17	1.25	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1267	C	N1-C6	9.17	1.42	1.37
1	AA	977	A	N3-C4	9.17	1.40	1.34
26	BB	2248	C	P-O5'	9.17	1.69	1.59
26	BB	2371	G	C2-N3	9.17	1.40	1.32
26	BB	2602	A	P-O5'	9.17	1.69	1.59
26	BB	947	A	C6-N6	-9.16	1.26	1.33
26	BB	1632	A	N3-C4	9.16	1.40	1.34
26	BB	1722	A	N3-C4	9.16	1.40	1.34
4	AD	46	G	N3-C4	9.16	1.41	1.35
26	BB	2727	A	N3-C4	9.16	1.40	1.34
1	AA	1481	U	C2-N3	9.16	1.44	1.37
26	BB	2117	A	C5-C4	-9.16	1.32	1.38
1	AA	719	C	C2-N3	9.15	1.43	1.35
26	BB	551	G	C2-N3	9.15	1.40	1.32
26	BB	1329	U	C2-N3	9.15	1.44	1.37
26	BB	2344	U	C5-C6	9.15	1.42	1.34
1	AA	573	A	N9-C8	9.15	1.45	1.37
2	AB	47	U	C4'-O4'	-9.15	1.33	1.45
1	AA	69	G	C6-O6	-9.14	1.16	1.24
1	AA	306	A	P-O5'	9.14	1.68	1.59
26	BB	427	U	C2-N3	9.14	1.44	1.37
26	BB	118	A	P-O5'	9.14	1.68	1.59
26	BB	1021	A	P-O5'	9.14	1.68	1.59
1	AA	1195	C	N3-C4	9.14	1.40	1.33
26	BB	2140	G	C6-N1	-9.14	1.33	1.39
26	BB	2231	U	P-O5'	9.13	1.68	1.59
26	BB	2691	C	C4-C5	9.13	1.50	1.43
3	AC	30	U	N1-C2	9.13	1.46	1.38
26	BB	176	A	P-O5'	9.13	1.68	1.59
26	BB	1284	A	N3-C4	9.13	1.40	1.34
1	AA	877	G	N3-C4	9.13	1.41	1.35
26	BB	1050	A	N9-C4	9.13	1.43	1.37
1	AA	1292	G	C8-N7	-9.12	1.25	1.30
26	BB	1893	C	C4-C5	9.12	1.50	1.43
1	AA	710	G	N7-C5	9.12	1.44	1.39
1	AA	1419	G	P-O5'	9.12	1.68	1.59
26	BB	876	C	N1-C6	9.11	1.42	1.37
26	BB	930	G	C2-N3	9.11	1.40	1.32
1	AA	787	A	N3-C4	9.11	1.40	1.34
26	BB	690	G	C2-N3	9.11	1.40	1.32
26	BB	1205	A	N3-C4	9.11	1.40	1.34
1	AA	952	U	P-O5'	9.11	1.68	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	9	G	C8-N7	-9.10	1.25	1.30
1	AA	268	U	C2-N3	9.10	1.44	1.37
1	AA	759	A	O3'-P	9.10	1.72	1.61
26	BB	2421	G	P-O5'	9.10	1.68	1.59
1	AA	1072	G	C5-C4	9.10	1.44	1.38
26	BB	617	G	N9-C8	9.10	1.44	1.37
1	AA	546	A	O3'-P	9.10	1.72	1.61
26	BB	457	A	N7-C5	9.10	1.44	1.39
1	AA	125	U	P-O5'	9.09	1.68	1.59
26	BB	710	U	N1-C2	9.09	1.46	1.38
26	BB	1118	C	C5-C6	9.09	1.41	1.34
1	AA	715	A	C4'-O4'	-9.09	1.33	1.45
26	BB	1275	A	N3-C4	9.09	1.40	1.34
26	BB	2378	A	P-O5'	9.09	1.68	1.59
26	BB	2788	C	N3-C4	9.09	1.40	1.33
26	BB	953	G	N9-C8	9.09	1.44	1.37
1	AA	127	G	C5'-C4'	9.09	1.62	1.51
26	BB	2100	G	P-O5'	9.09	1.68	1.59
1	AA	629	A	N3-C4	9.08	1.40	1.34
1	AA	1228	C	C5-C6	9.08	1.41	1.34
26	BB	1227	G	C6-N1	-9.08	1.33	1.39
26	BB	1492	G	C6-N1	9.08	1.46	1.39
26	BB	2115	G	C6-N1	9.08	1.46	1.39
26	BB	1922	G	C6-N1	9.08	1.46	1.39
1	AA	348	G	N1-C2	9.08	1.45	1.37
1	AA	646	G	N7-C5	9.08	1.44	1.39
26	BB	700	G	C8-N7	-9.07	1.25	1.30
25	BA	7	G	P-O5'	9.07	1.68	1.59
26	BB	749	A	N7-C5	9.07	1.44	1.39
26	BB	298	G	N7-C5	9.07	1.44	1.39
1	AA	1248	A	N9-C4	-9.06	1.32	1.37
1	AA	1137	C	P-O5'	9.06	1.68	1.59
1	AA	925	G	N3-C4	9.06	1.41	1.35
26	BB	1457	U	C5'-C4'	9.06	1.62	1.51
1	AA	1295	U	P-O5'	9.06	1.68	1.59
26	BB	868	U	C5-C6	9.05	1.42	1.34
25	BA	66	A	P-O5'	9.05	1.68	1.59
1	AA	59	A	N3-C4	9.05	1.40	1.34
26	BB	2333	A	N9-C4	9.05	1.43	1.37
1	AA	1169	A	N3-C4	9.04	1.40	1.34
26	BB	970	U	P-O5'	9.04	1.68	1.59
26	BB	1700	A	N3-C4	9.04	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1120	G	C8-N7	-9.04	1.25	1.30
26	BB	2581	G	C6-N1	-9.04	1.33	1.39
26	BB	2263	C	C4-N4	9.04	1.42	1.33
1	AA	1089	G	C6-N1	-9.03	1.33	1.39
4	AD	22	A	P-O5'	9.03	1.68	1.59
1	AA	866	C	C2-N3	9.03	1.43	1.35
1	AA	1417	G	N3-C4	9.03	1.41	1.35
26	BB	547	A	N7-C5	-9.03	1.33	1.39
26	BB	2549	G	N3-C4	9.03	1.41	1.35
1	AA	1021	A	N3-C4	9.03	1.40	1.34
26	BB	1703	G	P-O5'	9.03	1.68	1.59
26	BB	85	G	N7-C5	-9.02	1.33	1.39
26	BB	1553	A	N9-C4	-9.02	1.32	1.37
4	AD	5	G	N7-C5	9.02	1.44	1.39
26	BB	774	G	C2'-C1'	-9.02	1.43	1.53
4	AD	77	A	N3-C4	9.01	1.40	1.34
26	BB	535	G	C2-N3	9.01	1.40	1.32
1	AA	215	C	C4-C5	9.01	1.50	1.43
1	AA	1458	G	C2'-C1'	9.00	1.63	1.53
1	AA	1514	G	C2-N3	-9.00	1.25	1.32
26	BB	1142	A	N7-C5	-9.00	1.33	1.39
26	BB	1321	A	N3-C4	-9.00	1.29	1.34
26	BB	631	A	P-O5'	8.99	1.68	1.59
26	BB	792	A	C6-N6	8.99	1.41	1.33
2	AB	32	OMC	O3'-P	8.99	1.72	1.61
26	BB	1676	A	N9-C4	8.99	1.43	1.37
26	BB	1113	U	C2-N3	8.99	1.44	1.37
26	BB	1540	G	P-O5'	8.99	1.68	1.59
26	BB	2517	C	C2-O2	-8.99	1.16	1.24
26	BB	905	A	C5'-C4'	8.99	1.62	1.51
1	AA	733	G	N3-C4	8.98	1.41	1.35
1	AA	352	C	P-O5'	8.98	1.68	1.59
1	AA	923	A	N7-C5	-8.98	1.33	1.39
26	BB	2548	U	O3'-P	8.98	1.72	1.61
26	BB	2223	G	P-O5'	8.98	1.68	1.59
26	BB	537	G	N1-C2	8.98	1.45	1.37
26	BB	963	U	C2-N3	8.98	1.44	1.37
26	BB	1147	A	N3-C4	8.97	1.40	1.34
1	AA	988	G	N9-C8	8.97	1.44	1.37
1	AA	359	G	C6-N1	8.97	1.45	1.39
1	AA	1470	U	C2-N3	8.97	1.44	1.37
1	AA	551	U	N1-C6	8.97	1.46	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	889	C	N1-C6	-8.97	1.31	1.37
1	AA	1216	A	C4'-O4'	-8.96	1.33	1.45
26	BB	2893	A	N3-C4	-8.96	1.29	1.34
1	AA	1088	G	N9-C8	8.96	1.44	1.37
26	BB	858	G	P-O5'	8.96	1.68	1.59
26	BB	2027	G	C2-N3	8.95	1.40	1.32
26	BB	191	A	N3-C4	8.95	1.40	1.34
26	BB	1458	U	C2-N3	8.95	1.44	1.37
26	BB	2890	G	C2'-C1'	8.95	1.63	1.53
1	AA	262	A	N9-C4	8.95	1.43	1.37
26	BB	2702	G	C6-N1	8.94	1.45	1.39
26	BB	730	A	N9-C8	8.94	1.45	1.37
26	BB	2273	A	C8-N7	-8.94	1.25	1.31
26	BB	986	C	P-O5'	8.94	1.68	1.59
1	AA	183	C	C4'-O4'	-8.93	1.33	1.45
1	AA	677	U	C2-N3	8.93	1.44	1.37
1	AA	525	C	C4-C5	8.93	1.50	1.43
1	AA	1318	A	N9-C4	8.93	1.43	1.37
1	AA	290	C	C2-N3	8.93	1.42	1.35
1	AA	720	C	C5-C6	8.93	1.41	1.34
26	BB	1315	C	P-O5'	8.92	1.68	1.59
26	BB	2319	G	C6-N1	8.92	1.45	1.39
1	AA	770	C	C5-C6	8.92	1.41	1.34
1	AA	1224	U	N1-C2	8.91	1.46	1.38
26	BB	914	G	C8-N7	-8.91	1.25	1.30
26	BB	843	G	C4'-O4'	-8.91	1.33	1.45
26	BB	1650	A	N3-C4	8.91	1.40	1.34
26	BB	1509	A	C6-N1	-8.90	1.29	1.35
1	AA	814	A	N3-C4	8.90	1.40	1.34
26	BB	885	C	N3-C4	8.90	1.40	1.33
1	AA	1017	U	P-O5'	8.90	1.68	1.59
1	AA	255	G	P-O5'	8.89	1.68	1.59
1	AA	498	A	N7-C5	-8.89	1.33	1.39
26	BB	655	A	C5'-C4'	8.89	1.62	1.51
1	AA	209	U	C5'-C4'	8.89	1.62	1.51
1	AA	885	G	N3-C4	8.89	1.41	1.35
26	BB	1000	A	C6-N6	8.89	1.41	1.33
26	BB	1814	G	N9-C4	-8.89	1.30	1.38
1	AA	55	A	C5-C4	-8.89	1.32	1.38
1	AA	744	C	N3-C4	8.89	1.40	1.33
3	AC	47	C	C4'-O4'	-8.89	1.33	1.45
1	AA	189	A	N3-C4	8.88	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	612	C	C2-O2	-8.88	1.16	1.24
1	AA	1050	G	C2-N3	8.88	1.39	1.32
26	BB	655	A	O3'-P	8.88	1.71	1.61
3	AC	37	G	N7-C5	-8.88	1.33	1.39
26	BB	1505	A	N3-C4	8.88	1.40	1.34
1	AA	1383	C	C4-C5	8.88	1.50	1.43
26	BB	2444	G	C5'-C4'	8.88	1.62	1.51
1	AA	823	C	N1-C6	8.88	1.42	1.37
25	BA	87	U	N1-C2	8.88	1.46	1.38
26	BB	155	A	N3-C4	8.88	1.40	1.34
1	AA	1463	U	C2-N3	8.87	1.44	1.37
1	AA	336	A	C6-N1	8.87	1.41	1.35
1	AA	544	G	C8-N7	-8.87	1.25	1.30
1	AA	926	G	N3-C4	8.87	1.41	1.35
26	BB	1237	A	C5-C6	8.87	1.49	1.41
26	BB	1501	G	N3-C4	8.87	1.41	1.35
26	BB	1056	G	C6-N1	-8.87	1.33	1.39
26	BB	1219	U	N3-C4	8.87	1.46	1.38
26	BB	796	C	P-O5'	8.86	1.68	1.59
26	BB	2001	C	P-O5'	8.86	1.68	1.59
1	AA	159	G	C2-N3	8.86	1.39	1.32
26	BB	470	A	N3-C4	8.85	1.40	1.34
26	BB	683	U	N1-C2	8.85	1.46	1.38
26	BB	2118	U	C5'-C4'	8.85	1.61	1.51
26	BB	291	G	N9-C4	-8.85	1.30	1.38
1	AA	801	U	P-O5'	8.85	1.68	1.59
26	BB	1198	U	O3'-P	8.85	1.71	1.61
26	BB	1202	G	C8-N7	8.85	1.36	1.30
26	BB	2684	U	C3'-C2'	8.85	1.62	1.52
26	BB	339	U	C2-N3	8.84	1.44	1.37
1	AA	808	C	C5'-C4'	8.84	1.61	1.51
26	BB	599	A	P-O5'	8.84	1.68	1.59
1	AA	1289	A	N3-C4	8.84	1.40	1.34
1	AA	1347	G	C8-N7	-8.84	1.25	1.30
26	BB	393	C	N1-C6	-8.84	1.31	1.37
1	AA	442	G	C5-C4	-8.84	1.32	1.38
1	AA	351	G	C6-N1	8.83	1.45	1.39
26	BB	130	C	N1-C6	8.83	1.42	1.37
26	BB	2801	G	N7-C5	8.83	1.44	1.39
26	BB	2553	G	N1-C2	8.83	1.44	1.37
1	AA	59	A	O4'-C1'	8.83	1.53	1.41
1	AA	1089	G	C2-N3	8.83	1.39	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	66	C	P-O5'	8.83	1.68	1.59
26	BB	2714	G	N1-C2	8.83	1.44	1.37
1	AA	177	G	N7-C5	-8.83	1.33	1.39
1	AA	747	A	P-O5'	8.83	1.68	1.59
26	BB	306	U	N3-C4	8.82	1.46	1.38
26	BB	717	C	N1-C6	8.82	1.42	1.37
26	BB	1608	A	N3-C4	8.82	1.40	1.34
26	BB	1471	G	C6-N1	-8.82	1.33	1.39
26	BB	581	C	N3-C4	8.82	1.40	1.33
26	BB	611	C	P-O5'	8.81	1.68	1.59
2	AB	3	G	C2-N3	8.81	1.39	1.32
26	BB	2255	G	N3-C4	8.81	1.41	1.35
26	BB	2058	A	N3-C4	8.81	1.40	1.34
26	BB	1809	A	C8-N7	8.81	1.37	1.31
26	BB	2523	G	P-O5'	8.80	1.68	1.59
1	AA	188	C	O3'-P	8.80	1.71	1.61
1	AA	1471	U	P-O5'	8.80	1.68	1.59
1	AA	217	C	O3'-P	8.80	1.71	1.61
1	AA	318	G	N9-C8	8.80	1.44	1.37
26	BB	1032	A	N3-C4	8.80	1.40	1.34
26	BB	1657	U	C2-N3	8.80	1.44	1.37
26	BB	1718	G	C4'-O4'	-8.79	1.34	1.45
26	BB	836	G	O3'-P	-8.79	1.50	1.61
26	BB	2383	G	P-O5'	8.79	1.68	1.59
26	BB	2587	A	C6-N1	-8.79	1.29	1.35
1	AA	609	A	N3-C4	8.78	1.40	1.34
25	BA	33	G	N1-C2	8.78	1.44	1.37
26	BB	489	G	C8-N7	-8.78	1.25	1.30
26	BB	599	A	C5-C6	8.78	1.49	1.41
1	AA	844	G	C5-C4	8.78	1.44	1.38
26	BB	1283	G	C8-N7	8.77	1.36	1.30
26	BB	1789	A	N9-C4	8.77	1.43	1.37
1	AA	836	G	P-O5'	8.77	1.68	1.59
1	AA	1442	G	N9-C4	-8.77	1.30	1.38
1	AA	1282	C	C4'-O4'	-8.77	1.34	1.45
26	BB	1893	C	C5'-C4'	8.77	1.61	1.51
26	BB	2380	C	N1-C6	8.77	1.42	1.37
26	BB	2539	C	C5'-C4'	8.77	1.61	1.51
26	BB	178	G	N7-C5	8.76	1.44	1.39
1	AA	324	G	N9-C8	8.76	1.44	1.37
1	AA	709	U	C2-N3	8.76	1.43	1.37
26	BB	1714	U	C2-N3	8.75	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	831	A	C6-N1	-8.75	1.29	1.35
1	AA	682	G	N7-C5	8.75	1.44	1.39
1	AA	1366	C	O3'-P	8.75	1.71	1.61
26	BB	535	G	N3-C4	8.74	1.41	1.35
26	BB	1300	G	C5'-C4'	8.74	1.61	1.51
26	BB	1460	U	C2-O2	8.74	1.30	1.22
1	AA	661	G	C8-N7	-8.74	1.25	1.30
26	BB	1491	G	C5'-C4'	8.74	1.61	1.51
26	BB	2776	A	C6-N1	8.73	1.41	1.35
26	BB	2368	C	P-O5'	8.73	1.68	1.59
1	AA	1033	G	C8-N7	8.73	1.36	1.30
1	AA	1224	U	C2-N3	8.73	1.43	1.37
26	BB	813	U	O4'-C1'	8.73	1.53	1.41
26	BB	1114	C	P-O5'	8.73	1.68	1.59
26	BB	488	G	C8-N7	-8.73	1.25	1.30
1	AA	900	A	N9-C4	8.72	1.43	1.37
2	AB	35	C	C5-C6	8.72	1.41	1.34
26	BB	863	A	N9-C4	8.72	1.43	1.37
1	AA	948	C	P-O5'	8.72	1.68	1.59
1	AA	1329	A	C5'-C4'	8.72	1.61	1.51
1	AA	515	G	C8-N7	-8.71	1.25	1.30
26	BB	2270	A	N9-C4	8.72	1.43	1.37
26	BB	1560	G	N1-C2	8.71	1.44	1.37
1	AA	373	A	C8-N7	-8.71	1.25	1.31
26	BB	1105	U	C2-N3	8.71	1.43	1.37
26	BB	1274	A	O4'-C1'	8.71	1.52	1.41
1	AA	121	U	C2-N3	8.71	1.43	1.37
26	BB	1350	C	C5'-C4'	8.70	1.61	1.51
26	BB	683	U	C4'-C3'	-8.70	1.43	1.53
26	BB	939	G	C6-N1	-8.70	1.33	1.39
26	BB	1933	G	N3-C4	8.70	1.41	1.35
26	BB	2389	G	C6-N1	8.70	1.45	1.39
1	AA	626	G	C6-N1	8.70	1.45	1.39
1	AA	686	U	C4'-O4'	-8.70	1.34	1.45
25	BA	40	U	P-O5'	8.70	1.68	1.59
26	BB	2	G	C5-C6	8.70	1.51	1.42
26	BB	2164	C	C3'-C2'	-8.70	1.43	1.52
26	BB	2188	U	C2-N3	8.70	1.43	1.37
26	BB	2553	G	C5-C6	8.70	1.51	1.42
4	AD	20	G	C2-N3	8.70	1.39	1.32
26	BB	1345	C	N1-C6	8.69	1.42	1.37
1	AA	1384	C	P-O5'	8.69	1.68	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	35	C	C2-N3	8.69	1.42	1.35
26	BB	894	U	O3'-P	8.69	1.71	1.61
1	AA	625	U	C2-N3	8.68	1.43	1.37
25	BA	108	A	N7-C5	-8.68	1.34	1.39
1	AA	757	U	C2-N3	8.68	1.43	1.37
1	AA	197	A	C5-C4	-8.68	1.32	1.38
1	AA	1061	G	N3-C4	8.68	1.41	1.35
26	BB	1203	U	C2-N3	-8.68	1.31	1.37
1	AA	430	A	C4'-O4'	-8.68	1.34	1.45
25	BA	29	A	N7-C5	-8.68	1.34	1.39
26	BB	2799	A	N7-C5	8.68	1.44	1.39
1	AA	451	A	N9-C4	8.68	1.43	1.37
3	AC	39	U	P-O5'	8.68	1.68	1.59
1	AA	603	U	C4-O4	-8.67	1.16	1.23
1	AA	1115	U	C4-C5	8.67	1.51	1.43
1	AA	206	C	N1-C6	8.67	1.42	1.37
26	BB	2671	G	N7-C5	-8.67	1.34	1.39
26	BB	1090	A	N1-C2	-8.67	1.26	1.34
26	BB	2409	G	N1-C2	8.67	1.44	1.37
26	BB	2633	G	C2-N3	8.67	1.39	1.32
26	BB	2875	C	C5-C6	8.67	1.41	1.34
26	BB	2294	G	P-O5'	8.66	1.68	1.59
26	BB	385	C	N1-C6	8.65	1.42	1.37
26	BB	2485	G	N9-C4	8.65	1.44	1.38
1	AA	579	A	N9-C8	8.65	1.44	1.37
26	BB	717	C	N3-C4	8.65	1.40	1.33
26	BB	1576	U	C2-N3	8.65	1.43	1.37
26	BB	2861	U	N1-C2	8.65	1.46	1.38
1	AA	1438	G	C2-N3	8.65	1.39	1.32
1	AA	31	G	C4'-O4'	-8.65	1.34	1.45
1	AA	454	G	C5'-C4'	8.65	1.61	1.51
1	AA	669	G	N3-C4	8.64	1.41	1.35
1	AA	1494	G	C8-N7	-8.64	1.25	1.30
26	BB	1903	G	C8-N7	8.64	1.36	1.30
1	AA	1502	A	N3-C4	8.64	1.40	1.34
26	BB	1770	G	N3-C4	8.64	1.41	1.35
4	AD	16	C	C2-N3	8.63	1.42	1.35
26	BB	1348	C	C2-N3	8.63	1.42	1.35
26	BB	1495	A	C5-C4	-8.63	1.32	1.38
1	AA	1047	G	C6-N1	-8.63	1.33	1.39
26	BB	632	A	N3-C4	8.63	1.40	1.34
1	AA	1324	A	P-O5'	8.63	1.68	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1409	U	C4'-C3'	8.63	1.62	1.53
26	BB	1511	G	C6-O6	-8.63	1.16	1.24
26	BB	1739	A	P-O5'	8.63	1.68	1.59
26	BB	2102	G	N1-C2	8.63	1.44	1.37
26	BB	267	C	P-O5'	8.62	1.68	1.59
26	BB	1155	A	N3-C4	8.62	1.40	1.34
26	BB	1642	G	C2-N3	8.62	1.39	1.32
26	BB	2083	G	C8-N7	-8.62	1.25	1.30
25	BA	28	C	N1-C6	8.61	1.42	1.37
26	BB	729	G	C6-N1	8.61	1.45	1.39
26	BB	2003	A	C5'-C4'	8.61	1.61	1.51
26	BB	1971	U	C3'-C2'	8.61	1.62	1.52
1	AA	953	G	N3-C4	8.61	1.41	1.35
26	BB	1166	G	C2-N3	8.61	1.39	1.32
26	BB	2424	C	C5-C6	8.61	1.41	1.34
1	AA	901	A	P-O5'	8.61	1.68	1.59
26	BB	1228	G	N7-C5	8.60	1.44	1.39
26	BB	1621	U	P-O5'	8.60	1.68	1.59
1	AA	1153	G	C8-N7	-8.60	1.25	1.30
26	BB	2735	G	N3-C4	8.60	1.41	1.35
1	AA	1522	U	P-O5'	8.60	1.68	1.59
26	BB	2122	U	O3'-P	8.60	1.71	1.61
26	BB	255	A	C2-N3	8.59	1.41	1.33
26	BB	457	A	C6-N1	-8.59	1.29	1.35
1	AA	706	A	N3-C4	8.59	1.40	1.34
26	BB	1474	U	N1-C2	8.59	1.46	1.38
26	BB	551	G	P-O5'	8.59	1.68	1.59
26	BB	1126	A	N9-C8	8.59	1.44	1.37
26	BB	1250	G	N1-C2	8.59	1.44	1.37
26	BB	2202	U	C5'-C4'	8.59	1.61	1.51
26	BB	2512	C	N1-C2	8.59	1.48	1.40
26	BB	2737	G	C2-N3	8.59	1.39	1.32
26	BB	965	C	N3-C4	8.59	1.40	1.33
26	BB	1493	C	N3-C4	8.59	1.40	1.33
4	AD	32	G	C8-N7	-8.59	1.25	1.30
26	BB	1547	C	N3-C4	8.59	1.40	1.33
1	AA	703	G	C8-N7	8.58	1.36	1.30
1	AA	874	G	N7-C5	8.58	1.44	1.39
1	AA	917	G	N1-C2	8.58	1.44	1.37
26	BB	1814	G	N1-C2	8.58	1.44	1.37
1	AA	432	A	C5-C6	8.58	1.48	1.41
26	BB	2194	U	O3'-P	8.58	1.71	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1168	U	C2'-O2'	8.58	1.52	1.41
26	BB	2396	G	C2-N3	8.57	1.39	1.32
26	BB	510	C	P-O5'	8.57	1.68	1.59
26	BB	1190	G	N7-C5	8.57	1.44	1.39
4	AD	28	U	C2-N3	8.57	1.43	1.37
26	BB	2511	U	P-O5'	8.57	1.68	1.59
26	BB	1441	G	C2-N3	8.56	1.39	1.32
1	AA	435	A	C6-N1	8.56	1.41	1.35
26	BB	2316	G	N3-C4	8.56	1.41	1.35
26	BB	798	G	N3-C4	8.56	1.41	1.35
26	BB	847	U	P-O5'	8.55	1.68	1.59
26	BB	1456	G	N1-C2	8.55	1.44	1.37
1	AA	902	G	N7-C5	8.55	1.44	1.39
1	AA	1475	G	N9-C8	-8.55	1.31	1.37
26	BB	294	A	P-O5'	8.55	1.68	1.59
26	BB	1059	G	C6-O6	-8.55	1.16	1.24
26	BB	1814	G	C5-C4	-8.55	1.32	1.38
26	BB	2312	U	C4'-O4'	-8.55	1.34	1.45
26	BB	1599	U	P-O5'	-8.55	1.51	1.59
26	BB	215	G	N3-C4	8.55	1.41	1.35
26	BB	2659	G	N9-C8	-8.55	1.31	1.37
26	BB	999	U	C4'-C3'	8.54	1.62	1.53
26	BB	1216	G	C4'-O4'	-8.54	1.34	1.45
26	BB	979	A	P-O5'	8.54	1.68	1.59
26	BB	1147	A	N9-C8	-8.54	1.30	1.37
26	BB	730	A	N3-C4	8.54	1.40	1.34
26	BB	2592	G	O3'-P	8.54	1.71	1.61
26	BB	2790	U	P-O5'	8.54	1.68	1.59
26	BB	1511	G	P-O5'	8.53	1.68	1.59
1	AA	1457	G	C2-N3	8.53	1.39	1.32
26	BB	2084	C	N3-C4	8.53	1.40	1.33
1	AA	1305	G	N1-C2	8.52	1.44	1.37
25	BA	58	A	P-O5'	8.52	1.68	1.59
26	BB	111	A	N3-C4	8.52	1.40	1.34
3	AC	50	U	C4'-O4'	-8.52	1.34	1.45
1	AA	24	U	C3'-C2'	8.52	1.62	1.52
1	AA	1528	U	C4-C5	8.52	1.51	1.43
26	BB	1093	G	P-O5'	8.52	1.68	1.59
26	BB	1174	U	C2-N3	8.52	1.43	1.37
26	BB	1358	G	N9-C8	-8.52	1.31	1.37
26	BB	2344	U	N1-C6	8.52	1.45	1.38
26	BB	2887	A	O3'-P	8.52	1.71	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	38	G	N7-C5	8.51	1.44	1.39
26	BB	1706	C	P-O5'	8.51	1.68	1.59
26	BB	1717	A	N9-C4	-8.51	1.32	1.37
26	BB	2533	U	P-O5'	8.51	1.68	1.59
3	AC	15	G	C6-N1	8.51	1.45	1.39
3	AC	46	C	P-O5'	8.51	1.68	1.59
26	BB	1368	G	O3'-P	8.51	1.71	1.61
1	AA	321	A	C4'-C3'	-8.50	1.43	1.53
26	BB	2895	G	N3-C4	8.50	1.41	1.35
1	AA	815	A	P-O5'	8.50	1.68	1.59
26	BB	406	G	C2'-C1'	-8.50	1.44	1.53
26	BB	2083	G	N7-C5	8.50	1.44	1.39
26	BB	409	G	C2-N3	8.50	1.39	1.32
26	BB	700	G	C3'-C2'	8.50	1.62	1.52
26	BB	1965	C	N1-C6	-8.50	1.32	1.37
26	BB	2290	G	C8-N7	8.50	1.36	1.30
1	AA	612	C	C4'-O4'	-8.50	1.34	1.45
1	AA	1464	U	N1-C2	8.50	1.46	1.38
26	BB	2681	C	N1-C6	8.50	1.42	1.37
1	AA	227	G	N7-C5	8.49	1.44	1.39
1	AA	1343	G	C6-N1	8.49	1.45	1.39
1	AA	1455	G	C5'-C4'	8.49	1.61	1.51
1	AA	117	G	C6-N1	8.49	1.45	1.39
1	AA	638	U	C4-C5	8.49	1.51	1.43
1	AA	1306	A	C5'-C4'	8.49	1.61	1.51
26	BB	1129	A	N3-C4	8.49	1.40	1.34
26	BB	656	G	P-O5'	8.48	1.68	1.59
26	BB	1823	G	N7-C5	-8.48	1.34	1.39
26	BB	2564	A	C6-N6	8.48	1.40	1.33
26	BB	2519	U	C2-N3	8.48	1.43	1.37
26	BB	1311	G	C6-N1	8.48	1.45	1.39
26	BB	782	A	N3-C4	8.48	1.40	1.34
1	AA	357	G	N3-C4	8.48	1.41	1.35
1	AA	965	U	N1-C2	8.48	1.46	1.38
1	AA	1015	G	P-O5'	8.48	1.68	1.59
1	AA	1159	U	C2-N3	8.48	1.43	1.37
26	BB	1591	A	C3'-C2'	8.48	1.62	1.52
25	BA	26	C	C2-N3	8.48	1.42	1.35
26	BB	2387	U	C4'-O4'	-8.48	1.34	1.45
26	BB	2846	G	N9-C8	-8.48	1.31	1.37
1	AA	1314	C	C3'-C2'	8.47	1.62	1.52
26	BB	1575	C	C2'-C1'	8.47	1.62	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2210	U	C2-N3	8.47	1.43	1.37
1	AA	805	C	N1-C6	-8.47	1.32	1.37
26	BB	1890	A	N9-C4	8.47	1.43	1.37
26	BB	2138	G	C2'-C1'	8.47	1.62	1.53
25	BA	85	G	N1-C2	8.47	1.44	1.37
26	BB	1515	A	C6-N1	8.47	1.41	1.35
26	BB	1723	G	C6-N1	-8.46	1.33	1.39
1	AA	231	U	C2-N3	8.46	1.43	1.37
1	AA	721	G	N3-C4	8.46	1.41	1.35
1	AA	1309	G	N7-C5	8.46	1.44	1.39
25	BA	4	C	C2-O2	-8.46	1.16	1.24
26	BB	2292	U	C2-N3	8.46	1.43	1.37
26	BB	2518	A	C5'-C4'	8.46	1.61	1.51
26	BB	936	A	C8-N7	-8.46	1.25	1.31
26	BB	472	A	N7-C5	8.46	1.44	1.39
26	BB	620	G	C2-N3	8.46	1.39	1.32
1	AA	664	G	N7-C5	8.45	1.44	1.39
26	BB	1368	G	P-O5'	8.46	1.68	1.59
25	BA	9	G	C8-N7	8.45	1.36	1.30
1	AA	615	G	C6-N1	8.45	1.45	1.39
26	BB	2533	U	C2-O2	8.45	1.29	1.22
1	AA	1030	U	C5-C6	8.45	1.41	1.34
1	AA	835	U	O3'-P	8.45	1.71	1.61
1	AA	362	G	N7-C5	8.44	1.44	1.39
1	AA	653	U	C4'-O4'	-8.44	1.34	1.45
1	AA	1220	G	N7-C5	8.44	1.44	1.39
1	AA	1520	C	N1-C6	8.44	1.42	1.37
26	BB	1123	C	C2-N3	8.44	1.42	1.35
26	BB	2154	A	N7-C5	8.44	1.44	1.39
1	AA	552	U	O3'-P	8.44	1.71	1.61
1	AA	177	G	N3-C4	-8.44	1.29	1.35
26	BB	1739	A	O3'-P	8.44	1.71	1.61
26	BB	1830	C	N3-C4	8.43	1.39	1.33
26	BB	260	G	N9-C8	8.43	1.43	1.37
26	BB	2276	G	N9-C8	-8.43	1.31	1.37
1	AA	752	G	N9-C4	-8.43	1.31	1.38
26	BB	176	A	N9-C8	8.43	1.44	1.37
26	BB	516	C	N1-C6	8.43	1.42	1.37
26	BB	1272	A	P-O5'	8.43	1.68	1.59
26	BB	1854	A	C3'-C2'	-8.43	1.43	1.52
1	AA	964	A	C6-N1	8.43	1.41	1.35
1	AA	728	A	N9-C4	8.42	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1498	C	C4'-O4'	-8.42	1.34	1.45
4	AD	54	G	N3-C4	8.42	1.41	1.35
25	BA	64	G	N3-C4	8.42	1.41	1.35
1	AA	1038	C	C4-N4	-8.42	1.26	1.33
26	BB	775	G	C5-C4	8.42	1.44	1.38
1	AA	193	C	C2'-C1'	8.42	1.62	1.53
1	AA	985	C	C5-C6	8.42	1.41	1.34
26	BB	663	G	C5-C4	-8.42	1.32	1.38
26	BB	941	A	N3-C4	8.42	1.40	1.34
26	BB	2576	G	O4'-C1'	8.42	1.52	1.41
26	BB	2862	G	C3'-O3'	-8.42	1.30	1.42
1	AA	485	U	N1-C2	8.42	1.46	1.38
1	AA	1021	A	C5-C4	-8.42	1.32	1.38
1	AA	91	U	C2-N3	8.42	1.43	1.37
26	BB	1281	G	C2'-C1'	-8.41	1.44	1.53
1	AA	488	C	C2-N3	8.41	1.42	1.35
2	AB	14	A	N3-C4	8.41	1.39	1.34
26	BB	2029	G	C2-N3	8.41	1.39	1.32
1	AA	1490	U	P-O5'	8.41	1.68	1.59
26	BB	2071	A	N3-C4	8.41	1.39	1.34
4	AD	3	C	C2-N3	8.40	1.42	1.35
26	BB	80	G	N1-C2	8.40	1.44	1.37
1	AA	1058	G	C2-N3	8.39	1.39	1.32
26	BB	1826	G	C6-N1	-8.39	1.33	1.39
26	BB	1882	U	C4'-C3'	-8.39	1.44	1.53
1	AA	1222	G	N9-C8	-8.39	1.31	1.37
26	BB	1111	A	C6-N6	-8.39	1.27	1.33
26	BB	1136	G	N3-C4	8.39	1.41	1.35
1	AA	278	G	N3-C4	8.39	1.41	1.35
26	BB	833	A	O4'-C1'	8.39	1.52	1.41
26	BB	1230	A	N3-C4	8.38	1.39	1.34
26	BB	1562	U	P-O5'	8.38	1.68	1.59
26	BB	2893	A	C6-N6	8.38	1.40	1.33
26	BB	1980	G	P-O5'	8.38	1.68	1.59
26	BB	2241	A	N3-C4	8.38	1.39	1.34
1	AA	1104	G	C2-N3	8.38	1.39	1.32
26	BB	259	G	C8-N7	-8.38	1.25	1.30
26	BB	830	G	N7-C5	8.37	1.44	1.39
25	BA	23	G	C8-N7	-8.37	1.25	1.30
1	AA	773	G	N9-C8	8.37	1.43	1.37
26	BB	406	G	N9-C8	-8.37	1.31	1.37
26	BB	1005	C	N1-C6	8.37	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	92	U	N1-C2	8.37	1.46	1.38
26	BB	94	A	N3-C4	8.37	1.39	1.34
26	BB	1429	G	C8-N7	8.37	1.35	1.30
1	AA	1065	U	P-O5'	8.36	1.68	1.59
26	BB	1681	G	C2-N3	8.36	1.39	1.32
1	AA	1447	A	N9-C4	8.36	1.42	1.37
2	AB	51	G	N9-C8	8.36	1.43	1.37
1	AA	769	G	C2'-C1'	8.36	1.62	1.53
26	BB	634	C	N1-C6	8.36	1.42	1.37
26	BB	1842	G	C2-N3	8.36	1.39	1.32
26	BB	1893	C	C2-O2	-8.36	1.17	1.24
26	BB	632	A	N7-C5	8.36	1.44	1.39
26	BB	2270	A	C4'-O4'	-8.36	1.34	1.45
26	BB	1768	C	N3-C4	8.36	1.39	1.33
1	AA	1507	A	C6-N6	8.35	1.40	1.33
1	AA	10	A	C5'-C4'	8.35	1.61	1.51
26	BB	1331	G	N9-C8	8.35	1.43	1.37
26	BB	1531	C	N1-C6	8.35	1.42	1.37
26	BB	860	U	O3'-P	8.35	1.71	1.61
1	AA	582	C	P-O5'	8.35	1.68	1.59
26	BB	309	A	C4'-O4'	-8.35	1.34	1.45
1	AA	828	U	C5-C6	8.35	1.41	1.34
26	BB	13	A	P-O5'	8.35	1.68	1.59
26	BB	317	G	C6-N1	8.35	1.45	1.39
1	AA	25	C	N1-C6	8.34	1.42	1.37
1	AA	141	G	C6-N1	8.34	1.45	1.39
1	AA	339	C	C4-C5	8.34	1.49	1.43
1	AA	563	A	N3-C4	8.34	1.39	1.34
1	AA	1221	G	P-O5'	8.34	1.68	1.59
1	AA	1301	U	N1-C6	-8.34	1.30	1.38
3	AC	40	G	N1-C2	8.34	1.44	1.37
26	BB	1920	C	C2-N3	8.34	1.42	1.35
26	BB	1314	C	O3'-P	8.34	1.71	1.61
26	BB	39	G	C2-N3	8.34	1.39	1.32
26	BB	61	C	N3-C4	8.34	1.39	1.33
26	BB	270	A	N3-C4	8.34	1.39	1.34
26	BB	651	G	N9-C8	-8.34	1.32	1.37
26	BB	1186	G	C6-N1	8.34	1.45	1.39
26	BB	1363	C	C4'-O4'	-8.34	1.34	1.45
26	BB	1804	C	C4'-C3'	-8.34	1.44	1.53
26	BB	1968	G	C2-N3	8.34	1.39	1.32
1	AA	896	C	O3'-P	8.33	1.71	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	844	A	N7-C5	8.33	1.44	1.39
26	BB	1082	U	C4-C5	8.33	1.51	1.43
1	AA	184	G	P-O5'	8.33	1.68	1.59
1	AA	845	A	N7-C5	-8.33	1.34	1.39
1	AA	1474	U	C5-C6	8.33	1.41	1.34
2	AB	58	A	C8-N7	-8.33	1.25	1.31
26	BB	2535	G	N3-C4	8.33	1.41	1.35
1	AA	926	G	P-O5'	8.32	1.68	1.59
26	BB	914	G	N7-C5	8.32	1.44	1.39
26	BB	2873	A	C8-N7	-8.32	1.25	1.31
1	AA	594	U	N1-C2	8.32	1.46	1.38
26	BB	1651	G	C8-N7	-8.32	1.25	1.30
26	BB	2076	U	C2-N3	8.32	1.43	1.37
26	BB	470	A	C6-N6	8.32	1.40	1.33
1	AA	508	U	N1-C2	8.31	1.46	1.38
26	BB	115	C	C4'-O4'	-8.31	1.34	1.45
26	BB	389	G	N7-C5	-8.31	1.34	1.39
26	BB	504	A	N9-C4	8.31	1.42	1.37
26	BB	706	A	C4'-O4'	-8.31	1.34	1.45
26	BB	1090	A	N3-C4	8.31	1.39	1.34
26	BB	623	C	N1-C6	8.31	1.42	1.37
26	BB	967	U	N1-C2	8.31	1.46	1.38
26	BB	2633	G	P-O5'	8.31	1.68	1.59
1	AA	109	A	N3-C4	8.30	1.39	1.34
26	BB	2369	A	C2'-C1'	8.30	1.62	1.53
26	BB	2397	G	N1-C2	8.30	1.44	1.37
1	AA	299	G	N9-C8	-8.30	1.32	1.37
1	AA	468	A	C5'-C4'	8.30	1.61	1.51
1	AA	535	A	N7-C5	8.30	1.44	1.39
26	BB	588	U	P-O5'	8.30	1.68	1.59
26	BB	2027	G	C5-C6	8.30	1.50	1.42
1	AA	51	A	N7-C5	-8.30	1.34	1.39
26	BB	1225	G	C6-N1	8.30	1.45	1.39
26	BB	2680	U	C2-N3	8.30	1.43	1.37
26	BB	565	C	N1-C6	8.29	1.42	1.37
1	AA	684	U	P-O5'	8.29	1.68	1.59
1	AA	924	C	N3-C4	8.29	1.39	1.33
1	AA	1003	G	N7-C5	8.29	1.44	1.39
26	BB	539	G	C2'-C1'	-8.29	1.44	1.53
26	BB	825	A	C6-N6	8.29	1.40	1.33
26	BB	2435	A	N3-C4	8.29	1.39	1.34
1	AA	26	A	N3-C4	8.28	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2015	A	N3-C4	8.28	1.39	1.34
1	AA	570	G	C8-N7	-8.28	1.25	1.30
26	BB	102	U	C4-C5	8.28	1.51	1.43
1	AA	282	A	P-O5'	8.28	1.68	1.59
1	AA	405	U	C2-N3	8.28	1.43	1.37
1	AA	479	U	P-O5'	8.28	1.68	1.59
1	AA	1088	G	N3-C4	8.28	1.41	1.35
26	BB	2665	A	C8-N7	-8.28	1.25	1.31
26	BB	1749	A	N7-C5	-8.27	1.34	1.39
26	BB	1933	G	N9-C8	8.27	1.43	1.37
26	BB	2079	U	P-O5'	8.27	1.68	1.59
26	BB	1239	G	C2'-C1'	-8.27	1.44	1.53
1	AA	424	G	N3-C4	8.27	1.41	1.35
26	BB	690	G	N7-C5	8.27	1.44	1.39
26	BB	1457	U	P-O5'	8.27	1.68	1.59
25	BA	119	A	N3-C4	8.27	1.39	1.34
26	BB	725	G	C6-O6	-8.27	1.16	1.24
26	BB	1904	G	N1-C2	8.27	1.44	1.37
1	AA	75	G	C5-C4	-8.26	1.32	1.38
26	BB	2597	G	N7-C5	8.26	1.44	1.39
1	AA	343	U	P-O5'	8.26	1.68	1.59
26	BB	166	U	C4-C5	8.26	1.50	1.43
26	BB	1906	G	N7-C5	8.26	1.44	1.39
1	AA	656	G	N3-C4	8.26	1.41	1.35
26	BB	48	G	P-O5'	8.26	1.68	1.59
26	BB	1552	A	C5-C4	-8.26	1.32	1.38
1	AA	1206	G	N3-C4	8.26	1.41	1.35
1	AA	936	C	P-O5'	8.25	1.68	1.59
1	AA	1267	C	C4-C5	8.25	1.49	1.43
26	BB	637	A	C6-N6	8.25	1.40	1.33
26	BB	1131	G	N7-C5	-8.25	1.34	1.39
26	BB	934	U	C2-N3	8.25	1.43	1.37
26	BB	1221	C	P-O5'	8.25	1.68	1.59
26	BB	2657	A	C8-N7	-8.25	1.25	1.31
26	BB	182	A	P-O5'	-8.25	1.51	1.59
26	BB	678	C	C2-N3	8.25	1.42	1.35
26	BB	1444	G	C5-C4	-8.25	1.32	1.38
26	BB	2743	U	C2'-C1'	8.24	1.62	1.53
25	BA	86	G	P-O5'	8.24	1.68	1.59
26	BB	969	G	C5-C6	8.24	1.50	1.42
26	BB	1240	U	O3'-P	8.24	1.71	1.61
26	BB	1445	G	C2-N3	8.24	1.39	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1610	A	N9-C4	8.24	1.42	1.37
1	AA	1347	G	N3-C4	8.24	1.41	1.35
26	BB	638	G	C2-N3	8.24	1.39	1.32
26	BB	1430	G	O3'-P	8.24	1.71	1.61
26	BB	1846	G	C6-N1	8.24	1.45	1.39
3	AC	18	A	C5-C4	-8.23	1.32	1.38
26	BB	1142	A	N3-C4	8.23	1.39	1.34
25	BA	8	C	C5-C6	8.23	1.41	1.34
26	BB	1137	G	C6-N1	8.23	1.45	1.39
26	BB	1489	C	C5'-C4'	8.23	1.61	1.51
26	BB	2483	C	C5-C6	8.23	1.41	1.34
26	BB	192	C	O3'-P	-8.23	1.51	1.61
26	BB	582	A	N1-C2	8.23	1.41	1.34
26	BB	599	A	C6-N6	8.23	1.40	1.33
26	BB	335	C	P-O5'	-8.23	1.51	1.59
26	BB	1293	C	P-O5'	8.22	1.68	1.59
26	BB	2361	G	C4'-C3'	8.22	1.62	1.53
26	BB	1877	A	N9-C8	8.22	1.44	1.37
26	BB	2606	C	C2-N3	8.22	1.42	1.35
26	BB	37	C	N1-C6	8.22	1.42	1.37
26	BB	1317	G	C8-N7	-8.22	1.26	1.30
26	BB	1599	U	N1-C2	8.22	1.46	1.38
26	BB	4	U	N3-C4	8.22	1.45	1.38
26	BB	333	G	C5'-C4'	8.22	1.61	1.51
26	BB	2156	G	P-O5'	8.22	1.68	1.59
26	BB	2534	A	N9-C4	8.22	1.42	1.37
1	AA	365	U	C5-C6	8.22	1.41	1.34
3	AC	55	A	N3-C4	8.21	1.39	1.34
26	BB	245	G	C8-N7	-8.21	1.26	1.30
1	AA	790	A	N7-C5	-8.21	1.34	1.39
1	AA	1443	C	N1-C6	8.21	1.42	1.37
26	BB	1755	A	N7-C5	8.21	1.44	1.39
26	BB	2193	G	C2-N3	8.21	1.39	1.32
1	AA	630	A	C4'-O4'	-8.21	1.34	1.45
1	AA	662	U	C4-C5	8.21	1.50	1.43
26	BB	762	U	C4-O4	-8.21	1.17	1.23
26	BB	1546	G	C8-N7	8.21	1.35	1.30
1	AA	964	A	C8-N7	-8.21	1.25	1.31
1	AA	977	A	C6-N1	-8.21	1.29	1.35
26	BB	2662	A	N3-C4	8.21	1.39	1.34
26	BB	2839	G	N1-C2	8.20	1.44	1.37
1	AA	7	A	C8-N7	8.20	1.37	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	194	G	C6-O6	-8.20	1.16	1.24
26	BB	577	G	C5-C6	8.20	1.50	1.42
26	BB	1052	C	C5-C6	8.20	1.41	1.34
26	BB	1410	G	C2-N3	8.20	1.39	1.32
26	BB	451	U	P-O5'	8.20	1.68	1.59
26	BB	463	G	P-O5'	8.20	1.68	1.59
26	BB	1673	G	N7-C5	-8.20	1.34	1.39
1	AA	1139	G	C6-N1	8.20	1.45	1.39
26	BB	1045	C	N3-C4	8.19	1.39	1.33
26	BB	1886	U	P-O5'	8.19	1.68	1.59
1	AA	192	A	C8-N7	-8.19	1.25	1.31
1	AA	997	U	C4'-O4'	-8.19	1.34	1.45
26	BB	1158	C	N1-C6	8.19	1.42	1.37
1	AA	1417	G	C2-N3	8.19	1.39	1.32
26	BB	230	G	N7-C5	8.19	1.44	1.39
26	BB	1447	C	N3-C4	8.19	1.39	1.33
26	BB	2001	C	N3-C4	8.19	1.39	1.33
26	BB	998	C	N3-C4	8.19	1.39	1.33
26	BB	1079	C	N3-C4	-8.19	1.28	1.33
1	AA	861	G	N3-C4	8.19	1.41	1.35
26	BB	2327	A	P-O5'	8.19	1.68	1.59
26	BB	2005	A	N9-C4	8.18	1.42	1.37
26	BB	691	C	C4'-O4'	-8.18	1.34	1.45
26	BB	2346	A	O3'-P	-8.18	1.51	1.61
26	BB	173	A	N7-C5	8.18	1.44	1.39
1	AA	1422	G	C3'-C2'	-8.18	1.43	1.52
26	BB	2750	A	C8-N7	-8.18	1.25	1.31
1	AA	944	G	C2-N3	8.17	1.39	1.32
26	BB	1152	C	N3-C4	8.17	1.39	1.33
1	AA	444	G	C5'-C4'	8.17	1.61	1.51
1	AA	1102	A	N9-C4	-8.17	1.32	1.37
26	BB	386	G	C6-N1	-8.17	1.33	1.39
26	BB	663	G	C3'-C2'	8.17	1.61	1.52
26	BB	1187	G	C3'-C2'	-8.17	1.43	1.52
26	BB	1354	A	N3-C4	8.17	1.39	1.34
26	BB	1753	G	N3-C4	8.17	1.41	1.35
1	AA	987	G	N7-C5	8.16	1.44	1.39
26	BB	2229	U	C5-C6	8.16	1.41	1.34
26	BB	2736	A	P-O5'	8.16	1.68	1.59
26	BB	1555	G	C6-O6	-8.16	1.16	1.24
26	BB	1097	U	C4'-O4'	-8.16	1.34	1.45
1	AA	815	A	C6-N6	8.16	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1405	G	C2-N3	8.16	1.39	1.32
25	BA	69	G	N7-C5	8.16	1.44	1.39
26	BB	367	G	N9-C8	-8.16	1.32	1.37
26	BB	1087	G	C5'-C4'	8.16	1.61	1.51
26	BB	1423	G	C5'-C4'	8.16	1.61	1.51
1	AA	679	C	C2'-C1'	8.15	1.62	1.53
1	AA	1077	G	N3-C4	8.15	1.41	1.35
4	AD	15	G	C2-N3	8.15	1.39	1.32
25	BA	97	C	N1-C6	8.15	1.42	1.37
26	BB	2203	U	C4-C5	8.15	1.50	1.43
26	BB	1195	G	N7-C5	8.15	1.44	1.39
1	AA	838	G	N1-C2	8.15	1.44	1.37
26	BB	337	C	C4'-O4'	-8.15	1.34	1.45
26	BB	748	G	C2-N3	8.15	1.39	1.32
26	BB	2227	A	P-O5'	8.14	1.67	1.59
1	AA	1354	U	N3-C4	8.14	1.45	1.38
1	AA	1368	A	N3-C4	8.14	1.39	1.34
26	BB	357	C	P-O5'	8.14	1.67	1.59
26	BB	10	A	N3-C4	8.14	1.39	1.34
26	BB	686	U	N1-C2	8.14	1.45	1.38
26	BB	2365	G	N9-C8	-8.14	1.32	1.37
26	BB	2524	G	N7-C5	8.14	1.44	1.39
1	AA	1247	U	C4-O4	-8.14	1.17	1.23
3	AC	28	U	P-O5'	8.13	1.67	1.59
26	BB	520	G	C2-N3	8.13	1.39	1.32
26	BB	2295	C	C3'-C2'	8.13	1.61	1.52
1	AA	47	C	N1-C2	8.13	1.48	1.40
1	AA	276	G	C2-N3	8.13	1.39	1.32
26	BB	2161	C	N3-C4	-8.13	1.28	1.33
1	AA	122	G	C5-C4	-8.13	1.32	1.38
1	AA	546	A	P-O5'	8.13	1.67	1.59
26	BB	348	A	N7-C5	8.13	1.44	1.39
1	AA	1392	G	O3'-P	8.13	1.71	1.61
26	BB	809	G	C2-N3	8.13	1.39	1.32
1	AA	308	C	C4'-O4'	-8.13	1.34	1.45
26	BB	879	G	C2-N3	8.12	1.39	1.32
26	BB	2356	U	C4-C5	8.12	1.50	1.43
26	BB	2253	G	O3'-P	8.12	1.70	1.61
26	BB	132	G	N9-C8	-8.12	1.32	1.37
26	BB	1744	A	N9-C4	8.12	1.42	1.37
1	AA	1192	C	P-O5'	8.12	1.67	1.59
26	BB	1284	A	P-O5'	8.12	1.67	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1339	A	C3'-C2'	-8.12	1.43	1.52
1	AA	417	G	C2'-C1'	8.11	1.62	1.53
1	AA	836	G	C5-C6	8.12	1.50	1.42
26	BB	1625	C	N1-C2	8.12	1.48	1.40
26	BB	2191	A	N7-C5	-8.11	1.34	1.39
26	BB	2529	G	C6-N1	8.12	1.45	1.39
1	AA	100	G	N7-C5	-8.11	1.34	1.39
26	BB	944	C	C2-N3	8.11	1.42	1.35
26	BB	1572	A	C8-N7	-8.11	1.25	1.31
26	BB	2665	A	C6-N1	8.11	1.41	1.35
26	BB	654	A	N7-C5	8.10	1.44	1.39
26	BB	2447	G	N9-C4	8.10	1.44	1.38
1	AA	1280	A	N7-C5	-8.10	1.34	1.39
26	BB	209	C	P-O5'	8.10	1.67	1.59
26	BB	395	U	N1-C6	8.10	1.45	1.38
26	BB	424	G	P-O5'	8.10	1.67	1.59
26	BB	814	C	P-O5'	8.10	1.67	1.59
26	BB	2903	U	N1-C6	8.10	1.45	1.38
2	AB	58	A	N9-C4	-8.10	1.32	1.37
26	BB	1787	A	C6-N1	-8.10	1.29	1.35
1	AA	1506	U	C2-N3	8.09	1.43	1.37
25	BA	19	C	C5-C6	8.09	1.40	1.34
26	BB	128	C	N3-C4	8.09	1.39	1.33
26	BB	1418	G	N3-C4	-8.09	1.29	1.35
1	AA	119	A	C5-C4	-8.09	1.33	1.38
1	AA	265	G	C2-N3	8.09	1.39	1.32
1	AA	1225	A	N7-C5	-8.09	1.34	1.39
26	BB	778	G	N7-C5	8.09	1.44	1.39
26	BB	1073	A	C5-C4	-8.09	1.33	1.38
26	BB	1073	A	N3-C4	8.09	1.39	1.34
26	BB	1770	G	C5'-C4'	8.09	1.61	1.51
1	AA	40	C	P-O5'	8.09	1.67	1.59
1	AA	542	G	P-O5'	-8.09	1.51	1.59
26	BB	2216	G	P-O5'	8.09	1.67	1.59
1	AA	1418	A	C5-C4	-8.09	1.33	1.38
1	AA	1538	C	N1-C2	8.09	1.48	1.40
26	BB	445	C	N1-C6	8.09	1.42	1.37
26	BB	1928	A	P-O5'	8.09	1.67	1.59
26	BB	2007	U	O3'-P	8.09	1.70	1.61
1	AA	67	C	N1-C2	8.08	1.48	1.40
26	BB	2136	G	C8-N7	-8.08	1.26	1.30
1	AA	528	C	N1-C6	-8.08	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	687	A	C2'-O2'	-8.08	1.31	1.41
1	AA	778	G	N7-C5	8.08	1.44	1.39
1	AA	60	A	N9-C8	8.08	1.44	1.37
1	AA	1040	U	C2-N3	8.08	1.43	1.37
26	BB	933	A	C6-N1	8.08	1.41	1.35
26	BB	2722	G	N3-C4	8.08	1.41	1.35
26	BB	45	G	C4'-C3'	8.08	1.62	1.53
26	BB	1216	G	C2-N2	-8.08	1.26	1.34
26	BB	1831	G	C8-N7	-8.08	1.26	1.30
26	BB	2151	U	C5-C6	8.08	1.41	1.34
26	BB	2565	A	N3-C4	8.08	1.39	1.34
26	BB	1580	A	N9-C4	8.07	1.42	1.37
26	BB	2049	G	C5-C4	-8.07	1.32	1.38
26	BB	2509	G	C2'-O2'	8.07	1.52	1.41
26	BB	2551	C	N1-C6	-8.07	1.32	1.37
1	AA	1421	G	N3-C4	8.07	1.41	1.35
26	BB	18	U	C2-N3	8.07	1.43	1.37
26	BB	30	G	C6-N1	8.07	1.45	1.39
25	BA	95	U	C2-N3	8.07	1.43	1.37
26	BB	1371	G	C2-N3	8.07	1.39	1.32
26	BB	1508	A	C6-N1	8.07	1.41	1.35
26	BB	1715	G	C6-N1	8.07	1.45	1.39
1	AA	500	G	N9-C8	8.07	1.43	1.37
1	AA	1260	G	C2'-C1'	-8.07	1.44	1.53
26	BB	929	U	C3'-C2'	8.07	1.61	1.52
26	BB	1025	G	N9-C4	8.07	1.44	1.38
26	BB	2148	G	C2-N2	-8.07	1.26	1.34
1	AA	731	G	P-O5'	8.06	1.67	1.59
1	AA	813	U	P-O5'	8.06	1.67	1.59
26	BB	751	A	N9-C4	8.06	1.42	1.37
26	BB	757	G	C2'-C1'	8.06	1.62	1.53
26	BB	1759	A	N7-C5	8.06	1.44	1.39
26	BB	2428	G	N9-C4	-8.06	1.31	1.38
1	AA	6	G	N9-C8	8.06	1.43	1.37
26	BB	892	A	C5-C6	8.06	1.48	1.41
1	AA	923	A	C5-C6	8.06	1.48	1.41
1	AA	1401	G	N3-C4	-8.05	1.29	1.35
1	AA	507	C	C4-C5	8.05	1.49	1.43
26	BB	1381	G	P-O5'	8.05	1.67	1.59
1	AA	351	G	N1-C2	8.05	1.44	1.37
1	AA	581	G	P-O5'	8.05	1.67	1.59
1	AA	1297	G	C8-N7	8.05	1.35	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	962	G	C5-C4	-8.05	1.32	1.38
26	BB	1614	A	C5'-C4'	8.05	1.61	1.51
26	BB	1220	G	C8-N7	-8.05	1.26	1.30
26	BB	2241	A	C5-C4	-8.05	1.33	1.38
26	BB	795	C	N1-C6	8.04	1.42	1.37
26	BB	1688	U	C2-N3	8.04	1.43	1.37
26	BB	1907	G	C4'-C3'	8.04	1.61	1.53
26	BB	2577	A	C3'-C2'	8.04	1.61	1.52
1	AA	1184	G	C5-C4	-8.04	1.32	1.38
26	BB	1654	A	N9-C4	8.04	1.42	1.37
26	BB	1701	A	C6-N1	-8.04	1.29	1.35
1	AA	219	U	N3-C4	8.04	1.45	1.38
26	BB	2255	G	O3'-P	8.04	1.70	1.61
1	AA	1437	A	P-O5'	8.04	1.67	1.59
26	BB	2425	A	C5-C4	-8.04	1.33	1.38
26	BB	2765	A	N3-C4	8.04	1.39	1.34
1	AA	613	C	C4-C5	8.03	1.49	1.43
1	AA	1386	G	C5'-C4'	8.03	1.60	1.51
1	AA	1456	A	N9-C4	8.04	1.42	1.37
26	BB	455	C	C2-N3	8.03	1.42	1.35
26	BB	2220	U	N1-C2	8.04	1.45	1.38
1	AA	512	U	C5'-C4'	8.03	1.60	1.51
1	AA	568	G	N7-C5	-8.03	1.34	1.39
26	BB	1747	U	P-O5'	8.03	1.67	1.59
26	BB	2453	A	N7-C5	8.03	1.44	1.39
26	BB	2738	A	C5-C4	-8.03	1.33	1.38
1	AA	877	G	C8-N7	8.03	1.35	1.30
1	AA	1151	A	N7-C5	-8.03	1.34	1.39
1	AA	1176	A	N9-C4	8.03	1.42	1.37
3	AC	29	G	P-O5'	8.03	1.67	1.59
26	BB	804	A	N3-C4	8.03	1.39	1.34
25	BA	102	G	C6-N1	8.03	1.45	1.39
26	BB	630	G	N9-C8	8.03	1.43	1.37
26	BB	1888	G	C6-N1	8.03	1.45	1.39
26	BB	2579	C	P-O5'	8.03	1.67	1.59
1	AA	309	A	N3-C4	8.02	1.39	1.34
1	AA	1121	U	C4-C5	8.02	1.50	1.43
1	AA	634	C	C5-C6	-8.02	1.27	1.34
26	BB	662	G	N7-C5	8.02	1.44	1.39
26	BB	774	G	C6-N1	8.02	1.45	1.39
1	AA	25	C	C4'-O4'	-8.02	1.35	1.45
26	BB	279	A	C5'-C4'	8.02	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2101	A	N3-C4	8.02	1.39	1.34
1	AA	179	A	N3-C4	8.02	1.39	1.34
1	AA	731	G	C8-N7	-8.02	1.26	1.30
26	BB	159	G	C2-N3	8.02	1.39	1.32
26	BB	364	C	C5-C6	8.02	1.40	1.34
26	BB	2306	C	C5-C6	8.02	1.40	1.34
26	BB	2637	U	P-O5'	8.02	1.67	1.59
1	AA	835	U	P-O5'	8.02	1.67	1.59
26	BB	9	G	N7-C5	8.02	1.44	1.39
26	BB	1150	C	N1-C6	8.02	1.42	1.37
26	BB	1685	C	O4'-C1'	8.02	1.52	1.41
26	BB	1271	G	N1-C2	8.01	1.44	1.37
1	AA	752	G	C2-N3	8.01	1.39	1.32
26	BB	2759	G	C4'-C3'	-8.01	1.44	1.53
25	BA	81	G	N7-C5	8.01	1.44	1.39
26	BB	1332	G	C2'-C1'	8.01	1.62	1.53
26	BB	2505	G	N1-C2	8.01	1.44	1.37
26	BB	715	A	C5'-C4'	8.01	1.60	1.51
26	BB	499	U	C5-C6	8.00	1.41	1.34
26	BB	1048	A	C8-N7	-8.00	1.25	1.31
26	BB	1490	A	N9-C4	8.00	1.42	1.37
1	AA	1288	A	C2-N3	8.00	1.40	1.33
25	BA	67	G	C8-N7	8.00	1.35	1.30
25	BA	68	C	C4'-O4'	-8.00	1.35	1.45
26	BB	1008	A	C5'-C4'	8.00	1.60	1.51
1	AA	1034	G	N9-C8	-8.00	1.32	1.37
26	BB	1519	G	C4'-O4'	-8.00	1.35	1.45
26	BB	271	G	N1-C2	7.99	1.44	1.37
26	BB	614	A	C5-C4	-7.99	1.33	1.38
26	BB	849	A	C5'-C4'	7.99	1.60	1.51
26	BB	2089	C	O4'-C1'	7.99	1.52	1.41
26	BB	2121	G	C2-N3	7.99	1.39	1.32
1	AA	795	C	P-O5'	7.99	1.67	1.59
26	BB	2115	G	N9-C8	7.99	1.43	1.37
26	BB	2443	C	P-O5'	7.99	1.67	1.59
26	BB	2127	G	C2-N3	7.98	1.39	1.32
26	BB	1195	G	C5'-C4'	7.98	1.60	1.51
26	BB	1420	A	N3-C4	7.98	1.39	1.34
26	BB	1795	C	N1-C6	7.98	1.42	1.37
26	BB	1815	A	C5-C4	-7.98	1.33	1.38
26	BB	1866	A	C4'-C3'	7.98	1.61	1.53
1	AA	1088	G	C6-N1	-7.98	1.33	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	60	C	P-O5'	7.98	1.67	1.59
26	BB	1426	G	C2-N3	7.98	1.39	1.32
26	BB	1478	G	N3-C4	7.98	1.41	1.35
1	AA	1130	A	N9-C4	7.98	1.42	1.37
1	AA	986	U	P-O5'	7.98	1.67	1.59
26	BB	481	G	N7-C5	7.98	1.44	1.39
26	BB	1652	A	P-O5'	7.98	1.67	1.59
26	BB	1751	U	C2-N3	7.98	1.43	1.37
26	BB	1666	G	C5'-C4'	7.98	1.60	1.51
26	BB	1797	G	N3-C4	7.98	1.41	1.35
1	AA	371	A	N7-C5	-7.97	1.34	1.39
1	AA	827	U	N1-C2	7.97	1.45	1.38
1	AA	1495	U	C4'-O4'	-7.97	1.35	1.45
4	AD	47	A	C5'-C4'	7.97	1.60	1.51
25	BA	30	C	C4-C5	7.97	1.49	1.43
26	BB	506	G	O3'-P	7.97	1.70	1.61
26	BB	582	A	N3-C4	7.97	1.39	1.34
26	BB	2735	G	C8-N7	-7.97	1.26	1.30
1	AA	698	G	C8-N7	-7.97	1.26	1.30
2	AB	41	C	C5'-C4'	7.97	1.60	1.51
26	BB	2173	A	P-O5'	7.97	1.67	1.59
1	AA	1514	G	N3-C4	7.97	1.41	1.35
26	BB	2636	C	N3-C4	7.97	1.39	1.33
25	BA	88	C	P-O5'	7.97	1.67	1.59
1	AA	1388	C	O3'-P	7.96	1.70	1.61
26	BB	1308	A	C5'-C4'	7.96	1.60	1.51
26	BB	1338	G	N7-C5	7.96	1.44	1.39
26	BB	505	A	C5'-C4'	7.96	1.60	1.51
26	BB	1168	G	C6-N1	-7.96	1.33	1.39
26	BB	937	C	C4'-C3'	7.96	1.61	1.53
26	BB	118	A	N9-C8	7.96	1.44	1.37
26	BB	695	G	N7-C5	-7.96	1.34	1.39
26	BB	1237	A	N3-C4	7.96	1.39	1.34
26	BB	1614	A	N3-C4	7.96	1.39	1.34
1	AA	197	A	P-O5'	7.96	1.67	1.59
26	BB	708	G	O3'-P	7.96	1.70	1.61
1	AA	891	U	N1-C2	7.95	1.45	1.38
1	AA	1534	A	N9-C4	-7.95	1.33	1.37
3	AC	36	U	P-O5'	7.95	1.67	1.59
26	BB	1038	G	C2-N3	7.95	1.39	1.32
1	AA	767	A	C6-N1	7.95	1.41	1.35
1	AA	177	G	C5-C4	7.95	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	437	U	P-O5'	7.95	1.67	1.59
1	AA	591	U	C4-C5	7.95	1.50	1.43
26	BB	866	A	C5-C4	7.95	1.44	1.38
26	BB	447	A	C8-N7	-7.95	1.25	1.31
26	BB	2429	G	C8-N7	7.95	1.35	1.30
26	BB	2868	A	N9-C8	7.95	1.44	1.37
26	BB	283	G	N9-C8	-7.95	1.32	1.37
26	BB	1824	G	N7-C5	-7.95	1.34	1.39
26	BB	378	C	N1-C6	7.95	1.42	1.37
26	BB	321	U	C5'-C4'	7.94	1.60	1.51
1	AA	58	C	P-O5'	7.94	1.67	1.59
1	AA	550	G	N9-C8	-7.94	1.32	1.37
26	BB	1312	U	C4'-O4'	-7.94	1.35	1.45
26	BB	2611	C	N3-C4	7.94	1.39	1.33
1	AA	92	U	C5-C6	7.94	1.41	1.34
1	AA	389	A	C6-N1	7.94	1.41	1.35
1	AA	391	G	C5'-C4'	7.94	1.60	1.51
1	AA	893	C	C4-N4	-7.94	1.26	1.33
2	AB	72	U	C4-O4	-7.94	1.17	1.23
26	BB	104	A	C6-N1	-7.94	1.29	1.35
26	BB	930	G	C5-C4	-7.94	1.32	1.38
26	BB	1601	G	P-O5'	7.94	1.67	1.59
1	AA	1110	A	N3-C4	7.93	1.39	1.34
26	BB	30	G	N9-C8	-7.93	1.32	1.37
26	BB	1055	G	C2-N3	7.93	1.39	1.32
26	BB	2890	G	C6-N1	-7.93	1.33	1.39
3	AC	19	A	C4'-O4'	-7.93	1.35	1.45
26	BB	2110	G	N9-C4	-7.93	1.31	1.38
26	BB	2565	A	C5'-C4'	7.93	1.60	1.51
26	BB	2648	G	N9-C4	-7.93	1.31	1.38
26	BB	2020	A	N9-C4	7.93	1.42	1.37
1	AA	1483	A	N3-C4	7.93	1.39	1.34
1	AA	1115	U	C5'-C4'	7.93	1.60	1.51
26	BB	1787	A	C8-N7	-7.93	1.26	1.31
1	AA	404	G	N1-C2	7.92	1.44	1.37
1	AA	1308	U	O3'-P	7.92	1.70	1.61
26	BB	1530	G	C2-N3	7.92	1.39	1.32
1	AA	425	G	C8-N7	7.92	1.35	1.30
1	AA	1039	G	C5-C4	7.92	1.43	1.38
26	BB	671	C	C2-N3	7.92	1.42	1.35
1	AA	444	G	N1-C2	7.92	1.44	1.37
26	BB	58	G	N3-C4	7.92	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1953	A	C4'-C3'	7.92	1.61	1.53
1	AA	1004	A	P-O5'	7.92	1.67	1.59
26	BB	263	G	N3-C4	7.92	1.41	1.35
26	BB	337	C	C2'-C1'	7.92	1.62	1.53
26	BB	880	G	N3-C4	7.92	1.41	1.35
26	BB	2143	C	C5-C6	7.92	1.40	1.34
1	AA	655	A	N9-C4	7.92	1.42	1.37
1	AA	1337	G	P-O5'	7.92	1.67	1.59
26	BB	2012	G	C2-N3	7.92	1.39	1.32
26	BB	845	A	N9-C8	7.91	1.44	1.37
26	BB	2796	U	C2-O2	7.91	1.29	1.22
1	AA	1230	C	N1-C6	-7.91	1.32	1.37
26	BB	1726	C	C2-N3	7.91	1.42	1.35
26	BB	2221	G	C2-N3	7.91	1.39	1.32
1	AA	637	C	C2-N3	7.91	1.42	1.35
1	AA	1488	G	C4'-O4'	-7.91	1.35	1.45
26	BB	265	A	N9-C4	7.91	1.42	1.37
1	AA	104	G	C2-N3	-7.91	1.26	1.32
1	AA	205	A	N9-C4	-7.91	1.33	1.37
1	AA	520	A	N7-C5	-7.91	1.34	1.39
1	AA	1248	A	C8-N7	-7.91	1.26	1.31
1	AA	1480	A	N3-C4	7.91	1.39	1.34
26	BB	1247	A	N9-C4	7.91	1.42	1.37
26	BB	115	C	O4'-C1'	7.90	1.51	1.41
26	BB	1521	G	N9-C8	7.90	1.43	1.37
1	AA	617	G	C6-O6	-7.90	1.17	1.24
1	AA	762	U	C2-N3	7.90	1.43	1.37
26	BB	1757	A	P-O5'	7.90	1.67	1.59
26	BB	2120	G	N9-C4	-7.90	1.31	1.38
26	BB	2164	C	C4-N4	7.90	1.41	1.33
1	AA	469	C	C5'-C4'	7.90	1.60	1.51
26	BB	581	C	C5-C6	7.90	1.40	1.34
1	AA	509	A	C2'-C1'	-7.90	1.44	1.53
1	AA	925	G	C4'-O4'	-7.90	1.35	1.45
1	AA	1250	A	P-O5'	7.90	1.67	1.59
1	AA	1445	U	P-O5'	-7.90	1.51	1.59
1	AA	1476	A	P-O5'	7.90	1.67	1.59
26	BB	2173	A	C6-N1	7.90	1.41	1.35
26	BB	2086	U	P-O5'	7.90	1.67	1.59
1	AA	1156	G	N7-C5	-7.89	1.34	1.39
26	BB	2202	U	C2-N3	7.89	1.43	1.37
26	BB	2770	G	C5'-C4'	7.89	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	7	G	N7-C5	-7.89	1.34	1.39
26	BB	1208	C	O3'-P	7.89	1.70	1.61
26	BB	1283	G	N7-C5	-7.89	1.34	1.39
1	AA	5	U	C3'-C2'	7.89	1.61	1.52
26	BB	470	A	C4'-C3'	7.89	1.61	1.53
26	BB	2353	G	N7-C5	-7.89	1.34	1.39
26	BB	2816	G	N3-C4	7.89	1.41	1.35
1	AA	984	C	C3'-C2'	-7.89	1.44	1.52
3	AC	40	G	N9-C4	-7.89	1.31	1.38
1	AA	1033	G	N3-C4	7.89	1.41	1.35
1	AA	1536	C	P-O5'	7.89	1.67	1.59
3	AC	43	U	C2-N3	7.89	1.43	1.37
26	BB	609	A	N7-C5	7.89	1.44	1.39
26	BB	2038	G	C8-N7	7.89	1.35	1.30
26	BB	2141	G	C6-N1	7.89	1.45	1.39
26	BB	403	U	N1-C6	7.88	1.45	1.38
26	BB	897	C	P-O5'	7.88	1.67	1.59
26	BB	1184	U	C4'-O4'	-7.88	1.35	1.45
26	BB	1268	A	C4'-C3'	7.88	1.61	1.53
26	BB	1538	G	C2-N3	7.88	1.39	1.32
26	BB	1891	G	C4'-C3'	7.88	1.61	1.53
26	BB	2576	G	N9-C4	7.88	1.44	1.38
26	BB	1093	G	N7-C5	7.88	1.44	1.39
26	BB	1320	C	C2-N3	7.88	1.42	1.35
26	BB	2397	G	C2-N3	7.88	1.39	1.32
1	AA	193	C	C4-N4	7.88	1.41	1.33
1	AA	1155	A	C5-C6	-7.88	1.33	1.41
26	BB	1455	G	C5-C4	-7.88	1.32	1.38
1	AA	10	A	C8-N7	-7.88	1.26	1.31
26	BB	2067	G	C2-N3	7.88	1.39	1.32
1	AA	663	A	P-O5'	7.88	1.67	1.59
26	BB	2769	U	P-O5'	7.88	1.67	1.59
26	BB	937	C	N1-C6	7.88	1.41	1.37
26	BB	1955	U	N3-C4	7.88	1.45	1.38
1	AA	702	A	N3-C4	7.87	1.39	1.34
26	BB	2425	A	N9-C4	7.87	1.42	1.37
26	BB	702	U	C5-C6	7.87	1.41	1.34
26	BB	1772	A	C5-C4	-7.87	1.33	1.38
26	BB	2847	U	C4'-O4'	-7.87	1.35	1.45
26	BB	1430	G	N7-C5	7.87	1.44	1.39
1	AA	286	C	C5-C6	7.87	1.40	1.34
26	BB	1160	G	N9-C8	-7.87	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1222	U	O3'-P	7.87	1.70	1.61
26	BB	1903	G	N3-C4	7.87	1.41	1.35
4	AD	74	A	C6-N6	7.86	1.40	1.33
26	BB	320	A	C4'-O4'	-7.86	1.35	1.45
26	BB	1627	G	C6-N1	7.86	1.45	1.39
1	AA	1048	G	O4'-C1'	7.86	1.51	1.41
26	BB	92	U	C2-N3	7.86	1.43	1.37
26	BB	817	C	N3-C4	7.86	1.39	1.33
26	BB	1091	G	N1-C2	7.86	1.44	1.37
1	AA	1056	U	P-O5'	7.86	1.67	1.59
1	AA	1093	A	N9-C8	-7.86	1.31	1.37
26	BB	516	C	P-O5'	7.86	1.67	1.59
26	BB	2553	G	C4'-O4'	-7.86	1.35	1.45
1	AA	441	A	N9-C4	7.86	1.42	1.37
1	AA	849	G	C2-N3	7.86	1.39	1.32
26	BB	1783	A	C6-N1	-7.86	1.30	1.35
26	BB	1999	C	C4-C5	7.86	1.49	1.43
1	AA	153	C	P-O5'	7.85	1.67	1.59
26	BB	1770	G	N1-C2	7.85	1.44	1.37
26	BB	997	G	C6-N1	-7.85	1.34	1.39
26	BB	1897	G	C2-N3	7.85	1.39	1.32
26	BB	2499	C	N1-C6	7.85	1.41	1.37
1	AA	617	G	C5'-C4'	7.85	1.60	1.51
1	AA	1012	A	O3'-P	7.85	1.70	1.61
26	BB	662	G	C5-C4	7.85	1.43	1.38
26	BB	2134	A	P-O5'	7.85	1.67	1.59
26	BB	2262	U	C4'-O4'	-7.85	1.35	1.45
26	BB	2901	C	P-O5'	-7.85	1.51	1.59
26	BB	1096	A	P-O5'	7.85	1.67	1.59
1	AA	839	C	N1-C6	7.84	1.41	1.37
1	AA	1016	A	N7-C5	-7.84	1.34	1.39
2	AB	31	U	C3'-C2'	7.84	1.61	1.52
26	BB	96	C	C2-N3	7.84	1.42	1.35
26	BB	929	U	N1-C6	7.84	1.45	1.38
1	AA	1124	G	N9-C4	7.84	1.44	1.38
26	BB	342	A	C8-N7	-7.84	1.26	1.31
26	BB	2777	G	P-O5'	7.84	1.67	1.59
1	AA	121	U	C4'-O4'	-7.84	1.35	1.45
1	AA	316	C	N1-C6	7.84	1.41	1.37
26	BB	2534	A	N1-C2	7.84	1.41	1.34
26	BB	1410	G	C6-N1	-7.84	1.34	1.39
26	BB	2668	G	N3-C4	7.84	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1451	C	C5-C6	7.84	1.40	1.34
26	BB	2795	C	C2-N3	7.84	1.42	1.35
1	AA	278	G	C6-N1	7.84	1.45	1.39
26	BB	628	G	N7-C5	-7.84	1.34	1.39
26	BB	1055	G	N9-C4	7.84	1.44	1.38
26	BB	1674	G	C4'-C3'	7.84	1.61	1.53
1	AA	1268	G	N9-C8	7.83	1.43	1.37
26	BB	2869	G	N9-C8	7.83	1.43	1.37
1	AA	614	C	C4-C5	7.83	1.49	1.43
26	BB	1346	G	N1-C2	7.83	1.44	1.37
1	AA	431	A	C5-C6	7.83	1.48	1.41
1	AA	853	C	N3-C4	7.83	1.39	1.33
26	BB	1929	G	N1-C2	7.83	1.44	1.37
1	AA	557	G	C2'-C1'	7.83	1.61	1.53
26	BB	1232	G	C5-C4	-7.83	1.32	1.38
26	BB	2112	G	C6-N1	7.83	1.45	1.39
1	AA	907	A	N9-C4	7.82	1.42	1.37
1	AA	1135	U	N1-C2	7.82	1.45	1.38
2	AB	21	A	N3-C4	7.82	1.39	1.34
25	BA	18	G	N3-C4	7.82	1.41	1.35
26	BB	672	C	C2-O2	-7.82	1.17	1.24
26	BB	1754	A	N9-C4	7.82	1.42	1.37
26	BB	2149	U	P-O5'	7.82	1.67	1.59
1	AA	1297	G	C4'-O4'	-7.82	1.35	1.45
26	BB	1333	G	P-O5'	7.82	1.67	1.59
26	BB	2448	A	C8-N7	-7.82	1.26	1.31
26	BB	2597	G	C4'-C3'	-7.82	1.44	1.53
26	BB	1683	U	C5'-C4'	7.82	1.60	1.51
1	AA	1271	A	N7-C5	-7.82	1.34	1.39
26	BB	1935	G	C3'-O3'	7.82	1.53	1.42
1	AA	566	G	P-O5'	7.82	1.67	1.59
1	AA	650	G	N7-C5	-7.82	1.34	1.39
26	BB	157	C	C2-N3	7.82	1.42	1.35
26	BB	822	G	N7-C5	-7.82	1.34	1.39
26	BB	1289	C	C5-C6	7.82	1.40	1.34
26	BB	2702	G	N3-C4	7.82	1.41	1.35
1	AA	1122	U	N1-C2	7.81	1.45	1.38
26	BB	1401	G	C5'-C4'	7.81	1.60	1.51
26	BB	2289	G	O3'-P	7.81	1.70	1.61
26	BB	2439	A	N9-C4	7.81	1.42	1.37
1	AA	1036	A	C2'-C1'	7.81	1.61	1.53
26	BB	816	C	N3-C4	7.81	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	819	A	N7-C5	-7.81	1.34	1.39
26	BB	821	A	C8-N7	-7.81	1.26	1.31
26	BB	1970	A	N9-C4	7.81	1.42	1.37
26	BB	2524	G	N1-C2	7.81	1.44	1.37
1	AA	281	G	N1-C2	7.81	1.44	1.37
1	AA	1246	A	N9-C8	-7.81	1.31	1.37
26	BB	119	A	C5'-C4'	7.81	1.60	1.51
26	BB	609	A	P-O5'	7.81	1.67	1.59
26	BB	1004	U	P-O5'	7.81	1.67	1.59
26	BB	1160	G	C6-N1	7.81	1.45	1.39
26	BB	1477	A	C8-N7	-7.81	1.26	1.31
26	BB	2597	G	C6-N1	7.81	1.45	1.39
26	BB	315	G	C2-N2	-7.81	1.26	1.34
26	BB	1744	A	N3-C4	7.81	1.39	1.34
26	BB	2062	A	N7-C5	7.81	1.44	1.39
26	BB	1669	A	N9-C4	7.80	1.42	1.37
26	BB	1988	G	C6-N1	-7.80	1.34	1.39
1	AA	1188	A	P-O5'	7.80	1.67	1.59
26	BB	1066	U	N1-C2	7.80	1.45	1.38
26	BB	1824	G	C2-N3	7.80	1.39	1.32
1	AA	1410	A	C2-N3	7.80	1.40	1.33
26	BB	2814	A	N7-C5	-7.80	1.34	1.39
1	AA	946	A	N7-C5	-7.80	1.34	1.39
26	BB	2495	G	C8-N7	-7.80	1.26	1.30
26	BB	513	A	P-O5'	7.79	1.67	1.59
26	BB	978	G	N9-C4	-7.79	1.31	1.38
26	BB	2501	C	C2-N3	7.79	1.42	1.35
1	AA	1022	A	N3-C4	7.79	1.39	1.34
26	BB	358	U	N1-C2	7.79	1.45	1.38
26	BB	575	A	N9-C4	7.79	1.42	1.37
26	BB	611	C	N3-C4	7.79	1.39	1.33
26	BB	1126	A	N9-C4	-7.79	1.33	1.37
1	AA	1350	A	C5'-C4'	7.79	1.60	1.51
26	BB	591	U	O3'-P	7.79	1.70	1.61
26	BB	797	G	N3-C4	7.79	1.41	1.35
1	AA	889	A	N9-C4	-7.79	1.33	1.37
25	BA	27	C	C4'-O4'	-7.79	1.35	1.45
26	BB	64	A	N9-C4	7.79	1.42	1.37
26	BB	2663	G	C2-N3	7.79	1.39	1.32
1	AA	174	A	C5-C4	-7.79	1.33	1.38
1	AA	493	A	C5'-C4'	7.79	1.60	1.51
26	BB	114	U	C4'-O4'	-7.79	1.35	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1404	C	C2-N3	7.79	1.42	1.35
26	BB	2676	C	N3-C4	7.79	1.39	1.33
26	BB	864	G	P-O5'	7.78	1.67	1.59
26	BB	1885	A	C2'-C1'	7.78	1.61	1.53
1	AA	373	A	N3-C4	7.78	1.39	1.34
2	AB	38	A	O3'-P	7.78	1.70	1.61
1	AA	1281	C	N3-C4	7.78	1.39	1.33
2	AB	13	C	C2-N3	7.78	1.42	1.35
4	AD	77	A	P-O5'	7.78	1.67	1.59
26	BB	499	U	C4'-C3'	7.78	1.61	1.53
1	AA	424	G	N7-C5	7.78	1.44	1.39
25	BA	86	G	C8-N7	-7.78	1.26	1.30
26	BB	707	G	N7-C5	7.78	1.44	1.39
26	BB	1808	A	C6-N1	-7.78	1.30	1.35
26	BB	1334	G	P-O5'	7.78	1.67	1.59
1	AA	1144	G	C2'-C1'	-7.78	1.44	1.53
26	BB	1588	G	C6-N1	7.78	1.45	1.39
1	AA	1436	U	C4-C5	7.77	1.50	1.43
26	BB	882	G	P-O5'	7.77	1.67	1.59
1	AA	54	C	C4'-O4'	-7.77	1.35	1.45
1	AA	988	G	O4'-C1'	7.77	1.51	1.41
26	BB	2350	C	N1-C6	7.77	1.41	1.37
1	AA	405	U	N1-C2	7.76	1.45	1.38
26	BB	331	C	N1-C6	-7.76	1.32	1.37
26	BB	1761	C	C4-N4	7.76	1.41	1.33
26	BB	2224	G	P-O5'	7.76	1.67	1.59
1	AA	929	G	P-O5'	7.76	1.67	1.59
26	BB	726	G	C8-N7	7.76	1.35	1.30
1	AA	346	G	P-O5'	7.76	1.67	1.59
26	BB	56	A	C4'-C3'	7.76	1.61	1.53
1	AA	161	A	N7-C5	7.76	1.44	1.39
1	AA	1259	C	C4-N4	7.76	1.41	1.33
26	BB	1640	A	N7-C5	7.76	1.44	1.39
26	BB	983	A	N9-C4	7.76	1.42	1.37
26	BB	2458	G	P-O5'	7.76	1.67	1.59
26	BB	2569	G	N1-C2	7.76	1.44	1.37
1	AA	483	C	N1-C6	7.75	1.41	1.37
1	AA	1036	A	N3-C4	7.75	1.39	1.34
26	BB	579	G	N9-C4	-7.75	1.31	1.38
26	BB	846	U	P-O5'	7.75	1.67	1.59
26	BB	2565	A	N7-C5	7.75	1.44	1.39
1	AA	295	C	C4'-O4'	-7.75	1.35	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	471	A	N3-C4	7.75	1.39	1.34
1	AA	141	G	N9-C4	7.75	1.44	1.38
1	AA	281	G	C2-N3	7.75	1.39	1.32
1	AA	1196	A	C6-N6	7.75	1.40	1.33
1	AA	1252	A	C6-N6	-7.75	1.27	1.33
26	BB	2643	G	C4'-C3'	7.75	1.61	1.53
1	AA	826	C	P-O5'	-7.75	1.52	1.59
1	AA	869	G	P-O5'	7.75	1.67	1.59
26	BB	733	G	N3-C4	7.75	1.40	1.35
26	BB	1593	A	C5-C4	-7.75	1.33	1.38
1	AA	414	A	C2-N3	7.75	1.40	1.33
26	BB	514	A	N3-C4	7.75	1.39	1.34
26	BB	1937	A	C5'-C4'	7.75	1.60	1.51
26	BB	2084	C	C4-N4	7.75	1.41	1.33
1	AA	794	A	N7-C5	-7.74	1.34	1.39
26	BB	2297	A	P-O5'	7.74	1.67	1.59
26	BB	2690	U	N3-C4	7.74	1.45	1.38
26	BB	42	A	C5-C4	-7.74	1.33	1.38
26	BB	1882	U	C2-N3	7.74	1.43	1.37
1	AA	381	C	C4-C5	7.74	1.49	1.43
1	AA	650	G	C8-N7	-7.74	1.26	1.30
26	BB	1753	G	C2-N3	7.74	1.39	1.32
26	BB	2093	G	C8-N7	7.74	1.35	1.30
1	AA	710	G	C6-N1	7.74	1.45	1.39
1	AA	146	G	C6-N1	7.74	1.45	1.39
1	AA	711	G	C5-C4	7.74	1.43	1.38
26	BB	619	G	P-O5'	7.74	1.67	1.59
26	BB	1353	A	N9-C8	7.74	1.44	1.37
1	AA	174	A	N7-C5	7.73	1.43	1.39
26	BB	2520	C	C2-N3	7.73	1.42	1.35
1	AA	1206	G	C2-N3	7.73	1.39	1.32
26	BB	23	G	C2-N2	-7.73	1.26	1.34
26	BB	320	A	C8-N7	-7.73	1.26	1.31
26	BB	1106	G	C5'-C4'	7.73	1.60	1.51
1	AA	1111	A	C5-C6	7.73	1.48	1.41
1	AA	74	A	N3-C4	7.72	1.39	1.34
2	AB	29	G	N7-C5	-7.72	1.34	1.39
26	BB	374	A	O3'-P	7.72	1.70	1.61
26	BB	380	G	N7-C5	-7.72	1.34	1.39
26	BB	1073	A	N9-C8	-7.72	1.31	1.37
53	B2	26	SER	CB-OG	-7.72	1.32	1.42
1	AA	1318	A	C8-N7	-7.72	1.26	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	410	G	C6-N1	7.72	1.45	1.39
26	BB	1107	G	N7-C5	7.72	1.43	1.39
26	BB	35	G	C2-N3	7.72	1.39	1.32
26	BB	259	G	N7-C5	7.72	1.43	1.39
26	BB	488	G	C5'-C4'	7.72	1.60	1.51
1	AA	860	A	P-O5'	7.72	1.67	1.59
25	BA	34	A	C3'-O3'	7.72	1.52	1.42
26	BB	306	U	O3'-P	7.72	1.70	1.61
26	BB	2108	A	N3-C4	7.72	1.39	1.34
1	AA	157	U	P-O5'	7.71	1.67	1.59
26	BB	1327	A	C4'-O4'	-7.71	1.35	1.45
26	BB	2389	G	C2-N3	7.71	1.39	1.32
1	AA	1368	A	N9-C8	-7.71	1.31	1.37
4	AD	48	U	N1-C2	7.71	1.45	1.38
26	BB	2129	C	C2'-C1'	7.71	1.61	1.53
1	AA	36	C	C4-C5	7.71	1.49	1.43
4	AD	11	A	P-O5'	7.71	1.67	1.59
1	AA	1147	C	C2-N3	7.71	1.42	1.35
26	BB	320	A	N3-C4	7.71	1.39	1.34
26	BB	1593	A	N3-C4	7.71	1.39	1.34
26	BB	1525	A	C6-N6	7.71	1.40	1.33
26	BB	2320	U	P-O5'	7.71	1.67	1.59
26	BB	1896	G	C8-N7	7.71	1.35	1.30
26	BB	2071	A	C3'-C2'	-7.71	1.44	1.52
1	AA	753	A	N1-C2	-7.70	1.27	1.34
1	AA	1536	C	C4'-O4'	-7.70	1.35	1.45
1	AA	126	G	N1-C2	7.70	1.44	1.37
26	BB	1139	G	C2-N3	7.70	1.39	1.32
1	AA	147	G	N9-C4	-7.70	1.31	1.38
1	AA	775	G	P-O5'	7.70	1.67	1.59
26	BB	1306	C	N1-C6	7.70	1.41	1.37
10	AJ	176	TYR	CD2-CE2	7.70	1.50	1.39
26	BB	1372	U	C5-C6	7.70	1.41	1.34
26	BB	463	G	N9-C8	7.69	1.43	1.37
1	AA	1002	G	C8-N7	-7.69	1.26	1.30
26	BB	2515	C	C2-O2	-7.69	1.17	1.24
1	AA	847	G	P-O5'	7.69	1.67	1.59
26	BB	2602	A	N9-C8	-7.69	1.31	1.37
26	BB	1491	G	C6-N1	7.69	1.45	1.39
26	BB	2397	G	N9-C4	7.69	1.44	1.38
26	BB	2521	C	O3'-P	7.69	1.70	1.61
26	BB	272	A	C5'-C4'	7.69	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1063	G	P-O5'	7.69	1.67	1.59
26	BB	1554	U	N1-C2	7.69	1.45	1.38
26	BB	2116	G	N3-C4	7.69	1.40	1.35
1	AA	102	G	C5-C4	7.68	1.43	1.38
26	BB	918	A	C8-N7	-7.68	1.26	1.31
26	BB	1557	C	P-O5'	7.68	1.67	1.59
26	BB	1754	A	P-O5'	7.68	1.67	1.59
1	AA	1409	C	C5'-C4'	7.68	1.60	1.51
26	BB	2157	G	N7-C5	7.68	1.43	1.39
26	BB	2304	G	P-O5'	7.68	1.67	1.59
26	BB	2602	A	N3-C4	7.68	1.39	1.34
1	AA	215	C	N1-C6	7.68	1.41	1.37
1	AA	1365	G	C4'-C3'	-7.68	1.44	1.53
26	BB	1764	C	C4-C5	7.68	1.49	1.43
26	BB	346	A	C8-N7	-7.68	1.26	1.31
26	BB	1849	G	C2'-C1'	7.68	1.61	1.53
26	BB	119	A	P-O5'	7.68	1.67	1.59
26	BB	2454	G	N1-C2	7.68	1.43	1.37
26	BB	2248	C	C2-N3	7.67	1.41	1.35
26	BB	927	A	N3-C4	-7.67	1.30	1.34
26	BB	1236	G	N3-C4	7.67	1.40	1.35
26	BB	1803	A	C8-N7	-7.67	1.26	1.31
26	BB	369	U	N1-C2	7.67	1.45	1.38
26	BB	621	A	N3-C4	7.67	1.39	1.34
26	BB	940	G	C2'-C1'	-7.67	1.45	1.53
26	BB	1829	A	P-O5'	7.67	1.67	1.59
1	AA	114	U	C4-O4	-7.67	1.17	1.23
1	AA	165	G	N1-C2	7.67	1.43	1.37
1	AA	792	A	N9-C8	-7.67	1.31	1.37
26	BB	198	C	C4'-O4'	-7.67	1.35	1.45
26	BB	352	A	N3-C4	7.67	1.39	1.34
26	BB	1119	U	C2-O2	7.67	1.29	1.22
26	BB	1598	A	N3-C4	7.67	1.39	1.34
26	BB	2684	U	N1-C6	7.67	1.44	1.38
1	AA	76	G	C2'-C1'	7.67	1.61	1.53
26	BB	619	G	C8-N7	-7.67	1.26	1.30
26	BB	2017	U	N3-C4	7.67	1.45	1.38
1	AA	218	U	C2-N3	7.67	1.43	1.37
1	AA	640	A	O3'-P	7.67	1.70	1.61
1	AA	1404	C	C4'-C3'	7.66	1.61	1.53
26	BB	1	G	O3'-P	7.66	1.70	1.61
1	AA	959	A	N3-C4	7.66	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	217	A	N9-C8	-7.66	1.31	1.37
26	BB	2437	G	N1-C2	7.66	1.43	1.37
1	AA	939	G	N3-C4	7.66	1.40	1.35
26	BB	174	U	P-O5'	7.66	1.67	1.59
26	BB	673	C	C4'-C3'	-7.66	1.44	1.53
26	BB	2098	U	P-O5'	7.66	1.67	1.59
1	AA	1148	U	C2-N3	7.66	1.43	1.37
3	AC	48	C	N1-C6	7.66	1.41	1.37
2	AB	22	G	N7-C5	7.65	1.43	1.39
26	BB	1156	A	C6-N6	-7.65	1.27	1.33
26	BB	2568	U	C4-C5	7.65	1.50	1.43
26	BB	296	U	C2-N3	7.65	1.43	1.37
26	BB	1021	A	N7-C5	-7.65	1.34	1.39
26	BB	1210	G	N9-C8	-7.65	1.32	1.37
26	BB	1646	C	C4-C5	7.65	1.49	1.43
1	AA	1279	G	P-O5'	7.65	1.67	1.59
26	BB	2578	G	C2-N3	7.65	1.38	1.32
26	BB	2669	G	C5-C6	7.65	1.50	1.42
26	BB	2903	U	C2-N3	7.65	1.43	1.37
1	AA	433	G	C5'-C4'	7.65	1.60	1.51
3	AC	52	U	N3-C4	7.65	1.45	1.38
26	BB	383	C	C4-N4	7.65	1.40	1.33
26	BB	1907	G	N7-C5	7.65	1.43	1.39
26	BB	1969	A	N9-C4	7.65	1.42	1.37
26	BB	2745	C	C3'-C2'	-7.65	1.44	1.52
1	AA	1082	A	N3-C4	7.65	1.39	1.34
26	BB	1021	A	N9-C8	-7.65	1.31	1.37
1	AA	130	A	N3-C4	7.64	1.39	1.34
26	BB	46	G	N3-C4	7.64	1.40	1.35
26	BB	175	G	C6-N1	7.64	1.45	1.39
26	BB	1336	A	C4'-O4'	-7.64	1.35	1.45
26	BB	2054	A	C5-C4	-7.64	1.33	1.38
1	AA	131	A	C2-N3	7.64	1.40	1.33
1	AA	1025	U	C4'-C3'	7.64	1.61	1.53
26	BB	2540	C	C4-C5	7.64	1.49	1.43
26	BB	938	G	C5-C4	-7.64	1.33	1.38
26	BB	1703	G	N9-C8	7.64	1.43	1.37
1	AA	532	A	P-O5'	7.64	1.67	1.59
1	AA	837	U	C4'-C3'	7.64	1.61	1.53
3	AC	57	C	C2-N3	7.64	1.41	1.35
26	BB	1090	A	P-O5'	7.64	1.67	1.59
26	BB	2002	G	P-O5'	7.64	1.67	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	949	A	N9-C8	7.64	1.43	1.37
1	AA	1288	A	C2'-C1'	-7.64	1.45	1.53
25	BA	69	G	C6-N1	7.64	1.44	1.39
26	BB	2336	A	N3-C4	7.64	1.39	1.34
26	BB	60	G	C5-C4	7.63	1.43	1.38
26	BB	239	C	P-O5'	7.63	1.67	1.59
26	BB	1128	G	C2-N3	7.63	1.38	1.32
26	BB	2845	U	C5'-C4'	7.63	1.60	1.51
26	BB	1043	C	O3'-P	7.63	1.70	1.61
26	BB	1163	G	O3'-P	7.63	1.70	1.61
26	BB	2823	A	C5'-C4'	7.63	1.60	1.51
1	AA	208	U	C5'-C4'	7.63	1.60	1.51
26	BB	469	G	N9-C8	-7.63	1.32	1.37
26	BB	710	U	C5-C6	7.63	1.41	1.34
26	BB	1125	G	C6-N1	7.63	1.44	1.39
26	BB	2655	G	N1-C2	7.63	1.43	1.37
26	BB	20	C	N1-C6	7.63	1.41	1.37
26	BB	2361	G	N3-C4	7.63	1.40	1.35
25	BA	62	C	P-O5'	7.63	1.67	1.59
1	AA	706	A	N7-C5	-7.63	1.34	1.39
1	AA	1192	C	C5-C6	7.63	1.40	1.34
1	AA	1283	U	N3-C4	7.63	1.45	1.38
25	BA	87	U	P-O5'	7.63	1.67	1.59
26	BB	311	A	N3-C4	-7.62	1.30	1.34
1	AA	5	U	C5'-C4'	7.62	1.60	1.51
25	BA	52	A	N7-C5	-7.62	1.34	1.39
26	BB	2475	C	C5-C6	7.62	1.40	1.34
1	AA	113	G	N7-C5	7.62	1.43	1.39
1	AA	375	U	C3'-O3'	-7.62	1.31	1.42
1	AA	736	C	O4'-C1'	7.62	1.51	1.41
26	BB	1295	C	N1-C6	7.62	1.41	1.37
26	BB	1445	G	N7-C5	-7.62	1.34	1.39
2	AB	50	G	C6-O6	-7.62	1.17	1.24
26	BB	14	A	N7-C5	7.62	1.43	1.39
26	BB	1628	G	C6-N1	-7.62	1.34	1.39
26	BB	620	G	P-O5'	7.61	1.67	1.59
1	AA	525	C	P-O5'	7.61	1.67	1.59
26	BB	1131	G	C8-N7	-7.61	1.26	1.30
26	BB	1404	C	C4-N4	7.61	1.40	1.33
1	AA	140	U	C2-N3	7.61	1.43	1.37
26	BB	2674	G	C6-N1	7.61	1.44	1.39
26	BB	104	A	C6-N6	7.61	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	497	A	N3-C4	7.61	1.39	1.34
26	BB	1186	G	N7-C5	7.61	1.43	1.39
25	BA	10	G	C5'-C4'	7.61	1.60	1.51
26	BB	312	G	C5-C6	7.61	1.50	1.42
26	BB	1296	G	N9-C4	-7.61	1.31	1.38
1	AA	1365	G	N1-C2	-7.61	1.31	1.37
26	BB	415	A	N3-C4	7.61	1.39	1.34
26	BB	807	U	C4'-O4'	-7.61	1.35	1.45
26	BB	855	G	C4'-O4'	-7.61	1.35	1.45
26	BB	993	G	C6-N1	7.61	1.44	1.39
26	BB	2354	C	N3-C4	7.61	1.39	1.33
26	BB	2776	A	N9-C4	-7.61	1.33	1.37
1	AA	702	A	N1-C2	-7.60	1.27	1.34
26	BB	719	C	N3-C4	7.60	1.39	1.33
1	AA	239	U	N1-C2	7.60	1.45	1.38
1	AA	1268	G	C4'-C3'	7.60	1.61	1.53
1	AA	1504	G	C5-C4	-7.60	1.33	1.38
1	AA	1160	G	C5-C4	7.60	1.43	1.38
26	BB	1757	A	N3-C4	7.60	1.39	1.34
1	AA	829	G	C5'-C4'	7.60	1.60	1.51
1	AA	925	G	C5'-C4'	7.60	1.60	1.51
1	AA	1004	A	N3-C4	7.60	1.39	1.34
26	BB	1356	G	C2-N3	7.60	1.38	1.32
26	BB	2339	C	C2'-C1'	7.60	1.61	1.53
3	AC	53	G	C4'-O4'	-7.60	1.35	1.45
26	BB	457	A	C5-C4	-7.60	1.33	1.38
26	BB	1160	G	C5-C4	-7.60	1.33	1.38
1	AA	1066	C	N3-C4	7.59	1.39	1.33
26	BB	1877	A	N3-C4	7.59	1.39	1.34
26	BB	1658	C	C4'-O4'	-7.59	1.35	1.45
1	AA	678	U	C2-N3	7.59	1.43	1.37
26	BB	239	C	N1-C6	-7.59	1.32	1.37
26	BB	266	G	C4'-O4'	-7.59	1.35	1.45
26	BB	1062	G	C5-C4	-7.59	1.33	1.38
26	BB	2098	U	C5-C6	7.59	1.41	1.34
26	BB	2716	C	C4-N4	-7.59	1.27	1.33
26	BB	359	G	C5-C4	-7.59	1.33	1.38
26	BB	2076	U	C5'-C4'	7.59	1.60	1.51
1	AA	451	A	N3-C4	7.59	1.39	1.34
25	BA	120	U	C2-N3	7.59	1.43	1.37
26	BB	1	G	N3-C4	7.59	1.40	1.35
26	BB	715	A	C5-C4	-7.59	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1101	U	C2-N3	7.59	1.43	1.37
26	BB	2486	C	N1-C6	7.59	1.41	1.37
1	AA	605	U	C4-O4	7.58	1.29	1.23
26	BB	1401	G	C2-N3	7.58	1.38	1.32
26	BB	2726	A	C5-C4	-7.58	1.33	1.38
1	AA	531	U	O3'-P	-7.58	1.52	1.61
1	AA	1290	G	N9-C8	7.58	1.43	1.37
26	BB	1819	A	N7-C5	7.58	1.43	1.39
26	BB	2487	G	C8-N7	7.58	1.35	1.30
26	BB	2749	A	N3-C4	7.58	1.39	1.34
26	BB	2828	G	C6-N1	7.58	1.44	1.39
1	AA	113	G	N9-C4	7.58	1.44	1.38
1	AA	728	A	C5'-C4'	7.58	1.60	1.51
26	BB	794	A	C5'-C4'	7.58	1.60	1.51
26	BB	924	G	N1-C2	7.58	1.43	1.37
1	AA	93	U	N1-C2	7.58	1.45	1.38
1	AA	247	G	C6-O6	-7.58	1.17	1.24
26	BB	2883	A	C8-N7	-7.58	1.26	1.31
1	AA	44	A	N3-C4	7.58	1.39	1.34
26	BB	835	C	P-O5'	7.58	1.67	1.59
1	AA	304	U	O3'-P	7.58	1.70	1.61
1	AA	1360	A	N3-C4	7.58	1.39	1.34
25	BA	35	C	C2'-C1'	7.58	1.61	1.53
26	BB	516	C	N3-C4	7.58	1.39	1.33
26	BB	1856	U	C4'-O4'	-7.58	1.35	1.45
1	AA	1306	A	C6-N1	7.57	1.40	1.35
26	BB	548	G	C5'-C4'	7.57	1.60	1.51
26	BB	1680	U	C4'-O4'	-7.57	1.35	1.45
26	BB	1997	C	C2-N3	7.57	1.41	1.35
26	BB	2888	C	C5'-C4'	7.57	1.60	1.51
26	BB	690	G	P-O5'	7.57	1.67	1.59
26	BB	1353	A	C5-C4	7.57	1.44	1.38
1	AA	297	G	N9-C4	7.57	1.44	1.38
1	AA	774	G	N3-C4	7.57	1.40	1.35
1	AA	1044	A	N7-C5	7.57	1.43	1.39
26	BB	138	U	C2-N3	7.57	1.43	1.37
26	BB	335	C	N3-C4	-7.57	1.28	1.33
26	BB	2489	U	P-O5'	7.57	1.67	1.59
1	AA	559	A	N9-C4	7.57	1.42	1.37
26	BB	56	A	P-O5'	7.57	1.67	1.59
26	BB	381	G	P-O5'	7.57	1.67	1.59
26	BB	591	U	P-O5'	7.56	1.67	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	562	U	N3-C4	7.56	1.45	1.38
1	AA	1331	G	C8-N7	7.56	1.35	1.30
1	AA	271	C	C5'-C4'	7.56	1.60	1.51
1	AA	722	G	P-O5'	7.56	1.67	1.59
26	BB	346	A	P-O5'	7.56	1.67	1.59
26	BB	442	G	C6-N1	7.56	1.44	1.39
26	BB	941	A	C4'-O4'	-7.56	1.35	1.45
26	BB	2870	C	N3-C4	7.56	1.39	1.33
1	AA	1403	C	C4'-O4'	-7.56	1.35	1.45
26	BB	724	U	N1-C2	7.56	1.45	1.38
26	BB	1297	C	C2-N3	7.56	1.41	1.35
26	BB	178	G	N1-C2	7.55	1.43	1.37
26	BB	990	A	C8-N7	-7.55	1.26	1.31
26	BB	1836	C	N1-C2	7.55	1.47	1.40
26	BB	1990	C	N1-C6	-7.55	1.32	1.37
1	AA	122	G	N9-C8	-7.55	1.32	1.37
1	AA	149	A	N7-C5	7.55	1.43	1.39
26	BB	1086	A	N3-C4	7.55	1.39	1.34
26	BB	2686	G	P-O5'	7.55	1.67	1.59
26	BB	947	A	N9-C4	-7.55	1.33	1.37
26	BB	2436	G	C4'-C3'	-7.55	1.44	1.53
26	BB	2803	G	C6-N1	7.55	1.44	1.39
1	AA	870	U	C3'-C2'	7.55	1.61	1.52
26	BB	1743	G	C6-N1	7.55	1.44	1.39
26	BB	1861	G	C5-C4	7.55	1.43	1.38
26	BB	2218	G	P-O5'	7.55	1.67	1.59
26	BB	1002	G	P-O5'	7.54	1.67	1.59
1	AA	297	G	C6-N1	7.54	1.44	1.39
1	AA	1491	G	C5'-C4'	7.54	1.60	1.51
3	AC	26	U	P-O5'	7.54	1.67	1.59
4	AD	54	G	N9-C8	7.54	1.43	1.37
26	BB	473	G	P-O5'	7.54	1.67	1.59
26	BB	1355	G	C3'-C2'	7.54	1.61	1.52
26	BB	1587	G	C2-N3	7.54	1.38	1.32
26	BB	1614	A	C6-N1	7.54	1.40	1.35
26	BB	1929	G	C3'-O3'	7.54	1.52	1.42
1	AA	405	U	P-O5'	7.54	1.67	1.59
1	AA	559	A	O3'-P	7.54	1.70	1.61
1	AA	1030	U	C2-N3	7.54	1.43	1.37
4	AD	62	C	C5-C6	7.54	1.40	1.34
26	BB	1021	A	N3-C4	7.54	1.39	1.34
26	BB	1192	G	N1-C2	7.54	1.43	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1242	U	C4-C5	7.54	1.50	1.43
1	AA	232	G	C5'-C4'	7.54	1.60	1.51
26	BB	2487	G	N3-C4	7.54	1.40	1.35
25	BA	106	G	C6-N1	7.54	1.44	1.39
26	BB	134	G	C2-N3	7.54	1.38	1.32
26	BB	506	G	P-O5'	7.54	1.67	1.59
26	BB	2114	A	P-O5'	7.54	1.67	1.59
26	BB	1794	A	N9-C4	7.54	1.42	1.37
26	BB	1968	G	C6-N1	-7.54	1.34	1.39
1	AA	134	G	C2-N3	7.54	1.38	1.32
25	BA	16	G	N7-C5	-7.54	1.34	1.39
26	BB	788	A	N9-C4	-7.54	1.33	1.37
26	BB	908	C	C4'-O4'	-7.54	1.35	1.45
26	BB	1412	U	C4-C5	7.54	1.50	1.43
26	BB	1509	A	C4'-C3'	7.54	1.61	1.53
26	BB	2594	C	P-O5'	7.54	1.67	1.59
1	AA	467	U	C4-C5	7.53	1.50	1.43
1	AA	1251	A	C2'-C1'	-7.53	1.45	1.53
1	AA	1511	G	N7-C5	-7.53	1.34	1.39
26	BB	2496	C	C4-C5	-7.53	1.36	1.43
1	AA	545	C	C2-N3	7.53	1.41	1.35
26	BB	1372	U	P-O5'	7.53	1.67	1.59
26	BB	1446	C	N1-C6	7.53	1.41	1.37
26	BB	2598	A	N1-C2	-7.53	1.27	1.34
26	BB	1855	U	C5-C6	7.53	1.41	1.34
26	BB	2031	A	N7-C5	7.53	1.43	1.39
26	BB	933	A	O3'-P	7.53	1.70	1.61
1	AA	542	G	N9-C8	-7.53	1.32	1.37
1	AA	750	C	N1-C6	7.53	1.41	1.37
26	BB	2670	A	N3-C4	7.53	1.39	1.34
26	BB	2704	C	C4-C5	7.53	1.49	1.43
1	AA	261	U	C2-N3	7.52	1.43	1.37
26	BB	292	U	P-O5'	7.52	1.67	1.59
1	AA	745	G	C2'-C1'	7.52	1.61	1.53
26	BB	53	A	C3'-C2'	7.52	1.61	1.52
26	BB	1472	C	C2-N3	7.52	1.41	1.35
4	AD	7	G	N7-C5	-7.52	1.34	1.39
4	AD	19	G	N9-C4	7.52	1.44	1.38
25	BA	97	C	P-O5'	7.52	1.67	1.59
26	BB	1271	G	C5-C6	7.52	1.49	1.42
1	AA	988	G	C2-N3	7.52	1.38	1.32
1	AA	995	C	C2-N3	7.52	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	39	A	N3-C4	7.52	1.39	1.34
26	BB	2523	G	N9-C8	-7.52	1.32	1.37
26	BB	110	G	N9-C8	7.52	1.43	1.37
26	BB	1927	A	C5-C6	7.52	1.47	1.41
26	BB	2527	C	C5-C6	7.52	1.40	1.34
26	BB	829	A	N3-C4	7.52	1.39	1.34
26	BB	1735	A	N7-C5	-7.52	1.34	1.39
26	BB	2721	A	C5'-C4'	7.52	1.60	1.51
1	AA	149	A	N3-C4	7.51	1.39	1.34
1	AA	575	G	C2-N2	-7.51	1.27	1.34
1	AA	1281	C	C5'-C4'	7.51	1.60	1.51
1	AA	1379	G	P-O5'	7.51	1.67	1.59
26	BB	814	C	N1-C6	7.51	1.41	1.37
26	BB	1138	G	C8-N7	-7.51	1.26	1.30
26	BB	80	G	N3-C4	-7.51	1.30	1.35
26	BB	1229	C	N1-C2	7.51	1.47	1.40
1	AA	1203	C	C4-C5	7.51	1.49	1.43
26	BB	2283	C	C5-C6	7.51	1.40	1.34
26	BB	2839	G	N3-C4	7.51	1.40	1.35
26	BB	502	A	C5-C4	7.51	1.44	1.38
26	BB	1548	A	O3'-P	7.51	1.70	1.61
26	BB	2139	U	C2-O2	7.51	1.29	1.22
1	AA	459	A	P-O5'	7.51	1.67	1.59
1	AA	175	C	C5-C6	7.51	1.40	1.34
1	AA	1122	U	C2-N3	7.51	1.43	1.37
3	AC	32	U	O3'-P	7.51	1.70	1.61
4	AD	13	C	C2-N3	7.51	1.41	1.35
26	BB	1594	U	C5'-C4'	7.51	1.60	1.51
26	BB	631	A	N7-C5	7.50	1.43	1.39
1	AA	1026	G	O4'-C1'	7.50	1.51	1.41
1	AA	1330	U	N1-C6	7.50	1.44	1.38
26	BB	250	G	C5-C4	7.50	1.43	1.38
26	BB	405	U	O4'-C1'	7.50	1.51	1.41
26	BB	2195	U	C2'-C1'	7.50	1.61	1.53
1	AA	1334	G	N9-C8	7.50	1.43	1.37
26	BB	450	G	P-O5'	7.50	1.67	1.59
26	BB	266	G	C2-N3	7.50	1.38	1.32
26	BB	1596	A	N7-C5	7.50	1.43	1.39
1	AA	542	G	C8-N7	-7.50	1.26	1.30
26	BB	2632	A	N3-C4	7.50	1.39	1.34
26	BB	256	A	C4'-O4'	-7.50	1.35	1.45
26	BB	1520	U	C4-C5	7.50	1.50	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2757	A	C8-N7	-7.50	1.26	1.31
1	AA	176	C	P-O5'	7.50	1.67	1.59
26	BB	1503	A	C6-N1	7.50	1.40	1.35
26	BB	1620	G	N9-C4	7.50	1.44	1.38
26	BB	2430	A	N3-C4	7.50	1.39	1.34
1	AA	933	G	N3-C4	7.49	1.40	1.35
1	AA	1338	G	N3-C4	7.49	1.40	1.35
25	BA	106	G	N9-C8	-7.49	1.32	1.37
26	BB	866	A	N3-C4	7.49	1.39	1.34
26	BB	1958	C	N3-C4	-7.49	1.28	1.33
26	BB	2238	G	N1-C2	7.49	1.43	1.37
26	BB	2774	C	C3'-C2'	7.49	1.61	1.52
26	BB	2415	G	C2-N3	7.49	1.38	1.32
1	AA	1353	G	N9-C8	-7.49	1.32	1.37
1	AA	1534	A	C5'-C4'	7.49	1.60	1.51
26	BB	23	G	N1-C2	7.49	1.43	1.37
26	BB	277	G	N9-C4	7.49	1.44	1.38
26	BB	391	A	N3-C4	7.49	1.39	1.34
1	AA	579	A	C4'-O4'	-7.49	1.35	1.45
1	AA	815	A	N3-C4	7.49	1.39	1.34
26	BB	189	G	N9-C8	7.49	1.43	1.37
26	BB	834	G	N7-C5	7.49	1.43	1.39
26	BB	1357	C	N1-C6	-7.49	1.32	1.37
26	BB	2501	C	N3-C4	7.49	1.39	1.33
1	AA	257	G	C5-C6	7.49	1.49	1.42
26	BB	1205	A	P-O5'	7.49	1.67	1.59
1	AA	1089	G	N3-C4	7.49	1.40	1.35
26	BB	2198	A	C8-N7	-7.49	1.26	1.31
1	AA	946	A	N3-C4	7.48	1.39	1.34
26	BB	1238	G	C5'-C4'	7.48	1.60	1.51
1	AA	401	C	O3'-P	7.48	1.70	1.61
1	AA	599	C	C4'-C3'	7.48	1.61	1.53
1	AA	956	U	C4-O4	7.48	1.29	1.23
26	BB	1101	U	N1-C2	7.48	1.45	1.38
26	BB	1611	C	N1-C6	7.48	1.41	1.37
1	AA	1304	G	N7-C5	7.48	1.43	1.39
1	AA	1439	G	P-O5'	7.48	1.67	1.59
1	AA	1493	A	N7-C5	7.48	1.43	1.39
26	BB	2301	C	C5'-C4'	7.48	1.60	1.51
1	AA	408	A	N9-C4	7.48	1.42	1.37
4	AD	9	G	C5'-C4'	7.48	1.60	1.51
26	BB	333	G	O3'-P	7.48	1.70	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2534	A	C5-C4	-7.48	1.33	1.38
26	BB	585	G	N1-C2	7.48	1.43	1.37
26	BB	2866	U	O3'-P	-7.48	1.52	1.61
1	AA	1431	A	C3'-C2'	7.48	1.61	1.52
1	AA	741	G	N1-C2	-7.47	1.31	1.37
1	AA	1441	A	N3-C4	7.47	1.39	1.34
26	BB	204	A	N7-C5	-7.47	1.34	1.39
26	BB	756	A	O3'-P	7.47	1.70	1.61
26	BB	865	C	N1-C6	7.47	1.41	1.37
26	BB	1707	G	C2-N3	7.47	1.38	1.32
30	BF	49	ARG	CZ-NH2	7.47	1.42	1.33
1	AA	124	C	C5-C6	7.47	1.40	1.34
1	AA	1077	G	N9-C8	7.47	1.43	1.37
1	AA	1505	G	C2'-O2'	-7.47	1.31	1.41
3	AC	25	U	N1-C2	7.47	1.45	1.38
26	BB	233	A	N9-C4	-7.47	1.33	1.37
26	BB	801	G	C2-N3	7.47	1.38	1.32
26	BB	868	U	C2-N3	7.47	1.43	1.37
26	BB	1878	G	N9-C4	7.47	1.44	1.38
26	BB	1355	G	N3-C4	7.47	1.40	1.35
1	AA	486	U	P-O5'	7.47	1.67	1.59
1	AA	657	U	C4'-O4'	-7.47	1.35	1.45
1	AA	1301	U	N1-C2	7.47	1.45	1.38
26	BB	225	C	C5-C6	7.47	1.40	1.34
26	BB	278	A	C3'-C2'	-7.47	1.44	1.52
26	BB	376	G	P-O5'	7.47	1.67	1.59
1	AA	1166	G	N1-C2	7.46	1.43	1.37
1	AA	1212	U	C5-C6	7.46	1.40	1.34
26	BB	26	G	P-O5'	7.46	1.67	1.59
26	BB	1237	A	C5'-C4'	7.46	1.60	1.51
26	BB	1403	A	C4'-O4'	-7.46	1.35	1.45
26	BB	1551	A	C4'-O4'	-7.46	1.35	1.45
26	BB	2638	G	N7-C5	7.46	1.43	1.39
1	AA	657	U	C2-N3	7.46	1.43	1.37
26	BB	61	C	P-O5'	7.46	1.67	1.59
26	BB	2091	C	C4-C5	7.46	1.49	1.43
26	BB	2100	G	C6-O6	-7.46	1.17	1.24
1	AA	1362	A	C5-C4	7.46	1.44	1.38
26	BB	2512	C	C4-C5	7.46	1.49	1.43
1	AA	469	C	C4'-C3'	-7.46	1.45	1.53
1	AA	1340	A	P-O5'	7.46	1.67	1.59
25	BA	15	A	C5'-C4'	7.46	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	369	U	C4-C5	7.46	1.50	1.43
26	BB	552	U	C2-O2	7.46	1.29	1.22
26	BB	1935	G	N9-C8	7.46	1.43	1.37
26	BB	2721	A	N3-C4	7.46	1.39	1.34
1	AA	8	A	C6-N1	7.46	1.40	1.35
26	BB	744	U	C2'-C1'	7.45	1.61	1.53
26	BB	821	A	N3-C4	7.45	1.39	1.34
26	BB	829	A	N9-C4	-7.45	1.33	1.37
26	BB	1371	G	N7-C5	7.45	1.43	1.39
26	BB	2376	A	C8-N7	-7.45	1.26	1.31
26	BB	2388	A	C8-N7	-7.45	1.26	1.31
26	BB	2719	G	C2-N3	7.45	1.38	1.32
1	AA	1526	G	C2'-C1'	7.45	1.61	1.53
26	BB	873	C	C3'-C2'	7.45	1.61	1.52
26	BB	1114	C	N1-C6	7.45	1.41	1.37
26	BB	1268	A	C5'-C4'	7.45	1.60	1.51
26	BB	2182	U	C4-O4	-7.45	1.17	1.23
26	BB	2271	G	N9-C8	-7.45	1.32	1.37
26	BB	2849	U	C4-C5	7.45	1.50	1.43
1	AA	572	A	C5-C4	-7.45	1.33	1.38
1	AA	1280	A	O3'-P	7.45	1.70	1.61
3	AC	56	G	N9-C8	7.45	1.43	1.37
26	BB	1148	U	P-O5'	7.45	1.67	1.59
26	BB	2238	G	C6-N1	7.45	1.44	1.39
1	AA	826	C	C5'-C4'	7.45	1.60	1.51
25	BA	73	A	N7-C5	-7.45	1.34	1.39
26	BB	971	G	N3-C4	7.45	1.40	1.35
26	BB	1867	G	C5'-C4'	7.45	1.60	1.51
1	AA	1231	G	C2-N3	-7.44	1.26	1.32
26	BB	874	G	N7-C5	-7.44	1.34	1.39
26	BB	879	G	P-O5'	7.44	1.67	1.59
1	AA	642	A	C8-N7	7.44	1.36	1.31
1	AA	1328	C	C4'-O4'	-7.44	1.35	1.45
3	AC	13	A	C5-C4	-7.44	1.33	1.38
26	BB	1408	G	C6-N1	7.44	1.44	1.39
26	BB	447	A	C6-N1	-7.44	1.30	1.35
26	BB	2362	C	N3-C4	7.44	1.39	1.33
26	BB	187	G	C4'-O4'	-7.44	1.35	1.45
26	BB	1361	G	N9-C8	7.44	1.43	1.37
26	BB	2351	G	O3'-P	7.44	1.70	1.61
26	BB	2619	C	N3-C4	7.44	1.39	1.33
1	AA	577	G	O3'-P	-7.44	1.52	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1347	A	N3-C4	7.44	1.39	1.34
26	BB	1596	A	N9-C4	7.44	1.42	1.37
26	BB	2234	G	C2-N3	7.44	1.38	1.32
1	AA	1444	U	C4-C5	7.44	1.50	1.43
26	BB	2414	G	N7-C5	-7.44	1.34	1.39
26	BB	2493	U	C4-C5	7.44	1.50	1.43
26	BB	2740	A	N3-C4	7.44	1.39	1.34
4	AD	16	C	C4-C5	7.43	1.48	1.43
26	BB	2247	A	P-O5'	7.43	1.67	1.59
1	AA	249	U	C3'-C2'	7.43	1.61	1.52
26	BB	177	G	N3-C4	7.43	1.40	1.35
1	AA	1538	C	N1-C6	7.43	1.41	1.37
26	BB	2550	G	P-O5'	7.43	1.67	1.59
1	AA	376	G	P-O5'	7.43	1.67	1.59
26	BB	195	A	C8-N7	-7.43	1.26	1.31
26	BB	960	A	O3'-P	-7.43	1.52	1.61
26	BB	1232	G	N7-C5	-7.43	1.34	1.39
26	BB	1408	G	O3'-P	7.43	1.70	1.61
26	BB	2476	A	C8-N7	-7.43	1.26	1.31
26	BB	2342	C	O3'-P	7.43	1.70	1.61
1	AA	729	A	C5'-C4'	7.43	1.60	1.51
26	BB	543	G	N3-C4	7.43	1.40	1.35
26	BB	1733	G	P-O5'	7.43	1.67	1.59
26	BB	425	G	N3-C4	7.42	1.40	1.35
26	BB	911	A	N7-C5	-7.42	1.34	1.39
26	BB	2031	A	C6-N6	-7.42	1.28	1.33
1	AA	622	A	C4'-O4'	-7.42	1.35	1.45
1	AA	1216	A	C8-N7	7.42	1.36	1.31
26	BB	83	A	C5-C6	7.42	1.47	1.41
26	BB	831	G	N3-C4	7.42	1.40	1.35
26	BB	1480	C	C5'-C4'	7.42	1.60	1.51
1	AA	796	C	C2'-C1'	7.42	1.61	1.53
26	BB	1452	G	N3-C4	7.42	1.40	1.35
26	BB	2068	U	N3-C4	7.42	1.45	1.38
1	AA	155	A	C5-C6	7.42	1.47	1.41
26	BB	1138	G	N7-C5	7.42	1.43	1.39
26	BB	2762	C	P-O5'	7.42	1.67	1.59
4	AD	1	C	N1-C6	7.42	1.41	1.37
25	BA	71	C	N3-C4	7.42	1.39	1.33
26	BB	1196	C	N3-C4	7.42	1.39	1.33
26	BB	1982	U	C3'-C2'	7.42	1.61	1.52
26	BB	2096	C	N1-C6	7.42	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1386	G	C5-C6	7.41	1.49	1.42
26	BB	540	C	N3-C4	7.41	1.39	1.33
26	BB	629	G	C2-N3	7.41	1.38	1.32
26	BB	2680	U	P-O5'	7.41	1.67	1.59
26	BB	2717	C	C4-C5	7.41	1.48	1.43
1	AA	1007	U	C5'-C4'	7.41	1.60	1.51
26	BB	123	G	C4'-O4'	-7.41	1.35	1.45
26	BB	347	A	C2'-C1'	7.41	1.61	1.53
26	BB	982	C	C4'-O4'	-7.41	1.35	1.45
26	BB	2191	A	N3-C4	7.41	1.39	1.34
26	BB	2695	U	P-O5'	-7.41	1.52	1.59
26	BB	2722	G	N7-C5	7.41	1.43	1.39
1	AA	1052	U	N3-C4	7.41	1.45	1.38
1	AA	1463	U	C3'-C2'	7.41	1.61	1.52
1	AA	654	G	C2-N3	7.40	1.38	1.32
26	BB	380	G	C5'-C4'	7.40	1.60	1.51
26	BB	1023	U	C4-C5	7.40	1.50	1.43
1	AA	186	C	C4'-O4'	-7.40	1.35	1.45
1	AA	983	A	C4'-C3'	7.40	1.61	1.53
26	BB	254	G	C6-N1	7.40	1.44	1.39
1	AA	256	U	C5'-C4'	7.40	1.60	1.51
26	BB	2618	G	C2-N3	7.40	1.38	1.32
26	BB	931	U	C5'-C4'	7.40	1.60	1.51
26	BB	1674	G	N7-C5	-7.40	1.34	1.39
26	BB	2039	U	C2-N3	7.40	1.43	1.37
1	AA	1461	G	N3-C4	7.39	1.40	1.35
26	BB	1396	U	C5-C6	7.39	1.40	1.34
26	BB	1717	A	C5-C4	7.39	1.44	1.38
26	BB	2278	A	C8-N7	7.39	1.36	1.31
1	AA	704	A	C6-N6	-7.39	1.28	1.33
26	BB	1028	A	C5-C6	7.39	1.47	1.41
26	BB	1426	G	P-O5'	7.39	1.67	1.59
1	AA	1371	G	C2'-C1'	-7.39	1.45	1.53
26	BB	325	G	N1-C2	7.39	1.43	1.37
26	BB	2861	U	C4-O4	-7.39	1.17	1.23
1	AA	381	C	N1-C6	7.39	1.41	1.37
26	BB	2077	A	N7-C5	7.39	1.43	1.39
1	AA	521	G	C5-C4	7.39	1.43	1.38
2	AB	50	G	N9-C4	-7.39	1.32	1.38
26	BB	1502	A	O3'-P	7.39	1.70	1.61
26	BB	1869	G	P-O5'	7.39	1.67	1.59
26	BB	570	G	C5-C4	-7.38	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2648	G	N9-C8	7.38	1.43	1.37
2	AB	56	C	C5-C6	7.38	1.40	1.34
26	BB	2140	G	C4'-C3'	-7.38	1.45	1.53
1	AA	19	A	N9-C4	7.38	1.42	1.37
26	BB	1359	A	P-O5'	7.38	1.67	1.59
2	AB	71	C	N1-C2	7.38	1.47	1.40
1	AA	1246	A	N3-C4	-7.38	1.30	1.34
4	AD	14	A	N7-C5	7.38	1.43	1.39
26	BB	1869	G	C2-N2	-7.38	1.27	1.34
26	BB	881	G	N7-C5	7.38	1.43	1.39
1	AA	112	G	C8-N7	-7.38	1.26	1.30
26	BB	158	U	C3'-C2'	7.38	1.61	1.52
26	BB	793	A	C5'-C4'	7.38	1.60	1.51
1	AA	431	A	P-O5'	7.37	1.67	1.59
1	AA	832	G	N1-C2	7.37	1.43	1.37
26	BB	2177	C	C5'-C4'	7.37	1.60	1.51
26	BB	2820	A	C4'-C3'	7.37	1.61	1.53
26	BB	2185	U	P-O5'	7.37	1.67	1.59
26	BB	328	U	C3'-C2'	7.37	1.61	1.52
26	BB	752	A	C5-C6	7.37	1.47	1.41
1	AA	1535	C	C5'-C4'	7.37	1.60	1.51
26	BB	256	A	C2'-C1'	-7.37	1.45	1.53
26	BB	2173	A	O4'-C1'	7.37	1.51	1.41
1	AA	220	G	N9-C8	-7.37	1.32	1.37
1	AA	580	C	N1-C6	7.37	1.41	1.37
26	BB	1570	A	N3-C4	7.37	1.39	1.34
1	AA	134	G	N7-C5	7.37	1.43	1.39
26	BB	719	C	C2'-C1'	-7.37	1.45	1.53
3	AC	30	U	C5'-C4'	7.36	1.60	1.51
26	BB	334	C	C5-C6	7.36	1.40	1.34
26	BB	1526	C	N1-C6	7.36	1.41	1.37
26	BB	2114	A	N3-C4	7.36	1.39	1.34
1	AA	1475	G	C2-N3	7.36	1.38	1.32
26	BB	69	C	C2-O2	-7.36	1.17	1.24
26	BB	1514	G	O3'-P	7.36	1.70	1.61
26	BB	2230	G	N1-C2	7.36	1.43	1.37
26	BB	2427	C	C4-C5	7.36	1.48	1.43
26	BB	2769	U	C2-N3	7.36	1.43	1.37
1	AA	900	A	C4'-C3'	7.36	1.61	1.53
26	BB	1036	G	P-O5'	7.36	1.67	1.59
26	BB	2469	A	N3-C4	7.36	1.39	1.34
1	AA	394	G	C2-N2	-7.36	1.27	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2812	G	C6-N1	-7.36	1.34	1.39
26	BB	2846	G	N7-C5	-7.36	1.34	1.39
26	BB	978	G	N3-C4	7.35	1.40	1.35
26	BB	1077	A	C6-N6	7.35	1.39	1.33
26	BB	1448	G	C8-N7	-7.35	1.26	1.30
1	AA	1052	U	O3'-P	7.35	1.70	1.61
3	AC	32	U	C2-N3	7.35	1.42	1.37
25	BA	36	C	N1-C6	7.35	1.41	1.37
26	BB	83	A	N3-C4	7.35	1.39	1.34
26	BB	392	U	O4'-C1'	7.35	1.51	1.41
1	AA	1241	G	N1-C2	7.35	1.43	1.37
26	BB	270	A	N7-C5	7.35	1.43	1.39
26	BB	273	G	C2-N3	7.35	1.38	1.32
26	BB	412	A	N7-C5	-7.35	1.34	1.39
26	BB	689	A	P-O5'	7.35	1.67	1.59
26	BB	1288	G	C4'-O4'	-7.35	1.35	1.45
26	BB	1296	G	N3-C4	7.35	1.40	1.35
26	BB	2283	C	C4-C5	7.35	1.48	1.43
26	BB	2361	G	P-O5'	7.35	1.67	1.59
1	AA	494	G	N7-C5	-7.35	1.34	1.39
4	AD	41	C	O3'-P	7.35	1.70	1.61
26	BB	2165	C	P-O5'	7.35	1.67	1.59
1	AA	293	G	P-O5'	7.35	1.67	1.59
1	AA	587	G	N9-C4	7.35	1.43	1.38
26	BB	1350	C	C5-C6	7.34	1.40	1.34
26	BB	2249	U	C4-C5	7.34	1.50	1.43
26	BB	2447	G	C5-C4	-7.34	1.33	1.38
26	BB	900	A	O3'-P	7.34	1.70	1.61
26	BB	2409	G	C8-N7	7.34	1.35	1.30
26	BB	489	G	C6-O6	-7.34	1.17	1.24
26	BB	984	A	C6-N1	-7.34	1.30	1.35
1	AA	615	G	N7-C5	-7.34	1.34	1.39
25	BA	14	U	C2-N3	7.34	1.42	1.37
26	BB	1289	C	C4-C5	-7.34	1.37	1.43
26	BB	2789	C	C2'-C1'	7.34	1.61	1.53
26	BB	134	G	C6-O6	-7.34	1.17	1.24
1	AA	1135	U	P-O5'	7.34	1.67	1.59
25	BA	114	C	N1-C6	7.34	1.41	1.37
26	BB	1601	G	N9-C8	7.34	1.43	1.37
26	BB	1745	A	N3-C4	-7.34	1.30	1.34
26	BB	2862	G	O4'-C1'	7.34	1.51	1.41
1	AA	765	G	C2'-C1'	-7.33	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	971	G	C5-C4	-7.33	1.33	1.38
2	AB	40	C	P-O5'	-7.33	1.52	1.59
26	BB	285	G	C8-N7	-7.33	1.26	1.30
26	BB	1737	G	P-O5'	7.33	1.67	1.59
26	BB	2390	U	C2-N3	7.33	1.42	1.37
26	BB	101	A	N7-C5	-7.33	1.34	1.39
26	BB	1013	C	C5-C6	7.33	1.40	1.34
26	BB	2020	A	O3'-P	7.33	1.70	1.61
26	BB	2056	G	C5-C6	7.33	1.49	1.42
26	BB	2221	G	P-O5'	7.33	1.67	1.59
1	AA	909	A	C6-N6	-7.33	1.28	1.33
26	BB	386	G	N7-C5	7.33	1.43	1.39
26	BB	657	U	N1-C2	7.33	1.45	1.38
26	BB	1377	G	C3'-C2'	7.33	1.61	1.52
26	BB	1711	A	C6-N1	7.33	1.40	1.35
1	AA	281	G	C8-N7	-7.33	1.26	1.30
1	AA	1477	U	C2-N3	7.33	1.42	1.37
26	BB	1423	G	C6-N1	7.33	1.44	1.39
26	BB	1453	A	N7-C5	-7.33	1.34	1.39
25	BA	62	C	C3'-C2'	7.33	1.61	1.52
26	BB	782	A	N7-C5	-7.33	1.34	1.39
26	BB	2891	U	C5'-C4'	7.33	1.60	1.51
1	AA	1044	A	N3-C4	7.33	1.39	1.34
25	BA	62	C	C4'-C3'	7.33	1.61	1.53
26	BB	450	G	N9-C8	-7.33	1.32	1.37
26	BB	1549	A	C8-N7	-7.33	1.26	1.31
1	AA	1046	A	C3'-C2'	7.32	1.61	1.52
26	BB	2572	A	N7-C5	7.32	1.43	1.39
1	AA	812	G	C2-N3	7.32	1.38	1.32
26	BB	1174	U	C4-O4	-7.32	1.17	1.23
1	AA	175	C	N3-C4	-7.32	1.28	1.33
1	AA	586	C	N1-C6	7.32	1.41	1.37
26	BB	370	G	N7-C5	-7.32	1.34	1.39
26	BB	1220	G	N9-C4	-7.32	1.32	1.38
26	BB	1228	G	N1-C2	7.32	1.43	1.37
1	AA	320	A	N9-C4	-7.32	1.33	1.37
1	AA	1008	U	N1-C2	7.32	1.45	1.38
26	BB	65	U	C2-N3	7.32	1.42	1.37
26	BB	1425	G	P-O5'	7.32	1.67	1.59
26	BB	816	C	C4'-O4'	-7.32	1.36	1.45
26	BB	996	A	N3-C4	7.32	1.39	1.34
4	AD	38	A	P-O5'	7.32	1.67	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	100	G	N3-C4	7.32	1.40	1.35
26	BB	354	A	N3-C4	7.32	1.39	1.34
1	AA	64	G	P-O5'	7.31	1.67	1.59
1	AA	489	C	N3-C4	7.31	1.39	1.33
26	BB	866	A	C8-N7	-7.31	1.26	1.31
26	BB	1137	G	C8-N7	7.31	1.35	1.30
26	BB	2476	A	C5-C4	-7.31	1.33	1.38
1	AA	697	U	C4-C5	7.31	1.50	1.43
1	AA	1124	G	N7-C5	7.31	1.43	1.39
3	AC	20	G	C8-N7	7.31	1.35	1.30
26	BB	2404	U	C5-C6	7.31	1.40	1.34
1	AA	437	U	C2-N3	7.31	1.42	1.37
1	AA	700	G	C6-O6	-7.31	1.17	1.24
1	AA	836	G	N3-C4	7.31	1.40	1.35
1	AA	1478	U	C2'-C1'	-7.31	1.45	1.53
26	BB	443	A	P-O5'	7.31	1.67	1.59
26	BB	904	G	N9-C8	7.31	1.43	1.37
26	BB	1212	G	N7-C5	-7.31	1.34	1.39
26	BB	2806	C	N1-C6	7.31	1.41	1.37
26	BB	702	U	P-O5'	7.31	1.67	1.59
26	BB	1360	G	P-O5'	7.31	1.67	1.59
26	BB	1808	A	C4'-C3'	7.31	1.61	1.53
26	BB	2385	C	C2'-C1'	7.31	1.61	1.53
1	AA	186	C	N1-C6	-7.31	1.32	1.37
26	BB	371	A	N9-C8	-7.31	1.31	1.37
26	BB	1210	G	N7-C5	-7.31	1.34	1.39
26	BB	2065	C	P-O5'	7.31	1.67	1.59
26	BB	2573	C	N1-C2	-7.31	1.32	1.40
1	AA	1495	U	C2-N3	7.30	1.42	1.37
26	BB	2328	A	N3-C4	7.30	1.39	1.34
26	BB	135	U	N1-C2	7.30	1.45	1.38
26	BB	191	A	C6-N6	7.30	1.39	1.33
26	BB	2783	U	P-O5'	7.30	1.67	1.59
1	AA	715	A	C5-C4	-7.30	1.33	1.38
26	BB	718	A	C8-N7	7.30	1.36	1.31
26	BB	895	U	C4-C5	7.30	1.50	1.43
26	BB	1691	C	N3-C4	7.30	1.39	1.33
26	BB	2866	U	P-O5'	7.30	1.67	1.59
4	AD	42	C	C4-C5	7.30	1.48	1.43
26	BB	2671	G	O3'-P	-7.30	1.52	1.61
28	BD	268	ARG	NE-CZ	7.30	1.42	1.33
1	AA	903	G	C4'-O4'	-7.30	1.36	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1063	C	P-O5'	7.30	1.67	1.59
26	BB	2218	G	C6-N1	7.30	1.44	1.39
26	BB	2597	G	C3'-O3'	-7.30	1.31	1.42
26	BB	1588	G	P-O5'	7.29	1.67	1.59
26	BB	2271	G	N7-C5	7.29	1.43	1.39
26	BB	18	U	C4-O4	-7.29	1.17	1.23
26	BB	267	C	N1-C6	-7.29	1.32	1.37
26	BB	2860	A	N7-C5	-7.29	1.34	1.39
1	AA	408	A	N3-C4	7.29	1.39	1.34
26	BB	895	U	C2-N3	7.29	1.42	1.37
26	BB	1900	A	P-O5'	7.29	1.67	1.59
26	BB	2797	U	P-O5'	7.29	1.67	1.59
1	AA	690	G	N1-C2	7.29	1.43	1.37
26	BB	215	G	C3'-C2'	7.29	1.60	1.52
26	BB	625	G	P-O5'	7.29	1.67	1.59
26	BB	666	A	C8-N7	-7.29	1.26	1.31
26	BB	1112	G	N7-C5	7.29	1.43	1.39
26	BB	1365	A	N3-C4	7.29	1.39	1.34
26	BB	176	A	C4'-C3'	7.29	1.61	1.53
26	BB	2202	U	C5-C6	7.29	1.40	1.34
26	BB	2847	U	N1-C6	7.29	1.44	1.38
1	AA	39	G	N7-C5	7.29	1.43	1.39
26	BB	650	C	C5-C6	7.29	1.40	1.34
26	BB	2190	G	N1-C2	7.29	1.43	1.37
1	AA	248	C	C4'-O4'	-7.28	1.36	1.45
1	AA	480	U	P-O5'	7.28	1.67	1.59
1	AA	1510	C	P-O5'	7.28	1.67	1.59
4	AD	53	G	N9-C8	7.28	1.43	1.37
25	BA	12	C	P-O5'	7.28	1.67	1.59
26	BB	478	A	C5-C4	-7.28	1.33	1.38
26	BB	1384	A	C5-C4	7.28	1.43	1.38
1	AA	750	C	C2-N3	7.28	1.41	1.35
26	BB	1036	G	C4'-O4'	-7.28	1.36	1.45
1	AA	1065	U	C2'-O2'	-7.28	1.32	1.41
26	BB	383	C	N1-C6	7.28	1.41	1.37
26	BB	906	U	N1-C2	7.28	1.45	1.38
26	BB	1949	G	N7-C5	-7.28	1.34	1.39
1	AA	969	A	N3-C4	7.28	1.39	1.34
26	BB	487	C	C5-C6	7.28	1.40	1.34
26	BB	1033	U	P-O5'	7.28	1.67	1.59
26	BB	1703	G	C5-C4	-7.28	1.33	1.38
2	AB	5	G	C2'-C1'	7.27	1.61	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1931	U	C4-C5	7.27	1.50	1.43
26	BB	2640	G	C5-C4	-7.27	1.33	1.38
1	AA	305	G	N9-C8	-7.27	1.32	1.37
1	AA	660	C	C4-C5	7.27	1.48	1.43
3	AC	26	U	C2'-C1'	-7.27	1.45	1.53
3	AC	42	U	C5-C6	7.27	1.40	1.34
26	BB	2426	A	O3'-P	7.27	1.69	1.61
26	BB	2894	G	N3-C4	7.27	1.40	1.35
1	AA	1173	U	C5'-C4'	7.27	1.60	1.51
4	AD	11	A	N3-C4	7.27	1.39	1.34
26	BB	354	A	C3'-C2'	7.27	1.60	1.52
1	AA	662	U	C4'-O4'	-7.27	1.36	1.45
1	AA	764	C	N1-C6	7.27	1.41	1.37
26	BB	1351	C	N1-C6	7.27	1.41	1.37
26	BB	2085	U	P-O5'	7.27	1.67	1.59
1	AA	876	C	P-O5'	7.26	1.67	1.59
26	BB	2246	G	C2-N3	7.26	1.38	1.32
1	AA	314	C	O4'-C1'	7.26	1.51	1.41
26	BB	2505	G	C8-N7	7.26	1.35	1.30
2	AB	18	G	N9-C4	7.26	1.43	1.38
1	AA	293	G	N9-C8	-7.26	1.32	1.37
1	AA	630	A	C5-C6	7.26	1.47	1.41
26	BB	983	A	C8-N7	-7.26	1.26	1.31
26	BB	2323	G	C2'-C1'	7.26	1.61	1.53
26	BB	2595	G	N1-C2	7.26	1.43	1.37
1	AA	1045	C	C4-N4	7.26	1.40	1.33
26	BB	1347	A	C5'-C4'	7.26	1.60	1.51
25	BA	5	U	P-O5'	7.26	1.67	1.59
1	AA	218	U	P-O5'	7.25	1.67	1.59
1	AA	461	A	C4'-O4'	-7.25	1.36	1.45
1	AA	503	C	C5'-C4'	7.25	1.60	1.51
1	AA	787	A	C5'-C4'	7.25	1.60	1.51
1	AA	1303	C	N3-C4	7.25	1.39	1.33
1	AA	1387	G	C6-N1	7.25	1.44	1.39
2	AB	41	C	P-O5'	7.25	1.67	1.59
26	BB	2204	G	O4'-C1'	7.25	1.51	1.41
1	AA	52	C	C5'-C4'	7.25	1.60	1.51
1	AA	259	G	N7-C5	7.25	1.43	1.39
1	AA	293	G	N3-C4	7.25	1.40	1.35
1	AA	444	G	O3'-P	7.25	1.69	1.61
26	BB	593	U	P-O5'	7.25	1.67	1.59
26	BB	1380	G	C6-N1	7.25	1.44	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	604	G	N7-C5	7.25	1.43	1.39
1	AA	920	U	N1-C6	-7.25	1.31	1.38
2	AB	3	G	C4'-O4'	-7.25	1.36	1.45
2	AB	14	A	N9-C4	7.25	1.42	1.37
3	AC	21	U	P-O5'	7.25	1.67	1.59
26	BB	910	A	P-O5'	7.25	1.67	1.59
26	BB	1197	G	C2'-O2'	-7.25	1.32	1.41
26	BB	2549	G	C2'-C1'	-7.25	1.45	1.53
26	BB	1802	A	O3'-P	7.25	1.69	1.61
1	AA	608	A	N7-C5	7.25	1.43	1.39
1	AA	1171	A	N9-C4	7.25	1.42	1.37
1	AA	1139	G	C5'-C4'	7.25	1.60	1.51
1	AA	1504	G	P-O5'	7.24	1.67	1.59
26	BB	1715	G	N3-C4	7.24	1.40	1.35
26	BB	1929	G	C8-N7	-7.24	1.26	1.30
26	BB	130	C	C2-N3	7.24	1.41	1.35
1	AA	237	G	C8-N7	7.24	1.35	1.30
25	BA	111	U	C5-C6	7.24	1.40	1.34
26	BB	351	C	N3-C4	7.24	1.39	1.33
26	BB	1056	G	C4'-C3'	7.24	1.61	1.53
26	BB	1277	G	P-O5'	7.24	1.67	1.59
26	BB	392	U	N3-C4	7.24	1.45	1.38
26	BB	1784	A	O3'-P	7.24	1.69	1.61
26	BB	1872	A	N3-C4	7.24	1.39	1.34
26	BB	452	G	N9-C4	7.24	1.43	1.38
26	BB	1068	G	C2-N3	7.24	1.38	1.32
4	AD	39	A	P-O5'	7.24	1.67	1.59
26	BB	1224	U	N1-C2	7.24	1.45	1.38
26	BB	2040	G	N7-C5	7.24	1.43	1.39
26	BB	2326	C	C2-N3	7.24	1.41	1.35
34	BJ	50	TYR	CE1-CZ	7.24	1.48	1.38
1	AA	520	A	C6-N1	-7.23	1.30	1.35
1	AA	390	U	C2-N3	7.23	1.42	1.37
1	AA	445	G	P-O5'	7.23	1.67	1.59
26	BB	2353	G	C2-N3	7.23	1.38	1.32
26	BB	61	C	N1-C6	7.23	1.41	1.37
26	BB	295	G	C5-C6	7.23	1.49	1.42
26	BB	1711	A	N7-C5	-7.23	1.34	1.39
26	BB	2213	U	C2-N3	7.23	1.42	1.37
26	BB	799	G	C6-N1	7.23	1.44	1.39
26	BB	1664	A	C5-C4	-7.23	1.33	1.38
26	BB	1724	G	N7-C5	7.23	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2088	A	C6-N1	7.23	1.40	1.35
26	BB	2532	G	P-O5'	7.23	1.67	1.59
4	AD	39	A	N9-C4	-7.23	1.33	1.37
26	BB	1789	A	N7-C5	-7.23	1.34	1.39
26	BB	2203	U	P-O5'	7.23	1.67	1.59
1	AA	1455	G	C5-C4	-7.22	1.33	1.38
4	AD	5	G	N9-C8	7.22	1.43	1.37
26	BB	272	A	C8-N7	-7.22	1.26	1.31
26	BB	278	A	N3-C4	7.22	1.39	1.34
26	BB	1877	A	C5'-C4'	-7.22	1.42	1.51
26	BB	2631	G	N9-C4	-7.22	1.32	1.38
1	AA	78	A	P-O5'	7.22	1.67	1.59
1	AA	187	G	N9-C4	-7.22	1.32	1.38
26	BB	541	A	P-O5'	7.22	1.67	1.59
26	BB	595	C	C2-N3	7.22	1.41	1.35
26	BB	2873	A	N3-C4	7.22	1.39	1.34
1	AA	236	A	C6-N1	7.22	1.40	1.35
1	AA	413	G	C5'-C4'	7.22	1.60	1.51
26	BB	395	U	P-O5'	7.22	1.67	1.59
26	BB	1950	G	N3-C4	7.22	1.40	1.35
26	BB	403	U	C4'-O4'	-7.22	1.36	1.45
26	BB	465	G	P-O5'	7.22	1.67	1.59
26	BB	547	A	C5-C4	-7.22	1.33	1.38
26	BB	1055	G	N9-C8	-7.22	1.32	1.37
26	BB	1983	G	C5-C4	7.22	1.43	1.38
26	BB	2006	C	N1-C6	7.22	1.41	1.37
1	AA	346	G	C6-N1	7.22	1.44	1.39
26	BB	989	G	P-O5'	7.22	1.67	1.59
1	AA	779	C	P-O5'	7.22	1.67	1.59
1	AA	1305	G	C2-N3	7.22	1.38	1.32
26	BB	241	A	C8-N7	7.22	1.36	1.31
26	BB	749	A	N9-C4	7.22	1.42	1.37
1	AA	1275	A	C5'-C4'	7.21	1.60	1.51
26	BB	223	A	C8-N7	-7.21	1.26	1.31
26	BB	1607	C	N3-C4	7.21	1.39	1.33
26	BB	1867	G	C2-N3	7.21	1.38	1.32
26	BB	2252	G	C6-N1	7.21	1.44	1.39
26	BB	1935	G	N7-C5	7.21	1.43	1.39
26	BB	2488	G	C8-N7	-7.21	1.26	1.30
1	AA	181	A	C4'-O4'	-7.21	1.36	1.45
26	BB	1257	C	C3'-C2'	-7.21	1.44	1.52
26	BB	2858	C	O4'-C1'	7.21	1.51	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1458	G	C3'-C2'	7.21	1.60	1.52
26	BB	636	G	O3'-P	7.21	1.69	1.61
26	BB	2227	A	C5-C4	-7.21	1.33	1.38
26	BB	2347	C	C4-N4	7.21	1.40	1.33
1	AA	421	U	C4-C5	7.20	1.50	1.43
26	BB	847	U	C4'-O4'	-7.20	1.36	1.45
26	BB	1162	G	C8-N7	-7.20	1.26	1.30
1	AA	416	G	C5'-C4'	7.20	1.59	1.51
1	AA	767	A	P-O5'	7.20	1.67	1.59
4	AD	49	C	N1-C6	7.20	1.41	1.37
1	AA	79	G	C6-N1	7.20	1.44	1.39
1	AA	449	G	C2-N3	7.20	1.38	1.32
1	AA	550	G	N7-C5	-7.20	1.34	1.39
1	AA	794	A	C6-N1	-7.20	1.30	1.35
1	AA	1174	G	N7-C5	7.20	1.43	1.39
1	AA	1400	C	O3'-P	7.20	1.69	1.61
26	BB	973	A	N9-C8	-7.20	1.31	1.37
2	AB	28	C	N1-C6	-7.20	1.32	1.37
26	BB	2758	A	O3'-P	7.20	1.69	1.61
1	AA	636	U	C3'-C2'	7.20	1.60	1.52
1	AA	302	G	P-O5'	7.19	1.67	1.59
1	AA	234	C	C2-N3	7.19	1.41	1.35
1	AA	1269	A	P-O5'	7.19	1.67	1.59
26	BB	2	G	C6-N1	7.19	1.44	1.39
41	BQ	94	ARG	NE-CZ	7.19	1.42	1.33
1	AA	1082	A	C8-N7	-7.19	1.26	1.31
1	AA	1318	A	P-O5'	7.19	1.67	1.59
26	BB	1657	U	N1-C2	7.19	1.45	1.38
1	AA	106	C	N1-C6	7.19	1.41	1.37
1	AA	867	G	P-O5'	7.19	1.67	1.59
26	BB	851	C	N1-C2	7.19	1.47	1.40
26	BB	856	G	C2-N3	7.19	1.38	1.32
26	BB	895	U	C5'-C4'	7.19	1.59	1.51
26	BB	2027	G	N3-C4	7.19	1.40	1.35
26	BB	2058	A	C6-N1	-7.19	1.30	1.35
1	AA	578	C	N1-C6	-7.18	1.32	1.37
26	BB	681	G	N9-C8	-7.18	1.32	1.37
1	AA	903	G	C2-N3	7.18	1.38	1.32
1	AA	979	C	C2-N3	7.18	1.41	1.35
3	AC	34	U	C4-C5	7.18	1.50	1.43
26	BB	78	U	C2-N3	7.18	1.42	1.37
26	BB	849	A	C6-N1	7.18	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1808	A	N9-C4	7.18	1.42	1.37
26	BB	1884	G	C8-N7	-7.18	1.26	1.30
26	BB	2628	C	P-O5'	7.18	1.67	1.59
1	AA	412	A	C6-N6	-7.18	1.28	1.33
1	AA	800	G	N3-C4	7.18	1.40	1.35
1	AA	1071	C	N1-C2	7.18	1.47	1.40
26	BB	2681	C	O3'-P	-7.18	1.52	1.61
1	AA	383	A	N3-C4	7.18	1.39	1.34
26	BB	196	A	N9-C4	7.18	1.42	1.37
26	BB	1512	C	P-O5'	7.18	1.67	1.59
26	BB	2886	A	N3-C4	7.18	1.39	1.34
1	AA	1185	G	N9-C4	7.18	1.43	1.38
26	BB	1057	A	N9-C4	7.18	1.42	1.37
26	BB	1076	C	C4'-O4'	-7.18	1.36	1.45
1	AA	846	G	N7-C5	-7.18	1.34	1.39
1	AA	1128	C	N3-C4	7.17	1.39	1.33
26	BB	2019	A	C2-N3	7.17	1.40	1.33
26	BB	2617	U	P-O5'	7.17	1.67	1.59
26	BB	2747	G	C5'-C4'	7.17	1.59	1.51
1	AA	428	G	N1-C2	7.17	1.43	1.37
1	AA	1123	U	C2-N3	7.17	1.42	1.37
1	AA	1219	A	C4'-O4'	-7.17	1.36	1.45
1	AA	1492	A	C4'-O4'	-7.17	1.36	1.45
26	BB	1652	A	N1-C2	-7.17	1.27	1.34
26	BB	1901	A	N7-C5	-7.17	1.34	1.39
26	BB	2066	C	C4-C5	7.17	1.48	1.43
26	BB	1807	G	P-O5'	7.17	1.67	1.59
26	BB	2893	A	C5'-C4'	7.17	1.59	1.51
1	AA	598	U	P-O5'	7.17	1.67	1.59
1	AA	794	A	N3-C4	7.17	1.39	1.34
1	AA	807	A	C8-N7	-7.17	1.26	1.31
1	AA	1356	G	C4'-C3'	7.17	1.61	1.53
26	BB	994	C	C4'-C3'	7.17	1.61	1.53
26	BB	1985	C	C2-N3	-7.17	1.30	1.35
1	AA	1478	U	C4-O4	-7.17	1.18	1.23
26	BB	1079	C	C2'-C1'	-7.17	1.45	1.53
1	AA	145	G	N3-C4	7.16	1.40	1.35
26	BB	775	G	C8-N7	7.16	1.35	1.30
26	BB	2648	G	C4'-O4'	-7.16	1.36	1.45
1	AA	1184	G	C4'-C3'	-7.16	1.45	1.53
26	BB	823	C	C4-C5	7.16	1.48	1.43
26	BB	1502	A	C6-N1	-7.16	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1588	G	C5'-C4'	7.16	1.59	1.51
1	AA	285	C	C5-C6	7.16	1.40	1.34
1	AA	772	U	C2-N3	7.16	1.42	1.37
26	BB	466	A	N3-C4	7.16	1.39	1.34
26	BB	1984	G	N7-C5	7.16	1.43	1.39
1	AA	487	A	N9-C4	-7.16	1.33	1.37
1	AA	1532	U	C5'-C4'	7.16	1.59	1.51
26	BB	2413	G	C6-O6	-7.16	1.17	1.24
1	AA	307	C	C5-C6	7.16	1.40	1.34
26	BB	27	G	O3'-P	7.16	1.69	1.61
26	BB	75	G	N3-C4	7.16	1.40	1.35
1	AA	528	C	C5'-C4'	7.16	1.59	1.51
1	AA	1347	G	C4'-O4'	-7.16	1.36	1.45
26	BB	92	U	C5'-C4'	7.16	1.59	1.51
26	BB	489	G	N7-C5	7.16	1.43	1.39
1	AA	175	C	C2-N3	7.15	1.41	1.35
1	AA	1328	C	P-O5'	7.15	1.67	1.59
26	BB	1120	G	N9-C8	7.15	1.42	1.37
1	AA	939	G	C6-N1	-7.15	1.34	1.39
1	AA	1291	U	P-O5'	7.15	1.67	1.59
26	BB	659	G	N9-C8	-7.15	1.32	1.37
26	BB	2386	A	C5'-C4'	7.15	1.59	1.51
1	AA	939	G	C5-C6	7.15	1.49	1.42
25	BA	8	C	C4'-O4'	-7.15	1.36	1.45
26	BB	186	G	C5'-C4'	7.15	1.59	1.51
26	BB	214	G	N9-C8	7.15	1.42	1.37
26	BB	736	C	O3'-P	7.15	1.69	1.61
26	BB	752	A	C2'-O2'	7.15	1.50	1.41
26	BB	848	C	N1-C6	7.15	1.41	1.37
26	BB	2767	C	P-O5'	7.15	1.67	1.59
2	AB	21	A	P-O5'	-7.15	1.52	1.59
26	BB	760	G	C2-N3	7.15	1.38	1.32
26	BB	20	C	C4'-C3'	-7.15	1.45	1.53
26	BB	332	A	C4'-O4'	-7.15	1.36	1.45
26	BB	723	C	C2-O2	-7.15	1.18	1.24
26	BB	2364	C	N1-C6	7.15	1.41	1.37
26	BB	1373	A	C5'-C4'	7.15	1.59	1.51
1	AA	1311	A	N9-C4	7.14	1.42	1.37
3	AC	52	U	N1-C2	7.14	1.45	1.38
1	AA	389	A	N3-C4	7.14	1.39	1.34
1	AA	533	A	C4'-C3'	7.14	1.61	1.53
1	AA	922	G	N3-C4	7.14	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1320	C	C4'-C3'	7.14	1.61	1.53
4	AD	11	A	C4'-O4'	-7.14	1.36	1.45
26	BB	2491	U	C4-C5	7.14	1.50	1.43
26	BB	1623	G	C2-N3	7.14	1.38	1.32
1	AA	1122	U	O3'-P	7.14	1.69	1.61
3	AC	50	U	N1-C2	7.14	1.45	1.38
26	BB	348	A	P-O5'	7.14	1.66	1.59
26	BB	2830	C	O4'-C1'	7.14	1.50	1.41
26	BB	2872	A	N3-C4	7.14	1.39	1.34
3	AC	49	U	N1-C2	7.14	1.45	1.38
26	BB	960	A	C8-N7	-7.14	1.26	1.31
26	BB	712	G	N9-C4	7.14	1.43	1.38
26	BB	2396	G	N1-C2	7.14	1.43	1.37
26	BB	1298	C	C4'-O4'	-7.13	1.36	1.45
26	BB	1534	U	C2-N3	-7.13	1.32	1.37
26	BB	2301	C	C2'-O2'	-7.13	1.32	1.41
1	AA	197	A	C5-C6	7.13	1.47	1.41
1	AA	257	G	C6-O6	-7.13	1.17	1.24
26	BB	2083	G	N9-C8	7.13	1.42	1.37
26	BB	2846	G	C2-N3	7.13	1.38	1.32
2	AB	50	G	C4'-O4'	-7.13	1.36	1.45
26	BB	246	C	C5-C6	7.13	1.40	1.34
26	BB	633	A	N3-C4	7.13	1.39	1.34
1	AA	901	A	C5'-C4'	7.13	1.59	1.51
1	AA	1001	C	N1-C6	-7.13	1.32	1.37
1	AA	1079	G	N9-C8	7.13	1.42	1.37
1	AA	1337	G	C8-N7	-7.13	1.26	1.30
2	AB	57	G	N3-C4	7.13	1.40	1.35
26	BB	181	A	C6-N6	7.13	1.39	1.33
26	BB	676	A	C6-N6	7.13	1.39	1.33
26	BB	1236	G	P-O5'	7.13	1.66	1.59
26	BB	1798	U	C2'-C1'	7.13	1.61	1.53
1	AA	610	U	C2-N3	7.12	1.42	1.37
26	BB	848	C	C5-C6	7.12	1.40	1.34
26	BB	854	C	N3-C4	-7.12	1.28	1.33
1	AA	807	A	N9-C8	7.12	1.43	1.37
1	AA	1420	U	C2-O2	7.12	1.28	1.22
1	AA	1512	U	C4-O4	-7.12	1.18	1.23
25	BA	93	C	N1-C6	7.12	1.41	1.37
26	BB	439	A	N7-C5	7.12	1.43	1.39
26	BB	1206	G	N9-C8	7.12	1.42	1.37
26	BB	2501	C	N1-C6	7.12	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2752	C	P-O5'	-7.12	1.52	1.59
1	AA	82	G	C6-N1	7.12	1.44	1.39
26	BB	2298	A	N3-C4	7.12	1.39	1.34
1	AA	1320	C	C4'-O4'	-7.12	1.36	1.45
26	BB	2448	A	C4'-O4'	-7.12	1.36	1.45
26	BB	704	G	C8-N7	-7.12	1.26	1.30
26	BB	1492	G	N1-C2	7.12	1.43	1.37
26	BB	1558	C	N3-C4	7.12	1.39	1.33
1	AA	32	A	N9-C4	-7.11	1.33	1.37
26	BB	2237	G	C2-N3	7.11	1.38	1.32
1	AA	1056	U	C4-C5	7.11	1.50	1.43
26	BB	1027	A	C8-N7	-7.11	1.26	1.31
26	BB	2205	A	N3-C4	7.11	1.39	1.34
26	BB	2887	A	N9-C4	7.11	1.42	1.37
1	AA	355	C	C5'-C4'	7.11	1.59	1.51
26	BB	2217	G	C2-N3	7.11	1.38	1.32
1	AA	1432	G	N1-C2	7.11	1.43	1.37
26	BB	120	U	N1-C6	7.11	1.44	1.38
26	BB	175	G	N9-C4	7.11	1.43	1.38
26	BB	616	A	C6-N6	7.11	1.39	1.33
26	BB	1569	A	P-O5'	7.11	1.66	1.59
26	BB	1613	G	C4'-O4'	-7.11	1.36	1.45
1	AA	728	A	C6-N1	7.11	1.40	1.35
26	BB	2016	U	C5-C6	7.11	1.40	1.34
1	AA	438	U	O4'-C1'	7.10	1.50	1.41
1	AA	168	G	N3-C4	7.10	1.40	1.35
1	AA	856	C	N3-C4	-7.10	1.28	1.33
4	AD	3	C	O4'-C1'	7.10	1.50	1.41
25	BA	44	G	N7-C5	-7.10	1.34	1.39
26	BB	476	G	N3-C4	7.10	1.40	1.35
1	AA	172	A	N9-C8	7.10	1.43	1.37
1	AA	691	G	C5'-C4'	7.10	1.59	1.51
1	AA	204	G	C2'-C1'	-7.10	1.45	1.53
26	BB	597	G	N9-C4	7.10	1.43	1.38
1	AA	466	A	C4'-O4'	-7.10	1.36	1.45
1	AA	550	G	C5-C4	7.10	1.43	1.38
1	AA	870	U	C5-C6	7.10	1.40	1.34
1	AA	1152	A	C4'-O4'	-7.10	1.36	1.45
4	AD	43	G	C8-N7	-7.10	1.26	1.30
1	AA	361	G	C8-N7	7.10	1.35	1.30
26	BB	604	G	C5'-C4'	7.10	1.59	1.51
26	BB	714	U	C2'-C1'	7.10	1.61	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1336	A	C5'-C4'	7.09	1.59	1.51
26	BB	1608	A	N9-C4	7.09	1.42	1.37
26	BB	2486	C	P-O5'	7.09	1.66	1.59
26	BB	2529	G	C5'-C4'	7.09	1.59	1.51
26	BB	2847	U	N1-C2	7.09	1.45	1.38
4	AD	50	G	C2-N3	7.09	1.38	1.32
26	BB	1777	U	C4'-O4'	-7.09	1.36	1.45
26	BB	1829	A	N7-C5	-7.09	1.34	1.39
26	BB	2308	G	N3-C4	-7.09	1.30	1.35
1	AA	84	U	N3-C4	7.09	1.44	1.38
26	BB	307	G	O3'-P	7.09	1.69	1.61
1	AA	778	G	C6-N1	7.09	1.44	1.39
26	BB	1954	G	N7-C5	-7.09	1.34	1.39
26	BB	2768	U	C2'-C1'	7.09	1.61	1.53
1	AA	90	C	N1-C6	7.08	1.41	1.37
1	AA	597	G	C2-N3	7.08	1.38	1.32
1	AA	1013	G	P-O5'	7.08	1.66	1.59
26	BB	643	A	C6-N6	7.08	1.39	1.33
26	BB	751	A	C8-N7	-7.08	1.26	1.31
26	BB	1108	U	O3'-P	7.08	1.69	1.61
26	BB	1901	A	C5-C4	7.08	1.43	1.38
1	AA	839	C	C4'-O4'	-7.08	1.36	1.45
1	AA	862	C	C5'-C4'	7.08	1.59	1.51
26	BB	69	C	C4'-O4'	-7.08	1.36	1.45
26	BB	136	G	N3-C4	7.08	1.40	1.35
26	BB	2038	G	C5-C4	7.08	1.43	1.38
26	BB	1654	A	C4'-C3'	7.08	1.60	1.53
26	BB	1687	G	C8-N7	7.08	1.35	1.30
26	BB	265	A	N3-C4	7.08	1.39	1.34
26	BB	1451	C	C4'-O4'	-7.08	1.36	1.45
26	BB	2866	U	C4-O4	-7.08	1.18	1.23
1	AA	489	C	C4'-C3'	7.08	1.60	1.53
26	BB	1526	C	N3-C4	7.08	1.39	1.33
26	BB	1844	C	C3'-C2'	-7.08	1.45	1.52
1	AA	559	A	N3-C4	7.08	1.39	1.34
1	AA	1160	G	C2'-C1'	-7.08	1.45	1.53
1	AA	1431	A	C6-N6	7.08	1.39	1.33
26	BB	559	G	C6-O6	-7.08	1.17	1.24
26	BB	1552	A	N9-C4	7.08	1.42	1.37
1	AA	654	G	N9-C4	7.07	1.43	1.38
26	BB	1068	G	P-O5'	7.07	1.66	1.59
1	AA	833	G	P-O5'	7.07	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1140	C	C4-C5	-7.07	1.37	1.43
1	AA	900	A	O3'-P	7.07	1.69	1.61
1	AA	1253	G	C2-N3	7.07	1.38	1.32
25	BA	94	A	C5-C6	7.07	1.47	1.41
26	BB	334	C	O3'-P	7.07	1.69	1.61
26	BB	1112	G	C4'-O4'	-7.07	1.36	1.45
26	BB	2403	C	N3-C4	7.07	1.38	1.33
26	BB	1521	G	C5-C4	7.07	1.43	1.38
26	BB	1712	U	N1-C2	7.07	1.45	1.38
26	BB	1814	G	P-O5'	7.07	1.66	1.59
1	AA	137	U	C4-C5	7.07	1.50	1.43
1	AA	289	G	N1-C2	7.07	1.43	1.37
1	AA	630	A	O3'-P	7.07	1.69	1.61
1	AA	1522	U	N3-C4	7.07	1.44	1.38
1	AA	544	G	N7-C5	7.07	1.43	1.39
26	BB	141	G	C5-C4	-7.07	1.33	1.38
26	BB	1603	A	N9-C4	-7.07	1.33	1.37
26	BB	1784	A	C3'-C2'	7.07	1.60	1.52
1	AA	836	G	C2-N3	7.06	1.38	1.32
1	AA	1375	A	O3'-P	7.06	1.69	1.61
26	BB	776	G	C4'-C3'	7.06	1.60	1.53
26	BB	1824	G	C4'-O4'	-7.06	1.36	1.45
26	BB	2195	U	C5-C6	7.06	1.40	1.34
1	AA	6	G	C6-N1	7.06	1.44	1.39
1	AA	104	G	N1-C2	7.06	1.43	1.37
1	AA	427	U	N1-C6	7.06	1.44	1.38
3	AC	47	C	C4-C5	7.06	1.48	1.43
3	AC	50	U	C3'-O3'	7.06	1.52	1.42
26	BB	2176	A	N3-C4	7.06	1.39	1.34
1	AA	1039	G	C5'-C4'	7.06	1.59	1.51
1	AA	1312	G	N9-C8	-7.06	1.32	1.37
26	BB	2718	G	N1-C2	7.06	1.43	1.37
1	AA	157	U	C4-C5	7.06	1.50	1.43
1	AA	725	G	C8-N7	-7.06	1.26	1.30
26	BB	713	G	O3'-P	7.06	1.69	1.61
26	BB	753	A	P-O5'	7.06	1.66	1.59
2	AB	33	U	C5'-C4'	7.06	1.59	1.51
1	AA	259	G	C8-N7	7.06	1.35	1.30
4	AD	64	G	O4'-C1'	7.06	1.50	1.41
26	BB	1222	U	C5-C6	7.06	1.40	1.34
1	AA	7	A	C1'-N9	7.05	1.59	1.48
1	AA	327	A	C2'-C1'	-7.05	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	633	G	N1-C2	7.05	1.43	1.37
1	AA	917	G	N9-C4	7.05	1.43	1.38
1	AA	1263	C	C5-C6	7.05	1.40	1.34
26	BB	695	G	P-O5'	7.05	1.66	1.59
26	BB	1698	A	N9-C8	-7.05	1.32	1.37
26	BB	1907	G	C6-N1	-7.05	1.34	1.39
26	BB	2244	U	C4-C5	7.05	1.49	1.43
26	BB	2416	C	O3'-P	7.05	1.69	1.61
26	BB	2700	A	C5-C4	-7.05	1.33	1.38
26	BB	1006	C	C4-C5	7.05	1.48	1.43
26	BB	1359	A	C4'-O4'	-7.05	1.36	1.45
26	BB	2019	A	N9-C4	-7.05	1.33	1.37
26	BB	618	G	C8-N7	-7.05	1.26	1.30
1	AA	18	C	N1-C6	-7.05	1.32	1.37
1	AA	74	A	O3'-P	7.05	1.69	1.61
1	AA	961	U	C3'-C2'	-7.05	1.45	1.52
1	AA	1057	G	N9-C8	7.05	1.42	1.37
1	AA	1146	A	C6-N6	7.05	1.39	1.33
26	BB	2347	C	C5-C6	7.05	1.40	1.34
26	BB	2764	A	C4'-O4'	-7.05	1.36	1.45
1	AA	1428	A	C4'-O4'	-7.05	1.36	1.45
26	BB	1777	U	C4-C5	7.05	1.49	1.43
1	AA	1004	A	C2-N3	7.05	1.39	1.33
1	AA	1285	A	C5'-C4'	7.05	1.59	1.51
25	BA	2	G	C6-N1	7.05	1.44	1.39
26	BB	180	G	N9-C4	7.05	1.43	1.38
26	BB	885	C	C2-N3	7.05	1.41	1.35
26	BB	1179	G	N7-C5	7.05	1.43	1.39
26	BB	2092	U	N1-C2	7.05	1.44	1.38
26	BB	2433	A	O4'-C1'	7.05	1.50	1.41
26	BB	2836	U	P-O5'	7.05	1.66	1.59
26	BB	726	G	C5'-C4'	7.04	1.59	1.51
26	BB	985	C	C4-C5	7.04	1.48	1.43
26	BB	2212	A	N9-C4	7.04	1.42	1.37
1	AA	1302	C	N1-C6	7.04	1.41	1.37
1	AA	1347	G	N9-C4	-7.04	1.32	1.38
1	AA	1368	A	N9-C4	7.04	1.42	1.37
26	BB	1197	G	N3-C4	-7.04	1.30	1.35
26	BB	2765	A	O3'-P	7.04	1.69	1.61
26	BB	2802	G	N1-C2	7.04	1.43	1.37
1	AA	198	G	N7-C5	7.04	1.43	1.39
1	AA	949	A	N3-C4	7.04	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1106	G	C3'-C2'	-7.04	1.45	1.52
1	AA	1264	U	P-O5'	7.04	1.66	1.59
25	BA	39	A	N1-C2	7.04	1.40	1.34
25	BA	49	C	P-O5'	-7.04	1.52	1.59
26	BB	2	G	O3'-P	-7.04	1.52	1.61
26	BB	371	A	C8-N7	-7.04	1.26	1.31
26	BB	1500	G	C2-N3	7.04	1.38	1.32
26	BB	2148	G	C2-N3	7.04	1.38	1.32
26	BB	2248	C	N1-C6	7.04	1.41	1.37
1	AA	851	G	N9-C4	-7.04	1.32	1.38
1	AA	1364	U	N3-C4	7.04	1.44	1.38
1	AA	1501	C	P-O5'	7.04	1.66	1.59
26	BB	1412	U	P-O5'	7.04	1.66	1.59
26	BB	2749	A	C6-N1	-7.04	1.30	1.35
26	BB	2838	G	C2-N3	7.04	1.38	1.32
25	BA	94	A	N9-C4	7.04	1.42	1.37
26	BB	226	A	C5'-C4'	7.04	1.59	1.51
26	BB	289	G	N7-C5	-7.04	1.35	1.39
26	BB	528	A	N3-C4	7.04	1.39	1.34
1	AA	962	C	P-O5'	7.04	1.66	1.59
1	AA	1374	A	N1-C2	7.04	1.40	1.34
26	BB	785	G	N9-C8	-7.04	1.32	1.37
26	BB	958	U	N1-C2	7.04	1.44	1.38
26	BB	1794	A	N3-C4	7.04	1.39	1.34
26	BB	2582	G	C5'-C4'	7.04	1.59	1.51
1	AA	357	G	N9-C8	-7.03	1.32	1.37
1	AA	534	U	P-O5'	7.03	1.66	1.59
1	AA	877	G	C5-C4	7.03	1.43	1.38
26	BB	85	G	N9-C8	7.03	1.42	1.37
26	BB	1676	A	N3-C4	7.03	1.39	1.34
26	BB	1873	G	N3-C4	7.03	1.40	1.35
26	BB	1914	C	C4-C5	7.03	1.48	1.43
26	BB	2382	G	N3-C4	7.03	1.40	1.35
1	AA	780	A	N1-C2	-7.03	1.28	1.34
1	AA	1179	A	N9-C8	-7.03	1.32	1.37
26	BB	2606	C	P-O5'	7.03	1.66	1.59
1	AA	1182	G	N3-C4	7.03	1.40	1.35
26	BB	677	A	C6-N1	-7.03	1.30	1.35
1	AA	305	G	N3-C4	7.03	1.40	1.35
4	AD	28	U	N1-C6	-7.03	1.31	1.38
26	BB	545	U	N1-C2	7.03	1.44	1.38
26	BB	2211	A	C6-N6	7.03	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	796	C	N1-C2	7.03	1.47	1.40
1	AA	1139	G	C2-N3	7.03	1.38	1.32
1	AA	308	C	C5'-C4'	7.03	1.59	1.51
1	AA	507	C	P-O5'	7.03	1.66	1.59
1	AA	586	C	N3-C4	-7.03	1.29	1.33
1	AA	794	A	N9-C4	7.03	1.42	1.37
26	BB	610	C	C5'-C4'	7.03	1.59	1.51
26	BB	1680	U	C2-N3	7.03	1.42	1.37
1	AA	321	A	N7-C5	7.02	1.43	1.39
26	BB	938	G	N1-C2	7.02	1.43	1.37
26	BB	2791	G	P-O5'	7.02	1.66	1.59
2	AB	59	G	N7-C5	-7.02	1.35	1.39
26	BB	683	U	C2-N3	7.02	1.42	1.37
1	AA	635	A	N9-C4	7.02	1.42	1.37
1	AA	655	A	P-O5'	7.02	1.66	1.59
26	BB	98	G	C3'-C2'	-7.02	1.45	1.52
26	BB	280	U	C4'-O4'	-7.02	1.36	1.45
26	BB	2623	G	N3-C4	-7.02	1.30	1.35
26	BB	2747	G	P-O5'	7.02	1.66	1.59
26	BB	655	A	C4'-O4'	-7.02	1.36	1.45
26	BB	1218	G	P-O5'	7.02	1.66	1.59
26	BB	1805	A	C8-N7	-7.02	1.26	1.31
26	BB	1843	C	N1-C6	7.02	1.41	1.37
1	AA	592	G	C5'-C4'	7.02	1.59	1.51
26	BB	493	G	C2-N3	7.02	1.38	1.32
26	BB	275	C	C5-C6	7.01	1.40	1.34
26	BB	1807	G	N9-C4	7.01	1.43	1.38
26	BB	2530	A	N9-C8	-7.01	1.32	1.37
1	AA	78	A	C4'-O4'	-7.01	1.36	1.45
26	BB	30	G	C6-O6	-7.01	1.17	1.24
26	BB	297	G	N9-C4	-7.01	1.32	1.38
1	AA	913	A	N3-C4	7.01	1.39	1.34
1	AA	1053	G	N3-C4	7.01	1.40	1.35
26	BB	317	G	C2-N3	7.01	1.38	1.32
26	BB	333	G	N1-C2	7.01	1.43	1.37
1	AA	898	G	C4'-O4'	-7.01	1.36	1.45
12	AL	89	TYR	CG-CD2	7.01	1.48	1.39
26	BB	562	U	P-O5'	7.01	1.66	1.59
26	BB	2127	G	N7-C5	7.01	1.43	1.39
26	BB	2714	G	C8-N7	-7.01	1.26	1.30
26	BB	2799	A	N3-C4	7.01	1.39	1.34
1	AA	193	C	C5-C6	7.00	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	28	C	C4'-C3'	7.00	1.60	1.53
26	BB	2590	A	N7-C5	-7.00	1.35	1.39
1	AA	365	U	C2-N3	7.00	1.42	1.37
1	AA	976	G	N7-C5	7.00	1.43	1.39
1	AA	1300	G	N9-C4	-7.00	1.32	1.38
1	AA	1332	A	P-O5'	7.00	1.66	1.59
26	BB	199	A	C8-N7	-7.00	1.26	1.31
26	BB	1860	G	N9-C8	7.00	1.42	1.37
26	BB	2570	G	N7-C5	7.00	1.43	1.39
26	BB	2757	A	N9-C8	7.00	1.43	1.37
26	BB	2759	G	N7-C5	7.00	1.43	1.39
1	AA	565	U	C3'-C2'	7.00	1.60	1.52
1	AA	616	G	N9-C8	-7.00	1.32	1.37
1	AA	893	C	C4'-O4'	-7.00	1.36	1.45
1	AA	1384	C	C4'-O4'	-7.00	1.36	1.45
26	BB	252	G	N7-C5	-7.00	1.35	1.39
26	BB	1804	C	N3-C4	7.00	1.38	1.33
26	BB	1375	U	C4'-O4'	-7.00	1.36	1.45
1	AA	1534	A	N3-C4	7.00	1.39	1.34
26	BB	1852	U	C2-N3	7.00	1.42	1.37
1	AA	699	C	C5-C6	7.00	1.40	1.34
25	BA	36	C	O3'-P	7.00	1.69	1.61
26	BB	1022	G	N7-C5	-7.00	1.35	1.39
26	BB	1844	C	N1-C6	7.00	1.41	1.37
26	BB	1899	A	C4'-C3'	7.00	1.60	1.53
1	AA	305	G	C5-C6	7.00	1.49	1.42
26	BB	1580	A	O3'-P	7.00	1.69	1.61
1	AA	413	G	C8-N7	-6.99	1.26	1.30
1	AA	1484	C	N1-C6	6.99	1.41	1.37
25	BA	115	A	P-O5'	6.99	1.66	1.59
26	BB	95	A	N1-C2	-6.99	1.28	1.34
26	BB	444	C	C4'-O4'	-6.99	1.36	1.45
26	BB	1041	G	N7-C5	6.99	1.43	1.39
26	BB	1840	G	C8-N7	6.99	1.35	1.30
1	AA	172	A	N7-C5	6.99	1.43	1.39
25	BA	34	A	O3'-P	6.99	1.69	1.61
26	BB	1844	C	C4-C5	6.99	1.48	1.43
1	AA	519	C	C5-C6	6.99	1.40	1.34
26	BB	544	C	P-O5'	6.99	1.66	1.59
26	BB	920	A	P-O5'	6.99	1.66	1.59
26	BB	1777	U	C2-O2	6.99	1.28	1.22
1	AA	13	U	N1-C6	6.99	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1472	U	C2-N3	6.99	1.42	1.37
26	BB	690	G	C6-N1	6.99	1.44	1.39
26	BB	873	C	N1-C6	6.99	1.41	1.37
26	BB	924	G	P-O5'	6.99	1.66	1.59
26	BB	2741	A	C5-C4	-6.99	1.33	1.38
26	BB	559	G	C6-N1	6.99	1.44	1.39
1	AA	11	G	C3'-C2'	6.99	1.60	1.52
1	AA	112	G	P-O5'	6.99	1.66	1.59
4	AD	4	G	P-O5'	6.99	1.66	1.59
26	BB	376	G	N7-C5	-6.99	1.35	1.39
26	BB	1165	A	N7-C5	-6.99	1.35	1.39
26	BB	1400	U	C4'-O4'	-6.99	1.36	1.45
26	BB	1811	G	C5-C4	-6.99	1.33	1.38
26	BB	1840	G	N9-C4	6.99	1.43	1.38
1	AA	867	G	C6-N1	-6.98	1.34	1.39
1	AA	1152	A	C6-N6	6.98	1.39	1.33
1	AA	1314	C	C5-C6	6.98	1.40	1.34
1	AA	836	G	C3'-C2'	6.98	1.60	1.52
1	AA	1527	U	C3'-C2'	-6.98	1.45	1.52
26	BB	78	U	C3'-O3'	-6.98	1.32	1.42
26	BB	126	A	C4'-O4'	-6.98	1.36	1.45
26	BB	261	G	C8-N7	6.98	1.35	1.30
26	BB	1556	C	N3-C4	-6.98	1.29	1.33
1	AA	305	G	P-O5'	6.98	1.66	1.59
1	AA	719	C	P-O5'	6.98	1.66	1.59
1	AA	1194	U	N1-C2	6.98	1.44	1.38
1	AA	1404	C	N1-C6	6.98	1.41	1.37
26	BB	789	A	O3'-P	-6.98	1.52	1.61
26	BB	1429	G	N3-C4	6.98	1.40	1.35
26	BB	2738	A	O4'-C1'	6.98	1.50	1.41
1	AA	377	G	C5-C4	-6.98	1.33	1.38
1	AA	479	U	N3-C4	6.98	1.44	1.38
26	BB	598	U	C2-O2	6.98	1.28	1.22
26	BB	1394	U	C5'-C4'	6.98	1.59	1.51
1	AA	502	A	C5-C6	6.98	1.47	1.41
1	AA	567	G	C4'-O4'	-6.98	1.36	1.45
1	AA	658	C	C2-N3	6.98	1.41	1.35
1	AA	659	U	N1-C2	6.98	1.44	1.38
1	AA	1014	A	N7-C5	6.98	1.43	1.39
1	AA	122	G	C6-N1	6.98	1.44	1.39
26	BB	2014	A	P-O5'	6.98	1.66	1.59
1	AA	270	A	C6-N1	-6.97	1.30	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2374	C	N3-C4	6.97	1.38	1.33
26	BB	2547	A	C6-N1	-6.97	1.30	1.35
26	BB	2803	G	N9-C8	-6.97	1.32	1.37
1	AA	6	G	N3-C4	6.97	1.40	1.35
1	AA	470	C	N1-C6	-6.97	1.32	1.37
1	AA	810	C	N1-C6	6.97	1.41	1.37
2	AB	66	C	C4'-O4'	-6.97	1.36	1.45
26	BB	772	C	C4'-O4'	-6.97	1.36	1.45
26	BB	969	G	C2-N3	6.97	1.38	1.32
26	BB	1510	G	C2-N3	6.97	1.38	1.32
26	BB	1753	G	C8-N7	-6.97	1.26	1.30
26	BB	1647	U	N1-C2	6.97	1.44	1.38
26	BB	2664	G	C5-C6	6.97	1.49	1.42
26	BB	1212	G	N3-C4	6.97	1.40	1.35
26	BB	1784	A	P-O5'	6.97	1.66	1.59
1	AA	347	G	C6-O6	-6.97	1.17	1.24
1	AA	469	C	O3'-P	6.97	1.69	1.61
1	AA	1257	A	C5-C6	6.97	1.47	1.41
26	BB	342	A	N9-C4	6.97	1.42	1.37
26	BB	1701	A	N9-C4	-6.97	1.33	1.37
26	BB	859	G	P-O5'	6.97	1.66	1.59
26	BB	908	C	P-O5'	6.97	1.66	1.59
26	BB	1158	C	C3'-C2'	6.97	1.60	1.52
26	BB	2147	A	N3-C4	6.97	1.39	1.34
1	AA	859	G	N1-C2	6.96	1.43	1.37
3	AC	17	U	P-O5'	6.96	1.66	1.59
26	BB	804	A	C6-N1	6.96	1.40	1.35
26	BB	111	A	C5-C4	-6.96	1.33	1.38
26	BB	2636	C	N1-C6	6.96	1.41	1.37
1	AA	977	A	C5-C4	-6.96	1.33	1.38
1	AA	1296	C	N1-C6	6.96	1.41	1.37
1	AA	1311	A	C5'-C4'	6.96	1.59	1.51
26	BB	331	C	C5-C6	6.96	1.40	1.34
26	BB	1451	C	N1-C6	6.96	1.41	1.37
26	BB	1877	A	N7-C5	6.96	1.43	1.39
1	AA	181	A	C5'-C4'	6.96	1.59	1.51
1	AA	387	U	C2-N3	-6.96	1.32	1.37
1	AA	576	C	N1-C6	6.96	1.41	1.37
26	BB	476	G	N7-C5	-6.96	1.35	1.39
26	BB	676	A	N3-C4	6.96	1.39	1.34
26	BB	1275	A	C3'-C2'	6.96	1.60	1.52
1	AA	509	A	C6-N6	6.96	1.39	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	AD	34	U	C2-O2	6.96	1.28	1.22
3	AC	59	A	P-O5'	-6.95	1.52	1.59
26	BB	2677	G	C8-N7	6.95	1.35	1.30
1	AA	1351	U	C4'-C3'	-6.95	1.45	1.53
1	AA	476	U	C2'-C1'	-6.95	1.45	1.53
26	BB	2646	C	C5-C6	6.95	1.40	1.34
1	AA	891	U	C4-O4	-6.95	1.18	1.23
2	AB	63	C	C4'-C3'	6.95	1.60	1.53
26	BB	684	G	N9-C8	-6.95	1.32	1.37
26	BB	2662	A	N9-C4	6.95	1.42	1.37
1	AA	453	G	O3'-P	6.95	1.69	1.61
1	AA	622	A	C6-N6	6.95	1.39	1.33
1	AA	834	U	C4'-O4'	-6.95	1.36	1.45
26	BB	346	A	C4'-O4'	-6.95	1.36	1.45
26	BB	414	C	C4-C5	6.95	1.48	1.43
26	BB	668	A	C4'-O4'	-6.95	1.36	1.45
26	BB	983	A	N7-C5	6.95	1.43	1.39
26	BB	1973	G	P-O5'	6.95	1.66	1.59
1	AA	881	G	N1-C2	6.94	1.43	1.37
26	BB	1132	U	C4-C5	6.94	1.49	1.43
1	AA	362	G	N1-C2	6.94	1.43	1.37
1	AA	870	U	C5'-C4'	6.94	1.59	1.51
3	AC	57	C	C2'-O2'	6.94	1.50	1.41
1	AA	905	U	C4-C5	6.94	1.49	1.43
1	AA	1179	A	N9-C4	6.94	1.42	1.37
26	BB	263	G	N1-C2	6.94	1.43	1.37
28	BD	61	TYR	CE1-CZ	6.94	1.47	1.38
1	AA	426	U	C4'-O4'	-6.94	1.36	1.45
26	BB	1047	G	N3-C4	6.94	1.40	1.35
26	BB	2481	G	C8-N7	6.94	1.35	1.30
1	AA	79	G	N9-C8	6.94	1.42	1.37
26	BB	152	A	N7-C5	-6.94	1.35	1.39
26	BB	1882	U	O3'-P	6.94	1.69	1.61
26	BB	2295	C	C2-O2	-6.94	1.18	1.24
26	BB	1061	U	C4'-O4'	-6.94	1.36	1.45
26	BB	1430	G	N3-C4	6.94	1.40	1.35
26	BB	2881	U	C2-N3	6.94	1.42	1.37
1	AA	628	G	P-O5'	6.93	1.66	1.59
1	AA	944	G	N7-C5	6.93	1.43	1.39
1	AA	1043	G	P-O5'	6.93	1.66	1.59
1	AA	1454	G	C5'-C4'	6.93	1.59	1.51
26	BB	291	G	P-O5'	6.93	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1909	C	N1-C6	6.93	1.41	1.37
26	BB	2288	A	N3-C4	6.93	1.39	1.34
26	BB	46	G	C2'-C1'	6.93	1.60	1.53
26	BB	1281	G	P-O5'	6.93	1.66	1.59
1	AA	431	A	N3-C4	6.93	1.39	1.34
26	BB	1168	G	N7-C5	-6.93	1.35	1.39
1	AA	1162	C	N1-C6	6.93	1.41	1.37
1	AA	1232	U	C2-N3	6.93	1.42	1.37
1	AA	1493	A	C8-N7	-6.93	1.26	1.31
26	BB	48	G	N9-C4	-6.93	1.32	1.38
26	BB	1119	U	C4-O4	-6.93	1.18	1.23
26	BB	293	U	N3-C4	6.93	1.44	1.38
26	BB	1841	U	C4'-C3'	6.93	1.60	1.53
3	AC	24	A	C6-N6	-6.93	1.28	1.33
25	BA	79	G	N1-C2	6.93	1.43	1.37
26	BB	363	G	C6-N1	6.93	1.44	1.39
26	BB	1084	A	N7-C5	-6.93	1.35	1.39
26	BB	2345	G	N3-C4	6.93	1.40	1.35
26	BB	2609	U	O3'-P	6.93	1.69	1.61
1	AA	109	A	C5'-C4'	6.92	1.59	1.51
26	BB	226	A	N9-C8	6.92	1.43	1.37
26	BB	2031	A	N9-C4	-6.92	1.33	1.37
26	BB	2307	G	C4'-O4'	-6.92	1.36	1.45
26	BB	2366	A	C5'-C4'	6.92	1.59	1.51
26	BB	1959	G	C4'-O4'	-6.92	1.36	1.45
26	BB	2510	C	C2-N3	6.92	1.41	1.35
1	AA	117	G	N1-C2	6.92	1.43	1.37
1	AA	627	G	C2-N3	6.92	1.38	1.32
1	AA	661	G	C6-N1	6.92	1.44	1.39
26	BB	853	C	N3-C4	6.92	1.38	1.33
26	BB	2280	G	C2-N3	6.92	1.38	1.32
26	BB	2308	G	N1-C2	6.92	1.43	1.37
26	BB	2642	G	N1-C2	6.92	1.43	1.37
1	AA	1473	G	C4'-C3'	-6.92	1.45	1.53
26	BB	2173	A	N9-C4	6.92	1.42	1.37
1	AA	1040	U	C4-C5	6.92	1.49	1.43
26	BB	1700	A	C8-N7	-6.92	1.26	1.31
1	AA	1229	A	C6-N6	-6.92	1.28	1.33
1	AA	1231	G	N9-C4	6.92	1.43	1.38
25	BA	3	C	C4-C5	6.92	1.48	1.43
26	BB	60	G	N3-C4	6.92	1.40	1.35
26	BB	674	G	C5-C4	-6.92	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1484	U	C5-C6	6.92	1.40	1.34
26	BB	2793	C	C5'-C4'	6.92	1.59	1.51
1	AA	352	C	C5-C6	-6.92	1.28	1.34
1	AA	1430	A	N7-C5	6.92	1.43	1.39
1	AA	691	G	N3-C4	-6.91	1.30	1.35
1	AA	950	U	C2-N3	6.91	1.42	1.37
2	AB	76	A	P-O5'	-6.91	1.52	1.59
26	BB	1868	C	C2'-O2'	-6.91	1.32	1.41
26	BB	2096	C	C5-C6	-6.91	1.28	1.34
26	BB	2867	G	C2-N3	6.91	1.38	1.32
1	AA	352	C	C4'-O4'	-6.91	1.36	1.45
1	AA	1521	C	C2-O2	-6.91	1.18	1.24
26	BB	837	C	C5-C6	6.91	1.39	1.34
26	BB	54	G	C2-N3	6.91	1.38	1.32
26	BB	287	G	N3-C4	6.91	1.40	1.35
26	BB	401	A	C8-N7	-6.91	1.26	1.31
26	BB	613	A	C6-N6	-6.91	1.28	1.33
26	BB	1374	G	C4'-O4'	-6.91	1.36	1.45
26	BB	1014	A	N9-C4	-6.91	1.33	1.37
1	AA	364	A	C5-C4	-6.91	1.33	1.38
1	AA	736	C	C5-C6	6.91	1.39	1.34
26	BB	1545	A	P-O5'	6.91	1.66	1.59
26	BB	2170	A	N3-C4	6.91	1.39	1.34
1	AA	818	G	C2'-C1'	6.90	1.60	1.53
1	AA	1160	G	C2-N3	6.90	1.38	1.32
4	AD	53	G	C4'-O4'	-6.90	1.36	1.45
1	AA	362	G	C6-O6	-6.90	1.18	1.24
1	AA	362	G	N9-C8	6.90	1.42	1.37
1	AA	1189	U	N3-C4	6.90	1.44	1.38
1	AA	1227	A	C8-N7	-6.90	1.26	1.31
26	BB	2397	G	C5-C6	6.90	1.49	1.42
1	AA	449	G	N1-C2	6.90	1.43	1.37
1	AA	864	A	C6-N1	-6.90	1.30	1.35
1	AA	1487	G	N1-C2	6.90	1.43	1.37
26	BB	576	U	C4'-O4'	-6.90	1.36	1.45
26	BB	815	C	C5-C6	6.90	1.39	1.34
26	BB	1403	A	N9-C8	-6.90	1.32	1.37
26	BB	1662	U	C2-N3	6.90	1.42	1.37
1	AA	724	G	N9-C4	6.90	1.43	1.38
1	AA	1270	G	N7-C5	-6.90	1.35	1.39
26	BB	1664	A	C8-N7	-6.90	1.26	1.31
26	BB	1778	U	C2-N3	6.90	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	256	A	C6-N6	-6.90	1.28	1.33
26	BB	780	G	C2-N3	6.90	1.38	1.32
26	BB	2240	U	C4-O4	-6.90	1.18	1.23
3	AC	21	U	C4-C5	6.89	1.49	1.43
26	BB	183	C	N1-C6	6.89	1.41	1.37
26	BB	341	C	P-O5'	6.89	1.66	1.59
26	BB	506	G	N9-C8	-6.89	1.33	1.37
26	BB	2025	C	C2-N3	6.89	1.41	1.35
26	BB	2614	A	C5-C4	-6.89	1.33	1.38
1	AA	929	G	N1-C2	6.89	1.43	1.37
1	AA	1027	C	C5-C6	-6.89	1.28	1.34
3	AC	30	U	N1-C6	6.89	1.44	1.38
1	AA	133	U	C4-C5	6.89	1.49	1.43
26	BB	871	U	P-O5'	6.89	1.66	1.59
26	BB	1167	C	C5-C6	6.89	1.39	1.34
1	AA	168	G	C4'-C3'	6.89	1.60	1.53
26	BB	229	C	P-O5'	6.89	1.66	1.59
26	BB	739	A	N7-C5	6.89	1.43	1.39
26	BB	2237	G	N9-C8	6.89	1.42	1.37
26	BB	2808	G	C8-N7	6.89	1.35	1.30
26	BB	1653	G	C4'-C3'	-6.89	1.45	1.53
1	AA	575	G	C2-N3	6.89	1.38	1.32
26	BB	555	G	N9-C4	-6.89	1.32	1.38
26	BB	1193	G	O3'-P	6.89	1.69	1.61
26	BB	2493	U	P-O5'	6.89	1.66	1.59
4	AD	4	G	C5'-C4'	6.88	1.59	1.51
26	BB	190	A	N3-C4	6.88	1.39	1.34
26	BB	720	U	C2-N3	6.88	1.42	1.37
1	AA	1362	A	N7-C5	-6.88	1.35	1.39
26	BB	2217	G	P-O5'	6.88	1.66	1.59
1	AA	175	C	C3'-O3'	6.88	1.51	1.42
1	AA	197	A	N3-C4	-6.88	1.30	1.34
1	AA	649	A	C6-N6	-6.88	1.28	1.33
1	AA	669	G	N9-C4	6.88	1.43	1.38
2	AB	22	G	P-O5'	6.88	1.66	1.59
26	BB	579	G	N1-C2	6.88	1.43	1.37
26	BB	869	G	N9-C8	6.88	1.42	1.37
26	BB	1161	C	O3'-P	6.88	1.69	1.61
26	BB	2252	G	C5-C4	6.88	1.43	1.38
26	BB	2430	A	N7-C5	-6.88	1.35	1.39
26	BB	170	U	C2-N3	6.88	1.42	1.37
26	BB	2017	U	C5-C6	6.88	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	401	C	C4-C5	6.88	1.48	1.43
1	AA	1246	A	C8-N7	-6.88	1.26	1.31
2	AB	63	C	C3'-C2'	-6.88	1.45	1.52
26	BB	1540	G	N7-C5	6.88	1.43	1.39
26	BB	2289	G	C8-N7	-6.88	1.26	1.30
26	BB	2380	C	C5-C6	6.88	1.39	1.34
26	BB	2840	C	C4-C5	6.88	1.48	1.43
1	AA	250	A	N9-C4	6.88	1.42	1.37
1	AA	785	G	N7-C5	-6.88	1.35	1.39
1	AA	1358	U	O4'-C1'	6.88	1.50	1.41
26	BB	930	G	C5-C6	6.88	1.49	1.42
26	BB	1215	G	N9-C8	6.88	1.42	1.37
26	BB	1749	A	P-O5'	6.88	1.66	1.59
26	BB	2198	A	N7-C5	-6.88	1.35	1.39
26	BB	2538	C	C4-C5	6.88	1.48	1.43
26	BB	1360	G	C5-C6	6.87	1.49	1.42
26	BB	1492	G	C2'-C1'	6.87	1.60	1.53
26	BB	1707	G	N3-C4	6.87	1.40	1.35
26	BB	2876	G	C8-N7	6.87	1.35	1.30
1	AA	1266	G	O3'-P	6.87	1.69	1.61
6	AF	12	GLY	N-CA	-6.87	1.35	1.46
26	BB	392	U	C3'-C2'	-6.87	1.45	1.52
26	BB	644	A	N9-C4	6.87	1.42	1.37
26	BB	1049	C	C5'-C4'	6.87	1.59	1.51
26	BB	2780	G	N9-C8	6.87	1.42	1.37
1	AA	1455	G	C6-O6	6.87	1.30	1.24
26	BB	1812	U	C4-C5	6.87	1.49	1.43
26	BB	2443	C	C2'-C1'	6.87	1.60	1.53
26	BB	2702	G	C2-N3	6.87	1.38	1.32
26	BB	738	G	O3'-P	6.87	1.69	1.61
1	AA	95	C	P-O5'	6.87	1.66	1.59
1	AA	397	A	P-O5'	6.87	1.66	1.59
1	AA	561	U	C5'-C4'	6.87	1.59	1.51
1	AA	552	U	C5-C6	6.86	1.40	1.34
26	BB	280	U	N3-C4	6.86	1.44	1.38
26	BB	1736	U	C4-C5	6.86	1.49	1.43
1	AA	160	A	N3-C4	6.86	1.39	1.34
1	AA	202	G	N3-C4	-6.86	1.30	1.35
1	AA	775	G	C6-N1	6.86	1.44	1.39
1	AA	1079	G	C5-C6	6.86	1.49	1.42
26	BB	2031	A	C4'-C3'	6.86	1.60	1.53
26	BB	2165	C	C4'-C3'	6.86	1.60	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2513	A	C8-N7	-6.86	1.26	1.31
26	BB	415	A	C5'-C4'	6.86	1.59	1.51
1	AA	34	C	C2-N3	6.86	1.41	1.35
1	AA	529	G	C2-N3	6.86	1.38	1.32
1	AA	903	G	O4'-C1'	6.86	1.50	1.41
26	BB	1233	C	N1-C6	6.86	1.41	1.37
26	BB	1557	C	N1-C6	6.86	1.41	1.37
31	BG	127	TYR	CG-CD2	6.86	1.48	1.39
1	AA	39	G	C6-N1	6.86	1.44	1.39
2	AB	57	G	C8-N7	6.86	1.35	1.30
4	AD	15	G	N7-C5	-6.86	1.35	1.39
26	BB	639	U	C2'-O2'	6.86	1.50	1.41
26	BB	749	A	C6-N6	6.86	1.39	1.33
26	BB	2586	U	C5-C6	6.85	1.40	1.34
26	BB	2627	G	C2-N3	6.85	1.38	1.32
26	BB	1419	A	P-O5'	6.85	1.66	1.59
26	BB	2682	A	C5-C6	6.85	1.47	1.41
1	AA	75	G	N9-C8	-6.85	1.33	1.37
1	AA	799	G	N3-C4	6.85	1.40	1.35
26	BB	156	A	N3-C4	6.85	1.39	1.34
26	BB	316	C	N1-C6	6.85	1.41	1.37
26	BB	693	A	N9-C4	6.85	1.42	1.37
26	BB	2238	G	O3'-P	6.85	1.69	1.61
1	AA	433	G	C6-O6	-6.85	1.18	1.24
26	BB	1031	G	N1-C2	6.85	1.43	1.37
26	BB	1640	A	C3'-C2'	6.85	1.60	1.52
26	BB	1749	A	C2-N3	6.85	1.39	1.33
26	BB	1804	C	N1-C6	6.85	1.41	1.37
26	BB	2603	G	O4'-C1'	6.85	1.50	1.41
1	AA	602	A	N9-C4	6.85	1.42	1.37
1	AA	703	G	N9-C4	6.85	1.43	1.38
1	AA	906	A	C2'-C1'	6.85	1.60	1.53
26	BB	471	A	C4'-O4'	-6.85	1.36	1.45
26	BB	643	A	C6-N1	6.85	1.40	1.35
26	BB	892	A	N9-C8	6.85	1.43	1.37
26	BB	1433	A	C6-N6	-6.85	1.28	1.33
26	BB	1479	G	C2-N3	6.85	1.38	1.32
26	BB	2179	C	C4'-O4'	-6.85	1.36	1.45
26	BB	1381	G	O3'-P	6.85	1.69	1.61
1	AA	350	G	O3'-P	6.84	1.69	1.61
1	AA	821	G	C2-N3	6.84	1.38	1.32
4	AD	34	U	P-O5'	6.84	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
41	BQ	64	TYR	CE2-CZ	6.84	1.47	1.38
26	BB	333	G	C8-N7	-6.84	1.26	1.30
26	BB	1708	C	C2-N3	6.84	1.41	1.35
1	AA	11	G	N9-C8	6.84	1.42	1.37
1	AA	974	A	C5-C6	6.84	1.47	1.41
26	BB	822	G	C8-N7	6.84	1.35	1.30
26	BB	2328	A	C2'-C1'	6.84	1.60	1.53
26	BB	2623	G	C3'-O3'	6.84	1.51	1.42
26	BB	2824	C	C2-N3	6.84	1.41	1.35
1	AA	306	A	N3-C4	6.84	1.39	1.34
1	AA	1450	U	N1-C2	6.84	1.44	1.38
26	BB	639	U	N1-C6	6.84	1.44	1.38
26	BB	1483	G	N1-C2	6.84	1.43	1.37
26	BB	2337	G	C2-N3	6.84	1.38	1.32
1	AA	1225	A	C8-N7	-6.84	1.26	1.31
26	BB	696	G	N7-C5	-6.84	1.35	1.39
26	BB	1640	A	N9-C8	6.84	1.43	1.37
3	AC	13	A	C5'-C4'	6.84	1.59	1.51
26	BB	2509	G	C6-N1	-6.84	1.34	1.39
26	BB	2565	A	N9-C8	6.84	1.43	1.37
26	BB	2706	A	C6-N1	6.84	1.40	1.35
1	AA	247	G	N9-C4	-6.83	1.32	1.38
26	BB	626	A	C8-N7	6.83	1.36	1.31
26	BB	1411	U	C4-C5	6.83	1.49	1.43
26	BB	1954	G	C6-N1	6.83	1.44	1.39
1	AA	881	G	P-O5'	6.83	1.66	1.59
26	BB	537	G	C3'-C2'	6.83	1.60	1.52
26	BB	1622	G	N7-C5	6.83	1.43	1.39
26	BB	1789	A	O3'-P	-6.83	1.52	1.61
1	AA	679	C	P-O5'	6.83	1.66	1.59
26	BB	1427	A	N1-C2	-6.83	1.28	1.34
1	AA	14	U	C5-C6	6.83	1.40	1.34
1	AA	447	G	C2'-O2'	6.83	1.50	1.41
26	BB	1742	U	C5'-C4'	6.83	1.59	1.51
26	BB	2035	G	C4'-C3'	6.83	1.60	1.53
1	AA	24	U	O3'-P	6.83	1.69	1.61
1	AA	374	A	C6-N1	-6.83	1.30	1.35
1	AA	772	U	N1-C2	6.83	1.44	1.38
1	AA	788	U	C2-N3	6.83	1.42	1.37
26	BB	667	U	C2-N3	6.83	1.42	1.37
26	BB	1082	U	C5'-C4'	6.83	1.59	1.51
26	BB	2407	A	N3-C4	6.83	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2646	C	P-O5'	6.83	1.66	1.59
1	AA	599	C	P-O5'	-6.83	1.52	1.59
26	BB	433	C	C4'-O4'	-6.83	1.36	1.45
26	BB	1051	G	N7-C5	6.83	1.43	1.39
26	BB	1138	G	C5-C6	6.83	1.49	1.42
26	BB	1309	G	C6-N1	6.83	1.44	1.39
26	BB	1803	A	C4'-O4'	-6.83	1.36	1.45
26	BB	2621	G	C5'-C4'	6.82	1.59	1.51
26	BB	624	C	P-O5'	6.82	1.66	1.59
1	AA	74	A	C4'-C3'	-6.82	1.45	1.53
1	AA	372	C	P-O5'	6.82	1.66	1.59
26	BB	868	U	N1-C2	6.82	1.44	1.38
26	BB	2336	A	N1-C2	-6.82	1.28	1.34
26	BB	2581	G	C5-C4	-6.82	1.33	1.38
26	BB	1035	U	N1-C6	6.82	1.44	1.38
26	BB	1661	G	C2-N3	6.82	1.38	1.32
26	BB	2824	C	N1-C6	6.82	1.41	1.37
2	AB	48	U	C4-C5	6.82	1.49	1.43
26	BB	58	G	N7-C5	6.82	1.43	1.39
26	BB	75	G	N7-C5	-6.82	1.35	1.39
26	BB	1097	U	C5-C6	6.82	1.40	1.34
26	BB	1530	G	P-O5'	6.82	1.66	1.59
26	BB	2568	U	C4'-C3'	-6.82	1.45	1.53
1	AA	698	G	C4'-O4'	-6.81	1.36	1.45
26	BB	13	A	C4'-C3'	6.81	1.60	1.53
26	BB	958	U	C4-O4	-6.81	1.18	1.23
26	BB	1378	A	N9-C4	6.81	1.42	1.37
26	BB	999	U	P-O5'	6.81	1.66	1.59
26	BB	1298	C	O3'-P	6.81	1.69	1.61
26	BB	2351	G	C2-N2	-6.81	1.27	1.34
1	AA	84	U	P-O5'	6.81	1.66	1.59
1	AA	325	A	N9-C4	6.81	1.42	1.37
1	AA	1127	G	N7-C5	6.81	1.43	1.39
26	BB	1011	G	N1-C2	6.81	1.43	1.37
26	BB	2734	A	C5'-C4'	6.81	1.59	1.51
26	BB	1158	C	N3-C4	6.81	1.38	1.33
26	BB	1719	G	P-O5'	6.81	1.66	1.59
25	BA	19	C	N1-C6	6.80	1.41	1.37
26	BB	485	C	C4-C5	-6.80	1.37	1.43
26	BB	1299	G	C5'-C4'	6.80	1.59	1.51
26	BB	1307	A	N3-C4	6.80	1.39	1.34
26	BB	1709	U	P-O5'	6.80	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	695	A	N3-C4	6.80	1.39	1.34
26	BB	178	G	P-O5'	6.80	1.66	1.59
26	BB	888	C	P-O5'	6.80	1.66	1.59
26	BB	2341	G	N3-C4	6.80	1.40	1.35
26	BB	854	C	C5'-C4'	6.80	1.59	1.51
1	AA	1079	G	C2'-C1'	6.80	1.60	1.53
26	BB	571	U	C4-C5	6.80	1.49	1.43
26	BB	2106	U	C4-C5	6.80	1.49	1.43
1	AA	683	G	C2-N3	6.80	1.38	1.32
26	BB	244	A	N9-C4	-6.80	1.33	1.37
26	BB	2256	G	C2-N3	6.80	1.38	1.32
3	AC	16	A	C5-C4	-6.80	1.33	1.38
26	BB	377	G	C5-C4	-6.80	1.33	1.38
26	BB	1382	G	N7-C5	-6.80	1.35	1.39
26	BB	2341	G	P-O5'	-6.80	1.52	1.59
1	AA	1211	U	N1-C6	6.79	1.44	1.38
26	BB	2323	G	N9-C4	-6.79	1.32	1.38
1	AA	150	U	C3'-C2'	-6.79	1.45	1.52
4	AD	5	G	O3'-P	6.79	1.69	1.61
26	BB	966	G	N1-C2	6.79	1.43	1.37
1	AA	1117	A	P-O5'	-6.79	1.52	1.59
26	BB	685	A	C4'-C3'	6.79	1.60	1.53
26	BB	2780	G	C4'-O4'	-6.79	1.36	1.45
26	BB	2876	G	C2-N3	6.79	1.38	1.32
1	AA	537	G	C2-N3	6.79	1.38	1.32
26	BB	2106	U	N3-C4	6.79	1.44	1.38
26	BB	2159	G	C2-N3	6.79	1.38	1.32
1	AA	148	G	C5-C6	6.79	1.49	1.42
1	AA	417	G	N3-C4	6.79	1.40	1.35
26	BB	210	C	C1'-N1	6.79	1.58	1.48
26	BB	1173	U	N1-C2	6.79	1.44	1.38
26	BB	1368	G	N9-C8	-6.79	1.33	1.37
26	BB	1674	G	C3'-O3'	6.79	1.51	1.42
26	BB	2358	A	N1-C2	6.79	1.40	1.34
26	BB	2307	G	C5-C4	6.79	1.43	1.38
1	AA	89	U	C5-C6	6.79	1.40	1.34
1	AA	251	G	C4'-O4'	-6.79	1.36	1.45
1	AA	1397	C	C4'-C3'	6.79	1.60	1.53
3	AC	35	G	C8-N7	-6.79	1.26	1.30
25	BA	11	C	N1-C6	6.79	1.41	1.37
26	BB	901	C	C4-C5	6.79	1.48	1.43
26	BB	1626	A	N7-C5	6.79	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2708	G	N7-C5	6.79	1.43	1.39
1	AA	226	G	C2-N3	6.78	1.38	1.32
1	AA	605	U	C2-O2	6.78	1.28	1.22
1	AA	1108	G	N7-C5	6.78	1.43	1.39
25	BA	72	G	C2-N3	6.78	1.38	1.32
26	BB	175	G	N7-C5	6.78	1.43	1.39
26	BB	698	C	C3'-C2'	6.78	1.60	1.52
26	BB	1014	A	N7-C5	-6.78	1.35	1.39
26	BB	1654	A	C5'-C4'	6.78	1.59	1.51
26	BB	1753	G	O3'-P	-6.78	1.53	1.61
26	BB	2662	A	O3'-P	-6.78	1.53	1.61
26	BB	2680	U	C5'-C4'	6.78	1.59	1.51
1	AA	333	U	C2-N3	6.78	1.42	1.37
26	BB	2738	A	P-O5'	6.78	1.66	1.59
1	AA	754	C	C2-N3	6.78	1.41	1.35
1	AA	1087	G	N3-C4	6.78	1.40	1.35
4	AD	26	C	C2-N3	6.78	1.41	1.35
1	AA	1328	C	C2'-C1'	-6.78	1.45	1.53
26	BB	950	G	C6-N1	6.78	1.44	1.39
26	BB	2055	C	P-O5'	6.78	1.66	1.59
26	BB	899	A	N9-C8	6.78	1.43	1.37
26	BB	1602	U	C4'-O4'	-6.78	1.36	1.45
26	BB	2041	U	P-O5'	6.78	1.66	1.59
26	BB	2076	U	N1-C2	6.78	1.44	1.38
1	AA	250	A	C5'-C4'	6.78	1.59	1.51
1	AA	633	G	N9-C8	-6.78	1.33	1.37
1	AA	1526	G	N3-C4	6.78	1.40	1.35
26	BB	1133	A	P-O5'	6.78	1.66	1.59
26	BB	1770	G	C6-N1	6.78	1.44	1.39
26	BB	2762	C	C2-N3	6.78	1.41	1.35
1	AA	204	G	N9-C8	-6.77	1.33	1.37
1	AA	970	C	C4'-C3'	6.77	1.60	1.53
3	AC	44	U	P-O5'	6.77	1.66	1.59
26	BB	211	C	N3-C4	6.77	1.38	1.33
26	BB	673	C	N1-C6	6.77	1.41	1.37
26	BB	1009	A	C6-N1	-6.77	1.30	1.35
26	BB	2707	U	C1'-N1	6.77	1.58	1.48
26	BB	2733	A	P-O5'	6.77	1.66	1.59
4	AD	67	C	C4-C5	6.77	1.48	1.43
26	BB	1307	A	C4'-O4'	-6.77	1.36	1.45
26	BB	1922	G	O3'-P	6.77	1.69	1.61
1	AA	54	C	C4-C5	6.77	1.48	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	385	C	C3'-C2'	-6.77	1.45	1.52
1	AA	442	G	O3'-P	6.77	1.69	1.61
25	BA	23	G	C5'-C4'	6.77	1.59	1.51
26	BB	958	U	C5-C6	6.77	1.40	1.34
26	BB	2262	U	C2-N3	6.77	1.42	1.37
26	BB	2589	A	C6-N1	-6.77	1.30	1.35
40	BP	100	CYS	CB-SG	-6.77	1.70	1.82
26	BB	109	C	N3-C4	6.77	1.38	1.33
26	BB	161	A	C2-N3	6.77	1.39	1.33
26	BB	551	G	C5'-C4'	6.77	1.59	1.51
1	AA	814	A	N7-C5	-6.76	1.35	1.39
26	BB	196	A	C4'-O4'	-6.76	1.36	1.45
26	BB	1775	U	C2-N3	-6.76	1.33	1.37
26	BB	2706	A	N3-C4	6.76	1.39	1.34
1	AA	96	U	P-O5'	6.76	1.66	1.59
26	BB	1786	A	C5-C4	-6.76	1.34	1.38
26	BB	1506	U	C5'-C4'	6.76	1.59	1.51
26	BB	2653	U	C2'-C1'	-6.76	1.46	1.53
26	BB	2669	G	C5-C4	6.76	1.43	1.38
32	BH	94	ARG	CZ-NH1	6.76	1.41	1.33
1	AA	1080	A	N9-C8	-6.76	1.32	1.37
26	BB	1177	G	C5-C4	6.76	1.43	1.38
26	BB	2365	G	C6-O6	-6.76	1.18	1.24
1	AA	703	G	N3-C4	6.76	1.40	1.35
1	AA	45	G	N3-C4	-6.76	1.30	1.35
1	AA	48	C	C5-C6	6.76	1.39	1.34
26	BB	141	G	P-O5'	6.76	1.66	1.59
26	BB	658	U	C2-N3	6.76	1.42	1.37
26	BB	2228	G	N7-C5	-6.76	1.35	1.39
26	BB	2793	C	O3'-P	6.76	1.69	1.61
1	AA	353	A	C4'-O4'	-6.75	1.36	1.45
26	BB	369	U	N3-C4	6.75	1.44	1.38
26	BB	777	G	N3-C4	6.75	1.40	1.35
1	AA	378	G	C2'-C1'	6.75	1.60	1.53
1	AA	480	U	N1-C6	6.75	1.44	1.38
1	AA	1535	C	N1-C2	6.75	1.47	1.40
26	BB	749	A	N3-C4	6.75	1.39	1.34
26	BB	1324	G	P-O5'	6.75	1.66	1.59
1	AA	106	C	C4'-C3'	6.75	1.60	1.53
1	AA	1194	U	C2-O2	6.75	1.28	1.22
26	BB	1712	U	C3'-C2'	6.75	1.60	1.52
26	BB	2235	G	C6-O6	-6.75	1.18	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2851	A	C6-N6	-6.75	1.28	1.33
1	AA	299	G	C6-N1	6.75	1.44	1.39
1	AA	1364	U	N1-C2	6.75	1.44	1.38
1	AA	273	U	N1-C2	6.75	1.44	1.38
1	AA	930	C	N1-C6	6.75	1.41	1.37
1	AA	1400	C	C4-N4	6.75	1.40	1.33
4	AD	13	C	C4-C5	6.75	1.48	1.43
26	BB	508	A	C6-N6	-6.75	1.28	1.33
26	BB	572	A	N9-C8	-6.75	1.32	1.37
26	BB	1470	A	N9-C4	6.75	1.41	1.37
26	BB	2024	G	N3-C4	-6.75	1.30	1.35
26	BB	2102	G	O3'-P	-6.75	1.53	1.61
26	BB	2108	A	N7-C5	6.75	1.43	1.39
26	BB	2271	G	C4'-O4'	-6.75	1.36	1.45
26	BB	2510	C	C5'-C4'	6.75	1.59	1.51
1	AA	1225	A	N9-C8	-6.75	1.32	1.37
1	AA	1337	G	C4'-C3'	6.75	1.60	1.53
26	BB	1245	G	C8-N7	6.75	1.34	1.30
26	BB	1356	G	C6-O6	-6.75	1.18	1.24
26	BB	1836	C	P-O5'	6.75	1.66	1.59
2	AB	76	A	N9-C4	6.75	1.41	1.37
3	AC	48	C	C4-C5	6.75	1.48	1.43
26	BB	1178	C	C2-O2	-6.75	1.18	1.24
26	BB	2167	U	C2-N3	6.75	1.42	1.37
1	AA	1306	A	C4'-O4'	-6.74	1.36	1.45
1	AA	1316	G	P-O5'	6.74	1.66	1.59
4	AD	27	G	N3-C4	6.74	1.40	1.35
26	BB	273	G	P-O5'	6.74	1.66	1.59
26	BB	972	A	C8-N7	-6.74	1.26	1.31
26	BB	2482	A	N7-C5	-6.74	1.35	1.39
1	AA	452	A	N9-C4	6.74	1.41	1.37
1	AA	596	A	N9-C8	6.74	1.43	1.37
26	BB	2849	U	C2-N3	6.74	1.42	1.37
26	BB	2901	C	C5'-C4'	6.74	1.59	1.51
26	BB	899	A	C6-N1	6.74	1.40	1.35
26	BB	1276	A	N3-C4	6.74	1.38	1.34
26	BB	2599	G	O4'-C1'	6.74	1.50	1.41
1	AA	1084	G	N9-C8	-6.74	1.33	1.37
1	AA	1261	A	C6-N6	6.74	1.39	1.33
1	AA	1412	C	N1-C6	-6.74	1.33	1.37
26	BB	503	A	P-O5'	6.74	1.66	1.59
26	BB	1424	G	P-O5'	6.74	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2523	G	O4'-C1'	6.74	1.50	1.41
26	BB	2121	G	N1-C2	6.74	1.43	1.37
26	BB	18	U	C2-O2	6.74	1.28	1.22
26	BB	1386	C	N1-C6	6.74	1.41	1.37
26	BB	2227	A	C5'-C4'	6.74	1.59	1.51
1	AA	891	U	C2-N3	6.73	1.42	1.37
26	BB	1374	G	N7-C5	-6.73	1.35	1.39
1	AA	1012	A	C6-N1	-6.73	1.30	1.35
1	AA	1311	A	C6-N1	-6.73	1.30	1.35
1	AA	1376	U	P-O5'	6.73	1.66	1.59
26	BB	1339	G	N7-C5	6.73	1.43	1.39
26	BB	2450	A	C5'-C4'	6.73	1.59	1.51
26	BB	2814	A	P-O5'	-6.73	1.53	1.59
1	AA	50	A	N9-C4	-6.73	1.33	1.37
1	AA	824	G	P-O5'	6.73	1.66	1.59
1	AA	858	G	P-O5'	6.73	1.66	1.59
2	AB	51	G	P-O5'	6.73	1.66	1.59
26	BB	985	C	O3'-P	6.73	1.69	1.61
26	BB	758	C	P-O5'	6.73	1.66	1.59
26	BB	884	U	C3'-C2'	-6.73	1.45	1.52
1	AA	435	A	C5'-C4'	6.73	1.59	1.51
1	AA	747	A	N7-C5	6.73	1.43	1.39
26	BB	191	A	N7-C5	6.73	1.43	1.39
26	BB	2070	A	N9-C4	6.73	1.41	1.37
1	AA	98	A	N9-C4	6.72	1.41	1.37
1	AA	274	A	C4'-O4'	-6.72	1.36	1.45
26	BB	1202	G	N3-C4	6.72	1.40	1.35
26	BB	2120	G	C4'-O4'	-6.72	1.36	1.45
1	AA	685	G	N7-C5	6.72	1.43	1.39
1	AA	952	U	O4'-C1'	6.72	1.50	1.41
25	BA	35	C	C5-C6	6.72	1.39	1.34
26	BB	67	U	O3'-P	6.72	1.69	1.61
26	BB	900	A	N9-C4	6.72	1.41	1.37
26	BB	1424	G	C8-N7	-6.72	1.26	1.30
26	BB	2222	C	C4-C5	6.72	1.48	1.43
1	AA	1511	G	C2'-C1'	6.72	1.60	1.53
2	AB	44	G	N1-C2	6.72	1.43	1.37
1	AA	894	G	C5-C6	6.72	1.49	1.42
3	AC	44	U	C5'-C4'	6.72	1.59	1.51
25	BA	89	U	C2-N3	6.72	1.42	1.37
26	BB	196	A	C6-N1	6.72	1.40	1.35
26	BB	553	G	C8-N7	-6.72	1.26	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	192	A	C6-N6	6.72	1.39	1.33
26	BB	572	A	N9-C4	6.72	1.41	1.37
26	BB	1854	A	N7-C5	-6.72	1.35	1.39
26	BB	2654	A	C3'-C2'	6.72	1.60	1.52
1	AA	853	C	P-O5'	6.72	1.66	1.59
26	BB	1157	G	P-O5'	6.72	1.66	1.59
26	BB	2153	C	C3'-C2'	6.72	1.60	1.52
26	BB	2614	A	N7-C5	6.72	1.43	1.39
1	AA	299	G	C4'-C3'	-6.71	1.45	1.53
1	AA	847	G	N1-C2	6.71	1.43	1.37
1	AA	1480	A	C4'-O4'	-6.71	1.36	1.45
4	AD	4	G	C2-N3	6.71	1.38	1.32
26	BB	358	U	C4'-O4'	-6.71	1.36	1.45
26	BB	1109	C	C5-C6	6.71	1.39	1.34
26	BB	1191	G	C8-N7	-6.71	1.26	1.30
26	BB	1657	U	C4-O4	-6.71	1.18	1.23
26	BB	1873	G	N1-C2	-6.71	1.32	1.37
26	BB	2502	G	N1-C2	6.71	1.43	1.37
26	BB	2825	G	C5'-C4'	6.71	1.59	1.51
1	AA	27	G	C4'-C3'	6.71	1.60	1.53
1	AA	1116	U	C2-N3	6.71	1.42	1.37
26	BB	1523	U	C4-C5	6.71	1.49	1.43
26	BB	1663	G	C6-N1	6.71	1.44	1.39
26	BB	1862	G	C2'-C1'	6.71	1.60	1.53
26	BB	2705	A	N7-C5	6.71	1.43	1.39
26	BB	2826	A	C8-N7	6.71	1.36	1.31
1	AA	1287	A	C5-C4	6.71	1.43	1.38
1	AA	1343	G	C2-N3	6.71	1.38	1.32
26	BB	41	C	P-O5'	-6.71	1.53	1.59
26	BB	2425	A	C4'-O4'	-6.71	1.36	1.45
26	BB	2557	G	O3'-P	6.71	1.69	1.61
26	BB	1003	G	C2-N3	6.71	1.38	1.32
1	AA	54	C	O3'-P	6.71	1.69	1.61
1	AA	452	A	N3-C4	6.71	1.38	1.34
1	AA	1501	C	C2-N3	6.71	1.41	1.35
26	BB	234	U	C5-C6	6.71	1.40	1.34
26	BB	430	A	N7-C5	6.71	1.43	1.39
26	BB	1289	C	C3'-C2'	-6.71	1.45	1.52
26	BB	2601	C	C2-O2	-6.71	1.18	1.24
1	AA	20	U	C5-C6	6.71	1.40	1.34
1	AA	1090	U	C4-C5	6.71	1.49	1.43
1	AA	1414	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	BB	110	G	C5'-C4'	6.71	1.59	1.51
26	BB	1411	U	C5-C6	6.71	1.40	1.34
26	BB	2036	C	N3-C4	6.71	1.38	1.33
26	BB	2644	G	P-O5'	6.71	1.66	1.59
26	BB	1201	U	N1-C2	6.71	1.44	1.38
1	AA	619	U	C2'-C1'	6.70	1.60	1.53
26	BB	2070	A	P-O5'	6.70	1.66	1.59
26	BB	2127	G	C5'-C4'	6.70	1.59	1.51
26	BB	2285	C	P-O5'	6.70	1.66	1.59
1	AA	656	G	N7-C5	6.70	1.43	1.39
26	BB	1112	G	N3-C4	6.70	1.40	1.35
26	BB	2259	U	C5'-C4'	6.70	1.59	1.51
1	AA	326	G	C5'-C4'	6.70	1.59	1.51
1	AA	1489	G	N7-C5	-6.70	1.35	1.39
2	AB	21	A	C4'-O4'	-6.70	1.36	1.45
26	BB	363	G	C5-C4	-6.70	1.33	1.38
1	AA	485	U	C4'-O4'	-6.70	1.36	1.45
26	BB	322	A	C2-N3	-6.70	1.27	1.33
1	AA	705	G	C4'-O4'	-6.70	1.36	1.45
1	AA	825	A	C6-N1	6.70	1.40	1.35
26	BB	291	G	C6-N1	6.70	1.44	1.39
26	BB	1631	G	P-O5'	6.70	1.66	1.59
1	AA	237	G	C4'-C3'	6.70	1.60	1.53
1	AA	1276	G	P-O5'	6.70	1.66	1.59
25	BA	53	A	C8-N7	-6.70	1.26	1.31
26	BB	986	C	O4'-C1'	6.70	1.50	1.41
26	BB	1644	C	O3'-P	6.70	1.69	1.61
26	BB	2121	G	N3-C4	-6.70	1.30	1.35
1	AA	2	A	N9-C4	6.69	1.41	1.37
1	AA	26	A	N7-C5	6.69	1.43	1.39
1	AA	668	G	C2-N3	6.69	1.38	1.32
26	BB	219	A	N7-C5	6.69	1.43	1.39
26	BB	196	A	N7-C5	-6.69	1.35	1.39
26	BB	554	U	C4'-O4'	-6.69	1.36	1.45
26	BB	896	A	N7-C5	6.69	1.43	1.39
26	BB	1040	A	N3-C4	6.69	1.38	1.34
26	BB	1357	C	C3'-C2'	6.69	1.60	1.52
26	BB	1663	G	C2-N3	6.69	1.38	1.32
26	BB	2485	G	C5-C4	-6.69	1.33	1.38
26	BB	2645	G	P-O5'	6.69	1.66	1.59
1	AA	1179	A	N3-C4	6.69	1.38	1.34
26	BB	145	C	C4'-O4'	-6.69	1.36	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	185	G	C8-N7	6.69	1.34	1.30
26	BB	251	A	N9-C4	6.69	1.41	1.37
26	BB	1256	G	O3'-P	-6.69	1.53	1.61
26	BB	1504	A	N7-C5	-6.69	1.35	1.39
26	BB	2286	G	C2-N3	6.69	1.38	1.32
26	BB	2397	G	O5'-C5'	-6.69	1.32	1.42
26	BB	2494	G	C2-N3	6.69	1.38	1.32
26	BB	2574	G	O4'-C1'	6.69	1.50	1.41
1	AA	1484	C	C3'-C2'	6.69	1.60	1.52
1	AA	1233	G	N7-C5	-6.69	1.35	1.39
26	BB	1177	G	C2-N3	6.69	1.38	1.32
26	BB	2010	G	N3-C4	6.69	1.40	1.35
26	BB	2156	G	C2'-C1'	-6.69	1.46	1.53
26	BB	70	G	C2'-C1'	-6.69	1.46	1.53
26	BB	575	A	C8-N7	6.69	1.36	1.31
2	AB	5	G	N9-C8	6.68	1.42	1.37
26	BB	1895	C	P-O5'	6.68	1.66	1.59
1	AA	328	C	P-O5'	6.68	1.66	1.59
1	AA	454	G	C6-O6	-6.68	1.18	1.24
26	BB	2444	G	N9-C8	6.68	1.42	1.37
26	BB	1421	G	N7-C5	-6.68	1.35	1.39
26	BB	2604	U	C4-C5	6.68	1.49	1.43
1	AA	990	C	O4'-C1'	6.68	1.50	1.41
1	AA	1015	G	O3'-P	6.68	1.69	1.61
1	AA	1354	U	N1-C2	6.68	1.44	1.38
26	BB	557	C	N1-C2	-6.68	1.33	1.40
26	BB	675	A	N3-C4	6.68	1.38	1.34
26	BB	2097	A	C6-N6	6.68	1.39	1.33
1	AA	974	A	P-O5'	6.68	1.66	1.59
1	AA	1132	C	O3'-P	6.68	1.69	1.61
26	BB	87	U	P-O5'	6.68	1.66	1.59
1	AA	49	U	N3-C4	6.68	1.44	1.38
1	AA	1291	U	C2-N3	6.68	1.42	1.37
25	BA	88	C	C2'-O2'	-6.68	1.32	1.41
26	BB	462	C	P-O5'	6.68	1.66	1.59
26	BB	1133	A	N9-C8	-6.68	1.32	1.37
1	AA	929	G	C2-N3	6.67	1.38	1.32
26	BB	274	C	P-O5'	6.67	1.66	1.59
26	BB	1330	C	P-O5'	6.67	1.66	1.59
26	BB	2515	C	O4'-C1'	-6.67	1.32	1.41
26	BB	2711	A	C8-N7	6.67	1.36	1.31
1	AA	771	G	C5'-C4'	6.67	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1423	G	N9-C8	6.67	1.42	1.37
25	BA	74	U	P-O5'	6.67	1.66	1.59
26	BB	591	U	N1-C2	6.67	1.44	1.38
1	AA	1212	U	C4-C5	6.67	1.49	1.43
26	BB	54	G	C4'-O4'	-6.67	1.36	1.45
26	BB	137	U	C4-C5	6.67	1.49	1.43
26	BB	618	G	N9-C4	-6.67	1.32	1.38
26	BB	822	G	N1-C2	6.67	1.43	1.37
26	BB	2542	A	C5-C4	-6.67	1.34	1.38
26	BB	2759	G	C8-N7	6.67	1.34	1.30
1	AA	868	C	N3-C4	6.67	1.38	1.33
1	AA	243	A	O4'-C1'	6.67	1.50	1.41
1	AA	609	A	P-O5'	6.67	1.66	1.59
3	AC	19	A	P-O5'	-6.67	1.53	1.59
4	AD	23	G	N9-C8	6.67	1.42	1.37
26	BB	109	C	C4'-O4'	-6.67	1.36	1.45
26	BB	1650	A	N9-C4	-6.67	1.33	1.37
26	BB	2335	A	C6-N1	-6.67	1.30	1.35
1	AA	217	C	C2-N3	6.67	1.41	1.35
26	BB	770	G	C4'-C3'	6.67	1.60	1.53
26	BB	2250	G	C5'-C4'	6.67	1.59	1.51
1	AA	782	A	C4'-O4'	-6.67	1.36	1.45
2	AB	75	C	O3'-P	6.67	1.69	1.61
26	BB	1344	U	C2-N3	6.67	1.42	1.37
26	BB	310	A	C6-N1	-6.66	1.30	1.35
26	BB	1441	G	N9-C8	-6.66	1.33	1.37
26	BB	1072	C	C5-C6	6.66	1.39	1.34
26	BB	1650	A	C8-N7	-6.66	1.26	1.31
26	BB	1738	G	C2-N3	6.66	1.38	1.32
1	AA	30	U	C2-N3	6.66	1.42	1.37
4	AD	12	G	C6-N1	-6.66	1.34	1.39
4	AD	65	G	N9-C8	6.66	1.42	1.37
26	BB	279	A	O3'-P	6.66	1.69	1.61
26	BB	1572	A	C6-N1	-6.66	1.30	1.35
26	BB	1687	G	C2-N3	6.66	1.38	1.32
26	BB	1833	C	C2-N3	6.66	1.41	1.35
26	BB	2200	C	P-O5'	6.66	1.66	1.59
26	BB	2298	A	N9-C4	6.66	1.41	1.37
1	AA	1245	C	C3'-C2'	6.66	1.60	1.52
26	BB	270	A	C6-N6	6.66	1.39	1.33
26	BB	821	A	C2'-C1'	6.66	1.60	1.53
26	BB	2486	C	N3-C4	6.66	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2811	G	C4'-O4'	-6.66	1.36	1.45
26	BB	39	G	O3'-P	6.66	1.69	1.61
1	AA	82	G	N9-C8	6.66	1.42	1.37
1	AA	186	C	P-O5'	6.66	1.66	1.59
1	AA	1080	A	N9-C4	6.66	1.41	1.37
26	BB	126	A	C5'-C4'	6.65	1.59	1.51
26	BB	1785	A	C8-N7	-6.65	1.26	1.31
26	BB	2215	C	N1-C6	6.65	1.41	1.37
1	AA	548	G	C5-C6	6.65	1.49	1.42
1	AA	783	C	N1-C6	6.65	1.41	1.37
1	AA	904	U	C4-O4	6.65	1.28	1.23
25	BA	22	U	O4'-C1'	6.65	1.50	1.41
26	BB	261	G	C5-C4	-6.65	1.33	1.38
26	BB	1326	U	C5-C6	6.65	1.40	1.34
26	BB	1487	U	N3-C4	6.65	1.44	1.38
26	BB	1855	U	N3-C4	6.65	1.44	1.38
26	BB	2195	U	N1-C2	6.65	1.44	1.38
26	BB	2242	G	O3'-P	6.65	1.69	1.61
4	AD	23	G	C6-N1	-6.65	1.34	1.39
25	BA	74	U	C2-N3	6.65	1.42	1.37
26	BB	115	C	N3-C4	6.65	1.38	1.33
26	BB	169	G	C5-C4	6.65	1.43	1.38
26	BB	1451	C	C4-C5	-6.65	1.37	1.43
26	BB	1542	U	C5'-C4'	6.65	1.59	1.51
26	BB	1761	C	P-O5'	6.65	1.66	1.59
26	BB	2145	C	C2-N3	-6.65	1.30	1.35
26	BB	2649	C	C4'-O4'	-6.65	1.36	1.45
1	AA	178	C	N1-C2	-6.65	1.33	1.40
1	AA	505	G	C4'-O4'	-6.65	1.36	1.45
1	AA	1270	G	N1-C2	6.65	1.43	1.37
4	AD	58	A	C8-N7	-6.65	1.26	1.31
25	BA	101	A	N1-C2	6.65	1.40	1.34
26	BB	1322	A	N7-C5	-6.65	1.35	1.39
3	AC	22	G	N9-C8	-6.64	1.33	1.37
26	BB	764	A	O3'-P	-6.64	1.53	1.61
26	BB	820	A	C8-N7	-6.64	1.26	1.31
26	BB	869	G	O3'-P	6.64	1.69	1.61
26	BB	1309	G	P-O5'	6.64	1.66	1.59
26	BB	2619	C	O3'-P	6.64	1.69	1.61
1	AA	880	C	P-O5'	6.64	1.66	1.59
1	AA	1167	A	C2-N3	6.64	1.39	1.33
25	BA	55	U	N3-C4	6.64	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	274	C	N1-C6	6.64	1.41	1.37
26	BB	1002	G	C2-N3	6.64	1.38	1.32
26	BB	1971	U	C4-O4	-6.64	1.18	1.23
1	AA	1016	A	C6-N6	6.64	1.39	1.33
26	BB	2706	A	C6-N6	-6.64	1.28	1.33
26	BB	2897	U	C4-C5	6.64	1.49	1.43
1	AA	491	G	O3'-P	6.64	1.69	1.61
26	BB	1088	A	C5-C4	6.64	1.43	1.38
26	BB	1678	A	N9-C4	-6.64	1.33	1.37
26	BB	2390	U	O3'-P	6.64	1.69	1.61
26	BB	2565	A	C2'-C1'	-6.64	1.46	1.53
26	BB	2803	G	C2-N3	6.64	1.38	1.32
26	BB	1056	G	N3-C4	6.64	1.40	1.35
26	BB	1139	G	C6-N1	6.64	1.44	1.39
25	BA	81	G	C5'-C4'	6.64	1.59	1.51
26	BB	333	G	P-O5'	6.64	1.66	1.59
26	BB	418	C	C4-C5	6.64	1.48	1.43
26	BB	485	C	P-O5'	6.64	1.66	1.59
26	BB	956	G	C2'-C1'	-6.64	1.46	1.53
26	BB	1358	G	N9-C4	6.64	1.43	1.38
26	BB	2353	G	C4'-O4'	-6.64	1.36	1.45
1	AA	132	C	C5'-C4'	6.63	1.59	1.51
1	AA	1527	U	C2-O2	6.63	1.28	1.22
26	BB	1451	C	N3-C4	6.63	1.38	1.33
26	BB	1723	G	N7-C5	6.63	1.43	1.39
26	BB	2132	U	C2-O2	6.63	1.28	1.22
26	BB	406	G	C4'-O4'	-6.63	1.36	1.45
26	BB	648	G	C4'-O4'	-6.63	1.36	1.45
26	BB	1048	A	C5'-C4'	6.63	1.59	1.51
26	BB	2751	G	N7-C5	-6.63	1.35	1.39
26	BB	2881	U	C4'-C3'	-6.63	1.45	1.53
1	AA	383	A	C2'-O2'	6.63	1.50	1.41
3	AC	13	A	O4'-C1'	-6.63	1.33	1.41
26	BB	984	A	O3'-P	6.63	1.69	1.61
26	BB	1019	U	P-O5'	6.63	1.66	1.59
26	BB	1250	G	C2-N3	6.63	1.38	1.32
26	BB	1437	C	N3-C4	6.63	1.38	1.33
2	AB	2	G	C6-N1	-6.63	1.34	1.39
1	AA	987	G	C5-C4	-6.63	1.33	1.38
26	BB	21	A	C5-C4	-6.63	1.34	1.38
26	BB	404	A	N3-C4	6.63	1.38	1.34
26	BB	440	C	P-O5'	-6.63	1.53	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	877	A	O3'-P	6.63	1.69	1.61
26	BB	996	A	C2'-O2'	-6.62	1.33	1.41
1	AA	759	A	C5-C4	6.62	1.43	1.38
1	AA	808	C	C2-N3	6.62	1.41	1.35
1	AA	1158	C	P-O5'	6.62	1.66	1.59
26	BB	1449	G	N1-C2	6.62	1.43	1.37
26	BB	1650	A	P-O5'	6.62	1.66	1.59
26	BB	1976	U	C4-C5	6.62	1.49	1.43
3	AC	59	A	C6-N6	6.62	1.39	1.33
26	BB	965	C	C2'-C1'	-6.62	1.46	1.53
26	BB	1200	C	C1'-N1	6.62	1.58	1.48
26	BB	1841	U	P-O5'	6.62	1.66	1.59
26	BB	2329	U	C4'-O4'	-6.62	1.36	1.45
1	AA	710	G	O5'-C5'	-6.62	1.32	1.42
26	BB	1900	A	C5-C4	6.62	1.43	1.38
26	BB	2472	G	N1-C2	6.62	1.43	1.37
1	AA	1191	A	C2'-O2'	6.62	1.50	1.41
26	BB	2	G	C2-N3	6.62	1.38	1.32
26	BB	1159	U	C5-C6	6.62	1.40	1.34
26	BB	1914	C	C2-N3	6.62	1.41	1.35
26	BB	2132	U	C4'-O4'	-6.62	1.36	1.45
26	BB	2880	C	C4'-O4'	-6.62	1.36	1.45
1	AA	484	G	N9-C8	-6.62	1.33	1.37
26	BB	1551	A	N7-C5	6.62	1.43	1.39
26	BB	1966	A	C5-C4	-6.62	1.34	1.38
26	BB	149	A	C5-C4	-6.62	1.34	1.38
26	BB	408	G	N1-C2	6.62	1.43	1.37
26	BB	2011	U	C4-C5	6.62	1.49	1.43
26	BB	2332	C	C4'-O4'	-6.62	1.36	1.45
1	AA	25	C	N3-C4	6.61	1.38	1.33
1	AA	1012	A	C8-N7	-6.61	1.26	1.31
1	AA	1123	U	C2'-O2'	6.61	1.50	1.41
26	BB	717	C	C4-C5	6.61	1.48	1.43
26	BB	751	A	O3'-P	6.61	1.69	1.61
26	BB	1448	G	C6-N1	6.61	1.44	1.39
26	BB	1901	A	C6-N6	-6.61	1.28	1.33
26	BB	2032	G	N3-C4	6.61	1.40	1.35
26	BB	1112	G	P-O5'	6.61	1.66	1.59
26	BB	2729	G	C6-O6	-6.61	1.18	1.24
1	AA	767	A	N9-C8	6.61	1.43	1.37
1	AA	934	C	C5-C6	6.61	1.39	1.34
1	AA	1032	G	N3-C4	6.61	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1416	G	N9-C4	6.61	1.43	1.38
26	BB	1243	C	C2'-O2'	6.61	1.50	1.41
26	BB	2452	C	N3-C4	6.61	1.38	1.33
26	BB	2847	U	C4-C5	6.61	1.49	1.43
1	AA	306	A	N7-C5	6.61	1.43	1.39
1	AA	587	G	N3-C4	6.61	1.40	1.35
1	AA	1243	C	N3-C4	6.61	1.38	1.33
4	AD	7	G	P-O5'	6.61	1.66	1.59
26	BB	284	U	P-O5'	6.61	1.66	1.59
26	BB	1000	A	P-O5'	6.61	1.66	1.59
26	BB	1194	A	C4'-O4'	-6.61	1.36	1.45
26	BB	2402	U	C4-O4	-6.61	1.18	1.23
30	BF	88	ARG	CZ-NH2	6.61	1.41	1.33
1	AA	220	G	C6-N1	6.61	1.44	1.39
1	AA	413	G	C2-N3	6.61	1.38	1.32
1	AA	1212	U	O3'-P	6.61	1.69	1.61
26	BB	674	G	N7-C5	-6.61	1.35	1.39
26	BB	1986	C	C2-O2	-6.61	1.18	1.24
26	BB	2045	C	C4-C5	6.61	1.48	1.43
26	BB	2639	A	C5'-C4'	6.61	1.59	1.51
1	AA	423	G	C2'-O2'	6.60	1.50	1.41
26	BB	4	U	C5'-C4'	6.60	1.59	1.51
26	BB	180	G	C6-N1	6.60	1.44	1.39
26	BB	799	G	C5'-C4'	6.60	1.59	1.51
26	BB	1973	G	C6-N1	6.60	1.44	1.39
1	AA	912	C	P-O5'	6.60	1.66	1.59
26	BB	1689	A	C5-C4	-6.60	1.34	1.38
1	AA	695	A	N7-C5	-6.60	1.35	1.39
1	AA	1373	G	P-O5'	6.60	1.66	1.59
26	BB	712	G	N1-C2	6.60	1.43	1.37
26	BB	2731	G	C5'-C4'	6.60	1.59	1.51
1	AA	708	C	C5-C6	-6.60	1.29	1.34
26	BB	730	A	C2'-C1'	6.60	1.60	1.53
1	AA	351	G	C4'-C3'	6.60	1.60	1.53
1	AA	949	A	C5'-C4'	6.60	1.59	1.51
1	AA	1063	C	C2'-C1'	6.60	1.60	1.53
26	BB	1040	A	C3'-O3'	6.60	1.51	1.42
26	BB	2411	A	N3-C4	6.60	1.38	1.34
25	BA	41	G	C6-N1	6.60	1.44	1.39
26	BB	1063	G	C6-N1	6.60	1.44	1.39
1	AA	160	A	C5-C4	-6.59	1.34	1.38
1	AA	859	G	C3'-C2'	-6.59	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	862	C	N3-C4	6.59	1.38	1.33
1	AA	920	U	P-O5'	6.59	1.66	1.59
26	BB	420	C	C5-C6	6.59	1.39	1.34
26	BB	547	A	N1-C2	-6.59	1.28	1.34
26	BB	1734	G	O3'-P	6.59	1.69	1.61
1	AA	1483	A	C2'-C1'	6.59	1.60	1.53
26	BB	734	A	C5-C4	-6.59	1.34	1.38
1	AA	337	G	C2-N3	6.59	1.38	1.32
1	AA	355	C	C2-N3	6.59	1.41	1.35
4	AD	75	C	P-O5'	6.59	1.66	1.59
26	BB	267	C	C5'-C4'	6.59	1.59	1.51
26	BB	882	G	C4'-C3'	6.59	1.60	1.53
26	BB	1408	G	C4'-O4'	-6.59	1.36	1.45
26	BB	2797	U	C4'-C3'	-6.59	1.46	1.53
26	BB	2874	C	N1-C6	6.59	1.41	1.37
1	AA	547	A	N7-C5	6.59	1.43	1.39
1	AA	908	A	N7-C5	-6.59	1.35	1.39
26	BB	411	G	C5'-C4'	6.59	1.59	1.51
26	BB	1305	C	C4'-O4'	-6.59	1.36	1.45
1	AA	65	A	P-O5'	-6.59	1.53	1.59
1	AA	275	G	N9-C8	-6.59	1.33	1.37
1	AA	1393	U	N1-C2	6.59	1.44	1.38
26	BB	2081	U	C4'-O4'	-6.59	1.36	1.45
1	AA	298	A	C8-N7	-6.59	1.26	1.31
1	AA	561	U	P-O5'	6.59	1.66	1.59
1	AA	991	U	O3'-P	6.59	1.69	1.61
26	BB	449	A	C6-N1	-6.59	1.30	1.35
26	BB	542	C	N3-C4	-6.59	1.29	1.33
26	BB	1612	C	C4'-O4'	-6.59	1.36	1.45
26	BB	2396	G	N7-C5	-6.59	1.35	1.39
26	BB	1451	C	N1-C2	6.58	1.46	1.40
26	BB	2141	G	P-O5'	6.58	1.66	1.59
1	AA	988	G	C8-N7	-6.58	1.27	1.30
1	AA	1294	G	N7-C5	6.58	1.43	1.39
1	AA	1386	G	C6-O6	-6.58	1.18	1.24
25	BA	88	C	C4-C5	6.58	1.48	1.43
26	BB	114	U	C2-N3	6.58	1.42	1.37
26	BB	1828	G	O3'-P	6.58	1.69	1.61
19	AS	17	TYR	CE2-CZ	6.58	1.47	1.38
26	BB	230	G	C2'-O2'	-6.58	1.33	1.41
26	BB	418	C	N1-C6	-6.58	1.33	1.37
26	BB	522	A	N7-C5	-6.58	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	855	G	N9-C8	-6.58	1.33	1.37
26	BB	972	A	C6-N6	6.58	1.39	1.33
26	BB	979	A	C8-N7	6.58	1.36	1.31
26	BB	2242	G	N9-C4	6.58	1.43	1.38
26	BB	2624	G	N7-C5	6.58	1.43	1.39
26	BB	245	G	N9-C4	-6.58	1.32	1.38
26	BB	2169	A	N9-C4	6.58	1.41	1.37
1	AA	279	A	P-O5'	-6.58	1.53	1.59
1	AA	1190	G	N3-C4	6.58	1.40	1.35
1	AA	1285	A	P-O5'	6.58	1.66	1.59
1	AA	1313	U	N1-C2	6.58	1.44	1.38
4	AD	10	G	N1-C2	6.58	1.43	1.37
26	BB	766	U	C2-N3	6.58	1.42	1.37
26	BB	1311	G	C5-C4	-6.58	1.33	1.38
26	BB	1686	C	C5-C6	6.58	1.39	1.34
1	AA	873	A	N3-C4	6.58	1.38	1.34
26	BB	2035	G	O3'-P	6.58	1.69	1.61
26	BB	411	G	N7-C5	-6.58	1.35	1.39
26	BB	1682	G	P-O5'	6.58	1.66	1.59
26	BB	2769	U	O3'-P	6.58	1.69	1.61
1	AA	439	U	O3'-P	6.57	1.69	1.61
1	AA	628	G	C6-O6	-6.57	1.18	1.24
1	AA	1146	A	N9-C4	6.57	1.41	1.37
1	AA	1350	A	N1-C2	-6.57	1.28	1.34
1	AA	1385	G	C2'-C1'	6.57	1.60	1.53
26	BB	52	A	O3'-P	6.57	1.69	1.61
26	BB	147	C	C2-O2	-6.57	1.18	1.24
26	BB	1756	G	C2-N3	6.57	1.38	1.32
26	BB	2595	G	C8-N7	-6.57	1.27	1.30
26	BB	914	G	C5-C4	-6.57	1.33	1.38
1	AA	40	C	C5-C6	6.57	1.39	1.34
1	AA	1119	C	C3'-C2'	6.57	1.60	1.52
1	AA	1295	U	C4-C5	6.57	1.49	1.43
1	AA	1300	G	N1-C2	6.57	1.43	1.37
4	AD	54	G	N1-C2	6.57	1.43	1.37
26	BB	648	G	N1-C2	6.57	1.43	1.37
26	BB	1774	C	C5-C6	6.57	1.39	1.34
26	BB	1934	C	N1-C6	6.57	1.41	1.37
26	BB	1944	U	N1-C2	6.57	1.44	1.38
26	BB	2210	U	C5'-C4'	6.57	1.59	1.51
26	BB	2696	U	C4-O4	6.57	1.28	1.23
26	BB	1501	G	O3'-P	6.57	1.69	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1914	C	C4-N4	6.57	1.39	1.33
26	BB	2609	U	C4-C5	6.57	1.49	1.43
1	AA	901	A	C6-N1	-6.57	1.30	1.35
26	BB	540	C	C2'-C1'	6.57	1.60	1.53
26	BB	2025	C	C4-N4	-6.57	1.28	1.33
26	BB	2047	C	C2-N3	6.57	1.41	1.35
26	BB	2193	G	C8-N7	-6.57	1.27	1.30
1	AA	550	G	C4'-C3'	6.57	1.60	1.53
1	AA	855	U	N1-C2	6.57	1.44	1.38
26	BB	224	U	C4-C5	6.57	1.49	1.43
26	BB	301	G	N9-C8	6.57	1.42	1.37
26	BB	655	A	N9-C8	6.57	1.43	1.37
26	BB	1464	G	N3-C4	6.57	1.40	1.35
26	BB	1764	C	N1-C2	6.57	1.46	1.40
26	BB	1145	C	N3-C4	6.56	1.38	1.33
26	BB	1932	A	C4'-C3'	6.56	1.60	1.53
1	AA	1540	U	N1-C2	6.56	1.44	1.38
2	AB	15	A	N7-C5	-6.56	1.35	1.39
4	AD	46	G	C2-N3	6.56	1.38	1.32
26	BB	699	A	C5'-C4'	6.56	1.59	1.51
1	AA	1220	G	C6-N1	6.56	1.44	1.39
1	AA	1511	G	C6-N1	-6.56	1.34	1.39
26	BB	197	A	C5'-C4'	6.56	1.59	1.51
26	BB	645	C	C4'-O4'	-6.56	1.37	1.45
26	BB	859	G	N3-C4	6.56	1.40	1.35
26	BB	1464	G	C6-N1	6.56	1.44	1.39
26	BB	1731	G	C2'-C1'	6.56	1.60	1.53
26	BB	1778	U	P-O5'	6.56	1.66	1.59
1	AA	917	G	C6-N1	-6.56	1.34	1.39
1	AA	1064	G	N9-C8	-6.56	1.33	1.37
26	BB	963	U	P-O5'	6.56	1.66	1.59
26	BB	2625	G	N1-C2	6.56	1.43	1.37
26	BB	1217	U	C2-N3	-6.55	1.33	1.37
26	BB	1367	A	C4'-O4'	-6.55	1.37	1.45
26	BB	1465	G	N3-C4	6.55	1.40	1.35
26	BB	1716	U	O4'-C1'	6.55	1.50	1.41
1	AA	951	G	N7-C5	6.55	1.43	1.39
1	AA	1453	G	N9-C8	-6.55	1.33	1.37
26	BB	806	C	C2-N3	6.55	1.41	1.35
26	BB	1754	A	C5-C6	-6.55	1.35	1.41
26	BB	1929	G	N3-C4	-6.55	1.30	1.35
1	AA	295	C	C5'-C4'	6.55	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1126	U	C4'-O4'	-6.55	1.37	1.45
25	BA	23	G	N3-C4	6.55	1.40	1.35
26	BB	1369	G	N9-C8	6.55	1.42	1.37
1	AA	57	G	O3'-P	6.55	1.69	1.61
1	AA	372	C	O3'-P	6.55	1.69	1.61
1	AA	598	U	C3'-C2'	-6.55	1.45	1.52
1	AA	1199	U	N1-C2	6.55	1.44	1.38
2	AB	49	G	C6-N1	-6.55	1.34	1.39
26	BB	709	U	C5-C6	6.55	1.40	1.34
26	BB	908	C	C2'-O2'	6.55	1.50	1.41
26	BB	2185	U	C4'-O4'	-6.55	1.37	1.45
1	AA	425	G	C6-O6	-6.55	1.18	1.24
1	AA	812	G	P-O5'	6.55	1.66	1.59
1	AA	972	C	C4'-O4'	-6.55	1.37	1.45
1	AA	1255	G	N1-C2	6.55	1.43	1.37
1	AA	1467	C	N1-C6	6.55	1.41	1.37
25	BA	44	G	N3-C4	-6.55	1.30	1.35
26	BB	208	C	N1-C6	6.55	1.41	1.37
26	BB	382	A	N1-C2	-6.55	1.28	1.34
26	BB	768	G	C2-N3	6.55	1.38	1.32
26	BB	1302	A	N9-C4	6.55	1.41	1.37
26	BB	1444	G	C6-O6	-6.55	1.18	1.24
26	BB	2189	U	C2-O2	-6.55	1.16	1.22
26	BB	2354	C	C4-C5	6.55	1.48	1.43
26	BB	174	U	C4-O4	-6.54	1.18	1.23
26	BB	368	A	C5-C4	6.54	1.43	1.38
26	BB	556	A	N7-C5	-6.54	1.35	1.39
26	BB	2436	G	N9-C4	-6.54	1.32	1.38
1	AA	104	G	C5-C6	6.54	1.48	1.42
26	BB	777	G	N1-C2	6.54	1.43	1.37
26	BB	881	G	N3-C4	6.54	1.40	1.35
26	BB	1472	C	C4-C5	6.54	1.48	1.43
26	BB	1585	C	N1-C6	6.54	1.41	1.37
26	BB	2557	G	P-O5'	6.54	1.66	1.59
26	BB	2566	A	N7-C5	-6.54	1.35	1.39
1	AA	120	A	C6-N6	-6.54	1.28	1.33
1	AA	493	A	C5-C4	-6.54	1.34	1.38
1	AA	687	A	N3-C4	6.54	1.38	1.34
1	AA	1421	G	N7-C5	6.54	1.43	1.39
26	BB	6	A	C8-N7	-6.54	1.26	1.31
26	BB	330	A	O3'-P	6.54	1.69	1.61
26	BB	366	C	N1-C6	6.54	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1759	A	C3'-C2'	-6.54	1.45	1.52
1	AA	443	C	C4'-C3'	6.54	1.60	1.53
26	BB	133	U	C5'-C4'	6.54	1.59	1.51
26	BB	1779	U	N1-C2	6.54	1.44	1.38
1	AA	413	G	C4'-C3'	6.54	1.60	1.53
1	AA	668	G	N7-C5	6.54	1.43	1.39
1	AA	956	U	C2-N3	6.54	1.42	1.37
26	BB	1138	G	N3-C4	6.54	1.40	1.35
26	BB	1767	G	N7-C5	6.54	1.43	1.39
26	BB	2800	A	O3'-P	6.54	1.69	1.61
1	AA	311	C	C4-C5	6.54	1.48	1.43
1	AA	943	U	N1-C2	6.54	1.44	1.38
1	AA	1255	G	C2-N3	6.54	1.38	1.32
26	BB	2602	A	C5-C6	-6.54	1.35	1.41
1	AA	180	U	N1-C2	6.54	1.44	1.38
1	AA	307	C	N1-C6	6.54	1.41	1.37
1	AA	797	C	N3-C4	6.54	1.38	1.33
1	AA	1510	C	N1-C6	6.54	1.41	1.37
26	BB	572	A	C8-N7	-6.54	1.26	1.31
26	BB	881	G	C5'-C4'	6.54	1.59	1.51
26	BB	1492	G	C6-O6	-6.54	1.18	1.24
26	BB	1573	G	N9-C4	6.54	1.43	1.38
26	BB	2238	G	C2-N3	6.54	1.38	1.32
1	AA	558	G	C4'-O4'	-6.53	1.37	1.45
1	AA	882	C	C2'-C1'	-6.53	1.46	1.53
1	AA	1306	A	C3'-C2'	-6.53	1.45	1.52
26	BB	423	A	N9-C4	6.53	1.41	1.37
26	BB	671	C	C2'-C1'	-6.53	1.46	1.53
26	BB	37	C	P-O5'	6.53	1.66	1.59
26	BB	137	U	N1-C2	6.53	1.44	1.38
26	BB	285	G	C2-N3	6.53	1.38	1.32
26	BB	1000	A	C6-N1	-6.53	1.30	1.35
1	AA	346	G	N7-C5	-6.53	1.35	1.39
1	AA	431	A	N9-C4	6.53	1.41	1.37
26	BB	760	G	N7-C5	6.53	1.43	1.39
26	BB	1222	U	C4'-C3'	6.53	1.60	1.53
26	BB	2364	C	C4-C5	6.53	1.48	1.43
26	BB	180	G	P-O5'	6.53	1.66	1.59
26	BB	1408	G	N9-C8	6.53	1.42	1.37
26	BB	1968	G	C4'-C3'	-6.53	1.46	1.53
1	AA	713	G	C2-N3	6.53	1.38	1.32
25	BA	85	G	O4'-C1'	6.53	1.50	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1314	C	C4'-C3'	-6.53	1.46	1.53
26	BB	1385	A	C4'-O4'	-6.53	1.37	1.45
26	BB	1721	G	C5-C6	6.53	1.48	1.42
1	AA	539	A	C5-C4	-6.53	1.34	1.38
1	AA	1075	U	O3'-P	6.53	1.69	1.61
2	AB	4	G	C2-N3	6.53	1.38	1.32
4	AD	1	C	C5'-C4'	6.53	1.59	1.51
25	BA	87	U	O4'-C1'	6.53	1.50	1.41
26	BB	208	C	N3-C4	6.53	1.38	1.33
26	BB	1574	C	C4'-C3'	6.53	1.60	1.53
26	BB	2588	G	C6-N1	-6.53	1.34	1.39
49	BY	38	ARG	CZ-NH1	6.53	1.41	1.33
1	AA	1213	A	C8-N7	6.52	1.36	1.31
1	AA	1329	A	C5-C4	-6.52	1.34	1.38
1	AA	1346	A	N3-C4	6.52	1.38	1.34
1	AA	1354	U	C2-N3	6.52	1.42	1.37
26	BB	1511	G	N3-C4	6.52	1.40	1.35
26	BB	2682	A	O4'-C1'	6.52	1.50	1.41
1	AA	130	A	C6-N1	-6.52	1.30	1.35
1	AA	154	U	C4'-O4'	-6.52	1.37	1.45
1	AA	360	G	C8-N7	6.52	1.34	1.30
1	AA	740	U	C4-C5	6.52	1.49	1.43
2	AB	10	G	N1-C2	6.52	1.43	1.37
4	AD	65	G	C2'-C1'	-6.52	1.46	1.53
26	BB	704	G	O5'-C5'	-6.52	1.32	1.42
1	AA	637	C	C4'-O4'	-6.52	1.37	1.45
25	BA	45	A	C6-N1	-6.52	1.30	1.35
25	BA	73	A	P-O5'	6.52	1.66	1.59
26	BB	778	G	N3-C4	6.52	1.40	1.35
1	AA	973	G	C6-N1	6.52	1.44	1.39
26	BB	57	C	O3'-P	6.52	1.69	1.61
26	BB	250	G	P-O5'	-6.52	1.53	1.59
26	BB	1379	U	C4'-O4'	-6.52	1.37	1.45
1	AA	532	A	N7-C5	-6.52	1.35	1.39
1	AA	1164	G	C5'-C4'	6.52	1.59	1.51
26	BB	1161	C	N3-C4	6.52	1.38	1.33
26	BB	2364	C	O3'-P	6.52	1.69	1.61
26	BB	2474	U	C3'-C2'	6.52	1.60	1.52
26	BB	2545	G	C6-N1	-6.52	1.34	1.39
26	BB	2735	G	C6-O6	-6.52	1.18	1.24
1	AA	896	C	C4'-O4'	-6.52	1.37	1.45
1	AA	1383	C	C4'-O4'	-6.52	1.37	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1	A	C4'-C3'	6.52	1.60	1.53
3	AC	16	A	C4'-C3'	6.52	1.60	1.53
26	BB	372	G	C2-N3	6.52	1.38	1.32
1	AA	499	A	C6-N1	-6.51	1.30	1.35
1	AA	1339	A	O3'-P	6.51	1.69	1.61
26	BB	1626	A	C5'-C4'	6.51	1.59	1.51
1	AA	120	A	P-O5'	6.51	1.66	1.59
5	AE	192	PRO	N-CA	-6.51	1.36	1.47
26	BB	322	A	C5-C4	-6.51	1.34	1.38
26	BB	522	A	N9-C4	-6.51	1.33	1.37
26	BB	620	G	N3-C4	6.51	1.40	1.35
26	BB	675	A	N9-C4	-6.51	1.33	1.37
26	BB	779	U	C5-C6	6.51	1.40	1.34
26	BB	1937	A	N9-C4	6.51	1.41	1.37
1	AA	70	U	P-O5'	-6.51	1.53	1.59
26	BB	603	A	C8-N7	-6.51	1.26	1.31
26	BB	1484	U	C4'-O4'	-6.51	1.37	1.45
26	BB	1887	C	P-O5'	6.51	1.66	1.59
1	AA	164	G	N3-C4	6.51	1.40	1.35
26	BB	2342	C	P-O5'	-6.51	1.53	1.59
1	AA	200	G	N1-C2	6.51	1.43	1.37
1	AA	273	U	C2'-C1'	6.51	1.60	1.53
25	BA	84	G	C5-C6	6.51	1.48	1.42
26	BB	2542	A	C2-N3	6.51	1.39	1.33
1	AA	549	C	P-O5'	-6.50	1.53	1.59
25	BA	31	C	C4-C5	6.50	1.48	1.43
26	BB	452	G	C2'-O2'	6.50	1.50	1.41
26	BB	458	G	C8-N7	6.50	1.34	1.30
1	AA	188	C	C5-C6	6.50	1.39	1.34
1	AA	526	C	C2-N3	6.50	1.41	1.35
1	AA	563	A	N7-C5	-6.50	1.35	1.39
1	AA	1304	G	C5-C4	-6.50	1.33	1.38
2	AB	38	A	C2'-O2'	6.50	1.50	1.41
26	BB	856	G	N1-C2	6.50	1.43	1.37
26	BB	1432	G	N9-C8	6.50	1.42	1.37
26	BB	2817	U	C2-N3	6.50	1.42	1.37
1	AA	29	U	C2-N3	6.50	1.42	1.37
1	AA	72	A	P-O5'	6.50	1.66	1.59
1	AA	814	A	N1-C2	-6.50	1.28	1.34
1	AA	1151	A	N9-C4	6.50	1.41	1.37
26	BB	96	C	C4'-O4'	-6.50	1.37	1.45
26	BB	1584	U	C5-C6	6.50	1.40	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2787	C	N1-C2	6.50	1.46	1.40
26	BB	2845	U	C4-C5	6.50	1.49	1.43
1	AA	605	U	C2-N3	6.50	1.42	1.37
1	AA	655	A	N3-C4	6.50	1.38	1.34
1	AA	902	G	C5'-C4'	6.50	1.59	1.51
1	AA	1452	C	N3-C4	6.50	1.38	1.33
4	AD	20	G	N7-C5	-6.50	1.35	1.39
26	BB	235	U	C3'-C2'	6.50	1.60	1.52
26	BB	824	U	C5'-C4'	6.50	1.59	1.51
26	BB	943	A	C5-C4	6.50	1.43	1.38
26	BB	1384	A	O5'-C5'	-6.50	1.32	1.42
26	BB	1673	G	C2'-C1'	-6.50	1.46	1.53
26	BB	2115	G	N7-C5	6.50	1.43	1.39
34	BJ	83	TYR	CG-CD2	6.50	1.47	1.39
1	AA	619	U	C2-N3	6.50	1.42	1.37
1	AA	960	U	P-O5'	6.50	1.66	1.59
26	BB	697	G	O3'-P	-6.50	1.53	1.61
26	BB	1288	G	P-O5'	6.50	1.66	1.59
26	BB	1584	U	C4-C5	6.50	1.49	1.43
26	BB	2736	A	N3-C4	6.50	1.38	1.34
1	AA	1130	A	C6-N6	6.50	1.39	1.33
26	BB	1785	A	C4'-O4'	-6.50	1.37	1.45
26	BB	2340	A	C4'-O4'	-6.50	1.37	1.45
30	BF	64	GLY	CA-C	6.50	1.62	1.51
1	AA	144	G	C2-N3	6.49	1.38	1.32
1	AA	491	G	C3'-C2'	6.49	1.60	1.52
1	AA	663	A	C5-C4	-6.49	1.34	1.38
1	AA	875	U	N1-C2	6.49	1.44	1.38
1	AA	885	G	N1-C2	6.49	1.43	1.37
26	BB	189	G	C6-N1	6.49	1.44	1.39
26	BB	1341	G	N9-C8	-6.49	1.33	1.37
1	AA	7	A	N7-C5	6.49	1.43	1.39
1	AA	9	G	C6-N1	-6.49	1.35	1.39
26	BB	343	C	N1-C6	6.49	1.41	1.37
26	BB	2780	G	C2-N3	6.49	1.38	1.32
1	AA	1464	U	C5'-C4'	6.49	1.59	1.51
2	AB	66	C	C2'-O2'	6.49	1.50	1.41
26	BB	185	G	C3'-O3'	6.49	1.51	1.42
26	BB	1385	A	N7-C5	6.49	1.43	1.39
26	BB	2184	A	C6-N1	6.49	1.40	1.35
1	AA	575	G	C6-N1	6.49	1.44	1.39
1	AA	714	G	N3-C4	6.49	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	702	U	O3'-P	6.49	1.69	1.61
26	BB	2873	A	N9-C4	-6.49	1.33	1.37
26	BB	1585	C	C4'-O4'	-6.49	1.37	1.45
26	BB	2684	U	C2-N3	6.49	1.42	1.37
4	AD	50	G	C5-C6	6.49	1.48	1.42
25	BA	59	A	N9-C4	6.49	1.41	1.37
26	BB	1369	G	C8-N7	6.49	1.34	1.30
26	BB	2120	G	C5-C6	6.49	1.48	1.42
1	AA	1350	A	C4'-C3'	6.48	1.60	1.53
26	BB	1131	G	O3'-P	6.48	1.69	1.61
26	BB	820	A	C4'-O4'	-6.48	1.37	1.45
26	BB	2367	G	C4'-O4'	-6.48	1.37	1.45
1	AA	771	G	N1-C2	6.48	1.43	1.37
1	AA	1396	A	C5'-C4'	6.48	1.59	1.51
26	BB	300	A	O3'-P	6.48	1.69	1.61
26	BB	319	G	N7-C5	-6.48	1.35	1.39
26	BB	679	C	P-O5'	6.48	1.66	1.59
26	BB	1478	G	O3'-P	6.48	1.69	1.61
26	BB	1991	U	O3'-P	6.48	1.69	1.61
26	BB	2353	G	C5'-C4'	6.48	1.59	1.51
26	BB	2747	G	N3-C4	6.48	1.40	1.35
1	AA	721	G	C6-N1	-6.48	1.35	1.39
1	AA	790	A	C2'-C1'	-6.48	1.46	1.53
25	BA	97	C	O4'-C1'	6.48	1.50	1.41
26	BB	342	A	P-O5'	6.48	1.66	1.59
26	BB	1154	G	N9-C8	-6.48	1.33	1.37
26	BB	1973	G	C8-N7	6.48	1.34	1.30
1	AA	569	C	P-O5'	6.48	1.66	1.59
1	AA	1191	A	N3-C4	6.48	1.38	1.34
26	BB	2134	A	N9-C4	6.48	1.41	1.37
1	AA	778	G	C8-N7	6.48	1.34	1.30
26	BB	1511	G	C3'-C2'	6.48	1.60	1.52
1	AA	652	U	C2-N3	6.47	1.42	1.37
1	AA	1072	G	C2-N3	6.47	1.38	1.32
4	AD	69	C	C1'-N1	6.47	1.58	1.48
4	AD	75	C	N3-C4	6.47	1.38	1.33
26	BB	241	A	N9-C4	-6.47	1.33	1.37
26	BB	446	G	C2-N3	6.47	1.38	1.32
26	BB	486	C	N1-C6	6.47	1.41	1.37
26	BB	622	G	O3'-P	6.47	1.69	1.61
26	BB	2788	C	C2-N3	6.47	1.41	1.35
1	AA	723	U	C5'-C4'	6.47	1.59	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	906	A	C6-N1	-6.47	1.31	1.35
1	AA	964	A	C6-N6	-6.47	1.28	1.33
1	AA	1230	C	C2-O2	-6.47	1.18	1.24
26	BB	1271	G	N7-C5	-6.47	1.35	1.39
26	BB	1304	A	N3-C4	6.47	1.38	1.34
26	BB	1963	U	P-O5'	6.47	1.66	1.59
26	BB	2564	A	C4'-O4'	-6.47	1.37	1.45
1	AA	978	A	N3-C4	6.47	1.38	1.34
1	AA	1358	U	N3-C4	6.47	1.44	1.38
26	BB	230	G	C8-N7	-6.47	1.27	1.30
26	BB	563	A	C4'-C3'	-6.47	1.46	1.53
26	BB	1396	U	C4-C5	6.47	1.49	1.43
1	AA	1	A	N3-C4	6.47	1.38	1.34
26	BB	2071	A	C2'-O2'	6.47	1.50	1.41
26	BB	1000	A	C4'-O4'	-6.47	1.37	1.45
26	BB	1122	G	C6-N1	6.47	1.44	1.39
1	AA	894	G	P-O5'	6.47	1.66	1.59
4	AD	25	U	P-O5'	6.47	1.66	1.59
26	BB	215	G	N7-C5	6.47	1.43	1.39
26	BB	314	C	C5'-C4'	6.47	1.59	1.51
1	AA	220	G	C2-N3	6.46	1.38	1.32
1	AA	312	C	C2-N3	6.46	1.41	1.35
1	AA	369	G	C8-N7	-6.46	1.27	1.30
1	AA	617	G	C5-C4	-6.46	1.33	1.38
26	BB	1089	A	C4'-C3'	-6.46	1.46	1.53
26	BB	2738	A	N1-C2	-6.46	1.28	1.34
1	AA	10	A	N7-C5	-6.46	1.35	1.39
26	BB	670	A	C6-N1	6.46	1.40	1.35
26	BB	1627	G	N3-C4	6.46	1.40	1.35
26	BB	2699	C	C1'-N1	6.46	1.58	1.48
26	BB	2723	C	C2-N3	6.46	1.41	1.35
1	AA	1034	G	N1-C2	6.46	1.43	1.37
1	AA	1429	A	N3-C4	6.46	1.38	1.34
26	BB	200	U	C2-N3	6.46	1.42	1.37
26	BB	1755	A	C8-N7	-6.46	1.27	1.31
26	BB	2062	A	N3-C4	6.46	1.38	1.34
26	BB	113	U	C4-O4	6.46	1.28	1.23
26	BB	1647	U	C4-C5	6.46	1.49	1.43
26	BB	1752	C	C2'-O2'	6.46	1.50	1.41
1	AA	242	G	P-O5'	6.46	1.66	1.59
26	BB	95	A	P-O5'	6.46	1.66	1.59
26	BB	970	U	N1-C2	6.46	1.44	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1392	A	P-O5'	6.46	1.66	1.59
26	BB	1412	U	C2-O2	6.46	1.28	1.22
26	BB	2476	A	N3-C4	6.46	1.38	1.34
26	BB	2713	U	C4-C5	6.46	1.49	1.43
26	BB	2825	G	P-O5'	6.46	1.66	1.59
1	AA	1026	G	C3'-C2'	-6.46	1.45	1.52
1	AA	1231	G	P-O5'	6.46	1.66	1.59
26	BB	1755	A	C5-C4	-6.46	1.34	1.38
26	BB	2080	A	C5-C4	-6.46	1.34	1.38
26	BB	2355	G	C5-C6	6.46	1.48	1.42
26	BB	966	G	N3-C4	6.46	1.40	1.35
26	BB	2881	U	N3-C4	6.46	1.44	1.38
1	AA	443	C	N1-C6	6.45	1.41	1.37
1	AA	1219	A	N9-C4	-6.45	1.33	1.37
26	BB	2315	G	N9-C4	-6.45	1.32	1.38
26	BB	934	U	N3-C4	6.45	1.44	1.38
26	BB	1343	G	C8-N7	-6.45	1.27	1.30
1	AA	344	A	C5'-C4'	6.45	1.59	1.51
1	AA	645	G	C2'-C1'	6.45	1.60	1.53
1	AA	944	G	C2-N2	-6.45	1.28	1.34
26	BB	685	A	N7-C5	-6.45	1.35	1.39
26	BB	964	C	N1-C6	-6.45	1.33	1.37
26	BB	1709	U	C4-C5	6.45	1.49	1.43
26	BB	1892	C	N1-C6	-6.45	1.33	1.37
1	AA	1181	G	P-O5'	6.45	1.66	1.59
1	AA	1307	U	P-O5'	6.45	1.66	1.59
26	BB	667	U	C2-O2	6.45	1.28	1.22
26	BB	1074	G	C8-N7	6.45	1.34	1.30
26	BB	1127	A	C4'-O4'	-6.45	1.37	1.45
1	AA	1266	G	N7-C5	-6.45	1.35	1.39
1	AA	1271	A	C6-N6	-6.45	1.28	1.33
26	BB	2742	G	C8-N7	-6.45	1.27	1.30
1	AA	268	U	C3'-C2'	6.45	1.60	1.52
1	AA	281	G	C5-C6	6.45	1.48	1.42
1	AA	365	U	P-O5'	6.45	1.66	1.59
26	BB	154	U	C2'-O2'	-6.45	1.33	1.41
26	BB	467	G	N1-C2	6.45	1.43	1.37
26	BB	933	A	C5'-C4'	6.45	1.59	1.51
26	BB	1707	G	C5-C6	6.45	1.48	1.42
26	BB	1958	C	P-O5'	6.45	1.66	1.59
26	BB	2722	G	N9-C8	6.45	1.42	1.37
1	AA	40	C	O5'-C5'	-6.44	1.32	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	232	G	N7-C5	-6.44	1.35	1.39
26	BB	1750	G	C8-N7	-6.44	1.27	1.30
26	BB	2001	C	C4'-O4'	-6.44	1.37	1.45
1	AA	602	A	N9-C8	-6.44	1.32	1.37
1	AA	729	A	P-O5'	6.44	1.66	1.59
1	AA	1020	G	N9-C4	-6.44	1.32	1.38
2	AB	75	C	C2-O2	-6.44	1.18	1.24
26	BB	357	C	N1-C2	6.44	1.46	1.40
26	BB	1638	C	C5-C6	6.44	1.39	1.34
26	BB	1913	A	N7-C5	6.44	1.43	1.39
26	BB	1985	C	C4-C5	6.44	1.48	1.43
26	BB	2471	A	C5-C4	-6.44	1.34	1.38
1	AA	105	G	N9-C8	-6.44	1.33	1.37
1	AA	801	U	N1-C2	6.44	1.44	1.38
1	AA	1135	U	C4'-O4'	-6.44	1.37	1.45
1	AA	1141	C	P-O5'	6.44	1.66	1.59
1	AA	1513	A	C6-N1	6.44	1.40	1.35
26	BB	162	U	C2-N3	6.44	1.42	1.37
26	BB	1184	U	P-O5'	6.44	1.66	1.59
26	BB	1656	C	P-O5'	6.44	1.66	1.59
26	BB	2135	A	N9-C4	-6.44	1.33	1.37
1	AA	1027	C	P-O5'	6.44	1.66	1.59
26	BB	1453	A	C4'-C3'	6.44	1.60	1.53
26	BB	1708	C	P-O5'	6.44	1.66	1.59
26	BB	1991	U	N1-C2	6.44	1.44	1.38
26	BB	1115	G	C6-N1	-6.44	1.35	1.39
26	BB	2641	G	C3'-C2'	6.44	1.60	1.52
1	AA	91	U	O3'-P	6.44	1.68	1.61
1	AA	1447	A	N3-C4	6.44	1.38	1.34
26	BB	2763	G	C4'-C3'	6.44	1.60	1.53
1	AA	774	G	C6-O6	-6.43	1.18	1.24
1	AA	1182	G	C2-N3	6.43	1.37	1.32
26	BB	456	C	C4'-O4'	-6.43	1.37	1.45
26	BB	471	A	P-O5'	6.43	1.66	1.59
26	BB	579	G	C6-N1	-6.43	1.35	1.39
1	AA	415	A	C5'-C4'	6.43	1.59	1.51
1	AA	1036	A	N9-C4	-6.43	1.33	1.37
1	AA	1187	G	N3-C4	6.43	1.40	1.35
1	AA	1256	A	O3'-P	6.43	1.68	1.61
2	AB	52	A	N3-C4	6.43	1.38	1.34
25	BA	42	C	C2-O2	-6.43	1.18	1.24
26	BB	287	G	C6-N1	6.43	1.44	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	508	A	N3-C4	6.43	1.38	1.34
26	BB	641	U	N1-C2	-6.43	1.32	1.38
26	BB	655	A	P-O5'	6.43	1.66	1.59
26	BB	2730	C	N1-C6	6.43	1.41	1.37
26	BB	2884	U	C4-O4	-6.43	1.18	1.23
1	AA	1108	G	N1-C2	6.43	1.42	1.37
1	AA	1194	U	C2-N3	6.43	1.42	1.37
26	BB	1050	A	P-O5'	6.43	1.66	1.59
26	BB	2112	G	N1-C2	6.43	1.42	1.37
1	AA	670	G	C5-C6	6.43	1.48	1.42
26	BB	110	G	C4'-C3'	6.43	1.60	1.53
26	BB	819	A	P-O5'	6.43	1.66	1.59
26	BB	924	G	C4'-O4'	-6.43	1.37	1.45
26	BB	1660	G	N7-C5	6.43	1.43	1.39
26	BB	2463	C	C5-C6	6.43	1.39	1.34
26	BB	2574	G	C8-N7	-6.43	1.27	1.30
31	BG	163	GLU	CG-CD	6.43	1.61	1.51
1	AA	826	C	N1-C2	6.43	1.46	1.40
26	BB	531	C	P-O5'	6.43	1.66	1.59
1	AA	1208	C	N3-C4	6.43	1.38	1.33
1	AA	1470	U	N3-C4	6.43	1.44	1.38
26	BB	124	G	N1-C2	6.43	1.42	1.37
26	BB	1764	C	C2-N3	6.43	1.40	1.35
1	AA	10	A	C5-C4	-6.42	1.34	1.38
1	AA	465	A	C6-N6	6.42	1.39	1.33
25	BA	108	A	P-O5'	6.42	1.66	1.59
26	BB	1051	G	C8-N7	6.42	1.34	1.30
26	BB	1542	U	C3'-C2'	6.42	1.60	1.52
26	BB	1961	C	C5-C6	6.42	1.39	1.34
26	BB	1984	G	C2-N3	6.42	1.37	1.32
26	BB	2382	G	N7-C5	6.42	1.43	1.39
26	BB	2467	C	C4-C5	6.42	1.48	1.43
26	BB	2701	U	C2-N3	6.42	1.42	1.37
48	BX	2	PHE	CG-CD2	6.42	1.48	1.38
1	AA	64	G	C4'-C3'	6.42	1.60	1.53
26	BB	1571	A	P-O5'	6.42	1.66	1.59
26	BB	2779	U	P-O5'	6.42	1.66	1.59
1	AA	15	G	C4'-O4'	-6.42	1.37	1.45
1	AA	703	G	N1-C2	6.42	1.42	1.37
1	AA	1072	G	N9-C8	6.42	1.42	1.37
1	AA	1500	A	N9-C4	-6.42	1.33	1.37
26	BB	1181	U	C4-C5	6.42	1.49	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1904	G	C5-C4	-6.42	1.33	1.38
26	BB	2355	G	N1-C2	6.42	1.42	1.37
26	BB	2638	G	C2-N2	6.42	1.41	1.34
26	BB	2903	U	C5'-C4'	6.42	1.59	1.51
1	AA	112	G	O3'-P	6.42	1.68	1.61
1	AA	1079	G	C8-N7	6.42	1.34	1.30
1	AA	486	U	C3'-C2'	6.42	1.60	1.52
1	AA	766	A	N3-C4	6.42	1.38	1.34
1	AA	1301	U	N3-C4	-6.42	1.32	1.38
26	BB	218	A	C8-N7	6.42	1.36	1.31
26	BB	1060	U	C2-N3	6.42	1.42	1.37
1	AA	310	G	C5'-C4'	6.42	1.59	1.51
26	BB	439	A	C3'-C2'	-6.42	1.45	1.52
26	BB	1115	G	N9-C8	-6.42	1.33	1.37
26	BB	1309	G	N7-C5	6.42	1.43	1.39
26	BB	1893	C	N1-C2	6.42	1.46	1.40
26	BB	142	A	N9-C4	6.42	1.41	1.37
26	BB	912	C	C5-C6	6.42	1.39	1.34
1	AA	337	G	O3'-P	6.41	1.68	1.61
1	AA	796	C	N1-C6	6.41	1.41	1.37
1	AA	1270	G	C5-C4	-6.41	1.33	1.38
1	AA	1540	U	N1-C6	-6.41	1.32	1.38
3	AC	14	G	C4'-O4'	-6.41	1.37	1.45
26	BB	2305	U	N1-C2	6.41	1.44	1.38
26	BB	2621	G	C6-N1	6.41	1.44	1.39
26	BB	2680	U	C2'-O2'	-6.41	1.33	1.41
1	AA	105	G	N1-C2	6.41	1.42	1.37
1	AA	712	A	N3-C4	-6.41	1.31	1.34
1	AA	1042	A	C6-N1	-6.41	1.31	1.35
1	AA	1062	U	C5'-C4'	6.41	1.59	1.51
1	AA	1425	U	N1-C6	6.41	1.43	1.38
1	AA	1459	G	P-O5'	6.41	1.66	1.59
26	BB	176	A	N7-C5	-6.41	1.35	1.39
26	BB	223	A	N7-C5	6.41	1.43	1.39
26	BB	684	G	C8-N7	6.41	1.34	1.30
26	BB	2640	G	N9-C8	-6.41	1.33	1.37
1	AA	637	C	C5'-C4'	6.41	1.59	1.51
26	BB	100	U	C2-N3	6.41	1.42	1.37
26	BB	273	G	N9-C8	-6.41	1.33	1.37
26	BB	347	A	N9-C8	-6.41	1.32	1.37
26	BB	1878	G	C2-N2	-6.41	1.28	1.34
26	BB	2033	A	C4'-O4'	-6.41	1.37	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2318	G	C2-N3	6.41	1.37	1.32
26	BB	2749	A	C5-C4	6.41	1.43	1.38
1	AA	83	C	C4-C5	6.41	1.48	1.43
1	AA	1526	G	N7-C5	-6.41	1.35	1.39
4	AD	10	G	N9-C4	-6.41	1.32	1.38
25	BA	58	A	N9-C8	-6.41	1.32	1.37
26	BB	864	G	N7-C5	6.41	1.43	1.39
26	BB	953	G	C2'-C1'	-6.41	1.46	1.53
26	BB	1160	G	C5'-C4'	6.41	1.59	1.51
26	BB	1266	G	N7-C5	-6.41	1.35	1.39
26	BB	1456	G	C2-N3	6.41	1.37	1.32
26	BB	2506	U	N1-C6	6.41	1.43	1.38
26	BB	2753	A	O3'-P	6.41	1.68	1.61
26	BB	2771	C	C4'-O4'	-6.41	1.37	1.45
1	AA	1019	A	C6-N1	-6.41	1.31	1.35
1	AA	1155	A	N3-C4	6.41	1.38	1.34
26	BB	54	G	N7-C5	6.41	1.43	1.39
26	BB	108	G	C2-N3	6.41	1.37	1.32
26	BB	890	C	N1-C6	6.41	1.41	1.37
26	BB	1605	C	N1-C2	6.41	1.46	1.40
1	AA	319	G	N3-C4	-6.40	1.30	1.35
26	BB	281	C	C2'-C1'	6.40	1.60	1.53
1	AA	127	G	N1-C2	6.40	1.42	1.37
3	AC	59	A	N9-C4	-6.40	1.34	1.37
26	BB	1182	G	C5'-C4'	6.40	1.59	1.51
26	BB	1274	A	C6-N6	6.40	1.39	1.33
1	AA	148	G	C2-N3	6.40	1.37	1.32
1	AA	606	G	N7-C5	-6.40	1.35	1.39
1	AA	663	A	C8-N7	6.40	1.36	1.31
1	AA	913	A	C3'-O3'	6.40	1.51	1.42
26	BB	311	A	C8-N7	-6.40	1.27	1.31
26	BB	417	C	C4-N4	6.40	1.39	1.33
26	BB	551	G	N1-C2	6.40	1.42	1.37
26	BB	1486	U	N3-C4	6.40	1.44	1.38
26	BB	1906	G	C3'-C2'	-6.40	1.45	1.52
26	BB	2898	U	C2-N3	6.40	1.42	1.37
1	AA	120	A	C3'-C2'	-6.40	1.45	1.52
1	AA	991	U	C5'-C4'	6.40	1.59	1.51
1	AA	1365	G	N3-C4	6.40	1.40	1.35
26	BB	1686	C	C5'-C4'	6.40	1.59	1.51
4	AD	53	G	C5-C6	6.40	1.48	1.42
26	BB	697	G	N1-C2	6.40	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	788	A	N3-C4	6.40	1.38	1.34
26	BB	1578	U	C4-C5	6.40	1.49	1.43
26	BB	1903	G	C2-N3	6.40	1.37	1.32
26	BB	2154	A	N9-C4	6.40	1.41	1.37
26	BB	2732	G	O3'-P	-6.40	1.53	1.61
1	AA	310	G	C8-N7	6.40	1.34	1.30
1	AA	344	A	P-O5'	6.40	1.66	1.59
1	AA	769	G	C2-N3	6.40	1.37	1.32
1	AA	1371	G	N9-C4	-6.40	1.32	1.38
1	AA	326	G	O3'-P	6.39	1.68	1.61
1	AA	439	U	C5'-C4'	6.39	1.59	1.51
1	AA	907	A	P-O5'	6.39	1.66	1.59
26	BB	53	A	C8-N7	-6.39	1.27	1.31
26	BB	1557	C	N3-C4	6.39	1.38	1.33
26	BB	2528	U	O3'-P	-6.39	1.53	1.61
26	BB	2852	G	N9-C8	6.39	1.42	1.37
1	AA	523	A	C8-N7	-6.39	1.27	1.31
1	AA	1285	A	C5-C6	6.39	1.46	1.41
26	BB	216	A	C5'-C4'	6.39	1.59	1.51
26	BB	585	G	C4'-O4'	-6.39	1.37	1.45
26	BB	1146	C	N1-C2	6.39	1.46	1.40
26	BB	1214	A	O3'-P	6.39	1.68	1.61
26	BB	1777	U	N1-C2	6.39	1.44	1.38
26	BB	1792	G	P-O5'	6.39	1.66	1.59
26	BB	1905	C	C2-N3	6.39	1.40	1.35
26	BB	2376	A	C5-C4	-6.39	1.34	1.38
26	BB	2448	A	C2'-C1'	6.39	1.60	1.53
26	BB	536	G	C4'-O4'	-6.39	1.37	1.45
26	BB	579	G	O3'-P	-6.39	1.53	1.61
26	BB	2393	U	O4'-C1'	6.39	1.50	1.41
26	BB	279	A	C6-N1	6.39	1.40	1.35
36	BL	75	TYR	CE1-CZ	6.39	1.46	1.38
1	AA	97	G	P-O5'	6.39	1.66	1.59
1	AA	142	G	C8-N7	-6.39	1.27	1.30
1	AA	331	G	C2-N2	6.39	1.41	1.34
1	AA	603	U	O3'-P	6.39	1.68	1.61
1	AA	858	G	N9-C4	-6.39	1.32	1.38
1	AA	1018	G	C8-N7	-6.39	1.27	1.30
1	AA	1097	C	C5-C6	6.39	1.39	1.34
26	BB	482	A	C6-N6	6.39	1.39	1.33
26	BB	1876	A	C8-N7	-6.39	1.27	1.31
26	BB	2567	G	N1-C2	-6.39	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	226	G	C6-N1	6.38	1.44	1.39
1	AA	384	G	C5'-C4'	-6.38	1.43	1.51
2	AB	41	C	C4'-O4'	-6.38	1.37	1.45
26	BB	408	G	N9-C8	6.38	1.42	1.37
26	BB	533	G	C5-C4	6.38	1.42	1.38
26	BB	1006	C	C5-C6	6.38	1.39	1.34
26	BB	1529	G	C2'-O2'	6.38	1.50	1.41
26	BB	1825	U	O3'-P	6.38	1.68	1.61
37	BM	70	ARG	NE-CZ	6.38	1.41	1.33
1	AA	273	U	O3'-P	6.38	1.68	1.61
1	AA	442	G	C8-N7	6.38	1.34	1.30
26	BB	952	G	P-O5'	6.38	1.66	1.59
26	BB	1185	G	P-O5'	6.38	1.66	1.59
26	BB	1783	A	N9-C8	6.38	1.42	1.37
26	BB	2135	A	C8-N7	-6.38	1.27	1.31
26	BB	2898	U	O5'-C5'	-6.38	1.32	1.42
1	AA	530	G	C4'-O4'	-6.38	1.37	1.45
1	AA	1253	G	O4'-C1'	6.38	1.50	1.41
26	BB	538	A	C6-N1	6.38	1.40	1.35
26	BB	765	C	C2-N3	6.38	1.40	1.35
26	BB	1399	C	N1-C6	6.38	1.41	1.37
26	BB	2222	C	O3'-P	6.38	1.68	1.61
1	AA	270	A	N7-C5	-6.38	1.35	1.39
1	AA	334	C	P-O5'	6.38	1.66	1.59
1	AA	737	C	O4'-C1'	6.38	1.50	1.41
25	BA	104	A	C8-N7	-6.38	1.27	1.31
26	BB	530	G	N7-C5	-6.38	1.35	1.39
26	BB	1173	U	O3'-P	6.38	1.68	1.61
1	AA	659	U	N3-C4	6.38	1.44	1.38
1	AA	905	U	N1-C2	6.38	1.44	1.38
1	AA	1127	G	O3'-P	6.38	1.68	1.61
26	BB	95	A	N3-C4	6.38	1.38	1.34
26	BB	1530	G	C5-C6	6.38	1.48	1.42
26	BB	1727	C	C2'-O2'	6.38	1.50	1.41
26	BB	1879	C	C4-N4	6.38	1.39	1.33
26	BB	2035	G	C4'-O4'	-6.38	1.37	1.45
26	BB	2823	A	P-O5'	6.38	1.66	1.59
1	AA	543	U	N3-C4	6.38	1.44	1.38
1	AA	1232	U	C2'-C1'	-6.38	1.46	1.53
26	BB	277	G	C2'-C1'	6.38	1.60	1.53
26	BB	854	C	C2-N3	6.38	1.40	1.35
26	BB	2420	C	C4'-C3'	6.38	1.60	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	581	C	O4'-C1'	6.38	1.50	1.41
26	BB	1299	G	C2'-C1'	6.38	1.60	1.53
26	BB	1596	A	C6-N6	6.38	1.39	1.33
1	AA	887	G	N7-C5	6.37	1.43	1.39
1	AA	1054	C	P-O5'	6.37	1.66	1.59
1	AA	1405	G	C6-O6	-6.37	1.18	1.24
2	AB	49	G	C3'-C2'	6.37	1.59	1.52
26	BB	605	G	P-O5'	6.37	1.66	1.59
26	BB	1975	G	N7-C5	6.37	1.43	1.39
26	BB	2349	G	P-O5'	6.37	1.66	1.59
1	AA	728	A	C5-C4	-6.37	1.34	1.38
1	AA	1359	C	C4-C5	6.37	1.48	1.43
26	BB	86	G	C4'-C3'	6.37	1.60	1.53
26	BB	152	A	C5-C4	6.37	1.43	1.38
26	BB	1119	U	C2-N3	6.37	1.42	1.37
26	BB	2040	G	C8-N7	6.37	1.34	1.30
26	BB	2123	G	C8-N7	6.37	1.34	1.30
26	BB	2185	U	C2'-C1'	-6.37	1.46	1.53
26	BB	2194	U	C2-N3	6.37	1.42	1.37
1	AA	787	A	N9-C8	6.37	1.42	1.37
1	AA	824	G	N1-C2	6.37	1.42	1.37
26	BB	122	G	C8-N7	-6.37	1.27	1.30
26	BB	242	G	C2-N2	-6.37	1.28	1.34
26	BB	848	C	C2-N3	6.37	1.40	1.35
26	BB	2040	G	P-O5'	6.37	1.66	1.59
1	AA	1128	C	C4'-O4'	-6.37	1.37	1.45
1	AA	1198	G	C5-C4	-6.37	1.33	1.38
2	AB	59	G	C2-N3	6.37	1.37	1.32
14	AN	93	GLU	CG-CD	6.37	1.61	1.51
26	BB	1189	A	P-O5'	6.37	1.66	1.59
26	BB	1230	A	C5-C6	6.37	1.46	1.41
26	BB	1434	A	N3-C4	6.37	1.38	1.34
26	BB	1480	C	C2-O2	-6.37	1.18	1.24
26	BB	215	G	C5'-C4'	6.37	1.58	1.51
26	BB	1183	U	P-O5'	6.37	1.66	1.59
26	BB	1992	G	O3'-P	6.37	1.68	1.61
26	BB	2097	A	C5'-C4'	6.37	1.58	1.51
26	BB	2655	G	N9-C4	6.37	1.43	1.38
1	AA	313	A	C5-C4	-6.37	1.34	1.38
1	AA	566	G	C5-C4	-6.37	1.33	1.38
1	AA	717	U	C4-C5	6.37	1.49	1.43
1	AA	729	A	N3-C4	6.37	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	637	A	C6-N1	6.37	1.40	1.35
26	BB	1000	A	N7-C5	6.37	1.43	1.39
26	BB	1743	G	O3'-P	6.37	1.68	1.61
26	BB	2207	C	C4-N4	-6.37	1.28	1.33
4	AD	63	C	P-O5'	6.36	1.66	1.59
26	BB	638	G	C6-N1	6.36	1.44	1.39
26	BB	863	A	O3'-P	6.36	1.68	1.61
26	BB	2631	G	N7-C5	-6.36	1.35	1.39
26	BB	2649	C	C4-C5	6.36	1.48	1.43
1	AA	294	U	C4'-O4'	-6.36	1.37	1.45
1	AA	499	A	C2'-C1'	-6.36	1.46	1.53
26	BB	1348	C	N1-C2	6.36	1.46	1.40
26	BB	2473	U	N1-C2	6.36	1.44	1.38
1	AA	917	G	C3'-C2'	6.36	1.59	1.52
1	AA	1087	G	C2-N3	6.36	1.37	1.32
26	BB	551	G	C2-N2	-6.36	1.28	1.34
26	BB	748	G	N7-C5	6.36	1.43	1.39
1	AA	891	U	O3'-P	-6.36	1.53	1.61
1	AA	1154	G	N9-C8	6.36	1.42	1.37
2	AB	73	G	O3'-P	6.36	1.68	1.61
26	BB	125	A	P-O5'	6.36	1.66	1.59
26	BB	2168	G	C6-O6	-6.36	1.18	1.24
26	BB	2255	G	P-O5'	-6.36	1.53	1.59
26	BB	2661	G	N9-C8	-6.36	1.33	1.37
1	AA	1216	A	C5'-C4'	6.36	1.58	1.51
1	AA	1480	A	N1-C2	-6.36	1.28	1.34
25	BA	72	G	C4'-O4'	-6.36	1.37	1.45
26	BB	2038	G	P-O5'	6.36	1.66	1.59
26	BB	2179	C	P-O5'	6.36	1.66	1.59
26	BB	2614	A	O4'-C1'	6.36	1.50	1.41
1	AA	242	G	C2'-C1'	6.36	1.60	1.53
1	AA	663	A	C4'-O4'	-6.36	1.37	1.45
1	AA	1414	U	C2'-C1'	6.36	1.60	1.53
2	AB	67	G	C2-N2	-6.36	1.28	1.34
26	BB	804	A	C8-N7	-6.36	1.27	1.31
26	BB	877	A	C6-N1	-6.36	1.31	1.35
26	BB	1231	U	C5'-C4'	6.36	1.58	1.51
26	BB	1701	A	C4'-O4'	-6.36	1.37	1.45
26	BB	2409	G	N7-C5	-6.36	1.35	1.39
26	BB	2437	G	C4'-C3'	6.36	1.60	1.53
1	AA	433	G	C3'-O3'	6.35	1.51	1.42
1	AA	537	G	N7-C5	6.35	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	17	C	N1-C6	-6.35	1.33	1.37
26	BB	2554	U	C5-C6	6.35	1.39	1.34
26	BB	1245	G	C2-N3	6.35	1.37	1.32
26	BB	1501	G	C5'-C4'	6.35	1.58	1.51
26	BB	2021	C	C4-C5	6.35	1.48	1.43
26	BB	2146	C	C4'-C3'	6.35	1.60	1.53
1	AA	264	C	C4'-C3'	-6.35	1.46	1.53
26	BB	730	A	N7-C5	-6.35	1.35	1.39
26	BB	1316	U	C2'-O2'	-6.35	1.33	1.41
26	BB	1633	G	P-O5'	6.35	1.66	1.59
26	BB	2761	A	N9-C8	6.35	1.42	1.37
1	AA	97	G	C2-N3	6.35	1.37	1.32
1	AA	168	G	N7-C5	6.35	1.43	1.39
1	AA	222	C	N1-C2	6.35	1.46	1.40
1	AA	764	C	N1-C2	-6.35	1.33	1.40
1	AA	828	U	N1-C2	6.35	1.44	1.38
1	AA	1185	G	N9-C8	6.35	1.42	1.37
1	AA	1214	C	C4'-C3'	-6.35	1.46	1.53
1	AA	1455	G	P-O5'	6.35	1.66	1.59
25	BA	6	G	N9-C4	6.35	1.43	1.38
25	BA	12	C	C5'-C4'	6.35	1.58	1.51
26	BB	1189	A	N3-C4	-6.35	1.31	1.34
26	BB	1377	G	N3-C4	6.35	1.39	1.35
26	BB	1572	A	C5'-C4'	6.35	1.58	1.51
26	BB	1731	G	C3'-C2'	6.35	1.59	1.52
26	BB	2138	G	N3-C4	6.35	1.39	1.35
1	AA	428	G	N9-C4	-6.35	1.32	1.38
4	AD	9	G	C6-N1	6.35	1.44	1.39
26	BB	771	G	N7-C5	6.35	1.43	1.39
26	BB	1046	A	C6-N6	6.35	1.39	1.33
26	BB	1601	G	C5-C6	6.35	1.48	1.42
26	BB	2051	A	C8-N7	-6.35	1.27	1.31
1	AA	299	G	N7-C5	-6.35	1.35	1.39
1	AA	1379	G	N9-C8	-6.35	1.33	1.37
26	BB	1298	C	C4-C5	6.35	1.48	1.43
26	BB	2078	C	N3-C4	-6.35	1.29	1.33
26	BB	2146	C	C2-N3	-6.35	1.30	1.35
1	AA	141	G	N1-C2	6.34	1.42	1.37
1	AA	329	A	C6-N1	6.34	1.40	1.35
1	AA	1435	G	N9-C8	6.34	1.42	1.37
26	BB	78	U	C4'-C3'	6.34	1.60	1.53
26	BB	124	G	C5'-C4'	6.34	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2454	G	C8-N7	-6.34	1.27	1.30
26	BB	2667	C	C5'-C4'	6.34	1.58	1.51
26	BB	2903	U	N1-C2	6.34	1.44	1.38
1	AA	565	U	C2-N3	6.34	1.42	1.37
1	AA	1435	G	O3'-P	6.34	1.68	1.61
26	BB	541	A	C5'-C4'	6.34	1.58	1.51
26	BB	1656	C	O3'-P	6.34	1.68	1.61
26	BB	1784	A	C4'-O4'	-6.34	1.37	1.45
1	AA	937	A	C4'-O4'	-6.34	1.37	1.45
1	AA	1398	A	C2'-C1'	6.34	1.60	1.53
1	AA	1494	G	O3'-P	-6.34	1.53	1.61
26	BB	1036	G	C5-C4	6.34	1.42	1.38
26	BB	1270	C	C2'-C1'	6.34	1.60	1.53
26	BB	2129	C	C5-C6	6.34	1.39	1.34
1	AA	243	A	C2'-C1'	6.34	1.60	1.53
1	AA	971	G	C8-N7	-6.34	1.27	1.30
1	AA	990	C	C4'-C3'	6.34	1.60	1.53
4	AD	39	A	C5-C6	6.34	1.46	1.41
26	BB	91	A	C8-N7	-6.34	1.27	1.31
26	BB	286	U	O3'-P	6.34	1.68	1.61
26	BB	651	G	C2'-O2'	6.34	1.49	1.41
26	BB	1298	C	C2-N3	6.34	1.40	1.35
26	BB	1519	G	C6-N1	6.34	1.44	1.39
26	BB	2869	G	P-O5'	6.34	1.66	1.59
1	AA	374	A	N7-C5	6.34	1.43	1.39
1	AA	927	G	C6-N1	6.34	1.44	1.39
1	AA	1183	U	C4-C5	6.34	1.49	1.43
26	BB	156	A	C4'-O4'	-6.34	1.37	1.45
26	BB	944	C	C5'-C4'	6.34	1.58	1.51
1	AA	1270	G	P-O5'	6.33	1.66	1.59
26	BB	94	A	N9-C8	-6.33	1.32	1.37
26	BB	551	G	C8-N7	6.33	1.34	1.30
26	BB	2032	G	C4'-C3'	6.33	1.60	1.53
1	AA	282	A	N7-C5	-6.33	1.35	1.39
26	BB	8	C	P-O5'	6.33	1.66	1.59
26	BB	170	U	C2-O2	-6.33	1.16	1.22
26	BB	1469	A	C3'-C2'	6.33	1.59	1.52
26	BB	2222	C	C5'-C4'	6.33	1.58	1.51
1	AA	295	C	O3'-P	6.33	1.68	1.61
1	AA	647	C	O3'-P	6.33	1.68	1.61
1	AA	816	A	C5-C4	-6.33	1.34	1.38
1	AA	890	G	C5-C4	6.33	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1458	G	C8-N7	-6.33	1.27	1.30
26	BB	482	A	P-O5'	6.33	1.66	1.59
26	BB	1281	G	N7-C5	6.33	1.43	1.39
26	BB	2209	G	N1-C2	6.33	1.42	1.37
26	BB	2430	A	C5'-C4'	6.33	1.58	1.51
26	BB	2737	G	O3'-P	6.33	1.68	1.61
1	AA	56	U	C4'-O4'	-6.33	1.37	1.45
1	AA	758	C	C5-C6	6.33	1.39	1.34
26	BB	440	C	C5'-C4'	-6.33	1.43	1.51
26	BB	863	A	N3-C4	6.33	1.38	1.34
26	BB	2352	A	N3-C4	6.33	1.38	1.34
1	AA	243	A	N1-C2	-6.33	1.28	1.34
26	BB	1430	G	C5'-C4'	6.33	1.58	1.51
26	BB	1943	U	N1-C2	6.33	1.44	1.38
1	AA	521	G	P-O5'	6.33	1.66	1.59
26	BB	55	G	C8-N7	-6.33	1.27	1.30
26	BB	1416	G	O4'-C1'	-6.33	1.33	1.41
1	AA	140	U	P-O5'	6.32	1.66	1.59
1	AA	677	U	O4'-C1'	6.32	1.49	1.41
1	AA	1189	U	C4-C5	-6.32	1.37	1.43
4	AD	70	C	N3-C4	6.32	1.38	1.33
26	BB	1184	U	C2'-C1'	6.32	1.60	1.53
26	BB	1443	U	P-O5'	6.32	1.66	1.59
26	BB	1775	U	P-O5'	-6.32	1.53	1.59
26	BB	2447	G	N3-C4	6.32	1.39	1.35
26	BB	2469	A	P-O5'	-6.32	1.53	1.59
26	BB	2742	G	C2'-C1'	-6.32	1.46	1.53
1	AA	55	A	N9-C4	6.32	1.41	1.37
1	AA	524	G	C5'-C4'	6.32	1.58	1.51
26	BB	120	U	N1-C2	6.32	1.44	1.38
26	BB	529	A	C3'-C2'	6.32	1.59	1.52
26	BB	668	A	C6-N1	6.32	1.40	1.35
1	AA	371	A	N3-C4	6.32	1.38	1.34
1	AA	876	C	C2-N3	6.32	1.40	1.35
26	BB	1467	U	P-O5'	6.32	1.66	1.59
26	BB	1530	G	N3-C4	-6.32	1.31	1.35
26	BB	1776	G	C2'-C1'	-6.32	1.46	1.53
26	BB	2036	C	P-O5'	6.32	1.66	1.59
26	BB	2843	G	C8-N7	-6.32	1.27	1.30
26	BB	996	A	C4'-O4'	-6.32	1.37	1.45
26	BB	1024	G	O3'-P	6.32	1.68	1.61
1	AA	1245	C	P-O5'	6.32	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2012	G	C5'-C4'	6.32	1.58	1.51
26	BB	2071	A	O3'-P	-6.32	1.53	1.61
26	BB	2176	A	P-O5'	-6.32	1.53	1.59
26	BB	2584	U	C5'-C4'	6.32	1.58	1.51
1	AA	211	G	N1-C2	-6.32	1.32	1.37
26	BB	374	A	N3-C4	6.32	1.38	1.34
26	BB	540	C	P-O5'	6.32	1.66	1.59
26	BB	645	C	O3'-P	6.32	1.68	1.61
26	BB	826	U	N1-C6	6.32	1.43	1.38
26	BB	835	C	N3-C4	6.32	1.38	1.33
26	BB	2386	A	O3'-P	6.32	1.68	1.61
26	BB	2775	G	O3'-P	6.32	1.68	1.61
1	AA	1424	U	C4-O4	6.31	1.28	1.23
26	BB	795	C	C5'-C4'	6.31	1.58	1.51
1	AA	15	G	C4'-C3'	6.31	1.60	1.53
26	BB	2353	G	N9-C8	6.31	1.42	1.37
26	BB	2603	G	C5-C6	6.31	1.48	1.42
26	BB	2690	U	C4'-O4'	-6.31	1.37	1.45
26	BB	2872	A	C8-N7	6.31	1.35	1.31
1	AA	167	A	P-O5'	6.31	1.66	1.59
1	AA	921	U	C2'-O2'	-6.31	1.33	1.41
26	BB	334	C	C4'-O4'	-6.31	1.37	1.45
26	BB	430	A	P-O5'	6.31	1.66	1.59
26	BB	2731	G	N9-C8	-6.31	1.33	1.37
1	AA	1436	U	O3'-P	6.31	1.68	1.61
2	AB	26	A	N3-C4	6.31	1.38	1.34
26	BB	283	G	O3'-P	6.31	1.68	1.61
26	BB	908	C	O3'-P	6.31	1.68	1.61
26	BB	1851	U	O4'-C1'	6.31	1.49	1.41
1	AA	1439	G	C2-N3	6.31	1.37	1.32
26	BB	223	A	N3-C4	6.31	1.38	1.34
26	BB	1749	A	C4'-C3'	-6.31	1.46	1.53
26	BB	2355	G	N3-C4	6.31	1.39	1.35
26	BB	2751	G	N9-C4	6.31	1.43	1.38
25	BA	109	A	N3-C4	6.31	1.38	1.34
25	BA	115	A	O3'-P	-6.31	1.53	1.61
26	BB	2402	U	P-O5'	6.31	1.66	1.59
26	BB	2404	U	C4-C5	6.31	1.49	1.43
26	BB	2405	G	C5-C4	-6.31	1.33	1.38
26	BB	2813	A	N9-C4	-6.31	1.34	1.37
1	AA	138	G	P-O5'	6.30	1.66	1.59
1	AA	186	C	C2-O2	-6.30	1.18	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1164	G	C5-C6	6.30	1.48	1.42
26	BB	359	G	N1-C2	-6.30	1.32	1.37
26	BB	1604	C	C3'-O3'	6.30	1.50	1.42
1	AA	548	G	N7-C5	6.30	1.43	1.39
1	AA	604	G	C6-N1	6.30	1.44	1.39
26	BB	56	A	C6-N6	-6.30	1.28	1.33
1	AA	312	C	C2-O2	-6.30	1.18	1.24
1	AA	753	A	C5-C4	-6.30	1.34	1.38
1	AA	803	G	N9-C8	6.30	1.42	1.37
26	BB	244	A	C2'-C1'	-6.30	1.46	1.53
26	BB	357	C	C5-C6	6.30	1.39	1.34
26	BB	620	G	C5'-C4'	6.30	1.58	1.51
26	BB	1930	G	C5'-C4'	6.30	1.58	1.51
26	BB	2395	C	C4-C5	6.30	1.48	1.43
1	AA	1310	G	C6-N1	6.30	1.44	1.39
1	AA	1169	A	P-O5'	6.30	1.66	1.59
26	BB	613	A	C4'-C3'	6.30	1.60	1.53
26	BB	2347	C	C2-N3	6.30	1.40	1.35
1	AA	377	G	C5-C6	6.30	1.48	1.42
1	AA	478	A	C4'-O4'	-6.30	1.37	1.45
1	AA	666	G	N3-C4	-6.30	1.31	1.35
26	BB	541	A	C5-C4	6.30	1.43	1.38
26	BB	104	A	N9-C4	-6.29	1.34	1.37
26	BB	1159	U	N1-C2	6.29	1.44	1.38
1	AA	328	C	O3'-P	6.29	1.68	1.61
1	AA	1337	G	C5-C4	6.29	1.42	1.38
3	AC	38	G	N7-C5	6.29	1.43	1.39
26	BB	624	C	C4-C5	6.29	1.48	1.43
26	BB	2470	G	C8-N7	6.29	1.34	1.30
26	BB	2641	G	C2'-C1'	6.29	1.60	1.53
1	AA	203	G	C6-O6	6.29	1.29	1.24
1	AA	248	C	C5'-C4'	6.29	1.58	1.51
1	AA	414	A	C5'-C4'	6.29	1.58	1.51
1	AA	988	G	C5-C4	6.29	1.42	1.38
26	BB	72	U	O5'-C5'	-6.29	1.32	1.42
26	BB	311	A	C6-N1	-6.29	1.31	1.35
26	BB	1057	A	O4'-C1'	6.29	1.49	1.41
26	BB	2015	A	O3'-P	6.29	1.68	1.61
26	BB	2762	C	N3-C4	-6.29	1.29	1.33
1	AA	124	C	C2-N3	6.29	1.40	1.35
1	AA	141	G	C2-N2	-6.29	1.28	1.34
1	AA	1033	G	P-O5'	6.29	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	AD	26	C	C2-O2	-6.29	1.18	1.24
26	BB	1411	U	N1-C2	6.29	1.44	1.38
26	BB	2764	A	C2-N3	6.29	1.39	1.33
1	AA	668	G	N9-C8	6.29	1.42	1.37
1	AA	944	G	N3-C4	6.29	1.39	1.35
26	BB	218	A	N9-C4	6.29	1.41	1.37
26	BB	976	G	C8-N7	-6.29	1.27	1.30
26	BB	1570	A	P-O5'	6.29	1.66	1.59
1	AA	812	G	C5-C4	6.29	1.42	1.38
1	AA	1524	C	O3'-P	-6.29	1.53	1.61
1	AA	1524	C	C4-C5	6.29	1.48	1.43
26	BB	295	G	C6-N1	6.29	1.44	1.39
26	BB	1610	A	P-O5'	6.29	1.66	1.59
26	BB	1709	U	O3'-P	6.29	1.68	1.61
26	BB	2168	G	C3'-C2'	6.29	1.59	1.52
1	AA	647	C	C5'-C4'	6.29	1.58	1.51
3	AC	54	U	C2-O2	6.29	1.28	1.22
26	BB	318	C	C2-N3	6.29	1.40	1.35
26	BB	1537	G	C6-N1	-6.29	1.35	1.39
26	BB	1812	U	O3'-P	6.29	1.68	1.61
26	BB	2829	A	C5-C6	6.29	1.46	1.41
26	BB	2340	A	N7-C5	-6.28	1.35	1.39
26	BB	2381	A	O3'-P	6.28	1.68	1.61
26	BB	529	A	N3-C4	6.28	1.38	1.34
26	BB	807	U	P-O5'	6.28	1.66	1.59
26	BB	1690	A	P-O5'	6.28	1.66	1.59
26	BB	2518	A	C4'-C3'	-6.28	1.46	1.53
1	AA	784	A	O4'-C1'	6.28	1.49	1.41
1	AA	991	U	C3'-C2'	6.28	1.59	1.52
4	AD	52	C	O3'-P	6.28	1.68	1.61
26	BB	786	C	P-O5'	-6.28	1.53	1.59
26	BB	941	A	C2'-C1'	6.28	1.60	1.53
26	BB	1691	C	P-O5'	6.28	1.66	1.59
26	BB	2244	U	O4'-C1'	6.28	1.49	1.41
26	BB	2267	A	N3-C4	6.28	1.38	1.34
26	BB	2599	G	P-O5'	6.28	1.66	1.59
26	BB	322	A	C6-N1	6.28	1.40	1.35
26	BB	1515	A	N9-C4	-6.28	1.34	1.37
1	AA	832	G	N7-C5	-6.28	1.35	1.39
3	AC	47	C	C4'-C3'	6.28	1.60	1.53
26	BB	562	U	C4'-O4'	-6.28	1.37	1.45
26	BB	1193	G	N1-C2	6.28	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1202	G	C4'-C3'	6.28	1.60	1.53
26	BB	1455	G	N7-C5	6.28	1.43	1.39
26	BB	2644	G	C2-N3	6.28	1.37	1.32
44	BT	23	GLU	CG-CD	6.28	1.61	1.51
1	AA	359	G	C5-C6	6.28	1.48	1.42
25	BA	99	A	N3-C4	6.28	1.38	1.34
26	BB	127	A	N1-C2	-6.28	1.28	1.34
26	BB	1922	G	C2-N3	6.28	1.37	1.32
26	BB	2508	G	C8-N7	6.28	1.34	1.30
26	BB	2561	U	N3-C4	6.28	1.44	1.38
1	AA	458	U	N1-C6	-6.27	1.32	1.38
26	BB	1193	G	N3-C4	6.27	1.39	1.35
26	BB	1265	A	P-O5'	-6.27	1.53	1.59
26	BB	1392	A	N7-C5	6.27	1.43	1.39
26	BB	1984	G	C3'-C2'	6.27	1.59	1.52
1	AA	195	A	N9-C4	6.27	1.41	1.37
1	AA	450	G	N9-C4	6.27	1.43	1.38
7	AG	201	GLU	CG-CD	6.27	1.61	1.51
26	BB	55	G	N9-C8	-6.27	1.33	1.37
26	BB	836	G	C5-C6	6.27	1.48	1.42
26	BB	1733	G	N3-C4	6.27	1.39	1.35
26	BB	1830	C	N1-C6	6.27	1.41	1.37
26	BB	2527	C	O4'-C1'	6.27	1.49	1.41
1	AA	608	A	N1-C2	-6.27	1.28	1.34
3	AC	33	A	N7-C5	6.27	1.43	1.39
25	BA	115	A	N9-C4	6.27	1.41	1.37
26	BB	295	G	N3-C4	6.27	1.39	1.35
26	BB	848	C	C4-C5	-6.27	1.38	1.43
26	BB	1674	G	C6-O6	-6.27	1.18	1.24
1	AA	632	U	C4-C5	6.27	1.49	1.43
1	AA	954	G	P-O5'	-6.27	1.53	1.59
26	BB	132	G	C3'-C2'	-6.27	1.45	1.52
26	BB	255	A	P-O5'	6.27	1.66	1.59
26	BB	439	A	C3'-O3'	6.27	1.50	1.42
26	BB	1217	U	N3-C4	6.27	1.44	1.38
26	BB	2103	C	N1-C6	6.27	1.41	1.37
1	AA	652	U	P-O5'	6.27	1.66	1.59
1	AA	924	C	O4'-C1'	6.27	1.49	1.41
26	BB	272	A	C2-N3	6.27	1.39	1.33
26	BB	438	G	N9-C8	-6.27	1.33	1.37
26	BB	817	C	C2-N3	6.27	1.40	1.35
26	BB	2482	A	C4'-C3'	-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	BB	1663	G	C5-C4	6.27	1.42	1.38
1	AA	27	G	C6-N1	6.26	1.44	1.39
1	AA	761	G	C8-N7	6.26	1.34	1.30
1	AA	1071	C	N3-C4	6.26	1.38	1.33
4	AD	31	G	C4'-C3'	-6.26	1.46	1.53
26	BB	81	G	C2-N3	6.26	1.37	1.32
26	BB	2217	G	C8-N7	6.26	1.34	1.30
1	AA	1096	C	C2-N3	6.26	1.40	1.35
25	BA	50	A	O3'-P	6.26	1.68	1.61
26	BB	425	G	C6-O6	-6.26	1.18	1.24
26	BB	1513	U	C2-O2	6.26	1.27	1.22
1	AA	591	U	N1-C6	-6.26	1.32	1.38
1	AA	692	U	C2-O2	6.26	1.27	1.22
1	AA	880	C	N1-C6	-6.26	1.33	1.37
1	AA	977	A	C4'-C3'	6.26	1.60	1.53
26	BB	79	C	C2-N3	6.26	1.40	1.35
26	BB	581	C	C2-N3	6.26	1.40	1.35
29	BE	118	PHE	CG-CD1	6.26	1.48	1.38
1	AA	326	G	C5-C6	6.26	1.48	1.42
2	AB	5	G	C2-N3	6.26	1.37	1.32
2	AB	43	G	C5-C4	6.26	1.42	1.38
26	BB	833	A	C6-N6	6.26	1.39	1.33
26	BB	1173	U	C5'-C4'	6.26	1.58	1.51
26	BB	1931	U	C5-C6	6.26	1.39	1.34
26	BB	2256	G	N1-C2	6.26	1.42	1.37
25	BA	112	G	C8-N7	-6.26	1.27	1.30
1	AA	459	A	N3-C4	-6.26	1.31	1.34
1	AA	1099	G	C6-N1	6.26	1.44	1.39
1	AA	1212	U	C2-N3	6.26	1.42	1.37
10	AJ	78	ARG	CZ-NH1	6.26	1.41	1.33
25	BA	56	G	N9-C4	-6.26	1.32	1.38
26	BB	1067	A	N3-C4	6.26	1.38	1.34
26	BB	1206	G	C5-C6	6.26	1.48	1.42
1	AA	23	C	N1-C6	6.25	1.41	1.37
1	AA	1302	C	C3'-C2'	6.25	1.59	1.52
26	BB	2668	G	O3'-P	6.25	1.68	1.61
26	BB	2900	A	C6-N1	-6.25	1.31	1.35
1	AA	1131	G	C5'-C4'	6.25	1.58	1.51
25	BA	109	A	C4'-O4'	-6.25	1.37	1.45
26	BB	1827	U	C4-O4	6.25	1.28	1.23
26	BB	2111	U	P-O5'	6.25	1.66	1.59
26	BB	2248	C	C5-C6	6.25	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	675	A	P-O5'	6.25	1.66	1.59
1	AA	1225	A	C5'-C4'	6.25	1.58	1.51
4	AD	7	G	C2-N3	6.25	1.37	1.32
26	BB	313	G	C2-N3	6.25	1.37	1.32
26	BB	752	A	N7-C5	6.25	1.43	1.39
26	BB	927	A	O3'-P	6.25	1.68	1.61
26	BB	1071	G	C5-C4	-6.25	1.33	1.38
26	BB	1499	C	C2-N3	6.25	1.40	1.35
26	BB	1512	C	C2-N3	6.25	1.40	1.35
26	BB	1523	U	C3'-O3'	6.25	1.50	1.42
26	BB	2441	U	P-O5'	6.25	1.66	1.59
1	AA	1204	A	C5'-C4'	6.25	1.58	1.51
26	BB	2867	G	C6-N1	6.25	1.44	1.39
1	AA	338	A	P-O5'	6.25	1.66	1.59
1	AA	1413	A	N3-C4	6.25	1.38	1.34
2	AB	74	C	C2-N3	6.25	1.40	1.35
26	BB	12	U	C2'-C1'	6.25	1.60	1.53
26	BB	272	A	O3'-P	6.25	1.68	1.61
26	BB	286	U	C4-O4	-6.25	1.18	1.23
26	BB	698	C	N3-C4	6.25	1.38	1.33
26	BB	767	U	C4'-O4'	-6.25	1.37	1.45
26	BB	818	G	C2'-O2'	6.25	1.49	1.41
26	BB	927	A	C8-N7	-6.25	1.27	1.31
26	BB	1066	U	C4-C5	6.25	1.49	1.43
26	BB	1266	G	C4'-O4'	-6.25	1.37	1.45
26	BB	1339	G	C6-O6	-6.25	1.18	1.24
26	BB	2075	U	P-O5'	6.25	1.66	1.59
26	BB	2338	C	N1-C2	6.25	1.46	1.40
1	AA	239	U	C2-N3	6.25	1.42	1.37
1	AA	1037	C	C2'-O2'	6.25	1.49	1.41
1	AA	1492	A	N9-C4	6.25	1.41	1.37
26	BB	2681	C	N3-C4	6.25	1.38	1.33
1	AA	771	G	N9-C4	6.25	1.43	1.38
26	BB	2110	G	C6-O6	-6.25	1.18	1.24
1	AA	655	A	C6-N6	6.24	1.39	1.33
4	AD	63	C	N1-C6	-6.24	1.33	1.37
26	BB	828	U	C4'-O4'	-6.24	1.37	1.45
26	BB	1335	C	C4-C5	6.24	1.48	1.43
26	BB	2119	A	N7-C5	6.24	1.43	1.39
26	BB	1159	U	N1-C6	6.24	1.43	1.38
26	BB	1331	G	C3'-C2'	6.24	1.59	1.52
26	BB	2104	C	N1-C6	6.24	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2768	U	C2-N3	6.24	1.42	1.37
1	AA	704	A	C8-N7	-6.24	1.27	1.31
26	BB	1568	G	N7-C5	6.24	1.43	1.39
26	BB	2050	C	N3-C4	-6.24	1.29	1.33
1	AA	903	G	C8-N7	-6.24	1.27	1.30
1	AA	1480	A	O3'-P	6.24	1.68	1.61
1	AA	1488	G	C6-N1	6.24	1.44	1.39
26	BB	495	G	O3'-P	6.24	1.68	1.61
26	BB	1438	U	C2-O2	6.24	1.27	1.22
26	BB	2598	A	N3-C4	6.24	1.38	1.34
1	AA	1255	G	C4'-C3'	6.24	1.60	1.53
1	AA	1465	A	N9-C4	6.24	1.41	1.37
26	BB	1641	A	C5-C4	-6.24	1.34	1.38
26	BB	1862	G	N7-C5	-6.24	1.35	1.39
26	BB	2209	G	N7-C5	6.24	1.43	1.39
26	BB	754	U	C4-C5	6.24	1.49	1.43
26	BB	2630	G	O3'-P	6.24	1.68	1.61
1	AA	547	A	C6-N6	6.23	1.39	1.33
26	BB	1660	G	C4'-O4'	-6.23	1.37	1.45
1	AA	172	A	C6-N1	-6.23	1.31	1.35
1	AA	309	A	C2'-O2'	-6.23	1.33	1.41
1	AA	725	G	C3'-C2'	-6.23	1.45	1.52
1	AA	1194	U	N1-C6	6.23	1.43	1.38
1	AA	1486	G	C4'-C3'	6.23	1.60	1.53
26	BB	114	U	P-O5'	6.23	1.66	1.59
26	BB	892	A	N7-C5	6.23	1.43	1.39
26	BB	1176	U	O4'-C1'	6.23	1.49	1.41
26	BB	1415	U	C4'-C3'	-6.23	1.46	1.53
26	BB	1750	G	N9-C8	6.23	1.42	1.37
26	BB	2189	U	N1-C2	6.23	1.44	1.38
26	BB	2595	G	C2-N2	6.23	1.40	1.34
26	BB	2743	U	C2-N3	6.23	1.42	1.37
1	AA	86	G	C2'-O2'	6.23	1.49	1.41
1	AA	641	U	N3-C4	6.23	1.44	1.38
1	AA	908	A	P-O5'	6.23	1.66	1.59
1	AA	1413	A	C3'-O3'	6.23	1.50	1.42
1	AA	1463	U	C4'-O4'	-6.23	1.37	1.45
26	BB	242	G	C5-C4	6.23	1.42	1.38
26	BB	462	C	N3-C4	-6.23	1.29	1.33
26	BB	879	G	N7-C5	-6.23	1.35	1.39
26	BB	1224	U	C4-O4	6.23	1.28	1.23
26	BB	1913	A	P-O5'	6.23	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2693	G	N1-C2	6.23	1.42	1.37
1	AA	1288	A	N9-C4	6.23	1.41	1.37
26	BB	128	C	C2-N3	6.23	1.40	1.35
26	BB	2192	U	C5-C6	6.23	1.39	1.34
1	AA	462	G	P-O5'	6.23	1.66	1.59
1	AA	750	C	C5'-C4'	6.23	1.58	1.51
1	AA	814	A	C5-C6	6.23	1.46	1.41
25	BA	51	G	P-O5'	6.23	1.66	1.59
26	BB	34	U	C5'-C4'	6.23	1.58	1.51
26	BB	87	U	C4-C5	6.23	1.49	1.43
26	BB	310	A	N3-C4	6.23	1.38	1.34
26	BB	479	A	C8-N7	-6.23	1.27	1.31
26	BB	1135	C	N1-C6	6.23	1.40	1.37
26	BB	1172	C	C4'-C3'	-6.23	1.46	1.53
26	BB	1314	C	N1-C2	6.23	1.46	1.40
26	BB	2315	G	N3-C4	-6.23	1.31	1.35
26	BB	2545	G	C6-O6	-6.23	1.18	1.24
43	BS	23	TYR	CG-CD2	6.23	1.47	1.39
1	AA	1089	G	C8-N7	-6.22	1.27	1.30
1	AA	1460	C	C5'-C4'	6.22	1.58	1.51
25	BA	24	G	C6-N1	6.22	1.44	1.39
26	BB	373	U	C2-N3	6.22	1.42	1.37
26	BB	538	A	N7-C5	6.22	1.43	1.39
26	BB	1338	G	C5-C4	-6.22	1.33	1.38
26	BB	1573	G	C6-O6	-6.22	1.18	1.24
26	BB	2211	A	C8-N7	-6.22	1.27	1.31
26	BB	2432	A	C5'-C4'	6.22	1.58	1.51
3	AC	50	U	C4-C5	6.22	1.49	1.43
26	BB	983	A	N3-C4	6.22	1.38	1.34
26	BB	1070	A	C8-N7	6.22	1.35	1.31
26	BB	1544	A	O3'-P	6.22	1.68	1.61
26	BB	1879	C	C4'-O4'	-6.22	1.37	1.45
1	AA	1091	U	P-O5'	6.22	1.66	1.59
26	BB	2413	G	P-O5'	6.22	1.66	1.59
1	AA	101	A	N7-C5	6.22	1.43	1.39
1	AA	587	G	N9-C8	-6.22	1.33	1.37
1	AA	1078	U	P-O5'	6.22	1.66	1.59
1	AA	1270	G	O3'-P	6.22	1.68	1.61
1	AA	1496	C	C4-C5	6.22	1.48	1.43
26	BB	905	A	C8-N7	-6.22	1.27	1.31
26	BB	1956	U	C4-O4	6.22	1.28	1.23
26	BB	2400	G	P-O5'	6.22	1.66	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	AD	47	A	C8-N7	6.22	1.35	1.31
11	AK	79	ARG	CZ-NH1	6.22	1.41	1.33
26	BB	1587	G	C4'-O4'	-6.22	1.37	1.45
1	AA	1078	U	C4-C5	6.22	1.49	1.43
1	AA	1215	G	C2'-C1'	-6.22	1.46	1.53
1	AA	1323	G	P-O5'	6.22	1.66	1.59
4	AD	5	G	C2-N3	6.22	1.37	1.32
26	BB	1107	G	N3-C4	6.22	1.39	1.35
26	BB	1437	C	C2-O2	-6.22	1.18	1.24
26	BB	2399	G	N3-C4	6.22	1.39	1.35
1	AA	694	A	C6-N1	-6.21	1.31	1.35
2	AB	76	A	C5-C4	-6.21	1.34	1.38
26	BB	354	A	C6-N1	6.21	1.40	1.35
26	BB	1386	C	P-O5'	6.21	1.66	1.59
26	BB	1636	U	C2-N3	6.21	1.42	1.37
26	BB	2136	G	N7-C5	-6.21	1.35	1.39
3	AC	50	U	C3'-C2'	6.21	1.59	1.52
26	BB	160	A	C2-N3	6.21	1.39	1.33
26	BB	580	U	C2-N3	6.21	1.42	1.37
26	BB	1643	G	N9-C4	-6.21	1.32	1.38
26	BB	1748	C	C5-C6	6.21	1.39	1.34
26	BB	2816	G	C5-C4	-6.21	1.34	1.38
1	AA	1525	G	C5-C4	-6.21	1.34	1.38
4	AD	69	C	C4'-O4'	-6.21	1.37	1.45
26	BB	496	G	N7-C5	6.21	1.43	1.39
26	BB	1099	G	N3-C4	6.21	1.39	1.35
26	BB	2621	G	N9-C4	-6.21	1.32	1.38
26	BB	113	U	C5-C6	6.21	1.39	1.34
1	AA	539	A	N3-C4	6.21	1.38	1.34
1	AA	886	G	C5-C4	-6.21	1.34	1.38
26	BB	1552	A	C8-N7	-6.21	1.27	1.31
26	BB	1813	G	N7-C5	-6.21	1.35	1.39
26	BB	2491	U	C3'-C2'	6.21	1.59	1.52
1	AA	178	C	C5'-C4'	6.21	1.58	1.51
1	AA	344	A	N3-C4	6.21	1.38	1.34
25	BA	98	G	C5-C4	6.21	1.42	1.38
26	BB	580	U	C4'-O4'	-6.21	1.37	1.45
26	BB	141	G	N3-C4	6.21	1.39	1.35
26	BB	797	G	C2'-C1'	-6.21	1.46	1.53
26	BB	911	A	P-O5'	-6.21	1.53	1.59
26	BB	1175	A	C5-C4	6.21	1.43	1.38
26	BB	1945	G	N3-C4	6.21	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2315	G	C4'-O4'	-6.21	1.37	1.45
26	BB	2798	U	N1-C2	6.21	1.44	1.38
4	AD	39	A	N1-C2	6.20	1.40	1.34
26	BB	475	C	C2-N3	6.20	1.40	1.35
26	BB	926	G	C6-N1	6.20	1.43	1.39
26	BB	933	A	N9-C8	6.20	1.42	1.37
26	BB	1109	C	C2'-C1'	6.20	1.60	1.53
26	BB	2256	G	N7-C5	6.20	1.43	1.39
1	AA	1452	C	N1-C2	6.20	1.46	1.40
26	BB	830	G	N1-C2	6.20	1.42	1.37
26	BB	134	G	C8-N7	-6.20	1.27	1.30
26	BB	453	A	N3-C4	6.20	1.38	1.34
26	BB	554	U	O4'-C1'	6.20	1.49	1.41
1	AA	40	C	C2-N3	6.20	1.40	1.35
1	AA	189	A	N9-C8	6.20	1.42	1.37
1	AA	418	C	C5-C6	6.20	1.39	1.34
1	AA	1507	A	N3-C4	6.20	1.38	1.34
25	BA	96	G	N7-C5	6.20	1.43	1.39
26	BB	315	G	C3'-O3'	-6.20	1.33	1.42
26	BB	852	U	P-O5'	6.20	1.66	1.59
26	BB	984	A	C5'-C4'	6.20	1.58	1.51
26	BB	2221	G	C5'-C4'	6.20	1.58	1.51
26	BB	2428	G	C5-C4	6.20	1.42	1.38
26	BB	2713	U	P-O5'	6.20	1.66	1.59
26	BB	2899	A	C6-N6	-6.20	1.28	1.33
1	AA	508	U	C4'-C3'	6.20	1.59	1.53
1	AA	698	G	N1-C2	6.20	1.42	1.37
1	AA	1150	A	C8-N7	-6.20	1.27	1.31
1	AA	1503	A	N3-C4	6.20	1.38	1.34
1	AA	1529	G	C2-N3	6.20	1.37	1.32
26	BB	431	U	C4'-C3'	-6.20	1.46	1.53
26	BB	604	G	N1-C2	6.20	1.42	1.37
26	BB	1106	G	N7-C5	-6.20	1.35	1.39
26	BB	1842	G	P-O5'	6.20	1.66	1.59
26	BB	2169	A	N3-C4	6.20	1.38	1.34
26	BB	2602	A	N7-C5	-6.20	1.35	1.39
26	BB	2812	G	P-O5'	6.20	1.66	1.59
1	AA	123	U	C5'-C4'	6.19	1.58	1.51
11	AK	64	TYR	CE1-CZ	6.19	1.46	1.38
26	BB	2083	G	C4'-C3'	6.19	1.59	1.53
1	AA	129	A	C4'-O4'	-6.19	1.37	1.45
1	AA	184	G	N3-C4	6.19	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1106	G	N3-C4	6.19	1.39	1.35
26	BB	48	G	C6-O6	-6.19	1.18	1.24
26	BB	96	C	C1'-N1	6.19	1.58	1.48
26	BB	316	C	P-O5'	6.19	1.66	1.59
26	BB	470	A	C6-N1	-6.19	1.31	1.35
26	BB	1762	A	C5'-C4'	6.19	1.58	1.51
26	BB	2290	G	C2-N3	6.19	1.37	1.32
1	AA	470	C	O5'-C5'	-6.19	1.32	1.42
1	AA	927	G	N7-C5	-6.19	1.35	1.39
1	AA	1295	U	C4'-O4'	-6.19	1.37	1.45
1	AA	1531	A	N9-C4	-6.19	1.34	1.37
3	AC	43	U	C2-O2	6.19	1.27	1.22
25	BA	48	U	C4'-C3'	6.19	1.59	1.53
25	BA	95	U	O3'-P	6.19	1.68	1.61
26	BB	1292	G	C2-N3	6.19	1.37	1.32
26	BB	2837	A	N9-C4	-6.19	1.34	1.37
1	AA	352	C	N3-C4	-6.19	1.29	1.33
26	BB	2090	A	N1-C2	-6.19	1.28	1.34
1	AA	29	U	C2'-C1'	-6.19	1.46	1.53
1	AA	453	G	N3-C4	6.19	1.39	1.35
1	AA	478	A	N7-C5	-6.19	1.35	1.39
26	BB	72	U	O3'-P	6.19	1.68	1.61
26	BB	496	G	C2-N2	6.19	1.40	1.34
26	BB	1471	G	P-O5'	6.19	1.66	1.59
26	BB	2322	A	C5-C4	-6.19	1.34	1.38
25	BA	86	G	C4'-O4'	-6.19	1.37	1.45
26	BB	187	G	C1'-N9	6.19	1.58	1.48
26	BB	1077	A	C4'-O4'	-6.19	1.37	1.45
26	BB	1948	G	N9-C8	-6.19	1.33	1.37
26	BB	2204	G	C8-N7	-6.19	1.27	1.30
1	AA	947	G	P-O5'	6.18	1.66	1.59
25	BA	81	G	N9-C4	6.18	1.42	1.38
26	BB	153	U	C4'-O4'	-6.18	1.37	1.45
26	BB	872	U	C4'-O4'	-6.18	1.37	1.45
26	BB	1179	G	N3-C4	6.18	1.39	1.35
26	BB	1636	U	C3'-O3'	-6.18	1.33	1.42
26	BB	2622	U	C4-O4	-6.18	1.18	1.23
1	AA	1008	U	C4-C5	6.18	1.49	1.43
26	BB	2266	A	C6-N1	6.18	1.39	1.35
26	BB	1985	C	N3-C4	-6.18	1.29	1.33
1	AA	82	G	N1-C2	6.18	1.42	1.37
1	AA	217	C	O4'-C1'	6.18	1.49	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1375	A	N9-C4	6.18	1.41	1.37
1	AA	1426	G	N7-C5	6.18	1.43	1.39
26	BB	280	U	C5'-C4'	6.18	1.58	1.51
26	BB	1256	G	P-O5'	6.18	1.66	1.59
4	AD	75	C	C4'-O4'	-6.18	1.37	1.45
26	BB	1	G	C2-N3	6.18	1.37	1.32
26	BB	679	C	C2'-C1'	6.18	1.60	1.53
26	BB	2475	C	N3-C4	6.18	1.38	1.33
1	AA	392	C	N3-C4	6.18	1.38	1.33
26	BB	240	C	C4-C5	6.18	1.47	1.43
26	BB	376	G	C8-N7	-6.18	1.27	1.30
26	BB	1193	G	C6-O6	-6.18	1.18	1.24
26	BB	2825	G	C4'-O4'	-6.18	1.37	1.45
1	AA	848	C	C4'-C3'	6.17	1.59	1.53
1	AA	935	A	C5'-C4'	6.17	1.58	1.51
1	AA	1141	C	C5'-C4'	6.17	1.58	1.51
1	AA	1290	G	C6-O6	6.17	1.29	1.24
1	AA	1504	G	C3'-C2'	6.17	1.59	1.52
26	BB	185	G	C2-N3	6.17	1.37	1.32
26	BB	326	G	C3'-C2'	-6.17	1.46	1.52
1	AA	1484	C	O3'-P	6.17	1.68	1.61
26	BB	1824	G	N3-C4	-6.17	1.31	1.35
26	BB	2407	A	C6-N6	-6.17	1.29	1.33
26	BB	2453	A	C1'-N9	6.17	1.58	1.48
1	AA	73	C	N1-C2	6.17	1.46	1.40
1	AA	963	G	C2-N2	6.17	1.40	1.34
1	AA	1432	G	C2-N3	6.17	1.37	1.32
26	BB	297	G	C5-C4	-6.17	1.34	1.38
26	BB	953	G	P-O5'	6.17	1.66	1.59
26	BB	1156	A	C5-C6	6.17	1.46	1.41
26	BB	1544	A	C2'-C1'	6.17	1.60	1.53
26	BB	2050	C	C5'-C4'	-6.17	1.44	1.51
26	BB	2871	U	N1-C2	6.17	1.44	1.38
26	BB	2885	G	C2-N3	6.17	1.37	1.32
1	AA	1387	G	P-O5'	6.17	1.66	1.59
26	BB	124	G	C4'-O4'	-6.17	1.37	1.45
26	BB	982	C	C2'-C1'	6.17	1.60	1.53
26	BB	1341	G	C5-C4	6.17	1.42	1.38
26	BB	2679	A	C4'-C3'	-6.17	1.46	1.53
1	AA	298	A	C2'-C1'	6.17	1.60	1.53
1	AA	337	G	C6-N1	6.17	1.43	1.39
26	BB	51	G	C2-N3	6.17	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	203	A	P-O5'	-6.17	1.53	1.59
26	BB	1576	U	C4'-O4'	-6.17	1.37	1.45
1	AA	1528	U	P-O5'	6.17	1.66	1.59
25	BA	76	G	C8-N7	-6.17	1.27	1.30
26	BB	70	G	N9-C8	6.17	1.42	1.37
26	BB	337	C	P-O5'	6.17	1.66	1.59
26	BB	514	A	N9-C8	-6.17	1.32	1.37
26	BB	2099	U	N1-C2	6.17	1.44	1.38
26	BB	2513	A	C2'-O2'	6.17	1.49	1.41
26	BB	2888	C	C5-C6	6.17	1.39	1.34
26	BB	1128	G	C6-N1	-6.17	1.35	1.39
26	BB	2297	A	N3-C4	6.17	1.38	1.34
1	AA	177	G	N9-C4	-6.16	1.33	1.38
25	BA	23	G	N9-C8	6.16	1.42	1.37
25	BA	120	U	O4'-C1'	6.16	1.49	1.41
26	BB	521	U	N1-C2	6.16	1.44	1.38
26	BB	658	U	C2-O2	6.16	1.27	1.22
26	BB	766	U	N3-C4	-6.16	1.32	1.38
26	BB	2499	C	C2-N3	6.16	1.40	1.35
1	AA	38	G	C4'-C3'	6.16	1.59	1.53
1	AA	1196	A	C5-C6	6.16	1.46	1.41
1	AA	1225	A	N1-C2	-6.16	1.28	1.34
26	BB	2484	G	N7-C5	6.16	1.43	1.39
30	BF	183	PHE	CG-CD1	6.16	1.48	1.38
1	AA	43	C	C5-C6	6.16	1.39	1.34
1	AA	773	G	C6-N1	6.16	1.43	1.39
1	AA	1367	C	C3'-O3'	6.16	1.50	1.42
26	BB	875	G	C3'-C2'	6.16	1.59	1.52
26	BB	1182	G	C4'-O4'	-6.16	1.37	1.45
26	BB	1466	U	N1-C2	6.16	1.44	1.38
26	BB	2465	C	P-O5'	6.16	1.66	1.59
26	BB	2588	G	N9-C8	-6.16	1.33	1.37
1	AA	121	U	C5'-C4'	6.16	1.58	1.51
1	AA	332	G	C5-C4	-6.16	1.34	1.38
1	AA	629	A	C6-N6	-6.16	1.29	1.33
26	BB	488	G	C2-N3	6.16	1.37	1.32
26	BB	496	G	C2-N3	6.16	1.37	1.32
26	BB	886	A	O3'-P	6.16	1.68	1.61
26	BB	2568	U	C5'-C4'	6.16	1.58	1.51
26	BB	804	A	P-O5'	6.16	1.66	1.59
26	BB	2054	A	N7-C5	6.16	1.43	1.39
26	BB	2260	C	O3'-P	6.16	1.68	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	330	C	N1-C6	6.16	1.40	1.37
1	AA	1156	G	P-O5'	6.16	1.66	1.59
4	AD	22	A	N9-C8	6.16	1.42	1.37
26	BB	782	A	N1-C2	6.16	1.39	1.34
26	BB	1127	A	N7-C5	6.16	1.43	1.39
26	BB	1146	C	C5-C6	6.16	1.39	1.34
26	BB	2269	G	O3'-P	6.16	1.68	1.61
1	AA	471	U	C4-O4	6.15	1.28	1.23
1	AA	1257	A	C8-N7	-6.15	1.27	1.31
1	AA	1417	G	C5-C4	-6.15	1.34	1.38
26	BB	256	A	O3'-P	6.15	1.68	1.61
26	BB	851	C	N3-C4	6.15	1.38	1.33
26	BB	1935	G	N1-C2	6.15	1.42	1.37
1	AA	465	A	N3-C4	6.15	1.38	1.34
4	AD	10	G	C4'-O4'	-6.15	1.37	1.45
4	AD	64	G	N3-C4	6.15	1.39	1.35
26	BB	385	C	P-O5'	6.15	1.66	1.59
26	BB	1800	C	N1-C6	6.15	1.40	1.37
26	BB	1807	G	N7-C5	6.15	1.43	1.39
1	AA	433	G	N1-C2	6.15	1.42	1.37
3	AC	54	U	N1-C6	6.15	1.43	1.38
26	BB	698	C	C4-C5	6.15	1.47	1.43
26	BB	904	G	C6-N1	-6.15	1.35	1.39
26	BB	1650	A	N7-C5	6.15	1.43	1.39
1	AA	316	C	C3'-C2'	6.15	1.59	1.52
26	BB	426	C	C2-N3	6.15	1.40	1.35
26	BB	1218	G	N3-C4	6.15	1.39	1.35
1	AA	682	G	O3'-P	-6.15	1.53	1.61
1	AA	928	G	N1-C2	6.15	1.42	1.37
26	BB	865	C	P-O5'	6.15	1.65	1.59
26	BB	1197	G	N7-C5	-6.15	1.35	1.39
26	BB	1309	G	N3-C4	6.15	1.39	1.35
26	BB	2563	U	N1-C2	6.15	1.44	1.38
35	BK	7	TYR	CE2-CZ	6.15	1.46	1.38
1	AA	182	A	C8-N7	-6.15	1.27	1.31
1	AA	1390	U	C4'-O4'	-6.15	1.37	1.45
26	BB	2670	A	C3'-C2'	6.15	1.59	1.52
1	AA	774	G	N7-C5	-6.14	1.35	1.39
1	AA	1304	G	P-O5'	6.14	1.65	1.59
1	AA	1354	U	C4-C5	6.14	1.49	1.43
1	AA	1479	C	C5-C6	6.14	1.39	1.34
26	BB	651	G	O5'-C5'	-6.14	1.33	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1213	A	N7-C5	-6.14	1.35	1.39
26	BB	1326	U	N3-C4	-6.14	1.32	1.38
26	BB	1355	G	C5-C4	-6.14	1.34	1.38
26	BB	1478	G	C8-N7	-6.14	1.27	1.30
26	BB	1803	A	C2-N3	6.14	1.39	1.33
26	BB	1895	C	N3-C4	6.14	1.38	1.33
1	AA	321	A	C3'-C2'	6.14	1.59	1.52
26	BB	529	A	C3'-O3'	6.14	1.50	1.42
26	BB	1324	G	N9-C8	6.14	1.42	1.37
26	BB	1562	U	C4-C5	6.14	1.49	1.43
26	BB	1847	A	C3'-C2'	-6.14	1.46	1.52
26	BB	1916	A	C2-N3	-6.14	1.28	1.33
26	BB	2693	G	N7-C5	-6.14	1.35	1.39
26	BB	2748	A	N3-C4	-6.14	1.31	1.34
26	BB	2864	G	N9-C8	6.14	1.42	1.37
1	AA	260	G	C5-C4	-6.14	1.34	1.38
1	AA	769	G	C6-N1	6.14	1.43	1.39
25	BA	81	G	O3'-P	6.14	1.68	1.61
26	BB	739	A	C5'-C4'	6.14	1.58	1.51
26	BB	845	A	N3-C4	6.14	1.38	1.34
26	BB	1057	A	C4'-O4'	-6.14	1.37	1.45
1	AA	12	U	C5-C6	6.14	1.39	1.34
1	AA	1181	G	C4'-C3'	6.14	1.59	1.53
2	AB	11	U	C5'-C4'	6.14	1.58	1.51
25	BA	75	G	C5-C4	-6.14	1.34	1.38
26	BB	47	C	C5-C6	6.14	1.39	1.34
26	BB	784	G	P-O5'	6.14	1.65	1.59
26	BB	1202	G	C5-C4	6.14	1.42	1.38
26	BB	1419	A	N1-C2	-6.14	1.28	1.34
1	AA	1358	U	C5-C6	6.14	1.39	1.34
1	AA	374	A	C4'-O4'	-6.14	1.37	1.45
1	AA	548	G	C5-C4	-6.14	1.34	1.38
1	AA	1342	C	C5-C6	6.14	1.39	1.34
26	BB	134	G	C4'-O4'	-6.14	1.37	1.45
26	BB	248	G	C2-N2	6.14	1.40	1.34
26	BB	265	A	C4'-O4'	-6.14	1.37	1.45
26	BB	905	A	N7-C5	6.14	1.43	1.39
26	BB	1055	G	C3'-C2'	-6.14	1.46	1.52
26	BB	1271	G	C2'-O2'	6.14	1.49	1.41
1	AA	540	G	C2-N3	6.13	1.37	1.32
1	AA	1004	A	C3'-C2'	6.13	1.59	1.52
1	AA	1176	A	N7-C5	6.13	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	21	G	C6-O6	-6.13	1.18	1.24
26	BB	771	G	C6-N1	6.13	1.43	1.39
26	BB	1076	C	P-O5'	6.13	1.65	1.59
26	BB	1191	G	N7-C5	-6.13	1.35	1.39
26	BB	1591	A	C5-C4	6.13	1.43	1.38
26	BB	1670	C	C5'-C4'	6.13	1.58	1.51
26	BB	2569	G	C2-N2	-6.13	1.28	1.34
1	AA	717	U	C5'-C4'	6.13	1.58	1.51
1	AA	821	G	C5-C6	6.13	1.48	1.42
26	BB	663	G	N9-C8	-6.13	1.33	1.37
26	BB	1252	G	N7-C5	6.13	1.43	1.39
1	AA	7	A	C4'-C3'	6.13	1.59	1.53
1	AA	1015	G	C6-O6	-6.13	1.18	1.24
1	AA	1266	G	C5-C4	6.13	1.42	1.38
25	BA	51	G	N9-C8	-6.13	1.33	1.37
26	BB	246	C	C2-N3	-6.13	1.30	1.35
26	BB	518	G	C4'-O4'	-6.13	1.37	1.45
26	BB	2120	G	P-O5'	6.13	1.65	1.59
26	BB	2378	A	N3-C4	6.13	1.38	1.34
26	BB	2548	U	C4'-O4'	-6.13	1.37	1.45
1	AA	266	G	C2-N3	6.13	1.37	1.32
34	BJ	131	TYR	CE1-CZ	6.13	1.46	1.38
1	AA	1542	A	N7-C5	-6.13	1.35	1.39
26	BB	195	A	C2'-C1'	6.13	1.60	1.53
26	BB	361	G	C5-C4	-6.13	1.34	1.38
26	BB	748	G	O3'-P	-6.13	1.53	1.61
26	BB	1085	A	C2-N3	6.13	1.39	1.33
1	AA	54	C	C5-C6	6.13	1.39	1.34
1	AA	153	C	O3'-P	-6.13	1.53	1.61
1	AA	1244	G	C4'-C3'	-6.13	1.46	1.53
26	BB	621	A	C8-N7	-6.13	1.27	1.31
26	BB	950	G	N3-C4	6.13	1.39	1.35
26	BB	1510	G	C6-N1	6.13	1.43	1.39
26	BB	2491	U	C4'-O4'	-6.13	1.37	1.45
26	BB	2567	G	N9-C8	6.13	1.42	1.37
26	BB	2598	A	P-O5'	6.13	1.65	1.59
26	BB	2733	A	N9-C8	6.13	1.42	1.37
1	AA	361	G	N3-C4	6.12	1.39	1.35
26	BB	1099	G	P-O5'	6.12	1.65	1.59
26	BB	1383	A	N9-C8	6.12	1.42	1.37
26	BB	2056	G	O4'-C1'	6.12	1.49	1.41
1	AA	97	G	C5'-C4'	6.12	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	120	A	C6-N1	-6.12	1.31	1.35
1	AA	366	A	P-O5'	6.12	1.65	1.59
1	AA	373	A	N7-C5	6.12	1.43	1.39
1	AA	696	A	C3'-O3'	-6.12	1.33	1.42
25	BA	84	G	N7-C5	6.12	1.43	1.39
26	BB	1096	A	N3-C4	6.12	1.38	1.34
26	BB	1653	G	N3-C4	6.12	1.39	1.35
26	BB	1837	C	C2-N3	6.12	1.40	1.35
1	AA	129	A	C5'-C4'	6.12	1.58	1.51
1	AA	208	U	C5-C6	6.12	1.39	1.34
1	AA	495	A	C4'-C3'	6.12	1.59	1.53
1	AA	1418	A	N3-C4	6.12	1.38	1.34
25	BA	13	G	C6-O6	6.12	1.29	1.24
26	BB	1048	A	C3'-C2'	-6.12	1.46	1.52
26	BB	1137	G	N9-C4	-6.12	1.33	1.38
26	BB	2328	A	N9-C4	6.12	1.41	1.37
26	BB	2818	U	O3'-P	6.12	1.68	1.61
1	AA	756	C	C2'-C1'	6.12	1.60	1.53
26	BB	733	G	C5-C6	6.12	1.48	1.42
26	BB	1393	A	C6-N1	-6.12	1.31	1.35
1	AA	393	A	N7-C5	-6.12	1.35	1.39
1	AA	440	C	C5-C6	6.12	1.39	1.34
1	AA	914	A	C6-N6	-6.12	1.29	1.33
1	AA	1310	G	C4'-C3'	-6.12	1.46	1.53
26	BB	2851	A	P-O5'	-6.12	1.53	1.59
1	AA	952	U	C4'-C3'	-6.12	1.46	1.53
22	AV	72	GLU	CG-CD	6.12	1.61	1.51
26	BB	205	G	C4'-O4'	-6.12	1.37	1.45
1	AA	16	A	N7-C5	-6.12	1.35	1.39
1	AA	414	A	C5-C6	6.12	1.46	1.41
1	AA	625	U	C4'-O4'	-6.12	1.37	1.45
1	AA	1238	A	N3-C4	6.12	1.38	1.34
25	BA	39	A	N3-C4	6.12	1.38	1.34
26	BB	1809	A	N9-C8	-6.12	1.32	1.37
1	AA	57	G	C3'-C2'	6.11	1.59	1.52
1	AA	367	U	C1'-N1	6.11	1.57	1.48
1	AA	539	A	C3'-C2'	6.11	1.59	1.52
1	AA	670	G	P-O5'	6.11	1.65	1.59
1	AA	900	A	C6-N1	6.11	1.39	1.35
26	BB	44	A	N7-C5	-6.11	1.35	1.39
26	BB	569	U	O3'-P	6.11	1.68	1.61
26	BB	1744	A	N7-C5	6.11	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1756	G	C5'-C4'	6.11	1.58	1.51
26	BB	2304	G	C8-N7	6.11	1.34	1.30
26	BB	2370	G	N7-C5	6.11	1.43	1.39
26	BB	2784	U	O3'-P	6.11	1.68	1.61
1	AA	1027	C	N3-C4	6.11	1.38	1.33
1	AA	1491	G	C8-N7	6.11	1.34	1.30
3	AC	28	U	C5'-C4'	6.11	1.58	1.51
26	BB	901	C	P-O5'	6.11	1.65	1.59
26	BB	1909	C	P-O5'	6.11	1.65	1.59
26	BB	2324	U	C4'-O4'	-6.11	1.37	1.45
1	AA	627	G	N1-C2	6.11	1.42	1.37
1	AA	644	U	C2-N3	6.11	1.42	1.37
1	AA	800	G	O4'-C1'	6.11	1.49	1.41
1	AA	1385	G	N7-C5	-6.11	1.35	1.39
4	AD	8	4SU	O3'-P	-6.11	1.53	1.61
26	BB	976	G	C5-C4	6.11	1.42	1.38
26	BB	1136	G	C4'-C3'	6.11	1.59	1.53
26	BB	1889	A	C3'-C2'	6.11	1.59	1.52
26	BB	2722	G	N1-C2	6.11	1.42	1.37
1	AA	9	G	N3-C4	6.11	1.39	1.35
1	AA	117	G	N3-C4	-6.11	1.31	1.35
1	AA	1116	U	N1-C2	6.11	1.44	1.38
26	BB	122	G	N9-C8	6.11	1.42	1.37
2	AB	53	G	C5'-C4'	6.11	1.58	1.51
25	BA	61	G	C3'-C2'	6.11	1.59	1.52
26	BB	1122	G	N1-C2	6.11	1.42	1.37
26	BB	1888	G	C4'-C3'	6.11	1.59	1.53
26	BB	2271	G	C2-N3	6.11	1.37	1.32
26	BB	2567	G	N9-C4	6.11	1.42	1.38
26	BB	2676	C	C4'-O4'	-6.11	1.37	1.45
1	AA	640	A	N1-C2	-6.11	1.28	1.34
4	AD	21	H2U	O3'-P	6.11	1.68	1.61
5	AE	236	PHE	CE1-CZ	6.11	1.49	1.37
26	BB	3	U	N1-C2	6.11	1.44	1.38
1	AA	86	G	N1-C2	6.10	1.42	1.37
1	AA	447	G	C4'-O4'	-6.10	1.37	1.45
26	BB	338	G	N7-C5	-6.10	1.35	1.39
26	BB	521	U	C3'-C2'	6.10	1.59	1.52
26	BB	542	C	C4'-O4'	-6.10	1.37	1.45
26	BB	864	G	C6-N1	-6.10	1.35	1.39
26	BB	1093	G	C5-C4	6.10	1.42	1.38
1	AA	353	A	N3-C4	6.10	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	383	A	O3'-P	6.10	1.68	1.61
1	AA	861	G	N1-C2	-6.10	1.32	1.37
1	AA	1057	G	N9-C4	-6.10	1.33	1.38
1	AA	1062	U	N1-C6	6.10	1.43	1.38
1	AA	1448	C	N1-C6	6.10	1.40	1.37
26	BB	741	U	P-O5'	6.10	1.65	1.59
26	BB	1057	A	N3-C4	6.10	1.38	1.34
26	BB	2117	A	C4'-O4'	-6.10	1.37	1.45
26	BB	2830	C	N3-C4	6.10	1.38	1.33
26	BB	1862	G	N9-C8	-6.10	1.33	1.37
26	BB	2108	A	C6-N6	6.10	1.38	1.33
11	AK	76	ARG	CD-NE	6.10	1.56	1.46
26	BB	170	U	C4'-C3'	-6.10	1.46	1.53
26	BB	188	G	N9-C8	-6.10	1.33	1.37
26	BB	396	G	C6-N1	6.10	1.43	1.39
26	BB	517	C	C4'-O4'	-6.10	1.37	1.45
26	BB	655	A	C2'-C1'	-6.10	1.46	1.53
26	BB	923	G	N1-C2	6.10	1.42	1.37
26	BB	1480	C	N1-C6	6.10	1.40	1.37
26	BB	1999	C	N3-C4	6.10	1.38	1.33
26	BB	2694	G	N7-C5	-6.10	1.35	1.39
49	BY	40	ARG	NE-CZ	6.10	1.41	1.33
52	B1	52	PHE	CG-CD2	6.10	1.48	1.38
1	AA	1494	G	N1-C2	6.10	1.42	1.37
25	BA	6	G	C5'-C4'	-6.10	1.44	1.51
26	BB	576	U	C4-O4	-6.10	1.18	1.23
26	BB	634	C	C4-N4	6.10	1.39	1.33
26	BB	886	A	C6-N6	6.10	1.38	1.33
26	BB	2288	A	N9-C4	6.10	1.41	1.37
26	BB	2453	A	N1-C2	-6.10	1.28	1.34
26	BB	2579	C	C5-C6	6.10	1.39	1.34
26	BB	2762	C	N1-C6	-6.10	1.33	1.37
1	AA	292	G	O3'-P	6.10	1.68	1.61
26	BB	1189	A	N1-C2	6.10	1.39	1.34
26	BB	2866	U	C5-C6	6.10	1.39	1.34
1	AA	1515	G	C2-N3	6.09	1.37	1.32
4	AD	74	A	O4'-C1'	6.09	1.49	1.41
26	BB	110	G	N7-C5	6.09	1.43	1.39
26	BB	655	A	N7-C5	-6.09	1.35	1.39
26	BB	2307	G	C8-N7	-6.09	1.27	1.30
26	BB	2312	U	N1-C2	6.09	1.44	1.38
1	AA	616	G	C2-N3	6.09	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	633	G	C6-N1	-6.09	1.35	1.39
26	BB	759	G	O3'-P	-6.09	1.53	1.61
26	BB	2193	G	C4'-C3'	-6.09	1.46	1.53
1	AA	672	U	C2'-O2'	6.09	1.49	1.41
1	AA	1385	G	N1-C2	6.09	1.42	1.37
4	AD	13	C	C5'-C4'	6.09	1.58	1.51
26	BB	297	G	C5'-C4'	6.09	1.58	1.51
26	BB	910	A	N3-C4	6.09	1.38	1.34
26	BB	2355	G	N7-C5	-6.09	1.35	1.39
26	BB	2466	C	P-O5'	-6.09	1.53	1.59
26	BB	2543	G	C4'-O4'	-6.09	1.37	1.45
1	AA	13	U	P-O5'	6.09	1.65	1.59
1	AA	227	G	O3'-P	-6.09	1.53	1.61
1	AA	1182	G	C2'-C1'	-6.09	1.46	1.53
1	AA	1273	C	C2-N3	6.09	1.40	1.35
1	AA	1534	A	C6-N1	6.09	1.39	1.35
26	BB	209	C	C4-C5	6.09	1.47	1.43
26	BB	2010	G	C5-C6	6.09	1.48	1.42
26	BB	2526	G	C6-N1	6.09	1.43	1.39
26	BB	2794	C	N1-C6	6.09	1.40	1.37
1	AA	474	G	C3'-C2'	6.09	1.59	1.52
25	BA	72	G	C5-C4	-6.09	1.34	1.38
26	BB	1833	C	C2-O2	-6.09	1.19	1.24
26	BB	2318	G	C4'-C3'	6.09	1.59	1.53
53	B2	59	ARG	CZ-NH2	6.09	1.41	1.33
1	AA	391	G	C4'-O4'	-6.09	1.37	1.45
26	BB	1292	G	C6-N1	6.09	1.43	1.39
26	BB	1372	U	O4'-C1'	6.09	1.49	1.41
26	BB	2694	G	C8-N7	-6.09	1.27	1.30
26	BB	2814	A	O3'-P	6.09	1.68	1.61
26	BB	2838	G	P-O5'	6.09	1.65	1.59
1	AA	136	C	C4'-O4'	-6.08	1.37	1.45
43	BS	24	TYR	CE2-CZ	6.08	1.46	1.38
1	AA	472	U	C4-O4	-6.08	1.18	1.23
1	AA	1393	U	P-O5'	6.08	1.65	1.59
25	BA	6	G	N9-C8	-6.08	1.33	1.37
26	BB	1263	U	N3-C4	6.08	1.44	1.38
26	BB	2388	A	C4'-O4'	-6.08	1.37	1.45
1	AA	16	A	P-O5'	6.08	1.65	1.59
1	AA	48	C	N1-C6	6.08	1.40	1.37
1	AA	829	G	N9-C8	6.08	1.42	1.37
4	AD	52	C	C2-N3	6.08	1.40	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	221	A	C2'-C1'	6.08	1.60	1.53
26	BB	440	C	C5-C6	6.08	1.39	1.34
26	BB	760	G	C4'-O4'	-6.08	1.37	1.45
26	BB	828	U	C4-O4	-6.08	1.18	1.23
26	BB	893	C	N1-C2	-6.08	1.34	1.40
26	BB	1003	G	N1-C2	6.08	1.42	1.37
26	BB	2532	G	C4'-C3'	6.08	1.59	1.53
26	BB	2770	G	N3-C4	6.08	1.39	1.35
26	BB	2778	A	C2-N3	-6.08	1.28	1.33
1	AA	332	G	C2-N3	6.08	1.37	1.32
26	BB	2739	U	C5'-C4'	6.08	1.58	1.51
1	AA	1074	G	N7-C5	-6.08	1.35	1.39
2	AB	75	C	P-O5'	6.08	1.65	1.59
26	BB	964	C	C5'-C4'	6.08	1.58	1.51
26	BB	1740	G	C8-N7	6.08	1.34	1.30
26	BB	2209	G	C2-N3	6.08	1.37	1.32
26	BB	2220	U	C4'-C3'	6.08	1.59	1.53
26	BB	2410	G	C5-C4	-6.08	1.34	1.38
26	BB	2572	A	P-O5'	6.08	1.65	1.59
1	AA	385	C	C2-O2	-6.08	1.19	1.24
26	BB	613	A	N9-C8	-6.08	1.32	1.37
26	BB	55	G	N7-C5	6.08	1.42	1.39
26	BB	1321	A	N7-C5	6.08	1.42	1.39
26	BB	2106	U	C2-N3	-6.08	1.33	1.37
26	BB	2228	G	C5-C4	-6.08	1.34	1.38
1	AA	21	G	N3-C4	6.07	1.39	1.35
1	AA	1026	G	C5-C6	6.07	1.48	1.42
25	BA	14	U	P-O5'	-6.07	1.53	1.59
25	BA	97	C	O3'-P	6.07	1.68	1.61
26	BB	206	U	N1-C2	6.07	1.44	1.38
26	BB	258	G	N3-C4	6.07	1.39	1.35
26	BB	1370	C	C4-C5	6.07	1.47	1.43
26	BB	1898	U	P-O5'	6.07	1.65	1.59
26	BB	2135	A	N3-C4	6.07	1.38	1.34
1	AA	1118	U	C4-O4	-6.07	1.18	1.23
6	AF	167	TYR	CG-CD1	6.07	1.47	1.39
26	BB	227	A	C2'-O2'	6.07	1.49	1.41
26	BB	251	A	N7-C5	6.07	1.42	1.39
26	BB	1559	U	C4-O4	-6.07	1.18	1.23
26	BB	1966	A	O3'-P	6.07	1.68	1.61
1	AA	246	A	N7-C5	6.07	1.42	1.39
1	AA	588	G	C3'-C2'	-6.07	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1195	G	C8-N7	-6.07	1.27	1.30
26	BB	2061	G	O3'-P	6.07	1.68	1.61
26	BB	2216	G	N9-C4	6.07	1.42	1.38
26	BB	2791	G	C6-N1	-6.07	1.35	1.39
26	BB	1416	G	C5'-C4'	6.07	1.58	1.51
26	BB	1882	U	P-O5'	6.07	1.65	1.59
26	BB	1993	U	C4'-O4'	-6.07	1.37	1.45
26	BB	2385	C	C2-N3	6.07	1.40	1.35
26	BB	2452	C	C2-N3	6.07	1.40	1.35
1	AA	62	U	C4-C5	6.07	1.49	1.43
1	AA	646	G	N3-C4	6.07	1.39	1.35
1	AA	1198	G	C6-N1	-6.07	1.35	1.39
26	BB	113	U	C5'-C4'	6.07	1.58	1.51
26	BB	655	A	N3-C4	6.07	1.38	1.34
26	BB	2001	C	N1-C6	6.07	1.40	1.37
26	BB	2438	U	N1-C6	-6.07	1.32	1.38
1	AA	152	A	P-O5'	6.07	1.65	1.59
1	AA	344	A	C6-N6	6.07	1.38	1.33
7	AG	68	GLU	CD-OE1	6.07	1.32	1.25
25	BA	109	A	C5-C4	-6.07	1.34	1.38
25	BA	112	G	N3-C4	6.07	1.39	1.35
26	BB	388	G	C4'-O4'	6.07	1.53	1.45
26	BB	421	C	C4-C5	6.07	1.47	1.43
26	BB	1345	C	N1-C2	6.07	1.46	1.40
26	BB	1662	U	P-O5'	6.07	1.65	1.59
26	BB	2270	A	N9-C8	-6.07	1.32	1.37
26	BB	2761	A	N9-C4	6.07	1.41	1.37
1	AA	843	U	C2'-O2'	6.06	1.49	1.41
1	AA	1502	A	N9-C4	6.06	1.41	1.37
21	AU	69	TYR	CB-CG	6.06	1.60	1.51
1	AA	70	U	C4-O4	6.06	1.28	1.23
1	AA	386	C	O5'-C5'	-6.06	1.33	1.42
1	AA	980	C	C5-C6	6.06	1.39	1.34
1	AA	1369	C	C4'-O4'	-6.06	1.37	1.45
22	AV	45	GLY	CA-C	6.06	1.61	1.51
26	BB	808	G	N7-C5	6.06	1.42	1.39
26	BB	990	A	C6-N1	6.06	1.39	1.35
26	BB	2601	C	N1-C2	6.06	1.46	1.40
26	BB	2858	C	C4-C5	6.06	1.47	1.43
1	AA	99	C	C2'-C1'	6.06	1.60	1.53
26	BB	597	G	C2'-C1'	-6.06	1.46	1.53
26	BB	1755	A	C2'-C1'	-6.06	1.46	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	369	G	N1-C2	6.06	1.42	1.37
1	AA	973	G	C2-N3	6.06	1.37	1.32
1	AA	1094	G	C6-O6	-6.06	1.18	1.24
4	AD	67	C	C2-O2	-6.06	1.19	1.24
26	BB	1473	G	P-O5'	6.06	1.65	1.59
26	BB	1767	G	C6-O6	-6.06	1.18	1.24
1	AA	1241	G	N7-C5	-6.06	1.35	1.39
1	AA	1378	C	C4'-C3'	6.06	1.59	1.53
25	BA	67	G	C2'-O2'	6.06	1.49	1.41
26	BB	477	A	C5-C6	6.06	1.46	1.41
26	BB	840	C	N3-C4	6.06	1.38	1.33
1	AA	401	C	O4'-C1'	6.06	1.49	1.41
2	AB	36	A	C5-C4	6.06	1.43	1.38
7	AG	164	ARG	CD-NE	6.06	1.56	1.46
26	BB	143	C	N3-C4	6.06	1.38	1.33
26	BB	328	U	C4-O4	6.06	1.28	1.23
1	AA	915	A	N9-C8	-6.05	1.32	1.37
1	AA	915	A	P-O5'	6.05	1.65	1.59
1	AA	1193	G	C8-N7	-6.05	1.27	1.30
2	AB	76	A	C4'-O4'	-6.05	1.37	1.45
26	BB	136	G	C2-N3	6.05	1.37	1.32
26	BB	1413	A	C2'-C1'	-6.05	1.46	1.53
26	BB	1653	G	C2-N3	6.05	1.37	1.32
26	BB	2558	C	C4'-O4'	-6.05	1.37	1.45
1	AA	560	A	C4'-C3'	6.05	1.59	1.53
26	BB	347	A	O3'-P	6.05	1.68	1.61
26	BB	1657	U	C5'-C4'	6.05	1.58	1.51
26	BB	1834	U	C4'-O4'	-6.05	1.37	1.45
26	BB	1852	U	C4-C5	6.05	1.49	1.43
1	AA	134	G	N9-C8	-6.05	1.33	1.37
1	AA	213	G	N7-C5	6.05	1.42	1.39
1	AA	430	A	C6-N6	6.05	1.38	1.33
1	AA	436	C	N1-C6	-6.05	1.33	1.37
1	AA	668	G	C5-C4	6.05	1.42	1.38
1	AA	765	G	N3-C4	6.05	1.39	1.35
1	AA	1251	A	O3'-P	6.05	1.68	1.61
1	AA	1305	G	C6-O6	6.05	1.29	1.24
1	AA	1462	C	N3-C4	6.05	1.38	1.33
4	AD	65	G	C8-N7	-6.05	1.27	1.30
26	BB	207	A	N3-C4	-6.05	1.31	1.34
26	BB	455	C	P-O5'	6.05	1.65	1.59
26	BB	572	A	O3'-P	6.05	1.68	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	630	G	P-O5'	6.05	1.65	1.59
26	BB	1937	A	P-O5'	6.05	1.65	1.59
26	BB	2657	A	C6-N1	-6.05	1.31	1.35
1	AA	224	U	C4-C5	6.05	1.49	1.43
1	AA	868	C	C2-O2	-6.05	1.19	1.24
1	AA	1226	C	N3-C4	6.05	1.38	1.33
25	BA	8	C	C5'-C4'	6.05	1.58	1.51
26	BB	1553	A	C5'-C4'	6.05	1.58	1.51
26	BB	2116	G	C2-N3	6.05	1.37	1.32
26	BB	2214	C	P-O5'	6.05	1.65	1.59
1	AA	458	U	C4'-O4'	-6.05	1.37	1.45
1	AA	751	U	N3-C4	6.05	1.43	1.38
26	BB	972	A	C2-N3	6.05	1.39	1.33
26	BB	2577	A	O3'-P	-6.05	1.53	1.61
1	AA	198	G	O3'-P	6.05	1.68	1.61
1	AA	467	U	N3-C4	6.05	1.43	1.38
26	BB	332	A	C5-C4	-6.05	1.34	1.38
26	BB	536	G	O3'-P	6.05	1.68	1.61
26	BB	682	G	C5-C4	-6.05	1.34	1.38
26	BB	1141	U	P-O5'	6.05	1.65	1.59
1	AA	851	G	N9-C8	6.04	1.42	1.37
2	AB	59	G	C4'-C3'	6.04	1.59	1.53
26	BB	145	C	N3-C4	6.04	1.38	1.33
26	BB	369	U	N1-C6	-6.04	1.32	1.38
26	BB	567	U	C5'-C4'	6.04	1.58	1.51
26	BB	1011	G	C8-N7	-6.04	1.27	1.30
26	BB	2479	U	C5'-C4'	6.04	1.58	1.51
26	BB	2807	U	C5-C6	6.04	1.39	1.34
1	AA	558	G	O3'-P	6.04	1.68	1.61
1	AA	1061	G	C3'-C2'	6.04	1.59	1.52
1	AA	1126	U	C1'-N1	6.04	1.57	1.48
1	AA	1200	C	C4-C5	-6.04	1.38	1.43
2	AB	58	A	C2'-C1'	6.04	1.59	1.53
26	BB	59	U	C5'-C4'	6.04	1.58	1.51
26	BB	155	A	N7-C5	-6.04	1.35	1.39
26	BB	378	C	O3'-P	6.04	1.68	1.61
26	BB	978	G	C5-C6	6.04	1.48	1.42
26	BB	1181	U	N1-C6	6.04	1.43	1.38
26	BB	1646	C	O4'-C1'	6.04	1.49	1.41
1	AA	62	U	C1'-N1	6.04	1.57	1.48
1	AA	575	G	N9-C4	6.04	1.42	1.38
1	AA	600	A	C8-N7	-6.04	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	987	G	N9-C8	6.04	1.42	1.37
1	AA	1383	C	P-O5'	6.04	1.65	1.59
1	AA	1443	C	C4'-C3'	-6.04	1.46	1.53
26	BB	94	A	C6-N1	-6.04	1.31	1.35
26	BB	121	G	C8-N7	6.04	1.34	1.30
26	BB	625	G	N7-C5	6.04	1.42	1.39
26	BB	983	A	P-O5'	6.04	1.65	1.59
26	BB	1047	G	C4'-C3'	6.04	1.59	1.53
26	BB	1057	A	C5'-C4'	6.04	1.58	1.51
26	BB	1449	G	C5-C4	6.04	1.42	1.38
26	BB	1526	C	C4'-O4'	-6.04	1.37	1.45
26	BB	1648	U	C4-O4	-6.04	1.18	1.23
26	BB	1892	C	C4-N4	-6.04	1.28	1.33
26	BB	1926	U	C2-N3	6.04	1.42	1.37
26	BB	2349	G	C5-C6	-6.04	1.36	1.42
26	BB	2469	A	N9-C8	6.04	1.42	1.37
26	BB	2560	A	C2-N3	-6.04	1.28	1.33
25	BA	84	G	N3-C4	6.04	1.39	1.35
26	BB	2553	G	O3'-P	6.04	1.68	1.61
1	AA	441	A	C5'-C4'	6.04	1.58	1.51
1	AA	452	A	C6-N1	6.04	1.39	1.35
1	AA	482	A	P-O5'	-6.04	1.53	1.59
1	AA	523	A	C2'-O2'	6.04	1.49	1.41
1	AA	1487	G	N9-C4	6.04	1.42	1.38
1	AA	1529	G	C6-N1	-6.04	1.35	1.39
25	BA	17	C	O3'-P	-6.04	1.53	1.61
26	BB	101	A	P-O5'	6.04	1.65	1.59
26	BB	1232	G	N9-C8	6.04	1.42	1.37
26	BB	2310	C	C4-N4	-6.04	1.28	1.33
26	BB	2480	C	C2-N3	6.04	1.40	1.35
1	AA	278	G	N1-C2	6.04	1.42	1.37
1	AA	1262	C	P-O5'	6.04	1.65	1.59
1	AA	1361	G	O3'-P	6.04	1.68	1.61
3	AC	37	G	C5-C4	-6.04	1.34	1.38
3	AC	44	U	C4'-O4'	-6.04	1.37	1.45
26	BB	1573	G	C5-C6	6.04	1.48	1.42
1	AA	506	G	N3-C4	6.04	1.39	1.35
1	AA	1458	G	C5'-C4'	6.04	1.58	1.51
4	AD	77	A	C2-N3	-6.04	1.28	1.33
25	BA	10	G	C2-N3	6.04	1.37	1.32
26	BB	1024	G	N9-C4	6.04	1.42	1.38
26	BB	1925	C	C5-C6	6.04	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1963	U	C5-C6	6.04	1.39	1.34
26	BB	2782	G	O3'-P	6.04	1.68	1.61
26	BB	2854	G	N7-C5	6.04	1.42	1.39
1	AA	10	A	C4'-O4'	-6.03	1.37	1.45
1	AA	293	G	C6-O6	6.03	1.29	1.24
1	AA	397	A	N9-C4	6.03	1.41	1.37
4	AD	31	G	N1-C2	6.03	1.42	1.37
25	BA	59	A	C6-N1	-6.03	1.31	1.35
26	BB	411	G	C6-N1	6.03	1.43	1.39
26	BB	1763	G	N3-C4	6.03	1.39	1.35
26	BB	2416	C	C4-C5	6.03	1.47	1.43
26	BB	2768	U	C5'-C4'	6.03	1.58	1.51
1	AA	1225	A	P-O5'	-6.03	1.53	1.59
26	BB	1701	A	O3'-P	6.03	1.68	1.61
26	BB	2332	C	C2-N3	6.03	1.40	1.35
26	BB	2355	G	C3'-C2'	6.03	1.59	1.52
26	BB	2737	G	C5-C6	6.03	1.48	1.42
1	AA	416	G	P-O5'	6.03	1.65	1.59
1	AA	924	C	C4-C5	6.03	1.47	1.43
26	BB	190	A	C1'-N9	6.03	1.57	1.48
26	BB	775	G	C6-N1	6.03	1.43	1.39
26	BB	913	U	P-O5'	6.03	1.65	1.59
26	BB	990	A	N3-C4	6.03	1.38	1.34
26	BB	1570	A	C2-N3	6.03	1.39	1.33
26	BB	2832	U	C2-N3	6.03	1.42	1.37
29	BE	77	ARG	NE-CZ	6.03	1.40	1.33
1	AA	230	G	N1-C2	6.03	1.42	1.37
2	AB	1	A	C6-N1	-6.03	1.31	1.35
26	BB	155	A	O4'-C1'	6.03	1.49	1.41
1	AA	12	U	C2-O2	6.03	1.27	1.22
1	AA	736	C	C4'-O4'	-6.03	1.37	1.45
1	AA	908	A	N9-C4	6.03	1.41	1.37
25	BA	16	G	P-O5'	6.03	1.65	1.59
26	BB	144	A	C3'-C2'	6.03	1.59	1.52
26	BB	1230	A	N9-C4	-6.03	1.34	1.37
26	BB	1380	G	N3-C4	6.03	1.39	1.35
26	BB	1866	A	N3-C4	6.03	1.38	1.34
26	BB	1933	G	N7-C5	6.03	1.42	1.39
26	BB	2279	G	C2-N2	-6.03	1.28	1.34
37	BM	109	SER	CA-CB	6.03	1.61	1.52
1	AA	239	U	P-O5'	6.03	1.65	1.59
1	AA	890	G	N9-C8	6.03	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	63	A	C3'-C2'	-6.03	1.46	1.52
26	BB	151	C	C5'-C4'	6.03	1.58	1.51
26	BB	1292	G	O4'-C1'	6.03	1.49	1.41
26	BB	1384	A	C8-N7	6.03	1.35	1.31
26	BB	2015	A	N9-C8	6.03	1.42	1.37
26	BB	2620	C	C4-C5	6.03	1.47	1.43
26	BB	1524	G	C5'-C4'	6.02	1.58	1.51
26	BB	1686	C	N1-C2	6.02	1.46	1.40
26	BB	1713	A	C8-N7	-6.02	1.27	1.31
1	AA	141	G	C4'-O4'	-6.02	1.37	1.45
1	AA	504	C	C4-C5	6.02	1.47	1.43
1	AA	1503	A	C6-N1	-6.02	1.31	1.35
1	AA	1505	G	O3'-P	6.02	1.68	1.61
26	BB	370	G	C3'-C2'	6.02	1.59	1.52
26	BB	1135	C	C5-C6	6.02	1.39	1.34
26	BB	2194	U	C3'-C2'	-6.02	1.46	1.52
26	BB	2374	C	C5-C6	6.02	1.39	1.34
26	BB	2809	A	N1-C2	-6.02	1.28	1.34
26	BB	2898	U	C5-C6	6.02	1.39	1.34
1	AA	299	G	P-O5'	6.02	1.65	1.59
3	AC	19	A	C5-C4	6.02	1.43	1.38
15	AO	94	TYR	CE2-CZ	6.02	1.46	1.38
26	BB	1710	G	P-O5'	6.02	1.65	1.59
26	BB	1943	U	C4'-O4'	-6.02	1.37	1.45
26	BB	2357	G	C5-C4	-6.02	1.34	1.38
1	AA	1120	C	C4'-O4'	-6.02	1.37	1.45
1	AA	1228	C	C4-C5	6.02	1.47	1.43
2	AB	11	U	C5-C6	6.02	1.39	1.34
2	AB	60	U	P-O5'	6.02	1.65	1.59
26	BB	534	U	C2-N3	-6.02	1.33	1.37
26	BB	564	C	C2-O2	-6.02	1.19	1.24
26	BB	742	A	O3'-P	-6.02	1.53	1.61
26	BB	1171	G	O3'-P	6.02	1.68	1.61
26	BB	1235	G	P-O5'	6.02	1.65	1.59
26	BB	1487	U	C4-O4	6.02	1.28	1.23
26	BB	1532	A	N1-C2	-6.02	1.28	1.34
26	BB	1664	A	P-O5'	6.02	1.65	1.59
26	BB	1699	G	N9-C4	6.02	1.42	1.38
26	BB	2349	G	C4'-O4'	-6.02	1.37	1.45
26	BB	2389	G	C3'-C2'	6.02	1.59	1.52
1	AA	358	U	O3'-P	6.02	1.68	1.61
26	BB	43	G	C2-N3	6.02	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	220	G	C5'-C4'	6.02	1.58	1.51
26	BB	332	A	N3-C4	6.02	1.38	1.34
26	BB	762	U	N1-C6	6.02	1.43	1.38
26	BB	2736	A	C4'-O4'	-6.02	1.37	1.45
1	AA	74	A	C6-N1	6.01	1.39	1.35
1	AA	276	G	N9-C4	6.01	1.42	1.38
1	AA	851	G	C6-N1	-6.01	1.35	1.39
1	AA	999	C	N1-C6	6.01	1.40	1.37
1	AA	1101	A	N1-C2	-6.01	1.28	1.34
2	AB	1	A	C6-N6	6.01	1.38	1.33
14	AN	43	TRP	CD2-CE2	6.01	1.48	1.41
26	BB	97	C	C5'-C4'	6.01	1.58	1.51
26	BB	2415	G	N7-C5	-6.01	1.35	1.39
26	BB	174	U	C4'-O4'	-6.01	1.37	1.45
26	BB	1149	G	N3-C4	6.01	1.39	1.35
26	BB	2323	G	C2'-O2'	-6.01	1.33	1.41
1	AA	335	C	N1-C6	6.01	1.40	1.37
1	AA	378	G	C4'-O4'	-6.01	1.37	1.45
1	AA	1521	C	C5-C6	6.01	1.39	1.34
26	BB	416	U	N1-C6	6.01	1.43	1.38
26	BB	585	G	C4'-C3'	6.01	1.59	1.53
26	BB	2701	U	N3-C4	6.01	1.43	1.38
1	AA	71	A	N1-C2	-6.01	1.28	1.34
1	AA	1522	U	C4-C5	6.01	1.49	1.43
25	BA	11	C	C4-N4	6.01	1.39	1.33
25	BA	28	C	N1-C2	6.01	1.46	1.40
25	BA	38	C	N3-C4	-6.01	1.29	1.33
26	BB	415	A	N9-C4	6.01	1.41	1.37
1	AA	655	A	C6-N1	-6.01	1.31	1.35
26	BB	556	A	N3-C4	6.01	1.38	1.34
26	BB	2542	A	C2'-C1'	-6.01	1.46	1.53
26	BB	2569	G	N3-C4	6.01	1.39	1.35
1	AA	61	G	C5'-C4'	6.01	1.58	1.51
1	AA	1197	A	C8-N7	-6.01	1.27	1.31
26	BB	431	U	C2'-C1'	-6.01	1.46	1.53
26	BB	559	G	C5-C4	6.01	1.42	1.38
26	BB	861	A	C4'-O4'	-6.01	1.37	1.45
26	BB	910	A	N7-C5	-6.01	1.35	1.39
26	BB	1772	A	O4'-C1'	6.01	1.49	1.41
1	AA	1016	A	C2'-O2'	6.00	1.49	1.41
26	BB	1192	G	C4'-O4'	-6.00	1.37	1.45
26	BB	2502	G	C2'-O2'	6.00	1.49	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	257	G	C4'-O4'	-6.00	1.37	1.45
1	AA	495	A	C5'-C4'	6.00	1.58	1.51
1	AA	1528	U	O3'-P	6.00	1.68	1.61
3	AC	30	U	P-O5'	6.00	1.65	1.59
26	BB	581	C	C2-O2	-6.00	1.19	1.24
26	BB	637	A	C5-C4	-6.00	1.34	1.38
26	BB	1400	U	C3'-O3'	6.00	1.50	1.42
26	BB	1963	U	N1-C2	6.00	1.44	1.38
26	BB	2419	U	N3-C4	6.00	1.43	1.38
26	BB	2810	A	P-O5'	6.00	1.65	1.59
1	AA	1310	G	C2-N2	-6.00	1.28	1.34
26	BB	386	G	C4'-O4'	-6.00	1.37	1.45
26	BB	734	A	C5'-C4'	6.00	1.58	1.51
26	BB	1009	A	C3'-C2'	-6.00	1.46	1.52
26	BB	1066	U	N3-C4	6.00	1.43	1.38
26	BB	1204	A	C6-N1	6.00	1.39	1.35
26	BB	1632	A	C6-N1	-6.00	1.31	1.35
26	BB	1788	C	C2'-C1'	-6.00	1.46	1.53
26	BB	2011	U	C4'-O4'	6.00	1.53	1.45
26	BB	2436	G	C4'-O4'	-6.00	1.37	1.45
26	BB	471	A	O3'-P	6.00	1.68	1.61
26	BB	751	A	C3'-C2'	-6.00	1.46	1.52
26	BB	2040	G	C5'-C4'	6.00	1.58	1.51
26	BB	2146	C	N1-C2	6.00	1.46	1.40
1	AA	333	U	C4-C5	6.00	1.49	1.43
1	AA	1036	A	C4'-O4'	-6.00	1.37	1.45
26	BB	711	G	C2'-O2'	-6.00	1.33	1.41
26	BB	1248	G	C8-N7	-6.00	1.27	1.30
26	BB	1384	A	N7-C5	-6.00	1.35	1.39
26	BB	2173	A	C4'-O4'	-6.00	1.37	1.45
26	BB	2484	G	N9-C8	-6.00	1.33	1.37
26	BB	2612	C	C4'-O4'	-6.00	1.37	1.45
1	AA	280	C	N3-C4	-6.00	1.29	1.33
1	AA	852	G	O3'-P	6.00	1.68	1.61
1	AA	1075	U	C2-O2	6.00	1.27	1.22
1	AA	1137	C	O3'-P	6.00	1.68	1.61
1	AA	1168	U	P-O5'	6.00	1.65	1.59
1	AA	1447	A	O5'-C5'	-6.00	1.33	1.42
26	BB	83	A	N1-C2	-6.00	1.28	1.34
26	BB	238	C	C4'-O4'	-6.00	1.37	1.45
26	BB	771	G	P-O5'	6.00	1.65	1.59
26	BB	904	G	N9-C4	-6.00	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1181	U	N1-C2	6.00	1.44	1.38
26	BB	1225	G	O3'-P	-6.00	1.53	1.61
26	BB	1711	A	O4'-C1'	6.00	1.49	1.41
26	BB	1753	G	C4'-O4'	-6.00	1.37	1.45
26	BB	2195	U	C2-N3	6.00	1.42	1.37
1	AA	925	G	P-O5'	6.00	1.65	1.59
9	AI	44	ARG	NE-CZ	6.00	1.40	1.33
26	BB	1731	G	C5'-C4'	6.00	1.58	1.51
26	BB	2113	U	N1-C2	6.00	1.44	1.38
1	AA	275	G	C4'-O4'	-5.99	1.37	1.45
1	AA	1014	A	P-O5'	5.99	1.65	1.59
1	AA	1223	C	O3'-P	5.99	1.68	1.61
1	AA	1514	G	N9-C4	5.99	1.42	1.38
25	BA	46	A	N7-C5	-5.99	1.35	1.39
26	BB	450	G	C6-O6	-5.99	1.18	1.24
26	BB	1393	A	C5-C6	5.99	1.46	1.41
26	BB	1483	G	C2-N2	-5.99	1.28	1.34
26	BB	1608	A	N9-C8	5.99	1.42	1.37
26	BB	2036	C	C2-N3	5.99	1.40	1.35
26	BB	2589	A	N7-C5	5.99	1.42	1.39
26	BB	1451	C	P-O5'	5.99	1.65	1.59
26	BB	2303	G	N9-C4	-5.99	1.33	1.38
26	BB	2729	G	C2-N3	5.99	1.37	1.32
1	AA	540	G	C8-N7	5.99	1.34	1.30
1	AA	664	G	N9-C8	-5.99	1.33	1.37
1	AA	842	U	C2-N3	5.99	1.42	1.37
4	AD	60	A	N9-C8	5.99	1.42	1.37
26	BB	854	C	N1-C6	5.99	1.40	1.37
26	BB	1059	G	C4'-O4'	-5.99	1.37	1.45
26	BB	1258	U	N1-C2	5.99	1.44	1.38
26	BB	1516	G	N7-C5	5.99	1.42	1.39
26	BB	2454	G	N7-C5	5.99	1.42	1.39
1	AA	413	G	N7-C5	5.99	1.42	1.39
1	AA	932	C	N3-C4	-5.99	1.29	1.33
1	AA	1005	A	P-O5'	5.99	1.65	1.59
1	AA	1115	U	C4'-O4'	-5.99	1.37	1.45
1	AA	1305	G	C5-C6	5.99	1.48	1.42
1	AA	1325	C	C2-N3	5.99	1.40	1.35
1	AA	1423	G	P-O5'	5.99	1.65	1.59
2	AB	40	C	C5-C6	-5.99	1.29	1.34
26	BB	226	A	C5-C6	-5.99	1.35	1.41
26	BB	2010	G	N1-C2	-5.99	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2224	G	N7-C5	-5.99	1.35	1.39
26	BB	2230	G	C2-N2	5.99	1.40	1.34
1	AA	487	A	N7-C5	-5.99	1.35	1.39
26	BB	1041	G	C2-N2	-5.99	1.28	1.34
1	AA	245	U	C4-O4	-5.99	1.18	1.23
1	AA	302	G	C2-N2	5.99	1.40	1.34
1	AA	356	A	P-O5'	5.99	1.65	1.59
1	AA	436	C	N3-C4	5.99	1.38	1.33
1	AA	444	G	N9-C8	-5.99	1.33	1.37
1	AA	681	A	C4'-O4'	-5.99	1.37	1.45
1	AA	997	U	N3-C4	5.99	1.43	1.38
1	AA	1251	A	N9-C4	5.99	1.41	1.37
1	AA	1413	A	N7-C5	5.99	1.42	1.39
2	AB	63	C	C4'-O4'	-5.99	1.37	1.45
25	BA	18	G	C4'-O4'	-5.99	1.37	1.45
26	BB	718	A	P-O5'	5.99	1.65	1.59
26	BB	1116	G	C2-N3	5.99	1.37	1.32
26	BB	2808	G	N1-C2	5.99	1.42	1.37
26	BB	2878	U	C4'-O4'	-5.99	1.37	1.45
1	AA	273	U	C5'-C4'	5.98	1.58	1.51
1	AA	807	A	C5'-C4'	5.98	1.58	1.51
1	AA	1379	G	N3-C4	5.98	1.39	1.35
4	AD	64	G	N1-C2	5.98	1.42	1.37
26	BB	645	C	N3-C4	5.98	1.38	1.33
1	AA	149	A	N9-C8	-5.98	1.32	1.37
1	AA	923	A	C5-C4	5.98	1.43	1.38
2	AB	33	U	N1-C2	5.98	1.44	1.38
24	AX	70	TYR	CE2-CZ	5.98	1.46	1.38
25	BA	72	G	P-O5'	5.98	1.65	1.59
26	BB	673	C	C2-N3	5.98	1.40	1.35
26	BB	1803	A	N3-C4	5.98	1.38	1.34
26	BB	2096	C	C1'-N1	5.98	1.57	1.48
26	BB	2108	A	C5-C6	5.98	1.46	1.41
1	AA	616	G	C2-N2	-5.98	1.28	1.34
1	AA	812	G	C8-N7	5.98	1.34	1.30
26	BB	1826	G	C1'-N9	5.98	1.57	1.48
26	BB	1861	G	N3-C4	5.98	1.39	1.35
26	BB	2004	G	C6-O6	-5.98	1.18	1.24
26	BB	2090	A	N9-C4	5.98	1.41	1.37
26	BB	2544	G	N1-C2	5.98	1.42	1.37
26	BB	2826	A	N7-C5	5.98	1.42	1.39
25	BA	1	U	C5-C6	5.98	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	712	G	C6-N1	5.98	1.43	1.39
26	BB	950	G	C4'-O4'	-5.98	1.37	1.45
26	BB	1157	G	C5-C4	5.98	1.42	1.38
1	AA	1039	G	C2'-O2'	-5.98	1.33	1.41
5	AE	207	ARG	CZ-NH2	5.98	1.40	1.33
25	BA	65	U	C2-N3	5.98	1.42	1.37
26	BB	45	G	C2-N3	5.98	1.37	1.32
26	BB	408	G	C5-C6	5.98	1.48	1.42
26	BB	625	G	N9-C8	-5.98	1.33	1.37
26	BB	658	U	C4'-O4'	-5.98	1.37	1.45
26	BB	757	G	C5-C4	-5.98	1.34	1.38
26	BB	1082	U	C4'-O4'	-5.98	1.37	1.45
26	BB	1581	G	C2-N3	5.98	1.37	1.32
26	BB	1998	A	N7-C5	-5.98	1.35	1.39
26	BB	2286	G	P-O5'	5.98	1.65	1.59
26	BB	2317	A	C4'-C3'	5.98	1.59	1.53
26	BB	2468	A	N9-C4	-5.98	1.34	1.37
26	BB	2674	G	C6-O6	-5.98	1.18	1.24
26	BB	2889	C	N1-C6	5.98	1.40	1.37
1	AA	954	G	N7-C5	5.98	1.42	1.39
26	BB	1125	G	C5'-C4'	5.98	1.58	1.51
1	AA	44	A	C4'-C3'	-5.97	1.46	1.52
1	AA	771	G	O4'-C1'	5.97	1.49	1.41
1	AA	1395	C	O3'-P	-5.97	1.53	1.61
7	AG	25	ARG	CZ-NH2	5.97	1.40	1.33
26	BB	112	U	C4'-O4'	-5.97	1.37	1.45
26	BB	233	A	N9-C8	5.97	1.42	1.37
26	BB	2534	A	C5-C6	5.97	1.46	1.41
26	BB	2586	U	P-O5'	5.97	1.65	1.59
1	AA	1349	A	C5-C6	5.97	1.46	1.41
26	BB	234	U	C4'-O4'	-5.97	1.37	1.45
26	BB	1162	G	C3'-C2'	5.97	1.59	1.52
26	BB	1377	G	C5-C6	5.97	1.48	1.42
26	BB	2415	G	C5'-C4'	5.97	1.58	1.51
26	BB	2731	G	P-O5'	5.97	1.65	1.59
1	AA	526	C	C2-O2	5.97	1.29	1.24
1	AA	1319	A	C5-C4	5.97	1.43	1.38
1	AA	1450	U	P-O5'	5.97	1.65	1.59
2	AB	38	A	C2'-C1'	-5.97	1.46	1.53
26	BB	2017	U	C2-O2	5.97	1.27	1.22
26	BB	2310	C	C2-N3	5.97	1.40	1.35
1	AA	341	C	N3-C4	-5.97	1.29	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	445	G	C8-N7	5.97	1.34	1.30
1	AA	1284	C	C5-C6	5.97	1.39	1.34
6	AF	168	ARG	CZ-NH1	5.97	1.40	1.33
26	BB	1464	G	C3'-C2'	5.97	1.59	1.52
26	BB	1571	A	N9-C8	5.97	1.42	1.37
26	BB	2294	G	C8-N7	5.97	1.34	1.30
26	BB	2597	G	C5'-C4'	5.97	1.58	1.51
25	BA	48	U	C4-C5	5.97	1.49	1.43
26	BB	1073	A	C5-C6	5.97	1.46	1.41
26	BB	1169	A	P-O5'	5.97	1.65	1.59
26	BB	1858	A	C8-N7	-5.97	1.27	1.31
1	AA	39	G	C2-N3	5.97	1.37	1.32
1	AA	350	G	C5-C6	5.97	1.48	1.42
1	AA	1101	A	C6-N6	-5.97	1.29	1.33
2	AB	25	C	C4-C5	5.97	1.47	1.43
26	BB	636	G	N7-C5	-5.97	1.35	1.39
26	BB	716	A	N7-C5	5.97	1.42	1.39
26	BB	853	C	C4'-O4'	-5.97	1.37	1.45
26	BB	866	A	C6-N1	-5.97	1.31	1.35
26	BB	1017	G	N1-C2	5.97	1.42	1.37
26	BB	1115	G	N9-C4	5.97	1.42	1.38
26	BB	1314	C	N3-C4	-5.97	1.29	1.33
26	BB	1337	G	N9-C8	-5.97	1.33	1.37
26	BB	1365	A	N9-C8	-5.97	1.32	1.37
1	AA	468	A	C6-N1	-5.96	1.31	1.35
1	AA	925	G	O3'-P	5.96	1.68	1.61
3	AC	34	U	O4'-C1'	5.96	1.49	1.41
26	BB	974	G	C2'-O2'	5.96	1.49	1.41
26	BB	1524	G	C2-N3	5.96	1.37	1.32
26	BB	2102	G	C8-N7	-5.96	1.27	1.30
26	BB	2489	U	O4'-C1'	5.96	1.49	1.41
3	AC	58	C	N3-C4	-5.96	1.29	1.33
26	BB	51	G	C2'-O2'	-5.96	1.33	1.41
26	BB	118	A	C2'-C1'	5.96	1.59	1.53
1	AA	38	G	C3'-C2'	5.96	1.59	1.52
1	AA	961	U	O3'-P	5.96	1.68	1.61
25	BA	119	A	N7-C5	5.96	1.42	1.39
26	BB	238	C	N1-C6	5.96	1.40	1.37
26	BB	681	G	C4'-C3'	5.96	1.59	1.53
26	BB	2033	A	C8-N7	-5.96	1.27	1.31
26	BB	2078	C	C4'-O4'	-5.96	1.37	1.45
26	BB	2823	A	N3-C4	5.96	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	188	C	P-O5'	5.96	1.65	1.59
1	AA	684	U	C2-N3	5.96	1.42	1.37
10	AJ	110	ARG	NE-CZ	5.96	1.40	1.33
1	AA	1539	C	C3'-C2'	5.96	1.59	1.52
26	BB	679	C	C2-O2	-5.96	1.19	1.24
26	BB	1854	A	P-O5'	5.96	1.65	1.59
26	BB	2631	G	P-O5'	5.96	1.65	1.59
1	AA	615	G	P-O5'	5.96	1.65	1.59
1	AA	1007	U	C4-C5	5.96	1.49	1.43
1	AA	1192	C	N3-C4	-5.96	1.29	1.33
1	AA	1422	G	O3'-P	5.96	1.68	1.61
26	BB	5	A	N9-C4	-5.96	1.34	1.37
26	BB	431	U	C5'-C4'	5.96	1.58	1.51
26	BB	1148	U	C2'-O2'	5.96	1.49	1.41
26	BB	2745	C	P-O5'	5.96	1.65	1.59
1	AA	556	C	N3-C4	5.96	1.38	1.33
2	AB	34	C	C2-N3	-5.96	1.30	1.35
26	BB	916	G	C5'-C4'	5.96	1.58	1.51
26	BB	942	G	C2-N3	5.96	1.37	1.32
26	BB	1097	U	P-O5'	-5.96	1.53	1.59
26	BB	1701	A	C5-C6	5.96	1.46	1.41
26	BB	2292	U	N1-C2	5.96	1.44	1.38
1	AA	621	A	N3-C4	5.95	1.38	1.34
1	AA	679	C	C5'-C4'	5.95	1.58	1.51
1	AA	1108	G	N3-C4	-5.95	1.31	1.35
1	AA	1223	C	N1-C2	5.95	1.46	1.40
26	BB	729	G	C4'-C3'	-5.95	1.46	1.52
26	BB	836	G	C6-N1	5.95	1.43	1.39
26	BB	1329	U	N3-C4	5.95	1.43	1.38
26	BB	1773	A	C6-N1	-5.95	1.31	1.35
26	BB	2013	A	C5-C4	-5.95	1.34	1.38
26	BB	2294	G	N3-C4	-5.95	1.31	1.35
26	BB	1359	A	C4'-C3'	5.95	1.59	1.53
26	BB	2290	G	N3-C4	-5.95	1.31	1.35
46	BV	6	ARG	NE-CZ	5.95	1.40	1.33
1	AA	845	A	N3-C4	5.95	1.38	1.34
1	AA	881	G	C5'-C4'	5.95	1.58	1.51
26	BB	193	U	N3-C4	5.95	1.43	1.38
26	BB	1052	C	C4'-O4'	-5.95	1.37	1.45
26	BB	1502	A	N9-C4	5.95	1.41	1.37
26	BB	1847	A	N9-C4	5.95	1.41	1.37
26	BB	1910	G	N9-C8	-5.95	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	467	G	O4'-C1'	5.95	1.49	1.41
26	BB	1433	A	C3'-C2'	5.95	1.59	1.52
26	BB	1921	G	N1-C2	5.95	1.42	1.37
1	AA	40	C	O4'-C1'	5.95	1.49	1.41
1	AA	304	U	C4'-C3'	5.95	1.59	1.53
1	AA	314	C	C4'-O4'	-5.95	1.37	1.45
1	AA	1338	G	N9-C8	-5.95	1.33	1.37
1	AA	1386	G	C4'-C3'	-5.95	1.46	1.52
26	BB	220	G	C5-C4	5.95	1.42	1.38
26	BB	361	G	N7-C5	5.95	1.42	1.39
26	BB	1340	U	C5'-C4'	5.95	1.58	1.51
26	BB	1648	U	C5'-C4'	5.95	1.58	1.51
26	BB	2793	C	C5-C6	-5.95	1.29	1.34
1	AA	1270	G	C5'-C4'	5.94	1.58	1.51
26	BB	1532	A	N9-C4	-5.94	1.34	1.37
26	BB	2838	G	N9-C4	5.94	1.42	1.38
1	AA	331	G	C4'-O4'	-5.94	1.37	1.45
1	AA	1502	A	C5-C4	5.94	1.43	1.38
25	BA	45	A	N3-C4	5.94	1.38	1.34
25	BA	116	G	P-O5'	5.94	1.65	1.59
26	BB	578	G	P-O5'	5.94	1.65	1.59
26	BB	586	A	C3'-C2'	5.94	1.59	1.52
26	BB	1277	G	C2-N3	5.94	1.37	1.32
26	BB	1283	G	N1-C2	5.94	1.42	1.37
26	BB	1458	U	N1-C2	5.94	1.43	1.38
26	BB	2509	G	N1-C2	5.94	1.42	1.37
1	AA	69	G	C3'-C2'	5.94	1.59	1.52
1	AA	1330	U	N3-C4	5.94	1.43	1.38
26	BB	68	G	C5-C6	5.94	1.48	1.42
26	BB	84	A	P-O5'	5.94	1.65	1.59
26	BB	1020	A	P-O5'	5.94	1.65	1.59
26	BB	1809	A	C5-C6	5.94	1.46	1.41
26	BB	545	U	C4-C5	5.94	1.48	1.43
26	BB	1649	G	C5-C4	5.94	1.42	1.38
26	BB	1943	U	C5'-C4'	5.94	1.58	1.51
26	BB	2172	U	C2-N3	5.94	1.42	1.37
1	AA	435	A	P-O5'	5.94	1.65	1.59
1	AA	1282	C	O3'-P	5.94	1.68	1.61
26	BB	389	G	C5-C4	5.94	1.42	1.38
26	BB	785	G	C6-N1	-5.94	1.35	1.39
26	BB	2146	C	C5'-C4'	5.94	1.58	1.51
32	BH	153	PRO	N-CD	-5.94	1.39	1.47

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	AC	15	G	C2'-C1'	5.94	1.59	1.53
26	BB	55	G	O3'-P	5.94	1.68	1.61
26	BB	897	C	N3-C4	5.94	1.38	1.33
26	BB	1150	C	C5'-C4'	5.94	1.58	1.51
26	BB	2885	G	C6-N1	5.94	1.43	1.39
1	AA	753	A	C2'-O2'	5.93	1.49	1.41
26	BB	614	A	P-O5'	5.93	1.65	1.59
26	BB	1378	A	N3-C4	5.93	1.38	1.34
26	BB	1482	G	O4'-C1'	5.93	1.49	1.41
26	BB	2079	U	C2-N3	5.93	1.42	1.37
1	AA	350	G	N3-C4	5.93	1.39	1.35
26	BB	106	C	C4'-O4'	-5.93	1.37	1.45
26	BB	483	A	C4'-O4'	-5.93	1.37	1.45
26	BB	1371	G	C8-N7	5.93	1.34	1.30
26	BB	1608	A	C5'-C4'	5.93	1.58	1.51
26	BB	1615	C	C4'-C3'	-5.93	1.46	1.52
26	BB	1867	G	N3-C4	5.93	1.39	1.35
26	BB	2748	A	P-O5'	5.93	1.65	1.59
26	BB	1824	G	C3'-C2'	5.93	1.59	1.52
1	AA	318	G	C6-N1	-5.93	1.35	1.39
1	AA	1188	A	N7-C5	5.93	1.42	1.39
1	AA	1409	C	N1-C6	5.93	1.40	1.37
26	BB	227	A	N3-C4	5.93	1.38	1.34
26	BB	411	G	C8-N7	-5.93	1.27	1.30
26	BB	494	G	N3-C4	5.93	1.39	1.35
26	BB	1238	G	P-O5'	5.93	1.65	1.59
26	BB	1773	A	C5-C6	5.93	1.46	1.41
1	AA	346	G	C4'-O4'	-5.93	1.37	1.45
1	AA	643	C	N1-C2	5.93	1.46	1.40
26	BB	1009	A	N3-C4	5.93	1.38	1.34
1	AA	150	U	N1-C6	5.93	1.43	1.38
1	AA	1272	G	N3-C4	5.93	1.39	1.35
4	AD	29	C	O3'-P	5.93	1.68	1.61
25	BA	114	C	C2-N3	5.93	1.40	1.35
26	BB	100	U	O3'-P	5.93	1.68	1.61
26	BB	1095	A	O4'-C1'	5.93	1.49	1.41
26	BB	1121	C	N1-C6	5.93	1.40	1.37
26	BB	2866	U	C4-C5	5.93	1.48	1.43
1	AA	117	G	C3'-C2'	-5.92	1.46	1.52
1	AA	221	C	C5'-C4'	5.92	1.58	1.51
1	AA	602	A	C5-C6	5.92	1.46	1.41
1	AA	1089	G	C2'-C1'	5.92	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1178	G	N9-C8	5.92	1.42	1.37
26	BB	14	A	C4'-C3'	5.92	1.59	1.53
26	BB	164	C	C5'-C4'	5.92	1.58	1.51
26	BB	555	G	P-O5'	-5.92	1.53	1.59
26	BB	942	G	C2-N2	-5.92	1.28	1.34
26	BB	1115	G	N3-C4	5.92	1.39	1.35
26	BB	1636	U	C3'-C2'	-5.92	1.46	1.52
1	AA	1317	C	C4-C5	5.92	1.47	1.43
26	BB	1596	A	C5-C6	5.92	1.46	1.41
26	BB	1971	U	N1-C6	5.92	1.43	1.38
1	AA	818	G	N7-C5	-5.92	1.35	1.39
1	AA	858	G	N3-C4	5.92	1.39	1.35
1	AA	875	U	C4-C5	5.92	1.48	1.43
1	AA	1059	C	P-O5'	5.92	1.65	1.59
1	AA	1484	C	N3-C4	5.92	1.38	1.33
25	BA	120	U	C4-C5	5.92	1.48	1.43
26	BB	242	G	C3'-C2'	-5.92	1.46	1.52
26	BB	1817	G	N9-C4	5.92	1.42	1.38
1	AA	214	C	P-O5'	5.92	1.65	1.59
26	BB	289	G	C6-N1	5.92	1.43	1.39
26	BB	780	G	C4'-C3'	5.92	1.59	1.53
1	AA	171	A	C5-C6	5.92	1.46	1.41
1	AA	730	G	N3-C4	5.92	1.39	1.35
1	AA	756	C	O4'-C1'	5.92	1.49	1.41
1	AA	1335	U	P-O5'	5.92	1.65	1.59
1	AA	1385	G	C2-N3	5.92	1.37	1.32
26	BB	417	C	C4'-O4'	-5.92	1.37	1.45
26	BB	448	U	C4-C5	5.92	1.48	1.43
26	BB	2158	A	C2'-C1'	-5.92	1.46	1.53
26	BB	2451	A	C4'-C3'	5.92	1.59	1.53
26	BB	2650	U	C5-C6	5.92	1.39	1.34
1	AA	419	C	C5'-C4'	5.92	1.58	1.51
1	AA	749	A	C4'-O4'	-5.92	1.37	1.45
26	BB	269	C	C4-C5	5.92	1.47	1.43
26	BB	848	C	C2-O2	-5.92	1.19	1.24
26	BB	1183	U	N1-C2	5.92	1.43	1.38
26	BB	1847	A	C5-C4	-5.92	1.34	1.38
26	BB	2031	A	C6-N1	-5.92	1.31	1.35
26	BB	2075	U	N1-C6	-5.92	1.32	1.38
26	BB	2139	U	C4'-O4'	-5.92	1.37	1.45
26	BB	2422	C	C5-C6	5.92	1.39	1.34
26	BB	2811	G	C8-N7	5.92	1.34	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	480	U	C2-N3	5.92	1.41	1.37
1	AA	745	G	C5'-C4'	5.92	1.58	1.51
1	AA	1355	G	C4'-O4'	-5.92	1.37	1.45
26	BB	2194	U	O4'-C1'	5.92	1.49	1.41
26	BB	2482	A	C4'-O4'	-5.92	1.37	1.45
1	AA	701	U	P-O5'	5.91	1.65	1.59
26	BB	312	G	C8-N7	5.91	1.34	1.30
26	BB	779	U	C2-O2	5.91	1.27	1.22
26	BB	912	C	C4'-O4'	-5.91	1.37	1.45
26	BB	2138	G	C8-N7	-5.91	1.27	1.30
26	BB	2203	U	O3'-P	5.91	1.68	1.61
26	BB	2523	G	C8-N7	-5.91	1.27	1.30
26	BB	2628	C	C5'-C4'	5.91	1.58	1.51
1	AA	1068	G	P-O5'	5.91	1.65	1.59
25	BA	109	A	N7-C5	5.91	1.42	1.39
26	BB	80	G	C2-N3	5.91	1.37	1.32
26	BB	1933	G	C1'-N9	-5.91	1.38	1.46
1	AA	475	C	P-O5'	5.91	1.65	1.59
1	AA	995	C	C5-C6	5.91	1.39	1.34
25	BA	61	G	C4'-O4'	-5.91	1.37	1.45
26	BB	723	C	C4'-C3'	5.91	1.59	1.53
26	BB	814	C	O4'-C1'	5.91	1.49	1.41
26	BB	2074	U	C2-N3	5.91	1.41	1.37
26	BB	2087	G	N7-C5	-5.91	1.35	1.39
1	AA	328	C	C3'-O3'	5.91	1.50	1.42
1	AA	1025	U	C5-C6	5.91	1.39	1.34
26	BB	162	U	C3'-C2'	-5.91	1.46	1.52
26	BB	603	A	O4'-C1'	5.91	1.49	1.41
26	BB	630	G	N7-C5	5.91	1.42	1.39
26	BB	803	U	C2-N3	5.91	1.41	1.37
26	BB	811	U	C2'-C1'	-5.91	1.46	1.53
26	BB	847	U	C5-C6	5.91	1.39	1.34
26	BB	2011	U	O3'-P	5.91	1.68	1.61
26	BB	2477	U	C5-C6	5.91	1.39	1.34
26	BB	2769	U	C1'-N1	5.91	1.57	1.48
1	AA	191	G	P-O5'	5.91	1.65	1.59
26	BB	1237	A	N9-C4	5.91	1.41	1.37
26	BB	2505	G	C5-C4	5.91	1.42	1.38
26	BB	2632	A	N9-C8	-5.91	1.33	1.37
1	AA	235	C	C2-N3	5.91	1.40	1.35
1	AA	820	U	N1-C2	5.91	1.43	1.38
1	AA	991	U	C4'-O4'	-5.91	1.37	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1229	A	O3'-P	5.91	1.68	1.61
1	AA	1332	A	C5-C6	5.91	1.46	1.41
1	AA	1480	A	N9-C4	5.91	1.41	1.37
26	BB	61	C	C2'-C1'	5.91	1.59	1.53
26	BB	809	G	C5-C4	-5.91	1.34	1.38
26	BB	1025	G	C2'-O2'	5.91	1.49	1.41
26	BB	1352	U	C4-C5	5.91	1.48	1.43
26	BB	1664	A	N3-C4	5.91	1.38	1.34
26	BB	2541	A	C2'-C1'	5.91	1.59	1.53
26	BB	2365	G	P-O5'	5.90	1.65	1.59
1	AA	551	U	P-O5'	5.90	1.65	1.59
1	AA	865	A	N9-C4	-5.90	1.34	1.37
1	AA	969	A	N9-C4	5.90	1.41	1.37
26	BB	483	A	C2'-C1'	-5.90	1.46	1.53
26	BB	1078	U	C2-O2	5.90	1.27	1.22
26	BB	1942	C	C4-N4	5.90	1.39	1.33
26	BB	2072	C	C5'-C4'	5.90	1.58	1.51
26	BB	2391	G	N1-C2	5.90	1.42	1.37
26	BB	2509	G	N9-C4	5.90	1.42	1.38
26	BB	2816	G	C4'-C3'	5.90	1.59	1.53
1	AA	415	A	N3-C4	5.90	1.38	1.34
1	AA	1053	G	N7-C5	5.90	1.42	1.39
1	AA	1449	C	C2-O2	-5.90	1.19	1.24
26	BB	79	C	C5-C6	5.90	1.39	1.34
26	BB	842	U	C4-O4	-5.90	1.19	1.23
26	BB	1581	G	N3-C4	5.90	1.39	1.35
26	BB	1752	C	C4-N4	5.90	1.39	1.33
28	BD	77	VAL	CB-CG2	5.90	1.65	1.52
42	BR	18	SER	CB-OG	-5.90	1.34	1.42
26	BB	1242	U	N1-C6	-5.90	1.32	1.38
1	AA	135	C	O3'-P	-5.90	1.54	1.61
4	AD	48	U	C4'-O4'	-5.90	1.37	1.45
26	BB	320	A	C6-N1	5.90	1.39	1.35
26	BB	770	G	N3-C4	5.90	1.39	1.35
26	BB	918	A	O4'-C1'	5.90	1.49	1.41
26	BB	1976	U	C4'-O4'	-5.90	1.37	1.45
26	BB	2816	G	N7-C5	-5.90	1.35	1.39
1	AA	234	C	C2'-O2'	-5.90	1.33	1.41
2	AB	9	A	N7-C5	5.90	1.42	1.39
26	BB	242	G	C4'-O4'	-5.90	1.37	1.45
26	BB	936	A	N9-C4	-5.90	1.34	1.37
26	BB	1028	A	O3'-P	-5.90	1.54	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2692	G	O3'-P	5.90	1.68	1.61
26	BB	2766	A	N7-C5	5.90	1.42	1.39
1	AA	1009	U	C4'-O4'	-5.89	1.37	1.45
1	AA	1409	C	C2-O2	-5.89	1.19	1.24
26	BB	280	U	C2-O2	5.89	1.27	1.22
26	BB	670	A	C4'-O4'	-5.89	1.37	1.45
26	BB	836	G	O4'-C1'	5.89	1.49	1.41
26	BB	2513	A	C4'-O4'	-5.89	1.37	1.45
26	BB	2734	A	P-O5'	5.89	1.65	1.59
1	AA	278	G	P-O5'	5.89	1.65	1.59
1	AA	737	C	C5-C6	5.89	1.39	1.34
1	AA	1129	C	P-O5'	5.89	1.65	1.59
1	AA	1278	G	C6-N1	5.89	1.43	1.39
25	BA	31	C	C2'-C1'	5.89	1.59	1.53
26	BB	1612	C	C5'-C4'	5.89	1.58	1.51
26	BB	1698	A	N3-C4	-5.89	1.31	1.34
26	BB	2579	C	N3-C4	-5.89	1.29	1.33
42	BR	19	PHE	CE1-CZ	5.89	1.48	1.37
26	BB	2825	G	N9-C4	5.89	1.42	1.38
1	AA	656	G	C4'-O4'	-5.89	1.37	1.45
1	AA	1418	A	N9-C8	5.89	1.42	1.37
26	BB	260	G	P-O5'	5.89	1.65	1.59
26	BB	1274	A	N9-C4	5.89	1.41	1.37
26	BB	2053	G	N1-C2	5.89	1.42	1.37
26	BB	2221	G	O3'-P	5.89	1.68	1.61
1	AA	712	A	C6-N6	-5.89	1.29	1.33
1	AA	713	G	N1-C2	5.89	1.42	1.37
1	AA	941	G	C5-C4	5.89	1.42	1.38
1	AA	1003	G	P-O5'	5.89	1.65	1.59
1	AA	1190	G	C3'-O3'	5.89	1.50	1.42
1	AA	1274	A	N7-C5	-5.89	1.35	1.39
1	AA	1455	G	C2-N3	5.89	1.37	1.32
4	AD	77	A	C6-N6	5.89	1.38	1.33
26	BB	41	C	C2'-C1'	5.89	1.59	1.53
26	BB	1044	C	N3-C4	5.89	1.38	1.33
1	AA	58	C	C5-C6	5.88	1.39	1.34
1	AA	219	U	C5'-C4'	5.88	1.58	1.51
1	AA	309	A	C6-N1	5.88	1.39	1.35
1	AA	758	C	N3-C4	5.88	1.38	1.33
1	AA	834	U	C2'-C1'	-5.88	1.46	1.53
26	BB	158	U	N3-C4	5.88	1.43	1.38
26	BB	916	G	N3-C4	5.88	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1589	U	O5'-C5'	5.88	1.53	1.44
26	BB	2012	G	C8-N7	-5.88	1.27	1.30
26	BB	2241	A	N7-C5	-5.88	1.35	1.39
26	BB	2260	C	C2-O2	-5.88	1.19	1.24
28	BD	220	ARG	CZ-NH2	5.88	1.40	1.33
26	BB	464	U	C4'-O4'	-5.88	1.38	1.45
26	BB	1802	A	N7-C5	5.88	1.42	1.39
1	AA	311	C	N3-C4	5.88	1.38	1.33
1	AA	848	C	C3'-C2'	-5.88	1.46	1.52
1	AA	912	C	C4'-O4'	-5.88	1.38	1.45
1	AA	946	A	C5-C4	-5.88	1.34	1.38
1	AA	1260	G	N3-C4	-5.88	1.31	1.35
1	AA	1437	A	C2'-O2'	5.88	1.49	1.41
26	BB	306	U	O4'-C1'	5.88	1.49	1.41
26	BB	1461	C	N1-C2	5.88	1.46	1.40
26	BB	1529	G	C8-N7	-5.88	1.27	1.30
26	BB	2351	G	C2-N3	5.88	1.37	1.32
26	BB	2673	G	P-O5'	5.88	1.65	1.59
1	AA	469	C	N1-C6	5.88	1.40	1.37
26	BB	1005	C	C2'-C1'	5.88	1.59	1.53
1	AA	1160	G	N3-C4	5.88	1.39	1.35
26	BB	192	C	C4'-C3'	5.88	1.59	1.53
26	BB	942	G	C8-N7	-5.88	1.27	1.30
26	BB	1229	C	C4'-O4'	-5.88	1.38	1.45
26	BB	2545	G	N1-C2	-5.88	1.33	1.37
1	AA	303	A	N3-C4	5.88	1.38	1.34
1	AA	654	G	C5'-C4'	5.88	1.58	1.51
1	AA	787	A	P-O5'	5.88	1.65	1.59
4	AD	2	G	C4'-O4'	-5.88	1.38	1.45
26	BB	296	U	C3'-C2'	-5.88	1.46	1.52
26	BB	426	C	P-O5'	5.88	1.65	1.59
26	BB	503	A	N9-C4	-5.88	1.34	1.37
26	BB	572	A	N3-C4	5.88	1.38	1.34
26	BB	966	G	C4'-C3'	5.88	1.59	1.53
26	BB	1759	A	C6-N1	5.88	1.39	1.35
26	BB	1969	A	C2'-C1'	-5.88	1.46	1.53
26	BB	2323	G	N1-C2	5.88	1.42	1.37
26	BB	2442	C	N1-C6	-5.88	1.33	1.37
39	BO	91	TYR	CE2-CZ	5.88	1.46	1.38
1	AA	1113	C	N1-C6	5.88	1.40	1.37
3	AC	41	A	C2'-C1'	-5.88	1.46	1.53
26	BB	798	G	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)
1	AA	629	A	C5-C6	5.87	1.46	1.41
1	AA	1063	C	C3'-C2'	5.87	1.59	1.52
1	AA	1333	A	C5-C4	-5.87	1.34	1.38
1	AA	1524	C	C5-C6	5.87	1.39	1.34
26	BB	39	G	N7-C5	5.87	1.42	1.39
26	BB	563	A	N7-C5	5.87	1.42	1.39
26	BB	1276	A	P-O5'	-5.87	1.53	1.59
26	BB	1333	G	N7-C5	-5.87	1.35	1.39
26	BB	1396	U	N1-C2	5.87	1.43	1.38
26	BB	1527	G	C8-N7	5.87	1.34	1.30
26	BB	1792	G	C2'-C1'	-5.87	1.46	1.53
26	BB	2427	C	C2-N3	5.87	1.40	1.35
26	BB	2841	C	O3'-P	5.87	1.68	1.61
26	BB	2857	G	C2-N2	5.87	1.40	1.34
26	BB	105	C	C2'-C1'	5.87	1.59	1.53
26	BB	429	A	O3'-P	5.87	1.68	1.61
26	BB	481	G	C6-N1	-5.87	1.35	1.39
26	BB	535	G	C5-C6	5.87	1.48	1.42
26	BB	1084	A	P-O5'	5.87	1.65	1.59
26	BB	2139	U	C2-N3	5.87	1.41	1.37
26	BB	2238	G	N3-C4	-5.87	1.31	1.35
26	BB	2717	C	N1-C6	-5.87	1.33	1.37
3	AC	27	A	C5-C4	-5.87	1.34	1.38
26	BB	516	C	C4'-O4'	-5.87	1.38	1.45
26	BB	1260	A	N7-C5	-5.87	1.35	1.39
26	BB	1817	G	C6-N1	5.87	1.43	1.39
26	BB	2205	A	C6-N6	5.87	1.38	1.33
26	BB	2493	U	C5'-C4'	5.87	1.58	1.51
1	AA	355	C	C5-C6	5.87	1.39	1.34
25	BA	75	G	O3'-P	5.87	1.68	1.61
26	BB	294	A	C4'-O4'	-5.87	1.38	1.45
26	BB	2075	U	C4-C5	5.87	1.48	1.43
26	BB	2221	G	C1'-N9	5.87	1.57	1.48
26	BB	2295	C	C2-N3	5.87	1.40	1.35
26	BB	2357	G	N7-C5	5.87	1.42	1.39
26	BB	877	A	C5'-C4'	5.87	1.58	1.51
26	BB	1144	A	N9-C4	-5.87	1.34	1.37
26	BB	1160	G	C2-N3	5.87	1.37	1.32
1	AA	94	G	N7-C5	5.87	1.42	1.39
1	AA	635	A	C4'-O4'	-5.87	1.38	1.45
1	AA	746	A	P-O5'	5.87	1.65	1.59
1	AA	1047	G	C2-N3	5.87	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	908	C	N3-C4	5.87	1.38	1.33
26	BB	1138	G	C5-C4	-5.87	1.34	1.38
26	BB	2515	C	C1'-N1	5.87	1.57	1.48
26	BB	2600	A	N3-C4	5.87	1.38	1.34
1	AA	28	A	O3'-P	5.86	1.68	1.61
1	AA	54	C	C4-N4	-5.86	1.28	1.33
1	AA	861	G	C6-N1	5.86	1.43	1.39
1	AA	1061	G	C6-N1	5.86	1.43	1.39
26	BB	866	A	P-O5'	5.86	1.65	1.59
26	BB	1010	A	P-O5'	5.86	1.65	1.59
26	BB	1363	C	C4-C5	5.86	1.47	1.43
26	BB	1554	U	C5-C6	5.86	1.39	1.34
26	BB	2854	G	N9-C4	-5.86	1.33	1.38
1	AA	302	G	C2-N3	5.86	1.37	1.32
1	AA	703	G	O3'-P	-5.86	1.54	1.61
26	BB	1697	G	C6-O6	-5.86	1.18	1.24
26	BB	1980	G	C2-N3	5.86	1.37	1.32
26	BB	2252	G	C2-N3	5.86	1.37	1.32
26	BB	2427	C	N1-C6	-5.86	1.33	1.37
26	BB	2538	C	C2-N3	5.86	1.40	1.35
1	AA	1421	G	C4'-O4'	-5.86	1.38	1.45
1	AA	1494	G	C4'-C3'	-5.86	1.46	1.52
26	BB	1256	G	N1-C2	5.86	1.42	1.37
26	BB	2431	U	C4'-O4'	-5.86	1.38	1.45
26	BB	2639	A	P-O5'	-5.86	1.53	1.59
1	AA	354	G	C5'-C4'	5.86	1.58	1.51
26	BB	350	G	C2'-O2'	5.86	1.49	1.41
1	AA	730	G	N1-C2	5.86	1.42	1.37
1	AA	1240	U	C4-O4	-5.86	1.19	1.23
25	BA	25	U	C5'-C4'	5.86	1.58	1.51
26	BB	24	G	C2-N2	5.86	1.40	1.34
26	BB	40	U	P-O5'	-5.86	1.53	1.59
26	BB	320	A	N9-C4	5.86	1.41	1.37
26	BB	657	U	C5-C6	5.86	1.39	1.34
26	BB	756	A	P-O5'	5.86	1.65	1.59
26	BB	761	A	O4'-C1'	5.86	1.49	1.41
26	BB	2171	A	P-O5'	5.86	1.65	1.59
26	BB	2460	U	N1-C6	-5.86	1.32	1.38
1	AA	426	U	C2-N3	5.86	1.41	1.37
1	AA	1049	U	C2-N3	5.86	1.41	1.37
1	AA	1223	C	C2'-O2'	5.86	1.49	1.41
26	BB	331	C	P-O5'	5.86	1.65	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	416	U	C4-C5	5.86	1.48	1.43
26	BB	470	A	N9-C8	5.86	1.42	1.37
26	BB	1428	C	N1-C6	-5.86	1.33	1.37
26	BB	1720	U	C2-N3	-5.86	1.33	1.37
26	BB	2148	G	N9-C8	-5.86	1.33	1.37
26	BB	2418	A	N3-C4	5.86	1.38	1.34
26	BB	2894	G	C6-N1	5.86	1.43	1.39
1	AA	146	G	C5'-C4'	5.85	1.58	1.51
1	AA	198	G	N1-C2	5.85	1.42	1.37
1	AA	900	A	N9-C8	-5.85	1.33	1.37
1	AA	943	U	O3'-P	-5.85	1.54	1.61
26	BB	2474	U	C4'-O4'	-5.85	1.38	1.45
1	AA	716	A	C3'-C2'	-5.85	1.46	1.52
1	AA	919	A	N3-C4	5.85	1.38	1.34
1	AA	1105	A	C3'-C2'	5.85	1.59	1.52
1	AA	1294	G	C5'-C4'	5.85	1.58	1.51
26	BB	494	G	O3'-P	5.85	1.68	1.61
26	BB	580	U	N3-C4	5.85	1.43	1.38
26	BB	2544	G	C8-N7	-5.85	1.27	1.30
1	AA	328	C	C5-C6	5.85	1.39	1.34
1	AA	936	C	C4'-O4'	-5.85	1.38	1.45
1	AA	1256	A	P-O5'	5.85	1.65	1.59
25	BA	29	A	N9-C8	-5.85	1.33	1.37
26	BB	52	A	C6-N6	-5.85	1.29	1.33
26	BB	1864	U	P-O5'	5.85	1.65	1.59
37	BM	120	PRO	N-CD	-5.85	1.39	1.47
1	AA	38	G	C6-O6	-5.85	1.18	1.24
1	AA	245	U	N1-C2	5.85	1.43	1.38
1	AA	315	A	C5-C6	5.85	1.46	1.41
1	AA	509	A	N9-C8	5.85	1.42	1.37
26	BB	540	C	C5-C6	5.85	1.39	1.34
26	BB	1138	G	N9-C4	5.85	1.42	1.38
26	BB	1655	A	N1-C2	-5.85	1.29	1.34
26	BB	2780	G	C5-C4	-5.85	1.34	1.38
1	AA	173	U	C4-C5	5.85	1.48	1.43
1	AA	892	A	N3-C4	5.85	1.38	1.34
26	BB	297	G	C2-N2	-5.85	1.28	1.34
26	BB	1428	C	N3-C4	-5.85	1.29	1.33
26	BB	1695	G	C2-N3	5.85	1.37	1.32
26	BB	1738	G	C3'-C2'	5.85	1.59	1.52
26	BB	2776	A	C4'-C3'	5.85	1.59	1.53
1	AA	1306	A	O3'-P	5.85	1.68	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1479	C	N1-C6	5.85	1.40	1.37
25	BA	22	U	C2'-C1'	5.85	1.59	1.53
26	BB	300	A	C4'-C3'	5.85	1.59	1.53
26	BB	486	C	C3'-C2'	-5.85	1.46	1.52
26	BB	1236	G	C2-N2	5.85	1.40	1.34
26	BB	1271	G	C5-C4	5.85	1.42	1.38
26	BB	1395	A	C5'-C4'	5.85	1.58	1.51
26	BB	1811	G	N3-C4	5.85	1.39	1.35
26	BB	1931	U	O5'-C5'	-5.85	1.33	1.42
26	BB	2199	A	C4'-C3'	5.85	1.59	1.53
38	BN	33	ARG	CZ-NH2	5.85	1.40	1.33
1	AA	525	C	C2-N3	-5.84	1.31	1.35
1	AA	764	C	C5'-C4'	5.84	1.58	1.51
1	AA	843	U	C2-N3	5.84	1.41	1.37
1	AA	937	A	C6-N1	5.84	1.39	1.35
1	AA	1367	C	C5'-C4'	5.84	1.58	1.51
26	BB	618	G	C6-N1	5.84	1.43	1.39
26	BB	930	G	C6-N1	5.84	1.43	1.39
26	BB	1095	A	C5'-C4'	5.84	1.58	1.51
26	BB	1206	G	C4'-O4'	-5.84	1.38	1.45
26	BB	1230	A	C5-C4	-5.84	1.34	1.38
26	BB	1366	A	P-O5'	5.84	1.65	1.59
26	BB	1383	A	C3'-C2'	-5.84	1.46	1.52
26	BB	1935	G	P-O5'	5.84	1.65	1.59
26	BB	2290	G	C2'-O2'	-5.84	1.34	1.41
26	BB	2515	C	C5'-C4'	5.84	1.58	1.51
1	AA	269	C	C4'-O4'	-5.84	1.38	1.45
1	AA	492	C	N1-C2	5.84	1.46	1.40
26	BB	850	U	N1-C2	5.84	1.43	1.38
1	AA	786	G	C3'-C2'	-5.84	1.46	1.52
1	AA	1259	C	C2-N3	5.84	1.40	1.35
1	AA	1375	A	N9-C8	-5.84	1.33	1.37
2	AB	1	A	C4'-O4'	-5.84	1.38	1.45
4	AD	31	G	C6-N1	-5.84	1.35	1.39
4	AD	37	U	C2-N3	5.84	1.41	1.37
25	BA	16	G	N9-C4	5.84	1.42	1.38
26	BB	127	A	N9-C8	5.84	1.42	1.37
26	BB	503	A	C8-N7	-5.84	1.27	1.31
26	BB	1744	A	C8-N7	5.84	1.35	1.31
26	BB	2168	G	C5-C4	-5.84	1.34	1.38
26	BB	2198	A	C5-C4	-5.84	1.34	1.38
26	BB	2680	U	C5-C6	5.84	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2742	G	C4'-C3'	5.84	1.59	1.53
27	BC	232	SER	CB-OG	5.84	1.49	1.42
1	AA	1174	G	C6-O6	-5.84	1.18	1.24
1	AA	1268	G	P-O5'	5.84	1.65	1.59
20	AT	36	PHE	CE2-CZ	5.84	1.48	1.37
26	BB	357	C	O3'-P	5.84	1.68	1.61
26	BB	1361	G	C5'-C4'	5.84	1.58	1.51
26	BB	1595	C	C4-C5	5.84	1.47	1.43
1	AA	1297	G	C3'-C2'	5.84	1.59	1.52
25	BA	101	A	C2-N3	5.84	1.38	1.33
26	BB	2781	A	N9-C4	-5.84	1.34	1.37
26	BB	2797	U	C5'-C4'	5.84	1.58	1.51
1	AA	201	G	C5-C6	5.84	1.48	1.42
1	AA	892	A	N9-C4	5.84	1.41	1.37
1	AA	1252	A	C8-N7	-5.84	1.27	1.31
26	BB	1160	G	C5-C6	5.84	1.48	1.42
26	BB	2756	U	C5'-C4'	5.84	1.58	1.51
26	BB	2817	U	N1-C6	5.84	1.43	1.38
1	AA	560	A	N9-C4	5.83	1.41	1.37
1	AA	1413	A	C6-N1	5.83	1.39	1.35
26	BB	33	C	N1-C6	-5.83	1.33	1.37
34	BJ	134	ALA	CA-CB	5.83	1.64	1.52
26	BB	723	C	O3'-P	5.83	1.68	1.61
26	BB	1338	G	C3'-O3'	5.83	1.50	1.42
26	BB	1916	A	N7-C5	5.83	1.42	1.39
26	BB	2779	U	C4-C5	5.83	1.48	1.43
26	BB	2833	U	C2-O2	5.83	1.27	1.22
1	AA	1152	A	C5-C4	-5.83	1.34	1.38
26	BB	118	A	N7-C5	-5.83	1.35	1.39
26	BB	177	G	C6-O6	-5.83	1.19	1.24
26	BB	825	A	C4'-C3'	5.83	1.59	1.53
26	BB	852	U	C3'-O3'	5.83	1.50	1.42
26	BB	1139	G	C8-N7	-5.83	1.27	1.30
26	BB	2183	A	C5'-C4'	5.83	1.58	1.51
26	BB	2883	A	O4'-C1'	5.83	1.49	1.41
1	AA	70	U	O3'-P	5.83	1.68	1.61
1	AA	1271	A	C6-N1	5.83	1.39	1.35
26	BB	211	C	N1-C2	5.83	1.46	1.40
26	BB	1323	C	C5-C6	5.83	1.39	1.34
1	AA	184	G	C3'-C2'	5.83	1.59	1.52
1	AA	400	C	P-O5'	5.83	1.65	1.59
1	AA	678	U	N3-C4	5.83	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1029	U	P-O5'	5.83	1.65	1.59
1	AA	1273	C	C5'-C4'	5.83	1.58	1.51
26	BB	310	A	C2'-C1'	-5.83	1.47	1.53
26	BB	507	A	N3-C4	5.83	1.38	1.34
26	BB	632	A	C5-C4	-5.83	1.34	1.38
26	BB	2299	U	N3-C4	5.83	1.43	1.38
26	BB	2647	U	C3'-C2'	5.83	1.59	1.52
26	BB	2831	G	N3-C4	5.83	1.39	1.35
1	AA	914	A	C6-N1	-5.83	1.31	1.35
1	AA	1024	G	O3'-P	5.83	1.68	1.61
4	AD	23	G	N1-C2	5.83	1.42	1.37
26	BB	193	U	C4-C5	5.83	1.48	1.43
26	BB	265	A	C8-N7	5.83	1.35	1.31
26	BB	710	U	C4'-O4'	-5.83	1.38	1.45
26	BB	1784	A	N3-C4	5.83	1.38	1.34
26	BB	2213	U	N1-C2	5.83	1.43	1.38
26	BB	2710	C	C4'-C3'	-5.83	1.46	1.52
1	AA	446	G	P-O5'	5.83	1.65	1.59
1	AA	701	U	N1-C2	5.83	1.43	1.38
1	AA	741	G	C4'-O4'	-5.83	1.38	1.45
1	AA	1426	G	N9-C8	5.83	1.42	1.37
3	AC	53	G	N3-C4	5.83	1.39	1.35
26	BB	573	U	N1-C2	5.83	1.43	1.38
26	BB	710	U	C4-C5	5.83	1.48	1.43
26	BB	834	G	N3-C4	5.83	1.39	1.35
26	BB	1091	G	C5-C6	5.83	1.48	1.42
26	BB	1222	U	C4-O4	-5.83	1.19	1.23
26	BB	1248	G	N1-C2	5.83	1.42	1.37
26	BB	2295	C	C5-C6	5.83	1.39	1.34
26	BB	2739	U	O4'-C1'	5.83	1.49	1.41
1	AA	102	G	N3-C4	-5.82	1.31	1.35
1	AA	371	A	C5-C4	-5.82	1.34	1.38
1	AA	793	U	N3-C4	5.82	1.43	1.38
1	AA	883	C	C2-N3	5.82	1.40	1.35
1	AA	1170	A	C8-N7	-5.82	1.27	1.31
1	AA	1210	C	C4-C5	5.82	1.47	1.43
26	BB	146	A	N9-C4	-5.82	1.34	1.37
26	BB	360	U	C4-C5	5.82	1.48	1.43
26	BB	1722	A	N7-C5	5.82	1.42	1.39
26	BB	2178	C	C5'-C4'	5.82	1.58	1.51
26	BB	2422	C	C4-N4	5.82	1.39	1.33
1	AA	341	C	C5'-C4'	5.82	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1186	G	C8-N7	5.82	1.34	1.30
1	AA	1505	G	C8-N7	-5.82	1.27	1.30
26	BB	978	G	N9-C8	-5.82	1.33	1.37
1	AA	1252	A	N1-C2	-5.82	1.29	1.34
1	AA	1364	U	C4-O4	-5.82	1.19	1.23
13	AM	78	GLU	CG-CD	5.82	1.60	1.51
26	BB	387	U	C4-O4	-5.82	1.19	1.23
26	BB	601	C	C2-N3	5.82	1.40	1.35
26	BB	1635	A	C4'-O4'	-5.82	1.38	1.45
26	BB	2100	G	O5'-C5'	-5.82	1.33	1.42
26	BB	2324	U	C4-O4	5.82	1.28	1.23
26	BB	2339	C	O3'-P	5.82	1.68	1.61
32	BH	107	GLY	N-CA	5.82	1.54	1.46
1	AA	1454	G	C8-N7	-5.82	1.27	1.30
1	AA	1487	G	O3'-P	5.82	1.68	1.61
26	BB	511	U	N1-C6	5.82	1.43	1.38
26	BB	1168	G	C5-C6	5.82	1.48	1.42
26	BB	1359	A	N9-C4	-5.82	1.34	1.37
26	BB	2225	A	P-O5'	5.82	1.65	1.59
26	BB	2685	G	N7-C5	5.82	1.42	1.39
1	AA	414	A	C4'-O4'	-5.82	1.38	1.45
1	AA	441	A	C2-N3	5.82	1.38	1.33
1	AA	679	C	N3-C4	-5.82	1.29	1.33
1	AA	755	G	C5-C4	-5.82	1.34	1.38
1	AA	1340	A	C3'-C2'	5.82	1.59	1.52
26	BB	551	G	O3'-P	5.82	1.68	1.61
26	BB	869	G	N3-C4	5.82	1.39	1.35
26	BB	950	G	N9-C4	-5.82	1.33	1.38
1	AA	1107	C	O3'-P	5.82	1.68	1.61
1	AA	1228	C	P-O5'	5.82	1.65	1.59
1	AA	1365	G	P-O5'	-5.82	1.53	1.59
26	BB	408	G	N3-C4	5.82	1.39	1.35
26	BB	633	A	P-O5'	5.82	1.65	1.59
26	BB	1182	G	N3-C4	-5.82	1.31	1.35
26	BB	1413	A	C5-C4	-5.82	1.34	1.38
26	BB	2091	C	C4'-O4'	-5.82	1.38	1.45
26	BB	2177	C	C2'-C1'	5.82	1.59	1.53
1	AA	1464	U	C5-C6	5.81	1.39	1.34
4	AD	61	U	N1-C2	5.81	1.43	1.38
26	BB	31	C	N3-C4	-5.81	1.29	1.33
26	BB	35	G	C2'-O2'	5.81	1.49	1.41
26	BB	804	A	N9-C4	5.81	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1639	C	C4-C5	5.81	1.47	1.43
26	BB	2157	G	C6-N1	5.81	1.43	1.39
26	BB	2256	G	C2'-O2'	5.81	1.49	1.41
1	AA	457	G	C2-N3	5.81	1.37	1.32
26	BB	511	U	P-O5'	5.81	1.65	1.59
26	BB	1028	A	C2'-C1'	-5.81	1.47	1.53
26	BB	1929	G	P-O5'	5.81	1.65	1.59
26	BB	2212	A	C4'-O4'	-5.81	1.38	1.45
26	BB	2609	U	N1-C6	5.81	1.43	1.38
1	AA	791	G	N7-C5	5.81	1.42	1.39
9	AI	4	TYR	CD2-CE2	5.81	1.48	1.39
26	BB	1868	C	C4-C5	5.81	1.47	1.43
1	AA	1124	G	O3'-P	5.81	1.68	1.61
25	BA	94	A	N3-C4	5.81	1.38	1.34
25	BA	98	G	C5'-C4'	5.81	1.58	1.51
26	BB	801	G	C4'-O4'	-5.81	1.38	1.45
1	AA	280	C	P-O5'	5.81	1.65	1.59
4	AD	6	G	C2'-C1'	5.81	1.59	1.53
25	BA	32	U	N1-C2	5.81	1.43	1.38
25	BA	80	U	C2-O2	-5.81	1.17	1.22
26	BB	212	G	C2'-C1'	5.81	1.59	1.53
26	BB	419	U	N3-C4	5.81	1.43	1.38
26	BB	764	A	C5'-C4'	5.81	1.58	1.51
26	BB	992	C	C4'-C3'	-5.81	1.46	1.52
26	BB	1034	G	C6-N1	-5.81	1.35	1.39
26	BB	1139	G	N9-C8	5.81	1.42	1.37
26	BB	1947	C	C4-C5	5.81	1.47	1.43
26	BB	2355	G	C6-N1	5.81	1.43	1.39
26	BB	2447	G	O3'-P	5.81	1.68	1.61
26	BB	2783	U	C2'-C1'	5.81	1.59	1.53
1	AA	1525	G	C4'-O4'	-5.81	1.38	1.45
26	BB	171	U	C2-N3	5.81	1.41	1.37
1	AA	779	C	C4'-O4'	-5.80	1.38	1.45
1	AA	1010	U	C2-N3	5.80	1.41	1.37
1	AA	1461	G	N7-C5	5.80	1.42	1.39
4	AD	37	U	N1-C2	5.80	1.43	1.38
4	AD	44	A	C5-C6	5.80	1.46	1.41
26	BB	160	A	C6-N6	-5.80	1.29	1.33
26	BB	475	C	C2'-C1'	-5.80	1.47	1.53
26	BB	525	U	P-O5'	5.80	1.65	1.59
26	BB	1142	A	P-O5'	5.80	1.65	1.59
26	BB	1176	U	P-O5'	5.80	1.65	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1329	U	C4'-C3'	5.80	1.59	1.53
1	AA	957	U	N1-C2	5.80	1.43	1.38
26	BB	733	G	C5'-C4'	5.80	1.58	1.51
1	AA	672	U	C4-O4	-5.80	1.19	1.23
1	AA	1112	C	C3'-C2'	5.80	1.59	1.52
1	AA	1332	A	O4'-C1'	5.80	1.49	1.41
26	BB	864	G	N1-C2	5.80	1.42	1.37
26	BB	1909	C	N3-C4	5.80	1.38	1.33
26	BB	2219	U	C4-C5	5.80	1.48	1.43
1	AA	12	U	C3'-C2'	-5.80	1.46	1.52
1	AA	1133	G	C3'-C2'	-5.80	1.46	1.52
1	AA	1158	C	C5'-C4'	5.80	1.58	1.51
1	AA	1209	C	C5'-C4'	5.80	1.58	1.51
1	AA	1337	G	C3'-C2'	5.80	1.59	1.52
6	AF	81	GLU	CB-CG	5.80	1.63	1.52
20	AT	73	THR	CB-OG1	-5.80	1.31	1.43
26	BB	171	U	C4-O4	5.80	1.28	1.23
26	BB	875	G	P-O5'	5.80	1.65	1.59
26	BB	1195	G	C2'-O2'	-5.80	1.34	1.41
26	BB	1672	A	C8-N7	5.80	1.35	1.31
26	BB	1897	G	O3'-P	5.80	1.68	1.61
26	BB	2171	A	C5'-C4'	5.80	1.58	1.51
26	BB	2367	G	C2'-O2'	5.80	1.49	1.41
26	BB	2444	G	N1-C2	5.80	1.42	1.37
26	BB	2640	G	N7-C5	5.80	1.42	1.39
14	AN	10	ARG	NE-CZ	5.80	1.40	1.33
26	BB	957	C	N1-C6	5.80	1.40	1.37
26	BB	2562	U	C3'-C2'	5.80	1.59	1.52
1	AA	722	G	N9-C4	5.80	1.42	1.38
1	AA	1003	G	C6-N1	5.80	1.43	1.39
3	AC	21	U	C4-O4	5.80	1.28	1.23
25	BA	113	C	N1-C6	-5.80	1.33	1.37
26	BB	14	A	C2-N3	5.80	1.38	1.33
26	BB	694	U	C2-O2	5.80	1.27	1.22
26	BB	863	A	C4'-C3'	5.80	1.59	1.53
26	BB	1179	G	O3'-P	-5.80	1.54	1.61
26	BB	1339	G	N3-C4	5.80	1.39	1.35
26	BB	2356	U	O3'-P	5.80	1.68	1.61
26	BB	2537	U	C3'-C2'	5.80	1.59	1.52
26	BB	2721	A	C5-C4	-5.80	1.34	1.38
1	AA	445	G	C2-N3	5.79	1.37	1.32
26	BB	213	A	N9-C4	5.79	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2129	C	C2-N3	5.79	1.40	1.35
1	AA	260	G	C6-O6	5.79	1.29	1.24
26	BB	1627	G	C2-N3	5.79	1.37	1.32
26	BB	1728	C	N3-C4	-5.79	1.29	1.33
26	BB	1834	U	C2-O2	5.79	1.27	1.22
26	BB	2370	G	C2-N2	-5.79	1.28	1.34
1	AA	1267	C	N3-C4	5.79	1.38	1.33
1	AA	1531	A	C6-N1	-5.79	1.31	1.35
26	BB	244	A	N9-C8	5.79	1.42	1.37
26	BB	371	A	P-O5'	-5.79	1.53	1.59
26	BB	762	U	N1-C2	5.79	1.43	1.38
26	BB	821	A	C4'-O4'	-5.79	1.38	1.45
26	BB	2283	C	C3'-O3'	5.79	1.50	1.42
26	BB	2663	G	N9-C8	-5.79	1.33	1.37
1	AA	207	C	C4'-O4'	-5.79	1.38	1.45
6	AF	124	GLU	CD-OE2	5.79	1.32	1.25
26	BB	2217	G	N9-C4	-5.79	1.33	1.38
26	BB	2418	A	N1-C2	5.79	1.39	1.34
1	AA	404	G	N9-C4	5.79	1.42	1.38
1	AA	1006	G	N7-C5	5.79	1.42	1.39
1	AA	1258	G	N7-C5	-5.79	1.35	1.39
26	BB	2	G	C6-O6	-5.79	1.19	1.24
26	BB	193	U	C2-N3	5.79	1.41	1.37
26	BB	842	U	N1-C2	5.79	1.43	1.38
26	BB	1784	A	C6-N1	-5.79	1.31	1.35
26	BB	2579	C	C4-C5	5.79	1.47	1.43
1	AA	186	C	C5-C6	5.79	1.39	1.34
26	BB	350	G	C8-N7	-5.79	1.27	1.30
26	BB	585	G	N9-C4	5.79	1.42	1.38
26	BB	2156	G	C3'-C2'	-5.79	1.46	1.52
26	BB	2615	U	N3-C4	5.79	1.43	1.38
1	AA	848	C	C4'-O4'	-5.79	1.38	1.45
26	BB	189	G	C5'-C4'	5.79	1.58	1.51
26	BB	618	G	C5-C4	5.79	1.42	1.38
26	BB	886	A	N9-C4	5.79	1.41	1.37
26	BB	1049	C	C4-N4	-5.79	1.28	1.33
26	BB	1644	C	C5-C6	5.79	1.39	1.34
26	BB	2091	C	N1-C6	5.79	1.40	1.37
26	BB	2556	C	C5-C6	5.79	1.39	1.34
1	AA	260	G	P-O5'	-5.78	1.53	1.59
1	AA	730	G	C8-N7	-5.78	1.27	1.30
1	AA	815	A	C2'-O2'	5.78	1.49	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	926	G	C5'-C4'	5.78	1.58	1.51
4	AD	61	U	C5'-C4'	5.78	1.58	1.51
26	BB	231	A	N3-C4	5.78	1.38	1.34
26	BB	737	C	N1-C2	5.78	1.46	1.40
26	BB	1396	U	C4-O4	5.78	1.28	1.23
26	BB	2413	G	N1-C2	5.78	1.42	1.37
26	BB	2603	G	P-O5'	5.78	1.65	1.59
26	BB	2628	C	C4-C5	5.78	1.47	1.43
26	BB	2657	A	C3'-C2'	-5.78	1.46	1.52
26	BB	1110	G	C2'-C1'	-5.78	1.47	1.53
1	AA	142	G	C2'-O2'	5.78	1.49	1.41
1	AA	1309	G	C2-N3	5.78	1.37	1.32
26	BB	103	A	C6-N1	-5.78	1.31	1.35
26	BB	1615	C	C5-C6	5.78	1.39	1.34
26	BB	1615	C	N1-C2	-5.78	1.34	1.40
26	BB	1849	G	P-O5'	5.78	1.65	1.59
1	AA	1227	A	C5-C4	-5.78	1.34	1.38
2	AB	29	G	C6-O6	-5.78	1.19	1.24
25	BA	105	G	N1-C2	5.78	1.42	1.37
26	BB	1493	C	C5-C6	5.78	1.39	1.34
26	BB	2163	A	N9-C4	5.78	1.41	1.37
1	AA	17	U	C5'-C4'	5.78	1.58	1.51
1	AA	166	U	P-O5'	5.78	1.65	1.59
15	AO	103	CYS	CB-SG	-5.78	1.72	1.81
26	BB	372	G	C5-C4	-5.78	1.34	1.38
26	BB	1307	A	C3'-C2'	5.78	1.59	1.52
26	BB	1436	G	C8-N7	5.78	1.34	1.30
26	BB	1689	A	C8-N7	5.78	1.35	1.31
26	BB	2850	A	C4'-C3'	-5.78	1.46	1.52
49	BY	13	ARG	CZ-NH2	5.78	1.40	1.33
1	AA	377	G	O3'-P	5.78	1.68	1.61
1	AA	416	G	C6-N1	-5.78	1.35	1.39
1	AA	700	G	C8-N7	5.78	1.34	1.30
26	BB	102	U	C5-C6	5.78	1.39	1.34
26	BB	845	A	P-O5'	5.78	1.65	1.59
26	BB	1033	U	N3-C4	5.78	1.43	1.38
26	BB	1362	C	N1-C6	5.78	1.40	1.37
26	BB	2263	C	N1-C2	-5.78	1.34	1.40
1	AA	1449	C	N1-C6	5.77	1.40	1.37
1	AA	350	G	C5-C4	-5.77	1.34	1.38
1	AA	860	A	C5-C4	-5.77	1.34	1.38
1	AA	1179	A	O3'-P	5.77	1.68	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1213	A	N1-C2	-5.77	1.29	1.34
1	AA	1335	U	N3-C4	5.77	1.43	1.38
1	AA	1458	G	O3'-P	5.77	1.68	1.61
26	BB	291	G	C5-C4	5.77	1.42	1.38
26	BB	327	G	N1-C2	5.77	1.42	1.37
26	BB	1029	A	C6-N6	-5.77	1.29	1.33
26	BB	1096	A	C6-N1	-5.77	1.31	1.35
26	BB	1900	A	C8-N7	-5.77	1.27	1.31
26	BB	2126	A	C2'-C1'	5.77	1.59	1.53
26	BB	2659	G	N3-C4	5.77	1.39	1.35
26	BB	2754	U	P-O5'	5.77	1.65	1.59
26	BB	32	C	O4'-C1'	-5.77	1.34	1.41
26	BB	108	G	P-O5'	5.77	1.65	1.59
26	BB	266	G	N7-C5	5.77	1.42	1.39
26	BB	792	A	C4'-O4'	-5.77	1.38	1.45
26	BB	1228	G	C6-N1	-5.77	1.35	1.39
26	BB	2081	U	N1-C2	5.77	1.43	1.38
1	AA	916	U	C5-C6	5.77	1.39	1.34
1	AA	963	G	N3-C4	5.77	1.39	1.35
1	AA	1162	C	C4-C5	5.77	1.47	1.43
1	AA	1394	A	C6-N6	5.77	1.38	1.33
1	AA	1473	G	P-O5'	5.77	1.65	1.59
26	BB	441	U	C5-C6	5.77	1.39	1.34
26	BB	710	U	C1'-N1	5.77	1.57	1.48
26	BB	1261	C	P-O5'	5.77	1.65	1.59
26	BB	1467	U	C2-N3	5.77	1.41	1.37
26	BB	1544	A	N3-C4	5.77	1.38	1.34
26	BB	1567	G	C2'-O2'	-5.77	1.34	1.41
26	BB	1692	U	C5'-C4'	5.77	1.58	1.51
26	BB	2203	U	C5-C6	5.77	1.39	1.34
26	BB	2679	A	N7-C5	-5.77	1.35	1.39
1	AA	263	A	N9-C4	5.77	1.41	1.37
1	AA	553	A	C4'-O4'	-5.77	1.38	1.45
1	AA	600	A	C5-C4	-5.77	1.34	1.38
1	AA	695	A	C5-C4	-5.77	1.34	1.38
1	AA	1520	C	C5-C6	5.77	1.39	1.34
26	BB	25	U	N3-C4	-5.77	1.33	1.38
26	BB	691	C	C4-C5	5.77	1.47	1.43
26	BB	1171	G	C2-N3	5.77	1.37	1.32
26	BB	1513	U	C4'-O4'	-5.77	1.38	1.45
26	BB	1718	G	O3'-P	-5.77	1.54	1.61
26	BB	2626	C	C5'-C4'	5.77	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2653	U	P-O5'	-5.77	1.53	1.59
1	AA	720	C	C3'-O3'	5.77	1.50	1.42
3	AC	34	U	C3'-C2'	5.77	1.59	1.52
26	BB	2342	C	C4-C5	-5.77	1.38	1.43
26	BB	2707	U	C5'-C4'	5.77	1.58	1.51
1	AA	240	G	C2'-O2'	5.76	1.49	1.41
1	AA	277	C	O5'-C5'	-5.76	1.33	1.42
1	AA	301	G	C4'-C3'	-5.76	1.46	1.52
1	AA	729	A	C4'-O4'	-5.76	1.38	1.45
1	AA	1319	A	C4'-C3'	5.76	1.59	1.53
1	AA	1325	C	N1-C2	5.76	1.46	1.40
26	BB	533	G	C6-N1	-5.76	1.35	1.39
26	BB	605	G	C2-N2	5.76	1.40	1.34
26	BB	840	C	N1-C2	5.76	1.46	1.40
26	BB	1271	G	C8-N7	5.76	1.34	1.30
26	BB	2295	C	O3'-P	5.76	1.68	1.61
26	BB	2566	A	N3-C4	5.76	1.38	1.34
1	AA	229	U	N1-C2	5.76	1.43	1.38
26	BB	216	A	C5-C4	-5.76	1.34	1.38
26	BB	999	U	O3'-P	5.76	1.68	1.61
26	BB	1980	G	C6-N1	5.76	1.43	1.39
26	BB	2763	G	C2-N3	5.76	1.37	1.32
1	AA	476	U	N1-C6	5.76	1.43	1.38
1	AA	655	A	N7-C5	5.76	1.42	1.39
26	BB	632	A	C5-C6	5.76	1.46	1.41
26	BB	1078	U	O3'-P	5.76	1.68	1.61
1	AA	131	A	P-O5'	5.76	1.65	1.59
1	AA	851	G	N3-C4	5.76	1.39	1.35
1	AA	1234	C	N1-C6	5.76	1.40	1.37
3	AC	56	G	C2'-C1'	5.76	1.59	1.53
4	AD	4	G	N7-C5	5.76	1.42	1.39
4	AD	61	U	P-O5'	5.76	1.65	1.59
26	BB	497	A	C6-N6	5.76	1.38	1.33
26	BB	2693	G	C2-N3	5.76	1.37	1.32
1	AA	648	A	N9-C4	5.76	1.41	1.37
26	BB	1806	C	C3'-C2'	-5.76	1.46	1.52
1	AA	729	A	C5-C4	-5.76	1.34	1.38
1	AA	1174	G	P-O5'	5.76	1.65	1.59
1	AA	1394	A	N9-C4	5.76	1.41	1.37
1	AA	1435	G	C2-N3	5.76	1.37	1.32
26	BB	145	C	O3'-P	5.76	1.68	1.61
26	BB	213	A	C3'-C2'	5.76	1.59	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1196	C	C5-C6	5.76	1.39	1.34
26	BB	1547	C	C2-N3	5.76	1.40	1.35
26	BB	2540	C	C5'-C4'	5.76	1.58	1.51
26	BB	2815	C	P-O5'	5.76	1.65	1.59
26	BB	549	G	O3'-P	5.75	1.68	1.61
26	BB	1548	A	N7-C5	-5.75	1.35	1.39
26	BB	2044	C	C3'-C2'	5.75	1.59	1.52
1	AA	192	A	P-O5'	5.75	1.65	1.59
1	AA	783	C	N3-C4	5.75	1.38	1.33
1	AA	1350	A	N9-C8	5.75	1.42	1.37
26	BB	12	U	C4'-O4'	-5.75	1.38	1.45
26	BB	432	A	C5-C6	5.75	1.46	1.41
26	BB	1028	A	N9-C8	-5.75	1.33	1.37
26	BB	1030	C	O5'-C5'	-5.75	1.33	1.42
26	BB	1089	A	N9-C8	5.75	1.42	1.37
26	BB	2560	A	N9-C8	5.75	1.42	1.37
26	BB	2630	G	C5-C4	-5.75	1.34	1.38
26	BB	2847	U	C4-O4	5.75	1.28	1.23
1	AA	226	G	N1-C2	5.75	1.42	1.37
1	AA	227	G	P-O5'	5.75	1.65	1.59
1	AA	607	A	C2'-C1'	5.75	1.59	1.53
1	AA	1033	G	C4'-C3'	-5.75	1.46	1.52
26	BB	519	U	O3'-P	-5.75	1.54	1.61
26	BB	1133	A	C4'-C3'	5.75	1.59	1.53
26	BB	1346	G	C2-N3	5.75	1.37	1.32
26	BB	1483	G	C5-C4	-5.75	1.34	1.38
26	BB	2033	A	N3-C4	5.75	1.38	1.34
26	BB	2415	G	C3'-C2'	-5.75	1.46	1.52
26	BB	2822	G	C5-C4	-5.75	1.34	1.38
1	AA	1280	A	P-O5'	5.75	1.65	1.59
1	AA	1501	C	C5'-C4'	5.75	1.58	1.51
25	BA	95	U	C3'-C2'	5.75	1.59	1.52
26	BB	1665	A	C5-C4	-5.75	1.34	1.38
26	BB	2363	G	P-O5'	5.75	1.65	1.59
26	BB	2597	G	N3-C4	5.75	1.39	1.35
1	AA	135	C	C4-C5	5.75	1.47	1.43
1	AA	685	G	P-O5'	5.75	1.65	1.59
1	AA	816	A	N9-C4	-5.75	1.34	1.37
1	AA	1265	C	C4'-O4'	-5.75	1.38	1.45
1	AA	1477	U	P-O5'	5.75	1.65	1.59
3	AC	21	U	C5-C6	5.75	1.39	1.34
4	AD	32	G	N1-C2	5.75	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	553	G	C4'-C3'	-5.75	1.46	1.52
26	BB	2741	A	C2-N3	-5.75	1.28	1.33
1	AA	128	G	N3-C4	5.75	1.39	1.35
1	AA	989	U	C4'-C3'	5.75	1.59	1.53
1	AA	1156	G	C2-N3	5.75	1.37	1.32
26	BB	501	A	C2'-C1'	-5.75	1.47	1.53
26	BB	2668	G	C2-N2	5.75	1.40	1.34
26	BB	2776	A	C4'-O4'	-5.75	1.38	1.45
26	BB	2851	A	C6-N1	-5.75	1.31	1.35
1	AA	993	G	C3'-O3'	5.75	1.50	1.42
26	BB	1773	A	N1-C2	5.75	1.39	1.34
26	BB	1983	G	C4'-O4'	-5.75	1.38	1.45
1	AA	16	A	N9-C4	5.74	1.41	1.37
1	AA	498	A	C2'-C1'	-5.74	1.47	1.53
1	AA	1183	U	C5'-C4'	5.74	1.58	1.51
2	AB	1	A	C2'-C1'	5.74	1.59	1.53
26	BB	1026	G	C5'-C4'	5.74	1.58	1.51
26	BB	2749	A	N7-C5	5.74	1.42	1.39
26	BB	1267	U	C4'-O4'	-5.74	1.38	1.45
26	BB	1742	U	N1-C2	5.74	1.43	1.38
26	BB	2828	G	N9-C8	-5.74	1.33	1.37
1	AA	125	U	C4'-O4'	-5.74	1.38	1.45
1	AA	827	U	O3'-P	5.74	1.68	1.61
1	AA	1436	U	C2-N3	5.74	1.41	1.37
1	AA	1520	C	C4-C5	5.74	1.47	1.43
1	AA	1539	C	C5-C6	5.74	1.39	1.34
26	BB	93	G	O3'-P	5.74	1.68	1.61
26	BB	2296	U	P-O5'	5.74	1.65	1.59
26	BB	2432	A	C6-N6	5.74	1.38	1.33
26	BB	2610	C	O3'-P	5.74	1.68	1.61
26	BB	2659	G	C5-C4	-5.74	1.34	1.38
40	BP	49	GLU	CD-OE1	-5.74	1.19	1.25
1	AA	792	A	C8-N7	-5.74	1.27	1.31
7	AG	106	PHE	CG-CD2	5.74	1.47	1.38
26	BB	55	G	C2-N3	5.74	1.37	1.32
26	BB	308	G	C4'-O4'	-5.74	1.38	1.45
26	BB	311	A	C5'-C4'	5.74	1.58	1.51
26	BB	789	A	C4'-C3'	5.74	1.59	1.53
26	BB	1523	U	C2-N3	5.74	1.41	1.37
26	BB	2302	U	O4'-C1'	5.74	1.49	1.41
26	BB	2553	G	C8-N7	5.74	1.34	1.30
26	BB	2600	A	N7-C5	-5.74	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	554	A	C8-N7	-5.74	1.27	1.31
26	BB	843	G	N9-C4	-5.74	1.33	1.38
1	AA	285	C	C2'-C1'	5.74	1.59	1.53
1	AA	661	G	C5'-C4'	5.74	1.58	1.51
1	AA	721	G	N9-C8	-5.74	1.33	1.37
1	AA	1225	A	N9-C4	5.74	1.41	1.37
4	AD	38	A	C4'-O4'	-5.74	1.38	1.45
5	AE	201	GLY	CA-C	5.74	1.61	1.51
26	BB	57	C	P-O5'	5.74	1.65	1.59
26	BB	452	G	C8-N7	-5.74	1.27	1.30
26	BB	949	G	C8-N7	-5.74	1.27	1.30
26	BB	1064	C	N3-C4	5.74	1.38	1.33
26	BB	1067	A	N1-C2	-5.74	1.29	1.34
26	BB	2016	U	C2-N3	5.74	1.41	1.37
26	BB	2861	U	N1-C6	-5.74	1.32	1.38
1	AA	82	G	N7-C5	5.73	1.42	1.39
1	AA	332	G	C5'-C4'	5.73	1.58	1.51
1	AA	998	C	N3-C4	5.73	1.38	1.33
1	AA	1094	G	N1-C2	5.73	1.42	1.37
1	AA	1383	C	C5'-C4'	5.73	1.58	1.51
2	AB	75	C	C2'-C1'	-5.73	1.47	1.53
26	BB	589	U	C4'-O4'	-5.73	1.38	1.45
26	BB	1219	U	N1-C2	5.73	1.43	1.38
1	AA	470	C	C5-C6	5.73	1.39	1.34
1	AA	530	G	C5-C4	-5.73	1.34	1.38
1	AA	1362	A	C4'-O4'	-5.73	1.38	1.45
1	AA	1393	U	C5-C6	5.73	1.39	1.34
26	BB	1574	C	P-O5'	5.73	1.65	1.59
26	BB	1622	G	N1-C2	5.73	1.42	1.37
26	BB	1771	C	C5-C6	5.73	1.39	1.34
26	BB	2162	G	C2'-C1'	-5.73	1.47	1.53
28	BD	198	GLU	CD-OE1	5.73	1.31	1.25
1	AA	501	C	N3-C4	5.73	1.38	1.33
1	AA	651	C	O3'-P	5.73	1.68	1.61
1	AA	1265	C	N3-C4	5.73	1.38	1.33
1	AA	1540	U	C1'-N1	5.73	1.57	1.48
25	BA	71	C	P-O5'	5.73	1.65	1.59
26	BB	248	G	N9-C8	-5.73	1.33	1.37
26	BB	875	G	N9-C8	-5.73	1.33	1.37
26	BB	901	C	N1-C2	5.73	1.45	1.40
26	BB	918	A	C5-C6	5.73	1.46	1.41
26	BB	2000	C	C3'-O3'	5.73	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2363	G	N9-C8	5.73	1.41	1.37
26	BB	2559	C	C2'-C1'	5.73	1.59	1.53
26	BB	634	C	C2-N3	5.73	1.40	1.35
26	BB	1185	G	C4'-C3'	5.73	1.59	1.53
26	BB	2834	G	C2'-C1'	5.73	1.59	1.53
1	AA	735	C	C4'-O4'	-5.73	1.38	1.45
1	AA	1248	A	C5'-C4'	5.73	1.58	1.51
25	BA	66	A	C6-N1	-5.73	1.31	1.35
26	BB	58	G	C5-C4	5.73	1.42	1.38
26	BB	216	A	P-O5'	5.73	1.65	1.59
26	BB	1021	A	C6-N6	5.73	1.38	1.33
26	BB	1666	G	C5-C4	5.73	1.42	1.38
1	AA	35	G	P-O5'	5.73	1.65	1.59
1	AA	1450	U	C4'-O4'	-5.73	1.38	1.45
26	BB	2223	G	C5-C6	5.73	1.48	1.42
1	AA	1449	C	C2'-C1'	-5.72	1.47	1.53
26	BB	1150	C	P-O5'	5.72	1.65	1.59
26	BB	1320	C	C4-C5	5.72	1.47	1.43
26	BB	1739	A	C3'-C2'	-5.72	1.46	1.52
26	BB	1878	G	O3'-P	5.72	1.68	1.61
26	BB	2155	U	N3-C4	5.72	1.43	1.38
1	AA	1355	G	N3-C4	5.72	1.39	1.35
1	AA	1499	A	P-O5'	5.72	1.65	1.59
25	BA	76	G	C4'-O4'	-5.72	1.38	1.45
26	BB	1713	A	O3'-P	-5.72	1.54	1.61
26	BB	2411	A	C2-N3	-5.72	1.28	1.33
26	BB	2718	G	N7-C5	-5.72	1.35	1.39
26	BB	65	U	P-O5'	-5.72	1.54	1.59
26	BB	1453	A	C5'-C4'	5.72	1.58	1.51
26	BB	1522	A	C2'-O2'	5.72	1.49	1.41
1	AA	241	G	C6-N1	5.72	1.43	1.39
25	BA	24	G	N7-C5	5.72	1.42	1.39
26	BB	2599	G	N9-C4	5.72	1.42	1.38
26	BB	2835	A	O3'-P	5.72	1.68	1.61
26	BB	795	C	N3-C4	5.72	1.38	1.33
26	BB	1482	G	P-O5'	5.72	1.65	1.59
26	BB	1583	A	C5-C6	5.72	1.46	1.41
1	AA	174	A	C2'-O2'	5.72	1.49	1.41
2	AB	30	G	N9-C4	-5.72	1.33	1.38
26	BB	407	G	N9-C8	5.72	1.41	1.37
26	BB	1527	G	C5'-C4'	5.72	1.58	1.51
26	BB	2446	G	C6-N1	5.72	1.43	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2644	G	C8-N7	5.72	1.34	1.30
26	BB	2736	A	N7-C5	5.72	1.42	1.39
26	BB	2815	C	C3'-O3'	5.72	1.50	1.42
1	AA	134	G	O4'-C1'	5.71	1.49	1.41
25	BA	91	C	C4'-C3'	5.71	1.59	1.53
25	BA	102	G	C4'-O4'	-5.71	1.38	1.45
26	BB	267	C	C4'-O4'	-5.71	1.38	1.45
26	BB	1267	U	N1-C2	5.71	1.43	1.38
26	BB	1491	G	N3-C4	5.71	1.39	1.35
26	BB	1869	G	C6-N1	5.71	1.43	1.39
26	BB	2003	A	C2-N3	-5.71	1.28	1.33
26	BB	2128	G	N3-C4	5.71	1.39	1.35
26	BB	2472	G	C6-O6	-5.71	1.19	1.24
26	BB	2889	C	C4'-O4'	-5.71	1.38	1.45
1	AA	428	G	N9-C8	-5.71	1.33	1.37
1	AA	1418	A	C8-N7	-5.71	1.27	1.31
26	BB	1283	G	O4'-C1'	5.71	1.49	1.41
1	AA	632	U	C5-C6	5.71	1.39	1.34
1	AA	1001	C	C5-C6	5.71	1.39	1.34
25	BA	86	G	C4'-C3'	5.71	1.59	1.53
26	BB	968	C	O3'-P	-5.71	1.54	1.61
26	BB	1714	U	C3'-C2'	-5.71	1.46	1.52
26	BB	2121	G	N9-C4	-5.71	1.33	1.38
26	BB	2320	U	C4-C5	5.71	1.48	1.43
26	BB	2458	G	C5'-C4'	5.71	1.58	1.51
1	AA	302	G	N9-C4	-5.71	1.33	1.38
1	AA	330	C	C4-C5	5.71	1.47	1.43
1	AA	808	C	C4'-C3'	-5.71	1.46	1.52
1	AA	820	U	C2-N3	5.71	1.41	1.37
1	AA	927	G	C5'-C4'	5.71	1.58	1.51
26	BB	2053	G	C5-C4	5.71	1.42	1.38
1	AA	67	C	C4'-C3'	5.71	1.59	1.53
1	AA	169	C	C4-N4	5.71	1.39	1.33
1	AA	1202	U	C3'-O3'	5.71	1.50	1.42
2	AB	62	U	C5'-C4'	5.71	1.58	1.51
4	AD	65	G	C6-N1	-5.71	1.35	1.39
25	BA	59	A	N1-C2	5.71	1.39	1.34
26	BB	359	G	C3'-O3'	5.71	1.50	1.42
26	BB	428	A	C2'-C1'	5.71	1.59	1.53
26	BB	1586	A	C5'-C4'	5.71	1.58	1.51
26	BB	1725	U	C5'-C4'	5.71	1.58	1.51
26	BB	2329	U	C3'-C2'	5.71	1.59	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2434	A	N7-C5	-5.71	1.35	1.39
1	AA	133	U	N1-C2	5.71	1.43	1.38
26	BB	532	A	N9-C4	5.71	1.41	1.37
26	BB	1199	U	C2-O2	5.71	1.27	1.22
26	BB	1340	U	N1-C2	5.71	1.43	1.38
26	BB	2057	G	C5'-C4'	5.71	1.58	1.51
1	AA	139	A	P-O5'	5.71	1.65	1.59
1	AA	389	A	C5-C4	-5.71	1.34	1.38
1	AA	520	A	N9-C4	-5.71	1.34	1.37
1	AA	681	A	C5-C4	-5.71	1.34	1.38
26	BB	55	G	C4'-C3'	5.71	1.59	1.53
26	BB	493	G	C6-N1	-5.71	1.35	1.39
26	BB	520	G	C5-C6	5.71	1.48	1.42
26	BB	1555	G	C3'-C2'	5.71	1.59	1.52
26	BB	2130	U	C2-N3	5.71	1.41	1.37
1	AA	568	G	N3-C4	5.70	1.39	1.35
1	AA	673	A	N7-C5	-5.70	1.35	1.39
1	AA	723	U	P-O5'	5.70	1.65	1.59
1	AA	978	A	P-O5'	5.70	1.65	1.59
2	AB	62	U	C5-C6	5.70	1.39	1.34
26	BB	1031	G	C2'-O2'	5.70	1.49	1.41
26	BB	1209	U	C2-N3	5.70	1.41	1.37
26	BB	1535	A	C8-N7	5.70	1.35	1.31
26	BB	2867	G	N7-C5	-5.70	1.35	1.39
1	AA	44	A	C6-N6	-5.70	1.29	1.33
1	AA	292	G	C2-N3	5.70	1.37	1.32
1	AA	946	A	N9-C4	5.70	1.41	1.37
1	AA	1395	C	C5-C6	5.70	1.39	1.34
1	AA	1425	U	C5'-C4'	5.70	1.58	1.51
2	AB	47	U	C4'-C3'	5.70	1.59	1.53
1	AA	270	A	C4'-O4'	-5.70	1.38	1.45
1	AA	804	U	C3'-C2'	5.70	1.59	1.52
1	AA	1186	G	C4'-O4'	-5.70	1.38	1.45
1	AA	1188	A	O4'-C1'	5.70	1.49	1.41
26	BB	453	A	C5'-C4'	5.70	1.58	1.51
26	BB	565	C	C2-O2	-5.70	1.19	1.24
26	BB	1091	G	N3-C4	-5.70	1.31	1.35
26	BB	1654	A	N1-C2	-5.70	1.29	1.34
26	BB	2482	A	P-O5'	5.70	1.65	1.59
26	BB	2516	A	C6-N6	5.70	1.38	1.33
26	BB	2847	U	P-O5'	5.70	1.65	1.59
38	BN	132	ARG	CZ-NH2	5.70	1.40	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	340	U	C2-N3	5.70	1.41	1.37
1	AA	852	G	C8-N7	-5.70	1.27	1.30
1	AA	862	C	N1-C2	5.70	1.45	1.40
25	BA	42	C	C4-N4	5.70	1.39	1.33
26	BB	516	C	O3'-P	5.70	1.68	1.61
26	BB	1019	U	C2-N3	5.70	1.41	1.37
26	BB	1041	G	N1-C2	5.70	1.42	1.37
26	BB	1139	G	N3-C4	-5.70	1.31	1.35
1	AA	1006	G	C6-N1	5.70	1.43	1.39
2	AB	10	G	N3-C4	5.70	1.39	1.35
26	BB	41	C	C2-O2	-5.70	1.19	1.24
26	BB	111	A	P-O5'	5.70	1.65	1.59
26	BB	844	A	N1-C2	-5.70	1.29	1.34
1	AA	954	G	C6-N1	5.70	1.43	1.39
1	AA	1127	G	C2'-C1'	-5.70	1.47	1.53
1	AA	1462	C	N1-C6	5.70	1.40	1.37
25	BA	58	A	C5'-C4'	5.70	1.58	1.51
26	BB	38	A	N7-C5	5.70	1.42	1.39
26	BB	687	C	C3'-C2'	5.70	1.59	1.52
26	BB	717	C	P-O5'	5.70	1.65	1.59
26	BB	1469	A	C5'-C4'	5.70	1.58	1.51
26	BB	1532	A	C5-C6	5.70	1.46	1.41
26	BB	1739	A	N3-C4	-5.70	1.31	1.34
26	BB	1891	G	C3'-C2'	5.70	1.59	1.52
26	BB	2082	A	C6-N6	5.70	1.38	1.33
26	BB	2253	G	N7-C5	-5.70	1.35	1.39
26	BB	2274	A	C5-C4	5.70	1.42	1.38
1	AA	473	U	C4'-O4'	-5.69	1.38	1.45
1	AA	573	A	N7-C5	5.69	1.42	1.39
1	AA	835	U	N1-C2	5.69	1.43	1.38
26	BB	364	C	C2'-O2'	-5.69	1.34	1.41
26	BB	1447	C	C4-C5	5.69	1.47	1.43
26	BB	2744	G	C3'-C2'	5.69	1.59	1.52
1	AA	22	G	N7-C5	-5.69	1.35	1.39
1	AA	347	G	C5-C4	-5.69	1.34	1.38
1	AA	503	C	N3-C4	5.69	1.38	1.33
1	AA	1015	G	C2-N3	5.69	1.37	1.32
1	AA	1504	G	O3'-P	5.69	1.68	1.61
26	BB	494	G	C2-N3	5.69	1.37	1.32
26	BB	1113	U	C5'-C4'	5.69	1.58	1.51
1	AA	122	G	C8-N7	5.69	1.34	1.30
1	AA	500	G	P-O5'	5.69	1.65	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	762	U	C4-O4	5.69	1.28	1.23
1	AA	809	G	N1-C2	5.69	1.42	1.37
26	BB	284	U	C4-O4	5.69	1.28	1.23
1	AA	252	U	C4'-O4'	-5.69	1.38	1.45
1	AA	633	G	O3'-P	-5.69	1.54	1.61
26	BB	1004	U	N1-C6	5.69	1.43	1.38
26	BB	1160	G	N9-C4	-5.69	1.33	1.38
26	BB	1266	G	C3'-C2'	-5.69	1.46	1.52
1	AA	85	U	C2-N3	5.69	1.41	1.37
1	AA	259	G	C5'-C4'	5.69	1.58	1.51
1	AA	917	G	C2'-C1'	5.69	1.59	1.53
26	BB	315	G	C6-N1	-5.69	1.35	1.39
26	BB	396	G	N3-C4	-5.69	1.31	1.35
26	BB	1038	G	C5'-C4'	5.69	1.58	1.51
26	BB	1630	A	O3'-P	5.69	1.68	1.61
26	BB	2086	U	C4'-C3'	-5.69	1.46	1.52
26	BB	2505	G	C4'-C3'	5.69	1.59	1.53
26	BB	2736	A	C5-C6	5.69	1.46	1.41
1	AA	121	U	C3'-C2'	5.69	1.59	1.52
26	BB	158	U	C4'-C3'	5.69	1.59	1.53
26	BB	805	G	N7-C5	-5.69	1.35	1.39
26	BB	2669	G	C2-N3	5.69	1.37	1.32
1	AA	619	U	P-O5'	5.68	1.65	1.59
1	AA	698	G	C5-C4	-5.68	1.34	1.38
1	AA	1159	U	C2-O2	5.68	1.27	1.22
2	AB	27	C	C5-C6	5.68	1.38	1.34
26	BB	636	G	P-O5'	5.68	1.65	1.59
26	BB	851	C	C4-C5	5.68	1.47	1.43
26	BB	1867	G	C4'-C3'	-5.68	1.46	1.52
1	AA	67	C	C2'-C1'	5.68	1.59	1.53
1	AA	112	G	N1-C2	5.68	1.42	1.37
1	AA	240	G	N1-C2	5.68	1.42	1.37
1	AA	1238	A	N7-C5	-5.68	1.35	1.39
26	BB	587	C	C5-C6	5.68	1.38	1.34
26	BB	1565	C	C2-O2	-5.68	1.19	1.24
26	BB	2037	A	P-O5'	5.68	1.65	1.59
1	AA	1529	G	C2'-C1'	5.68	1.59	1.53
26	BB	32	C	C5'-C4'	5.68	1.58	1.51
26	BB	477	A	N7-C5	-5.68	1.35	1.39
26	BB	498	G	C6-N1	-5.68	1.35	1.39
26	BB	499	U	C2-N3	5.68	1.41	1.37
26	BB	1940	U	N3-C4	5.68	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	79	G	N9-C4	5.68	1.42	1.38
1	AA	607	A	C5-C6	5.68	1.46	1.41
1	AA	856	C	C2'-O2'	5.68	1.49	1.41
1	AA	856	C	C5-C6	5.68	1.38	1.34
1	AA	1298	U	C5'-C4'	5.68	1.58	1.51
11	AK	59	GLU	CD-OE2	-5.68	1.19	1.25
25	BA	118	C	P-O5'	5.68	1.65	1.59
26	BB	58	G	C3'-C2'	5.68	1.59	1.52
26	BB	325	G	C2'-O2'	-5.68	1.34	1.41
26	BB	876	C	O4'-C1'	5.68	1.49	1.41
26	BB	1541	C	P-O5'	5.68	1.65	1.59
26	BB	2481	G	P-O5'	5.68	1.65	1.59
26	BB	1047	G	N9-C8	5.68	1.41	1.37
26	BB	1754	A	C6-N6	5.68	1.38	1.33
1	AA	274	A	C5-C6	5.68	1.46	1.41
1	AA	842	U	C4-O4	-5.68	1.19	1.23
3	AC	41	A	C4'-O4'	-5.68	1.38	1.45
26	BB	135	U	C5'-C4'	5.68	1.58	1.51
26	BB	916	G	C6-O6	5.68	1.29	1.24
26	BB	1428	C	C4'-C3'	-5.68	1.46	1.52
26	BB	2033	A	C2'-C1'	-5.68	1.47	1.53
26	BB	2561	U	C2-N3	5.68	1.41	1.37
1	AA	540	G	P-O5'	5.67	1.65	1.59
1	AA	759	A	N9-C4	-5.67	1.34	1.37
1	AA	1171	A	P-O5'	5.67	1.65	1.59
1	AA	1295	U	C5'-C4'	5.67	1.58	1.51
26	BB	241	A	C4'-O4'	-5.67	1.38	1.45
26	BB	531	C	N1-C6	5.67	1.40	1.37
26	BB	808	G	C2-N3	5.67	1.37	1.32
26	BB	1000	A	C5-C4	-5.67	1.34	1.38
26	BB	2003	A	N1-C2	-5.67	1.29	1.34
26	BB	2110	G	N3-C4	5.67	1.39	1.35
26	BB	2597	G	P-O5'	5.67	1.65	1.59
26	BB	2699	C	O3'-P	5.67	1.68	1.61
1	AA	125	U	C2-N3	-5.67	1.33	1.37
1	AA	1534	A	C8-N7	-5.67	1.27	1.31
26	BB	66	C	C2'-O2'	5.67	1.49	1.41
26	BB	295	G	N1-C2	5.67	1.42	1.37
26	BB	363	G	N9-C4	5.67	1.42	1.38
26	BB	1613	G	N7-C5	5.67	1.42	1.39
1	AA	81	A	P-O5'	5.67	1.65	1.59
1	AA	483	C	N3-C4	5.67	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	802	A	P-O5'	5.67	1.65	1.59
1	AA	1134	G	O4'-C1'	5.67	1.49	1.41
25	BA	88	C	C4'-O4'	-5.67	1.38	1.45
26	BB	804	A	O3'-P	5.67	1.68	1.61
26	BB	1156	A	C5'-C4'	5.67	1.58	1.51
26	BB	2054	A	C2-N3	5.67	1.38	1.33
1	AA	580	C	N1-C2	-5.67	1.34	1.40
25	BA	92	C	C4-C5	-5.67	1.38	1.43
26	BB	856	G	N3-C4	5.67	1.39	1.35
26	BB	2287	A	C4'-O4'	-5.67	1.38	1.45
26	BB	2542	A	C5'-C4'	5.67	1.58	1.51
26	BB	2903	U	P-O5'	5.67	1.65	1.59
1	AA	432	A	C5'-C4'	5.67	1.58	1.51
1	AA	547	A	P-O5'	5.67	1.65	1.59
1	AA	568	G	C4'-C3'	-5.67	1.46	1.52
1	AA	758	C	O3'-P	5.67	1.68	1.61
1	AA	917	G	C4'-O4'	-5.67	1.38	1.45
1	AA	1432	G	N9-C4	5.67	1.42	1.38
25	BA	76	G	C2-N3	5.67	1.37	1.32
26	BB	309	A	C5'-C4'	5.67	1.58	1.51
26	BB	594	U	N1-C6	-5.67	1.32	1.38
26	BB	685	A	C5-C6	5.67	1.46	1.41
26	BB	689	A	C5'-C4'	5.67	1.58	1.51
26	BB	1003	G	C4'-O4'	-5.67	1.38	1.45
26	BB	1239	G	C4'-C3'	-5.67	1.46	1.52
26	BB	2693	G	N9-C8	5.67	1.41	1.37
26	BB	956	G	C8-N7	-5.67	1.27	1.30
26	BB	1296	G	C6-O6	-5.67	1.19	1.24
26	BB	1749	A	C5-C6	5.67	1.46	1.41
26	BB	2259	U	C2-N3	5.67	1.41	1.37
26	BB	2610	C	C5-C6	5.67	1.38	1.34
26	BB	2828	G	N7-C5	-5.67	1.35	1.39
1	AA	239	U	O5'-C5'	-5.67	1.33	1.42
1	AA	497	G	P-O5'	-5.67	1.54	1.59
1	AA	1200	C	C3'-O3'	5.67	1.50	1.42
1	AA	599	C	C5'-C4'	5.66	1.58	1.51
1	AA	1307	U	O3'-P	5.66	1.68	1.61
26	BB	77	G	C3'-C2'	-5.66	1.46	1.52
26	BB	1558	C	C3'-O3'	5.66	1.50	1.42
26	BB	1799	G	N9-C8	-5.66	1.33	1.37
26	BB	2071	A	C6-N6	5.66	1.38	1.33
26	BB	2483	C	C2-O2	-5.66	1.19	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1159	U	N1-C2	5.66	1.43	1.38
3	AC	57	C	C5-C6	5.66	1.38	1.34
26	BB	1727	C	N1-C6	5.66	1.40	1.37
26	BB	1780	A	N3-C4	5.66	1.38	1.34
1	AA	212	G	N9-C4	5.66	1.42	1.38
1	AA	262	A	C4'-O4'	-5.66	1.38	1.45
1	AA	363	A	N9-C8	5.66	1.42	1.37
1	AA	404	G	C8-N7	-5.66	1.27	1.30
1	AA	487	A	O3'-P	5.66	1.68	1.61
1	AA	1233	G	N1-C2	5.66	1.42	1.37
1	AA	1504	G	C2-N3	5.66	1.37	1.32
26	BB	160	A	P-O5'	5.66	1.65	1.59
26	BB	556	A	C6-N6	-5.66	1.29	1.33
26	BB	2001	C	C2'-C1'	5.66	1.59	1.53
26	BB	2212	A	C5'-C4'	5.66	1.58	1.51
26	BB	2615	U	P-O5'	5.66	1.65	1.59
1	AA	555	U	O4'-C1'	5.66	1.49	1.41
1	AA	1339	A	N9-C8	-5.66	1.33	1.37
26	BB	149	A	N1-C2	-5.66	1.29	1.34
26	BB	716	A	C6-N1	5.66	1.39	1.35
26	BB	1279	G	N1-C2	5.66	1.42	1.37
26	BB	1337	G	C2-N3	5.66	1.37	1.32
26	BB	1742	U	O3'-P	5.66	1.68	1.61
26	BB	1756	G	N7-C5	5.66	1.42	1.39
1	AA	627	G	N9-C8	-5.66	1.33	1.37
26	BB	501	A	N9-C4	5.66	1.41	1.37
2	AB	21	A	N7-C5	5.66	1.42	1.39
26	BB	1041	G	N3-C4	5.66	1.39	1.35
26	BB	1682	G	C4'-O4'	-5.66	1.38	1.45
26	BB	2053	G	C6-N1	5.66	1.43	1.39
26	BB	2116	G	C4'-O4'	-5.66	1.38	1.45
26	BB	2743	U	N1-C2	5.66	1.43	1.38
26	BB	2824	C	C4-C5	5.66	1.47	1.43
1	AA	1024	G	C6-N1	5.65	1.43	1.39
26	BB	656	G	C5-C4	-5.65	1.34	1.38
26	BB	1656	C	N1-C2	5.65	1.45	1.40
1	AA	301	G	P-O5'	5.65	1.65	1.59
1	AA	565	U	C5'-C4'	5.65	1.58	1.51
1	AA	782	A	C5-C4	-5.65	1.34	1.38
25	BA	53	A	N3-C4	5.65	1.38	1.34
26	BB	36	G	N7-C5	-5.65	1.35	1.39
26	BB	2233	U	C4-C5	5.65	1.48	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	46	G	C1'-N9	5.65	1.57	1.48
1	AA	667	G	C5-C4	-5.65	1.34	1.38
1	AA	1261	A	C4'-C3'	-5.65	1.47	1.52
2	AB	60	U	C2-N3	5.65	1.41	1.37
26	BB	299	A	N7-C5	-5.65	1.35	1.39
26	BB	370	G	O4'-C1'	5.65	1.49	1.41
26	BB	1741	C	C5-C6	5.65	1.38	1.34
26	BB	2297	A	N1-C2	-5.65	1.29	1.34
26	BB	2206	C	C5-C6	5.65	1.38	1.34
1	AA	338	A	N3-C4	5.65	1.38	1.34
1	AA	431	A	C5'-C4'	5.65	1.58	1.51
26	BB	3	U	C4-C5	5.65	1.48	1.43
26	BB	1198	U	N1-C2	5.65	1.43	1.38
26	BB	1266	G	P-O5'	-5.65	1.54	1.59
26	BB	1488	C	N3-C4	-5.65	1.29	1.33
26	BB	2598	A	C5'-C4'	5.65	1.58	1.51
1	AA	302	G	N1-C2	5.64	1.42	1.37
1	AA	580	C	C4-C5	5.64	1.47	1.43
1	AA	1206	G	N1-C2	5.64	1.42	1.37
1	AA	1493	A	N9-C8	-5.64	1.33	1.37
26	BB	384	A	C2-N3	-5.64	1.28	1.33
26	BB	398	C	O3'-P	5.64	1.68	1.61
26	BB	542	C	C4-N4	5.64	1.39	1.33
26	BB	1028	A	C4'-C3'	-5.64	1.47	1.52
26	BB	1114	C	C5-C6	5.64	1.38	1.34
26	BB	1791	A	N7-C5	-5.64	1.35	1.39
26	BB	1868	C	C5'-C4'	5.64	1.58	1.51
26	BB	2300	C	N3-C4	5.64	1.38	1.33
26	BB	2345	G	N7-C5	5.64	1.42	1.39
26	BB	2437	G	C3'-C2'	5.64	1.59	1.52
26	BB	2521	C	N3-C4	5.64	1.38	1.33
1	AA	196	A	N1-C2	5.64	1.39	1.34
1	AA	796	C	C4'-O4'	-5.64	1.38	1.45
1	AA	1149	C	C4'-C3'	-5.64	1.47	1.52
26	BB	306	U	C4-O4	-5.64	1.19	1.23
26	BB	439	A	C4'-O4'	-5.64	1.38	1.45
26	BB	670	A	C5-C4	5.64	1.42	1.38
26	BB	1261	C	C5-C6	5.64	1.38	1.34
26	BB	1989	G	N7-C5	-5.64	1.35	1.39
1	AA	1272	G	C3'-O3'	-5.64	1.34	1.42
26	BB	14	A	N9-C8	5.64	1.42	1.37
26	BB	738	G	C6-N1	-5.64	1.35	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	800	G	C2-N3	5.64	1.37	1.32
1	AA	811	C	P-O5'	5.64	1.65	1.59
1	AA	887	G	C8-N7	-5.64	1.27	1.30
1	AA	1124	G	C2-N3	5.64	1.37	1.32
26	BB	223	A	C3'-O3'	5.64	1.50	1.42
26	BB	367	G	C8-N7	-5.64	1.27	1.30
26	BB	1776	G	C2-N3	5.64	1.37	1.32
26	BB	2806	C	N3-C4	-5.64	1.30	1.33
26	BB	1736	U	C3'-C2'	5.64	1.59	1.52
26	BB	2206	C	C2-O2	-5.64	1.19	1.24
1	AA	19	A	C5-C6	5.64	1.46	1.41
1	AA	108	G	P-O5'	5.64	1.65	1.59
1	AA	264	C	N1-C6	5.64	1.40	1.37
1	AA	933	G	N9-C8	5.64	1.41	1.37
1	AA	1079	G	C5'-C4'	5.64	1.58	1.51
1	AA	1509	C	N1-C2	5.64	1.45	1.40
26	BB	152	A	N1-C2	5.64	1.39	1.34
26	BB	225	C	C2-O2	-5.64	1.19	1.24
26	BB	227	A	O4'-C1'	5.64	1.49	1.41
26	BB	384	A	C4'-O4'	-5.64	1.38	1.45
26	BB	1155	A	C4'-O4'	-5.64	1.38	1.45
26	BB	1609	A	C8-N7	-5.64	1.27	1.31
26	BB	1960	A	N9-C4	5.64	1.41	1.37
1	AA	149	A	P-O5'	5.63	1.65	1.59
1	AA	519	C	O3'-P	5.63	1.68	1.61
1	AA	1088	G	C2-N3	5.63	1.37	1.32
1	AA	1386	G	O4'-C1'	-5.63	1.34	1.41
26	BB	437	U	C4'-O4'	-5.63	1.38	1.45
26	BB	690	G	C4'-C3'	-5.63	1.47	1.52
26	BB	880	G	N9-C4	-5.63	1.33	1.38
26	BB	1821	A	N9-C4	5.63	1.41	1.37
26	BB	2768	U	O5'-C5'	-5.63	1.33	1.42
1	AA	96	U	C2-N3	5.63	1.41	1.37
1	AA	337	G	C5-C4	-5.63	1.34	1.38
1	AA	823	C	C2-N3	5.63	1.40	1.35
1	AA	1390	U	P-O5'	5.63	1.65	1.59
26	BB	130	C	O3'-P	5.63	1.68	1.61
26	BB	1400	U	O3'-P	5.63	1.68	1.61
1	AA	320	A	O3'-P	5.63	1.68	1.61
1	AA	473	U	C3'-C2'	5.63	1.59	1.52
1	AA	529	G	N1-C2	5.63	1.42	1.37
1	AA	671	G	C8-N7	-5.63	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	21	G	C6-N1	5.63	1.43	1.39
26	BB	8	C	N1-C6	5.63	1.40	1.37
26	BB	662	G	P-O5'	5.63	1.65	1.59
26	BB	707	G	N3-C4	5.63	1.39	1.35
26	BB	1102	C	N3-C4	5.63	1.37	1.33
26	BB	1244	A	N3-C4	5.63	1.38	1.34
26	BB	1760	C	N1-C6	5.63	1.40	1.37
26	BB	2235	G	C2-N3	5.63	1.37	1.32
26	BB	2436	G	N9-C8	5.63	1.41	1.37
26	BB	1810	A	C8-N7	-5.63	1.27	1.31
26	BB	2119	A	C6-N1	5.63	1.39	1.35
26	BB	2819	G	N7-C5	5.63	1.42	1.39
1	AA	133	U	N3-C4	-5.63	1.33	1.38
1	AA	858	G	N1-C2	5.63	1.42	1.37
1	AA	991	U	N1-C2	5.63	1.43	1.38
4	AD	50	G	C6-N1	5.63	1.43	1.39
26	BB	483	A	N7-C5	-5.63	1.35	1.39
26	BB	782	A	N9-C4	5.63	1.41	1.37
26	BB	1867	G	C2'-O2'	5.63	1.49	1.41
26	BB	2123	G	N1-C2	-5.63	1.33	1.37
26	BB	2278	A	C5-C4	5.63	1.42	1.38
26	BB	2338	C	C4-C5	5.63	1.47	1.43
26	BB	2846	G	C2'-O2'	-5.63	1.34	1.41
1	AA	709	U	O3'-P	-5.63	1.54	1.61
4	AD	4	G	C6-O6	-5.63	1.19	1.24
26	BB	171	U	C1'-N1	5.63	1.57	1.48
26	BB	285	G	P-O5'	-5.63	1.54	1.59
26	BB	1036	G	N7-C5	-5.63	1.35	1.39
26	BB	1636	U	P-O5'	5.63	1.65	1.59
1	AA	872	A	N3-C4	5.62	1.38	1.34
1	AA	975	A	N3-C4	5.62	1.38	1.34
1	AA	1235	U	O5'-C5'	-5.62	1.33	1.42
1	AA	1333	A	C8-N7	-5.62	1.27	1.31
26	BB	2420	C	C5-C6	5.62	1.38	1.34
1	AA	83	C	C2-N3	5.62	1.40	1.35
1	AA	187	G	C6-N1	5.62	1.43	1.39
1	AA	275	G	C2-N3	5.62	1.37	1.32
1	AA	478	A	O4'-C1'	5.62	1.49	1.41
25	BA	35	C	P-O5'	5.62	1.65	1.59
26	BB	121	G	O3'-P	5.62	1.67	1.61
26	BB	175	G	C8-N7	-5.62	1.27	1.30
26	BB	744	U	N1-C2	5.62	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1980	G	N1-C2	5.62	1.42	1.37
26	BB	2089	C	C2'-C1'	5.62	1.59	1.53
26	BB	2218	G	C6-O6	-5.62	1.19	1.24
26	BB	2671	G	C6-N1	5.62	1.43	1.39
1	AA	925	G	N9-C4	5.62	1.42	1.38
1	AA	969	A	C2'-C1'	-5.62	1.47	1.53
1	AA	1131	G	N7-C5	5.62	1.42	1.39
25	BA	13	G	C8-N7	-5.62	1.27	1.30
25	BA	16	G	C4'-C3'	5.62	1.59	1.53
26	BB	548	G	N1-C2	5.62	1.42	1.37
26	BB	921	C	N3-C4	5.62	1.37	1.33
26	BB	1868	C	C4'-O4'	-5.62	1.38	1.45
26	BB	1959	G	C5-C4	-5.62	1.34	1.38
26	BB	2136	G	C4'-O4'	-5.62	1.38	1.45
26	BB	2714	G	C6-N1	-5.62	1.35	1.39
1	AA	270	A	N9-C8	5.62	1.42	1.37
25	BA	68	C	C2-N3	5.62	1.40	1.35
26	BB	662	G	C4'-O4'	-5.62	1.38	1.45
26	BB	2144	G	P-O5'	5.62	1.65	1.59
1	AA	399	G	C6-N1	5.62	1.43	1.39
1	AA	1109	C	C2'-C1'	5.62	1.59	1.53
1	AA	1500	A	C8-N7	-5.62	1.27	1.31
26	BB	566	U	C5'-C4'	5.62	1.58	1.51
26	BB	865	C	N3-C4	5.62	1.37	1.33
26	BB	1350	C	C2-N3	-5.62	1.31	1.35
26	BB	1447	C	P-O5'	5.62	1.65	1.59
26	BB	1472	C	C4'-O4'	-5.62	1.38	1.45
26	BB	1702	G	N9-C8	5.62	1.41	1.37
26	BB	2426	A	C5-C4	5.62	1.42	1.38
1	AA	247	G	C4'-O4'	-5.62	1.38	1.45
19	AS	24	SER	CB-OG	5.62	1.49	1.42
26	BB	60	G	C4'-O4'	-5.62	1.38	1.45
26	BB	1198	U	P-O5'	5.62	1.65	1.59
26	BB	1302	A	C8-N7	-5.62	1.27	1.31
2	AB	39	A	N9-C4	-5.62	1.34	1.37
26	BB	479	A	N7-C5	-5.62	1.35	1.39
26	BB	504	A	N3-C4	5.62	1.38	1.34
26	BB	1910	G	N7-C5	-5.62	1.35	1.39
26	BB	2399	G	N1-C2	5.62	1.42	1.37
1	AA	351	G	C5'-C4'	5.61	1.58	1.51
25	BA	66	A	C4'-O4'	-5.61	1.38	1.45
26	BB	181	A	C5'-C4'	5.61	1.58	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	413	C	N1-C6	5.61	1.40	1.37
26	BB	1249	U	P-O5'	5.61	1.65	1.59
26	BB	1459	G	C4'-C3'	5.61	1.59	1.53
26	BB	2328	A	C4'-O4'	-5.61	1.38	1.45
26	BB	2373	G	N7-C5	-5.61	1.35	1.39
26	BB	2530	A	C6-N1	5.61	1.39	1.35
26	BB	2581	G	P-O5'	5.61	1.65	1.59
1	AA	321	A	O3'-P	5.61	1.67	1.61
26	BB	1450	G	C6-N1	-5.61	1.35	1.39
26	BB	1725	U	P-O5'	5.61	1.65	1.59
26	BB	2163	A	C5-C4	-5.61	1.34	1.38
26	BB	2195	U	P-O5'	5.61	1.65	1.59
26	BB	2276	G	C5'-C4'	5.61	1.58	1.51
26	BB	2299	U	C4-C5	5.61	1.48	1.43
26	BB	2894	G	C5-C6	5.61	1.48	1.42
1	AA	443	C	O3'-P	5.61	1.67	1.61
1	AA	882	C	C4-N4	5.61	1.39	1.33
1	AA	1021	A	N7-C5	5.61	1.42	1.39
25	BA	59	A	N7-C5	-5.61	1.35	1.39
26	BB	743	A	C4'-O4'	-5.61	1.38	1.45
26	BB	1198	U	C2-N3	5.61	1.41	1.37
26	BB	1475	G	C8-N7	5.61	1.34	1.30
26	BB	1482	G	N9-C8	-5.61	1.33	1.37
26	BB	1784	A	N1-C2	5.61	1.39	1.34
26	BB	1842	G	N9-C8	5.61	1.41	1.37
26	BB	2628	C	N1-C6	5.61	1.40	1.37
26	BB	2697	G	C6-N1	5.61	1.43	1.39
40	BP	8	ARG	CZ-NH1	5.61	1.40	1.33
1	AA	366	A	C2-N3	5.61	1.38	1.33
1	AA	927	G	N1-C2	-5.61	1.33	1.37
26	BB	399	U	C4-C5	5.61	1.48	1.43
26	BB	1088	A	N3-C4	5.61	1.38	1.34
26	BB	1222	U	P-O5'	5.61	1.65	1.59
26	BB	1363	C	C4-N4	5.61	1.39	1.33
26	BB	1547	C	C2'-C1'	5.61	1.59	1.53
1	AA	630	A	C6-N6	5.61	1.38	1.33
1	AA	928	G	P-O5'	5.61	1.65	1.59
26	BB	23	G	C8-N7	5.61	1.34	1.30
26	BB	1193	G	N7-C5	-5.61	1.35	1.39
26	BB	1231	U	C5-C6	5.61	1.39	1.34
26	BB	1471	G	C2-N3	5.61	1.37	1.32
26	BB	1556	C	C5-C6	5.61	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1978	A	O4'-C1'	5.61	1.49	1.41
26	BB	2016	U	C5'-C4'	5.61	1.58	1.51
48	BX	11	GLU	CG-CD	5.61	1.60	1.51
1	AA	83	C	N1-C2	5.61	1.45	1.40
1	AA	274	A	C6-N1	5.61	1.39	1.35
1	AA	1092	A	N9-C4	-5.61	1.34	1.37
26	BB	105	C	N1-C6	5.61	1.40	1.37
26	BB	247	G	C5-C4	5.61	1.42	1.38
26	BB	725	G	N1-C2	5.61	1.42	1.37
26	BB	904	G	N1-C2	5.61	1.42	1.37
26	BB	943	A	N9-C8	5.61	1.42	1.37
26	BB	953	G	N9-C4	-5.61	1.33	1.38
26	BB	1057	A	C5-C4	-5.61	1.34	1.38
54	B3	39	ARG	NE-CZ	5.61	1.40	1.33
1	AA	500	G	C5-C4	-5.60	1.34	1.38
1	AA	715	A	P-O5'	5.60	1.65	1.59
26	BB	940	G	N3-C4	5.60	1.39	1.35
26	BB	1213	A	C3'-C2'	5.60	1.59	1.52
26	BB	1459	G	N9-C4	5.60	1.42	1.38
26	BB	2495	G	N9-C8	-5.60	1.33	1.37
26	BB	2496	C	C4-N4	5.60	1.39	1.33
1	AA	407	U	P-O5'	-5.60	1.54	1.59
1	AA	602	A	C6-N6	5.60	1.38	1.33
1	AA	705	G	C5'-C4'	5.60	1.58	1.51
1	AA	1079	G	C2'-O2'	-5.60	1.34	1.41
1	AA	1462	C	C3'-C2'	5.60	1.59	1.52
4	AD	45	A	C5'-C4'	5.60	1.58	1.51
25	BA	44	G	C8-N7	5.60	1.34	1.30
26	BB	241	A	O4'-C1'	5.60	1.49	1.41
26	BB	429	A	C6-N1	-5.60	1.31	1.35
26	BB	441	U	N1-C2	5.60	1.43	1.38
26	BB	818	G	N9-C4	5.60	1.42	1.38
26	BB	1436	G	N9-C8	-5.60	1.33	1.37
26	BB	1690	A	C2'-C1'	5.60	1.59	1.53
26	BB	1724	G	N9-C8	-5.60	1.33	1.37
26	BB	1986	C	C2-N3	5.60	1.40	1.35
26	BB	1989	G	C4'-O4'	-5.60	1.38	1.45
26	BB	2801	G	P-O5'	5.60	1.65	1.59
26	BB	2813	A	C4'-O4'	-5.60	1.38	1.45
1	AA	164	G	C8-N7	-5.60	1.27	1.30
25	BA	22	U	C5'-C4'	5.60	1.58	1.51
26	BB	9	G	C5-C4	-5.60	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	983	A	C5-C4	-5.60	1.34	1.38
26	BB	1421	G	P-O5'	5.60	1.65	1.59
26	BB	2351	G	P-O5'	-5.60	1.54	1.59
26	BB	2398	U	C4'-C3'	5.60	1.59	1.53
1	AA	114	U	C5'-C4'	5.60	1.58	1.51
1	AA	614	C	P-O5'	-5.60	1.54	1.59
1	AA	703	G	N9-C8	-5.60	1.33	1.37
1	AA	1320	C	C3'-C2'	-5.60	1.46	1.52
3	AC	35	G	C2-N3	5.60	1.37	1.32
26	BB	1517	G	P-O5'	5.60	1.65	1.59
26	BB	2534	A	C5'-C4'	5.60	1.58	1.51
26	BB	2550	G	N9-C4	5.60	1.42	1.38
26	BB	2643	G	N9-C8	-5.60	1.33	1.37
26	BB	2689	U	P-O5'	-5.60	1.54	1.59
1	AA	180	U	C2-N3	5.60	1.41	1.37
1	AA	854	U	C2-N3	5.60	1.41	1.37
1	AA	1083	U	C5'-C4'	5.60	1.58	1.51
26	BB	380	G	O4'-C1'	5.60	1.49	1.41
26	BB	618	G	C3'-C2'	5.60	1.59	1.52
26	BB	1330	C	C4'-O4'	-5.60	1.38	1.45
26	BB	1426	G	N7-C5	-5.60	1.35	1.39
26	BB	1729	U	C5-C6	5.60	1.39	1.34
26	BB	2309	A	N3-C4	5.60	1.38	1.34
26	BB	2396	G	C8-N7	-5.60	1.27	1.30
26	BB	2898	U	C2'-C1'	5.60	1.59	1.53
1	AA	212	G	C5'-C4'	5.60	1.58	1.51
1	AA	958	A	P-O5'	5.60	1.65	1.59
1	AA	1223	C	C2-N3	5.60	1.40	1.35
25	BA	53	A	C3'-C2'	5.60	1.59	1.52
26	BB	30	G	C5-C4	-5.60	1.34	1.38
26	BB	647	G	C2-N2	5.60	1.40	1.34
26	BB	931	U	O3'-P	-5.60	1.54	1.61
26	BB	1027	A	C3'-O3'	5.60	1.50	1.42
26	BB	2047	C	C2'-O2'	-5.60	1.34	1.41
26	BB	2636	C	C4-C5	-5.60	1.38	1.43
1	AA	1377	A	C4'-C3'	5.59	1.59	1.53
26	BB	127	A	P-O5'	5.59	1.65	1.59
26	BB	160	A	N3-C4	5.59	1.38	1.34
26	BB	587	C	O3'-P	5.59	1.67	1.61
26	BB	723	C	C2-N3	5.59	1.40	1.35
26	BB	1070	A	C5-C6	-5.59	1.36	1.41
26	BB	1403	A	P-O5'	5.59	1.65	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1405	U	C5-C6	5.59	1.39	1.34
26	BB	1514	G	N1-C2	5.59	1.42	1.37
26	BB	1897	G	N1-C2	5.59	1.42	1.37
26	BB	2138	G	N7-C5	5.59	1.42	1.39
26	BB	2516	A	C4'-O4'	-5.59	1.38	1.45
1	AA	638	U	O4'-C1'	5.59	1.49	1.41
1	AA	920	U	N1-C2	5.59	1.43	1.38
1	AA	1372	U	C2-N3	5.59	1.41	1.37
11	AK	57	GLU	CB-CG	5.59	1.62	1.52
26	BB	696	G	N3-C4	5.59	1.39	1.35
26	BB	948	C	C4'-O4'	-5.59	1.38	1.45
26	BB	1794	A	C8-N7	-5.59	1.27	1.31
26	BB	2573	C	P-O5'	5.59	1.65	1.59
1	AA	921	U	C3'-C2'	5.59	1.59	1.52
1	AA	1077	G	P-O5'	5.59	1.65	1.59
4	AD	47	A	N9-C4	-5.59	1.34	1.37
26	BB	427	U	O4'-C1'	5.59	1.49	1.41
26	BB	1492	G	C3'-C2'	5.59	1.59	1.52
26	BB	1783	A	C5-C6	5.59	1.46	1.41
26	BB	2118	U	C2-N3	5.59	1.41	1.37
26	BB	2521	C	N1-C6	5.59	1.40	1.37
1	AA	633	G	P-O5'	5.59	1.65	1.59
1	AA	658	C	C4'-O4'	-5.59	1.38	1.45
1	AA	1055	A	N7-C5	-5.59	1.35	1.39
26	BB	32	C	N3-C4	-5.59	1.30	1.33
26	BB	340	A	C1'-N9	5.59	1.57	1.48
26	BB	368	A	C1'-N9	5.59	1.57	1.48
26	BB	594	U	C4-O4	5.59	1.28	1.23
26	BB	1614	A	C8-N7	-5.59	1.27	1.31
1	AA	748	G	C3'-C2'	-5.59	1.46	1.52
1	AA	1297	G	N9-C8	-5.59	1.33	1.37
1	AA	1528	U	O4'-C1'	5.59	1.49	1.41
19	AS	31	ARG	NE-CZ	5.59	1.40	1.33
26	BB	416	U	C2-O2	-5.59	1.17	1.22
26	BB	906	U	O3'-P	5.59	1.67	1.61
26	BB	1596	A	P-O5'	5.59	1.65	1.59
1	AA	984	C	C2-N3	5.59	1.40	1.35
1	AA	1046	A	N7-C5	5.59	1.42	1.39
1	AA	1403	C	C4-N4	5.59	1.39	1.33
26	BB	399	U	C4-O4	5.59	1.28	1.23
26	BB	451	U	C5'-C4'	5.59	1.58	1.51
26	BB	776	G	N3-C4	5.59	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1185	G	C4'-O4'	-5.59	1.38	1.45
26	BB	1403	A	C4'-C3'	-5.59	1.47	1.52
26	BB	1590	A	C3'-C2'	5.59	1.59	1.52
26	BB	1791	A	N9-C8	5.59	1.42	1.37
26	BB	2113	U	P-O5'	5.59	1.65	1.59
26	BB	2248	C	C4-C5	5.59	1.47	1.43
26	BB	2477	U	N1-C6	-5.59	1.32	1.38
26	BB	2634	A	N9-C8	-5.59	1.33	1.37
26	BB	2784	U	C3'-C2'	-5.59	1.46	1.52
26	BB	2798	U	C5'-C4'	5.59	1.58	1.51
1	AA	74	A	C5-C4	-5.58	1.34	1.38
1	AA	737	C	P-O5'	-5.58	1.54	1.59
26	BB	5	A	N3-C4	5.58	1.38	1.34
26	BB	473	G	C4'-O4'	-5.58	1.38	1.45
26	BB	2156	G	C8-N7	-5.58	1.27	1.30
26	BB	2470	G	C6-N1	-5.58	1.35	1.39
26	BB	2562	U	C4'-O4'	-5.58	1.38	1.45
1	AA	316	C	C2-N3	5.58	1.40	1.35
1	AA	546	A	N1-C2	-5.58	1.29	1.34
1	AA	627	G	N9-C4	5.58	1.42	1.38
1	AA	690	G	C4'-O4'	-5.58	1.38	1.45
1	AA	853	C	C4-C5	5.58	1.47	1.43
1	AA	1153	G	C2'-C1'	5.58	1.59	1.53
1	AA	1352	C	P-O5'	5.58	1.65	1.59
26	BB	607	U	N1-C2	5.58	1.43	1.38
26	BB	1264	A	C5-C4	-5.58	1.34	1.38
26	BB	1360	G	N3-C4	-5.58	1.31	1.35
26	BB	1839	G	C5'-C4'	5.58	1.58	1.51
26	BB	2425	A	N3-C4	5.58	1.38	1.34
26	BB	2565	A	C2-N3	5.58	1.38	1.33
26	BB	2771	C	C2-N3	5.58	1.40	1.35
1	AA	43	C	C2-N3	5.58	1.40	1.35
3	AC	13	A	N9-C8	5.58	1.42	1.37
26	BB	268	C	C2'-C1'	5.58	1.59	1.53
26	BB	878	A	C4'-C3'	5.58	1.59	1.53
26	BB	899	A	C5-C4	-5.58	1.34	1.38
26	BB	1090	A	C2'-C1'	-5.58	1.47	1.53
26	BB	1213	A	O3'-P	-5.58	1.54	1.61
26	BB	1227	G	C2-N3	5.58	1.37	1.32
26	BB	1782	U	N1-C2	5.58	1.43	1.38
26	BB	1816	C	C3'-C2'	-5.58	1.46	1.52
26	BB	1933	G	C3'-C2'	5.58	1.59	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2007	U	C2'-C1'	5.58	1.59	1.53
3	AC	59	A	C2-N3	5.58	1.38	1.33
26	BB	672	C	C2-N3	5.58	1.40	1.35
26	BB	843	G	P-O5'	5.58	1.65	1.59
26	BB	1589	U	N1-C6	-5.58	1.32	1.38
26	BB	2166	U	P-O5'	5.58	1.65	1.59
26	BB	2447	G	C5'-C4'	5.58	1.58	1.51
1	AA	324	G	N1-C2	5.58	1.42	1.37
1	AA	666	G	C5'-C4'	5.58	1.58	1.51
1	AA	684	U	C4-O4	-5.58	1.19	1.23
1	AA	812	G	N3-C4	5.58	1.39	1.35
1	AA	975	A	P-O5'	-5.58	1.54	1.59
1	AA	1046	A	N3-C4	5.58	1.38	1.34
26	BB	365	U	O3'-P	5.58	1.67	1.61
26	BB	620	G	C4'-O4'	-5.58	1.38	1.45
26	BB	652	U	C5-C6	5.58	1.39	1.34
26	BB	735	A	N3-C4	5.58	1.38	1.34
26	BB	850	U	N3-C4	5.58	1.43	1.38
26	BB	1191	G	P-O5'	5.58	1.65	1.59
26	BB	2343	U	C4-C5	5.58	1.48	1.43
26	BB	2741	A	C1'-N9	5.58	1.57	1.48
54	B3	47	TYR	CB-CG	5.58	1.60	1.51
26	BB	150	U	C2'-C1'	5.58	1.59	1.53
26	BB	382	A	N3-C4	5.58	1.38	1.34
26	BB	603	A	C2'-C1'	-5.58	1.47	1.53
26	BB	1211	C	C4'-O4'	-5.58	1.38	1.45
26	BB	1596	A	C4'-O4'	-5.58	1.38	1.45
26	BB	1979	U	N3-C4	-5.58	1.33	1.38
26	BB	2160	C	C4'-O4'	-5.58	1.38	1.45
1	AA	463	U	C4-C5	5.58	1.48	1.43
1	AA	1129	C	N3-C4	5.58	1.37	1.33
1	AA	1467	C	C5'-C4'	5.58	1.58	1.51
1	AA	1485	U	C4-C5	5.58	1.48	1.43
26	BB	560	C	N3-C4	5.58	1.37	1.33
26	BB	994	C	N1-C6	-5.58	1.33	1.37
26	BB	1219	U	O4'-C1'	5.58	1.48	1.41
26	BB	1865	U	C4-C5	5.58	1.48	1.43
26	BB	2076	U	C5-C6	5.58	1.39	1.34
26	BB	2569	G	N9-C8	-5.58	1.33	1.37
26	BB	2599	G	C6-N1	5.58	1.43	1.39
26	BB	2644	G	N1-C2	5.58	1.42	1.37
1	AA	993	G	C4'-C3'	5.57	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	73	G	C4'-O4'	-5.57	1.38	1.45
3	AC	22	G	N3-C4	5.57	1.39	1.35
26	BB	744	U	C5-C6	5.57	1.39	1.34
26	BB	1209	U	C4-C5	5.57	1.48	1.43
26	BB	1215	G	C2'-C1'	5.57	1.59	1.53
26	BB	1838	C	N1-C6	5.57	1.40	1.37
26	BB	1860	G	N7-C5	5.57	1.42	1.39
26	BB	2225	A	N3-C4	5.57	1.38	1.34
26	BB	2440	C	C5-C6	5.57	1.38	1.34
26	BB	2787	C	C2-N3	5.57	1.40	1.35
26	BB	2829	A	N9-C4	-5.57	1.34	1.37
26	BB	2844	G	C2-N3	5.57	1.37	1.32
1	AA	148	G	P-O5'	5.57	1.65	1.59
1	AA	179	A	C4'-O4'	-5.57	1.38	1.45
26	BB	118	A	O3'-P	5.57	1.67	1.61
26	BB	651	G	C6-N1	5.57	1.43	1.39
26	BB	1137	G	C2-N3	5.57	1.37	1.32
26	BB	1289	C	C2-O2	-5.57	1.19	1.24
26	BB	1499	C	C5-C6	-5.57	1.29	1.34
26	BB	1518	C	C4-C5	5.57	1.47	1.43
26	BB	2853	C	C2'-C1'	5.57	1.59	1.53
1	AA	703	G	O4'-C1'	5.57	1.48	1.41
1	AA	867	G	C8-N7	5.57	1.34	1.30
26	BB	9	G	P-O5'	5.57	1.65	1.59
26	BB	332	A	P-O5'	5.57	1.65	1.59
26	BB	887	U	C2-O2	5.57	1.27	1.22
26	BB	1113	U	C5-C6	5.57	1.39	1.34
26	BB	1342	A	P-O5'	-5.57	1.54	1.59
26	BB	1370	C	C4-N4	5.57	1.39	1.33
26	BB	1416	G	C2'-O2'	-5.57	1.34	1.41
26	BB	1587	G	N9-C4	-5.57	1.33	1.38
26	BB	1975	G	C2'-C1'	-5.57	1.47	1.53
26	BB	2326	C	C2'-O2'	5.57	1.48	1.41
1	AA	992	U	P-O5'	5.57	1.65	1.59
1	AA	1078	U	C5'-C4'	5.57	1.58	1.51
26	BB	836	G	C8-N7	5.57	1.34	1.30
26	BB	2474	U	C2-O2	-5.57	1.17	1.22
1	AA	137	U	C3'-C2'	5.57	1.59	1.52
1	AA	280	C	C3'-O3'	5.57	1.50	1.42
1	AA	457	G	P-O5'	5.57	1.65	1.59
1	AA	517	G	C8-N7	-5.57	1.27	1.30
1	AA	1080	A	C2'-C1'	-5.57	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1345	U	C2-N3	5.57	1.41	1.37
26	BB	63	A	O3'-P	5.57	1.67	1.61
26	BB	659	G	N9-C4	-5.57	1.33	1.38
26	BB	1094	U	C5-C6	5.57	1.39	1.34
26	BB	1602	U	C4'-C3'	5.57	1.59	1.53
26	BB	2375	G	C2-N3	5.57	1.37	1.32
26	BB	2532	G	C5-C4	5.57	1.42	1.38
26	BB	2660	A	C5'-C4'	5.57	1.58	1.51
26	BB	2857	G	P-O5'	5.57	1.65	1.59
1	AA	152	A	N3-C4	5.57	1.38	1.34
1	AA	454	G	N3-C4	5.57	1.39	1.35
26	BB	285	G	N1-C2	5.57	1.42	1.37
26	BB	1565	C	N1-C2	5.57	1.45	1.40
26	BB	1745	A	O4'-C1'	-5.57	1.34	1.41
26	BB	2418	A	C2-N3	5.57	1.38	1.33
26	BB	2502	G	C2'-C1'	-5.57	1.47	1.53
43	BS	76	SER	N-CA	5.57	1.57	1.46
26	BB	1845	G	C5'-C4'	5.56	1.58	1.51
26	BB	2782	G	P-O5'	5.56	1.65	1.59
34	BJ	67	PRO	N-CD	-5.56	1.40	1.47
1	AA	134	G	N9-C4	5.56	1.42	1.38
1	AA	226	G	C6-O6	-5.56	1.19	1.24
26	BB	116	C	N1-C6	5.56	1.40	1.37
26	BB	1699	G	N1-C2	5.56	1.42	1.37
1	AA	160	A	C4'-O4'	-5.56	1.38	1.45
26	BB	149	A	N9-C8	-5.56	1.33	1.37
1	AA	283	U	C4-C5	5.56	1.48	1.43
1	AA	338	A	N9-C8	-5.56	1.33	1.37
1	AA	673	A	C5'-C4'	5.56	1.58	1.51
1	AA	1081	A	C5-C6	5.56	1.46	1.41
1	AA	1103	C	O4'-C1'	5.56	1.48	1.41
26	BB	369	U	C3'-O3'	5.56	1.50	1.42
26	BB	802	A	O3'-P	5.56	1.67	1.61
26	BB	1465	G	C6-O6	-5.56	1.19	1.24
26	BB	2002	G	C5-C6	5.56	1.48	1.42
26	BB	2344	U	C2-N3	5.56	1.41	1.37
1	AA	691	G	C4'-O4'	-5.56	1.38	1.45
1	AA	1499	A	N9-C8	5.56	1.42	1.37
26	BB	166	U	O3'-P	5.56	1.67	1.61
26	BB	692	C	C4-C5	5.56	1.47	1.43
26	BB	1257	C	C4'-O4'	-5.56	1.38	1.45
1	AA	448	A	C8-N7	-5.56	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2443	C	O3'-P	5.56	1.67	1.61
1	AA	377	G	C6-N1	5.55	1.43	1.39
1	AA	650	G	C2-N3	5.55	1.37	1.32
1	AA	663	A	N9-C4	5.55	1.41	1.37
1	AA	1128	C	N1-C2	-5.55	1.34	1.40
1	AA	1250	A	C5-C6	5.55	1.46	1.41
1	AA	1321	U	C2-N3	5.55	1.41	1.37
4	AD	22	A	C3'-C2'	5.55	1.59	1.52
26	BB	91	A	C5-C6	5.55	1.46	1.41
26	BB	272	A	C5-C6	5.55	1.46	1.41
26	BB	1585	C	O3'-P	5.55	1.67	1.61
26	BB	2387	U	C4-O4	5.55	1.28	1.23
26	BB	2470	G	C2-N3	5.55	1.37	1.32
1	AA	38	G	N9-C4	5.55	1.42	1.38
1	AA	428	G	C5'-C4'	5.55	1.58	1.51
1	AA	1189	U	O3'-P	-5.55	1.54	1.61
26	BB	1354	A	O5'-C5'	-5.55	1.33	1.42
26	BB	1773	A	C5'-C4'	5.55	1.58	1.51
1	AA	26	A	C4'-O4'	-5.55	1.38	1.45
1	AA	147	G	C3'-C2'	-5.55	1.46	1.52
1	AA	558	G	N7-C5	5.55	1.42	1.39
1	AA	830	G	C3'-C2'	-5.55	1.46	1.52
1	AA	1205	U	C4-C5	5.55	1.48	1.43
1	AA	1255	G	C5-C4	-5.55	1.34	1.38
25	BA	82	U	C4-O4	-5.55	1.19	1.23
26	BB	610	C	C2'-C1'	5.55	1.59	1.53
26	BB	815	C	C4-C5	-5.55	1.38	1.43
26	BB	1122	G	C8-N7	5.55	1.34	1.30
26	BB	2222	C	C5-C6	-5.55	1.29	1.34
1	AA	387	U	N1-C2	5.55	1.43	1.38
2	AB	51	G	C6-N1	5.55	1.43	1.39
25	BA	33	G	N9-C4	-5.55	1.33	1.38
26	BB	77	G	C2-N2	-5.55	1.29	1.34
26	BB	416	U	O4'-C1'	5.55	1.48	1.41
26	BB	470	A	C5'-C4'	5.55	1.58	1.51
26	BB	954	G	N9-C8	5.55	1.41	1.37
26	BB	1098	A	C8-N7	-5.55	1.27	1.31
26	BB	1128	G	C3'-C2'	5.55	1.59	1.52
26	BB	1368	G	C1'-N9	5.55	1.57	1.48
26	BB	1872	A	C3'-C2'	5.55	1.59	1.52
26	BB	2585	U	C2'-C1'	5.55	1.59	1.53
1	AA	1009	U	C2'-C1'	5.55	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1669	A	N3-C4	5.55	1.38	1.34
26	BB	1729	U	P-O5'	5.55	1.65	1.59
26	BB	1741	C	C2'-O2'	-5.55	1.34	1.41
26	BB	1832	C	C5'-C4'	5.55	1.58	1.51
26	BB	1900	A	C5'-C4'	5.55	1.58	1.51
26	BB	2269	G	C4'-O4'	-5.55	1.38	1.45
26	BB	2627	G	O4'-C1'	5.55	1.48	1.41
26	BB	2750	A	N9-C4	-5.55	1.34	1.37
1	AA	365	U	C2-O2	5.55	1.27	1.22
1	AA	788	U	N1-C2	5.55	1.43	1.38
1	AA	1290	G	N3-C4	5.55	1.39	1.35
1	AA	1367	C	P-O5'	5.55	1.65	1.59
26	BB	39	G	P-O5'	-5.55	1.54	1.59
26	BB	47	C	C4-N4	5.55	1.39	1.33
26	BB	219	A	N9-C4	-5.55	1.34	1.37
26	BB	417	C	N3-C4	5.55	1.37	1.33
26	BB	627	A	O5'-C5'	-5.55	1.33	1.42
26	BB	1001	A	N9-C8	5.55	1.42	1.37
26	BB	1103	A	P-O5'	5.55	1.65	1.59
26	BB	1144	A	C3'-C2'	5.55	1.59	1.52
26	BB	1347	A	C5-C4	-5.55	1.34	1.38
26	BB	2469	A	C6-N1	-5.55	1.31	1.35
1	AA	103	U	N1-C2	5.54	1.43	1.38
1	AA	149	A	N9-C4	5.54	1.41	1.37
1	AA	650	G	C2'-C1'	5.54	1.59	1.53
2	AB	29	G	C8-N7	5.54	1.34	1.30
26	BB	935	C	N1-C6	5.54	1.40	1.37
26	BB	2668	G	C2'-C1'	-5.54	1.47	1.53
1	AA	267	C	C5'-C4'	5.54	1.58	1.51
1	AA	460	A	C6-N6	5.54	1.38	1.33
1	AA	1025	U	C2-N3	5.54	1.41	1.37
1	AA	1080	A	N7-C5	-5.54	1.35	1.39
1	AA	1497	G	N7-C5	5.54	1.42	1.39
26	BB	352	A	C8-N7	5.54	1.35	1.31
26	BB	1141	U	N1-C2	5.54	1.43	1.38
26	BB	1628	G	C2-N3	5.54	1.37	1.32
26	BB	2031	A	N3-C4	5.54	1.38	1.34
26	BB	2242	G	N3-C4	-5.54	1.31	1.35
26	BB	2297	A	O3'-P	5.54	1.67	1.61
26	BB	2568	U	O3'-P	5.54	1.67	1.61
1	AA	353	A	C2'-O2'	5.54	1.48	1.41
1	AA	604	G	C5-C4	5.54	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	696	A	C4'-C3'	5.54	1.59	1.53
1	AA	1228	C	C5'-C4'	5.54	1.57	1.51
26	BB	301	G	P-O5'	-5.54	1.54	1.59
26	BB	670	A	C3'-C2'	5.54	1.59	1.52
26	BB	1311	G	C2-N3	5.54	1.37	1.32
26	BB	1320	C	N3-C4	-5.54	1.30	1.33
26	BB	1887	C	C4-C5	5.54	1.47	1.43
26	BB	2426	A	C3'-C2'	5.54	1.59	1.52
25	BA	75	G	C5'-C4'	5.54	1.57	1.51
26	BB	1474	U	N1-C6	5.54	1.43	1.38
26	BB	1971	U	C4'-O4'	-5.54	1.38	1.45
26	BB	1974	C	N3-C4	5.54	1.37	1.33
26	BB	2070	A	O3'-P	5.54	1.67	1.61
1	AA	155	A	C5'-C4'	5.54	1.57	1.51
1	AA	216	U	C2-N3	5.54	1.41	1.37
1	AA	373	A	N9-C4	-5.54	1.34	1.37
1	AA	800	G	C8-N7	-5.54	1.27	1.30
25	BA	56	G	C2-N3	5.54	1.37	1.32
26	BB	737	C	O4'-C1'	5.54	1.48	1.41
26	BB	842	U	C3'-O3'	5.54	1.50	1.42
26	BB	1112	G	C8-N7	5.54	1.34	1.30
26	BB	1850	G	C6-N1	5.54	1.43	1.39
26	BB	2162	G	N1-C2	5.54	1.42	1.37
26	BB	2276	G	C2'-C1'	-5.54	1.47	1.53
26	BB	2431	U	C4-O4	-5.54	1.19	1.23
31	BG	6	TYR	CE2-CZ	5.54	1.45	1.38
1	AA	45	G	C3'-O3'	-5.54	1.34	1.42
1	AA	75	G	C4'-O4'	-5.54	1.38	1.45
1	AA	104	G	C1'-N9	5.54	1.57	1.48
1	AA	1360	A	P-O5'	5.54	1.65	1.59
1	AA	156	C	C4'-C3'	-5.54	1.47	1.52
1	AA	357	G	C5'-C4'	5.54	1.57	1.51
1	AA	360	G	N3-C4	-5.54	1.31	1.35
1	AA	1145	A	C5-C4	5.54	1.42	1.38
1	AA	1382	C	N1-C6	-5.54	1.33	1.37
4	AD	9	G	C8-N7	5.54	1.34	1.30
25	BA	36	C	P-O5'	5.54	1.65	1.59
26	BB	538	A	C6-N6	5.54	1.38	1.33
26	BB	660	C	C4'-O4'	-5.54	1.38	1.45
26	BB	1509	A	C5-C4	-5.54	1.34	1.38
26	BB	1518	C	C4'-O4'	-5.54	1.38	1.45
26	BB	1612	C	C2'-C1'	5.54	1.59	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1687	G	N9-C4	5.54	1.42	1.38
26	BB	2159	G	C6-O6	-5.54	1.19	1.24
26	BB	2482	A	N9-C4	5.54	1.41	1.37
26	BB	2493	U	C2-O2	5.54	1.27	1.22
26	BB	2797	U	N1-C2	5.54	1.43	1.38
1	AA	376	G	C5'-C4'	5.53	1.57	1.51
1	AA	650	G	N9-C8	-5.53	1.33	1.37
1	AA	869	G	N9-C4	-5.53	1.33	1.38
1	AA	1182	G	O3'-P	5.53	1.67	1.61
1	AA	1415	G	C5-C4	-5.53	1.34	1.38
26	BB	277	G	C4'-O4'	-5.53	1.38	1.45
26	BB	1354	A	O3'-P	5.53	1.67	1.61
26	BB	1393	A	C2-N3	-5.53	1.28	1.33
26	BB	2014	A	N9-C4	-5.53	1.34	1.37
26	BB	2439	A	C4'-O4'	-5.53	1.38	1.45
26	BB	2513	A	O4'-C1'	5.53	1.48	1.41
26	BB	2652	C	C4-C5	5.53	1.47	1.43
1	AA	793	U	C4-C5	5.53	1.48	1.43
1	AA	807	A	O3'-P	-5.53	1.54	1.61
1	AA	872	A	C3'-C2'	5.53	1.59	1.52
2	AB	52	A	C6-N1	-5.53	1.31	1.35
25	BA	101	A	N9-C8	-5.53	1.33	1.37
26	BB	918	A	C5-C4	-5.53	1.34	1.38
26	BB	2045	C	C2-N3	5.53	1.40	1.35
1	AA	340	U	C2'-O2'	5.53	1.48	1.41
1	AA	626	G	N9-C8	-5.53	1.33	1.37
26	BB	880	G	C4'-C3'	5.53	1.59	1.53
26	BB	1096	A	N9-C4	-5.53	1.34	1.37
26	BB	1099	G	C2-N3	5.53	1.37	1.32
26	BB	1326	U	C4-O4	5.53	1.28	1.23
26	BB	1850	G	O3'-P	5.53	1.67	1.61
26	BB	2133	G	N1-C2	5.53	1.42	1.37
26	BB	38	A	O4'-C1'	5.53	1.48	1.41
26	BB	989	G	N1-C2	5.53	1.42	1.37
26	BB	1416	G	P-O5'	5.53	1.65	1.59
26	BB	1514	G	C2-N3	5.53	1.37	1.32
1	AA	420	U	P-O5'	5.53	1.65	1.59
1	AA	897	C	C5-C6	5.53	1.38	1.34
1	AA	918	A	C5-C6	5.53	1.46	1.41
1	AA	1123	U	P-O5'	5.53	1.65	1.59
2	AB	4	G	C4'-O4'	-5.53	1.38	1.45
3	AC	38	G	C2-N3	5.53	1.37	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	AF	166	TRP	CD2-CE2	5.53	1.48	1.41
26	BB	859	G	C6-O6	-5.53	1.19	1.24
1	AA	374	A	O3'-P	5.53	1.67	1.61
1	AA	398	U	C4-C5	5.53	1.48	1.43
1	AA	1213	A	C3'-C2'	-5.53	1.46	1.52
1	AA	1304	G	N3-C4	-5.53	1.31	1.35
1	AA	1338	G	N7-C5	5.53	1.42	1.39
1	AA	1393	U	N1-C6	5.53	1.43	1.38
1	AA	1469	C	C4'-C3'	5.53	1.59	1.53
1	AA	1472	U	C4'-O4'	-5.53	1.38	1.45
26	BB	315	G	N9-C4	-5.53	1.33	1.38
26	BB	1361	G	C2-N2	5.53	1.40	1.34
26	BB	2824	C	C4-N4	5.53	1.39	1.33
1	AA	511	C	C1'-N1	5.52	1.57	1.48
26	BB	488	G	C6-N1	5.52	1.43	1.39
26	BB	813	U	C2'-C1'	5.52	1.59	1.53
26	BB	1198	U	C2'-C1'	5.52	1.59	1.53
26	BB	1460	U	O3'-P	5.52	1.67	1.61
1	AA	1341	U	N3-C4	5.52	1.43	1.38
2	AB	35	C	C4'-O4'	-5.52	1.38	1.45
6	AF	119	ILE	N-CA	5.52	1.57	1.46
26	BB	76	C	C4'-O4'	-5.52	1.38	1.45
26	BB	210	C	N3-C4	-5.52	1.30	1.33
26	BB	251	A	C2-N3	5.52	1.38	1.33
26	BB	775	G	N9-C8	5.52	1.41	1.37
26	BB	1082	U	C2-N3	5.52	1.41	1.37
26	BB	1083	U	C2-N3	5.52	1.41	1.37
26	BB	2806	C	O3'-P	5.52	1.67	1.61
1	AA	495	A	N9-C4	5.52	1.41	1.37
1	AA	1325	C	C4'-O4'	-5.52	1.38	1.45
3	AC	31	U	O5'-C5'	-5.52	1.34	1.42
26	BB	523	C	C4'-O4'	-5.52	1.38	1.45
26	BB	916	G	N7-C5	-5.52	1.35	1.39
26	BB	935	C	C5'-C4'	5.52	1.57	1.51
26	BB	2129	C	N1-C6	5.52	1.40	1.37
1	AA	131	A	N9-C8	5.52	1.42	1.37
1	AA	501	C	P-O5'	5.52	1.65	1.59
1	AA	1044	A	C5'-C4'	5.52	1.57	1.51
1	AA	1251	A	C5-C4	-5.52	1.34	1.38
1	AA	1473	G	C5'-C4'	5.52	1.57	1.51
26	BB	442	G	O4'-C1'	5.52	1.48	1.41
26	BB	1109	C	C2'-O2'	5.52	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1428	C	C1'-N1	5.52	1.57	1.48
48	BX	82	TYR	CE2-CZ	5.52	1.45	1.38
1	AA	31	G	C2'-C1'	5.52	1.59	1.53
1	AA	79	G	N3-C4	5.52	1.39	1.35
1	AA	135	C	C2'-C1'	-5.52	1.47	1.53
1	AA	576	C	O3'-P	-5.52	1.54	1.61
1	AA	1130	A	P-O5'	5.52	1.65	1.59
26	BB	603	A	N7-C5	-5.52	1.35	1.39
26	BB	1172	C	N1-C6	5.52	1.40	1.37
26	BB	1522	A	N3-C4	5.52	1.38	1.34
26	BB	2204	G	N9-C8	-5.52	1.33	1.37
1	AA	485	U	C5-C6	5.52	1.39	1.34
1	AA	793	U	C4'-O4'	-5.52	1.38	1.45
1	AA	1000	A	N3-C4	5.52	1.38	1.34
26	BB	752	A	C5-C4	-5.52	1.34	1.38
26	BB	1891	G	N3-C4	5.52	1.39	1.35
1	AA	1060	U	N1-C2	5.51	1.43	1.38
1	AA	1175	G	C5-C4	5.51	1.42	1.38
1	AA	1271	A	N9-C4	5.51	1.41	1.37
25	BA	104	A	C5-C4	-5.51	1.34	1.38
26	BB	76	C	C5'-C4'	5.51	1.57	1.51
26	BB	371	A	N3-C4	5.51	1.38	1.34
26	BB	1639	C	C4-N4	5.51	1.39	1.33
26	BB	2814	A	N9-C8	-5.51	1.33	1.37
1	AA	321	A	P-O5'	-5.51	1.54	1.59
1	AA	418	C	C2'-C1'	-5.51	1.47	1.53
1	AA	1110	A	C5-C4	5.51	1.42	1.38
26	BB	831	G	C3'-C2'	-5.51	1.46	1.52
26	BB	1085	A	C5-C6	5.51	1.46	1.41
1	AA	10	A	C4'-C3'	-5.51	1.47	1.52
1	AA	163	C	C2-N3	5.51	1.40	1.35
1	AA	556	C	C4-C5	5.51	1.47	1.43
1	AA	792	A	N9-C4	-5.51	1.34	1.37
1	AA	818	G	C2-N3	5.51	1.37	1.32
1	AA	1022	A	C6-N6	5.51	1.38	1.33
26	BB	1214	A	C5-C6	-5.51	1.36	1.41
26	BB	1394	U	C2-N3	5.51	1.41	1.37
26	BB	2570	G	O3'-P	5.51	1.67	1.61
26	BB	2885	G	N9-C8	-5.51	1.33	1.37
1	AA	2	A	N7-C5	5.51	1.42	1.39
1	AA	699	C	O3'-P	-5.51	1.54	1.61
1	AA	846	G	C6-O6	-5.51	1.19	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1430	A	C2-N3	5.51	1.38	1.33
26	BB	225	C	P-O5'	5.51	1.65	1.59
26	BB	484	C	C2-N3	5.51	1.40	1.35
26	BB	505	A	N3-C4	5.51	1.38	1.34
26	BB	766	U	N1-C6	5.51	1.43	1.38
26	BB	1242	U	C4'-O4'	-5.51	1.38	1.45
26	BB	1494	A	C6-N1	-5.51	1.31	1.35
26	BB	1814	G	N7-C5	-5.51	1.35	1.39
26	BB	818	G	P-O5'	5.51	1.65	1.59
26	BB	2297	A	C5-C6	5.51	1.46	1.41
1	AA	46	G	C2-N2	-5.51	1.29	1.34
1	AA	1499	A	C2-N3	5.51	1.38	1.33
1	AA	1536	C	N1-C6	5.51	1.40	1.37
2	AB	61	C	P-O5'	5.51	1.65	1.59
26	BB	176	A	C6-N1	-5.51	1.31	1.35
26	BB	515	A	N9-C4	-5.51	1.34	1.37
26	BB	520	G	P-O5'	5.51	1.65	1.59
26	BB	1212	G	O3'-P	5.51	1.67	1.61
26	BB	2206	C	C4-N4	-5.51	1.28	1.33
26	BB	2222	C	P-O5'	-5.51	1.54	1.59
26	BB	2505	G	C5-C6	5.51	1.47	1.42
26	BB	2866	U	N3-C4	-5.51	1.33	1.38
40	BP	94	TYR	CE1-CZ	5.51	1.45	1.38
1	AA	871	U	C4-C5	5.50	1.48	1.43
25	BA	20	G	P-O5'	5.50	1.65	1.59
26	BB	1454	C	P-O5'	5.50	1.65	1.59
26	BB	1581	G	C2'-C1'	-5.50	1.47	1.53
26	BB	1945	G	C5-C4	-5.50	1.34	1.38
26	BB	2118	U	O3'-P	-5.50	1.54	1.61
26	BB	2158	A	P-O5'	5.50	1.65	1.59
26	BB	2750	A	C4'-C3'	5.50	1.59	1.53
1	AA	954	G	O5'-C5'	-5.50	1.34	1.42
1	AA	1009	U	C3'-C2'	5.50	1.59	1.52
26	BB	1409	U	N1-C6	-5.50	1.32	1.38
26	BB	2197	U	C4-C5	5.50	1.48	1.43
26	BB	2276	G	N1-C2	5.50	1.42	1.37
28	BD	147	PRO	N-CD	-5.50	1.40	1.47
34	BJ	31	GLY	CA-C	5.50	1.60	1.51
1	AA	374	A	N3-C4	5.50	1.38	1.34
1	AA	409	U	C5'-C4'	5.50	1.57	1.51
1	AA	465	A	C5'-C4'	5.50	1.57	1.51
1	AA	670	G	N7-C5	5.50	1.42	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	777	A	C5'-C4'	5.50	1.57	1.51
1	AA	830	G	N9-C8	-5.50	1.33	1.37
10	AJ	124	SER	CB-OG	-5.50	1.35	1.42
26	BB	715	A	C4'-O4'	-5.50	1.38	1.45
26	BB	1086	A	C6-N1	-5.50	1.31	1.35
26	BB	1350	C	N1-C6	-5.50	1.33	1.37
26	BB	1398	C	N1-C6	5.50	1.40	1.37
26	BB	1491	G	C5-C4	-5.50	1.34	1.38
26	BB	1957	C	C5-C6	5.50	1.38	1.34
26	BB	2138	G	P-O5'	-5.50	1.54	1.59
28	BD	150	GLY	N-CA	5.50	1.54	1.46
4	AD	73	A	N9-C4	5.50	1.41	1.37
26	BB	2396	G	C5-C6	5.50	1.47	1.42
1	AA	260	G	C2-N3	5.50	1.37	1.32
1	AA	767	A	N3-C4	5.50	1.38	1.34
1	AA	1119	C	P-O5'	5.50	1.65	1.59
2	AB	63	C	C4-C5	5.50	1.47	1.43
25	BA	83	G	C3'-O3'	5.50	1.49	1.42
26	BB	373	U	C2'-C1'	-5.50	1.47	1.53
26	BB	423	A	C4'-C3'	-5.50	1.47	1.52
26	BB	1362	C	C2-N3	5.50	1.40	1.35
26	BB	1395	A	C2'-C1'	5.50	1.59	1.53
26	BB	1839	G	N3-C4	5.50	1.39	1.35
26	BB	2389	G	N7-C5	-5.50	1.35	1.39
26	BB	2846	G	O4'-C1'	5.50	1.48	1.41
1	AA	326	G	C6-N1	5.50	1.43	1.39
1	AA	432	A	C8-N7	5.50	1.35	1.31
1	AA	624	C	O4'-C1'	5.50	1.48	1.41
1	AA	809	G	C6-N1	5.50	1.43	1.39
1	AA	936	C	N1-C6	5.50	1.40	1.37
1	AA	948	C	C4-C5	5.50	1.47	1.43
1	AA	992	U	C4'-C3'	5.50	1.59	1.53
1	AA	1163	A	C2'-O2'	5.50	1.48	1.41
1	AA	1454	G	O3'-P	-5.50	1.54	1.61
2	AB	27	C	C5'-C4'	5.50	1.57	1.51
26	BB	147	C	N3-C4	5.50	1.37	1.33
26	BB	291	G	C3'-O3'	5.50	1.49	1.42
26	BB	1342	A	C5-C4	-5.50	1.34	1.38
26	BB	1507	C	C5-C6	5.50	1.38	1.34
26	BB	1605	C	C5'-C4'	5.50	1.57	1.51
26	BB	2506	U	C3'-O3'	5.50	1.49	1.42
26	BB	2572	A	C5-C4	5.50	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1361	G	C5-C6	5.50	1.47	1.42
26	BB	1718	G	C6-N1	5.50	1.43	1.39
26	BB	2535	G	C5-C6	5.50	1.47	1.42
1	AA	200	G	N3-C4	5.49	1.39	1.35
1	AA	465	A	N9-C4	5.49	1.41	1.37
26	BB	1105	U	C4-C5	5.49	1.48	1.43
26	BB	1280	G	N3-C4	5.49	1.39	1.35
26	BB	1516	G	N9-C8	5.49	1.41	1.37
26	BB	1570	A	C4'-O4'	-5.49	1.38	1.45
26	BB	1782	U	C2-N3	5.49	1.41	1.37
26	BB	2177	C	C4'-C3'	5.49	1.59	1.53
26	BB	2763	G	N1-C2	5.49	1.42	1.37
26	BB	2900	A	N3-C4	5.49	1.38	1.34
1	AA	41	G	N1-C2	5.49	1.42	1.37
1	AA	335	C	C4-N4	5.49	1.38	1.33
26	BB	716	A	C5-C6	5.49	1.46	1.41
26	BB	1794	A	C4'-O4'	-5.49	1.38	1.45
26	BB	1976	U	C2-N3	5.49	1.41	1.37
26	BB	2116	G	P-O5'	5.49	1.65	1.59
1	AA	740	U	P-O5'	-5.49	1.54	1.59
1	AA	1430	A	N9-C4	5.49	1.41	1.37
25	BA	16	G	N3-C4	5.49	1.39	1.35
26	BB	98	G	C2-N3	5.49	1.37	1.32
26	BB	557	C	P-O5'	5.49	1.65	1.59
26	BB	951	C	C5'-C4'	5.49	1.57	1.51
26	BB	1208	C	C4-C5	-5.49	1.38	1.43
26	BB	1516	G	C5-C6	5.49	1.47	1.42
26	BB	1945	G	C4'-O4'	-5.49	1.38	1.45
26	BB	2246	G	C8-N7	-5.49	1.27	1.30
26	BB	2358	A	C6-N6	5.49	1.38	1.33
26	BB	2438	U	C4'-O4'	-5.49	1.38	1.45
1	AA	457	G	O3'-P	5.49	1.67	1.61
1	AA	992	U	C4-C5	5.49	1.48	1.43
26	BB	598	U	C2-N3	5.49	1.41	1.37
26	BB	696	G	C2-N2	-5.49	1.29	1.34
26	BB	1215	G	C6-N1	-5.49	1.35	1.39
26	BB	1511	G	N7-C5	5.49	1.42	1.39
26	BB	1904	G	N3-C4	5.49	1.39	1.35
26	BB	2187	U	C4-C5	5.49	1.48	1.43
26	BB	2289	G	C2-N2	-5.49	1.29	1.34
26	BB	2627	G	C6-N1	-5.49	1.35	1.39
26	BB	2673	G	N1-C2	5.49	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	235	C	O3'-P	5.49	1.67	1.61
1	AA	642	A	N9-C8	5.49	1.42	1.37
1	AA	1039	G	C5-C6	-5.49	1.36	1.42
26	BB	1896	G	N1-C2	5.49	1.42	1.37
26	BB	2267	A	N1-C2	-5.49	1.29	1.34
1	AA	6	G	C4'-O4'	-5.49	1.38	1.45
1	AA	48	C	C4-C5	5.49	1.47	1.43
1	AA	352	C	C2-O2	-5.49	1.19	1.24
1	AA	487	A	C4'-O4'	-5.49	1.38	1.45
1	AA	801	U	C4-O4	5.49	1.28	1.23
1	AA	1076	U	C4'-C3'	5.49	1.59	1.53
1	AA	1342	C	C2-N3	5.49	1.40	1.35
26	BB	208	C	C2-N3	5.49	1.40	1.35
26	BB	711	G	C2-N3	5.49	1.37	1.32
26	BB	1321	A	O3'-P	5.49	1.67	1.61
26	BB	2192	U	C2-N3	-5.49	1.33	1.37
26	BB	2363	G	N7-C5	-5.49	1.35	1.39
1	AA	692	U	C2-N3	5.48	1.41	1.37
1	AA	883	C	C2-O2	-5.48	1.19	1.24
26	BB	316	C	C4'-C3'	-5.48	1.47	1.52
26	BB	1619	G	N3-C4	-5.48	1.31	1.35
26	BB	2870	C	C5-C6	5.48	1.38	1.34
1	AA	22	G	P-O5'	5.48	1.65	1.59
1	AA	73	C	C4-C5	5.48	1.47	1.43
1	AA	240	G	O3'-P	-5.48	1.54	1.61
1	AA	608	A	C5-C4	-5.48	1.34	1.38
1	AA	674	G	N9-C4	5.48	1.42	1.38
26	BB	83	A	P-O5'	5.48	1.65	1.59
26	BB	171	U	N1-C6	-5.48	1.33	1.38
26	BB	596	U	N1-C6	-5.48	1.33	1.38
26	BB	679	C	C4'-O4'	-5.48	1.38	1.45
26	BB	1498	C	C5'-C4'	5.48	1.57	1.51
26	BB	2848	G	C2'-C1'	5.48	1.59	1.53
1	AA	327	A	O4'-C1'	5.48	1.48	1.41
1	AA	745	G	C4'-O4'	-5.48	1.38	1.45
1	AA	1180	A	N1-C2	-5.48	1.29	1.34
1	AA	1215	G	N3-C4	5.48	1.39	1.35
1	AA	1325	C	N1-C6	5.48	1.40	1.37
26	BB	250	G	C2-N2	-5.48	1.29	1.34
26	BB	670	A	N7-C5	5.48	1.42	1.39
26	BB	737	C	N1-C6	5.48	1.40	1.37
26	BB	758	C	N1-C6	5.48	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	921	C	C2-N3	5.48	1.40	1.35
26	BB	1156	A	P-O5'	5.48	1.65	1.59
26	BB	1475	G	C3'-C2'	-5.48	1.46	1.52
26	BB	1475	G	C6-N1	5.48	1.43	1.39
26	BB	1510	G	C2'-C1'	5.48	1.59	1.53
26	BB	2149	U	C2'-C1'	5.48	1.59	1.53
26	BB	2581	G	C5-C6	5.48	1.47	1.42
26	BB	190	A	C5-C4	-5.48	1.34	1.38
26	BB	1095	A	N1-C2	5.48	1.39	1.34
26	BB	1775	U	C5-C6	5.48	1.39	1.34
26	BB	2275	C	C2-N3	5.48	1.40	1.35
47	BW	29	SER	CB-OG	5.48	1.49	1.42
1	AA	792	A	C2'-C1'	5.48	1.59	1.53
1	AA	1321	U	O3'-P	-5.48	1.54	1.61
1	AA	1365	G	N7-C5	-5.48	1.35	1.39
26	BB	785	G	C4'-O4'	-5.48	1.38	1.45
26	BB	829	A	O3'-P	5.48	1.67	1.61
26	BB	1028	A	O5'-C5'	-5.48	1.34	1.42
26	BB	1845	G	O4'-C1'	5.48	1.48	1.41
26	BB	2159	G	C8-N7	-5.48	1.27	1.30
1	AA	220	G	N7-C5	5.47	1.42	1.39
1	AA	411	A	N1-C2	5.47	1.39	1.34
1	AA	1196	A	N1-C2	-5.47	1.29	1.34
4	AD	50	G	N3-C4	5.47	1.39	1.35
26	BB	179	C	N1-C6	5.47	1.40	1.37
26	BB	399	U	O3'-P	5.47	1.67	1.61
26	BB	505	A	N1-C2	-5.47	1.29	1.34
26	BB	1052	C	N1-C6	5.47	1.40	1.37
1	AA	667	G	N9-C4	5.47	1.42	1.38
1	AA	1065	U	C4'-O4'	-5.47	1.38	1.45
25	BA	10	G	C5-C4	-5.47	1.34	1.38
26	BB	149	A	N3-C4	5.47	1.38	1.34
26	BB	270	A	C4'-O4'	-5.47	1.38	1.45
26	BB	1003	G	C5-C4	-5.47	1.34	1.38
26	BB	1099	G	C3'-C2'	-5.47	1.46	1.52
26	BB	1312	U	C2-N3	-5.47	1.33	1.37
26	BB	1383	A	N9-C4	5.47	1.41	1.37
26	BB	1619	G	C2-N3	5.47	1.37	1.32
26	BB	248	G	N7-C5	5.47	1.42	1.39
26	BB	1501	G	N9-C8	5.47	1.41	1.37
26	BB	1639	C	O3'-P	5.47	1.67	1.61
1	AA	428	G	C5-C6	5.47	1.47	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	633	G	N7-C5	5.47	1.42	1.39
1	AA	1398	A	C2-N3	-5.47	1.28	1.33
1	AA	1538	C	P-O5'	-5.47	1.54	1.59
3	AC	48	C	C1'-N1	5.47	1.56	1.48
26	BB	342	A	C3'-C2'	-5.47	1.46	1.52
26	BB	1295	C	N1-C2	-5.47	1.34	1.40
26	BB	1825	U	C2'-C1'	5.47	1.59	1.53
1	AA	542	G	C3'-C2'	5.47	1.58	1.52
1	AA	1287	A	N7-C5	-5.47	1.35	1.39
1	AA	1517	G	C2-N2	-5.47	1.29	1.34
26	BB	149	A	C8-N7	-5.47	1.27	1.31
26	BB	1968	G	C5'-C4'	5.47	1.57	1.51
1	AA	2	A	C8-N7	-5.47	1.27	1.31
1	AA	324	G	N7-C5	5.47	1.42	1.39
1	AA	328	C	C2-O2	-5.47	1.19	1.24
1	AA	441	A	C2'-C1'	-5.47	1.47	1.53
1	AA	866	C	C4'-O4'	-5.47	1.38	1.45
1	AA	1010	U	C4'-C3'	-5.47	1.47	1.52
1	AA	1187	G	C4'-C3'	-5.47	1.47	1.52
1	AA	1460	C	N3-C4	5.47	1.37	1.33
26	BB	1	G	N7-C5	5.47	1.42	1.39
26	BB	382	A	C6-N1	5.47	1.39	1.35
26	BB	448	U	C5'-C4'	5.47	1.57	1.51
26	BB	706	A	C5'-C4'	5.47	1.57	1.51
26	BB	799	G	N9-C4	-5.47	1.33	1.38
26	BB	859	G	C3'-C2'	5.47	1.58	1.52
26	BB	1345	C	O3'-P	5.47	1.67	1.61
26	BB	2295	C	C3'-O3'	5.47	1.49	1.42
1	AA	1	A	O3'-P	5.46	1.67	1.61
4	AD	39	A	N3-C4	-5.46	1.31	1.34
22	AV	79	TYR	CE2-CZ	5.46	1.45	1.38
26	BB	1758	U	C4'-O4'	-5.46	1.38	1.45
26	BB	2439	A	C5-C4	5.46	1.42	1.38
26	BB	2473	U	C2'-C1'	5.46	1.59	1.53
1	AA	16	A	C5-C4	-5.46	1.34	1.38
1	AA	478	A	C6-N1	-5.46	1.31	1.35
1	AA	630	A	C5-C4	-5.46	1.34	1.38
1	AA	943	U	C2'-C1'	-5.46	1.47	1.53
1	AA	991	U	P-O5'	5.46	1.65	1.59
1	AA	1044	A	C4'-O4'	-5.46	1.38	1.45
1	AA	1458	G	N7-C5	5.46	1.42	1.39
6	AF	109	GLU	CD-OE2	-5.46	1.19	1.25

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	47	C	C5-C6	5.46	1.38	1.34
26	BB	148	U	O4'-C1'	-5.46	1.34	1.41
26	BB	1302	A	P-O5'	5.46	1.65	1.59
26	BB	1572	A	N3-C4	-5.46	1.31	1.34
26	BB	1850	G	P-O5'	5.46	1.65	1.59
26	BB	2255	G	N7-C5	-5.46	1.35	1.39
26	BB	2463	C	O4'-C1'	-5.46	1.34	1.41
26	BB	2534	A	N7-C5	5.46	1.42	1.39
1	AA	376	G	C3'-C2'	5.46	1.58	1.52
1	AA	539	A	O4'-C1'	-5.46	1.34	1.41
1	AA	1001	C	C2-O2	-5.46	1.19	1.24
1	AA	1178	G	C2-N3	5.46	1.37	1.32
1	AA	1413	A	C4'-C3'	5.46	1.59	1.53
26	BB	262	A	C4'-O4'	-5.46	1.38	1.45
26	BB	696	G	C2'-O2'	5.46	1.48	1.41
26	BB	699	A	C2'-C1'	5.46	1.59	1.53
26	BB	1591	A	C4'-C3'	5.46	1.59	1.53
26	BB	2025	C	C5'-C4'	5.46	1.57	1.51
26	BB	2411	A	C8-N7	-5.46	1.27	1.31
26	BB	2533	U	C4'-C3'	5.46	1.59	1.53
1	AA	202	G	P-O5'	5.46	1.65	1.59
1	AA	413	G	C2'-O2'	5.46	1.48	1.41
26	BB	2394	C	C5-C6	5.46	1.38	1.34
26	BB	2571	U	N1-C6	5.46	1.42	1.38
1	AA	262	A	C6-N6	5.46	1.38	1.33
1	AA	1033	G	C2'-O2'	5.46	1.48	1.41
1	AA	1383	C	N3-C4	-5.46	1.30	1.33
26	BB	362	A	C6-N1	-5.46	1.31	1.35
26	BB	1485	U	O3'-P	5.46	1.67	1.61
26	BB	1575	C	C5'-C4'	5.46	1.57	1.51
26	BB	2155	U	C4'-O4'	-5.46	1.38	1.45
26	BB	2507	C	N3-C4	5.46	1.37	1.33
1	AA	416	G	C6-O6	-5.46	1.19	1.24
1	AA	483	C	C2-N3	5.46	1.40	1.35
1	AA	579	A	C6-N1	5.46	1.39	1.35
1	AA	1142	G	C2'-C1'	-5.46	1.47	1.53
1	AA	1308	U	C4'-O4'	-5.46	1.38	1.45
25	BA	5	U	O4'-C1'	5.46	1.48	1.41
26	BB	54	G	C8-N7	-5.46	1.27	1.30
26	BB	804	A	C5-C4	-5.46	1.34	1.38
26	BB	1270	C	C4-C5	5.46	1.47	1.43
26	BB	1808	A	N3-C4	5.46	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2651	C	P-O5'	5.46	1.65	1.59
26	BB	2692	G	N9-C4	5.46	1.42	1.38
1	AA	180	U	C4'-C3'	5.46	1.59	1.53
1	AA	345	C	C5-C6	5.46	1.38	1.34
1	AA	818	G	C4'-O4'	-5.46	1.38	1.45
26	BB	537	G	P-O5'	5.46	1.65	1.59
26	BB	2242	G	N1-C2	5.46	1.42	1.37
26	BB	2626	C	C2'-C1'	5.46	1.59	1.53
1	AA	287	U	C5'-C4'	5.45	1.57	1.51
1	AA	1379	G	O4'-C1'	5.45	1.48	1.41
4	AD	2	G	P-O5'	5.45	1.65	1.59
25	BA	91	C	N3-C4	5.45	1.37	1.33
26	BB	132	G	C6-O6	5.45	1.29	1.24
26	BB	263	G	C4'-O4'	-5.45	1.38	1.45
26	BB	1699	G	C6-O6	5.45	1.29	1.24
26	BB	2444	G	P-O5'	5.45	1.65	1.59
26	BB	2587	A	C5-C6	5.45	1.46	1.41
1	AA	1021	A	C5-C6	5.45	1.46	1.41
1	AA	1148	U	C2-O2	5.45	1.27	1.22
26	BB	104	A	N9-C8	5.45	1.42	1.37
26	BB	710	U	N3-C4	5.45	1.43	1.38
26	BB	2718	G	C6-O6	-5.45	1.19	1.24
1	AA	68	G	P-O5'	5.45	1.65	1.59
1	AA	418	C	O4'-C1'	5.45	1.48	1.41
1	AA	1240	U	O3'-P	5.45	1.67	1.61
25	BA	67	G	N3-C4	5.45	1.39	1.35
26	BB	1406	U	C5'-C4'	5.45	1.57	1.51
26	BB	1897	G	N3-C4	5.45	1.39	1.35
26	BB	2011	U	N1-C2	5.45	1.43	1.38
1	AA	1387	G	C5'-C4'	5.45	1.57	1.51
1	AA	1493	A	C5-C4	-5.45	1.34	1.38
26	BB	28	A	C6-N1	-5.45	1.31	1.35
26	BB	445	C	C2'-C1'	5.45	1.59	1.53
26	BB	802	A	C4'-O4'	-5.45	1.38	1.45
26	BB	941	A	N9-C4	5.45	1.41	1.37
26	BB	1050	A	C6-N1	-5.45	1.31	1.35
26	BB	1120	G	C2'-O2'	5.45	1.48	1.41
26	BB	1165	A	C4'-O4'	-5.45	1.38	1.45
26	BB	1876	A	C2-N3	5.45	1.38	1.33
26	BB	2690	U	P-O5'	5.45	1.65	1.59
26	BB	2752	C	N3-C4	-5.45	1.30	1.33
1	AA	395	C	C4'-O4'	-5.45	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	569	C	O3'-P	5.45	1.67	1.61
1	AA	959	A	C8-N7	-5.45	1.27	1.31
3	AC	23	C	N1-C6	5.45	1.40	1.37
4	AD	14	A	N3-C4	5.45	1.38	1.34
26	BB	430	A	C2'-C1'	5.45	1.59	1.53
26	BB	2391	G	C2'-C1'	5.45	1.59	1.53
26	BB	2654	A	N9-C4	5.45	1.41	1.37
1	AA	1326	U	N3-C4	5.45	1.43	1.38
26	BB	70	G	C8-N7	-5.45	1.27	1.30
26	BB	894	U	C4'-C3'	-5.45	1.47	1.52
26	BB	911	A	N9-C4	-5.45	1.34	1.37
26	BB	948	C	O4'-C1'	5.45	1.48	1.41
26	BB	1204	A	C4'-C3'	-5.45	1.47	1.52
26	BB	1252	G	C2-N2	5.45	1.40	1.34
26	BB	1518	C	C5-C6	5.45	1.38	1.34
26	BB	1613	G	C5'-C4'	5.45	1.57	1.51
26	BB	2444	G	C2-N3	5.45	1.37	1.32
26	BB	2623	G	C2-N3	5.45	1.37	1.32
1	AA	1196	A	N9-C8	-5.44	1.33	1.37
26	BB	117	G	C2'-C1'	5.44	1.59	1.53
26	BB	1082	U	C3'-O3'	-5.44	1.34	1.42
26	BB	2021	C	N3-C4	5.44	1.37	1.33
26	BB	2663	G	O3'-P	5.44	1.67	1.61
26	BB	2892	G	N7-C5	5.44	1.42	1.39
1	AA	25	C	C4-C5	5.44	1.47	1.43
1	AA	381	C	N1-C2	5.44	1.45	1.40
1	AA	553	A	N9-C4	-5.44	1.34	1.37
25	BA	6	G	O3'-P	5.44	1.67	1.61
26	BB	790	U	O3'-P	5.44	1.67	1.61
26	BB	1297	C	C5'-C4'	5.44	1.57	1.51
26	BB	1394	U	C5-C6	5.44	1.39	1.34
26	BB	1508	A	C2'-O2'	5.44	1.48	1.41
26	BB	2888	C	C2'-O2'	5.44	1.48	1.41
1	AA	570	G	C6-N1	5.44	1.43	1.39
1	AA	809	G	N7-C5	-5.44	1.35	1.39
1	AA	851	G	P-O5'	5.44	1.65	1.59
1	AA	933	G	C2'-C1'	5.44	1.59	1.53
1	AA	1049	U	C5'-C4'	-5.44	1.44	1.51
4	AD	75	C	C3'-O3'	-5.44	1.34	1.42
26	BB	575	A	C6-N1	5.44	1.39	1.35
26	BB	992	C	O5'-C5'	-5.44	1.34	1.42
26	BB	1052	C	N1-C2	5.44	1.45	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1100	C	C2-O2	-5.44	1.19	1.24
26	BB	1286	A	O3'-P	5.44	1.67	1.61
26	BB	1350	C	N3-C4	5.44	1.37	1.33
26	BB	1456	G	C5'-C4'	5.44	1.57	1.51
26	BB	1781	U	C4'-C3'	5.44	1.59	1.53
26	BB	2181	U	N1-C6	-5.44	1.33	1.38
26	BB	2574	G	N1-C2	5.44	1.42	1.37
26	BB	2851	A	O3'-P	5.44	1.67	1.61
1	AA	1033	G	N9-C8	5.44	1.41	1.37
26	BB	377	G	N3-C4	5.44	1.39	1.35
26	BB	2123	G	N7-C5	5.44	1.42	1.39
26	BB	2635	A	N9-C4	5.44	1.41	1.37
1	AA	1297	G	C5'-C4'	5.44	1.57	1.51
1	AA	1500	A	C4'-O4'	-5.44	1.38	1.45
26	BB	273	G	C5-C4	-5.44	1.34	1.38
26	BB	296	U	O4'-C1'	5.44	1.48	1.41
26	BB	643	A	N3-C4	5.44	1.38	1.34
26	BB	1383	A	N1-C2	-5.44	1.29	1.34
26	BB	1386	C	C4'-O4'	-5.44	1.38	1.45
26	BB	1995	U	C2-N3	5.44	1.41	1.37
26	BB	2218	G	N9-C8	-5.44	1.34	1.37
30	BF	16	GLU	CB-CG	5.44	1.62	1.52
47	BW	93	ARG	NE-CZ	5.44	1.40	1.33
1	AA	409	U	P-O5'	5.44	1.65	1.59
1	AA	482	A	C6-N6	5.44	1.38	1.33
1	AA	1269	A	N3-C4	5.44	1.38	1.34
1	AA	1422	G	C3'-O3'	5.44	1.49	1.42
26	BB	1511	G	O3'-P	5.44	1.67	1.61
26	BB	1696	G	C2'-C1'	5.44	1.59	1.53
26	BB	1722	A	O3'-P	5.44	1.67	1.61
26	BB	1745	A	C2-N3	-5.44	1.28	1.33
26	BB	1848	A	O5'-C5'	-5.44	1.34	1.42
26	BB	2552	OMU	O3'-P	5.44	1.67	1.61
26	BB	2670	A	C5-C6	-5.44	1.36	1.41
1	AA	79	G	P-O5'	5.43	1.65	1.59
1	AA	159	G	C6-N1	5.43	1.43	1.39
1	AA	215	C	C3'-C2'	5.43	1.58	1.52
1	AA	340	U	C5'-C4'	5.43	1.57	1.51
1	AA	1405	G	C4'-O4'	-5.43	1.38	1.45
25	BA	70	C	N1-C6	5.43	1.40	1.37
26	BB	126	A	N3-C4	5.43	1.38	1.34
26	BB	350	G	C5-C4	5.43	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	387	U	C4'-O4'	-5.43	1.38	1.45
26	BB	543	G	C6-O6	-5.43	1.19	1.24
26	BB	862	G	O4'-C1'	-5.43	1.34	1.41
26	BB	922	C	N1-C2	5.43	1.45	1.40
26	BB	1049	C	C2'-C1'	5.43	1.59	1.53
26	BB	1741	C	P-O5'	5.43	1.65	1.59
26	BB	1768	C	N1-C6	5.43	1.40	1.37
26	BB	2297	A	C5'-C4'	5.43	1.57	1.51
26	BB	2488	G	C4'-O4'	-5.43	1.38	1.45
26	BB	2528	U	C3'-C2'	5.43	1.58	1.52
26	BB	2804	U	C4'-C3'	-5.43	1.47	1.52
26	BB	2829	A	C2'-C1'	5.43	1.59	1.53
1	AA	271	C	P-O5'	5.43	1.65	1.59
1	AA	472	U	C4-C5	5.43	1.48	1.43
1	AA	610	U	P-O5'	5.43	1.65	1.59
25	BA	26	C	O3'-P	-5.43	1.54	1.61
25	BA	104	A	N9-C8	5.43	1.42	1.37
26	BB	34	U	N1-C6	-5.43	1.33	1.38
26	BB	36	G	C5-C4	5.43	1.42	1.38
26	BB	449	A	N3-C4	-5.43	1.31	1.34
26	BB	1525	A	C6-N1	5.43	1.39	1.35
26	BB	1608	A	N7-C5	5.43	1.42	1.39
1	AA	193	C	N3-C4	5.43	1.37	1.33
1	AA	1392	G	N9-C8	5.43	1.41	1.37
25	BA	118	C	C4'-C3'	5.43	1.59	1.53
26	BB	46	G	C5'-C4'	5.43	1.57	1.51
26	BB	368	A	C5'-C4'	5.43	1.57	1.51
26	BB	996	A	C6-N1	-5.43	1.31	1.35
26	BB	2344	U	C5'-C4'	5.43	1.57	1.51
42	BR	21	PRO	N-CD	-5.43	1.40	1.47
1	AA	1405	G	C5-C6	5.43	1.47	1.42
1	AA	1488	G	N3-C4	-5.43	1.31	1.35
26	BB	779	U	N3-C4	5.43	1.43	1.38
26	BB	1069	A	N1-C2	-5.43	1.29	1.34
26	BB	1651	G	O3'-P	5.43	1.67	1.61
26	BB	1759	A	C2'-O2'	-5.43	1.34	1.41
2	AB	74	C	P-O5'	5.43	1.65	1.59
6	AF	142	ARG	CZ-NH2	5.43	1.40	1.33
26	BB	205	G	C2-N2	-5.43	1.29	1.34
26	BB	1413	A	C5-C6	5.43	1.46	1.41
28	BD	208	GLY	CA-C	5.43	1.60	1.51
39	BO	47	GLU	CG-CD	5.43	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	29	U	C3'-O3'	5.43	1.49	1.42
1	AA	758	C	C4-C5	5.43	1.47	1.43
1	AA	1437	A	C8-N7	-5.43	1.27	1.31
25	BA	45	A	P-O5'	5.43	1.65	1.59
26	BB	8	C	C4'-C3'	-5.43	1.47	1.52
26	BB	607	U	N1-C6	5.43	1.42	1.38
26	BB	891	G	N7-C5	5.43	1.42	1.39
26	BB	1285	A	C2'-C1'	5.43	1.59	1.53
26	BB	2232	C	C2-N3	5.43	1.40	1.35
26	BB	2270	A	N1-C2	-5.43	1.29	1.34
26	BB	2283	C	C5'-C4'	5.43	1.57	1.51
1	AA	103	U	C4'-O4'	-5.42	1.38	1.45
1	AA	107	G	C2'-C1'	5.42	1.59	1.53
1	AA	284	C	C4-N4	-5.42	1.29	1.33
1	AA	345	C	C4-C5	5.42	1.47	1.43
1	AA	726	C	C4'-O4'	-5.42	1.38	1.45
1	AA	1397	C	P-O5'	5.42	1.65	1.59
26	BB	32	C	O3'-P	5.42	1.67	1.61
26	BB	827	U	P-O5'	5.42	1.65	1.59
26	BB	1255	U	O3'-P	5.42	1.67	1.61
26	BB	2008	C	P-O5'	5.42	1.65	1.59
26	BB	2178	C	N1-C6	-5.42	1.33	1.37
26	BB	2187	U	N1-C2	5.42	1.43	1.38
1	AA	650	G	N3-C4	5.42	1.39	1.35
1	AA	311	C	C2'-O2'	5.42	1.48	1.41
1	AA	742	G	C5-C4	-5.42	1.34	1.38
1	AA	1363	A	C5-C6	5.42	1.46	1.41
5	AE	109	SER	CB-OG	-5.42	1.35	1.42
26	BB	147	C	C4'-O4'	-5.42	1.38	1.45
26	BB	478	A	C2'-C1'	-5.42	1.47	1.53
26	BB	777	G	C6-N1	5.42	1.43	1.39
26	BB	1432	G	C2-N3	5.42	1.37	1.32
26	BB	1665	A	C3'-C2'	-5.42	1.46	1.52
26	BB	1855	U	C4-C5	5.42	1.48	1.43
26	BB	2175	C	C4'-O4'	-5.42	1.38	1.45
26	BB	2506	U	P-O5'	5.42	1.65	1.59
26	BB	2820	A	C6-N1	5.42	1.39	1.35
31	BG	64	PRO	N-CD	-5.42	1.40	1.47
26	BB	537	G	C6-N1	5.42	1.43	1.39
26	BB	806	C	C5-C6	5.42	1.38	1.34
26	BB	1059	G	N3-C4	5.42	1.39	1.35
26	BB	1500	G	O3'-P	5.42	1.67	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2412	A	C8-N7	-5.42	1.27	1.31
26	BB	2508	G	C4'-O4'	-5.42	1.38	1.45
26	BB	2540	C	C3'-C2'	-5.42	1.46	1.52
1	AA	260	G	O3'-P	-5.42	1.54	1.61
1	AA	290	C	C5'-C4'	5.42	1.57	1.51
1	AA	918	A	C8-N7	-5.42	1.27	1.31
1	AA	935	A	C5-C4	-5.42	1.34	1.38
1	AA	1015	G	C2'-C1'	-5.42	1.47	1.53
1	AA	1386	G	C2-N3	5.42	1.37	1.32
1	AA	1438	G	C8-N7	5.42	1.34	1.30
26	BB	250	G	O3'-P	-5.42	1.54	1.61
26	BB	918	A	N9-C4	-5.42	1.34	1.37
26	BB	1999	C	C4-N4	5.42	1.38	1.33
26	BB	2035	G	C2-N3	5.42	1.37	1.32
26	BB	2205	A	N7-C5	-5.42	1.35	1.39
26	BB	2589	A	N3-C4	5.42	1.38	1.34
26	BB	2829	A	C4'-C3'	5.42	1.59	1.53
1	AA	410	G	P-O5'	5.42	1.65	1.59
1	AA	814	A	C1'-N9	5.42	1.56	1.48
1	AA	1024	G	C5-C4	-5.42	1.34	1.38
1	AA	1097	C	O3'-P	5.42	1.67	1.61
1	AA	1489	G	O3'-P	5.42	1.67	1.61
1	AA	1514	G	C5'-C4'	5.42	1.57	1.51
25	BA	50	A	N3-C4	5.42	1.38	1.34
26	BB	1478	G	C2-N3	5.42	1.37	1.32
26	BB	1568	G	N3-C4	-5.42	1.31	1.35
26	BB	2096	C	N3-C4	5.42	1.37	1.33
1	AA	801	U	O3'-P	5.42	1.67	1.61
1	AA	926	G	N1-C2	5.42	1.42	1.37
26	BB	1753	G	C2-N2	-5.42	1.29	1.34
26	BB	2164	C	N3-C4	-5.42	1.30	1.33
1	AA	61	G	O5'-C5'	-5.41	1.34	1.42
1	AA	534	U	C4'-C3'	5.41	1.59	1.53
1	AA	1308	U	C2-N3	-5.41	1.33	1.37
26	BB	326	G	P-O5'	5.41	1.65	1.59
26	BB	948	C	P-O5'	5.41	1.65	1.59
26	BB	1268	A	C5-C4	-5.41	1.34	1.38
26	BB	2082	A	C5-C4	-5.41	1.34	1.38
26	BB	2432	A	N3-C4	5.41	1.38	1.34
1	AA	500	G	N7-C5	-5.41	1.36	1.39
26	BB	309	A	P-O5'	5.41	1.65	1.59
26	BB	316	C	C4-C5	5.41	1.47	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	271	C	C2'-C1'	-5.41	1.47	1.53
1	AA	606	G	N9-C4	-5.41	1.33	1.38
1	AA	870	U	C2-N3	5.41	1.41	1.37
1	AA	887	G	O3'-P	5.41	1.67	1.61
26	BB	225	C	C4'-O4'	-5.41	1.38	1.45
26	BB	577	G	N1-C2	5.41	1.42	1.37
26	BB	603	A	N3-C4	5.41	1.38	1.34
26	BB	933	A	C2'-O2'	5.41	1.48	1.41
26	BB	1363	C	C2-O2	-5.41	1.19	1.24
26	BB	1948	G	O3'-P	5.41	1.67	1.61
26	BB	2167	U	C4'-O4'	-5.41	1.38	1.45
26	BB	2323	G	C6-O6	-5.41	1.19	1.24
26	BB	2565	A	O3'-P	5.41	1.67	1.61
26	BB	2715	C	C5-C6	5.41	1.38	1.34
1	AA	1181	G	C2-N3	5.41	1.37	1.32
1	AA	1261	A	C6-N1	5.41	1.39	1.35
3	AC	26	U	C5'-C4'	5.41	1.57	1.51
4	AD	39	A	C6-N6	-5.41	1.29	1.33
26	BB	340	A	C2-N3	5.41	1.38	1.33
26	BB	371	A	N9-C4	-5.41	1.34	1.37
26	BB	602	A	C8-N7	-5.41	1.27	1.31
26	BB	653	U	C4'-O4'	-5.41	1.38	1.45
26	BB	961	C	C5'-C4'	5.41	1.57	1.51
26	BB	1905	C	N1-C2	5.41	1.45	1.40
26	BB	2325	G	C6-N1	-5.41	1.35	1.39
26	BB	2454	G	C4'-O4'	-5.41	1.38	1.45
1	AA	1511	G	O4'-C1'	5.41	1.48	1.41
26	BB	74	A	N3-C4	5.41	1.38	1.34
26	BB	2189	U	N3-C4	5.41	1.43	1.38
1	AA	53	A	N9-C8	5.41	1.42	1.37
1	AA	290	C	P-O5'	5.41	1.65	1.59
1	AA	530	G	N1-C2	5.41	1.42	1.37
1	AA	923	A	C3'-C2'	5.41	1.58	1.52
1	AA	962	C	C4-C5	5.41	1.47	1.43
1	AA	1012	A	N9-C4	5.41	1.41	1.37
1	AA	1517	G	C2'-O2'	5.41	1.48	1.41
3	AC	22	G	P-O5'	5.41	1.65	1.59
26	BB	151	C	C4'-O4'	-5.41	1.38	1.45
26	BB	206	U	C4-C5	5.41	1.48	1.43
26	BB	811	U	O4'-C1'	5.41	1.48	1.41
26	BB	2079	U	N1-C6	5.41	1.42	1.38
26	BB	2337	G	C8-N7	-5.41	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2521	C	C4'-C3'	-5.41	1.47	1.52
1	AA	57	G	C5-C4	-5.40	1.34	1.38
1	AA	174	A	C8-N7	-5.40	1.27	1.31
1	AA	791	G	C8-N7	-5.40	1.27	1.30
26	BB	198	C	C5'-C4'	5.40	1.57	1.51
26	BB	1780	A	C5-C4	5.40	1.42	1.38
26	BB	1861	G	C5-C6	5.40	1.47	1.42
44	BT	2	TYR	CG-CD2	5.40	1.46	1.39
1	AA	130	A	P-O5'	5.40	1.65	1.59
1	AA	505	G	N1-C2	5.40	1.42	1.37
1	AA	586	C	C5-C6	5.40	1.38	1.34
1	AA	1000	A	C2-N3	5.40	1.38	1.33
1	AA	1222	G	C2-N3	5.40	1.37	1.32
26	BB	965	C	C3'-C2'	5.40	1.58	1.52
26	BB	1278	C	N3-C4	5.40	1.37	1.33
26	BB	1599	U	C4'-O4'	-5.40	1.38	1.45
26	BB	1869	G	C4'-O4'	-5.40	1.38	1.45
26	BB	2110	G	C8-N7	-5.40	1.27	1.30
26	BB	2287	A	C3'-O3'	5.40	1.49	1.42
26	BB	2586	U	N1-C6	-5.40	1.33	1.38
26	BB	2719	G	C5'-C4'	5.40	1.57	1.51
1	AA	19	A	N7-C5	5.40	1.42	1.39
1	AA	271	C	C2-N3	-5.40	1.31	1.35
1	AA	889	A	C4'-C3'	-5.40	1.47	1.52
1	AA	964	A	N9-C4	-5.40	1.34	1.37
1	AA	1061	G	P-O5'	5.40	1.65	1.59
1	AA	1111	A	C4'-C3'	5.40	1.59	1.53
25	BA	103	U	N1-C2	5.40	1.43	1.38
26	BB	192	C	P-O5'	5.40	1.65	1.59
26	BB	260	G	C3'-C2'	-5.40	1.46	1.52
26	BB	956	G	N9-C4	-5.40	1.33	1.38
26	BB	1241	A	C3'-C2'	-5.40	1.46	1.52
26	BB	1367	A	N3-C4	-5.40	1.31	1.34
26	BB	1465	G	P-O5'	-5.40	1.54	1.59
26	BB	2408	U	C5-C6	5.40	1.39	1.34
26	BB	2875	C	O3'-P	5.40	1.67	1.61
1	AA	1145	A	N7-C5	-5.40	1.36	1.39
26	BB	91	A	N3-C4	5.40	1.38	1.34
26	BB	311	A	N1-C2	-5.40	1.29	1.34
26	BB	2649	C	C2-N3	-5.40	1.31	1.35
1	AA	297	G	P-O5'	5.40	1.65	1.59
1	AA	376	G	N7-C5	5.40	1.42	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	773	G	C2'-C1'	5.40	1.59	1.53
1	AA	1389	C	P-O5'	5.40	1.65	1.59
1	AA	1506	U	C3'-C2'	5.40	1.58	1.52
17	AQ	100	TRP	CD2-CE2	5.40	1.47	1.41
25	BA	89	U	N1-C2	5.40	1.43	1.38
25	BA	97	C	C2-N3	5.40	1.40	1.35
25	BA	104	A	O3'-P	5.40	1.67	1.61
26	BB	165	A	N3-C4	-5.40	1.31	1.34
26	BB	1069	A	C6-N1	5.40	1.39	1.35
26	BB	1177	G	O3'-P	5.40	1.67	1.61
26	BB	1652	A	C2'-O2'	-5.40	1.34	1.41
26	BB	2081	U	P-O5'	5.40	1.65	1.59
26	BB	2098	U	N3-C4	5.40	1.43	1.38
1	AA	114	U	C4'-O4'	-5.40	1.38	1.45
26	BB	205	G	N9-C8	5.40	1.41	1.37
26	BB	1364	G	C6-N1	5.40	1.43	1.39
1	AA	107	G	C2-N3	5.39	1.37	1.32
1	AA	619	U	C2-O2	5.39	1.27	1.22
1	AA	621	A	C4'-O4'	-5.39	1.38	1.45
1	AA	716	A	C4'-O4'	-5.39	1.38	1.45
1	AA	726	C	C5'-C4'	5.39	1.57	1.51
1	AA	830	G	N1-C2	5.39	1.42	1.37
1	AA	1525	G	N7-C5	5.39	1.42	1.39
3	AC	18	A	N9-C4	5.39	1.41	1.37
26	BB	582	A	C4'-O4'	-5.39	1.38	1.45
26	BB	623	C	P-O5'	-5.39	1.54	1.59
26	BB	793	A	N3-C4	5.39	1.38	1.34
26	BB	1121	C	C2'-O2'	-5.39	1.34	1.41
26	BB	1228	G	C2-N3	5.39	1.37	1.32
26	BB	1530	G	C2'-C1'	5.39	1.59	1.53
26	BB	2037	A	N3-C4	-5.39	1.31	1.34
1	AA	526	C	N3-C4	5.39	1.37	1.33
1	AA	890	G	C5'-C4'	5.39	1.57	1.51
1	AA	1061	G	C2-N2	5.39	1.40	1.34
1	AA	1368	A	C5-C6	-5.39	1.36	1.41
1	AA	1479	C	C4-C5	5.39	1.47	1.43
26	BB	122	G	N7-C5	-5.39	1.36	1.39
26	BB	620	G	C6-N1	5.39	1.43	1.39
26	BB	869	G	C8-N7	5.39	1.34	1.30
26	BB	1349	C	C5'-C4'	5.39	1.57	1.51
26	BB	2066	C	C2'-O2'	-5.39	1.34	1.41
26	BB	2315	G	N7-C5	5.39	1.42	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2376	A	N3-C4	5.39	1.38	1.34
26	BB	2709	G	N3-C4	5.39	1.39	1.35
26	BB	2867	G	C4'-O4'	-5.39	1.38	1.45
45	BU	8	ARG	CA-CB	5.39	1.65	1.53
1	AA	1228	C	N1-C6	-5.39	1.33	1.37
26	BB	790	U	N1-C6	5.39	1.42	1.38
26	BB	1438	U	N3-C4	5.39	1.43	1.38
26	BB	2181	U	N1-C2	5.39	1.43	1.38
26	BB	2490	G	O3'-P	5.39	1.67	1.61
26	BB	2736	A	O3'-P	5.39	1.67	1.61
1	AA	102	G	C6-O6	-5.39	1.19	1.24
1	AA	481	G	C6-N1	5.39	1.43	1.39
3	AC	14	G	C6-O6	-5.39	1.19	1.24
7	AG	75	TYR	CE2-CZ	5.39	1.45	1.38
25	BA	24	G	C5-C4	5.39	1.42	1.38
25	BA	100	G	N1-C2	5.39	1.42	1.37
26	BB	114	U	C5'-C4'	5.39	1.57	1.51
26	BB	374	A	C4'-C3'	-5.39	1.47	1.52
26	BB	707	G	C4'-C3'	-5.39	1.47	1.52
26	BB	1226	A	C6-N1	-5.39	1.31	1.35
26	BB	1926	U	C5'-C4'	5.39	1.57	1.51
26	BB	1992	G	C4'-C3'	5.39	1.59	1.53
26	BB	2277	G	C8-N7	5.39	1.34	1.30
26	BB	2288	A	C2'-O2'	-5.39	1.34	1.41
26	BB	2408	U	C4-O4	5.39	1.27	1.23
1	AA	295	C	C4'-C3'	5.39	1.59	1.53
1	AA	652	U	O3'-P	5.39	1.67	1.61
1	AA	1366	C	N3-C4	5.39	1.37	1.33
26	BB	290	U	P-O5'	5.39	1.65	1.59
26	BB	423	A	C5'-C4'	5.39	1.57	1.51
26	BB	902	C	C4-C5	5.39	1.47	1.43
26	BB	1443	U	C2-N3	5.39	1.41	1.37
26	BB	1988	G	N9-C4	5.39	1.42	1.38
26	BB	2903	U	C4-C5	5.39	1.48	1.43
1	AA	104	G	C2'-C1'	5.39	1.59	1.53
1	AA	209	U	C4-C5	5.39	1.48	1.43
1	AA	247	G	C2-N3	5.39	1.37	1.32
1	AA	538	G	O4'-C1'	-5.39	1.34	1.41
9	AI	25	TYR	CG-CD2	5.39	1.46	1.39
9	AI	59	TYR	CE1-CZ	5.39	1.45	1.38
25	BA	55	U	C4-O4	-5.39	1.19	1.23
26	BB	552	U	O3'-P	5.39	1.67	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	577	G	C4'-C3'	-5.39	1.47	1.52
26	BB	802	A	N1-C2	-5.39	1.29	1.34
26	BB	1070	A	N9-C4	5.39	1.41	1.37
26	BB	1294	U	O3'-P	5.39	1.67	1.61
1	AA	214	C	C5'-C4'	5.38	1.57	1.51
1	AA	1245	C	C4'-O4'	-5.38	1.38	1.45
25	BA	39	A	C5-C4	-5.38	1.34	1.38
25	BA	101	A	N3-C4	5.38	1.38	1.34
26	BB	116	C	C4-N4	-5.38	1.29	1.33
26	BB	424	G	N3-C4	5.38	1.39	1.35
26	BB	834	G	N9-C8	5.38	1.41	1.37
26	BB	1257	C	N3-C4	5.38	1.37	1.33
26	BB	1399	C	C4'-O4'	-5.38	1.38	1.45
26	BB	1735	A	C2'-O2'	5.38	1.48	1.41
26	BB	2397	G	O3'-P	5.38	1.67	1.61
1	AA	578	C	O3'-P	5.38	1.67	1.61
1	AA	828	U	C4-O4	5.38	1.27	1.23
1	AA	1142	G	N9-C4	5.38	1.42	1.38
26	BB	492	A	C5-C4	-5.38	1.34	1.38
26	BB	790	U	N1-C2	5.38	1.43	1.38
1	AA	234	C	C2'-C1'	5.38	1.59	1.53
1	AA	605	U	P-O5'	5.38	1.65	1.59
1	AA	1014	A	C5-C4	-5.38	1.34	1.38
1	AA	1532	U	O3'-P	5.38	1.67	1.61
25	BA	71	C	C1'-N1	5.38	1.56	1.48
26	BB	261	G	N3-C4	5.38	1.39	1.35
26	BB	1353	A	N3-C4	5.38	1.38	1.34
26	BB	1909	C	C5-C6	5.38	1.38	1.34
26	BB	2174	C	C2'-O2'	5.38	1.48	1.41
1	AA	1080	A	C5-C6	5.38	1.45	1.41
26	BB	1704	C	C2'-C1'	5.38	1.59	1.53
26	BB	2534	A	C6-N1	-5.38	1.31	1.35
1	AA	876	C	C4-C5	5.38	1.47	1.43
1	AA	1278	G	C5'-C4'	5.38	1.57	1.51
26	BB	337	C	C3'-C2'	5.38	1.58	1.52
26	BB	384	A	C3'-C2'	5.38	1.58	1.52
26	BB	593	U	C2-N3	5.38	1.41	1.37
26	BB	641	U	C2-N3	5.38	1.41	1.37
26	BB	1132	U	C4'-C3'	5.38	1.59	1.53
26	BB	1194	A	N3-C4	5.38	1.38	1.34
26	BB	2055	C	C2-N3	5.38	1.40	1.35
26	BB	2452	C	N1-C6	5.38	1.40	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	324	G	C3'-C2'	-5.38	1.46	1.52
1	AA	830	G	O3'-P	5.38	1.67	1.61
1	AA	882	C	N1-C6	5.38	1.40	1.37
1	AA	1469	C	C2'-C1'	-5.38	1.47	1.53
3	AC	53	G	C2'-C1'	-5.38	1.47	1.53
26	BB	1136	G	C6-N1	5.38	1.43	1.39
26	BB	1336	A	C6-N6	5.38	1.38	1.33
26	BB	1807	G	N3-C4	5.38	1.39	1.35
26	BB	2270	A	C6-N1	-5.38	1.31	1.35
52	B1	45	GLY	CA-C	5.38	1.60	1.51
52	B1	52	PHE	CG-CD1	5.38	1.46	1.38
1	AA	810	C	N3-C4	-5.38	1.30	1.33
1	AA	938	A	P-O5'	5.38	1.65	1.59
1	AA	953	G	C8-N7	-5.38	1.27	1.30
1	AA	1286	U	C4-C5	5.38	1.48	1.43
1	AA	1355	G	O4'-C1'	5.38	1.48	1.41
3	AC	41	A	C5-C4	-5.38	1.34	1.38
26	BB	15	G	C6-N1	5.38	1.43	1.39
26	BB	637	A	C4'-O4'	-5.38	1.38	1.45
26	BB	2638	G	C2-N3	5.38	1.37	1.32
1	AA	85	U	C4'-O4'	-5.37	1.38	1.45
1	AA	869	G	C2'-C1'	5.37	1.59	1.53
26	BB	126	A	C5-C4	-5.37	1.34	1.38
26	BB	233	A	N3-C4	5.37	1.38	1.34
26	BB	479	A	C6-N6	5.37	1.38	1.33
26	BB	699	A	C2'-O2'	5.37	1.48	1.41
26	BB	1027	A	C5'-C4'	5.37	1.57	1.51
26	BB	1031	G	N7-C5	5.37	1.42	1.39
26	BB	1293	C	C5'-C4'	5.37	1.57	1.51
26	BB	2357	G	C5-C6	5.37	1.47	1.42
1	AA	309	A	C2'-C1'	-5.37	1.47	1.53
1	AA	321	A	N3-C4	5.37	1.38	1.34
1	AA	522	C	N1-C6	-5.37	1.33	1.37
2	AB	3	G	N7-C5	-5.37	1.36	1.39
4	AD	29	C	N3-C4	5.37	1.37	1.33
26	BB	1007	C	C1'-N1	5.37	1.56	1.48
26	BB	1091	G	C8-N7	-5.37	1.27	1.30
26	BB	1122	G	C3'-C2'	-5.37	1.46	1.52
26	BB	2355	G	C2-N2	-5.37	1.29	1.34
26	BB	2430	A	P-O5'	5.37	1.65	1.59
1	AA	910	C	C2-O2	-5.37	1.19	1.24
26	BB	405	U	N1-C2	5.37	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	855	G	C3'-C2'	5.37	1.58	1.52
26	BB	1344	U	C4-O4	5.37	1.27	1.23
1	AA	424	G	C5-C6	5.37	1.47	1.42
1	AA	593	U	O3'-P	5.37	1.67	1.61
1	AA	704	A	N3-C4	5.37	1.38	1.34
1	AA	825	A	C5'-C4'	5.37	1.57	1.51
1	AA	988	G	C3'-O3'	5.37	1.49	1.42
1	AA	1289	A	C5'-C4'	5.37	1.57	1.51
1	AA	1458	G	O5'-C5'	-5.37	1.34	1.42
4	AD	43	G	N9-C4	-5.37	1.33	1.38
26	BB	208	C	C2-O2	-5.37	1.19	1.24
26	BB	1076	C	N1-C6	5.37	1.40	1.37
26	BB	2228	G	C2-N2	-5.37	1.29	1.34
26	BB	2828	G	C8-N7	5.37	1.34	1.30
36	BL	46	PRO	N-CD	-5.37	1.40	1.47
1	AA	649	A	N9-C8	-5.37	1.33	1.37
2	AB	5	G	C5-C6	5.37	1.47	1.42
1	AA	120	A	N9-C8	5.37	1.42	1.37
1	AA	344	A	N9-C8	5.37	1.42	1.37
1	AA	1354	U	C3'-C2'	-5.37	1.46	1.52
26	BB	178	G	O3'-P	5.37	1.67	1.61
26	BB	470	A	C2'-C1'	5.37	1.59	1.53
26	BB	1365	A	O3'-P	5.37	1.67	1.61
26	BB	1823	G	O5'-C5'	-5.37	1.34	1.42
26	BB	1969	A	O3'-P	5.37	1.67	1.61
26	BB	2008	C	C4-N4	-5.37	1.29	1.33
26	BB	2064	C	N1-C6	5.37	1.40	1.37
1	AA	382	A	P-O5'	5.36	1.65	1.59
1	AA	792	A	C4'-O4'	-5.36	1.38	1.45
1	AA	819	A	N7-C5	5.36	1.42	1.39
1	AA	1479	C	C2'-O2'	5.36	1.48	1.41
26	BB	189	G	C2'-C1'	-5.36	1.47	1.53
26	BB	779	U	C5'-C4'	5.36	1.57	1.51
26	BB	804	A	N9-C8	-5.36	1.33	1.37
26	BB	1596	A	C3'-O3'	5.36	1.49	1.42
26	BB	1860	G	C6-N1	5.36	1.43	1.39
26	BB	2032	G	C4'-O4'	-5.36	1.38	1.45
26	BB	2105	U	N3-C4	5.36	1.43	1.38
26	BB	2345	G	C4'-C3'	-5.36	1.47	1.52
26	BB	2545	G	N9-C4	-5.36	1.33	1.38
26	BB	2882	A	C6-N6	-5.36	1.29	1.33
1	AA	1538	C	C4-N4	5.36	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	68	C	C3'-C2'	-5.36	1.46	1.52
25	BA	80	U	C4-O4	-5.36	1.19	1.23
26	BB	694	U	N1-C2	5.36	1.43	1.38
26	BB	2232	C	O3'-P	5.36	1.67	1.61
26	BB	2646	C	C2-N3	5.36	1.40	1.35
46	BV	5	GLU	CG-CD	5.36	1.59	1.51
1	AA	344	A	C5-C4	-5.36	1.34	1.38
1	AA	441	A	C8-N7	-5.36	1.27	1.31
1	AA	1037	C	C1'-N1	5.36	1.56	1.48
1	AA	1302	C	P-O5'	5.36	1.65	1.59
1	AA	1435	G	C6-N1	5.36	1.43	1.39
25	BA	92	C	O3'-P	5.36	1.67	1.61
26	BB	687	C	P-O5'	5.36	1.65	1.59
26	BB	734	A	C4'-O4'	-5.36	1.38	1.45
26	BB	909	A	C5'-C4'	5.36	1.57	1.51
26	BB	945	A	N7-C5	5.36	1.42	1.39
26	BB	1011	G	N3-C4	5.36	1.39	1.35
26	BB	1020	A	N3-C4	5.36	1.38	1.34
26	BB	1032	A	N9-C8	5.36	1.42	1.37
26	BB	1343	G	N1-C2	5.36	1.42	1.37
26	BB	1895	C	C5-C6	5.36	1.38	1.34
26	BB	2111	U	C2-O2	-5.36	1.17	1.22
26	BB	2664	G	C6-N1	-5.36	1.35	1.39
1	AA	641	U	N1-C6	-5.36	1.33	1.38
1	AA	857	C	C4-C5	5.36	1.47	1.43
3	AC	43	U	C2'-C1'	5.36	1.59	1.53
25	BA	103	U	C2-N3	5.36	1.41	1.37
26	BB	604	G	P-O5'	-5.36	1.54	1.59
26	BB	981	A	C4'-O4'	-5.36	1.38	1.45
26	BB	1768	C	C5'-C4'	5.36	1.57	1.51
26	BB	1977	A	C4'-C3'	-5.36	1.47	1.52
57	B6	63	TYR	CE1-CZ	5.36	1.45	1.38
1	AA	751	U	C2-O2	5.36	1.27	1.22
1	AA	1100	C	N1-C2	5.36	1.45	1.40
1	AA	1300	G	C4'-O4'	-5.36	1.38	1.45
2	AB	64	U	P-O5'	5.36	1.65	1.59
25	BA	6	G	N3-C4	-5.36	1.31	1.35
26	BB	172	A	N9-C8	5.36	1.42	1.37
26	BB	191	A	N9-C8	5.36	1.42	1.37
26	BB	281	C	N3-C4	5.36	1.37	1.33
26	BB	507	A	O5'-C5'	-5.36	1.34	1.42
26	BB	1242	U	C2'-O2'	-5.36	1.34	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1445	G	C5-C4	5.36	1.42	1.38
26	BB	1715	G	C8-N7	5.36	1.34	1.30
26	BB	2391	G	N7-C5	5.36	1.42	1.39
26	BB	2718	G	N3-C4	5.36	1.39	1.35
1	AA	846	G	C4'-O4'	-5.36	1.38	1.45
1	AA	892	A	C6-N6	5.36	1.38	1.33
1	AA	1211	U	N1-C2	5.36	1.43	1.38
1	AA	1335	U	C4'-O4'	-5.36	1.38	1.45
2	AB	65	C	C2'-C1'	5.36	1.59	1.53
25	BA	104	A	N7-C5	-5.36	1.36	1.39
26	BB	138	U	C4'-O4'	-5.36	1.38	1.45
26	BB	155	A	C5-C4	5.36	1.42	1.38
26	BB	1050	A	C5-C6	5.36	1.45	1.41
26	BB	1341	G	N7-C5	-5.36	1.36	1.39
26	BB	1436	G	N1-C2	-5.36	1.33	1.37
26	BB	1488	C	C4'-O4'	-5.36	1.38	1.45
26	BB	1863	G	C2'-C1'	-5.36	1.47	1.53
26	BB	2880	C	C3'-O3'	5.36	1.49	1.42
57	B6	63	TYR	CE2-CZ	5.36	1.45	1.38
58	B7	31	PRO	N-CD	-5.36	1.40	1.47
1	AA	540	G	C6-O6	-5.35	1.19	1.24
26	BB	100	U	O5'-C5'	5.35	1.53	1.44
26	BB	473	G	C6-N1	5.35	1.43	1.39
26	BB	539	G	C4'-O4'	-5.35	1.38	1.45
26	BB	973	A	C2-N3	5.35	1.38	1.33
26	BB	2026	U	P-O5'	-5.35	1.54	1.59
1	AA	242	G	N7-C5	-5.35	1.36	1.39
1	AA	763	G	C2-N3	5.35	1.37	1.32
1	AA	910	C	P-O5'	-5.35	1.54	1.59
25	BA	9	G	C2-N3	5.35	1.37	1.32
25	BA	49	C	C2-O2	-5.35	1.19	1.24
26	BB	86	G	C6-N1	5.35	1.43	1.39
26	BB	934	U	C5'-C4'	5.35	1.57	1.51
26	BB	1659	G	C6-N1	-5.35	1.35	1.39
26	BB	1748	C	P-O5'	5.35	1.65	1.59
26	BB	2062	A	C8-N7	-5.35	1.27	1.31
1	AA	370	C	O5'-C5'	-5.35	1.34	1.42
26	BB	1663	G	N3-C4	5.35	1.39	1.35
26	BB	2390	U	C4-C5	5.35	1.48	1.43
1	AA	380	G	C5-C4	-5.35	1.34	1.38
1	AA	463	U	C3'-C2'	-5.35	1.46	1.52
1	AA	936	C	N1-C2	5.35	1.45	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1001	C	C4-C5	5.35	1.47	1.43
23	AW	79	THR	CB-OG1	-5.35	1.32	1.43
26	BB	1262	A	N9-C8	5.35	1.42	1.37
26	BB	2472	G	C4'-C3'	5.35	1.59	1.53
48	BX	82	TYR	CE1-CZ	5.35	1.45	1.38
57	B6	62	PRO	N-CD	-5.35	1.40	1.47
1	AA	489	C	O4'-C1'	5.35	1.48	1.41
1	AA	1220	G	N3-C4	5.35	1.39	1.35
25	BA	5	U	C5-C6	5.35	1.39	1.34
26	BB	257	C	C4'-O4'	-5.35	1.38	1.45
26	BB	301	G	C5'-C4'	5.35	1.57	1.51
26	BB	906	U	C5-C6	5.35	1.39	1.34
26	BB	1145	C	C4'-O4'	-5.35	1.38	1.45
26	BB	2019	A	C5-C4	5.35	1.42	1.38
26	BB	2469	A	C3'-O3'	-5.35	1.34	1.42
1	AA	640	A	C5-C6	5.35	1.45	1.41
2	AB	56	C	O3'-P	5.35	1.67	1.61
26	BB	1682	G	C2-N3	5.35	1.37	1.32
26	BB	2354	C	C2-N3	-5.35	1.31	1.35
26	BB	2623	G	P-O5'	5.35	1.65	1.59
1	AA	1027	C	C4'-C3'	5.34	1.59	1.53
26	BB	72	U	N3-C4	-5.34	1.33	1.38
26	BB	87	U	C4'-C3'	5.34	1.59	1.53
26	BB	95	A	N9-C4	5.34	1.41	1.37
26	BB	732	C	C4'-O4'	-5.34	1.38	1.45
26	BB	980	A	C4'-O4'	-5.34	1.38	1.45
26	BB	1460	U	C3'-C2'	5.34	1.58	1.52
26	BB	2044	C	C5'-C4'	5.34	1.57	1.51
26	BB	2172	U	C5-C6	5.34	1.39	1.34
27	BC	39	VAL	CB-CG2	5.34	1.64	1.52
1	AA	949	A	O4'-C1'	-5.34	1.34	1.41
1	AA	1457	G	C4'-O4'	-5.34	1.38	1.45
26	BB	1360	G	N9-C8	5.34	1.41	1.37
26	BB	1435	G	C5-C4	5.34	1.42	1.38
26	BB	1842	G	O3'-P	5.34	1.67	1.61
26	BB	2377	A	P-O5'	5.34	1.65	1.59
26	BB	2697	G	N7-C5	5.34	1.42	1.39
1	AA	334	C	C2-N3	5.34	1.40	1.35
1	AA	350	G	N1-C2	5.34	1.42	1.37
1	AA	394	G	C2'-C1'	-5.34	1.47	1.53
1	AA	1257	A	N7-C5	-5.34	1.36	1.39
26	BB	549	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	BB	980	A	C6-N6	5.34	1.38	1.33
26	BB	1368	G	C5-C4	-5.34	1.34	1.38
26	BB	1440	U	N1-C6	-5.34	1.33	1.38
26	BB	2540	C	N1-C6	5.34	1.40	1.37
26	BB	2758	A	C3'-C2'	5.34	1.58	1.52
26	BB	2870	C	C5'-C4'	5.34	1.57	1.51
1	AA	646	G	C5'-C4'	-5.34	1.45	1.51
1	AA	878	A	N3-C4	5.34	1.38	1.34
1	AA	885	G	C3'-C2'	5.34	1.58	1.52
1	AA	1006	G	C2-N3	5.34	1.37	1.32
1	AA	1515	G	C6-O6	-5.34	1.19	1.24
2	AB	29	G	C4'-O4'	-5.34	1.38	1.45
19	AS	45	GLU	N-CA	5.34	1.57	1.46
25	BA	61	G	N9-C4	5.34	1.42	1.38
26	BB	709	U	O3'-P	5.34	1.67	1.61
26	BB	836	G	C2-N3	5.34	1.37	1.32
26	BB	861	A	N9-C8	5.34	1.42	1.37
26	BB	1266	G	C3'-O3'	5.34	1.49	1.42
26	BB	1865	U	C2'-C1'	-5.34	1.47	1.53
26	BB	2252	G	C5'-C4'	5.34	1.57	1.51
26	BB	2330	G	C6-N1	5.34	1.43	1.39
26	BB	2561	U	N1-C6	-5.34	1.33	1.38
26	BB	2833	U	C3'-O3'	5.34	1.49	1.42
26	BB	70	G	O5'-C5'	-5.34	1.34	1.42
26	BB	635	C	C4-C5	5.34	1.47	1.43
26	BB	701	G	C8-N7	5.34	1.34	1.30
26	BB	713	G	N9-C4	5.34	1.42	1.38
26	BB	816	C	C2'-C1'	5.34	1.59	1.53
26	BB	2061	G	C5-C6	5.34	1.47	1.42
26	BB	2314	A	C5-C6	5.34	1.45	1.41
26	BB	2473	U	C2-N3	5.34	1.41	1.37
47	BW	5	ARG	NE-CZ	5.34	1.40	1.33
1	AA	216	U	C4'-O4'	-5.34	1.38	1.45
1	AA	336	A	C2-N3	5.34	1.38	1.33
1	AA	1089	G	C5'-C4'	5.34	1.57	1.51
4	AD	27	G	C5-C6	5.34	1.47	1.42
26	BB	784	G	C3'-C2'	5.34	1.58	1.52
26	BB	817	C	C5-C6	5.34	1.38	1.34
26	BB	853	C	P-O5'	5.34	1.65	1.59
26	BB	897	C	C4-N4	-5.34	1.29	1.33
26	BB	1322	A	C2-N3	-5.34	1.28	1.33
26	BB	1774	C	N3-C4	5.34	1.37	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2429	G	P-O5'	5.34	1.65	1.59
26	BB	2510	C	N3-C4	-5.34	1.30	1.33
26	BB	2516	A	C4'-C3'	5.34	1.59	1.53
26	BB	2732	G	N3-C4	-5.34	1.31	1.35
1	AA	79	G	C3'-C2'	5.33	1.58	1.52
1	AA	446	G	O3'-P	5.33	1.67	1.61
1	AA	725	G	C2'-C1'	-5.33	1.47	1.53
26	BB	605	G	C5-C6	5.33	1.47	1.42
26	BB	811	U	O5'-C5'	-5.33	1.34	1.42
30	BF	85	PHE	CG-CD1	5.33	1.46	1.38
1	AA	358	U	C2'-O2'	-5.33	1.34	1.41
1	AA	798	U	C2'-O2'	5.33	1.48	1.41
1	AA	844	G	C8-N7	5.33	1.34	1.30
1	AA	1264	U	N1-C6	5.33	1.42	1.38
1	AA	1296	C	C2-O2	5.33	1.29	1.24
26	BB	613	A	P-O5'	5.33	1.65	1.59
26	BB	752	A	N9-C4	5.33	1.41	1.37
26	BB	2434	A	N9-C4	5.33	1.41	1.37
26	BB	2674	G	N9-C8	5.33	1.41	1.37
1	AA	1102	A	C3'-C2'	-5.33	1.46	1.52
1	AA	1264	U	N1-C2	5.33	1.43	1.38
1	AA	1330	U	C4'-O4'	-5.33	1.38	1.45
25	BA	24	G	C2-N3	5.33	1.37	1.32
26	BB	187	G	N3-C4	5.33	1.39	1.35
26	BB	305	C	C4'-C3'	5.33	1.59	1.53
26	BB	986	C	C4'-O4'	-5.33	1.38	1.45
26	BB	1439	A	N7-C5	5.33	1.42	1.39
26	BB	1678	A	O4'-C1'	5.33	1.48	1.41
26	BB	2461	A	N7-C5	-5.33	1.36	1.39
26	BB	2657	A	P-O5'	5.33	1.65	1.59
1	AA	524	G	N1-C2	5.33	1.42	1.37
1	AA	545	C	C4-C5	5.33	1.47	1.43
26	BB	1518	C	C2-N3	5.33	1.40	1.35
26	BB	1519	G	C2-N3	5.33	1.37	1.32
26	BB	1772	A	C5'-C4'	5.33	1.57	1.51
26	BB	1988	G	P-O5'	5.33	1.65	1.59
1	AA	195	A	N1-C2	5.33	1.39	1.34
1	AA	842	U	C4'-O4'	-5.33	1.38	1.45
26	BB	33	C	C4-C5	5.33	1.47	1.43
26	BB	297	G	N3-C4	5.33	1.39	1.35
26	BB	1990	C	O3'-P	5.33	1.67	1.61
26	BB	2421	G	N1-C2	5.33	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2526	G	C5-C4	-5.33	1.34	1.38
26	BB	2593	U	C3'-O3'	-5.33	1.34	1.42
1	AA	1258	G	P-O5'	5.33	1.65	1.59
26	BB	130	C	C5'-C4'	5.33	1.57	1.51
26	BB	250	G	C1'-N9	-5.33	1.39	1.46
26	BB	360	U	N3-C4	5.33	1.43	1.38
26	BB	509	C	O3'-P	5.33	1.67	1.61
26	BB	1520	U	C4'-O4'	-5.33	1.38	1.45
26	BB	2758	A	N9-C4	5.33	1.41	1.37
1	AA	1398	A	C2'-O2'	5.33	1.48	1.41
1	AA	1523	G	N1-C2	5.33	1.42	1.37
26	BB	28	A	N7-C5	5.33	1.42	1.39
26	BB	532	A	C6-N1	5.33	1.39	1.35
26	BB	556	A	C5'-C4'	5.33	1.57	1.51
26	BB	666	A	C2-N3	5.33	1.38	1.33
26	BB	973	A	O3'-P	5.33	1.67	1.61
26	BB	1256	G	C5-C4	5.33	1.42	1.38
26	BB	2006	C	C4-C5	5.33	1.47	1.43
27	BC	134	ARG	NE-CZ	5.33	1.40	1.33
1	AA	153	C	N1-C6	5.32	1.40	1.37
1	AA	251	G	C4'-C3'	5.32	1.59	1.53
1	AA	299	G	C2-N2	-5.32	1.29	1.34
1	AA	634	C	C2-O2	-5.32	1.19	1.24
1	AA	667	G	O3'-P	-5.32	1.54	1.61
1	AA	962	C	C5'-C4'	5.32	1.57	1.51
1	AA	1140	C	C4'-O4'	-5.32	1.38	1.45
26	BB	700	G	C5'-C4'	5.32	1.57	1.51
26	BB	1005	C	C2-N3	-5.32	1.31	1.35
26	BB	2045	C	C5-C6	5.32	1.38	1.34
26	BB	2277	G	C2-N3	5.32	1.37	1.32
1	AA	296	U	C5-C6	5.32	1.39	1.34
1	AA	306	A	C2-N3	5.32	1.38	1.33
2	AB	34	C	C4-C5	-5.32	1.38	1.43
26	BB	914	G	N9-C4	5.32	1.42	1.38
26	BB	1473	G	C6-N1	5.32	1.43	1.39
26	BB	1753	G	C5'-C4'	5.32	1.57	1.51
26	BB	1756	G	C4'-O4'	-5.32	1.38	1.45
26	BB	2677	G	C2-N2	-5.32	1.29	1.34
1	AA	701	U	C4'-O4'	-5.32	1.38	1.45
22	AV	79	TYR	CE1-CZ	5.32	1.45	1.38
25	BA	6	G	C3'-O3'	5.32	1.49	1.42
26	BB	653	U	C5'-C4'	5.32	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1157	G	N9-C8	-5.32	1.34	1.37
26	BB	1222	U	C1'-N1	5.32	1.56	1.48
26	BB	1351	C	C4-N4	-5.32	1.29	1.33
26	BB	1968	G	C8-N7	-5.32	1.27	1.30
26	BB	1997	C	N1-C6	-5.32	1.33	1.37
26	BB	2415	G	C5-C6	-5.32	1.37	1.42
26	BB	2700	A	C6-N6	-5.32	1.29	1.33
1	AA	109	A	N9-C4	5.32	1.41	1.37
1	AA	546	A	C3'-C2'	5.32	1.58	1.52
1	AA	1323	G	C2-N2	5.32	1.39	1.34
26	BB	420	C	N3-C4	5.32	1.37	1.33
26	BB	1394	U	C4-O4	-5.32	1.19	1.23
26	BB	1719	G	C3'-O3'	5.32	1.49	1.42
26	BB	2007	U	O4'-C1'	5.32	1.48	1.41
1	AA	190	A	O3'-P	-5.32	1.54	1.61
1	AA	488	C	C5'-C4'	5.32	1.57	1.51
1	AA	497	G	O3'-P	5.32	1.67	1.61
1	AA	698	G	P-O5'	5.32	1.65	1.59
1	AA	898	G	N9-C4	-5.32	1.33	1.38
1	AA	1255	G	N9-C4	-5.32	1.33	1.38
2	AB	36	A	C2'-O2'	5.32	1.48	1.41
26	BB	1031	G	C2-N2	-5.32	1.29	1.34
26	BB	1671	U	C1'-N1	5.32	1.56	1.48
26	BB	2469	A	C5-C4	-5.32	1.35	1.38
28	BD	265	PHE	CB-CG	5.32	1.60	1.51
30	BF	162	ARG	NE-CZ	5.32	1.40	1.33
1	AA	764	C	C3'-C2'	5.32	1.58	1.52
1	AA	895	G	P-O5'	5.32	1.65	1.59
1	AA	1284	C	N3-C4	5.32	1.37	1.33
26	BB	373	U	P-O5'	5.32	1.65	1.59
26	BB	514	A	C6-N6	5.32	1.38	1.33
26	BB	1611	C	N3-C4	5.32	1.37	1.33
26	BB	2019	A	O3'-P	5.32	1.67	1.61
26	BB	2158	A	C2'-O2'	-5.32	1.34	1.41
26	BB	2327	A	C8-N7	-5.32	1.27	1.31
26	BB	2356	U	C5'-C4'	5.32	1.57	1.51
1	AA	1268	G	C4'-O4'	-5.31	1.38	1.45
1	AA	1480	A	C4'-C3'	5.31	1.58	1.53
26	BB	1392	A	C5-C4	-5.31	1.35	1.38
1	AA	871	U	N1-C6	-5.31	1.33	1.38
1	AA	1050	G	N9-C4	5.31	1.42	1.38
26	BB	619	G	N9-C8	5.31	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	947	A	N7-C5	-5.31	1.36	1.39
26	BB	1025	G	C5-C4	-5.31	1.34	1.38
26	BB	1719	G	N7-C5	-5.31	1.36	1.39
26	BB	1834	U	P-O5'	5.31	1.65	1.59
26	BB	2407	A	N9-C4	-5.31	1.34	1.37
26	BB	2847	U	C5'-C4'	5.31	1.57	1.51
28	BD	84	PRO	N-CD	-5.31	1.40	1.47
1	AA	1441	A	P-O5'	5.31	1.65	1.59
26	BB	7	G	N1-C2	5.31	1.42	1.37
26	BB	351	C	C5-C6	5.31	1.38	1.34
26	BB	2034	U	C5-C6	5.31	1.39	1.34
1	AA	251	G	P-O5'	5.31	1.65	1.59
1	AA	565	U	C4-O4	-5.31	1.19	1.23
1	AA	726	C	C4-N4	-5.31	1.29	1.33
1	AA	818	G	C5'-C4'	5.31	1.57	1.51
1	AA	1064	G	O4'-C1'	5.31	1.48	1.41
2	AB	50	G	N9-C8	-5.31	1.34	1.37
25	BA	28	C	C4-N4	5.31	1.38	1.33
26	BB	376	G	C2-N3	5.31	1.36	1.32
26	BB	379	G	C2-N3	5.31	1.36	1.32
26	BB	512	G	C5'-C4'	5.31	1.57	1.51
26	BB	1112	G	C2-N3	5.31	1.36	1.32
26	BB	1223	G	C5'-C4'	5.31	1.57	1.51
26	BB	1705	A	C5-C4	-5.31	1.35	1.38
26	BB	2237	G	C6-N1	-5.31	1.35	1.39
26	BB	2362	C	C4'-C3'	5.31	1.58	1.53
26	BB	2433	A	C5'-C4'	5.31	1.57	1.51
26	BB	2481	G	C5-C4	5.31	1.42	1.38
26	BB	2548	U	C5-C6	5.31	1.39	1.34
26	BB	2692	G	N7-C5	5.31	1.42	1.39
1	AA	122	G	C2-N3	5.31	1.36	1.32
1	AA	1200	C	C2-N3	5.31	1.40	1.35
1	AA	1426	G	C2'-O2'	5.31	1.48	1.41
3	AC	54	U	C4'-O4'	-5.31	1.38	1.45
26	BB	353	C	C2-N3	5.31	1.40	1.35
26	BB	353	C	C4-C5	5.31	1.47	1.43
26	BB	509	C	N1-C2	5.31	1.45	1.40
26	BB	803	U	N1-C6	5.31	1.42	1.38
26	BB	961	C	N1-C6	5.31	1.40	1.37
26	BB	974	G	C8-N7	-5.31	1.27	1.30
26	BB	1128	G	C8-N7	5.31	1.34	1.30
26	BB	1841	U	C5-C6	5.31	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1891	G	O4'-C1'	5.31	1.48	1.41
26	BB	2433	A	C5-C4	-5.31	1.35	1.38
26	BB	2666	C	C5'-C4'	5.31	1.57	1.51
26	BB	2867	G	C6-O6	5.31	1.28	1.24
1	AA	310	G	C4'-O4'	-5.31	1.38	1.45
1	AA	408	A	P-O5'	5.31	1.65	1.59
1	AA	617	G	C8-N7	5.31	1.34	1.30
1	AA	773	G	C2'-O2'	-5.31	1.34	1.41
1	AA	1147	C	N1-C6	-5.31	1.33	1.37
26	BB	231	A	C2'-C1'	5.31	1.59	1.53
26	BB	613	A	O3'-P	5.31	1.67	1.61
26	BB	1008	A	N3-C4	5.31	1.38	1.34
26	BB	1540	G	C8-N7	-5.31	1.27	1.30
26	BB	1753	G	C6-N1	5.31	1.43	1.39
26	BB	2739	U	P-O5'	5.31	1.65	1.59
53	B2	49	ARG	NE-CZ	5.31	1.40	1.33
1	AA	279	A	O3'-P	5.30	1.67	1.61
2	AB	53	G	N1-C2	-5.30	1.33	1.37
26	BB	914	G	P-O5'	5.30	1.65	1.59
26	BB	1697	G	O3'-P	5.30	1.67	1.61
26	BB	1809	A	O3'-P	5.30	1.67	1.61
26	BB	1928	A	C4'-O4'	-5.30	1.38	1.45
26	BB	2112	G	C4'-O4'	-5.30	1.38	1.45
26	BB	2825	G	N9-C8	-5.30	1.34	1.37
1	AA	195	A	P-O5'	-5.30	1.54	1.59
1	AA	356	A	C4'-C3'	5.30	1.58	1.53
1	AA	1281	C	C2'-O2'	5.30	1.48	1.41
3	AC	20	G	N1-C2	5.30	1.42	1.37
10	AJ	69	ARG	NE-CZ	5.30	1.40	1.33
26	BB	224	U	O3'-P	5.30	1.67	1.61
26	BB	602	A	C3'-C2'	-5.30	1.47	1.52
26	BB	763	G	N3-C4	5.30	1.39	1.35
26	BB	836	G	P-O5'	5.30	1.65	1.59
26	BB	929	U	C2-O2	5.30	1.27	1.22
26	BB	1332	G	N3-C4	5.30	1.39	1.35
26	BB	2540	C	O3'-P	5.30	1.67	1.61
26	BB	2824	C	C3'-C2'	5.30	1.58	1.52
1	AA	179	A	C5-C4	-5.30	1.35	1.38
1	AA	642	A	N7-C5	5.30	1.42	1.39
1	AA	878	A	C4'-O4'	-5.30	1.38	1.45
1	AA	1084	G	C4'-O4'	-5.30	1.38	1.45
1	AA	1513	A	C5'-C4'	5.30	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	732	C	C2'-C1'	5.30	1.59	1.53
26	BB	1534	U	P-O5'	5.30	1.65	1.59
26	BB	1552	A	C5-C6	-5.30	1.36	1.41
26	BB	1739	A	C5-C4	5.30	1.42	1.38
26	BB	1798	U	C2'-O2'	-5.30	1.34	1.41
26	BB	2175	C	N3-C4	5.30	1.37	1.33
1	AA	118	U	C2'-C1'	-5.30	1.47	1.53
1	AA	277	C	N3-C4	5.30	1.37	1.33
1	AA	376	G	C8-N7	-5.30	1.27	1.30
1	AA	867	G	C5'-C4'	5.30	1.57	1.51
1	AA	897	C	C4-C5	5.30	1.47	1.43
1	AA	1121	U	C2-N3	5.30	1.41	1.37
1	AA	1493	A	C4'-O4'	-5.30	1.38	1.45
21	AU	31	TYR	CG-CD1	5.30	1.46	1.39
26	BB	91	A	C6-N1	5.30	1.39	1.35
26	BB	1003	G	N9-C8	5.30	1.41	1.37
26	BB	1237	A	O3'-P	-5.30	1.54	1.61
26	BB	1402	U	C4'-O4'	-5.30	1.38	1.45
26	BB	1574	C	C4'-O4'	-5.30	1.38	1.45
26	BB	1800	C	C2-N3	-5.30	1.31	1.35
26	BB	2239	G	N7-C5	-5.30	1.36	1.39
26	BB	2288	A	O3'-P	5.30	1.67	1.61
36	BL	34	ARG	CZ-NH2	5.30	1.40	1.33
1	AA	69	G	N3-C4	5.30	1.39	1.35
1	AA	176	C	C2'-C1'	5.30	1.59	1.53
1	AA	213	G	C2-N3	5.30	1.36	1.32
1	AA	932	C	C2-N3	5.30	1.40	1.35
26	BB	126	A	N7-C5	-5.30	1.36	1.39
1	AA	288	A	C5-C6	-5.30	1.36	1.41
1	AA	327	A	N9-C8	-5.30	1.33	1.37
1	AA	382	A	N9-C8	5.30	1.42	1.37
1	AA	808	C	C2'-O2'	5.30	1.48	1.41
1	AA	963	G	N7-C5	5.30	1.42	1.39
1	AA	1081	A	C2-N3	5.30	1.38	1.33
1	AA	1208	C	C4'-C3'	5.30	1.58	1.53
1	AA	1272	G	C5-C6	5.30	1.47	1.42
1	AA	1333	A	C5-C6	5.30	1.45	1.41
1	AA	1382	C	C4'-O4'	-5.30	1.38	1.45
1	AA	1425	U	C4'-C3'	-5.30	1.47	1.52
26	BB	492	A	N1-C2	-5.30	1.29	1.34
26	BB	792	A	N7-C5	5.30	1.42	1.39
26	BB	1603	A	N3-C4	5.30	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2054	A	C2'-C1'	5.30	1.59	1.53
26	BB	2608	G	O3'-P	-5.30	1.54	1.61
26	BB	2665	A	C4'-C3'	-5.30	1.47	1.52
26	BB	2776	A	C6-N6	5.30	1.38	1.33
26	BB	743	A	P-O5'	-5.29	1.54	1.59
26	BB	1071	G	C4'-O4'	-5.29	1.38	1.45
1	AA	466	A	N3-C4	5.29	1.38	1.34
1	AA	513	C	O3'-P	5.29	1.67	1.61
1	AA	713	G	C3'-O3'	5.29	1.49	1.42
1	AA	759	A	C5-C6	-5.29	1.36	1.41
1	AA	1040	U	C5-C6	5.29	1.39	1.34
1	AA	1521	C	C5'-C4'	5.29	1.57	1.51
4	AD	25	U	N1-C2	5.29	1.43	1.38
25	BA	27	C	N3-C4	5.29	1.37	1.33
26	BB	111	A	C5-C6	5.29	1.45	1.41
26	BB	263	G	N9-C8	5.29	1.41	1.37
26	BB	431	U	C3'-C2'	5.29	1.58	1.52
26	BB	953	G	C8-N7	5.29	1.34	1.30
26	BB	1041	G	C2'-C1'	5.29	1.59	1.53
26	BB	2068	U	C5'-C4'	5.29	1.57	1.51
26	BB	2615	U	C4'-O4'	-5.29	1.38	1.45
28	BD	216	ARG	CZ-NH1	5.29	1.40	1.33
1	AA	166	U	C5'-C4'	5.29	1.57	1.51
1	AA	340	U	C4-C5	5.29	1.48	1.43
1	AA	416	G	C5-C6	5.29	1.47	1.42
1	AA	859	G	O3'-P	5.29	1.67	1.61
1	AA	894	G	O3'-P	5.29	1.67	1.61
1	AA	1003	G	C8-N7	5.29	1.34	1.30
1	AA	1052	U	N1-C2	5.29	1.43	1.38
1	AA	1054	C	C5'-C4'	5.29	1.57	1.51
1	AA	1115	U	C4-O4	5.29	1.27	1.23
26	BB	103	A	C8-N7	-5.29	1.27	1.31
26	BB	222	A	N3-C4	5.29	1.38	1.34
26	BB	598	U	C1'-N1	5.29	1.56	1.48
26	BB	1054	A	P-O5'	5.29	1.65	1.59
26	BB	1125	G	C8-N7	5.29	1.34	1.30
26	BB	1162	G	C1'-N9	5.29	1.56	1.48
26	BB	1186	G	O3'-P	5.29	1.67	1.61
26	BB	1296	G	C5-C4	-5.29	1.34	1.38
26	BB	1738	G	N9-C8	-5.29	1.34	1.37
26	BB	1983	G	P-O5'	5.29	1.65	1.59
26	BB	2119	A	C2'-C1'	-5.29	1.47	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2246	G	N1-C2	5.29	1.42	1.37
26	BB	2275	C	O4'-C1'	5.29	1.48	1.41
1	AA	649	A	C4'-O4'	-5.29	1.38	1.45
1	AA	1101	A	C6-N1	5.29	1.39	1.35
1	AA	1524	C	C2'-C1'	5.29	1.59	1.53
3	AC	41	A	N9-C8	5.29	1.42	1.37
26	BB	180	G	O4'-C1'	5.29	1.48	1.41
26	BB	1737	G	C2-N3	5.29	1.36	1.32
26	BB	2663	G	O4'-C1'	-5.29	1.34	1.41
1	AA	561	U	C2'-C1'	5.29	1.59	1.53
1	AA	856	C	O3'-P	5.29	1.67	1.61
1	AA	1305	G	N7-C5	-5.29	1.36	1.39
2	AB	27	C	C4'-C3'	-5.29	1.47	1.52
26	BB	5	A	C6-N1	-5.29	1.31	1.35
26	BB	185	G	C5-C4	5.29	1.42	1.38
26	BB	404	A	C8-N7	-5.29	1.27	1.31
26	BB	428	A	P-O5'	5.29	1.65	1.59
26	BB	980	A	C5-C4	5.29	1.42	1.38
26	BB	2453	A	C5'-C4'	5.29	1.57	1.51
26	BB	2712	C	C4'-O4'	-5.29	1.38	1.45
29	BE	169	ARG	CD-NE	5.29	1.55	1.46
4	AD	44	A	N9-C4	5.29	1.41	1.37
26	BB	267	C	C4-C5	-5.29	1.38	1.43
26	BB	1449	G	C2-N3	5.29	1.36	1.32
26	BB	1782	U	C1'-N1	5.29	1.56	1.48
1	AA	235	C	N3-C4	-5.29	1.30	1.33
1	AA	353	A	C5'-C4'	5.29	1.57	1.51
26	BB	42	A	C4'-O4'	-5.29	1.38	1.45
26	BB	184	C	C3'-O3'	5.29	1.49	1.42
26	BB	249	C	C4'-O4'	-5.29	1.38	1.45
26	BB	695	G	O3'-P	5.29	1.67	1.61
26	BB	735	A	C6-N1	5.29	1.39	1.35
26	BB	743	A	N3-C4	5.29	1.38	1.34
26	BB	1565	C	N3-C4	5.29	1.37	1.33
26	BB	2039	U	C4'-O4'	-5.29	1.38	1.45
26	BB	2078	C	C4-N4	5.29	1.38	1.33
26	BB	2435	A	C5'-C4'	5.29	1.57	1.51
26	BB	2489	U	C4-C5	5.29	1.48	1.43
1	AA	137	U	C3'-O3'	5.28	1.49	1.42
1	AA	322	C	O3'-P	5.28	1.67	1.61
1	AA	1049	U	C2'-C1'	5.28	1.59	1.53
1	AA	1075	U	N1-C6	5.28	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1109	C	N3-C4	-5.28	1.30	1.33
1	AA	1442	G	C4'-C3'	-5.28	1.47	1.52
2	AB	73	G	N3-C4	5.28	1.39	1.35
14	AN	68	ARG	CA-CB	5.28	1.65	1.53
26	BB	154	U	C5'-C4'	5.28	1.57	1.51
26	BB	476	G	N9-C8	-5.28	1.34	1.37
26	BB	1023	U	C4'-C3'	5.28	1.58	1.53
26	BB	1253	A	C2-N3	5.28	1.38	1.33
26	BB	1328	A	C5-C4	-5.28	1.35	1.38
26	BB	1757	A	C6-N1	5.28	1.39	1.35
26	BB	2269	G	N7-C5	-5.28	1.36	1.39
4	AD	5	G	C8-N7	5.28	1.34	1.30
26	BB	79	C	C1'-N1	5.28	1.56	1.48
26	BB	132	G	C8-N7	-5.28	1.27	1.30
26	BB	1512	C	C4-C5	5.28	1.47	1.43
1	AA	173	U	N1-C2	5.28	1.43	1.38
1	AA	1238	A	C5'-C4'	5.28	1.57	1.51
2	AB	70	C	O3'-P	5.28	1.67	1.61
3	AC	35	G	N9-C8	5.28	1.41	1.37
26	BB	184	C	C4'-O4'	-5.28	1.38	1.45
26	BB	511	U	C2-O2	5.28	1.27	1.22
26	BB	774	G	C6-O6	-5.28	1.19	1.24
26	BB	1613	G	N1-C2	5.28	1.42	1.37
26	BB	1811	G	O3'-P	5.28	1.67	1.61
26	BB	2035	G	N7-C5	-5.28	1.36	1.39
1	AA	907	A	O3'-P	5.28	1.67	1.61
1	AA	1306	A	C8-N7	-5.28	1.27	1.31
1	AA	1324	A	N9-C8	5.28	1.42	1.37
1	AA	1453	G	C6-N1	5.28	1.43	1.39
26	BB	24	G	N9-C8	-5.28	1.34	1.37
26	BB	931	U	C4-O4	-5.28	1.19	1.23
26	BB	1042	G	C2'-C1'	-5.28	1.47	1.53
26	BB	1866	A	N9-C4	5.28	1.41	1.37
1	AA	191	G	C2-N2	-5.28	1.29	1.34
1	AA	451	A	N9-C8	-5.28	1.33	1.37
1	AA	907	A	C2'-O2'	5.28	1.48	1.41
1	AA	1501	C	C2-O2	-5.28	1.19	1.24
6	AF	87	ARG	CZ-NH1	5.28	1.40	1.33
26	BB	240	C	N3-C4	-5.28	1.30	1.33
26	BB	602	A	O3'-P	5.28	1.67	1.61
26	BB	1052	C	C4-C5	-5.28	1.38	1.43
26	BB	1713	A	C3'-C2'	-5.28	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1859	U	C2-N3	5.28	1.41	1.37
1	AA	296	U	N1-C2	5.28	1.43	1.38
1	AA	371	A	P-O5'	5.28	1.65	1.59
1	AA	474	G	N9-C8	-5.28	1.34	1.37
1	AA	779	C	C4-N4	-5.28	1.29	1.33
1	AA	1014	A	O3'-P	5.28	1.67	1.61
1	AA	1020	G	N1-C2	5.28	1.42	1.37
1	AA	1533	C	C5'-C4'	5.28	1.57	1.51
26	BB	590	A	C2'-C1'	5.28	1.59	1.53
26	BB	1458	U	C5-C6	5.28	1.38	1.34
26	BB	1938	A	C6-N1	5.28	1.39	1.35
26	BB	2078	C	P-O5'	5.28	1.65	1.59
26	BB	2420	C	C5'-C4'	5.28	1.57	1.51
26	BB	2863	C	P-O5'	-5.28	1.54	1.59
58	B7	30	GLU	CG-CD	5.28	1.59	1.51
1	AA	1283	U	C2-O2	5.27	1.27	1.22
26	BB	1031	G	C8-N7	-5.27	1.27	1.30
26	BB	2577	A	N3-C4	5.27	1.38	1.34
1	AA	177	G	P-O5'	5.27	1.65	1.59
1	AA	396	C	C3'-O3'	5.27	1.49	1.42
1	AA	571	U	N1-C6	-5.27	1.33	1.38
1	AA	704	A	C4'-O4'	-5.27	1.38	1.45
25	BA	97	C	C2'-C1'	-5.27	1.47	1.53
26	BB	493	G	N1-C2	5.27	1.42	1.37
26	BB	612	G	C2'-O2'	5.27	1.48	1.41
26	BB	1071	G	C2'-O2'	5.27	1.48	1.41
26	BB	1149	G	C2'-O2'	-5.27	1.34	1.41
26	BB	1589	U	O3'-P	5.27	1.67	1.61
26	BB	1783	A	N7-C5	-5.27	1.36	1.39
26	BB	2065	C	C4'-O4'	-5.27	1.38	1.45
1	AA	460	A	P-O5'	5.27	1.65	1.59
1	AA	663	A	N3-C4	5.27	1.38	1.34
4	AD	77	A	N9-C8	5.27	1.42	1.37
26	BB	545	U	C4'-C3'	5.27	1.58	1.53
26	BB	851	C	C2'-O2'	5.27	1.48	1.41
26	BB	2168	G	C5'-C4'	5.27	1.57	1.51
26	BB	2311	A	N7-C5	5.27	1.42	1.39
1	AA	718	A	N3-C4	5.27	1.38	1.34
1	AA	862	C	P-O5'	5.27	1.65	1.59
1	AA	1141	C	C4'-O4'	-5.27	1.38	1.45
26	BB	741	U	N1-C2	5.27	1.43	1.38
26	BB	1207	C	C2-O2	-5.27	1.19	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1783	A	C5-C4	-5.27	1.35	1.38
26	BB	2556	C	C4-C5	5.27	1.47	1.43
26	BB	2603	G	N9-C4	-5.27	1.33	1.38
26	BB	2700	A	C2-N3	-5.27	1.28	1.33
26	BB	2711	A	N9-C8	-5.27	1.33	1.37
26	BB	2748	A	N9-C4	-5.27	1.34	1.37
1	AA	552	U	C1'-N1	5.27	1.56	1.48
1	AA	934	C	C5'-C4'	5.27	1.57	1.51
4	AD	20	G	N9-C4	5.27	1.42	1.38
25	BA	35	C	C4'-C3'	5.27	1.58	1.53
25	BA	67	G	C6-N1	-5.27	1.35	1.39
25	BA	119	A	N9-C4	5.27	1.41	1.37
26	BB	29	U	C3'-C2'	5.27	1.58	1.52
26	BB	122	G	C6-O6	-5.27	1.19	1.24
26	BB	453	A	C4'-O4'	-5.27	1.38	1.45
26	BB	667	U	N3-C4	5.27	1.43	1.38
26	BB	785	G	C2-N2	-5.27	1.29	1.34
26	BB	976	G	N7-C5	-5.27	1.36	1.39
26	BB	1359	A	N3-C4	-5.27	1.31	1.34
26	BB	1798	U	C5'-C4'	5.27	1.57	1.51
26	BB	2029	G	C2'-C1'	5.27	1.59	1.53
26	BB	2337	G	P-O5'	5.27	1.65	1.59
26	BB	2358	A	N9-C4	5.27	1.41	1.37
53	B2	16	CYS	CB-SG	5.27	1.91	1.82
26	BB	2332	C	C4-C5	5.27	1.47	1.43
1	AA	504	C	N1-C6	5.26	1.40	1.37
1	AA	687	A	C2-N3	5.26	1.38	1.33
1	AA	888	G	C6-O6	-5.26	1.19	1.24
1	AA	1426	G	C6-O6	-5.26	1.19	1.24
1	AA	1465	A	N9-C8	5.26	1.42	1.37
26	BB	397	U	C4-C5	5.26	1.48	1.43
26	BB	479	A	C4'-C3'	5.26	1.58	1.53
26	BB	1239	G	N1-C2	5.26	1.42	1.37
26	BB	1250	G	C4'-O4'	-5.26	1.38	1.45
26	BB	1681	G	O3'-P	-5.26	1.54	1.61
26	BB	1905	C	C4'-O4'	-5.26	1.38	1.45
26	BB	2493	U	C4'-O4'	-5.26	1.38	1.45
26	BB	2671	G	P-O5'	5.26	1.65	1.59
26	BB	2831	G	C8-N7	5.26	1.34	1.30
1	AA	1010	U	O4'-C1'	5.26	1.48	1.41
1	AA	1281	C	C2-N3	5.26	1.40	1.35
3	AC	24	A	O3'-P	5.26	1.67	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	AC	48	C	C4-N4	5.26	1.38	1.33
26	BB	578	G	N9-C8	-5.26	1.34	1.37
26	BB	811	U	O3'-P	5.26	1.67	1.61
26	BB	2243	U	C5'-C4'	5.26	1.57	1.51
26	BB	2513	A	C6-N6	5.26	1.38	1.33
1	AA	100	G	N3-C4	5.26	1.39	1.35
1	AA	411	A	C2'-C1'	5.26	1.59	1.53
1	AA	699	C	N1-C6	-5.26	1.33	1.37
1	AA	968	A	C2-N3	5.26	1.38	1.33
1	AA	1437	A	O3'-P	-5.26	1.54	1.61
1	AA	1514	G	P-O5'	5.26	1.65	1.59
4	AD	54	G	C8-N7	5.26	1.34	1.30
26	BB	305	C	C2-N3	5.26	1.40	1.35
26	BB	507	A	N9-C4	-5.26	1.34	1.37
26	BB	917	A	N7-C5	-5.26	1.36	1.39
26	BB	1242	U	N1-C2	-5.26	1.33	1.38
26	BB	1420	A	C6-N1	5.26	1.39	1.35
26	BB	1813	G	C2'-O2'	5.26	1.48	1.41
26	BB	2868	A	C2'-C1'	5.26	1.59	1.53
1	AA	266	G	N3-C4	5.26	1.39	1.35
1	AA	674	G	C5-C4	-5.26	1.34	1.38
1	AA	676	A	P-O5'	5.26	1.65	1.59
1	AA	1261	A	C4'-O4'	-5.26	1.38	1.45
26	BB	831	G	C2-N3	5.26	1.36	1.32
26	BB	1259	G	C8-N7	-5.26	1.27	1.30
26	BB	1340	U	C2-N3	5.26	1.41	1.37
26	BB	1465	G	N9-C4	5.26	1.42	1.38
26	BB	1951	U	C4-O4	5.26	1.27	1.23
26	BB	1965	C	C4'-O4'	-5.26	1.38	1.45
26	BB	2075	U	C4'-C3'	-5.26	1.47	1.52
26	BB	2816	G	C4'-O4'	-5.26	1.38	1.45
1	AA	743	A	C1'-N9	5.26	1.56	1.48
1	AA	1314	C	N3-C4	5.26	1.37	1.33
1	AA	1452	C	C5-C6	5.26	1.38	1.34
26	BB	20	C	P-O5'	5.26	1.65	1.59
26	BB	1516	G	C6-N1	-5.26	1.35	1.39
1	AA	82	G	C5'-C4'	-5.26	1.45	1.51
1	AA	252	U	C4-O4	-5.26	1.19	1.23
1	AA	843	U	C4'-O4'	-5.26	1.38	1.45
1	AA	965	U	C2-O2	5.26	1.27	1.22
1	AA	971	G	N3-C4	-5.26	1.31	1.35
1	AA	1109	C	C4'-C3'	5.26	1.58	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1396	A	N3-C4	5.26	1.38	1.34
26	BB	471	A	C5-C6	5.26	1.45	1.41
26	BB	548	G	P-O5'	-5.26	1.54	1.59
26	BB	927	A	N7-C5	5.26	1.42	1.39
26	BB	1159	U	C4'-C3'	5.26	1.58	1.53
26	BB	1742	U	N3-C4	-5.26	1.33	1.38
26	BB	1861	G	N7-C5	-5.26	1.36	1.39
26	BB	1941	C	O4'-C1'	5.26	1.48	1.41
26	BB	2312	U	C5-C6	5.26	1.38	1.34
36	BL	44	TYR	CG-CD2	5.26	1.46	1.39
1	AA	543	U	C4-O4	-5.25	1.19	1.23
1	AA	787	A	O3'-P	5.25	1.67	1.61
1	AA	1046	A	N9-C8	5.25	1.42	1.37
26	BB	40	U	C2-N3	5.25	1.41	1.37
26	BB	173	A	O3'-P	5.25	1.67	1.61
26	BB	485	C	O3'-P	5.25	1.67	1.61
26	BB	1673	G	P-O5'	5.25	1.65	1.59
26	BB	2390	U	N3-C4	5.25	1.43	1.38
26	BB	2687	U	C5'-C4'	5.25	1.57	1.51
1	AA	316	C	N1-C2	-5.25	1.34	1.40
1	AA	1227	A	O3'-P	5.25	1.67	1.61
1	AA	1332	A	C3'-C2'	5.25	1.58	1.52
7	AG	107	GLY	CA-C	5.25	1.60	1.51
26	BB	190	A	C6-N1	-5.25	1.31	1.35
26	BB	505	A	N9-C4	5.25	1.41	1.37
26	BB	787	C	C4-C5	5.25	1.47	1.43
26	BB	1175	A	C2-N3	5.25	1.38	1.33
26	BB	1339	G	C4'-O4'	-5.25	1.38	1.45
26	BB	1598	A	C8-N7	-5.25	1.27	1.31
26	BB	1899	A	N7-C5	-5.25	1.36	1.39
26	BB	2654	A	C5-C4	5.25	1.42	1.38
1	AA	40	C	N3-C4	5.25	1.37	1.33
1	AA	151	A	N7-C5	5.25	1.42	1.39
1	AA	164	G	C2-N3	5.25	1.36	1.32
1	AA	238	A	C3'-C2'	5.25	1.58	1.52
1	AA	691	G	P-O5'	5.25	1.65	1.59
1	AA	1448	C	C5-C6	5.25	1.38	1.34
26	BB	981	A	N3-C4	-5.25	1.31	1.34
26	BB	1138	G	N9-C8	-5.25	1.34	1.37
26	BB	1240	U	C1'-N1	5.25	1.56	1.48
26	BB	1524	G	C3'-O3'	-5.25	1.34	1.42
26	BB	1662	U	O3'-P	5.25	1.67	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2067	G	C5'-C4'	5.25	1.57	1.51
26	BB	2137	U	C2-N3	5.25	1.41	1.37
26	BB	2351	G	C5-C4	-5.25	1.34	1.38
26	BB	2415	G	C8-N7	-5.25	1.27	1.30
26	BB	2459	A	C5'-C4'	5.25	1.57	1.51
26	BB	2881	U	C2'-C1'	5.25	1.59	1.53
1	AA	1060	U	P-O5'	5.25	1.65	1.59
1	AA	1390	U	C2-N3	5.25	1.41	1.37
1	AA	1467	C	C5-C6	5.25	1.38	1.34
1	AA	1515	G	C5'-C4'	5.25	1.57	1.51
26	BB	302	C	C4'-O4'	-5.25	1.38	1.45
26	BB	869	G	C3'-C2'	5.25	1.58	1.52
26	BB	921	C	C4'-C3'	-5.25	1.47	1.52
26	BB	933	A	N9-C4	5.25	1.41	1.37
26	BB	1940	U	C4-C5	5.25	1.48	1.43
1	AA	550	G	C2'-C1'	5.25	1.59	1.53
1	AA	996	A	C3'-O3'	5.25	1.49	1.42
1	AA	1525	G	O3'-P	5.25	1.67	1.61
26	BB	266	G	C4'-C3'	5.25	1.58	1.53
26	BB	478	A	N3-C4	5.25	1.38	1.34
26	BB	1089	A	N3-C4	5.25	1.38	1.34
26	BB	1477	A	C5'-C4'	5.25	1.57	1.51
26	BB	1936	A	C5-C4	-5.25	1.35	1.38
26	BB	2204	G	C2-N3	5.25	1.36	1.32
26	BB	2531	A	C3'-C2'	5.25	1.58	1.52
26	BB	2876	G	N9-C4	5.25	1.42	1.38
1	AA	176	C	N3-C4	-5.25	1.30	1.33
1	AA	285	C	C2-N3	5.25	1.40	1.35
1	AA	1047	G	O4'-C1'	5.25	1.48	1.41
1	AA	1255	G	C5-C6	5.25	1.47	1.42
1	AA	1271	A	C3'-C2'	-5.25	1.47	1.52
1	AA	1305	G	C5-C4	5.25	1.42	1.38
1	AA	1449	C	C4'-C3'	-5.25	1.47	1.52
26	BB	136	G	C4'-O4'	-5.25	1.38	1.45
26	BB	433	C	P-O5'	5.25	1.65	1.59
26	BB	663	G	C2'-C1'	-5.25	1.47	1.53
26	BB	734	A	N1-C2	-5.25	1.29	1.34
26	BB	1123	C	C5'-C4'	5.25	1.57	1.51
26	BB	2428	G	C8-N7	5.25	1.34	1.30
26	BB	2471	A	O4'-C1'	5.25	1.48	1.41
26	BB	2645	G	N9-C4	5.25	1.42	1.38
26	BB	2854	G	C1'-N9	5.25	1.56	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
41	BQ	99	TYR	CG-CD2	-5.25	1.32	1.39
1	AA	158	G	O4'-C1'	5.25	1.48	1.41
1	AA	1201	A	C5-C4	-5.25	1.35	1.38
26	BB	471	A	C4'-C3'	5.25	1.58	1.53
26	BB	558	U	C4'-C3'	5.25	1.58	1.53
26	BB	1934	C	C4-N4	-5.25	1.29	1.33
1	AA	187	G	O4'-C1'	-5.24	1.34	1.41
1	AA	419	C	N3-C4	5.24	1.37	1.33
1	AA	510	A	O3'-P	5.24	1.67	1.61
1	AA	511	C	N1-C2	5.24	1.45	1.40
1	AA	570	G	C2'-C1'	5.24	1.59	1.53
1	AA	662	U	N1-C2	5.24	1.43	1.38
1	AA	665	A	N3-C4	-5.24	1.31	1.34
1	AA	1395	C	N1-C6	-5.24	1.34	1.37
1	AA	1437	A	O5'-C5'	-5.24	1.34	1.42
26	BB	133	U	C4'-O4'	-5.24	1.38	1.45
26	BB	703	U	C3'-C2'	-5.24	1.47	1.52
26	BB	909	A	C4'-O4'	-5.24	1.38	1.45
26	BB	2209	G	C8-N7	-5.24	1.27	1.30
43	BS	44	TYR	CE1-CZ	5.24	1.45	1.38
1	AA	152	A	C8-N7	-5.24	1.27	1.31
26	BB	235	U	C4'-O4'	-5.24	1.38	1.45
1	AA	448	A	O3'-P	5.24	1.67	1.61
1	AA	869	G	C4'-O4'	-5.24	1.38	1.45
1	AA	1468	A	N7-C5	-5.24	1.36	1.39
25	BA	19	C	N3-C4	-5.24	1.30	1.33
26	BB	646	U	C2'-C1'	5.24	1.59	1.53
26	BB	1116	G	N7-C5	-5.24	1.36	1.39
26	BB	1754	A	N9-C8	5.24	1.42	1.37
26	BB	2174	C	N3-C4	5.24	1.37	1.33
26	BB	2588	G	O3'-P	5.24	1.67	1.61
1	AA	442	G	C2'-C1'	5.24	1.59	1.53
1	AA	668	G	P-O5'	-5.24	1.54	1.59
1	AA	987	G	C1'-N9	5.24	1.56	1.48
1	AA	1064	G	C5-C4	-5.24	1.34	1.38
1	AA	1276	G	C2-N3	5.24	1.36	1.32
1	AA	1335	U	C2-O2	5.24	1.27	1.22
1	AA	1449	C	C2-N3	5.24	1.40	1.35
4	AD	57	C	C4'-C3'	-5.24	1.47	1.52
25	BA	6	G	P-O5'	5.24	1.65	1.59
26	BB	50	U	O3'-P	5.24	1.67	1.61
26	BB	216	A	C8-N7	-5.24	1.27	1.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	708	G	C8-N7	-5.24	1.27	1.30
26	BB	923	G	N9-C4	5.24	1.42	1.38
26	BB	1422	G	C3'-C2'	-5.24	1.47	1.52
26	BB	2098	U	C4-O4	-5.24	1.19	1.23
1	AA	1026	G	N9-C8	-5.24	1.34	1.37
26	BB	79	C	C4-N4	5.24	1.38	1.33
26	BB	2095	A	N3-C4	5.24	1.38	1.34
1	AA	54	C	N1-C6	5.24	1.40	1.37
1	AA	183	C	N3-C4	5.24	1.37	1.33
1	AA	447	G	P-O5'	5.24	1.65	1.59
1	AA	1210	C	C2'-O2'	5.24	1.48	1.41
2	AB	22	G	C5-C4	-5.24	1.34	1.38
25	BA	64	G	N1-C2	5.24	1.42	1.37
26	BB	47	C	P-O5'	5.24	1.65	1.59
26	BB	376	G	C5'-C4'	5.24	1.57	1.51
26	BB	952	G	O3'-P	5.24	1.67	1.61
26	BB	1703	G	N3-C4	-5.24	1.31	1.35
26	BB	2002	G	C4'-O4'	-5.24	1.38	1.45
26	BB	2377	A	C5'-C4'	5.24	1.57	1.51
26	BB	2555	U	C5-C6	5.24	1.38	1.34
1	AA	736	C	C3'-C2'	5.23	1.58	1.52
1	AA	1307	U	C2-O2	5.23	1.27	1.22
26	BB	1860	G	C4'-O4'	-5.23	1.38	1.45
26	BB	2257	U	C2-O2	-5.23	1.17	1.22
1	AA	14	U	C4-C5	5.23	1.48	1.43
26	BB	365	U	C2'-C1'	5.23	1.59	1.53
26	BB	432	A	C6-N1	5.23	1.39	1.35
26	BB	763	G	C2-N3	5.23	1.36	1.32
26	BB	965	C	C5-C6	5.23	1.38	1.34
26	BB	1600	C	C3'-C2'	-5.23	1.47	1.52
26	BB	2179	C	C4'-C3'	-5.23	1.47	1.52
26	BB	2502	G	C5-C6	5.23	1.47	1.42
26	BB	2821	A	O4'-C1'	5.23	1.48	1.41
1	AA	92	U	C4-C5	5.23	1.48	1.43
1	AA	565	U	C2'-O2'	5.23	1.48	1.41
1	AA	939	G	C6-O6	-5.23	1.19	1.24
2	AB	52	A	P-O5'	-5.23	1.54	1.59
26	BB	21	A	N7-C5	-5.23	1.36	1.39
26	BB	686	U	C2'-O2'	5.23	1.48	1.41
26	BB	966	G	P-O5'	5.23	1.65	1.59
26	BB	975	A	C4'-C3'	-5.23	1.47	1.52
26	BB	1582	C	C4-C5	5.23	1.47	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1888	G	N3-C4	5.23	1.39	1.35
26	BB	2677	G	N9-C8	-5.23	1.34	1.37
1	AA	985	C	C1'-N1	5.23	1.56	1.48
26	BB	550	C	N3-C4	5.23	1.37	1.33
26	BB	1749	A	N9-C4	5.23	1.41	1.37
1	AA	476	U	C3'-O3'	-5.23	1.34	1.42
1	AA	597	G	C4'-O4'	-5.23	1.38	1.45
1	AA	895	G	C2-N3	5.23	1.36	1.32
1	AA	1388	C	N1-C6	5.23	1.40	1.37
2	AB	73	G	C2'-C1'	5.23	1.59	1.53
26	BB	118	A	C5'-C4'	5.23	1.57	1.51
26	BB	293	U	N1-C2	5.23	1.43	1.38
26	BB	478	A	C5-C6	5.23	1.45	1.41
26	BB	505	A	C4'-O4'	-5.23	1.38	1.45
26	BB	1786	A	N9-C4	5.23	1.41	1.37
26	BB	2061	G	C6-N1	-5.23	1.35	1.39
26	BB	2282	G	N1-C2	5.23	1.42	1.37
26	BB	2341	G	N9-C4	-5.23	1.33	1.38
26	BB	2347	C	C4'-O4'	-5.23	1.38	1.45
26	BB	2406	A	P-O5'	5.23	1.65	1.59
26	BB	2462	C	P-O5'	5.23	1.65	1.59
1	AA	760	G	N3-C4	5.23	1.39	1.35
26	BB	148	U	C4-C5	5.23	1.48	1.43
26	BB	255	A	N3-C4	5.23	1.38	1.34
26	BB	291	G	N1-C2	5.23	1.42	1.37
26	BB	606	U	C3'-C2'	5.23	1.58	1.52
26	BB	863	A	C8-N7	-5.23	1.27	1.31
26	BB	1001	A	N3-C4	-5.23	1.31	1.34
26	BB	1470	A	C2'-C1'	-5.23	1.47	1.53
26	BB	1748	C	C3'-O3'	-5.23	1.34	1.42
1	AA	683	G	N1-C2	-5.22	1.33	1.37
1	AA	1385	G	N9-C4	5.22	1.42	1.38
1	AA	1388	C	C5-C6	5.22	1.38	1.34
1	AA	1466	C	C5-C6	5.22	1.38	1.34
4	AD	42	C	C5'-C4'	-5.22	1.45	1.51
25	BA	19	C	C4-C5	5.22	1.47	1.43
26	BB	74	A	C2'-O2'	-5.22	1.34	1.41
26	BB	1120	G	C5-C4	-5.22	1.34	1.38
26	BB	1145	C	P-O5'	5.22	1.65	1.59
26	BB	1964	G	C5-C4	5.22	1.42	1.38
26	BB	2168	G	O3'-P	5.22	1.67	1.61
26	BB	2188	U	C4-C5	5.22	1.48	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2224	G	C2'-C1'	-5.22	1.47	1.53
26	BB	2277	G	C5-C4	5.22	1.42	1.38
26	BB	2428	G	C3'-C2'	5.22	1.58	1.52
26	BB	2810	A	C2-N3	5.22	1.38	1.33
1	AA	73	C	P-O5'	-5.22	1.54	1.59
1	AA	261	U	C2-O2	5.22	1.27	1.22
1	AA	788	U	C3'-O3'	-5.22	1.34	1.42
1	AA	867	G	N1-C2	5.22	1.42	1.37
2	AB	18	G	C2-N3	5.22	1.36	1.32
4	AD	44	A	C5-C4	-5.22	1.35	1.38
26	BB	344	A	C5'-C4'	5.22	1.57	1.51
26	BB	435	C	C5-C6	5.22	1.38	1.34
26	BB	977	G	C2'-O2'	5.22	1.48	1.41
26	BB	2080	A	N9-C4	5.22	1.41	1.37
26	BB	2511	U	C4'-O4'	-5.22	1.38	1.45
1	AA	348	G	P-O5'	5.22	1.65	1.59
1	AA	503	C	O3'-P	5.22	1.67	1.61
25	BA	70	C	N1-C2	-5.22	1.34	1.40
26	BB	1023	U	N3-C4	-5.22	1.33	1.38
26	BB	1667	G	N7-C5	-5.22	1.36	1.39
26	BB	2599	G	N9-C8	-5.22	1.34	1.37
1	AA	889	A	N3-C4	-5.22	1.31	1.34
1	AA	938	A	C5'-C4'	5.22	1.57	1.51
4	AD	50	G	N7-C5	-5.22	1.36	1.39
26	BB	1034	G	C4'-O4'	-5.22	1.38	1.45
26	BB	1127	A	N9-C8	-5.22	1.33	1.37
26	BB	1564	C	C5-C6	5.22	1.38	1.34
26	BB	1866	A	C4'-O4'	-5.22	1.38	1.45
26	BB	2621	G	C2-N3	5.22	1.36	1.32
1	AA	275	G	C3'-C2'	5.22	1.58	1.52
1	AA	841	C	C5'-C4'	5.22	1.57	1.51
12	AL	40	ARG	CZ-NH1	5.22	1.39	1.33
26	BB	1176	U	C4-C5	5.22	1.48	1.43
26	BB	1792	G	C5-C4	-5.22	1.34	1.38
26	BB	2570	G	O5'-C5'	-5.22	1.34	1.42
1	AA	465	A	C3'-C2'	-5.22	1.47	1.52
1	AA	993	G	C2'-C1'	5.22	1.59	1.53
1	AA	1229	A	C2-N3	-5.22	1.28	1.33
1	AA	1472	U	C5-C6	5.22	1.38	1.34
4	AD	29	C	C2'-C1'	-5.22	1.47	1.53
26	BB	435	C	C4-C5	5.22	1.47	1.43
26	BB	529	A	C5'-C4'	5.22	1.57	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	617	G	C2-N3	5.22	1.36	1.32
26	BB	674	G	N9-C8	-5.22	1.34	1.37
26	BB	1131	G	C5'-C4'	5.22	1.57	1.51
26	BB	1999	C	O4'-C1'	5.22	1.48	1.41
26	BB	2026	U	N3-C4	5.22	1.43	1.38
26	BB	2549	G	P-O5'	5.22	1.65	1.59
26	BB	2849	U	N3-C4	5.22	1.43	1.38
38	BN	143	GLU	CG-CD	5.22	1.59	1.51
1	AA	963	G	C5'-C4'	5.21	1.57	1.51
1	AA	1184	G	N1-C2	-5.21	1.33	1.37
6	AF	41	TYR	CE2-CZ	5.21	1.45	1.38
26	BB	1135	C	C5'-C4'	5.21	1.57	1.51
26	BB	1602	U	N3-C4	-5.21	1.33	1.38
1	AA	340	U	P-O5'	5.21	1.65	1.59
1	AA	721	G	C2'-O2'	5.21	1.48	1.41
1	AA	279	A	C6-N6	5.21	1.38	1.33
1	AA	473	U	C4'-C3'	-5.21	1.47	1.52
1	AA	726	C	C2'-C1'	-5.21	1.47	1.53
1	AA	1204	A	O3'-P	5.21	1.67	1.61
1	AA	1280	A	C4'-O4'	-5.21	1.38	1.45
1	AA	1294	G	C5-C4	-5.21	1.34	1.38
1	AA	1386	G	N9-C8	5.21	1.41	1.37
25	BA	59	A	C4'-C3'	-5.21	1.47	1.52
25	BA	119	A	N9-C8	-5.21	1.33	1.37
26	BB	38	A	O3'-P	5.21	1.67	1.61
26	BB	48	G	N1-C2	5.21	1.42	1.37
26	BB	204	A	C2'-C1'	-5.21	1.47	1.53
26	BB	270	A	C5-C4	5.21	1.42	1.38
26	BB	1017	G	C6-N1	-5.21	1.35	1.39
26	BB	1354	A	N9-C8	-5.21	1.33	1.37
26	BB	1381	G	C8-N7	-5.21	1.27	1.30
26	BB	1399	C	C4-C5	5.21	1.47	1.43
26	BB	1452	G	O3'-P	5.21	1.67	1.61
26	BB	1459	G	N1-C2	-5.21	1.33	1.37
26	BB	1517	G	O4'-C1'	5.21	1.48	1.41
26	BB	1529	G	N7-C5	-5.21	1.36	1.39
26	BB	1759	A	C5-C6	5.21	1.45	1.41
26	BB	1803	A	C3'-C2'	5.21	1.58	1.52
26	BB	2268	A	C6-N6	5.21	1.38	1.33
26	BB	2893	A	C2'-C1'	5.21	1.59	1.53
56	B5	28	ARG	CZ-NH1	5.21	1.39	1.33
2	AB	26	A	N9-C4	-5.21	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1655	A	C6-N1	5.21	1.39	1.35
26	BB	1910	G	C5-C4	-5.21	1.34	1.38
26	BB	2050	C	C4'-O4'	-5.21	1.38	1.45
26	BB	2658	C	P-O5'	5.21	1.65	1.59
26	BB	2718	G	C8-N7	-5.21	1.27	1.30
26	BB	2789	C	N3-C4	-5.21	1.30	1.33
1	AA	880	C	C4-C5	5.21	1.47	1.43
26	BB	981	A	N9-C4	-5.21	1.34	1.37
26	BB	1279	G	O3'-P	5.21	1.67	1.61
26	BB	1827	U	C5'-C4'	5.21	1.57	1.51
26	BB	2163	A	C4'-C3'	5.21	1.58	1.53
26	BB	2726	A	N1-C2	-5.21	1.29	1.34
26	BB	2885	G	C6-O6	5.21	1.28	1.24
1	AA	162	A	N7-C5	5.21	1.42	1.39
1	AA	234	C	C5'-C4'	5.21	1.57	1.51
1	AA	506	G	P-O5'	5.21	1.65	1.59
1	AA	1351	U	C1'-N1	5.21	1.56	1.48
4	AD	68	C	O4'-C1'	5.21	1.48	1.41
26	BB	434	U	O3'-P	5.21	1.67	1.61
26	BB	1475	G	P-O5'	5.21	1.65	1.59
26	BB	1733	G	N7-C5	-5.21	1.36	1.39
26	BB	1773	A	C8-N7	-5.21	1.27	1.31
26	BB	2083	G	C6-N1	5.21	1.43	1.39
26	BB	2193	G	O3'-P	5.21	1.67	1.61
26	BB	2459	A	C3'-C2'	5.21	1.58	1.52
1	AA	574	A	N7-C5	5.21	1.42	1.39
1	AA	1387	G	C5-C6	5.21	1.47	1.42
25	BA	60	C	C1'-N1	5.21	1.56	1.48
26	BB	639	U	C4'-C3'	-5.21	1.47	1.52
26	BB	912	C	N1-C6	-5.21	1.34	1.37
26	BB	2041	U	C2-N3	5.21	1.41	1.37
26	BB	2185	U	C3'-C2'	5.21	1.58	1.52
26	BB	2707	U	N1-C2	5.21	1.43	1.38
26	BB	2734	A	O5'-C5'	-5.21	1.34	1.42
1	AA	319	G	O4'-C1'	5.20	1.48	1.41
1	AA	352	C	C3'-O3'	-5.20	1.34	1.42
1	AA	416	G	C5-C4	-5.20	1.34	1.38
1	AA	1010	U	C4-O4	5.20	1.27	1.23
1	AA	1330	U	C2-N3	5.20	1.41	1.37
1	AA	1539	C	C2'-O2'	5.20	1.48	1.41
26	BB	633	A	C4'-O4'	-5.20	1.38	1.45
26	BB	693	A	O4'-C1'	5.20	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	980	A	O3'-P	-5.20	1.54	1.61
26	BB	1919	A	C2-N3	5.20	1.38	1.33
26	BB	2829	A	O3'-P	5.20	1.67	1.61
1	AA	447	G	C2-N3	5.20	1.36	1.32
26	BB	427	U	P-O5'	-5.20	1.54	1.59
26	BB	583	G	C5-C4	-5.20	1.34	1.38
26	BB	739	A	C2'-O2'	-5.20	1.34	1.41
26	BB	1026	G	C6-N1	5.20	1.43	1.39
26	BB	1534	U	C2'-O2'	5.20	1.48	1.41
26	BB	1976	U	C2-O2	5.20	1.27	1.22
1	AA	225	C	C4-N4	5.20	1.38	1.33
1	AA	745	G	N7-C5	-5.20	1.36	1.39
1	AA	823	C	C2'-C1'	-5.20	1.47	1.53
1	AA	1163	A	C6-N1	5.20	1.39	1.35
1	AA	1173	U	C5-C6	5.20	1.38	1.34
3	AC	29	G	C4'-O4'	-5.20	1.38	1.45
4	AD	43	G	C3'-C2'	5.20	1.58	1.52
26	BB	483	A	C5-C6	-5.20	1.36	1.41
26	BB	635	C	P-O5'	5.20	1.65	1.59
26	BB	748	G	C4'-O4'	-5.20	1.38	1.45
26	BB	1510	G	C8-N7	5.20	1.34	1.30
26	BB	1527	G	P-O5'	5.20	1.65	1.59
26	BB	1540	G	C4'-O4'	-5.20	1.38	1.45
26	BB	1690	A	O3'-P	5.20	1.67	1.61
26	BB	1814	G	C6-N1	5.20	1.43	1.39
26	BB	2089	C	C2-O2	-5.20	1.19	1.24
26	BB	2506	U	N3-C4	5.20	1.43	1.38
26	BB	2672	U	C2-N3	-5.20	1.34	1.37
26	BB	2849	U	O3'-P	5.20	1.67	1.61
1	AA	11	G	C2'-O2'	5.20	1.48	1.41
1	AA	1057	G	C4'-O4'	-5.20	1.38	1.45
1	AA	1332	A	C5-C4	-5.20	1.35	1.38
1	AA	1443	C	C2-N3	-5.20	1.31	1.35
26	BB	1253	A	C5-C6	5.20	1.45	1.41
26	BB	1313	U	N3-C4	5.20	1.43	1.38
26	BB	1322	A	C2'-O2'	5.20	1.48	1.41
26	BB	1533	C	N3-C4	5.20	1.37	1.33
26	BB	2142	A	N3-C4	5.20	1.38	1.34
26	BB	2644	G	C2'-O2'	5.20	1.48	1.41
26	BB	2722	G	C2'-C1'	5.20	1.59	1.53
1	AA	730	G	C6-N1	5.20	1.43	1.39
1	AA	822	U	C2-N3	5.20	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	600	G	N9-C4	-5.20	1.33	1.38
26	BB	982	C	C5-C6	5.20	1.38	1.34
26	BB	1177	G	C2'-O2'	-5.20	1.34	1.41
26	BB	1364	G	C4'-C3'	-5.20	1.47	1.52
26	BB	1554	U	P-O5'	5.20	1.65	1.59
26	BB	2289	G	N7-C5	-5.20	1.36	1.39
1	AA	160	A	C8-N7	-5.20	1.27	1.31
1	AA	160	A	N9-C4	5.20	1.41	1.37
1	AA	1281	C	C4-C5	-5.20	1.38	1.43
26	BB	141	G	C6-N1	5.20	1.43	1.39
26	BB	196	A	P-O5'	-5.20	1.54	1.59
26	BB	1375	U	N1-C2	-5.20	1.33	1.38
26	BB	1533	C	C3'-C2'	5.20	1.58	1.52
26	BB	1976	U	C5-C6	5.20	1.38	1.34
26	BB	2327	A	N3-C4	5.20	1.38	1.34
26	BB	2597	G	N9-C8	5.20	1.41	1.37
1	AA	799	G	C5-C6	5.19	1.47	1.42
1	AA	1091	U	C4-O4	-5.19	1.19	1.23
1	AA	1236	A	C6-N1	5.19	1.39	1.35
3	AC	18	A	O4'-C1'	5.19	1.48	1.41
26	BB	89	A	N3-C4	5.19	1.38	1.34
26	BB	656	G	O4'-C1'	5.19	1.48	1.41
26	BB	1313	U	O3'-P	-5.19	1.54	1.61
26	BB	1706	C	C3'-C2'	5.19	1.58	1.52
26	BB	1809	A	C4'-O4'	-5.19	1.38	1.45
26	BB	1912	A	N9-C8	-5.19	1.33	1.37
1	AA	65	A	N1-C2	-5.19	1.29	1.34
1	AA	552	U	C4-O4	-5.19	1.19	1.23
1	AA	1148	U	P-O5'	5.19	1.65	1.59
1	AA	1152	A	N7-C5	5.19	1.42	1.39
1	AA	1259	C	C4'-C3'	-5.19	1.47	1.52
2	AB	59	G	C6-N1	-5.19	1.35	1.39
26	BB	148	U	O3'-P	5.19	1.67	1.61
26	BB	181	A	C2'-C1'	-5.19	1.47	1.53
26	BB	590	A	N9-C8	-5.19	1.33	1.37
26	BB	614	A	N7-C5	-5.19	1.36	1.39
26	BB	1211	C	C2'-C1'	5.19	1.59	1.53
26	BB	1218	G	O3'-P	5.19	1.67	1.61
26	BB	1290	C	P-O5'	5.19	1.65	1.59
26	BB	1429	G	C5-C4	-5.19	1.34	1.38
26	BB	1473	G	N1-C2	5.19	1.42	1.37
26	BB	1633	G	N3-C4	5.19	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2531	A	N7-C5	-5.19	1.36	1.39
1	AA	144	G	N7-C5	-5.19	1.36	1.39
1	AA	163	C	C4-C5	5.19	1.47	1.43
1	AA	382	A	C2-N3	-5.19	1.28	1.33
1	AA	951	G	C6-N1	5.19	1.43	1.39
1	AA	1018	G	N9-C8	5.19	1.41	1.37
1	AA	1099	G	C8-N7	5.19	1.34	1.30
5	AE	77	GLU	CD-OE1	5.19	1.31	1.25
26	BB	210	C	C5'-C4'	5.19	1.57	1.51
26	BB	764	A	P-O5'	-5.19	1.54	1.59
26	BB	845	A	C6-N6	5.19	1.38	1.33
26	BB	860	U	N1-C2	5.19	1.43	1.38
26	BB	1102	C	C2-N3	5.19	1.40	1.35
26	BB	1768	C	C5-C6	5.19	1.38	1.34
26	BB	1845	G	O3'-P	5.19	1.67	1.61
26	BB	2020	A	C2-N3	5.19	1.38	1.33
26	BB	2366	A	C2-N3	5.19	1.38	1.33
26	BB	2444	G	C8-N7	-5.19	1.27	1.30
26	BB	303	G	C5-C4	-5.19	1.34	1.38
26	BB	1244	A	O3'-P	5.19	1.67	1.61
26	BB	1653	G	C3'-C2'	5.19	1.58	1.52
26	BB	2135	A	C6-N6	5.19	1.38	1.33
1	AA	122	G	N9-C4	5.19	1.42	1.38
26	BB	260	G	C5'-C4'	5.19	1.57	1.51
26	BB	495	G	N3-C4	5.19	1.39	1.35
26	BB	787	C	N3-C4	-5.19	1.30	1.33
26	BB	1141	U	C2-O2	-5.19	1.17	1.22
26	BB	1739	A	N9-C4	5.19	1.41	1.37
26	BB	1787	A	C5'-C4'	5.19	1.57	1.51
26	BB	1788	C	N1-C2	5.19	1.45	1.40
26	BB	1872	A	N9-C4	-5.19	1.34	1.37
26	BB	1963	U	C3'-C2'	5.19	1.58	1.52
26	BB	2576	G	O3'-P	-5.19	1.54	1.61
26	BB	2586	U	C4'-O4'	-5.19	1.38	1.45
26	BB	2587	A	C4'-O4'	-5.19	1.38	1.45
1	AA	182	A	C5-C6	5.19	1.45	1.41
1	AA	328	C	C4-C5	5.19	1.47	1.43
1	AA	882	C	C4-C5	5.19	1.47	1.43
4	AD	9	G	N9-C8	-5.19	1.34	1.37
26	BB	18	U	C2'-O2'	5.19	1.48	1.41
26	BB	241	A	N3-C4	5.19	1.38	1.34
26	BB	520	G	N3-C4	5.19	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1774	C	C4'-C3'	5.19	1.58	1.53
26	BB	2542	A	O3'-P	-5.19	1.54	1.61
1	AA	1178	G	P-O5'	5.18	1.65	1.59
1	AA	1251	A	C2-N3	-5.18	1.28	1.33
25	BA	70	C	C2-N3	5.18	1.39	1.35
25	BA	89	U	C5-C6	5.18	1.38	1.34
26	BB	45	G	N9-C4	5.18	1.42	1.38
26	BB	763	G	C2'-C1'	5.18	1.59	1.53
26	BB	1761	C	C4-C5	5.18	1.47	1.43
26	BB	2067	G	N9-C8	5.18	1.41	1.37
26	BB	2373	G	N9-C8	5.18	1.41	1.37
26	BB	2648	G	N7-C5	5.18	1.42	1.39
1	AA	196	A	C2-N3	5.18	1.38	1.33
1	AA	339	C	O4'-C1'	5.18	1.48	1.41
26	BB	169	G	C2'-C1'	5.18	1.59	1.53
26	BB	913	U	C2'-C1'	-5.18	1.47	1.53
26	BB	1434	A	C3'-C2'	5.18	1.58	1.52
26	BB	1634	A	C6-N1	5.18	1.39	1.35
26	BB	2021	C	N1-C6	5.18	1.40	1.37
26	BB	2199	A	C2-N3	5.18	1.38	1.33
26	BB	2622	U	C5'-C4'	5.18	1.57	1.51
1	AA	77	A	C6-N1	5.18	1.39	1.35
26	BB	925	A	C6-N6	-5.18	1.29	1.33
26	BB	1663	G	C5'-C4'	5.18	1.57	1.51
1	AA	1313	U	C5'-C4'	5.18	1.57	1.51
2	AB	29	G	C5-C6	-5.18	1.37	1.42
25	BA	40	U	C3'-C2'	5.18	1.58	1.52
25	BA	112	G	N9-C4	-5.18	1.33	1.38
26	BB	20	C	C5'-C4'	5.18	1.57	1.51
26	BB	388	G	O3'-P	5.18	1.67	1.61
26	BB	568	U	C4-O4	-5.18	1.19	1.23
26	BB	1409	U	C4-C5	5.18	1.48	1.43
26	BB	2426	A	N1-C2	5.18	1.39	1.34
26	BB	2733	A	O3'-P	5.18	1.67	1.61
1	AA	10	A	O3'-P	-5.18	1.54	1.61
1	AA	1257	A	C4'-C3'	-5.18	1.47	1.52
26	BB	480	A	C2-N3	5.18	1.38	1.33
26	BB	1148	U	O3'-P	5.18	1.67	1.61
26	BB	1177	G	N9-C8	-5.18	1.34	1.37
26	BB	1476	U	C5'-C4'	5.18	1.57	1.51
26	BB	2035	G	C8-N7	5.18	1.34	1.30
26	BB	2402	U	O3'-P	5.18	1.67	1.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2845	U	N1-C2	5.18	1.43	1.38
1	AA	264	C	C4'-O4'	-5.18	1.38	1.45
1	AA	349	A	O3'-P	5.18	1.67	1.61
1	AA	744	C	C4'-O4'	-5.18	1.38	1.45
1	AA	1107	C	C3'-C2'	5.18	1.58	1.52
1	AA	1221	G	C4'-C3'	-5.18	1.47	1.52
25	BA	11	C	C1'-N1	5.18	1.56	1.48
25	BA	20	G	C2'-C1'	-5.18	1.47	1.53
26	BB	469	G	O3'-P	5.18	1.67	1.61
26	BB	1521	G	N7-C5	-5.18	1.36	1.39
26	BB	1696	G	N3-C4	5.18	1.39	1.35
26	BB	1987	A	C5-C6	5.18	1.45	1.41
26	BB	2408	U	C4'-O4'	-5.18	1.38	1.45
1	AA	133	U	O3'-P	5.17	1.67	1.61
1	AA	660	C	C5'-C4'	5.17	1.57	1.51
1	AA	868	C	C1'-N1	5.17	1.56	1.48
1	AA	888	G	C2-N3	5.17	1.36	1.32
1	AA	1253	G	C6-O6	-5.17	1.19	1.24
1	AA	1493	A	P-O5'	5.17	1.65	1.59
10	AJ	1	PRO	N-CD	5.17	1.55	1.47
26	BB	477	A	C4'-O4'	-5.17	1.38	1.45
26	BB	1867	G	C3'-C2'	5.17	1.58	1.52
26	BB	1992	G	C2'-O2'	-5.17	1.34	1.41
26	BB	2089	C	N3-C4	5.17	1.37	1.33
26	BB	2126	A	N9-C4	5.17	1.41	1.37
26	BB	415	A	C5-C4	-5.17	1.35	1.38
26	BB	457	A	C2-N3	-5.17	1.28	1.33
26	BB	506	G	N7-C5	5.17	1.42	1.39
26	BB	1803	A	C3'-O3'	-5.17	1.34	1.42
26	BB	2032	G	C6-N1	5.17	1.43	1.39
26	BB	2116	G	C5'-C4'	5.17	1.57	1.51
26	BB	2850	A	N3-C4	-5.17	1.31	1.34
1	AA	423	G	C5'-C4'	5.17	1.57	1.51
1	AA	498	A	C2'-O2'	-5.17	1.34	1.41
1	AA	629	A	C4'-C3'	-5.17	1.47	1.52
25	BA	74	U	C4-C5	5.17	1.48	1.43
26	BB	332	A	N7-C5	-5.17	1.36	1.39
26	BB	427	U	C4-O4	5.17	1.27	1.23
26	BB	1022	G	C4'-O4'	-5.17	1.38	1.45
26	BB	1454	C	C5-C6	5.17	1.38	1.34
26	BB	2524	G	C8-N7	5.17	1.34	1.30
26	BB	2615	U	N1-C2	5.17	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	BS	78	PHE	CE2-CZ	5.17	1.47	1.37
1	AA	753	A	C4'-O4'	-5.17	1.38	1.45
1	AA	1084	G	C5-C4	-5.17	1.34	1.38
1	AA	1156	G	C5-C4	5.17	1.42	1.38
26	BB	84	A	N3-C4	5.17	1.38	1.34
26	BB	456	C	C2-N3	5.17	1.39	1.35
26	BB	800	A	O4'-C1'	5.17	1.48	1.41
26	BB	942	G	C4'-O4'	-5.17	1.38	1.45
26	BB	1091	G	C4'-O4'	-5.17	1.38	1.45
26	BB	2799	A	O3'-P	-5.17	1.54	1.61
1	AA	880	C	O3'-P	5.17	1.67	1.61
3	AC	57	C	N3-C4	5.17	1.37	1.33
25	BA	44	G	C5-C4	5.17	1.42	1.38
25	BA	106	G	C5'-C4'	5.17	1.57	1.51
26	BB	772	C	C3'-C2'	5.17	1.58	1.52
26	BB	858	G	C5-C4	-5.17	1.34	1.38
26	BB	1134	A	C4'-O4'	-5.17	1.38	1.45
26	BB	1871	A	N3-C4	5.17	1.38	1.34
28	BD	68	ARG	NE-CZ	5.17	1.39	1.33
1	AA	831	A	C8-N7	-5.17	1.27	1.31
1	AA	1506	U	C5-C6	5.17	1.38	1.34
25	BA	29	A	C8-N7	5.17	1.35	1.31
26	BB	490	C	C4'-O4'	-5.17	1.38	1.45
26	BB	501	A	C2-N3	5.17	1.38	1.33
26	BB	910	A	C8-N7	-5.17	1.27	1.31
26	BB	1270	C	C4'-C3'	5.17	1.58	1.53
26	BB	1274	A	C5'-C4'	5.17	1.57	1.51
26	BB	1757	A	C3'-C2'	5.17	1.58	1.52
26	BB	1926	U	C5-C6	5.17	1.38	1.34
26	BB	1960	A	C5-C6	5.17	1.45	1.41
26	BB	2004	G	C8-N7	-5.17	1.27	1.30
26	BB	2167	U	C4-C5	5.17	1.48	1.43
26	BB	2255	G	C4'-O4'	-5.17	1.38	1.45
26	BB	2307	G	C6-N1	5.17	1.43	1.39
26	BB	2555	U	C2-N3	5.17	1.41	1.37
28	BD	81	GLU	CD-OE2	5.17	1.31	1.25
1	AA	1306	A	P-O5'	5.17	1.65	1.59
1	AA	1343	G	C5'-C4'	5.17	1.57	1.51
4	AD	19	G	C2-N3	5.17	1.36	1.32
26	BB	721	A	C4'-O4'	-5.17	1.38	1.45
26	BB	762	U	C2-O2	5.17	1.26	1.22
26	BB	795	C	O4'-C1'	5.17	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1141	U	O3'-P	-5.17	1.54	1.61
26	BB	1198	U	C1'-N1	5.17	1.56	1.48
26	BB	1811	G	N1-C2	5.17	1.41	1.37
1	AA	121	U	P-O5'	5.16	1.65	1.59
1	AA	704	A	C2'-C1'	5.16	1.59	1.53
1	AA	987	G	P-O5'	5.16	1.65	1.59
1	AA	1087	G	O4'-C1'	5.16	1.48	1.41
1	AA	1110	A	P-O5'	5.16	1.65	1.59
1	AA	1410	A	N7-C5	5.16	1.42	1.39
1	AA	1515	G	C5-C4	5.16	1.42	1.38
26	BB	142	A	O3'-P	-5.16	1.54	1.61
26	BB	396	G	C4'-O4'	-5.16	1.38	1.45
26	BB	502	A	C5-C6	5.16	1.45	1.41
26	BB	593	U	O3'-P	-5.16	1.54	1.61
26	BB	679	C	C2-N3	-5.16	1.31	1.35
26	BB	712	G	C5-C6	5.16	1.47	1.42
26	BB	1237	A	C6-N6	5.16	1.38	1.33
26	BB	1323	C	C5'-C4'	-5.16	1.45	1.51
26	BB	1427	A	C4'-C3'	5.16	1.58	1.53
26	BB	1996	C	C4-C5	5.16	1.47	1.43
26	BB	2438	U	N1-C2	5.16	1.43	1.38
26	BB	2596	U	C5-C6	5.16	1.38	1.34
1	AA	434	U	O4'-C1'	5.16	1.48	1.41
16	AP	85	TYR	CE1-CZ	5.16	1.45	1.38
26	BB	2205	A	C5-C4	-5.16	1.35	1.38
26	BB	2577	A	N1-C2	-5.16	1.29	1.34
26	BB	2639	A	C4'-O4'	-5.16	1.38	1.45
1	AA	640	A	O4'-C1'	5.16	1.48	1.41
1	AA	937	A	C6-N6	5.16	1.38	1.33
1	AA	962	C	C4'-O4'	-5.16	1.38	1.45
26	BB	324	A	C4'-O4'	-5.16	1.38	1.45
26	BB	421	C	C2-O2	-5.16	1.19	1.24
26	BB	1037	G	C6-N1	5.16	1.43	1.39
26	BB	1275	A	C5-C6	5.16	1.45	1.41
26	BB	1361	G	N1-C2	5.16	1.41	1.37
26	BB	1632	A	C2'-O2'	-5.16	1.34	1.41
26	BB	1793	C	P-O5'	5.16	1.65	1.59
26	BB	1883	U	O3'-P	5.16	1.67	1.61
26	BB	2272	U	O3'-P	-5.16	1.54	1.61
26	BB	2565	A	N9-C4	5.16	1.41	1.37
26	BB	2770	G	C6-O6	5.16	1.28	1.24
1	AA	139	A	C5-C6	5.16	1.45	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	257	G	O3'-P	-5.16	1.54	1.61
1	AA	273	U	C4-O4	-5.16	1.19	1.23
1	AA	485	U	C4'-C3'	5.16	1.58	1.53
1	AA	576	C	C5-C6	5.16	1.38	1.34
1	AA	622	A	N7-C5	5.16	1.42	1.39
1	AA	819	A	C6-N6	-5.16	1.29	1.33
1	AA	833	G	C2-N3	5.16	1.36	1.32
1	AA	1109	C	C4-N4	5.16	1.38	1.33
24	AX	61	ARG	CZ-NH2	5.16	1.39	1.33
26	BB	606	U	O4'-C1'	5.16	1.48	1.41
26	BB	940	G	N7-C5	5.16	1.42	1.39
26	BB	1263	U	C5-C6	5.16	1.38	1.34
26	BB	1592	C	O4'-C1'	5.16	1.48	1.41
1	AA	1032	G	C5-C6	-5.16	1.37	1.42
26	BB	471	A	C6-N6	-5.16	1.29	1.33
26	BB	561	G	N3-C4	5.16	1.39	1.35
26	BB	706	A	C5-C4	-5.16	1.35	1.38
26	BB	1005	C	P-O5'	5.16	1.65	1.59
26	BB	2573	C	C5-C6	5.16	1.38	1.34
26	BB	2610	C	C2'-C1'	-5.16	1.47	1.53
1	AA	806	C	C2-N3	-5.16	1.31	1.35
1	AA	1343	G	C8-N7	-5.16	1.27	1.30
4	AD	27	G	C6-N1	5.16	1.43	1.39
7	AG	62	ARG	NE-CZ	5.16	1.39	1.33
9	AI	75	GLU	CG-CD	5.16	1.59	1.51
25	BA	100	G	C2-N3	5.16	1.36	1.32
26	BB	19	A	C6-N1	-5.16	1.31	1.35
26	BB	434	U	N1-C2	5.16	1.43	1.38
26	BB	1012	U	C2'-C1'	-5.16	1.47	1.53
26	BB	1203	U	N3-C4	5.16	1.43	1.38
26	BB	1538	G	N9-C8	5.16	1.41	1.37
26	BB	1640	A	C5-C6	5.16	1.45	1.41
26	BB	2000	C	P-O5'	-5.16	1.54	1.59
26	BB	2143	C	C4'-O4'	-5.16	1.38	1.45
26	BB	2411	A	C6-N1	5.16	1.39	1.35
26	BB	2437	G	N9-C4	5.16	1.42	1.38
26	BB	2583	G	C5'-C4'	5.16	1.57	1.51
26	BB	2678	C	C4-N4	5.16	1.38	1.33
26	BB	2872	A	C6-N1	-5.16	1.31	1.35
1	AA	347	G	N7-C5	-5.15	1.36	1.39
1	AA	367	U	C4'-O4'	-5.15	1.38	1.45
1	AA	660	C	O4'-C1'	5.15	1.48	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	850	U	N3-C4	5.15	1.43	1.38
1	AA	1271	A	C2'-C1'	5.15	1.59	1.53
26	BB	43	G	O4'-C1'	5.15	1.48	1.41
26	BB	512	G	O3'-P	5.15	1.67	1.61
26	BB	597	G	N9-C8	-5.15	1.34	1.37
26	BB	615	U	N1-C6	5.15	1.42	1.38
26	BB	932	U	N1-C2	5.15	1.43	1.38
26	BB	1127	A	N9-C4	5.15	1.41	1.37
26	BB	1840	G	C3'-O3'	5.15	1.49	1.42
26	BB	2165	C	N3-C4	5.15	1.37	1.33
26	BB	2446	G	C5-C4	-5.15	1.34	1.38
26	BB	2528	U	C2'-O2'	5.15	1.48	1.41
1	AA	181	A	N7-C5	5.15	1.42	1.39
1	AA	1297	G	C5-C4	5.15	1.42	1.38
2	AB	49	G	N9-C4	5.15	1.42	1.38
25	BA	23	G	C2'-C1'	-5.15	1.47	1.53
26	BB	231	A	N7-C5	5.15	1.42	1.39
26	BB	768	G	N1-C2	5.15	1.41	1.37
26	BB	979	A	N9-C8	-5.15	1.33	1.37
26	BB	1017	G	C2-N3	5.15	1.36	1.32
26	BB	1357	C	C4'-O4'	-5.15	1.38	1.45
26	BB	1487	U	C4'-O4'	-5.15	1.38	1.45
26	BB	2346	A	P-O5'	5.15	1.65	1.59
26	BB	2431	U	O5'-C5'	-5.15	1.34	1.42
26	BB	2520	C	C5-C6	5.15	1.38	1.34
26	BB	2571	U	N1-C2	5.15	1.43	1.38
26	BB	2688	G	C4'-O4'	-5.15	1.38	1.45
44	BT	90	ARG	CZ-NH1	5.15	1.39	1.33
1	AA	37	U	C4'-O4'	-5.15	1.38	1.45
1	AA	140	U	C5'-C4'	5.15	1.57	1.51
1	AA	481	G	C6-O6	-5.15	1.19	1.24
1	AA	1039	G	C8-N7	-5.15	1.27	1.30
1	AA	1058	G	C6-N1	-5.15	1.35	1.39
1	AA	1294	G	C6-N1	-5.15	1.35	1.39
2	AB	2	G	C5-C4	5.15	1.42	1.38
3	AC	37	G	C4'-C3'	5.15	1.58	1.53
26	BB	331	C	C4-C5	5.15	1.47	1.43
26	BB	1899	A	N3-C4	5.15	1.38	1.34
26	BB	2751	G	C5'-C4'	5.15	1.57	1.51
1	AA	45	G	N9-C8	5.15	1.41	1.37
3	AC	43	U	N1-C2	5.15	1.43	1.38
26	BB	863	A	N1-C2	5.15	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1312	U	O3'-P	5.15	1.67	1.61
26	BB	1458	U	C2'-C1'	5.15	1.59	1.53
26	BB	1968	G	O3'-P	5.15	1.67	1.61
26	BB	2492	U	C2'-C1'	-5.15	1.47	1.53
26	BB	2696	U	O4'-C1'	5.15	1.48	1.41
1	AA	359	G	C5-C4	5.15	1.42	1.38
1	AA	537	G	P-O5'	5.15	1.64	1.59
1	AA	595	A	P-O5'	5.15	1.64	1.59
1	AA	616	G	C4'-O4'	-5.15	1.38	1.45
1	AA	1049	U	N1-C2	5.15	1.43	1.38
1	AA	1067	A	C1'-N9	5.15	1.56	1.48
4	AD	73	A	C5-C4	5.15	1.42	1.38
26	BB	233	A	C5-C4	-5.15	1.35	1.38
26	BB	430	A	N3-C4	5.15	1.38	1.34
26	BB	580	U	C3'-C2'	5.15	1.58	1.52
26	BB	2384	U	C3'-O3'	5.15	1.49	1.42
27	BC	108	GLU	CG-CD	5.15	1.59	1.51
1	AA	79	G	C2'-C1'	-5.15	1.47	1.53
1	AA	752	G	O3'-P	5.15	1.67	1.61
1	AA	932	C	O3'-P	5.15	1.67	1.61
25	BA	48	U	C2'-C1'	5.15	1.59	1.53
26	BB	392	U	N1-C6	5.15	1.42	1.38
26	BB	964	C	C2'-C1'	5.15	1.59	1.53
26	BB	1449	G	P-O5'	5.15	1.64	1.59
26	BB	1953	A	C8-N7	5.15	1.35	1.31
1	AA	323	U	C3'-C2'	5.14	1.58	1.52
1	AA	694	A	C3'-C2'	5.14	1.58	1.52
1	AA	1211	U	C1'-N1	5.14	1.56	1.48
1	AA	1497	G	P-O5'	5.14	1.64	1.59
26	BB	201	C	C4-N4	5.14	1.38	1.33
26	BB	578	G	O4'-C1'	5.14	1.48	1.41
26	BB	1252	G	P-O5'	-5.14	1.54	1.59
26	BB	1586	A	P-O5'	5.14	1.64	1.59
26	BB	1684	G	P-O5'	5.14	1.64	1.59
26	BB	1886	U	C5'-C4'	5.14	1.57	1.51
26	BB	2156	G	C4'-O4'	-5.14	1.38	1.45
26	BB	2390	U	C3'-C2'	5.14	1.58	1.52
26	BB	2571	U	P-O5'	5.14	1.64	1.59
1	AA	607	A	N3-C4	5.14	1.38	1.34
1	AA	1050	G	C5-C4	5.14	1.42	1.38
2	AB	48	U	C2-N3	5.14	1.41	1.37
25	BA	6	G	C4'-O4'	-5.14	1.38	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	240	C	C2-O2	-5.14	1.19	1.24
26	BB	456	C	O3'-P	5.14	1.67	1.61
26	BB	583	G	C5'-C4'	5.14	1.57	1.51
26	BB	783	A	O3'-P	5.14	1.67	1.61
26	BB	911	A	C5-C6	5.14	1.45	1.41
26	BB	1520	U	C5-C6	-5.14	1.29	1.34
26	BB	2169	A	N1-C2	-5.14	1.29	1.34
26	BB	2514	U	C4-O4	5.14	1.27	1.23
1	AA	1254	A	C2'-O2'	-5.14	1.34	1.41
1	AA	1434	A	C5'-C4'	5.14	1.57	1.51
26	BB	1133	A	N9-C4	-5.14	1.34	1.37
26	BB	1358	G	C4'-C3'	5.14	1.58	1.53
26	BB	1487	U	C1'-N1	5.14	1.56	1.48
1	AA	67	C	C5-C6	5.14	1.38	1.34
1	AA	772	U	C5'-C4'	5.14	1.57	1.51
1	AA	789	U	N1-C2	5.14	1.43	1.38
2	AB	67	G	C4'-C3'	5.14	1.58	1.53
26	BB	1228	G	P-OP2	-5.14	1.40	1.49
26	BB	1669	A	C4'-C3'	5.14	1.58	1.53
26	BB	1844	C	O4'-C1'	5.14	1.48	1.41
26	BB	1857	G	C2-N3	5.14	1.36	1.32
26	BB	2639	A	C6-N1	-5.14	1.31	1.35
1	AA	506	G	C4'-O4'	-5.14	1.38	1.45
1	AA	663	A	O3'-P	5.14	1.67	1.61
26	BB	96	C	N1-C6	-5.14	1.34	1.37
26	BB	2423	U	O3'-P	5.14	1.67	1.61
26	BB	2824	C	N3-C4	-5.14	1.30	1.33
1	AA	53	A	N3-C4	5.14	1.38	1.34
1	AA	108	G	C8-N7	-5.14	1.27	1.30
1	AA	225	C	N1-C6	5.14	1.40	1.37
1	AA	608	A	N9-C4	5.14	1.41	1.37
1	AA	1315	U	P-O5'	5.14	1.64	1.59
2	AB	42	G	O3'-P	5.14	1.67	1.61
14	AN	46	ALA	C-N	5.14	1.42	1.33
26	BB	847	U	C4-C5	5.14	1.48	1.43
26	BB	943	A	C6-N1	-5.14	1.31	1.35
26	BB	1182	G	C1'-N9	5.14	1.56	1.48
26	BB	1225	G	P-O5'	-5.14	1.54	1.59
26	BB	1651	G	C4'-O4'	-5.14	1.38	1.45
26	BB	1690	A	N3-C4	5.14	1.38	1.34
26	BB	1919	A	C5-C4	5.14	1.42	1.38
26	BB	2055	C	C4'-C3'	-5.14	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2166	U	C2'-O2'	5.14	1.48	1.41
46	BV	42	GLU	CD-OE1	5.14	1.31	1.25
1	AA	288	A	N3-C4	5.13	1.38	1.34
1	AA	476	U	C2'-O2'	5.13	1.48	1.41
1	AA	754	C	N1-C6	5.13	1.40	1.37
1	AA	1344	C	O4'-C1'	-5.13	1.34	1.41
1	AA	1423	G	N1-C2	5.13	1.41	1.37
1	AA	1424	U	N3-C4	5.13	1.43	1.38
3	AC	19	A	N3-C4	5.13	1.38	1.34
26	BB	922	C	C2-N3	5.13	1.39	1.35
26	BB	1381	G	C3'-C2'	5.13	1.58	1.52
26	BB	1501	G	C5-C4	-5.13	1.34	1.38
26	BB	1543	G	C5-C6	5.13	1.47	1.42
26	BB	1570	A	N1-C2	-5.13	1.29	1.34
26	BB	1728	C	C4-C5	5.13	1.47	1.43
26	BB	1924	C	C4-N4	-5.13	1.29	1.33
26	BB	2447	G	C3'-C2'	5.13	1.58	1.52
26	BB	2788	C	P-O5'	5.13	1.64	1.59
39	BO	9	PHE	CG-CD1	5.13	1.46	1.38
2	AB	15	A	C2'-O2'	5.13	1.48	1.41
26	BB	691	C	C1'-N1	5.13	1.56	1.48
26	BB	842	U	C2-N3	5.13	1.41	1.37
26	BB	1239	G	C3'-C2'	5.13	1.58	1.52
26	BB	1301	A	N7-C5	-5.13	1.36	1.39
26	BB	2095	A	C8-N7	5.13	1.35	1.31
1	AA	87	C	C4-C5	5.13	1.47	1.43
1	AA	740	U	C4'-C3'	5.13	1.58	1.53
4	AD	29	C	C2-N3	5.13	1.39	1.35
25	BA	94	A	C6-N1	-5.13	1.31	1.35
26	BB	398	C	C5'-C4'	5.13	1.57	1.51
26	BB	565	C	C4'-O4'	-5.13	1.38	1.45
26	BB	647	G	C2'-C1'	5.13	1.58	1.53
26	BB	1607	C	O4'-C1'	-5.13	1.34	1.41
26	BB	1929	G	C5'-C4'	5.13	1.57	1.51
26	BB	2035	G	C2-N2	-5.13	1.29	1.34
26	BB	2145	C	O3'-P	-5.13	1.54	1.61
26	BB	2572	A	C5'-C4'	5.13	1.57	1.51
26	BB	2675	A	C6-N6	-5.13	1.29	1.33
1	AA	145	G	N7-C5	5.13	1.42	1.39
1	AA	1056	U	N1-C2	5.13	1.43	1.38
1	AA	1329	A	C3'-C2'	5.13	1.58	1.52
26	BB	480	A	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	BB	670	A	P-O5'	5.13	1.64	1.59
26	BB	947	A	C2'-C1'	5.13	1.58	1.53
26	BB	952	G	N7-C5	-5.13	1.36	1.39
26	BB	1091	G	O5'-C5'	-5.13	1.34	1.42
26	BB	1318	U	P-O5'	5.13	1.64	1.59
26	BB	2613	U	C4'-O4'	-5.13	1.38	1.45
1	AA	25	C	C2'-C1'	5.13	1.58	1.53
1	AA	723	U	C1'-N1	5.13	1.56	1.48
1	AA	760	G	O3'-P	5.13	1.67	1.61
1	AA	837	U	N1-C6	5.13	1.42	1.38
1	AA	1009	U	C2-N3	5.13	1.41	1.37
26	BB	409	G	O3'-P	-5.13	1.54	1.61
26	BB	1672	A	C6-N6	-5.13	1.29	1.33
26	BB	1896	G	C2-N3	5.13	1.36	1.32
26	BB	1991	U	C3'-C2'	5.13	1.58	1.52
26	BB	2465	C	C5'-C4'	5.13	1.57	1.51
26	BB	2548	U	C3'-C2'	5.13	1.58	1.52
26	BB	2671	G	C5'-C4'	5.13	1.57	1.51
26	BB	2856	A	C3'-O3'	5.13	1.49	1.42
28	BD	99	GLU	CG-CD	5.13	1.59	1.51
39	BO	38	ARG	NE-CZ	5.13	1.39	1.33
1	AA	48	C	P-O5'	5.13	1.64	1.59
1	AA	874	G	O5'-C5'	-5.13	1.34	1.42
1	AA	1542	A	C4'-O4'	-5.13	1.38	1.45
4	AD	4	G	N1-C2	5.13	1.41	1.37
26	BB	18	U	C4'-O4'	-5.13	1.38	1.45
26	BB	383	C	N1-C2	-5.13	1.35	1.40
26	BB	613	A	C5-C6	5.13	1.45	1.41
26	BB	636	G	C3'-C2'	-5.13	1.47	1.52
26	BB	2088	A	P-O5'	5.13	1.64	1.59
26	BB	2701	U	C4'-O4'	-5.13	1.38	1.45
26	BB	2889	C	P-O5'	5.13	1.64	1.59
26	BB	2899	A	N3-C4	5.13	1.38	1.34
7	AG	127	ARG	CZ-NH2	5.12	1.39	1.33
25	BA	30	C	N1-C6	5.12	1.40	1.37
26	BB	893	C	P-O5'	5.12	1.64	1.59
26	BB	1214	A	C5-C4	5.12	1.42	1.38
26	BB	1477	A	N7-C5	5.12	1.42	1.39
26	BB	1633	G	C6-N1	-5.12	1.35	1.39
26	BB	2588	G	N9-C4	-5.12	1.33	1.38
26	BB	2795	C	P-O5'	5.12	1.64	1.59
1	AA	545	C	P-O5'	5.12	1.64	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	725	G	N3-C4	5.12	1.39	1.35
1	AA	1463	U	C2-O2	5.12	1.26	1.22
2	AB	36	A	C6-N6	-5.12	1.29	1.33
25	BA	91	C	C4'-O4'	-5.12	1.38	1.45
26	BB	43	G	C5-C4	-5.12	1.34	1.38
26	BB	467	G	C2-N3	5.12	1.36	1.32
26	BB	469	G	C6-O6	-5.12	1.19	1.24
26	BB	701	G	C4'-O4'	-5.12	1.38	1.45
26	BB	1071	G	N7-C5	-5.12	1.36	1.39
26	BB	1085	A	P-O5'	5.12	1.64	1.59
26	BB	1123	C	C4'-O4'	-5.12	1.38	1.45
26	BB	1288	G	C4'-C3'	5.12	1.58	1.53
26	BB	1410	G	C2'-C1'	5.12	1.58	1.53
26	BB	1852	U	C2-O2	5.12	1.26	1.22
26	BB	2063	C	C4-C5	5.12	1.47	1.43
26	BB	2430	A	C6-N1	5.12	1.39	1.35
26	BB	2577	A	C2-N3	5.12	1.38	1.33
26	BB	2740	A	C5-C6	5.12	1.45	1.41
1	AA	692	U	C4-O4	-5.12	1.19	1.23
1	AA	821	G	C6-O6	-5.12	1.19	1.24
1	AA	1437	A	C4'-O4'	-5.12	1.38	1.45
26	BB	134	G	N7-C5	5.12	1.42	1.39
26	BB	299	A	C5-C6	5.12	1.45	1.41
26	BB	548	G	O4'-C1'	5.12	1.48	1.41
26	BB	1047	G	O3'-P	5.12	1.67	1.61
26	BB	1221	C	C5'-C4'	5.12	1.57	1.51
26	BB	1400	U	C4-O4	-5.12	1.19	1.23
26	BB	1765	U	N1-C2	-5.12	1.33	1.38
26	BB	1870	C	N1-C6	5.12	1.40	1.37
26	BB	2025	C	P-O5'	5.12	1.64	1.59
26	BB	2541	A	N3-C4	5.12	1.38	1.34
26	BB	2900	A	C3'-C2'	5.12	1.58	1.52
41	BQ	36	TYR	CE1-CZ	5.12	1.45	1.38
1	AA	81	A	C4'-C3'	-5.12	1.47	1.52
1	AA	980	C	C2-N3	-5.12	1.31	1.35
26	BB	1928	A	N7-C5	-5.12	1.36	1.39
26	BB	1988	G	C5-C4	5.12	1.42	1.38
26	BB	2060	A	C3'-C2'	5.12	1.58	1.52
1	AA	146	G	C8-N7	-5.12	1.27	1.30
1	AA	804	U	P-O5'	-5.12	1.54	1.59
1	AA	1383	C	O3'-P	-5.12	1.55	1.61
1	AA	1472	U	C2-O2	5.12	1.26	1.22

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	287	G	N1-C2	5.12	1.41	1.37
26	BB	701	G	N3-C4	5.12	1.39	1.35
26	BB	780	G	C5'-C4'	-5.12	1.45	1.51
26	BB	1521	G	P-O5'	-5.12	1.54	1.59
26	BB	1767	G	O4'-C1'	5.12	1.48	1.41
26	BB	1964	G	C5-C6	5.12	1.47	1.42
26	BB	2073	C	N1-C6	5.12	1.40	1.37
26	BB	2526	G	N7-C5	5.12	1.42	1.39
26	BB	2583	G	N7-C5	5.12	1.42	1.39
26	BB	2789	C	C3'-C2'	5.12	1.58	1.52
1	AA	1343	G	N9-C8	5.12	1.41	1.37
26	BB	41	C	N1-C2	5.12	1.45	1.40
26	BB	247	G	C2-N3	5.12	1.36	1.32
26	BB	673	C	C4-C5	5.12	1.47	1.43
26	BB	899	A	C8-N7	5.12	1.35	1.31
26	BB	1007	C	O4'-C1'	5.12	1.48	1.41
26	BB	1673	G	C5'-C4'	5.12	1.57	1.51
26	BB	2232	C	C5'-C4'	5.12	1.57	1.51
26	BB	2354	C	C1'-N1	5.12	1.56	1.48
4	AD	65	G	N7-C5	5.12	1.42	1.39
8	AH	7	ALA	C-N	5.12	1.42	1.33
26	BB	327	G	C3'-C2'	-5.12	1.47	1.52
26	BB	1094	U	C4-C5	5.12	1.48	1.43
26	BB	1477	A	C3'-C2'	5.12	1.58	1.52
26	BB	1559	U	P-O5'	5.12	1.64	1.59
26	BB	1584	U	P-O5'	5.12	1.64	1.59
26	BB	1841	U	N3-C4	5.12	1.43	1.38
26	BB	2425	A	C5'-C4'	5.12	1.57	1.51
26	BB	2704	C	C4'-O4'	-5.12	1.38	1.45
26	BB	2716	C	P-O5'	5.12	1.64	1.59
4	AD	12	G	N9-C4	-5.11	1.33	1.38
16	AP	112	ARG	NE-CZ	5.11	1.39	1.33
26	BB	476	G	O4'-C1'	5.11	1.48	1.41
26	BB	1583	A	C4'-O4'	-5.11	1.39	1.45
26	BB	2272	U	C4-C5	5.11	1.48	1.43
26	BB	2665	A	N3-C4	5.11	1.38	1.34
26	BB	2753	A	C8-N7	-5.11	1.27	1.31
1	AA	808	C	C4'-O4'	-5.11	1.39	1.45
1	AA	922	G	C2'-C1'	-5.11	1.47	1.53
25	BA	69	G	C4'-O4'	-5.11	1.39	1.45
26	BB	1683	U	C3'-C2'	5.11	1.58	1.52
26	BB	1821	A	N3-C4	5.11	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2074	U	N1-C2	5.11	1.43	1.38
26	BB	2879	A	N3-C4	5.11	1.38	1.34
1	AA	265	G	N3-C4	5.11	1.39	1.35
1	AA	511	C	C5-C6	5.11	1.38	1.34
1	AA	532	A	C5'-C4'	5.11	1.57	1.51
1	AA	579	A	C5'-C4'	5.11	1.57	1.51
1	AA	656	G	N9-C8	-5.11	1.34	1.37
2	AB	38	A	N9-C4	5.11	1.41	1.37
4	AD	19	G	N3-C4	5.11	1.39	1.35
26	BB	73	A	C5-C4	-5.11	1.35	1.38
26	BB	807	U	C5-C6	5.11	1.38	1.34
26	BB	811	U	C4-O4	5.11	1.27	1.23
26	BB	1200	C	N3-C4	-5.11	1.30	1.33
26	BB	1514	G	P-O5'	5.11	1.64	1.59
26	BB	1702	G	C5-C6	5.11	1.47	1.42
26	BB	2027	G	C8-N7	-5.11	1.27	1.30
26	BB	2168	G	N9-C4	5.11	1.42	1.38
26	BB	2395	C	N1-C2	5.11	1.45	1.40
26	BB	2649	C	C3'-C2'	-5.11	1.47	1.52
26	BB	2822	G	C8-N7	5.11	1.34	1.30
1	AA	773	G	N1-C2	5.11	1.41	1.37
2	AB	5	G	C5-C4	-5.11	1.34	1.38
25	BA	9	G	N9-C8	-5.11	1.34	1.37
26	BB	456	C	C2-O2	-5.11	1.19	1.24
1	AA	165	G	C2-N3	5.11	1.36	1.32
1	AA	325	A	C2'-O2'	5.11	1.48	1.41
1	AA	855	U	C2'-O2'	5.11	1.48	1.41
1	AA	1008	U	C5-C6	5.11	1.38	1.34
1	AA	1196	A	O3'-P	-5.11	1.55	1.61
1	AA	1353	G	C2-N3	5.11	1.36	1.32
2	AB	52	A	C5'-C4'	5.11	1.57	1.51
26	BB	157	C	O3'-P	5.11	1.67	1.61
26	BB	177	G	C1'-N9	5.11	1.56	1.48
26	BB	382	A	C5-C4	-5.11	1.35	1.38
26	BB	680	C	N3-C4	-5.11	1.30	1.33
26	BB	752	A	C4'-O4'	-5.11	1.39	1.45
26	BB	1649	G	N3-C4	5.11	1.39	1.35
26	BB	1766	G	C2-N3	5.11	1.36	1.32
26	BB	2141	G	N1-C2	5.11	1.41	1.37
26	BB	2618	G	C4'-O4'	-5.11	1.39	1.45
51	B0	12	GLU	CB-CG	5.11	1.61	1.52
1	AA	1154	G	C5-C4	5.11	1.42	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1257	A	N9-C8	-5.11	1.33	1.37
1	AA	1500	A	P-O5'	5.11	1.64	1.59
25	BA	115	A	C6-N1	5.11	1.39	1.35
26	BB	415	A	C4'-C3'	-5.11	1.47	1.52
26	BB	502	A	P-O5'	5.11	1.64	1.59
26	BB	791	C	C4-C5	5.11	1.47	1.43
26	BB	973	A	N1-C2	-5.11	1.29	1.34
26	BB	1441	G	N3-C4	-5.11	1.31	1.35
26	BB	1651	G	C2-N2	-5.11	1.29	1.34
26	BB	1820	U	C5'-C4'	5.11	1.57	1.51
26	BB	2186	G	C4'-O4'	-5.11	1.39	1.45
26	BB	2803	G	O3'-P	5.11	1.67	1.61
25	BA	22	U	O3'-P	5.10	1.67	1.61
26	BB	245	G	C2-N2	-5.10	1.29	1.34
26	BB	853	C	N1-C6	-5.10	1.34	1.37
26	BB	881	G	C6-O6	5.10	1.28	1.24
1	AA	31	G	N7-C5	-5.10	1.36	1.39
1	AA	782	A	C3'-O3'	5.10	1.49	1.42
1	AA	813	U	C2-N3	-5.10	1.34	1.37
10	AJ	131	GLY	CA-C	5.10	1.60	1.51
26	BB	26	G	C5-C4	-5.10	1.34	1.38
26	BB	67	U	C4'-O4'	-5.10	1.39	1.45
26	BB	362	A	C4'-C3'	5.10	1.58	1.53
26	BB	596	U	P-O5'	5.10	1.64	1.59
26	BB	900	A	C2-N3	5.10	1.38	1.33
26	BB	1180	U	P-O5'	5.10	1.64	1.59
26	BB	1646	C	C4'-O4'	-5.10	1.39	1.45
26	BB	1674	G	C8-N7	-5.10	1.27	1.30
26	BB	1756	G	P-O5'	5.10	1.64	1.59
26	BB	1524	G	N9-C4	5.10	1.42	1.38
26	BB	2360	G	C4'-C3'	5.10	1.58	1.53
1	AA	33	A	C6-N1	-5.10	1.31	1.35
1	AA	624	C	N3-C4	-5.10	1.30	1.33
1	AA	777	A	P-O5'	5.10	1.64	1.59
1	AA	1046	A	C2-N3	-5.10	1.28	1.33
1	AA	1294	G	P-O5'	5.10	1.64	1.59
1	AA	1307	U	C4'-O4'	-5.10	1.39	1.45
1	AA	1356	G	N3-C4	5.10	1.39	1.35
2	AB	26	A	C4'-C3'	-5.10	1.47	1.52
3	AC	17	U	C3'-O3'	-5.10	1.35	1.42
25	BA	84	G	C5-C4	-5.10	1.34	1.38
26	BB	74	A	C4'-O4'	-5.10	1.39	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	196	A	C5-C4	5.10	1.42	1.38
26	BB	312	G	N3-C4	5.10	1.39	1.35
26	BB	1212	G	C6-N1	-5.10	1.35	1.39
26	BB	1813	G	C3'-C2'	-5.10	1.47	1.52
26	BB	1822	C	C4-N4	-5.10	1.29	1.33
26	BB	1952	A	C6-N1	5.10	1.39	1.35
26	BB	2269	G	C6-N1	5.10	1.43	1.39
25	BA	6	G	C5-C6	5.10	1.47	1.42
26	BB	597	G	N1-C2	-5.10	1.33	1.37
26	BB	654	A	C6-N6	5.10	1.38	1.33
26	BB	732	C	C5'-C4'	5.10	1.57	1.51
26	BB	758	C	N3-C4	-5.10	1.30	1.33
26	BB	994	C	C3'-O3'	5.10	1.49	1.42
26	BB	1150	C	N3-C4	5.10	1.37	1.33
26	BB	1411	U	C1'-N1	5.10	1.56	1.48
26	BB	1754	A	P-OP1	-5.10	1.40	1.49
26	BB	2281	A	N3-C4	5.10	1.38	1.34
26	BB	2473	U	O4'-C1'	5.10	1.48	1.41
1	AA	259	G	P-O5'	5.10	1.64	1.59
26	BB	1271	G	C4'-C3'	-5.10	1.47	1.52
26	BB	1750	G	C6-N1	5.10	1.43	1.39
26	BB	2331	G	C3'-C2'	5.10	1.58	1.52
26	BB	2338	C	C2-O2	-5.10	1.19	1.24
1	AA	699	C	C4'-O4'	-5.09	1.39	1.45
1	AA	831	A	N9-C4	5.09	1.41	1.37
3	AC	30	U	C3'-C2'	5.09	1.58	1.52
25	BA	18	G	O3'-P	-5.09	1.55	1.61
26	BB	255	A	N9-C8	-5.09	1.33	1.37
26	BB	1061	U	C2'-C1'	5.09	1.58	1.53
26	BB	1201	U	C4'-O4'	-5.09	1.39	1.45
26	BB	1206	G	N1-C2	-5.09	1.33	1.37
27	BC	78	PHE	CE2-CZ	5.09	1.47	1.37
1	AA	382	A	C5-C4	5.09	1.42	1.38
1	AA	1146	A	C6-N1	5.09	1.39	1.35
26	BB	512	G	C2-N3	5.09	1.36	1.32
26	BB	675	A	C6-N6	-5.09	1.29	1.33
26	BB	2354	C	C2'-O2'	5.09	1.48	1.41
26	BB	2448	A	N3-C4	5.09	1.38	1.34
26	BB	2807	U	O3'-P	5.09	1.67	1.61
26	BB	2839	G	P-O5'	-5.09	1.54	1.59
1	AA	496	A	C6-N6	5.09	1.38	1.33
1	AA	610	U	C1'-N1	5.09	1.56	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	629	A	C2-N3	-5.09	1.28	1.33
1	AA	1478	U	N3-C4	5.09	1.43	1.38
3	AC	57	C	N1-C6	5.09	1.40	1.37
26	BB	1189	A	C2-N3	5.09	1.38	1.33
26	BB	1940	U	C5-C6	5.09	1.38	1.34
26	BB	2455	G	C8-N7	-5.09	1.27	1.30
26	BB	2695	U	C2-N3	5.09	1.41	1.37
1	AA	76	G	C5-C4	-5.09	1.34	1.38
1	AA	771	G	C4'-C3'	-5.09	1.47	1.52
1	AA	927	G	N3-C4	5.09	1.39	1.35
1	AA	1353	G	C2'-C1'	-5.09	1.47	1.53
26	BB	457	A	N3-C4	-5.09	1.31	1.34
26	BB	773	U	C4'-O4'	-5.09	1.39	1.45
26	BB	1473	G	N9-C4	5.09	1.42	1.38
26	BB	1852	U	O3'-P	5.09	1.67	1.61
26	BB	2307	G	P-O5'	5.09	1.64	1.59
26	BB	2377	A	N9-C4	-5.09	1.34	1.37
26	BB	2500	U	C4-O4	-5.09	1.19	1.23
26	BB	2661	G	C8-N7	-5.09	1.27	1.30
1	AA	686	U	C4-C5	5.09	1.48	1.43
1	AA	1138	G	O4'-C1'	5.09	1.48	1.41
25	BA	46	A	C5'-C4'	5.09	1.57	1.51
26	BB	475	C	C5-C6	5.09	1.38	1.34
26	BB	1181	U	N3-C4	5.09	1.43	1.38
26	BB	1290	C	C2-O2	5.09	1.29	1.24
1	AA	646	G	C5-C4	5.09	1.42	1.38
26	BB	121	G	N3-C4	5.09	1.39	1.35
26	BB	598	U	O3'-P	5.09	1.67	1.61
26	BB	961	C	C2-N3	-5.09	1.31	1.35
26	BB	1331	G	P-O5'	5.09	1.64	1.59
26	BB	1548	A	O4'-C1'	-5.09	1.35	1.41
26	BB	2027	G	C3'-C2'	5.09	1.58	1.52
26	BB	2244	U	C2-N3	5.09	1.41	1.37
1	AA	513	C	N1-C6	5.08	1.40	1.37
1	AA	1318	A	C6-N1	5.08	1.39	1.35
26	BB	24	G	C4'-O4'	-5.08	1.39	1.45
26	BB	1179	G	N1-C2	5.08	1.41	1.37
26	BB	1377	G	N7-C5	5.08	1.42	1.39
26	BB	2867	G	C8-N7	5.08	1.34	1.30
3	AC	24	A	C8-N7	5.08	1.35	1.31
3	AC	35	G	C6-N1	5.08	1.43	1.39
4	AD	6	G	N9-C8	-5.08	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	153	U	C3'-C2'	5.08	1.58	1.52
26	BB	355	U	N3-C4	-5.08	1.33	1.38
26	BB	964	C	C1'-N1	5.08	1.56	1.48
1	AA	285	C	C4'-C3'	5.08	1.58	1.53
1	AA	1104	G	N7-C5	-5.08	1.36	1.39
1	AA	1302	C	O3'-P	-5.08	1.55	1.61
1	AA	1366	C	C4'-C3'	-5.08	1.47	1.52
26	BB	847	U	C3'-C2'	5.08	1.58	1.52
26	BB	887	U	C4'-C3'	5.08	1.58	1.53
26	BB	909	A	C8-N7	-5.08	1.27	1.31
26	BB	922	C	N3-C4	5.08	1.37	1.33
26	BB	1890	A	N9-C8	5.08	1.41	1.37
26	BB	2568	U	C5-C6	-5.08	1.29	1.34
26	BB	2774	C	N1-C6	5.08	1.40	1.37
1	AA	204	G	C8-N7	5.08	1.33	1.30
1	AA	541	G	C4'-O4'	-5.08	1.39	1.45
1	AA	614	C	N3-C4	5.08	1.37	1.33
26	BB	1964	G	P-O5'	5.08	1.64	1.59
26	BB	2110	G	C3'-O3'	-5.08	1.35	1.42
1	AA	125	U	O3'-P	5.08	1.67	1.61
1	AA	679	C	C4-N4	-5.08	1.29	1.33
1	AA	848	C	N1-C2	5.08	1.45	1.40
1	AA	1353	G	C5-C6	5.08	1.47	1.42
1	AA	1380	U	C3'-C2'	5.08	1.58	1.52
26	BB	196	A	N1-C2	-5.08	1.29	1.34
26	BB	1041	G	C5'-C4'	5.08	1.57	1.51
26	BB	1182	G	C2-N2	-5.08	1.29	1.34
26	BB	1313	U	C5-C6	5.08	1.38	1.34
26	BB	1545	A	O4'-C1'	5.08	1.48	1.41
26	BB	2061	G	C5-C4	-5.08	1.34	1.38
26	BB	2341	G	C2'-O2'	5.08	1.48	1.41
26	BB	2368	C	N1-C2	5.08	1.45	1.40
26	BB	2398	U	C2-N3	5.08	1.41	1.37
26	BB	2778	A	P-O5'	5.08	1.64	1.59
1	AA	327	A	C4'-O4'	-5.08	1.39	1.45
1	AA	1061	G	C5-C6	5.08	1.47	1.42
1	AA	1159	U	C3'-O3'	5.08	1.49	1.42
1	AA	1434	A	N7-C5	-5.08	1.36	1.39
26	BB	423	A	C2-N3	5.08	1.38	1.33
26	BB	606	U	C4'-O4'	-5.08	1.39	1.45
26	BB	659	G	O3'-P	5.08	1.67	1.61
26	BB	819	A	C2'-O2'	-5.08	1.35	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1474	U	O5'-C5'	5.08	1.52	1.44
26	BB	2151	U	C5'-C4'	5.08	1.57	1.51
1	AA	199	A	N9-C4	5.08	1.40	1.37
1	AA	275	G	P-O5'	5.08	1.64	1.59
1	AA	801	U	C5-C6	5.08	1.38	1.34
1	AA	1253	G	N9-C8	-5.08	1.34	1.37
4	AD	19	G	C6-O6	-5.08	1.19	1.24
26	BB	112	U	C2-O2	5.08	1.26	1.22
26	BB	257	C	C4-C5	5.08	1.47	1.43
26	BB	573	U	C4-C5	5.08	1.48	1.43
26	BB	596	U	C4-O4	5.08	1.27	1.23
26	BB	896	A	C6-N6	-5.08	1.29	1.33
26	BB	1314	C	N1-C6	5.08	1.40	1.37
26	BB	1667	G	N9-C4	5.08	1.42	1.38
26	BB	1971	U	C2-O2	5.08	1.26	1.22
26	BB	2517	C	O3'-P	5.08	1.67	1.61
26	BB	1280	G	N1-C2	5.07	1.41	1.37
26	BB	1537	G	P-O5'	5.07	1.64	1.59
26	BB	1982	U	C4'-C3'	-5.07	1.47	1.52
26	BB	2263	C	N1-C6	5.07	1.40	1.37
26	BB	2488	G	N9-C8	-5.07	1.34	1.37
26	BB	2741	A	O3'-P	5.07	1.67	1.61
26	BB	2903	U	N3-C4	-5.07	1.33	1.38
1	AA	841	C	P-O5'	5.07	1.64	1.59
26	BB	36	G	C2-N3	5.07	1.36	1.32
26	BB	325	G	C6-N1	-5.07	1.35	1.39
26	BB	783	A	N3-C4	5.07	1.37	1.34
26	BB	1992	G	N9-C8	5.07	1.41	1.37
26	BB	2127	G	N3-C4	5.07	1.39	1.35
26	BB	2244	U	C4'-O4'	-5.07	1.39	1.45
26	BB	2878	U	C3'-O3'	-5.07	1.35	1.42
1	AA	108	G	C4'-O4'	-5.07	1.39	1.45
1	AA	345	C	N3-C4	-5.07	1.30	1.33
1	AA	615	G	C5-C4	5.07	1.42	1.38
1	AA	653	U	N1-C6	5.07	1.42	1.38
1	AA	1028	C	C2-N3	5.07	1.39	1.35
2	AB	29	G	C2-N3	5.07	1.36	1.32
4	AD	18	U	C5'-C4'	5.07	1.57	1.51
5	AE	21	TYR	CE2-CZ	5.07	1.45	1.38
26	BB	703	U	C4'-C3'	5.07	1.58	1.53
26	BB	820	A	P-O5'	5.07	1.64	1.59
26	BB	1737	G	C8-N7	5.07	1.33	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1923	U	P-O5'	5.07	1.64	1.59
26	BB	2282	G	C4'-O4'	-5.07	1.39	1.45
26	BB	2887	A	O4'-C1'	-5.07	1.35	1.41
1	AA	272	C	C4'-C3'	-5.07	1.47	1.52
26	BB	79	C	P-O5'	5.07	1.64	1.59
26	BB	674	G	C5'-C4'	5.07	1.57	1.51
26	BB	1591	A	C6-N1	5.07	1.39	1.35
1	AA	636	U	C5-C6	5.07	1.38	1.34
1	AA	661	G	C2-N3	5.07	1.36	1.32
1	AA	666	G	C6-O6	-5.07	1.19	1.24
2	AB	23	A	C5-C4	-5.07	1.35	1.38
2	AB	75	C	C2-N3	5.07	1.39	1.35
25	BA	30	C	C2'-C1'	-5.07	1.47	1.53
26	BB	34	U	C5-C6	5.07	1.38	1.34
26	BB	131	A	N9-C8	-5.07	1.33	1.37
26	BB	586	A	C5'-C4'	5.07	1.57	1.51
26	BB	1067	A	C6-N1	5.07	1.39	1.35
26	BB	1534	U	N1-C2	5.07	1.43	1.38
26	BB	1743	G	N9-C8	5.07	1.41	1.37
26	BB	1904	G	C8-N7	5.07	1.33	1.30
26	BB	2099	U	N1-C6	5.07	1.42	1.38
26	BB	2890	G	C5-C4	5.07	1.41	1.38
1	AA	45	G	O3'-P	5.07	1.67	1.61
1	AA	243	A	C4'-O4'	-5.07	1.39	1.45
1	AA	406	G	C4'-O4'	-5.07	1.39	1.45
1	AA	493	A	O4'-C1'	5.07	1.48	1.41
1	AA	600	A	C6-N1	-5.07	1.32	1.35
1	AA	941	G	C4'-O4'	-5.07	1.39	1.45
1	AA	1032	G	N9-C8	5.07	1.41	1.37
1	AA	1288	A	C5-C4	-5.07	1.35	1.38
26	BB	649	G	C5-C4	-5.07	1.34	1.38
26	BB	1551	A	N9-C4	5.07	1.40	1.37
26	BB	1692	U	N3-C4	5.07	1.43	1.38
26	BB	1760	C	C5-C6	-5.07	1.30	1.34
26	BB	2281	A	C6-N1	5.07	1.39	1.35
26	BB	2359	C	O4'-C1'	5.07	1.48	1.41
26	BB	2513	A	N7-C5	5.07	1.42	1.39
1	AA	43	C	C4-N4	5.06	1.38	1.33
1	AA	760	G	P-O5'	5.06	1.64	1.59
1	AA	1266	G	C4'-O4'	-5.06	1.39	1.45
1	AA	1535	C	O4'-C1'	-5.06	1.35	1.41
2	AB	70	C	P-O5'	5.06	1.64	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	3	U	C2-N3	5.06	1.41	1.37
26	BB	416	U	C2'-C1'	-5.06	1.47	1.53
26	BB	868	U	C3'-C2'	5.06	1.58	1.52
26	BB	1651	G	C5-C6	5.06	1.47	1.42
1	AA	411	A	O4'-C1'	5.06	1.48	1.41
1	AA	977	A	C3'-C2'	-5.06	1.47	1.52
1	AA	1004	A	C5-C4	5.06	1.42	1.38
1	AA	1188	A	C8-N7	5.06	1.35	1.31
2	AB	18	G	C6-O6	5.06	1.28	1.24
25	BA	6	G	C5-C4	5.06	1.41	1.38
26	BB	52	A	N9-C4	5.06	1.40	1.37
26	BB	340	A	C4'-O4'	-5.06	1.39	1.45
26	BB	576	U	C5-C6	5.06	1.38	1.34
26	BB	1125	G	N7-C5	5.06	1.42	1.39
26	BB	1315	C	O4'-C1'	5.06	1.48	1.41
26	BB	1579	A	P-O5'	5.06	1.64	1.59
26	BB	2886	A	N9-C8	-5.06	1.33	1.37
1	AA	464	U	C5-C6	5.06	1.38	1.34
10	AJ	138	GLU	CD-OE1	-5.06	1.20	1.25
26	BB	303	G	N3-C4	5.06	1.39	1.35
26	BB	1286	A	C3'-C2'	5.06	1.58	1.52
26	BB	1586	A	C2-N3	-5.06	1.28	1.33
26	BB	1645	G	C3'-C2'	-5.06	1.47	1.52
26	BB	1703	G	N7-C5	5.06	1.42	1.39
26	BB	2089	C	C4-C5	5.06	1.47	1.43
1	AA	18	C	O3'-P	5.06	1.67	1.61
1	AA	192	A	O3'-P	-5.06	1.55	1.61
1	AA	480	U	C3'-C2'	5.06	1.58	1.52
1	AA	878	A	N9-C8	-5.06	1.33	1.37
1	AA	1318	A	N9-C8	-5.06	1.33	1.37
2	AB	65	C	C5-C6	5.06	1.38	1.34
25	BA	69	G	C5'-C4'	5.06	1.57	1.51
26	BB	898	C	O4'-C1'	5.06	1.48	1.41
26	BB	951	C	P-O5'	5.06	1.64	1.59
26	BB	1740	G	C2'-C1'	5.06	1.58	1.53
26	BB	2082	A	N7-C5	-5.06	1.36	1.39
26	BB	2419	U	C4'-O4'	-5.06	1.39	1.45
26	BB	2550	G	C6-O6	-5.06	1.19	1.24
55	B4	19	PHE	CE1-CZ	5.06	1.47	1.37
1	AA	230	G	C6-N1	5.06	1.43	1.39
1	AA	263	A	O3'-P	5.06	1.67	1.61
1	AA	303	A	C3'-C2'	-5.06	1.47	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	766	A	C4'-C3'	5.06	1.58	1.53
1	AA	840	C	P-O5'	5.06	1.64	1.59
4	AD	31	G	C2-N2	-5.06	1.29	1.34
26	BB	297	G	C3'-C2'	5.06	1.58	1.52
26	BB	311	A	C3'-C2'	5.06	1.58	1.52
26	BB	359	G	N9-C8	-5.06	1.34	1.37
26	BB	755	U	C4-C5	5.06	1.48	1.43
26	BB	1083	U	O5'-C5'	-5.06	1.34	1.42
26	BB	1786	A	C5-C6	5.06	1.45	1.41
26	BB	2040	G	N9-C4	5.06	1.42	1.38
26	BB	2219	U	N1-C2	5.06	1.43	1.38
26	BB	2272	U	C4'-O4'	-5.06	1.39	1.45
26	BB	2838	G	C5'-C4'	5.06	1.57	1.51
36	BL	129	GLU	CG-CD	5.06	1.59	1.51
1	AA	900	A	P-O5'	-5.06	1.54	1.59
1	AA	1164	G	O3'-P	5.06	1.67	1.61
1	AA	1494	G	P-O5'	5.06	1.64	1.59
4	AD	58	A	C6-N1	-5.06	1.32	1.35
26	BB	46	G	C6-O6	-5.06	1.19	1.24
26	BB	931	U	C4-C5	-5.06	1.39	1.43
1	AA	113	G	C6-O6	-5.05	1.19	1.24
1	AA	168	G	C3'-C2'	5.05	1.58	1.52
1	AA	310	G	N7-C5	5.05	1.42	1.39
1	AA	929	G	C5-C6	5.05	1.47	1.42
1	AA	1391	U	C5-C6	5.05	1.38	1.34
26	BB	768	G	N3-C4	5.05	1.39	1.35
26	BB	816	C	C2-N3	5.05	1.39	1.35
26	BB	899	A	C2'-C1'	-5.05	1.47	1.53
26	BB	923	G	C6-N1	5.05	1.43	1.39
26	BB	1877	A	C3'-C2'	5.05	1.58	1.52
26	BB	1987	A	C5-C4	-5.05	1.35	1.38
26	BB	1997	C	P-O5'	5.05	1.64	1.59
26	BB	2096	C	C2-O2	-5.05	1.20	1.24
26	BB	2495	G	C5'-C4'	5.05	1.57	1.51
26	BB	2705	A	C6-N6	-5.05	1.29	1.33
1	AA	1133	G	C4'-O4'	-5.05	1.39	1.45
26	BB	170	U	C4-O4	5.05	1.27	1.23
26	BB	953	G	C5-C4	-5.05	1.34	1.38
26	BB	1709	U	N3-C4	-5.05	1.33	1.38
26	BB	2090	A	C4'-C3'	-5.05	1.47	1.52
1	AA	5	U	O3'-P	5.05	1.67	1.61
1	AA	632	U	N1-C2	5.05	1.43	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1068	G	C2-N3	5.05	1.36	1.32
4	AD	18	U	C2-N3	5.05	1.41	1.37
10	AJ	176	TYR	CE1-CZ	5.05	1.45	1.38
25	BA	69	G	C3'-C2'	5.05	1.58	1.52
26	BB	254	G	N7-C5	-5.05	1.36	1.39
26	BB	501	A	C1'-N9	-5.05	1.39	1.46
26	BB	552	U	C5'-C4'	5.05	1.57	1.51
26	BB	648	G	N9-C8	-5.05	1.34	1.37
26	BB	1588	G	N3-C4	-5.05	1.31	1.35
26	BB	2261	C	C2-O2	-5.05	1.20	1.24
26	BB	2716	C	C4-C5	5.05	1.47	1.43
1	AA	871	U	P-O5'	5.05	1.64	1.59
1	AA	915	A	N7-C5	5.05	1.42	1.39
1	AA	1372	U	N1-C2	5.05	1.43	1.38
26	BB	742	A	C2'-O2'	-5.05	1.35	1.41
26	BB	938	G	P-O5'	5.05	1.64	1.59
26	BB	1283	G	C6-O6	-5.05	1.19	1.24
26	BB	1676	A	C8-N7	-5.05	1.28	1.31
26	BB	1826	G	C8-N7	-5.05	1.27	1.30
26	BB	1903	G	C5-C6	5.05	1.47	1.42
37	BM	70	ARG	CZ-NH1	5.05	1.39	1.33
1	AA	240	G	N9-C4	5.05	1.42	1.38
1	AA	271	C	N1-C6	5.05	1.40	1.37
1	AA	1185	G	C6-N1	5.05	1.43	1.39
26	BB	220	G	C4'-O4'	5.05	1.52	1.45
26	BB	361	G	C5-C6	5.05	1.47	1.42
26	BB	491	G	C4'-C3'	5.05	1.58	1.53
1	AA	446	G	N9-C4	-5.05	1.33	1.38
1	AA	737	C	C4'-O4'	-5.05	1.39	1.45
1	AA	785	G	C4'-O4'	-5.05	1.39	1.45
1	AA	1288	A	O3'-P	5.05	1.67	1.61
3	AC	27	A	N3-C4	5.05	1.37	1.34
23	AW	50	PHE	CG-CD2	5.05	1.46	1.38
26	BB	1269	A	N3-C4	5.05	1.37	1.34
26	BB	1589	U	C4-C5	5.05	1.48	1.43
26	BB	1715	G	N7-C5	5.05	1.42	1.39
26	BB	1858	A	N9-C4	-5.05	1.34	1.37
26	BB	2346	A	N7-C5	5.05	1.42	1.39
26	BB	2695	U	C2'-O2'	5.05	1.48	1.41
1	AA	360	G	C2-N2	5.04	1.39	1.34
1	AA	1451	U	C2-O2	5.04	1.26	1.22
26	BB	131	A	P-O5'	5.04	1.64	1.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1408	G	C5-C4	-5.04	1.34	1.38
26	BB	1637	A	N9-C4	-5.04	1.34	1.37
1	AA	470	C	C5'-C4'	5.04	1.57	1.51
1	AA	1267	C	C5-C6	-5.04	1.30	1.34
1	AA	1317	C	C5-C6	5.04	1.38	1.34
26	BB	378	C	C2-N3	5.04	1.39	1.35
26	BB	914	G	C2'-O2'	-5.04	1.35	1.41
26	BB	1189	A	C2'-O2'	-5.04	1.35	1.41
26	BB	1323	C	N1-C2	-5.04	1.35	1.40
26	BB	1490	A	N1-C2	-5.04	1.29	1.34
26	BB	1508	A	C2-N3	-5.04	1.29	1.33
26	BB	2396	G	C2'-C1'	-5.04	1.47	1.53
26	BB	2868	A	N3-C4	5.04	1.37	1.34
31	BG	139	GLU	CD-OE2	-5.04	1.20	1.25
1	AA	273	U	C5-C6	5.04	1.38	1.34
1	AA	323	U	C2'-C1'	-5.04	1.47	1.53
1	AA	812	G	N1-C2	5.04	1.41	1.37
1	AA	1231	G	C4'-C3'	5.04	1.58	1.53
26	BB	205	G	N1-C2	-5.04	1.33	1.37
26	BB	1677	A	C3'-C2'	5.04	1.58	1.52
26	BB	1729	U	C2-O2	5.04	1.26	1.22
26	BB	1808	A	C6-N6	-5.04	1.29	1.33
1	AA	421	U	C5-C6	5.04	1.38	1.34
1	AA	954	G	N1-C2	5.04	1.41	1.37
1	AA	1353	G	C6-O6	-5.04	1.19	1.24
5	AE	34	ARG	CZ-NH2	5.04	1.39	1.33
26	BB	415	A	C8-N7	-5.04	1.28	1.31
26	BB	1565	C	C5'-C4'	5.04	1.57	1.51
26	BB	1760	C	C5'-C4'	5.04	1.57	1.51
26	BB	2791	G	C5-C4	-5.04	1.34	1.38
1	AA	64	G	N3-C4	5.04	1.39	1.35
1	AA	164	G	N1-C2	5.04	1.41	1.37
1	AA	721	G	N7-C5	-5.04	1.36	1.39
1	AA	738	C	C5-C6	5.04	1.38	1.34
1	AA	1030	U	P-O5'	-5.04	1.54	1.59
25	BA	54	G	N1-C2	5.04	1.41	1.37
26	BB	526	A	C6-N6	-5.04	1.29	1.33
26	BB	623	C	C5'-C4'	5.04	1.57	1.51
26	BB	1034	G	N3-C4	-5.04	1.31	1.35
26	BB	1358	G	C6-N1	5.04	1.43	1.39
26	BB	1927	A	N3-C4	5.04	1.37	1.34
26	BB	2000	C	C3'-C2'	5.04	1.58	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1194	U	C2'-C1'	-5.04	1.47	1.53
26	BB	484	C	N1-C2	5.04	1.45	1.40
26	BB	889	C	C2'-C1'	5.04	1.58	1.53
26	BB	1246	A	P-O5'	5.04	1.64	1.59
26	BB	1675	C	C4-C5	-5.04	1.39	1.43
1	AA	434	U	C2-N3	-5.04	1.34	1.37
1	AA	564	C	C2'-C1'	5.04	1.58	1.53
1	AA	620	C	C5-C6	5.04	1.38	1.34
1	AA	724	G	C2-N3	5.04	1.36	1.32
1	AA	1146	A	P-O5'	5.04	1.64	1.59
1	AA	1186	G	C4'-C3'	-5.04	1.47	1.52
3	AC	33	A	P-O5'	5.04	1.64	1.59
25	BA	32	U	O3'-P	5.04	1.67	1.61
26	BB	118	A	C2'-O2'	5.04	1.48	1.41
26	BB	838	C	C1'-N1	5.04	1.56	1.48
26	BB	1005	C	N1-C2	-5.04	1.35	1.40
26	BB	1380	G	P-O5'	5.04	1.64	1.59
26	BB	1454	C	C5'-C4'	5.04	1.57	1.51
26	BB	1666	G	C6-O6	-5.04	1.19	1.24
26	BB	2032	G	C5'-C4'	5.04	1.57	1.51
26	BB	2315	G	N9-C8	-5.04	1.34	1.37
27	BC	40	GLU	CB-CG	5.04	1.61	1.52
1	AA	161	A	N9-C4	-5.03	1.34	1.37
1	AA	1096	C	C5-C6	5.03	1.38	1.34
3	AC	24	A	C5-C6	5.03	1.45	1.41
26	BB	62	U	N1-C6	5.03	1.42	1.38
26	BB	1478	G	C5-C6	-5.03	1.37	1.42
26	BB	1479	G	C5-C4	-5.03	1.34	1.38
26	BB	1691	C	N1-C2	5.03	1.45	1.40
26	BB	1770	G	C3'-C2'	-5.03	1.47	1.52
26	BB	2014	A	C4'-C3'	-5.03	1.47	1.52
26	BB	2734	A	C6-N1	5.03	1.39	1.35
36	BL	76	HIS	CB-CG	5.03	1.59	1.50
47	BW	21	ARG	CZ-NH2	5.03	1.39	1.33
26	BB	435	C	C2-O2	-5.03	1.20	1.24
26	BB	865	C	C2'-C1'	-5.03	1.47	1.53
26	BB	1253	A	C4'-O4'	-5.03	1.39	1.45
26	BB	2219	U	C4'-O4'	-5.03	1.39	1.45
26	BB	2459	A	C8-N7	-5.03	1.28	1.31
1	AA	161	A	C5-C4	-5.03	1.35	1.38
1	AA	613	C	C4'-O4'	-5.03	1.39	1.45
1	AA	859	G	C2-N2	5.03	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1031	C	N1-C2	5.03	1.45	1.40
1	AA	1058	G	C2-N2	5.03	1.39	1.34
1	AA	1102	A	C5-C6	5.03	1.45	1.41
1	AA	1454	G	C5-C6	5.03	1.47	1.42
26	BB	611	C	C4-C5	5.03	1.47	1.43
26	BB	834	G	N1-C2	5.03	1.41	1.37
26	BB	1169	A	C8-N7	-5.03	1.28	1.31
26	BB	1583	A	C2'-C1'	5.03	1.58	1.53
26	BB	1949	G	C6-N1	5.03	1.43	1.39
26	BB	2101	A	C2'-O2'	5.03	1.48	1.41
26	BB	2217	G	C5-C6	5.03	1.47	1.42
1	AA	119	A	N1-C2	5.03	1.38	1.34
1	AA	1369	C	C5'-C4'	5.03	1.57	1.51
4	AD	57	C	C4-C5	5.03	1.47	1.43
26	BB	2071	A	N7-C5	5.03	1.42	1.39
26	BB	2708	G	C2-N3	5.03	1.36	1.32
1	AA	362	G	C2-N3	5.03	1.36	1.32
1	AA	553	A	C8-N7	-5.03	1.28	1.31
1	AA	604	G	C5-C6	5.03	1.47	1.42
1	AA	694	A	C5-C4	-5.03	1.35	1.38
1	AA	909	A	C4'-C3'	5.03	1.58	1.53
1	AA	1376	U	C2'-O2'	5.03	1.48	1.41
1	AA	1477	U	C5-C6	5.03	1.38	1.34
3	AC	53	G	C8-N7	5.03	1.33	1.30
4	AD	28	U	P-O5'	5.03	1.64	1.59
26	BB	435	C	N3-C4	5.03	1.37	1.33
26	BB	610	C	C3'-C2'	-5.03	1.47	1.52
26	BB	664	G	C2-N3	5.03	1.36	1.32
26	BB	806	C	N1-C6	-5.03	1.34	1.37
26	BB	936	A	C5-C6	5.03	1.45	1.41
26	BB	989	G	N3-C4	5.03	1.39	1.35
26	BB	1247	A	C5-C6	5.03	1.45	1.41
26	BB	1658	C	C5'-C4'	-5.03	1.45	1.51
26	BB	2184	A	C4'-C3'	5.03	1.58	1.53
38	BN	62	PRO	N-CD	-5.03	1.40	1.47
2	AB	9	A	C3'-O3'	5.03	1.49	1.42
26	BB	66	C	O3'-P	5.03	1.67	1.61
26	BB	352	A	C3'-C2'	5.03	1.58	1.52
26	BB	488	G	C3'-O3'	-5.03	1.35	1.42
26	BB	1105	U	C4'-C3'	5.03	1.58	1.53
26	BB	1217	U	C4-O4	-5.03	1.19	1.23
26	BB	1817	G	C8-N7	-5.03	1.27	1.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1969	A	C5-C4	5.03	1.42	1.38
26	BB	2246	G	C5'-C4'	5.03	1.57	1.51
26	BB	2796	U	C2-N3	5.03	1.41	1.37
1	AA	115	G	P-O5'	-5.02	1.54	1.59
1	AA	1091	U	C5'-C4'	5.02	1.57	1.51
26	BB	2754	U	C2-O2	5.02	1.26	1.22
26	BB	2758	A	C5-C4	5.02	1.42	1.38
1	AA	162	A	C5'-C4'	5.02	1.57	1.51
1	AA	269	C	P-O5'	5.02	1.64	1.59
1	AA	551	U	C2-N3	5.02	1.41	1.37
1	AA	660	C	N1-C6	5.02	1.40	1.37
1	AA	714	G	C8-N7	5.02	1.33	1.30
1	AA	826	C	C4-C5	5.02	1.47	1.43
5	AE	141	GLU	CG-CD	5.02	1.59	1.51
26	BB	1362	C	C5'-C4'	5.02	1.57	1.51
26	BB	1382	G	N9-C4	5.02	1.42	1.38
26	BB	1553	A	N1-C2	-5.02	1.29	1.34
26	BB	2019	A	C8-N7	-5.02	1.28	1.31
26	BB	2169	A	C2'-O2'	-5.02	1.35	1.41
26	BB	2304	G	C2'-O2'	-5.02	1.35	1.41
26	BB	2687	U	C5-C6	5.02	1.38	1.34
26	BB	2745	C	C5'-C4'	5.02	1.57	1.51
1	AA	224	U	C3'-C2'	5.02	1.58	1.52
1	AA	362	G	C4'-O4'	-5.02	1.39	1.45
1	AA	426	U	C4-C5	5.02	1.48	1.43
3	AC	19	A	N9-C4	5.02	1.40	1.37
26	BB	1907	G	N9-C4	5.02	1.42	1.38
26	BB	2458	G	N7-C5	5.02	1.42	1.39
1	AA	239	U	C5-C6	5.02	1.38	1.34
1	AA	356	A	C5-C6	-5.02	1.36	1.41
1	AA	962	C	O3'-P	5.02	1.67	1.61
1	AA	1315	U	C5-C6	5.02	1.38	1.34
26	BB	11	C	C5'-C4'	5.02	1.57	1.51
26	BB	450	G	N3-C4	5.02	1.39	1.35
26	BB	1395	A	O3'-P	5.02	1.67	1.61
26	BB	1612	C	N1-C6	-5.02	1.34	1.37
26	BB	1893	C	O3'-P	5.02	1.67	1.61
26	BB	2485	G	P-O5'	5.02	1.64	1.59
26	BB	2675	A	P-O5'	5.02	1.64	1.59
1	AA	161	A	C3'-O3'	5.02	1.49	1.42
26	BB	764	A	N7-C5	-5.02	1.36	1.39
26	BB	776	G	C4'-O4'	-5.02	1.39	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1030	C	O3'-P	5.02	1.67	1.61
26	BB	1158	C	C2-O2	-5.02	1.20	1.24
26	BB	1173	U	N3-C4	-5.02	1.33	1.38
26	BB	1475	G	C2-N2	-5.02	1.29	1.34
26	BB	1597	A	C6-N1	-5.02	1.32	1.35
26	BB	1838	C	P-O5'	5.02	1.64	1.59
26	BB	1894	C	C4'-O4'	-5.02	1.39	1.45
26	BB	2398	U	C4-O4	5.02	1.27	1.23
26	BB	2630	G	O4'-C1'	5.02	1.48	1.41
38	BN	49	GLY	N-CA	-5.02	1.38	1.46
1	AA	969	A	N9-C8	5.02	1.41	1.37
1	AA	1428	A	C2'-O2'	5.02	1.48	1.41
26	BB	95	A	C3'-O3'	5.02	1.49	1.42
26	BB	396	G	N1-C2	5.02	1.41	1.37
1	AA	337	G	C2'-C1'	5.01	1.58	1.53
1	AA	588	G	C6-O6	-5.01	1.19	1.24
1	AA	630	A	C2'-C1'	-5.01	1.47	1.53
1	AA	1139	G	C5-C6	5.01	1.47	1.42
1	AA	1325	C	C2-O2	5.01	1.28	1.24
1	AA	1370	G	N9-C4	5.01	1.42	1.38
26	BB	1470	A	N3-C4	5.01	1.37	1.34
26	BB	2191	A	O3'-P	5.01	1.67	1.61
26	BB	2450	A	P-O5'	-5.01	1.54	1.59
26	BB	2527	C	C2-N3	5.01	1.39	1.35
4	AD	1	C	C5-C6	5.01	1.38	1.34
26	BB	404	A	P-O5'	5.01	1.64	1.59
26	BB	696	G	C3'-C2'	5.01	1.58	1.52
26	BB	998	C	C4'-C3'	5.01	1.58	1.53
26	BB	1626	A	N3-C4	5.01	1.37	1.34
1	AA	863	U	N1-C2	5.01	1.43	1.38
1	AA	881	G	C6-N1	5.01	1.43	1.39
3	AC	51	C	C3'-O3'	-5.01	1.35	1.42
26	BB	435	C	O5'-C5'	-5.01	1.34	1.42
26	BB	967	U	C2-N3	5.01	1.41	1.37
26	BB	986	C	C5'-C4'	5.01	1.57	1.51
26	BB	2412	A	C5'-C4'	5.01	1.57	1.51
26	BB	2573	C	C4'-C3'	5.01	1.58	1.53
26	BB	2686	G	N9-C8	5.01	1.41	1.37
26	BB	2854	G	C6-N1	5.01	1.43	1.39
26	BB	2870	C	C2-O2	5.01	1.28	1.24
1	AA	164	G	N7-C5	-5.01	1.36	1.39
1	AA	266	G	N9-C8	-5.01	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	436	C	C5'-C4'	5.01	1.57	1.51
1	AA	539	A	C8-N7	-5.01	1.28	1.31
1	AA	915	A	C6-N1	-5.01	1.32	1.35
1	AA	1230	C	C3'-C2'	5.01	1.58	1.52
4	AD	4	G	C4'-O4'	-5.01	1.39	1.45
26	BB	144	A	O5'-C5'	-5.01	1.34	1.42
26	BB	415	A	O3'-P	-5.01	1.55	1.61
26	BB	503	A	C5'-C4'	5.01	1.57	1.51
26	BB	1222	U	C3'-C2'	5.01	1.58	1.52
26	BB	1645	G	C4'-C3'	5.01	1.58	1.53
26	BB	2285	C	N1-C6	-5.01	1.34	1.37
1	AA	1353	G	N7-C5	-5.01	1.36	1.39
25	BA	3	C	N1-C2	-5.01	1.35	1.40
26	BB	808	G	P-O5'	5.01	1.64	1.59
26	BB	1098	A	N7-C5	5.01	1.42	1.39
26	BB	2687	U	C2'-O2'	-5.01	1.35	1.41
1	AA	143	A	C8-N7	5.01	1.35	1.31
1	AA	333	U	N1-C2	5.01	1.43	1.38
1	AA	1366	C	C3'-C2'	-5.01	1.47	1.52
26	BB	47	C	C2-N3	5.01	1.39	1.35
26	BB	846	U	C2'-O2'	-5.01	1.35	1.41
26	BB	899	A	N9-C4	5.01	1.40	1.37
26	BB	1033	U	N1-C2	5.01	1.43	1.38
26	BB	2621	G	C4'-O4'	-5.01	1.39	1.45
26	BB	2677	G	C2-N3	5.01	1.36	1.32
1	AA	25	C	C2-N3	-5.00	1.31	1.35
1	AA	128	G	C5-C6	5.00	1.47	1.42
1	AA	452	A	P-O5'	5.00	1.64	1.59
1	AA	547	A	C6-N1	5.00	1.39	1.35
1	AA	687	A	C3'-C2'	5.00	1.58	1.52
1	AA	950	U	N1-C6	5.00	1.42	1.38
4	AD	7	G	C4'-O4'	-5.00	1.39	1.45
26	BB	940	G	C6-N1	-5.00	1.36	1.39
26	BB	1071	G	N1-C2	5.00	1.41	1.37
26	BB	1740	G	N3-C4	5.00	1.39	1.35
26	BB	2826	A	C4'-O4'	-5.00	1.39	1.45
1	AA	424	G	C2-N3	5.00	1.36	1.32
1	AA	517	G	C1'-N9	5.00	1.56	1.48
1	AA	626	G	N9-C4	5.00	1.42	1.38
1	AA	630	A	C5'-C4'	5.00	1.57	1.51
1	AA	789	U	C4'-C3'	5.00	1.58	1.53
1	AA	813	U	C4-O4	-5.00	1.19	1.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	852	G	C3'-O3'	-5.00	1.35	1.42
1	AA	892	A	O5'-C5'	-5.00	1.34	1.42
1	AA	1041	G	N9-C8	5.00	1.41	1.37
25	BA	42	C	C3'-C2'	-5.00	1.47	1.52
26	BB	211	C	P-O5'	5.00	1.64	1.59
26	BB	305	C	C2-O2	-5.00	1.20	1.24
26	BB	510	C	O4'-C1'	5.00	1.48	1.41
26	BB	1377	G	C6-O6	5.00	1.28	1.24
26	BB	1411	U	C4'-O4'	-5.00	1.39	1.45
26	BB	1557	C	C4-C5	-5.00	1.39	1.43
26	BB	2019	A	C6-N6	5.00	1.38	1.33
26	BB	2417	C	O3'-P	5.00	1.67	1.61
26	BB	2570	G	C6-O6	-5.00	1.19	1.24
26	BB	2885	G	N9-C4	-5.00	1.33	1.38
1	AA	140	U	C5-C6	5.00	1.38	1.34
1	AA	761	G	C5-C6	-5.00	1.37	1.42
1	AA	1322	C	C2-N3	5.00	1.39	1.35
26	BB	63	A	C5-C6	-5.00	1.36	1.41
26	BB	76	C	O3'-P	5.00	1.67	1.61
26	BB	561	G	O3'-P	5.00	1.67	1.61
26	BB	1019	U	C3'-C2'	-5.00	1.47	1.52
26	BB	1189	A	N9-C4	5.00	1.40	1.37
26	BB	1409	U	C5-C6	5.00	1.38	1.34
26	BB	1623	G	P-O5'	5.00	1.64	1.59
26	BB	1802	A	C2-N3	5.00	1.38	1.33
26	BB	2185	U	C2-N3	5.00	1.41	1.37
26	BB	2469	A	N1-C2	-5.00	1.29	1.34
26	BB	2502	G	N7-C5	5.00	1.42	1.39
26	BB	2653	U	C4'-O4'	-5.00	1.39	1.45
26	BB	2796	U	P-O5'	5.00	1.64	1.59
26	BB	2801	G	C3'-C2'	-5.00	1.47	1.52

All (27099) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	AO	55	ARG	NE-CZ-NH2	-27.98	106.31	120.30
26	BB	2063	C	N3-C4-C5	-21.69	113.22	121.90
26	BB	2163	A	O4'-C1'-N9	21.36	125.29	108.20
26	BB	337	C	O4'-C1'-N1	21.12	125.10	108.20
1	AA	190	A	C8-N9-C4	-20.93	97.43	105.80
43	BS	91	ARG	NE-CZ-NH2	-20.73	109.94	120.30
46	BV	76	ARG	NE-CZ-NH1	20.54	130.57	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	70	C	N3-C4-C5	-20.16	113.83	121.90
1	AA	1094	G	C8-N9-C4	-20.05	98.38	106.40
26	BB	2782	G	N9-C4-C5	19.95	113.38	105.40
25	BA	2	G	C2-N3-C4	19.58	121.69	111.90
26	BB	2529	G	C8-N9-C4	-19.56	98.58	106.40
26	BB	1545	A	O4'-C1'-N9	19.43	123.74	108.20
15	AO	109	ARG	NE-CZ-NH1	19.29	129.95	120.30
44	BT	13	ARG	NE-CZ-NH1	19.22	129.91	120.30
1	AA	1094	G	N9-C4-C5	19.09	113.03	105.40
26	BB	312	G	C5-N7-C8	-19.06	94.77	104.30
38	BN	123	ARG	NE-CZ-NH2	-18.88	110.86	120.30
1	AA	319	G	N9-C4-C5	18.66	112.86	105.40
1	AA	1071	C	C6-N1-C2	-18.46	112.92	120.30
26	BB	254	G	N3-C4-C5	-18.45	119.38	128.60
26	BB	946	C	O4'-C1'-N1	18.32	122.86	108.20
26	BB	2107	G	C2-N3-C4	18.23	121.01	111.90
26	BB	730	A	C8-N9-C4	-18.21	98.51	105.80
26	BB	1677	A	N1-C2-N3	-18.09	120.25	129.30
26	BB	70	G	C8-N9-C4	-18.09	99.16	106.40
1	AA	10	A	C8-N9-C4	-18.07	98.57	105.80
26	BB	2409	G	C8-N9-C4	-18.06	99.18	106.40
26	BB	2178	C	N3-C4-C5	-17.99	114.70	121.90
1	AA	281	G	C4-C5-N7	-17.92	103.63	110.80
26	BB	2869	G	C8-N9-C4	-17.92	99.23	106.40
26	BB	1753	G	N1-C6-O6	-17.90	109.16	119.90
26	BB	533	G	C4-C5-N7	-17.85	103.66	110.80
26	BB	2353	G	C8-N9-C4	-17.81	99.28	106.40
26	BB	2743	U	O4'-C1'-N1	17.75	122.40	108.20
26	BB	2747	G	C8-N9-C4	-17.70	99.32	106.40
26	BB	2847	U	O4'-C1'-N1	17.68	122.34	108.20
26	BB	141	G	O4'-C1'-N9	17.65	122.32	108.20
29	BE	59	ARG	NE-CZ-NH2	17.59	129.10	120.30
19	AS	14	ARG	NE-CZ-NH2	-17.59	111.51	120.30
26	BB	834	G	C8-N9-C4	-17.57	99.37	106.40
1	AA	765	G	O4'-C1'-N9	17.56	122.25	108.20
26	BB	2115	G	C8-N9-C4	-17.55	99.38	106.40
46	BV	12	ARG	NE-CZ-NH1	17.50	129.05	120.30
58	B7	24	ARG	NE-CZ-NH2	17.39	129.00	120.30
26	BB	2065	C	N1-C2-O2	17.36	129.32	118.90
26	BB	314	C	N3-C4-C5	-17.29	114.98	121.90
26	BB	71	A	O4'-C1'-N9	17.28	122.02	108.20
1	AA	200	G	C6-C5-N7	-17.20	120.08	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1178	G	C8-N9-C4	-17.20	99.52	106.40
26	BB	2178	C	C2-N3-C4	17.19	128.50	119.90
26	BB	1223	G	C2-N3-C4	17.18	120.49	111.90
1	AA	647	C	C6-N1-C2	-17.16	113.44	120.30
4	AD	40	C	O4'-C1'-N1	17.14	121.92	108.20
14	AN	92	ARG	NE-CZ-NH1	17.14	128.87	120.30
26	BB	41	C	O4'-C1'-N1	17.14	121.92	108.20
1	AA	319	G	C8-N9-C4	-17.09	99.56	106.40
1	AA	478	A	O4'-C1'-N9	17.08	121.86	108.20
26	BB	977	G	C8-N9-C4	-17.03	99.59	106.40
1	AA	79	G	C8-N9-C4	-17.01	99.60	106.40
1	AA	54	C	C2-N3-C4	16.99	128.39	119.90
26	BB	1619	G	C8-N9-C4	-16.98	99.61	106.40
26	BB	2048	G	N9-C4-C5	16.98	112.19	105.40
1	AA	829	G	C8-N9-C4	-16.96	99.61	106.40
26	BB	1783	A	C8-N9-C4	-16.96	99.02	105.80
26	BB	1498	C	N1-C2-O2	16.94	129.06	118.90
1	AA	51	A	C8-N9-C4	-16.87	99.05	105.80
26	BB	713	G	C8-N9-C4	-16.87	99.65	106.40
26	BB	1170	C	O4'-C1'-N1	16.84	121.67	108.20
26	BB	319	G	C8-N9-C4	-16.83	99.67	106.40
26	BB	1091	G	C2-N3-C4	16.79	120.30	111.90
55	B4	5	ARG	NE-CZ-NH2	-16.77	111.92	120.30
26	BB	2448	A	C8-N9-C4	-16.76	99.09	105.80
26	BB	1511	G	C5-C6-N1	16.76	119.88	111.50
1	AA	923	A	C8-N9-C4	16.73	112.49	105.80
25	BA	15	A	N1-C2-N3	-16.71	120.95	129.30
26	BB	2592	G	O4'-C1'-N9	16.69	121.55	108.20
26	BB	1875	G	C8-N9-C4	-16.57	99.77	106.40
53	B2	63	ARG	NE-CZ-NH1	16.55	128.58	120.30
26	BB	603	A	C8-N9-C4	-16.50	99.20	105.80
26	BB	989	G	N9-C4-C5	16.50	112.00	105.40
4	AD	4	G	N9-C4-C5	16.44	111.98	105.40
1	AA	931	C	N3-C4-C5	-16.41	115.33	121.90
26	BB	2106	U	C5-C6-N1	-16.38	114.51	122.70
26	BB	323	C	O4'-C1'-N1	16.33	121.27	108.20
26	BB	483	A	N1-C2-N3	-16.33	121.13	129.30
1	AA	46	G	N7-C8-N9	16.32	121.26	113.10
26	BB	1159	U	O4'-C1'-N1	16.31	121.25	108.20
36	BL	116	ARG	NE-CZ-NH2	16.27	128.44	120.30
26	BB	2045	C	O4'-C1'-N1	16.24	121.19	108.20
26	BB	186	G	C2-N3-C4	16.21	120.01	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	AP	28	ARG	NE-CZ-NH2	-16.19	112.20	120.30
26	BB	55	G	C4-C5-N7	-16.19	104.32	110.80
26	BB	1681	G	C4-C5-N7	-16.19	104.32	110.80
26	BB	2822	G	O4'-C1'-N9	16.17	121.13	108.20
1	AA	473	U	O4'-C1'-N1	16.15	121.12	108.20
26	BB	532	A	N1-C2-N3	-16.11	121.24	129.30
3	AC	41	A	C8-N9-C4	-16.11	99.36	105.80
26	BB	2671	G	C8-N9-C4	-16.10	99.96	106.40
26	BB	481	G	O4'-C1'-N9	16.06	121.05	108.20
26	BB	952	G	N9-C4-C5	16.05	111.82	105.40
16	AP	86	ARG	NE-CZ-NH1	16.01	128.31	120.30
1	AA	614	C	O4'-C1'-N1	16.00	121.00	108.20
26	BB	2652	C	C5-C4-N4	-15.99	109.01	120.20
33	BI	116	ARG	NE-CZ-NH1	15.98	128.29	120.30
26	BB	1125	G	C8-N9-C4	-15.91	100.03	106.40
16	AP	86	ARG	NE-CZ-NH2	-15.91	112.35	120.30
26	BB	881	G	N3-C4-C5	-15.91	120.65	128.60
26	BB	1824	G	O4'-C1'-N9	15.90	120.92	108.20
6	AF	71	ARG	NE-CZ-NH2	-15.88	112.36	120.30
1	AA	794	A	C8-N9-C4	-15.88	99.45	105.80
26	BB	904	G	N9-C4-C5	15.87	111.75	105.40
26	BB	2751	G	C8-N9-C4	-15.87	100.05	106.40
26	BB	2782	G	C8-N9-C4	-15.87	100.05	106.40
26	BB	2129	C	O4'-C1'-N1	15.84	120.87	108.20
44	BT	13	ARG	NE-CZ-NH2	-15.82	112.39	120.30
26	BB	2174	C	O4'-C1'-N1	15.81	120.85	108.20
26	BB	487	C	O4'-C1'-N1	15.80	120.84	108.20
1	AA	1511	G	C8-N9-C4	-15.79	100.08	106.40
26	BB	1182	G	C2-N3-C4	15.77	119.79	111.90
26	BB	2465	C	C4-C5-C6	-15.76	109.52	117.40
26	BB	2072	C	N1-C2-O2	15.74	128.34	118.90
25	BA	2	G	N3-C4-C5	-15.74	120.73	128.60
1	AA	1182	G	C8-N9-C4	-15.73	100.11	106.40
26	BB	1168	G	C2-N3-C4	15.73	119.76	111.90
1	AA	193	C	N3-C4-C5	-15.72	115.61	121.90
1	AA	721	G	C4-C5-N7	-15.70	104.52	110.80
7	AG	12	ARG	NE-CZ-NH1	15.66	128.13	120.30
1	AA	1019	A	C8-N9-C4	-15.66	99.54	105.80
1	AA	499	A	O4'-C1'-N9	15.66	120.72	108.20
26	BB	1436	G	N3-C4-C5	-15.66	120.77	128.60
26	BB	2107	G	N3-C4-C5	-15.64	120.78	128.60
26	BB	2275	C	C6-N1-C2	-15.62	114.05	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	836	G	N9-C4-C5	15.62	111.65	105.40
1	AA	1051	C	C6-N1-C2	-15.61	114.06	120.30
26	BB	944	C	C6-N1-C2	-15.60	114.06	120.30
26	BB	2390	U	O4'-C1'-N1	15.59	120.67	108.20
1	AA	946	A	C8-N9-C4	-15.58	99.57	105.80
26	BB	644	A	C8-N9-C4	-15.56	99.58	105.80
26	BB	651	G	C2-N3-C4	15.55	119.68	111.90
16	AP	89	ARG	NE-CZ-NH1	15.55	128.07	120.30
1	AA	510	A	C5-N7-C8	15.54	111.67	103.90
1	AA	443	C	N3-C2-O2	-15.54	111.03	121.90
26	BB	2014	A	N9-C4-C5	15.52	112.01	105.80
26	BB	1505	A	N1-C2-N3	-15.51	121.54	129.30
26	BB	2360	G	N3-C4-C5	-15.51	120.84	128.60
26	BB	2870	C	N3-C4-C5	-15.51	115.70	121.90
42	BR	38	ARG	NE-CZ-NH1	-15.50	112.55	120.30
26	BB	2092	U	C5-C6-N1	-15.50	114.95	122.70
51	B0	7	ARG	NE-CZ-NH2	15.49	128.05	120.30
26	BB	81	G	C4-C5-N7	-15.48	104.61	110.80
26	BB	2609	U	C5-C4-O4	-15.48	116.61	125.90
1	AA	540	G	N3-C4-C5	-15.48	120.86	128.60
1	AA	493	A	O4'-C1'-N9	15.47	120.58	108.20
26	BB	1870	C	N1-C2-O2	15.45	128.17	118.90
26	BB	1758	U	O4'-C1'-N1	15.44	120.55	108.20
26	BB	105	C	O4'-C1'-N1	15.43	120.54	108.20
26	BB	1677	A	C2-N3-C4	15.43	118.31	110.60
26	BB	97	C	N3-C4-C5	-15.42	115.73	121.90
26	BB	1906	G	O4'-C1'-N9	15.42	120.53	108.20
26	BB	2804	U	C5-C6-N1	-15.41	114.99	122.70
1	AA	195	A	N9-C4-C5	15.41	111.96	105.80
26	BB	2269	G	N3-C4-C5	-15.40	120.90	128.60
26	BB	2487	G	C5-C6-O6	-15.38	119.37	128.60
26	BB	304	U	O4'-C1'-N1	15.37	120.50	108.20
26	BB	581	C	O4'-C1'-N1	15.34	120.47	108.20
26	BB	575	A	O4'-C1'-N9	15.34	120.47	108.20
26	BB	94	A	N9-C4-C5	15.33	111.93	105.80
25	BA	45	A	O4'-C1'-N9	15.33	120.46	108.20
21	AU	42	ARG	NE-CZ-NH1	15.30	127.95	120.30
1	AA	923	A	N9-C4-C5	-15.30	99.68	105.80
26	BB	342	A	N1-C2-N3	-15.30	121.65	129.30
26	BB	620	G	O4'-C1'-N9	15.29	120.43	108.20
26	BB	532	A	C2-N3-C4	15.29	118.25	110.60
26	BB	1573	G	C2-N3-C4	15.24	119.52	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	614	A	N1-C6-N6	15.24	127.74	118.60
26	BB	2115	G	N9-C4-C5	15.24	111.50	105.40
26	BB	437	U	N3-C2-O2	-15.23	111.54	122.20
26	BB	1801	A	O4'-C1'-N9	15.23	120.38	108.20
26	BB	1529	G	C8-N9-C4	-15.22	100.31	106.40
26	BB	645	C	N1-C2-O2	15.21	128.03	118.90
26	BB	2841	C	O4'-C1'-N1	15.21	120.37	108.20
1	AA	796	C	C6-N1-C2	-15.20	114.22	120.30
26	BB	205	G	C8-N9-C4	-15.20	100.32	106.40
26	BB	2652	C	N3-C4-N4	15.20	128.64	118.00
26	BB	909	A	O4'-C1'-N9	15.19	120.35	108.20
1	AA	190	A	N9-C4-C5	15.19	111.88	105.80
1	AA	207	C	O4'-C1'-N1	15.18	120.35	108.20
26	BB	584	C	O4'-C1'-N1	15.18	120.34	108.20
1	AA	748	G	N3-C4-N9	15.17	135.10	126.00
26	BB	733	G	N9-C4-C5	15.17	111.47	105.40
26	BB	1317	G	N7-C8-N9	15.15	120.68	113.10
1	AA	1360	A	C2-N3-C4	15.15	118.18	110.60
1	AA	1287	A	O4'-C1'-N9	15.15	120.32	108.20
26	BB	977	G	N7-C8-N9	15.13	120.66	113.10
26	BB	33	C	O4'-C1'-N1	15.12	120.30	108.20
1	AA	500	G	C6-C5-N7	-15.12	121.33	130.40
1	AA	100	G	N1-C6-O6	-15.11	110.83	119.90
26	BB	2597	G	C8-N9-C4	-15.11	100.35	106.40
43	BS	63	ARG	NE-CZ-NH1	15.10	127.85	120.30
26	BB	2806	C	C2-N3-C4	15.10	127.45	119.90
30	BF	162	ARG	NE-CZ-NH1	-15.09	112.75	120.30
1	AA	1151	A	C2-N3-C4	-15.08	103.06	110.60
26	BB	473	G	C8-N9-C4	-15.05	100.38	106.40
4	AD	1	C	C6-N1-C2	-15.04	114.28	120.30
26	BB	1619	G	N9-C4-C5	15.04	111.42	105.40
26	BB	952	G	C8-N9-C4	-15.02	100.39	106.40
26	BB	2187	U	O4'-C1'-N1	15.02	120.21	108.20
26	BB	2164	C	O4'-C1'-N1	15.02	120.21	108.20
1	AA	339	C	O4'-C1'-N1	15.01	120.21	108.20
9	AI	112	ARG	NE-CZ-NH2	-15.01	112.79	120.30
26	BB	1741	C	O4'-C1'-N1	14.98	120.19	108.20
26	BB	573	U	O4'-C1'-N1	14.98	120.18	108.20
1	AA	1482	G	N3-C4-C5	-14.97	121.12	128.60
14	AN	92	ARG	NE-CZ-NH2	-14.97	112.81	120.30
26	BB	2081	U	O4'-C1'-N1	14.97	120.17	108.20
20	AT	64	ARG	NE-CZ-NH2	-14.97	112.82	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	15	A	C2-N3-C4	14.94	118.07	110.60
1	AA	1133	G	C2-N3-C4	14.93	119.37	111.90
26	BB	1510	G	C2-N3-C4	14.93	119.36	111.90
26	BB	1613	G	N3-C4-C5	-14.93	121.14	128.60
26	BB	1170	C	N3-C4-C5	-14.91	115.94	121.90
15	AO	49	ARG	NE-CZ-NH2	-14.90	112.85	120.30
26	BB	678	C	O4'-C1'-N1	14.90	120.12	108.20
41	BQ	15	ARG	NE-CZ-NH1	14.89	127.75	120.30
1	AA	1153	G	N3-C4-C5	-14.87	121.16	128.60
26	BB	2601	C	C6-N1-C2	-14.86	114.35	120.30
26	BB	577	G	N3-C4-C5	-14.86	121.17	128.60
26	BB	1146	C	O4'-C1'-N1	14.85	120.08	108.20
26	BB	1836	C	C2-N3-C4	14.85	127.33	119.90
26	BB	2199	A	O4'-C1'-N9	14.85	120.08	108.20
2	AB	41	C	C6-N1-C2	14.85	126.24	120.30
26	BB	312	G	C4-C5-N7	14.84	116.74	110.80
1	AA	809	G	O4'-C1'-N9	14.83	120.07	108.20
26	BB	7	G	C2-N3-C4	14.82	119.31	111.90
26	BB	823	C	C5-C6-N1	14.82	128.41	121.00
26	BB	1348	C	O4'-C1'-N1	14.81	120.05	108.20
26	BB	1666	G	C5-C6-N1	14.81	118.90	111.50
26	BB	2437	G	C2-N3-C4	14.80	119.30	111.90
1	AA	720	C	N3-C4-C5	-14.79	115.98	121.90
1	AA	737	C	N1-C2-O2	14.79	127.77	118.90
26	BB	1287	A	N9-C4-C5	14.78	111.71	105.80
1	AA	293	G	C8-N9-C4	-14.78	100.49	106.40
26	BB	1232	G	C8-N9-C4	-14.78	100.49	106.40
1	AA	285	C	O4'-C1'-N1	14.78	120.02	108.20
1	AA	1325	C	O4'-C1'-N1	14.78	120.02	108.20
1	AA	3	A	O4'-C1'-N9	14.76	120.01	108.20
16	AP	89	ARG	NE-CZ-NH2	-14.76	112.92	120.30
26	BB	1276	A	C4-C5-C6	-14.76	109.62	117.00
26	BB	2791	G	C5-C6-N1	14.76	118.88	111.50
26	BB	930	G	N9-C4-C5	14.74	111.30	105.40
26	BB	2845	U	O4'-C1'-N1	14.74	119.99	108.20
1	AA	57	G	C2-N3-C4	14.73	119.27	111.90
28	BD	79	ARG	NE-CZ-NH2	-14.71	112.94	120.30
1	AA	204	G	N7-C8-N9	14.71	120.45	113.10
1	AA	293	G	N9-C4-C5	14.71	111.28	105.40
1	AA	1248	A	O4'-C1'-N9	14.70	119.96	108.20
26	BB	1231	U	C3'-C2'-C1'	14.70	113.26	101.50
1	AA	69	G	N9-C4-C5	14.69	111.28	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	85	G	C8-N9-C4	-14.69	100.52	106.40
26	BB	2241	A	C8-N9-C4	-14.69	99.92	105.80
26	BB	2126	A	C8-N9-C4	-14.67	99.93	105.80
26	BB	1988	G	C4-C5-N7	-14.65	104.94	110.80
1	AA	26	A	C4-C5-N7	-14.65	103.38	110.70
26	BB	712	G	O4'-C1'-N9	14.65	119.92	108.20
1	AA	46	G	C8-N9-C4	-14.64	100.54	106.40
26	BB	2472	G	C6-N1-C2	-14.63	116.32	125.10
56	B5	34	ARG	NE-CZ-NH1	14.62	127.61	120.30
3	AC	22	G	C8-N9-C4	-14.62	100.55	106.40
26	BB	764	A	N9-C4-C5	14.62	111.65	105.80
1	AA	263	A	C8-N9-C4	-14.61	99.95	105.80
26	BB	94	A	C4-C5-N7	-14.61	103.40	110.70
1	AA	373	A	N9-C4-C5	-14.61	99.96	105.80
26	BB	904	G	C8-N9-C4	-14.60	100.56	106.40
1	AA	148	G	N3-C4-C5	-14.60	121.30	128.60
26	BB	1252	G	N3-C4-C5	-14.59	121.30	128.60
1	AA	620	C	C6-N1-C2	-14.59	114.46	120.30
26	BB	1235	G	C8-N9-C4	-14.58	100.57	106.40
1	AA	1019	A	N7-C8-N9	14.58	121.09	113.80
1	AA	540	G	C2-N3-C4	14.56	119.18	111.90
1	AA	564	C	N3-C4-C5	-14.56	116.08	121.90
1	AA	539	A	C8-N9-C4	-14.55	99.98	105.80
26	BB	2884	U	O4'-C1'-N1	14.55	119.84	108.20
26	BB	467	G	C4-C5-N7	-14.54	104.98	110.80
26	BB	1418	G	N3-C4-N9	14.54	134.72	126.00
26	BB	2409	G	C2-N3-C4	14.54	119.17	111.90
1	AA	1366	C	N3-C2-O2	-14.54	111.72	121.90
26	BB	312	G	N7-C8-N9	14.52	120.36	113.10
1	AA	1430	A	C2-N3-C4	14.51	117.85	110.60
26	BB	218	A	O4'-C1'-N9	14.51	119.80	108.20
26	BB	1188	U	O4'-C1'-N1	14.50	119.80	108.20
26	BB	2494	G	O4'-C1'-N9	14.50	119.80	108.20
26	BB	1846	G	C2-N3-C4	14.49	119.15	111.90
26	BB	1482	G	C4-C5-N7	-14.48	105.01	110.80
1	AA	207	C	N3-C4-C5	14.48	127.69	121.90
15	AO	49	ARG	NE-CZ-NH1	14.47	127.54	120.30
26	BB	2112	G	N7-C8-N9	14.47	120.34	113.10
1	AA	102	G	N3-C4-C5	-14.47	121.36	128.60
1	AA	690	G	O4'-C1'-N9	14.45	119.76	108.20
26	BB	1459	G	C5-C6-O6	-14.44	119.94	128.60
1	AA	1166	G	C8-N9-C4	-14.44	100.62	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	AP	28	ARG	NE-CZ-NH1	14.43	127.52	120.30
1	AA	1448	C	C2-N3-C4	14.43	127.11	119.90
26	BB	266	G	N7-C8-N9	14.43	120.31	113.10
1	AA	948	C	N3-C4-C5	-14.43	116.13	121.90
25	BA	67	G	C5-C6-O6	-14.43	119.94	128.60
1	AA	1279	G	C8-N9-C4	-14.42	100.63	106.40
56	B5	12	ARG	NE-CZ-NH1	-14.42	113.09	120.30
26	BB	2640	G	C4-C5-N7	-14.41	105.04	110.80
26	BB	1759	A	C2-N3-C4	14.41	117.80	110.60
1	AA	846	G	C8-N9-C4	-14.40	100.64	106.40
26	BB	1371	G	N9-C4-C5	14.40	111.16	105.40
26	BB	940	G	C5-C6-N1	14.40	118.70	111.50
26	BB	1964	G	C5-C6-O6	-14.39	119.96	128.60
26	BB	2375	G	C6-C5-N7	-14.38	121.77	130.40
26	BB	1310	G	C8-N9-C4	-14.37	100.65	106.40
11	AK	12	ARG	NE-CZ-NH1	14.36	127.48	120.30
16	AP	92	ARG	NE-CZ-NH2	-14.36	113.12	120.30
26	BB	1459	G	C2-N3-C4	14.36	119.08	111.90
26	BB	577	G	C8-N9-C4	-14.35	100.66	106.40
26	BB	847	U	C5-C6-N1	-14.35	115.53	122.70
26	BB	2582	G	N9-C4-C5	14.34	111.14	105.40
26	BB	1540	G	C6-N1-C2	-14.34	116.50	125.10
1	AA	577	G	N1-C6-O6	-14.34	111.30	119.90
1	AA	700	G	N3-C4-C5	-14.34	121.43	128.60
3	AC	22	G	N7-C8-N9	14.34	120.27	113.10
1	AA	1266	G	N3-C4-N9	14.33	134.59	126.00
26	BB	1050	A	N7-C8-N9	14.32	120.96	113.80
26	BB	1108	U	O4'-C1'-N1	14.32	119.65	108.20
1	AA	212	G	C8-N9-C4	-14.31	100.68	106.40
1	AA	1355	G	N9-C4-C5	14.31	111.12	105.40
26	BB	176	A	C8-N9-C4	-14.31	100.08	105.80
26	BB	1721	G	C2-N3-C4	14.30	119.05	111.90
26	BB	1780	A	O4'-C1'-N9	14.29	119.63	108.20
1	AA	443	C	N1-C2-O2	14.27	127.46	118.90
9	AI	91	ARG	NE-CZ-NH2	-14.27	113.16	120.30
3	AC	15	G	O4'-C1'-N9	14.27	119.61	108.20
2	AB	70	C	C2-N3-C4	14.26	127.03	119.90
26	BB	1604	C	N3-C4-C5	-14.24	116.20	121.90
26	BB	90	U	C2-N3-C4	-14.24	118.46	127.00
26	BB	837	C	N3-C2-O2	-14.24	111.93	121.90
26	BB	958	U	C5-C4-O4	-14.24	117.36	125.90
26	BB	2409	G	N9-C4-C5	14.24	111.09	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
41	BQ	81	ARG	NE-CZ-NH1	14.23	127.42	120.30
4	AD	65	G	C8-N9-C4	-14.23	100.71	106.40
1	AA	326	G	C2-N3-C4	14.21	119.01	111.90
6	AF	39	ARG	NE-CZ-NH2	-14.21	113.20	120.30
26	BB	866	A	N7-C8-N9	14.20	120.90	113.80
26	BB	2844	G	C8-N9-C4	-14.20	100.72	106.40
26	BB	2385	C	O4'-C1'-N1	14.20	119.56	108.20
26	BB	122	G	C2-N3-C4	14.19	119.00	111.90
26	BB	612	G	C5-C6-O6	-14.19	120.08	128.60
26	BB	1285	A	N9-C4-C5	14.18	111.47	105.80
26	BB	1408	G	N9-C4-C5	14.18	111.07	105.40
26	BB	1510	G	N3-C4-C5	-14.17	121.51	128.60
26	BB	2798	U	N3-C2-O2	-14.17	112.28	122.20
1	AA	89	U	N1-C2-N3	14.17	123.40	114.90
1	AA	227	G	C4-C5-N7	-14.16	105.13	110.80
26	BB	2048	G	C4-C5-N7	-14.16	105.14	110.80
13	AM	68	ARG	NE-CZ-NH2	14.15	127.38	120.30
26	BB	2307	G	C4-C5-N7	-14.15	105.14	110.80
1	AA	464	U	O4'-C1'-N1	14.15	119.52	108.20
9	AI	78	PHE	CB-CG-CD2	-14.14	110.90	120.80
1	AA	526	C	O4'-C1'-N1	14.13	119.50	108.20
26	BB	2640	G	N9-C4-C5	14.13	111.05	105.40
25	BA	115	A	N7-C8-N9	14.12	120.86	113.80
1	AA	173	U	N1-C2-N3	14.11	123.37	114.90
26	BB	1507	C	C4-C5-C6	-14.10	110.35	117.40
1	AA	739	C	C4-C5-C6	-14.10	110.35	117.40
26	BB	2118	U	O4'-C1'-N1	14.10	119.48	108.20
26	BB	1861	G	N7-C8-N9	14.09	120.15	113.10
26	BB	2702	G	C5-N7-C8	-14.08	97.26	104.30
25	BA	71	C	C6-N1-C2	14.08	125.93	120.30
26	BB	2117	A	C5-C6-N1	14.06	124.73	117.70
26	BB	1568	G	C8-N9-C4	-14.06	100.78	106.40
26	BB	1819	A	N1-C6-N6	14.06	127.03	118.60
4	AD	17	C	O4'-C1'-N1	14.05	119.44	108.20
26	BB	620	G	C4-C5-N7	-14.04	105.18	110.80
26	BB	2063	C	C2-N3-C4	14.04	126.92	119.90
26	BB	2860	A	N1-C2-N3	14.04	136.32	129.30
1	AA	582	C	C6-N1-C2	-14.03	114.69	120.30
26	BB	1429	G	N9-C4-C5	14.02	111.01	105.40
25	BA	101	A	N1-C2-N3	-14.02	122.29	129.30
26	BB	873	C	C6-N1-C2	-14.02	114.69	120.30
1	AA	615	G	C2-N3-C4	14.01	118.91	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	540	C	O4'-C1'-N1	14.01	119.40	108.20
1	AA	929	G	O4'-C1'-N9	14.00	119.40	108.20
26	BB	2529	G	C2-N3-C4	14.00	118.90	111.90
1	AA	1173	U	O4'-C1'-N1	13.99	119.39	108.20
26	BB	600	G	C5-C6-O6	-13.99	120.20	128.60
26	BB	817	C	O4'-C1'-N1	13.99	119.39	108.20
1	AA	567	G	C8-N9-C4	-13.99	100.80	106.40
26	BB	2120	G	N3-C4-C5	-13.97	121.61	128.60
1	AA	262	A	N1-C2-N3	-13.97	122.31	129.30
26	BB	989	G	C8-N9-C4	-13.97	100.81	106.40
26	BB	1459	G	C5-C6-N1	13.97	118.48	111.50
26	BB	2487	G	N1-C6-O6	13.97	128.28	119.90
26	BB	2808	G	O4'-C1'-N9	13.96	119.37	108.20
1	AA	173	U	N3-C2-O2	-13.95	112.43	122.20
26	BB	1050	A	C8-N9-C4	-13.95	100.22	105.80
26	BB	2870	C	C2-N3-C4	13.96	126.88	119.90
26	BB	577	G	C2-N3-C4	13.95	118.87	111.90
38	BN	59	ARG	NE-CZ-NH2	13.94	127.27	120.30
1	AA	159	G	N3-C4-C5	-13.94	121.63	128.60
1	AA	26	A	C2-N3-C4	13.94	117.57	110.60
25	BA	96	G	N7-C8-N9	13.94	120.07	113.10
26	BB	1285	A	C8-N9-C4	-13.92	100.23	105.80
26	BB	1888	G	C2-N3-C4	13.91	118.86	111.90
26	BB	122	G	N3-C4-C5	-13.91	121.65	128.60
1	AA	565	U	C5-C6-N1	-13.91	115.75	122.70
26	BB	2888	C	N3-C4-C5	-13.91	116.34	121.90
1	AA	153	C	N3-C4-C5	13.91	127.46	121.90
4	AD	11	A	O4'-C1'-N9	13.90	119.32	108.20
26	BB	1847	A	C8-N9-C4	-13.90	100.24	105.80
26	BB	2362	C	N3-C4-C5	-13.90	116.34	121.90
26	BB	2837	A	C8-N9-C4	-13.90	100.24	105.80
26	BB	1357	C	N1-C2-O2	13.90	127.24	118.90
26	BB	974	G	C2-N3-C4	13.89	118.85	111.90
26	BB	1998	A	C4-C5-N7	-13.89	103.75	110.70
26	BB	2332	C	N3-C4-C5	-13.89	116.34	121.90
26	BB	1002	G	N3-C4-C5	-13.88	121.66	128.60
26	BB	1998	A	N9-C4-C5	13.88	111.35	105.80
26	BB	70	G	N9-C4-C5	13.88	110.95	105.40
1	AA	296	U	O4'-C1'-N1	13.87	119.30	108.20
26	BB	1568	G	N7-C8-N9	13.87	120.03	113.10
2	AB	29	G	C8-N9-C4	-13.86	100.86	106.40
26	BB	31	C	C6-N1-C2	-13.86	114.76	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	368	A	O4'-C1'-N9	13.86	119.29	108.20
5	AE	73	ARG	NE-CZ-NH1	13.86	127.23	120.30
1	AA	737	C	N3-C2-O2	-13.85	112.20	121.90
1	AA	1264	U	C6-N1-C2	-13.85	112.69	121.00
1	AA	1032	G	N3-C4-C5	-13.85	121.68	128.60
4	AD	19	G	N3-C2-N2	-13.85	110.21	119.90
26	BB	899	A	O4'-C1'-N9	13.84	119.27	108.20
26	BB	1168	G	N1-C6-O6	-13.84	111.59	119.90
26	BB	1837	C	N1-C2-O2	13.84	127.21	118.90
1	AA	354	G	C6-N1-C2	-13.84	116.80	125.10
4	AD	71	G	C4-C5-N7	13.84	116.33	110.80
26	BB	1434	A	O4'-C1'-N9	13.83	119.27	108.20
26	BB	1065	U	C6-N1-C2	-13.81	112.71	121.00
26	BB	1973	G	C4-C5-N7	13.81	116.32	110.80
6	AF	126	ARG	NE-CZ-NH2	13.80	127.20	120.30
1	AA	69	G	C4-C5-N7	-13.79	105.28	110.80
1	AA	791	G	C4-C5-N7	-13.79	105.28	110.80
26	BB	2715	C	N3-C4-C5	-13.79	116.38	121.90
1	AA	302	G	O4'-C1'-N9	13.78	119.23	108.20
1	AA	132	C	N3-C4-C5	-13.78	116.39	121.90
26	BB	2391	G	C4-C5-N7	-13.77	105.29	110.80
26	BB	2747	G	N9-C4-C5	13.77	110.91	105.40
26	BB	1929	G	O4'-C1'-N9	13.77	119.22	108.20
26	BB	2407	A	N1-C6-N6	13.77	126.86	118.60
26	BB	2610	C	O4'-C1'-N1	13.77	119.21	108.20
26	BB	134	G	C4-C5-N7	-13.76	105.30	110.80
26	BB	733	G	C8-N9-C4	-13.76	100.89	106.40
26	BB	2360	G	C8-N9-C4	-13.76	100.90	106.40
2	AB	47	U	C5-C6-N1	-13.76	115.82	122.70
26	BB	1348	C	N1-C2-O2	13.75	127.15	118.90
1	AA	268	U	C5-C4-O4	-13.75	117.65	125.90
26	BB	327	G	N9-C4-C5	13.74	110.90	105.40
26	BB	1017	G	C4-C5-N7	13.74	116.30	110.80
8	AH	32	PHE	CB-CG-CD2	-13.74	111.18	120.80
26	BB	616	A	O4'-C1'-N9	13.73	119.18	108.20
1	AA	1400	C	O4'-C1'-N1	13.72	119.18	108.20
26	BB	2702	G	C4-C5-N7	13.72	116.29	110.80
1	AA	1504	G	N3-C4-C5	-13.71	121.74	128.60
10	AJ	69	ARG	NE-CZ-NH2	-13.71	113.44	120.30
26	BB	2610	C	N1-C2-O2	13.70	127.12	118.90
26	BB	1655	A	C4-C5-C6	-13.69	110.16	117.00
26	BB	713	G	N9-C4-C5	13.68	110.87	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	560	C	C5-C6-N1	13.68	127.84	121.00
1	AA	1430	A	N1-C2-N3	-13.68	122.46	129.30
26	BB	969	G	C4-C5-N7	-13.68	105.33	110.80
1	AA	981	U	O4'-C1'-N1	13.67	119.14	108.20
26	BB	1895	C	O4'-C1'-N1	13.66	119.13	108.20
1	AA	1435	G	C4-C5-N7	13.66	116.26	110.80
1	AA	54	C	N3-C4-C5	-13.65	116.44	121.90
26	BB	813	U	O4'-C1'-N1	13.65	119.12	108.20
1	AA	1000	A	O4'-C1'-N9	13.65	119.12	108.20
26	BB	126	A	O4'-C1'-N9	13.64	119.11	108.20
26	BB	1875	G	C2-N3-C4	13.64	118.72	111.90
26	BB	499	U	C5-C4-O4	-13.64	117.72	125.90
26	BB	1062	G	C8-N9-C4	-13.64	100.94	106.40
26	BB	930	G	C8-N9-C4	-13.64	100.94	106.40
43	BS	69	ARG	NE-CZ-NH1	-13.63	113.48	120.30
1	AA	1341	U	O4'-C1'-N1	13.62	119.10	108.20
26	BB	885	C	O4'-C1'-N1	13.62	119.10	108.20
51	B0	23	ARG	NE-CZ-NH1	13.61	127.11	120.30
1	AA	930	C	C5-C4-N4	13.60	129.72	120.20
1	AA	620	C	O4'-C1'-N1	13.60	119.08	108.20
26	BB	1896	G	C8-N9-C4	-13.60	100.96	106.40
26	BB	2851	A	C5-N7-C8	-13.60	97.10	103.90
1	AA	547	A	N9-C4-C5	13.60	111.24	105.80
26	BB	817	C	N1-C2-O2	13.60	127.06	118.90
26	BB	2853	C	O4'-C1'-N1	13.60	119.08	108.20
1	AA	926	G	N3-C4-C5	-13.59	121.81	128.60
1	AA	542	G	O4'-C1'-N9	13.59	119.07	108.20
26	BB	1687	G	C2-N3-C4	13.59	118.69	111.90
26	BB	1992	G	C8-N9-C4	-13.58	100.97	106.40
26	BB	1008	A	O4'-C1'-N9	13.58	119.06	108.20
1	AA	1046	A	N9-C4-C5	13.58	111.23	105.80
26	BB	1437	C	O4'-C1'-N1	13.57	119.06	108.20
26	BB	266	G	C5-N7-C8	-13.57	97.52	104.30
26	BB	589	U	O4'-C1'-N1	13.57	119.06	108.20
26	BB	2027	G	C8-N9-C4	-13.57	100.97	106.40
1	AA	1116	U	C3'-C2'-C1'	13.56	112.35	101.50
26	BB	2597	G	N7-C8-N9	13.56	119.88	113.10
1	AA	510	A	N7-C8-N9	-13.56	107.02	113.80
1	AA	124	C	N3-C4-C5	-13.55	116.48	121.90
26	BB	939	G	O4'-C1'-N9	13.55	119.04	108.20
1	AA	381	C	N3-C4-N4	13.54	127.48	118.00
1	AA	5	U	O4'-C1'-N1	13.54	119.03	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AC	40	G	C5-N7-C8	-13.53	97.53	104.30
26	BB	1176	U	O4'-C1'-N1	13.53	119.02	108.20
25	BA	79	G	N3-C4-C5	-13.52	121.84	128.60
26	BB	598	U	O4'-C1'-N1	13.50	119.00	108.20
26	BB	2421	G	C8-N9-C4	-13.50	101.00	106.40
12	AL	10	ARG	NE-CZ-NH2	-13.49	113.55	120.30
26	BB	751	A	N7-C8-N9	13.49	120.54	113.80
10	AJ	43	TYR	CB-CG-CD2	-13.48	112.91	121.00
1	AA	1076	U	O4'-C1'-N1	13.47	118.98	108.20
26	BB	1203	U	C5-C6-N1	-13.47	115.96	122.70
1	AA	1192	C	C2-N3-C4	13.47	126.64	119.90
26	BB	1098	A	N9-C4-C5	-13.46	100.41	105.80
26	BB	1811	G	N3-C4-C5	-13.46	121.87	128.60
26	BB	2234	G	C6-C5-N7	-13.46	122.32	130.40
26	BB	786	C	O4'-C1'-N1	13.46	118.97	108.20
26	BB	1008	A	C8-N9-C4	-13.46	100.42	105.80
1	AA	1192	C	C6-N1-C2	-13.46	114.92	120.30
3	AC	57	C	C4-C5-C6	13.45	124.13	117.40
1	AA	1187	G	N9-C4-C5	13.45	110.78	105.40
26	BB	2349	G	N3-C2-N2	13.44	129.31	119.90
26	BB	1652	A	O4'-C1'-N9	13.44	118.95	108.20
26	BB	1168	G	N3-C4-C5	-13.43	121.88	128.60
1	AA	334	C	C6-N1-C2	13.43	125.67	120.30
26	BB	1998	A	N1-C6-N6	13.43	126.66	118.60
1	AA	746	A	N1-C2-N3	-13.42	122.59	129.30
1	AA	352	C	N1-C2-O2	13.42	126.95	118.90
26	BB	1720	U	N1-C2-O2	-13.41	113.41	122.80
26	BB	2675	A	N7-C8-N9	-13.41	107.09	113.80
28	BD	62	ARG	NE-CZ-NH2	-13.41	113.59	120.30
1	AA	547	A	C2-N3-C4	13.41	117.30	110.60
26	BB	1687	G	C5-C6-N1	13.40	118.20	111.50
26	BB	2838	G	O4'-C1'-N9	13.40	118.92	108.20
1	AA	110	C	O4'-C1'-N1	13.40	118.92	108.20
26	BB	1581	G	N7-C8-N9	13.40	119.80	113.10
26	BB	1358	G	C2-N3-C4	13.39	118.59	111.90
1	AA	423	G	C8-N9-C4	-13.38	101.05	106.40
1	AA	48	C	N1-C2-O2	13.38	126.93	118.90
26	BB	2101	A	C8-N9-C4	-13.37	100.45	105.80
1	AA	581	G	C8-N9-C4	-13.37	101.05	106.40
10	AJ	4	ARG	NE-CZ-NH2	-13.36	113.62	120.30
26	BB	1098	A	C8-N9-C4	13.36	111.14	105.80
26	BB	2377	A	O4'-C1'-N9	13.36	118.89	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2835	A	C3'-C2'-C1'	13.36	112.19	101.50
1	AA	204	G	C2-N3-C4	13.36	118.58	111.90
42	BR	112	ARG	NE-CZ-NH1	13.36	126.98	120.30
11	AK	87	ARG	NE-CZ-NH2	-13.36	113.62	120.30
26	BB	1500	G	C8-N9-C4	-13.35	101.06	106.40
26	BB	1732	C	N3-C4-C5	-13.35	116.56	121.90
1	AA	851	G	N9-C4-C5	13.35	110.74	105.40
1	AA	1365	G	C8-N9-C4	-13.33	101.07	106.40
26	BB	1535	A	O4'-C1'-N9	13.32	118.86	108.20
4	AD	23	G	C8-N9-C4	-13.32	101.07	106.40
26	BB	1250	G	N7-C8-N9	13.32	119.76	113.10
26	BB	1645	G	O4'-C1'-N9	13.32	118.85	108.20
1	AA	1470	U	C2-N3-C4	-13.31	119.01	127.00
1	AA	185	U	C5'-C4'-O4'	13.31	125.08	109.10
1	AA	1413	A	N1-C6-N6	13.31	126.59	118.60
26	BB	1074	G	N9-C4-C5	13.31	110.72	105.40
40	BP	64	ARG	NE-CZ-NH1	13.31	126.96	120.30
26	BB	1219	U	O4'-C1'-N1	13.31	118.84	108.20
26	BB	2036	C	N3-C4-C5	-13.30	116.58	121.90
1	AA	494	G	N7-C8-N9	13.30	119.75	113.10
1	AA	1382	C	O4'-C1'-N1	13.29	118.83	108.20
26	BB	2426	A	N1-C6-N6	13.29	126.57	118.60
26	BB	2465	C	N3-C4-C5	13.29	127.22	121.90
1	AA	510	A	C5-C6-N1	13.29	124.34	117.70
1	AA	233	C	N3-C2-O2	-13.28	112.60	121.90
6	AF	41	TYR	CB-CG-CD1	-13.28	113.03	121.00
26	BB	1317	G	C5-N7-C8	-13.27	97.66	104.30
1	AA	147	G	C4-C5-N7	-13.27	105.49	110.80
1	AA	241	G	N3-C4-C5	-13.27	121.97	128.60
1	AA	500	G	C8-N9-C4	-13.27	101.09	106.40
1	AA	69	G	C2-N3-C4	13.27	118.53	111.90
26	BB	1899	A	C8-N9-C4	-13.26	100.50	105.80
1	AA	782	A	N9-C4-C5	13.26	111.10	105.80
1	AA	189	A	C4-C5-N7	13.25	117.32	110.70
26	BB	1403	A	C8-N9-C4	13.25	111.10	105.80
26	BB	2801	G	N9-C4-C5	13.25	110.70	105.40
26	BB	2220	U	O4'-C1'-N1	13.24	118.80	108.20
26	BB	1375	U	O4'-C1'-N1	13.24	118.79	108.20
26	BB	1774	C	C2-N3-C4	13.23	126.52	119.90
26	BB	1287	A	C8-N9-C4	-13.23	100.51	105.80
29	BE	128	ARG	NE-CZ-NH2	13.23	126.91	120.30
25	BA	25	U	C5-C6-N1	-13.22	116.09	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2427	C	O4'-C1'-N1	13.22	118.78	108.20
34	BJ	41	ARG	NE-CZ-NH2	-13.22	113.69	120.30
1	AA	233	C	N3-C4-C5	-13.22	116.61	121.90
1	AA	1112	C	N3-C4-C5	13.21	127.18	121.90
26	BB	2468	A	N1-C6-N6	-13.21	110.67	118.60
26	BB	2888	C	C2-N3-C4	13.21	126.50	119.90
1	AA	1102	A	C8-N9-C4	13.20	111.08	105.80
26	BB	1617	C	N3-C4-C5	-13.20	116.62	121.90
26	BB	1133	A	N1-C6-N6	13.20	126.52	118.60
26	BB	1084	A	C8-N9-C4	-13.19	100.52	105.80
26	BB	2846	G	O4'-C1'-N9	13.18	118.75	108.20
26	BB	1673	G	C8-N9-C4	-13.17	101.13	106.40
26	BB	485	C	O4'-C1'-N1	13.16	118.73	108.20
26	BB	81	G	N9-C4-C5	13.16	110.67	105.40
26	BB	2645	G	C3'-C2'-C1'	13.16	112.03	101.50
26	BB	220	G	N3-C4-C5	-13.16	122.02	128.60
26	BB	663	G	O4'-C1'-N9	13.16	118.73	108.20
26	BB	1891	G	C8-N9-C4	-13.16	101.14	106.40
26	BB	1906	G	C5-C6-N1	13.16	118.08	111.50
26	BB	2360	G	N9-C4-C5	13.16	110.66	105.40
26	BB	467	G	N9-C4-C5	13.15	110.66	105.40
26	BB	2554	U	O4'-C1'-N1	13.15	118.72	108.20
1	AA	1021	A	N9-C4-C5	13.14	111.06	105.80
26	BB	1369	G	C4-C5-N7	13.14	116.06	110.80
26	BB	1481	U	O4'-C1'-N1	13.14	118.72	108.20
1	AA	241	G	C4-C5-N7	-13.13	105.55	110.80
26	BB	1539	U	O4'-C1'-N1	13.13	118.71	108.20
26	BB	2188	U	O4'-C1'-N1	13.13	118.71	108.20
37	BM	98	ARG	NE-CZ-NH1	13.13	126.87	120.30
26	BB	2702	G	C6-C5-N7	-13.13	122.52	130.40
1	AA	1490	U	C5-C6-N1	-13.12	116.14	122.70
1	AA	421	U	N3-C2-O2	-13.12	113.02	122.20
26	BB	859	G	N9-C4-C5	13.11	110.64	105.40
26	BB	2694	G	C8-N9-C4	-13.11	101.16	106.40
26	BB	1550	C	C6-N1-C2	13.11	125.54	120.30
2	AB	12	U	C5-C4-O4	-13.10	118.04	125.90
26	BB	975	A	N1-C6-N6	13.10	126.46	118.60
26	BB	1907	G	N9-C4-C5	13.09	110.64	105.40
26	BB	621	A	C8-N9-C4	-13.09	100.56	105.80
25	BA	94	A	N1-C6-N6	13.09	126.45	118.60
26	BB	1246	A	O4'-C1'-N9	13.09	118.67	108.20
26	BB	2732	G	C5-C6-N1	13.09	118.04	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2437	G	N1-C2-N3	-13.08	116.05	123.90
26	BB	2716	C	O4'-C1'-N1	13.08	118.67	108.20
26	BB	2732	G	C6-N1-C2	-13.08	117.25	125.10
26	BB	1650	A	N9-C4-C5	13.08	111.03	105.80
26	BB	1369	G	C6-C5-N7	-13.07	122.56	130.40
26	BB	2178	C	N3-C4-N4	13.07	127.15	118.00
26	BB	495	G	N3-C4-C5	-13.06	122.07	128.60
26	BB	859	G	C4-C5-N7	-13.05	105.58	110.80
25	BA	111	U	O4'-C1'-N1	13.05	118.64	108.20
26	BB	2388	A	C5-C6-N1	13.05	124.22	117.70
1	AA	860	A	C5-C6-N1	13.04	124.22	117.70
1	AA	1349	A	C5-C6-N1	13.04	124.22	117.70
26	BB	1235	G	N3-C4-C5	-13.04	122.08	128.60
26	BB	387	U	C5-C6-N1	-13.04	116.18	122.70
4	AD	32	G	O4'-C1'-N9	13.04	118.63	108.20
1	AA	26	A	C5-N7-C8	13.03	110.42	103.90
26	BB	989	G	C4-C5-N7	-13.02	105.59	110.80
26	BB	2578	G	N9-C4-C5	-13.02	100.19	105.40
26	BB	469	G	C2-N3-C4	13.02	118.41	111.90
26	BB	2822	G	C3'-C2'-C1'	13.02	111.91	101.50
1	AA	1180	A	C8-N9-C4	-13.02	100.59	105.80
26	BB	1429	G	C8-N9-C4	-13.02	101.19	106.40
3	AC	23	C	O4'-C1'-N1	13.01	118.61	108.20
25	BA	90	C	C2-N3-C4	13.01	126.41	119.90
26	BB	2298	A	C8-N9-C4	-13.01	100.60	105.80
1	AA	316	C	O4'-C1'-N1	13.01	118.61	108.20
8	AH	53	ARG	NE-CZ-NH1	13.01	126.80	120.30
1	AA	228	A	N1-C2-N3	-13.00	122.80	129.30
1	AA	109	A	O4'-C1'-N9	12.99	118.60	108.20
1	AA	807	A	C4-C5-C6	-12.99	110.50	117.00
26	BB	578	G	O4'-C1'-N9	12.99	118.59	108.20
26	BB	1632	A	N1-C2-N3	12.98	135.79	129.30
26	BB	232	G	C8-N9-C4	-12.98	101.21	106.40
1	AA	802	A	O4'-C1'-N9	12.98	118.58	108.20
1	AA	1181	G	C4-C5-N7	-12.97	105.61	110.80
26	BB	908	C	O4'-C1'-N1	12.97	118.58	108.20
26	BB	1132	U	O4'-C1'-N1	12.96	118.57	108.20
26	BB	361	G	N3-C4-N9	12.95	133.77	126.00
26	BB	1935	G	C8-N9-C4	-12.95	101.22	106.40
1	AA	726	C	O4'-C1'-N1	12.95	118.56	108.20
26	BB	1533	C	N3-C4-C5	12.94	127.08	121.90
26	BB	2402	U	C5-C4-O4	-12.94	118.14	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1361	G	O4'-C1'-N9	12.94	118.55	108.20
1	AA	780	A	C8-N9-C4	-12.93	100.63	105.80
1	AA	995	C	O4'-C1'-N1	12.93	118.55	108.20
26	BB	2692	G	C5-N7-C8	-12.93	97.83	104.30
1	AA	999	C	O4'-C1'-N1	12.93	118.54	108.20
26	BB	1568	G	N9-C4-C5	12.93	110.57	105.40
26	BB	2373	G	C8-N9-C4	-12.92	101.23	106.40
1	AA	703	G	N3-C4-C5	-12.91	122.14	128.60
26	BB	1857	G	N3-C4-C5	-12.91	122.14	128.60
26	BB	2043	C	O4'-C1'-N1	12.91	118.53	108.20
1	AA	281	G	N9-C4-C5	12.91	110.56	105.40
26	BB	2063	C	N1-C2-O2	12.91	126.65	118.90
1	AA	82	G	N9-C4-C5	12.91	110.56	105.40
1	AA	1045	C	O4'-C1'-N1	12.91	118.52	108.20
26	BB	1656	C	C6-N1-C2	-12.90	115.14	120.30
26	BB	1891	G	N7-C8-N9	12.90	119.55	113.10
26	BB	2084	C	C2-N3-C4	-12.90	113.45	119.90
1	AA	1224	U	C4-C5-C6	12.90	127.44	119.70
26	BB	320	A	C8-N9-C4	-12.90	100.64	105.80
26	BB	473	G	N7-C8-N9	12.89	119.55	113.10
26	BB	2600	A	N1-C6-N6	-12.89	110.86	118.60
4	AD	65	G	N9-C4-C5	12.89	110.56	105.40
26	BB	602	A	N7-C8-N9	12.88	120.24	113.80
26	BB	2049	G	C4-C5-N7	12.88	115.95	110.80
1	AA	233	C	C6-N1-C2	-12.88	115.15	120.30
1	AA	912	C	O4'-C1'-N1	12.88	118.50	108.20
1	AA	1247	U	O4'-C1'-N1	12.87	118.50	108.20
26	BB	1087	G	N9-C4-C5	12.88	110.55	105.40
26	BB	1180	U	N3-C4-O4	12.88	128.41	119.40
26	BB	1575	C	O4'-C1'-N1	12.86	118.49	108.20
1	AA	318	G	N1-C6-O6	12.86	127.61	119.90
1	AA	1060	U	O4'-C1'-N1	12.86	118.48	108.20
26	BB	649	G	C2-N3-C4	12.86	118.33	111.90
26	BB	2255	G	C8-N9-C4	-12.85	101.26	106.40
26	BB	473	G	N9-C4-C5	12.85	110.54	105.40
26	BB	2035	G	C4-C5-N7	-12.85	105.66	110.80
26	BB	1223	G	N3-C4-C5	-12.84	122.18	128.60
26	BB	1789	A	C2-N3-C4	-12.84	104.18	110.60
26	BB	207	A	C2-N3-C4	12.84	117.02	110.60
26	BB	493	G	C8-N9-C4	-12.84	101.26	106.40
26	BB	2733	A	C5-N7-C8	12.84	110.32	103.90
26	BB	367	G	N7-C8-N9	12.84	119.52	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1131	G	C2-N3-C4	12.84	118.32	111.90
26	BB	1613	G	C2-N3-C4	12.84	118.32	111.90
1	AA	1533	C	O4'-C1'-N1	12.82	118.46	108.20
1	AA	1201	A	C1'-O4'-C4'	-12.81	99.65	109.90
26	BB	233	A	N7-C8-N9	-12.81	107.39	113.80
26	BB	997	G	O4'-C1'-N9	12.81	118.45	108.20
26	BB	438	G	N3-C2-N2	-12.81	110.93	119.90
26	BB	659	G	N3-C4-N9	12.81	133.68	126.00
26	BB	2588	G	N3-C4-C5	-12.80	122.20	128.60
26	BB	2192	U	O4'-C1'-N1	12.80	118.44	108.20
1	AA	195	A	C8-N9-C4	-12.79	100.68	105.80
25	BA	75	G	C8-N9-C4	-12.79	101.28	106.40
26	BB	1286	A	O4'-C1'-N9	12.79	118.43	108.20
1	AA	323	U	C5-C6-N1	-12.79	116.31	122.70
1	AA	859	G	N1-C6-O6	-12.79	112.23	119.90
1	AA	1096	C	O4'-C1'-N1	12.79	118.43	108.20
3	AC	26	U	C5-C6-N1	-12.78	116.31	122.70
26	BB	489	G	C5-C6-N1	12.78	117.89	111.50
1	AA	1344	C	N1-C2-O2	12.78	126.57	118.90
26	BB	2416	C	N1-C2-O2	12.78	126.57	118.90
26	BB	128	C	N3-C4-C5	12.78	127.01	121.90
26	BB	969	G	N9-C4-C5	12.78	110.51	105.40
26	BB	2811	G	C1'-O4'-C4'	12.78	120.12	109.90
1	AA	1178	G	N9-C4-C5	12.77	110.51	105.40
26	BB	1981	A	C8-N9-C4	-12.77	100.69	105.80
26	BB	2441	U	O4'-C1'-N1	12.77	118.42	108.20
1	AA	851	G	C8-N9-C4	-12.77	101.29	106.40
4	AD	7	G	N3-C2-N2	12.77	128.84	119.90
1	AA	319	G	N3-C4-C5	-12.77	122.22	128.60
1	AA	380	G	O4'-C1'-N9	12.77	118.41	108.20
1	AA	1485	U	N3-C4-O4	12.77	128.34	119.40
26	BB	1339	G	C4-C5-N7	-12.76	105.69	110.80
1	AA	1459	G	N9-C1'-C2'	-12.76	97.41	114.00
26	BB	1528	A	O4'-C1'-N9	12.76	118.41	108.20
1	AA	1513	A	N1-C6-N6	-12.76	110.95	118.60
26	BB	1235	G	N9-C4-C5	12.76	110.50	105.40
25	BA	9	G	C5-N7-C8	-12.75	97.92	104.30
26	BB	1008	A	N9-C4-C5	12.75	110.90	105.80
26	BB	1956	U	O4'-C1'-N1	12.75	118.40	108.20
26	BB	2855	C	C2-N3-C4	12.74	126.27	119.90
26	BB	1321	A	O4'-C1'-N9	12.74	118.39	108.20
26	BB	2399	G	N3-C4-C5	-12.74	122.23	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	940	G	N1-C6-O6	-12.73	112.26	119.90
26	BB	393	C	C4-C5-C6	-12.73	111.03	117.40
26	BB	1640	A	N9-C4-C5	12.73	110.89	105.80
26	BB	2372	U	C5-C4-O4	-12.73	118.26	125.90
26	BB	2572	A	O4'-C1'-N9	12.73	118.38	108.20
26	BB	2345	G	C8-N9-C4	-12.72	101.31	106.40
4	AD	74	A	N1-C6-N6	-12.71	110.97	118.60
2	AB	28	C	O4'-C1'-N1	12.71	118.37	108.20
3	AC	22	G	N9-C4-C5	12.71	110.48	105.40
26	BB	2698	U	O4'-C1'-N1	12.71	118.37	108.20
1	AA	388	G	N3-C4-C5	-12.70	122.25	128.60
26	BB	1635	A	C8-N9-C4	-12.70	100.72	105.80
26	BB	415	A	O4'-C1'-N9	12.70	118.36	108.20
1	AA	460	A	N1-C6-N6	-12.70	110.98	118.60
30	BF	85	PHE	CB-CG-CD2	-12.70	111.91	120.80
26	BB	2582	G	C8-N9-C4	-12.70	101.32	106.40
41	BQ	16	ARG	NE-CZ-NH2	12.69	126.64	120.30
1	AA	1031	C	N3-C4-C5	-12.69	116.83	121.90
41	BQ	9	ARG	NE-CZ-NH1	12.68	126.64	120.30
1	AA	500	G	N3-C2-N2	12.67	128.77	119.90
26	BB	731	C	C5-C4-N4	-12.67	111.33	120.20
1	AA	991	U	O4'-C1'-N1	12.67	118.33	108.20
1	AA	494	G	C4-C5-N7	12.66	115.87	110.80
26	BB	2738	A	C8-N9-C4	-12.66	100.73	105.80
1	AA	1153	G	N1-C6-O6	-12.66	112.30	119.90
1	AA	988	G	N7-C8-N9	12.66	119.43	113.10
26	BB	2015	A	N1-C2-N3	-12.66	122.97	129.30
26	BB	1765	U	N3-C4-C5	-12.66	107.01	114.60
26	BB	2388	A	C4-C5-C6	-12.66	110.67	117.00
1	AA	1534	A	N1-C6-N6	12.65	126.19	118.60
2	AB	69	C	O4'-C1'-N1	12.65	118.32	108.20
26	BB	2234	G	C4-C5-N7	12.65	115.86	110.80
26	BB	1293	C	N3-C4-C5	-12.64	116.84	121.90
26	BB	1817	G	N3-C4-N9	12.64	133.59	126.00
26	BB	2042	A	C8-N9-C4	-12.64	100.74	105.80
26	BB	1470	A	O4'-C1'-N9	-12.64	98.09	108.20
26	BB	254	G	C2-N3-C4	12.64	118.22	111.90
26	BB	1337	G	C8-N9-C4	-12.64	101.34	106.40
26	BB	2812	G	N3-C4-C5	-12.64	122.28	128.60
26	BB	2884	U	N3-C2-O2	-12.63	113.36	122.20
31	BG	114	ARG	NE-CZ-NH2	12.63	126.61	120.30
1	AA	728	A	C5-C6-N1	12.63	124.01	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	B3	51	ARG	NE-CZ-NH1	-12.62	113.99	120.30
1	AA	941	G	C5-C6-O6	-12.62	121.03	128.60
26	BB	2693	G	C2-N3-C4	-12.62	105.59	111.90
1	AA	988	G	C8-N9-C4	-12.62	101.35	106.40
26	BB	1790	C	C2-N3-C4	12.62	126.21	119.90
26	BB	246	C	C5'-C4'-O4'	12.62	124.24	109.10
1	AA	715	A	C8-N9-C4	-12.61	100.75	105.80
26	BB	2116	G	C8-N9-C4	-12.61	101.36	106.40
25	BA	102	G	N9-C4-C5	12.61	110.44	105.40
26	BB	967	U	O4'-C1'-N1	12.61	118.29	108.20
1	AA	829	G	N3-C4-C5	-12.61	122.30	128.60
1	AA	344	A	C6-C5-N7	-12.61	123.48	132.30
1	AA	1517	G	N9-C4-C5	12.61	110.44	105.40
26	BB	2281	A	C8-N9-C4	-12.61	100.76	105.80
1	AA	311	C	N3-C4-C5	-12.60	116.86	121.90
16	AP	69	ARG	NE-CZ-NH2	-12.60	114.00	120.30
26	BB	380	G	O4'-C1'-N9	12.60	118.28	108.20
26	BB	70	G	N1-C2-N3	12.60	131.46	123.90
26	BB	1101	U	C5-C4-O4	12.60	133.46	125.90
26	BB	1137	G	C6-N1-C2	-12.60	117.54	125.10
1	AA	1488	G	O4'-C1'-N9	12.59	118.28	108.20
26	BB	818	G	C8-N9-C4	-12.59	101.36	106.40
26	BB	986	C	O4'-C1'-N1	12.59	118.28	108.20
26	BB	1149	G	N3-C4-C5	-12.59	122.30	128.60
26	BB	1010	A	C8-N9-C4	-12.59	100.76	105.80
1	AA	618	C	N1-C2-O2	12.59	126.45	118.90
1	AA	805	C	C6-N1-C2	12.59	125.33	120.30
26	BB	348	A	C5-N7-C8	-12.58	97.61	103.90
26	BB	1026	G	C2-N3-C4	12.57	118.19	111.90
1	AA	1409	C	N1-C2-O2	12.57	126.44	118.90
26	BB	2509	G	C8-N9-C4	-12.57	101.37	106.40
26	BB	2852	G	N3-C4-C5	-12.57	122.32	128.60
26	BB	1570	A	C5-C6-N6	-12.57	113.65	123.70
26	BB	356	G	O4'-C1'-N9	12.56	118.25	108.20
1	AA	1400	C	N1-C2-O2	12.56	126.44	118.90
25	BA	117	G	C3'-C2'-C1'	12.56	111.55	101.50
26	BB	2194	U	N1-C2-N3	12.56	122.43	114.90
1	AA	243	A	N1-C2-N3	-12.55	123.02	129.30
29	BE	169	ARG	NE-CZ-NH1	-12.55	114.02	120.30
26	BB	733	G	C4-C5-N7	-12.55	105.78	110.80
26	BB	1726	C	N3-C4-N4	12.55	126.78	118.00
1	AA	459	A	C4-C5-C6	-12.55	110.73	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	605	G	O4'-C1'-N9	12.54	118.24	108.20
26	BB	1811	G	C2-N3-C4	12.54	118.17	111.90
26	BB	1106	G	C5-C6-N1	12.54	117.77	111.50
1	AA	580	C	O4'-C1'-N1	12.54	118.23	108.20
1	AA	1491	G	O4'-C1'-N9	12.54	118.23	108.20
1	AA	57	G	N3-C4-C5	-12.53	122.33	128.60
1	AA	345	C	N3-C4-C5	-12.53	116.89	121.90
26	BB	510	C	C2-N3-C4	12.53	126.17	119.90
26	BB	696	G	C4-C5-N7	12.53	115.81	110.80
26	BB	100	U	C4-C5-C6	12.52	127.21	119.70
1	AA	965	U	O4'-C1'-N1	12.52	118.22	108.20
18	AR	16	ARG	NE-CZ-NH1	12.52	126.56	120.30
26	BB	164	C	O4'-C1'-N1	12.52	118.21	108.20
26	BB	562	U	O4'-C1'-N1	12.51	118.21	108.20
26	BB	2692	G	C4-C5-N7	12.51	115.81	110.80
3	AC	31	U	O4'-C1'-N1	12.51	118.20	108.20
26	BB	1612	C	O4'-C1'-N1	12.51	118.20	108.20
26	BB	2345	G	N3-C4-C5	-12.51	122.35	128.60
1	AA	1231	G	C8-N9-C4	-12.50	101.40	106.40
26	BB	2511	U	C5-C4-O4	-12.50	118.40	125.90
26	BB	187	G	C4-C5-N7	-12.49	105.80	110.80
4	AD	5	G	N9-C4-C5	12.49	110.39	105.40
26	BB	1505	A	C2-N3-C4	12.49	116.84	110.60
26	BB	1975	G	C4'-C3'-C2'	-12.49	90.11	102.60
1	AA	1094	G	C4-C5-N7	-12.48	105.81	110.80
26	BB	1777	U	N3-C2-O2	-12.48	113.46	122.20
10	AJ	91	ARG	NE-CZ-NH2	12.48	126.54	120.30
26	BB	1547	C	O4'-C1'-N1	12.48	118.18	108.20
1	AA	602	A	O4'-C1'-N9	12.47	118.18	108.20
26	BB	167	A	N1-C2-N3	-12.47	123.06	129.30
26	BB	766	U	N1-C2-O2	-12.47	114.07	122.80
25	BA	9	G	C4-C5-N7	12.47	115.79	110.80
26	BB	1182	G	N1-C6-O6	-12.46	112.42	119.90
26	BB	2484	G	N7-C8-N9	12.46	119.33	113.10
26	BB	1047	G	C8-N9-C4	-12.46	101.42	106.40
1	AA	71	A	N1-C6-N6	-12.45	111.13	118.60
1	AA	421	U	C2-N3-C4	-12.45	119.53	127.00
1	AA	494	G	C5-N7-C8	-12.45	98.08	104.30
26	BB	1694	C	O4'-C1'-N1	12.45	118.16	108.20
26	BB	1739	A	C8-N9-C4	-12.45	100.82	105.80
26	BB	619	G	C8-N9-C4	-12.44	101.42	106.40
3	AC	55	A	C8-N9-C4	-12.44	100.82	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2399	G	N9-C4-C5	12.44	110.38	105.40
26	BB	2040	G	O4'-C1'-N9	12.44	118.15	108.20
26	BB	1870	C	N3-C2-O2	-12.44	113.20	121.90
26	BB	2048	G	C8-N9-C4	-12.44	101.43	106.40
1	AA	577	G	C5-C6-O6	12.43	136.06	128.60
1	AA	1362	A	O4'-C1'-N9	12.43	118.14	108.20
26	BB	1032	A	N1-C6-N6	12.42	126.05	118.60
26	BB	1475	G	C8-N9-C4	-12.42	101.43	106.40
26	BB	2307	G	C5-N7-C8	12.42	110.51	104.30
1	AA	579	A	N1-C6-N6	12.41	126.05	118.60
26	BB	547	A	C2-N3-C4	12.41	116.81	110.60
26	BB	602	A	C8-N9-C4	-12.41	100.83	105.80
26	BB	1875	G	N7-C8-N9	12.41	119.31	113.10
26	BB	1631	G	N9-C4-C5	12.41	110.36	105.40
1	AA	570	G	C6-C5-N7	-12.39	122.96	130.40
1	AA	1338	G	N3-C4-C5	-12.39	122.40	128.60
5	AE	107	ARG	NE-CZ-NH2	-12.39	114.10	120.30
29	BE	179	ARG	NE-CZ-NH1	12.39	126.50	120.30
26	BB	220	G	C4-C5-N7	-12.39	105.84	110.80
26	BB	318	C	O4'-C1'-N1	12.38	118.10	108.20
1	AA	568	G	C8-N9-C4	-12.37	101.45	106.40
1	AA	1210	C	O4'-C1'-N1	12.37	118.10	108.20
26	BB	15	G	O4'-C1'-N9	12.37	118.09	108.20
10	AJ	9	ARG	NE-CZ-NH1	-12.36	114.12	120.30
26	BB	883	G	C5-C6-N1	12.36	117.68	111.50
26	BB	1455	G	C4-C5-N7	12.36	115.74	110.80
1	AA	131	A	N9-C4-C5	12.36	110.74	105.80
26	BB	612	G	C8-N9-C4	-12.35	101.46	106.40
26	BB	2367	G	C2-N3-C4	12.35	118.08	111.90
25	BA	115	A	C5-N7-C8	-12.35	97.72	103.90
26	BB	1649	G	C8-N9-C4	-12.35	101.46	106.40
26	BB	2890	G	N3-C4-C5	-12.35	122.42	128.60
1	AA	768	A	C8-N9-C4	-12.35	100.86	105.80
26	BB	1749	A	C8-N9-C4	-12.35	100.86	105.80
1	AA	171	A	C5-N7-C8	-12.34	97.73	103.90
1	AA	293	G	C4-C5-N7	-12.34	105.86	110.80
26	BB	640	C	O4'-C1'-N1	12.34	118.07	108.20
1	AA	808	C	C6-N1-C2	-12.34	115.36	120.30
25	BA	35	C	C4'-C3'-C2'	-12.34	90.26	102.60
1	AA	1503	A	N9-C4-C5	12.33	110.73	105.80
26	BB	1776	G	N3-C4-C5	-12.33	122.44	128.60
1	AA	860	A	C6-N1-C2	-12.32	111.21	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	4	U	C4-C5-C6	12.32	127.09	119.70
3	AC	16	A	N9-C4-C5	12.32	110.73	105.80
1	AA	735	C	O4'-C1'-N1	12.32	118.06	108.20
26	BB	2707	U	O4'-C1'-N1	12.31	118.05	108.20
25	BA	48	U	C5-C4-O4	-12.30	118.52	125.90
26	BB	707	G	C4-C5-N7	-12.30	105.88	110.80
1	AA	1128	C	O4'-C1'-N1	12.30	118.04	108.20
1	AA	1166	G	N9-C4-C5	12.30	110.32	105.40
1	AA	339	C	C2-N3-C4	12.29	126.05	119.90
15	AO	8	ARG	NE-CZ-NH1	12.30	126.45	120.30
26	BB	85	G	N9-C4-C5	12.29	110.32	105.40
1	AA	373	A	C8-N9-C4	12.29	110.72	105.80
13	AM	48	ARG	NE-CZ-NH1	12.29	126.44	120.30
1	AA	1187	G	C8-N9-C4	-12.29	101.48	106.40
26	BB	2076	U	O4'-C1'-N1	12.29	118.03	108.20
26	BB	1753	G	C5-C6-O6	12.28	135.97	128.60
1	AA	159	G	C4-C5-N7	-12.28	105.89	110.80
26	BB	1087	G	C4-C5-N7	-12.28	105.89	110.80
1	AA	614	C	C4-C5-C6	-12.28	111.26	117.40
24	AX	17	ARG	NE-CZ-NH2	-12.28	114.16	120.30
25	BA	1	U	O4'-C1'-N1	12.28	118.02	108.20
26	BB	327	G	C4-C5-C6	12.28	126.17	118.80
26	BB	1182	G	C5-C6-N1	12.28	117.64	111.50
1	AA	560	A	C4-C5-C6	-12.27	110.86	117.00
26	BB	1918	A	C5-C6-N1	12.27	123.84	117.70
26	BB	787	C	C6-N1-C2	-12.27	115.39	120.30
1	AA	1087	G	N7-C8-N9	12.26	119.23	113.10
26	BB	1631	G	C8-N9-C4	-12.26	101.50	106.40
50	BZ	73	ARG	NE-CZ-NH2	12.26	126.43	120.30
1	AA	159	G	N9-C4-C5	12.26	110.30	105.40
26	BB	2275	C	O4'-C1'-N1	12.26	118.01	108.20
26	BB	1333	G	C8-N9-C4	-12.25	101.50	106.40
26	BB	1756	G	C5-C6-N1	12.25	117.63	111.50
4	AD	30	G	N3-C4-C5	-12.25	122.47	128.60
26	BB	757	G	C8-N9-C4	-12.25	101.50	106.40
1	AA	1181	G	N3-C4-C5	-12.25	122.48	128.60
26	BB	2000	C	C6-N1-C2	-12.25	115.40	120.30
1	AA	59	A	O4'-C1'-N9	12.24	117.99	108.20
26	BB	2101	A	N9-C4-C5	12.24	110.69	105.80
1	AA	796	C	C5-C6-N1	12.23	127.12	121.00
26	BB	185	G	C4-C5-N7	-12.23	105.91	110.80
1	AA	10	A	N9-C4-C5	12.23	110.69	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	203	G	C8-N9-C4	-12.23	101.51	106.40
1	AA	1026	G	C2-N3-C4	12.23	118.02	111.90
26	BB	1344	U	O4'-C1'-N1	12.23	117.98	108.20
1	AA	782	A	C8-N9-C4	-12.22	100.91	105.80
25	BA	54	G	C2-N3-C4	12.22	118.01	111.90
26	BB	593	U	C6-N1-C2	-12.22	113.67	121.00
26	BB	370	G	C5-C6-O6	-12.22	121.27	128.60
26	BB	1131	G	N3-C4-C5	-12.22	122.49	128.60
1	AA	758	C	O4'-C1'-N1	12.21	117.97	108.20
25	BA	25	U	C4-C5-C6	12.21	127.03	119.70
26	BB	140	C	C6-N1-C2	-12.21	115.42	120.30
26	BB	2232	C	N1-C2-O2	12.21	126.22	118.90
26	BB	1433	A	C4-C5-N7	12.21	116.80	110.70
1	AA	642	A	N9-C4-C5	12.20	110.68	105.80
26	BB	276	U	O4'-C1'-N1	12.20	117.96	108.20
26	BB	2771	C	N3-C4-C5	12.20	126.78	121.90
1	AA	57	G	C8-N9-C4	-12.19	101.52	106.40
3	AC	46	C	N3-C4-C5	-12.19	117.02	121.90
1	AA	951	G	N1-C6-O6	-12.19	112.59	119.90
1	AA	1336	C	C6-N1-C2	-12.19	115.42	120.30
16	AP	78	ARG	NE-CZ-NH1	12.18	126.39	120.30
26	BB	2674	G	C2-N3-C4	12.18	117.99	111.90
26	BB	2544	G	C8-N9-C4	-12.18	101.53	106.40
1	AA	849	G	N3-C4-C5	-12.18	122.51	128.60
26	BB	1079	C	N1-C2-O2	12.18	126.21	118.90
26	BB	1505	A	O4'-C1'-N9	12.18	117.94	108.20
26	BB	632	A	O4'-C1'-N9	12.18	117.94	108.20
6	AF	87	ARG	NE-CZ-NH2	-12.18	114.21	120.30
26	BB	1601	G	N1-C6-O6	-12.18	112.59	119.90
26	BB	1047	G	N7-C8-N9	12.17	119.19	113.10
1	AA	658	C	N3-C4-C5	-12.17	117.03	121.90
26	BB	1964	G	C8-N9-C4	-12.17	101.53	106.40
26	BB	2510	C	N3-C2-O2	-12.17	113.38	121.90
26	BB	961	C	N1-C2-O2	12.17	126.20	118.90
26	BB	614	A	C5-C6-N6	-12.16	113.97	123.70
26	BB	1317	G	C4-C5-N7	12.16	115.66	110.80
1	AA	1147	C	C6-N1-C2	-12.15	115.44	120.30
1	AA	1347	G	N7-C8-N9	12.15	119.18	113.10
1	AA	661	G	O4'-C1'-N9	12.15	117.92	108.20
1	AA	606	G	O4'-C1'-N9	12.14	117.92	108.20
26	BB	776	G	N1-C6-O6	-12.14	112.61	119.90
1	AA	91	U	N3-C2-O2	-12.14	113.70	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	686	U	N1-C2-N3	12.14	122.18	114.90
26	BB	295	G	N3-C2-N2	-12.14	111.40	119.90
26	BB	325	G	C8-N9-C4	-12.14	101.55	106.40
1	AA	219	U	O4'-C1'-N1	12.13	117.91	108.20
26	BB	2202	U	O4'-C1'-N1	12.13	117.91	108.20
26	BB	1125	G	N9-C4-C5	12.13	110.25	105.40
4	AD	19	G	N9-C4-C5	-12.12	100.55	105.40
4	AD	44	A	C2-N3-C4	12.12	116.66	110.60
26	BB	2042	A	N9-C4-C5	12.13	110.65	105.80
1	AA	748	G	N3-C4-C5	-12.12	122.54	128.60
1	AA	1510	C	N3-C4-C5	-12.12	117.05	121.90
26	BB	190	A	N9-C4-C5	12.12	110.65	105.80
4	AD	17	C	C3'-C2'-C1'	12.12	111.20	101.50
26	BB	1261	C	C1'-O4'-C4'	-12.12	100.20	109.90
26	BB	159	G	C8-N9-C4	-12.12	101.55	106.40
26	BB	2549	G	C8-N9-C4	-12.12	101.55	106.40
26	BB	2662	A	N1-C6-N6	-12.11	111.33	118.60
1	AA	466	A	C5-C6-N1	12.11	123.76	117.70
25	BA	63	C	N3-C4-C5	-12.11	117.06	121.90
26	BB	2430	A	C5-N7-C8	12.11	109.96	103.90
26	BB	409	G	O4'-C1'-N9	12.11	117.89	108.20
26	BB	1193	G	C2-N3-C4	12.11	117.95	111.90
26	BB	76	C	C4-C5-C6	12.10	123.45	117.40
26	BB	361	G	C6-C5-N7	-12.10	123.14	130.40
26	BB	1230	A	C5-N7-C8	-12.10	97.85	103.90
26	BB	726	G	N9-C4-C5	12.10	110.24	105.40
26	BB	1906	G	N3-C4-N9	12.10	133.26	126.00
26	BB	2734	A	O4'-C1'-N9	12.10	117.88	108.20
1	AA	760	G	C5'-C4'-O4'	12.09	123.61	109.10
10	AJ	43	TYR	CB-CG-CD1	12.09	128.26	121.00
25	BA	113	C	N3-C4-C5	-12.09	117.06	121.90
26	BB	621	A	N7-C8-N9	12.09	119.84	113.80
26	BB	1959	G	O4'-C1'-N9	12.09	117.87	108.20
26	BB	2760	C	C2-N3-C4	12.09	125.94	119.90
1	AA	771	G	C5-C6-N1	12.09	117.54	111.50
26	BB	469	G	C5-C6-N1	12.09	117.54	111.50
26	BB	591	U	C5-C4-O4	-12.09	118.65	125.90
26	BB	1807	G	C8-N9-C4	-12.08	101.57	106.40
1	AA	697	U	O4'-C1'-N1	12.08	117.86	108.20
1	AA	700	G	C2-N3-C4	12.08	117.94	111.90
26	BB	1320	C	O4'-C1'-N1	12.08	117.86	108.20
26	BB	250	G	N3-C4-C5	-12.08	122.56	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	857	G	N3-C4-C5	-12.08	122.56	128.60
26	BB	112	U	O4'-C1'-N1	12.07	117.86	108.20
26	BB	1361	G	N9-C4-C5	12.07	110.23	105.40
26	BB	2510	C	N3-C4-C5	12.07	126.73	121.90
26	BB	2617	U	C4-C5-C6	12.07	126.94	119.70
26	BB	2859	G	N3-C4-C5	-12.07	122.56	128.60
1	AA	1257	A	C5-C6-N6	-12.06	114.05	123.70
26	BB	2682	A	C8-N9-C4	-12.06	100.97	105.80
26	BB	1522	A	C8-N9-C4	-12.06	100.97	105.80
26	BB	751	A	O4'-C1'-N9	12.06	117.85	108.20
26	BB	1535	A	N1-C2-N3	-12.06	123.27	129.30
39	BO	117	PHE	CB-CG-CD2	-12.06	112.36	120.80
26	BB	1489	C	C4-C5-C6	-12.06	111.37	117.40
26	BB	2712	C	N1-C2-O2	12.05	126.13	118.90
1	AA	1104	G	N3-C4-C5	-12.05	122.58	128.60
26	BB	510	C	O4'-C1'-N1	12.05	117.84	108.20
26	BB	816	C	N3-C4-C5	-12.05	117.08	121.90
1	AA	1182	G	N7-C8-N9	12.05	119.12	113.10
1	AA	1241	G	N9-C4-C5	12.05	110.22	105.40
26	BB	438	G	C4-C5-N7	-12.05	105.98	110.80
26	BB	238	C	C6-N1-C2	-12.04	115.48	120.30
26	BB	612	G	C2-N3-C4	12.04	117.92	111.90
26	BB	1250	G	O4'-C1'-N9	12.04	117.83	108.20
1	AA	1201	A	P-O3'-C3'	12.04	134.14	119.70
26	BB	1054	A	N9-C4-C5	12.04	110.61	105.80
1	AA	752	G	N9-C4-C5	12.03	110.21	105.40
26	BB	464	U	C4-C5-C6	12.03	126.92	119.70
1	AA	405	U	C5-C4-O4	12.03	133.12	125.90
1	AA	1316	G	C2-N3-C4	12.02	117.91	111.90
26	BB	357	C	N1-C2-O2	12.02	126.11	118.90
26	BB	2117	A	C4-C5-N7	12.02	116.71	110.70
1	AA	715	A	N9-C4-C5	12.02	110.61	105.80
26	BB	171	U	C4-C5-C6	12.02	126.91	119.70
26	BB	493	G	C5-C6-N1	12.02	117.51	111.50
26	BB	945	A	N1-C2-N3	-12.02	123.29	129.30
26	BB	2574	G	C6-N1-C2	-12.02	117.89	125.10
26	BB	644	A	O4'-C1'-N9	12.01	117.81	108.20
26	BB	1974	C	C2-N3-C4	12.01	125.91	119.90
1	AA	858	G	C4-C5-N7	-12.01	106.00	110.80
1	AA	1476	A	O4'-C1'-N9	12.01	117.81	108.20
26	BB	1157	G	N3-C4-C5	-12.01	122.59	128.60
1	AA	1066	C	O4'-C1'-N1	12.01	117.81	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1356	G	C5-C6-N1	12.01	117.50	111.50
25	BA	69	G	C2-N3-C4	12.01	117.90	111.90
26	BB	2241	A	N9-C4-C5	12.00	110.60	105.80
26	BB	2851	A	C4-C5-N7	12.00	116.70	110.70
26	BB	218	A	C5-C6-N1	12.00	123.70	117.70
26	BB	748	G	O4'-C1'-N9	12.00	117.80	108.20
26	BB	2729	G	N3-C4-C5	-12.00	122.60	128.60
1	AA	1440	U	C5-C4-O4	-11.99	118.70	125.90
1	AA	1153	G	O4'-C1'-N9	11.99	117.79	108.20
1	AA	1204	A	C8-N9-C4	-11.99	101.00	105.80
26	BB	1488	C	C6-N1-C2	-11.99	115.50	120.30
26	BB	1285	A	N1-C2-N3	-11.99	123.31	129.30
26	BB	2733	A	N7-C8-N9	-11.99	107.80	113.80
25	BA	30	C	N3-C4-N4	11.99	126.39	118.00
26	BB	803	U	N3-C2-O2	-11.99	113.81	122.20
26	BB	1817	G	N9-C4-C5	-11.99	100.60	105.40
26	BB	2065	C	N3-C2-O2	-11.99	113.51	121.90
1	AA	188	C	O4'-C1'-N1	11.99	117.79	108.20
28	BD	216	ARG	NE-CZ-NH1	11.99	126.29	120.30
26	BB	2456	C	N3-C4-C5	-11.98	117.11	121.90
1	AA	785	G	C8-N9-C4	-11.98	101.61	106.40
26	BB	1763	G	C8-N9-C4	-11.98	101.61	106.40
26	BB	1408	G	C8-N9-C4	-11.98	101.61	106.40
26	BB	1557	C	O4'-C1'-N1	11.98	117.78	108.20
1	AA	1124	G	C8-N9-C4	-11.98	101.61	106.40
26	BB	2530	A	C5-C6-N1	11.98	123.69	117.70
1	AA	1440	U	N1-C2-N3	11.97	122.08	114.90
26	BB	2639	A	C5-C6-N1	11.97	123.69	117.70
25	BA	6	G	N7-C8-N9	11.97	119.08	113.10
1	AA	963	G	N3-C4-C5	-11.96	122.62	128.60
26	BB	1476	U	C5-C6-N1	-11.96	116.72	122.70
1	AA	429	U	O4'-C1'-N1	11.96	117.77	108.20
26	BB	348	A	N7-C8-N9	11.96	119.78	113.80
26	BB	2588	G	N7-C8-N9	11.96	119.08	113.10
26	BB	2120	G	C2-N3-C4	11.94	117.87	111.90
26	BB	425	G	N7-C8-N9	11.94	119.07	113.10
26	BB	1626	A	C5-N7-C8	-11.94	97.93	103.90
1	AA	1416	G	C8-N9-C4	-11.93	101.63	106.40
1	AA	465	A	N1-C2-N3	-11.93	123.33	129.30
1	AA	909	A	C8-N9-C4	-11.93	101.03	105.80
26	BB	1507	C	O4'-C1'-N1	11.93	117.75	108.20
26	BB	438	G	O4'-C1'-N9	11.93	117.74	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2683	C	C6-N1-C2	-11.93	115.53	120.30
1	AA	1375	A	C8-N9-C4	-11.93	101.03	105.80
1	AA	814	A	N1-C2-N3	11.92	135.26	129.30
1	AA	284	C	O4'-C1'-N1	11.92	117.74	108.20
26	BB	185	G	C5-N7-C8	11.92	110.26	104.30
26	BB	1743	G	N1-C2-N3	11.92	131.05	123.90
1	AA	573	A	N1-C6-N6	11.92	125.75	118.60
2	AB	67	G	C2-N3-C4	11.92	117.86	111.90
26	BB	1095	A	N1-C2-N3	-11.92	123.34	129.30
26	BB	351	C	N3-C4-C5	-11.92	117.13	121.90
26	BB	1824	G	N3-C4-C5	-11.92	122.64	128.60
26	BB	2444	G	O4'-C1'-N9	11.92	117.73	108.20
26	BB	1481	U	N3-C2-O2	-11.91	113.86	122.20
26	BB	2276	G	O4'-C1'-N9	11.91	117.73	108.20
20	AT	76	ARG	NE-CZ-NH2	-11.91	114.35	120.30
26	BB	1426	G	C8-N9-C4	-11.91	101.64	106.40
1	AA	153	C	C5-C4-N4	-11.91	111.86	120.20
26	BB	1216	G	N1-C2-N3	11.90	131.04	123.90
26	BB	1572	A	N1-C6-N6	-11.90	111.46	118.60
1	AA	318	G	C8-N9-C4	-11.89	101.64	106.40
26	BB	1468	U	O4'-C1'-N1	11.89	117.72	108.20
26	BB	624	C	N3-C4-C5	-11.89	117.14	121.90
26	BB	1670	C	N3-C4-C5	-11.89	117.14	121.90
26	BB	667	U	C2-N3-C4	-11.89	119.87	127.00
26	BB	430	A	C5-C6-N1	11.88	123.64	117.70
26	BB	370	G	N1-C6-O6	11.88	127.03	119.90
1	AA	203	G	N7-C8-N9	11.88	119.04	113.10
1	AA	204	G	C5-N7-C8	-11.88	98.36	104.30
1	AA	1472	U	O4'-C1'-N1	11.88	117.70	108.20
26	BB	2625	G	C8-N9-C4	-11.88	101.65	106.40
26	BB	2692	G	N7-C8-N9	11.88	119.04	113.10
1	AA	1453	G	O4'-C1'-N9	11.88	117.70	108.20
26	BB	547	A	N7-C8-N9	-11.88	107.86	113.80
26	BB	1907	G	C8-N9-C4	-11.88	101.65	106.40
26	BB	116	C	O4'-C1'-N1	11.87	117.70	108.20
1	AA	333	U	N3-C2-O2	-11.87	113.89	122.20
26	BB	764	A	C8-N9-C4	-11.87	101.05	105.80
1	AA	1029	U	C6-N1-C2	-11.87	113.88	121.00
1	AA	1224	U	N3-C2-O2	-11.87	113.89	122.20
1	AA	1249	C	C6-N1-C2	-11.87	115.55	120.30
25	BA	70	C	O4'-C1'-N1	11.87	117.69	108.20
26	BB	2255	G	N9-C4-C5	11.87	110.15	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	586	A	C5-N7-C8	-11.87	97.97	103.90
26	BB	2349	G	O4'-C1'-N9	11.86	117.69	108.20
27	BC	164	ARG	NE-CZ-NH2	-11.86	114.37	120.30
1	AA	15	G	N1-C2-N3	-11.85	116.79	123.90
1	AA	1370	G	N3-C2-N2	11.85	128.20	119.90
26	BB	55	G	N1-C6-O6	11.85	127.01	119.90
36	BL	44	TYR	CB-CG-CD1	-11.85	113.89	121.00
1	AA	810	C	C2-N3-C4	11.84	125.82	119.90
3	AC	56	G	O4'-C1'-N9	11.84	117.67	108.20
10	AJ	94	ARG	NE-CZ-NH1	11.84	126.22	120.30
25	BA	75	G	N3-C4-C5	-11.84	122.68	128.60
26	BB	288	U	O4'-C1'-N1	11.84	117.67	108.20
26	BB	1088	A	C8-N9-C4	-11.84	101.06	105.80
24	AX	44	ARG	NE-CZ-NH1	11.83	126.22	120.30
26	BB	924	G	C8-N9-C4	-11.83	101.67	106.40
26	BB	1881	C	N1-C2-O2	11.83	126.00	118.90
26	BB	2793	C	O4'-C1'-N1	11.83	117.66	108.20
26	BB	1318	U	O4'-C1'-N1	11.83	117.66	108.20
26	BB	2063	C	C4-C5-C6	11.83	123.31	117.40
26	BB	1337	G	N9-C4-C5	11.83	110.13	105.40
26	BB	1084	A	N9-C4-C5	11.82	110.53	105.80
1	AA	82	G	C2-N3-C4	11.82	117.81	111.90
1	AA	1154	G	N3-C4-C5	-11.82	122.69	128.60
26	BB	1738	G	N1-C2-N3	-11.82	116.81	123.90
26	BB	2369	A	N9-C4-C5	11.82	110.53	105.80
1	AA	231	U	O4'-C1'-N1	11.82	117.65	108.20
12	AL	37	TYR	CB-CG-CD2	-11.82	113.91	121.00
26	BB	1171	G	N9-C4-C5	11.82	110.13	105.40
26	BB	387	U	N3-C2-O2	-11.82	113.93	122.20
54	B3	16	ARG	NE-CZ-NH1	11.82	126.21	120.30
26	BB	1217	U	O4'-C1'-N1	11.81	117.65	108.20
26	BB	2336	A	C3'-C2'-C1'	-11.81	92.05	101.50
26	BB	2774	C	O4'-C1'-N1	11.81	117.64	108.20
25	BA	89	U	N3-C2-O2	-11.80	113.94	122.20
1	AA	327	A	N1-C6-N6	11.79	125.68	118.60
1	AA	185	U	O4'-C1'-N1	11.79	117.63	108.20
26	BB	1150	C	O4'-C1'-N1	11.79	117.63	108.20
1	AA	1539	C	N3-C4-N4	11.79	126.25	118.00
26	BB	2106	U	C4-C5-C6	11.79	126.77	119.70
1	AA	1360	A	C5'-C4'-O4'	11.79	123.24	109.10
1	AA	328	C	C6-N1-C2	-11.78	115.59	120.30
1	AA	382	A	C8-N9-C4	-11.78	101.09	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	440	C	O4'-C1'-N1	11.78	117.63	108.20
26	BB	2660	A	C2-N3-C4	11.78	116.49	110.60
1	AA	801	U	C5-C6-N1	-11.78	116.81	122.70
1	AA	340	U	N3-C4-O4	11.78	127.64	119.40
1	AA	397	A	N1-C2-N3	-11.78	123.41	129.30
1	AA	699	C	N3-C4-C5	-11.78	117.19	121.90
26	BB	860	U	C5-C6-N1	11.78	128.59	122.70
1	AA	684	U	C5-C4-O4	-11.78	118.83	125.90
26	BB	2131	U	O4'-C1'-N1	11.78	117.62	108.20
26	BB	2646	C	N3-C4-C5	-11.78	117.19	121.90
26	BB	561	G	P-O3'-C3'	11.77	133.83	119.70
1	AA	406	G	N7-C8-N9	11.77	118.98	113.10
1	AA	484	G	C5-C6-O6	-11.77	121.54	128.60
26	BB	1924	C	O4'-C1'-N1	11.77	117.62	108.20
26	BB	1928	A	N9-C4-C5	11.77	110.51	105.80
26	BB	1416	G	C8-N9-C4	-11.77	101.69	106.40
26	BB	952	G	C4-C5-N7	-11.76	106.09	110.80
26	BB	86	G	C8-N9-C4	-11.76	101.70	106.40
26	BB	1603	A	N1-C6-N6	-11.76	111.55	118.60
26	BB	2567	G	C8-N9-C4	-11.76	101.70	106.40
1	AA	144	G	C8-N9-C4	-11.76	101.70	106.40
1	AA	57	G	N9-C4-C5	11.75	110.10	105.40
26	BB	1416	G	N9-C4-C5	11.75	110.10	105.40
1	AA	164	G	C4-C5-N7	-11.75	106.10	110.80
26	BB	2031	A	N9-C4-C5	11.75	110.50	105.80
1	AA	757	U	O4'-C1'-N1	11.75	117.60	108.20
26	BB	1099	G	C8-N9-C4	-11.75	101.70	106.40
26	BB	134	G	C5-C6-O6	-11.75	121.55	128.60
26	BB	2175	C	C5-C4-N4	-11.75	111.98	120.20
26	BB	2299	U	C2-N3-C4	-11.74	119.95	127.00
1	AA	1136	C	C6-N1-C2	-11.74	115.60	120.30
26	BB	86	G	N9-C4-C5	11.74	110.10	105.40
1	AA	187	G	C4'-C3'-C2'	-11.74	90.86	102.60
26	BB	1169	A	C5-N7-C8	11.73	109.77	103.90
26	BB	1333	G	N3-C4-C5	-11.73	122.73	128.60
26	BB	2266	A	O4'-C1'-N9	11.73	117.59	108.20
1	AA	1270	G	C8-N9-C4	-11.73	101.71	106.40
4	AD	41	C	N3-C4-C5	-11.73	117.21	121.90
26	BB	409	G	C4-C5-N7	-11.73	106.11	110.80
26	BB	1129	A	C8-N9-C4	-11.73	101.11	105.80
26	BB	2855	C	N3-C4-C5	-11.73	117.21	121.90
1	AA	410	G	N3-C2-N2	11.72	128.11	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1306	A	C8-N9-C4	-11.72	101.11	105.80
26	BB	1952	A	O4'-C1'-N9	11.72	117.58	108.20
26	BB	92	U	O4'-C1'-N1	11.72	117.57	108.20
1	AA	794	A	N1-C6-N6	-11.71	111.57	118.60
1	AA	1120	C	O4'-C1'-N1	11.71	117.57	108.20
26	BB	12	U	O4'-C1'-N1	11.71	117.57	108.20
26	BB	350	G	C6-C5-N7	11.71	137.43	130.40
26	BB	1299	G	C4-C5-N7	-11.71	106.11	110.80
15	AO	11	ARG	NE-CZ-NH1	11.71	126.16	120.30
26	BB	289	G	C8-N9-C4	-11.71	101.72	106.40
26	BB	1252	G	C2-N3-C4	11.71	117.75	111.90
26	BB	1310	G	N9-C4-C5	11.71	110.08	105.40
26	BB	1475	G	O4'-C1'-N9	11.71	117.57	108.20
26	BB	1810	A	N1-C2-N3	-11.71	123.45	129.30
26	BB	2165	C	O4'-C1'-N1	11.71	117.57	108.20
26	BB	2402	U	O4'-C1'-N1	11.71	117.56	108.20
26	BB	1000	A	N1-C2-N3	-11.71	123.45	129.30
1	AA	46	G	C5-N7-C8	-11.70	98.45	104.30
1	AA	1452	C	O4'-C1'-N1	11.70	117.56	108.20
2	AB	66	C	N1-C2-O2	11.70	125.92	118.90
26	BB	2241	A	C5-C6-N1	11.70	123.55	117.70
1	AA	222	C	C6-N1-C2	-11.70	115.62	120.30
26	BB	348	A	O4'-C1'-N9	11.70	117.56	108.20
26	BB	1048	A	C2-N3-C4	11.70	116.45	110.60
26	BB	1180	U	O4'-C1'-N1	11.70	117.56	108.20
26	BB	1461	C	C5-C4-N4	-11.69	112.02	120.20
26	BB	2738	A	N1-C6-N6	-11.69	111.58	118.60
26	BB	2777	G	N3-C4-C5	-11.69	122.76	128.60
1	AA	134	G	C2-N3-C4	11.69	117.74	111.90
1	AA	433	G	O4'-C1'-N9	11.68	117.55	108.20
26	BB	2486	C	O4'-C1'-N1	11.68	117.55	108.20
1	AA	406	G	C5-N7-C8	-11.68	98.46	104.30
26	BB	1847	A	O4'-C1'-N9	11.68	117.54	108.20
26	BB	853	C	N3-C4-C5	-11.67	117.23	121.90
1	AA	721	G	N9-C4-C5	11.67	110.07	105.40
1	AA	1510	C	C6-N1-C2	-11.67	115.63	120.30
26	BB	931	U	O4'-C1'-N1	11.67	117.54	108.20
26	BB	2657	A	C4-C5-C6	-11.67	111.17	117.00
1	AA	246	A	O4'-C1'-N9	11.67	117.53	108.20
1	AA	384	G	C6-N1-C2	-11.67	118.10	125.10
1	AA	777	A	O4'-C1'-N9	11.67	117.53	108.20
26	BB	819	A	N1-C6-N6	11.67	125.60	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1018	G	C8-N9-C4	-11.66	101.73	106.40
26	BB	218	A	C5-C6-N6	-11.66	114.37	123.70
26	BB	260	G	C5-C6-N1	11.66	117.33	111.50
3	AC	56	G	C8-N9-C4	-11.66	101.74	106.40
26	BB	2035	G	C5-N7-C8	11.66	110.13	104.30
38	BN	2	ARG	NE-CZ-NH2	11.66	126.13	120.30
26	BB	1974	C	N3-C4-C5	-11.65	117.24	121.90
26	BB	150	U	O4'-C1'-N1	11.65	117.52	108.20
26	BB	2469	A	O4'-C1'-N9	11.65	117.52	108.20
3	AC	25	U	O4'-C1'-N1	11.65	117.52	108.20
25	BA	75	G	C6-C5-N7	-11.65	123.41	130.40
26	BB	2410	G	N9-C4-C5	11.65	110.06	105.40
1	AA	381	C	O4'-C1'-N1	11.65	117.52	108.20
26	BB	1157	G	C2-N3-C4	11.65	117.72	111.90
1	AA	776	G	N9-C4-C5	11.64	110.06	105.40
41	BQ	81	ARG	NE-CZ-NH2	-11.64	114.48	120.30
1	AA	1467	C	N1-C2-O2	11.64	125.88	118.90
26	BB	1819	A	N7-C8-N9	11.64	119.62	113.80
26	BB	2351	G	N9-C4-C5	11.63	110.05	105.40
26	BB	2618	G	N3-C4-C5	-11.63	122.78	128.60
26	BB	146	A	N9-C4-C5	11.63	110.45	105.80
1	AA	270	A	C8-N9-C4	-11.63	101.15	105.80
1	AA	1084	G	N1-C6-O6	-11.63	112.92	119.90
26	BB	490	C	N3-C4-C5	-11.62	117.25	121.90
1	AA	347	G	C8-N9-C4	-11.62	101.75	106.40
26	BB	736	C	N3-C4-C5	-11.62	117.25	121.90
26	BB	2747	G	N7-C8-N9	11.62	118.91	113.10
26	BB	1567	G	N7-C8-N9	11.62	118.91	113.10
26	BB	2463	C	C6-N1-C2	11.62	124.95	120.30
1	AA	917	G	C8-N9-C4	-11.62	101.75	106.40
26	BB	931	U	N3-C2-O2	-11.62	114.07	122.20
1	AA	26	A	N7-C8-N9	-11.61	107.99	113.80
1	AA	723	U	O4'-C1'-N1	11.62	117.49	108.20
1	AA	1050	G	C5-C6-O6	11.61	135.57	128.60
26	BB	510	C	N1-C2-O2	11.62	125.87	118.90
26	BB	1366	A	C8-N9-C4	-11.61	101.16	105.80
26	BB	518	G	C5-N7-C8	-11.61	98.50	104.30
26	BB	1681	G	N9-C4-C5	11.61	110.04	105.40
1	AA	3	A	C2-N3-C4	11.61	116.40	110.60
26	BB	1187	G	C3'-C2'-C1'	11.61	110.78	101.50
26	BB	1028	A	C5-C6-N1	-11.60	111.90	117.70
1	AA	462	G	C1'-O4'-C4'	-11.60	100.62	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	774	G	C4-C5-N7	11.60	115.44	110.80
1	AA	1231	G	N7-C8-N9	11.60	118.90	113.10
26	BB	287	G	O4'-C1'-N9	11.60	117.48	108.20
26	BB	683	U	C2-N3-C4	-11.60	120.04	127.00
26	BB	2842	G	N3-C4-N9	11.60	132.96	126.00
1	AA	786	G	O4'-C1'-N9	11.59	117.47	108.20
1	AA	750	C	O4'-C1'-N1	11.59	117.47	108.20
25	BA	88	C	O4'-C1'-N1	11.59	117.47	108.20
26	BB	2351	G	N3-C4-C5	-11.59	122.80	128.60
1	AA	420	U	C5-C6-N1	-11.59	116.91	122.70
26	BB	380	G	N7-C8-N9	11.59	118.89	113.10
26	BB	578	G	N3-C4-C5	-11.59	122.81	128.60
26	BB	2636	C	N3-C4-C5	11.59	126.53	121.90
26	BB	1477	A	N7-C8-N9	11.58	119.59	113.80
1	AA	589	U	C5-C4-O4	-11.58	118.95	125.90
26	BB	1498	C	N3-C2-O2	-11.58	113.79	121.90
26	BB	788	A	C5-C6-N1	-11.58	111.91	117.70
26	BB	969	G	C8-N9-C4	-11.58	101.77	106.40
26	BB	1570	A	O4'-C1'-N9	11.57	117.46	108.20
26	BB	1404	C	C6-N1-C2	-11.57	115.67	120.30
26	BB	2801	G	C8-N9-C4	-11.57	101.77	106.40
26	BB	258	G	N3-C4-C5	-11.57	122.82	128.60
26	BB	668	A	C4-C5-N7	-11.56	104.92	110.70
26	BB	2674	G	N1-C2-N3	-11.56	116.96	123.90
26	BB	2410	G	C8-N9-C4	-11.56	101.78	106.40
26	BB	2842	G	N3-C4-C5	-11.56	122.82	128.60
1	AA	1167	A	C8-N9-C4	-11.55	101.18	105.80
26	BB	65	U	N1-C2-N3	11.55	121.83	114.90
26	BB	615	U	O4'-C1'-N1	11.55	117.44	108.20
1	AA	1329	A	C8-N9-C4	-11.55	101.18	105.80
26	BB	2810	A	C8-N9-C4	-11.55	101.18	105.80
26	BB	327	G	C4-C5-N7	-11.55	106.18	110.80
26	BB	549	G	O4'-C1'-N9	11.55	117.44	108.20
1	AA	1050	G	N1-C6-O6	-11.54	112.97	119.90
1	AA	1448	C	N3-C4-C5	-11.54	117.28	121.90
1	AA	1279	G	N7-C8-N9	11.54	118.87	113.10
1	AA	1087	G	C8-N9-C4	-11.54	101.79	106.40
4	AD	37	U	C5-C4-O4	-11.54	118.98	125.90
26	BB	1088	A	N9-C4-C5	11.54	110.42	105.80
1	AA	838	G	C4-C5-C6	11.53	125.72	118.80
26	BB	2095	A	C8-N9-C4	-11.53	101.19	105.80
26	BB	2325	G	N1-C6-O6	-11.53	112.98	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	655	A	C8-N9-C4	-11.53	101.19	105.80
26	BB	556	A	C8-N9-C4	-11.53	101.19	105.80
1	AA	262	A	C8-N9-C4	-11.52	101.19	105.80
26	BB	7	G	C8-N9-C4	-11.52	101.79	106.40
26	BB	1129	A	N9-C4-C5	11.52	110.41	105.80
26	BB	2884	U	N1-C2-O2	11.52	130.87	122.80
26	BB	1091	G	N3-C4-N9	11.52	132.91	126.00
26	BB	506	G	N3-C4-C5	-11.52	122.84	128.60
26	BB	569	U	C5-C6-N1	-11.52	116.94	122.70
25	BA	13	G	O4'-C1'-N9	11.52	117.41	108.20
1	AA	674	G	C8-N9-C4	-11.51	101.80	106.40
1	AA	1109	C	C6-N1-C2	11.51	124.91	120.30
26	BB	2869	G	N7-C8-N9	11.51	118.86	113.10
39	BO	81	ARG	NE-CZ-NH1	11.51	126.05	120.30
26	BB	619	G	C2-N3-C4	11.51	117.65	111.90
26	BB	2784	U	O4'-C1'-N1	11.51	117.40	108.20
1	AA	873	A	N9-C4-C5	11.50	110.40	105.80
26	BB	2314	A	C4-C5-C6	-11.50	111.25	117.00
3	AC	25	U	C5-C4-O4	-11.50	119.00	125.90
38	BN	126	ARG	NE-CZ-NH1	-11.50	114.55	120.30
1	AA	1108	G	N1-C6-O6	11.50	126.80	119.90
26	BB	271	G	O4'-C1'-N9	11.50	117.40	108.20
26	BB	1430	G	C5-N7-C8	-11.50	98.55	104.30
26	BB	2058	A	C6-N1-C2	11.50	125.50	118.60
1	AA	1109	C	C2-N3-C4	11.49	125.65	119.90
1	AA	641	U	O4'-C1'-N1	11.49	117.39	108.20
26	BB	2399	G	C4-C5-N7	-11.49	106.20	110.80
26	BB	2694	G	N7-C8-N9	11.49	118.85	113.10
17	AQ	64	ARG	NE-CZ-NH2	-11.49	114.56	120.30
26	BB	899	A	C4-C5-C6	11.49	122.74	117.00
1	AA	1260	G	C5-C6-O6	-11.48	121.71	128.60
31	BG	94	ARG	NE-CZ-NH2	-11.48	114.56	120.30
1	AA	683	G	O4'-C1'-N9	11.48	117.38	108.20
1	AA	1435	G	C5-N7-C8	-11.47	98.56	104.30
26	BB	1024	G	C8-N9-C4	-11.47	101.81	106.40
26	BB	2018	G	N3-C4-C5	-11.47	122.86	128.60
26	BB	981	A	C2-N3-C4	11.47	116.33	110.60
1	AA	938	A	N9-C4-C5	11.46	110.39	105.80
26	BB	316	C	O4'-C1'-N1	11.47	117.37	108.20
26	BB	1056	G	N3-C4-C5	-11.47	122.87	128.60
26	BB	1661	G	C5-C6-O6	-11.46	121.72	128.60
1	AA	82	G	C4-C5-N7	-11.46	106.22	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	614	C	C5-C6-N1	11.46	126.73	121.00
1	AA	1417	G	C6-C5-N7	-11.46	123.52	130.40
26	BB	166	U	N3-C2-O2	-11.46	114.18	122.20
26	BB	564	C	N3-C4-C5	11.46	126.48	121.90
26	BB	1548	A	N9-C1'-C2'	-11.46	99.10	114.00
26	BB	2492	U	C5-C4-O4	-11.46	119.02	125.90
26	BB	2759	G	O4'-C1'-N9	11.46	117.37	108.20
26	BB	1617	C	C6-N1-C2	11.46	124.88	120.30
1	AA	1041	G	N3-C4-C5	-11.46	122.87	128.60
1	AA	1431	A	N1-C6-N6	11.46	125.47	118.60
26	BB	946	C	N3-C4-N4	11.46	126.02	118.00
1	AA	590	U	C2-N3-C4	-11.45	120.13	127.00
26	BB	769	U	N3-C2-O2	-11.45	114.18	122.20
1	AA	1440	U	C2-N3-C4	-11.45	120.13	127.00
26	BB	1973	G	C5-N7-C8	-11.45	98.57	104.30
1	AA	434	U	C6-N1-C2	-11.45	114.13	121.00
1	AA	1032	G	C4-C5-C6	11.45	125.67	118.80
26	BB	2266	A	N1-C2-N3	-11.45	123.58	129.30
26	BB	723	C	N1-C2-O2	11.45	125.77	118.90
26	BB	1448	G	C2-N3-C4	11.45	117.62	111.90
1	AA	526	C	N3-C4-C5	-11.44	117.32	121.90
4	AD	4	G	C4-C5-N7	-11.44	106.22	110.80
26	BB	733	G	O4'-C1'-N9	11.44	117.36	108.20
26	BB	764	A	C4-C5-N7	-11.44	104.98	110.70
26	BB	1078	U	O4'-C1'-N1	11.44	117.35	108.20
3	AC	35	G	C8-N9-C4	-11.44	101.82	106.40
26	BB	2325	G	C4-C5-N7	-11.44	106.22	110.80
26	BB	1062	G	N7-C8-N9	11.44	118.82	113.10
26	BB	1123	C	N1-C2-O2	11.44	125.76	118.90
26	BB	1398	C	N3-C4-C5	-11.44	117.33	121.90
1	AA	1245	C	N3-C4-C5	-11.43	117.33	121.90
26	BB	275	C	N3-C4-C5	-11.43	117.33	121.90
26	BB	583	G	C8-N9-C4	-11.43	101.83	106.40
26	BB	530	G	C2-N3-C4	11.43	117.61	111.90
26	BB	1507	C	N3-C4-C5	11.43	126.47	121.90
26	BB	2176	A	C2-N3-C4	11.43	116.31	110.60
26	BB	2588	G	C8-N9-C4	-11.42	101.83	106.40
1	AA	505	G	O4'-C1'-N9	11.42	117.34	108.20
25	BA	43	C	N1-C2-O2	11.42	125.75	118.90
26	BB	52	A	C8-N9-C4	-11.42	101.23	105.80
26	BB	60	G	O4'-C4'-C3'	11.42	115.42	104.00
26	BB	977	G	C5-N7-C8	-11.42	98.59	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1568	G	N3-C4-C5	-11.42	122.89	128.60
26	BB	2319	G	O4'-C1'-N9	11.42	117.33	108.20
1	AA	898	G	C6-C5-N7	-11.41	123.55	130.40
1	AA	1450	U	O4'-C1'-N1	11.41	117.33	108.20
26	BB	358	U	C6-N1-C2	-11.41	114.15	121.00
1	AA	907	A	C8-N9-C4	-11.41	101.24	105.80
1	AA	565	U	C4-C5-C6	11.41	126.55	119.70
26	BB	1635	A	O4'-C1'-N9	11.41	117.33	108.20
26	BB	707	G	N9-C4-C5	11.41	109.96	105.40
26	BB	1921	G	C2-N3-C4	11.41	117.60	111.90
26	BB	2253	G	N3-C4-C5	-11.40	122.90	128.60
25	BA	66	A	N1-C2-N3	-11.40	123.60	129.30
26	BB	2198	A	C6-N1-C2	-11.40	111.76	118.60
26	BB	1857	G	O4'-C1'-N9	11.40	117.32	108.20
1	AA	568	G	N9-C4-C5	11.40	109.96	105.40
28	BD	211	ARG	NE-CZ-NH1	11.40	126.00	120.30
1	AA	719	C	N3-C4-C5	-11.39	117.34	121.90
26	BB	1901	A	C2-N3-C4	11.39	116.30	110.60
1	AA	50	A	O4'-C1'-N9	11.39	117.31	108.20
26	BB	2782	G	C2-N3-C4	11.39	117.60	111.90
26	BB	2016	U	C3'-C2'-C1'	-11.39	92.39	101.50
1	AA	361	G	C2-N3-C4	11.39	117.59	111.90
28	BD	68	ARG	NE-CZ-NH1	11.39	125.99	120.30
1	AA	1539	C	C5-C4-N4	-11.39	112.23	120.20
1	AA	1426	G	O4'-C1'-N9	11.38	117.31	108.20
26	BB	1380	G	C8-N9-C4	-11.38	101.85	106.40
26	BB	2832	U	O4'-C1'-N1	11.38	117.31	108.20
26	BB	1549	A	O4'-C1'-N9	11.38	117.30	108.20
1	AA	220	G	O4'-C1'-N9	11.37	117.30	108.20
1	AA	1525	G	C4-C5-N7	11.37	115.35	110.80
26	BB	1074	G	C8-N9-C4	-11.37	101.85	106.40
26	BB	1733	G	O4'-C1'-N9	11.37	117.30	108.20
26	BB	1831	G	N3-C4-C5	-11.37	122.92	128.60
1	AA	1502	A	O4'-C1'-N9	11.37	117.30	108.20
1	AA	1319	A	C5-N7-C8	-11.37	98.22	103.90
26	BB	232	G	N9-C4-C5	11.37	109.95	105.40
26	BB	1169	A	C4-C5-N7	-11.37	105.02	110.70
26	BB	1407	G	O4'-C1'-N9	11.37	117.30	108.20
26	BB	1989	G	N3-C4-C5	-11.37	122.92	128.60
1	AA	401	C	O4'-C1'-N1	11.36	117.29	108.20
1	AA	1233	G	C2-N3-C4	11.36	117.58	111.90
1	AA	1373	G	C8-N9-C4	-11.36	101.86	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	98	G	C4-C5-N7	-11.36	106.26	110.80
26	BB	2413	G	N3-C2-N2	-11.36	111.95	119.90
14	AN	68	ARG	NE-CZ-NH1	11.36	125.98	120.30
26	BB	1423	G	N9-C4-C5	11.36	109.94	105.40
26	BB	1606	C	N1-C2-O2	11.36	125.71	118.90
1	AA	419	C	N3-C4-C5	-11.36	117.36	121.90
26	BB	234	U	O4'-C1'-N1	11.35	117.28	108.20
26	BB	77	G	C8-N9-C4	-11.35	101.86	106.40
26	BB	312	G	C8-N9-C4	-11.35	101.86	106.40
26	BB	1998	A	C5-N7-C8	11.35	109.58	103.90
26	BB	2057	G	C5-C6-O6	11.35	135.41	128.60
1	AA	1057	G	C8-N9-C4	-11.35	101.86	106.40
26	BB	1813	G	C4-C5-N7	-11.35	106.26	110.80
1	AA	1189	U	C2-N3-C4	-11.34	120.19	127.00
26	BB	2555	U	O4'-C1'-N1	11.34	117.28	108.20
1	AA	231	U	N3-C2-O2	-11.34	114.26	122.20
1	AA	413	G	N7-C8-N9	11.34	118.77	113.10
1	AA	1084	G	C4-C5-N7	-11.34	106.26	110.80
26	BB	22	C	N3-C4-C5	-11.34	117.36	121.90
1	AA	1241	G	C4-C5-N7	-11.34	106.27	110.80
1	AA	1437	A	N1-C6-N6	11.34	125.40	118.60
26	BB	1144	A	N9-C4-C5	11.34	110.33	105.80
1	AA	424	G	C5-C6-N1	11.33	117.17	111.50
1	AA	17	U	O4'-C1'-N1	11.33	117.26	108.20
26	BB	2037	A	N1-C2-N3	-11.33	123.64	129.30
1	AA	1130	A	C5-N7-C8	11.33	109.56	103.90
26	BB	1802	A	C5'-C4'-C3'	-11.33	97.88	116.00
26	BB	2520	C	O4'-C1'-N1	11.33	117.26	108.20
26	BB	2618	G	C8-N9-C4	-11.33	101.87	106.40
26	BB	640	C	C5-C4-N4	-11.32	112.27	120.20
26	BB	1588	G	N3-C4-C5	-11.32	122.94	128.60
26	BB	2231	U	C5-C6-N1	-11.32	117.04	122.70
26	BB	1988	G	C5-N7-C8	11.32	109.96	104.30
26	BB	965	C	O4'-C1'-N1	11.32	117.25	108.20
26	BB	533	G	C5-N7-C8	11.32	109.96	104.30
26	BB	1082	U	O4'-C1'-N1	11.32	117.25	108.20
26	BB	2200	C	O4'-C1'-N1	11.32	117.25	108.20
26	BB	2374	C	N3-C4-C5	11.32	126.43	121.90
1	AA	421	U	C3'-C2'-C1'	11.31	110.55	101.50
1	AA	486	U	N1-C2-O2	-11.31	114.88	122.80
1	AA	945	G	C8-N9-C4	-11.31	101.87	106.40
2	AB	50	G	N7-C8-N9	11.31	118.76	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	548	G	N1-C6-O6	-11.31	113.11	119.90
26	BB	1827	U	O4'-C1'-N1	11.31	117.25	108.20
26	BB	2408	U	O4'-C1'-N1	11.31	117.25	108.20
1	AA	1169	A	C5-C6-N1	11.30	123.35	117.70
26	BB	1646	C	N1-C2-O2	11.30	125.68	118.90
1	AA	147	G	N9-C4-C5	11.30	109.92	105.40
26	BB	254	G	C8-N9-C4	-11.30	101.88	106.40
1	AA	838	G	N1-C6-O6	11.30	126.68	119.90
26	BB	1126	A	C5-C6-N1	11.30	123.35	117.70
26	BB	1807	G	N7-C8-N9	11.30	118.75	113.10
26	BB	1804	C	C6-N1-C2	-11.30	115.78	120.30
1	AA	434	U	N1-C2-N3	11.29	121.68	114.90
26	BB	1055	G	C5-C6-N1	11.30	117.15	111.50
1	AA	1485	U	C5-C4-O4	-11.29	119.12	125.90
9	AI	109	ARG	NE-CZ-NH2	-11.29	114.65	120.30
26	BB	395	U	O4'-C1'-N1	11.29	117.23	108.20
1	AA	172	A	C4-C5-C6	-11.29	111.35	117.00
26	BB	1461	C	C6-N1-C2	-11.29	115.78	120.30
26	BB	1673	G	N1-C6-O6	11.29	126.67	119.90
6	AF	171	ARG	NE-CZ-NH1	11.29	125.94	120.30
26	BB	1026	G	N3-C4-C5	-11.29	122.95	128.60
26	BB	600	G	N1-C6-O6	11.29	126.67	119.90
26	BB	1645	G	N1-C6-O6	-11.29	113.13	119.90
1	AA	547	A	C8-N9-C4	-11.29	101.29	105.80
26	BB	336	C	O4'-C1'-N1	11.29	117.23	108.20
26	BB	1299	G	N3-C4-C5	-11.29	122.96	128.60
4	AD	68	C	N1-C2-O2	11.28	125.67	118.90
1	AA	1360	A	C5-C6-N1	11.28	123.34	117.70
25	BA	68	C	O4'-C1'-N1	11.28	117.22	108.20
26	BB	102	U	N3-C2-O2	-11.28	114.31	122.20
26	BB	2845	U	C2-N3-C4	-11.28	120.23	127.00
26	BB	1552	A	C8-N9-C4	-11.28	101.29	105.80
26	BB	2473	U	O4'-C1'-N1	11.28	117.22	108.20
26	BB	243	U	O4'-C1'-N1	11.27	117.22	108.20
26	BB	707	G	N3-C4-C5	-11.27	122.97	128.60
26	BB	2844	G	N9-C4-C5	11.27	109.91	105.40
26	BB	2464	G	N3-C4-C5	-11.27	122.97	128.60
26	BB	2398	U	C5-C4-O4	-11.27	119.14	125.90
3	AC	22	G	C5-N7-C8	-11.27	98.67	104.30
26	BB	1142	A	N1-C2-N3	-11.27	123.67	129.30
26	BB	1943	U	N3-C2-O2	-11.27	114.31	122.20
26	BB	2751	G	N7-C8-N9	11.27	118.73	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1906	G	C5-N7-C8	-11.26	98.67	104.30
1	AA	264	C	C2-N3-C4	11.26	125.53	119.90
26	BB	2525	G	C5-N7-C8	-11.26	98.67	104.30
26	BB	1880	U	C5-C4-O4	-11.26	119.14	125.90
1	AA	1362	A	C8-N9-C4	-11.26	101.30	105.80
26	BB	781	A	C5-C6-N1	11.26	123.33	117.70
25	BA	69	G	C5-N7-C8	-11.25	98.67	104.30
26	BB	163	C	C5-C4-N4	-11.25	112.32	120.20
26	BB	949	G	N3-C4-C5	-11.25	122.97	128.60
35	BK	133	ARG	NE-CZ-NH2	-11.25	114.67	120.30
1	AA	65	A	C2-N3-C4	11.25	116.22	110.60
1	AA	76	G	C5-C6-O6	-11.25	121.85	128.60
1	AA	475	C	N1-C2-O2	11.25	125.65	118.90
1	AA	907	A	O4'-C1'-N9	11.25	117.20	108.20
26	BB	883	G	C2-N3-C4	11.25	117.53	111.90
26	BB	1724	G	C1'-O4'-C4'	11.25	118.90	109.90
26	BB	2557	G	C4-C5-N7	-11.25	106.30	110.80
26	BB	2730	C	N3-C2-O2	-11.25	114.03	121.90
38	BN	60	ARG	NE-CZ-NH2	-11.25	114.67	120.30
1	AA	509	A	C6-N1-C2	-11.25	111.85	118.60
26	BB	875	G	C6-N1-C2	-11.25	118.35	125.10
26	BB	2089	C	C6-N1-C2	11.25	124.80	120.30
30	BF	21	ARG	NE-CZ-NH2	11.25	125.92	120.30
42	BR	87	ARG	NE-CZ-NH1	11.25	125.92	120.30
26	BB	1600	C	N1-C2-O2	11.24	125.65	118.90
25	BA	75	G	N7-C8-N9	11.24	118.72	113.10
1	AA	728	A	C5-C6-N6	-11.24	114.71	123.70
26	BB	431	U	O4'-C1'-N1	11.24	117.19	108.20
26	BB	2107	G	N1-C6-O6	-11.24	113.16	119.90
1	AA	1504	G	N9-C4-C5	11.23	109.89	105.40
26	BB	319	G	N9-C4-C5	11.23	109.89	105.40
26	BB	908	C	C1'-O4'-C4'	-11.23	100.91	109.90
26	BB	932	U	N1-C2-O2	11.23	130.66	122.80
26	BB	781	A	C8-N9-C4	-11.23	101.31	105.80
26	BB	1155	A	N1-C6-N6	-11.23	111.86	118.60
26	BB	1581	G	C5-N7-C8	-11.23	98.69	104.30
26	BB	423	A	C5-N7-C8	11.23	109.51	103.90
26	BB	1609	A	C3'-C2'-C1'	11.23	110.48	101.50
26	BB	1815	A	C8-N9-C4	-11.23	101.31	105.80
26	BB	2023	C	N3-C2-O2	-11.23	114.04	121.90
1	AA	116	A	N9-C4-C5	11.22	110.29	105.80
1	AA	1181	G	N9-C4-C5	11.22	109.89	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1276	A	N1-C2-N3	-11.22	123.69	129.30
26	BB	1340	U	O4'-C1'-N1	11.22	117.18	108.20
26	BB	167	A	C2-N3-C4	11.22	116.21	110.60
1	AA	212	G	O4'-C1'-N9	11.22	117.18	108.20
1	AA	377	G	C8-N9-C4	-11.22	101.91	106.40
1	AA	721	G	O4'-C1'-C2'	-11.22	94.58	105.80
26	BB	921	C	O4'-C1'-N1	11.22	117.17	108.20
1	AA	848	C	O4'-C1'-N1	11.22	117.17	108.20
1	AA	352	C	O4'-C1'-N1	11.22	117.17	108.20
1	AA	152	A	C5-C6-N1	-11.21	112.09	117.70
1	AA	866	C	C4'-C3'-C2'	-11.21	91.39	102.60
2	AB	36	A	O4'-C4'-C3'	11.21	115.21	104.00
26	BB	1744	A	C3'-C2'-C1'	11.21	110.47	101.50
1	AA	68	G	C2-N3-C4	11.21	117.50	111.90
26	BB	629	G	C5-C6-N1	11.21	117.11	111.50
26	BB	2310	C	N3-C4-C5	-11.21	117.42	121.90
26	BB	1062	G	C5-N7-C8	-11.21	98.70	104.30
26	BB	2654	A	C5-C6-N1	11.21	123.30	117.70
1	AA	1334	G	C2-N3-C4	11.21	117.50	111.90
26	BB	350	G	C4-C5-N7	-11.21	106.32	110.80
1	AA	1462	C	N3-C2-O2	-11.20	114.06	121.90
26	BB	50	U	C5-C6-N1	-11.20	117.10	122.70
26	BB	993	G	C4-C5-N7	-11.20	106.32	110.80
26	BB	1289	C	C6-N1-C2	-11.20	115.82	120.30
26	BB	2790	U	N3-C2-O2	-11.20	114.36	122.20
26	BB	921	C	C5-C6-N1	11.19	126.60	121.00
26	BB	118	A	C8-N9-C4	-11.19	101.32	105.80
1	AA	48	C	N3-C2-O2	-11.19	114.07	121.90
26	BB	1662	U	O4'-C1'-N1	11.19	117.15	108.20
38	BN	78	ARG	NE-CZ-NH2	-11.19	114.71	120.30
26	BB	2778	A	C2-N3-C4	11.18	116.19	110.60
1	AA	69	G	N3-C4-C5	-11.18	123.01	128.60
1	AA	1033	G	N3-C4-C5	-11.18	123.01	128.60
26	BB	1025	G	C8-N9-C4	-11.18	101.93	106.40
26	BB	2209	G	C5-C6-N1	11.18	117.09	111.50
26	BB	1184	U	C3'-C2'-C1'	-11.18	92.56	101.50
1	AA	654	G	O4'-C1'-N9	11.17	117.14	108.20
26	BB	2301	C	C4-C5-C6	11.17	122.99	117.40
1	AA	124	C	N1-C2-O2	11.17	125.60	118.90
26	BB	834	G	N9-C4-C5	11.17	109.87	105.40
1	AA	1538	C	N1-C2-O2	11.16	125.60	118.90
26	BB	1861	G	C2-N3-C4	11.16	117.48	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1092	C	N3-C2-O2	-11.16	114.09	121.90
1	AA	953	G	N1-C2-N3	-11.16	117.21	123.90
1	AA	980	C	C2-N3-C4	11.16	125.48	119.90
26	BB	107	G	C8-N9-C4	11.16	110.86	106.40
26	BB	2035	G	C2-N3-C4	11.16	117.48	111.90
26	BB	2624	G	N7-C8-N9	11.15	118.68	113.10
1	AA	211	G	N3-C4-C5	-11.15	123.02	128.60
1	AA	1185	G	C8-N9-C4	-11.15	101.94	106.40
1	AA	1476	A	C6-N1-C2	-11.15	111.91	118.60
2	AB	74	C	N1-C2-O2	11.15	125.59	118.90
26	BB	1006	C	C4-C5-C6	-11.15	111.82	117.40
26	BB	1207	C	C5-C6-N1	11.15	126.58	121.00
26	BB	973	A	N9-C4-C5	11.15	110.26	105.80
1	AA	77	A	C8-N9-C4	-11.15	101.34	105.80
1	AA	785	G	C4-C5-N7	-11.15	106.34	110.80
26	BB	1323	C	C6-N1-C2	11.15	124.76	120.30
26	BB	1340	U	C4-C5-C6	11.15	126.39	119.70
26	BB	1944	U	O4'-C1'-N1	11.15	117.12	108.20
1	AA	720	C	C2-N3-C4	11.14	125.47	119.90
1	AA	841	C	O4'-C1'-N1	11.14	117.11	108.20
2	AB	61	C	C4'-C3'-C2'	-11.14	91.45	102.60
26	BB	645	C	N3-C2-O2	-11.14	114.10	121.90
26	BB	2256	G	O4'-C1'-N9	11.14	117.11	108.20
1	AA	1433	A	N7-C8-N9	11.14	119.37	113.80
26	BB	2372	U	N3-C4-O4	11.14	127.20	119.40
1	AA	199	A	C5-C6-N1	11.14	123.27	117.70
1	AA	1016	A	O4'-C1'-N9	11.14	117.11	108.20
26	BB	1456	G	C5-N7-C8	-11.14	98.73	104.30
1	AA	1303	C	N3-C4-C5	-11.13	117.45	121.90
25	BA	47	C	O4'-C1'-N1	11.13	117.11	108.20
45	BU	92	ARG	NE-CZ-NH1	11.13	125.87	120.30
1	AA	319	G	C4-C5-N7	-11.13	106.35	110.80
1	AA	564	C	C2-N3-C4	11.13	125.47	119.90
16	AP	91	ARG	NE-CZ-NH1	11.13	125.86	120.30
1	AA	586	C	N1-C2-O2	11.13	125.58	118.90
1	AA	741	G	N3-C4-C5	-11.12	123.04	128.60
26	BB	470	A	C8-N9-C4	-11.12	101.35	105.80
26	BB	1423	G	C2-N3-C4	11.12	117.46	111.90
1	AA	15	G	C2-N3-C4	11.12	117.46	111.90
1	AA	459	A	N1-C2-N3	-11.12	123.74	129.30
26	BB	1546	G	C6-C5-N7	11.12	137.07	130.40
26	BB	2053	G	N7-C8-N9	11.12	118.66	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	358	U	O4'-C1'-N1	11.12	117.09	108.20
26	BB	481	G	O4'-C1'-C2'	-11.11	94.69	105.80
1	AA	1241	G	N1-C6-O6	11.11	126.57	119.90
50	BZ	17	ARG	NE-CZ-NH1	-11.11	114.74	120.30
26	BB	2821	A	O4'-C1'-N9	11.11	117.09	108.20
1	AA	68	G	N3-C4-C5	-11.11	123.05	128.60
1	AA	250	A	C8-N9-C4	-11.11	101.36	105.80
1	AA	695	A	N9-C4-C5	11.11	110.24	105.80
26	BB	2405	G	N7-C8-N9	11.11	118.65	113.10
26	BB	2470	G	C5-C6-N1	11.11	117.05	111.50
1	AA	794	A	N9-C4-C5	11.10	110.24	105.80
1	AA	1181	G	O4'-C1'-N9	11.10	117.08	108.20
26	BB	270	A	N1-C2-N3	-11.10	123.75	129.30
1	AA	545	C	C4-C5-C6	11.10	122.95	117.40
26	BB	2107	G	N1-C2-N3	-11.10	117.24	123.90
1	AA	1400	C	N3-C2-O2	-11.10	114.13	121.90
26	BB	799	G	C2-N3-C4	11.10	117.45	111.90
26	BB	770	G	N1-C6-O6	-11.09	113.24	119.90
26	BB	1896	G	O4'-C1'-N9	-11.09	99.33	108.20
26	BB	1164	C	C5-C4-N4	11.09	127.96	120.20
26	BB	2685	G	C5-N7-C8	-11.09	98.75	104.30
1	AA	998	C	C2-N3-C4	11.09	125.44	119.90
1	AA	1421	G	N3-C4-C5	-11.09	123.06	128.60
1	AA	1479	C	N3-C4-C5	-11.09	117.47	121.90
16	AP	22	TYR	CB-CG-CD1	-11.09	114.35	121.00
26	BB	1567	G	C8-N9-C4	-11.09	101.97	106.40
1	AA	1049	U	O4'-C1'-N1	11.08	117.07	108.20
26	BB	110	G	C6-C5-N7	-11.08	123.75	130.40
26	BB	2332	C	O4'-C1'-N1	11.08	117.07	108.20
26	BB	93	G	O4'-C1'-N9	11.08	117.06	108.20
1	AA	329	A	O4'-C1'-N9	11.08	117.06	108.20
26	BB	2351	G	C5-C6-N1	11.08	117.04	111.50
1	AA	1243	C	N3-C4-C5	-11.08	117.47	121.90
21	AU	12	PHE	CB-CG-CD1	-11.08	113.05	120.80
26	BB	2041	U	O4'-C1'-N1	11.08	117.06	108.20
26	BB	2697	G	C4-C5-N7	-11.08	106.37	110.80
1	AA	1409	C	N3-C2-O2	-11.07	114.15	121.90
1	AA	1071	C	N1-C2-O2	-11.07	112.26	118.90
26	BB	2470	G	N9-C4-C5	-11.07	100.97	105.40
26	BB	2671	G	N9-C4-C5	11.07	109.83	105.40
26	BB	2730	C	N1-C2-O2	11.07	125.54	118.90
27	BC	74	ARG	NE-CZ-NH1	11.07	125.83	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	163	C	N3-C4-N4	11.07	125.75	118.00
26	BB	1124	G	O4'-C1'-N9	11.07	117.05	108.20
26	BB	1138	G	N9-C4-C5	-11.07	100.97	105.40
26	BB	2535	G	C8-N9-C4	-11.07	101.97	106.40
1	AA	674	G	N9-C4-C5	11.06	109.83	105.40
1	AA	1421	G	N3-C4-N9	11.06	132.64	126.00
26	BB	26	G	C4-C5-N7	-11.06	106.37	110.80
12	AL	118	ARG	NE-CZ-NH1	11.06	125.83	120.30
26	BB	1947	C	C5-C6-N1	-11.06	115.47	121.00
1	AA	172	A	C6-C5-N7	11.06	140.04	132.30
1	AA	1067	A	O4'-C1'-N9	11.06	117.05	108.20
26	BB	1829	A	C8-N9-C4	-11.06	101.38	105.80
1	AA	1097	C	C5-C6-N1	-11.05	115.47	121.00
1	AA	1169	A	C2-N3-C4	11.05	116.13	110.60
26	BB	922	C	N3-C4-C5	-11.05	117.48	121.90
26	BB	1108	U	C5-C6-N1	-11.05	117.17	122.70
26	BB	924	G	N9-C4-C5	11.05	109.82	105.40
4	AD	39	A	N1-C2-N3	-11.05	123.77	129.30
1	AA	1304	G	C5-N7-C8	-11.05	98.78	104.30
26	BB	787	C	N3-C2-O2	-11.05	114.17	121.90
1	AA	651	C	N3-C4-C5	-11.04	117.48	121.90
1	AA	869	G	C4-C5-N7	-11.04	106.38	110.80
1	AA	1029	U	O4'-C1'-N1	11.04	117.04	108.20
26	BB	1749	A	N9-C4-C5	11.04	110.22	105.80
1	AA	369	G	O4'-C1'-N9	11.04	117.03	108.20
1	AA	918	A	C8-N9-C4	-11.04	101.39	105.80
2	AB	59	G	C8-N9-C4	-11.04	101.98	106.40
26	BB	21	A	C5-C6-N1	11.04	123.22	117.70
58	B7	36	ARG	NE-CZ-NH1	11.04	125.82	120.30
2	AB	61	C	O4'-C1'-N1	11.04	117.03	108.20
1	AA	1046	A	C2-N3-C4	11.03	116.11	110.60
1	AA	1483	A	O4'-C1'-N9	11.03	117.02	108.20
26	BB	344	A	O4'-C1'-N9	11.03	117.02	108.20
26	BB	1089	A	C8-N9-C4	-11.03	101.39	105.80
26	BB	650	C	N1-C2-O2	11.03	125.52	118.90
26	BB	1954	G	C1'-O4'-C4'	-11.03	101.08	109.90
26	BB	478	A	C5-N7-C8	11.03	109.41	103.90
1	AA	1019	A	C5-N7-C8	-11.02	98.39	103.90
2	AB	73	G	C3'-C2'-C1'	11.02	110.31	101.50
26	BB	322	A	N9-C4-C5	11.01	110.20	105.80
54	B3	39	ARG	NE-CZ-NH1	11.01	125.81	120.30
26	BB	1109	C	C6-N1-C2	-11.01	115.89	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	754	C	N3-C2-O2	-11.01	114.19	121.90
26	BB	925	A	N1-C6-N6	11.01	125.21	118.60
26	BB	1283	G	N1-C6-O6	11.01	126.51	119.90
26	BB	2481	G	O4'-C4'-C3'	11.01	115.01	104.00
26	BB	2002	G	C6-N1-C2	-11.01	118.50	125.10
26	BB	2702	G	N7-C8-N9	11.01	118.60	113.10
25	BA	112	G	C4-C5-N7	-11.01	106.40	110.80
26	BB	2194	U	C2-N3-C4	-11.01	120.40	127.00
1	AA	70	U	C5-C6-N1	-11.00	117.20	122.70
26	BB	882	G	N3-C2-N2	11.00	127.60	119.90
1	AA	539	A	C2-N3-C4	11.00	116.10	110.60
26	BB	1841	U	O4'-C1'-N1	11.00	117.00	108.20
26	BB	1895	C	N3-C4-N4	11.00	125.70	118.00
1	AA	658	C	C4-C5-C6	11.00	122.90	117.40
1	AA	902	G	O4'-C1'-N9	11.00	117.00	108.20
26	BB	215	G	C1'-O4'-C4'	11.00	118.70	109.90
26	BB	669	G	C8-N9-C4	-11.00	102.00	106.40
26	BB	1536	C	P-O3'-C3'	11.00	132.90	119.70
26	BB	1540	G	C5-C6-N1	11.00	117.00	111.50
26	BB	1555	G	C8-N9-C4	-11.00	102.00	106.40
26	BB	2606	C	O4'-C1'-N1	11.00	117.00	108.20
1	AA	1017	U	O4'-C1'-N1	10.99	116.99	108.20
2	AB	67	G	C5-N7-C8	10.99	109.80	104.30
3	AC	29	G	C2-N3-C4	10.99	117.40	111.90
1	AA	241	G	C4-C5-C6	10.99	125.39	118.80
1	AA	1026	G	N3-C4-C5	-10.99	123.11	128.60
1	AA	11	G	N3-C4-N9	10.98	132.59	126.00
26	BB	1197	G	C6-C5-N7	-10.98	123.81	130.40
26	BB	2347	C	O4'-C1'-N1	10.98	116.99	108.20
6	AF	87	ARG	NE-CZ-NH1	10.98	125.79	120.30
26	BB	1002	G	C2-N3-C4	10.98	117.39	111.90
26	BB	949	G	C8-N9-C4	-10.98	102.01	106.40
1	AA	1235	U	O4'-C1'-N1	10.98	116.98	108.20
1	AA	1108	G	N9-C4-C5	10.98	109.79	105.40
26	BB	2576	G	C8-N9-C4	-10.98	102.01	106.40
27	BC	122	ARG	NE-CZ-NH1	10.98	125.79	120.30
1	AA	650	G	N3-C4-C5	-10.97	123.11	128.60
26	BB	1490	A	C5-C6-N1	10.97	123.19	117.70
1	AA	154	U	C2-N3-C4	-10.97	120.42	127.00
26	BB	883	G	N7-C8-N9	10.97	118.58	113.10
26	BB	1879	C	C2-N3-C4	-10.97	114.42	119.90
26	BB	677	A	N1-C6-N6	10.97	125.18	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2820	A	O4'-C1'-N9	10.97	116.97	108.20
1	AA	3	A	N1-C2-N3	-10.96	123.82	129.30
1	AA	320	A	N1-C2-N3	-10.96	123.82	129.30
26	BB	54	G	N7-C8-N9	10.96	118.58	113.10
26	BB	693	A	O4'-C1'-N9	10.96	116.97	108.20
1	AA	233	C	N1-C2-O2	10.96	125.48	118.90
1	AA	654	G	N3-C2-N2	-10.96	112.23	119.90
26	BB	153	U	C4-C5-C6	10.96	126.28	119.70
26	BB	605	G	N3-C4-C5	-10.96	123.12	128.60
1	AA	928	G	C5-C6-O6	10.96	135.17	128.60
26	BB	2376	A	C8-N9-C4	-10.96	101.42	105.80
26	BB	2281	A	N1-C6-N6	-10.95	112.03	118.60
26	BB	2865	U	O4'-C1'-N1	10.95	116.96	108.20
4	AD	7	G	C5-C6-O6	-10.95	122.03	128.60
26	BB	2633	G	O4'-C1'-N9	10.95	116.96	108.20
26	BB	2719	G	C8-N9-C4	-10.95	102.02	106.40
26	BB	2	G	C2-N3-C4	10.95	117.37	111.90
26	BB	1111	A	O4'-C1'-N9	10.95	116.96	108.20
26	BB	1283	G	N9-C4-C5	10.94	109.78	105.40
1	AA	54	C	C5-C6-N1	10.94	126.47	121.00
26	BB	447	A	N9-C4-C5	-10.94	101.42	105.80
26	BB	160	A	C5'-C4'-O4'	10.94	122.23	109.10
1	AA	575	G	C4-C5-N7	-10.94	106.42	110.80
1	AA	1014	A	C4-C5-N7	-10.94	105.23	110.70
26	BB	2290	G	C5-C6-N1	10.94	116.97	111.50
1	AA	159	G	C2-N3-C4	10.93	117.37	111.90
26	BB	264	C	C1'-O4'-C4'	-10.93	101.15	109.90
26	BB	2529	G	N9-C4-C5	10.93	109.77	105.40
26	BB	530	G	C5-C6-N1	10.93	116.97	111.50
26	BB	1418	G	N3-C4-C5	-10.93	123.13	128.60
1	AA	381	C	N3-C2-O2	-10.93	114.25	121.90
26	BB	1531	C	C5-C4-N4	10.93	127.85	120.20
1	AA	703	G	N9-C4-C5	10.93	109.77	105.40
26	BB	2309	A	C8-N9-C4	10.93	110.17	105.80
26	BB	2777	G	C8-N9-C4	-10.93	102.03	106.40
1	AA	384	G	C5-C6-O6	-10.92	122.05	128.60
1	AA	839	C	N1-C2-O2	10.92	125.45	118.90
1	AA	1044	A	C5'-C4'-O4'	10.92	122.21	109.10
9	AI	109	ARG	NE-CZ-NH1	10.92	125.76	120.30
1	AA	396	C	N1-C2-O2	10.92	125.45	118.90
26	BB	1394	U	O4'-C1'-N1	10.92	116.94	108.20
1	AA	760	G	O4'-C1'-N9	10.92	116.93	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1113	C	O4'-C1'-N1	10.92	116.93	108.20
25	BA	66	A	C8-N9-C4	-10.92	101.43	105.80
26	BB	2717	C	C4-C5-C6	-10.92	111.94	117.40
5	AE	221	ARG	NE-CZ-NH2	-10.91	114.84	120.30
1	AA	176	C	C6-N1-C2	-10.91	115.94	120.30
1	AA	443	C	N3-C4-C5	10.91	126.27	121.90
42	BR	52	ARG	NE-CZ-NH1	10.91	125.76	120.30
26	BB	623	C	N1-C2-O2	10.91	125.44	118.90
1	AA	326	G	O4'-C1'-N9	10.91	116.93	108.20
26	BB	1135	C	C4-C5-C6	-10.91	111.95	117.40
26	BB	1172	C	C2-N3-C4	10.91	125.35	119.90
26	BB	2804	U	C2-N3-C4	-10.91	120.46	127.00
25	BA	46	A	O4'-C1'-N9	10.90	116.92	108.20
1	AA	764	C	P-O3'-C3'	10.90	132.78	119.70
1	AA	1057	G	N9-C4-C5	10.90	109.76	105.40
26	BB	725	G	C2-N3-C4	10.90	117.35	111.90
26	BB	232	G	N3-C4-C5	-10.90	123.15	128.60
1	AA	719	C	C5-C4-N4	10.90	127.83	120.20
26	BB	784	G	O4'-C1'-N9	10.90	116.92	108.20
26	BB	2569	G	O4'-C1'-N9	10.90	116.92	108.20
26	BB	7	G	N3-C4-C5	-10.90	123.15	128.60
1	AA	1113	C	C5-C6-N1	10.90	126.45	121.00
1	AA	1473	G	C8-N9-C4	-10.90	102.04	106.40
26	BB	143	C	C6-N1-C2	-10.90	115.94	120.30
1	AA	44	A	C6-C5-N7	-10.89	124.67	132.30
3	AC	17	U	O4'-C1'-N1	10.89	116.91	108.20
26	BB	1235	G	C2-N3-C4	10.89	117.35	111.90
26	BB	2058	A	N1-C6-N6	10.89	125.14	118.60
1	AA	772	U	O4'-C1'-N1	10.89	116.91	108.20
26	BB	1541	C	N1-C2-O2	10.89	125.43	118.90
1	AA	758	C	C5-C6-N1	10.89	126.44	121.00
26	BB	364	C	N3-C4-C5	10.89	126.25	121.90
26	BB	1062	G	C5-C6-O6	-10.89	122.07	128.60
26	BB	2832	U	C4-C5-C6	10.89	126.23	119.70
1	AA	1243	C	C4-C5-C6	10.89	122.84	117.40
1	AA	122	G	O4'-C1'-N9	10.88	116.91	108.20
1	AA	987	G	N9-C4-C5	10.88	109.75	105.40
26	BB	931	U	N1-C2-O2	10.88	130.41	122.80
26	BB	1195	G	N3-C4-C5	-10.88	123.16	128.60
26	BB	1720	U	N3-C2-O2	10.88	129.81	122.20
26	BB	1975	G	C2-N3-C4	10.88	117.34	111.90
1	AA	522	C	N3-C4-C5	-10.88	117.55	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	903	C	N3-C4-N4	10.88	125.61	118.00
2	AB	19	G	N3-C4-C5	-10.87	123.16	128.60
26	BB	1494	A	N1-C2-N3	-10.87	123.86	129.30
26	BB	2759	G	N9-C4-C5	10.87	109.75	105.40
1	AA	1053	G	N3-C4-C5	-10.87	123.16	128.60
26	BB	586	A	N7-C8-N9	10.87	119.24	113.80
26	BB	1161	C	C6-N1-C2	-10.87	115.95	120.30
26	BB	1683	U	O4'-C1'-N1	10.87	116.90	108.20
1	AA	663	A	N7-C8-N9	-10.87	108.37	113.80
1	AA	487	A	C2-N3-C4	10.87	116.03	110.60
26	BB	604	G	C8-N9-C4	-10.86	102.05	106.40
1	AA	567	G	N7-C8-N9	10.86	118.53	113.10
26	BB	1665	A	C5-N7-C8	-10.86	98.47	103.90
26	BB	1361	G	C8-N9-C4	-10.86	102.06	106.40
45	BU	99	ARG	NE-CZ-NH1	10.86	125.73	120.30
26	BB	102	U	N1-C2-N3	10.86	121.42	114.90
1	AA	856	C	C5-C6-N1	-10.86	115.57	121.00
26	BB	305	C	C6-N1-C2	-10.86	115.96	120.30
26	BB	1643	G	N3-C4-C5	-10.86	123.17	128.60
26	BB	748	G	N3-C4-C5	-10.85	123.17	128.60
1	AA	423	G	C6-N1-C2	-10.85	118.59	125.10
1	AA	765	G	C8-N9-C4	-10.85	102.06	106.40
1	AA	1368	A	C8-N9-C4	-10.85	101.46	105.80
26	BB	313	G	C6-C5-N7	-10.85	123.89	130.40
26	BB	1568	G	C2-N3-C4	10.84	117.32	111.90
26	BB	2250	G	C4-C5-N7	-10.84	106.47	110.80
1	AA	748	G	C6-C5-N7	-10.84	123.90	130.40
26	BB	73	A	C5-C6-N1	-10.84	112.28	117.70
26	BB	357	C	C5-C6-N1	-10.84	115.58	121.00
26	BB	704	G	C8-N9-C4	-10.84	102.07	106.40
1	AA	260	G	C5-C6-N1	10.83	116.92	111.50
26	BB	890	C	C2-N3-C4	10.83	125.31	119.90
26	BB	1197	G	C4-C5-N7	10.83	115.13	110.80
26	BB	496	G	C2-N3-C4	10.83	117.31	111.90
26	BB	2095	A	N9-C4-C5	10.83	110.13	105.80
26	BB	939	G	C5-C6-O6	-10.83	122.10	128.60
1	AA	73	C	O4'-C1'-N1	10.82	116.86	108.20
1	AA	281	G	C8-N9-C4	-10.82	102.07	106.40
26	BB	2437	G	N3-C4-C5	-10.82	123.19	128.60
1	AA	74	A	O4'-C1'-N9	10.82	116.86	108.20
1	AA	671	G	C4-C5-N7	-10.82	106.47	110.80
15	AO	55	ARG	NE-CZ-NH1	10.82	125.71	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	507	A	N1-C2-N3	-10.82	123.89	129.30
26	BB	1045	C	N1-C2-O2	10.82	125.39	118.90
26	BB	1652	A	C2-N3-C4	10.82	116.01	110.60
26	BB	810	U	C5-C6-N1	-10.82	117.29	122.70
26	BB	2546	U	C5-C6-N1	-10.82	117.29	122.70
26	BB	1323	C	O4'-C1'-N1	10.81	116.85	108.20
26	BB	1436	G	N9-C4-C5	10.81	109.72	105.40
1	AA	393	A	C8-N9-C4	-10.81	101.47	105.80
26	BB	2106	U	N3-C4-O4	10.81	126.97	119.40
26	BB	836	G	C2-N3-C4	10.81	117.31	111.90
26	BB	1065	U	N3-C2-O2	-10.81	114.63	122.20
26	BB	1631	G	C4-C5-N7	-10.81	106.48	110.80
26	BB	187	G	N9-C4-C5	10.81	109.72	105.40
26	BB	1183	U	O4'-C1'-N1	10.81	116.85	108.20
26	BB	1655	A	N9-C4-C5	-10.81	101.48	105.80
26	BB	2277	G	C5-C6-O6	-10.80	122.12	128.60
26	BB	91	A	O4'-C1'-N9	10.80	116.84	108.20
26	BB	827	U	C6-N1-C2	-10.80	114.52	121.00
26	BB	1013	C	O4'-C1'-N1	10.80	116.84	108.20
1	AA	1432	G	N3-C4-C5	-10.80	123.20	128.60
26	BB	146	A	C4-C5-N7	-10.80	105.30	110.70
26	BB	696	G	C5-C6-N1	10.80	116.90	111.50
26	BB	2376	A	N7-C8-N9	10.80	119.20	113.80
49	BY	38	ARG	NE-CZ-NH2	-10.80	114.90	120.30
1	AA	1530	G	C2-N3-C4	10.79	117.30	111.90
26	BB	640	C	N3-C4-N4	10.79	125.56	118.00
1	AA	217	C	O4'-C1'-N1	10.79	116.83	108.20
1	AA	317	U	N3-C2-O2	-10.79	114.64	122.20
26	BB	1636	U	O4'-C1'-N1	10.79	116.83	108.20
1	AA	241	G	C5-N7-C8	10.79	109.69	104.30
26	BB	1912	A	O4'-C1'-N9	10.79	116.83	108.20
26	BB	2584	U	O4'-C1'-N1	10.79	116.83	108.20
3	AC	39	U	N3-C2-O2	-10.79	114.65	122.20
1	AA	1483	A	N1-C6-N6	-10.78	112.13	118.60
26	BB	1343	G	C5-C6-O6	-10.79	122.13	128.60
1	AA	171	A	N1-C2-N3	-10.78	123.91	129.30
1	AA	212	G	N3-C4-C5	-10.78	123.21	128.60
1	AA	467	U	O4'-C1'-N1	10.78	116.83	108.20
1	AA	686	U	C3'-C2'-C1'	-10.78	92.87	101.50
26	BB	976	G	N7-C8-N9	10.78	118.49	113.10
26	BB	1576	U	O4'-C1'-N1	10.78	116.83	108.20
26	BB	2250	G	N9-C4-C5	10.78	109.71	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	575	G	C8-N9-C4	-10.78	102.09	106.40
26	BB	685	A	C2-N3-C4	10.78	115.99	110.60
26	BB	1519	G	O4'-C1'-N9	10.78	116.82	108.20
26	BB	1868	C	N1-C2-O2	10.78	125.36	118.90
1	AA	297	G	C8-N9-C4	-10.77	102.09	106.40
26	BB	828	U	C2-N3-C4	-10.77	120.54	127.00
26	BB	838	C	O4'-C1'-N1	10.77	116.82	108.20
26	BB	977	G	N1-C6-O6	10.77	126.36	119.90
26	BB	1542	U	C5-C6-N1	-10.77	117.31	122.70
26	BB	1276	A	N3-C4-N9	-10.77	118.78	127.40
26	BB	2624	G	C5-N7-C8	-10.77	98.91	104.30
44	BT	68	ARG	NE-CZ-NH2	10.77	125.69	120.30
1	AA	887	G	N1-C6-O6	-10.77	113.44	119.90
15	AO	98	ARG	NE-CZ-NH1	10.77	125.68	120.30
26	BB	2782	G	N3-C4-N9	-10.77	119.54	126.00
1	AA	227	G	C6-C5-N7	10.77	136.86	130.40
26	BB	751	A	C3'-C2'-C1'	10.77	110.11	101.50
1	AA	615	G	C5-C6-O6	-10.76	122.14	128.60
26	BB	334	C	N3-C4-C5	-10.76	117.59	121.90
26	BB	943	A	N1-C6-N6	-10.76	112.14	118.60
26	BB	2266	A	N1-C6-N6	-10.76	112.14	118.60
3	AC	24	A	N7-C8-N9	-10.76	108.42	113.80
26	BB	2196	C	N3-C4-C5	-10.76	117.60	121.90
1	AA	788	U	C5'-C4'-O4'	10.76	122.01	109.10
1	AA	1485	U	O4'-C1'-N1	10.76	116.81	108.20
1	AA	1183	U	C5-C4-O4	10.76	132.35	125.90
26	BB	1706	C	N1-C2-O2	10.76	125.35	118.90
48	BX	93	ARG	NE-CZ-NH1	10.76	125.68	120.30
25	BA	90	C	N3-C4-C5	-10.75	117.60	121.90
26	BB	1468	U	C5-C6-N1	-10.75	117.32	122.70
26	BB	1837	C	O4'-C1'-N1	10.75	116.80	108.20
26	BB	2244	U	N1-C2-O2	10.75	130.33	122.80
26	BB	1930	G	C8-N9-C4	-10.75	102.10	106.40
1	AA	1227	A	O4'-C1'-N9	10.75	116.80	108.20
26	BB	784	G	C2-N3-C4	10.75	117.27	111.90
1	AA	241	G	C2-N3-C4	10.75	117.27	111.90
13	AM	45	ARG	NE-CZ-NH2	-10.75	114.93	120.30
26	BB	248	G	C5-N7-C8	-10.75	98.93	104.30
26	BB	515	A	C5-C6-N1	-10.75	112.33	117.70
26	BB	567	U	N3-C4-O4	10.75	126.92	119.40
26	BB	960	A	N1-C6-N6	10.75	125.05	118.60
26	BB	1186	G	C8-N9-C4	-10.75	102.10	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1317	G	C8-N9-C4	-10.75	102.10	106.40
1	AA	1241	G	C5-C6-O6	-10.74	122.15	128.60
1	AA	1280	A	C8-N9-C4	-10.74	101.50	105.80
26	BB	134	G	N1-C6-O6	10.74	126.35	119.90
26	BB	1950	G	O4'-C1'-N9	10.74	116.80	108.20
1	AA	881	G	C6-N1-C2	-10.74	118.65	125.10
26	BB	373	U	O4'-C1'-N1	10.74	116.79	108.20
26	BB	803	U	N1-C2-O2	10.74	130.32	122.80
26	BB	1131	G	N3-C4-N9	10.74	132.45	126.00
26	BB	1386	C	N1-C2-O2	10.74	125.35	118.90
26	BB	2229	U	C5-C6-N1	-10.74	117.33	122.70
1	AA	762	U	N3-C2-O2	10.74	129.72	122.20
26	BB	1906	G	N9-C4-C5	-10.74	101.10	105.40
1	AA	1204	A	N1-C2-N3	-10.74	123.93	129.30
1	AA	570	G	N7-C8-N9	10.74	118.47	113.10
26	BB	2360	G	N7-C8-N9	10.74	118.47	113.10
26	BB	2704	C	O4'-C1'-N1	10.73	116.79	108.20
26	BB	2634	A	O4'-C1'-N9	10.73	116.79	108.20
28	BD	176	ARG	NE-CZ-NH2	-10.73	114.93	120.30
26	BB	795	C	N3-C2-O2	-10.73	114.39	121.90
1	AA	89	U	C6-N1-C2	-10.73	114.56	121.00
25	BA	10	G	N9-C4-C5	10.73	109.69	105.40
26	BB	496	G	N1-C2-N3	-10.72	117.47	123.90
26	BB	547	A	C5-N7-C8	10.72	109.26	103.90
1	AA	1231	G	N3-C4-C5	-10.72	123.24	128.60
25	BA	43	C	O4'-C1'-N1	10.72	116.77	108.20
26	BB	315	G	C2-N3-C4	10.72	117.26	111.90
26	BB	1017	G	C6-C5-N7	-10.72	123.97	130.40
26	BB	1290	C	N3-C4-C5	-10.72	117.61	121.90
26	BB	2782	G	C4-C5-N7	-10.72	106.51	110.80
26	BB	2133	G	N1-C6-O6	-10.72	113.47	119.90
26	BB	2243	U	C2-N3-C4	-10.72	120.57	127.00
26	BB	2795	C	N3-C4-C5	-10.72	117.61	121.90
1	AA	9	G	N7-C8-N9	10.71	118.46	113.10
1	AA	35	G	C4-C5-N7	-10.71	106.51	110.80
1	AA	240	G	C5-N7-C8	10.71	109.66	104.30
26	BB	1035	U	N3-C4-O4	10.71	126.90	119.40
26	BB	1687	G	N1-C2-N3	-10.71	117.47	123.90
26	BB	2253	G	N9-C4-C5	10.71	109.68	105.40
1	AA	741	G	C8-N9-C4	-10.70	102.12	106.40
2	AB	25	C	C2-N3-C4	10.71	125.25	119.90
4	AD	67	C	C6-N1-C2	10.71	124.58	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	29	G	N3-C2-N2	10.70	127.39	119.90
26	BB	823	C	C4-C5-C6	-10.71	112.05	117.40
26	BB	1769	U	O4'-C1'-N1	10.70	116.76	108.20
26	BB	55	G	N9-C4-C5	10.70	109.68	105.40
26	BB	250	G	C4-C5-N7	-10.70	106.52	110.80
26	BB	1052	C	C6-N1-C2	-10.70	116.02	120.30
26	BB	2632	A	C6-N1-C2	10.70	125.02	118.60
1	AA	931	C	C2-N3-C4	10.70	125.25	119.90
1	AA	1096	C	C6-N1-C2	-10.70	116.02	120.30
4	AD	37	U	C2-N3-C4	-10.70	120.58	127.00
26	BB	353	C	N3-C4-C5	10.69	126.18	121.90
26	BB	1535	A	C2-N3-C4	10.69	115.95	110.60
26	BB	2862	G	C8-N9-C4	-10.69	102.12	106.40
1	AA	945	G	N7-C8-N9	10.69	118.45	113.10
1	AA	1445	U	N1-C2-O2	10.69	130.28	122.80
26	BB	1395	A	N9-C4-C5	10.69	110.08	105.80
26	BB	663	G	C8-N9-C4	10.69	110.68	106.40
26	BB	1921	G	C5-C6-N1	10.69	116.84	111.50
26	BB	2549	G	N9-C4-C5	10.69	109.67	105.40
26	BB	1777	U	O4'-C1'-N1	10.69	116.75	108.20
26	BB	1927	A	N7-C8-N9	10.69	119.14	113.80
1	AA	635	A	O4'-C1'-N9	10.69	116.75	108.20
1	AA	1229	A	C4-C5-N7	-10.69	105.36	110.70
1	AA	1374	A	N1-C6-N6	-10.68	112.19	118.60
26	BB	101	A	C5-C6-N1	10.68	123.04	117.70
25	BA	97	C	N1-C2-O2	10.68	125.31	118.90
41	BQ	10	ARG	NE-CZ-NH2	10.68	125.64	120.30
26	BB	247	G	N7-C8-N9	10.68	118.44	113.10
26	BB	1946	U	C5-C6-N1	10.68	128.04	122.70
26	BB	2000	C	N3-C4-C5	-10.68	117.63	121.90
26	BB	1495	A	C4-C5-N7	10.68	116.04	110.70
26	BB	1776	G	C4-C5-N7	-10.68	106.53	110.80
26	BB	2096	C	O4'-C1'-N1	10.68	116.74	108.20
26	BB	539	G	C6-N1-C2	-10.67	118.69	125.10
1	AA	1180	A	N7-C8-N9	10.67	119.14	113.80
26	BB	1942	C	N1-C2-O2	10.67	125.30	118.90
26	BB	2719	G	N9-C4-C5	10.67	109.67	105.40
1	AA	486	U	N3-C2-O2	10.67	129.67	122.20
26	BB	27	G	O4'-C1'-N9	10.67	116.74	108.20
26	BB	625	G	C8-N9-C4	-10.67	102.13	106.40
25	BA	6	G	C2-N3-C4	10.67	117.23	111.90
1	AA	1427	C	N1-C2-O2	10.66	125.30	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	216	A	N1-C2-N3	-10.66	123.97	129.30
26	BB	904	G	N3-C4-C5	-10.66	123.27	128.60
26	BB	1750	G	O4'-C1'-N9	10.66	116.73	108.20
26	BB	2888	C	C3'-C2'-C1'	10.66	110.03	101.50
26	BB	24	G	C5-N7-C8	-10.66	98.97	104.30
26	BB	393	C	N3-C4-C5	10.66	126.16	121.90
26	BB	1478	G	N9-C4-C5	10.66	109.67	105.40
1	AA	644	U	C2-N3-C4	-10.66	120.61	127.00
1	AA	1522	U	O4'-C1'-N1	10.66	116.73	108.20
25	BA	102	G	C8-N9-C4	-10.66	102.14	106.40
26	BB	1579	A	C4-C5-N7	-10.66	105.37	110.70
26	BB	2100	G	C6-C5-N7	-10.66	124.00	130.40
1	AA	838	G	N9-C4-C5	10.65	109.66	105.40
26	BB	961	C	C6-N1-C2	10.65	124.56	120.30
1	AA	51	A	P-O3'-C3'	10.65	132.48	119.70
1	AA	853	C	N1-C2-O2	10.65	125.29	118.90
1	AA	1294	G	N1-C2-N3	10.65	130.29	123.90
25	BA	12	C	N3-C4-C5	-10.65	117.64	121.90
26	BB	247	G	C8-N9-C4	-10.65	102.14	106.40
26	BB	1171	G	C5-C6-N1	10.65	116.83	111.50
26	BB	1570	A	N1-C6-N6	10.65	124.99	118.60
1	AA	1470	U	N1-C2-N3	10.65	121.29	114.90
26	BB	982	C	N3-C4-C5	-10.65	117.64	121.90
26	BB	2571	U	P-O3'-C3'	10.65	132.48	119.70
26	BB	2675	A	N9-C4-C5	-10.65	101.54	105.80
1	AA	131	A	C8-N9-C4	-10.65	101.54	105.80
1	AA	225	C	C5-C4-N4	-10.65	112.75	120.20
2	AB	12	U	C2-N3-C4	-10.65	120.61	127.00
4	AD	31	G	O4'-C1'-N9	10.65	116.72	108.20
26	BB	221	A	N9-C4-C5	10.65	110.06	105.80
26	BB	1615	C	O4'-C1'-N1	10.65	116.72	108.20
1	AA	1478	U	C5-C4-O4	10.65	132.29	125.90
26	BB	883	G	C5-N7-C8	-10.65	98.98	104.30
26	BB	464	U	N3-C4-O4	10.64	126.85	119.40
26	BB	755	U	N3-C4-C5	-10.64	108.21	114.60
26	BB	1722	A	C2-N3-C4	10.64	115.92	110.60
26	BB	2264	C	O4'-C1'-N1	10.64	116.72	108.20
1	AA	774	G	N9-C4-C5	-10.64	101.14	105.40
26	BB	2347	C	N3-C4-C5	-10.64	117.64	121.90
26	BB	2091	C	O4'-C1'-N1	10.64	116.71	108.20
26	BB	1832	C	C6-N1-C2	-10.64	116.05	120.30
26	BB	122	G	N3-C4-N9	10.64	132.38	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1875	G	C4'-C3'-C2'	-10.64	91.96	102.60
1	AA	397	A	N9-C4-C5	-10.63	101.55	105.80
1	AA	785	G	N3-C2-N2	-10.63	112.46	119.90
26	BB	1899	A	N9-C4-C5	10.64	110.05	105.80
1	AA	734	G	C8-N9-C4	-10.63	102.15	106.40
26	BB	837	C	N1-C2-O2	10.63	125.28	118.90
30	BF	117	ARG	NE-CZ-NH2	-10.63	114.98	120.30
1	AA	148	G	C2-N3-C4	10.63	117.22	111.90
26	BB	1602	U	C5-C6-N1	-10.63	117.39	122.70
26	BB	2326	C	N3-C4-C5	-10.63	117.65	121.90
1	AA	862	C	N3-C4-C5	-10.62	117.65	121.90
26	BB	1020	A	C2-N3-C4	10.62	115.91	110.60
26	BB	1252	G	N3-C4-N9	10.62	132.38	126.00
26	BB	2048	G	C6-C5-N7	10.62	136.77	130.40
26	BB	2268	A	C5'-C4'-O4'	10.62	121.85	109.10
26	BB	2531	A	O4'-C1'-N9	10.62	116.70	108.20
1	AA	195	A	C4-C5-C6	10.62	122.31	117.00
1	AA	1074	G	C8-N9-C4	-10.62	102.15	106.40
26	BB	518	G	N7-C8-N9	10.62	118.41	113.10
26	BB	1490	A	C4-C5-C6	-10.62	111.69	117.00
26	BB	2223	G	O4'-C4'-C3'	10.62	114.62	104.00
26	BB	2368	C	O4'-C1'-N1	10.62	116.69	108.20
1	AA	1448	C	N3-C4-N4	10.62	125.43	118.00
1	AA	135	C	N3-C4-C5	-10.62	117.65	121.90
26	BB	3	U	N3-C2-O2	-10.62	114.77	122.20
26	BB	2810	A	N9-C4-C5	10.62	110.05	105.80
26	BB	2115	G	N9-C1'-C2'	-10.61	100.20	114.00
1	AA	744	C	N3-C4-C5	-10.61	117.66	121.90
26	BB	282	A	C8-N9-C4	-10.61	101.56	105.80
1	AA	1320	C	O4'-C1'-N1	10.61	116.69	108.20
26	BB	407	G	C8-N9-C4	-10.61	102.16	106.40
54	B3	39	ARG	NE-CZ-NH2	-10.61	115.00	120.30
1	AA	155	A	C4-C5-C6	-10.60	111.70	117.00
1	AA	610	U	C2-N3-C4	-10.60	120.64	127.00
1	AA	981	U	C5-C6-N1	-10.60	117.40	122.70
26	BB	295	G	C8-N9-C4	-10.60	102.16	106.40
26	BB	2729	G	C2-N3-C4	10.60	117.20	111.90
1	AA	381	C	N1-C2-O2	10.60	125.26	118.90
1	AA	1285	A	C8-N9-C4	10.60	110.04	105.80
26	BB	2448	A	N7-C8-N9	10.60	119.10	113.80
1	AA	293	G	N7-C8-N9	10.60	118.40	113.10
26	BB	1186	G	N9-C4-C5	10.60	109.64	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1818	U	C5-C4-O4	-10.60	119.54	125.90
1	AA	1217	C	C3'-C2'-C1'	10.60	109.98	101.50
26	BB	1650	A	C4-C5-N7	-10.60	105.40	110.70
26	BB	2363	G	C6-N1-C2	-10.60	118.74	125.10
26	BB	990	A	N1-C6-N6	10.59	124.96	118.60
3	AC	38	G	C2-N3-C4	-10.59	106.60	111.90
26	BB	2027	G	N9-C4-C5	10.59	109.64	105.40
26	BB	1628	G	C5-N7-C8	10.59	109.59	104.30
1	AA	678	U	C5'-C4'-O4'	10.59	121.81	109.10
1	AA	682	G	C5-N7-C8	-10.59	99.01	104.30
26	BB	495	G	C8-N9-C4	-10.58	102.17	106.40
26	BB	1006	C	N3-C2-O2	-10.58	114.49	121.90
26	BB	1777	U	N1-C2-O2	10.58	130.21	122.80
26	BB	1812	U	C5-C4-O4	10.58	132.25	125.90
26	BB	1849	G	O4'-C1'-N9	10.58	116.67	108.20
4	AD	3	C	O4'-C1'-N1	10.58	116.67	108.20
26	BB	2243	U	N3-C2-O2	-10.58	114.79	122.20
1	AA	1204	A	N7-C8-N9	10.58	119.09	113.80
1	AA	1379	G	N3-C2-N2	-10.58	112.50	119.90
26	BB	21	A	C4-C5-C6	-10.58	111.71	117.00
26	BB	1854	A	N1-C2-N3	-10.58	124.01	129.30
26	BB	2339	C	N3-C4-C5	-10.58	117.67	121.90
26	BB	1091	G	N1-C2-N3	-10.57	117.56	123.90
26	BB	1345	C	N1-C2-O2	10.57	125.24	118.90
1	AA	42	G	C2-N3-C4	10.57	117.19	111.90
4	AD	66	C	N3-C4-N4	10.57	125.40	118.00
26	BB	848	C	C6-N1-C2	-10.57	116.07	120.30
26	BB	1476	U	C4-C5-C6	10.57	126.04	119.70
26	BB	115	C	O4'-C1'-N1	10.57	116.66	108.20
26	BB	1834	U	N1-C2-O2	10.57	130.20	122.80
26	BB	2112	G	C8-N9-C4	-10.57	102.17	106.40
26	BB	843	G	N3-C2-N2	-10.57	112.50	119.90
26	BB	529	A	N1-C6-N6	-10.56	112.26	118.60
26	BB	1868	C	N3-C2-O2	-10.56	114.50	121.90
25	BA	48	U	N3-C4-O4	10.56	126.79	119.40
26	BB	782	A	O4'-C1'-N9	10.56	116.65	108.20
26	BB	2501	C	N3-C4-C5	-10.56	117.67	121.90
1	AA	128	G	C5-C6-O6	-10.56	122.26	128.60
26	BB	1461	C	N3-C2-O2	-10.56	114.51	121.90
26	BB	1940	U	N3-C4-O4	10.56	126.79	119.40
26	BB	2518	A	C1'-O4'-C4'	-10.56	101.45	109.90
1	AA	560	A	C5-C6-N1	10.56	122.98	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	574	A	C2-N3-C4	10.56	115.88	110.60
26	BB	1031	G	C4-C5-N7	-10.56	106.58	110.80
26	BB	1743	G	C4-C5-C6	10.56	125.14	118.80
26	BB	1947	C	C2-N3-C4	-10.56	114.62	119.90
26	BB	2207	C	O4'-C1'-N1	10.56	116.65	108.20
26	BB	2490	G	N3-C2-N2	-10.56	112.51	119.90
1	AA	934	C	O4'-C1'-N1	10.55	116.64	108.20
25	BA	79	G	C4-C5-C6	10.55	125.13	118.80
26	BB	2756	U	C2-N3-C4	-10.55	120.67	127.00
1	AA	189	A	C6-C5-N7	-10.55	124.92	132.30
1	AA	347	G	N9-C4-C5	10.55	109.62	105.40
1	AA	1430	A	O4'-C1'-N9	10.55	116.64	108.20
25	BA	84	G	N3-C4-C5	-10.55	123.33	128.60
26	BB	1451	C	N1-C2-O2	10.55	125.23	118.90
26	BB	731	C	C2-N3-C4	-10.54	114.63	119.90
1	AA	1225	A	C8-N9-C4	-10.54	101.58	105.80
1	AA	1403	C	N1-C2-O2	10.54	125.22	118.90
26	BB	407	G	N9-C4-C5	10.54	109.62	105.40
26	BB	757	G	N7-C8-N9	10.54	118.37	113.10
26	BB	1234	U	O4'-C1'-N1	10.54	116.63	108.20
1	AA	107	G	C8-N9-C4	-10.54	102.19	106.40
1	AA	50	A	C5-N7-C8	-10.54	98.63	103.90
26	BB	712	G	C8-N9-C4	-10.53	102.19	106.40
26	BB	2228	G	C8-N9-C4	-10.54	102.19	106.40
26	BB	1620	G	C5-C6-O6	-10.53	122.28	128.60
26	BB	2723	C	O4'-C1'-N1	10.53	116.62	108.20
21	AU	5	ARG	NE-CZ-NH2	-10.53	115.03	120.30
26	BB	2319	G	C2-N3-C4	10.53	117.17	111.90
1	AA	912	C	C2-N3-C4	-10.53	114.64	119.90
25	BA	36	C	N1-C2-O2	10.53	125.22	118.90
26	BB	954	G	C8-N9-C4	-10.53	102.19	106.40
26	BB	2677	G	O4'-C1'-N9	10.53	116.62	108.20
1	AA	32	A	O4'-C1'-N9	10.52	116.62	108.20
1	AA	1101	A	O4'-C1'-N9	10.52	116.62	108.20
26	BB	1293	C	C4-C5-C6	10.52	122.66	117.40
26	BB	2652	C	O4'-C1'-N1	10.52	116.62	108.20
1	AA	145	G	O4'-C1'-N9	10.52	116.62	108.20
26	BB	2489	U	C3'-C2'-C1'	10.52	109.91	101.50
1	AA	913	A	O4'-C1'-N9	10.52	116.61	108.20
15	AO	53	ARG	NE-CZ-NH2	-10.52	115.04	120.30
26	BB	773	U	C5-C4-O4	-10.52	119.59	125.90
26	BB	2846	G	C6-C5-N7	-10.52	124.09	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	408	A	C8-N9-C4	-10.51	101.59	105.80
1	AA	1169	A	C4-C5-N7	-10.51	105.44	110.70
26	BB	108	G	O4'-C1'-N9	10.51	116.61	108.20
1	AA	861	G	N9-C4-C5	10.51	109.61	105.40
26	BB	2841	C	C6-N1-C2	10.51	124.50	120.30
26	BB	1400	U	O4'-C1'-N1	10.51	116.61	108.20
1	AA	430	A	N1-C2-N3	10.51	134.55	129.30
1	AA	1083	U	C3'-C2'-C1'	10.51	109.90	101.50
26	BB	286	U	O4'-C1'-N1	10.51	116.61	108.20
26	BB	1168	G	O4'-C1'-N9	10.51	116.61	108.20
26	BB	1309	G	C5-C6-O6	-10.51	122.30	128.60
26	BB	1581	G	C8-N9-C4	-10.51	102.20	106.40
26	BB	2553	G	C2-N3-C4	10.51	117.15	111.90
3	AC	29	G	C5-C6-N1	10.50	116.75	111.50
26	BB	2359	C	C5-C6-N1	10.50	126.25	121.00
1	AA	628	G	C8-N9-C4	-10.50	102.20	106.40
26	BB	140	C	C5-C6-N1	10.50	126.25	121.00
26	BB	2646	C	C2-N3-C4	10.50	125.15	119.90
1	AA	129	A	C6-N1-C2	-10.50	112.30	118.60
1	AA	553	A	N1-C6-N6	-10.50	112.30	118.60
1	AA	1089	G	C2-N3-C4	-10.50	106.65	111.90
26	BB	1262	A	C8-N9-C4	-10.50	101.60	105.80
26	BB	1366	A	N9-C4-C5	10.50	110.00	105.80
26	BB	1643	G	O4'-C1'-N9	10.50	116.60	108.20
1	AA	1509	C	O4'-C1'-N1	10.50	116.60	108.20
26	BB	922	C	O4'-C1'-N1	10.50	116.60	108.20
26	BB	1118	C	O4'-C1'-N1	10.50	116.60	108.20
26	BB	1144	A	C8-N9-C4	-10.50	101.60	105.80
26	BB	1223	G	N1-C2-N3	-10.50	117.60	123.90
26	BB	2130	U	N3-C2-O2	-10.50	114.85	122.20
50	BZ	27	ARG	NE-CZ-NH2	-10.50	115.05	120.30
1	AA	721	G	C5-N7-C8	10.49	109.55	104.30
1	AA	1375	A	N7-C8-N9	10.49	119.05	113.80
26	BB	1057	A	N9-C4-C5	-10.49	101.60	105.80
26	BB	1751	U	O4'-C1'-N1	10.49	116.59	108.20
1	AA	558	G	N9-C4-C5	10.49	109.60	105.40
1	AA	1347	G	P-O3'-C3'	10.49	132.29	119.70
26	BB	2607	G	C2-N3-C4	10.49	117.15	111.90
1	AA	1361	G	C8-N9-C4	-10.49	102.20	106.40
26	BB	561	G	O4'-C1'-N9	10.49	116.59	108.20
26	BB	2428	G	N3-C4-C5	-10.49	123.36	128.60
26	BB	2682	A	C2-N3-C4	10.49	115.84	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	865	A	N9-C4-C5	10.48	109.99	105.80
1	AA	1350	A	N9-C4-C5	10.48	109.99	105.80
25	BA	12	C	N3-C4-N4	10.48	125.34	118.00
26	BB	1663	G	C4-C5-N7	-10.48	106.61	110.80
26	BB	1940	U	N3-C4-C5	-10.48	108.31	114.60
26	BB	2053	G	C8-N9-C4	-10.48	102.21	106.40
26	BB	2224	G	C8-N9-C4	-10.48	102.21	106.40
26	BB	1714	U	C4-C5-C6	10.48	125.99	119.70
1	AA	1216	A	N1-C2-N3	10.48	134.54	129.30
26	BB	1475	G	N7-C8-N9	10.48	118.34	113.10
26	BB	1813	G	C3'-C2'-C1'	10.48	109.88	101.50
26	BB	2536	G	C8-N9-C4	-10.48	102.21	106.40
26	BB	755	U	C4-C5-C6	10.47	125.98	119.70
1	AA	396	C	N3-C4-N4	10.47	125.33	118.00
26	BB	2705	A	O4'-C1'-N9	10.47	116.58	108.20
1	AA	9	G	C8-N9-C4	-10.47	102.21	106.40
1	AA	47	C	O4'-C1'-N1	10.47	116.58	108.20
1	AA	384	G	C5-C6-N1	10.47	116.73	111.50
26	BB	836	G	C4-C5-N7	-10.47	106.61	110.80
33	BI	116	ARG	NE-CZ-NH2	-10.47	115.06	120.30
2	AB	38	A	O4'-C1'-N9	10.47	116.58	108.20
1	AA	350	G	O4'-C4'-C3'	10.46	114.47	106.10
26	BB	1532	A	C4-C5-C6	-10.46	111.77	117.00
26	BB	1688	U	N3-C4-O4	10.46	126.73	119.40
26	BB	2685	G	C5-C6-N1	10.47	116.73	111.50
26	BB	2798	U	N1-C2-N3	10.47	121.18	114.90
1	AA	515	G	N1-C6-O6	-10.46	113.62	119.90
3	AC	50	U	N3-C2-O2	-10.46	114.88	122.20
1	AA	1144	G	C3'-C2'-C1'	10.46	109.87	101.50
26	BB	331	C	N3-C2-O2	-10.46	114.58	121.90
1	AA	319	G	N7-C8-N9	10.46	118.33	113.10
26	BB	2450	A	N1-C6-N6	10.46	124.87	118.60
28	BD	247	TRP	CD1-CG-CD2	-10.46	97.93	106.30
1	AA	1266	G	N3-C4-C5	-10.46	123.37	128.60
1	AA	1365	G	N3-C4-C5	-10.46	123.37	128.60
26	BB	2561	U	N3-C2-O2	-10.45	114.89	122.20
2	AB	52	A	C1'-O4'-C4'	10.45	118.26	109.90
4	AD	12	G	N7-C8-N9	10.45	118.33	113.10
26	BB	836	G	C8-N9-C4	-10.45	102.22	106.40
26	BB	1091	G	N9-C4-C5	-10.45	101.22	105.40
26	BB	1239	G	C5'-C4'-O4'	10.45	121.64	109.10
26	BB	1080	A	O4'-C1'-N9	10.45	116.56	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2346	A	N7-C8-N9	10.45	119.02	113.80
4	AD	44	A	O4'-C1'-N9	10.45	116.56	108.20
26	BB	1461	C	C5-C6-N1	10.45	126.22	121.00
25	BA	112	G	N3-C4-C5	-10.44	123.38	128.60
26	BB	82	U	C5-C6-N1	-10.44	117.48	122.70
26	BB	312	G	C6-C5-N7	-10.44	124.14	130.40
26	BB	713	G	C5'-C4'-O4'	10.44	121.63	109.10
26	BB	1127	A	C2-N3-C4	10.44	115.82	110.60
4	AD	70	C	N3-C4-N4	10.44	125.31	118.00
26	BB	273	G	O4'-C1'-N9	10.44	116.55	108.20
26	BB	1456	G	C5-C6-O6	-10.44	122.34	128.60
1	AA	1181	G	C4-C5-C6	10.44	125.06	118.80
26	BB	1596	A	C2-N3-C4	10.44	115.82	110.60
1	AA	1365	G	N9-C4-C5	10.44	109.58	105.40
1	AA	1014	A	N9-C4-C5	10.44	109.97	105.80
1	AA	1422	G	C8-N9-C4	-10.44	102.23	106.40
26	BB	2214	C	O4'-C1'-N1	10.44	116.55	108.20
1	AA	67	C	C3'-C2'-C1'	10.43	109.85	101.50
1	AA	116	A	C8-N9-C4	-10.43	101.63	105.80
1	AA	829	G	C2-N3-C4	10.43	117.12	111.90
26	BB	355	U	N3-C4-O4	10.43	126.70	119.40
26	BB	2374	C	C4-C5-C6	-10.43	112.18	117.40
1	AA	326	G	N1-C2-N3	-10.43	117.64	123.90
1	AA	533	A	C5-C6-N6	-10.43	115.36	123.70
26	BB	1406	U	N3-C2-O2	-10.43	114.90	122.20
1	AA	875	U	O4'-C1'-N1	10.42	116.54	108.20
26	BB	1861	G	C8-N9-C4	-10.42	102.23	106.40
1	AA	410	G	C4'-C3'-C2'	-10.42	92.18	102.60
26	BB	1781	U	O4'-C1'-N1	10.42	116.54	108.20
26	BB	1808	A	N9-C4-C5	-10.42	101.63	105.80
43	BS	57	ARG	NE-CZ-NH2	-10.42	115.09	120.30
1	AA	1504	G	C8-N9-C4	-10.42	102.23	106.40
26	BB	1968	G	C5-C6-N1	10.42	116.71	111.50
26	BB	2023	C	C5-C6-N1	-10.42	115.79	121.00
26	BB	2275	C	C5-C6-N1	10.42	126.21	121.00
26	BB	2616	C	C2-N3-C4	10.42	125.11	119.90
1	AA	107	G	N1-C6-O6	-10.41	113.65	119.90
1	AA	119	A	N1-C2-N3	-10.41	124.09	129.30
26	BB	577	G	C6-N1-C2	-10.41	118.85	125.10
1	AA	404	G	C5-N7-C8	10.41	109.51	104.30
1	AA	502	A	C8-N9-C4	-10.41	101.64	105.80
1	AA	1468	A	N9-C4-C5	10.41	109.97	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1149	G	C2-N3-C4	10.41	117.11	111.90
26	BB	2150	C	N3-C4-C5	-10.41	117.73	121.90
1	AA	506	G	O4'-C1'-N9	10.41	116.53	108.20
12	AL	123	ARG	NE-CZ-NH1	10.41	125.51	120.30
26	BB	1248	G	C6-N1-C2	-10.41	118.85	125.10
26	BB	1850	G	C2-N3-C4	10.41	117.11	111.90
26	BB	1307	A	N9-C4-C5	-10.41	101.64	105.80
26	BB	1579	A	C5-N7-C8	10.41	109.10	103.90
1	AA	683	G	C8-N9-C4	-10.40	102.24	106.40
1	AA	1035	A	C8-N9-C4	-10.40	101.64	105.80
10	AJ	91	ARG	NE-CZ-NH1	-10.40	115.10	120.30
26	BB	642	U	C5-C4-O4	10.40	132.14	125.90
26	BB	1250	G	C8-N9-C4	-10.40	102.24	106.40
26	BB	2084	C	N3-C4-C5	10.40	126.06	121.90
26	BB	2337	G	C6-N1-C2	-10.40	118.86	125.10
26	BB	2604	U	C5-C4-O4	10.40	132.14	125.90
1	AA	4	U	N3-C4-C5	-10.40	108.36	114.60
1	AA	44	A	C4-C5-C6	10.40	122.20	117.00
1	AA	575	G	N3-C4-N9	-10.40	119.76	126.00
1	AA	442	G	N9-C4-C5	10.40	109.56	105.40
1	AA	763	G	N9-C4-C5	10.40	109.56	105.40
1	AA	1138	G	O4'-C1'-N9	10.40	116.52	108.20
26	BB	1906	G	C4-C5-N7	10.40	114.96	110.80
26	BB	2219	U	C2-N3-C4	-10.40	120.76	127.00
1	AA	423	G	C5-C6-N1	10.40	116.70	111.50
26	BB	141	G	N9-C4-C5	10.40	109.56	105.40
26	BB	1844	C	C5-C6-N1	10.40	126.20	121.00
34	BJ	137	ARG	NE-CZ-NH1	10.40	125.50	120.30
1	AA	909	A	N9-C4-C5	10.39	109.96	105.80
1	AA	1316	G	N3-C4-C5	-10.39	123.40	128.60
26	BB	1924	C	C6-N1-C2	-10.39	116.14	120.30
1	AA	402	G	N1-C2-N2	-10.39	106.85	116.20
1	AA	1427	C	N3-C2-O2	-10.39	114.62	121.90
26	BB	2447	G	C8-N9-C4	-10.39	102.24	106.40
1	AA	354	G	N1-C2-N3	10.39	130.13	123.90
26	BB	2643	G	N3-C4-C5	-10.39	123.41	128.60
41	BQ	9	ARG	NE-CZ-NH2	-10.39	115.10	120.30
1	AA	1143	G	C2-N3-C4	10.39	117.09	111.90
1	AA	1051	C	C5-C6-N1	10.39	126.19	121.00
26	BB	1853	A	N9-C4-C5	-10.39	101.64	105.80
26	BB	2290	G	C8-N9-C4	-10.39	102.25	106.40
1	AA	1496	C	N3-C4-C5	10.38	126.05	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	27	C	C1'-O4'-C4'	-10.38	101.59	109.90
26	BB	308	G	C8-N9-C4	-10.38	102.25	106.40
26	BB	1594	U	O4'-C1'-N1	10.38	116.51	108.20
1	AA	1458	G	N7-C8-N9	10.38	118.29	113.10
26	BB	1521	G	C2-N3-C4	10.38	117.09	111.90
26	BB	2351	G	C2-N3-C4	10.38	117.09	111.90
26	BB	1675	C	O4'-C1'-N1	10.38	116.50	108.20
26	BB	2530	A	O4'-C4'-C3'	-10.38	93.62	104.00
26	BB	26	G	N3-C4-C5	-10.37	123.41	128.60
26	BB	185	G	N7-C8-N9	-10.38	107.91	113.10
26	BB	774	G	O4'-C1'-N9	10.38	116.50	108.20
26	BB	1739	A	N7-C8-N9	10.38	118.99	113.80
1	AA	26	A	O4'-C4'-C3'	10.37	114.40	106.10
1	AA	1415	G	C6-N1-C2	-10.37	118.88	125.10
26	BB	496	G	C4-C5-N7	-10.37	106.65	110.80
26	BB	2026	U	O4'-C1'-N1	10.37	116.50	108.20
26	BB	2053	G	C5'-C4'-O4'	10.37	121.54	109.10
26	BB	2690	U	O4'-C1'-N1	10.37	116.50	108.20
2	AB	49	G	C2-N3-C4	10.37	117.08	111.90
26	BB	128	C	C2-N3-C4	-10.37	114.72	119.90
26	BB	2475	C	N3-C2-O2	-10.37	114.64	121.90
26	BB	1675	C	C2-N3-C4	10.36	125.08	119.90
1	AA	558	G	C8-N9-C4	-10.36	102.25	106.40
26	BB	711	G	O4'-C1'-N9	10.36	116.49	108.20
3	AC	57	C	N3-C4-C5	-10.36	117.75	121.90
26	BB	814	C	N3-C4-C5	-10.36	117.75	121.90
26	BB	1721	G	O4'-C1'-N9	10.36	116.49	108.20
1	AA	51	A	N9-C4-C5	10.36	109.94	105.80
26	BB	1853	A	C8-N9-C4	10.36	109.94	105.80
4	AD	71	G	C5-N7-C8	-10.36	99.12	104.30
26	BB	2454	G	N7-C8-N9	10.36	118.28	113.10
1	AA	462	G	O4'-C4'-C3'	10.36	114.38	106.10
1	AA	976	G	C8-N9-C4	-10.36	102.26	106.40
1	AA	1496	C	C4-C5-C6	-10.36	112.22	117.40
26	BB	341	C	N3-C4-C5	-10.36	117.76	121.90
26	BB	731	C	C6-N1-C2	-10.36	116.16	120.30
26	BB	2708	G	N9-C4-C5	10.36	109.54	105.40
26	BB	2715	C	C2-N3-C4	10.36	125.08	119.90
26	BB	2777	G	C2-N3-C4	10.36	117.08	111.90
25	BA	82	U	C5-C6-N1	-10.35	117.52	122.70
26	BB	787	C	C5-C4-N4	-10.35	112.95	120.20
1	AA	800	G	O4'-C1'-N9	-10.35	99.92	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2175	C	O4'-C1'-N1	10.35	116.48	108.20
1	AA	108	G	N7-C8-N9	10.35	118.28	113.10
1	AA	172	A	N1-C2-N3	-10.35	124.13	129.30
26	BB	717	C	N3-C2-O2	-10.35	114.66	121.90
26	BB	2465	C	C5-C6-N1	10.35	126.17	121.00
26	BB	2902	C	O4'-C1'-N1	10.35	116.48	108.20
42	BR	38	ARG	NE-CZ-NH2	10.35	125.47	120.30
1	AA	852	G	N9-C1'-C2'	-10.35	100.55	114.00
26	BB	1091	G	N3-C2-N2	10.35	127.14	119.90
26	BB	2035	G	N3-C4-C5	-10.35	123.43	128.60
1	AA	1433	A	C8-N9-C4	-10.35	101.66	105.80
26	BB	65	U	C6-N1-C2	-10.35	114.79	121.00
26	BB	1195	G	N3-C4-N9	10.35	132.21	126.00
26	BB	1416	G	N3-C4-C5	-10.35	123.43	128.60
26	BB	1371	G	C4-C5-N7	-10.34	106.66	110.80
1	AA	193	C	C2-N3-C4	10.34	125.07	119.90
1	AA	440	C	C4-C5-C6	-10.34	112.23	117.40
25	BA	115	A	C8-N9-C4	-10.34	101.66	105.80
26	BB	905	A	C5-C6-N1	-10.34	112.53	117.70
26	BB	1829	A	O4'-C1'-N9	10.34	116.47	108.20
1	AA	1258	G	C8-N9-C4	-10.34	102.26	106.40
7	AG	183	ARG	NE-CZ-NH2	-10.34	115.13	120.30
26	BB	152	A	O4'-C1'-N9	10.34	116.47	108.20
25	BA	88	C	C5-C4-N4	-10.34	112.96	120.20
1	AA	550	G	O4'-C1'-N9	10.34	116.47	108.20
1	AA	728	A	C4-C5-C6	-10.34	111.83	117.00
25	BA	37	C	C2-N3-C4	10.34	125.07	119.90
1	AA	62	U	O4'-C1'-N1	10.33	116.47	108.20
1	AA	617	G	C5-N7-C8	-10.33	99.13	104.30
26	BB	478	A	N7-C8-N9	-10.33	108.63	113.80
26	BB	582	A	N9-C4-C5	10.33	109.93	105.80
26	BB	2325	G	N3-C4-C5	-10.33	123.43	128.60
26	BB	266	G	C5-C6-O6	-10.33	122.40	128.60
26	BB	412	A	C1'-O4'-C4'	10.33	118.17	109.90
1	AA	1514	G	C5-C6-N1	10.33	116.66	111.50
4	AD	1	C	C5-C6-N1	10.33	126.16	121.00
25	BA	96	G	C8-N9-C4	-10.33	102.27	106.40
26	BB	1117	C	N3-C2-O2	-10.33	114.67	121.90
26	BB	1593	A	O4'-C1'-N9	10.33	116.46	108.20
34	BJ	52	ARG	NE-CZ-NH2	-10.33	115.13	120.30
26	BB	80	G	O4'-C1'-N9	10.33	116.46	108.20
26	BB	1583	A	N1-C6-N6	10.33	124.80	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	630	A	N1-C6-N6	-10.33	112.40	118.60
1	AA	1020	G	O4'-C1'-N9	10.33	116.46	108.20
1	AA	1094	G	N7-C8-N9	10.33	118.26	113.10
26	BB	2702	G	C4'-C3'-C2'	-10.33	92.27	102.60
1	AA	1360	A	C6-C5-N7	10.32	139.53	132.30
3	AC	22	G	C2-N3-C4	10.32	117.06	111.90
26	BB	1424	G	O4'-C1'-N9	10.32	116.46	108.20
26	BB	1572	A	C8-N9-C4	-10.32	101.67	105.80
26	BB	2748	A	C4-C5-N7	-10.32	105.54	110.70
31	BG	124	ARG	NE-CZ-NH2	-10.32	115.14	120.30
26	BB	1673	G	C5-C6-O6	-10.32	122.41	128.60
26	BB	1815	A	N1-C2-N3	-10.32	124.14	129.30
26	BB	1972	G	N3-C4-N9	10.32	132.19	126.00
26	BB	2594	C	O4'-C1'-N1	10.32	116.45	108.20
1	AA	1118	U	N1-C2-O2	-10.32	115.58	122.80
26	BB	606	U	O4'-C1'-N1	10.32	116.45	108.20
26	BB	1328	A	C3'-C2'-C1'	10.32	109.75	101.50
26	BB	2804	U	C4-C5-C6	10.32	125.89	119.70
26	BB	894	U	O4'-C1'-N1	10.31	116.45	108.20
26	BB	1928	A	C4-C5-N7	-10.31	105.54	110.70
26	BB	134	G	N9-C4-C5	10.31	109.53	105.40
26	BB	346	A	N9-C1'-C2'	-10.31	100.59	114.00
1	AA	1517	G	C8-N9-C4	-10.31	102.28	106.40
26	BB	260	G	C2-N3-C4	10.31	117.06	111.90
26	BB	336	C	N1-C2-O2	10.31	125.09	118.90
26	BB	1090	A	C5-C6-N1	10.31	122.86	117.70
26	BB	1646	C	C2-N3-C4	10.31	125.06	119.90
26	BB	1743	G	C6-N1-C2	-10.31	118.91	125.10
26	BB	1767	G	C8-N9-C4	-10.31	102.28	106.40
26	BB	2298	A	C2-N3-C4	10.31	115.75	110.60
1	AA	1122	U	N3-C2-O2	-10.31	114.98	122.20
1	AA	319	G	C2-N3-C4	10.31	117.05	111.90
26	BB	2349	G	N3-C4-N9	10.31	132.18	126.00
1	AA	391	G	C8-N9-C4	-10.30	102.28	106.40
26	BB	1288	G	N1-C2-N2	-10.30	106.93	116.20
26	BB	1299	G	C4-C5-C6	10.30	124.98	118.80
26	BB	2327	A	C8-N9-C4	-10.30	101.68	105.80
26	BB	1882	U	O4'-C1'-N1	10.30	116.44	108.20
26	BB	2326	C	N3-C4-N4	10.30	125.21	118.00
35	BK	66	PHE	CB-CG-CD2	-10.30	113.59	120.80
1	AA	450	G	C8-N9-C4	-10.30	102.28	106.40
26	BB	2840	C	O4'-C1'-N1	10.30	116.44	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	717	U	N3-C2-O2	-10.30	114.99	122.20
26	BB	2308	G	N3-C4-C5	-10.30	123.45	128.60
26	BB	2571	U	O4'-C1'-N1	10.30	116.44	108.20
26	BB	2654	A	C4-C5-C6	-10.30	111.85	117.00
26	BB	2393	U	C1'-O4'-C4'	-10.30	101.66	109.90
1	AA	335	C	O4'-C1'-N1	10.30	116.44	108.20
26	BB	1846	G	N3-C4-C5	-10.30	123.45	128.60
1	AA	560	A	C6-C5-N7	10.29	139.51	132.30
1	AA	1111	A	N1-C2-N3	10.29	134.45	129.30
26	BB	1753	G	C6-N1-C2	-10.29	118.92	125.10
1	AA	903	G	C8-N9-C4	-10.29	102.28	106.40
1	AA	1076	U	N1-C2-O2	10.29	130.00	122.80
26	BB	1973	G	N1-C6-O6	-10.29	113.72	119.90
1	AA	549	C	C5'-C4'-O4'	10.29	121.45	109.10
1	AA	778	G	C4-C5-N7	-10.29	106.68	110.80
1	AA	1452	C	C5'-C4'-O4'	10.29	121.45	109.10
2	AB	70	C	N3-C4-N4	10.29	125.20	118.00
26	BB	91	A	C4-C5-C6	-10.29	111.86	117.00
26	BB	357	C	N3-C2-O2	-10.29	114.70	121.90
26	BB	1215	G	C4-C5-N7	10.29	114.92	110.80
26	BB	1216	G	C6-N1-C2	-10.29	118.93	125.10
26	BB	1824	G	N9-C4-C5	10.29	109.52	105.40
26	BB	2721	A	C8-N9-C4	10.29	109.92	105.80
26	BB	636	G	N9-C4-C5	-10.29	101.28	105.40
26	BB	818	G	N7-C8-N9	10.29	118.24	113.10
26	BB	1729	U	O4'-C1'-N1	10.29	116.43	108.20
26	BB	2438	U	C4-C5-C6	10.29	125.87	119.70
1	AA	871	U	C3'-C2'-C1'	-10.29	93.27	101.50
1	AA	1218	C	C6-N1-C2	-10.29	116.19	120.30
26	BB	1250	G	C5-N7-C8	-10.29	99.16	104.30
26	BB	1314	C	O4'-C1'-N1	10.29	116.43	108.20
26	BB	2510	C	N1-C2-O2	10.29	125.07	118.90
1	AA	1455	G	C2-N3-C4	10.28	117.04	111.90
1	AA	1018	G	N9-C4-C5	10.28	109.51	105.40
4	AD	1	C	N3-C2-O2	-10.28	114.70	121.90
1	AA	11	G	N3-C4-C5	-10.28	123.46	128.60
1	AA	413	G	C6-C5-N7	-10.28	124.23	130.40
46	BV	6	ARG	NE-CZ-NH1	10.28	125.44	120.30
1	AA	810	C	C4-C5-C6	-10.28	112.26	117.40
26	BB	192	C	N1-C2-O2	10.28	125.07	118.90
26	BB	213	A	C8-N9-C4	-10.28	101.69	105.80
1	AA	299	G	C2-N3-C4	10.28	117.04	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1886	U	C5-C6-N1	-10.28	117.56	122.70
25	BA	22	U	C1'-O4'-C4'	-10.27	101.68	109.90
26	BB	871	U	C5-C6-N1	-10.27	117.56	122.70
26	BB	1169	A	N9-C4-C5	10.27	109.91	105.80
26	BB	1711	A	C4-C5-C6	-10.27	111.86	117.00
26	BB	1907	G	C4-C5-N7	-10.27	106.69	110.80
26	BB	123	G	C4-C5-N7	10.27	114.91	110.80
26	BB	367	G	O4'-C1'-N9	10.27	116.42	108.20
26	BB	2654	A	N9-C4-C5	-10.27	101.69	105.80
5	AE	6	ARG	NE-CZ-NH1	-10.27	115.17	120.30
26	BB	1474	U	O4'-C1'-N1	10.27	116.42	108.20
26	BB	1816	C	C5'-C4'-O4'	10.27	121.42	109.10
26	BB	2749	A	C5'-C4'-O4'	10.27	121.42	109.10
26	BB	1997	C	O4'-C1'-N1	10.27	116.41	108.20
26	BB	2835	A	N9-C1'-C2'	10.27	127.34	114.00
1	AA	1243	C	C6-N1-C2	-10.26	116.19	120.30
26	BB	1193	G	N1-C2-N3	-10.26	117.74	123.90
26	BB	2481	G	O4'-C1'-N9	10.26	116.41	108.20
1	AA	839	C	N3-C2-O2	-10.26	114.72	121.90
26	BB	1014	A	N9-C4-C5	10.26	109.90	105.80
26	BB	1390	U	O4'-C1'-N1	10.26	116.41	108.20
26	BB	1668	A	O4'-C1'-N9	10.26	116.41	108.20
26	BB	2259	U	C6-N1-C2	-10.26	114.84	121.00
1	AA	555	U	C2-N3-C4	-10.26	120.85	127.00
26	BB	274	C	C4'-C3'-C2'	-10.26	92.34	102.60
26	BB	1354	A	O4'-C1'-N9	10.26	116.41	108.20
26	BB	1696	G	O4'-C1'-N9	10.26	116.41	108.20
26	BB	2837	A	N7-C8-N9	10.26	118.93	113.80
1	AA	642	A	C8-N9-C4	-10.25	101.70	105.80
1	AA	918	A	N9-C4-C5	10.25	109.90	105.80
3	AC	42	U	O4'-C1'-N1	10.25	116.40	108.20
26	BB	2838	G	C5-C6-O6	10.25	134.75	128.60
39	BO	18	ARG	NE-CZ-NH1	-10.25	115.17	120.30
26	BB	2269	G	N3-C4-N9	10.25	132.15	126.00
26	BB	2402	U	N3-C4-O4	10.25	126.58	119.40
1	AA	79	G	N7-C8-N9	10.25	118.22	113.10
1	AA	1156	G	N1-C6-O6	-10.25	113.75	119.90
1	AA	1445	U	N3-C2-O2	-10.25	115.03	122.20
1	AA	255	G	N3-C2-N2	-10.24	112.73	119.90
1	AA	647	C	C5-C6-N1	10.24	126.12	121.00
1	AA	985	C	N1-C2-O2	10.24	125.05	118.90
2	AB	73	G	C8-N9-C4	-10.24	102.30	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2411	A	C5'-C4'-O4'	10.24	121.39	109.10
25	BA	76	G	C8-N9-C4	-10.24	102.30	106.40
26	BB	544	C	O4'-C1'-N1	10.24	116.39	108.20
26	BB	608	A	O4'-C1'-N9	10.24	116.39	108.20
26	BB	2419	U	N3-C2-O2	-10.24	115.03	122.20
1	AA	79	G	C8-N9-C1'	10.24	140.31	127.00
4	AD	54	G	C2-N3-C4	10.24	117.02	111.90
26	BB	2009	A	N7-C8-N9	10.24	118.92	113.80
26	BB	2657	A	N3-C4-C5	10.24	133.97	126.80
1	AA	91	U	N1-C2-O2	10.23	129.96	122.80
26	BB	757	G	C5-N7-C8	-10.23	99.18	104.30
26	BB	1292	G	C2-N3-C4	10.23	117.02	111.90
26	BB	1344	U	C6-N1-C2	-10.23	114.86	121.00
26	BB	1820	U	C2-N3-C4	-10.23	120.86	127.00
26	BB	2702	G	C8-N9-C4	-10.23	102.31	106.40
1	AA	1257	A	N1-C6-N6	10.23	124.74	118.60
4	AD	6	G	C4-C5-N7	-10.23	106.71	110.80
26	BB	1175	A	C4-C5-C6	10.23	122.12	117.00
26	BB	2363	G	C8-N9-C4	-10.23	102.31	106.40
1	AA	541	G	O4'-C1'-N9	10.23	116.38	108.20
4	AD	22	A	C5'-C4'-O4'	10.23	121.38	109.10
26	BB	2616	C	N3-C4-C5	-10.23	117.81	121.90
26	BB	2771	C	N3-C2-O2	-10.23	114.74	121.90
4	AD	9	G	C5'-C4'-O4'	-10.23	96.83	109.10
26	BB	510	C	N3-C4-C5	-10.23	117.81	121.90
1	AA	705	G	C5-C6-N1	10.22	116.61	111.50
26	BB	507	A	C2-N3-C4	10.22	115.71	110.60
26	BB	814	C	O4'-C1'-N1	10.22	116.38	108.20
26	BB	2553	G	C8-N9-C4	-10.22	102.31	106.40
1	AA	1106	G	O4'-C1'-N9	10.22	116.38	108.20
26	BB	1250	G	C5-C6-N1	10.22	116.61	111.50
26	BB	2014	A	O4'-C1'-N9	10.22	116.38	108.20
1	AA	634	C	O4'-C1'-N1	10.22	116.37	108.20
1	AA	1204	A	C6-N1-C2	10.22	124.73	118.60
4	AD	48	U	C3'-C2'-C1'	-10.22	93.33	101.50
26	BB	625	G	N7-C8-N9	10.22	118.21	113.10
1	AA	117	G	C2-N3-C4	10.22	117.01	111.90
1	AA	1229	A	C5-N7-C8	10.21	109.01	103.90
26	BB	1026	G	N3-C4-N9	10.21	132.13	126.00
1	AA	692	U	C4-C5-C6	10.21	125.83	119.70
1	AA	782	A	C2-N3-C4	10.21	115.70	110.60
2	AB	45	U	C4-C5-C6	10.21	125.83	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	430	A	C5-N7-C8	-10.21	98.79	103.90
26	BB	2365	G	N7-C8-N9	10.21	118.20	113.10
26	BB	1927	A	C5-N7-C8	-10.21	98.80	103.90
26	BB	2578	G	O4'-C1'-N9	10.21	116.37	108.20
1	AA	278	G	N9-C1'-C2'	-10.21	100.73	114.00
1	AA	1001	C	N3-C2-O2	-10.21	114.75	121.90
26	BB	2110	G	C4-C5-C6	-10.21	112.67	118.80
26	BB	2572	A	C8-N9-C4	-10.21	101.72	105.80
26	BB	1699	G	O4'-C1'-N9	10.20	116.36	108.20
1	AA	340	U	C5-C4-O4	-10.20	119.78	125.90
1	AA	1068	G	C5-C6-O6	-10.20	122.48	128.60
26	BB	1051	G	O4'-C1'-N9	10.20	116.36	108.20
26	BB	1276	A	C6-C5-N7	10.20	139.44	132.30
26	BB	1998	A	C5-C6-N6	-10.20	115.54	123.70
37	BM	98	ARG	NE-CZ-NH2	-10.20	115.20	120.30
50	BZ	64	ASP	CB-CG-OD1	-10.20	109.12	118.30
26	BB	1433	A	C5-N7-C8	-10.20	98.80	103.90
12	AL	108	ARG	NE-CZ-NH1	10.20	125.40	120.30
26	BB	731	C	N3-C4-C5	10.20	125.98	121.90
26	BB	1855	U	O4'-C1'-N1	10.20	116.36	108.20
1	AA	1113	C	C6-N1-C2	-10.20	116.22	120.30
26	BB	1935	G	N9-C4-C5	10.20	109.48	105.40
1	AA	738	C	C2-N3-C4	10.19	125.00	119.90
1	AA	818	G	C3'-C2'-C1'	-10.19	93.35	101.50
4	AD	30	G	C2-N3-C4	10.19	117.00	111.90
26	BB	761	A	C2-N3-C4	10.19	115.69	110.60
1	AA	1441	A	C5-N7-C8	10.19	108.99	103.90
1	AA	768	A	N9-C4-C5	10.18	109.87	105.80
26	BB	356	G	C2-N3-C4	10.18	116.99	111.90
26	BB	1817	G	C8-N9-C4	10.18	110.47	106.40
25	BA	75	G	C5-N7-C8	-10.18	99.21	104.30
26	BB	2771	C	N1-C2-O2	10.18	125.01	118.90
1	AA	370	C	C2-N3-C4	-10.18	114.81	119.90
4	AD	22	A	N1-C6-N6	-10.18	112.49	118.60
25	BA	112	G	N9-C4-C5	10.18	109.47	105.40
26	BB	966	G	C8-N9-C4	-10.18	102.33	106.40
1	AA	1212	U	O4'-C1'-N1	10.17	116.34	108.20
4	AD	36	A	N9-C4-C5	10.17	109.87	105.80
26	BB	614	A	N7-C8-N9	-10.17	108.71	113.80
1	AA	1169	A	N1-C6-N6	-10.17	112.50	118.60
26	BB	637	A	C5-N7-C8	-10.17	98.81	103.90
45	BU	99	ARG	NE-CZ-NH2	-10.17	115.22	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	117	G	N1-C6-O6	-10.17	113.80	119.90
1	AA	748	G	C2-N3-C4	10.17	116.98	111.90
1	AA	1249	C	C2-N3-C4	-10.17	114.82	119.90
1	AA	1440	U	N3-C2-O2	-10.17	115.08	122.20
26	BB	1211	C	N1-C2-O2	10.17	125.00	118.90
26	BB	2895	G	N3-C2-N2	-10.17	112.78	119.90
26	BB	2183	A	C8-N9-C4	-10.16	101.73	105.80
26	BB	2657	A	N1-C2-N3	-10.16	124.22	129.30
1	AA	1234	C	N3-C4-N4	10.16	125.11	118.00
18	AR	71	ARG	NE-CZ-NH2	10.16	125.38	120.30
26	BB	511	U	O4'-C1'-N1	10.16	116.33	108.20
26	BB	2228	G	C6-N1-C2	-10.16	119.00	125.10
3	AC	36	U	O4'-C1'-N1	10.16	116.33	108.20
26	BB	249	C	C5-C4-N4	-10.16	113.09	120.20
26	BB	1171	G	C6-N1-C2	-10.16	119.00	125.10
26	BB	2360	G	O4'-C1'-N9	10.16	116.33	108.20
3	AC	47	C	C3'-C2'-C1'	-10.16	93.37	101.50
26	BB	2315	G	C5-C6-O6	-10.16	122.50	128.60
26	BB	2677	G	N1-C6-O6	-10.16	113.81	119.90
26	BB	1620	G	C6-N1-C2	-10.15	119.01	125.10
3	AC	33	A	C2-N3-C4	10.15	115.67	110.60
26	BB	2035	G	N9-C4-C5	10.15	109.46	105.40
7	AG	71	PHE	CB-CG-CD1	-10.15	113.69	120.80
26	BB	1704	C	C1'-O4'-C4'	-10.15	101.78	109.90
26	BB	1845	G	O4'-C1'-N9	10.15	116.32	108.20
26	BB	2136	G	C2-N3-C4	10.15	116.97	111.90
1	AA	374	A	C8-N9-C4	-10.15	101.74	105.80
1	AA	1046	A	C4-C5-N7	-10.15	105.63	110.70
26	BB	1382	G	N3-C4-C5	-10.15	123.53	128.60
1	AA	860	A	N1-C6-N6	-10.14	112.51	118.60
26	BB	1099	G	N7-C8-N9	10.14	118.17	113.10
26	BB	2314	A	C5-C6-N1	10.14	122.77	117.70
1	AA	1463	U	N1-C2-O2	-10.14	115.70	122.80
26	BB	2221	G	C6-C5-N7	-10.14	124.31	130.40
26	BB	2432	A	C4-C5-C6	-10.14	111.93	117.00
26	BB	201	C	C6-N1-C2	-10.14	116.24	120.30
26	BB	659	G	C2-N3-C4	10.14	116.97	111.90
1	AA	103	U	C3'-C2'-C1'	10.14	109.61	101.50
1	AA	503	C	N3-C4-C5	-10.14	117.84	121.90
1	AA	520	A	N9-C4-C5	10.14	109.86	105.80
1	AA	665	A	O4'-C1'-N9	10.14	116.31	108.20
1	AA	899	C	O4'-C1'-N1	10.14	116.31	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	102	G	C4-C5-N7	-10.14	106.75	110.80
26	BB	1950	G	O4'-C4'-C3'	10.14	114.21	106.10
26	BB	2554	U	C5-C6-N1	-10.14	117.63	122.70
1	AA	1381	U	N3-C2-O2	-10.14	115.11	122.20
26	BB	1142	A	C8-N9-C4	-10.14	101.75	105.80
26	BB	603	A	N7-C8-N9	10.13	118.87	113.80
26	BB	1655	A	C5-C6-N1	10.13	122.77	117.70
26	BB	1710	G	C1'-O4'-C4'	-10.14	101.79	109.90
26	BB	2310	C	N3-C4-N4	10.13	125.09	118.00
26	BB	2424	C	C4-C5-C6	-10.13	112.33	117.40
26	BB	889	C	N1-C2-O2	10.13	124.98	118.90
26	BB	1147	A	N7-C8-N9	10.13	118.87	113.80
26	BB	1929	G	C2-N3-C4	10.13	116.97	111.90
26	BB	2014	A	C8-N9-C4	-10.13	101.75	105.80
1	AA	1334	G	C5-C6-O6	-10.13	122.52	128.60
6	AF	126	ARG	NE-CZ-NH1	-10.13	115.24	120.30
26	BB	186	G	N3-C4-C5	-10.13	123.54	128.60
2	AB	67	G	N3-C4-C5	-10.13	123.54	128.60
1	AA	897	C	N1-C2-O2	10.12	124.97	118.90
1	AA	506	G	C8-N9-C4	-10.12	102.35	106.40
26	BB	493	G	C6-N1-C2	-10.12	119.03	125.10
1	AA	507	C	N3-C4-C5	-10.12	117.85	121.90
1	AA	703	G	C8-N9-C4	-10.12	102.35	106.40
1	AA	1176	A	N9-C4-C5	-10.12	101.75	105.80
24	AX	68	ARG	NE-CZ-NH2	-10.12	115.24	120.30
26	BB	153	U	N1-C2-N3	10.12	120.97	114.90
26	BB	1133	A	C4-C5-N7	-10.12	105.64	110.70
26	BB	986	C	C6-N1-C2	-10.12	116.25	120.30
26	BB	1339	G	N9-C4-C5	10.12	109.45	105.40
26	BB	2816	G	N3-C2-N2	-10.12	112.82	119.90
26	BB	2141	G	O4'-C1'-N9	10.12	116.29	108.20
3	AC	23	C	N3-C4-N4	10.11	125.08	118.00
26	BB	1382	G	C2-N3-C4	10.12	116.96	111.90
26	BB	2824	C	C2-N3-C4	10.11	124.96	119.90
1	AA	1044	A	C2-N3-C4	10.11	115.66	110.60
2	AB	5	G	C8-N9-C4	-10.11	102.36	106.40
5	AE	212	TYR	CB-CG-CD1	-10.11	114.93	121.00
26	BB	759	G	N9-C4-C5	10.11	109.44	105.40
26	BB	1011	G	O4'-C1'-N9	10.11	116.29	108.20
26	BB	1172	C	N1-C2-N3	-10.11	112.12	119.20
1	AA	325	A	O4'-C4'-C3'	10.11	114.18	106.10
1	AA	768	A	O4'-C1'-N9	10.11	116.28	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2198	A	P-O3'-C3'	10.11	131.83	119.70
26	BB	2337	G	C6-C5-N7	-10.11	124.34	130.40
26	BB	2510	C	C2-N3-C4	-10.11	114.85	119.90
1	AA	515	G	C2-N3-C4	10.10	116.95	111.90
26	BB	1553	A	O4'-C1'-N9	10.10	116.28	108.20
26	BB	2597	G	N9-C4-C5	10.10	109.44	105.40
1	AA	377	G	C2-N3-C4	10.10	116.95	111.90
26	BB	1988	G	N7-C8-N9	-10.10	108.05	113.10
36	BL	74	TYR	CB-CG-CD1	-10.10	114.94	121.00
1	AA	670	G	N7-C8-N9	-10.10	108.05	113.10
26	BB	1467	U	O4'-C1'-N1	10.10	116.28	108.20
26	BB	2477	U	C3'-C2'-C1'	10.10	109.58	101.50
9	AI	59	TYR	CB-CG-CD2	-10.09	114.94	121.00
26	BB	380	G	C8-N9-C4	-10.09	102.36	106.40
26	BB	1964	G	N7-C8-N9	10.09	118.15	113.10
1	AA	47	C	C4-C5-C6	10.09	122.45	117.40
26	BB	186	G	O4'-C1'-N9	10.09	116.27	108.20
1	AA	310	G	C8-N9-C4	-10.09	102.36	106.40
41	BQ	111	ARG	NE-CZ-NH1	10.09	125.34	120.30
1	AA	221	C	O4'-C1'-N1	10.09	116.27	108.20
1	AA	329	A	C8-N9-C4	-10.09	101.77	105.80
1	AA	930	C	N3-C4-C5	-10.09	117.86	121.90
1	AA	934	C	C2-N3-C4	10.09	124.94	119.90
1	AA	1464	U	C2-N3-C4	-10.09	120.95	127.00
26	BB	2013	A	N9-C4-C5	-10.09	101.77	105.80
26	BB	2162	G	C4-C5-N7	-10.09	106.77	110.80
26	BB	2588	G	N9-C4-C5	10.09	109.44	105.40
1	AA	1537	U	O4'-C1'-C2'	-10.09	95.72	105.80
26	BB	467	G	C8-N9-C4	-10.08	102.37	106.40
1	AA	567	G	C2-N3-C4	10.08	116.94	111.90
26	BB	2295	C	C4'-C3'-C2'	-10.08	92.52	102.60
31	BG	132	ARG	NE-CZ-NH1	-10.08	115.26	120.30
26	BB	489	G	N7-C8-N9	10.08	118.14	113.10
1	AA	1453	G	C1'-O4'-C4'	-10.07	101.84	109.90
25	BA	116	G	O4'-C1'-N9	10.07	116.26	108.20
26	BB	619	G	C5-C6-N1	10.07	116.54	111.50
26	BB	1988	G	C6-C5-N7	10.07	136.44	130.40
26	BB	2534	A	C5-C6-N1	10.07	122.73	117.70
1	AA	1108	G	C2-N3-C4	10.07	116.93	111.90
25	BA	75	G	C4-C5-C6	10.07	124.84	118.80
1	AA	620	C	C5-C6-N1	10.07	126.03	121.00
1	AA	739	C	C5-C6-N1	10.07	126.03	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1063	C	N3-C4-N4	10.07	125.05	118.00
1	AA	724	G	C4-C5-N7	10.07	114.83	110.80
26	BB	1849	G	N9-C4-C5	10.07	109.43	105.40
26	BB	2438	U	O4'-C1'-N1	10.06	116.25	108.20
26	BB	2298	A	N7-C8-N9	10.06	118.83	113.80
1	AA	816	A	C8-N9-C4	-10.06	101.78	105.80
26	BB	1947	C	O4'-C1'-N1	10.06	116.25	108.20
1	AA	6	G	O4'-C1'-N9	10.06	116.25	108.20
1	AA	1306	A	N1-C6-N6	10.06	124.64	118.60
26	BB	1619	G	C4-C5-N7	-10.06	106.78	110.80
26	BB	2561	U	O4'-C1'-N1	10.06	116.25	108.20
26	BB	2770	G	C4-C5-N7	10.06	114.82	110.80
1	AA	191	G	O4'-C1'-N9	10.05	116.24	108.20
19	AS	14	ARG	NE-CZ-NH1	10.06	125.33	120.30
26	BB	2397	G	C2-N3-C4	10.06	116.93	111.90
1	AA	957	U	C1'-O4'-C4'	10.05	117.94	109.90
26	BB	2130	U	C1'-O4'-C4'	-10.05	101.86	109.90
26	BB	2355	G	N3-C4-C5	-10.05	123.57	128.60
1	AA	451	A	N1-C6-N6	10.05	124.63	118.60
1	AA	500	G	C4-C5-C6	10.05	124.83	118.80
26	BB	1927	A	C8-N9-C4	-10.05	101.78	105.80
26	BB	2322	A	N7-C8-N9	10.05	118.83	113.80
26	BB	647	G	N9-C4-C5	10.05	109.42	105.40
1	AA	1542	A	C4-C5-C6	-10.05	111.98	117.00
26	BB	1095	A	C3'-C2'-C1'	10.05	109.54	101.50
26	BB	1903	G	C2-N3-C4	10.05	116.92	111.90
26	BB	541	A	O4'-C1'-N9	-10.05	100.16	108.20
26	BB	1117	C	C2-N3-C4	-10.05	114.88	119.90
26	BB	2023	C	N1-C2-O2	10.05	124.93	118.90
26	BB	2496	C	O4'-C1'-N1	10.05	116.24	108.20
26	BB	2599	G	C6-N1-C2	-10.05	119.07	125.10
1	AA	391	G	N3-C4-C5	-10.04	123.58	128.60
1	AA	714	G	C4-C5-N7	10.04	114.82	110.80
2	AB	35	C	C3'-C2'-C1'	10.04	109.54	101.50
26	BB	2888	C	O4'-C1'-N1	10.04	116.23	108.20
26	BB	30	G	C3'-C2'-C1'	-10.04	93.47	101.50
26	BB	1041	G	O4'-C1'-N9	10.04	116.23	108.20
26	BB	2892	G	C5-C6-O6	-10.04	122.58	128.60
26	BB	267	C	C6-N1-C2	-10.04	116.28	120.30
26	BB	2088	A	N1-C6-N6	-10.04	112.58	118.60
1	AA	513	C	C5-C6-N1	10.04	126.02	121.00
1	AA	124	C	C5'-C4'-O4'	10.03	121.14	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	528	C	N3-C4-C5	-10.03	117.89	121.90
1	AA	1208	C	N3-C4-C5	10.04	125.91	121.90
26	BB	544	C	N1-C2-O2	10.03	124.92	118.90
26	BB	1836	C	N1-C2-O2	10.03	124.92	118.90
26	BB	2569	G	C5-C6-O6	-10.03	122.58	128.60
26	BB	2691	C	O4'-C1'-N1	10.03	116.22	108.20
55	B4	5	ARG	NE-CZ-NH1	10.03	125.32	120.30
1	AA	294	U	C2-N3-C4	-10.03	120.98	127.00
1	AA	1303	C	N3-C4-N4	10.03	125.02	118.00
26	BB	2181	U	O4'-C1'-N1	10.03	116.22	108.20
1	AA	1357	A	O4'-C1'-N9	10.03	116.22	108.20
1	AA	1413	A	N1-C2-N3	-10.03	124.29	129.30
4	AD	30	G	C4-C5-N7	-10.03	106.79	110.80
26	BB	364	C	C4-C5-C6	-10.03	112.39	117.40
26	BB	994	C	O4'-C1'-N1	10.03	116.22	108.20
26	BB	2440	C	O4'-C1'-N1	10.03	116.22	108.20
26	BB	2442	C	N1-C2-O2	10.03	124.92	118.90
26	BB	2890	G	N3-C4-N9	10.03	132.02	126.00
26	BB	372	G	C6-N1-C2	-10.02	119.08	125.10
26	BB	403	U	C6-N1-C2	-10.02	114.99	121.00
26	BB	1477	A	C8-N9-C4	-10.02	101.79	105.80
26	BB	1584	U	C5-C4-O4	-10.02	119.89	125.90
25	BA	81	G	C5-C6-O6	-10.02	122.59	128.60
26	BB	720	U	C5-C6-N1	-10.02	117.69	122.70
26	BB	1573	G	N3-C4-C5	-10.02	123.59	128.60
26	BB	1928	A	C4-C5-C6	10.02	122.01	117.00
1	AA	371	A	O4'-C1'-N9	-10.02	100.19	108.20
26	BB	683	U	N1-C2-N3	10.02	120.91	114.90
26	BB	1846	G	N9-C4-C5	10.02	109.41	105.40
26	BB	2021	C	N1-C2-O2	10.02	124.91	118.90
1	AA	209	U	C5-C6-N1	-10.01	117.69	122.70
26	BB	171	U	N3-C2-O2	-10.01	115.19	122.20
26	BB	1947	C	N3-C2-O2	-10.01	114.89	121.90
26	BB	2108	A	N9-C4-C5	10.01	109.81	105.80
1	AA	147	G	O4'-C1'-N9	10.01	116.21	108.20
1	AA	1016	A	C8-N9-C4	-10.01	101.80	105.80
26	BB	1555	G	O4'-C1'-N9	10.01	116.21	108.20
1	AA	651	C	C2-N3-C4	10.01	124.90	119.90
1	AA	745	G	C8-N9-C4	-10.01	102.40	106.40
26	BB	275	C	C6-N1-C2	-10.01	116.30	120.30
26	BB	1814	G	C6-N1-C2	-10.01	119.09	125.10
26	BB	2052	A	O4'-C1'-N9	10.01	116.21	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	238	A	C5-C6-N1	10.01	122.70	117.70
25	BA	10	G	N3-C4-N9	-10.01	120.00	126.00
26	BB	775	G	C6-N1-C2	-10.01	119.10	125.10
26	BB	988	A	C1'-O4'-C4'	10.01	117.91	109.90
26	BB	1436	G	C4-C5-N7	-10.01	106.80	110.80
26	BB	1891	G	N3-C4-C5	-10.01	123.60	128.60
26	BB	2610	C	N3-C2-O2	-10.01	114.90	121.90
55	B4	27	ARG	NE-CZ-NH2	-10.01	115.30	120.30
1	AA	208	U	O4'-C1'-N1	10.00	116.20	108.20
1	AA	774	G	N3-C2-N2	-10.00	112.90	119.90
1	AA	1300	G	N9-C4-C5	10.00	109.40	105.40
26	BB	1337	G	N7-C8-N9	10.00	118.10	113.10
26	BB	1896	G	C6-C5-N7	-10.00	124.40	130.40
50	BZ	56	ARG	NE-CZ-NH2	10.00	125.30	120.30
26	BB	2792	A	N9-C1'-C2'	-10.00	101.00	112.00
1	AA	235	C	C5-C4-N4	-10.00	113.20	120.20
26	BB	1595	C	C4-C5-C6	10.00	122.40	117.40
26	BB	2205	A	C8-N9-C4	-10.00	101.80	105.80
26	BB	2220	U	N1-C1'-C2'	-10.00	101.00	112.00
26	BB	1380	G	O4'-C1'-N9	10.00	116.20	108.20
26	BB	2618	G	N7-C8-N9	10.00	118.10	113.10
1	AA	350	G	C1'-O4'-C4'	-9.99	101.90	109.90
26	BB	855	G	N3-C2-N2	9.99	126.90	119.90
26	BB	1197	G	O4'-C1'-N9	9.99	116.20	108.20
26	BB	1527	G	C5-C6-O6	9.99	134.60	128.60
26	BB	2253	G	C8-N9-C4	-9.99	102.40	106.40
26	BB	2442	C	O4'-C1'-N1	9.99	116.20	108.20
1	AA	830	G	C5-C6-N1	9.99	116.50	111.50
1	AA	1108	G	N1-C2-N3	-9.99	117.91	123.90
26	BB	1746	A	C8-N9-C4	-9.99	101.80	105.80
26	BB	1970	A	N1-C6-N6	-9.99	112.60	118.60
26	BB	2484	G	N3-C4-C5	-9.99	123.60	128.60
1	AA	352	C	N3-C2-O2	-9.99	114.91	121.90
26	BB	1770	G	C4-C5-C6	9.99	124.80	118.80
1	AA	191	G	C6-C5-N7	-9.99	124.41	130.40
1	AA	984	C	C6-N1-C2	-9.99	116.30	120.30
25	BA	94	A	C4'-C3'-C2'	-9.99	92.61	102.60
1	AA	123	U	C5-C6-N1	-9.99	117.71	122.70
1	AA	655	A	N7-C8-N9	9.99	118.79	113.80
26	BB	674	G	C8-N9-C4	-9.99	102.41	106.40
26	BB	2133	G	C3'-C2'-C1'	9.99	109.49	101.50
1	AA	558	G	C4-C5-N7	-9.98	106.81	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	573	A	C4-C5-N7	9.98	115.69	110.70
26	BB	2190	G	C4-C5-N7	-9.98	106.81	110.80
26	BB	1139	G	C6-N1-C2	-9.98	119.11	125.10
1	AA	527	7MG	P-O3'-C3'	9.98	131.67	119.70
26	BB	1477	A	C3'-C2'-C1'	-9.98	93.52	101.50
26	BB	1616	A	O4'-C1'-N9	9.98	116.18	108.20
26	BB	2597	G	N1-C6-O6	-9.98	113.91	119.90
1	AA	63	C	N3-C4-N4	9.97	124.98	118.00
26	BB	218	A	C4-C5-C6	-9.97	112.01	117.00
26	BB	899	A	N9-C4-C5	9.97	109.79	105.80
26	BB	1896	G	N7-C8-N9	9.97	118.09	113.10
3	AC	46	C	O4'-C1'-N1	9.97	116.18	108.20
26	BB	537	G	C2-N3-C4	9.97	116.89	111.90
26	BB	1099	G	N9-C4-C5	9.97	109.39	105.40
26	BB	2337	G	N1-C2-N3	9.97	129.88	123.90
1	AA	129	A	C5-C6-N1	9.97	122.68	117.70
26	BB	409	G	N9-C4-C5	9.97	109.39	105.40
26	BB	1433	A	N9-C4-C5	-9.97	101.81	105.80
26	BB	1654	A	C5'-C4'-O4'	9.97	121.06	109.10
26	BB	2203	U	O4'-C1'-N1	9.97	116.17	108.20
26	BB	2287	A	P-O3'-C3'	9.97	131.66	119.70
1	AA	185	U	C5-C4-O4	-9.96	119.92	125.90
26	BB	877	A	C8-N9-C4	-9.97	101.81	105.80
1	AA	361	G	C5-C6-N1	9.96	116.48	111.50
26	BB	467	G	C4-C5-C6	9.96	124.78	118.80
26	BB	2439	A	N1-C2-N3	-9.96	124.32	129.30
1	AA	100	G	C5-C6-O6	9.96	134.58	128.60
26	BB	359	G	C5-N7-C8	-9.96	99.32	104.30
26	BB	496	G	N3-C4-C5	-9.96	123.62	128.60
26	BB	560	C	C6-N1-C2	-9.96	116.32	120.30
26	BB	2099	U	N1-C2-O2	-9.96	115.83	122.80
26	BB	2721	A	N7-C8-N9	-9.96	108.82	113.80
1	AA	799	G	C5-C6-O6	-9.95	122.63	128.60
2	AB	33	U	N3-C2-O2	-9.95	115.23	122.20
26	BB	1297	C	C6-N1-C2	9.96	124.28	120.30
26	BB	1323	C	O4'-C4'-C3'	9.95	114.06	106.10
26	BB	1648	U	N3-C4-O4	9.95	126.37	119.40
26	BB	2117	A	C4-C5-C6	-9.96	112.02	117.00
26	BB	2308	G	C4-C5-N7	-9.95	106.82	110.80
1	AA	525	C	N3-C4-C5	-9.95	117.92	121.90
1	AA	339	C	N3-C4-C5	-9.95	117.92	121.90
1	AA	780	A	N9-C4-C5	9.95	109.78	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	69	G	N1-C2-N3	-9.95	117.93	123.90
26	BB	416	U	O4'-C1'-N1	9.95	116.16	108.20
26	BB	1082	U	C5'-C4'-O4'	9.95	121.04	109.10
26	BB	2018	G	C2-N3-C4	9.95	116.88	111.90
1	AA	357	G	N3-C4-C5	-9.95	123.62	128.60
26	BB	1439	A	C5-C6-N6	9.95	131.66	123.70
26	BB	2585	U	N1-C2-O2	9.95	129.76	122.80
1	AA	362	G	C6-N1-C2	-9.95	119.13	125.10
26	BB	539	G	N1-C2-N3	9.95	129.87	123.90
26	BB	731	C	C4-C5-C6	-9.95	112.43	117.40
26	BB	2085	U	O4'-C1'-N1	9.95	116.16	108.20
1	AA	127	G	O4'-C1'-N9	9.95	116.16	108.20
1	AA	570	G	C8-N9-C4	-9.95	102.42	106.40
1	AA	581	G	N7-C8-N9	9.95	118.07	113.10
26	BB	973	A	C4-C5-N7	-9.95	105.73	110.70
26	BB	1025	G	O4'-C1'-N9	9.95	116.16	108.20
26	BB	2349	G	N3-C4-C5	-9.95	123.63	128.60
26	BB	1890	A	C8-N9-C4	-9.94	101.82	105.80
26	BB	2360	G	C2-N3-C4	9.94	116.87	111.90
26	BB	668	A	C6-N1-C2	-9.94	112.63	118.60
26	BB	674	G	N1-C2-N3	-9.94	117.94	123.90
26	BB	1429	G	N3-C4-C5	-9.94	123.63	128.60
26	BB	2243	U	C5-C6-N1	-9.94	117.73	122.70
25	BA	16	G	C8-N9-C4	-9.94	102.42	106.40
26	BB	2627	G	N9-C1'-C2'	-9.94	101.07	112.00
1	AA	641	U	N3-C2-O2	-9.94	115.25	122.20
1	AA	838	G	C8-N9-C4	-9.94	102.43	106.40
1	AA	1021	A	C8-N9-C4	-9.94	101.83	105.80
1	AA	1041	G	C5-C6-O6	-9.94	122.64	128.60
1	AA	1390	U	N1-C2-N3	9.94	120.86	114.90
26	BB	515	A	C4-C5-C6	9.94	121.97	117.00
26	BB	798	G	C8-N9-C4	-9.94	102.43	106.40
26	BB	973	A	O4'-C1'-N9	9.94	116.15	108.20
1	AA	1099	G	N1-C2-N3	-9.93	117.94	123.90
26	BB	325	G	N7-C8-N9	9.93	118.07	113.10
26	BB	1055	G	C6-C5-N7	9.93	136.36	130.40
26	BB	1279	G	O4'-C1'-N9	9.93	116.14	108.20
1	AA	15	G	C5-C6-O6	-9.93	122.64	128.60
1	AA	1537	U	C3'-C2'-C1'	9.93	109.44	101.50
4	AD	68	C	C6-N1-C2	9.93	124.27	120.30
26	BB	2152	G	C5-C6-O6	-9.93	122.64	128.60
26	BB	2751	G	N3-C4-C5	-9.93	123.63	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2806	C	O4'-C1'-N1	9.93	116.14	108.20
1	AA	1167	A	N7-C8-N9	9.93	118.76	113.80
1	AA	1278	G	O4'-C1'-N9	9.93	116.14	108.20
1	AA	1487	G	C8-N9-C4	-9.93	102.43	106.40
26	BB	54	G	C8-N9-C4	-9.93	102.43	106.40
26	BB	1568	G	C5-N7-C8	-9.93	99.33	104.30
26	BB	1973	G	C6-C5-N7	-9.93	124.44	130.40
1	AA	654	G	C6-C5-N7	9.93	136.36	130.40
24	AX	68	ARG	NE-CZ-NH1	9.93	125.26	120.30
26	BB	2277	G	N3-C4-C5	-9.93	123.64	128.60
1	AA	1272	G	C5-C6-O6	-9.92	122.64	128.60
26	BB	22	C	O4'-C1'-N1	9.92	116.14	108.20
1	AA	100	G	C8-N9-C4	-9.92	102.43	106.40
1	AA	128	G	O4'-C1'-N9	9.92	116.14	108.20
26	BB	7	G	N1-C2-N3	-9.92	117.95	123.90
26	BB	948	C	N3-C4-N4	9.92	124.95	118.00
26	BB	1249	U	O4'-C1'-N1	9.92	116.14	108.20
26	BB	1489	C	C5-C6-N1	9.92	125.96	121.00
26	BB	1511	G	C6-N1-C2	-9.92	119.15	125.10
26	BB	1645	G	C6-N1-C2	-9.92	119.15	125.10
26	BB	1701	A	C5-C6-N1	9.92	122.66	117.70
1	AA	836	G	C8-N9-C4	-9.92	102.43	106.40
26	BB	103	A	N7-C8-N9	9.92	118.76	113.80
1	AA	1135	U	C5-C6-N1	-9.92	117.74	122.70
1	AA	421	U	O4'-C1'-N1	9.91	116.13	108.20
1	AA	1361	G	N7-C8-N9	9.91	118.06	113.10
1	AA	1504	G	C6-N1-C2	-9.91	119.15	125.10
1	AA	521	G	N3-C2-N2	-9.91	112.96	119.90
26	BB	271	G	C4-C5-C6	9.91	124.75	118.80
26	BB	548	G	N7-C8-N9	9.91	118.06	113.10
53	B2	49	ARG	NE-CZ-NH2	-9.91	115.34	120.30
1	AA	293	G	C6-N1-C2	9.91	131.05	125.10
1	AA	676	A	C6-N1-C2	-9.91	112.65	118.60
26	BB	1446	C	N1-C2-O2	9.91	124.85	118.90
26	BB	2831	G	C8-N9-C4	-9.91	102.44	106.40
1	AA	374	A	N7-C8-N9	9.91	118.75	113.80
15	AO	60	PHE	CB-CG-CD1	-9.91	113.87	120.80
1	AA	1482	G	N3-C4-N9	9.90	131.94	126.00
26	BB	458	G	N9-C4-C5	9.90	109.36	105.40
26	BB	617	G	C8-N9-C4	-9.90	102.44	106.40
25	BA	71	C	N3-C4-C5	9.90	125.86	121.90
26	BB	19	A	C4'-C3'-C2'	-9.90	92.70	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1332	G	O4'-C1'-N9	9.90	116.12	108.20
26	BB	1696	G	O4'-C4'-C3'	9.90	114.02	106.10
26	BB	1186	G	C4-C5-N7	-9.90	106.84	110.80
26	BB	1201	U	O4'-C1'-N1	9.90	116.12	108.20
26	BB	2006	C	N3-C4-N4	9.90	124.93	118.00
26	BB	1824	G	C4-C5-N7	-9.90	106.84	110.80
1	AA	69	G	C6-C5-N7	9.90	136.34	130.40
1	AA	615	G	C5-C6-N1	9.90	116.45	111.50
1	AA	860	A	N9-C4-C5	9.90	109.76	105.80
26	BB	863	A	C8-N9-C4	-9.90	101.84	105.80
26	BB	222	A	O4'-C1'-N9	9.89	116.12	108.20
26	BB	2136	G	N3-C4-C5	-9.89	123.65	128.60
26	BB	564	C	N3-C2-O2	-9.89	114.97	121.90
26	BB	840	C	N3-C4-C5	-9.89	117.94	121.90
26	BB	1250	G	C6-N1-C2	-9.89	119.17	125.10
26	BB	2726	A	O4'-C1'-N9	9.89	116.11	108.20
1	AA	771	G	C2-N3-C4	9.89	116.84	111.90
1	AA	1300	G	N3-C4-C5	-9.89	123.66	128.60
26	BB	1700	A	N1-C6-N6	9.89	124.53	118.60
50	BZ	56	ARG	NE-CZ-NH1	-9.89	115.36	120.30
26	BB	1834	U	N3-C2-O2	-9.88	115.28	122.20
26	BB	432	A	C2-N3-C4	9.88	115.54	110.60
26	BB	498	G	O4'-C1'-N9	9.88	116.11	108.20
26	BB	693	A	C2-N3-C4	9.88	115.54	110.60
26	BB	1227	G	C5-C6-N1	9.88	116.44	111.50
26	BB	1255	U	N3-C2-O2	-9.88	115.28	122.20
1	AA	102	G	C4-C5-N7	-9.88	106.85	110.80
1	AA	238	A	N1-C6-N6	-9.88	112.67	118.60
1	AA	714	G	N9-C4-C5	-9.88	101.45	105.40
26	BB	1613	G	C4-C5-C6	9.88	124.73	118.80
1	AA	132	C	N1-C1'-C2'	-9.88	101.14	112.00
26	BB	2264	C	N1-C2-O2	9.87	124.83	118.90
26	BB	2494	G	C8-N9-C4	-9.87	102.45	106.40
1	AA	193	C	N1-C1'-C2'	-9.87	101.14	112.00
1	AA	646	G	C5'-C4'-O4'	9.87	120.95	109.10
26	BB	221	A	C8-N9-C4	-9.87	101.85	105.80
26	BB	1576	U	C2-N3-C4	-9.87	121.08	127.00
26	BB	1844	C	C4-C5-C6	-9.87	112.47	117.40
26	BB	2051	A	O4'-C1'-N9	9.87	116.10	108.20
1	AA	1130	A	N1-C6-N6	-9.87	112.68	118.60
26	BB	702	U	C5-C6-N1	-9.87	117.77	122.70
1	AA	262	A	N9-C4-C5	9.87	109.75	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	582	C	O4'-C1'-N1	9.87	116.09	108.20
26	BB	387	U	C5-C4-O4	-9.87	119.98	125.90
26	BB	1948	G	N3-C4-C5	-9.87	123.67	128.60
26	BB	576	U	O4'-C1'-N1	9.87	116.09	108.20
26	BB	683	U	C6-N1-C2	-9.87	115.08	121.00
26	BB	791	C	O4'-C1'-N1	9.86	116.09	108.20
26	BB	827	U	N1-C2-N3	9.86	120.82	114.90
26	BB	1173	U	C6-N1-C2	-9.86	115.08	121.00
1	AA	848	C	C6-N1-C2	-9.86	116.36	120.30
1	AA	848	C	N3-C4-C5	-9.86	117.95	121.90
26	BB	1186	G	O4'-C4'-C3'	9.86	113.99	106.10
26	BB	1228	G	C8-N9-C4	9.86	110.34	106.40
26	BB	2474	U	O4'-C1'-N1	9.86	116.09	108.20
1	AA	26	A	N3-C4-C5	-9.86	119.90	126.80
1	AA	124	C	N3-C4-N4	9.86	124.90	118.00
1	AA	142	G	C5-C6-O6	-9.86	122.68	128.60
25	BA	69	G	C4-C5-N7	9.86	114.74	110.80
1	AA	1476	A	C4-C5-C6	9.86	121.93	117.00
26	BB	257	C	O4'-C1'-N1	9.86	116.09	108.20
26	BB	1200	C	O4'-C1'-N1	9.86	116.09	108.20
26	BB	2040	G	N9-C1'-C2'	-9.86	101.16	112.00
26	BB	2574	G	C5-C6-O6	-9.86	122.68	128.60
1	AA	474	G	C2-N3-C4	9.86	116.83	111.90
26	BB	319	G	N7-C8-N9	9.86	118.03	113.10
1	AA	413	G	C5-N7-C8	-9.86	99.37	104.30
1	AA	980	C	C4-C5-C6	-9.86	112.47	117.40
26	BB	383	C	N1-C2-O2	9.86	124.81	118.90
26	BB	409	G	N3-C4-C5	-9.86	123.67	128.60
26	BB	2285	C	N3-C4-C5	-9.86	117.96	121.90
26	BB	2337	G	N9-C4-C5	-9.86	101.46	105.40
26	BB	1272	A	N1-C2-N3	-9.85	124.37	129.30
26	BB	361	G	N3-C4-C5	-9.85	123.67	128.60
26	BB	1463	C	O4'-C1'-N1	9.85	116.08	108.20
26	BB	1658	C	C6-N1-C2	9.85	124.24	120.30
26	BB	1897	G	N3-C2-N2	-9.85	113.00	119.90
1	AA	979	C	N3-C4-C5	-9.85	117.96	121.90
26	BB	1052	C	C5-C4-N4	-9.85	113.31	120.20
26	BB	2225	A	C5-C6-N1	9.85	122.62	117.70
26	BB	1180	U	C5-C4-O4	-9.85	119.99	125.90
26	BB	2729	G	C4-C5-N7	-9.85	106.86	110.80
26	BB	2015	A	C5-N7-C8	-9.85	98.98	103.90
26	BB	2266	A	C2-N3-C4	9.85	115.52	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2362	C	C5-C6-N1	9.85	125.92	121.00
26	BB	2391	G	O4'-C1'-N9	9.85	116.08	108.20
39	BO	6	ARG	NE-CZ-NH2	-9.85	115.38	120.30
41	BQ	102	ARG	NE-CZ-NH2	-9.85	115.38	120.30
1	AA	121	U	O4'-C1'-N1	9.84	116.07	108.20
1	AA	142	G	C4'-C3'-C2'	-9.84	92.76	102.60
26	BB	76	C	N3-C4-C5	-9.84	117.96	121.90
30	BF	114	ARG	NE-CZ-NH1	9.84	125.22	120.30
1	AA	1093	A	C2-N3-C4	9.84	115.52	110.60
1	AA	1250	A	O4'-C1'-N9	9.84	116.07	108.20
2	AB	73	G	C4'-C3'-C2'	-9.84	92.76	102.60
26	BB	1525	A	O4'-C1'-N9	9.84	116.07	108.20
26	BB	1697	G	N3-C4-C5	-9.84	123.68	128.60
26	BB	1907	G	N3-C4-C5	-9.84	123.68	128.60
26	BB	2631	G	C2-N3-C4	9.84	116.82	111.90
1	AA	82	G	N3-C4-C5	-9.83	123.68	128.60
1	AA	997	U	O4'-C1'-N1	9.83	116.07	108.20
1	AA	1334	G	N3-C4-C5	-9.83	123.68	128.60
1	AA	1338	G	C2-N3-C4	9.83	116.82	111.90
26	BB	456	C	O4'-C1'-N1	9.83	116.07	108.20
26	BB	1265	A	C2-N3-C4	9.83	115.52	110.60
26	BB	2748	A	C2-N3-C4	9.83	115.52	110.60
26	BB	2781	A	N1-C6-N6	-9.83	112.70	118.60
56	B5	12	ARG	NE-CZ-NH2	9.83	125.22	120.30
1	AA	1423	G	C2-N3-C4	9.83	116.81	111.90
26	BB	207	A	N3-C4-C5	-9.83	119.92	126.80
26	BB	1740	G	N3-C4-C5	-9.83	123.69	128.60
26	BB	2632	A	N1-C2-N3	-9.83	124.39	129.30
1	AA	431	A	C8-N9-C4	-9.82	101.87	105.80
26	BB	1477	A	N1-C2-N3	-9.82	124.39	129.30
26	BB	2382	G	N7-C8-N9	9.82	118.01	113.10
26	BB	126	A	C1'-O4'-C4'	-9.82	102.04	109.90
26	BB	1744	A	O4'-C1'-N9	9.82	116.06	108.20
26	BB	2830	C	C5-C6-N1	9.82	125.91	121.00
26	BB	573	U	C4'-C3'-C2'	-9.82	92.78	102.60
26	BB	2362	C	C2-N3-C4	9.82	124.81	119.90
17	AQ	60	ARG	NE-CZ-NH1	9.81	125.21	120.30
26	BB	213	A	N7-C8-N9	9.81	118.71	113.80
26	BB	485	C	C2-N3-C4	9.81	124.81	119.90
1	AA	484	G	N1-C6-O6	9.81	125.79	119.90
26	BB	333	G	C4-C5-N7	-9.81	106.88	110.80
26	BB	361	G	C5-C6-N1	-9.81	106.59	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1552	A	P-O3'-C3'	9.81	131.47	119.70
26	BB	1567	G	O4'-C1'-N9	9.81	116.05	108.20
26	BB	2610	C	N3-C4-C5	-9.81	117.97	121.90
36	BL	35	ARG	NE-CZ-NH2	-9.81	115.39	120.30
1	AA	153	C	C4-C5-C6	-9.81	112.50	117.40
1	AA	547	A	C4-C5-N7	-9.81	105.80	110.70
26	BB	620	G	N1-C6-O6	-9.81	114.02	119.90
1	AA	926	G	C4-C5-N7	-9.81	106.88	110.80
1	AA	1214	C	C6-N1-C2	-9.81	116.38	120.30
26	BB	1719	G	O4'-C1'-N9	9.81	116.05	108.20
26	BB	1816	C	C3'-C2'-C1'	9.81	109.34	101.50
1	AA	703	G	C4-C5-N7	-9.80	106.88	110.80
1	AA	973	G	C5-N7-C8	9.80	109.20	104.30
26	BB	270	A	N7-C8-N9	9.80	118.70	113.80
26	BB	979	A	C8-N9-C4	9.80	109.72	105.80
26	BB	1941	C	O4'-C1'-N1	9.80	116.04	108.20
26	BB	579	G	C5-N7-C8	-9.80	99.40	104.30
26	BB	1123	C	N3-C2-O2	-9.80	115.04	121.90
26	BB	1014	A	C8-N9-C4	-9.80	101.88	105.80
26	BB	2714	G	N7-C8-N9	9.80	118.00	113.10
1	AA	654	G	N3-C4-N9	-9.80	120.12	126.00
26	BB	2625	G	N7-C8-N9	9.80	118.00	113.10
1	AA	653	U	N3-C4-O4	9.80	126.26	119.40
1	AA	1392	G	C1'-O4'-C4'	-9.79	102.06	109.90
26	BB	1031	G	N3-C4-C5	-9.80	123.70	128.60
26	BB	985	C	O4'-C1'-N1	9.79	116.03	108.20
1	AA	773	G	N3-C2-N2	-9.79	113.05	119.90
26	BB	1826	G	C5-C6-N1	9.79	116.40	111.50
26	BB	2225	A	C4-C5-C6	-9.79	112.10	117.00
26	BB	2626	C	N1-C2-O2	9.79	124.78	118.90
26	BB	2865	U	C2-N3-C4	-9.79	121.13	127.00
1	AA	539	A	N7-C8-N9	9.79	118.69	113.80
1	AA	1285	A	N7-C8-N9	-9.79	108.91	113.80
1	AA	1319	A	C4-C5-N7	9.79	115.59	110.70
1	AA	1412	C	C2-N3-C4	-9.79	115.01	119.90
26	BB	90	U	N1-C2-N3	9.79	120.77	114.90
26	BB	1791	A	C5-N7-C8	9.79	108.80	103.90
26	BB	1887	C	C5'-C4'-O4'	9.79	120.85	109.10
26	BB	1357	C	N3-C2-O2	-9.79	115.05	121.90
26	BB	1927	A	O4'-C1'-N9	9.79	116.03	108.20
53	B2	63	ARG	NE-CZ-NH2	-9.79	115.41	120.30
1	AA	343	U	O4'-C1'-N1	9.78	116.03	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	744	C	O4'-C1'-N1	9.79	116.03	108.20
1	AA	1282	C	O4'-C1'-N1	9.78	116.03	108.20
2	AB	63	C	O4'-C1'-N1	9.79	116.03	108.20
26	BB	1171	G	C4-C5-N7	-9.79	106.89	110.80
26	BB	2688	G	C6-N1-C2	-9.78	119.23	125.10
1	AA	292	G	C5-C6-N1	9.78	116.39	111.50
26	BB	254	G	C4-C5-C6	9.78	124.67	118.80
4	AD	19	G	C2-N3-C4	-9.78	107.01	111.90
1	AA	708	C	C2-N3-C4	-9.78	115.01	119.90
26	BB	1083	U	C2-N3-C4	-9.78	121.13	127.00
26	BB	1385	A	C8-N9-C4	-9.78	101.89	105.80
41	BQ	16	ARG	NE-CZ-NH1	-9.78	115.41	120.30
1	AA	88	U	O4'-C1'-N1	9.78	116.02	108.20
1	AA	725	G	C8-N9-C4	-9.78	102.49	106.40
26	BB	1619	G	C6-N1-C2	-9.78	119.23	125.10
1	AA	1080	A	C8-N9-C4	-9.77	101.89	105.80
1	AA	1523	G	C5'-C4'-O4'	9.77	120.83	109.10
25	BA	107	G	C8-N9-C4	-9.77	102.49	106.40
3	AC	50	U	N1-C2-O2	9.77	129.64	122.80
26	BB	283	G	N9-C4-C5	9.77	109.31	105.40
26	BB	1157	G	N3-C4-N9	9.77	131.86	126.00
26	BB	1349	C	O4'-C1'-N1	9.77	116.02	108.20
26	BB	1441	G	O4'-C1'-N9	9.77	116.02	108.20
26	BB	1813	G	N3-C2-N2	9.77	126.74	119.90
26	BB	1861	G	N3-C4-C5	-9.77	123.72	128.60
26	BB	2814	A	O4'-C1'-N9	9.77	116.02	108.20
1	AA	1048	G	N3-C2-N2	-9.77	113.06	119.90
26	BB	770	G	C4-C5-N7	-9.77	106.89	110.80
26	BB	1459	G	C4-C5-C6	-9.77	112.94	118.80
26	BB	2383	G	C8-N9-C4	-9.77	102.49	106.40
26	BB	1539	U	C5-C6-N1	-9.77	117.82	122.70
26	BB	2455	G	N7-C8-N9	9.77	117.98	113.10
28	BD	247	TRP	CE2-CD2-CG	9.77	115.11	107.30
26	BB	2510	C	O4'-C1'-N1	9.77	116.01	108.20
1	AA	200	G	C5-N7-C8	-9.76	99.42	104.30
26	BB	981	A	O4'-C1'-N9	9.76	116.01	108.20
26	BB	1580	A	C5-C6-N1	9.76	122.58	117.70
26	BB	1732	C	N1-C2-O2	9.76	124.76	118.90
26	BB	2376	A	C5-N7-C8	-9.76	99.02	103.90
1	AA	670	G	C8-N9-C4	9.76	110.31	106.40
1	AA	778	G	C2-N3-C4	9.76	116.78	111.90
1	AA	981	U	C4-C5-C6	9.76	125.56	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	454	G	N3-C2-N2	-9.76	113.07	119.90
1	AA	209	U	O4'-C1'-N1	9.76	116.01	108.20
26	BB	8	C	N1-C2-O2	9.76	124.75	118.90
1	AA	739	C	N3-C4-C5	9.76	125.80	121.90
1	AA	1244	G	C5-C6-N1	9.76	116.38	111.50
1	AA	1315	U	O4'-C1'-N1	9.76	116.01	108.20
26	BB	440	C	N1-C2-O2	9.76	124.75	118.90
26	BB	650	C	O4'-C1'-N1	9.76	116.00	108.20
26	BB	1005	C	N3-C4-C5	-9.76	118.00	121.90
26	BB	2218	G	N1-C6-O6	9.76	125.75	119.90
26	BB	2781	A	N7-C8-N9	9.76	118.68	113.80
26	BB	668	A	C5-N7-C8	9.75	108.78	103.90
26	BB	2308	G	N1-C6-O6	-9.75	114.05	119.90
26	BB	2362	C	O4'-C1'-N1	9.75	116.00	108.20
26	BB	2762	C	N1-C2-O2	9.75	124.75	118.90
25	BA	2	G	N3-C4-N9	9.75	131.85	126.00
26	BB	644	A	N7-C8-N9	9.75	118.67	113.80
1	AA	6	G	N3-C2-N2	-9.75	113.08	119.90
1	AA	1316	G	N3-C4-N9	9.75	131.85	126.00
26	BB	271	G	N3-C4-C5	-9.75	123.73	128.60
26	BB	1088	A	C4-C5-N7	-9.75	105.83	110.70
26	BB	1421	G	N3-C4-C5	-9.75	123.73	128.60
26	BB	775	G	N9-C4-C5	9.75	109.30	105.40
26	BB	1617	C	C2-N3-C4	9.75	124.77	119.90
26	BB	647	G	N3-C4-C5	-9.74	123.73	128.60
26	BB	1879	C	C4'-C3'-C2'	-9.74	92.86	102.60
26	BB	1881	C	N3-C2-O2	-9.74	115.08	121.90
1	AA	135	C	N3-C4-N4	9.74	124.82	118.00
26	BB	2290	G	O4'-C1'-N9	9.74	116.00	108.20
26	BB	2396	G	O4'-C1'-N9	9.74	115.99	108.20
26	BB	2662	A	O4'-C1'-N9	9.74	116.00	108.20
4	AD	63	C	N3-C4-C5	-9.74	118.00	121.90
26	BB	321	U	O4'-C1'-N1	9.74	115.99	108.20
26	BB	1942	C	C6-N1-C2	9.74	124.20	120.30
26	BB	2387	U	C5-C4-O4	-9.74	120.06	125.90
26	BB	2456	C	C6-N1-C2	-9.74	116.40	120.30
1	AA	311	C	N3-C2-O2	-9.74	115.08	121.90
1	AA	917	G	N7-C8-N9	9.74	117.97	113.10
1	AA	1483	A	C5-C6-N1	9.74	122.57	117.70
26	BB	2430	A	C5'-C4'-O4'	9.74	120.78	109.10
1	AA	1374	A	O4'-C1'-N9	9.73	115.99	108.20
2	AB	61	C	N1-C2-O2	9.73	124.74	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AC	19	A	C8-N9-C4	-9.73	101.91	105.80
26	BB	310	A	N1-C6-N6	-9.73	112.76	118.60
26	BB	628	G	N3-C4-C5	9.73	133.47	128.60
26	BB	2487	G	N3-C4-C5	-9.73	123.73	128.60
26	BB	2434	A	C1'-O4'-C4'	-9.73	102.11	109.90
1	AA	861	G	C8-N9-C4	-9.73	102.51	106.40
1	AA	1391	U	N3-C4-C5	-9.73	108.76	114.60
26	BB	220	G	N9-C4-C5	9.73	109.29	105.40
26	BB	2688	G	N3-C4-C5	-9.73	123.73	128.60
1	AA	381	C	N3-C4-C5	-9.73	118.01	121.90
1	AA	575	G	N9-C4-C5	9.73	109.29	105.40
1	AA	1153	G	N3-C4-N9	9.73	131.84	126.00
26	BB	1494	A	N9-C4-C5	9.73	109.69	105.80
1	AA	1432	G	C2-N3-C4	9.72	116.76	111.90
26	BB	490	C	N1-C2-O2	9.72	124.73	118.90
26	BB	1350	C	N3-C4-C5	-9.72	118.01	121.90
26	BB	2532	G	C4-C5-N7	-9.72	106.91	110.80
26	BB	1043	C	O4'-C1'-N1	9.72	115.98	108.20
26	BB	2033	A	N7-C8-N9	9.72	118.66	113.80
1	AA	88	U	C5-C4-O4	-9.72	120.07	125.90
26	BB	1819	A	C5-C6-N6	-9.72	115.92	123.70
26	BB	2211	A	C8-N9-C4	-9.72	101.91	105.80
1	AA	194	C	N1-C2-O2	9.72	124.73	118.90
1	AA	823	C	O4'-C1'-N1	9.72	115.97	108.20
26	BB	620	G	N9-C4-C5	9.72	109.29	105.40
26	BB	974	G	N3-C4-C5	-9.72	123.74	128.60
26	BB	1141	U	N1-C2-N3	9.72	120.73	114.90
1	AA	1208	C	C6-N1-C2	9.71	124.19	120.30
2	AB	4	G	O4'-C4'-C3'	9.72	113.87	106.10
26	BB	291	G	N3-C4-C5	-9.72	123.74	128.60
19	AS	70	ARG	NE-CZ-NH1	9.71	125.16	120.30
26	BB	1362	C	C2-N3-C4	9.71	124.76	119.90
1	AA	285	C	C2-N3-C4	9.71	124.76	119.90
1	AA	816	A	C5-N7-C8	-9.71	99.04	103.90
26	BB	98	G	C8-N9-C4	-9.71	102.52	106.40
1	AA	827	U	C4-C5-C6	9.71	125.53	119.70
8	AH	68	ARG	NE-CZ-NH1	9.71	125.16	120.30
25	BA	78	A	O4'-C1'-N9	9.71	115.97	108.20
26	BB	369	U	C1'-O4'-C4'	-9.71	102.13	109.90
26	BB	1426	G	O4'-C1'-N9	9.71	115.97	108.20
42	BR	98	TYR	CB-CG-CD1	9.71	126.83	121.00
26	BB	752	A	O4'-C1'-N9	9.71	115.97	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2768	U	O4'-C1'-N1	9.71	115.97	108.20
1	AA	479	U	N3-C2-O2	-9.71	115.41	122.20
26	BB	1916	A	C8-N9-C4	-9.71	101.92	105.80
1	AA	1222	G	O4'-C1'-N9	9.70	115.96	108.20
26	BB	258	G	C2-N3-C4	9.70	116.75	111.90
26	BB	1845	G	C8-N9-C4	-9.71	102.52	106.40
2	AB	19	G	O4'-C1'-N9	9.70	115.96	108.20
1	AA	122	G	C8-N9-C4	-9.70	102.52	106.40
1	AA	669	G	N1-C6-O6	9.70	125.72	119.90
1	AA	1222	G	C4-C5-N7	-9.70	106.92	110.80
1	AA	1386	G	N3-C2-N2	-9.70	113.11	119.90
1	AA	1482	G	C2-N3-C4	9.70	116.75	111.90
4	AD	35	C	N3-C4-C5	-9.70	118.02	121.90
1	AA	124	C	N3-C2-O2	-9.70	115.11	121.90
1	AA	190	A	N7-C8-N9	9.70	118.65	113.80
26	BB	857	G	C2-N3-C4	9.70	116.75	111.90
26	BB	1375	U	C5-C4-O4	-9.70	120.08	125.90
26	BB	1565	C	C3'-C2'-C1'	-9.70	93.74	101.50
26	BB	2243	U	C5-C4-O4	-9.70	120.08	125.90
1	AA	540	G	N3-C4-N9	9.70	131.82	126.00
1	AA	883	C	O4'-C1'-N1	9.70	115.96	108.20
1	AA	1179	A	C4-C5-N7	-9.70	105.85	110.70
26	BB	1820	U	N1-C2-N3	9.70	120.72	114.90
26	BB	2482	A	N1-C6-N6	-9.70	112.78	118.60
1	AA	945	G	O4'-C1'-N9	9.69	115.95	108.20
1	AA	1019	A	N9-C4-C5	9.69	109.68	105.80
1	AA	1392	G	C8-N9-C4	-9.69	102.52	106.40
26	BB	2002	G	C5-C6-N1	9.69	116.35	111.50
26	BB	10	A	C6-C5-N7	9.69	139.08	132.30
26	BB	2817	U	O4'-C1'-N1	9.69	115.95	108.20
1	AA	147	G	C6-C5-N7	9.69	136.21	130.40
1	AA	810	C	C5-C6-N1	9.69	125.84	121.00
1	AA	878	A	O4'-C4'-C3'	9.69	113.85	106.10
1	AA	1151	A	N1-C2-N3	9.69	134.15	129.30
26	BB	22	C	C2-N3-C4	9.69	124.75	119.90
26	BB	359	G	C8-N9-C4	-9.69	102.52	106.40
26	BB	1981	A	N1-C6-N6	-9.69	112.79	118.60
26	BB	4	U	C5-C4-O4	-9.69	120.09	125.90
1	AA	1024	G	O4'-C1'-N9	9.69	115.95	108.20
1	AA	1369	C	O4'-C1'-N1	9.69	115.95	108.20
17	AQ	8	ARG	NE-CZ-NH2	-9.69	115.46	120.30
3	AC	16	A	C4-C5-N7	-9.68	105.86	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	36	A	C3'-C2'-C1'	-9.68	93.75	101.50
26	BB	486	C	C5'-C4'-O4'	9.68	120.72	109.10
26	BB	829	A	C8-N9-C4	9.68	109.67	105.80
26	BB	1893	C	O4'-C1'-N1	9.68	115.94	108.20
1	AA	50	A	C4-C5-C6	-9.68	112.16	117.00
1	AA	599	C	C4'-C3'-C2'	-9.68	92.92	102.60
1	AA	1003	G	C2-N3-C4	9.68	116.74	111.90
26	BB	549	G	C2-N3-C4	9.68	116.74	111.90
26	BB	712	G	C2-N3-C4	9.68	116.74	111.90
26	BB	1388	G	O4'-C1'-N9	9.68	115.94	108.20
1	AA	869	G	N3-C4-C5	-9.68	123.76	128.60
1	AA	1044	A	N1-C2-N3	-9.68	124.46	129.30
1	AA	326	G	C8-N9-C4	-9.68	102.53	106.40
25	BA	82	U	C4-C5-C6	9.68	125.50	119.70
26	BB	2719	G	C4-C5-C6	9.68	124.61	118.80
1	AA	292	G	C4-C5-N7	9.67	114.67	110.80
1	AA	881	G	C5-C6-O6	-9.67	122.80	128.60
9	AI	72	ASP	CB-CG-OD1	-9.67	109.60	118.30
25	BA	100	G	C4-C5-N7	-9.67	106.93	110.80
26	BB	573	U	C3'-C2'-C1'	9.67	109.24	101.50
26	BB	1250	G	C5-C6-O6	-9.67	122.80	128.60
26	BB	1465	G	N3-C4-N9	9.67	131.80	126.00
26	BB	2375	G	C4-C5-N7	9.67	114.67	110.80
26	BB	2416	C	N3-C2-O2	-9.67	115.13	121.90
26	BB	2496	C	C5-C6-N1	9.67	125.83	121.00
26	BB	2866	U	O4'-C4'-C3'	9.67	113.83	106.10
26	BB	2879	A	C5-N7-C8	-9.67	99.07	103.90
1	AA	1038	C	C2-N3-C4	9.67	124.73	119.90
26	BB	2010	G	N3-C4-C5	-9.67	123.77	128.60
1	AA	1121	U	N1-C1'-C2'	-9.67	101.37	112.00
1	AA	1355	G	C8-N9-C4	-9.66	102.53	106.40
26	BB	969	G	C3'-C2'-C1'	9.66	109.23	101.50
26	BB	1837	C	N3-C2-O2	-9.66	115.14	121.90
26	BB	1151	A	N7-C8-N9	9.66	118.63	113.80
26	BB	17	G	C8-N9-C4	-9.66	102.54	106.40
26	BB	834	G	N7-C8-N9	9.66	117.93	113.10
26	BB	2046	G	C8-N9-C4	9.66	110.26	106.40
1	AA	1505	G	C6-C5-N7	9.66	136.19	130.40
1	AA	1506	U	C4-C5-C6	9.66	125.50	119.70
26	BB	654	A	N7-C8-N9	9.66	118.63	113.80
1	AA	1525	G	C5-N7-C8	-9.66	99.47	104.30
4	AD	32	G	N3-C2-N2	9.66	126.66	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	BJ	60	ARG	NE-CZ-NH2	9.66	125.13	120.30
26	BB	260	G	N1-C6-O6	-9.65	114.11	119.90
26	BB	1141	U	C6-N1-C2	-9.65	115.21	121.00
26	BB	1727	C	O4'-C1'-N1	9.65	115.92	108.20
26	BB	2266	A	O4'-C1'-C2'	-9.65	96.15	105.80
26	BB	2496	C	N1-C2-O2	9.65	124.69	118.90
3	AC	28	U	C3'-C2'-C1'	9.65	109.22	101.50
25	BA	81	G	C4'-C3'-C2'	-9.65	92.95	102.60
26	BB	1740	G	N3-C4-N9	9.65	131.79	126.00
26	BB	2339	C	O4'-C1'-N1	9.65	115.92	108.20
26	BB	1344	U	N1-C2-N3	9.65	120.69	114.90
26	BB	2370	G	N3-C4-C5	-9.65	123.78	128.60
26	BB	2515	C	N3-C2-O2	-9.65	115.15	121.90
1	AA	1240	U	C5-C6-N1	9.65	127.52	122.70
26	BB	481	G	C5-N7-C8	-9.65	99.48	104.30
26	BB	1854	A	C4-C5-C6	-9.65	112.18	117.00
26	BB	2443	C	C6-N1-C2	-9.65	116.44	120.30
26	BB	2862	G	N7-C8-N9	9.65	117.92	113.10
1	AA	483	C	C5'-C4'-O4'	9.64	120.67	109.10
1	AA	557	G	C8-N9-C4	-9.64	102.54	106.40
1	AA	705	G	N1-C6-O6	-9.64	114.11	119.90
21	AU	71	ASP	CB-CG-OD2	-9.64	109.62	118.30
25	BA	110	C	N1-C2-O2	9.64	124.69	118.90
26	BB	2269	G	C4-C5-C6	9.64	124.59	118.80
1	AA	187	G	O4'-C1'-N9	9.64	115.91	108.20
1	AA	1217	C	O4'-C1'-N1	9.64	115.91	108.20
1	AA	1484	C	N3-C2-O2	-9.64	115.15	121.90
26	BB	778	G	C6-N1-C2	-9.64	119.32	125.10
26	BB	1235	G	C4-C5-N7	-9.64	106.94	110.80
1	AA	427	U	C5-C6-N1	-9.64	117.88	122.70
4	AD	9	G	C2-N3-C4	9.64	116.72	111.90
4	AD	69	C	N1-C2-O2	9.64	124.68	118.90
17	AQ	52	ARG	NE-CZ-NH2	-9.64	115.48	120.30
26	BB	1022	G	C3'-C2'-C1'	-9.64	93.79	101.50
26	BB	1295	C	C2-N3-C4	9.64	124.72	119.90
26	BB	2235	G	C4-C5-N7	-9.64	106.94	110.80
26	BB	1469	A	C4-C5-N7	9.64	115.52	110.70
26	BB	1732	C	C4-C5-C6	9.64	122.22	117.40
29	BE	46	ARG	NE-CZ-NH1	9.64	125.12	120.30
1	AA	1260	G	C5-C6-N1	9.63	116.32	111.50
26	BB	817	C	N3-C2-O2	-9.63	115.16	121.90
26	BB	1920	C	O4'-C4'-C3'	9.64	113.81	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1117	A	C5-C6-N1	9.63	122.52	117.70
14	AN	17	ASP	CB-CG-OD2	-9.63	109.63	118.30
26	BB	2884	U	C5'-C4'-O4'	9.63	120.66	109.10
1	AA	448	A	C3'-C2'-C1'	9.63	109.20	101.50
1	AA	711	G	N3-C4-C5	-9.63	123.78	128.60
26	BB	327	G	C8-N9-C4	-9.63	102.55	106.40
26	BB	1125	G	N7-C8-N9	9.63	117.92	113.10
26	BB	2101	A	N7-C8-N9	9.63	118.61	113.80
26	BB	2772	C	C5-C6-N1	9.63	125.81	121.00
1	AA	987	G	C8-N9-C4	-9.63	102.55	106.40
1	AA	1331	G	C2-N3-C4	9.63	116.71	111.90
26	BB	136	G	N3-C4-C5	-9.63	123.79	128.60
26	BB	254	G	N3-C4-N9	9.63	131.78	126.00
26	BB	934	U	N1-C1'-C2'	-9.63	101.41	112.00
1	AA	592	G	C4-C5-N7	-9.62	106.95	110.80
1	AA	1385	G	C8-N9-C4	-9.63	102.55	106.40
26	BB	1168	G	C5-C6-O6	9.62	134.37	128.60
26	BB	2048	G	C6-N1-C2	-9.62	119.33	125.10
26	BB	216	A	C1'-O4'-C4'	-9.62	102.20	109.90
26	BB	857	G	C4-C5-N7	-9.62	106.95	110.80
26	BB	2644	G	C6-C5-N7	-9.62	124.63	130.40
34	BJ	30	ARG	NE-CZ-NH1	9.62	125.11	120.30
26	BB	2464	G	C2-N3-C4	9.62	116.71	111.90
26	BB	188	G	C5-C6-N1	9.62	116.31	111.50
26	BB	797	G	C6-C5-N7	-9.62	124.63	130.40
26	BB	1358	G	N3-C4-C5	-9.62	123.79	128.60
1	AA	1064	G	N3-C4-C5	-9.62	123.79	128.60
26	BB	1095	A	O4'-C1'-N9	9.62	115.89	108.20
26	BB	1510	G	C4-C5-N7	-9.62	106.95	110.80
26	BB	2442	C	N3-C2-O2	-9.62	115.17	121.90
1	AA	1319	A	N7-C8-N9	9.61	118.61	113.80
26	BB	1753	G	N7-C8-N9	9.61	117.91	113.10
26	BB	2102	G	N1-C2-N3	-9.61	118.13	123.90
1	AA	4	U	O4'-C1'-N1	9.61	115.89	108.20
1	AA	220	G	C4-C5-N7	-9.61	106.96	110.80
26	BB	811	U	C1'-O4'-C4'	-9.61	102.21	109.90
26	BB	1731	G	C8-N9-C4	-9.61	102.56	106.40
26	BB	585	G	O4'-C1'-N9	9.61	115.89	108.20
26	BB	1381	G	C5-C6-O6	-9.61	122.84	128.60
26	BB	2193	G	N3-C4-C5	-9.61	123.80	128.60
26	BB	2484	G	C5-N7-C8	-9.61	99.50	104.30
6	AF	202	PHE	CB-CG-CD2	-9.60	114.08	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	307	C	O4'-C1'-N1	9.60	115.88	108.20
1	AA	765	G	C5-C6-N1	9.60	116.30	111.50
26	BB	695	G	N7-C8-N9	-9.60	108.30	113.10
1	AA	644	U	O4'-C1'-N1	9.60	115.88	108.20
26	BB	1067	A	C5-N7-C8	-9.60	99.10	103.90
58	B7	24	ARG	NE-CZ-NH1	-9.60	115.50	120.30
1	AA	598	U	C5-C4-O4	-9.60	120.14	125.90
26	BB	1619	G	N7-C8-N9	9.60	117.90	113.10
26	BB	323	C	N3-C2-O2	-9.60	115.18	121.90
26	BB	1010	A	N9-C4-C5	9.60	109.64	105.80
26	BB	2527	C	N3-C4-C5	9.60	125.74	121.90
1	AA	307	C	C5-C6-N1	-9.59	116.20	121.00
1	AA	449	G	O4'-C1'-N9	9.59	115.87	108.20
1	AA	1245	C	C4-C5-C6	9.59	122.20	117.40
26	BB	62	U	C5-C4-O4	-9.59	120.15	125.90
26	BB	377	G	N1-C2-N3	-9.59	118.15	123.90
26	BB	990	A	C4'-C3'-C2'	9.59	112.19	102.60
26	BB	1209	U	C1'-O4'-C4'	9.59	117.57	109.90
1	AA	306	A	N1-C6-N6	-9.59	112.85	118.60
1	AA	173	U	C2-N3-C4	-9.59	121.25	127.00
1	AA	1500	A	C8-N9-C4	9.59	109.64	105.80
26	BB	1455	G	C6-C5-N7	-9.59	124.65	130.40
26	BB	1489	C	N3-C4-C5	9.59	125.73	121.90
26	BB	2413	G	C2-N3-C4	-9.59	107.11	111.90
1	AA	1489	G	C5-N7-C8	9.59	109.09	104.30
2	AB	33	U	O4'-C1'-N1	9.59	115.87	108.20
26	BB	179	C	O4'-C1'-N1	9.59	115.87	108.20
26	BB	458	G	C8-N9-C4	-9.59	102.56	106.40
26	BB	615	U	N3-C2-O2	-9.59	115.49	122.20
26	BB	764	A	C3'-C2'-C1'	-9.59	93.83	101.50
26	BB	2120	G	C4-C5-N7	-9.59	106.97	110.80
18	AR	62	ARG	NE-CZ-NH2	-9.58	115.51	120.30
26	BB	409	G	C2-N3-C4	9.58	116.69	111.90
26	BB	1270	C	N1-C2-O2	9.58	124.65	118.90
26	BB	2740	A	C3'-C2'-C1'	-9.58	93.83	101.50
1	AA	718	A	O4'-C1'-N9	9.58	115.86	108.20
3	AC	19	A	C5-C6-N1	-9.58	112.91	117.70
26	BB	145	C	O4'-C1'-N1	9.58	115.86	108.20
26	BB	248	G	N3-C4-N9	9.58	131.75	126.00
26	BB	1321	A	C2-N3-C4	9.58	115.39	110.60
26	BB	2222	C	C5-C4-N4	-9.58	113.49	120.20
1	AA	865	A	C8-N9-C4	-9.58	101.97	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	998	C	N1-C2-O2	9.58	124.65	118.90
1	AA	1306	A	N7-C8-N9	9.58	118.59	113.80
4	AD	1	C	C4-C5-C6	-9.58	112.61	117.40
26	BB	610	C	C6-N1-C2	9.58	124.13	120.30
26	BB	781	A	N7-C8-N9	9.58	118.59	113.80
1	AA	163	C	C6-N1-C2	-9.57	116.47	120.30
1	AA	998	C	N1-C2-N3	-9.57	112.50	119.20
1	AA	1051	C	O4'-C4'-C3'	9.57	113.76	106.10
26	BB	122	G	C5-C6-O6	-9.57	122.86	128.60
26	BB	1215	G	O4'-C1'-N9	9.57	115.86	108.20
26	BB	2359	C	C6-N1-C2	-9.57	116.47	120.30
26	BB	1613	G	C4-C5-N7	-9.57	106.97	110.80
1	AA	728	A	C8-N9-C4	-9.57	101.97	105.80
1	AA	745	G	N9-C4-C5	9.57	109.23	105.40
3	AC	28	U	N3-C4-O4	9.57	126.10	119.40
26	BB	321	U	O4'-C1'-C2'	-9.57	96.23	105.80
1	AA	1091	U	N3-C2-O2	-9.57	115.50	122.20
26	BB	1185	G	N9-C4-C5	9.57	109.23	105.40
26	BB	1207	C	C6-N1-C2	-9.57	116.47	120.30
26	BB	2015	A	C4-C5-N7	9.57	115.48	110.70
26	BB	2138	G	O4'-C1'-N9	9.57	115.86	108.20
26	BB	2486	C	C6-N1-C2	-9.57	116.47	120.30
1	AA	733	G	N9-C4-C5	9.57	109.23	105.40
26	BB	1	G	C8-N9-C4	-9.57	102.57	106.40
1	AA	1154	G	N3-C4-N9	9.57	131.74	126.00
18	AR	14	PHE	CB-CG-CD2	-9.57	114.10	120.80
26	BB	1293	C	O4'-C1'-N1	9.57	115.85	108.20
26	BB	1649	G	N9-C4-C5	9.57	109.23	105.40
26	BB	2758	A	C2-N3-C4	-9.57	105.82	110.60
1	AA	283	U	C5-C6-N1	-9.56	117.92	122.70
1	AA	289	G	C6-N1-C2	-9.56	119.36	125.10
26	BB	1258	U	C5-C6-N1	-9.56	117.92	122.70
26	BB	2043	C	C2-N3-C4	9.56	124.68	119.90
1	AA	362	G	C5-C6-N1	9.56	116.28	111.50
26	BB	1261	C	O4'-C4'-C3'	9.56	113.75	106.10
1	AA	323	U	C4-C5-C6	9.56	125.44	119.70
1	AA	506	G	N7-C8-N9	9.56	117.88	113.10
1	AA	551	U	C5-C6-N1	-9.56	117.92	122.70
26	BB	649	G	N3-C4-C5	-9.56	123.82	128.60
26	BB	2670	A	C4'-C3'-C2'	-9.56	93.04	102.60
1	AA	590	U	O4'-C1'-N1	9.56	115.85	108.20
26	BB	2559	C	O4'-C1'-N1	9.56	115.85	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1055	A	O4'-C1'-N9	9.56	115.85	108.20
26	BB	1517	G	N1-C2-N2	9.56	124.80	116.20
26	BB	1540	G	C5-C6-O6	-9.56	122.86	128.60
26	BB	682	G	O4'-C1'-N9	9.56	115.84	108.20
26	BB	751	A	C5-N7-C8	-9.56	99.12	103.90
1	AA	774	G	N1-C2-N2	9.56	124.80	116.20
2	AB	40	C	C2-N3-C4	-9.56	115.12	119.90
26	BB	2738	A	N9-C4-C5	9.56	109.62	105.80
1	AA	936	C	C5-C4-N4	-9.55	113.51	120.20
1	AA	1470	U	C4-C5-C6	9.55	125.43	119.70
25	BA	49	C	C6-N1-C2	-9.55	116.48	120.30
1	AA	885	G	N3-C4-C5	-9.55	123.83	128.60
26	BB	836	G	N3-C4-C5	-9.55	123.82	128.60
26	BB	1786	A	C5-N7-C8	-9.55	99.12	103.90
26	BB	1896	G	C5-N7-C8	-9.55	99.52	104.30
26	BB	1992	G	N7-C8-N9	9.55	117.88	113.10
1	AA	1257	A	N9-C4-C5	-9.55	101.98	105.80
3	AC	48	C	N1-C2-O2	9.55	124.63	118.90
26	BB	1556	C	N3-C4-N4	9.55	124.68	118.00
3	AC	29	G	O4'-C1'-N9	9.55	115.84	108.20
26	BB	788	A	C6-N1-C2	9.55	124.33	118.60
26	BB	1971	U	C5-C6-N1	-9.55	117.93	122.70
1	AA	597	G	N3-C4-C5	-9.55	123.83	128.60
1	AA	754	C	C6-N1-C2	-9.54	116.48	120.30
2	AB	27	C	N3-C4-C5	-9.54	118.08	121.90
26	BB	205	G	N7-C8-N9	9.54	117.87	113.10
26	BB	238	C	N3-C4-C5	-9.54	118.08	121.90
2	AB	47	U	C4-C5-C6	9.54	125.43	119.70
26	BB	291	G	C2-N3-C4	9.54	116.67	111.90
26	BB	334	C	C2-N3-C4	9.54	124.67	119.90
26	BB	623	C	O4'-C1'-N1	9.54	115.83	108.20
26	BB	2608	G	C1'-O4'-C4'	-9.54	102.27	109.90
1	AA	189	A	N9-C4-C5	-9.54	101.98	105.80
26	BB	1288	G	O4'-C1'-N9	9.54	115.83	108.20
26	BB	2044	C	O4'-C1'-N1	9.54	115.83	108.20
26	BB	2269	G	C2-N3-C4	9.54	116.67	111.90
1	AA	1378	C	N3-C4-C5	-9.54	118.08	121.90
2	AB	3	G	N9-C4-C5	9.54	109.22	105.40
5	AE	136	ARG	NE-CZ-NH2	-9.54	115.53	120.30
1	AA	1133	G	C5-C6-N1	9.54	116.27	111.50
26	BB	985	C	C5-C6-N1	9.54	125.77	121.00
26	BB	1463	C	N1-C2-O2	9.54	124.62	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1656	C	N3-C2-O2	-9.54	115.22	121.90
26	BB	221	A	C2-N3-C4	9.54	115.37	110.60
1	AA	88	U	N1-C1'-C2'	9.53	126.39	114.00
1	AA	901	A	C2-N3-C4	9.54	115.37	110.60
26	BB	110	G	N9-C1'-C2'	-9.54	101.51	112.00
6	AF	142	ARG	NE-CZ-NH2	9.53	125.07	120.30
26	BB	1120	G	C4-C5-N7	9.53	114.61	110.80
26	BB	1726	C	N3-C4-C5	-9.53	118.09	121.90
4	AD	66	C	O4'-C1'-N1	9.53	115.82	108.20
26	BB	1445	G	O4'-C1'-N9	9.53	115.82	108.20
26	BB	2325	G	N9-C4-C5	9.53	109.21	105.40
26	BB	1277	G	C8-N9-C4	-9.53	102.59	106.40
26	BB	1687	G	C8-N9-C4	-9.53	102.59	106.40
25	BA	5	U	O4'-C1'-N1	9.53	115.82	108.20
1	AA	954	G	O4'-C1'-N9	9.53	115.82	108.20
26	BB	838	C	C2-N3-C4	9.53	124.66	119.90
26	BB	1147	A	C8-N9-C4	-9.53	101.99	105.80
26	BB	2120	G	O4'-C1'-N9	9.53	115.82	108.20
26	BB	1475	G	N9-C4-C5	9.52	109.21	105.40
26	BB	2437	G	O4'-C1'-N9	9.52	115.82	108.20
26	BB	2545	G	N9-C4-C5	9.52	109.21	105.40
1	AA	722	G	C1'-O4'-C4'	-9.52	102.28	109.90
26	BB	241	A	C5-N7-C8	-9.52	99.14	103.90
26	BB	1214	A	C8-N9-C4	-9.52	101.99	105.80
1	AA	896	C	O4'-C1'-N1	9.52	115.81	108.20
26	BB	2154	A	N1-C2-N3	9.52	134.06	129.30
1	AA	1439	G	N3-C4-C5	-9.52	123.84	128.60
3	AC	24	A	C4-C5-N7	-9.52	105.94	110.70
26	BB	298	G	C5-N7-C8	-9.52	99.54	104.30
1	AA	941	G	N1-C6-O6	9.51	125.61	119.90
26	BB	1045	C	N3-C4-C5	-9.51	118.09	121.90
1	AA	36	C	C6-N1-C2	9.51	124.10	120.30
1	AA	686	U	N3-C2-O2	-9.51	115.54	122.20
3	AC	28	U	C5-C4-O4	-9.51	120.19	125.90
26	BB	2791	G	C1'-O4'-C4'	-9.51	102.29	109.90
1	AA	1290	G	C5-C6-N1	9.51	116.25	111.50
1	AA	1491	G	C6-N1-C2	-9.51	119.40	125.10
26	BB	1790	C	N3-C4-C5	-9.51	118.10	121.90
1	AA	227	G	N9-C4-C5	9.50	109.20	105.40
1	AA	459	A	N3-C4-C5	9.50	133.45	126.80
26	BB	2086	U	C5-C6-N1	-9.50	117.95	122.70
1	AA	205	A	O4'-C1'-N9	9.50	115.80	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1408	A	C6-C5-N7	9.50	138.95	132.30
1	AA	803	G	C4-C5-N7	9.50	114.60	110.80
26	BB	65	U	C4-C5-C6	9.50	125.40	119.70
26	BB	351	C	C4-C5-C6	9.50	122.15	117.40
26	BB	450	G	N3-C2-N2	9.50	126.55	119.90
26	BB	984	A	N9-C4-C5	9.50	109.60	105.80
26	BB	1658	C	N1-C2-O2	9.50	124.60	118.90
1	AA	264	C	O4'-C1'-N1	9.50	115.80	108.20
2	AB	24	G	C5'-C4'-O4'	9.50	120.50	109.10
26	BB	207	A	N1-C6-N6	-9.50	112.90	118.60
26	BB	548	G	C5-N7-C8	-9.50	99.55	104.30
26	BB	818	G	C5-C6-N1	9.50	116.25	111.50
26	BB	1140	C	C5-C6-N1	9.50	125.75	121.00
1	AA	310	G	N7-C8-N9	9.49	117.85	113.10
1	AA	364	A	N3-C4-C5	9.49	133.45	126.80
1	AA	731	G	N1-C6-O6	9.49	125.60	119.90
1	AA	932	C	O4'-C4'-C3'	9.49	113.70	106.10
18	AR	16	ARG	NE-CZ-NH2	-9.49	115.55	120.30
1	AA	877	G	O4'-C1'-N9	9.49	115.80	108.20
26	BB	474	G	C4-C5-N7	9.49	114.60	110.80
26	BB	1978	A	C8-N9-C4	-9.49	102.00	105.80
26	BB	2477	U	N1-C2-N3	9.49	120.60	114.90
1	AA	1147	C	C5-C6-N1	9.49	125.75	121.00
26	BB	26	G	C4-C5-C6	9.49	124.50	118.80
1	AA	163	C	C5-C6-N1	9.49	125.75	121.00
26	BB	1333	G	N3-C2-N2	-9.49	113.26	119.90
26	BB	2003	A	C4-C5-C6	-9.49	112.25	117.00
26	BB	2353	G	N7-C8-N9	9.49	117.84	113.10
1	AA	557	G	N3-C4-C5	-9.49	123.86	128.60
26	BB	1338	G	N3-C4-C5	-9.49	123.86	128.60
1	AA	902	G	C5-N7-C8	-9.49	99.56	104.30
1	AA	1122	U	O4'-C1'-N1	9.49	115.79	108.20
1	AA	1493	A	C5-N7-C8	-9.49	99.16	103.90
15	AO	109	ARG	NE-CZ-NH2	-9.49	115.56	120.30
26	BB	1736	U	O4'-C1'-N1	9.49	115.79	108.20
26	BB	2025	C	N1-C2-O2	9.49	124.59	118.90
1	AA	65	A	N1-C2-N3	-9.48	124.56	129.30
1	AA	1097	C	C1'-O4'-C4'	9.48	117.49	109.90
1	AA	1134	G	C4-C5-N7	9.48	114.59	110.80
3	AC	19	A	N1-C6-N6	9.48	124.29	118.60
26	BB	2591	C	O4'-C1'-N1	9.48	115.79	108.20
26	BB	4	U	N3-C4-O4	9.48	126.04	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	128	C	C3'-C2'-C1'	9.48	109.09	101.50
26	BB	1638	C	N3-C2-O2	-9.48	115.26	121.90
26	BB	1752	C	O4'-C1'-N1	9.48	115.79	108.20
26	BB	1984	G	C4-C5-N7	-9.48	107.01	110.80
26	BB	814	C	C2-N3-C4	9.48	124.64	119.90
26	BB	1062	G	N3-C4-C5	-9.48	123.86	128.60
26	BB	338	G	N3-C4-C5	-9.48	123.86	128.60
26	BB	529	A	C1'-O4'-C4'	-9.48	102.32	109.90
26	BB	2351	G	C6-N1-C2	-9.48	119.41	125.10
26	BB	2577	A	O4'-C1'-N9	9.48	115.78	108.20
1	AA	672	U	C4-C5-C6	9.47	125.38	119.70
1	AA	894	G	C5-N7-C8	-9.47	99.56	104.30
1	AA	1145	A	N7-C8-N9	9.47	118.54	113.80
25	BA	3	C	N3-C2-O2	-9.47	115.27	121.90
26	BB	1657	U	C4-C5-C6	9.47	125.38	119.70
26	BB	2221	G	C4-C5-N7	9.47	114.59	110.80
26	BB	2283	C	O4'-C1'-N1	9.47	115.78	108.20
26	BB	2649	C	O4'-C1'-N1	9.47	115.78	108.20
26	BB	122	G	C5-N7-C8	9.47	109.04	104.30
26	BB	1370	C	N3-C4-C5	-9.47	118.11	121.90
26	BB	1622	G	N7-C8-N9	9.47	117.84	113.10
26	BB	1448	G	C3'-C2'-C1'	-9.47	93.92	101.50
26	BB	2444	G	C5-C6-N1	9.47	116.23	111.50
26	BB	2491	U	O4'-C1'-N1	9.47	115.78	108.20
26	BB	2364	C	N3-C4-N4	9.47	124.63	118.00
1	AA	754	C	C5-C4-N4	-9.47	113.57	120.20
26	BB	790	U	C5-C6-N1	-9.46	117.97	122.70
26	BB	948	C	O4'-C1'-N1	9.46	115.77	108.20
26	BB	1006	C	N3-C4-C5	9.46	125.69	121.90
26	BB	1084	A	N1-C6-N6	9.46	124.28	118.60
26	BB	2692	G	C8-N9-C4	-9.46	102.61	106.40
1	AA	19	A	C5-N7-C8	9.46	108.63	103.90
1	AA	465	A	C6-N1-C2	9.46	124.28	118.60
1	AA	951	G	C5-C6-N1	9.46	116.23	111.50
26	BB	109	C	N1-C2-O2	9.46	124.58	118.90
26	BB	187	G	C2-N3-C4	9.46	116.63	111.90
26	BB	1346	G	C2-N3-C4	-9.46	107.17	111.90
26	BB	1734	G	C5-C6-O6	-9.46	122.92	128.60
26	BB	132	G	N1-C2-N3	-9.46	118.23	123.90
26	BB	2727	A	C5-N7-C8	-9.46	99.17	103.90
26	BB	171	U	N1-C2-N3	9.45	120.57	114.90
26	BB	619	G	N7-C8-N9	9.45	117.83	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	882	G	N1-C2-N3	-9.45	118.23	123.90
26	BB	2022	U	N3-C2-O2	-9.45	115.58	122.20
26	BB	2049	G	C6-C5-N7	-9.45	124.73	130.40
4	AD	77	A	O4'-C1'-N9	9.45	115.76	108.20
26	BB	518	G	C8-N9-C4	-9.45	102.62	106.40
26	BB	1456	G	N7-C8-N9	9.45	117.83	113.10
26	BB	1540	G	N3-C4-C5	-9.45	123.87	128.60
26	BB	1862	G	C2-N3-C4	9.45	116.63	111.90
26	BB	2780	G	N9-C4-C5	9.45	109.18	105.40
1	AA	1503	A	C1'-O4'-C4'	-9.45	102.34	109.90
1	AA	894	G	C5'-C4'-O4'	9.45	120.44	109.10
1	AA	911	U	P-O3'-C3'	9.45	131.04	119.70
26	BB	2324	U	O4'-C4'-C3'	9.45	113.66	106.10
1	AA	173	U	C4-C5-C6	9.45	125.37	119.70
1	AA	570	G	C4-C5-N7	9.45	114.58	110.80
26	BB	780	G	C4'-C3'-C2'	-9.45	93.15	102.60
26	BB	1311	G	N3-C2-N2	-9.45	113.29	119.90
1	AA	1169	A	N3-C4-C5	-9.44	120.19	126.80
26	BB	298	G	N1-C6-O6	-9.45	114.23	119.90
26	BB	784	G	N3-C4-C5	-9.45	123.88	128.60
1	AA	778	G	N1-C2-N3	-9.44	118.23	123.90
26	BB	1447	C	N3-C4-C5	-9.44	118.12	121.90
25	BA	86	G	C6-N1-C2	-9.44	119.44	125.10
26	BB	2361	G	C5-C6-N1	9.44	116.22	111.50
2	AB	52	A	O4'-C1'-N9	9.44	115.75	108.20
26	BB	291	G	C4-C5-N7	-9.44	107.03	110.80
26	BB	1179	G	C8-N9-C4	-9.44	102.62	106.40
1	AA	771	G	N1-C6-O6	-9.44	114.24	119.90
3	AC	26	U	C6-N1-C2	9.44	126.66	121.00
25	BA	105	G	O4'-C1'-N9	9.44	115.75	108.20
26	BB	1045	C	C5-C6-N1	9.44	125.72	121.00
26	BB	2072	C	N3-C2-O2	-9.44	115.29	121.90
26	BB	25	U	N3-C2-O2	-9.44	115.60	122.20
26	BB	2528	U	N3-C4-O4	9.44	126.00	119.40
1	AA	94	G	P-O3'-C3'	9.43	131.02	119.70
1	AA	733	G	C8-N9-C4	-9.43	102.63	106.40
1	AA	1071	C	C5-C6-N1	9.43	125.72	121.00
26	BB	196	A	C8-N9-C4	-9.43	102.03	105.80
26	BB	421	C	C4-C5-C6	-9.43	112.68	117.40
26	BB	1219	U	C4-C5-C6	9.43	125.36	119.70
26	BB	1587	G	N3-C4-C5	-9.43	123.88	128.60
26	BB	2353	G	N9-C4-C5	9.43	109.17	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2741	A	N9-C4-C5	9.43	109.57	105.80
26	BB	2867	G	N7-C8-N9	-9.43	108.38	113.10
1	AA	604	G	C4'-C3'-C2'	-9.43	93.17	102.60
26	BB	437	U	C2-N3-C4	-9.43	121.34	127.00
26	BB	2463	C	N3-C4-N4	9.43	124.60	118.00
1	AA	801	U	O4'-C1'-N1	9.43	115.74	108.20
2	AB	36	A	C4'-C3'-C2'	-9.43	93.17	102.60
1	AA	1288	A	C2-N3-C4	-9.43	105.89	110.60
25	BA	10	G	C5-C6-O6	9.43	134.26	128.60
30	BF	88	ARG	NE-CZ-NH2	9.43	125.01	120.30
1	AA	111	G	N1-C6-O6	-9.43	114.24	119.90
1	AA	293	G	N1-C2-N3	-9.43	118.24	123.90
1	AA	1392	G	C4'-C3'-C2'	-9.43	93.17	102.60
26	BB	1813	G	N3-C4-C5	-9.43	123.89	128.60
26	BB	2860	A	C8-N9-C4	-9.43	102.03	105.80
26	BB	1152	C	C2-N3-C4	-9.43	115.19	119.90
26	BB	1189	A	N9-C4-C5	-9.43	102.03	105.80
26	BB	1666	G	C6-N1-C2	-9.43	119.44	125.10
26	BB	2518	A	P-O3'-C3'	9.43	131.01	119.70
26	BB	2835	A	N1-C2-N3	-9.43	124.59	129.30
49	BY	40	ARG	NE-CZ-NH2	-9.43	115.59	120.30
1	AA	68	G	N3-C4-N9	9.42	131.65	126.00
2	AB	66	C	O4'-C1'-N1	9.42	115.74	108.20
26	BB	677	A	N9-C4-C5	9.42	109.57	105.80
26	BB	1776	G	C2-N3-C4	9.42	116.61	111.90
26	BB	2263	C	C2-N3-C4	9.42	124.61	119.90
26	BB	271	G	N9-C4-C5	9.42	109.17	105.40
26	BB	704	G	N7-C8-N9	9.42	117.81	113.10
26	BB	1815	A	C2-N3-C4	9.42	115.31	110.60
26	BB	2891	U	N3-C4-C5	-9.42	108.95	114.60
1	AA	87	C	C4-C5-C6	9.42	122.11	117.40
1	AA	838	G	O4'-C1'-N9	9.42	115.74	108.20
1	AA	1366	C	N1-C2-O2	9.42	124.55	118.90
26	BB	510	C	N1-C2-N3	-9.42	112.61	119.20
26	BB	2230	G	C4-C5-N7	-9.42	107.03	110.80
26	BB	2578	G	N3-C4-N9	9.42	131.65	126.00
28	BD	170	TYR	CB-CG-CD1	-9.42	115.35	121.00
1	AA	82	G	C8-N9-C4	-9.41	102.63	106.40
1	AA	604	G	C4-C5-N7	-9.41	107.03	110.80
26	BB	811	U	C5-C6-N1	-9.41	117.99	122.70
26	BB	1507	C	C5-C6-N1	9.41	125.71	121.00
26	BB	2271	G	C4-C5-N7	-9.41	107.03	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2387	U	N3-C4-O4	9.41	125.99	119.40
26	BB	2511	U	N3-C4-O4	9.41	125.99	119.40
26	BB	2811	G	N1-C2-N3	-9.41	118.25	123.90
26	BB	2309	A	N7-C8-N9	-9.41	109.09	113.80
26	BB	2106	U	N1-C2-N3	9.41	120.55	114.90
1	AA	758	C	C6-N1-C2	-9.41	116.54	120.30
7	AG	43	ARG	NE-CZ-NH2	-9.41	115.59	120.30
7	AG	134	TYR	CG-CD2-CE2	-9.41	113.77	121.30
26	BB	762	U	P-O3'-C3'	9.41	130.99	119.70
26	BB	81	G	C8-N9-C4	-9.41	102.64	106.40
26	BB	1516	G	O4'-C1'-N9	9.41	115.73	108.20
1	AA	1112	C	C2-N3-C4	-9.41	115.20	119.90
1	AA	1393	U	C5-C4-O4	-9.41	120.26	125.90
26	BB	671	C	C2-N3-C4	-9.41	115.20	119.90
26	BB	1061	U	O4'-C1'-N1	9.41	115.73	108.20
1	AA	276	G	C2-N3-C4	-9.40	107.20	111.90
4	AD	4	G	C8-N9-C4	-9.40	102.64	106.40
26	BB	1161	C	C5-C6-N1	9.40	125.70	121.00
26	BB	2592	G	N3-C4-C5	-9.40	123.90	128.60
1	AA	572	A	N1-C2-N3	-9.40	124.60	129.30
1	AA	1029	U	N3-C2-O2	-9.40	115.62	122.20
26	BB	989	G	O4'-C1'-N9	9.40	115.72	108.20
26	BB	1513	U	C5-C6-N1	9.40	127.40	122.70
26	BB	2820	A	C2-N3-C4	9.40	115.30	110.60
1	AA	339	C	C6-N1-C2	9.40	124.06	120.30
1	AA	932	C	C1'-O4'-C4'	-9.40	102.38	109.90
1	AA	1133	G	N1-C2-N3	-9.40	118.26	123.90
1	AA	1301	U	C5-C4-O4	-9.40	120.26	125.90
26	BB	1177	G	C5-C6-O6	-9.40	122.96	128.60
25	BA	35	C	N3-C2-O2	-9.40	115.32	121.90
26	BB	787	C	C5-C6-N1	9.40	125.70	121.00
26	BB	1595	C	C6-N1-C2	-9.40	116.54	120.30
26	BB	1997	C	N1-C1'-C2'	-9.40	101.66	112.00
26	BB	2581	G	N9-C4-C5	9.40	109.16	105.40
26	BB	2801	G	N3-C4-C5	-9.40	123.90	128.60
25	BA	75	G	N9-C4-C5	9.40	109.16	105.40
26	BB	1495	A	N9-C4-C5	-9.40	102.04	105.80
26	BB	1588	G	C6-N1-C2	-9.40	119.46	125.10
1	AA	581	G	N9-C4-C5	9.39	109.16	105.40
1	AA	765	G	N7-C8-N9	9.39	117.80	113.10
26	BB	685	A	C8-N9-C4	-9.39	102.04	105.80
26	BB	2568	U	O4'-C1'-N1	9.39	115.72	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2609	U	N3-C4-O4	9.39	125.98	119.40
26	BB	738	G	N3-C2-N2	-9.39	113.33	119.90
1	AA	563	A	C5-C6-N1	9.39	122.39	117.70
1	AA	840	C	C5'-C4'-O4'	9.39	120.37	109.10
26	BB	178	G	O4'-C1'-N9	9.39	115.71	108.20
26	BB	250	G	C8-N9-C4	-9.39	102.64	106.40
26	BB	659	G	C8-N9-C4	9.39	110.16	106.40
26	BB	1209	U	O4'-C4'-C3'	-9.39	94.61	104.00
1	AA	545	C	N3-C4-C5	-9.39	118.14	121.90
1	AA	1441	A	C4-C5-N7	-9.39	106.01	110.70
26	BB	730	A	N9-C4-C5	9.39	109.56	105.80
26	BB	1421	G	C2-N3-C4	9.39	116.59	111.90
26	BB	1983	G	O4'-C1'-N9	9.39	115.71	108.20
26	BB	2617	U	N3-C2-O2	-9.39	115.63	122.20
1	AA	987	G	C4-C5-N7	-9.38	107.05	110.80
2	AB	73	G	N3-C4-C5	-9.38	123.91	128.60
26	BB	564	C	O4'-C1'-N1	9.38	115.71	108.20
26	BB	1280	G	C2-N3-C4	9.39	116.59	111.90
26	BB	1337	G	C4-C5-N7	-9.38	107.05	110.80
26	BB	1696	G	C6-C5-N7	-9.39	124.77	130.40
1	AA	547	A	C5-C6-N1	9.38	122.39	117.70
1	AA	785	G	C6-N1-C2	-9.38	119.47	125.10
1	AA	1322	C	C6-N1-C2	-9.38	116.55	120.30
26	BB	2537	U	N3-C2-O2	-9.38	115.63	122.20
25	BA	114	C	C5-C4-N4	9.38	126.77	120.20
26	BB	2700	A	C2-N3-C4	9.38	115.29	110.60
26	BB	2891	U	N3-C4-O4	9.38	125.97	119.40
1	AA	64	G	O4'-C1'-N9	9.38	115.70	108.20
1	AA	109	A	O4'-C4'-C3'	9.38	113.60	106.10
26	BB	60	G	C8-N9-C4	-9.38	102.65	106.40
26	BB	808	G	N7-C8-N9	9.38	117.79	113.10
26	BB	1539	U	C5'-C4'-O4'	9.38	120.36	109.10
26	BB	2266	A	C3'-C2'-C1'	9.38	109.00	101.50
26	BB	2835	A	C4'-C3'-C2'	-9.38	93.22	102.60
1	AA	1529	G	N3-C4-C5	-9.38	123.91	128.60
25	BA	59	A	C8-N9-C4	-9.38	102.05	105.80
34	BJ	124	ARG	NE-CZ-NH2	-9.38	115.61	120.30
1	AA	289	G	O4'-C1'-N9	9.38	115.70	108.20
1	AA	613	C	O4'-C1'-N1	9.38	115.70	108.20
26	BB	733	G	C3'-C2'-C1'	-9.37	94.00	101.50
26	BB	2156	G	O4'-C1'-N9	9.38	115.70	108.20
26	BB	1850	G	N1-C2-N3	-9.37	118.28	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1688	U	O4'-C1'-N1	9.37	115.70	108.20
26	BB	2298	A	C5-C6-N1	9.37	122.39	117.70
26	BB	2150	C	O4'-C1'-N1	9.37	115.69	108.20
26	BB	2234	G	C5-N7-C8	-9.37	99.61	104.30
26	BB	2573	C	N3-C2-O2	-9.37	115.34	121.90
1	AA	1130	A	N1-C2-N3	-9.37	124.62	129.30
26	BB	207	A	C5'-C4'-O4'	9.37	120.34	109.10
26	BB	949	G	N9-C4-C5	9.37	109.15	105.40
17	AQ	74	ARG	NE-CZ-NH2	-9.37	115.62	120.30
25	BA	89	U	C2-N3-C4	-9.37	121.38	127.00
26	BB	613	A	N7-C8-N9	9.36	118.48	113.80
26	BB	1227	G	C8-N9-C4	9.37	110.15	106.40
26	BB	1581	G	N3-C2-N2	9.37	126.46	119.90
26	BB	1943	U	C2-N3-C4	-9.37	121.38	127.00
1	AA	396	C	O4'-C1'-N1	9.36	115.69	108.20
1	AA	608	A	C4-C5-C6	-9.36	112.32	117.00
26	BB	107	G	C5-C6-O6	-9.36	122.98	128.60
26	BB	1852	U	N1-C2-N3	9.36	120.52	114.90
26	BB	1653	G	C8-N9-C4	-9.36	102.66	106.40
26	BB	1824	G	C8-N9-C4	-9.36	102.66	106.40
1	AA	1325	C	C5-C4-N4	-9.36	113.65	120.20
1	AA	130	A	C8-N9-C4	-9.36	102.06	105.80
1	AA	753	A	O4'-C1'-N9	9.36	115.69	108.20
26	BB	240	C	C6-N1-C2	-9.36	116.56	120.30
26	BB	1378	A	O4'-C1'-N9	9.36	115.69	108.20
26	BB	2590	A	O4'-C1'-N9	9.36	115.69	108.20
26	BB	1646	C	C5-C6-N1	9.36	125.68	121.00
1	AA	285	C	N3-C4-C5	-9.36	118.16	121.90
1	AA	505	G	N3-C2-N2	9.36	126.45	119.90
4	AD	71	G	O4'-C1'-N9	9.36	115.69	108.20
26	BB	499	U	N3-C4-C5	9.36	120.21	114.60
26	BB	1493	C	C5-C6-N1	9.36	125.68	121.00
1	AA	177	G	C6-N1-C2	-9.35	119.49	125.10
1	AA	251	G	O4'-C1'-N9	9.35	115.68	108.20
1	AA	479	U	C2-N3-C4	-9.35	121.39	127.00
26	BB	253	C	N1-C2-O2	9.35	124.51	118.90
26	BB	1830	C	N3-C4-C5	-9.35	118.16	121.90
1	AA	477	C	C5-C4-N4	-9.35	113.65	120.20
1	AA	1001	C	N3-C4-N4	9.35	124.55	118.00
26	BB	114	U	N3-C4-C5	-9.35	108.99	114.60
26	BB	659	G	N3-C4-C5	-9.35	123.92	128.60
26	BB	1439	A	N1-C6-N6	-9.35	112.99	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1664	A	C8-N9-C4	-9.35	102.06	105.80
26	BB	1689	A	N1-C6-N6	-9.35	112.99	118.60
26	BB	2428	G	N9-C4-C5	9.35	109.14	105.40
1	AA	90	C	C6-N1-C2	-9.35	116.56	120.30
1	AA	112	G	N3-C4-C5	-9.35	123.92	128.60
1	AA	765	G	C5-N7-C8	-9.35	99.62	104.30
26	BB	1052	C	N3-C4-C5	9.35	125.64	121.90
1	AA	1416	G	C2-N3-C4	9.35	116.57	111.90
26	BB	1420	A	N1-C2-N3	-9.35	124.63	129.30
26	BB	1846	G	C4-C5-N7	-9.35	107.06	110.80
1	AA	87	C	C5-C6-N1	-9.35	116.33	121.00
1	AA	1352	C	C4-C5-C6	9.35	122.07	117.40
25	BA	67	G	C5-C6-N1	9.35	116.17	111.50
26	BB	484	C	N1-C2-O2	9.35	124.51	118.90
26	BB	731	C	C5-C6-N1	9.35	125.67	121.00
31	BG	91	ARG	NE-CZ-NH2	9.34	124.97	120.30
26	BB	70	G	N7-C8-N9	9.34	117.77	113.10
26	BB	466	A	C8-N9-C4	-9.34	102.06	105.80
1	AA	26	A	O4'-C1'-N9	9.34	115.67	108.20
1	AA	1408	A	N1-C2-N3	-9.34	124.63	129.30
4	AD	70	C	N3-C4-C5	-9.34	118.16	121.90
1	AA	850	U	C5-C4-O4	-9.34	120.30	125.90
26	BB	261	G	N9-C4-C5	9.34	109.14	105.40
26	BB	826	U	C5-C6-N1	-9.34	118.03	122.70
26	BB	1216	G	N7-C8-N9	-9.34	108.43	113.10
26	BB	1788	C	N3-C4-C5	-9.34	118.16	121.90
1	AA	417	G	C5-C6-O6	-9.34	123.00	128.60
1	AA	1538	C	C4-C5-C6	9.34	122.07	117.40
25	BA	92	C	C6-N1-C2	-9.34	116.56	120.30
26	BB	1564	C	O4'-C1'-N1	9.34	115.67	108.20
1	AA	164	G	C8-N9-C4	-9.33	102.67	106.40
1	AA	475	C	C6-N1-C2	9.33	124.03	120.30
25	BA	82	U	N3-C2-O2	-9.33	115.67	122.20
26	BB	21	A	C5-C6-N6	-9.33	116.23	123.70
26	BB	186	G	N1-C2-N3	-9.33	118.30	123.90
26	BB	265	A	C4-C5-N7	9.33	115.37	110.70
26	BB	1311	G	C6-N1-C2	-9.33	119.50	125.10
26	BB	1948	G	N3-C4-N9	9.33	131.60	126.00
26	BB	2684	U	C6-N1-C2	-9.33	115.40	121.00
26	BB	1382	G	N3-C4-N9	9.33	131.60	126.00
26	BB	1664	A	O4'-C1'-C2'	9.33	116.00	107.60
1	AA	195	A	C4-C5-N7	-9.33	106.04	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1258	G	N9-C4-C5	9.33	109.13	105.40
26	BB	376	G	O4'-C1'-N9	9.33	115.66	108.20
26	BB	939	G	C4'-C3'-C2'	-9.33	93.27	102.60
26	BB	1312	U	N3-C4-O4	9.32	125.93	119.40
1	AA	717	U	N1-C2-N3	9.32	120.49	114.90
26	BB	669	G	N9-C4-C5	9.32	109.13	105.40
26	BB	1156	A	N1-C6-N6	9.32	124.19	118.60
26	BB	1534	U	C5-C4-O4	-9.32	120.31	125.90
26	BB	1779	U	N3-C2-O2	-9.32	115.67	122.20
26	BB	2128	G	N7-C8-N9	9.32	117.76	113.10
16	AP	91	ARG	NE-CZ-NH2	-9.32	115.64	120.30
1	AA	753	A	C5'-C4'-O4'	9.32	120.28	109.10
26	BB	1461	C	O4'-C1'-N1	9.32	115.66	108.20
1	AA	1032	G	O4'-C1'-N9	9.32	115.66	108.20
2	AB	61	C	O4'-C4'-C3'	9.32	113.56	106.10
26	BB	273	G	N3-C4-C5	-9.32	123.94	128.60
26	BB	1310	G	N3-C2-N2	-9.32	113.38	119.90
34	BJ	124	ARG	NE-CZ-NH1	9.32	124.96	120.30
26	BB	1854	A	C3'-C2'-C1'	9.32	108.95	101.50
26	BB	2708	G	C8-N9-C4	-9.32	102.67	106.40
1	AA	31	G	C6-C5-N7	-9.32	124.81	130.40
1	AA	505	G	C5'-C4'-C3'	-9.32	101.09	116.00
1	AA	612	C	N3-C4-C5	-9.32	118.17	121.90
26	BB	679	C	C6-N1-C2	9.32	124.03	120.30
26	BB	2144	G	C8-N9-C4	-9.32	102.67	106.40
1	AA	376	G	C5'-C4'-O4'	9.31	120.28	109.10
1	AA	1426	G	C5-C6-O6	9.31	134.19	128.60
26	BB	1486	U	N1-C2-N3	9.31	120.49	114.90
26	BB	1920	C	N1-C2-O2	9.31	124.49	118.90
26	BB	1951	U	C5-C4-O4	-9.31	120.31	125.90
26	BB	1576	U	N1-C1'-C2'	-9.31	101.76	112.00
1	AA	58	C	C5-C6-N1	9.31	125.66	121.00
1	AA	137	U	N3-C4-O4	9.31	125.92	119.40
1	AA	1526	G	C6-N1-C2	-9.31	119.51	125.10
26	BB	671	C	C1'-O4'-C4'	-9.31	102.45	109.90
26	BB	988	A	C2-N3-C4	9.31	115.25	110.60
26	BB	2208	C	C6-N1-C2	-9.31	116.58	120.30
1	AA	786	G	C4-C5-N7	-9.31	107.08	110.80
1	AA	134	G	N1-C2-N3	-9.31	118.32	123.90
1	AA	860	A	C8-N9-C4	-9.31	102.08	105.80
1	AA	923	A	N3-C4-N9	9.31	134.85	127.40
1	AA	1153	G	C8-N9-C4	-9.31	102.68	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	250	G	N9-C4-C5	9.31	109.12	105.40
26	BB	315	G	N3-C4-C5	-9.31	123.95	128.60
26	BB	2215	C	C2-N3-C4	9.31	124.55	119.90
26	BB	2383	G	N9-C4-C5	9.31	109.12	105.40
26	BB	2811	G	C2-N3-C4	9.31	116.55	111.90
1	AA	1135	U	O4'-C1'-N1	9.31	115.64	108.20
1	AA	1250	A	N1-C2-N3	-9.31	124.65	129.30
26	BB	1179	G	N9-C4-C5	9.31	109.12	105.40
25	BA	82	U	C4'-C3'-C2'	-9.30	93.30	102.60
26	BB	1454	C	C4-C5-C6	-9.30	112.75	117.40
26	BB	486	C	O4'-C1'-N1	9.30	115.64	108.20
26	BB	1741	C	C5-C4-N4	-9.30	113.69	120.20
26	BB	2495	G	C8-N9-C4	-9.30	102.68	106.40
1	AA	529	G	C8-N9-C4	9.30	110.12	106.40
26	BB	532	A	O4'-C1'-N9	9.30	115.64	108.20
26	BB	543	G	N3-C2-N2	-9.30	113.39	119.90
1	AA	990	C	N3-C4-N4	9.30	124.51	118.00
26	BB	184	C	O4'-C1'-N1	9.30	115.64	108.20
26	BB	873	C	C5-C6-N1	9.30	125.65	121.00
26	BB	1978	A	N9-C4-C5	9.30	109.52	105.80
26	BB	2013	A	O4'-C1'-N9	9.30	115.64	108.20
26	BB	2758	A	N9-C4-C5	-9.30	102.08	105.80
39	BO	16	ARG	NE-CZ-NH2	-9.30	115.65	120.30
1	AA	170	U	O4'-C1'-N1	9.30	115.64	108.20
26	BB	710	U	N1-C2-N3	9.30	120.48	114.90
26	BB	1793	C	C5-C4-N4	-9.30	113.69	120.20
1	AA	148	G	C4-C5-C6	9.30	124.38	118.80
1	AA	176	C	N3-C4-C5	-9.30	118.18	121.90
1	AA	260	G	C6-N1-C2	-9.29	119.52	125.10
1	AA	1208	C	N1-C2-O2	9.30	124.48	118.90
1	AA	1426	G	N1-C6-O6	-9.29	114.32	119.90
4	AD	71	G	C6-C5-N7	-9.29	124.82	130.40
26	BB	2265	U	C5'-C4'-O4'	9.29	120.25	109.10
26	BB	2648	G	N9-C4-C5	9.29	109.12	105.40
1	AA	128	G	C6-N1-C2	-9.29	119.53	125.10
1	AA	132	C	C2-N3-C4	9.29	124.55	119.90
1	AA	173	U	C6-N1-C2	-9.29	115.42	121.00
26	BB	55	G	C5-C6-O6	-9.29	123.03	128.60
26	BB	885	C	C3'-C2'-C1'	9.29	108.93	101.50
26	BB	1010	A	C5-N7-C8	-9.29	99.25	103.90
26	BB	2126	A	O4'-C1'-N9	9.29	115.63	108.20
26	BB	2492	U	C2-N3-C4	-9.29	121.43	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	495	A	O4'-C1'-N9	9.29	115.63	108.20
1	AA	907	A	N7-C8-N9	9.29	118.44	113.80
26	BB	851	C	O4'-C1'-N1	9.29	115.63	108.20
26	BB	2346	A	C5-N7-C8	-9.29	99.25	103.90
1	AA	998	C	C6-N1-C2	9.29	124.02	120.30
26	BB	1258	U	C4-C5-C6	9.29	125.27	119.70
1	AA	923	A	C2-N3-C4	9.29	115.24	110.60
1	AA	983	A	C8-N9-C4	-9.29	102.09	105.80
1	AA	1134	G	C5-N7-C8	-9.29	99.66	104.30
1	AA	1369	C	P-O3'-C3'	9.29	130.84	119.70
26	BB	2797	U	O4'-C1'-N1	9.29	115.63	108.20
1	AA	92	U	O4'-C1'-N1	9.28	115.63	108.20
1	AA	763	G	C8-N9-C4	-9.28	102.69	106.40
26	BB	948	C	C5-C4-N4	-9.28	113.70	120.20
26	BB	1850	G	C5'-C4'-O4'	9.28	120.24	109.10
26	BB	1983	G	C4-C5-N7	-9.28	107.09	110.80
26	BB	489	G	C4-C5-C6	-9.28	113.23	118.80
26	BB	27	G	C8-N9-C4	-9.28	102.69	106.40
26	BB	1427	A	C6-C5-N7	9.28	138.79	132.30
26	BB	2025	C	N3-C4-C5	9.28	125.61	121.90
26	BB	2284	A	N1-C6-N6	9.28	124.17	118.60
1	AA	55	A	O4'-C1'-N9	9.28	115.62	108.20
26	BB	1056	G	C2-N3-C4	9.28	116.54	111.90
26	BB	95	A	O4'-C1'-N9	-9.28	100.78	108.20
26	BB	906	U	C5-C4-O4	-9.27	120.34	125.90
26	BB	1886	U	C4-C5-C6	9.27	125.26	119.70
1	AA	243	A	C2-N3-C4	9.27	115.23	110.60
2	AB	56	C	N1-C2-O2	9.27	124.46	118.90
26	BB	478	A	N9-C4-C5	9.27	109.51	105.80
26	BB	613	A	C4-C5-C6	-9.27	112.36	117.00
26	BB	811	U	O4'-C1'-N1	9.27	115.61	108.20
30	BF	188	MET	CG-SD-CE	9.27	115.03	100.20
1	AA	65	A	C5-N7-C8	-9.27	99.27	103.90
26	BB	1857	G	C2-N3-C4	9.27	116.53	111.90
28	BD	86	ARG	NE-CZ-NH1	9.27	124.93	120.30
1	AA	782	A	P-O3'-C3'	9.27	130.82	119.70
1	AA	1371	G	C6-C5-N7	-9.27	124.84	130.40
10	AJ	118	ARG	NE-CZ-NH2	9.27	124.93	120.30
26	BB	445	C	C5'-C4'-O4'	9.27	120.22	109.10
26	BB	743	A	C5-C6-N1	9.27	122.33	117.70
26	BB	1920	C	C4'-C3'-C2'	-9.27	93.33	102.60
30	BF	85	PHE	CB-CG-CD1	9.27	127.29	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	6	G	C8-N9-C4	-9.26	102.69	106.40
1	AA	481	G	C2-N3-C4	9.26	116.53	111.90
1	AA	435	A	N1-C2-N3	-9.26	124.67	129.30
1	AA	480	U	C5'-C4'-O4'	9.26	120.21	109.10
1	AA	1124	G	N7-C8-N9	9.26	117.73	113.10
1	AA	1150	A	N7-C8-N9	9.26	118.43	113.80
1	AA	1392	G	N3-C4-C5	-9.26	123.97	128.60
26	BB	1943	U	N1-C2-N3	9.26	120.46	114.90
1	AA	104	G	C6-C5-N7	9.26	135.95	130.40
1	AA	740	U	C4'-C3'-C2'	-9.26	93.34	102.60
25	BA	40	U	O4'-C1'-N1	9.26	115.61	108.20
26	BB	902	C	N3-C4-C5	-9.26	118.20	121.90
26	BB	748	G	N9-C4-C5	9.26	109.10	105.40
26	BB	925	A	C5-C6-N6	-9.26	116.30	123.70
26	BB	2787	C	O4'-C1'-N1	9.26	115.60	108.20
26	BB	60	G	C1'-O4'-C4'	-9.25	102.50	109.90
26	BB	1134	A	O4'-C1'-N9	9.25	115.60	108.20
28	BD	270	ARG	NE-CZ-NH1	-9.25	115.67	120.30
26	BB	1423	G	C4-C5-N7	-9.25	107.10	110.80
26	BB	1471	G	C4-C5-N7	-9.25	107.10	110.80
1	AA	1327	C	N3-C4-C5	-9.25	118.20	121.90
26	BB	863	A	O4'-C1'-N9	9.25	115.60	108.20
26	BB	1391	U	O4'-C1'-N1	9.25	115.60	108.20
26	BB	1396	U	C6-N1-C2	9.25	126.55	121.00
26	BB	2093	G	N3-C4-C5	-9.25	123.97	128.60
26	BB	2331	G	N3-C4-C5	-9.25	123.97	128.60
25	BA	54	G	C5'-C4'-O4'	9.25	120.19	109.10
26	BB	565	C	C6-N1-C2	-9.25	116.60	120.30
26	BB	956	G	N7-C8-N9	9.25	117.72	113.10
26	BB	1021	A	O4'-C1'-N9	9.25	115.60	108.20
26	BB	2821	A	N7-C8-N9	-9.25	109.18	113.80
1	AA	722	G	C4-C5-N7	9.24	114.50	110.80
1	AA	1511	G	N7-C8-N9	9.24	117.72	113.10
26	BB	103	A	C8-N9-C4	-9.24	102.10	105.80
1	AA	1458	G	C8-N9-C4	-9.24	102.70	106.40
26	BB	781	A	C5'-C4'-O4'	9.24	120.19	109.10
26	BB	2722	G	N1-C6-O6	-9.24	114.35	119.90
26	BB	2759	G	C8-N9-C4	-9.24	102.70	106.40
1	AA	895	G	O4'-C1'-N9	9.24	115.59	108.20
25	BA	86	G	C5-C6-N1	9.24	116.12	111.50
26	BB	313	G	N3-C4-C5	-9.24	123.98	128.60
26	BB	560	C	O4'-C1'-N1	9.24	115.59	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1476	U	C1'-O4'-C4'	-9.24	102.51	109.90
26	BB	697	G	C5-C6-O6	9.24	134.14	128.60
1	AA	1158	C	C5-C6-N1	9.24	125.62	121.00
26	BB	26	G	N9-C4-C5	9.24	109.09	105.40
26	BB	2160	C	C6-N1-C2	-9.24	116.61	120.30
25	BA	27	C	O4'-C4'-C3'	9.23	113.49	106.10
26	BB	1813	G	C2-N3-C4	9.23	116.52	111.90
1	AA	1299	A	C4-C5-C6	-9.23	112.38	117.00
26	BB	51	G	N7-C8-N9	9.23	117.72	113.10
26	BB	876	C	C4'-C3'-C2'	-9.23	93.37	102.60
26	BB	1610	A	N1-C6-N6	-9.23	113.06	118.60
26	BB	2021	C	O4'-C1'-N1	9.23	115.59	108.20
26	BB	2338	C	O4'-C1'-N1	9.23	115.59	108.20
1	AA	379	C	O4'-C1'-N1	9.23	115.58	108.20
1	AA	897	C	C6-N1-C2	9.23	123.99	120.30
26	BB	2198	A	C5-N7-C8	9.23	108.52	103.90
1	AA	1388	C	C4-C5-C6	-9.23	112.79	117.40
1	AA	1464	U	N3-C2-O2	-9.23	115.74	122.20
26	BB	972	A	N7-C8-N9	9.23	118.42	113.80
1	AA	528	C	O4'-C1'-N1	9.23	115.58	108.20
1	AA	529	G	N9-C4-C5	-9.23	101.71	105.40
1	AA	669	G	C5-C6-O6	-9.23	123.06	128.60
1	AA	973	G	N7-C8-N9	-9.23	108.49	113.10
1	AA	1134	G	C5-C6-N1	9.23	116.11	111.50
26	BB	520	G	N7-C8-N9	9.23	117.71	113.10
26	BB	1288	G	C6-N1-C2	-9.23	119.56	125.10
1	AA	579	A	C4-C5-C6	9.22	121.61	117.00
1	AA	933	G	O4'-C1'-N9	9.22	115.58	108.20
1	AA	452	A	O4'-C1'-N9	9.22	115.58	108.20
1	AA	830	G	C6-N1-C2	-9.22	119.57	125.10
1	AA	1150	A	C8-N9-C4	-9.22	102.11	105.80
25	BA	41	G	N3-C4-C5	-9.22	123.99	128.60
26	BB	101	A	N1-C2-N3	9.22	133.91	129.30
26	BB	600	G	C4'-C3'-C2'	-9.22	93.38	102.60
26	BB	1054	A	N1-C6-N6	9.22	124.13	118.60
26	BB	2023	C	O4'-C1'-N1	9.22	115.58	108.20
2	AB	4	G	C4'-C3'-C2'	-9.22	93.38	102.60
26	BB	1452	G	C8-N9-C4	-9.22	102.71	106.40
26	BB	1556	C	C5-C4-N4	-9.22	113.75	120.20
26	BB	2548	U	C5-C4-O4	-9.22	120.37	125.90
26	BB	2798	U	C2-N3-C4	-9.22	121.47	127.00
1	AA	1336	C	N3-C2-O2	-9.22	115.45	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1383	C	C4-C5-C6	-9.22	112.79	117.40
26	BB	2832	U	C5-C4-O4	9.22	131.43	125.90
1	AA	721	G	N3-C4-C5	-9.22	123.99	128.60
26	BB	418	C	C4-C5-C6	-9.22	112.79	117.40
26	BB	1028	A	C5-C6-N6	9.22	131.07	123.70
26	BB	1543	G	C8-N9-C4	-9.22	102.71	106.40
26	BB	2022	U	O4'-C1'-N1	9.22	115.57	108.20
1	AA	87	C	N1-C2-O2	9.22	124.43	118.90
2	AB	28	C	N1-C2-O2	9.21	124.43	118.90
26	BB	1474	U	C2-N3-C4	-9.21	121.47	127.00
26	BB	2830	C	C6-N1-C2	-9.21	116.61	120.30
31	BG	124	ARG	NE-CZ-NH1	9.21	124.91	120.30
1	AA	1035	A	N1-C2-N3	-9.21	124.69	129.30
26	BB	227	A	C4-C5-N7	9.21	115.31	110.70
26	BB	824	U	O4'-C1'-N1	9.21	115.57	108.20
26	BB	1277	G	C6-N1-C2	-9.21	119.57	125.10
25	BA	106	G	N9-C4-C5	-9.21	101.72	105.40
26	BB	645	C	C5-C6-N1	9.21	125.61	121.00
26	BB	2006	C	N3-C4-C5	-9.21	118.22	121.90
26	BB	2137	U	C5-C4-O4	-9.21	120.37	125.90
26	BB	2821	A	C8-N9-C4	9.21	109.48	105.80
1	AA	375	U	O4'-C1'-N1	9.21	115.56	108.20
1	AA	906	A	N1-C2-N3	9.21	133.90	129.30
1	AA	1280	A	N9-C4-C5	9.21	109.48	105.80
21	AU	47	ARG	NE-CZ-NH1	9.21	124.90	120.30
25	BA	82	U	N1-C2-O2	9.21	129.25	122.80
26	BB	1101	U	N3-C4-O4	-9.21	112.96	119.40
1	AA	726	C	N3-C4-C5	-9.20	118.22	121.90
26	BB	1188	U	N1-C2-O2	9.20	129.24	122.80
26	BB	1995	U	O4'-C1'-N1	9.20	115.56	108.20
26	BB	1884	G	C8-N9-C4	-9.20	102.72	106.40
1	AA	1	A	C2-N3-C4	9.20	115.20	110.60
1	AA	818	G	C4-C5-C6	9.20	124.32	118.80
1	AA	1051	C	C3'-C2'-C1'	9.20	108.86	101.50
26	BB	337	C	C1'-O4'-C4'	9.20	117.26	109.90
26	BB	1107	G	C5-C6-O6	-9.20	123.08	128.60
26	BB	2337	G	C8-N9-C4	9.20	110.08	106.40
26	BB	699	A	C6-N1-C2	-9.20	113.08	118.60
26	BB	877	A	N7-C8-N9	9.20	118.40	113.80
26	BB	2824	C	N1-C2-O2	9.20	124.42	118.90
1	AA	358	U	O4'-C1'-N1	9.19	115.56	108.20
1	AA	691	G	O4'-C1'-N9	9.19	115.56	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	703	G	C2-N3-C4	9.19	116.50	111.90
1	AA	294	U	C4'-C3'-C2'	-9.19	93.41	102.60
1	AA	1110	A	N7-C8-N9	9.19	118.40	113.80
26	BB	577	G	N9-C4-C5	9.19	109.08	105.40
26	BB	2582	G	C4-C5-C6	9.19	124.32	118.80
1	AA	1331	G	N1-C6-O6	-9.19	114.39	119.90
26	BB	1093	G	C4-C5-N7	-9.19	107.12	110.80
26	BB	1811	G	C6-N1-C2	-9.19	119.58	125.10
26	BB	1999	C	N3-C4-C5	-9.19	118.22	121.90
1	AA	753	A	C5-C6-N1	-9.19	113.11	117.70
3	AC	42	U	N3-C4-C5	-9.19	109.09	114.60
26	BB	831	G	O4'-C1'-N9	9.19	115.55	108.20
26	BB	890	C	N3-C4-C5	-9.19	118.22	121.90
26	BB	1710	G	C4-C5-N7	-9.19	107.12	110.80
26	BB	1721	G	N1-C2-N3	-9.19	118.39	123.90
26	BB	2124	G	N3-C2-N2	-9.19	113.47	119.90
26	BB	2345	G	C6-N1-C2	-9.19	119.59	125.10
26	BB	2870	C	C5-C6-N1	9.19	125.59	121.00
1	AA	69	G	C8-N9-C4	-9.19	102.72	106.40
1	AA	457	G	C6-N1-C2	-9.19	119.59	125.10
1	AA	1385	G	C2-N3-C4	9.19	116.49	111.90
4	AD	47	A	O4'-C1'-N9	9.19	115.55	108.20
26	BB	613	A	O4'-C1'-N9	9.19	115.55	108.20
26	BB	1499	C	C5'-C4'-O4'	9.19	120.12	109.10
26	BB	1679	A	C8-N9-C4	-9.19	102.13	105.80
26	BB	2530	A	C6-N1-C2	-9.19	113.09	118.60
26	BB	726	G	N3-C4-C5	-9.18	124.01	128.60
26	BB	1411	U	C5-C6-N1	-9.18	118.11	122.70
26	BB	1615	C	N3-C2-O2	-9.18	115.47	121.90
26	BB	2079	U	O4'-C1'-N1	9.18	115.55	108.20
1	AA	1234	C	C5-C4-N4	-9.18	113.78	120.20
26	BB	551	G	N3-C2-N2	9.18	126.33	119.90
26	BB	1918	A	O4'-C1'-N9	9.18	115.54	108.20
1	AA	72	A	C5'-C4'-O4'	9.18	120.11	109.10
26	BB	359	G	N7-C8-N9	9.18	117.69	113.10
26	BB	1090	A	C4-C5-N7	9.18	115.29	110.70
2	AB	53	G	C8-N9-C4	-9.17	102.73	106.40
26	BB	568	U	C1'-O4'-C4'	-9.17	102.56	109.90
26	BB	1459	G	C8-N9-C4	-9.17	102.73	106.40
26	BB	1684	G	C5-C6-O6	-9.17	123.09	128.60
26	BB	1686	C	C5-C4-N4	-9.17	113.78	120.20
26	BB	2389	G	N3-C2-N2	-9.17	113.48	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2742	G	C8-N9-C4	-9.17	102.73	106.40
1	AA	531	U	C5-C6-N1	9.17	127.28	122.70
4	AD	40	C	C6-N1-C2	9.17	123.97	120.30
26	BB	29	U	C5-C4-O4	-9.17	120.40	125.90
26	BB	382	A	C5-N7-C8	9.17	108.48	103.90
26	BB	2421	G	N7-C8-N9	9.17	117.68	113.10
1	AA	827	U	N1-C2-N3	9.17	120.40	114.90
26	BB	328	U	C2-N3-C4	-9.17	121.50	127.00
26	BB	695	G	C4'-C3'-C2'	-9.17	93.43	102.60
26	BB	1560	G	O4'-C1'-N9	9.17	115.53	108.20
26	BB	1600	C	O4'-C1'-N1	9.17	115.53	108.20
26	BB	1714	U	C1'-O4'-C4'	-9.17	102.57	109.90
1	AA	29	U	C2-N3-C4	-9.16	121.50	127.00
1	AA	906	A	C5-N7-C8	-9.16	99.32	103.90
1	AA	1380	U	C5-C6-N1	-9.16	118.12	122.70
26	BB	2894	G	C8-N9-C4	-9.16	102.73	106.40
1	AA	282	A	C4'-C3'-C2'	-9.16	93.44	102.60
1	AA	358	U	C2-N3-C4	-9.16	121.50	127.00
1	AA	1304	G	C4-C5-N7	9.16	114.47	110.80
2	AB	50	G	N3-C4-C5	-9.16	124.02	128.60
26	BB	236	C	O4'-C1'-N1	9.16	115.53	108.20
26	BB	427	U	O4'-C1'-N1	9.16	115.53	108.20
26	BB	585	G	C6-N1-C2	-9.16	119.60	125.10
26	BB	2460	U	N3-C4-O4	9.16	125.81	119.40
1	AA	127	G	C5-C6-N1	9.16	116.08	111.50
1	AA	213	G	N3-C4-C5	-9.16	124.02	128.60
1	AA	1418	A	C8-N9-C4	-9.16	102.14	105.80
1	AA	405	U	C4-C5-C6	9.16	125.20	119.70
25	BA	112	G	C6-N1-C2	-9.16	119.60	125.10
26	BB	475	C	C2-N3-C4	9.16	124.48	119.90
26	BB	1276	A	C5-C6-N1	9.16	122.28	117.70
26	BB	1904	G	C6-N1-C2	-9.16	119.60	125.10
26	BB	2397	G	N7-C8-N9	9.16	117.68	113.10
26	BB	2480	C	O4'-C1'-N1	9.16	115.53	108.20
26	BB	2698	U	C4-C5-C6	9.16	125.20	119.70
1	AA	773	G	N9-C1'-C2'	-9.16	101.93	112.00
1	AA	686	U	C2-N3-C4	-9.15	121.51	127.00
1	AA	938	A	C8-N9-C4	-9.15	102.14	105.80
26	BB	503	A	N1-C2-N3	-9.15	124.72	129.30
26	BB	790	U	C4-C5-C6	9.15	125.19	119.70
26	BB	1484	U	C5'-C4'-O4'	9.15	120.08	109.10
1	AA	709	U	C2-N3-C4	-9.15	121.51	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	502	A	C6-C5-N7	9.15	138.71	132.30
26	BB	575	A	N1-C2-N3	-9.15	124.72	129.30
26	BB	1230	A	C1'-O4'-C4'	9.15	117.22	109.90
26	BB	1461	C	N1-C2-O2	9.15	124.39	118.90
26	BB	1478	G	C4-C5-N7	-9.15	107.14	110.80
31	BG	177	ARG	NE-CZ-NH1	9.15	124.88	120.30
1	AA	1255	G	C5-N7-C8	-9.15	99.73	104.30
25	BA	59	A	N7-C8-N9	9.15	118.37	113.80
20	AT	47	ASP	CB-CG-OD1	-9.15	110.07	118.30
26	BB	506	G	C4-C5-N7	-9.15	107.14	110.80
26	BB	1154	G	N3-C4-C5	-9.15	124.03	128.60
3	AC	17	U	C3'-C2'-C1'	9.14	108.82	101.50
26	BB	1168	G	N1-C2-N3	-9.14	118.41	123.90
26	BB	2093	G	C2-N3-C4	9.14	116.47	111.90
26	BB	2379	G	N3-C4-C5	-9.14	124.03	128.60
26	BB	2527	C	C5-C4-N4	-9.14	113.80	120.20
1	AA	293	G	C5-C6-N1	-9.14	106.93	111.50
1	AA	723	U	N3-C4-O4	9.14	125.80	119.40
26	BB	2345	G	N7-C8-N9	9.14	117.67	113.10
26	BB	2531	A	C2-N3-C4	9.14	115.17	110.60
1	AA	380	G	N9-C4-C5	9.14	109.06	105.40
1	AA	873	A	C8-N9-C4	-9.14	102.14	105.80
1	AA	925	G	N1-C6-O6	-9.14	114.42	119.90
1	AA	1383	C	N1-C2-O2	9.14	124.39	118.90
1	AA	1486	G	N7-C8-N9	-9.14	108.53	113.10
7	AG	69	ARG	NE-CZ-NH2	-9.14	115.73	120.30
26	BB	1142	A	P-O3'-C3'	9.14	130.67	119.70
26	BB	1514	G	C6-C5-N7	-9.14	124.92	130.40
26	BB	42	A	P-O3'-C3'	9.14	130.67	119.70
26	BB	2521	C	O4'-C1'-N1	9.14	115.51	108.20
26	BB	2609	U	O4'-C1'-N1	9.14	115.51	108.20
26	BB	2318	G	N3-C2-N2	-9.14	113.50	119.90
4	AD	49	C	N1-C2-O2	9.14	124.38	118.90
26	BB	2198	A	N1-C6-N6	-9.14	113.12	118.60
1	AA	328	C	C5-C6-N1	9.14	125.57	121.00
26	BB	676	A	C5-C6-N1	9.13	122.27	117.70
26	BB	1514	G	C4-C5-C6	9.13	124.28	118.80
19	AS	70	ARG	NE-CZ-NH2	-9.13	115.73	120.30
25	BA	2	G	C4'-C3'-C2'	-9.13	93.47	102.60
26	BB	1931	U	C4'-C3'-C2'	-9.13	93.47	102.60
26	BB	2376	A	N1-C6-N6	-9.13	113.12	118.60
1	AA	156	C	O4'-C1'-N1	9.13	115.50	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1397	C	N1-C2-O2	9.13	124.38	118.90
26	BB	2058	A	N1-C2-N3	-9.13	124.73	129.30
26	BB	2288	A	C6-C5-N7	9.13	138.69	132.30
1	AA	1268	G	C8-N9-C4	-9.13	102.75	106.40
26	BB	258	G	C4-C5-C6	9.13	124.28	118.80
1	AA	302	G	C5-C6-N1	9.13	116.06	111.50
2	AB	30	G	C5-C6-N1	-9.13	106.94	111.50
3	AC	24	A	C5-N7-C8	9.13	108.46	103.90
26	BB	31	C	C5'-C4'-O4'	9.13	120.05	109.10
26	BB	62	U	C5-C6-N1	-9.13	118.14	122.70
26	BB	339	U	C6-N1-C2	-9.13	115.52	121.00
26	BB	618	G	N7-C8-N9	9.13	117.66	113.10
31	BG	173	ASP	CB-CG-OD1	-9.13	110.08	118.30
1	AA	726	C	N3-C4-N4	9.13	124.39	118.00
1	AA	1196	A	C8-N9-C4	9.12	109.45	105.80
4	AD	65	G	N1-C6-O6	-9.12	114.42	119.90
26	BB	110	G	C4-C5-N7	9.13	114.45	110.80
26	BB	1057	A	C6-N1-C2	-9.12	113.13	118.60
26	BB	1520	U	C4-C5-C6	9.12	125.17	119.70
26	BB	1852	U	N3-C2-O2	-9.12	115.81	122.20
1	AA	1239	A	N1-C6-N6	9.12	124.07	118.60
26	BB	132	G	O4'-C1'-N9	9.12	115.50	108.20
26	BB	1102	C	O4'-C1'-N1	9.12	115.50	108.20
26	BB	1350	C	C5-C6-N1	-9.12	116.44	121.00
26	BB	1081	U	N3-C4-C5	-9.12	109.13	114.60
26	BB	1262	A	N9-C4-C5	9.12	109.45	105.80
26	BB	2444	G	C6-N1-C2	-9.12	119.63	125.10
26	BB	2791	G	C6-N1-C2	-9.12	119.63	125.10
26	BB	462	C	N1-C2-O2	9.12	124.37	118.90
1	AA	451	A	C5-C6-N6	-9.12	116.41	123.70
1	AA	904	U	N1-C2-N3	9.12	120.37	114.90
1	AA	1393	U	N3-C4-C5	9.12	120.07	114.60
4	AD	20	G	C3'-C2'-C1'	-9.12	94.20	101.50
1	AA	1079	G	O4'-C1'-N9	9.12	115.49	108.20
26	BB	483	A	C2-N3-C4	9.12	115.16	110.60
26	BB	1451	C	C6-N1-C2	-9.12	116.65	120.30
1	AA	533	A	C4-C5-C6	-9.12	112.44	117.00
1	AA	1165	U	O4'-C1'-N1	9.11	115.49	108.20
2	AB	1	A	N1-C6-N6	-9.12	113.13	118.60
26	BB	1921	G	N1-C6-O6	-9.11	114.43	119.90
26	BB	2012	G	C8-N9-C4	-9.12	102.75	106.40
26	BB	2427	C	C2-N3-C4	-9.12	115.34	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2743	U	C4-C5-C6	9.12	125.17	119.70
1	AA	128	G	C3'-C2'-C1'	-9.11	94.21	101.50
1	AA	366	A	N9-C4-C5	9.11	109.44	105.80
1	AA	568	G	C5-C6-O6	-9.11	123.13	128.60
1	AA	581	G	N3-C4-C5	-9.11	124.04	128.60
26	BB	1972	G	C8-N9-C4	9.11	110.05	106.40
26	BB	1998	A	N3-C4-C5	-9.11	120.42	126.80
26	BB	2427	C	N3-C2-O2	-9.11	115.52	121.90
26	BB	2599	G	O4'-C1'-N9	9.11	115.49	108.20
26	BB	798	G	C5-C6-N1	9.11	116.06	111.50
1	AA	1015	G	C4-C5-N7	9.11	114.44	110.80
1	AA	1068	G	N1-C2-N3	-9.11	118.44	123.90
26	BB	558	U	N1-C1'-C2'	-9.11	101.98	112.00
26	BB	2304	G	C5-C6-N1	9.11	116.06	111.50
26	BB	2804	U	N1-C2-N3	9.11	120.37	114.90
2	AB	45	U	N3-C2-O2	-9.11	115.83	122.20
26	BB	548	G	C5-C6-N1	9.11	116.05	111.50
26	BB	606	U	O4'-C4'-C3'	9.11	113.39	106.10
26	BB	1450	G	C5-C6-N1	9.11	116.05	111.50
26	BB	2104	C	O4'-C1'-N1	9.11	115.48	108.20
1	AA	122	G	N7-C8-N9	9.10	117.65	113.10
1	AA	545	C	C1'-O4'-C4'	9.10	117.18	109.90
1	AA	1254	A	O4'-C1'-N9	9.10	115.48	108.20
25	BA	46	A	C4-C5-C6	-9.10	112.45	117.00
26	BB	1433	A	N1-C2-N3	-9.10	124.75	129.30
26	BB	2586	U	N1-C2-N3	9.10	120.36	114.90
26	BB	2841	C	C3'-C2'-C1'	9.10	108.78	101.50
26	BB	260	G	C8-N9-C4	-9.10	102.76	106.40
26	BB	533	G	N3-C4-C5	-9.10	124.05	128.60
26	BB	2184	A	C4-C5-C6	-9.10	112.45	117.00
26	BB	1109	C	C5-C6-N1	9.10	125.55	121.00
26	BB	1792	G	C5-N7-C8	9.10	108.85	104.30
26	BB	2536	G	C6-C5-N7	-9.10	124.94	130.40
1	AA	740	U	N3-C2-O2	-9.10	115.83	122.20
25	BA	30	C	N3-C4-C5	-9.10	118.26	121.90
26	BB	352	A	N9-C4-C5	9.10	109.44	105.80
26	BB	368	A	N1-C6-N6	9.10	124.06	118.60
26	BB	396	G	N1-C6-O6	9.10	125.36	119.90
26	BB	451	U	N3-C4-O4	-9.10	113.03	119.40
26	BB	1002	G	C6-N1-C2	-9.10	119.64	125.10
1	AA	345	C	C2-N3-C4	9.09	124.45	119.90
1	AA	1067	A	C8-N9-C4	9.09	109.44	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	903	C	C5-C4-N4	-9.09	113.83	120.20
1	AA	350	G	N9-C4-C5	9.09	109.04	105.40
26	BB	924	G	N3-C2-N2	-9.09	113.53	119.90
26	BB	1816	C	O4'-C1'-N1	9.09	115.47	108.20
26	BB	2700	A	N3-C4-C5	-9.09	120.44	126.80
1	AA	447	G	C6-C5-N7	-9.09	124.94	130.40
26	BB	522	A	C2-N3-C4	9.09	115.15	110.60
1	AA	1434	A	N1-C6-N6	9.09	124.05	118.60
3	AC	25	U	N3-C4-O4	9.09	125.76	119.40
14	AN	126	ARG	NE-CZ-NH2	9.09	124.84	120.30
26	BB	969	G	N3-C4-C5	-9.09	124.06	128.60
26	BB	101	A	C6-N1-C2	-9.09	113.15	118.60
26	BB	376	G	C1'-O4'-C4'	9.09	117.17	109.90
26	BB	708	G	O4'-C1'-N9	9.09	115.47	108.20
26	BB	1152	C	O4'-C1'-N1	9.09	115.47	108.20
26	BB	1475	G	C5-N7-C8	-9.09	99.75	104.30
26	BB	2413	G	N1-C2-N3	9.09	129.35	123.90
26	BB	2578	G	C5-C6-N1	9.09	116.05	111.50
26	BB	2732	G	N9-C4-C5	-9.09	101.76	105.40
1	AA	311	C	O4'-C1'-N1	9.09	115.47	108.20
26	BB	249	C	P-O3'-C3'	9.09	130.60	119.70
1	AA	614	C	C5-C4-N4	-9.09	113.84	120.20
26	BB	428	A	C3'-C2'-C1'	9.09	108.77	101.50
26	BB	2107	G	C5-C6-O6	9.09	134.05	128.60
1	AA	205	A	C5-N7-C8	-9.08	99.36	103.90
1	AA	1095	U	C5'-C4'-O4'	9.08	120.00	109.10
26	BB	210	C	O4'-C4'-C3'	9.08	113.37	106.10
26	BB	537	G	N1-C2-N3	-9.08	118.45	123.90
26	BB	2117	A	C5-N7-C8	-9.08	99.36	103.90
26	BB	407	G	N3-C4-C5	-9.08	124.06	128.60
26	BB	835	C	C5-C4-N4	9.08	126.56	120.20
26	BB	1307	A	O4'-C1'-N9	9.08	115.47	108.20
26	BB	1582	C	C1'-O4'-C4'	-9.08	102.63	109.90
26	BB	2409	G	N1-C2-N3	-9.08	118.45	123.90
43	BS	2	ARG	NE-CZ-NH1	-9.08	115.76	120.30
1	AA	89	U	N3-C2-O2	-9.08	115.84	122.20
26	BB	2647	U	O4'-C4'-C3'	9.08	113.36	106.10
26	BB	18	U	O4'-C1'-N1	9.08	115.46	108.20
26	BB	2547	A	C5'-C4'-O4'	9.08	120.00	109.10
1	AA	831	A	C4-C5-C6	-9.08	112.46	117.00
1	AA	1493	A	N9-C4-C5	-9.08	102.17	105.80
7	AG	55	ARG	NE-CZ-NH1	9.08	124.84	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	249	C	N1-C2-O2	9.08	124.35	118.90
1	AA	126	G	C1'-O4'-C4'	-9.08	102.64	109.90
1	AA	853	C	C5-C6-N1	9.08	125.54	121.00
26	BB	1137	G	O4'-C1'-N9	9.08	115.46	108.20
26	BB	1419	A	C1'-O4'-C4'	-9.08	102.64	109.90
26	BB	2470	G	C8-N9-C4	9.08	110.03	106.40
1	AA	138	G	C8-N9-C4	-9.07	102.77	106.40
1	AA	311	C	N1-C2-O2	9.07	124.34	118.90
1	AA	663	A	C2-N3-C4	9.07	115.14	110.60
1	AA	1241	G	C8-N9-C4	-9.07	102.77	106.40
1	AA	1249	C	N3-C2-O2	-9.07	115.55	121.90
26	BB	216	A	O4'-C1'-N9	9.07	115.46	108.20
45	BU	84	ARG	NE-CZ-NH1	-9.07	115.76	120.30
26	BB	541	A	C1'-O4'-C4'	-9.07	102.64	109.90
26	BB	2198	A	N1-C2-N3	9.07	133.84	129.30
26	BB	255	A	N1-C2-N3	9.07	133.84	129.30
26	BB	849	A	C2-N3-C4	9.07	115.14	110.60
26	BB	1189	A	C5'-C4'-O4'	9.07	119.98	109.10
26	BB	2626	C	N3-C2-O2	-9.07	115.55	121.90
26	BB	2653	U	O4'-C1'-N1	9.07	115.45	108.20
26	BB	2708	G	N7-C8-N9	9.07	117.64	113.10
1	AA	204	G	C8-N9-C4	-9.07	102.77	106.40
1	AA	638	U	O4'-C1'-N1	9.07	115.45	108.20
26	BB	233	A	N1-C2-N3	-9.07	124.77	129.30
26	BB	1042	G	C5-N7-C8	9.07	108.83	104.30
26	BB	1283	G	C8-N9-C4	-9.07	102.77	106.40
26	BB	1848	A	C8-N9-C4	-9.07	102.17	105.80
26	BB	2871	U	C6-N1-C2	-9.07	115.56	121.00
1	AA	579	A	C8-N9-C4	-9.06	102.17	105.80
1	AA	1263	C	C4'-C3'-C2'	-9.06	93.53	102.60
2	AB	52	A	N9-C4-C5	-9.06	102.17	105.80
12	AL	129	ARG	NE-CZ-NH1	9.06	124.83	120.30
26	BB	1075	C	C6-N1-C2	-9.06	116.67	120.30
26	BB	1522	A	C5-C6-N6	-9.06	116.45	123.70
26	BB	2530	A	O4'-C1'-N9	9.06	115.45	108.20
26	BB	2685	G	C4-C5-N7	9.06	114.43	110.80
1	AA	536	C	C3'-C2'-C1'	9.06	108.75	101.50
1	AA	816	A	N7-C8-N9	9.06	118.33	113.80
1	AA	964	A	N7-C8-N9	9.06	118.33	113.80
26	BB	111	A	C8-N9-C4	-9.06	102.17	105.80
26	BB	2322	A	N1-C2-N3	-9.06	124.77	129.30
26	BB	2514	U	O4'-C1'-N1	9.06	115.45	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2874	C	O4'-C1'-N1	9.06	115.45	108.20
1	AA	529	G	C6-C5-N7	-9.06	124.97	130.40
1	AA	1355	G	C4-C5-N7	-9.06	107.18	110.80
1	AA	1370	G	C2-N3-C4	9.06	116.43	111.90
3	AC	33	A	O4'-C4'-C3'	9.06	113.35	106.10
26	BB	1654	A	N1-C6-N6	-9.06	113.16	118.60
26	BB	1660	G	C5-N7-C8	-9.06	99.77	104.30
26	BB	1806	C	O4'-C1'-N1	9.06	115.45	108.20
1	AA	930	C	C4-C5-C6	9.06	121.93	117.40
1	AA	1153	G	C6-C5-N7	-9.05	124.97	130.40
26	BB	442	G	C8-N9-C4	-9.06	102.78	106.40
1	AA	796	C	C3'-C2'-C1'	-9.05	94.26	101.50
26	BB	808	G	N3-C4-C5	-9.05	124.07	128.60
26	BB	958	U	N3-C4-O4	9.05	125.74	119.40
26	BB	1483	G	C6-N1-C2	-9.05	119.67	125.10
1	AA	1230	C	O4'-C1'-N1	9.05	115.44	108.20
25	BA	41	G	C6-N1-C2	-9.05	119.67	125.10
26	BB	1066	U	C4-C5-C6	9.05	125.13	119.70
26	BB	1588	G	C2-N3-C4	9.05	116.43	111.90
26	BB	2738	A	N1-C2-N3	-9.05	124.78	129.30
1	AA	253	A	C4'-C3'-C2'	-9.05	93.55	102.60
1	AA	858	G	N9-C4-C5	9.05	109.02	105.40
26	BB	761	A	O4'-C1'-N9	9.05	115.44	108.20
26	BB	1963	U	O4'-C1'-N1	9.05	115.44	108.20
1	AA	184	G	N9-C1'-C2'	-9.04	102.05	112.00
25	BA	83	G	N1-C2-N2	9.05	124.34	116.20
26	BB	2505	G	O4'-C4'-C3'	9.05	113.34	106.10
26	BB	2843	G	N1-C2-N2	9.04	124.34	116.20
1	AA	171	A	C4-C5-C6	-9.04	112.48	117.00
1	AA	652	U	C5-C4-O4	9.04	131.33	125.90
26	BB	1053	C	N1-C2-O2	9.04	124.33	118.90
26	BB	1681	G	C8-N9-C4	-9.04	102.78	106.40
1	AA	1338	G	O4'-C1'-N9	9.04	115.43	108.20
25	BA	73	A	N1-C6-N6	-9.04	113.17	118.60
26	BB	985	C	C6-N1-C2	-9.04	116.68	120.30
26	BB	2040	G	N1-C6-O6	-9.04	114.47	119.90
1	AA	563	A	C1'-O4'-C4'	-9.04	102.67	109.90
1	AA	1292	G	C8-N9-C4	-9.04	102.78	106.40
1	AA	1511	G	C5-C6-O6	-9.04	123.18	128.60
25	BA	114	C	O4'-C1'-N1	9.04	115.43	108.20
26	BB	361	G	C2-N3-C4	9.04	116.42	111.90
26	BB	883	G	C8-N9-C4	-9.04	102.78	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1285	A	C2-N3-C4	9.04	115.12	110.60
26	BB	1454	C	O4'-C1'-N1	9.04	115.43	108.20
26	BB	2091	C	C4'-C3'-C2'	-9.04	93.56	102.60
1	AA	163	C	C5-C4-N4	-9.04	113.87	120.20
1	AA	458	U	C5'-C4'-O4'	9.04	119.94	109.10
1	AA	592	G	N9-C4-C5	9.04	109.02	105.40
1	AA	1245	C	C5-C6-N1	-9.04	116.48	121.00
26	BB	762	U	N3-C2-O2	-9.03	115.88	122.20
26	BB	1416	G	C2-N3-C4	9.03	116.42	111.90
26	BB	2556	C	O4'-C1'-N1	9.03	115.43	108.20
26	BB	2676	C	C5-C6-N1	9.04	125.52	121.00
26	BB	1605	C	O4'-C1'-N1	9.03	115.43	108.20
1	AA	736	C	C3'-C2'-C1'	-9.03	94.28	101.50
26	BB	174	U	C3'-C2'-C1'	-9.03	94.28	101.50
26	BB	179	C	C2-N3-C4	9.03	124.42	119.90
26	BB	612	G	N3-C4-C5	-9.03	124.08	128.60
26	BB	1980	G	C5-C6-O6	-9.03	123.18	128.60
1	AA	56	U	N3-C4-C5	-9.03	109.18	114.60
1	AA	595	A	C5-N7-C8	-9.03	99.39	103.90
1	AA	746	A	O4'-C1'-N9	9.03	115.42	108.20
26	BB	464	U	N3-C4-C5	-9.03	109.18	114.60
26	BB	672	C	N1-C2-O2	9.03	124.32	118.90
26	BB	1056	G	N1-C2-N3	-9.03	118.48	123.90
26	BB	2859	G	C8-N9-C4	-9.03	102.79	106.40
26	BB	716	A	C2-N3-C4	9.03	115.11	110.60
26	BB	926	G	C6-N1-C2	-9.03	119.68	125.10
2	AB	27	C	C6-N1-C2	-9.02	116.69	120.30
26	BB	166	U	O4'-C1'-N1	9.02	115.42	108.20
26	BB	849	A	N7-C8-N9	-9.02	109.29	113.80
26	BB	920	A	C5-N7-C8	-9.02	99.39	103.90
26	BB	943	A	O4'-C1'-N9	9.02	115.42	108.20
26	BB	1057	A	N1-C2-N3	9.02	133.81	129.30
26	BB	1677	A	C5'-C4'-O4'	9.02	119.93	109.10
26	BB	2184	A	C5-C6-N1	9.02	122.21	117.70
1	AA	749	A	O4'-C1'-N9	9.02	115.42	108.20
1	AA	1381	U	N1-C2-N3	9.02	120.31	114.90
26	BB	424	G	C5-C6-N1	9.02	116.01	111.50
26	BB	705	A	C1'-O4'-C4'	-9.02	102.68	109.90
26	BB	902	C	O4'-C4'-C3'	9.02	113.31	106.10
26	BB	1382	G	N1-C2-N3	-9.02	118.49	123.90
1	AA	148	G	N3-C4-N9	9.02	131.41	126.00
1	AA	281	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(°)
10	AJ	110	ARG	NE-CZ-NH2	-9.02	115.79	120.30
25	BA	11	C	C6-N1-C2	-9.02	116.69	120.30
26	BB	87	U	N1-C2-N3	9.02	120.31	114.90
26	BB	1286	A	N1-C6-N6	9.02	124.01	118.60
26	BB	2581	G	C4-C5-N7	-9.02	107.19	110.80
26	BB	339	U	N1-C2-N3	9.01	120.31	114.90
26	BB	834	G	N3-C4-C5	-9.01	124.09	128.60
26	BB	1375	U	C4-C5-C6	-9.01	114.29	119.70
26	BB	10	A	N1-C2-N3	-9.01	124.79	129.30
26	BB	770	G	C5-C6-O6	9.01	134.01	128.60
26	BB	2009	A	C6-N1-C2	-9.01	113.19	118.60
1	AA	361	G	N9-C4-C5	9.01	109.00	105.40
1	AA	758	C	N3-C4-C5	-9.01	118.30	121.90
26	BB	1847	A	C2-N3-C4	9.01	115.11	110.60
26	BB	868	U	C5-C4-O4	-9.01	120.49	125.90
26	BB	905	A	C4-C5-C6	9.01	121.50	117.00
26	BB	1810	A	N1-C6-N6	9.01	124.01	118.60
1	AA	601	G	C8-N9-C4	-9.01	102.80	106.40
1	AA	1339	A	C4-C5-N7	-9.01	106.20	110.70
26	BB	1511	G	C5-C6-O6	-9.01	123.19	128.60
1	AA	669	G	O4'-C1'-N9	9.01	115.41	108.20
1	AA	1186	G	O4'-C1'-N9	9.01	115.41	108.20
26	BB	494	G	N3-C4-C5	-9.01	124.10	128.60
26	BB	2438	U	C5-C6-N1	-9.01	118.20	122.70
58	B7	20	ASP	CB-CG-OD1	-9.01	110.19	118.30
26	BB	693	A	N7-C8-N9	9.01	118.30	113.80
56	B5	28	ARG	NE-CZ-NH1	9.01	124.80	120.30
1	AA	50	A	N9-C4-C5	-9.00	102.20	105.80
1	AA	597	G	C8-N9-C4	-9.00	102.80	106.40
1	AA	1124	G	N3-C4-C5	-9.00	124.10	128.60
1	AA	1194	U	N3-C2-O2	-9.00	115.90	122.20
4	AD	32	G	C2-N3-C4	9.00	116.40	111.90
26	BB	2303	G	C5-C6-N1	9.00	116.00	111.50
1	AA	65	A	C5-C6-N1	9.00	122.20	117.70
26	BB	2398	U	N1-C1'-C2'	-9.00	102.10	112.00
1	AA	372	C	N3-C4-C5	-9.00	118.30	121.90
1	AA	1377	A	C8-N9-C4	-9.00	102.20	105.80
26	BB	513	A	O4'-C1'-N9	9.00	115.40	108.20
26	BB	992	C	O4'-C1'-N1	9.00	115.40	108.20
26	BB	1698	A	C3'-C2'-C1'	9.00	108.70	101.50
26	BB	2859	G	C2-N3-C4	9.00	116.40	111.90
26	BB	612	G	N7-C8-N9	9.00	117.60	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	771	G	N3-C4-N9	9.00	131.40	126.00
26	BB	2877	G	O4'-C1'-N9	9.00	115.40	108.20
1	AA	616	G	N3-C4-C5	-8.99	124.10	128.60
26	BB	2453	A	C2-N3-C4	8.99	115.10	110.60
26	BB	47	C	C5'-C4'-O4'	8.99	119.89	109.10
26	BB	328	U	C3'-C2'-C1'	8.99	108.69	101.50
1	AA	210	C	C5-C6-N1	8.99	125.50	121.00
26	BB	1461	C	C4-C5-C6	-8.99	112.91	117.40
26	BB	2126	A	C4-C5-C6	-8.99	112.50	117.00
1	AA	508	U	C5-C6-N1	-8.99	118.21	122.70
26	BB	8	C	O4'-C1'-N1	8.99	115.39	108.20
26	BB	592	A	O4'-C1'-N9	8.99	115.39	108.20
1	AA	100	G	N3-C2-N2	-8.99	113.61	119.90
5	AE	224	ARG	NE-CZ-NH1	8.99	124.79	120.30
26	BB	1711	A	C5-C6-N1	8.99	122.19	117.70
1	AA	598	U	C3'-C2'-C1'	8.99	108.69	101.50
1	AA	1503	A	C4-C5-N7	-8.99	106.21	110.70
26	BB	529	A	O4'-C4'-C3'	8.99	113.29	106.10
26	BB	1822	C	C5-C4-N4	-8.99	113.91	120.20
26	BB	681	G	N1-C6-O6	8.99	125.29	119.90
26	BB	278	A	C5'-C4'-O4'	8.98	119.88	109.10
26	BB	2529	G	N3-C4-C5	-8.98	124.11	128.60
1	AA	1184	G	N9-C4-C5	8.98	108.99	105.40
26	BB	1500	G	N7-C8-N9	8.98	117.59	113.10
1	AA	935	A	C1'-O4'-C4'	8.98	117.09	109.90
26	BB	128	C	N3-C4-N4	-8.98	111.71	118.00
26	BB	1220	G	O4'-C1'-N9	8.98	115.38	108.20
26	BB	1497	U	N3-C4-C5	-8.98	109.21	114.60
26	BB	1999	C	N3-C2-O2	-8.98	115.61	121.90
26	BB	2681	C	N3-C2-O2	-8.98	115.61	121.90
1	AA	48	C	C2-N3-C4	8.98	124.39	119.90
1	AA	328	C	N3-C2-O2	-8.98	115.61	121.90
26	BB	1242	U	N1-C2-N3	8.98	120.29	114.90
26	BB	1362	C	C5-C6-N1	8.98	125.49	121.00
1	AA	715	A	C5-C6-N1	8.98	122.19	117.70
26	BB	2676	C	N3-C4-C5	-8.98	118.31	121.90
26	BB	2308	G	C5-C6-O6	8.97	133.99	128.60
1	AA	716	A	N1-C2-N3	-8.97	124.81	129.30
1	AA	883	C	N1-C2-O2	8.97	124.28	118.90
26	BB	672	C	N3-C4-N4	8.97	124.28	118.00
26	BB	1017	G	N9-C4-C5	-8.97	101.81	105.40
26	BB	1347	A	C8-N9-C4	-8.97	102.21	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1810	A	C5-C6-N6	-8.97	116.52	123.70
1	AA	38	G	O4'-C1'-N9	8.97	115.38	108.20
1	AA	234	C	C5-C4-N4	8.97	126.48	120.20
1	AA	396	C	N3-C2-O2	-8.97	115.62	121.90
1	AA	906	A	N7-C8-N9	8.97	118.28	113.80
2	AB	58	A	C8-N9-C4	-8.97	102.21	105.80
26	BB	1942	C	C3'-C2'-C1'	8.97	108.68	101.50
26	BB	1981	A	C5-C6-N6	8.97	130.88	123.70
26	BB	2072	C	C5-C4-N4	-8.97	113.92	120.20
1	AA	172	A	C6-N1-C2	8.97	123.98	118.60
1	AA	713	G	O4'-C1'-N9	8.97	115.38	108.20
32	BH	31	GLU	OE1-CD-OE2	8.97	134.06	123.30
1	AA	1304	G	N9-C1'-C2'	-8.97	102.14	112.00
1	AA	1489	G	N7-C8-N9	-8.97	108.62	113.10
25	BA	114	C	N3-C4-C5	-8.97	118.31	121.90
26	BB	70	G	C4-C5-C6	8.97	124.18	118.80
26	BB	613	A	C5-C6-N1	8.97	122.19	117.70
26	BB	1497	U	O4'-C1'-N1	8.97	115.37	108.20
26	BB	1770	G	C8-N9-C4	-8.97	102.81	106.40
26	BB	2198	A	C8-N9-C4	-8.97	102.21	105.80
1	AA	318	G	C5-C6-N1	-8.97	107.02	111.50
12	AL	112	ARG	NE-CZ-NH2	8.96	124.78	120.30
26	BB	468	G	C4-C5-N7	-8.96	107.21	110.80
26	BB	2340	A	O4'-C1'-N9	8.97	115.37	108.20
26	BB	2741	A	N1-C6-N6	-8.97	113.22	118.60
26	BB	1054	A	C8-N9-C4	-8.96	102.21	105.80
26	BB	1965	C	C4-C5-C6	-8.96	112.92	117.40
1	AA	419	C	C6-N1-C2	-8.96	116.72	120.30
1	AA	551	U	N1-C2-O2	8.96	129.07	122.80
26	BB	424	G	C8-N9-C4	-8.96	102.81	106.40
26	BB	473	G	C2-N3-C4	8.96	116.38	111.90
26	BB	662	G	O4'-C1'-N9	8.96	115.37	108.20
26	BB	1037	G	C4-C5-N7	8.96	114.39	110.80
26	BB	2056	G	O4'-C1'-N9	8.96	115.37	108.20
26	BB	2363	G	C5-C6-N1	8.96	115.98	111.50
39	BO	10	ARG	NE-CZ-NH2	-8.96	115.82	120.30
26	BB	2270	A	O4'-C1'-N9	8.96	115.37	108.20
1	AA	1507	A	C5-C6-N6	-8.96	116.53	123.70
26	BB	148	U	C5-C6-N1	-8.96	118.22	122.70
26	BB	339	U	C4-C5-C6	8.96	125.08	119.70
26	BB	2448	A	N9-C4-C5	8.96	109.38	105.80
26	BB	928	A	O4'-C1'-N9	8.96	115.37	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1603	A	C5-N7-C8	-8.96	99.42	103.90
26	BB	2008	C	N1-C2-O2	8.96	124.28	118.90
26	BB	2656	U	C5-C6-N1	-8.96	118.22	122.70
26	BB	2775	G	C8-N9-C4	-8.96	102.82	106.40
1	AA	33	A	C8-N9-C4	-8.95	102.22	105.80
1	AA	446	G	C4-C5-N7	-8.96	107.22	110.80
1	AA	1116	U	C4'-C3'-C2'	-8.95	93.65	102.60
26	BB	62	U	N3-C4-O4	8.96	125.67	119.40
26	BB	758	C	C5'-C4'-O4'	8.96	119.85	109.10
26	BB	932	U	N3-C2-O2	-8.96	115.93	122.20
26	BB	1010	A	N7-C8-N9	8.95	118.28	113.80
26	BB	1746	A	N1-C2-N3	-8.96	124.82	129.30
26	BB	2748	A	C6-C5-N7	8.95	138.57	132.30
26	BB	2897	U	C5-C4-O4	-8.96	120.53	125.90
1	AA	54	C	O4'-C1'-N1	8.95	115.36	108.20
1	AA	695	A	C8-N9-C4	-8.95	102.22	105.80
1	AA	810	C	C6-N1-C2	-8.95	116.72	120.30
26	BB	1521	G	N3-C4-N9	8.95	131.37	126.00
1	AA	989	U	C1'-O4'-C4'	-8.95	102.74	109.90
2	AB	52	A	C4-C5-C6	-8.95	112.52	117.00
26	BB	910	A	C8-N9-C4	-8.95	102.22	105.80
26	BB	1763	G	N3-C4-C5	-8.95	124.12	128.60
26	BB	1836	C	N1-C2-N3	-8.95	112.93	119.20
26	BB	1264	A	C6-N1-C2	-8.95	113.23	118.60
26	BB	2472	G	N3-C4-C5	-8.95	124.13	128.60
1	AA	117	G	C8-N9-C4	-8.95	102.82	106.40
1	AA	1371	G	C5-N7-C8	-8.95	99.83	104.30
26	BB	775	G	C4-C5-N7	-8.95	107.22	110.80
26	BB	2042	A	O4'-C1'-N9	8.95	115.36	108.20
1	AA	691	G	C8-N9-C4	-8.95	102.82	106.40
1	AA	1014	A	C5-N7-C8	8.95	108.37	103.90
26	BB	1470	A	C5-N7-C8	8.95	108.37	103.90
1	AA	1347	G	C8-N9-C4	-8.94	102.82	106.40
1	AA	1352	C	N1-C1'-C2'	-8.94	102.16	112.00
1	AA	1386	G	N9-C1'-C2'	-8.95	102.16	112.00
26	BB	346	A	C1'-O4'-C4'	8.95	117.06	109.90
26	BB	688	U	C5-C4-O4	-8.94	120.53	125.90
26	BB	816	C	C2-N3-C4	8.95	124.37	119.90
26	BB	918	A	C1'-O4'-C4'	-8.95	102.74	109.90
26	BB	2081	U	C3'-C2'-C1'	8.95	108.66	101.50
26	BB	2250	G	C6-C5-N7	8.95	135.77	130.40
1	AA	1077	G	C6-C5-N7	-8.94	125.03	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1218	C	O4'-C1'-N1	8.94	115.35	108.20
6	AF	178	ARG	NE-CZ-NH1	-8.94	115.83	120.30
26	BB	32	C	C4'-C3'-C2'	-8.94	93.66	102.60
26	BB	214	G	C1'-O4'-C4'	8.94	117.05	109.90
26	BB	1109	C	C4-C5-C6	-8.94	112.93	117.40
26	BB	1343	G	C6-N1-C2	-8.94	119.73	125.10
26	BB	2712	C	C1'-O4'-C4'	8.94	117.06	109.90
26	BB	1376	C	C4-C5-C6	-8.94	112.93	117.40
1	AA	204	G	N3-C4-C5	-8.94	124.13	128.60
1	AA	710	G	C4'-C3'-C2'	-8.94	93.66	102.60
1	AA	853	C	N3-C2-O2	-8.94	115.64	121.90
26	BB	882	G	C2-N3-C4	8.94	116.37	111.90
26	BB	1715	G	C8-N9-C4	-8.94	102.83	106.40
26	BB	2168	G	N3-C4-C5	-8.94	124.13	128.60
26	BB	417	C	O4'-C1'-N1	8.94	115.35	108.20
26	BB	1453	A	N9-C1'-C2'	-8.94	102.17	112.00
26	BB	1734	G	C6-C5-N7	8.94	135.76	130.40
1	AA	706	A	C8-N9-C4	-8.94	102.23	105.80
26	BB	332	A	O4'-C1'-C2'	-8.94	96.86	105.80
26	BB	1773	A	O4'-C1'-N9	8.94	115.35	108.20
26	BB	2405	G	C8-N9-C4	-8.94	102.83	106.40
26	BB	2811	G	P-O3'-C3'	8.93	130.42	119.70
1	AA	337	G	C5-C6-N1	-8.93	107.03	111.50
3	AC	37	G	N1-C2-N2	8.93	124.24	116.20
26	BB	29	U	N3-C4-O4	8.93	125.65	119.40
26	BB	1313	U	N3-C2-O2	-8.93	115.95	122.20
4	AD	7	G	N1-C6-O6	8.93	125.26	119.90
26	BB	668	A	N9-C4-C5	8.93	109.37	105.80
26	BB	1017	G	C5-N7-C8	-8.93	99.83	104.30
26	BB	1237	A	N9-C4-C5	-8.93	102.23	105.80
26	BB	1421	G	O4'-C1'-N9	8.93	115.34	108.20
26	BB	1940	U	C1'-O4'-C4'	-8.93	102.75	109.90
26	BB	1967	C	P-O3'-C3'	8.93	130.42	119.70
26	BB	1710	G	N9-C4-C5	8.93	108.97	105.40
26	BB	2048	G	N3-C4-N9	-8.93	120.64	126.00
1	AA	417	G	C5-C6-N1	8.93	115.96	111.50
1	AA	951	G	C6-N1-C2	-8.93	119.74	125.10
1	AA	768	A	N7-C8-N9	8.93	118.26	113.80
26	BB	51	G	N1-C6-O6	-8.93	114.54	119.90
26	BB	440	C	N3-C2-O2	-8.93	115.65	121.90
26	BB	522	A	N1-C2-N3	-8.93	124.84	129.30
26	BB	1311	G	N1-C2-N3	8.93	129.26	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1555	G	C5-C6-O6	-8.93	123.24	128.60
26	BB	2100	G	C4-C5-C6	8.93	124.16	118.80
26	BB	2515	C	C2-N3-C4	-8.93	115.44	119.90
1	AA	724	G	N9-C4-C5	-8.92	101.83	105.40
1	AA	1130	A	C2-N3-C4	8.92	115.06	110.60
1	AA	157	U	N1-C2-N3	8.92	120.25	114.90
1	AA	990	C	C5-C4-N4	-8.92	113.95	120.20
1	AA	1413	A	C1'-O4'-C4'	-8.92	102.76	109.90
26	BB	472	A	C5'-C4'-O4'	8.92	119.81	109.10
26	BB	651	G	N3-C4-C5	-8.92	124.14	128.60
26	BB	1005	C	C2-N3-C4	8.92	124.36	119.90
36	BL	96	ARG	NE-CZ-NH1	-8.92	115.84	120.30
26	BB	99	U	C5-C6-N1	-8.92	118.24	122.70
26	BB	272	A	N1-C2-N3	-8.92	124.84	129.30
26	BB	2367	G	N3-C4-C5	-8.92	124.14	128.60
26	BB	882	G	C5-C6-N1	-8.92	107.04	111.50
1	AA	1172	C	N1-C2-O2	8.92	124.25	118.90
1	AA	1260	G	N7-C8-N9	8.92	117.56	113.10
26	BB	167	A	C6-N1-C2	8.92	123.95	118.60
26	BB	726	G	C2-N3-C4	8.92	116.36	111.90
26	BB	2633	G	C4-C5-N7	-8.92	107.23	110.80
39	BO	66	ARG	NE-CZ-NH1	8.92	124.76	120.30
1	AA	88	U	C4'-C3'-C2'	-8.91	93.69	102.60
1	AA	19	A	N7-C8-N9	-8.91	109.34	113.80
1	AA	292	G	N1-C6-O6	-8.91	114.55	119.90
1	AA	1149	C	C3'-C2'-C1'	8.91	108.63	101.50
25	BA	13	G	N1-C6-O6	-8.91	114.55	119.90
26	BB	87	U	O4'-C1'-N1	8.91	115.33	108.20
26	BB	502	A	C4-C5-C6	-8.91	112.54	117.00
1	AA	337	G	C4-C5-N7	-8.91	107.23	110.80
1	AA	1410	A	N1-C6-N6	-8.91	113.25	118.60
26	BB	103	A	O4'-C1'-N9	8.91	115.33	108.20
26	BB	2029	G	C4'-C3'-C2'	-8.91	93.69	102.60
26	BB	1603	A	C4-C5-N7	8.91	115.16	110.70
1	AA	692	U	N3-C4-O4	8.91	125.64	119.40
1	AA	1300	G	C8-N9-C4	-8.91	102.84	106.40
1	AA	301	G	C5-C6-O6	-8.91	123.26	128.60
1	AA	547	A	N1-C6-N6	-8.91	113.25	118.60
26	BB	100	U	C5-C6-N1	-8.91	118.25	122.70
26	BB	670	A	C2-N3-C4	8.91	115.05	110.60
26	BB	1665	A	C8-N9-C4	-8.91	102.24	105.80
26	BB	1767	G	N9-C4-C5	8.91	108.96	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2328	A	N1-C6-N6	-8.91	113.26	118.60
26	BB	2553	G	N3-C4-C5	-8.91	124.15	128.60
1	AA	1312	G	C3'-C2'-C1'	8.90	108.62	101.50
2	AB	26	A	C5-C6-N1	8.90	122.15	117.70
21	AU	62	ARG	NE-CZ-NH2	-8.90	115.85	120.30
26	BB	61	C	O4'-C1'-N1	8.90	115.32	108.20
26	BB	144	A	C6-N1-C2	8.90	123.94	118.60
26	BB	1024	G	N7-C8-N9	8.90	117.55	113.10
26	BB	1187	G	C4-C5-N7	-8.90	107.24	110.80
1	AA	302	G	C5-C6-O6	-8.90	123.26	128.60
26	BB	518	G	C5-C6-O6	-8.90	123.26	128.60
1	AA	1153	G	C5-C6-O6	8.90	133.94	128.60
26	BB	350	G	N1-C6-O6	-8.90	114.56	119.90
26	BB	1270	C	O4'-C4'-C3'	8.90	113.22	106.10
26	BB	1536	C	O4'-C1'-N1	8.90	115.32	108.20
26	BB	2871	U	C2-N3-C4	-8.90	121.66	127.00
2	AB	39	A	O4'-C1'-N9	8.90	115.32	108.20
2	AB	74	C	N3-C2-O2	-8.90	115.67	121.90
26	BB	128	C	C4-C5-C6	-8.90	112.95	117.40
26	BB	2117	A	C3'-C2'-C1'	-8.90	94.38	101.50
1	AA	756	C	N3-C4-C5	-8.90	118.34	121.90
1	AA	1376	U	O4'-C1'-C2'	8.89	115.61	107.60
1	AA	443	C	C5-C4-N4	-8.89	113.97	120.20
1	AA	1430	A	C5-C6-N6	-8.89	116.58	123.70
26	BB	643	A	C4-C5-N7	-8.89	106.25	110.70
26	BB	681	G	C5-C6-O6	-8.89	123.26	128.60
26	BB	1023	U	C5-C6-N1	-8.89	118.25	122.70
26	BB	1577	C	O4'-C1'-N1	8.89	115.31	108.20
26	BB	1964	G	O4'-C1'-C2'	-8.89	96.91	105.80
1	AA	250	A	N9-C4-C5	8.89	109.36	105.80
1	AA	356	A	N1-C6-N6	-8.89	113.27	118.60
26	BB	1703	G	O4'-C1'-N9	8.89	115.31	108.20
1	AA	739	C	N3-C4-N4	-8.89	111.78	118.00
26	BB	1884	G	O4'-C1'-N9	-8.89	101.09	108.20
26	BB	2407	A	C5-C6-N6	-8.89	116.59	123.70
26	BB	2621	G	O4'-C1'-N9	8.89	115.31	108.20
1	AA	725	G	N7-C8-N9	8.88	117.54	113.10
1	AA	814	A	C2-N3-C4	-8.89	106.16	110.60
26	BB	186	G	C8-N9-C4	-8.89	102.85	106.40
1	AA	1471	U	C5-C4-O4	8.88	131.23	125.90
26	BB	589	U	C5'-C4'-O4'	8.88	119.76	109.10
26	BB	1453	A	C1'-O4'-C4'	-8.88	102.79	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2351	G	C8-N9-C4	-8.88	102.85	106.40
28	BD	202	ARG	NE-CZ-NH1	8.88	124.74	120.30
1	AA	14	U	C4-C5-C6	8.88	125.03	119.70
1	AA	515	G	C5-C6-O6	8.88	133.93	128.60
2	AB	18	G	C3'-C2'-C1'	8.88	108.61	101.50
26	BB	483	A	C6-N1-C2	8.88	123.93	118.60
26	BB	886	A	C3'-C2'-C1'	8.88	108.61	101.50
26	BB	1204	A	N1-C2-N3	-8.88	124.86	129.30
26	BB	2618	G	C6-C5-N7	-8.88	125.07	130.40
26	BB	2813	A	O4'-C1'-N9	8.88	115.31	108.20
26	BB	139	U	O4'-C1'-C2'	-8.88	96.92	105.80
26	BB	669	G	O4'-C4'-C3'	8.88	113.20	106.10
26	BB	1685	C	N3-C4-C5	-8.88	118.35	121.90
26	BB	1980	G	C2-N3-C4	8.88	116.34	111.90
26	BB	2244	U	N3-C2-O2	-8.88	115.98	122.20
1	AA	310	G	C5-N7-C8	-8.88	99.86	104.30
1	AA	1310	G	O4'-C1'-N9	8.88	115.30	108.20
1	AA	1448	C	N1-C2-O2	8.88	124.23	118.90
26	BB	90	U	C5-C6-N1	-8.88	118.26	122.70
26	BB	696	G	O4'-C1'-N9	8.88	115.30	108.20
1	AA	493	A	N9-C4-C5	8.88	109.35	105.80
1	AA	753	A	C6-N1-C2	8.88	123.93	118.60
2	AB	11	U	O4'-C1'-N1	8.88	115.30	108.20
26	BB	129	C	N1-C2-O2	8.88	124.23	118.90
26	BB	1226	A	C4-C5-C6	8.88	121.44	117.00
26	BB	2602	A	N9-C1'-C2'	8.88	125.54	114.00
26	BB	1880	U	C5-C6-N1	-8.87	118.26	122.70
1	AA	158	G	N1-C6-O6	8.87	125.22	119.90
1	AA	423	G	N1-C6-O6	-8.87	114.58	119.90
1	AA	452	A	C8-N9-C4	-8.87	102.25	105.80
26	BB	2055	C	C2-N3-C4	-8.87	115.46	119.90
1	AA	352	C	C1'-O4'-C4'	8.87	117.00	109.90
1	AA	1494	G	N3-C2-N2	8.87	126.11	119.90
26	BB	1588	G	N3-C4-N9	8.87	131.32	126.00
26	BB	2263	C	N3-C4-C5	-8.87	118.35	121.90
26	BB	2439	A	C6-N1-C2	8.87	123.92	118.60
26	BB	2455	G	N3-C2-N2	-8.87	113.69	119.90
26	BB	669	G	C4'-C3'-C2'	-8.87	93.73	102.60
1	AA	1206	G	O4'-C1'-N9	8.87	115.29	108.20
1	AA	1236	A	N1-C2-N3	8.87	133.73	129.30
26	BB	764	A	C5-N7-C8	8.87	108.33	103.90
26	BB	777	G	O4'-C1'-N9	8.87	115.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2439	A	C6-C5-N7	8.87	138.51	132.30
26	BB	233	A	C3'-C2'-C1'	8.87	108.59	101.50
26	BB	1259	G	N7-C8-N9	8.87	117.53	113.10
1	AA	648	A	C6-N1-C2	-8.87	113.28	118.60
26	BB	15	G	N1-C6-O6	8.87	125.22	119.90
26	BB	1813	G	C5-N7-C8	8.87	108.73	104.30
1	AA	855	U	C5-C6-N1	-8.86	118.27	122.70
1	AA	1323	G	C6-N1-C2	-8.87	119.78	125.10
26	BB	162	U	N1-C2-N3	8.87	120.22	114.90
26	BB	1861	G	O4'-C1'-N9	8.86	115.29	108.20
1	AA	1284	C	N3-C2-O2	-8.86	115.70	121.90
1	AA	1362	A	C3'-C2'-C1'	8.86	108.59	101.50
1	AA	376	G	C5-C6-O6	-8.86	123.28	128.60
1	AA	742	G	C3'-C2'-C1'	-8.86	94.41	101.50
26	BB	146	A	C1'-O4'-C4'	-8.86	102.81	109.90
26	BB	350	G	C5-C6-N1	8.86	115.93	111.50
26	BB	610	C	O4'-C1'-N1	8.86	115.29	108.20
26	BB	881	G	C4-C5-C6	8.86	124.12	118.80
26	BB	950	G	N3-C4-C5	-8.86	124.17	128.60
26	BB	1197	G	N9-C4-C5	-8.86	101.86	105.40
1	AA	107	G	N9-C4-C5	8.86	108.94	105.40
1	AA	1031	C	C4-C5-C6	8.86	121.83	117.40
1	AA	1455	G	N1-C2-N3	-8.86	118.58	123.90
26	BB	400	G	N3-C2-N2	8.86	126.10	119.90
26	BB	563	A	N1-C6-N6	-8.86	113.28	118.60
26	BB	809	G	C5-C6-N1	8.86	115.93	111.50
26	BB	1928	A	C5-N7-C8	8.86	108.33	103.90
26	BB	1299	G	C5-C6-N1	-8.86	107.07	111.50
26	BB	2292	U	C5-C6-N1	-8.86	118.27	122.70
26	BB	2350	C	N1-C2-O2	8.86	124.22	118.90
1	AA	65	A	C4-C5-C6	-8.86	112.57	117.00
1	AA	212	G	N7-C8-N9	8.86	117.53	113.10
26	BB	186	G	N9-C4-C5	8.86	108.94	105.40
26	BB	545	U	C3'-C2'-C1'	8.86	108.58	101.50
26	BB	766	U	C5-C4-O4	-8.86	120.59	125.90
26	BB	1197	G	N3-C4-N9	8.86	131.31	126.00
26	BB	2032	G	C6-N1-C2	-8.86	119.79	125.10
26	BB	2117	A	C6-N1-C2	-8.86	113.29	118.60
26	BB	2501	C	N1-C2-O2	8.86	124.21	118.90
25	BA	10	G	N1-C6-O6	-8.85	114.59	119.90
26	BB	238	C	C4-C5-C6	8.85	121.83	117.40
26	BB	340	A	N9-C4-C5	-8.85	102.26	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2055	C	C5-C4-N4	-8.85	114.00	120.20
1	AA	204	G	N1-C6-O6	-8.85	114.59	119.90
26	BB	2238	G	C6-C5-N7	-8.85	125.09	130.40
1	AA	1403	C	C2-N3-C4	8.85	124.32	119.90
1	AA	1403	C	C6-N1-C2	8.85	123.84	120.30
26	BB	226	A	C5-C6-N6	-8.85	116.62	123.70
26	BB	649	G	N9-C1'-C2'	-8.85	102.27	112.00
26	BB	1722	A	N3-C4-C5	-8.85	120.61	126.80
26	BB	2092	U	C4-C5-C6	8.85	125.01	119.70
26	BB	2337	G	N3-C4-N9	8.85	131.31	126.00
26	BB	2656	U	O4'-C1'-N1	8.85	115.28	108.20
26	BB	2836	U	O4'-C1'-N1	8.85	115.28	108.20
26	BB	1055	G	C4-C5-N7	-8.85	107.26	110.80
1	AA	648	A	O4'-C1'-N9	8.85	115.28	108.20
1	AA	949	A	N7-C8-N9	-8.85	109.38	113.80
26	BB	1250	G	N3-C2-N2	8.85	126.09	119.90
26	BB	1995	U	N3-C4-O4	8.85	125.59	119.40
1	AA	477	C	N3-C4-N4	8.84	124.19	118.00
1	AA	628	G	O4'-C1'-N9	8.84	115.28	108.20
1	AA	740	U	C5'-C4'-O4'	8.84	119.71	109.10
26	BB	2472	G	C5-C6-N1	8.84	115.92	111.50
4	AD	66	C	C5-C4-N4	-8.84	114.01	120.20
26	BB	1170	C	C2-N3-C4	8.84	124.32	119.90
26	BB	1494	A	C6-N1-C2	8.84	123.91	118.60
1	AA	905	U	O4'-C1'-N1	8.84	115.27	108.20
1	AA	907	A	C5'-C4'-O4'	8.84	119.71	109.10
1	AA	1229	A	N9-C4-C5	8.84	109.34	105.80
2	AB	5	G	N9-C4-C5	8.84	108.94	105.40
3	AC	56	G	C5-C6-O6	-8.84	123.30	128.60
26	BB	1510	G	C5-C6-N1	8.84	115.92	111.50
26	BB	2059	A	N1-C6-N6	-8.84	113.30	118.60
26	BB	2574	G	N1-C2-N3	8.84	129.20	123.90
26	BB	2657	A	C6-C5-N7	8.84	138.49	132.30
1	AA	117	G	O4'-C1'-N9	8.84	115.27	108.20
26	BB	94	A	C5-N7-C8	8.84	108.32	103.90
26	BB	882	G	C6-N1-C2	8.84	130.40	125.10
26	BB	1066	U	N1-C2-N3	8.84	120.20	114.90
26	BB	2456	C	C2-N3-C4	8.84	124.32	119.90
26	BB	1701	A	C4-C5-C6	-8.84	112.58	117.00
1	AA	55	A	N9-C4-C5	8.83	109.33	105.80
25	BA	99	A	N1-C6-N6	-8.83	113.30	118.60
26	BB	1665	A	N7-C8-N9	8.83	118.22	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BK	7	TYR	CB-CG-CD1	8.83	126.30	121.00
1	AA	510	A	C6-C5-N7	8.83	138.48	132.30
1	AA	578	C	C5'-C4'-O4'	8.83	119.70	109.10
1	AA	627	G	N1-C2-N3	-8.83	118.60	123.90
4	AD	27	G	N9-C4-C5	8.83	108.93	105.40
26	BB	1157	G	N7-C8-N9	8.83	117.52	113.10
26	BB	1903	G	N3-C4-C5	-8.83	124.18	128.60
1	AA	364	A	C4-C5-N7	8.83	115.11	110.70
1	AA	1001	C	C5-C4-N4	-8.83	114.02	120.20
26	BB	553	G	O4'-C1'-N9	8.83	115.27	108.20
26	BB	743	A	C5-C6-N6	-8.83	116.64	123.70
1	AA	1293	C	N3-C4-N4	-8.83	111.82	118.00
1	AA	1360	A	N1-C2-N3	-8.83	124.89	129.30
25	BA	79	G	C4-C5-N7	-8.83	107.27	110.80
26	BB	1074	G	N3-C4-C5	-8.83	124.19	128.60
26	BB	1252	G	O4'-C1'-N9	8.83	115.26	108.20
26	BB	1753	G	C8-N9-C4	-8.83	102.87	106.40
26	BB	2515	C	N3-C4-C5	8.83	125.43	121.90
26	BB	2669	G	C5-C6-N1	-8.83	107.08	111.50
1	AA	71	A	C1'-O4'-C4'	8.83	116.96	109.90
1	AA	577	G	N3-C4-C5	-8.83	124.19	128.60
26	BB	86	G	C4-C5-N7	-8.83	107.27	110.80
26	BB	750	A	O4'-C1'-N9	8.83	115.26	108.20
26	BB	875	G	C5-C6-N1	8.83	115.91	111.50
26	BB	1022	G	O4'-C4'-C3'	8.83	113.16	106.10
26	BB	1794	A	C5-C6-N1	8.83	122.11	117.70
25	BA	7	G	C8-N9-C4	-8.82	102.87	106.40
26	BB	1803	A	C8-N9-C4	-8.82	102.27	105.80
26	BB	2296	U	O4'-C1'-N1	8.82	115.26	108.20
1	AA	988	G	C2-N3-C4	-8.82	107.49	111.90
26	BB	951	C	N3-C2-O2	-8.82	115.72	121.90
26	BB	2113	U	C1'-O4'-C4'	-8.82	102.84	109.90
46	BV	77	ARG	NE-CZ-NH1	8.82	124.71	120.30
1	AA	323	U	O4'-C1'-N1	-8.82	101.14	108.20
1	AA	403	C	O4'-C1'-N1	8.82	115.25	108.20
3	AC	48	C	N3-C4-C5	-8.82	118.37	121.90
26	BB	588	U	C2-N3-C4	-8.82	121.71	127.00
39	BO	31	PHE	CB-CG-CD2	-8.82	114.62	120.80
1	AA	945	G	C5-N7-C8	-8.82	99.89	104.30
26	BB	420	C	N3-C4-C5	-8.82	118.37	121.90
26	BB	619	G	N3-C4-C5	-8.82	124.19	128.60
26	BB	1155	A	N1-C2-N3	-8.82	124.89	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	425	G	C5-N7-C8	-8.82	99.89	104.30
26	BB	1079	C	N3-C4-C5	-8.82	118.37	121.90
26	BB	2290	G	N1-C6-O6	-8.82	114.61	119.90
1	AA	718	A	C1'-O4'-C4'	-8.81	102.85	109.90
1	AA	990	C	O4'-C1'-N1	8.81	115.25	108.20
1	AA	1351	U	O4'-C1'-N1	8.81	115.25	108.20
1	AA	1515	G	C4-C5-N7	-8.81	107.28	110.80
26	BB	242	G	P-O3'-C3'	8.81	130.28	119.70
26	BB	856	G	N3-C4-C5	-8.81	124.19	128.60
26	BB	2830	C	C3'-C2'-C1'	-8.81	94.45	101.50
1	AA	818	G	C6-C5-N7	-8.81	125.11	130.40
1	AA	1058	G	C4-C5-N7	-8.81	107.28	110.80
1	AA	1383	C	C5'-C4'-C3'	-8.81	101.90	116.00
25	BA	113	C	C2-N3-C4	8.81	124.31	119.90
26	BB	1103	A	N1-C6-N6	-8.81	113.31	118.60
26	BB	2394	C	C3'-C2'-C1'	8.81	108.55	101.50
2	AB	44	G	C4'-C3'-C2'	-8.81	93.79	102.60
26	BB	665	U	N1-C2-N3	8.81	120.19	114.90
26	BB	1409	U	C4'-C3'-C2'	-8.81	93.79	102.60
26	BB	2839	G	N1-C6-O6	8.81	125.19	119.90
26	BB	2146	C	O4'-C1'-N1	8.81	115.25	108.20
26	BB	2799	A	N9-C4-C5	8.81	109.32	105.80
26	BB	716	A	O4'-C1'-N9	8.81	115.25	108.20
26	BB	1202	G	N1-C6-O6	-8.81	114.61	119.90
26	BB	1795	C	C4'-C3'-C2'	-8.81	93.79	102.60
26	BB	1859	U	C4-C5-C6	8.81	124.98	119.70
26	BB	2015	A	N7-C8-N9	8.81	118.20	113.80
1	AA	1056	U	O4'-C1'-N1	8.81	115.25	108.20
26	BB	6	A	C4-C5-C6	8.81	121.40	117.00
26	BB	392	U	C5-C6-N1	-8.81	118.30	122.70
26	BB	1164	C	N1-C2-O2	8.81	124.18	118.90
26	BB	1967	C	O4'-C1'-N1	8.81	115.25	108.20
26	BB	2707	U	N1-C1'-C2'	-8.81	102.31	112.00
1	AA	610	U	N1-C2-N3	8.80	120.18	114.90
1	AA	743	A	C4-C5-N7	-8.81	106.30	110.70
26	BB	1004	U	C5-C4-O4	-8.81	120.62	125.90
26	BB	515	A	N9-C4-C5	8.80	109.32	105.80
26	BB	2091	C	N1-C2-O2	-8.80	113.62	118.90
1	AA	344	A	C4-C5-N7	8.80	115.10	110.70
1	AA	1515	G	C5-C6-N1	8.80	115.90	111.50
26	BB	1888	G	C8-N9-C4	-8.80	102.88	106.40
4	AD	14	A	N9-C4-C5	8.80	109.32	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1521	C	C4-C5-C6	-8.80	113.00	117.40
1	AA	270	A	C3'-C2'-C1'	-8.80	94.46	101.50
1	AA	1416	G	N1-C2-N2	8.80	124.12	116.20
26	BB	508	A	N1-C2-N3	-8.80	124.90	129.30
26	BB	585	G	N7-C8-N9	-8.80	108.70	113.10
26	BB	1149	G	N3-C4-N9	8.80	131.28	126.00
26	BB	2528	U	O4'-C1'-N1	8.80	115.24	108.20
26	BB	2791	G	C5-N7-C8	-8.80	99.90	104.30
1	AA	106	C	N1-C1'-C2'	-8.80	102.32	112.00
1	AA	601	G	N7-C8-N9	8.80	117.50	113.10
1	AA	852	G	N3-C4-N9	8.79	131.28	126.00
4	AD	14	A	C4-C5-C6	8.79	121.40	117.00
26	BB	394	C	O4'-C1'-N1	8.80	115.24	108.20
26	BB	1079	C	C2-N3-C4	8.79	124.30	119.90
1	AA	344	A	O4'-C1'-N9	8.79	115.23	108.20
26	BB	222	A	C4-C5-C6	8.79	121.40	117.00
26	BB	1127	A	N1-C2-N3	-8.79	124.91	129.30
26	BB	1484	U	N3-C2-O2	-8.79	116.05	122.20
26	BB	2200	C	C5-C4-N4	-8.79	114.05	120.20
26	BB	2463	C	C5-C4-N4	-8.79	114.05	120.20
26	BB	2428	G	P-O3'-C3'	8.79	130.25	119.70
26	BB	2902	C	C3'-C2'-C1'	8.79	108.53	101.50
26	BB	1279	G	C4-C5-N7	-8.79	107.28	110.80
26	BB	1723	G	C4'-C3'-C2'	-8.79	93.81	102.60
1	AA	1327	C	N1-C2-O2	8.79	124.17	118.90
1	AA	1386	G	C5-N7-C8	8.79	108.69	104.30
1	AA	396	C	C5-C4-N4	-8.78	114.05	120.20
26	BB	1781	U	C3'-C2'-C1'	8.78	108.53	101.50
26	BB	2638	G	O4'-C1'-N9	8.79	115.23	108.20
1	AA	834	U	C2-N3-C4	-8.78	121.73	127.00
26	BB	435	C	N3-C2-O2	-8.78	115.75	121.90
26	BB	1106	G	O4'-C1'-N9	8.78	115.23	108.20
26	BB	1491	G	N3-C2-N2	-8.78	113.75	119.90
26	BB	1723	G	N3-C4-C5	-8.78	124.21	128.60
1	AA	126	G	C2-N3-C4	8.78	116.29	111.90
1	AA	306	A	O4'-C1'-N9	8.78	115.22	108.20
1	AA	354	G	O4'-C1'-N9	8.78	115.22	108.20
1	AA	485	U	N3-C2-O2	-8.78	116.06	122.20
1	AA	1476	A	C4-C5-N7	-8.78	106.31	110.70
26	BB	2207	C	C5'-C4'-O4'	8.78	119.64	109.10
1	AA	1023	U	C4-C5-C6	8.78	124.97	119.70
1	AA	1024	G	C6-N1-C2	-8.78	119.83	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	47	C	C1'-O4'-C4'	8.78	116.92	109.90
26	BB	579	G	C3'-C2'-C1'	-8.78	94.48	101.50
26	BB	1351	C	O4'-C1'-N1	8.78	115.22	108.20
26	BB	1700	A	C5-C6-N6	-8.78	116.68	123.70
26	BB	2383	G	C2-N3-C4	8.78	116.29	111.90
1	AA	1260	G	N9-C4-C5	-8.78	101.89	105.40
1	AA	1309	G	N3-C4-C5	-8.78	124.21	128.60
26	BB	1243	C	N1-C2-N3	-8.78	113.06	119.20
46	BV	76	ARG	NE-CZ-NH2	-8.78	115.91	120.30
26	BB	1300	G	C3'-C2'-C1'	8.78	108.52	101.50
26	BB	1504	A	C4-C5-C6	-8.78	112.61	117.00
26	BB	2024	G	O4'-C1'-N9	8.78	115.22	108.20
1	AA	344	A	C4-C5-C6	8.77	121.39	117.00
1	AA	533	A	C5'-C4'-O4'	8.77	119.63	109.10
1	AA	740	U	C5-C6-N1	-8.77	118.31	122.70
1	AA	1404	C	N1-C2-O2	8.77	124.16	118.90
1	AA	1506	U	C5-C6-N1	-8.77	118.31	122.70
1	AA	617	G	C4-C5-N7	8.77	114.31	110.80
1	AA	1038	C	N3-C4-C5	-8.77	118.39	121.90
26	BB	218	A	C2-N3-C4	8.77	114.99	110.60
26	BB	269	C	O4'-C1'-N1	8.77	115.22	108.20
26	BB	381	G	C8-N9-C4	-8.77	102.89	106.40
26	BB	484	C	N3-C4-C5	8.77	125.41	121.90
26	BB	485	C	N3-C4-C5	-8.77	118.39	121.90
26	BB	860	U	C6-N1-C2	-8.77	115.74	121.00
26	BB	1712	U	O4'-C1'-N1	8.77	115.22	108.20
26	BB	2276	G	C1'-O4'-C4'	8.77	116.92	109.90
4	AD	28	U	O4'-C1'-N1	8.77	115.22	108.20
26	BB	1828	G	C8-N9-C4	-8.77	102.89	106.40
26	BB	1951	U	C6-N1-C2	-8.77	115.74	121.00
1	AA	443	C	C2-N3-C4	-8.77	115.52	119.90
1	AA	1094	G	N3-C4-N9	-8.77	120.74	126.00
26	BB	1310	G	C6-N1-C2	-8.77	119.84	125.10
26	BB	22	C	N1-C2-O2	8.77	124.16	118.90
26	BB	128	C	N3-C2-O2	-8.77	115.77	121.90
26	BB	2870	C	C6-N1-C2	-8.77	116.79	120.30
1	AA	432	A	C8-N9-C4	-8.76	102.29	105.80
1	AA	577	G	C5-N7-C8	8.76	108.68	104.30
1	AA	1068	G	C8-N9-C4	-8.76	102.89	106.40
1	AA	371	A	N7-C8-N9	-8.76	109.42	113.80
1	AA	670	G	C5-C6-O6	-8.76	123.34	128.60
26	BB	714	U	N3-C2-O2	-8.76	116.07	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1366	A	O4'-C1'-N9	8.76	115.21	108.20
26	BB	2308	G	C6-N1-C2	-8.76	119.84	125.10
26	BB	2578	G	C4-C5-N7	8.76	114.31	110.80
43	BS	52	ARG	NE-CZ-NH1	8.76	124.68	120.30
1	AA	183	C	C2-N3-C4	-8.76	115.52	119.90
1	AA	238	A	C2-N3-C4	8.76	114.98	110.60
26	BB	2	G	C6-N1-C2	-8.76	119.84	125.10
26	BB	806	C	C4-C5-C6	-8.76	113.02	117.40
1	AA	728	A	O4'-C1'-N9	8.76	115.21	108.20
26	BB	134	G	C8-N9-C4	-8.76	102.90	106.40
26	BB	1168	G	C8-N9-C4	-8.76	102.90	106.40
1	AA	388	G	C4-C5-N7	-8.76	107.30	110.80
1	AA	739	C	O4'-C1'-N1	8.76	115.20	108.20
1	AA	1166	G	C4-C5-N7	-8.76	107.30	110.80
26	BB	2186	G	N7-C8-N9	8.76	117.48	113.10
26	BB	15	G	N3-C2-N2	-8.76	113.77	119.90
26	BB	2617	U	C6-N1-C2	-8.76	115.75	121.00
8	AH	19	ARG	NE-CZ-NH1	-8.75	115.92	120.30
26	BB	490	C	N3-C2-O2	-8.75	115.77	121.90
26	BB	2877	G	C3'-C2'-C1'	8.75	108.50	101.50
1	AA	484	G	P-O3'-C3'	8.75	130.20	119.70
6	AF	178	ARG	NE-CZ-NH2	-8.75	115.92	120.30
26	BB	68	G	C4-C5-C6	-8.75	113.55	118.80
26	BB	85	G	C5-N7-C8	8.75	108.68	104.30
26	BB	625	G	N9-C4-C5	8.75	108.90	105.40
24	AX	66	ARG	NE-CZ-NH2	8.75	124.68	120.30
26	BB	469	G	N7-C8-N9	8.75	117.47	113.10
26	BB	495	G	C6-C5-N7	-8.75	125.15	130.40
26	BB	568	U	O4'-C4'-C3'	8.75	113.10	106.10
26	BB	2329	U	C6-N1-C2	-8.75	115.75	121.00
1	AA	403	C	N3-C4-C5	-8.75	118.40	121.90
1	AA	564	C	N3-C4-N4	8.75	124.12	118.00
1	AA	1169	A	C5-N7-C8	8.75	108.27	103.90
26	BB	132	G	C2-N3-C4	8.75	116.27	111.90
26	BB	148	U	C1'-O4'-C4'	8.75	116.90	109.90
26	BB	813	U	C6-N1-C2	-8.75	115.75	121.00
26	BB	1603	A	O4'-C4'-C3'	8.75	113.10	106.10
26	BB	2047	C	O4'-C1'-N1	8.75	115.20	108.20
26	BB	2121	G	C6-C5-N7	-8.75	125.15	130.40
1	AA	940	C	O4'-C1'-N1	8.74	115.19	108.20
1	AA	1131	G	N1-C2-N3	-8.74	118.65	123.90
26	BB	169	G	N3-C4-C5	-8.74	124.23	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	748	G	C4-C5-N7	-8.74	107.30	110.80
26	BB	1409	U	C3'-C2'-C1'	8.74	108.50	101.50
1	AA	1001	C	N1-C2-O2	8.74	124.15	118.90
18	AR	88	ARG	NE-CZ-NH2	-8.74	115.93	120.30
25	BA	12	C	C3'-C2'-C1'	8.74	108.50	101.50
26	BB	68	G	C3'-C2'-C1'	8.74	108.50	101.50
26	BB	1688	U	C5-C4-O4	-8.74	120.65	125.90
28	BD	97	ASP	CB-CG-OD2	-8.74	110.43	118.30
1	AA	1365	G	C5-C6-O6	-8.74	123.36	128.60
1	AA	1459	G	O4'-C1'-N9	8.74	115.19	108.20
26	BB	228	C	O4'-C1'-N1	8.74	115.19	108.20
26	BB	1420	A	N9-C4-C5	-8.74	102.30	105.80
26	BB	1216	G	N3-C2-N2	-8.74	113.78	119.90
26	BB	1910	G	O4'-C1'-N9	8.74	115.19	108.20
26	BB	2444	G	C8-N9-C4	-8.74	102.90	106.40
26	BB	2717	C	C5-C4-N4	-8.74	114.08	120.20
25	BA	65	U	C5-C4-O4	8.74	131.14	125.90
26	BB	1362	C	C6-N1-C2	-8.74	116.81	120.30
26	BB	2049	G	C6-N1-C2	-8.74	119.86	125.10
26	BB	2593	U	C2-N3-C4	-8.74	121.76	127.00
26	BB	2627	G	N3-C4-N9	8.74	131.24	126.00
26	BB	2808	G	C4-C5-N7	8.74	114.29	110.80
1	AA	741	G	C5-N7-C8	-8.73	99.93	104.30
1	AA	568	G	N3-C4-C5	-8.73	124.23	128.60
1	AA	1168	U	N1-C2-N3	8.73	120.14	114.90
26	BB	495	G	N3-C2-N2	-8.73	113.79	119.90
26	BB	1889	A	C2-N3-C4	8.73	114.97	110.60
26	BB	2294	G	N3-C4-C5	-8.73	124.23	128.60
1	AA	81	A	C3'-C2'-C1'	-8.73	94.51	101.50
1	AA	269	C	N3-C4-N4	-8.73	111.89	118.00
1	AA	2	A	C3'-C2'-C1'	-8.73	94.52	101.50
1	AA	141	G	O4'-C1'-N9	8.73	115.19	108.20
1	AA	466	A	O4'-C1'-N9	8.73	115.19	108.20
1	AA	635	A	N9-C1'-C2'	-8.73	102.39	112.00
12	AL	122	ARG	NE-CZ-NH2	-8.73	115.93	120.30
26	BB	2157	G	O4'-C1'-N9	8.73	115.19	108.20
25	BA	30	C	O4'-C1'-N1	8.73	115.18	108.20
25	BA	44	G	C2-N3-C4	8.73	116.27	111.90
26	BB	1664	A	N9-C4-C5	8.73	109.29	105.80
26	BB	2744	G	C4-C5-N7	-8.73	107.31	110.80
26	BB	2366	A	O4'-C1'-N9	8.73	115.18	108.20
26	BB	171	U	C2-N3-C4	-8.73	121.76	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2891	U	C5-C6-N1	-8.73	118.34	122.70
2	AB	50	G	N9-C4-C5	8.73	108.89	105.40
26	BB	452	G	N3-C4-N9	8.73	131.24	126.00
26	BB	1099	G	N3-C4-C5	-8.73	124.24	128.60
26	BB	1512	C	O4'-C1'-N1	8.73	115.18	108.20
26	BB	1828	G	C6-N1-C2	-8.73	119.86	125.10
1	AA	332	G	N3-C4-N9	-8.72	120.77	126.00
1	AA	398	U	O4'-C1'-N1	8.72	115.18	108.20
1	AA	413	G	C4-C5-N7	8.72	114.29	110.80
1	AA	1160	G	C5-C6-O6	-8.72	123.36	128.60
1	AA	1514	G	C2-N3-C4	8.72	116.26	111.90
26	BB	830	G	C6-C5-N7	-8.72	125.17	130.40
26	BB	1848	A	N9-C4-C5	8.72	109.29	105.80
26	BB	1987	A	C8-N9-C4	-8.72	102.31	105.80
26	BB	2049	G	C8-N9-C4	8.72	109.89	106.40
26	BB	2614	A	N1-C2-N3	-8.72	124.94	129.30
1	AA	450	G	N9-C4-C5	8.72	108.89	105.40
18	AR	63	ARG	NE-CZ-NH1	8.72	124.66	120.30
26	BB	478	A	C4-C5-N7	-8.72	106.34	110.70
26	BB	708	G	C5-C6-O6	8.72	133.83	128.60
26	BB	1139	G	C3'-C2'-C1'	-8.72	94.52	101.50
26	BB	2276	G	C4-C5-N7	-8.72	107.31	110.80
26	BB	2464	G	C5-C6-O6	-8.72	123.37	128.60
26	BB	2586	U	C5'-C4'-O4'	8.72	119.57	109.10
26	BB	2697	G	N9-C4-C5	8.72	108.89	105.40
1	AA	9	G	N9-C4-C5	8.72	108.89	105.40
1	AA	125	U	N3-C2-O2	-8.72	116.10	122.20
1	AA	1228	C	C2-N3-C4	8.72	124.26	119.90
1	AA	1346	A	N1-C6-N6	-8.72	113.37	118.60
2	AB	26	A	C5-C6-N6	-8.72	116.73	123.70
3	AC	48	C	C2-N3-C4	8.72	124.26	119.90
6	AF	17	TRP	CE2-CD2-CG	8.72	114.27	107.30
26	BB	599	A	N9-C1'-C2'	-8.72	102.41	112.00
26	BB	1533	C	C2-N3-C4	-8.72	115.54	119.90
26	BB	1721	G	N3-C4-C5	-8.72	124.24	128.60
26	BB	2033	A	C8-N9-C4	-8.72	102.31	105.80
53	B2	4	ASP	CB-CG-OD2	-8.72	110.45	118.30
1	AA	1178	G	N1-C6-O6	-8.72	114.67	119.90
1	AA	1451	U	O4'-C1'-N1	8.72	115.17	108.20
26	BB	429	A	C8-N9-C4	-8.72	102.31	105.80
1	AA	14	U	C5-C4-O4	8.71	131.13	125.90
26	BB	2014	A	C4-C5-N7	-8.71	106.34	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2352	A	C5-C6-N1	8.71	122.06	117.70
26	BB	2424	C	C5-C6-N1	8.71	125.36	121.00
26	BB	2584	U	N1-C2-O2	-8.71	116.70	122.80
1	AA	475	C	C4'-C3'-C2'	-8.71	93.89	102.60
1	AA	740	U	N1-C2-O2	8.71	128.90	122.80
26	BB	1296	G	N9-C4-C5	8.71	108.89	105.40
1	AA	1006	G	O4'-C1'-N9	8.71	115.17	108.20
1	AA	1257	A	N3-C4-N9	8.71	134.37	127.40
26	BB	1664	A	N1-C2-N3	-8.71	124.94	129.30
26	BB	2685	G	O4'-C4'-C3'	8.71	113.07	106.10
1	AA	187	G	C5-C6-N1	8.71	115.85	111.50
1	AA	1237	C	C5-C6-N1	8.71	125.35	121.00
26	BB	604	G	C4-C5-N7	-8.71	107.32	110.80
26	BB	818	G	C2-N3-C4	8.71	116.25	111.90
26	BB	2168	G	C4-C5-C6	8.71	124.02	118.80
26	BB	2223	G	C4'-C3'-C2'	-8.71	93.89	102.60
26	BB	2801	G	N7-C8-N9	8.71	117.45	113.10
26	BB	2867	G	C5-N7-C8	8.71	108.65	104.30
1	AA	87	C	O4'-C1'-N1	8.71	115.16	108.20
1	AA	412	A	C5'-C4'-O4'	8.71	119.55	109.10
1	AA	820	U	C2-N3-C4	-8.70	121.78	127.00
26	BB	382	A	C4-C5-N7	-8.71	106.35	110.70
1	AA	663	A	N1-C2-N3	-8.70	124.95	129.30
26	BB	248	G	O4'-C1'-N9	8.70	115.16	108.20
26	BB	278	A	C5-C6-N1	8.70	122.05	117.70
1	AA	81	A	C8-N9-C4	-8.70	102.32	105.80
1	AA	457	G	N1-C2-N2	-8.70	108.37	116.20
2	AB	61	C	C3'-C2'-C1'	8.70	108.46	101.50
26	BB	340	A	N1-C2-N3	-8.70	124.95	129.30
26	BB	766	U	C6-N1-C2	-8.70	115.78	121.00
26	BB	2803	G	C6-C5-N7	8.70	135.62	130.40
29	BE	83	ARG	NE-CZ-NH2	8.70	124.65	120.30
1	AA	328	C	N1-C2-O2	8.70	124.12	118.90
1	AA	564	C	N1-C2-O2	8.70	124.12	118.90
26	BB	2380	C	C2-N3-C4	8.70	124.25	119.90
26	BB	1614	A	N7-C8-N9	8.70	118.15	113.80
1	AA	506	G	N9-C4-C5	8.70	108.88	105.40
1	AA	732	C	C2-N3-C4	8.70	124.25	119.90
1	AA	755	G	N3-C4-C5	-8.70	124.25	128.60
1	AA	1015	G	C5-N7-C8	-8.70	99.95	104.30
26	BB	1070	A	N1-C6-N6	-8.70	113.38	118.60
26	BB	2107	G	N3-C4-N9	8.70	131.22	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	320	A	O4'-C1'-N9	8.69	115.16	108.20
5	AE	29	PHE	CB-CG-CD1	-8.70	114.71	120.80
26	BB	2600	A	C8-N9-C4	-8.70	102.32	105.80
25	BA	68	C	N3-C4-N4	8.69	124.09	118.00
1	AA	1169	A	O4'-C1'-N9	8.69	115.16	108.20
26	BB	218	A	P-O3'-C3'	8.69	130.13	119.70
26	BB	1008	A	C4-C5-N7	-8.69	106.35	110.70
26	BB	2424	C	O4'-C1'-N1	8.69	115.15	108.20
1	AA	618	C	C4'-C3'-C2'	-8.69	93.91	102.60
26	BB	1916	A	N7-C8-N9	8.69	118.14	113.80
26	BB	2331	G	N9-C4-C5	8.69	108.88	105.40
1	AA	48	C	N3-C4-C5	-8.69	118.42	121.90
3	AC	45	G	N3-C4-C5	-8.69	124.25	128.60
1	AA	500	G	C5-C6-N1	-8.69	107.16	111.50
26	BB	911	A	C8-N9-C4	-8.69	102.32	105.80
26	BB	1808	A	C4-C5-C6	-8.69	112.66	117.00
26	BB	2322	A	C8-N9-C4	-8.69	102.33	105.80
1	AA	1015	G	N1-C6-O6	-8.69	114.69	119.90
26	BB	1482	G	C1'-O4'-C4'	-8.69	102.95	109.90
25	BA	96	G	C5-N7-C8	-8.69	99.96	104.30
26	BB	331	C	C6-N1-C2	-8.69	116.83	120.30
26	BB	977	G	N9-C4-C5	8.69	108.87	105.40
26	BB	1065	U	N1-C2-N3	8.69	120.11	114.90
26	BB	2000	C	C5-C6-N1	8.69	125.34	121.00
26	BB	2652	C	C3'-C2'-C1'	8.69	108.45	101.50
1	AA	262	A	C2-N3-C4	8.68	114.94	110.60
1	AA	1131	G	C6-C5-N7	8.68	135.61	130.40
26	BB	2762	C	O4'-C1'-N1	8.68	115.15	108.20
1	AA	345	C	N3-C4-N4	8.68	124.08	118.00
1	AA	938	A	O4'-C1'-N9	8.68	115.14	108.20
26	BB	809	G	C5-C6-O6	-8.68	123.39	128.60
1	AA	904	U	O4'-C1'-N1	8.68	115.14	108.20
4	AD	13	C	N3-C4-N4	8.68	124.08	118.00
26	BB	347	A	C5-C6-N6	-8.68	116.76	123.70
26	BB	720	U	C4-C5-C6	8.68	124.91	119.70
26	BB	855	G	N1-C2-N3	-8.68	118.69	123.90
26	BB	847	U	N3-C2-O2	-8.68	116.13	122.20
26	BB	1082	U	C1'-O4'-C4'	8.68	116.84	109.90
26	BB	1571	A	C8-N9-C4	-8.68	102.33	105.80
26	BB	1766	G	C8-N9-C4	-8.68	102.93	106.40
26	BB	2102	G	C5-C6-O6	-8.68	123.39	128.60
26	BB	2604	U	N3-C4-O4	-8.68	113.32	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AU	24	ASP	CB-CG-OD2	-8.68	110.49	118.30
1	AA	505	G	C2-N3-C4	8.68	116.24	111.90
1	AA	1063	C	C2-N3-C4	8.68	124.24	119.90
1	AA	1079	G	C1'-O4'-C4'	8.68	116.84	109.90
26	BB	1414	C	C5-C6-N1	8.68	125.34	121.00
26	BB	1970	A	N7-C8-N9	-8.68	109.46	113.80
1	AA	1299	A	C5-C6-N1	8.68	122.04	117.70
1	AA	1319	A	O4'-C1'-N9	-8.68	101.26	108.20
26	BB	1398	C	C3'-C2'-C1'	8.68	108.44	101.50
26	BB	1438	U	N3-C4-O4	8.68	125.47	119.40
26	BB	1742	U	C3'-C2'-C1'	8.68	108.44	101.50
26	BB	2315	G	O4'-C1'-N9	8.68	115.14	108.20
26	BB	349	U	C5-C6-N1	-8.67	118.36	122.70
26	BB	975	A	C5-C6-N6	-8.67	116.76	123.70
26	BB	2772	C	C4-C5-C6	-8.67	113.06	117.40
1	AA	281	G	N7-C8-N9	8.67	117.44	113.10
1	AA	135	C	C2-N3-C4	8.67	124.23	119.90
26	BB	579	G	C2-N3-C4	-8.67	107.56	111.90
26	BB	775	G	N3-C4-C5	-8.67	124.26	128.60
26	BB	597	G	C6-C5-N7	8.67	135.60	130.40
26	BB	877	A	C5-N7-C8	-8.67	99.56	103.90
26	BB	1490	A	C5-C6-N6	-8.67	116.77	123.70
1	AA	713	G	N9-C4-C5	8.67	108.87	105.40
1	AA	770	C	N1-C2-O2	8.67	124.10	118.90
1	AA	1192	C	C5-C6-N1	8.67	125.33	121.00
2	AB	13	C	C6-N1-C2	8.67	123.77	120.30
2	AB	50	G	C8-N9-C4	-8.67	102.93	106.40
25	BA	4	C	C5-C6-N1	-8.67	116.67	121.00
26	BB	1333	G	N7-C8-N9	8.67	117.43	113.10
26	BB	1828	G	N7-C8-N9	8.67	117.43	113.10
26	BB	2192	U	C5-C4-O4	-8.67	120.70	125.90
30	BF	114	ARG	NE-CZ-NH2	-8.67	115.97	120.30
1	AA	582	C	C5-C6-N1	8.66	125.33	121.00
4	AD	59	A	N1-C6-N6	8.66	123.80	118.60
25	BA	90	C	N1-C2-O2	8.66	124.10	118.90
1	AA	1070	U	C5'-C4'-C3'	-8.66	102.14	116.00
26	BB	253	C	O4'-C1'-N1	8.66	115.13	108.20
26	BB	1385	A	N7-C8-N9	8.66	118.13	113.80
26	BB	1743	G	N3-C4-C5	-8.66	124.27	128.60
1	AA	1032	G	N9-C4-C5	8.66	108.86	105.40
1	AA	1093	A	N7-C8-N9	8.66	118.13	113.80
1	AA	21	G	N7-C8-N9	-8.66	108.77	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	72	A	C4-C5-C6	-8.66	112.67	117.00
26	BB	93	G	N3-C4-C5	-8.66	124.27	128.60
26	BB	650	C	N3-C2-O2	-8.66	115.84	121.90
26	BB	1762	A	N1-C6-N6	-8.66	113.40	118.60
26	BB	2074	U	C5'-C4'-O4'	8.66	119.49	109.10
26	BB	2345	G	N9-C4-C5	8.66	108.86	105.40
26	BB	2822	G	C6-N1-C2	-8.66	119.91	125.10
1	AA	388	G	C2-N3-C4	8.66	116.23	111.90
1	AA	1030	U	N3-C2-O2	-8.66	116.14	122.20
1	AA	1063	C	C5-C4-N4	-8.66	114.14	120.20
16	AP	2	ARG	NE-CZ-NH1	-8.66	115.97	120.30
31	BG	94	ARG	NE-CZ-NH1	8.66	124.63	120.30
26	BB	868	U	O4'-C1'-N1	8.66	115.12	108.20
26	BB	1377	G	C5-C6-N1	8.66	115.83	111.50
26	BB	2010	G	C5-C6-O6	-8.66	123.41	128.60
26	BB	2865	U	C5-C6-N1	-8.66	118.37	122.70
1	AA	247	G	C5'-C4'-O4'	8.65	119.48	109.10
1	AA	525	C	N1-C2-O2	8.65	124.09	118.90
26	BB	744	U	O4'-C1'-N1	8.65	115.12	108.20
26	BB	1429	G	C2-N3-C4	8.65	116.23	111.90
26	BB	1178	C	O4'-C1'-N1	8.65	115.12	108.20
26	BB	2601	C	N3-C4-C5	-8.65	118.44	121.90
1	AA	704	A	C4-C5-C6	-8.65	112.67	117.00
1	AA	1022	A	C3'-C2'-C1'	8.65	108.42	101.50
26	BB	858	G	C8-N9-C4	-8.65	102.94	106.40
26	BB	1282	U	N3-C2-O2	-8.65	116.14	122.20
26	BB	2248	C	C3'-C2'-C1'	8.65	108.42	101.50
1	AA	102	G	C6-N1-C2	-8.65	119.91	125.10
1	AA	422	C	N1-C2-O2	8.65	124.09	118.90
2	AB	38	A	N7-C8-N9	8.65	118.12	113.80
3	AC	28	U	C5'-C4'-O4'	8.65	119.48	109.10
26	BB	1235	G	C3'-C2'-C1'	8.65	108.42	101.50
26	BB	1242	U	O4'-C1'-N1	8.65	115.12	108.20
1	AA	1321	U	P-O3'-C3'	8.65	130.08	119.70
1	AA	1463	U	O4'-C1'-N1	8.65	115.12	108.20
26	BB	676	A	N1-C6-N6	-8.65	113.41	118.60
26	BB	2258	C	N3-C4-N4	8.65	124.05	118.00
25	BA	64	G	O4'-C1'-N9	8.64	115.12	108.20
26	BB	1815	A	O4'-C1'-N9	8.64	115.12	108.20
1	AA	1245	C	O4'-C1'-N1	8.64	115.11	108.20
26	BB	766	U	N3-C4-C5	8.64	119.79	114.60
26	BB	2074	U	C1'-O4'-C4'	-8.64	102.98	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	589	U	C1'-O4'-C4'	8.64	116.81	109.90
26	BB	1645	G	N3-C4-N9	8.64	131.19	126.00
26	BB	1898	U	C5-C4-O4	8.64	131.09	125.90
26	BB	1823	G	C8-N9-C4	-8.64	102.94	106.40
26	BB	2077	A	N3-C4-C5	-8.64	120.75	126.80
30	BF	158	PHE	CB-CG-CD1	-8.64	114.75	120.80
1	AA	318	G	C6-C5-N7	-8.64	125.22	130.40
1	AA	372	C	C4-C5-C6	8.64	121.72	117.40
1	AA	1258	G	N3-C4-C5	-8.64	124.28	128.60
26	BB	1186	G	N3-C4-C5	-8.64	124.28	128.60
26	BB	1227	G	N7-C8-N9	-8.64	108.78	113.10
26	BB	2017	U	C1'-O4'-C4'	-8.64	102.99	109.90
26	BB	2117	A	O4'-C1'-N9	8.64	115.11	108.20
26	BB	2750	A	N7-C8-N9	8.64	118.12	113.80
26	BB	2171	A	O4'-C1'-N9	8.64	115.11	108.20
26	BB	2643	G	N3-C4-N9	8.64	131.18	126.00
1	AA	1289	A	C5-C6-N1	8.63	122.02	117.70
6	AF	22	PHE	CB-CG-CD1	-8.63	114.76	120.80
19	AS	31	ARG	NE-CZ-NH2	-8.63	115.98	120.30
26	BB	630	G	C5-C6-O6	-8.63	123.42	128.60
26	BB	1278	C	O4'-C1'-N1	8.63	115.11	108.20
26	BB	1353	A	C2-N3-C4	8.63	114.92	110.60
26	BB	1942	C	C2-N3-C4	8.63	124.22	119.90
1	AA	770	C	C6-N1-C2	-8.63	116.85	120.30
1	AA	1011	C	O4'-C1'-N1	8.63	115.11	108.20
1	AA	1266	G	N9-C4-C5	-8.63	101.95	105.40
1	AA	608	A	C5-C6-N1	8.63	122.02	117.70
25	BA	81	G	C5-C6-N1	8.63	115.82	111.50
26	BB	403	U	C5-C6-N1	8.63	127.02	122.70
26	BB	625	G	N3-C2-N2	8.63	125.94	119.90
26	BB	1531	C	N3-C4-C5	-8.63	118.45	121.90
28	BD	62	ARG	NE-CZ-NH1	8.63	124.62	120.30
26	BB	2579	C	O4'-C1'-N1	8.63	115.10	108.20
26	BB	2727	A	C6-C5-N7	-8.63	126.26	132.30
1	AA	849	G	C4-C5-N7	-8.63	107.35	110.80
1	AA	1109	C	N1-C2-N3	-8.63	113.16	119.20
43	BS	54	ARG	NE-CZ-NH2	-8.63	115.98	120.30
26	BB	629	G	N1-C6-O6	-8.63	114.72	119.90
26	BB	1897	G	C6-N1-C2	-8.63	119.92	125.10
1	AA	479	U	N1-C2-N3	8.63	120.08	114.90
1	AA	555	U	N3-C2-O2	-8.63	116.16	122.20
1	AA	924	C	C2-N3-C4	8.62	124.21	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	748	G	C4-C5-C6	8.62	123.97	118.80
1	AA	254	G	C5-C6-O6	-8.62	123.43	128.60
4	AD	58	A	C8-N9-C4	-8.62	102.35	105.80
26	BB	543	G	C8-N9-C4	-8.62	102.95	106.40
26	BB	1812	U	N3-C4-C5	-8.62	109.43	114.60
26	BB	2024	G	C2-N3-C4	8.62	116.21	111.90
26	BB	2878	U	C2-N3-C4	-8.62	121.83	127.00
1	AA	324	G	N3-C4-C5	-8.62	124.29	128.60
1	AA	531	U	C6-N1-C2	-8.62	115.83	121.00
1	AA	1158	C	N1-C2-O2	8.62	124.07	118.90
26	BB	543	G	N1-C2-N2	8.62	123.96	116.20
26	BB	1469	A	N1-C6-N6	-8.62	113.43	118.60
26	BB	1602	U	C5-C4-O4	-8.62	120.73	125.90
30	BF	200	LEU	CB-CG-CD1	8.62	125.65	111.00
26	BB	110	G	O4'-C1'-N9	8.62	115.09	108.20
26	BB	341	C	C3'-C2'-C1'	8.62	108.39	101.50
26	BB	749	A	N7-C8-N9	8.62	118.11	113.80
26	BB	2735	G	C5-C6-N1	8.62	115.81	111.50
26	BB	853	C	C5-C4-N4	8.61	126.23	120.20
26	BB	2752	C	O4'-C1'-N1	8.61	115.09	108.20
26	BB	920	A	N9-C1'-C2'	-8.61	102.53	112.00
26	BB	2066	C	N3-C2-O2	-8.61	115.87	121.90
1	AA	776	G	C8-N9-C4	-8.61	102.96	106.40
6	AF	168	ARG	NE-CZ-NH1	8.61	124.61	120.30
26	BB	70	G	N3-C4-C5	-8.61	124.29	128.60
26	BB	953	G	C6-C5-N7	-8.61	125.23	130.40
26	BB	989	G	C4-C5-C6	8.61	123.97	118.80
26	BB	1473	G	C4-C5-C6	8.61	123.97	118.80
26	BB	2873	A	O5'-P-OP2	-8.61	97.95	105.70
26	BB	2892	G	C5-C6-N1	8.61	115.81	111.50
1	AA	608	A	C6-C5-N7	8.61	138.33	132.30
26	BB	986	C	C4-C5-C6	-8.61	113.09	117.40
26	BB	1935	G	N7-C8-N9	8.61	117.41	113.10
1	AA	758	C	P-O3'-C3'	8.61	130.03	119.70
26	BB	470	A	N9-C4-C5	8.61	109.24	105.80
26	BB	997	G	N1-C2-N3	-8.61	118.73	123.90
26	BB	1434	A	C8-N9-C4	-8.61	102.36	105.80
26	BB	2551	C	C4'-C3'-C2'	-8.61	93.99	102.60
26	BB	2889	C	O4'-C1'-N1	8.61	115.09	108.20
1	AA	359	G	C3'-C2'-C1'	8.61	108.39	101.50
25	BA	89	U	N1-C2-O2	8.61	128.82	122.80
26	BB	1211	C	O4'-C1'-N1	8.61	115.09	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1060	U	N3-C2-O2	-8.61	116.18	122.20
1	AA	1319	A	N9-C4-C5	-8.61	102.36	105.80
26	BB	1606	C	C1'-O4'-C4'	-8.61	103.02	109.90
26	BB	1759	A	C6-C5-N7	8.61	138.32	132.30
26	BB	2709	G	O4'-C1'-N9	8.61	115.08	108.20
26	BB	2756	U	C2'-C3'-O3'	8.61	128.43	109.50
26	BB	632	A	C5-N7-C8	-8.60	99.60	103.90
26	BB	1016	G	O4'-C1'-N9	8.60	115.08	108.20
26	BB	1219	U	C5'-C4'-O4'	8.60	119.42	109.10
26	BB	2781	A	C5-N7-C8	-8.60	99.60	103.90
1	AA	292	G	C6-N1-C2	-8.60	119.94	125.10
26	BB	596	U	O4'-C1'-N1	8.60	115.08	108.20
26	BB	1181	U	C5-C6-N1	-8.60	118.40	122.70
26	BB	1327	A	N1-C6-N6	-8.60	113.44	118.60
26	BB	1951	U	N1-C2-N3	8.60	120.06	114.90
26	BB	2532	G	C5'-C4'-O4'	8.60	119.42	109.10
56	B5	19	ARG	NE-CZ-NH2	8.60	124.60	120.30
1	AA	255	G	N1-C2-N2	8.60	123.94	116.20
1	AA	1012	A	C6-C5-N7	8.60	138.32	132.30
4	AD	46	G	O4'-C1'-N9	8.60	115.08	108.20
26	BB	1887	C	O4'-C1'-N1	8.60	115.08	108.20
26	BB	1890	A	O4'-C1'-N9	8.60	115.08	108.20
26	BB	2708	G	C4-C5-N7	-8.60	107.36	110.80
1	AA	526	C	C4-C5-C6	8.60	121.70	117.40
1	AA	701	U	N3-C2-O2	-8.60	116.18	122.20
2	AB	38	A	C5'-C4'-O4'	8.60	119.42	109.10
26	BB	806	C	C5-C6-N1	8.60	125.30	121.00
26	BB	987	C	N3-C2-O2	-8.60	115.88	121.90
26	BB	1507	C	N1-C2-O2	8.60	124.06	118.90
26	BB	1670	C	C6-N1-C2	-8.60	116.86	120.30
26	BB	2549	G	C5-C6-N1	8.60	115.80	111.50
26	BB	2839	G	C5'-C4'-O4'	8.60	119.41	109.10
50	BZ	27	ARG	NE-CZ-NH1	8.60	124.60	120.30
1	AA	1359	C	O4'-C1'-N1	8.59	115.07	108.20
3	AC	57	C	N3-C4-N4	8.59	124.02	118.00
26	BB	436	C	O4'-C1'-N1	8.59	115.07	108.20
26	BB	649	G	N1-C2-N2	8.59	123.93	116.20
26	BB	2485	G	C8-N9-C4	-8.59	102.96	106.40
1	AA	507	C	C2-N3-C4	8.59	124.19	119.90
26	BB	2117	A	C5-C6-N6	-8.59	116.83	123.70
1	AA	963	G	C4-C5-N7	-8.59	107.36	110.80
26	BB	1673	G	N9-C4-C5	8.59	108.83	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2043	C	C4'-C3'-C2'	-8.59	94.01	102.60
26	BB	1343	G	C5-C6-N1	8.59	115.79	111.50
26	BB	1409	U	N1-C1'-C2'	-8.59	102.55	112.00
1	AA	578	C	O4'-C1'-N1	8.59	115.07	108.20
1	AA	1029	U	C2-N3-C4	-8.59	121.85	127.00
1	AA	1105	A	C4'-C3'-C2'	-8.59	94.01	102.60
26	BB	583	G	N3-C4-C5	-8.59	124.31	128.60
3	AC	26	U	C5-C4-O4	8.59	131.05	125.90
1	AA	189	A	C5-N7-C8	-8.58	99.61	103.90
1	AA	455	G	C6-N1-C2	-8.58	119.95	125.10
26	BB	265	A	C5'-C4'-O4'	8.58	119.40	109.10
1	AA	508	U	C4-C5-C6	8.58	124.85	119.70
1	AA	686	U	O4'-C1'-N1	8.58	115.07	108.20
1	AA	734	G	N9-C4-C5	8.58	108.83	105.40
1	AA	1459	G	N9-C4-C5	8.58	108.83	105.40
26	BB	231	A	N1-C6-N6	-8.58	113.45	118.60
26	BB	1151	A	C4'-C3'-C2'	-8.58	94.02	102.60
26	BB	1588	G	C4'-C3'-C2'	-8.58	94.02	102.60
1	AA	238	A	N3-C4-C5	-8.58	120.79	126.80
1	AA	1021	A	N1-C2-N3	8.58	133.59	129.30
1	AA	1138	G	N3-C2-N2	8.58	125.91	119.90
3	AC	39	U	N1-C2-O2	8.58	128.81	122.80
26	BB	2262	U	O4'-C1'-N1	8.58	115.06	108.20
26	BB	332	A	O4'-C1'-N9	8.58	115.06	108.20
26	BB	1021	A	C8-N9-C4	-8.58	102.37	105.80
26	BB	2415	G	N1-C2-N3	-8.58	118.75	123.90
43	BS	91	ARG	NH1-CZ-NH2	8.58	128.84	119.40
1	AA	145	G	N3-C4-C5	-8.58	124.31	128.60
1	AA	273	U	O4'-C1'-N1	8.58	115.06	108.20
26	BB	1242	U	C5-C4-O4	8.58	131.05	125.90
26	BB	2379	G	C6-N1-C2	-8.58	119.95	125.10
26	BB	1704	C	N1-C2-O2	8.58	124.05	118.90
1	AA	1267	C	C4-C5-C6	-8.57	113.11	117.40
1	AA	645	G	N9-C4-C5	-8.57	101.97	105.40
1	AA	1068	G	C2-N3-C4	8.57	116.19	111.90
1	AA	1153	G	C2-N3-C4	8.57	116.19	111.90
4	AD	42	C	C2-N3-C4	8.57	124.19	119.90
26	BB	413	C	N3-C2-O2	-8.57	115.90	121.90
26	BB	728	G	O4'-C1'-N9	8.57	115.06	108.20
26	BB	1013	C	P-O3'-C3'	8.57	129.99	119.70
26	BB	2742	G	N7-C8-N9	8.57	117.39	113.10
26	BB	1092	C	O4'-C1'-N1	8.57	115.06	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1866	A	N1-C2-N3	-8.57	125.01	129.30
26	BB	2029	G	N1-C6-O6	8.57	125.04	119.90
26	BB	2317	A	C6-N1-C2	8.57	123.75	118.60
1	AA	810	C	N1-C2-O2	8.57	124.04	118.90
1	AA	1524	C	O4'-C4'-C3'	8.57	112.96	106.10
4	AD	29	C	C5-C6-N1	8.57	125.29	121.00
26	BB	1410	G	O4'-C1'-N9	8.57	115.06	108.20
26	BB	2344	U	N3-C2-O2	-8.57	116.20	122.20
26	BB	2379	G	C8-N9-C4	-8.57	102.97	106.40
26	BB	2891	U	O4'-C1'-N1	8.57	115.06	108.20
1	AA	182	A	C3'-C2'-C1'	-8.57	94.64	101.50
1	AA	886	G	C2-N3-C4	8.57	116.19	111.90
1	AA	1200	C	O4'-C1'-N1	8.57	115.06	108.20
1	AA	1514	G	N3-C4-N9	8.57	131.14	126.00
26	BB	130	C	N3-C4-C5	-8.57	118.47	121.90
26	BB	2781	A	P-O3'-C3'	8.57	129.99	119.70
56	B5	35	ARG	NE-CZ-NH2	8.57	124.59	120.30
1	AA	512	U	C1'-O4'-C4'	8.57	116.75	109.90
6	AF	183	TYR	CB-CG-CD1	-8.57	115.86	121.00
25	BA	26	C	O4'-C1'-N1	8.57	115.05	108.20
26	BB	940	G	N7-C8-N9	8.57	117.38	113.10
26	BB	1702	G	C8-N9-C4	-8.57	102.97	106.40
26	BB	2477	U	N3-C2-O2	-8.57	116.20	122.20
26	BB	2284	A	C5-C6-N1	-8.57	113.42	117.70
26	BB	1062	G	C6-N1-C2	-8.56	119.96	125.10
26	BB	1951	U	C2-N3-C4	-8.56	121.86	127.00
26	BB	2248	C	O4'-C1'-N1	8.56	115.05	108.20
26	BB	2384	U	N1-C2-N3	8.56	120.04	114.90
25	BA	108	A	C8-N9-C4	-8.56	102.38	105.80
26	BB	826	U	C5-C4-O4	-8.56	120.76	125.90
36	BL	99	ARG	NE-CZ-NH1	-8.56	116.02	120.30
1	AA	556	C	P-O3'-C3'	8.56	129.97	119.70
1	AA	581	G	C5-C6-O6	8.56	133.74	128.60
1	AA	846	G	N7-C8-N9	8.56	117.38	113.10
26	BB	59	U	C5-C6-N1	-8.56	118.42	122.70
26	BB	2487	G	C2-N3-C4	8.56	116.18	111.90
26	BB	1811	G	N3-C4-N9	8.56	131.14	126.00
26	BB	2535	G	N7-C8-N9	8.56	117.38	113.10
48	BX	82	TYR	CB-CG-CD2	-8.56	115.86	121.00
1	AA	1441	A	C4'-C3'-C2'	-8.56	94.04	102.60
26	BB	668	A	C6-C5-N7	8.56	138.29	132.30
26	BB	2375	G	O4'-C1'-N9	8.56	115.05	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1178	G	N3-C4-N9	-8.56	120.87	126.00
1	AA	1267	C	N1-C2-O2	8.56	124.03	118.90
2	AB	1	A	C4'-C3'-C2'	-8.56	94.04	102.60
4	AD	74	A	C3'-C2'-C1'	8.56	108.35	101.50
26	BB	792	A	N1-C6-N6	-8.56	113.47	118.60
26	BB	865	C	C4-C5-C6	8.56	121.68	117.40
26	BB	1218	G	C8-N9-C4	-8.56	102.98	106.40
26	BB	1658	C	O4'-C1'-N1	8.56	115.05	108.20
26	BB	2223	G	C1'-O4'-C4'	-8.56	103.05	109.90
26	BB	2341	G	C8-N9-C4	8.56	109.82	106.40
25	BA	35	C	N1-C2-O2	8.55	124.03	118.90
26	BB	2182	U	N3-C2-O2	-8.56	116.21	122.20
26	BB	2852	G	C2-N3-C4	8.55	116.18	111.90
1	AA	292	G	C5-N7-C8	-8.55	100.02	104.30
1	AA	699	C	C2-N3-C4	8.55	124.18	119.90
26	BB	708	G	C5-C6-N1	-8.55	107.22	111.50
26	BB	1094	U	P-O3'-C3'	8.55	129.97	119.70
26	BB	1136	G	N3-C4-C5	-8.55	124.32	128.60
26	BB	2801	G	C4-C5-N7	-8.55	107.38	110.80
27	BC	71	ARG	NE-CZ-NH2	-8.55	116.02	120.30
34	BJ	152	ARG	NE-CZ-NH2	-8.55	116.02	120.30
1	AA	1041	G	C2-N3-C4	8.55	116.17	111.90
26	BB	325	G	O4'-C1'-N9	8.55	115.04	108.20
26	BB	770	G	N9-C4-C5	8.55	108.82	105.40
1	AA	1486	G	N3-C4-N9	8.55	131.13	126.00
3	AC	29	G	N1-C6-O6	-8.55	114.77	119.90
26	BB	868	U	C6-N1-C2	-8.55	115.87	121.00
26	BB	361	G	O4'-C1'-N9	8.55	115.04	108.20
26	BB	412	A	C4-C5-C6	-8.55	112.72	117.00
26	BB	847	U	C5-C4-O4	-8.55	120.77	125.90
26	BB	922	C	C2-N3-C4	8.55	124.17	119.90
1	AA	1026	G	N1-C2-N3	-8.55	118.77	123.90
1	AA	1388	C	C5-C6-N1	8.55	125.27	121.00
26	BB	637	A	C2-N3-C4	8.55	114.87	110.60
1	AA	1435	G	C6-C5-N7	-8.55	125.27	130.40
3	AC	41	A	N9-C4-C5	8.55	109.22	105.80
26	BB	266	G	C4'-C3'-C2'	-8.55	94.05	102.60
26	BB	666	A	N1-C2-N3	-8.55	125.03	129.30
26	BB	799	G	C8-N9-C4	-8.55	102.98	106.40
26	BB	1212	G	C3'-C2'-C1'	-8.55	94.66	101.50
26	BB	1613	G	N9-C4-C5	8.55	108.82	105.40
26	BB	2082	A	C5-C6-N1	8.55	121.97	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2586	U	O4'-C1'-N1	8.55	115.04	108.20
33	BI	29	PHE	CB-CG-CD2	-8.55	114.82	120.80
26	BB	1126	A	C3'-C2'-C1'	8.54	108.34	101.50
26	BB	1223	G	C8-N9-C4	-8.54	102.98	106.40
26	BB	2225	A	O4'-C1'-N9	8.54	115.04	108.20
1	AA	1003	G	C6-N1-C2	-8.54	119.97	125.10
1	AA	1206	G	N3-C2-N2	8.54	125.88	119.90
1	AA	1517	G	C4-C5-N7	-8.54	107.38	110.80
26	BB	1655	A	C8-N9-C4	8.54	109.22	105.80
26	BB	1990	C	C3'-C2'-C1'	8.54	108.33	101.50
26	BB	2872	A	N9-C4-C5	8.54	109.22	105.80
1	AA	139	A	N1-C2-N3	8.54	133.57	129.30
1	AA	791	G	C6-C5-N7	8.54	135.52	130.40
1	AA	1286	U	C6-N1-C2	-8.54	115.88	121.00
26	BB	2439	A	O4'-C1'-N9	8.54	115.03	108.20
1	AA	835	U	C2-N3-C4	8.54	132.12	127.00
1	AA	1369	C	C4-C5-C6	-8.54	113.13	117.40
3	AC	47	C	N1-C2-O2	8.54	124.02	118.90
26	BB	576	U	P-O3'-C3'	8.54	129.95	119.70
26	BB	594	U	O4'-C1'-N1	8.54	115.03	108.20
26	BB	1429	G	C5-C6-O6	-8.54	123.48	128.60
26	BB	1813	G	N9-C4-C5	8.54	108.81	105.40
26	BB	2252	G	C3'-C2'-C1'	8.54	108.33	101.50
26	BB	2369	A	C4-C5-N7	-8.54	106.43	110.70
1	AA	1396	A	N1-C6-N6	-8.54	113.48	118.60
26	BB	229	C	N3-C4-N4	8.53	123.97	118.00
26	BB	990	A	C5-C6-N6	-8.53	116.87	123.70
26	BB	1167	C	C2-N3-C4	8.54	124.17	119.90
26	BB	2381	A	N1-C2-N3	-8.54	125.03	129.30
26	BB	1947	C	C4'-C3'-C2'	-8.53	94.07	102.60
1	AA	130	A	N7-C8-N9	8.53	118.07	113.80
1	AA	177	G	O4'-C1'-N9	8.53	115.03	108.20
1	AA	649	A	C3'-C2'-C1'	-8.53	94.67	101.50
1	AA	1455	G	O4'-C1'-N9	8.53	115.03	108.20
2	AB	52	A	C5-N7-C8	-8.53	99.63	103.90
2	AB	65	C	C1'-O4'-C4'	-8.53	103.07	109.90
26	BB	1398	C	C4'-C3'-C2'	-8.53	94.07	102.60
26	BB	2603	G	O4'-C1'-N9	8.53	115.03	108.20
26	BB	582	A	O4'-C1'-N9	8.53	115.02	108.20
1	AA	545	C	C3'-C2'-C1'	8.53	108.32	101.50
1	AA	993	G	N3-C4-C5	-8.53	124.34	128.60
26	BB	68	G	C4-C5-N7	8.53	114.21	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	163	C	N3-C4-N4	8.53	123.97	118.00
26	BB	696	G	N1-C6-O6	-8.53	114.78	119.90
26	BB	2240	U	O4'-C1'-N1	8.53	115.02	108.20
26	BB	2255	G	C5-C6-O6	-8.53	123.48	128.60
26	BB	2792	A	C8-N9-C4	8.53	109.21	105.80
1	AA	610	U	C5-C4-O4	-8.53	120.78	125.90
1	AA	1249	C	N3-C4-C5	8.53	125.31	121.90
1	AA	684	U	N3-C4-O4	8.52	125.37	119.40
2	AB	24	G	C2-N3-C4	8.52	116.16	111.90
26	BB	1255	U	C1'-O4'-C4'	-8.52	103.08	109.90
1	AA	1304	G	N1-C6-O6	-8.52	114.79	119.90
26	BB	2219	U	N1-C2-N3	8.52	120.01	114.90
26	BB	2369	A	C8-N9-C4	-8.52	102.39	105.80
26	BB	2434	A	C8-N9-C4	-8.52	102.39	105.80
52	B1	15	ARG	NE-CZ-NH1	-8.52	116.04	120.30
1	AA	1391	U	O4'-C1'-N1	8.52	115.02	108.20
1	AA	239	U	O4'-C1'-N1	8.52	115.02	108.20
1	AA	713	G	C4-C5-N7	-8.52	107.39	110.80
1	AA	1271	A	C5-N7-C8	8.52	108.16	103.90
1	AA	1433	A	C5-N7-C8	-8.52	99.64	103.90
1	AA	1513	A	O4'-C1'-N9	8.52	115.02	108.20
26	BB	672	C	N3-C2-O2	-8.52	115.94	121.90
26	BB	1029	A	O4'-C4'-C3'	8.52	112.92	106.10
26	BB	1812	U	C4-C5-C6	8.52	124.81	119.70
26	BB	2269	G	C8-N9-C4	-8.52	102.99	106.40
26	BB	230	G	C5'-C4'-O4'	8.52	119.32	109.10
26	BB	314	C	N3-C4-N4	8.52	123.96	118.00
26	BB	520	G	C5-N7-C8	-8.52	100.04	104.30
26	BB	937	C	C6-N1-C2	-8.52	116.89	120.30
26	BB	1024	G	O4'-C1'-N9	8.52	115.01	108.20
26	BB	1296	G	C8-N9-C4	-8.52	102.99	106.40
26	BB	2184	A	C6-N1-C2	-8.52	113.49	118.60
26	BB	2631	G	N3-C4-C5	-8.52	124.34	128.60
26	BB	2684	U	O4'-C1'-N1	8.52	115.01	108.20
26	BB	320	A	C3'-C2'-C1'	8.51	108.31	101.50
26	BB	1844	C	C6-N1-C2	-8.51	116.89	120.30
1	AA	1078	U	N3-C2-O2	-8.51	116.24	122.20
26	BB	523	C	O4'-C1'-N1	8.51	115.01	108.20
26	BB	1828	G	N3-C4-C5	-8.51	124.34	128.60
26	BB	2455	G	C8-N9-C4	-8.51	103.00	106.40
26	BB	2320	U	N3-C2-O2	-8.51	116.24	122.20
26	BB	2536	G	N7-C8-N9	8.51	117.36	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2729	G	N3-C2-N2	8.51	125.86	119.90
31	BG	166	ARG	NE-CZ-NH1	8.51	124.56	120.30
1	AA	301	G	O4'-C1'-N9	8.51	115.01	108.20
1	AA	776	G	N3-C2-N2	8.51	125.86	119.90
1	AA	925	G	C5-N7-C8	8.51	108.56	104.30
26	BB	2409	G	N7-C8-N9	8.51	117.36	113.10
1	AA	1246	A	C4-C5-N7	-8.51	106.45	110.70
26	BB	67	U	C5-C6-N1	8.51	126.95	122.70
26	BB	296	U	N3-C2-O2	-8.51	116.24	122.20
1	AA	574	A	N1-C6-N6	8.51	123.70	118.60
1	AA	690	G	C1'-O4'-C4'	8.51	116.71	109.90
4	AD	67	C	N3-C4-C5	-8.51	118.50	121.90
26	BB	1818	U	C5'-C4'-O4'	8.51	119.31	109.10
1	AA	1530	G	N3-C4-C5	-8.51	124.35	128.60
26	BB	205	G	N9-C4-C5	8.51	108.80	105.40
26	BB	254	G	C6-C5-N7	-8.51	125.30	130.40
26	BB	630	G	N9-C4-C5	8.51	108.80	105.40
26	BB	727	A	C6-N1-C2	8.51	123.70	118.60
26	BB	856	G	C5-C6-O6	-8.51	123.50	128.60
26	BB	1132	U	N3-C4-C5	-8.51	109.50	114.60
26	BB	1671	U	N3-C4-C5	-8.51	109.50	114.60
26	BB	858	G	C6-C5-N7	-8.51	125.30	130.40
26	BB	1258	U	N3-C2-O2	-8.51	116.25	122.20
26	BB	1721	G	N3-C4-N9	8.51	131.10	126.00
26	BB	1843	C	O4'-C1'-N1	8.51	115.00	108.20
26	BB	2109	U	N3-C4-C5	-8.51	109.50	114.60
26	BB	2816	G	N3-C4-C5	-8.51	124.35	128.60
26	BB	604	G	C4-C5-C6	8.50	123.90	118.80
26	BB	731	C	N3-C2-O2	-8.50	115.95	121.90
26	BB	758	C	N1-C2-O2	8.50	124.00	118.90
1	AA	1003	G	C5-C6-N1	8.50	115.75	111.50
1	AA	1404	C	C6-N1-C2	8.50	123.70	120.30
26	BB	107	G	N9-C4-C5	-8.50	102.00	105.40
26	BB	188	G	C5-C6-O6	-8.50	123.50	128.60
26	BB	313	G	N3-C4-N9	8.50	131.10	126.00
26	BB	673	C	O4'-C1'-N1	8.50	115.00	108.20
26	BB	861	A	N1-C6-N6	-8.50	113.50	118.60
26	BB	1404	C	C3'-C2'-C1'	8.50	108.30	101.50
1	AA	322	C	C2-N3-C4	8.50	124.15	119.90
1	AA	838	G	C4-C5-N7	-8.50	107.40	110.80
1	AA	859	G	C5'-C4'-O4'	8.50	119.30	109.10
2	AB	74	C	O4'-C1'-N1	8.50	115.00	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	57	A	P-O3'-C3'	8.50	129.90	119.70
26	BB	290	U	N1-C2-O2	-8.50	116.85	122.80
26	BB	551	G	N9-C4-C5	8.50	108.80	105.40
26	BB	869	G	N3-C2-N2	-8.50	113.95	119.90
26	BB	1529	G	N9-C4-C5	8.50	108.80	105.40
26	BB	2698	U	C5-C6-N1	-8.50	118.45	122.70
26	BB	2812	G	N9-C4-C5	8.50	108.80	105.40
1	AA	1539	C	O4'-C4'-C3'	8.50	112.90	106.10
26	BB	960	A	C5'-C4'-O4'	8.50	119.30	109.10
26	BB	2025	C	C4-C5-C6	-8.50	113.15	117.40
1	AA	1376	U	C1'-O4'-C4'	-8.50	103.10	109.90
2	AB	47	U	P-O3'-C3'	8.50	129.90	119.70
26	BB	2063	C	N3-C2-O2	-8.50	115.95	121.90
26	BB	2573	C	O4'-C1'-N1	8.50	115.00	108.20
1	AA	1213	A	C6-N1-C2	8.49	123.70	118.60
26	BB	86	G	N3-C4-C5	-8.49	124.35	128.60
26	BB	844	A	N3-C4-N9	8.49	134.19	127.40
26	BB	1479	G	C4-C5-N7	8.49	114.20	110.80
4	AD	50	G	C4-C5-N7	8.49	114.20	110.80
26	BB	1041	G	C6-N1-C2	-8.49	120.00	125.10
26	BB	2270	A	O4'-C4'-C3'	8.49	112.89	106.10
26	BB	2379	G	C2-N3-C4	8.49	116.15	111.90
26	BB	2751	G	O4'-C1'-N9	8.49	115.00	108.20
1	AA	330	C	C3'-C2'-C1'	8.49	108.29	101.50
26	BB	1310	G	N3-C4-C5	-8.49	124.35	128.60
26	BB	2794	C	O4'-C1'-N1	8.49	114.99	108.20
12	AL	118	ARG	NE-CZ-NH2	-8.49	116.06	120.30
26	BB	986	C	C5-C4-N4	-8.49	114.26	120.20
26	BB	2115	G	N7-C8-N9	8.49	117.34	113.10
3	AC	52	U	C1'-O4'-C4'	-8.49	103.11	109.90
26	BB	111	A	N7-C8-N9	8.49	118.04	113.80
26	BB	838	C	C5-C6-N1	8.49	125.24	121.00
1	AA	1278	G	C6-C5-N7	-8.49	125.31	130.40
26	BB	1135	C	N3-C4-C5	8.49	125.30	121.90
26	BB	1196	C	N3-C4-C5	-8.49	118.50	121.90
26	BB	2322	A	C5-N7-C8	-8.49	99.66	103.90
26	BB	2570	G	P-O3'-C3'	8.49	129.88	119.70
1	AA	570	G	N3-C4-N9	8.48	131.09	126.00
1	AA	214	C	C5'-C4'-O4'	8.48	119.28	109.10
1	AA	695	A	C5-N7-C8	8.48	108.14	103.90
26	BB	1413	A	C5-N7-C8	-8.48	99.66	103.90
26	BB	2473	U	P-O3'-C3'	8.48	129.88	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1316	G	P-O3'-C3'	8.48	129.88	119.70
26	BB	248	G	C4-C5-N7	8.48	114.19	110.80
26	BB	400	G	P-O3'-C3'	8.48	129.88	119.70
26	BB	425	G	C8-N9-C4	-8.48	103.01	106.40
26	BB	1655	A	O4'-C1'-N9	8.48	114.99	108.20
26	BB	1989	G	C5-C6-O6	8.48	133.69	128.60
26	BB	2582	G	N3-C4-C5	-8.48	124.36	128.60
42	BR	79	VAL	CA-CB-CG2	8.48	123.62	110.90
1	AA	1250	A	C2-N3-C4	8.48	114.84	110.60
26	BB	2324	U	O4'-C1'-N1	8.48	114.99	108.20
1	AA	333	U	C6-N1-C2	-8.48	115.91	121.00
1	AA	421	U	N1-C2-N3	8.48	119.99	114.90
1	AA	636	U	O4'-C1'-N1	8.48	114.98	108.20
26	BB	163	C	O4'-C1'-N1	8.48	114.98	108.20
26	BB	430	A	N1-C2-N3	-8.48	125.06	129.30
26	BB	1810	A	C2-N3-C4	8.48	114.84	110.60
1	AA	374	A	C5-N7-C8	-8.48	99.66	103.90
3	AC	23	C	C5-C4-N4	-8.48	114.26	120.20
26	BB	132	G	N7-C8-N9	8.48	117.34	113.10
26	BB	769	U	N3-C4-O4	-8.48	113.47	119.40
26	BB	2232	C	N3-C4-C5	-8.48	118.51	121.90
26	BB	2307	G	N3-C4-C5	-8.48	124.36	128.60
1	AA	65	A	C4-C5-N7	8.48	114.94	110.70
26	BB	2203	U	C5-C6-N1	-8.48	118.46	122.70
26	BB	2775	G	N7-C8-N9	8.48	117.34	113.10
1	AA	246	A	N9-C4-C5	8.47	109.19	105.80
1	AA	353	A	C5'-C4'-O4'	8.47	119.27	109.10
1	AA	887	G	C5-C6-O6	8.47	133.69	128.60
26	BB	2138	G	N1-C2-N2	8.47	123.83	116.20
1	AA	642	A	C2-N3-C4	8.47	114.84	110.60
26	BB	27	G	N9-C4-C5	8.47	108.79	105.40
26	BB	1851	U	C4-C5-C6	8.47	124.78	119.70
26	BB	1972	G	N9-C4-C5	-8.47	102.01	105.40
26	BB	2066	C	C3'-C2'-C1'	-8.47	94.72	101.50
1	AA	557	G	C6-N1-C2	-8.47	120.02	125.10
4	AD	52	C	C6-N1-C2	-8.47	116.91	120.30
26	BB	345	A	N9-C1'-C2'	-8.47	102.68	112.00
4	AD	54	G	N1-C2-N3	-8.47	118.82	123.90
26	BB	474	G	C5-C6-O6	-8.47	123.52	128.60
26	BB	994	C	N1-C2-O2	8.47	123.98	118.90
1	AA	98	A	C5-C6-N1	8.47	121.93	117.70
1	AA	128	G	P-O3'-C3'	8.47	129.86	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	819	A	O4'-C1'-N9	8.47	114.97	108.20
26	BB	1007	C	N3-C4-N4	8.47	123.93	118.00
26	BB	1659	G	C5-N7-C8	-8.47	100.06	104.30
26	BB	1220	G	N3-C4-C5	-8.47	124.37	128.60
26	BB	1808	A	C2-N3-C4	-8.47	106.37	110.60
26	BB	2254	C	C6-N1-C2	8.47	123.69	120.30
26	BB	120	U	C6-N1-C2	-8.47	115.92	121.00
26	BB	230	G	C2-N3-C4	8.47	116.13	111.90
26	BB	2613	U	C2-N3-C4	-8.47	121.92	127.00
26	BB	1091	G	C5-C6-O6	-8.46	123.52	128.60
26	BB	1313	U	C2-N3-C4	-8.46	121.92	127.00
1	AA	1340	A	C6-N1-C2	8.46	123.68	118.60
1	AA	171	A	C4-C5-N7	8.46	114.93	110.70
5	AE	90	PHE	CB-CG-CD1	-8.46	114.88	120.80
26	BB	77	G	N7-C8-N9	8.46	117.33	113.10
26	BB	495	G	C4-C5-C6	8.46	123.88	118.80
26	BB	859	G	C4-C5-C6	8.46	123.88	118.80
1	AA	1279	G	O4'-C4'-C3'	8.46	112.87	106.10
1	AA	1294	G	C6-N1-C2	-8.46	120.02	125.10
26	BB	163	C	C1'-O4'-C4'	8.46	116.67	109.90
26	BB	2087	G	C5-C6-N1	8.46	115.73	111.50
26	BB	2146	C	C2-N3-C4	8.46	124.13	119.90
1	AA	700	G	C5-C6-N1	8.46	115.73	111.50
1	AA	741	G	C6-C5-N7	-8.46	125.33	130.40
26	BB	217	A	P-O3'-C3'	8.46	129.85	119.70
26	BB	354	A	N1-C6-N6	-8.46	113.53	118.60
26	BB	1564	C	C5-C6-N1	8.46	125.23	121.00
26	BB	2574	G	C4-C5-N7	-8.46	107.42	110.80
29	BE	128	ARG	NH1-CZ-NH2	-8.46	110.10	119.40
1	AA	100	G	N3-C4-C5	-8.46	124.37	128.60
1	AA	259	G	O4'-C1'-N9	8.46	114.96	108.20
1	AA	1008	U	C5-C4-O4	-8.46	120.83	125.90
26	BB	2701	U	N3-C4-O4	8.46	125.32	119.40
1	AA	466	A	C6-N1-C2	-8.45	113.53	118.60
26	BB	909	A	C2-N3-C4	8.45	114.83	110.60
1	AA	310	G	C5-C6-O6	-8.45	123.53	128.60
26	BB	2032	G	C5-C6-O6	-8.45	123.53	128.60
26	BB	553	G	N3-C4-C5	-8.45	124.37	128.60
26	BB	2317	A	C5-C6-N1	-8.45	113.47	117.70
1	AA	596	A	N1-C6-N6	8.45	123.67	118.60
1	AA	1462	C	N1-C2-O2	8.45	123.97	118.90
1	AA	1163	A	N1-C6-N6	8.45	123.67	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1305	G	C4-C5-N7	-8.45	107.42	110.80
26	BB	2183	A	N7-C8-N9	8.45	118.03	113.80
26	BB	678	C	C5-C6-N1	8.45	125.22	121.00
26	BB	902	C	C1'-O4'-C4'	-8.45	103.14	109.90
26	BB	1076	C	C6-N1-C2	8.45	123.68	120.30
26	BB	2043	C	O4'-C1'-C2'	-8.45	97.35	105.80
26	BB	2703	C	C5-C6-N1	-8.45	116.78	121.00
1	AA	35	G	C6-C5-N7	8.45	135.47	130.40
1	AA	146	G	O4'-C1'-N9	8.45	114.96	108.20
1	AA	448	A	C8-N9-C4	-8.45	102.42	105.80
1	AA	702	A	N1-C6-N6	8.45	123.67	118.60
4	AD	19	G	O4'-C4'-C3'	8.45	112.86	106.10
25	BA	104	A	C8-N9-C4	-8.45	102.42	105.80
26	BB	2068	U	C5'-C4'-O4'	8.45	119.24	109.10
1	AA	366	A	N1-C2-N3	-8.44	125.08	129.30
1	AA	555	U	N3-C4-C5	8.44	119.67	114.60
26	BB	302	C	O4'-C1'-N1	8.44	114.95	108.20
26	BB	377	G	C8-N9-C4	-8.45	103.02	106.40
26	BB	858	G	C5-C6-N1	-8.45	107.28	111.50
26	BB	1714	U	C5-C6-N1	-8.44	118.48	122.70
26	BB	2615	U	O4'-C1'-N1	8.45	114.96	108.20
1	AA	403	C	N3-C4-N4	8.44	123.91	118.00
26	BB	940	G	N3-C2-N2	-8.44	113.99	119.90
26	BB	962	G	C5-N7-C8	-8.44	100.08	104.30
1	AA	741	G	N9-C4-C5	8.44	108.78	105.40
1	AA	1034	G	N1-C6-O6	-8.44	114.83	119.90
26	BB	488	G	O4'-C1'-N9	8.44	114.95	108.20
26	BB	976	G	N3-C4-C5	-8.44	124.38	128.60
1	AA	1240	U	N1-C2-O2	8.44	128.71	122.80
26	BB	876	C	C1'-O4'-C4'	-8.44	103.15	109.90
1	AA	941	G	N7-C8-N9	8.44	117.32	113.10
2	AB	14	A	C8-N9-C4	-8.44	102.42	105.80
1	AA	1339	A	C5-N7-C8	8.44	108.12	103.90
2	AB	65	C	O4'-C1'-N1	8.44	114.95	108.20
26	BB	900	A	P-O3'-C3'	8.44	129.83	119.70
26	BB	1573	G	C5-N7-C8	8.44	108.52	104.30
26	BB	2537	U	C1'-O4'-C4'	8.44	116.65	109.90
26	BB	1614	A	C1'-O4'-C4'	-8.44	103.15	109.90
26	BB	2412	A	C2-N3-C4	8.44	114.82	110.60
1	AA	1151	A	C5-C6-N1	-8.44	113.48	117.70
26	BB	1630	A	O4'-C1'-N9	8.44	114.95	108.20
26	BB	2148	G	N7-C8-N9	8.44	117.32	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2697	G	N3-C4-C5	-8.44	124.38	128.60
1	AA	14	U	N3-C4-C5	-8.43	109.54	114.60
1	AA	241	G	N3-C4-N9	8.43	131.06	126.00
1	AA	597	G	N9-C4-C5	8.43	108.77	105.40
26	BB	63	A	C5-N7-C8	-8.43	99.68	103.90
1	AA	164	G	N9-C4-C5	8.43	108.77	105.40
1	AA	482	A	O4'-C1'-N9	8.43	114.94	108.20
24	AX	70	TYR	CB-CG-CD2	-8.43	115.94	121.00
26	BB	968	C	O4'-C1'-N1	8.43	114.94	108.20
25	BA	53	A	O4'-C1'-N9	8.43	114.94	108.20
26	BB	1662	U	C4-C5-C6	8.43	124.76	119.70
26	BB	2472	G	C8-N9-C4	-8.43	103.03	106.40
38	BN	78	ARG	NE-CZ-NH1	8.43	124.52	120.30
26	BB	1022	G	C1'-O4'-C4'	-8.43	103.16	109.90
26	BB	2672	U	O4'-C1'-N1	8.43	114.94	108.20
1	AA	137	U	N1-C2-O2	-8.43	116.90	122.80
1	AA	309	A	C5-N7-C8	-8.43	99.69	103.90
4	AD	15	G	N7-C8-N9	-8.43	108.89	113.10
26	BB	909	A	N9-C1'-C2'	-8.43	102.73	112.00
1	AA	606	G	C6-N1-C2	-8.43	120.05	125.10
1	AA	814	A	N1-C6-N6	-8.43	113.54	118.60
26	BB	220	G	C8-N9-C4	-8.43	103.03	106.40
26	BB	382	A	N7-C8-N9	-8.43	109.59	113.80
26	BB	1232	G	N9-C4-C5	8.43	108.77	105.40
26	BB	1293	C	N1-C2-O2	8.43	123.96	118.90
26	BB	1350	C	O4'-C1'-N1	8.43	114.94	108.20
26	BB	2056	G	N1-C2-N3	8.43	128.96	123.90
26	BB	2582	G	C4-C5-N7	-8.43	107.43	110.80
26	BB	2309	A	N1-C6-N6	-8.43	113.55	118.60
1	AA	732	C	C6-N1-C2	8.42	123.67	120.30
1	AA	891	U	C5-C6-N1	-8.42	118.49	122.70
1	AA	980	C	O4'-C4'-C3'	8.42	112.84	106.10
26	BB	1	G	N9-C4-C5	8.42	108.77	105.40
26	BB	1578	U	N1-C2-O2	8.42	128.70	122.80
26	BB	195	A	N9-C4-C5	-8.42	102.43	105.80
26	BB	705	A	N1-C6-N6	-8.42	113.55	118.60
26	BB	2410	G	C5-C6-O6	-8.42	123.55	128.60
26	BB	2572	A	C4-C5-N7	-8.42	106.49	110.70
26	BB	2881	U	C5-C4-O4	-8.42	120.85	125.90
1	AA	231	U	C3'-C2'-C1'	8.42	108.24	101.50
1	AA	509	A	N9-C4-C5	8.42	109.17	105.80
1	AA	982	U	C5'-C4'-O4'	8.42	119.20	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1350	C	N3-C4-N4	8.42	123.89	118.00
1	AA	1187	G	O4'-C1'-N9	8.42	114.94	108.20
25	BA	21	G	C5-C6-N1	8.42	115.71	111.50
26	BB	2269	G	C6-C5-N7	-8.42	125.35	130.40
26	BB	2370	G	C6-N1-C2	-8.42	120.05	125.10
26	BB	305	C	C5-C4-N4	-8.42	114.31	120.20
26	BB	319	G	O4'-C1'-N9	8.42	114.94	108.20
1	AA	276	G	C4-C5-N7	8.42	114.17	110.80
26	BB	430	A	C2-N3-C4	8.42	114.81	110.60
26	BB	1998	A	C4-C5-C6	8.42	121.21	117.00
1	AA	595	A	N7-C8-N9	8.42	118.01	113.80
1	AA	1046	A	N1-C6-N6	8.42	123.65	118.60
26	BB	1170	C	C5-C4-N4	8.41	126.09	120.20
26	BB	1288	G	N1-C2-N3	8.41	128.95	123.90
26	BB	1453	A	C2-N3-C4	8.41	114.81	110.60
26	BB	1632	A	C6-N1-C2	-8.41	113.55	118.60
1	AA	258	G	N7-C8-N9	8.41	117.31	113.10
26	BB	1048	A	N1-C2-N3	-8.41	125.09	129.30
26	BB	2206	C	N1-C2-O2	8.41	123.95	118.90
26	BB	2776	A	C2-N3-C4	8.41	114.81	110.60
1	AA	495	A	N1-C6-N6	-8.41	113.56	118.60
1	AA	622	A	N9-C1'-C2'	-8.41	102.75	112.00
1	AA	1244	G	C2-N3-C4	8.41	116.11	111.90
26	BB	2490	G	N9-C1'-C2'	8.41	124.93	114.00
26	BB	138	U	N1-C1'-C2'	-8.41	102.75	112.00
26	BB	265	A	N9-C4-C5	-8.41	102.44	105.80
26	BB	392	U	N1-C2-N3	8.41	119.95	114.90
1	AA	1040	U	N1-C2-N3	8.41	119.94	114.90
1	AA	1117	A	O4'-C1'-N9	8.41	114.93	108.20
6	AF	28	PHE	CB-CG-CD2	-8.41	114.92	120.80
26	BB	2314	A	C5-C6-N6	-8.41	116.97	123.70
1	AA	754	C	N1-C2-O2	8.41	123.94	118.90
26	BB	65	U	O4'-C1'-N1	8.41	114.92	108.20
26	BB	238	C	O4'-C1'-N1	8.41	114.92	108.20
26	BB	1504	A	C5-C6-N1	8.41	121.90	117.70
26	BB	1536	C	C6-N1-C2	-8.41	116.94	120.30
1	AA	1026	G	C6-N1-C2	8.40	130.14	125.10
1	AA	1459	G	C4-C5-N7	-8.40	107.44	110.80
26	BB	1087	G	C4-C5-C6	8.40	123.84	118.80
26	BB	2252	G	C4-C5-N7	-8.40	107.44	110.80
1	AA	62	U	C5-C6-N1	-8.40	118.50	122.70
1	AA	836	G	N9-C4-C5	8.40	108.76	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	846	G	N3-C4-N9	-8.40	120.96	126.00
4	AD	23	G	N7-C8-N9	8.40	117.30	113.10
36	BL	74	TYR	CB-CG-CD2	8.40	126.04	121.00
4	AD	27	G	C4-C5-N7	-8.40	107.44	110.80
26	BB	862	G	C5-C6-N1	8.40	115.70	111.50
26	BB	2128	G	C8-N9-C4	-8.40	103.04	106.40
26	BB	2655	G	O4'-C1'-C2'	-8.40	97.40	105.80
1	AA	36	C	N1-C2-O2	8.40	123.94	118.90
1	AA	356	A	C4-C5-C6	8.40	121.20	117.00
1	AA	519	C	C5'-C4'-O4'	8.40	119.18	109.10
26	BB	275	C	C4-C5-C6	8.40	121.60	117.40
26	BB	533	G	C4-C5-C6	8.40	123.84	118.80
26	BB	1632	A	C2-N3-C4	-8.40	106.40	110.60
26	BB	1987	A	C2-N3-C4	8.40	114.80	110.60
6	AF	200	TRP	CD1-NE1-CE2	8.40	116.56	109.00
26	BB	81	G	N3-C4-C5	-8.40	124.40	128.60
26	BB	318	C	C5-C4-N4	-8.40	114.32	120.20
26	BB	946	C	C5-C4-N4	-8.40	114.32	120.20
26	BB	974	G	N1-C2-N3	-8.40	118.86	123.90
26	BB	1445	G	N3-C4-N9	8.40	131.04	126.00
26	BB	1717	A	N1-C6-N6	8.40	123.64	118.60
1	AA	240	G	C4-C5-N7	-8.39	107.44	110.80
1	AA	1231	G	N3-C4-N9	8.39	131.04	126.00
1	AA	1349	A	C4-C5-C6	-8.39	112.80	117.00
1	AA	213	G	N1-C6-O6	-8.39	114.86	119.90
1	AA	278	G	N3-C2-N2	-8.39	114.02	119.90
4	AD	31	G	C5-C6-N1	8.39	115.70	111.50
26	BB	489	G	N1-C2-N2	-8.39	108.65	116.20
26	BB	510	C	C4-C5-C6	8.39	121.60	117.40
26	BB	876	C	N3-C4-N4	8.39	123.88	118.00
26	BB	1089	A	N9-C4-C5	8.39	109.16	105.80
26	BB	1194	A	C6-C5-N7	8.39	138.18	132.30
26	BB	1702	G	N9-C4-C5	8.39	108.76	105.40
26	BB	1848	A	C2-N3-C4	8.39	114.80	110.60
26	BB	2180	U	O4'-C1'-N1	8.39	114.92	108.20
26	BB	1455	G	C5-N7-C8	-8.39	100.10	104.30
1	AA	604	G	N1-C6-O6	8.39	124.93	119.90
26	BB	879	G	C4-C5-N7	8.39	114.16	110.80
26	BB	1296	G	N3-C4-C5	-8.39	124.41	128.60
26	BB	2770	G	C5-N7-C8	-8.39	100.10	104.30
26	BB	848	C	O4'-C1'-N1	8.39	114.91	108.20
26	BB	2370	G	C5-C6-N1	8.39	115.69	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2544	G	C6-C5-N7	-8.39	125.37	130.40
1	AA	382	A	N1-C2-N3	-8.39	125.11	129.30
1	AA	588	G	N7-C8-N9	8.39	117.29	113.10
26	BB	2723	C	C2-N3-C4	-8.39	115.71	119.90
1	AA	1485	U	C6-N1-C2	-8.39	115.97	121.00
26	BB	2118	U	N3-C2-O2	-8.39	116.33	122.20
45	BU	25	ARG	NE-CZ-NH1	8.39	124.49	120.30
26	BB	731	C	C3'-C2'-C1'	8.39	108.21	101.50
26	BB	1350	C	C1'-O4'-C4'	8.39	116.61	109.90
26	BB	1547	C	C4-C5-C6	-8.39	113.21	117.40
26	BB	1703	G	C6-N1-C2	-8.39	120.07	125.10
26	BB	2057	G	N1-C6-O6	-8.38	114.87	119.90
26	BB	2665	A	O4'-C1'-N9	8.38	114.91	108.20
1	AA	310	G	N3-C4-C5	-8.38	124.41	128.60
2	AB	29	G	C5-N7-C8	-8.38	100.11	104.30
13	AM	7	ARG	NE-CZ-NH2	-8.38	116.11	120.30
26	BB	270	A	C5-N7-C8	-8.38	99.71	103.90
26	BB	271	G	C8-N9-C1'	8.38	137.90	127.00
26	BB	918	A	C2-N3-C4	8.38	114.79	110.60
26	BB	2023	C	C4-C5-C6	8.38	121.59	117.40
1	AA	458	U	C4-C5-C6	8.38	124.73	119.70
1	AA	1069	C	N3-C2-O2	-8.38	116.03	121.90
5	AE	90	PHE	CB-CG-CD2	8.38	126.67	120.80
26	BB	60	G	N9-C4-C5	8.38	108.75	105.40
26	BB	83	A	C8-N9-C4	-8.38	102.45	105.80
26	BB	578	G	N3-C4-N9	8.38	131.03	126.00
26	BB	1977	A	N1-C2-N3	-8.38	125.11	129.30
26	BB	2649	C	C5-C4-N4	8.38	126.07	120.20
26	BB	1928	A	C1'-O4'-C4'	-8.38	103.20	109.90
26	BB	1985	C	C5-C4-N4	-8.38	114.33	120.20
26	BB	2211	A	N1-C2-N3	-8.38	125.11	129.30
26	BB	2265	U	C5-C4-O4	8.38	130.93	125.90
1	AA	715	A	C5-C6-N6	-8.38	117.00	123.70
1	AA	1107	C	N3-C4-N4	8.38	123.86	118.00
1	AA	1113	C	C4-C5-C6	-8.38	113.21	117.40
26	BB	864	G	N7-C8-N9	8.38	117.29	113.10
26	BB	960	A	C5-C6-N6	-8.38	117.00	123.70
26	BB	1035	U	C5-C4-O4	-8.38	120.87	125.90
1	AA	779	C	C6-N1-C2	-8.38	116.95	120.30
1	AA	894	G	N7-C8-N9	8.38	117.29	113.10
8	AH	137	ARG	NE-CZ-NH2	-8.38	116.11	120.30
26	BB	1246	A	N9-C4-C5	8.38	109.15	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1493	C	N3-C4-C5	-8.38	118.55	121.90
1	AA	631	C	C5-C6-N1	-8.38	116.81	121.00
1	AA	636	U	N3-C2-O2	-8.38	116.34	122.20
1	AA	855	U	C4'-C3'-C2'	-8.37	94.23	102.60
1	AA	1246	A	O4'-C1'-N9	8.38	114.90	108.20
26	BB	1952	A	N9-C1'-C2'	-8.38	102.79	112.00
26	BB	1990	C	O4'-C1'-N1	8.38	114.90	108.20
26	BB	2045	C	N1-C1'-C2'	-8.37	102.79	112.00
26	BB	1956	U	C5-C6-N1	-8.37	118.51	122.70
1	AA	79	G	C5-C6-O6	-8.37	123.58	128.60
1	AA	1139	G	C4-C5-N7	-8.37	107.45	110.80
26	BB	2032	G	N3-C4-C5	-8.37	124.41	128.60
26	BB	2687	U	O4'-C1'-N1	8.37	114.90	108.20
1	AA	1356	G	C5-C6-O6	-8.37	123.58	128.60
26	BB	153	U	N3-C4-C5	-8.37	109.58	114.60
26	BB	915	C	C4'-C3'-C2'	-8.37	94.23	102.60
26	BB	964	C	P-O3'-C3'	8.37	129.75	119.70
26	BB	2259	U	O4'-C1'-N1	8.37	114.90	108.20
1	AA	564	C	O4'-C1'-N1	8.37	114.90	108.20
26	BB	2398	U	N3-C4-O4	8.37	125.26	119.40
26	BB	348	A	C5-C6-N1	8.37	121.88	117.70
26	BB	976	G	C2-N3-C4	8.37	116.08	111.90
26	BB	2695	U	O4'-C1'-N1	8.37	114.89	108.20
26	BB	2794	C	C5-C4-N4	-8.37	114.34	120.20
1	AA	1316	G	N1-C6-O6	-8.37	114.88	119.90
26	BB	2218	G	C5-C6-O6	-8.37	123.58	128.60
1	AA	267	C	N1-C1'-C2'	-8.36	102.80	112.00
1	AA	518	C	C5-C6-N1	-8.36	116.82	121.00
1	AA	1444	U	C5-C4-O4	8.36	130.92	125.90
26	BB	82	U	C6-N1-C2	8.37	126.02	121.00
26	BB	647	G	C2-N3-C4	8.36	116.08	111.90
26	BB	811	U	N1-C1'-C2'	-8.36	102.80	112.00
26	BB	1652	A	N1-C2-N3	-8.36	125.12	129.30
26	BB	1706	C	O4'-C1'-N1	8.36	114.89	108.20
26	BB	2216	G	C8-N9-C4	-8.36	103.06	106.40
26	BB	2710	C	O4'-C4'-C3'	8.36	112.79	106.10
26	BB	1020	A	O4'-C1'-N9	8.36	114.89	108.20
26	BB	1167	C	N3-C4-C5	-8.36	118.56	121.90
26	BB	2747	G	C5-N7-C8	-8.36	100.12	104.30
1	AA	273	U	P-O3'-C3'	8.36	129.73	119.70
1	AA	470	C	N3-C4-C5	-8.36	118.56	121.90
1	AA	692	U	C5-C6-N1	-8.36	118.52	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AU	47	ARG	NE-CZ-NH2	-8.36	116.12	120.30
26	BB	628	G	C8-N9-C4	-8.36	103.06	106.40
26	BB	904	G	C2-N3-C4	8.36	116.08	111.90
26	BB	1277	G	N7-C8-N9	8.36	117.28	113.10
26	BB	1412	U	O4'-C1'-N1	8.36	114.89	108.20
26	BB	2468	A	C4-C5-C6	-8.36	112.82	117.00
26	BB	1820	U	C5-C4-O4	-8.36	120.89	125.90
1	AA	53	A	C5'-C4'-O4'	8.35	119.12	109.10
2	AB	42	G	C2-N3-C4	8.35	116.08	111.90
26	BB	254	G	N9-C4-C5	8.35	108.74	105.40
26	BB	1291	C	C5-C6-N1	8.35	125.18	121.00
1	AA	80	A	C8-N9-C4	-8.35	102.46	105.80
1	AA	525	C	C2-N3-C4	8.35	124.08	119.90
2	AB	75	C	C4-C5-C6	8.35	121.58	117.40
26	BB	691	C	O4'-C1'-N1	8.35	114.88	108.20
26	BB	853	C	C2-N3-C4	8.35	124.08	119.90
26	BB	1856	U	C5'-C4'-O4'	8.35	119.12	109.10
26	BB	1970	A	C5-N7-C8	8.35	108.08	103.90
25	BA	82	U	C3'-C2'-C1'	8.35	108.18	101.50
26	BB	391	A	C8-N9-C4	-8.35	102.46	105.80
26	BB	536	G	C8-N9-C4	-8.35	103.06	106.40
26	BB	1292	G	C1'-O4'-C4'	-8.35	103.22	109.90
26	BB	1585	C	C5'-C4'-O4'	8.35	119.12	109.10
26	BB	1601	G	C5-C6-O6	8.35	133.61	128.60
26	BB	1604	C	C6-N1-C2	-8.35	116.96	120.30
26	BB	1682	G	C5-C6-O6	-8.35	123.59	128.60
46	BV	6	ARG	NE-CZ-NH2	-8.35	116.12	120.30
1	AA	1173	U	N3-C2-O2	-8.35	116.36	122.20
26	BB	1088	A	N7-C8-N9	8.35	117.97	113.80
1	AA	106	C	O4'-C1'-N1	8.35	114.88	108.20
1	AA	839	C	O4'-C1'-N1	8.35	114.88	108.20
26	BB	428	A	C5-N7-C8	-8.35	99.72	103.90
1	AA	885	G	C4-C5-C6	8.35	123.81	118.80
26	BB	275	C	C5-C4-N4	8.35	126.04	120.20
26	BB	2261	C	N3-C4-C5	8.35	125.24	121.90
26	BB	2886	A	O4'-C1'-N9	8.35	114.88	108.20
1	AA	107	G	C5-C6-N1	8.35	115.67	111.50
1	AA	245	U	C6-N1-C2	-8.35	115.99	121.00
1	AA	377	G	N9-C4-C5	8.35	108.74	105.40
2	AB	42	G	N3-C2-N2	8.35	125.74	119.90
26	BB	2904	U	O4'-C1'-N1	8.35	114.88	108.20
1	AA	1243	C	N3-C4-N4	8.35	123.84	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1438	G	C2-N3-C4	8.35	116.07	111.90
26	BB	34	U	N3-C4-C5	-8.35	109.59	114.60
26	BB	371	A	C8-N9-C4	8.35	109.14	105.80
26	BB	1182	G	N1-C2-N3	-8.35	118.89	123.90
26	BB	2285	C	C5-C6-N1	8.35	125.17	121.00
26	BB	135	U	N3-C4-C5	8.35	119.61	114.60
26	BB	251	A	N9-C4-C5	-8.35	102.46	105.80
26	BB	333	G	C8-N9-C4	-8.35	103.06	106.40
26	BB	412	A	N1-C6-N6	-8.35	113.59	118.60
26	BB	2348	U	N3-C2-O2	-8.35	116.36	122.20
1	AA	11	G	C6-N1-C2	-8.34	120.09	125.10
26	BB	1296	G	C5'-C4'-O4'	8.34	119.11	109.10
1	AA	282	A	C3'-C2'-C1'	8.34	108.17	101.50
1	AA	381	C	C5-C4-N4	-8.34	114.36	120.20
1	AA	918	A	N7-C8-N9	8.34	117.97	113.80
26	BB	258	G	C6-C5-N7	-8.34	125.39	130.40
1	AA	616	G	N3-C4-N9	8.34	131.00	126.00
1	AA	654	G	N3-C4-C5	8.34	132.77	128.60
1	AA	1379	G	C2-N3-C4	-8.34	107.73	111.90
1	AA	1480	A	C6-N1-C2	8.34	123.61	118.60
26	BB	2516	A	C5-C6-N6	-8.34	117.03	123.70
26	BB	2838	G	C5-C6-N1	-8.34	107.33	111.50
1	AA	637	C	C5-C4-N4	-8.34	114.36	120.20
1	AA	1175	G	C6-C5-N7	-8.34	125.40	130.40
26	BB	433	C	C5'-C4'-O4'	8.34	119.11	109.10
26	BB	469	G	C4-C5-N7	-8.34	107.46	110.80
26	BB	953	G	C4-C5-N7	8.34	114.14	110.80
26	BB	1723	G	O4'-C4'-C3'	8.34	112.77	106.10
26	BB	1479	G	C5-C6-N1	8.34	115.67	111.50
26	BB	927	A	C4-C5-N7	-8.34	106.53	110.70
26	BB	1792	G	C2-N3-C4	8.34	116.07	111.90
1	AA	352	C	O4'-C1'-C2'	-8.34	97.46	105.80
26	BB	1300	G	C4-C5-N7	8.34	114.14	110.80
26	BB	2772	C	O4'-C1'-N1	8.34	114.87	108.20
26	BB	1396	U	N1-C2-O2	8.34	128.63	122.80
26	BB	1531	C	O4'-C1'-N1	8.34	114.87	108.20
26	BB	1905	C	O4'-C1'-N1	8.34	114.87	108.20
1	AA	439	U	N3-C2-O2	-8.33	116.37	122.20
26	BB	252	G	C5-C6-N1	8.33	115.67	111.50
26	BB	1018	U	O4'-C1'-N1	8.33	114.87	108.20
26	BB	1169	A	C4-C5-C6	8.33	121.17	117.00
26	BB	1184	U	C2-N3-C4	-8.33	122.00	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1631	G	N7-C8-N9	8.33	117.27	113.10
26	BB	2702	G	N1-C6-O6	-8.33	114.90	119.90
1	AA	1377	A	C4'-C3'-C2'	-8.33	94.27	102.60
26	BB	1085	A	N7-C8-N9	-8.33	109.64	113.80
26	BB	2140	G	O4'-C4'-C3'	8.33	112.77	106.10
1	AA	320	A	N9-C1'-C2'	-8.33	102.84	112.00
1	AA	494	G	C8-N9-C4	-8.33	103.07	106.40
1	AA	1114	C	N1-C2-O2	8.33	123.90	118.90
26	BB	123	G	N9-C1'-C2'	-8.33	102.84	112.00
1	AA	1033	G	C5-C6-O6	-8.33	123.60	128.60
1	AA	1318	A	O4'-C1'-N9	8.33	114.86	108.20
26	BB	77	G	C2-N3-C4	8.33	116.06	111.90
26	BB	828	U	C5-C4-O4	-8.33	120.90	125.90
26	BB	1636	U	C2-N3-C4	-8.33	122.00	127.00
26	BB	2022	U	C2-N3-C4	-8.33	122.00	127.00
26	BB	2623	G	N7-C8-N9	-8.33	108.94	113.10
1	AA	517	G	C5-N7-C8	8.33	108.46	104.30
26	BB	840	C	N3-C4-N4	8.33	123.83	118.00
26	BB	194	G	C6-N1-C2	-8.33	120.10	125.10
26	BB	436	C	N3-C4-N4	8.33	123.83	118.00
26	BB	1779	U	C1'-O4'-C4'	-8.33	103.24	109.90
26	BB	2032	G	C4'-C3'-C2'	-8.33	94.27	102.60
26	BB	2578	G	C2-N3-C4	8.33	116.06	111.90
1	AA	636	U	C5-C6-N1	-8.32	118.54	122.70
1	AA	1077	G	C1'-O4'-C4'	-8.32	103.24	109.90
1	AA	1459	G	C5-C6-O6	-8.32	123.61	128.60
26	BB	342	A	C6-N1-C2	8.32	123.59	118.60
26	BB	2781	A	C5-C6-N1	8.32	121.86	117.70
1	AA	859	G	C5-C6-O6	8.32	133.59	128.60
26	BB	75	G	C4'-C3'-C2'	-8.32	94.28	102.60
26	BB	1822	C	O4'-C1'-N1	8.32	114.86	108.20
26	BB	2137	U	C2-N3-C4	-8.32	122.01	127.00
26	BB	2356	U	O4'-C1'-N1	8.32	114.86	108.20
26	BB	2545	G	C8-N9-C4	-8.32	103.07	106.40
26	BB	2835	A	N7-C8-N9	8.32	117.96	113.80
1	AA	106	C	C2-N3-C4	8.32	124.06	119.90
1	AA	723	U	C5-C4-O4	-8.32	120.91	125.90
26	BB	584	C	C5-C4-N4	-8.32	114.38	120.20
26	BB	2046	G	C2-N3-C4	8.32	116.06	111.90
26	BB	2361	G	O4'-C1'-N9	8.32	114.86	108.20
26	BB	620	G	C5-N7-C8	8.32	108.46	104.30
26	BB	1661	G	O4'-C1'-N9	8.32	114.86	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1688	U	P-O3'-C3'	8.32	129.68	119.70
1	AA	157	U	N3-C2-O2	-8.32	116.38	122.20
1	AA	280	C	N3-C2-O2	-8.32	116.08	121.90
1	AA	658	C	O4'-C1'-N1	8.32	114.86	108.20
1	AA	881	G	N3-C4-C5	-8.32	124.44	128.60
1	AA	1023	U	N3-C2-O2	-8.32	116.38	122.20
1	AA	1246	A	C5-N7-C8	8.32	108.06	103.90
1	AA	91	U	C5'-C4'-O4'	8.31	119.08	109.10
1	AA	1104	G	C4-C5-C6	8.31	123.79	118.80
26	BB	313	G	C3'-C2'-C1'	8.31	108.15	101.50
26	BB	373	U	C5-C4-O4	-8.31	120.91	125.90
26	BB	883	G	C4-C5-N7	8.31	114.12	110.80
26	BB	1759	A	N1-C6-N6	-8.31	113.61	118.60
26	BB	2749	A	O4'-C1'-C2'	-8.31	97.48	105.80
32	BH	54	ARG	NE-CZ-NH1	8.31	124.46	120.30
26	BB	2100	G	N3-C4-C5	-8.31	124.44	128.60
26	BB	2775	G	N3-C4-C5	-8.31	124.44	128.60
26	BB	2857	G	C2-N3-C4	8.31	116.06	111.90
1	AA	1470	U	N3-C2-O2	-8.31	116.38	122.20
26	BB	1309	G	N1-C6-O6	8.31	124.89	119.90
1	AA	1483	A	C4-C5-C6	-8.31	112.84	117.00
2	AB	27	C	C5'-C4'-O4'	8.31	119.07	109.10
12	AL	63	TYR	CB-CG-CD1	-8.31	116.01	121.00
26	BB	962	G	C4-C5-N7	8.31	114.12	110.80
26	BB	1147	A	O4'-C1'-N9	8.31	114.85	108.20
26	BB	1148	U	N1-C2-N3	8.31	119.89	114.90
26	BB	1165	A	O4'-C1'-N9	8.31	114.85	108.20
26	BB	1235	G	C8-N9-C1'	8.31	137.80	127.00
26	BB	1992	G	N9-C4-C5	8.31	108.72	105.40
1	AA	173	U	P-O3'-C3'	8.31	129.67	119.70
1	AA	413	G	N9-C4-C5	-8.31	102.08	105.40
1	AA	849	G	C8-N9-C4	-8.31	103.08	106.40
26	BB	1103	A	N1-C2-N3	-8.31	125.15	129.30
26	BB	1801	A	N1-C6-N6	-8.31	113.61	118.60
1	AA	468	A	C5'-C4'-O4'	8.30	119.07	109.10
1	AA	803	G	N9-C4-C5	-8.30	102.08	105.40
1	AA	881	G	C5-C6-N1	8.30	115.65	111.50
1	AA	930	C	O4'-C1'-N1	8.30	114.84	108.20
4	AD	7	G	N1-C2-N3	-8.31	118.92	123.90
26	BB	2204	G	C4-C5-N7	-8.31	107.48	110.80
26	BB	2636	C	O4'-C1'-N1	8.31	114.84	108.20
1	AA	469	C	C2-N3-C4	8.30	124.05	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	9	G	O4'-C1'-N9	8.30	114.84	108.20
26	BB	370	G	C3'-C2'-C1'	8.30	108.14	101.50
26	BB	1221	C	O4'-C1'-N1	8.30	114.84	108.20
26	BB	1514	G	N7-C8-N9	8.30	117.25	113.10
26	BB	1886	U	N3-C4-C5	-8.30	109.62	114.60
26	BB	2247	A	O4'-C1'-N9	8.30	114.84	108.20
1	AA	142	G	C3'-C2'-C1'	8.30	108.14	101.50
1	AA	682	G	N3-C4-C5	-8.30	124.45	128.60
4	AD	60	A	N7-C8-N9	-8.30	109.65	113.80
25	BA	71	C	O4'-C1'-N1	8.30	114.84	108.20
26	BB	2603	G	N9-C4-C5	8.30	108.72	105.40
26	BB	1243	C	O4'-C1'-N1	8.30	114.84	108.20
26	BB	2042	A	C2-N3-C4	8.30	114.75	110.60
26	BB	2639	A	C6-N1-C2	-8.30	113.62	118.60
1	AA	548	G	O4'-C1'-N9	8.30	114.84	108.20
1	AA	1025	U	O4'-C4'-C3'	8.30	112.74	106.10
1	AA	1408	A	C5'-C4'-O4'	8.30	119.06	109.10
26	BB	804	A	P-O3'-C3'	8.30	129.66	119.70
1	AA	131	A	C4'-C3'-C2'	-8.30	94.30	102.60
1	AA	191	G	C8-N9-C4	-8.30	103.08	106.40
1	AA	680	C	O4'-C1'-N1	8.29	114.84	108.20
1	AA	838	G	N3-C2-N2	-8.29	114.09	119.90
1	AA	1426	G	P-O3'-C3'	8.29	129.65	119.70
26	BB	2277	G	C2-N3-C4	8.29	116.05	111.90
26	BB	2277	G	N1-C6-O6	8.30	124.88	119.90
1	AA	776	G	C2-N3-C4	8.29	116.05	111.90
4	AD	41	C	C4-C5-C6	8.29	121.55	117.40
26	BB	1434	A	N7-C8-N9	8.29	117.95	113.80
26	BB	2558	C	N3-C2-O2	-8.29	116.09	121.90
1	AA	1075	U	O4'-C1'-N1	8.29	114.83	108.20
1	AA	1214	C	C1'-O4'-C4'	-8.29	103.27	109.90
25	BA	14	U	C5-C6-N1	-8.29	118.56	122.70
26	BB	595	C	C5-C6-N1	8.29	125.15	121.00
26	BB	1615	C	N1-C2-O2	8.29	123.88	118.90
26	BB	2087	G	C3'-C2'-C1'	8.29	108.13	101.50
26	BB	2729	G	C8-N9-C4	-8.29	103.08	106.40
26	BB	2365	G	C5-N7-C8	-8.29	100.15	104.30
1	AA	133	U	O4'-C1'-N1	8.29	114.83	108.20
4	AD	35	C	C2-N3-C4	8.29	124.04	119.90
26	BB	823	C	O4'-C1'-N1	8.29	114.83	108.20
26	BB	1815	A	C5-N7-C8	-8.29	99.75	103.90
26	BB	1891	G	C2-N3-C4	8.29	116.05	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2143	C	O4'-C1'-N1	8.29	114.83	108.20
26	BB	2253	G	C4-C5-N7	-8.29	107.48	110.80
1	AA	882	C	N3-C4-C5	-8.29	118.58	121.90
26	BB	378	C	C4-C5-C6	-8.29	113.26	117.40
26	BB	557	C	O4'-C1'-N1	8.29	114.83	108.20
26	BB	615	U	N1-C2-N3	8.29	119.87	114.90
26	BB	1018	U	N3-C2-O2	-8.29	116.40	122.20
26	BB	1973	G	C6-N1-C2	-8.29	120.13	125.10
41	BQ	97	PHE	CB-CG-CD1	-8.29	115.00	120.80
7	AG	28	ASP	CB-CG-OD1	-8.29	110.84	118.30
1	AA	965	U	C5-C4-O4	-8.28	120.93	125.90
2	AB	73	G	O4'-C1'-N9	8.29	114.83	108.20
10	AJ	3	ARG	NE-CZ-NH2	8.29	124.44	120.30
26	BB	940	G	C6-N1-C2	-8.28	120.13	125.10
26	BB	2325	G	C5-C6-O6	8.29	133.57	128.60
1	AA	1074	G	C2-N3-C4	8.28	116.04	111.90
26	BB	146	A	C6-C5-N7	8.28	138.10	132.30
26	BB	1831	G	C4-C5-C6	8.28	123.77	118.80
26	BB	2327	A	N7-C8-N9	8.28	117.94	113.80
26	BB	2873	A	P-O3'-C3'	8.28	129.64	119.70
29	BE	89	GLU	OE1-CD-OE2	8.28	133.24	123.30
26	BB	2794	C	N3-C4-C5	8.28	125.21	121.90
1	AA	1195	C	C5'-C4'-O4'	8.28	119.03	109.10
1	AA	1220	G	C8-N9-C4	-8.28	103.09	106.40
1	AA	1389	C	N3-C4-C5	-8.28	118.59	121.90
4	AD	19	G	N1-C2-N3	8.28	128.87	123.90
26	BB	68	G	C5-N7-C8	-8.28	100.16	104.30
26	BB	156	A	C5'-C4'-C3'	-8.28	102.75	116.00
26	BB	1162	G	N3-C2-N2	-8.28	114.10	119.90
26	BB	2529	G	N1-C6-O6	-8.28	114.93	119.90
26	BB	2808	G	C5-N7-C8	-8.28	100.16	104.30
26	BB	2809	A	P-O3'-C3'	8.28	129.63	119.70
26	BB	1139	G	C2-N3-C4	8.28	116.04	111.90
26	BB	2016	U	C1'-O4'-C4'	-8.28	103.28	109.90
1	AA	122	G	C5-N7-C8	-8.28	100.16	104.30
1	AA	979	C	N3-C4-N4	8.28	123.79	118.00
1	AA	1390	U	C5-C4-O4	8.28	130.87	125.90
2	AB	18	G	N3-C4-N9	8.28	130.97	126.00
26	BB	307	G	N1-C6-O6	-8.28	114.93	119.90
3	AC	52	U	O4'-C1'-N1	8.28	114.82	108.20
25	BA	3	C	C5-C6-N1	8.28	125.14	121.00
26	BB	564	C	C2-N3-C4	-8.28	115.76	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1206	G	O4'-C4'-C3'	8.28	112.72	106.10
26	BB	1456	G	C8-N9-C4	-8.28	103.09	106.40
26	BB	1774	C	C6-N1-C2	8.28	123.61	120.30
26	BB	1898	U	N1-C2-N3	8.28	119.87	114.90
26	BB	2541	A	C5-C6-N6	-8.28	117.08	123.70
26	BB	2617	U	C1'-O4'-C4'	-8.28	103.28	109.90
26	BB	2617	U	N3-C4-C5	-8.28	109.63	114.60
1	AA	91	U	C1'-O4'-C4'	8.27	116.52	109.90
1	AA	265	G	N1-C6-O6	-8.27	114.94	119.90
1	AA	541	G	N3-C2-N2	8.27	125.69	119.90
1	AA	728	A	C2-N3-C4	8.27	114.74	110.60
1	AA	983	A	N1-C2-N3	-8.27	125.16	129.30
1	AA	1013	G	N9-C4-C5	8.27	108.71	105.40
1	AA	1191	A	C4-C5-C6	-8.27	112.86	117.00
26	BB	490	C	O4'-C1'-N1	8.27	114.82	108.20
26	BB	539	G	C5-C6-N1	8.27	115.64	111.50
26	BB	658	U	C6-N1-C2	-8.27	116.04	121.00
26	BB	1250	G	N1-C2-N2	-8.27	108.75	116.20
26	BB	1417	C	O4'-C1'-N1	8.27	114.82	108.20
26	BB	1436	G	C4-C5-C6	8.27	123.76	118.80
26	BB	1650	A	C8-N9-C4	-8.27	102.49	105.80
26	BB	2388	A	C2-N3-C4	8.27	114.74	110.60
26	BB	2567	G	C2-N3-C4	8.27	116.04	111.90
26	BB	1591	A	N7-C8-N9	8.27	117.94	113.80
26	BB	2820	A	C3'-C2'-C1'	8.27	108.12	101.50
38	BN	123	ARG	NE-CZ-NH1	8.27	124.44	120.30
1	AA	402	G	C6-N1-C2	-8.27	120.14	125.10
1	AA	1321	U	C5-C4-O4	8.27	130.86	125.90
1	AA	1397	C	C4'-C3'-C2'	-8.27	94.33	102.60
26	BB	2399	G	C2-N3-C4	8.27	116.03	111.90
26	BB	2732	G	C1'-O4'-C4'	-8.27	103.28	109.90
1	AA	1419	G	C4-C5-N7	-8.27	107.49	110.80
3	AC	41	A	C4-C5-C6	8.27	121.13	117.00
1	AA	932	C	N3-C4-C5	8.27	125.21	121.90
1	AA	444	G	N9-C4-C5	-8.27	102.09	105.40
1	AA	893	C	N1-C2-O2	8.27	123.86	118.90
1	AA	1343	G	O4'-C1'-N9	8.27	114.81	108.20
5	AE	20	ARG	NE-CZ-NH1	8.27	124.43	120.30
26	BB	496	G	N9-C4-C5	8.27	108.71	105.40
26	BB	1386	C	C5-C4-N4	-8.27	114.41	120.20
26	BB	1898	U	N3-C4-O4	-8.27	113.61	119.40
26	BB	2376	A	C4-C5-N7	8.27	114.83	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2719	G	C4-C5-N7	-8.27	107.49	110.80
26	BB	2667	C	C5-C4-N4	8.27	125.99	120.20
1	AA	552	U	N1-C2-N3	8.26	119.86	114.90
1	AA	1336	C	N3-C4-N4	8.26	123.78	118.00
3	AC	20	G	C5'-C4'-O4'	8.26	119.02	109.10
26	BB	455	C	C4-C5-C6	-8.26	113.27	117.40
26	BB	749	A	C5-N7-C8	-8.26	99.77	103.90
26	BB	1929	G	N3-C4-C5	-8.26	124.47	128.60
26	BB	2096	C	N1-C2-O2	8.26	123.86	118.90
26	BB	2867	G	C2-N3-C4	8.26	116.03	111.90
1	AA	770	C	N3-C2-O2	-8.26	116.12	121.90
1	AA	1057	G	N3-C2-N2	-8.26	114.12	119.90
1	AA	1057	G	O4'-C1'-N9	8.26	114.81	108.20
25	BA	21	G	N3-C4-C5	-8.26	124.47	128.60
26	BB	1259	G	C8-N9-C4	-8.26	103.10	106.40
26	BB	2800	A	O4'-C1'-N9	8.26	114.81	108.20
26	BB	2822	G	C4'-C3'-C2'	-8.26	94.34	102.60
26	BB	1041	G	C6-C5-N7	-8.26	125.44	130.40
26	BB	1270	C	C4-C5-C6	-8.26	113.27	117.40
26	BB	1317	G	N3-C2-N2	-8.26	114.12	119.90
26	BB	1585	C	C6-N1-C2	-8.26	117.00	120.30
26	BB	1765	U	C4-C5-C6	8.26	124.66	119.70
26	BB	2016	U	O4'-C1'-N1	8.26	114.81	108.20
26	BB	2242	G	O4'-C1'-N9	-8.26	101.59	108.20
1	AA	653	U	C4-C5-C6	8.26	124.65	119.70
1	AA	1084	G	N9-C4-C5	8.26	108.70	105.40
26	BB	1109	C	N3-C2-O2	-8.26	116.12	121.90
26	BB	1722	A	N3-C4-N9	8.26	134.00	127.40
26	BB	2869	G	C4-C5-N7	8.26	114.10	110.80
1	AA	391	G	C6-C5-N7	-8.26	125.45	130.40
1	AA	790	A	P-O3'-C3'	8.26	129.61	119.70
1	AA	1331	G	N3-C4-C5	-8.26	124.47	128.60
26	BB	847	U	C6-N1-C2	8.26	125.95	121.00
26	BB	936	A	C2-N3-C4	8.26	114.73	110.60
26	BB	1507	C	N3-C2-O2	-8.26	116.12	121.90
26	BB	1878	G	N1-C2-N3	-8.26	118.95	123.90
26	BB	2216	G	N3-C4-C5	-8.26	124.47	128.60
26	BB	2471	A	C8-N9-C4	-8.25	102.50	105.80
1	AA	58	C	C4-C5-C6	-8.25	113.27	117.40
1	AA	100	G	C6-N1-C2	-8.25	120.15	125.10
1	AA	451	A	C2-N3-C4	-8.25	106.47	110.60
1	AA	557	G	N3-C2-N2	-8.25	114.12	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	128	C	C4'-C3'-C2'	-8.25	94.35	102.60
26	BB	2270	A	C4'-C3'-C2'	-8.25	94.35	102.60
37	BM	31	ARG	NE-CZ-NH1	8.25	124.43	120.30
1	AA	743	A	O4'-C1'-N9	8.25	114.80	108.20
26	BB	582	A	C6-N1-C2	-8.25	113.65	118.60
26	BB	2164	C	C6-N1-C2	-8.25	117.00	120.30
26	BB	2558	C	C5-C4-N4	-8.25	114.42	120.20
26	BB	1651	G	N3-C4-N9	8.25	130.95	126.00
1	AA	243	A	P-O3'-C3'	8.25	129.60	119.70
1	AA	41	G	N9-C4-C5	8.25	108.70	105.40
1	AA	774	G	N3-C4-N9	8.25	130.95	126.00
1	AA	1399	C	O4'-C1'-N1	8.25	114.80	108.20
11	AK	113	ARG	NE-CZ-NH1	8.25	124.42	120.30
26	BB	256	A	C5-C6-N1	8.25	121.82	117.70
26	BB	526	A	N1-C2-N3	8.25	133.42	129.30
26	BB	1184	U	N3-C2-O2	-8.25	116.43	122.20
26	BB	2312	U	C2'-C3'-O3'	8.25	127.64	109.50
26	BB	2851	A	N7-C8-N9	8.25	117.92	113.80
26	BB	856	G	C8-N9-C4	-8.24	103.10	106.40
26	BB	2331	G	C2-N3-C4	8.24	116.02	111.90
26	BB	2630	G	C4-C5-N7	8.24	114.10	110.80
1	AA	162	A	N9-C4-C5	8.24	109.10	105.80
1	AA	770	C	C1'-O4'-C4'	-8.24	103.31	109.90
1	AA	1368	A	C4-C5-N7	-8.24	106.58	110.70
3	AC	37	G	N3-C2-N2	-8.24	114.13	119.90
26	BB	915	C	O4'-C1'-N1	8.24	114.80	108.20
26	BB	908	C	N3-C4-C5	-8.24	118.60	121.90
26	BB	2748	A	C5'-C4'-O4'	8.24	118.99	109.10
1	AA	51	A	C3'-C2'-C1'	8.24	108.09	101.50
1	AA	827	U	C5-C6-N1	-8.24	118.58	122.70
26	BB	313	G	N3-C2-N2	-8.24	114.13	119.90
1	AA	1497	G	N3-C4-C5	-8.24	124.48	128.60
3	AC	51	C	C6-N1-C2	-8.24	117.00	120.30
26	BB	437	U	N1-C2-N3	8.24	119.84	114.90
26	BB	1024	G	C6-N1-C2	-8.24	120.16	125.10
26	BB	1292	G	C5-C6-O6	-8.24	123.66	128.60
26	BB	493	G	O4'-C1'-N9	8.24	114.79	108.20
26	BB	2469	A	N9-C1'-C2'	-8.24	102.94	112.00
1	AA	1181	G	N3-C2-N2	-8.24	114.14	119.90
1	AA	1480	A	O4'-C1'-N9	8.24	114.79	108.20
26	BB	438	G	C5-C6-O6	8.24	133.54	128.60
26	BB	1820	U	N3-C2-O2	-8.24	116.43	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1860	G	N9-C4-C5	-8.24	102.11	105.40
26	BB	2544	G	C5-N7-C8	-8.24	100.18	104.30
1	AA	1104	G	C2-N3-C4	8.23	116.02	111.90
1	AA	338	A	O4'-C1'-N9	8.23	114.79	108.20
1	AA	1257	A	C2-N3-C4	8.23	114.72	110.60
26	BB	507	A	O4'-C4'-C3'	8.23	112.69	106.10
26	BB	404	A	N1-C2-N3	8.23	133.42	129.30
26	BB	797	G	N3-C4-C5	-8.23	124.48	128.60
26	BB	2617	U	C4'-C3'-C2'	-8.23	94.37	102.60
1	AA	502	A	O4'-C1'-N9	8.23	114.78	108.20
26	BB	467	G	N3-C4-C5	-8.23	124.48	128.60
26	BB	2184	A	N1-C6-N6	-8.23	113.66	118.60
37	BM	100	PHE	CB-CG-CD1	-8.23	115.04	120.80
1	AA	1109	C	C5-C6-N1	-8.23	116.89	121.00
1	AA	347	G	C4'-C3'-C2'	-8.23	94.37	102.60
1	AA	653	U	C5-C6-N1	-8.23	118.59	122.70
1	AA	1266	G	N1-C6-O6	-8.23	114.96	119.90
1	AA	1299	A	N9-C4-C5	-8.23	102.51	105.80
26	BB	1846	G	C4'-C3'-C2'	-8.23	94.37	102.60
1	AA	406	G	C4-C5-N7	8.23	114.09	110.80
1	AA	513	C	O4'-C1'-N1	8.23	114.78	108.20
1	AA	1272	G	N3-C4-C5	-8.23	124.49	128.60
2	AB	41	C	C5-C6-N1	-8.23	116.89	121.00
26	BB	668	A	N1-C2-N3	8.23	133.41	129.30
26	BB	671	C	N3-C2-O2	-8.23	116.14	121.90
26	BB	2245	U	O4'-C1'-N1	8.23	114.78	108.20
26	BB	2395	C	C6-N1-C2	-8.23	117.01	120.30
26	BB	2846	G	C4-C5-C6	8.23	123.74	118.80
26	BB	2890	G	C2-N3-C4	8.23	116.01	111.90
1	AA	386	C	N3-C4-N4	8.22	123.76	118.00
1	AA	1165	U	C5-C6-N1	-8.22	118.59	122.70
1	AA	1231	G	N3-C2-N2	8.22	125.66	119.90
26	BB	2429	G	N3-C2-N2	-8.22	114.14	119.90
1	AA	417	G	N3-C4-C5	-8.22	124.49	128.60
1	AA	1207	2MG	P-O3'-C3'	8.22	129.57	119.70
26	BB	33	C	N3-C4-C5	-8.22	118.61	121.90
26	BB	685	A	C5-C6-N1	8.22	121.81	117.70
26	BB	638	G	C5-N7-C8	-8.22	100.19	104.30
26	BB	670	A	N9-C4-C5	8.22	109.09	105.80
26	BB	1318	U	N3-C2-O2	8.22	127.96	122.20
26	BB	1491	G	C6-C5-N7	-8.22	125.47	130.40
26	BB	1866	A	C2-N3-C4	8.22	114.71	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	63	C	N3-C4-C5	-8.22	118.61	121.90
1	AA	645	G	C4-C5-N7	8.22	114.09	110.80
26	BB	2317	A	C6-C5-N7	-8.22	126.54	132.30
1	AA	557	G	N9-C4-C5	8.22	108.69	105.40
1	AA	712	A	O4'-C1'-N9	8.22	114.78	108.20
1	AA	1055	A	C4'-C3'-C2'	-8.22	94.38	102.60
14	AN	85	VAL	CG1-CB-CG2	-8.22	97.75	110.90
26	BB	617	G	C5-C6-O6	-8.22	123.67	128.60
26	BB	2232	C	C2-N3-C4	8.22	124.01	119.90
26	BB	2657	A	N3-C4-N9	-8.22	120.82	127.40
1	AA	23	C	C2-N3-C4	-8.22	115.79	119.90
1	AA	81	A	C5-C6-N1	8.22	121.81	117.70
1	AA	171	A	C2-N3-C4	8.22	114.71	110.60
1	AA	1080	A	C5-C6-N1	-8.22	113.59	117.70
1	AA	1124	G	N9-C4-C5	8.22	108.69	105.40
1	AA	1253	G	C5-C6-N1	8.22	115.61	111.50
1	AA	1432	G	C8-N9-C4	-8.22	103.11	106.40
26	BB	1090	A	C4-C5-C6	-8.22	112.89	117.00
26	BB	1543	G	N7-C8-N9	8.22	117.21	113.10
26	BB	2382	G	N3-C4-C5	-8.22	124.49	128.60
26	BB	911	A	C3'-C2'-C1'	-8.22	94.93	101.50
26	BB	997	G	N9-C1'-C2'	-8.22	102.96	112.00
26	BB	1408	G	C4-C5-N7	-8.22	107.51	110.80
34	BJ	45	ARG	NE-CZ-NH1	8.22	124.41	120.30
1	AA	643	C	N1-C2-O2	8.21	123.83	118.90
1	AA	808	C	O4'-C4'-C3'	8.22	112.67	106.10
26	BB	613	A	C5-N7-C8	-8.22	99.79	103.90
1	AA	717	U	C5-C6-N1	-8.21	118.59	122.70
26	BB	403	U	C2-N1-C1'	8.21	127.56	117.70
26	BB	2161	C	N3-C2-O2	-8.22	116.15	121.90
26	BB	633	A	C4-C5-N7	8.21	114.81	110.70
26	BB	2673	G	C5-C6-N1	8.21	115.61	111.50
26	BB	2792	A	P-O3'-C3'	8.21	129.56	119.70
1	AA	39	G	O4'-C4'-C3'	-8.21	95.79	104.00
26	BB	924	G	C5'-C4'-O4'	8.21	118.96	109.10
4	AD	12	G	C5-N7-C8	-8.21	100.19	104.30
25	BA	10	G	O4'-C1'-N9	8.21	114.77	108.20
26	BB	1	G	N7-C8-N9	8.21	117.21	113.10
26	BB	240	C	N3-C4-C5	-8.21	118.61	121.90
26	BB	992	C	N3-C4-C5	-8.21	118.61	121.90
26	BB	1276	A	C8-N9-C4	-8.21	102.52	105.80
26	BB	1527	G	N1-C2-N2	8.21	123.59	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2365	G	N3-C4-C5	-8.21	124.49	128.60
26	BB	713	G	C5-C6-O6	-8.21	123.67	128.60
26	BB	2573	C	N1-C2-O2	8.21	123.83	118.90
35	BK	7	TYR	CB-CG-CD2	-8.21	116.07	121.00
1	AA	354	G	C3'-C2'-C1'	-8.21	94.93	101.50
1	AA	1416	G	N7-C8-N9	8.21	117.20	113.10
26	BB	1298	C	N3-C4-C5	-8.21	118.62	121.90
1	AA	279	A	P-O3'-C3'	8.21	129.55	119.70
1	AA	1022	A	C4'-C3'-C2'	-8.21	94.39	102.60
1	AA	1435	G	N7-C8-N9	8.21	117.20	113.10
4	AD	32	G	C5-C6-N1	8.21	115.60	111.50
26	BB	1478	G	N9-C1'-C2'	-8.21	102.97	112.00
26	BB	1666	G	N7-C8-N9	8.21	117.20	113.10
26	BB	2694	G	C5-C6-O6	-8.21	123.67	128.60
26	BB	1858	A	N1-C6-N6	8.21	123.52	118.60
1	AA	320	A	N1-C6-N6	-8.21	113.68	118.60
1	AA	467	U	N3-C2-O2	-8.21	116.46	122.20
25	BA	88	C	C6-N1-C2	8.21	123.58	120.30
26	BB	1226	A	C6-C5-N7	-8.21	126.56	132.30
1	AA	1529	G	O4'-C1'-N9	8.20	114.76	108.20
26	BB	1051	G	C5-C6-N1	-8.21	107.40	111.50
26	BB	1449	G	C4-C5-N7	-8.20	107.52	110.80
26	BB	1478	G	C4-C5-C6	8.21	123.72	118.80
26	BB	1517	G	N3-C2-N2	-8.21	114.16	119.90
26	BB	1622	G	O4'-C1'-N9	8.21	114.77	108.20
26	BB	2453	A	C4-C5-C6	-8.21	112.90	117.00
26	BB	2770	G	O4'-C1'-N9	-8.20	101.64	108.20
28	BD	170	TYR	CB-CG-CD2	8.20	125.92	121.00
1	AA	509	A	N1-C2-N3	8.20	133.40	129.30
1	AA	987	G	O4'-C1'-N9	8.20	114.76	108.20
1	AA	1500	A	N9-C4-C5	-8.20	102.52	105.80
4	AD	36	A	C6-N1-C2	-8.20	113.68	118.60
26	BB	473	G	C5-N7-C8	-8.20	100.20	104.30
26	BB	2141	G	C5-C6-N1	-8.20	107.40	111.50
1	AA	310	G	C2-N3-C4	8.20	116.00	111.90
26	BB	780	G	N1-C6-O6	-8.20	114.98	119.90
1	AA	474	G	N1-C6-O6	-8.20	114.98	119.90
1	AA	529	G	N7-C8-N9	-8.20	109.00	113.10
2	AB	44	G	N1-C2-N3	-8.20	118.98	123.90
26	BB	806	C	N3-C4-C5	8.20	125.18	121.90
26	BB	2429	G	N1-C2-N3	8.20	128.82	123.90
26	BB	2798	U	C4-C5-C6	8.20	124.62	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	177	G	C3'-C2'-C1'	8.20	108.06	101.50
1	AA	593	U	O4'-C1'-N1	8.20	114.76	108.20
4	AD	49	C	C3'-C2'-C1'	8.20	108.06	101.50
1	AA	509	A	C5-C6-N1	8.20	121.80	117.70
26	BB	1306	C	O4'-C1'-N1	8.20	114.76	108.20
3	AC	22	G	N1-C2-N3	-8.19	118.98	123.90
25	BA	20	G	C2-N3-C4	8.19	116.00	111.90
25	BA	32	U	C6-N1-C2	-8.20	116.08	121.00
26	BB	625	G	N3-C4-C5	-8.19	124.50	128.60
26	BB	2086	U	C4-C5-C6	8.20	124.62	119.70
26	BB	2542	A	N7-C8-N9	-8.19	109.70	113.80
26	BB	2666	C	O4'-C1'-N1	8.20	114.76	108.20
26	BB	2787	C	N3-C4-N4	8.19	123.74	118.00
1	AA	9	G	C4-C5-N7	-8.19	107.52	110.80
26	BB	471	A	C4'-C3'-C2'	-8.19	94.41	102.60
26	BB	808	G	N3-C4-N9	8.19	130.91	126.00
26	BB	2536	G	C5-N7-C8	-8.19	100.20	104.30
26	BB	2373	G	N3-C4-C5	-8.19	124.50	128.60
42	BR	102	ARG	NE-CZ-NH1	8.19	124.39	120.30
1	AA	288	A	N3-C4-C5	-8.19	121.07	126.80
1	AA	218	U	O4'-C1'-N1	8.19	114.75	108.20
1	AA	633	G	C5-N7-C8	-8.19	100.21	104.30
1	AA	657	U	C4-C5-C6	8.19	124.61	119.70
1	AA	799	G	N7-C8-N9	8.19	117.19	113.10
1	AA	1020	G	C2-N3-C4	8.19	116.00	111.90
26	BB	128	C	N1-C2-O2	8.19	123.81	118.90
26	BB	998	C	C4-C5-C6	-8.19	113.31	117.40
26	BB	1358	G	N3-C4-N9	8.19	130.91	126.00
26	BB	1391	U	C5'-C4'-O4'	8.19	118.93	109.10
26	BB	1504	A	C4-C5-N7	8.19	114.79	110.70
26	BB	2293	G	C8-N9-C4	-8.19	103.12	106.40
29	BE	103	ASP	CB-CG-OD2	8.19	125.67	118.30
1	AA	226	G	O4'-C1'-N9	8.19	114.75	108.20
4	AD	62	C	N3-C4-N4	8.19	123.73	118.00
25	BA	110	C	N3-C4-C5	-8.19	118.63	121.90
26	BB	875	G	N7-C8-N9	8.19	117.19	113.10
26	BB	1525	A	C6-N1-C2	-8.19	113.69	118.60
26	BB	1620	G	N9-C4-C5	-8.19	102.13	105.40
26	BB	1671	U	N3-C2-O2	-8.19	116.47	122.20
26	BB	1980	G	C5'-C4'-O4'	8.19	118.92	109.10
26	BB	1606	C	N3-C2-O2	-8.18	116.17	121.90
1	AA	193	C	N3-C4-N4	8.18	123.73	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	AM	9	ARG	NE-CZ-NH2	-8.18	116.21	120.30
26	BB	169	G	C8-N9-C4	-8.18	103.13	106.40
26	BB	182	A	N9-C1'-C2'	-8.18	103.00	112.00
26	BB	435	C	N1-C1'-C2'	-8.18	103.00	112.00
26	BB	2011	U	O4'-C1'-N1	8.18	114.75	108.20
26	BB	2264	C	N1-C1'-C2'	-8.18	103.00	112.00
1	AA	247	G	C6-N1-C2	-8.18	120.19	125.10
1	AA	1538	C	C2-N3-C4	8.18	123.99	119.90
4	AD	12	G	C8-N9-C4	-8.18	103.13	106.40
26	BB	318	C	N3-C4-N4	8.18	123.73	118.00
26	BB	2218	G	C2-N3-C4	8.18	115.99	111.90
26	BB	2570	G	C5'-C4'-O4'	8.18	118.92	109.10
26	BB	2704	C	C6-N1-C2	-8.18	117.03	120.30
1	AA	746	A	C2-N3-C4	8.18	114.69	110.60
1	AA	1419	G	N3-C2-N2	-8.18	114.18	119.90
1	AA	1504	G	C2-N3-C4	8.18	115.99	111.90
26	BB	371	A	N1-C2-N3	8.18	133.39	129.30
26	BB	409	G	C8-N9-C4	-8.18	103.13	106.40
26	BB	2360	G	C4-C5-N7	-8.18	107.53	110.80
26	BB	648	G	C5-C6-O6	-8.18	123.69	128.60
26	BB	912	C	O4'-C1'-N1	8.18	114.74	108.20
26	BB	1370	C	O5'-P-OP1	-8.18	98.34	105.70
26	BB	1991	U	C1'-O4'-C4'	8.18	116.44	109.90
26	BB	2208	C	C5-C6-N1	8.18	125.09	121.00
1	AA	1334	G	N1-C6-O6	8.18	124.81	119.90
26	BB	1751	U	C5-C6-N1	-8.18	118.61	122.70
26	BB	2848	G	C8-N9-C4	-8.18	103.13	106.40
1	AA	665	A	C5-N7-C8	-8.18	99.81	103.90
1	AA	1279	G	N9-C4-C5	8.18	108.67	105.40
26	BB	241	A	N1-C2-N3	-8.18	125.21	129.30
26	BB	1178	C	N1-C1'-C2'	-8.18	103.00	112.00
26	BB	1450	G	C8-N9-C4	-8.18	103.13	106.40
1	AA	481	G	N3-C2-N2	8.17	125.62	119.90
1	AA	539	A	C5-C6-N1	8.17	121.79	117.70
26	BB	325	G	N9-C1'-C2'	-8.17	103.01	112.00
26	BB	1517	G	N1-C6-O6	-8.17	115.00	119.90
26	BB	2175	C	N3-C4-N4	8.17	123.72	118.00
26	BB	141	G	C8-N9-C4	-8.17	103.13	106.40
26	BB	142	A	C6-N1-C2	8.17	123.50	118.60
26	BB	223	A	C4-C5-C6	8.17	121.09	117.00
26	BB	369	U	C2-N3-C4	-8.17	122.10	127.00
26	BB	519	U	O4'-C1'-N1	8.17	114.74	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	635	C	N3-C4-C5	-8.17	118.63	121.90
26	BB	1087	G	C8-N9-C4	-8.17	103.13	106.40
26	BB	2583	G	O4'-C1'-N9	8.17	114.74	108.20
26	BB	2134	A	C5-N7-C8	8.17	107.99	103.90
26	BB	2788	C	C6-N1-C2	8.17	123.57	120.30
1	AA	143	A	N1-C2-N3	-8.17	125.22	129.30
1	AA	633	G	N7-C8-N9	8.17	117.19	113.10
1	AA	1496	C	O4'-C1'-N1	8.17	114.74	108.20
26	BB	420	C	N1-C2-O2	8.17	123.80	118.90
26	BB	2543	G	N7-C8-N9	8.17	117.19	113.10
1	AA	1504	G	C4-C5-C6	8.17	123.70	118.80
26	BB	1219	U	N3-C2-O2	-8.17	116.48	122.20
26	BB	1317	G	O4'-C1'-N9	8.17	114.73	108.20
26	BB	2206	C	O4'-C1'-N1	8.17	114.73	108.20
1	AA	385	C	C1'-O4'-C4'	8.17	116.43	109.90
1	AA	1520	C	C5-C6-N1	-8.17	116.92	121.00
26	BB	975	A	C2-N3-C4	-8.17	106.52	110.60
26	BB	2374	C	N3-C4-N4	-8.17	112.28	118.00
2	AB	36	A	N1-C2-N3	8.17	133.38	129.30
26	BB	231	A	P-O3'-C3'	8.17	129.50	119.70
26	BB	458	G	N3-C4-C5	-8.17	124.52	128.60
26	BB	1456	G	C5'-C4'-C3'	-8.17	102.93	116.00
1	AA	77	A	N7-C8-N9	8.16	117.88	113.80
1	AA	204	G	C1'-O4'-C4'	-8.16	103.37	109.90
1	AA	644	U	N3-C2-O2	-8.16	116.48	122.20
26	BB	104	A	C5-C6-N1	8.16	121.78	117.70
26	BB	953	G	C6-N1-C2	-8.16	120.20	125.10
6	AF	125	ARG	NE-CZ-NH1	8.16	124.38	120.30
25	BA	13	G	C5-C6-N1	8.16	115.58	111.50
26	BB	438	G	C5-C6-N1	-8.16	107.42	111.50
26	BB	1446	C	C4'-C3'-C2'	-8.16	94.44	102.60
26	BB	1461	C	N3-C4-N4	8.16	123.71	118.00
26	BB	1801	A	O4'-C1'-C2'	-8.16	97.64	105.80
26	BB	1846	G	N3-C2-N2	8.16	125.61	119.90
26	BB	1948	G	C2-N3-C4	8.16	115.98	111.90
26	BB	2403	C	N3-C2-O2	-8.16	116.19	121.90
1	AA	649	A	C5-C6-N1	8.16	121.78	117.70
1	AA	755	G	C2-N3-C4	8.16	115.98	111.90
26	BB	1368	G	C2-N3-C4	8.16	115.98	111.90
1	AA	869	G	N1-C6-O6	-8.16	115.00	119.90
1	AA	1160	G	C5-C6-N1	8.16	115.58	111.50
26	BB	409	G	C5-C6-O6	-8.16	123.70	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	619	G	N1-C2-N3	-8.16	119.00	123.90
26	BB	1591	A	C8-N9-C4	-8.16	102.54	105.80
26	BB	1854	A	C2-N3-C4	8.16	114.68	110.60
26	BB	1950	G	C1'-O4'-C4'	-8.16	103.37	109.90
26	BB	1881	C	N3-C4-C5	-8.16	118.64	121.90
1	AA	131	A	C1'-O4'-C4'	-8.16	103.38	109.90
1	AA	869	G	C5'-C4'-C3'	-8.16	102.95	116.00
1	AA	1333	A	C2-N3-C4	8.16	114.68	110.60
26	BB	337	C	C3'-C2'-C1'	-8.16	94.97	101.50
26	BB	537	G	C8-N9-C4	-8.16	103.14	106.40
26	BB	1418	G	N9-C4-C5	-8.16	102.14	105.40
26	BB	2015	A	C6-N1-C2	8.16	123.50	118.60
26	BB	2727	A	N7-C8-N9	8.16	117.88	113.80
26	BB	844	A	C8-N9-C4	8.16	109.06	105.80
26	BB	886	A	O4'-C4'-C3'	8.16	112.62	106.10
26	BB	1420	A	P-O3'-C3'	8.16	129.49	119.70
26	BB	1714	U	N1-C1'-C2'	-8.16	103.03	112.00
1	AA	1482	G	N1-C6-O6	-8.15	115.01	119.90
26	BB	481	G	N1-C2-N2	8.15	123.54	116.20
26	BB	1659	G	C4-C5-N7	8.15	114.06	110.80
26	BB	1848	A	N1-C2-N3	-8.15	125.22	129.30
26	BB	2237	G	C2-N3-C4	-8.15	107.82	111.90
26	BB	2236	U	N3-C4-O4	8.15	125.11	119.40
26	BB	2795	C	C2-N3-C4	8.15	123.98	119.90
37	BM	120	PRO	N-CA-CB	8.15	113.09	103.30
1	AA	25	C	N3-C4-N4	8.15	123.70	118.00
1	AA	277	C	N3-C2-O2	-8.15	116.19	121.90
1	AA	580	C	C6-N1-C2	8.15	123.56	120.30
26	BB	106	C	O4'-C1'-N1	8.15	114.72	108.20
26	BB	583	G	N9-C4-C5	8.15	108.66	105.40
26	BB	1122	G	C2-N3-C4	8.15	115.98	111.90
26	BB	2011	U	N1-C2-N3	8.15	119.79	114.90
26	BB	2810	A	N9-C1'-C2'	-8.15	103.03	112.00
26	BB	2488	G	N3-C4-N9	8.15	130.89	126.00
26	BB	2719	G	N3-C4-C5	-8.15	124.53	128.60
1	AA	353	A	C1'-O4'-C4'	8.15	116.42	109.90
1	AA	531	U	P-O3'-C3'	8.15	129.48	119.70
1	AA	1109	C	C4'-C3'-C2'	-8.15	94.45	102.60
1	AA	1133	G	C6-C5-N7	8.15	135.29	130.40
3	AC	32	U	N3-C2-O2	-8.15	116.50	122.20
26	BB	65	U	C2-N3-C4	-8.15	122.11	127.00
26	BB	921	C	C6-N1-C2	-8.15	117.04	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2565	A	C3'-C2'-C1'	8.15	108.02	101.50
3	AC	45	G	C5-N7-C8	8.15	108.37	104.30
26	BB	726	G	C8-N9-C4	-8.15	103.14	106.40
26	BB	829	A	C5-C6-N1	8.15	121.77	117.70
26	BB	1235	G	N3-C2-N2	8.15	125.60	119.90
26	BB	1269	A	C4-C5-N7	8.15	114.77	110.70
26	BB	1627	G	C8-N9-C4	-8.15	103.14	106.40
26	BB	1643	G	N3-C4-N9	8.15	130.89	126.00
26	BB	1867	G	N1-C6-O6	-8.15	115.01	119.90
26	BB	2536	G	C1'-O4'-C4'	-8.15	103.38	109.90
1	AA	773	G	C8-N9-C4	-8.14	103.14	106.40
1	AA	149	A	N9-C1'-C2'	-8.14	103.04	112.00
1	AA	895	G	C3'-C2'-C1'	-8.14	94.98	101.50
1	AA	1371	G	O4'-C1'-N9	8.14	114.72	108.20
1	AA	1485	U	N1-C2-N3	8.14	119.79	114.90
26	BB	543	G	C2-N3-C4	8.14	115.97	111.90
26	BB	2126	A	N7-C8-N9	8.14	117.87	113.80
4	AD	61	U	C2-N3-C4	-8.14	122.11	127.00
26	BB	2546	U	C4-C5-C6	8.14	124.59	119.70
26	BB	2887	A	C8-N9-C4	-8.14	102.54	105.80
26	BB	2897	U	C3'-C2'-C1'	8.14	108.02	101.50
1	AA	229	U	N3-C4-O4	8.14	125.10	119.40
1	AA	1501	C	C2-N3-C4	-8.14	115.83	119.90
26	BB	465	G	C1'-O4'-C4'	8.14	116.41	109.90
26	BB	1210	G	C8-N9-C4	-8.14	103.14	106.40
3	AC	31	U	N1-C1'-C2'	-8.14	103.05	112.00
26	BB	221	A	C4-C5-N7	-8.14	106.63	110.70
26	BB	1649	G	C4-C5-N7	-8.14	107.54	110.80
26	BB	1698	A	C4-C5-C6	-8.14	112.93	117.00
26	BB	2244	U	O4'-C1'-N1	8.14	114.71	108.20
26	BB	2523	G	N3-C4-N9	8.14	130.88	126.00
26	BB	936	A	C4-C5-N7	-8.14	106.63	110.70
26	BB	2317	A	C1'-O4'-C4'	-8.14	103.39	109.90
26	BB	821	A	C4'-C3'-C2'	-8.14	94.46	102.60
26	BB	1371	G	C4-C5-C6	8.14	123.68	118.80
1	AA	1357	A	C6-N1-C2	8.14	123.48	118.60
4	AD	31	G	C8-N9-C4	-8.14	103.14	106.40
8	AH	137	ARG	NE-CZ-NH1	8.14	124.37	120.30
26	BB	421	C	C5-C6-N1	8.14	125.07	121.00
26	BB	637	A	C4-C5-N7	8.14	114.77	110.70
1	AA	424	G	C2-N3-C4	8.13	115.97	111.90
1	AA	1023	U	N3-C4-O4	8.13	125.09	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1254	A	N9-C4-C5	8.13	109.05	105.80
26	BB	1243	C	C2-N3-C4	8.13	123.97	119.90
26	BB	1719	G	C5'-C4'-O4'	8.14	118.86	109.10
1	AA	729	A	O4'-C1'-N9	8.13	114.71	108.20
1	AA	1185	G	N1-C6-O6	-8.13	115.02	119.90
26	BB	879	G	C6-C5-N7	-8.13	125.52	130.40
1	AA	604	G	N1-C2-N3	8.13	128.78	123.90
25	BA	54	G	N3-C4-C5	-8.13	124.53	128.60
26	BB	803	U	C5-C4-O4	-8.13	121.02	125.90
26	BB	1131	G	O4'-C1'-N9	8.13	114.70	108.20
26	BB	1365	A	C5-C6-N1	8.13	121.77	117.70
26	BB	2029	G	C3'-C2'-C1'	8.13	108.00	101.50
26	BB	2231	U	C4-C5-C6	8.13	124.58	119.70
26	BB	2276	G	C2-N3-C4	8.13	115.97	111.90
26	BB	2812	G	C2-N3-C4	8.13	115.97	111.90
1	AA	834	U	N1-C2-O2	-8.13	117.11	122.80
1	AA	1404	C	C2-N3-C4	8.13	123.96	119.90
26	BB	769	U	N1-C2-O2	8.13	128.49	122.80
26	BB	1172	C	C3'-C2'-C1'	-8.13	95.00	101.50
26	BB	1412	U	C5-C4-O4	8.13	130.78	125.90
31	BG	79	ARG	NE-CZ-NH2	8.13	124.36	120.30
26	BB	1666	G	C5-C6-O6	-8.13	123.72	128.60
1	AA	187	G	C2-N3-C4	8.13	115.96	111.90
1	AA	573	A	O4'-C1'-N9	-8.13	101.70	108.20
1	AA	1040	U	C5-C4-O4	-8.13	121.02	125.90
1	AA	1067	A	N7-C8-N9	-8.13	109.74	113.80
2	AB	66	C	C2-N3-C4	8.13	123.96	119.90
1	AA	1421	G	C6-C5-N7	-8.12	125.53	130.40
26	BB	404	A	N9-C4-C5	-8.12	102.55	105.80
26	BB	1216	G	C5-N7-C8	8.13	108.36	104.30
26	BB	797	G	C1'-O4'-C4'	8.12	116.40	109.90
26	BB	2238	G	C2-N3-C4	8.12	115.96	111.90
26	BB	2333	A	C8-N9-C4	-8.12	102.55	105.80
1	AA	786	G	N3-C4-C5	-8.12	124.54	128.60
26	BB	651	G	N3-C4-N9	8.12	130.87	126.00
1	AA	885	G	C3'-C2'-C1'	-8.12	95.00	101.50
1	AA	1226	C	O4'-C1'-N1	8.12	114.70	108.20
26	BB	1437	C	C5-C6-N1	8.12	125.06	121.00
26	BB	1901	A	N1-C2-N3	-8.12	125.24	129.30
1	AA	1461	G	C5-C6-N1	8.12	115.56	111.50
4	AD	60	A	C5'-C4'-O4'	8.12	118.84	109.10
26	BB	932	U	C3'-C2'-C1'	8.12	108.00	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2063	C	C5'-C4'-O4'	8.12	118.85	109.10
26	BB	2336	A	C5-C6-N1	8.12	121.76	117.70
26	BB	2879	A	N9-C4-C5	-8.12	102.55	105.80
1	AA	222	C	N3-C4-N4	8.12	123.68	118.00
26	BB	1324	G	O4'-C1'-N9	8.12	114.70	108.20
1	AA	700	G	C5-C6-O6	-8.12	123.73	128.60
1	AA	984	C	O4'-C1'-N1	8.12	114.69	108.20
1	AA	1082	A	N1-C6-N6	8.12	123.47	118.60
26	BB	649	G	C5-C6-N1	8.12	115.56	111.50
1	AA	1415	G	C8-N9-C4	-8.12	103.15	106.40
26	BB	702	U	C2-N3-C4	-8.12	122.13	127.00
26	BB	2186	G	C2-N3-C4	8.12	115.96	111.90
47	BW	93	ARG	NE-CZ-NH2	8.12	124.36	120.30
1	AA	289	G	O4'-C4'-C3'	8.12	112.59	106.10
1	AA	547	A	C6-C5-N7	8.12	137.98	132.30
1	AA	1125	U	O4'-C1'-N1	8.11	114.69	108.20
1	AA	1231	G	C6-C5-N7	-8.11	125.53	130.40
5	AE	15	PHE	CB-CG-CD2	-8.11	115.12	120.80
26	BB	555	G	C5-C6-O6	8.12	133.47	128.60
26	BB	1819	A	O4'-C1'-N9	8.12	114.69	108.20
26	BB	2166	U	C1'-O4'-C4'	-8.11	103.41	109.90
26	BB	2236	U	C5-C4-O4	-8.12	121.03	125.90
26	BB	2846	G	N3-C4-N9	8.11	130.87	126.00
26	BB	2888	C	C5-C4-N4	8.12	125.88	120.20
1	AA	1321	U	C2-N3-C4	-8.11	122.13	127.00
1	AA	774	G	C6-C5-N7	-8.11	125.53	130.40
1	AA	807	A	N3-C4-C5	8.11	132.48	126.80
1	AA	1461	G	C6-N1-C2	-8.11	120.23	125.10
26	BB	1817	G	C4-N9-C1'	-8.11	115.95	126.50
26	BB	2426	A	O4'-C1'-N9	8.11	114.69	108.20
26	BB	2678	C	C1'-O4'-C4'	8.11	116.39	109.90
26	BB	1246	A	C3'-C2'-C1'	8.11	107.99	101.50
26	BB	2111	U	C5-C6-N1	-8.11	118.64	122.70
26	BB	2797	U	C5'-C4'-O4'	8.11	118.83	109.10
26	BB	2848	G	P-O3'-C3'	8.11	129.43	119.70
1	AA	276	G	N3-C2-N2	-8.11	114.22	119.90
1	AA	554	A	O4'-C1'-N9	8.11	114.69	108.20
26	BB	815	C	N3-C2-O2	-8.11	116.22	121.90
26	BB	1380	G	N9-C4-C5	8.11	108.64	105.40
1	AA	1193	G	N9-C4-C5	8.11	108.64	105.40
1	AA	1361	G	C5-N7-C8	-8.11	100.25	104.30
26	BB	2128	G	C5-C6-O6	-8.11	123.73	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	363	A	C2-N3-C4	8.11	114.65	110.60
4	AD	7	G	C2-N3-C4	8.11	115.95	111.90
26	BB	73	A	N1-C6-N6	8.11	123.46	118.60
1	AA	1121	U	O4'-C1'-N1	8.11	114.68	108.20
26	BB	291	G	C3'-C2'-C1'	-8.11	95.02	101.50
26	BB	922	C	N3-C4-N4	8.11	123.67	118.00
26	BB	1383	A	C1'-O4'-C4'	-8.11	103.42	109.90
1	AA	517	G	C4-C5-N7	-8.10	107.56	110.80
1	AA	1453	G	C5-C6-N1	-8.10	107.45	111.50
26	BB	1647	U	C5-C6-N1	-8.10	118.65	122.70
1	AA	300	A	C4-C5-N7	-8.10	106.65	110.70
1	AA	600	A	C4'-C3'-C2'	-8.10	94.50	102.60
26	BB	167	A	N7-C8-N9	8.10	117.85	113.80
26	BB	810	U	C4'-C3'-C2'	-8.10	94.50	102.60
26	BB	1216	G	N1-C6-O6	-8.10	115.04	119.90
26	BB	1759	A	C4-C5-N7	-8.10	106.65	110.70
26	BB	2863	C	O4'-C1'-N1	8.10	114.68	108.20
1	AA	12	U	O4'-C1'-N1	8.10	114.68	108.20
1	AA	210	C	C4-C5-C6	-8.10	113.35	117.40
1	AA	670	G	N1-C6-O6	8.10	124.76	119.90
26	BB	2614	A	O4'-C1'-N9	8.10	114.68	108.20
1	AA	1004	A	C5'-C4'-O4'	8.10	118.82	109.10
1	AA	1515	G	C6-N1-C2	-8.10	120.24	125.10
26	BB	308	G	N7-C8-N9	8.10	117.15	113.10
26	BB	1986	C	N1-C2-O2	8.10	123.76	118.90
26	BB	2570	G	C5-N7-C8	-8.10	100.25	104.30
26	BB	2663	G	P-O3'-C3'	8.10	129.42	119.70
1	AA	388	G	N3-C4-N9	8.10	130.86	126.00
1	AA	540	G	N1-C2-N3	-8.10	119.04	123.90
1	AA	746	A	N1-C6-N6	-8.10	113.74	118.60
14	AN	10	ARG	NE-CZ-NH2	8.10	124.35	120.30
26	BB	1740	G	C4-C5-N7	8.10	114.04	110.80
26	BB	2347	C	C1'-O4'-C4'	8.10	116.38	109.90
1	AA	1048	G	N1-C2-N2	8.09	123.48	116.20
1	AA	1399	C	N3-C4-C5	-8.09	118.66	121.90
2	AB	58	A	P-O3'-C3'	8.09	129.41	119.70
3	AC	47	C	C4'-C3'-C2'	8.09	110.69	102.60
25	BA	10	G	C4-C5-N7	-8.09	107.56	110.80
25	BA	35	C	O4'-C1'-N1	8.09	114.67	108.20
26	BB	1555	G	N7-C8-N9	8.09	117.15	113.10
26	BB	2221	G	O4'-C1'-N9	8.09	114.67	108.20
26	BB	2189	U	O4'-C1'-N1	8.09	114.67	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	277	C	N1-C2-O2	8.09	123.75	118.90
1	AA	1195	C	O4'-C1'-N1	8.09	114.67	108.20
26	BB	139	U	O4'-C1'-N1	8.09	114.67	108.20
26	BB	267	C	C5-C6-N1	8.09	125.05	121.00
26	BB	1017	G	C2-N3-C4	-8.09	107.86	111.90
26	BB	1651	G	C1'-O4'-C4'	-8.09	103.43	109.90
26	BB	1623	G	C4-C5-N7	-8.09	107.56	110.80
26	BB	2171	A	N1-C6-N6	8.09	123.45	118.60
26	BB	2549	G	C4-C5-N7	-8.09	107.56	110.80
1	AA	703	G	C4-C5-C6	8.09	123.65	118.80
1	AA	944	G	O4'-C1'-N9	8.09	114.67	108.20
26	BB	1497	U	C2-N1-C1'	8.09	127.41	117.70
26	BB	2324	U	C5'-C4'-O4'	-8.09	99.39	109.10
2	AB	21	A	O4'-C1'-N9	8.09	114.67	108.20
3	AC	16	A	C6-C5-N7	8.09	137.96	132.30
26	BB	107	G	N3-C4-N9	8.09	130.85	126.00
26	BB	887	U	N3-C4-O4	8.09	125.06	119.40
26	BB	1796	U	N1-C2-N3	8.09	119.75	114.90
26	BB	155	A	C5-C6-N1	8.09	121.74	117.70
26	BB	768	G	C8-N9-C4	-8.09	103.17	106.40
26	BB	1374	G	C6-N1-C2	-8.09	120.25	125.10
26	BB	1384	A	C8-N9-C4	-8.09	102.57	105.80
26	BB	2579	C	C5-C6-N1	-8.09	116.96	121.00
1	AA	134	G	N7-C8-N9	8.08	117.14	113.10
1	AA	1244	G	N1-C6-O6	-8.08	115.05	119.90
2	AB	10	G	O4'-C1'-C2'	8.08	114.88	107.60
26	BB	399	U	C1'-O4'-C4'	-8.08	103.43	109.90
26	BB	2453	A	N1-C2-N3	-8.08	125.26	129.30
1	AA	1171	A	C5-N7-C8	8.08	107.94	103.90
1	AA	1293	C	C4-C5-C6	-8.08	113.36	117.40
2	AB	43	G	N3-C4-N9	8.08	130.85	126.00
26	BB	1106	G	C5-C6-O6	-8.08	123.75	128.60
26	BB	2843	G	N3-C2-N2	-8.08	114.24	119.90
1	AA	1412	C	C4'-C3'-C2'	-8.08	94.52	102.60
26	BB	1813	G	O4'-C4'-C3'	8.08	112.56	106.10
26	BB	2407	A	C6-N1-C2	8.08	123.45	118.60
26	BB	2744	G	C2-N3-C4	-8.08	107.86	111.90
26	BB	62	U	O4'-C1'-N1	8.08	114.66	108.20
26	BB	1370	C	C2-N3-C4	8.08	123.94	119.90
1	AA	1014	A	N7-C8-N9	-8.08	109.76	113.80
1	AA	1321	U	C1'-O4'-C4'	8.08	116.36	109.90
26	BB	783	A	O4'-C1'-N9	-8.08	101.74	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	41	C	N1-C1'-C2'	-8.08	103.12	112.00
26	BB	100	U	N3-C2-O2	-8.08	116.55	122.20
26	BB	413	C	N1-C2-O2	8.08	123.75	118.90
26	BB	1591	A	C5'-C4'-O4'	8.08	118.79	109.10
26	BB	2744	G	N1-C2-N3	8.08	128.75	123.90
1	AA	404	G	C4'-C3'-C2'	-8.07	94.53	102.60
1	AA	515	G	N1-C2-N3	-8.07	119.06	123.90
1	AA	1103	C	O4'-C1'-N1	8.07	114.66	108.20
1	AA	1158	C	N3-C2-O2	-8.07	116.25	121.90
26	BB	155	A	C8-N9-C4	8.07	109.03	105.80
26	BB	2359	C	C4-C5-C6	-8.07	113.36	117.40
26	BB	2871	U	C5-C4-O4	-8.07	121.06	125.90
1	AA	1166	G	C4-C5-C6	8.07	123.64	118.80
1	AA	1302	C	N3-C4-C5	-8.07	118.67	121.90
1	AA	1492	A	C6-C5-N7	8.07	137.95	132.30
2	AB	19	G	C5-N7-C8	8.07	108.34	104.30
26	BB	279	A	N9-C4-C5	-8.07	102.57	105.80
26	BB	417	C	C3'-C2'-C1'	8.07	107.96	101.50
26	BB	646	U	O4'-C1'-N1	8.07	114.66	108.20
26	BB	872	U	C2-N3-C4	-8.07	122.16	127.00
1	AA	1161	C	C5'-C4'-O4'	8.07	118.78	109.10
2	AB	43	G	C6-N1-C2	-8.07	120.26	125.10
26	BB	907	G	N9-C4-C5	-8.07	102.17	105.40
26	BB	2349	G	C8-N9-C4	8.07	109.63	106.40
1	AA	714	G	N3-C4-N9	8.07	130.84	126.00
1	AA	1131	G	N1-C2-N2	8.07	123.46	116.20
1	AA	1171	A	N7-C8-N9	-8.07	109.77	113.80
1	AA	1358	U	N1-C2-N3	8.07	119.74	114.90
26	BB	68	G	N9-C4-C5	-8.07	102.17	105.40
26	BB	358	U	N3-C2-O2	-8.07	116.55	122.20
26	BB	502	A	C5-C6-N1	8.07	121.73	117.70
26	BB	1578	U	N3-C2-O2	-8.07	116.55	122.20
26	BB	859	G	N3-C4-C5	-8.07	124.56	128.60
26	BB	1049	C	C2-N3-C4	8.07	123.94	119.90
26	BB	1358	G	C4'-C3'-C2'	-8.07	94.53	102.60
26	BB	1598	A	C5'-C4'-O4'	8.07	118.78	109.10
26	BB	1920	C	O4'-C1'-N1	8.07	114.66	108.20
1	AA	248	C	P-O3'-C3'	8.07	129.38	119.70
1	AA	637	C	C3'-C2'-C1'	-8.07	95.05	101.50
1	AA	1274	A	N1-C6-N6	8.07	123.44	118.60
26	BB	2346	A	O4'-C1'-N9	8.07	114.66	108.20
25	BA	27	C	N3-C4-C5	-8.07	118.67	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	248	G	N7-C8-N9	8.07	117.13	113.10
26	BB	580	U	C5'-C4'-O4'	8.07	118.78	109.10
26	BB	1785	A	C8-N9-C4	-8.07	102.57	105.80
26	BB	2551	C	O4'-C1'-N1	8.07	114.65	108.20
26	BB	2561	U	N3-C4-O4	8.07	125.05	119.40
26	BB	2850	A	N1-C6-N6	8.07	123.44	118.60
26	BB	2878	U	N1-C2-N3	8.07	119.74	114.90
31	BG	9	ASP	CB-CG-OD2	8.07	125.56	118.30
1	AA	300	A	C5-N7-C8	8.06	107.93	103.90
26	BB	1152	C	C6-N1-C2	-8.06	117.07	120.30
26	BB	2035	G	N7-C8-N9	-8.06	109.07	113.10
1	AA	765	G	C6-N1-C2	-8.06	120.26	125.10
26	BB	355	U	C2-N3-C4	8.06	131.84	127.00
26	BB	367	G	N3-C2-N2	-8.06	114.26	119.90
26	BB	981	A	P-O3'-C3'	8.06	129.38	119.70
26	BB	2047	C	C3'-C2'-C1'	8.06	107.95	101.50
26	BB	2534	A	C4-C5-C6	-8.06	112.97	117.00
26	BB	2868	A	C4'-C3'-C2'	-8.06	94.54	102.60
1	AA	28	A	O4'-C1'-N9	8.06	114.65	108.20
1	AA	372	C	C5-C6-N1	-8.06	116.97	121.00
1	AA	882	C	O4'-C1'-N1	8.06	114.65	108.20
1	AA	1181	G	C8-N9-C4	-8.06	103.17	106.40
26	BB	1340	U	P-O3'-C3'	8.06	129.38	119.70
26	BB	1774	C	N3-C4-C5	-8.06	118.68	121.90
39	BO	38	ARG	NE-CZ-NH1	8.06	124.33	120.30
1	AA	821	G	N3-C4-N9	8.06	130.84	126.00
25	BA	94	A	C6-N1-C2	8.06	123.44	118.60
26	BB	60	G	O5'-P-OP2	-8.06	98.45	105.70
26	BB	687	C	N3-C4-C5	8.06	125.12	121.90
26	BB	1952	A	C2-N3-C4	-8.06	106.57	110.60
26	BB	2437	G	N3-C4-N9	8.06	130.84	126.00
26	BB	575	A	C2-N3-C4	8.06	114.63	110.60
26	BB	1054	A	C4-C5-N7	-8.06	106.67	110.70
26	BB	1397	U	N3-C2-O2	-8.06	116.56	122.20
26	BB	1574	C	N3-C2-O2	-8.06	116.26	121.90
26	BB	2682	A	C5'-C4'-C3'	-8.06	103.11	116.00
42	BR	112	ARG	NE-CZ-NH2	-8.06	116.27	120.30
1	AA	26	A	C6-C5-N7	8.06	137.94	132.30
1	AA	194	C	N3-C2-O2	-8.05	116.26	121.90
1	AA	388	G	C5-N7-C8	8.05	108.33	104.30
26	BB	2250	G	C5-C6-N1	8.06	115.53	111.50
26	BB	2471	A	N1-C6-N6	-8.06	113.77	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	520	A	C5-N7-C8	8.05	107.93	103.90
1	AA	727	G	O4'-C1'-N9	8.05	114.64	108.20
1	AA	978	A	C5'-C4'-O4'	8.05	118.77	109.10
1	AA	1369	C	N1-C1'-C2'	-8.05	103.14	112.00
4	AD	45	A	C2-N3-C4	8.05	114.63	110.60
26	BB	1219	U	C5-C6-N1	-8.05	118.67	122.70
26	BB	2410	G	C5'-C4'-O4'	8.05	118.77	109.10
1	AA	937	A	P-O3'-C3'	8.05	129.36	119.70
1	AA	1179	A	O4'-C1'-N9	8.05	114.64	108.20
26	BB	86	G	C2-N3-C4	8.05	115.93	111.90
26	BB	223	A	C1'-O4'-C4'	-8.05	103.46	109.90
43	BS	31	TYR	CB-CG-CD2	-8.05	116.17	121.00
2	AB	3	G	C8-N9-C4	-8.05	103.18	106.40
26	BB	1745	A	N7-C8-N9	-8.05	109.78	113.80
26	BB	2125	G	O4'-C1'-C2'	-8.05	97.75	105.80
26	BB	2189	U	C5-C6-N1	-8.05	118.67	122.70
26	BB	2474	U	C5-C4-O4	-8.05	121.07	125.90
1	AA	493	A	C3'-C2'-C1'	8.05	107.94	101.50
2	AB	68	C	C6-N1-C2	-8.05	117.08	120.30
4	AD	7	G	O4'-C1'-N9	8.05	114.64	108.20
26	BB	516	C	C6-N1-C2	-8.05	117.08	120.30
26	BB	529	A	C5-C6-N6	8.05	130.14	123.70
26	BB	1041	G	C5-C6-O6	-8.05	123.77	128.60
26	BB	1171	G	O4'-C1'-N9	8.05	114.64	108.20
26	BB	2430	A	N1-C6-N6	-8.05	113.77	118.60
26	BB	2540	C	C5-C6-N1	8.05	125.03	121.00
1	AA	228	A	C4-C5-C6	-8.04	112.98	117.00
1	AA	410	G	C5-C6-O6	-8.04	123.77	128.60
1	AA	945	G	C6-C5-N7	-8.04	125.57	130.40
26	BB	355	U	O4'-C1'-N1	8.04	114.64	108.20
26	BB	672	C	O4'-C1'-N1	8.04	114.64	108.20
26	BB	1156	A	C5-C6-N6	-8.04	117.27	123.70
26	BB	1321	A	O5'-P-OP2	-8.04	98.46	105.70
26	BB	2177	C	O4'-C1'-N1	8.04	114.64	108.20
26	BB	2693	G	C4'-C3'-C2'	-8.04	94.56	102.60
1	AA	888	G	N1-C2-N2	-8.04	108.96	116.20
1	AA	1044	A	C1'-O4'-C4'	8.04	116.33	109.90
26	BB	1900	A	O4'-C1'-N9	8.04	114.63	108.20
26	BB	2459	A	O4'-C4'-C3'	8.04	112.53	106.10
1	AA	138	G	C5-C6-O6	-8.04	123.78	128.60
1	AA	933	G	C8-N9-C4	-8.04	103.18	106.40
26	BB	1855	U	N3-C2-O2	-8.04	116.57	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2009	A	N1-C2-N3	8.04	133.32	129.30
26	BB	2692	G	C6-N1-C2	-8.04	120.28	125.10
1	AA	532	A	C6-C5-N7	8.04	137.93	132.30
1	AA	724	G	C6-C5-N7	-8.04	125.58	130.40
26	BB	733	G	C5-C6-O6	-8.04	123.78	128.60
26	BB	1056	G	N3-C2-N2	8.04	125.53	119.90
1	AA	491	G	C8-N9-C4	-8.04	103.19	106.40
1	AA	639	G	N1-C6-O6	8.04	124.72	119.90
1	AA	1532	U	C5-C4-O4	-8.04	121.08	125.90
26	BB	301	G	C8-N9-C4	-8.04	103.19	106.40
26	BB	718	A	O4'-C1'-N9	8.04	114.63	108.20
26	BB	1888	G	N3-C4-C5	-8.04	124.58	128.60
26	BB	2357	G	O4'-C1'-N9	8.04	114.63	108.20
1	AA	407	U	O4'-C1'-N1	8.04	114.63	108.20
1	AA	502	A	C5-C6-N1	8.04	121.72	117.70
1	AA	616	G	C6-N1-C2	-8.04	120.28	125.10
1	AA	891	U	O4'-C1'-N1	8.04	114.63	108.20
1	AA	1367	C	N3-C2-O2	-8.04	116.28	121.90
17	AQ	58	ARG	NE-CZ-NH2	-8.04	116.28	120.30
26	BB	1088	A	C3'-C2'-C1'	8.04	107.93	101.50
26	BB	283	G	C4-C5-N7	-8.03	107.59	110.80
26	BB	755	U	O4'-C1'-N1	8.03	114.63	108.20
26	BB	1512	C	O4'-C4'-C3'	-8.04	95.97	104.00
26	BB	1846	G	C5-N7-C8	8.03	108.32	104.30
26	BB	1849	G	C4-C5-N7	-8.03	107.59	110.80
1	AA	936	C	C4-C5-C6	-8.03	113.38	117.40
1	AA	1109	C	N1-C2-O2	8.03	123.72	118.90
7	AG	52	VAL	CA-CB-CG2	8.03	122.95	110.90
26	BB	658	U	N3-C2-O2	-8.03	116.58	122.20
26	BB	737	C	C5-C4-N4	-8.03	114.58	120.20
26	BB	737	C	O4'-C1'-N1	8.03	114.62	108.20
26	BB	1765	U	C2-N3-C4	8.03	131.82	127.00
26	BB	2115	G	N3-C4-C5	-8.03	124.58	128.60
26	BB	2636	C	C6-N1-C2	8.03	123.51	120.30
1	AA	1156	G	C3'-C2'-C1'	-8.03	95.08	101.50
1	AA	1505	G	N1-C2-N3	-8.03	119.08	123.90
26	BB	151	C	C2-N3-C4	-8.03	115.89	119.90
1	AA	725	G	O4'-C1'-N9	8.03	114.62	108.20
25	BA	44	G	C1'-O4'-C4'	-8.03	103.48	109.90
26	BB	913	U	O4'-C1'-N1	8.03	114.62	108.20
1	AA	195	A	C5'-C4'-O4'	8.03	118.73	109.10
1	AA	299	G	C4-C5-N7	-8.03	107.59	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	856	G	C6-C5-N7	-8.03	125.58	130.40
1	AA	842	U	N3-C4-O4	8.03	125.02	119.40
26	BB	1382	G	O4'-C1'-N9	8.03	114.62	108.20
26	BB	1977	A	C4-C5-C6	-8.03	112.99	117.00
26	BB	2306	C	N3-C2-O2	-8.03	116.28	121.90
26	BB	2526	G	O4'-C1'-N9	-8.03	101.78	108.20
26	BB	2718	G	C8-N9-C4	-8.03	103.19	106.40
1	AA	475	C	O4'-C4'-C3'	8.02	112.52	106.10
1	AA	1120	C	N1-C2-O2	8.02	123.71	118.90
1	AA	1187	G	C5-C6-N1	8.02	115.51	111.50
1	AA	1253	G	N1-C6-O6	-8.02	115.09	119.90
2	AB	35	C	C6-N1-C2	-8.02	117.09	120.30
26	BB	733	G	C6-C5-N7	8.02	135.21	130.40
26	BB	947	A	O4'-C1'-N9	8.02	114.62	108.20
26	BB	1737	G	N3-C4-N9	-8.02	121.19	126.00
1	AA	452	A	N7-C8-N9	8.02	117.81	113.80
1	AA	959	A	O4'-C1'-N9	8.02	114.62	108.20
1	AA	1235	U	N1-C2-O2	-8.02	117.19	122.80
1	AA	1438	G	N1-C2-N3	-8.02	119.09	123.90
57	B6	44	ARG	NE-CZ-NH2	8.02	124.31	120.30
25	BA	77	U	O4'-C1'-N1	8.02	114.62	108.20
26	BB	322	A	C8-N9-C4	-8.02	102.59	105.80
26	BB	1126	A	C4-C5-C6	-8.02	112.99	117.00
26	BB	2064	C	O4'-C1'-N1	8.02	114.62	108.20
1	AA	191	G	C4'-C3'-C2'	-8.02	94.58	102.60
1	AA	552	U	N3-C2-O2	-8.02	116.59	122.20
1	AA	829	G	C4'-C3'-C2'	-8.02	94.58	102.60
1	AA	960	U	N1-C2-N3	8.02	119.71	114.90
2	AB	23	A	N1-C6-N6	8.02	123.41	118.60
26	BB	1950	G	C3'-C2'-C1'	8.02	107.92	101.50
1	AA	1327	C	N3-C4-N4	8.02	123.61	118.00
25	BA	23	G	C8-N9-C4	-8.02	103.19	106.40
25	BA	79	G	N9-C4-C5	8.02	108.61	105.40
26	BB	184	C	C4'-C3'-C2'	-8.02	94.58	102.60
26	BB	376	G	N9-C1'-C2'	-8.02	103.18	112.00
26	BB	849	A	N1-C6-N6	-8.02	113.79	118.60
26	BB	942	G	C5-C6-N1	8.02	115.51	111.50
26	BB	1081	U	C4-C5-C6	8.02	124.51	119.70
26	BB	1341	G	C5-C6-N1	8.02	115.51	111.50
26	BB	1677	A	C6-N1-C2	8.02	123.41	118.60
26	BB	2473	U	C3'-C2'-C1'	8.02	107.92	101.50
26	BB	2731	G	C4-C5-N7	-8.02	107.59	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	BO	91	TYR	CG-CD2-CE2	8.02	127.72	121.30
1	AA	142	G	C1'-O4'-C4'	-8.02	103.49	109.90
25	BA	63	C	N1-C2-O2	-8.02	114.09	118.90
26	BB	71	A	N1-C2-N3	-8.02	125.29	129.30
26	BB	151	C	N3-C4-C5	8.02	125.11	121.90
26	BB	706	A	C2-N3-C4	8.02	114.61	110.60
26	BB	881	G	C2-N3-C4	8.02	115.91	111.90
26	BB	1311	G	C6-C5-N7	-8.02	125.59	130.40
26	BB	1807	G	O4'-C1'-N9	8.02	114.61	108.20
26	BB	2482	A	O4'-C1'-N9	-8.02	101.79	108.20
26	BB	2611	C	N3-C4-C5	-8.02	118.69	121.90
26	BB	2751	G	C2-N3-C4	8.02	115.91	111.90
26	BB	1073	A	C6-C5-N7	8.01	137.91	132.30
26	BB	2198	A	O4'-C1'-N9	8.01	114.61	108.20
1	AA	940	C	N3-C2-O2	-8.01	116.29	121.90
6	AF	178	ARG	NH1-CZ-NH2	8.01	128.22	119.40
26	BB	1202	G	O4'-C1'-N9	8.01	114.61	108.20
26	BB	1930	G	N9-C4-C5	8.01	108.61	105.40
26	BB	2619	C	C6-N1-C2	-8.01	117.09	120.30
1	AA	979	C	C3'-C2'-C1'	8.01	107.91	101.50
26	BB	2757	A	O4'-C1'-N9	8.01	114.61	108.20
26	BB	2790	U	C2-N3-C4	-8.01	122.19	127.00
1	AA	1202	U	C5'-C4'-O4'	8.01	118.71	109.10
2	AB	62	U	N3-C4-O4	8.01	125.01	119.40
1	AA	305	G	C6-N1-C2	-8.01	120.30	125.10
1	AA	445	G	O4'-C1'-N9	8.01	114.61	108.20
4	AD	20	G	C8-N9-C4	-8.01	103.20	106.40
26	BB	527	C	C5-C4-N4	-8.01	114.59	120.20
4	AD	23	G	N3-C4-C5	-8.01	124.60	128.60
26	BB	1755	A	N1-C2-N3	-8.01	125.30	129.30
26	BB	1985	C	C2-N3-C4	8.01	123.90	119.90
26	BB	2300	C	N3-C4-N4	8.01	123.61	118.00
26	BB	2834	G	C5-C6-O6	8.01	133.41	128.60
1	AA	260	G	C5-C6-O6	-8.00	123.80	128.60
1	AA	299	G	C1'-O4'-C4'	-8.00	103.50	109.90
26	BB	698	C	N1-C2-O2	8.00	123.70	118.90
26	BB	2837	A	C4'-C3'-C2'	-8.00	94.60	102.60
1	AA	1330	U	C5-C6-N1	-8.00	118.70	122.70
1	AA	1530	G	C3'-C2'-C1'	8.00	107.90	101.50
26	BB	1136	G	C8-N9-C4	-8.00	103.20	106.40
26	BB	1799	G	C5'-C4'-O4'	-8.00	99.50	109.10
26	BB	2549	G	C5-C6-O6	-8.00	123.80	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	57	G	N1-C2-N3	-8.00	119.10	123.90
1	AA	704	A	C6-C5-N7	8.00	137.90	132.30
1	AA	1480	A	C8-N9-C4	-8.00	102.60	105.80
2	AB	29	G	O4'-C1'-N9	8.00	114.60	108.20
26	BB	615	U	C1'-O4'-C4'	8.00	116.30	109.90
26	BB	2526	G	N1-C2-N3	-8.00	119.10	123.90
54	B3	30	ASP	CB-CG-OD1	-8.00	111.10	118.30
1	AA	939	G	C5'-C4'-O4'	8.00	118.70	109.10
1	AA	1336	C	C5-C4-N4	-8.00	114.60	120.20
1	AA	1461	G	C8-N9-C4	-8.00	103.20	106.40
1	AA	1464	U	N1-C2-N3	8.00	119.70	114.90
4	AD	30	G	C5-C6-N1	8.00	115.50	111.50
25	BA	85	G	C2-N3-C4	8.00	115.90	111.90
26	BB	397	U	N1-C2-N3	8.00	119.70	114.90
26	BB	2293	G	C6-N1-C2	-8.00	120.30	125.10
26	BB	2628	C	C5-C6-N1	8.00	125.00	121.00
2	AB	28	C	C2-N3-C4	8.00	123.90	119.90
26	BB	19	A	C3'-C2'-C1'	8.00	107.90	101.50
26	BB	1560	G	C5'-C4'-O4'	8.00	118.69	109.10
10	AJ	134	VAL	CA-CB-CG1	8.00	122.89	110.90
26	BB	2048	G	C5-C6-O6	-8.00	123.80	128.60
1	AA	26	A	C8-N9-C4	7.99	109.00	105.80
1	AA	40	C	O4'-C1'-N1	7.99	114.59	108.20
1	AA	303	A	C5-C6-N1	7.99	121.70	117.70
1	AA	636	U	C5-C4-O4	-7.99	121.10	125.90
1	AA	683	G	C5-C6-N1	7.99	115.50	111.50
4	AD	15	G	C5-N7-C8	7.99	108.30	104.30
9	AI	113	ARG	NE-CZ-NH2	-7.99	116.30	120.30
26	BB	104	A	N1-C6-N6	-7.99	113.80	118.60
26	BB	654	A	C4-C5-C6	-7.99	113.00	117.00
26	BB	1283	G	O4'-C1'-N9	7.99	114.59	108.20
26	BB	1396	U	C5-C6-N1	-7.99	118.70	122.70
26	BB	158	U	C5-C6-N1	7.99	126.70	122.70
1	AA	98	A	C4-C5-C6	-7.99	113.00	117.00
1	AA	338	A	N7-C8-N9	7.99	117.80	113.80
1	AA	930	C	N3-C4-N4	-7.99	112.41	118.00
1	AA	1463	U	N3-C4-O4	7.99	124.99	119.40
26	BB	1439	A	N7-C8-N9	7.99	117.80	113.80
26	BB	1453	A	O4'-C1'-C2'	7.99	114.79	107.60
26	BB	1700	A	C4-C5-N7	-7.99	106.70	110.70
1	AA	350	G	N1-C6-O6	7.99	124.69	119.90
1	AA	553	A	N3-C4-C5	-7.99	121.21	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	806	C	N3-C4-C5	-7.99	118.70	121.90
25	BA	13	G	C2-N3-C4	7.99	115.89	111.90
26	BB	190	A	C8-N9-C4	-7.99	102.60	105.80
26	BB	931	U	C5-C4-O4	-7.99	121.11	125.90
26	BB	1197	G	N3-C2-N2	-7.99	114.31	119.90
26	BB	1446	C	C6-N1-C2	7.99	123.50	120.30
26	BB	1159	U	C2-N3-C4	-7.99	122.21	127.00
1	AA	1486	G	N3-C4-C5	-7.99	124.61	128.60
1	AA	1536	C	N3-C4-N4	-7.99	112.41	118.00
26	BB	469	G	C6-C5-N7	7.99	135.19	130.40
26	BB	493	G	N3-C4-C5	-7.99	124.61	128.60
26	BB	647	G	C8-N9-C4	-7.99	103.21	106.40
26	BB	1451	C	C4'-C3'-C2'	7.99	110.59	102.60
26	BB	1931	U	O4'-C1'-N1	7.99	114.59	108.20
26	BB	2388	A	C5'-C4'-O4'	7.99	118.68	109.10
26	BB	2452	C	N1-C2-O2	7.99	123.69	118.90
1	AA	233	C	C4-C5-C6	7.98	121.39	117.40
1	AA	317	U	C2-N3-C4	-7.98	122.21	127.00
1	AA	968	A	C8-N9-C4	-7.98	102.61	105.80
26	BB	170	U	N1-C2-O2	7.98	128.39	122.80
1	AA	805	C	P-O3'-C3'	7.98	129.28	119.70
26	BB	430	A	C4-C5-C6	-7.98	113.01	117.00
26	BB	998	C	C5-C4-N4	-7.98	114.61	120.20
26	BB	1564	C	C6-N1-C2	-7.98	117.11	120.30
26	BB	2391	G	N9-C4-C5	7.98	108.59	105.40
1	AA	281	G	C3'-C2'-C1'	7.98	107.89	101.50
1	AA	452	A	C6-C5-N7	7.98	137.89	132.30
3	AC	43	U	C5-C4-O4	-7.98	121.11	125.90
26	BB	1659	G	O4'-C1'-N9	7.98	114.58	108.20
26	BB	1807	G	C5-N7-C8	-7.98	100.31	104.30
26	BB	2592	G	C4'-C3'-C2'	-7.98	94.62	102.60
1	AA	99	C	N3-C4-N4	7.98	123.58	118.00
1	AA	196	A	C5-C6-N1	7.98	121.69	117.70
4	AD	74	A	O4'-C1'-N9	7.98	114.58	108.20
8	AH	127	TYR	CB-CG-CD1	-7.98	116.21	121.00
26	BB	874	G	N7-C8-N9	-7.98	109.11	113.10
26	BB	1365	A	N1-C2-N3	-7.98	125.31	129.30
26	BB	2116	G	N9-C4-C5	7.98	108.59	105.40
26	BB	707	G	C4-C5-C6	7.98	123.59	118.80
26	BB	1209	U	C3'-C2'-C1'	-7.98	95.12	101.50
26	BB	1300	G	N9-C4-C5	-7.98	102.21	105.40
26	BB	2751	G	C5-C6-N1	7.98	115.49	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	380	G	C8-N9-C4	-7.97	103.21	106.40
26	BB	156	A	N9-C4-C5	7.97	108.99	105.80
26	BB	255	A	C6-N1-C2	-7.97	113.81	118.60
26	BB	637	A	O4'-C1'-N9	7.97	114.58	108.20
26	BB	913	U	C5-C4-O4	-7.97	121.12	125.90
26	BB	2394	C	O4'-C1'-N1	7.97	114.58	108.20
26	BB	2418	A	C4-C5-N7	-7.97	106.71	110.70
1	AA	901	A	N3-C4-C5	-7.97	121.22	126.80
26	BB	15	G	C4-C5-N7	-7.97	107.61	110.80
26	BB	1071	G	C2-N3-C4	7.97	115.89	111.90
26	BB	1500	G	N3-C2-N2	-7.97	114.32	119.90
26	BB	1746	A	C6-N1-C2	7.97	123.38	118.60
26	BB	2383	G	C4-C5-N7	-7.97	107.61	110.80
1	AA	145	G	N1-C6-O6	-7.97	115.12	119.90
1	AA	587	G	C8-N9-C4	-7.97	103.21	106.40
1	AA	1392	G	O4'-C4'-C3'	7.97	112.48	106.10
26	BB	1743	G	N9-C4-C5	7.97	108.59	105.40
1	AA	204	G	C5-C6-N1	7.97	115.48	111.50
1	AA	469	C	O4'-C1'-N1	7.97	114.58	108.20
1	AA	1103	C	N1-C2-O2	7.97	123.68	118.90
1	AA	1401	G	C5-C6-N1	7.97	115.48	111.50
1	AA	1453	G	N9-C1'-C2'	-7.97	103.23	112.00
3	AC	42	U	O4'-C1'-C2'	-7.97	97.83	105.80
25	BA	36	C	O4'-C4'-C3'	-7.97	96.03	104.00
25	BA	116	G	N3-C2-N2	-7.97	114.32	119.90
26	BB	10	A	O4'-C1'-N9	7.97	114.58	108.20
26	BB	339	U	N3-C2-O2	-7.97	116.62	122.20
26	BB	412	A	C5-C6-N1	7.97	121.69	117.70
26	BB	891	G	N9-C1'-C2'	-7.97	103.23	112.00
26	BB	1322	A	C5'-C4'-O4'	7.97	118.66	109.10
26	BB	1449	G	O4'-C1'-N9	7.97	114.58	108.20
26	BB	2087	G	C8-N9-C4	-7.97	103.21	106.40
26	BB	2340	A	N9-C1'-C2'	-7.97	103.23	112.00
1	AA	6	G	N1-C2-N2	7.97	123.37	116.20
26	BB	263	G	C8-N9-C4	-7.97	103.21	106.40
26	BB	591	U	O4'-C1'-N1	7.97	114.57	108.20
26	BB	1952	A	N3-C4-C5	7.97	132.38	126.80
1	AA	291	U	O4'-C1'-N1	7.97	114.57	108.20
1	AA	901	A	N1-C2-N3	-7.97	125.32	129.30
1	AA	1026	G	N7-C8-N9	7.97	117.08	113.10
1	AA	1198	G	O4'-C1'-N9	7.97	114.57	108.20
26	BB	487	C	C2-N3-C4	7.97	123.88	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	605	G	C2-N3-C4	7.97	115.88	111.90
26	BB	713	G	C4-C5-N7	-7.97	107.61	110.80
26	BB	1348	C	N1-C2-N3	-7.97	113.62	119.20
26	BB	1774	C	N1-C2-N3	-7.97	113.62	119.20
26	BB	1897	G	N3-C4-C5	-7.97	124.62	128.60
26	BB	2455	G	C5-C6-N1	7.97	115.48	111.50
4	AD	49	C	O4'-C1'-N1	7.96	114.57	108.20
25	BA	101	A	C5-C6-N1	7.96	121.68	117.70
26	BB	670	A	C3'-C2'-C1'	-7.96	95.13	101.50
26	BB	1707	G	N3-C4-C5	-7.96	124.62	128.60
26	BB	2106	U	C2-N3-C4	-7.96	122.22	127.00
26	BB	2385	C	N1-C2-O2	7.96	123.68	118.90
26	BB	434	U	N3-C2-O2	-7.96	116.63	122.20
26	BB	875	G	C3'-C2'-C1'	-7.96	95.13	101.50
26	BB	915	C	N1-C2-O2	7.96	123.68	118.90
1	AA	76	G	C5-N7-C8	-7.96	100.32	104.30
1	AA	1254	A	N1-C2-N3	-7.96	125.32	129.30
1	AA	1260	G	O4'-C1'-N9	7.96	114.57	108.20
2	AB	43	G	N1-C2-N3	7.96	128.68	123.90
7	AG	134	TYR	CB-CG-CD2	-7.96	116.22	121.00
25	BA	26	C	N3-C4-C5	-7.96	118.72	121.90
25	BA	75	G	C5'-C4'-C3'	7.96	128.74	116.00
25	BA	120	U	O4'-C1'-N1	7.96	114.57	108.20
26	BB	787	C	C4'-C3'-C2'	-7.96	94.64	102.60
26	BB	1231	U	O4'-C1'-N1	7.96	114.57	108.20
26	BB	1301	A	C5-N7-C8	7.96	107.88	103.90
26	BB	1473	G	C6-C5-N7	-7.96	125.62	130.40
26	BB	2886	A	C5-C6-N1	-7.96	113.72	117.70
1	AA	575	G	C6-C5-N7	7.96	135.18	130.40
26	BB	378	C	C5-C6-N1	7.96	124.98	121.00
1	AA	1246	A	N1-C6-N6	-7.96	113.83	118.60
4	AD	10	G	N9-C4-C5	7.96	108.58	105.40
26	BB	119	A	O4'-C1'-N9	7.96	114.57	108.20
26	BB	481	G	N7-C8-N9	7.96	117.08	113.10
26	BB	514	A	C8-N9-C4	7.96	108.98	105.80
1	AA	23	C	N3-C4-C5	7.96	125.08	121.90
1	AA	1080	A	C2-N3-C4	7.96	114.58	110.60
26	BB	1291	C	C6-N1-C2	-7.96	117.12	120.30
26	BB	1522	A	N9-C4-C5	7.96	108.98	105.80
26	BB	2475	C	C6-N1-C2	-7.96	117.12	120.30
26	BB	973	A	N3-C4-C5	-7.96	121.23	126.80
26	BB	1929	G	N3-C4-N9	7.96	130.77	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2054	A	C5-C6-N1	7.96	121.68	117.70
1	AA	42	G	N1-C2-N3	-7.95	119.13	123.90
1	AA	517	G	C6-C5-N7	7.95	135.17	130.40
1	AA	1051	C	N3-C2-O2	-7.95	116.33	121.90
26	BB	1541	C	C5'-C4'-C3'	-7.95	103.27	116.00
26	BB	2603	G	C8-N9-C4	-7.95	103.22	106.40
26	BB	372	G	O4'-C1'-N9	7.95	114.56	108.20
26	BB	2750	A	C5-N7-C8	-7.95	99.92	103.90
1	AA	395	C	N3-C2-O2	-7.95	116.33	121.90
26	BB	469	G	N3-C4-C5	-7.95	124.62	128.60
26	BB	708	G	C8-N9-C4	-7.95	103.22	106.40
26	BB	781	A	C6-N1-C2	-7.95	113.83	118.60
26	BB	1459	G	C4-C5-N7	7.95	113.98	110.80
26	BB	1711	A	C5'-C4'-C3'	-7.95	103.28	116.00
40	BP	67	PHE	CB-CG-CD2	-7.95	115.23	120.80
26	BB	933	A	C4-C5-N7	7.95	114.67	110.70
26	BB	1164	C	N3-C4-N4	-7.95	112.44	118.00
26	BB	2001	C	O4'-C1'-N1	7.95	114.56	108.20
26	BB	2100	G	C8-N9-C4	-7.95	103.22	106.40
26	BB	2311	A	N1-C6-N6	-7.95	113.83	118.60
26	BB	2325	G	C5-N7-C8	7.95	108.27	104.30
26	BB	2708	G	C4-C5-C6	7.95	123.57	118.80
26	BB	217	A	N9-C4-C5	7.95	108.98	105.80
26	BB	1133	A	C2-N3-C4	-7.95	106.63	110.60
26	BB	1387	A	N9-C4-C5	7.95	108.98	105.80
26	BB	2262	U	N3-C2-O2	-7.95	116.64	122.20
26	BB	2410	G	N3-C4-N9	-7.95	121.23	126.00
1	AA	7	A	C4-C5-C6	-7.95	113.03	117.00
1	AA	1012	A	N9-C1'-C2'	-7.95	103.26	112.00
26	BB	329	G	N3-C2-N2	-7.95	114.34	119.90
26	BB	382	A	N1-C6-N6	-7.95	113.83	118.60
26	BB	918	A	N9-C1'-C2'	-7.95	103.26	112.00
26	BB	1494	A	C2-N3-C4	7.95	114.57	110.60
1	AA	992	U	C5-C6-N1	-7.94	118.73	122.70
26	BB	1260	A	N9-C1'-C2'	-7.94	103.26	112.00
26	BB	1350	C	C4-C5-C6	7.94	121.37	117.40
26	BB	1569	A	O4'-C1'-N9	7.94	114.56	108.20
26	BB	2275	C	N1-C2-N3	7.94	124.76	119.20
26	BB	1277	G	C5-C6-N1	7.94	115.47	111.50
26	BB	1489	C	C3'-C2'-C1'	-7.94	95.15	101.50
26	BB	2764	A	C4-C5-C6	7.94	120.97	117.00
26	BB	2844	G	N7-C8-N9	7.94	117.07	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	30	G	N3-C2-N2	-7.94	114.34	119.90
26	BB	260	G	C1'-O4'-C4'	-7.94	103.55	109.90
26	BB	320	A	N7-C8-N9	7.94	117.77	113.80
26	BB	2144	G	C5-C6-O6	-7.94	123.83	128.60
26	BB	2648	G	C8-N9-C4	-7.94	103.22	106.40
49	BY	13	ARG	NE-CZ-NH1	7.94	124.27	120.30
26	BB	535	G	C5-C6-O6	-7.94	123.84	128.60
26	BB	559	G	N7-C8-N9	7.94	117.07	113.10
26	BB	826	U	C4-C5-C6	7.94	124.46	119.70
26	BB	991	C	O4'-C1'-N1	7.94	114.55	108.20
26	BB	1404	C	N3-C2-O2	-7.94	116.34	121.90
26	BB	1867	G	C5-C6-O6	7.94	133.36	128.60
32	BH	45	ALA	CB-CA-C	7.94	122.01	110.10
1	AA	1395	C	N3-C4-N4	7.94	123.56	118.00
26	BB	412	A	O4'-C1'-N9	7.94	114.55	108.20
26	BB	603	A	N9-C4-C5	7.94	108.97	105.80
26	BB	913	U	N3-C4-O4	7.94	124.96	119.40
26	BB	1242	U	N3-C2-O2	-7.94	116.64	122.20
26	BB	1820	U	O4'-C1'-N1	7.94	114.55	108.20
26	BB	1996	C	N1-C2-O2	7.94	123.66	118.90
26	BB	2117	A	C2-N3-C4	7.94	114.57	110.60
26	BB	2118	U	C1'-O4'-C4'	-7.94	103.55	109.90
26	BB	2576	G	C6-N1-C2	-7.94	120.34	125.10
26	BB	2625	G	N3-C4-C5	-7.94	124.63	128.60
1	AA	1108	G	N3-C4-N9	-7.94	121.24	126.00
26	BB	997	G	C2-N3-C4	7.94	115.87	111.90
26	BB	2218	G	N3-C4-C5	-7.94	124.63	128.60
1	AA	269	C	N3-C2-O2	-7.93	116.35	121.90
1	AA	737	C	O4'-C1'-N1	7.93	114.55	108.20
4	AD	7	G	O4'-C4'-C3'	7.93	112.45	106.10
26	BB	750	A	C3'-C2'-C1'	7.93	107.85	101.50
26	BB	974	G	N3-C4-N9	7.93	130.76	126.00
26	BB	1314	C	C5-C4-N4	-7.93	114.65	120.20
26	BB	1625	C	C5-C4-N4	-7.93	114.64	120.20
1	AA	815	A	C5-C6-N1	7.93	121.67	117.70
26	BB	504	A	C8-N9-C4	-7.93	102.63	105.80
26	BB	1174	U	N3-C4-C5	-7.93	109.84	114.60
45	BU	88	ARG	NE-CZ-NH2	7.93	124.27	120.30
1	AA	1081	A	C3'-C2'-C1'	-7.93	95.16	101.50
26	BB	1163	G	O4'-C1'-N9	7.93	114.55	108.20
26	BB	2138	G	N3-C2-N2	-7.93	114.35	119.90
26	BB	2361	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(°)
26	BB	2442	C	C3'-C2'-C1'	7.93	107.84	101.50
26	BB	2544	G	N3-C4-C5	-7.93	124.64	128.60
1	AA	408	A	N9-C4-C5	7.93	108.97	105.80
1	AA	709	U	N3-C2-O2	-7.93	116.65	122.20
1	AA	873	A	C2-N3-C4	7.93	114.56	110.60
1	AA	1003	G	N3-C2-N2	-7.93	114.35	119.90
1	AA	1278	G	C3'-C2'-C1'	7.93	107.84	101.50
25	BA	34	A	N1-C2-N3	7.93	133.26	129.30
26	BB	717	C	N3-C4-C5	-7.93	118.73	121.90
26	BB	1694	C	C6-N1-C2	7.93	123.47	120.30
26	BB	1961	C	C5'-C4'-O4'	7.93	118.62	109.10
26	BB	2736	A	C4-C5-C6	-7.93	113.03	117.00
2	AB	40	C	N1-C2-N3	7.93	124.75	119.20
26	BB	2264	C	N3-C2-O2	-7.93	116.35	121.90
26	BB	2642	G	C6-N1-C2	-7.93	120.34	125.10
1	AA	119	A	C8-N9-C4	-7.93	102.63	105.80
1	AA	1486	G	C5-N7-C8	7.93	108.26	104.30
25	BA	19	C	C6-N1-C2	-7.93	117.13	120.30
26	BB	334	C	C5-C4-N4	7.93	125.75	120.20
26	BB	813	U	N3-C4-C5	-7.93	109.84	114.60
26	BB	1222	U	O4'-C1'-N1	7.93	114.54	108.20
26	BB	1532	A	C5-N7-C8	-7.93	99.94	103.90
26	BB	1584	U	O4'-C1'-N1	7.93	114.54	108.20
26	BB	1793	C	C4'-C3'-C2'	-7.93	94.67	102.60
1	AA	586	C	N3-C2-O2	-7.92	116.35	121.90
4	AD	46	G	N9-C1'-C2'	-7.92	103.28	112.00
26	BB	241	A	P-O3'-C3'	7.92	129.21	119.70
26	BB	370	G	C2-N3-C4	7.92	115.86	111.90
26	BB	1693	U	N3-C4-O4	7.92	124.95	119.40
26	BB	2226	C	O4'-C1'-N1	7.92	114.54	108.20
1	AA	1390	U	N3-C4-O4	-7.92	113.85	119.40
26	BB	804	A	C2-N3-C4	7.92	114.56	110.60
1	AA	1236	A	N9-C1'-C2'	-7.92	103.29	112.00
4	AD	74	A	N9-C4-C5	-7.92	102.63	105.80
21	AU	7	ARG	NE-CZ-NH2	7.92	124.26	120.30
25	BA	106	G	N3-C4-N9	7.92	130.75	126.00
26	BB	1444	G	C5-C6-O6	7.92	133.35	128.60
26	BB	2744	G	C8-N9-C4	-7.92	103.23	106.40
1	AA	616	G	C1'-O4'-C4'	-7.92	103.56	109.90
1	AA	796	C	N3-C4-C5	-7.92	118.73	121.90
26	BB	787	C	C3'-C2'-C1'	7.92	107.84	101.50
26	BB	1142	A	C6-N1-C2	7.92	123.35	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1186	G	N3-C2-N2	7.92	125.44	119.90
26	BB	2641	G	O4'-C1'-N9	7.92	114.54	108.20
1	AA	1032	G	C4-C5-N7	-7.92	107.63	110.80
1	AA	1065	U	N1-C1'-C2'	7.92	124.29	114.00
1	AA	1093	A	N3-C4-C5	-7.92	121.26	126.80
26	BB	295	G	C6-N1-C2	-7.92	120.35	125.10
26	BB	1210	G	N3-C2-N2	7.92	125.44	119.90
26	BB	2019	A	C2'-C3'-O3'	7.92	126.92	109.50
26	BB	2446	G	C8-N9-C4	-7.92	103.23	106.40
26	BB	2861	U	C2-N3-C4	-7.92	122.25	127.00
1	AA	697	U	C5'-C4'-O4'	7.92	118.60	109.10
1	AA	1144	G	C4'-C3'-C2'	-7.92	94.68	102.60
26	BB	227	A	N9-C4-C5	-7.92	102.63	105.80
26	BB	1131	G	N7-C8-N9	7.92	117.06	113.10
1	AA	900	A	N7-C8-N9	7.92	117.76	113.80
3	AC	46	C	C2-N3-C4	7.92	123.86	119.90
1	AA	566	G	N3-C4-C5	-7.91	124.64	128.60
1	AA	1375	A	N1-C6-N6	-7.91	113.85	118.60
25	BA	117	G	N3-C2-N2	-7.91	114.36	119.90
26	BB	595	C	C6-N1-C2	-7.91	117.13	120.30
26	BB	1486	U	C4-C5-C6	7.91	124.45	119.70
26	BB	2372	U	O4'-C1'-N1	7.91	114.53	108.20
26	BB	2477	U	C6-N1-C2	-7.91	116.25	121.00
33	BI	91	PHE	CB-CG-CD1	-7.91	115.26	120.80
26	BB	2067	G	O4'-C4'-C3'	7.91	112.43	106.10
26	BB	2873	A	O4'-C1'-N9	7.91	114.53	108.20
1	AA	154	U	C5-C6-N1	-7.91	118.74	122.70
1	AA	688	G	C5-C6-O6	-7.91	123.85	128.60
1	AA	934	C	N3-C2-O2	7.91	127.44	121.90
26	BB	695	G	C2-N3-C4	7.91	115.86	111.90
26	BB	1254	A	N9-C4-C5	-7.91	102.64	105.80
26	BB	2410	G	N3-C2-N2	7.91	125.44	119.90
26	BB	2534	A	N9-C4-C5	-7.91	102.64	105.80
26	BB	2602	A	N7-C8-N9	7.91	117.75	113.80
1	AA	649	A	N1-C6-N6	-7.91	113.86	118.60
26	BB	1284	A	C6-C5-N7	-7.91	126.77	132.30
26	BB	1387	A	C8-N9-C4	-7.91	102.64	105.80
26	BB	1923	U	O4'-C1'-N1	7.91	114.53	108.20
26	BB	2799	A	C4-C5-C6	7.91	120.95	117.00
26	BB	2814	A	C6-C5-N7	7.91	137.84	132.30
1	AA	1534	A	C4-C5-C6	7.91	120.95	117.00
26	BB	235	U	O4'-C1'-N1	7.91	114.53	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	BD	68	ARG	NH1-CZ-NH2	-7.91	110.70	119.40
1	AA	199	A	C6-N1-C2	-7.91	113.86	118.60
1	AA	581	G	O4'-C1'-N9	-7.91	101.88	108.20
1	AA	1198	G	N9-C4-C5	7.91	108.56	105.40
1	AA	1266	G	C5-C6-N1	7.91	115.45	111.50
1	AA	1410	A	O4'-C1'-N9	7.91	114.52	108.20
25	BA	56	G	N3-C4-C5	-7.91	124.65	128.60
25	BA	116	G	C8-N9-C4	-7.91	103.24	106.40
26	BB	47	C	N3-C4-N4	7.91	123.53	118.00
26	BB	998	C	N3-C4-N4	7.91	123.53	118.00
26	BB	2133	G	C5-C6-N1	7.91	115.45	111.50
26	BB	2415	G	C2-N3-C4	7.91	115.85	111.90
26	BB	2660	A	C8-N9-C4	-7.91	102.64	105.80
26	BB	2778	A	O4'-C1'-N9	7.91	114.53	108.20
47	BW	6	ARG	NE-CZ-NH1	7.91	124.25	120.30
26	BB	628	G	N3-C4-N9	-7.90	121.26	126.00
26	BB	971	G	C4-C5-C6	7.90	123.54	118.80
26	BB	1606	C	C4'-C3'-C2'	-7.90	94.70	102.60
26	BB	2831	G	O4'-C1'-N9	7.90	114.52	108.20
1	AA	504	C	C2-N3-C4	-7.90	115.95	119.90
1	AA	626	G	C3'-C2'-C1'	7.90	107.82	101.50
1	AA	743	A	C5'-C4'-O4'	7.90	118.58	109.10
1	AA	1444	U	O4'-C1'-N1	7.90	114.52	108.20
25	BA	84	G	C8-N9-C4	-7.90	103.24	106.40
26	BB	1436	G	O4'-C1'-N9	7.90	114.52	108.20
1	AA	329	A	N9-C4-C5	7.90	108.96	105.80
1	AA	585	G	N3-C4-C5	-7.90	124.65	128.60
26	BB	472	A	N1-C2-N3	-7.90	125.35	129.30
26	BB	593	U	C5-C6-N1	7.90	126.65	122.70
26	BB	740	C	N3-C4-C5	7.90	125.06	121.90
26	BB	2500	U	C5-C6-N1	-7.90	118.75	122.70
26	BB	2760	C	N1-C2-N3	-7.90	113.67	119.20
2	AB	45	U	O4'-C1'-N1	7.90	114.52	108.20
26	BB	1042	G	C4'-C3'-C2'	-7.90	94.70	102.60
26	BB	1382	G	C8-N9-C4	-7.90	103.24	106.40
1	AA	449	G	N3-C2-N2	7.90	125.43	119.90
4	AD	67	C	C2-N3-C4	7.90	123.85	119.90
25	BA	71	C	N1-C2-O2	7.90	123.64	118.90
26	BB	116	C	C3'-C2'-C1'	7.90	107.82	101.50
26	BB	465	G	C5'-C4'-O4'	7.90	118.58	109.10
26	BB	1253	A	C8-N9-C4	-7.90	102.64	105.80
26	BB	2321	U	N1-C2-N3	7.90	119.64	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2839	G	N3-C2-N2	7.90	125.43	119.90
34	BJ	75	PHE	CB-CG-CD2	-7.90	115.27	120.80
1	AA	1020	G	C5-N7-C8	-7.90	100.35	104.30
1	AA	1508	A	C1'-O4'-C4'	-7.90	103.58	109.90
26	BB	142	A	C3'-C2'-C1'	7.90	107.82	101.50
26	BB	972	A	C8-N9-C4	-7.90	102.64	105.80
26	BB	1341	G	C3'-C2'-C1'	-7.90	95.18	101.50
26	BB	2296	U	C6-N1-C2	-7.90	116.26	121.00
1	AA	228	A	C2-N3-C4	7.89	114.55	110.60
1	AA	569	C	C5-C6-N1	-7.89	117.05	121.00
1	AA	792	A	N1-C2-N3	-7.89	125.35	129.30
26	BB	2426	A	C3'-C2'-C1'	-7.89	95.18	101.50
26	BB	2601	C	N3-C4-N4	7.89	123.53	118.00
26	BB	2644	G	C1'-O4'-C4'	-7.89	103.58	109.90
1	AA	203	G	C5-N7-C8	-7.89	100.35	104.30
1	AA	1072	G	N3-C4-C5	-7.89	124.65	128.60
1	AA	1106	G	C6-C5-N7	7.89	135.13	130.40
26	BB	117	G	C4-C5-N7	7.89	113.96	110.80
26	BB	2017	U	O4'-C1'-N1	7.89	114.51	108.20
26	BB	2098	U	O4'-C1'-N1	7.89	114.51	108.20
26	BB	2635	A	N1-C6-N6	-7.89	113.86	118.60
36	BL	95	ARG	NE-CZ-NH2	-7.89	116.35	120.30
49	BY	68	PHE	CB-CG-CD2	-7.89	115.28	120.80
26	BB	30	G	C5'-C4'-O4'	7.89	118.57	109.10
26	BB	1447	C	N3-C2-O2	-7.89	116.38	121.90
28	BD	203	VAL	CA-CB-CG1	7.89	122.74	110.90
1	AA	611	C	N3-C4-C5	7.89	125.06	121.90
26	BB	363	G	C8-N9-C4	-7.89	103.24	106.40
26	BB	555	G	C3'-C2'-C1'	7.89	107.81	101.50
26	BB	949	G	C4-C5-C6	7.89	123.53	118.80
26	BB	1033	U	O4'-C1'-C2'	-7.89	97.91	105.80
26	BB	1155	A	O4'-C1'-N9	-7.89	101.89	108.20
26	BB	1634	A	O4'-C1'-N9	-7.89	101.89	108.20
26	BB	1747	U	O4'-C1'-N1	7.89	114.51	108.20
26	BB	2278	A	C2-N3-C4	7.89	114.54	110.60
26	BB	2359	C	N3-C4-C5	7.89	125.06	121.90
1	AA	1198	G	C8-N9-C4	-7.89	103.25	106.40
25	BA	105	G	N1-C2-N3	-7.89	119.17	123.90
26	BB	1128	G	C3'-C2'-C1'	-7.89	95.19	101.50
26	BB	2216	G	C6-N1-C2	-7.89	120.37	125.10
26	BB	2724	U	N1-C2-N3	7.89	119.63	114.90
1	AA	412	A	O4'-C1'-N9	7.89	114.51	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1047	G	C5-N7-C8	-7.89	100.36	104.30
1	AA	1187	G	C6-N1-C2	-7.89	120.37	125.10
26	BB	662	G	C2-N3-C4	7.89	115.84	111.90
26	BB	761	A	N3-C4-C5	-7.89	121.28	126.80
26	BB	912	C	C2-N3-C4	7.89	123.84	119.90
26	BB	964	C	C1'-O4'-C4'	-7.89	103.59	109.90
26	BB	2054	A	N3-C4-C5	7.89	132.32	126.80
26	BB	2081	U	C4'-C3'-C2'	-7.89	94.71	102.60
1	AA	75	G	C5-C6-N1	-7.88	107.56	111.50
26	BB	1285	A	C5-C6-N1	7.88	121.64	117.70
26	BB	1410	G	O4'-C4'-C3'	7.88	112.41	106.10
26	BB	1473	G	C8-N9-C4	-7.88	103.25	106.40
26	BB	2288	A	C8-N9-C4	-7.88	102.65	105.80
26	BB	2596	U	N1-C2-N3	7.88	119.63	114.90
26	BB	538	A	N1-C6-N6	-7.88	113.87	118.60
26	BB	560	C	C4'-C3'-C2'	-7.88	94.72	102.60
26	BB	878	A	C4'-C3'-C2'	-7.88	94.72	102.60
26	BB	980	A	N1-C2-N3	7.88	133.24	129.30
1	AA	172	A	N7-C8-N9	-7.88	109.86	113.80
1	AA	476	U	N3-C4-C5	-7.88	109.87	114.60
1	AA	681	A	C4-C5-N7	7.88	114.64	110.70
1	AA	865	A	C1'-O4'-C4'	-7.88	103.59	109.90
1	AA	547	A	C3'-C2'-C1'	7.88	107.80	101.50
1	AA	589	U	C4'-C3'-C2'	-7.88	94.72	102.60
1	AA	151	A	O4'-C1'-N9	7.88	114.50	108.20
1	AA	464	U	C5'-C4'-O4'	7.88	118.56	109.10
1	AA	539	A	N1-C6-N6	-7.88	113.87	118.60
1	AA	906	A	C4-C5-N7	7.88	114.64	110.70
1	AA	1012	A	C5-C6-N1	7.88	121.64	117.70
22	AV	40	PHE	CB-CG-CD1	7.88	126.31	120.80
26	BB	1436	G	C2-N3-C4	7.88	115.84	111.90
26	BB	1493	C	C2-N3-C4	7.88	123.84	119.90
26	BB	2403	C	N1-C2-O2	7.88	123.63	118.90
1	AA	317	U	P-O3'-C3'	7.88	129.15	119.70
26	BB	1428	C	O3'-P-O5'	-7.88	89.03	104.00
1	AA	1281	C	N1-C2-O2	7.87	123.62	118.90
1	AA	1283	U	C3'-C2'-C1'	7.87	107.80	101.50
1	AA	1357	A	C8-N9-C4	-7.87	102.65	105.80
25	BA	9	G	N7-C8-N9	7.87	117.04	113.10
25	BA	91	C	O4'-C1'-N1	7.87	114.50	108.20
26	BB	1416	G	P-O3'-C3'	7.87	129.15	119.70
26	BB	1843	C	C4-C5-C6	7.87	121.34	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2708	G	O4'-C1'-N9	7.87	114.50	108.20
1	AA	536	C	C4-C5-C6	-7.87	113.46	117.40
16	AP	69	ARG	NE-CZ-NH1	7.87	124.23	120.30
26	BB	2158	A	N3-C4-C5	7.87	132.31	126.80
26	BB	2869	G	C5-C6-O6	-7.87	123.88	128.60
1	AA	475	C	C3'-C2'-C1'	7.87	107.80	101.50
25	BA	71	C	C1'-O4'-C4'	7.87	116.20	109.90
26	BB	520	G	N1-C2-N3	7.87	128.62	123.90
26	BB	743	A	C6-N1-C2	-7.87	113.88	118.60
1	AA	987	G	N3-C4-N9	-7.87	121.28	126.00
1	AA	1026	G	C5-C6-N1	-7.87	107.57	111.50
1	AA	1375	A	N1-C2-N3	7.87	133.24	129.30
26	BB	122	G	N1-C6-O6	7.87	124.62	119.90
26	BB	781	A	N1-C6-N6	-7.87	113.88	118.60
26	BB	1666	G	C4-C5-C6	-7.87	114.08	118.80
26	BB	1905	C	C2-N3-C4	-7.87	115.97	119.90
26	BB	2877	G	C4'-C3'-C2'	-7.87	94.73	102.60
1	AA	1111	A	N1-C6-N6	-7.87	113.88	118.60
4	AD	11	A	N1-C2-N3	-7.87	125.37	129.30
26	BB	781	A	O4'-C1'-N9	7.87	114.49	108.20
26	BB	2584	U	N1-C1'-C2'	-7.87	103.35	112.00
1	AA	227	G	C5-C6-O6	-7.87	123.88	128.60
1	AA	382	A	C2-N3-C4	7.87	114.53	110.60
1	AA	622	A	N7-C8-N9	7.87	117.73	113.80
26	BB	971	G	N3-C4-C5	-7.87	124.67	128.60
1	AA	480	U	N1-C2-N3	7.86	119.62	114.90
26	BB	736	C	C6-N1-C2	-7.86	117.16	120.30
26	BB	1028	A	C5-N7-C8	-7.86	99.97	103.90
26	BB	1838	C	C6-N1-C2	-7.86	117.15	120.30
26	BB	1987	A	C4-C5-C6	7.86	120.93	117.00
26	BB	2705	A	C8-N9-C4	-7.86	102.66	105.80
1	AA	1346	A	O4'-C1'-N9	7.86	114.49	108.20
26	BB	1245	G	C8-N9-C4	7.86	109.55	106.40
26	BB	2502	G	C6-N1-C2	-7.86	120.38	125.10
26	BB	698	C	N3-C2-O2	-7.86	116.40	121.90
26	BB	1644	C	O4'-C1'-N1	7.86	114.49	108.20
26	BB	2770	G	N1-C6-O6	-7.86	115.18	119.90
1	AA	695	A	C4-C5-N7	-7.86	106.77	110.70
26	BB	1154	G	C2-N3-C4	7.86	115.83	111.90
26	BB	2287	A	C4-C5-N7	-7.86	106.77	110.70
26	BB	2305	U	O4'-C1'-N1	7.86	114.49	108.20
1	AA	4	U	C5-C6-N1	-7.86	118.77	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	158	G	C8-N9-C4	-7.86	103.26	106.40
1	AA	229	U	C5-C4-O4	-7.86	121.19	125.90
1	AA	876	C	N3-C2-O2	-7.86	116.40	121.90
1	AA	1390	U	C2-N3-C4	-7.86	122.29	127.00
1	AA	1506	U	N3-C4-O4	7.86	124.90	119.40
25	BA	3	C	C5-C4-N4	-7.86	114.70	120.20
26	BB	212	G	O4'-C1'-N9	7.86	114.49	108.20
26	BB	915	C	C3'-C2'-C1'	7.86	107.79	101.50
26	BB	1171	G	N3-C4-N9	-7.86	121.28	126.00
26	BB	2325	G	C8-N9-C4	-7.86	103.26	106.40
1	AA	140	U	O4'-C1'-N1	7.86	114.48	108.20
1	AA	1015	G	C5-C6-N1	7.86	115.43	111.50
1	AA	1357	A	N9-C4-C5	7.86	108.94	105.80
26	BB	93	G	C6-C5-N7	-7.86	125.69	130.40
26	BB	429	A	N7-C8-N9	7.86	117.73	113.80
26	BB	2395	C	N3-C4-N4	7.86	123.50	118.00
1	AA	104	G	C4-C5-C6	-7.85	114.09	118.80
1	AA	573	A	N9-C4-C5	-7.85	102.66	105.80
1	AA	637	C	N1-C2-O2	7.85	123.61	118.90
1	AA	1161	C	C3'-C2'-C1'	7.85	107.78	101.50
26	BB	470	A	O4'-C1'-N9	7.85	114.48	108.20
26	BB	2232	C	N3-C4-N4	7.85	123.50	118.00
26	BB	2894	G	N3-C2-N2	-7.85	114.40	119.90
45	BU	95	ARG	NE-CZ-NH2	-7.85	116.37	120.30
1	AA	791	G	C5-N7-C8	7.85	108.23	104.30
1	AA	1352	C	C5-C6-N1	-7.85	117.07	121.00
26	BB	2048	G	C5-C6-N1	7.85	115.43	111.50
26	BB	2860	A	C6-N1-C2	-7.85	113.89	118.60
1	AA	863	U	N1-C2-N3	7.85	119.61	114.90
1	AA	1057	G	N3-C4-C5	-7.85	124.67	128.60
25	BA	14	U	C4-C5-C6	7.85	124.41	119.70
26	BB	1739	A	C2-N3-C4	7.85	114.53	110.60
26	BB	1833	C	C3'-C2'-C1'	-7.85	95.22	101.50
26	BB	1901	A	C8-N9-C4	-7.85	102.66	105.80
26	BB	2901	C	C4'-C3'-C2'	-7.85	94.75	102.60
1	AA	1221	G	C5-C6-N1	7.85	115.42	111.50
26	BB	858	G	C4-C5-C6	7.85	123.51	118.80
1	AA	254	G	N1-C2-N2	-7.85	109.14	116.20
1	AA	650	G	N3-C4-N9	7.85	130.71	126.00
1	AA	662	U	N1-C1'-C2'	-7.85	103.37	112.00
1	AA	1313	U	C5'-C4'-O4'	7.85	118.52	109.10
2	AB	41	C	N1-C2-N3	-7.85	113.71	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	846	U	O4'-C1'-N1	7.85	114.48	108.20
26	BB	2190	G	O4'-C1'-N9	7.85	114.48	108.20
26	BB	2240	U	N1-C2-N3	7.85	119.61	114.90
1	AA	808	C	N3-C4-C5	-7.85	118.76	121.90
1	AA	1464	U	C5-C4-O4	-7.84	121.19	125.90
25	BA	24	G	N3-C2-N2	7.84	125.39	119.90
26	BB	750	A	N1-C6-N6	7.84	123.31	118.60
1	AA	108	G	C5-N7-C8	-7.84	100.38	104.30
1	AA	827	U	C2-N3-C4	-7.84	122.30	127.00
26	BB	85	G	C2-N3-C4	7.84	115.82	111.90
26	BB	919	U	O4'-C1'-N1	7.84	114.47	108.20
26	BB	1758	U	N3-C4-C5	-7.84	109.90	114.60
26	BB	2062	A	O4'-C1'-N9	7.84	114.47	108.20
26	BB	2316	G	N1-C2-N2	-7.84	109.14	116.20
26	BB	2718	G	O4'-C1'-N9	7.84	114.47	108.20
26	BB	2786	U	C4'-C3'-C2'	-7.84	94.76	102.60
1	AA	297	G	N7-C8-N9	7.84	117.02	113.10
1	AA	735	C	N1-C1'-C2'	-7.84	103.38	112.00
4	AD	75	C	O4'-C1'-N1	-7.84	101.93	108.20
26	BB	1041	G	C5-N7-C8	-7.84	100.38	104.30
26	BB	1338	G	C5'-C4'-O4'	7.84	118.51	109.10
26	BB	2112	G	C5-N7-C8	-7.84	100.38	104.30
27	BC	122	ARG	NE-CZ-NH2	-7.84	116.38	120.30
1	AA	584	G	N3-C2-N2	-7.84	114.41	119.90
4	AD	57	C	O4'-C1'-N1	7.84	114.47	108.20
26	BB	1075	C	N3-C4-C5	-7.84	118.77	121.90
1	AA	154	U	N3-C4-C5	7.83	119.30	114.60
1	AA	603	U	N3-C4-C5	-7.83	109.90	114.60
26	BB	414	C	N1-C2-O2	7.83	123.60	118.90
26	BB	530	G	N3-C4-C5	-7.83	124.68	128.60
1	AA	41	G	O4'-C1'-N9	7.83	114.47	108.20
1	AA	819	A	C5-N7-C8	-7.83	99.98	103.90
1	AA	1159	U	C3'-C2'-C1'	7.83	107.77	101.50
1	AA	1259	C	O4'-C1'-N1	7.83	114.47	108.20
14	AN	90	PRO	N-CA-CB	7.83	112.70	103.30
26	BB	705	A	O4'-C1'-N9	7.83	114.47	108.20
26	BB	1227	G	C5'-C4'-O4'	7.83	118.50	109.10
26	BB	1230	A	C4-C5-N7	7.83	114.62	110.70
26	BB	2024	G	C4-C5-N7	-7.83	107.67	110.80
39	BO	81	ARG	NE-CZ-NH2	-7.83	116.38	120.30
1	AA	298	A	N1-C6-N6	-7.83	113.90	118.60
1	AA	1193	G	C6-N1-C2	-7.83	120.40	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1459	G	C8-N9-C4	-7.83	103.27	106.40
4	AD	12	G	N9-C1'-C2'	-7.83	103.39	112.00
25	BA	39	A	O4'-C4'-C3'	7.83	112.36	106.10
25	BA	60	C	N3-C4-N4	-7.83	112.52	118.00
26	BB	167	A	C8-N9-C4	-7.83	102.67	105.80
26	BB	2261	C	C5-C4-N4	-7.83	114.72	120.20
35	BK	133	ARG	CD-NE-CZ	7.83	134.56	123.60
1	AA	553	A	C4-C5-N7	-7.83	106.78	110.70
1	AA	839	C	C3'-C2'-C1'	-7.83	95.24	101.50
5	AE	207	ARG	NE-CZ-NH1	-7.83	116.39	120.30
1	AA	101	A	C5-C6-N6	7.83	129.96	123.70
25	BA	36	C	N3-C2-O2	-7.83	116.42	121.90
25	BA	50	A	C8-N9-C4	7.83	108.93	105.80
26	BB	7	G	N9-C4-C5	7.83	108.53	105.40
26	BB	711	G	N1-C6-O6	-7.83	115.20	119.90
26	BB	1684	G	C6-N1-C2	-7.83	120.40	125.10
26	BB	1775	U	C1'-O4'-C4'	-7.83	103.64	109.90
26	BB	1995	U	C5-C4-O4	-7.83	121.20	125.90
1	AA	88	U	C3'-C2'-C1'	7.83	107.76	101.50
26	BB	66	C	N3-C4-C5	-7.83	118.77	121.90
26	BB	332	A	C5'-C4'-O4'	7.83	118.49	109.10
26	BB	1428	C	C6-N1-C2	7.83	123.43	120.30
26	BB	1793	C	O4'-C1'-N1	7.83	114.46	108.20
1	AA	802	A	C2-N3-C4	7.83	114.51	110.60
1	AA	1146	A	C3'-C2'-C1'	-7.83	95.24	101.50
1	AA	1237	C	C4-C5-C6	-7.83	113.49	117.40
26	BB	50	U	O4'-C1'-N1	7.83	114.46	108.20
26	BB	82	U	O4'-C1'-N1	7.83	114.46	108.20
26	BB	1934	C	C2-N3-C4	7.83	123.81	119.90
1	AA	733	G	C4-C5-N7	-7.82	107.67	110.80
1	AA	1121	U	C2-N3-C4	-7.82	122.31	127.00
26	BB	273	G	C5-C6-O6	-7.82	123.91	128.60
26	BB	428	A	O4'-C4'-C3'	7.82	112.36	106.10
26	BB	1641	A	N9-C4-C5	7.82	108.93	105.80
1	AA	685	G	C4'-C3'-C2'	-7.82	94.78	102.60
1	AA	1260	G	C5-N7-C8	-7.82	100.39	104.30
1	AA	1461	G	C4-C5-N7	-7.82	107.67	110.80
26	BB	1014	A	C4-C5-N7	-7.82	106.79	110.70
26	BB	1435	G	N3-C4-N9	7.82	130.69	126.00
26	BB	1645	G	C3'-C2'-C1'	7.82	107.76	101.50
26	BB	1898	U	N3-C2-O2	-7.82	116.72	122.20
26	BB	2538	C	C6-N1-C2	7.82	123.43	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	148	G	O4'-C1'-N9	7.82	114.46	108.20
1	AA	308	C	O4'-C1'-N1	7.82	114.46	108.20
1	AA	492	C	N3-C2-O2	-7.82	116.42	121.90
4	AD	22	A	C3'-C2'-C1'	7.82	107.76	101.50
26	BB	242	G	C5-C6-N1	7.82	115.41	111.50
26	BB	840	C	N1-C2-O2	7.82	123.59	118.90
26	BB	923	G	C4-C5-N7	-7.82	107.67	110.80
26	BB	1249	U	C1'-O4'-C4'	-7.82	103.64	109.90
26	BB	1567	G	O4'-C4'-C3'	7.82	112.36	106.10
26	BB	1928	A	C8-N9-C4	-7.82	102.67	105.80
26	BB	2169	A	O4'-C1'-N9	7.82	114.46	108.20
26	BB	2265	U	N3-C4-C5	-7.82	109.91	114.60
26	BB	2803	G	C4-C5-N7	-7.82	107.67	110.80
26	BB	2896	C	C5'-C4'-O4'	7.82	118.48	109.10
26	BB	262	A	C6-N1-C2	-7.82	113.91	118.60
26	BB	883	G	C6-N1-C2	-7.82	120.41	125.10
26	BB	2049	G	N9-C4-C5	-7.82	102.27	105.40
26	BB	1451	C	C5-C6-N1	7.82	124.91	121.00
26	BB	1642	G	N7-C8-N9	-7.82	109.19	113.10
26	BB	2113	U	O4'-C1'-N1	7.82	114.45	108.20
26	BB	2892	G	O4'-C1'-N9	7.82	114.45	108.20
1	AA	167	A	N1-C6-N6	7.82	123.29	118.60
1	AA	180	U	O4'-C4'-C3'	7.82	112.35	106.10
1	AA	416	G	C6-C5-N7	-7.82	125.71	130.40
1	AA	578	C	P-O3'-C3'	7.82	129.08	119.70
26	BB	176	A	C5-C6-N6	-7.82	117.45	123.70
26	BB	306	U	N3-C2-O2	-7.82	116.73	122.20
26	BB	469	G	C5'-C4'-O4'	7.82	118.48	109.10
26	BB	851	C	C6-N1-C2	-7.82	117.17	120.30
26	BB	2293	G	N3-C4-C5	-7.82	124.69	128.60
26	BB	2867	G	O4'-C1'-N9	7.82	114.45	108.20
1	AA	242	G	C5-C6-N1	7.81	115.41	111.50
1	AA	506	G	C5-N7-C8	-7.81	100.39	104.30
4	AD	54	G	N1-C2-N2	7.81	123.23	116.20
26	BB	803	U	O4'-C1'-N1	7.81	114.45	108.20
26	BB	1080	A	C3'-C2'-C1'	7.81	107.75	101.50
26	BB	2259	U	C5-C6-N1	7.81	126.61	122.70
26	BB	2421	G	C5-C6-O6	-7.81	123.91	128.60
26	BB	2727	A	C4-C5-N7	7.81	114.61	110.70
1	AA	351	G	N7-C8-N9	7.81	117.01	113.10
26	BB	494	G	C5-N7-C8	7.81	108.20	104.30
1	AA	1	A	N1-C6-N6	-7.81	113.91	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	243	A	C6-N1-C2	7.81	123.29	118.60
1	AA	359	G	C5-N7-C8	-7.81	100.40	104.30
1	AA	430	A	N9-C4-C5	-7.81	102.68	105.80
1	AA	1185	G	C5-C6-O6	7.81	133.29	128.60
3	AC	46	C	C5-C4-N4	7.81	125.67	120.20
25	BA	95	U	N3-C4-C5	-7.81	109.91	114.60
26	BB	420	C	O4'-C1'-N1	7.81	114.45	108.20
26	BB	856	G	N1-C6-O6	7.81	124.59	119.90
26	BB	2663	G	N1-C6-O6	-7.81	115.21	119.90
26	BB	2666	C	N3-C4-C5	-7.81	118.78	121.90
26	BB	2667	C	O4'-C1'-N1	7.81	114.45	108.20
42	BR	97	TYR	CB-CG-CD2	-7.81	116.31	121.00
1	AA	366	A	C2-N3-C4	7.81	114.50	110.60
1	AA	776	G	N1-C6-O6	7.81	124.58	119.90
1	AA	778	G	N9-C4-C5	7.81	108.52	105.40
1	AA	868	C	O4'-C1'-N1	7.81	114.45	108.20
1	AA	1263	C	C6-N1-C2	-7.81	117.18	120.30
1	AA	1492	A	C5-C6-N6	-7.81	117.45	123.70
2	AB	2	G	N9-C4-C5	-7.81	102.28	105.40
4	AD	65	G	C4-C5-N7	-7.81	107.68	110.80
26	BB	379	G	N1-C2-N3	-7.81	119.22	123.90
26	BB	1552	A	C4-C5-C6	7.81	120.90	117.00
26	BB	1619	G	N3-C2-N2	-7.81	114.43	119.90
26	BB	2153	C	N3-C4-N4	7.81	123.47	118.00
26	BB	2581	G	N3-C4-C5	-7.81	124.70	128.60
1	AA	656	G	C4'-C3'-C2'	-7.81	94.79	102.60
1	AA	748	G	N9-C4-C5	-7.81	102.28	105.40
1	AA	1534	A	N3-C4-N9	7.81	133.65	127.40
2	AB	61	C	C5-C4-N4	-7.81	114.74	120.20
25	BA	61	G	O4'-C1'-N9	7.81	114.44	108.20
26	BB	309	A	O4'-C4'-C3'	7.81	112.34	106.10
26	BB	323	C	N1-C2-O2	7.81	123.58	118.90
26	BB	584	C	N1-C2-O2	7.81	123.58	118.90
26	BB	1790	C	O4'-C1'-N1	7.81	114.44	108.20
1	AA	87	C	N3-C2-O2	-7.80	116.44	121.90
1	AA	161	A	O4'-C1'-N9	7.80	114.44	108.20
1	AA	342	C	C6-N1-C2	-7.80	117.18	120.30
1	AA	505	G	N1-C2-N3	-7.80	119.22	123.90
26	BB	2674	G	N1-C2-N2	7.80	123.22	116.20
26	BB	1062	G	C5-C6-N1	7.80	115.40	111.50
26	BB	1276	A	N9-C4-C5	7.80	108.92	105.80
1	AA	435	A	N1-C6-N6	7.80	123.28	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	505	G	C8-N9-C4	-7.80	103.28	106.40
1	AA	1071	C	N1-C2-N3	7.80	124.66	119.20
2	AB	66	C	C5-C4-N4	-7.80	114.74	120.20
17	AQ	58	ARG	NE-CZ-NH1	7.80	124.20	120.30
26	BB	1858	A	C5-C6-N6	-7.80	117.46	123.70
26	BB	1933	G	C5-C6-N1	7.80	115.40	111.50
26	BB	2648	G	O4'-C1'-N9	7.80	114.44	108.20
1	AA	21	G	N3-C4-C5	-7.80	124.70	128.60
15	AO	55	ARG	NH1-CZ-NH2	7.80	127.98	119.40
26	BB	307	G	C6-N1-C2	-7.80	120.42	125.10
26	BB	340	A	C2-N3-C4	7.80	114.50	110.60
26	BB	898	C	O4'-C1'-N1	7.80	114.44	108.20
26	BB	1934	C	N1-C2-O2	7.80	123.58	118.90
4	AD	61	U	N1-C2-N3	7.80	119.58	114.90
26	BB	221	A	C5-C6-N1	7.80	121.60	117.70
26	BB	1223	G	N9-C4-C5	7.80	108.52	105.40
1	AA	1367	C	N3-C4-C5	-7.80	118.78	121.90
1	AA	1373	G	N9-C4-C5	7.80	108.52	105.40
25	BA	76	G	N3-C2-N2	7.80	125.36	119.90
26	BB	1016	G	C5-N7-C8	-7.80	100.40	104.30
26	BB	1049	C	N3-C4-C5	-7.80	118.78	121.90
26	BB	2345	G	C5-C6-N1	7.80	115.40	111.50
26	BB	2660	A	N1-C2-N3	-7.80	125.40	129.30
1	AA	748	G	C6-N1-C2	-7.79	120.42	125.10
1	AA	1272	G	N3-C2-N2	-7.79	114.44	119.90
26	BB	69	C	C6-N1-C2	-7.79	117.18	120.30
4	AD	23	G	C1'-O4'-C4'	-7.79	103.67	109.90
23	AW	59	ARG	NE-CZ-NH1	7.79	124.20	120.30
26	BB	759	G	C8-N9-C4	-7.79	103.28	106.40
26	BB	1678	A	N1-C6-N6	-7.79	113.92	118.60
26	BB	2424	C	C6-N1-C2	-7.79	117.18	120.30
32	BH	49	LEU	CB-CG-CD1	7.79	124.25	111.00
1	AA	178	C	C3'-C2'-C1'	7.79	107.73	101.50
1	AA	230	G	C5-N7-C8	-7.79	100.41	104.30
1	AA	927	G	N1-C6-O6	-7.79	115.22	119.90
1	AA	1012	A	C5-C6-N6	-7.79	117.47	123.70
1	AA	1023	U	O4'-C1'-N1	7.79	114.43	108.20
1	AA	1460	C	O4'-C1'-N1	7.79	114.43	108.20
26	BB	951	C	C6-N1-C2	-7.79	117.18	120.30
26	BB	1826	G	N9-C4-C5	-7.79	102.28	105.40
26	BB	2243	U	N3-C4-O4	7.79	124.85	119.40
26	BB	2348	U	O4'-C1'-N1	7.79	114.43	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2688	G	C8-N9-C4	-7.79	103.28	106.40
1	AA	766	A	C4'-C3'-C2'	-7.79	94.81	102.60
1	AA	960	U	N3-C2-O2	-7.79	116.75	122.20
4	AD	36	A	O4'-C1'-N9	7.79	114.43	108.20
26	BB	458	G	C2-N3-C4	7.79	115.80	111.90
26	BB	1308	A	N9-C4-C5	7.79	108.92	105.80
1	AA	931	C	C4-C5-C6	7.79	121.29	117.40
26	BB	534	U	O4'-C1'-N1	7.79	114.43	108.20
26	BB	677	A	C5-C6-N6	-7.79	117.47	123.70
26	BB	902	C	O4'-C1'-N1	7.79	114.43	108.20
26	BB	1291	C	C2-N3-C4	7.79	123.79	119.90
26	BB	1736	U	C5-C6-N1	-7.79	118.81	122.70
26	BB	1933	G	C6-N1-C2	-7.79	120.43	125.10
26	BB	2120	G	N3-C4-N9	7.79	130.67	126.00
26	BB	2495	G	N7-C8-N9	7.79	116.99	113.10
1	AA	799	G	C8-N9-C4	-7.79	103.28	106.40
1	AA	1255	G	C6-C5-N7	-7.79	125.73	130.40
1	AA	1517	G	N1-C2-N2	7.79	123.21	116.20
2	AB	73	G	N9-C4-C5	7.79	108.52	105.40
26	BB	781	A	N9-C4-C5	7.79	108.92	105.80
26	BB	2362	C	N1-C2-O2	7.79	123.57	118.90
1	AA	183	C	C6-N1-C2	-7.79	117.19	120.30
1	AA	245	U	C5-C6-N1	7.79	126.59	122.70
1	AA	1132	C	O4'-C1'-N1	7.79	114.43	108.20
25	BA	105	G	C2-N3-C4	7.79	115.79	111.90
1	AA	221	C	N3-C4-C5	-7.78	118.79	121.90
26	BB	495	G	N9-C4-C5	7.78	108.51	105.40
26	BB	496	G	N3-C2-N2	7.78	125.35	119.90
26	BB	520	G	C5'-C4'-O4'	7.78	118.44	109.10
4	AD	11	A	C8-N9-C4	-7.78	102.69	105.80
13	AM	89	ARG	NE-CZ-NH1	7.78	124.19	120.30
26	BB	688	U	C2-N3-C4	-7.78	122.33	127.00
26	BB	2407	A	N1-C2-N3	-7.78	125.41	129.30
26	BB	2900	A	C1'-O4'-C4'	-7.78	103.67	109.90
1	AA	619	U	C3'-C2'-C1'	-7.78	95.28	101.50
1	AA	1235	U	N1-C2-N3	7.78	119.57	114.90
1	AA	1263	C	C3'-C2'-C1'	7.78	107.72	101.50
14	AN	34	THR	CA-CB-CG2	7.78	123.29	112.40
26	BB	80	G	C5-C6-O6	-7.78	123.93	128.60
26	BB	998	C	C5-C6-N1	7.78	124.89	121.00
26	BB	1728	C	C6-N1-C1'	-7.78	111.46	120.80
26	BB	2349	G	N1-C2-N2	-7.78	109.20	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	134	G	N3-C4-C5	-7.78	124.71	128.60
26	BB	751	A	C8-N9-C4	-7.78	102.69	105.80
26	BB	1579	A	N9-C4-C5	7.78	108.91	105.80
26	BB	1952	A	N9-C4-C5	-7.78	102.69	105.80
26	BB	767	U	O4'-C1'-N1	7.78	114.42	108.20
26	BB	924	G	C4-C5-N7	-7.78	107.69	110.80
26	BB	1516	G	C2-N3-C4	7.78	115.79	111.90
26	BB	1844	C	C1'-O4'-C4'	7.78	116.12	109.90
26	BB	2130	U	C4-C5-C6	7.78	124.37	119.70
26	BB	2450	A	N9-C4-C5	-7.78	102.69	105.80
26	BB	2558	C	N3-C4-C5	7.78	125.01	121.90
45	BU	18	ARG	NE-CZ-NH1	7.78	124.19	120.30
1	AA	1020	G	N1-C2-N3	-7.78	119.23	123.90
1	AA	1046	A	C8-N9-C4	-7.78	102.69	105.80
1	AA	1322	C	C5-C6-N1	7.78	124.89	121.00
25	BA	106	G	C5'-C4'-O4'	7.78	118.43	109.10
26	BB	1993	U	N3-C2-O2	-7.78	116.76	122.20
18	AR	73	ASP	CB-CG-OD1	-7.77	111.30	118.30
25	BA	16	G	N3-C4-C5	-7.77	124.71	128.60
26	BB	167	A	C5-N7-C8	-7.77	100.01	103.90
26	BB	428	A	O4'-C1'-N9	7.77	114.42	108.20
1	AA	47	C	C3'-C2'-C1'	7.77	107.72	101.50
1	AA	407	U	N1-C2-N3	7.77	119.56	114.90
1	AA	468	A	C4-C5-N7	-7.77	106.81	110.70
1	AA	771	G	O4'-C1'-N9	7.77	114.42	108.20
26	BB	2353	G	N3-C4-N9	-7.77	121.34	126.00
26	BB	2411	A	C8-N9-C4	7.77	108.91	105.80
26	BB	2499	C	N1-C2-O2	7.77	123.56	118.90
1	AA	1417	G	C4-C5-C6	7.77	123.46	118.80
26	BB	183	C	C3'-C2'-C1'	-7.77	95.28	101.50
26	BB	443	A	C6-N1-C2	7.77	123.26	118.60
26	BB	843	G	N1-C2-N2	7.77	123.19	116.20
26	BB	2756	U	N3-C2-O2	-7.77	116.76	122.20
1	AA	606	G	C8-N9-C4	-7.77	103.29	106.40
26	BB	85	G	N9-C1'-C2'	-7.77	103.45	112.00
26	BB	1187	G	C4'-C3'-C2'	-7.77	94.83	102.60
26	BB	1547	C	C5-C6-N1	7.77	124.89	121.00
26	BB	1602	U	O4'-C4'-C3'	7.77	112.31	106.10
26	BB	1685	C	C2-N3-C4	7.77	123.78	119.90
26	BB	1770	G	C5-N7-C8	-7.77	100.42	104.30
26	BB	2070	A	N7-C8-N9	7.77	117.69	113.80
1	AA	80	A	C3'-C2'-C1'	7.77	107.71	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	623	C	N1-C2-O2	7.77	123.56	118.90
1	AA	1302	C	N3-C2-O2	-7.77	116.46	121.90
9	AI	92	THR	CA-CB-CG2	7.77	123.28	112.40
26	BB	240	C	C1'-O4'-C4'	7.77	116.11	109.90
26	BB	324	A	C3'-C2'-C1'	-7.77	95.29	101.50
26	BB	699	A	C4-C5-N7	7.77	114.58	110.70
26	BB	856	G	N9-C4-C5	7.77	108.51	105.40
1	AA	702	A	C5-C6-N6	-7.77	117.49	123.70
26	BB	91	A	C3'-C2'-C1'	7.77	107.71	101.50
26	BB	866	A	C5-N7-C8	-7.77	100.02	103.90
26	BB	2126	A	C2'-C3'-O3'	7.77	126.59	109.50
12	AL	11	ARG	NE-CZ-NH2	-7.76	116.42	120.30
26	BB	751	A	N9-C4-C5	-7.76	102.69	105.80
26	BB	1675	C	N1-C2-N3	-7.76	113.77	119.20
26	BB	2091	C	C6-N1-C2	7.76	123.41	120.30
26	BB	2250	G	C8-N9-C4	-7.76	103.29	106.40
26	BB	2341	G	C5-C6-N1	7.76	115.38	111.50
26	BB	2682	A	N9-C4-C5	7.76	108.91	105.80
18	AR	79	ARG	NE-CZ-NH2	7.76	124.18	120.30
26	BB	1355	G	C5-C6-O6	-7.76	123.94	128.60
26	BB	1710	G	O4'-C1'-C2'	7.76	114.59	107.60
1	AA	279	A	C5-N7-C8	7.76	107.78	103.90
1	AA	1229	A	O4'-C1'-N9	7.76	114.41	108.20
26	BB	199	A	N9-C4-C5	-7.76	102.69	105.80
26	BB	666	A	N9-C4-C5	-7.76	102.70	105.80
26	BB	1059	G	C4-C5-N7	-7.76	107.69	110.80
26	BB	1560	G	N7-C8-N9	7.76	116.98	113.10
26	BB	2490	G	C4-C5-C6	7.76	123.46	118.80
26	BB	2771	C	C2-N3-C4	-7.76	116.02	119.90
1	AA	545	C	O4'-C1'-C2'	-7.76	98.04	105.80
1	AA	935	A	C3'-C2'-C1'	7.76	107.71	101.50
1	AA	1437	A	C6-N1-C2	7.76	123.25	118.60
1	AA	1450	U	N3-C4-C5	-7.76	109.94	114.60
1	AA	1480	A	N7-C8-N9	7.76	117.68	113.80
26	BB	712	G	N3-C4-C5	-7.76	124.72	128.60
26	BB	1360	G	N1-C2-N3	7.76	128.56	123.90
26	BB	1725	U	N3-C4-O4	7.76	124.83	119.40
1	AA	1458	G	N9-C4-C5	7.76	108.50	105.40
26	BB	1243	C	N1-C2-O2	7.76	123.56	118.90
1	AA	1223	C	O4'-C1'-N1	-7.76	102.00	108.20
26	BB	1138	G	N3-C2-N2	-7.76	114.47	119.90
26	BB	1770	G	N7-C8-N9	7.76	116.98	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2798	U	O4'-C1'-N1	7.76	114.41	108.20
1	AA	111	G	C4'-C3'-C2'	-7.75	94.84	102.60
26	BB	713	G	C5-C6-N1	7.75	115.38	111.50
1	AA	876	C	C2-N1-C1'	-7.75	110.27	118.80
1	AA	1029	U	N1-C2-N3	7.75	119.55	114.90
1	AA	1392	G	N9-C4-C5	7.75	108.50	105.40
1	AA	1507	A	P-O3'-C3'	7.75	129.00	119.70
25	BA	31	C	N3-C4-C5	-7.75	118.80	121.90
26	BB	1353	A	C5'-C4'-O4'	7.75	118.40	109.10
26	BB	1456	G	O4'-C1'-N9	7.75	114.40	108.20
26	BB	1632	A	C8-N9-C4	-7.75	102.70	105.80
4	AD	12	G	O4'-C1'-N9	7.75	114.40	108.20
26	BB	363	G	C4-C5-C6	7.75	123.45	118.80
26	BB	1556	C	C2-N3-C4	7.75	123.78	119.90
26	BB	1778	U	C5-C6-N1	-7.75	118.82	122.70
26	BB	2141	G	N1-C6-O6	7.75	124.55	119.90
26	BB	2186	G	C8-N9-C4	-7.75	103.30	106.40
26	BB	2628	C	C5'-C4'-O4'	7.75	118.40	109.10
1	AA	176	C	P-O5'-C5'	7.75	133.30	120.90
26	BB	1990	C	C2-N3-C4	-7.75	116.03	119.90
26	BB	2867	G	C5-C6-N1	7.75	115.38	111.50
26	BB	1122	G	N9-C4-C5	7.75	108.50	105.40
26	BB	1316	U	O4'-C1'-N1	7.75	114.40	108.20
26	BB	1536	C	N3-C4-N4	7.75	123.42	118.00
26	BB	1680	U	C6-N1-C2	-7.75	116.35	121.00
26	BB	2698	U	P-O3'-C3'	7.75	129.00	119.70
26	BB	224	U	O4'-C1'-N1	7.75	114.40	108.20
1	AA	855	U	C3'-C2'-C1'	7.75	107.70	101.50
1	AA	870	U	N3-C2-O2	-7.75	116.78	122.20
1	AA	902	G	N3-C2-N2	7.74	125.32	119.90
26	BB	80	G	N1-C2-N3	-7.74	119.25	123.90
26	BB	104	A	O4'-C1'-N9	7.74	114.39	108.20
26	BB	2423	U	N1-C2-O2	-7.74	117.38	122.80
26	BB	2635	A	C8-N9-C4	-7.74	102.70	105.80
1	AA	1046	A	N1-C2-N3	-7.74	125.43	129.30
3	AC	16	A	C5-C6-N1	7.74	121.57	117.70
26	BB	1961	C	C2-N3-C4	7.74	123.77	119.90
26	BB	2547	A	C5-C6-N1	7.74	121.57	117.70
1	AA	95	C	C5'-C4'-O4'	7.74	118.39	109.10
4	AD	60	A	O4'-C1'-N9	7.74	114.39	108.20
25	BA	105	G	C1'-O4'-C4'	-7.74	103.71	109.90
26	BB	389	G	C5-C6-O6	-7.74	123.95	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	518	G	C2-N3-C4	7.74	115.77	111.90
26	BB	785	G	N7-C8-N9	7.74	116.97	113.10
26	BB	1379	U	C2-N3-C4	-7.74	122.36	127.00
26	BB	2119	A	N9-C4-C5	7.74	108.90	105.80
1	AA	525	C	C5'-C4'-O4'	7.74	118.39	109.10
1	AA	535	A	C5-C6-N6	-7.74	117.51	123.70
26	BB	626	A	C5-C6-N6	-7.74	117.51	123.70
26	BB	1289	C	N1-C2-O2	7.74	123.54	118.90
26	BB	1648	U	C2-N3-C4	7.74	131.64	127.00
26	BB	2075	U	C5-C4-O4	-7.74	121.26	125.90
26	BB	2373	G	N9-C4-C5	7.74	108.50	105.40
26	BB	2562	U	N3-C4-O4	7.74	124.82	119.40
1	AA	748	G	C4-C5-N7	7.74	113.89	110.80
1	AA	940	C	N1-C2-O2	7.74	123.54	118.90
26	BB	916	G	N1-C6-O6	-7.74	115.26	119.90
26	BB	1852	U	C2-N3-C4	-7.74	122.36	127.00
26	BB	1718	G	C8-N9-C4	-7.74	103.31	106.40
26	BB	2758	A	C4'-C3'-C2'	-7.74	94.86	102.60
26	BB	2803	G	C5-C6-N1	7.74	115.37	111.50
1	AA	849	G	C4-C5-C6	7.73	123.44	118.80
1	AA	1524	C	O4'-C1'-N1	7.73	114.39	108.20
26	BB	2	G	C3'-C2'-C1'	7.73	107.69	101.50
26	BB	939	G	N1-C6-O6	7.73	124.54	119.90
26	BB	1130	U	C5-C6-N1	-7.73	118.83	122.70
26	BB	1753	G	N3-C4-C5	-7.73	124.73	128.60
26	BB	2015	A	C6-C5-N7	-7.73	126.89	132.30
26	BB	2308	G	C4-C5-C6	7.73	123.44	118.80
1	AA	1282	C	C3'-C2'-C1'	-7.73	95.31	101.50
26	BB	424	G	C6-N1-C2	-7.73	120.46	125.10
26	BB	1661	G	N3-C4-C5	-7.73	124.73	128.60
26	BB	2682	A	N1-C6-N6	7.73	123.24	118.60
26	BB	2823	A	C2-N3-C4	7.73	114.47	110.60
1	AA	506	G	C2-N3-C4	7.73	115.77	111.90
1	AA	914	A	C2-N3-C4	7.73	114.47	110.60
1	AA	1491	G	C5-C6-O6	-7.73	123.96	128.60
2	AB	14	A	N7-C8-N9	7.73	117.67	113.80
26	BB	919	U	N3-C4-O4	7.73	124.81	119.40
26	BB	1538	G	N3-C4-N9	7.73	130.64	126.00
26	BB	2718	G	C5'-C4'-O4'	7.73	118.38	109.10
1	AA	44	A	N3-C4-N9	7.73	133.58	127.40
26	BB	526	A	C6-N1-C2	-7.73	113.96	118.60
26	BB	2439	A	C4-C5-C6	-7.73	113.14	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	14	U	O4'-C1'-N1	7.73	114.38	108.20
25	BA	71	C	C2-N3-C4	-7.73	116.04	119.90
26	BB	1662	U	C5-C6-N1	-7.73	118.84	122.70
26	BB	2633	G	C8-N9-C4	-7.73	103.31	106.40
26	BB	2655	G	N3-C4-N9	7.73	130.64	126.00
50	BZ	71	ARG	NE-CZ-NH1	7.73	124.16	120.30
1	AA	27	G	N7-C8-N9	-7.73	109.24	113.10
1	AA	164	G	C5-N7-C8	7.73	108.16	104.30
1	AA	449	G	C5-N7-C8	-7.73	100.44	104.30
1	AA	1077	G	C4-C5-C6	7.73	123.44	118.80
26	BB	572	A	O4'-C1'-N9	7.73	114.38	108.20
26	BB	1289	C	N3-C2-O2	-7.73	116.49	121.90
26	BB	2362	C	N3-C4-N4	7.73	123.41	118.00
1	AA	210	C	C6-N1-C2	-7.72	117.21	120.30
1	AA	963	G	O4'-C1'-N9	7.72	114.38	108.20
1	AA	1052	U	C2-N3-C4	-7.72	122.36	127.00
1	AA	1441	A	C3'-C2'-C1'	7.72	107.68	101.50
25	BA	58	A	N7-C8-N9	7.72	117.66	113.80
26	BB	278	A	C4-C5-C6	-7.72	113.14	117.00
26	BB	1818	U	C2-N3-C4	-7.72	122.36	127.00
26	BB	1831	G	C5-C6-O6	-7.72	123.97	128.60
26	BB	1984	G	C3'-C2'-C1'	-7.72	95.32	101.50
1	AA	298	A	N1-C2-N3	-7.72	125.44	129.30
1	AA	790	A	N1-C2-N3	-7.72	125.44	129.30
1	AA	1158	C	C6-N1-C2	-7.72	117.21	120.30
1	AA	1524	C	C4-C5-C6	-7.72	113.54	117.40
2	AB	47	U	O4'-C1'-N1	7.72	114.38	108.20
26	BB	130	C	N1-C2-O2	7.72	123.53	118.90
26	BB	846	U	N3-C2-O2	-7.72	116.80	122.20
26	BB	2211	A	C6-N1-C2	7.72	123.23	118.60
26	BB	2512	C	C6-N1-C2	-7.72	117.21	120.30
26	BB	2547	A	C4-C5-C6	-7.72	113.14	117.00
26	BB	63	A	N7-C8-N9	7.72	117.66	113.80
26	BB	514	A	N9-C4-C5	-7.72	102.71	105.80
26	BB	2289	G	N7-C8-N9	7.72	116.96	113.10
1	AA	293	G	N3-C4-N9	-7.72	121.37	126.00
1	AA	332	G	N9-C4-C5	7.72	108.49	105.40
25	BA	12	C	C2-N3-C4	7.72	123.76	119.90
25	BA	41	G	C5-C6-O6	-7.72	123.97	128.60
26	BB	818	G	C5-N7-C8	-7.72	100.44	104.30
26	BB	1365	A	N1-C6-N6	-7.72	113.97	118.60
26	BB	2357	G	C5-C6-N1	7.72	115.36	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	829	G	N9-C4-C5	7.72	108.49	105.40
26	BB	808	G	C2-N3-C4	7.72	115.76	111.90
26	BB	1614	A	C8-N9-C4	-7.72	102.71	105.80
26	BB	245	G	N7-C8-N9	7.72	116.96	113.10
26	BB	1661	G	N1-C6-O6	7.72	124.53	119.90
1	AA	1300	G	C4-C5-C6	7.71	123.43	118.80
1	AA	1505	G	C2-N3-C4	7.71	115.76	111.90
26	BB	1421	G	N3-C4-N9	7.71	130.63	126.00
26	BB	2045	C	C5-C6-N1	7.71	124.86	121.00
26	BB	2300	C	C6-N1-C2	7.71	123.39	120.30
1	AA	407	U	C5-C4-O4	-7.71	121.27	125.90
1	AA	440	C	C5-C4-N4	-7.71	114.80	120.20
1	AA	613	C	N3-C4-C5	-7.71	118.81	121.90
1	AA	623	C	C1'-O4'-C4'	7.71	116.07	109.90
26	BB	381	G	N9-C4-C5	7.71	108.48	105.40
26	BB	461	C	N3-C4-C5	7.71	124.98	121.90
26	BB	597	G	C5-C6-O6	-7.71	123.97	128.60
26	BB	917	A	C6-C5-N7	7.71	137.70	132.30
26	BB	1107	G	O4'-C1'-C2'	-7.71	98.09	105.80
26	BB	1627	G	C6-N1-C2	-7.71	120.47	125.10
26	BB	1901	A	N1-C6-N6	-7.71	113.97	118.60
47	BW	12	VAL	CG1-CB-CG2	-7.71	98.56	110.90
1	AA	339	C	N1-C1'-C2'	-7.71	103.52	112.00
25	BA	100	G	C5-N7-C8	7.71	108.16	104.30
26	BB	277	G	C8-N9-C4	-7.71	103.31	106.40
26	BB	935	C	C6-N1-C2	-7.71	117.22	120.30
26	BB	1895	C	N3-C4-C5	-7.71	118.82	121.90
1	AA	459	A	N9-C1'-C2'	-7.71	103.52	112.00
1	AA	1540	U	C2-N3-C4	-7.71	122.37	127.00
26	BB	354	A	C5-C6-N1	7.71	121.55	117.70
26	BB	445	C	N1-C2-O2	-7.71	114.28	118.90
26	BB	651	G	N1-C2-N2	7.71	123.14	116.20
26	BB	1067	A	N7-C8-N9	7.71	117.65	113.80
26	BB	1510	G	N3-C4-N9	7.71	130.62	126.00
26	BB	1826	G	C4-C5-N7	7.71	113.88	110.80
26	BB	2105	U	C5-C4-O4	-7.71	121.28	125.90
26	BB	2624	G	C8-N9-C4	-7.71	103.32	106.40
1	AA	1500	A	C5-C6-N1	7.71	121.55	117.70
25	BA	46	A	N1-C6-N6	-7.71	113.98	118.60
26	BB	436	C	C4'-C3'-C2'	-7.71	94.89	102.60
26	BB	2142	A	N7-C8-N9	-7.71	109.95	113.80
26	BB	2425	A	C4-C5-N7	7.71	114.55	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	542	C	C2-N3-C4	7.70	123.75	119.90
26	BB	934	U	C2-N3-C4	-7.70	122.38	127.00
26	BB	1409	U	N3-C4-O4	7.70	124.79	119.40
26	BB	2471	A	O4'-C1'-N9	7.70	114.36	108.20
26	BB	2782	G	N1-C2-N2	7.70	123.13	116.20
26	BB	1893	C	N3-C4-N4	7.70	123.39	118.00
26	BB	2329	U	C5-C6-N1	7.70	126.55	122.70
1	AA	1144	G	C5-N7-C8	7.70	108.15	104.30
1	AA	1220	G	C5'-C4'-O4'	-7.70	99.86	109.10
25	BA	31	C	O4'-C1'-N1	7.70	114.36	108.20
26	BB	1878	G	N7-C8-N9	7.70	116.95	113.10
26	BB	2519	U	C2-N3-C4	-7.70	122.38	127.00
26	BB	2620	C	O4'-C1'-N1	7.70	114.36	108.20
1	AA	265	G	C5-C6-O6	7.70	133.22	128.60
1	AA	1145	A	C5-C6-N1	7.70	121.55	117.70
1	AA	1217	C	N1-C2-O2	7.70	123.52	118.90
1	AA	1260	G	C4-C5-C6	-7.70	114.18	118.80
1	AA	1362	A	N9-C4-C5	7.70	108.88	105.80
26	BB	60	G	C4-C5-N7	-7.70	107.72	110.80
26	BB	494	G	C2-N3-C4	7.70	115.75	111.90
26	BB	610	C	N1-C2-O2	7.70	123.52	118.90
26	BB	1563	U	O4'-C1'-N1	7.70	114.36	108.20
26	BB	1766	G	N7-C8-N9	7.70	116.95	113.10
26	BB	2146	C	N1-C2-O2	7.70	123.52	118.90
26	BB	2618	G	C4-C5-C6	7.70	123.42	118.80
26	BB	217	A	C4'-C3'-C2'	-7.70	94.90	102.60
26	BB	386	G	C1'-O4'-C4'	7.70	116.06	109.90
26	BB	675	A	C4-C5-C6	7.70	120.85	117.00
1	AA	26	A	N9-C4-C5	7.70	108.88	105.80
1	AA	324	G	O4'-C1'-N9	7.70	114.36	108.20
1	AA	573	A	C5-C6-N6	-7.70	117.54	123.70
1	AA	1539	C	N1-C2-O2	7.70	123.52	118.90
26	BB	55	G	O4'-C4'-C3'	7.70	112.26	106.10
26	BB	475	C	C5-C6-N1	7.70	124.85	121.00
26	BB	537	G	N9-C4-C5	7.70	108.48	105.40
26	BB	590	A	C5'-C4'-O4'	7.70	118.33	109.10
26	BB	1119	U	O4'-C1'-N1	7.70	114.36	108.20
26	BB	1379	U	O4'-C1'-N1	7.70	114.36	108.20
26	BB	1628	G	N3-C4-C5	-7.70	124.75	128.60
25	BA	112	G	C5-C6-N1	7.69	115.35	111.50
1	AA	760	G	C1'-O4'-C4'	7.69	116.05	109.90
26	BB	586	A	C4-C5-N7	7.69	114.55	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	648	G	N7-C8-N9	7.69	116.95	113.10
26	BB	818	G	P-O3'-C3'	7.69	128.93	119.70
26	BB	1043	C	N1-C1'-C2'	-7.69	103.54	112.00
26	BB	1280	G	N9-C1'-C2'	-7.69	103.54	112.00
26	BB	1341	G	C4'-C3'-C2'	7.69	110.29	102.60
26	BB	1414	C	C6-N1-C2	-7.69	117.22	120.30
26	BB	1959	G	C5-C6-O6	-7.69	123.98	128.60
26	BB	1963	U	N3-C4-C5	-7.69	109.98	114.60
26	BB	2516	A	C4-C5-C6	-7.69	113.15	117.00
1	AA	694	A	C5-C6-N6	-7.69	117.55	123.70
1	AA	1224	U	N1-C2-N3	7.69	119.52	114.90
12	AL	102	PHE	CB-CG-CD2	-7.69	115.42	120.80
25	BA	108	A	C5-N7-C8	7.69	107.75	103.90
26	BB	1836	C	O4'-C1'-N1	7.69	114.35	108.20
1	AA	1258	G	C4-C5-N7	-7.69	107.72	110.80
26	BB	691	C	C5-C4-N4	-7.69	114.82	120.20
26	BB	864	G	N3-C4-C5	-7.69	124.76	128.60
26	BB	1509	A	C1'-O4'-C4'	-7.69	103.75	109.90
26	BB	2536	G	O4'-C4'-C3'	7.69	112.25	106.10
1	AA	1	A	C3'-C2'-C1'	7.69	107.65	101.50
26	BB	1132	U	N3-C4-O4	7.69	124.78	119.40
26	BB	2212	A	C6-N1-C2	-7.69	113.99	118.60
26	BB	2458	G	N7-C8-N9	7.69	116.94	113.10
26	BB	2786	U	C4-C5-C6	7.69	124.31	119.70
1	AA	661	G	C5-C6-O6	7.68	133.21	128.60
1	AA	687	A	N1-C6-N6	-7.68	113.99	118.60
1	AA	778	G	P-O3'-C3'	7.68	128.92	119.70
1	AA	1507	A	C8-N9-C4	-7.68	102.73	105.80
5	AE	207	ARG	NE-CZ-NH2	7.68	124.14	120.30
26	BB	2044	C	N1-C2-N3	-7.68	113.82	119.20
1	AA	361	G	C8-N9-C4	-7.68	103.33	106.40
1	AA	685	G	C5-C6-O6	-7.68	123.99	128.60
1	AA	906	A	C2-N3-C4	-7.68	106.76	110.60
26	BB	117	G	C6-C5-N7	-7.68	125.79	130.40
26	BB	553	G	O4'-C4'-C3'	7.68	112.25	106.10
26	BB	1726	C	C5'-C4'-O4'	7.68	118.32	109.10
26	BB	1743	G	C6-C5-N7	-7.68	125.79	130.40
26	BB	2290	G	C6-N1-C2	-7.68	120.49	125.10
26	BB	2628	C	O4'-C1'-N1	7.68	114.35	108.20
26	BB	2685	G	C2-N3-C4	7.68	115.74	111.90
26	BB	2869	G	C5-N7-C8	-7.68	100.46	104.30
44	BT	47	VAL	CA-CB-CG2	7.68	122.42	110.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	431	A	C6-C5-N7	7.68	137.68	132.30
1	AA	566	G	C2-N3-C4	7.68	115.74	111.90
1	AA	919	A	O4'-C1'-N9	7.68	114.34	108.20
1	AA	1040	U	N3-C4-O4	7.68	124.78	119.40
1	AA	1066	C	N3-C4-C5	-7.68	118.83	121.90
1	AA	1111	A	C6-N1-C2	-7.68	113.99	118.60
1	AA	1194	U	C5'-C4'-O4'	7.68	118.32	109.10
26	BB	208	C	C1'-O4'-C4'	7.68	116.04	109.90
26	BB	1979	U	N3-C2-O2	-7.68	116.83	122.20
26	BB	2383	G	N1-C6-O6	-7.68	115.29	119.90
1	AA	295	C	N3-C4-C5	7.68	124.97	121.90
1	AA	306	A	C4-C5-N7	-7.68	106.86	110.70
26	BB	1595	C	O4'-C1'-N1	7.68	114.34	108.20
52	B1	30	ARG	NE-CZ-NH2	-7.68	116.46	120.30
1	AA	83	C	C5'-C4'-O4'	7.68	118.31	109.10
1	AA	590	U	N1-C2-N3	7.68	119.51	114.90
26	BB	606	U	N3-C2-O2	-7.68	116.83	122.20
26	BB	719	C	C5-C6-N1	7.68	124.84	121.00
26	BB	1392	A	C2-N3-C4	7.68	114.44	110.60
26	BB	2323	G	C8-N9-C4	-7.68	103.33	106.40
1	AA	192	A	O4'-C1'-N9	7.67	114.34	108.20
1	AA	292	G	P-O3'-C3'	7.67	128.91	119.70
1	AA	344	A	N7-C8-N9	-7.67	109.96	113.80
1	AA	513	C	C4-C5-C6	-7.67	113.56	117.40
1	AA	728	A	N7-C8-N9	7.67	117.64	113.80
1	AA	782	A	N9-C1'-C2'	-7.67	103.56	112.00
1	AA	875	U	C5'-C4'-C3'	-7.67	103.72	116.00
6	AF	167	TYR	CB-CG-CD2	7.67	125.61	121.00
26	BB	822	G	N1-C6-O6	-7.67	115.30	119.90
26	BB	1622	G	C2-N3-C4	7.67	115.74	111.90
26	BB	2217	G	C6-C5-N7	-7.67	125.80	130.40
26	BB	2258	C	N3-C4-C5	-7.67	118.83	121.90
26	BB	2741	A	C6-C5-N7	7.67	137.67	132.30
28	BD	79	ARG	NE-CZ-NH1	7.67	124.14	120.30
26	BB	882	G	N3-C4-C5	-7.67	124.76	128.60
26	BB	2243	U	N1-C2-N3	7.67	119.50	114.90
1	AA	57	G	C4-C5-C6	7.67	123.40	118.80
1	AA	699	C	C6-N1-C2	-7.67	117.23	120.30
1	AA	797	C	O4'-C1'-N1	7.67	114.34	108.20
26	BB	64	A	N7-C8-N9	7.67	117.64	113.80
26	BB	268	C	O4'-C1'-N1	7.67	114.34	108.20
26	BB	568	U	N1-C2-N3	7.67	119.50	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2261	C	N1-C2-O2	7.67	123.50	118.90
26	BB	2488	G	N3-C4-C5	-7.67	124.76	128.60
26	BB	2500	U	O4'-C1'-N1	7.67	114.34	108.20
26	BB	2733	A	C4'-C3'-C2'	-7.67	94.93	102.60
26	BB	123	G	C5-N7-C8	-7.67	100.47	104.30
26	BB	253	C	C5'-C4'-O4'	7.67	118.30	109.10
26	BB	2490	G	N9-C4-C5	7.67	108.47	105.40
1	AA	74	A	C6-N1-C2	-7.67	114.00	118.60
1	AA	699	C	C5-C6-N1	7.67	124.83	121.00
1	AA	1476	A	C5-C6-N6	-7.67	117.56	123.70
26	BB	956	G	C5-N7-C8	-7.67	100.47	104.30
26	BB	2001	C	C4-C5-C6	7.67	121.23	117.40
26	BB	2017	U	N3-C4-O4	7.67	124.77	119.40
1	AA	1106	G	O4'-C4'-C3'	7.67	112.23	106.10
1	AA	1337	G	C6-C5-N7	7.67	135.00	130.40
1	AA	1383	C	N3-C2-O2	-7.67	116.53	121.90
26	BB	841	G	C5'-C4'-C3'	-7.67	103.73	116.00
26	BB	1266	G	P-O3'-C3'	7.67	128.90	119.70
26	BB	1595	C	N1-C2-N3	7.67	124.57	119.20
26	BB	1648	U	C5-C4-O4	-7.67	121.30	125.90
26	BB	1731	G	N9-C4-C5	7.67	108.47	105.40
26	BB	1845	G	N9-C4-C5	7.67	108.47	105.40
26	BB	2547	A	C5-C6-N6	-7.67	117.57	123.70
26	BB	2843	G	N1-C2-N3	-7.67	119.30	123.90
1	AA	595	A	N1-C6-N6	-7.67	114.00	118.60
26	BB	518	G	O4'-C1'-N9	7.67	114.33	108.20
26	BB	2177	C	N3-C2-O2	-7.67	116.53	121.90
26	BB	2801	G	C4-C5-C6	7.67	123.40	118.80
1	AA	258	G	O4'-C1'-N9	7.66	114.33	108.20
1	AA	478	A	C8-N9-C4	-7.66	102.73	105.80
1	AA	511	C	O4'-C1'-N1	7.66	114.33	108.20
26	BB	1093	G	P-O3'-C3'	7.66	128.90	119.70
26	BB	2102	G	N1-C6-O6	7.66	124.50	119.90
1	AA	462	G	C5-C6-O6	-7.66	124.00	128.60
17	AQ	64	ARG	NH1-CZ-NH2	7.66	127.83	119.40
1	AA	24	U	C5-C4-O4	-7.66	121.30	125.90
1	AA	572	A	N7-C8-N9	-7.66	109.97	113.80
10	AJ	4	ARG	NE-CZ-NH1	7.66	124.13	120.30
26	BB	1873	G	C5-N7-C8	7.66	108.13	104.30
26	BB	1984	G	C5-N7-C8	7.66	108.13	104.30
26	BB	2716	C	C3'-C2'-C1'	7.66	107.63	101.50
1	AA	159	G	C4-C5-C6	7.66	123.40	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	442	G	C2-N3-C4	7.66	115.73	111.90
1	AA	1026	G	N3-C4-N9	7.66	130.59	126.00
4	AD	32	G	N7-C8-N9	7.66	116.93	113.10
25	BA	44	G	N1-C6-O6	-7.66	115.31	119.90
26	BB	698	C	C6-N1-C2	7.66	123.36	120.30
26	BB	2179	C	O4'-C1'-N1	7.66	114.33	108.20
26	BB	2204	G	N1-C2-N3	-7.66	119.31	123.90
26	BB	2328	A	C5-C6-N1	7.66	121.53	117.70
26	BB	2371	G	N1-C2-N3	-7.66	119.30	123.90
26	BB	2641	G	C2-N3-C4	7.66	115.73	111.90
1	AA	9	G	N9-C1'-C2'	-7.66	103.58	112.00
10	AJ	17	PHE	CB-CG-CD2	-7.66	115.44	120.80
25	BA	102	G	C3'-C2'-C1'	7.66	107.62	101.50
26	BB	1035	U	C4'-C3'-C2'	-7.66	94.94	102.60
26	BB	1400	U	N3-C4-C5	-7.66	110.01	114.60
26	BB	1555	G	C5-N7-C8	-7.66	100.47	104.30
26	BB	2816	G	N1-C6-O6	-7.66	115.31	119.90
1	AA	354	G	C8-N9-C4	-7.66	103.34	106.40
1	AA	487	A	O4'-C1'-N9	7.66	114.32	108.20
25	BA	35	C	C2-N3-C4	-7.66	116.07	119.90
26	BB	537	G	C4-C5-N7	-7.66	107.74	110.80
26	BB	1831	G	N3-C4-N9	7.66	130.59	126.00
26	BB	2056	G	N3-C4-C5	-7.66	124.77	128.60
26	BB	2665	A	C8-N9-C4	-7.66	102.74	105.80
1	AA	168	G	O4'-C1'-N9	7.65	114.32	108.20
1	AA	1322	C	C5'-C4'-O4'	-7.65	99.92	109.10
26	BB	141	G	C2-N3-C4	7.65	115.73	111.90
26	BB	297	G	N3-C4-C5	-7.65	124.77	128.60
1	AA	211	G	C2-N3-C4	7.65	115.73	111.90
1	AA	740	U	O4'-C1'-N1	7.65	114.32	108.20
20	AT	76	ARG	NE-CZ-NH1	7.65	124.13	120.30
26	BB	41	C	N1-C2-O2	7.65	123.49	118.90
26	BB	66	C	N3-C4-N4	7.65	123.36	118.00
26	BB	1405	U	O4'-C1'-N1	7.65	114.32	108.20
1	AA	1517	G	C1'-O4'-C4'	-7.65	103.78	109.90
26	BB	192	C	C2-N3-C4	7.65	123.73	119.90
26	BB	221	A	O4'-C1'-N9	7.65	114.32	108.20
26	BB	407	G	C5'-C4'-C3'	7.65	128.24	116.00
26	BB	864	G	C6-C5-N7	-7.65	125.81	130.40
26	BB	1366	A	C2-N3-C4	7.65	114.42	110.60
26	BB	1434	A	C5-N7-C8	-7.65	100.08	103.90
28	BD	181	ARG	NE-CZ-NH1	7.65	124.12	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	BP	29	VAL	CA-CB-CG1	7.65	122.38	110.90
26	BB	319	G	N3-C4-N9	-7.65	121.41	126.00
26	BB	2209	G	N7-C8-N9	7.65	116.92	113.10
26	BB	2279	G	N1-C6-O6	-7.65	115.31	119.90
1	AA	305	G	C5-C6-O6	-7.65	124.01	128.60
1	AA	771	G	C5-N7-C8	7.65	108.12	104.30
12	AL	79	ARG	NE-CZ-NH1	7.65	124.12	120.30
26	BB	46	G	C5-C6-O6	-7.65	124.01	128.60
26	BB	1986	C	C6-N1-C2	7.65	123.36	120.30
26	BB	2413	G	N1-C6-O6	7.65	124.49	119.90
26	BB	99	U	O4'-C1'-N1	7.65	114.32	108.20
26	BB	418	C	O4'-C1'-N1	7.65	114.32	108.20
26	BB	638	G	N7-C8-N9	7.65	116.92	113.10
26	BB	2622	U	C5-C4-O4	-7.65	121.31	125.90
1	AA	207	C	C5-C4-N4	-7.64	114.85	120.20
1	AA	510	A	C5-C6-N6	-7.64	117.58	123.70
1	AA	1018	G	N1-C6-O6	-7.64	115.31	119.90
26	BB	832	U	C5'-C4'-O4'	7.64	118.27	109.10
26	BB	2227	A	C4-C5-N7	7.64	114.52	110.70
1	AA	340	U	C1'-O4'-C4'	-7.64	103.79	109.90
1	AA	949	A	N1-C6-N6	-7.64	114.02	118.60
2	AB	75	C	O4'-C1'-N1	7.64	114.31	108.20
8	AH	44	ARG	NE-CZ-NH1	7.64	124.12	120.30
26	BB	1080	A	C4-C5-C6	-7.64	113.18	117.00
26	BB	2099	U	O4'-C1'-N1	7.64	114.31	108.20
1	AA	528	C	N3-C4-N4	7.64	123.35	118.00
1	AA	1276	G	N3-C4-C5	-7.64	124.78	128.60
1	AA	1451	U	C1'-O4'-C4'	-7.64	103.79	109.90
2	AB	75	C	C3'-C2'-C1'	7.64	107.61	101.50
26	BB	1122	G	C4-C5-N7	-7.64	107.74	110.80
26	BB	2255	G	N1-C6-O6	7.64	124.48	119.90
38	BN	47	ARG	NE-CZ-NH2	7.64	124.12	120.30
54	B3	51	ARG	NE-CZ-NH2	7.64	124.12	120.30
1	AA	158	G	C4-C5-N7	-7.64	107.74	110.80
1	AA	160	A	O4'-C4'-C3'	7.64	112.21	106.10
26	BB	196	A	C3'-C2'-C1'	-7.64	95.39	101.50
26	BB	821	A	C2-N3-C4	7.64	114.42	110.60
26	BB	1490	A	N1-C2-N3	-7.64	125.48	129.30
26	BB	1677	A	N3-C4-C5	-7.64	121.45	126.80
26	BB	2165	C	O4'-C1'-C2'	-7.64	98.16	105.80
26	BB	677	A	C5'-C4'-C3'	-7.64	103.78	116.00
1	AA	733	G	P-O3'-C3'	7.64	128.86	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1410	A	C8-N9-C4	7.64	108.85	105.80
26	BB	272	A	C5-N7-C8	7.64	107.72	103.90
26	BB	909	A	C4-C5-C6	-7.64	113.18	117.00
26	BB	1059	G	C5-N7-C8	7.64	108.12	104.30
26	BB	1427	A	C4-C5-C6	-7.64	113.18	117.00
26	BB	1998	A	O4'-C1'-N9	7.64	114.31	108.20
26	BB	2037	A	N1-C6-N6	7.64	123.18	118.60
1	AA	360	G	C1'-O4'-C4'	-7.63	103.79	109.90
1	AA	576	C	N1-C2-O2	7.63	123.48	118.90
1	AA	591	U	N1-C2-N3	7.63	119.48	114.90
1	AA	1321	U	O4'-C1'-N1	7.63	114.31	108.20
26	BB	47	C	O4'-C4'-C3'	-7.63	96.37	104.00
26	BB	1583	A	C5-C6-N1	-7.63	113.88	117.70
26	BB	1958	C	N3-C4-C5	-7.63	118.85	121.90
26	BB	2455	G	N1-C6-O6	-7.63	115.32	119.90
26	BB	2557	G	C5-N7-C8	7.63	108.12	104.30
36	BL	16	TYR	CB-CG-CD1	7.63	125.58	121.00
48	BX	65	VAL	CA-CB-CG1	7.63	122.35	110.90
1	AA	138	G	N1-C6-O6	7.63	124.48	119.90
1	AA	963	G	N1-C6-O6	7.63	124.48	119.90
3	AC	42	U	N3-C4-O4	7.63	124.74	119.40
26	BB	248	G	C6-C5-N7	-7.63	125.82	130.40
26	BB	1094	U	C6-N1-C1'	-7.63	110.52	121.20
26	BB	2525	G	N7-C8-N9	7.63	116.92	113.10
1	AA	1041	G	C5'-C4'-C3'	7.63	128.21	116.00
26	BB	1875	G	N9-C4-C5	7.63	108.45	105.40
1	AA	335	C	C6-N1-C2	-7.63	117.25	120.30
1	AA	596	A	C5-C6-N6	-7.63	117.60	123.70
1	AA	774	G	O4'-C1'-N9	7.63	114.30	108.20
1	AA	1046	A	C4'-C3'-C2'	-7.63	94.97	102.60
1	AA	1085	U	C1'-O4'-C4'	-7.63	103.80	109.90
1	AA	1360	A	C4-C5-C6	-7.63	113.19	117.00
1	AA	1534	A	C6-C5-N7	-7.63	126.96	132.30
26	BB	16	C	C3'-C2'-C1'	7.63	107.60	101.50
26	BB	379	G	N3-C4-C5	7.63	132.41	128.60
26	BB	388	G	O4'-C1'-N9	7.63	114.30	108.20
26	BB	2365	G	C8-N9-C4	-7.63	103.35	106.40
26	BB	2637	U	O4'-C1'-N1	7.63	114.30	108.20
26	BB	2846	G	N3-C4-C5	-7.63	124.78	128.60
1	AA	41	G	C8-N9-C4	-7.63	103.35	106.40
1	AA	191	G	C5-N7-C8	-7.63	100.49	104.30
1	AA	533	A	N1-C6-N6	7.63	123.18	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	816	A	N1-C6-N6	7.63	123.17	118.60
1	AA	1299	A	C4-C5-N7	7.63	114.51	110.70
25	BA	3	C	C4-C5-C6	-7.63	113.59	117.40
26	BB	66	C	C2-N3-C4	7.63	123.71	119.90
26	BB	1338	G	C4-C5-C6	7.63	123.38	118.80
26	BB	1564	C	N3-C4-N4	7.63	123.34	118.00
1	AA	882	C	C5-C6-N1	-7.62	117.19	121.00
3	AC	30	U	C5-C4-O4	-7.62	121.33	125.90
26	BB	100	U	O4'-C1'-N1	7.62	114.30	108.20
1	AA	849	G	N9-C4-C5	7.62	108.45	105.40
8	AH	47	PHE	CB-CG-CD2	-7.62	115.46	120.80
26	BB	1534	U	N3-C2-O2	-7.62	116.86	122.20
26	BB	2321	U	N3-C4-O4	-7.62	114.06	119.40
1	AA	755	G	C4-C5-C6	7.62	123.37	118.80
1	AA	845	A	C8-N9-C4	-7.62	102.75	105.80
4	AD	29	C	C4-C5-C6	-7.62	113.59	117.40
20	AT	6	THR	CA-CB-CG2	7.62	123.07	112.40
26	BB	547	A	N3-C4-C5	-7.62	121.47	126.80
26	BB	957	C	N3-C4-C5	-7.62	118.85	121.90
26	BB	1901	A	O4'-C1'-N9	7.62	114.30	108.20
26	BB	1996	C	C5-C6-N1	7.62	124.81	121.00
26	BB	2463	C	N1-C2-N3	-7.62	113.86	119.20
1	AA	334	C	N1-C2-N3	-7.62	113.87	119.20
26	BB	855	G	C4'-C3'-C2'	-7.62	94.98	102.60
26	BB	1583	A	O4'-C4'-C3'	7.62	112.20	106.10
26	BB	1695	G	N3-C2-N2	-7.62	114.57	119.90
26	BB	2515	C	N3-C4-N4	-7.62	112.67	118.00
1	AA	262	A	C4-C5-N7	-7.62	106.89	110.70
26	BB	420	C	C5-C4-N4	7.62	125.53	120.20
26	BB	524	G	N9-C4-C5	-7.62	102.35	105.40
26	BB	1070	A	P-O3'-C3'	7.62	128.84	119.70
26	BB	1540	G	C2-N3-C4	7.62	115.71	111.90
1	AA	1228	C	C5-C4-N4	7.62	125.53	120.20
10	AJ	2	ARG	NE-CZ-NH1	7.62	124.11	120.30
26	BB	1127	A	O4'-C4'-C3'	7.62	112.19	106.10
26	BB	1705	A	C5-C6-N1	7.62	121.51	117.70
26	BB	1780	A	C3'-C2'-C1'	7.62	107.59	101.50
26	BB	2407	A	C2-N3-C4	7.62	114.41	110.60
1	AA	692	U	N3-C4-C5	-7.62	110.03	114.60
26	BB	322	A	N3-C4-N9	-7.62	121.31	127.40
26	BB	474	G	N3-C2-N2	-7.62	114.57	119.90
26	BB	1459	G	C6-N1-C2	-7.62	120.53	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2211	A	C1'-O4'-C4'	7.62	115.99	109.90
26	BB	2541	A	C5-C6-N1	7.62	121.51	117.70
47	BW	21	ARG	NE-CZ-NH1	7.62	124.11	120.30
1	AA	631	C	P-O3'-C3'	7.61	128.84	119.70
1	AA	982	U	N3-C2-O2	-7.61	116.87	122.20
1	AA	1254	A	C4-C5-N7	-7.61	106.89	110.70
1	AA	1266	G	C2-N3-C4	7.61	115.71	111.90
26	BB	19	A	C5-C6-N1	7.61	121.51	117.70
26	BB	90	U	O4'-C1'-N1	7.61	114.29	108.20
26	BB	1004	U	N1-C2-N3	7.61	119.47	114.90
26	BB	1098	A	N3-C4-N9	7.61	133.49	127.40
26	BB	1622	G	C8-N9-C4	-7.61	103.36	106.40
26	BB	1834	U	C5-C6-N1	-7.61	118.89	122.70
26	BB	2032	G	C4-C5-N7	-7.61	107.75	110.80
1	AA	80	A	N1-C6-N6	7.61	123.17	118.60
1	AA	110	C	N1-C2-O2	7.61	123.47	118.90
1	AA	1156	G	C5-C6-O6	7.61	133.17	128.60
1	AA	1238	A	C3'-C2'-C1'	7.61	107.59	101.50
22	AV	40	PHE	CB-CG-CD2	-7.61	115.47	120.80
26	BB	26	G	C5-N7-C8	7.61	108.11	104.30
26	BB	648	G	N1-C6-O6	7.61	124.47	119.90
1	AA	21	G	C5'-C4'-O4'	7.61	118.23	109.10
1	AA	409	U	O4'-C1'-N1	7.61	114.29	108.20
1	AA	1097	C	C5'-C4'-O4'	7.61	118.23	109.10
1	AA	1244	G	N3-C4-C5	-7.61	124.79	128.60
26	BB	2505	G	C4'-C3'-C2'	-7.61	94.99	102.60
1	AA	371	A	C4-C5-C6	-7.61	113.19	117.00
4	AD	40	C	N1-C2-O2	7.61	123.47	118.90
26	BB	2458	G	C5-N7-C8	-7.61	100.50	104.30
1	AA	1349	A	C1'-O4'-C4'	-7.61	103.81	109.90
26	BB	466	A	N7-C8-N9	7.61	117.60	113.80
26	BB	574	A	O4'-C1'-N9	7.61	114.29	108.20
26	BB	2067	G	C5-C6-N1	7.61	115.30	111.50
26	BB	2408	U	C5-C6-N1	-7.61	118.90	122.70
26	BB	2698	U	C2-N3-C4	-7.61	122.44	127.00
1	AA	773	G	C6-C5-N7	-7.61	125.84	130.40
3	AC	57	C	C5-C6-N1	-7.61	117.20	121.00
26	BB	626	A	C6-N1-C2	-7.61	114.04	118.60
1	AA	731	G	C4-C5-C6	7.60	123.36	118.80
1	AA	978	A	O4'-C1'-N9	7.60	114.28	108.20
4	AD	11	A	N9-C4-C5	7.60	108.84	105.80
25	BA	28	C	C1'-O4'-C4'	-7.60	103.82	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2161	C	O4'-C1'-N1	7.60	114.28	108.20
1	AA	293	G	C4-C5-C6	7.60	123.36	118.80
1	AA	495	A	C5-C6-N6	7.60	129.78	123.70
1	AA	567	G	N3-C4-C5	-7.60	124.80	128.60
1	AA	716	A	C6-N1-C2	7.60	123.16	118.60
1	AA	1214	C	P-O3'-C3'	7.60	128.82	119.70
25	BA	49	C	C5-C4-N4	7.60	125.52	120.20
26	BB	356	G	C6-C5-N7	7.60	134.96	130.40
26	BB	612	G	N1-C6-O6	7.60	124.46	119.90
26	BB	1058	U	C5'-C4'-O4'	7.60	118.22	109.10
26	BB	1425	G	C8-N9-C4	-7.60	103.36	106.40
26	BB	1696	G	N3-C2-N2	-7.60	114.58	119.90
26	BB	1772	A	O4'-C1'-N9	7.60	114.28	108.20
26	BB	2561	U	C4'-C3'-C2'	-7.60	95.00	102.60
4	AD	17	C	N1-C2-O2	7.60	123.46	118.90
26	BB	659	G	N9-C4-C5	-7.60	102.36	105.40
26	BB	1151	A	C8-N9-C4	-7.60	102.76	105.80
1	AA	365	U	O3'-P-O5'	-7.60	89.56	104.00
26	BB	35	G	C3'-C2'-C1'	7.60	107.58	101.50
26	BB	180	G	C1'-O4'-C4'	-7.60	103.82	109.90
26	BB	508	A	C6-N1-C2	7.60	123.16	118.60
26	BB	850	U	C3'-C2'-C1'	7.60	107.58	101.50
26	BB	2361	G	N3-C4-C5	-7.60	124.80	128.60
1	AA	906	A	O4'-C1'-N9	7.60	114.28	108.20
12	AL	129	ARG	NE-CZ-NH2	-7.60	116.50	120.30
26	BB	359	G	N3-C4-C5	-7.60	124.80	128.60
26	BB	741	U	C4-C5-C6	7.60	124.26	119.70
26	BB	1430	G	C6-C5-N7	-7.60	125.84	130.40
26	BB	1906	G	C2-N3-C4	7.60	115.70	111.90
26	BB	2529	G	C5-C6-N1	7.60	115.30	111.50
26	BB	408	G	N3-C2-N2	7.60	125.22	119.90
1	AA	103	U	C4'-C3'-C2'	-7.59	95.00	102.60
1	AA	500	G	C4-C5-N7	7.59	113.84	110.80
1	AA	683	G	N9-C4-C5	7.59	108.44	105.40
2	AB	38	A	C5-N7-C8	-7.59	100.10	103.90
25	BA	35	C	C1'-O4'-C4'	-7.59	103.82	109.90
26	BB	162	U	C6-N1-C2	-7.59	116.44	121.00
26	BB	707	G	C8-N9-C4	-7.59	103.36	106.40
26	BB	864	G	C5-N7-C8	-7.59	100.50	104.30
26	BB	882	G	C5-C6-O6	7.59	133.16	128.60
26	BB	889	C	N3-C4-C5	-7.59	118.86	121.90
26	BB	977	G	N1-C2-N2	7.59	123.03	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1494	A	N3-C4-C5	-7.59	121.48	126.80
26	BB	1806	C	C2-N3-C4	7.59	123.70	119.90
26	BB	1983	G	C5-N7-C8	7.59	108.10	104.30
26	BB	2290	G	C5-N7-C8	-7.59	100.50	104.30
1	AA	162	A	O4'-C1'-N9	7.59	114.28	108.20
26	BB	593	U	N1-C2-N3	7.59	119.46	114.90
26	BB	2385	C	C5-C4-N4	-7.59	114.89	120.20
1	AA	989	U	C4-C5-C6	7.59	124.25	119.70
1	AA	1439	G	N3-C4-N9	7.59	130.56	126.00
1	AA	1523	G	C8-N9-C4	-7.59	103.36	106.40
2	AB	26	A	C5-N7-C8	-7.59	100.10	103.90
22	AV	2	ARG	NE-CZ-NH2	7.59	124.10	120.30
26	BB	129	C	C2-N3-C4	7.59	123.70	119.90
26	BB	1568	G	C5'-C4'-O4'	7.59	118.21	109.10
26	BB	2606	C	N3-C4-N4	7.59	123.31	118.00
1	AA	173	U	C5'-C4'-C3'	-7.59	103.86	116.00
1	AA	305	G	C6-C5-N7	7.59	134.95	130.40
1	AA	926	G	C2-N3-C4	7.59	115.69	111.90
1	AA	1163	A	C6-C5-N7	-7.59	126.99	132.30
1	AA	1360	A	C3'-C2'-C1'	-7.59	95.43	101.50
26	BB	583	G	N3-C2-N2	-7.59	114.59	119.90
26	BB	1689	A	P-O3'-C3'	7.59	128.81	119.70
26	BB	1742	U	C4'-C3'-C2'	-7.59	95.01	102.60
26	BB	2196	C	C2-N3-C4	7.59	123.69	119.90
26	BB	2359	C	C2-N3-C4	-7.59	116.11	119.90
26	BB	2409	G	N3-C2-N2	7.59	125.21	119.90
26	BB	2428	G	O4'-C1'-N9	7.59	114.27	108.20
28	BD	202	ARG	NE-CZ-NH2	-7.59	116.50	120.30
2	AB	24	G	N3-C4-C5	-7.59	124.81	128.60
26	BB	290	U	N3-C2-O2	7.59	127.51	122.20
26	BB	457	A	N9-C4-C5	7.59	108.83	105.80
26	BB	865	C	N3-C4-C5	-7.59	118.86	121.90
53	B2	4	ASP	CB-CG-OD1	7.59	125.13	118.30
1	AA	36	C	C3'-C2'-C1'	7.59	107.57	101.50
1	AA	211	G	N3-C4-N9	7.59	130.55	126.00
2	AB	70	C	O4'-C1'-N1	7.59	114.27	108.20
26	BB	1029	A	C4'-C3'-C2'	-7.59	95.01	102.60
26	BB	1413	A	C4-C5-N7	7.59	114.49	110.70
26	BB	1923	U	C5-C4-O4	-7.59	121.35	125.90
1	AA	954	G	N1-C6-O6	7.58	124.45	119.90
1	AA	1363	A	C1'-O4'-C4'	-7.58	103.83	109.90
1	AA	1385	G	C1'-O4'-C4'	-7.58	103.83	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	8	C	C2-N3-C4	7.58	123.69	119.90
26	BB	864	G	P-O3'-C3'	7.58	128.80	119.70
26	BB	2262	U	C2-N3-C4	-7.58	122.45	127.00
26	BB	2355	G	C3'-C2'-C1'	-7.58	95.43	101.50
26	BB	2814	A	C8-N9-C4	-7.58	102.77	105.80
1	AA	342	C	O4'-C1'-N1	7.58	114.27	108.20
1	AA	936	C	C5-C6-N1	7.58	124.79	121.00
25	BA	73	A	C5'-C4'-O4'	7.58	118.20	109.10
26	BB	181	A	N9-C4-C5	-7.58	102.77	105.80
26	BB	473	G	N3-C4-C5	-7.58	124.81	128.60
26	BB	1490	A	C4-C5-N7	7.58	114.49	110.70
26	BB	2273	A	N1-C2-N3	-7.58	125.51	129.30
26	BB	2281	A	C5-C6-N6	7.58	129.77	123.70
2	AB	26	A	N7-C8-N9	7.58	117.59	113.80
26	BB	479	A	C8-N9-C4	-7.58	102.77	105.80
26	BB	1110	G	C5-N7-C8	-7.58	100.51	104.30
26	BB	1387	A	C4-C5-N7	-7.58	106.91	110.70
26	BB	2647	U	C4'-C3'-C2'	-7.58	95.02	102.60
1	AA	1337	G	C5-C6-N1	7.58	115.29	111.50
25	BA	98	G	C5-N7-C8	7.58	108.09	104.30
26	BB	932	U	C5-C6-N1	7.58	126.49	122.70
26	BB	2274	A	N1-C2-N3	-7.58	125.51	129.30
1	AA	280	C	N3-C4-C5	7.58	124.93	121.90
1	AA	543	U	C2-N3-C4	-7.58	122.45	127.00
26	BB	71	A	C3'-C2'-C1'	7.58	107.56	101.50
26	BB	574	A	N1-C2-N3	-7.58	125.51	129.30
26	BB	2110	G	C5-C6-N1	7.58	115.29	111.50
26	BB	2384	U	N3-C2-O2	-7.58	116.90	122.20
26	BB	2478	A	C5-C6-N1	7.58	121.49	117.70
1	AA	1064	G	N3-C4-N9	7.58	130.55	126.00
26	BB	837	C	C6-N1-C2	-7.58	117.27	120.30
26	BB	1087	G	C5-C6-N1	-7.58	107.71	111.50
1	AA	94	G	C5-C6-N1	7.58	115.29	111.50
1	AA	900	A	N9-C4-C5	-7.58	102.77	105.80
1	AA	1131	G	C4-C5-C6	-7.58	114.25	118.80
1	AA	1341	U	C4'-C3'-C2'	-7.58	95.02	102.60
26	BB	68	G	N9-C1'-C2'	-7.58	103.67	112.00
26	BB	512	G	N7-C8-N9	7.58	116.89	113.10
26	BB	877	A	N9-C4-C5	7.58	108.83	105.80
26	BB	1704	C	N3-C2-O2	-7.58	116.60	121.90
26	BB	1934	C	O4'-C1'-N1	7.58	114.26	108.20
26	BB	2544	G	N7-C8-N9	7.58	116.89	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	117	G	C5-C6-O6	7.57	133.14	128.60
1	AA	397	A	C4-C5-N7	7.57	114.49	110.70
1	AA	558	G	N7-C8-N9	7.57	116.89	113.10
1	AA	774	G	C8-N9-C4	7.57	109.43	106.40
1	AA	928	G	N1-C6-O6	-7.57	115.36	119.90
1	AA	1515	G	C5'-C4'-O4'	7.57	118.19	109.10
26	BB	480	A	C3'-C2'-C1'	7.57	107.56	101.50
26	BB	497	A	N7-C8-N9	7.57	117.59	113.80
26	BB	787	C	C2-N3-C4	-7.57	116.11	119.90
26	BB	875	G	C5-C6-O6	-7.57	124.06	128.60
26	BB	1408	G	N3-C4-N9	-7.57	121.46	126.00
26	BB	2834	G	P-O3'-C3'	7.57	128.79	119.70
26	BB	1168	G	N9-C1'-C2'	-7.57	103.67	112.00
26	BB	2288	A	C4-C5-N7	-7.57	106.91	110.70
26	BB	2635	A	C5-C6-N1	7.57	121.49	117.70
1	AA	548	G	O4'-C4'-C3'	-7.57	96.43	104.00
1	AA	593	U	C4'-C3'-C2'	-7.57	95.03	102.60
25	BA	61	G	C3'-C2'-C1'	-7.57	95.44	101.50
26	BB	99	U	C5-C4-O4	7.57	130.44	125.90
26	BB	735	A	N7-C8-N9	7.57	117.58	113.80
26	BB	1148	U	C4-C5-C6	7.57	124.24	119.70
26	BB	2237	G	N1-C2-N3	7.57	128.44	123.90
26	BB	2308	G	C8-N9-C4	-7.57	103.37	106.40
26	BB	2758	A	C1'-O4'-C4'	-7.57	103.84	109.90
1	AA	231	U	C2-N3-C4	-7.57	122.46	127.00
1	AA	603	U	N3-C4-O4	7.57	124.70	119.40
1	AA	805	C	C4'-C3'-C2'	-7.57	95.03	102.60
26	BB	95	A	N3-C4-C5	-7.57	121.50	126.80
26	BB	1261	C	C4'-C3'-C2'	-7.57	95.03	102.60
26	BB	2224	G	C6-N1-C2	-7.57	120.56	125.10
26	BB	2426	A	C2-N3-C4	-7.57	106.81	110.60
26	BB	2432	A	C4'-C3'-C2'	-7.57	95.03	102.60
26	BB	2770	G	P-O3'-C3'	7.57	128.78	119.70
1	AA	680	C	N3-C4-N4	7.57	123.30	118.00
26	BB	85	G	C4-C5-N7	-7.57	107.77	110.80
26	BB	146	A	C6-N1-C2	-7.57	114.06	118.60
26	BB	449	A	O4'-C1'-N9	7.57	114.25	108.20
26	BB	779	U	O4'-C1'-N1	7.57	114.25	108.20
26	BB	1199	U	N3-C2-O2	-7.57	116.90	122.20
26	BB	1480	C	C5-C4-N4	-7.57	114.90	120.20
26	BB	1486	U	N3-C2-O2	-7.57	116.90	122.20
26	BB	2304	G	C4-C5-N7	7.57	113.83	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1075	U	C3'-C2'-C1'	7.57	107.55	101.50
26	BB	330	A	O4'-C1'-N9	7.57	114.25	108.20
26	BB	583	G	C2-N3-C4	7.57	115.68	111.90
26	BB	588	U	N1-C2-N3	7.57	119.44	114.90
26	BB	783	A	N9-C4-C5	-7.57	102.77	105.80
26	BB	784	G	O3'-P-O5'	-7.57	89.62	104.00
26	BB	1756	G	P-O3'-C3'	7.57	128.78	119.70
26	BB	2511	U	C2-N3-C4	-7.57	122.46	127.00
26	BB	2803	G	O4'-C1'-N9	7.57	114.25	108.20
1	AA	752	G	C4-C5-N7	-7.56	107.77	110.80
26	BB	1186	G	C1'-O4'-C4'	-7.56	103.85	109.90
26	BB	1503	A	O4'-C1'-N9	7.56	114.25	108.20
26	BB	1808	A	C5-C6-N6	-7.56	117.65	123.70
26	BB	2250	G	C1'-O4'-C4'	-7.56	103.85	109.90
26	BB	2532	G	N3-C4-C5	-7.56	124.82	128.60
1	AA	442	G	N1-C2-N3	-7.56	119.36	123.90
1	AA	572	A	C6-C5-N7	7.56	137.59	132.30
1	AA	740	U	C3'-C2'-C1'	7.56	107.55	101.50
2	AB	26	A	C6-N1-C2	-7.56	114.06	118.60
26	BB	246	C	C6-N1-C2	7.56	123.33	120.30
26	BB	924	G	N1-C2-N2	7.56	123.01	116.20
26	BB	1275	A	O4'-C1'-N9	7.56	114.25	108.20
26	BB	1359	A	O4'-C1'-N9	7.56	114.25	108.20
26	BB	2771	C	C5'-C4'-O4'	7.56	118.18	109.10
54	B3	47	TYR	CB-CG-CD1	7.56	125.54	121.00
1	AA	12	U	P-O3'-C3'	7.56	128.77	119.70
1	AA	1190	G	C8-N9-C4	-7.56	103.38	106.40
26	BB	2632	A	N1-C6-N6	7.56	123.14	118.60
26	BB	2693	G	N3-C4-C5	7.56	132.38	128.60
1	AA	238	A	C4'-C3'-C2'	-7.56	95.04	102.60
1	AA	1460	C	C5-C4-N4	7.56	125.49	120.20
2	AB	9	A	C3'-C2'-C1'	7.56	107.55	101.50
3	AC	41	A	C6-C5-N7	-7.56	127.01	132.30
7	AG	49	ASP	CB-CG-OD1	-7.56	111.50	118.30
12	AL	94	ARG	NE-CZ-NH2	-7.56	116.52	120.30
26	BB	58	G	C5-C6-O6	-7.56	124.06	128.60
26	BB	174	U	O4'-C1'-C2'	7.56	114.40	107.60
26	BB	788	A	O4'-C1'-N9	7.56	114.25	108.20
26	BB	2439	A	C3'-C2'-C1'	7.56	107.55	101.50
1	AA	311	C	C5-C6-N1	7.56	124.78	121.00
1	AA	681	A	C5-N7-C8	-7.56	100.12	103.90
4	AD	71	G	N9-C4-C5	-7.56	102.38	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1046	A	C4-C5-N7	7.56	114.48	110.70
26	BB	1348	C	C2-N3-C4	7.56	123.68	119.90
26	BB	1534	U	C2-N3-C4	-7.56	122.47	127.00
26	BB	1680	U	C4-C5-C6	7.56	124.23	119.70
26	BB	2223	G	C4-C5-N7	-7.56	107.78	110.80
1	AA	1368	A	N9-C4-C5	7.56	108.82	105.80
1	AA	1163	A	C4-C5-C6	7.55	120.78	117.00
26	BB	1901	A	N3-C4-C5	-7.55	121.51	126.80
1	AA	1106	G	C1'-O4'-C4'	-7.55	103.86	109.90
1	AA	1330	U	C4'-C3'-C2'	-7.55	95.05	102.60
26	BB	549	G	C5-C6-O6	-7.55	124.07	128.60
26	BB	1310	G	N7-C8-N9	7.55	116.88	113.10
26	BB	2652	C	C4'-C3'-C2'	-7.55	95.05	102.60
1	AA	67	C	N3-C4-C5	7.55	124.92	121.90
1	AA	742	G	N9-C4-C5	7.55	108.42	105.40
18	AR	14	PHE	CB-CG-CD1	7.55	126.09	120.80
26	BB	422	A	C5-N7-C8	7.55	107.68	103.90
26	BB	967	U	C2-N3-C4	-7.55	122.47	127.00
26	BB	1702	G	C4'-C3'-C2'	-7.55	95.05	102.60
26	BB	1715	G	N9-C4-C5	7.55	108.42	105.40
1	AA	316	C	N1-C1'-C2'	-7.55	103.70	112.00
1	AA	1413	A	C5-C6-N6	-7.55	117.66	123.70
42	BR	19	PHE	CB-CG-CD2	-7.55	115.52	120.80
1	AA	615	G	N3-C4-C5	-7.55	124.83	128.60
1	AA	1524	C	N3-C4-N4	7.55	123.28	118.00
26	BB	1802	A	C4'-C3'-C2'	-7.55	95.05	102.60
1	AA	217	C	N1-C2-O2	7.55	123.43	118.90
1	AA	1041	G	N3-C4-N9	7.55	130.53	126.00
25	BA	21	G	C6-N1-C2	-7.55	120.57	125.10
26	BB	184	C	O4'-C4'-C3'	7.55	112.14	106.10
26	BB	1943	U	O4'-C1'-N1	7.55	114.24	108.20
26	BB	2397	G	C5-C6-O6	-7.55	124.07	128.60
26	BB	2690	U	C3'-C2'-C1'	-7.55	95.46	101.50
1	AA	149	A	C6-N1-C2	7.54	123.13	118.60
1	AA	266	G	N3-C4-N9	7.54	130.53	126.00
1	AA	1321	U	N3-C4-O4	-7.54	114.12	119.40
4	AD	36	A	C8-N9-C4	-7.54	102.78	105.80
26	BB	1398	C	O4'-C4'-C3'	7.54	112.14	106.10
26	BB	2058	A	N9-C4-C5	7.54	108.82	105.80
26	BB	2469	A	C2-N3-C4	-7.54	106.83	110.60
1	AA	1036	A	C5-N7-C8	-7.54	100.13	103.90
26	BB	157	C	N3-C2-O2	-7.54	116.62	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	348	A	C4-C5-C6	-7.54	113.23	117.00
26	BB	361	G	N1-C2-N3	-7.54	119.37	123.90
26	BB	578	G	C2-N3-C4	7.54	115.67	111.90
26	BB	790	U	O4'-C1'-N1	7.54	114.23	108.20
26	BB	1941	C	N3-C4-C5	-7.54	118.88	121.90
26	BB	2062	A	N1-C6-N6	7.54	123.13	118.60
26	BB	2371	G	N3-C2-N2	7.54	125.18	119.90
26	BB	2712	C	C4-C5-C6	-7.54	113.63	117.40
26	BB	2721	A	C5-N7-C8	7.54	107.67	103.90
26	BB	2834	G	C1'-O4'-C4'	-7.54	103.86	109.90
1	AA	143	A	C2-N3-C4	7.54	114.37	110.60
1	AA	251	G	C6-N1-C2	-7.54	120.58	125.10
1	AA	487	A	N3-C4-C5	-7.54	121.52	126.80
1	AA	606	G	C5-C6-N1	7.54	115.27	111.50
1	AA	936	C	N3-C4-N4	7.54	123.28	118.00
1	AA	939	G	N3-C2-N2	-7.54	114.62	119.90
26	BB	160	A	C6-C5-N7	-7.54	127.02	132.30
26	BB	396	G	O4'-C4'-C3'	7.54	112.13	106.10
26	BB	687	C	O4'-C1'-N1	7.54	114.23	108.20
26	BB	993	G	C4'-C3'-C2'	-7.54	95.06	102.60
26	BB	1460	U	N1-C1'-C2'	7.54	123.80	114.00
26	BB	1645	G	N9-C1'-C2'	-7.54	103.70	112.00
26	BB	2409	G	N3-C4-C5	-7.54	124.83	128.60
1	AA	42	G	C5-C6-N1	7.54	115.27	111.50
1	AA	520	A	C4'-C3'-C2'	-7.54	95.06	102.60
2	AB	70	C	N1-C2-O2	7.54	123.42	118.90
26	BB	1746	A	N9-C4-C5	7.54	108.82	105.80
26	BB	1770	G	N9-C4-C5	7.54	108.42	105.40
26	BB	2607	G	N1-C2-N3	-7.54	119.38	123.90
26	BB	1225	G	C2'-C3'-O3'	7.54	126.08	109.50
26	BB	1406	U	N1-C2-O2	7.54	128.08	122.80
26	BB	2045	C	C2-N3-C4	7.54	123.67	119.90
26	BB	2166	U	C5-C6-N1	-7.54	118.93	122.70
26	BB	2310	C	C2-N3-C4	7.54	123.67	119.90
26	BB	2539	C	C4-C5-C6	-7.54	113.63	117.40
34	BJ	30	ARG	NE-CZ-NH2	-7.54	116.53	120.30
54	B3	16	ARG	NE-CZ-NH2	-7.54	116.53	120.30
1	AA	1386	G	O4'-C1'-N9	7.54	114.23	108.20
26	BB	1054	A	C2-N3-C4	7.54	114.37	110.60
26	BB	1824	G	C5-N7-C8	7.54	108.07	104.30
26	BB	2562	U	N3-C2-O2	-7.54	116.92	122.20
1	AA	108	G	C8-N9-C4	-7.54	103.39	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	892	A	C3'-C2'-C1'	-7.54	95.47	101.50
1	AA	974	A	N1-C6-N6	-7.54	114.08	118.60
4	AD	15	G	C4'-C3'-C2'	7.54	110.14	102.60
26	BB	853	C	N1-C2-N3	-7.54	113.92	119.20
26	BB	905	A	C6-N1-C2	7.54	123.12	118.60
26	BB	1140	C	N3-C4-N4	7.54	123.28	118.00
26	BB	2366	A	C5-N7-C8	-7.54	100.13	103.90
1	AA	318	G	N9-C4-C5	7.53	108.41	105.40
1	AA	588	G	C8-N9-C4	-7.53	103.39	106.40
26	BB	64	A	C8-N9-C4	-7.53	102.79	105.80
26	BB	303	G	N1-C2-N2	7.53	122.98	116.20
26	BB	2198	A	C4-C5-N7	-7.53	106.93	110.70
26	BB	2374	C	N3-C2-O2	-7.53	116.63	121.90
1	AA	25	C	C5-C4-N4	-7.53	114.93	120.20
1	AA	274	A	C2-N3-C4	7.53	114.37	110.60
26	BB	230	G	N3-C4-C5	-7.53	124.83	128.60
26	BB	615	U	C4-C5-C6	7.53	124.22	119.70
26	BB	1832	C	N3-C4-C5	-7.53	118.89	121.90
47	BW	8	ASP	CB-CG-OD1	-7.53	111.52	118.30
1	AA	758	C	C2-N3-C4	7.53	123.67	119.90
2	AB	2	G	N3-C4-N9	7.53	130.52	126.00
26	BB	271	G	C4-N9-C1'	-7.53	116.71	126.50
26	BB	717	C	C6-N1-C2	-7.53	117.29	120.30
1	AA	937	A	C5-N7-C8	7.53	107.66	103.90
1	AA	303	A	N9-C4-C5	7.53	108.81	105.80
1	AA	665	A	C1'-O4'-C4'	7.53	115.92	109.90
1	AA	1459	G	N3-C4-C5	-7.53	124.84	128.60
26	BB	20	C	O4'-C1'-N1	7.53	114.22	108.20
26	BB	1555	G	C4-C5-N7	7.53	113.81	110.80
26	BB	1679	A	N9-C4-C5	7.53	108.81	105.80
26	BB	1925	C	C1'-O4'-C4'	7.53	115.92	109.90
26	BB	2092	U	C2-N3-C4	-7.53	122.48	127.00
26	BB	2524	G	C5-C6-O6	-7.53	124.08	128.60
1	AA	435	A	C2-N3-C4	7.53	114.36	110.60
4	AD	36	A	C5-C6-N1	7.53	121.46	117.70
4	AD	72	C	N3-C2-O2	-7.53	116.63	121.90
13	AM	49	PHE	CB-CG-CD2	7.53	126.07	120.80
26	BB	1647	U	N1-C1'-C2'	7.53	123.78	114.00
26	BB	2668	G	N3-C4-C5	-7.53	124.84	128.60
26	BB	1685	C	C1'-O4'-C4'	-7.52	103.88	109.90
26	BB	2133	G	N3-C2-N2	7.52	125.17	119.90
26	BB	2172	U	O4'-C1'-N1	7.52	114.22	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2289	G	C5'-C4'-O4'	7.52	118.13	109.10
1	AA	101	A	N7-C8-N9	7.52	117.56	113.80
1	AA	487	A	N1-C2-N3	-7.52	125.54	129.30
1	AA	585	G	C6-N1-C2	-7.52	120.59	125.10
1	AA	950	U	C5-C4-O4	-7.52	121.39	125.90
26	BB	865	C	N3-C4-N4	7.52	123.27	118.00
26	BB	1984	G	N3-C4-C5	-7.52	124.84	128.60
26	BB	2579	C	N3-C4-N4	7.52	123.27	118.00
1	AA	342	C	C5-C6-N1	7.52	124.76	121.00
2	AB	21	A	C4'-C3'-C2'	-7.52	95.08	102.60
3	AC	40	G	N7-C8-N9	7.52	116.86	113.10
26	BB	250	G	N7-C8-N9	7.52	116.86	113.10
26	BB	2754	U	C3'-C2'-C1'	7.52	107.52	101.50
1	AA	971	G	C2-N3-C4	7.52	115.66	111.90
25	BA	73	A	C8-N9-C4	-7.52	102.79	105.80
26	BB	489	G	N3-C2-N2	7.52	125.16	119.90
26	BB	693	A	C4-C5-C6	-7.52	113.24	117.00
26	BB	1715	G	P-O3'-C3'	7.52	128.72	119.70
26	BB	2150	C	N1-C1'-C2'	-7.52	103.73	112.00
1	AA	1275	A	N1-C2-N3	-7.52	125.54	129.30
4	AD	73	A	N7-C8-N9	7.52	117.56	113.80
26	BB	663	G	N1-C2-N3	-7.52	119.39	123.90
26	BB	664	G	O4'-C1'-N9	7.52	114.22	108.20
26	BB	2323	G	C4-C5-C6	7.52	123.31	118.80
26	BB	2444	G	N1-C6-O6	-7.52	115.39	119.90
26	BB	2744	G	N3-C2-N2	-7.52	114.64	119.90
1	AA	134	G	C5'-C4'-O4'	7.52	118.12	109.10
1	AA	380	G	C4-C5-C6	7.52	123.31	118.80
1	AA	1062	U	P-O3'-C3'	7.52	128.72	119.70
1	AA	1404	C	O4'-C1'-N1	7.52	114.21	108.20
26	BB	85	G	N3-C4-C5	-7.52	124.84	128.60
1	AA	34	C	C6-N1-C2	-7.51	117.29	120.30
26	BB	159	G	N7-C8-N9	7.51	116.86	113.10
26	BB	894	U	C2-N3-C4	-7.51	122.49	127.00
26	BB	1584	U	N3-C2-O2	-7.51	116.94	122.20
26	BB	2066	C	O4'-C1'-C2'	7.51	114.36	107.60
26	BB	2077	A	C2-N3-C4	7.51	114.36	110.60
26	BB	2193	G	N3-C4-N9	7.51	130.51	126.00
54	B3	47	TYR	CB-CG-CD2	-7.51	116.49	121.00
1	AA	235	C	O4'-C1'-N1	7.51	114.21	108.20
1	AA	256	U	N1-C1'-C2'	-7.51	103.74	112.00
1	AA	368	U	N1-C2-O2	7.51	128.06	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	26	C	N1-C2-O2	7.51	123.41	118.90
26	BB	279	A	O4'-C4'-C3'	7.51	112.11	106.10
26	BB	2000	C	O4'-C1'-N1	7.51	114.21	108.20
26	BB	2669	G	N7-C8-N9	7.51	116.86	113.10
42	BR	20	ARG	NE-CZ-NH1	7.51	124.06	120.30
1	AA	101	A	N1-C6-N6	-7.51	114.09	118.60
1	AA	1322	C	N3-C4-C5	-7.51	118.89	121.90
4	AD	36	A	C4-C5-N7	-7.51	106.94	110.70
8	AH	19	ARG	NE-CZ-NH2	7.51	124.06	120.30
26	BB	98	G	N7-C8-N9	7.51	116.86	113.10
26	BB	930	G	C4-C5-N7	-7.51	107.80	110.80
26	BB	1704	C	C6-N1-C2	-7.51	117.30	120.30
26	BB	2529	G	C6-N1-C2	-7.51	120.59	125.10
26	BB	2662	A	C5-C6-N6	7.51	129.71	123.70
26	BB	2876	G	N9-C4-C5	7.51	108.41	105.40
1	AA	131	A	N1-C6-N6	7.51	123.11	118.60
1	AA	180	U	O4'-C1'-N1	7.51	114.21	108.20
1	AA	566	G	C5-C6-O6	-7.51	124.09	128.60
2	AB	40	C	O4'-C1'-N1	7.51	114.21	108.20
26	BB	226	A	C5-C6-N1	7.51	121.45	117.70
26	BB	1128	G	N3-C4-C5	-7.51	124.84	128.60
26	BB	1138	G	C5'-C4'-O4'	7.51	118.11	109.10
26	BB	2080	A	N1-C6-N6	-7.51	114.09	118.60
26	BB	2331	G	C4-C5-N7	-7.51	107.80	110.80
26	BB	2649	C	N1-C2-N3	7.51	124.46	119.20
26	BB	2726	A	C4-C5-C6	7.51	120.75	117.00
1	AA	168	G	N9-C1'-C2'	-7.51	103.74	112.00
1	AA	176	C	N3-C4-N4	7.51	123.25	118.00
1	AA	271	C	C5-C6-N1	-7.51	117.25	121.00
26	BB	1099	G	C5-N7-C8	-7.51	100.55	104.30
26	BB	1202	G	C4-C5-C6	-7.51	114.30	118.80
26	BB	1422	G	C5-N7-C8	-7.51	100.55	104.30
26	BB	1620	G	C8-N9-C4	7.51	109.40	106.40
26	BB	1778	U	N3-C4-O4	7.51	124.66	119.40
26	BB	2027	G	N7-C8-N9	7.51	116.85	113.10
5	AE	95	TRP	CB-CG-CD2	7.50	136.36	126.60
10	AJ	95	ARG	NE-CZ-NH1	7.50	124.05	120.30
26	BB	579	G	N1-C6-O6	-7.50	115.40	119.90
26	BB	1906	G	C6-N1-C2	-7.50	120.60	125.10
26	BB	2267	A	C6-C5-N7	7.50	137.55	132.30
1	AA	372	C	C1'-O4'-C4'	-7.50	103.90	109.90
1	AA	836	G	N3-C4-C5	-7.50	124.85	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	791	C	N3-C4-C5	-7.50	118.90	121.90
26	BB	1469	A	C5-N7-C8	-7.50	100.15	103.90
26	BB	2036	C	C6-N1-C2	-7.50	117.30	120.30
1	AA	758	C	C1'-O4'-C4'	7.50	115.90	109.90
1	AA	1203	C	O4'-C1'-N1	7.50	114.20	108.20
22	AV	1	PRO	CA-N-CD	-7.50	101.00	111.50
26	BB	2242	G	N9-C4-C5	-7.50	102.40	105.40
26	BB	2300	C	C5-C4-N4	-7.50	114.95	120.20
26	BB	215	G	O4'-C1'-C2'	-7.50	98.30	105.80
26	BB	386	G	N3-C4-C5	-7.50	124.85	128.60
1	AA	412	A	N9-C4-C5	7.50	108.80	105.80
1	AA	533	A	C6-C5-N7	7.50	137.55	132.30
1	AA	740	U	N3-C4-C5	-7.50	110.10	114.60
3	AC	47	C	N3-C4-C5	-7.50	118.90	121.90
26	BB	253	C	N3-C2-O2	-7.50	116.65	121.90
26	BB	701	G	O4'-C1'-N9	7.50	114.20	108.20
26	BB	784	G	N1-C6-O6	-7.50	115.40	119.90
26	BB	1763	G	C8-N9-C1'	7.50	136.75	127.00
26	BB	2423	U	C2-N3-C4	-7.50	122.50	127.00
1	AA	256	U	C2-N3-C4	-7.50	122.50	127.00
1	AA	1083	U	N1-C2-O2	7.50	128.05	122.80
26	BB	236	C	C3'-C2'-C1'	7.50	107.50	101.50
26	BB	2143	C	C4-C5-C6	-7.50	113.65	117.40
26	BB	2807	U	N3-C2-O2	-7.50	116.95	122.20
4	AD	65	G	N3-C4-C5	-7.50	124.85	128.60
26	BB	349	U	C4-C5-C6	7.50	124.20	119.70
26	BB	423	A	N7-C8-N9	-7.50	110.05	113.80
26	BB	1743	G	C1'-O4'-C4'	-7.50	103.90	109.90
26	BB	1816	C	C6-N1-C2	7.50	123.30	120.30
26	BB	1980	G	C5-C6-N1	7.50	115.25	111.50
26	BB	2070	A	C4-C5-C6	-7.50	113.25	117.00
26	BB	2731	G	C5'-C4'-O4'	7.50	118.09	109.10
26	BB	2867	G	N1-C2-N3	-7.50	119.40	123.90
1	AA	529	G	C5-C6-O6	7.49	133.10	128.60
1	AA	1047	G	C4-C5-N7	7.49	113.80	110.80
26	BB	1182	G	N3-C4-C5	-7.49	124.85	128.60
26	BB	2316	G	N3-C4-N9	7.49	130.50	126.00
1	AA	1449	C	C5-C4-N4	7.49	125.44	120.20
3	AC	28	U	C4-C5-C6	7.49	124.19	119.70
26	BB	96	C	C4'-C3'-C2'	-7.49	95.11	102.60
26	BB	2321	U	C6-N1-C2	-7.49	116.50	121.00
26	BB	2516	A	N1-C2-N3	-7.49	125.55	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	223	A	O5'-P-OP2	-7.49	98.96	105.70
1	AA	1012	A	C4-C5-C6	-7.49	113.25	117.00
1	AA	1108	G	C4-C5-N7	-7.49	107.80	110.80
26	BB	176	A	N7-C8-N9	7.49	117.55	113.80
26	BB	815	C	N1-C2-O2	7.49	123.39	118.90
26	BB	2606	C	C5-C4-N4	-7.49	114.96	120.20
1	AA	266	G	O5'-C5'-C4'	-7.49	97.47	111.70
1	AA	583	A	O4'-C4'-C3'	7.49	112.09	106.10
1	AA	717	U	C4-C5-C6	7.49	124.19	119.70
1	AA	780	A	C5-N7-C8	-7.49	100.16	103.90
1	AA	1317	C	C4'-C3'-C2'	-7.49	95.11	102.60
1	AA	1322	C	C2-N1-C1'	7.49	127.04	118.80
1	AA	1386	G	N1-C2-N2	7.49	122.94	116.20
1	AA	1476	A	N1-C6-N6	7.49	123.09	118.60
4	AD	45	A	C5-C6-N1	7.49	121.44	117.70
26	BB	530	G	C8-N9-C4	-7.49	103.41	106.40
26	BB	1363	C	N3-C4-C5	7.49	124.89	121.90
26	BB	1525	A	C5-C6-N1	7.49	121.44	117.70
26	BB	2003	A	O4'-C1'-N9	7.49	114.19	108.20
28	BD	42	ARG	NE-CZ-NH1	-7.49	116.56	120.30
1	AA	963	G	C5-C6-O6	-7.49	124.11	128.60
1	AA	1117	A	C5-N7-C8	-7.49	100.16	103.90
26	BB	87	U	N1-C1'-C2'	-7.49	103.76	112.00
26	BB	670	A	N7-C8-N9	7.49	117.54	113.80
26	BB	805	G	O4'-C1'-N9	7.49	114.19	108.20
26	BB	2237	G	N1-C2-N2	-7.49	109.46	116.20
26	BB	2421	G	N9-C4-C5	7.49	108.39	105.40
1	AA	340	U	C5-C6-N1	-7.49	118.96	122.70
1	AA	780	A	N7-C8-N9	7.49	117.54	113.80
26	BB	967	U	C5-C6-N1	-7.49	118.96	122.70
26	BB	1503	A	N9-C4-C5	7.49	108.79	105.80
26	BB	1527	G	C6-C5-N7	-7.49	125.91	130.40
26	BB	2099	U	C4-C5-C6	7.49	124.19	119.70
26	BB	2245	U	N1-C2-N3	7.49	119.39	114.90
26	BB	2866	U	C1'-O4'-C4'	-7.49	103.91	109.90
25	BA	9	G	C6-C5-N7	-7.48	125.91	130.40
26	BB	491	G	N7-C8-N9	-7.48	109.36	113.10
26	BB	624	C	C2-N3-C4	7.48	123.64	119.90
1	AA	1021	A	C4-C5-N7	-7.48	106.96	110.70
1	AA	1399	C	O4'-C1'-C2'	-7.48	98.32	105.80
2	AB	36	A	O4'-C1'-N9	7.48	114.19	108.20
25	BA	43	C	P-O3'-C3'	7.48	128.68	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	165	A	C4'-C3'-C2'	7.48	110.08	102.60
26	BB	397	U	C3'-C2'-C1'	7.48	107.48	101.50
26	BB	528	A	C1'-O4'-C4'	-7.48	103.91	109.90
26	BB	676	A	C2-N3-C4	7.48	114.34	110.60
26	BB	1487	U	C2-N3-C4	-7.48	122.51	127.00
26	BB	1842	G	C8-N9-C4	-7.48	103.41	106.40
26	BB	1985	C	N3-C4-N4	7.48	123.24	118.00
26	BB	2538	C	O4'-C1'-N1	7.48	114.19	108.20
1	AA	466	A	C4'-C3'-C2'	-7.48	95.12	102.60
1	AA	996	A	O4'-C1'-N9	7.48	114.19	108.20
26	BB	857	G	N3-C4-N9	7.48	130.49	126.00
26	BB	971	G	C5-C6-N1	-7.48	107.76	111.50
26	BB	2539	C	C2-N3-C4	7.48	123.64	119.90
26	BB	1520	U	N1-C2-N3	7.48	119.39	114.90
26	BB	1524	G	N3-C4-N9	7.48	130.49	126.00
26	BB	2471	A	C4-C5-C6	-7.48	113.26	117.00
1	AA	47	C	C5-C6-N1	-7.48	117.26	121.00
1	AA	76	G	N1-C6-O6	7.48	124.39	119.90
1	AA	573	A	C2-N3-C4	-7.48	106.86	110.60
1	AA	1033	G	N1-C6-O6	7.48	124.39	119.90
1	AA	1511	G	N9-C4-C5	7.48	108.39	105.40
1	AA	1531	A	N1-C2-N3	-7.48	125.56	129.30
6	AF	130	ARG	NE-CZ-NH2	7.48	124.04	120.30
24	AX	32	ARG	NE-CZ-NH1	7.48	124.04	120.30
26	BB	1409	U	O4'-C1'-N1	7.48	114.18	108.20
26	BB	2780	G	N1-C6-O6	-7.48	115.41	119.90
1	AA	494	G	C6-C5-N7	-7.48	125.92	130.40
1	AA	708	C	N3-C4-C5	7.48	124.89	121.90
7	AG	3	TYR	CB-CG-CD2	-7.48	116.51	121.00
25	BA	35	C	N3-C4-C5	7.48	124.89	121.90
25	BA	50	A	C4'-C3'-C2'	-7.48	95.12	102.60
26	BB	1386	C	N3-C4-N4	7.48	123.23	118.00
26	BB	2166	U	C4'-C3'-C2'	-7.48	95.12	102.60
1	AA	1006	G	C5'-C4'-O4'	7.47	118.07	109.10
1	AA	1439	G	C5-C6-O6	-7.47	124.11	128.60
2	AB	28	C	N3-C4-C5	-7.47	118.91	121.90
26	BB	350	G	N9-C4-C5	7.47	108.39	105.40
26	BB	674	G	O4'-C1'-N9	7.47	114.18	108.20
26	BB	777	G	C8-N9-C4	-7.47	103.41	106.40
26	BB	1188	U	N3-C2-O2	-7.47	116.97	122.20
26	BB	2617	U	N1-C1'-C2'	-7.47	103.78	112.00
26	BB	2816	G	C4-C5-C6	7.47	123.28	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	11	G	N9-C1'-C2'	-7.47	103.78	112.00
1	AA	80	A	N7-C8-N9	7.47	117.54	113.80
1	AA	481	G	C5-C6-O6	-7.47	124.12	128.60
1	AA	542	G	N3-C4-C5	-7.47	124.86	128.60
1	AA	548	G	C6-C5-N7	-7.47	125.92	130.40
1	AA	597	G	C4-C5-C6	7.47	123.28	118.80
1	AA	1145	A	C8-N9-C4	-7.47	102.81	105.80
1	AA	1319	A	C3'-C2'-C1'	-7.47	95.52	101.50
1	AA	1385	G	N3-C4-C5	-7.47	124.86	128.60
7	AG	43	ARG	CD-NE-CZ	7.47	134.06	123.60
26	BB	111	A	C5-N7-C8	-7.47	100.16	103.90
26	BB	1055	G	C5-C6-O6	-7.47	124.12	128.60
26	BB	1113	U	C2-N3-C4	-7.47	122.52	127.00
26	BB	1297	C	N1-C2-O2	7.47	123.38	118.90
26	BB	1634	A	N1-C2-N3	-7.47	125.56	129.30
26	BB	1786	A	N7-C8-N9	7.47	117.54	113.80
26	BB	1856	U	O4'-C1'-N1	7.47	114.18	108.20
1	AA	1418	A	N9-C4-C5	7.47	108.79	105.80
26	BB	1067	A	C4-C5-C6	-7.47	113.26	117.00
26	BB	1086	A	C6-N1-C2	7.47	123.08	118.60
26	BB	2391	G	N3-C4-C5	-7.47	124.86	128.60
1	AA	457	G	N3-C4-C5	-7.47	124.86	128.60
1	AA	1174	G	O4'-C1'-N9	7.47	114.18	108.20
26	BB	604	G	N1-C6-O6	7.47	124.38	119.90
1	AA	270	A	N9-C4-C5	7.47	108.79	105.80
1	AA	881	G	C2-N3-C4	7.47	115.63	111.90
26	BB	464	U	O4'-C1'-N1	7.47	114.17	108.20
26	BB	1415	U	C5-C4-O4	-7.47	121.42	125.90
1	AA	626	G	N7-C8-N9	7.47	116.83	113.10
1	AA	962	C	C4'-C3'-C2'	-7.47	95.13	102.60
1	AA	1053	G	C5-C6-O6	-7.47	124.12	128.60
1	AA	1514	G	N3-C4-C5	-7.47	124.87	128.60
3	AC	23	C	C2-N3-C4	7.47	123.63	119.90
26	BB	406	G	N3-C2-N2	-7.47	114.67	119.90
26	BB	892	A	C2-N3-C4	7.47	114.33	110.60
26	BB	1490	A	P-O3'-C3'	7.47	128.66	119.70
26	BB	1885	A	O4'-C1'-N9	7.47	114.17	108.20
26	BB	2341	G	C5'-C4'-O4'	7.47	118.06	109.10
1	AA	132	C	O4'-C1'-N1	7.46	114.17	108.20
1	AA	405	U	N1-C2-O2	7.46	128.03	122.80
1	AA	994	A	N7-C8-N9	-7.46	110.07	113.80
1	AA	1300	G	C5-N7-C8	-7.46	100.57	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	46	G	N9-C4-C5	7.46	108.39	105.40
26	BB	1122	G	C6-C5-N7	7.46	134.88	130.40
26	BB	1261	C	C3'-C2'-C1'	7.46	107.47	101.50
26	BB	1281	G	C3'-C2'-C1'	7.46	107.47	101.50
26	BB	1740	G	C5-C6-O6	-7.46	124.12	128.60
26	BB	1973	G	C5-C6-N1	7.46	115.23	111.50
26	BB	2136	G	N3-C4-N9	7.46	130.48	126.00
26	BB	2576	G	O4'-C1'-N9	7.46	114.17	108.20
1	AA	203	G	N9-C4-C5	7.46	108.39	105.40
26	BB	2377	A	C4-C5-C6	7.46	120.73	117.00
26	BB	2777	G	N1-C6-O6	-7.46	115.42	119.90
1	AA	117	G	C6-N1-C2	-7.46	120.62	125.10
1	AA	1068	G	N1-C6-O6	7.46	124.38	119.90
1	AA	1368	A	N7-C8-N9	7.46	117.53	113.80
25	BA	6	G	O4'-C1'-N9	7.46	114.17	108.20
26	BB	505	A	C2-N3-C4	-7.46	106.87	110.60
26	BB	2648	G	C5-N7-C8	-7.46	100.57	104.30
1	AA	57	G	C4-C5-N7	-7.46	107.82	110.80
1	AA	149	A	O4'-C1'-N9	7.46	114.17	108.20
1	AA	353	A	N1-C6-N6	-7.46	114.12	118.60
25	BA	41	G	C8-N9-C4	-7.46	103.42	106.40
26	BB	1117	C	C5-C4-N4	-7.46	114.98	120.20
27	BC	53	ARG	NE-CZ-NH2	7.46	124.03	120.30
1	AA	678	U	C1'-O4'-C4'	7.46	115.87	109.90
1	AA	1053	G	C2-N3-C4	7.46	115.63	111.90
26	BB	730	A	C4'-C3'-C2'	7.46	110.06	102.60
26	BB	911	A	N9-C4-C5	7.46	108.78	105.80
26	BB	1221	C	N3-C4-C5	-7.46	118.92	121.90
26	BB	1302	A	C8-N9-C4	-7.46	102.82	105.80
26	BB	1448	G	N1-C2-N3	-7.46	119.42	123.90
26	BB	2582	G	O4'-C4'-C3'	7.46	112.07	106.10
27	BC	111	PHE	CB-CG-CD1	-7.46	115.58	120.80
1	AA	49	U	O4'-C1'-N1	7.46	114.16	108.20
1	AA	570	G	C5-C6-O6	-7.46	124.13	128.60
1	AA	1492	A	C5-C6-N1	7.46	121.43	117.70
26	BB	21	A	C4-C5-N7	7.46	114.43	110.70
26	BB	1665	A	N1-C2-N3	-7.46	125.57	129.30
26	BB	1686	C	N1-C2-O2	-7.46	114.43	118.90
26	BB	2128	G	N1-C6-O6	7.46	124.37	119.90
1	AA	53	A	N1-C2-N3	-7.46	125.57	129.30
1	AA	288	A	C4-C5-N7	-7.46	106.97	110.70
26	BB	369	U	N3-C2-O2	-7.46	116.98	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1112	G	N9-C1'-C2'	-7.46	103.80	112.00
26	BB	1836	C	C5'-C4'-O4'	7.46	118.05	109.10
26	BB	1867	G	N9-C4-C5	7.46	108.38	105.40
26	BB	2735	G	C3'-C2'-C1'	-7.46	95.54	101.50
1	AA	606	G	N9-C4-C5	7.45	108.38	105.40
1	AA	1106	G	N1-C6-O6	-7.45	115.43	119.90
26	BB	1454	C	N1-C2-O2	7.45	123.37	118.90
26	BB	2309	A	N3-C4-C5	7.45	132.02	126.80
26	BB	2732	G	N3-C4-N9	7.45	130.47	126.00
1	AA	1486	G	C8-N9-C4	7.45	109.38	106.40
26	BB	273	G	C2-N3-C4	7.45	115.63	111.90
26	BB	548	G	C4-C5-C6	-7.45	114.33	118.80
1	AA	569	C	C4-C5-C6	7.45	121.12	117.40
1	AA	1227	A	C8-N9-C4	-7.45	102.82	105.80
26	BB	152	A	C5'-C4'-O4'	7.45	118.04	109.10
26	BB	669	G	N3-C2-N2	-7.45	114.69	119.90
26	BB	710	U	C6-N1-C2	-7.45	116.53	121.00
26	BB	900	A	C5'-C4'-C3'	-7.45	104.08	116.00
26	BB	1119	U	N1-C1'-C2'	-7.45	103.80	112.00
26	BB	1470	A	N1-C6-N6	7.45	123.07	118.60
26	BB	2134	A	O4'-C1'-N9	7.45	114.16	108.20
26	BB	2481	G	C8-N9-C4	-7.45	103.42	106.40
26	BB	2515	C	C4'-C3'-C2'	-7.45	95.15	102.60
33	BI	123	ARG	NE-CZ-NH1	7.45	124.03	120.30
1	AA	504	C	N1-C2-N3	7.45	124.41	119.20
1	AA	881	G	O4'-C1'-N9	7.45	114.16	108.20
19	AS	21	VAL	CA-CB-CG2	7.45	122.07	110.90
25	BA	15	A	O4'-C1'-N9	7.45	114.16	108.20
26	BB	82	U	C4-C5-C6	7.45	124.17	119.70
26	BB	210	C	C4'-C3'-C2'	-7.45	95.15	102.60
26	BB	2326	C	C2-N3-C4	7.45	123.62	119.90
1	AA	684	U	N1-C1'-C2'	-7.45	103.81	112.00
2	AB	45	U	N1-C2-N3	7.45	119.37	114.90
25	BA	109	A	C2-N3-C4	7.45	114.32	110.60
26	BB	38	A	O4'-C1'-N9	7.45	114.16	108.20
26	BB	467	G	C8-N9-C1'	7.45	136.68	127.00
26	BB	1215	G	C3'-C2'-C1'	-7.45	95.54	101.50
1	AA	64	G	C5-C6-N1	7.45	115.22	111.50
1	AA	947	G	N1-C2-N3	-7.45	119.43	123.90
26	BB	114	U	C2'-C3'-O3'	7.45	125.88	109.50
26	BB	894	U	C5-C6-N1	-7.45	118.98	122.70
26	BB	1846	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(°)
26	BB	2458	G	N3-C4-N9	7.45	130.47	126.00
26	BB	2464	G	C5-C6-N1	7.45	115.22	111.50
26	BB	2682	A	N7-C8-N9	7.45	117.52	113.80
39	BO	55	ARG	NE-CZ-NH2	7.45	124.02	120.30
26	BB	1386	C	C6-N1-C2	7.44	123.28	120.30
26	BB	2587	A	C1'-O4'-C4'	-7.44	103.94	109.90
1	AA	174	A	C5-N7-C8	-7.44	100.18	103.90
1	AA	306	A	C5-C6-N1	7.44	121.42	117.70
1	AA	334	C	N1-C2-O2	7.44	123.37	118.90
1	AA	655	A	N9-C4-C5	7.44	108.78	105.80
1	AA	660	C	O4'-C1'-N1	7.44	114.16	108.20
26	BB	149	A	C8-N9-C4	-7.44	102.82	105.80
26	BB	869	G	C6-C5-N7	-7.44	125.93	130.40
26	BB	1021	A	C3'-C2'-C1'	7.44	107.45	101.50
26	BB	1047	G	C2-N3-C4	-7.44	108.18	111.90
26	BB	1293	C	P-O3'-C3'	7.44	128.63	119.70
26	BB	2029	G	O4'-C1'-N9	7.44	114.15	108.20
26	BB	2277	G	N3-C4-N9	7.44	130.47	126.00
26	BB	2814	A	N1-C6-N6	-7.44	114.13	118.60
26	BB	1010	A	C2-N3-C4	7.44	114.32	110.60
26	BB	1324	G	N7-C8-N9	-7.44	109.38	113.10
26	BB	1684	G	C5-C6-N1	7.44	115.22	111.50
26	BB	2628	C	C6-N1-C2	-7.44	117.32	120.30
1	AA	1242	G	N9-C4-C5	7.44	108.38	105.40
26	BB	584	C	N3-C4-N4	7.44	123.21	118.00
26	BB	990	A	P-O3'-C3'	7.44	128.63	119.70
26	BB	2662	A	C5'-C4'-O4'	7.44	118.03	109.10
1	AA	178	C	C4-C5-C6	-7.44	113.68	117.40
26	BB	361	G	C5-C6-O6	7.44	133.06	128.60
26	BB	438	G	N1-C2-N3	7.44	128.36	123.90
26	BB	2078	C	C1'-O4'-C4'	-7.44	103.95	109.90
26	BB	2178	C	N1-C2-O2	7.44	123.36	118.90
26	BB	2298	A	N1-C6-N6	-7.44	114.14	118.60
26	BB	1207	C	C2-N3-C4	7.44	123.62	119.90
26	BB	2845	U	N1-C2-N3	7.44	119.36	114.90
1	AA	68	G	N1-C2-N3	-7.43	119.44	123.90
1	AA	1075	U	C1'-O4'-C4'	7.43	115.85	109.90
26	BB	1921	G	C4-C5-N7	7.43	113.77	110.80
26	BB	2553	G	N7-C8-N9	7.43	116.82	113.10
1	AA	464	U	N1-C2-O2	7.43	128.00	122.80
2	AB	30	G	N7-C8-N9	7.43	116.82	113.10
26	BB	462	C	N3-C4-C5	7.43	124.87	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	881	G	C8-N9-C4	-7.43	103.43	106.40
26	BB	1732	C	N3-C4-N4	7.43	123.20	118.00
26	BB	2157	G	C2-N3-C4	7.43	115.62	111.90
26	BB	2412	A	N3-C4-C5	-7.43	121.60	126.80
37	BM	120	PRO	CA-N-CD	-7.43	101.09	111.50
56	B5	5	PHE	CB-CG-CD1	-7.43	115.60	120.80
26	BB	1942	C	N1-C2-N3	-7.43	114.00	119.20
1	AA	698	G	C4-C5-C6	7.43	123.26	118.80
1	AA	1333	A	C8-N9-C4	-7.43	102.83	105.80
26	BB	1605	C	C4'-C3'-C2'	-7.43	95.17	102.60
26	BB	1859	U	C5-C6-N1	-7.43	118.98	122.70
26	BB	2005	A	O4'-C1'-N9	7.43	114.14	108.20
26	BB	2522	U	C5-C4-O4	-7.43	121.44	125.90
26	BB	1004	U	C6-N1-C2	-7.43	116.54	121.00
26	BB	2546	U	N3-C2-O2	-7.43	117.00	122.20
1	AA	545	C	C5-C6-N1	-7.43	117.29	121.00
4	AD	14	A	C4-C5-N7	-7.43	106.99	110.70
6	AF	17	TRP	CD1-CG-CD2	-7.43	100.36	106.30
25	BA	113	C	C5-C4-N4	7.43	125.40	120.20
26	BB	577	G	C5-C6-N1	7.43	115.21	111.50
26	BB	765	C	O4'-C1'-N1	7.43	114.14	108.20
26	BB	1084	A	C1'-O4'-C4'	-7.43	103.96	109.90
26	BB	1804	C	C5-C6-N1	7.43	124.71	121.00
26	BB	2066	C	C5'-C4'-O4'	7.43	118.01	109.10
26	BB	2298	A	N3-C4-C5	-7.43	121.60	126.80
26	BB	2328	A	O4'-C1'-N9	7.43	114.14	108.20
1	AA	308	C	C5'-C4'-O4'	-7.42	100.19	109.10
1	AA	313	A	C5'-C4'-O4'	7.42	118.01	109.10
1	AA	1276	G	C2-N3-C4	7.42	115.61	111.90
2	AB	29	G	N7-C8-N9	7.42	116.81	113.10
26	BB	1224	U	P-O3'-C3'	7.42	128.61	119.70
26	BB	1613	G	C3'-C2'-C1'	-7.42	95.56	101.50
26	BB	1658	C	N3-C4-C5	7.42	124.87	121.90
26	BB	1944	U	C2-N3-C4	7.42	131.46	127.00
26	BB	2357	G	C1'-O4'-C4'	-7.42	103.96	109.90
26	BB	2597	G	C5-C6-O6	7.42	133.06	128.60
26	BB	2613	U	N1-C2-O2	-7.42	117.60	122.80
1	AA	1537	U	C6-N1-C2	-7.42	116.55	121.00
26	BB	379	G	C6-C5-N7	7.42	134.85	130.40
26	BB	2141	G	C5'-C4'-O4'	7.42	118.01	109.10
26	BB	2687	U	P-O3'-C3'	7.42	128.61	119.70
26	BB	2733	A	C5'-C4'-C3'	-7.42	104.12	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	42	G	O4'-C1'-N9	7.42	114.14	108.20
1	AA	1258	G	C1'-O4'-C4'	-7.42	103.96	109.90
2	AB	68	C	N3-C2-O2	-7.42	116.70	121.90
26	BB	182	A	O4'-C1'-N9	7.42	114.14	108.20
26	BB	266	G	C5-C6-N1	7.42	115.21	111.50
26	BB	1430	G	N7-C8-N9	7.42	116.81	113.10
26	BB	2401	U	P-O3'-C3'	7.42	128.61	119.70
26	BB	2412	A	N1-C2-N3	-7.42	125.59	129.30
1	AA	1070	U	C5'-C4'-O4'	7.42	118.00	109.10
26	BB	295	G	N7-C8-N9	7.42	116.81	113.10
26	BB	1017	G	O4'-C1'-N9	7.42	114.14	108.20
26	BB	1540	G	N9-C1'-C2'	-7.42	103.84	112.00
1	AA	548	G	N1-C6-O6	7.42	124.35	119.90
2	AB	43	G	N3-C4-C5	-7.42	124.89	128.60
25	BA	87	U	C4-C5-C6	7.42	124.15	119.70
25	BA	102	G	N3-C4-C5	-7.42	124.89	128.60
26	BB	1018	U	C5-C4-O4	-7.42	121.45	125.90
26	BB	1249	U	C2-N3-C4	-7.42	122.55	127.00
26	BB	1473	G	N1-C2-N2	-7.42	109.52	116.20
26	BB	1687	G	N3-C4-C5	-7.42	124.89	128.60
26	BB	2540	C	O4'-C1'-N1	7.42	114.13	108.20
26	BB	2627	G	N1-C2-N3	7.42	128.35	123.90
1	AA	190	A	N3-C4-C5	-7.42	121.61	126.80
1	AA	374	A	C5'-C4'-O4'	7.42	118.00	109.10
1	AA	418	C	O4'-C1'-N1	7.42	114.13	108.20
1	AA	571	U	C2-N3-C4	-7.42	122.55	127.00
1	AA	622	A	C6-N1-C2	7.42	123.05	118.60
1	AA	1247	U	C4'-C3'-C2'	-7.42	95.18	102.60
1	AA	1445	U	C5-C6-N1	7.42	126.41	122.70
26	BB	1488	C	N3-C2-O2	-7.42	116.71	121.90
26	BB	1612	C	C3'-C2'-C1'	-7.42	95.57	101.50
26	BB	2003	A	C4-C5-N7	7.42	114.41	110.70
26	BB	2374	C	C2-N3-C4	-7.42	116.19	119.90
26	BB	2429	G	N9-C4-C5	7.42	108.37	105.40
1	AA	767	A	N9-C4-C5	7.42	108.77	105.80
1	AA	803	G	C5'-C4'-O4'	7.42	118.00	109.10
1	AA	1078	U	C3'-C2'-C1'	7.42	107.43	101.50
4	AD	2	G	C8-N9-C4	-7.42	103.43	106.40
26	BB	536	G	C4'-C3'-C2'	-7.42	95.19	102.60
26	BB	2122	U	C3'-C2'-C1'	7.42	107.43	101.50
26	BB	144	A	N9-C4-C5	7.41	108.77	105.80
26	BB	353	C	N1-C2-O2	7.41	123.35	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	518	G	C5-C6-N1	7.41	115.21	111.50
26	BB	1190	G	C1'-O4'-C4'	-7.41	103.97	109.90
26	BB	1436	G	N1-C6-O6	7.41	124.35	119.90
26	BB	2576	G	C1'-O4'-C4'	-7.41	103.97	109.90
1	AA	542	G	N7-C8-N9	7.41	116.81	113.10
26	BB	2484	G	C6-N1-C2	7.41	129.55	125.10
1	AA	253	A	C8-N9-C4	-7.41	102.84	105.80
1	AA	589	U	C1'-O4'-C4'	-7.41	103.97	109.90
1	AA	646	G	N3-C2-N2	7.41	125.09	119.90
1	AA	1249	C	N1-C2-N3	7.41	124.39	119.20
1	AA	1497	G	C4-C5-C6	7.41	123.25	118.80
15	AO	53	ARG	NE-CZ-NH1	7.41	124.01	120.30
26	BB	502	A	C5'-C4'-C3'	-7.41	104.14	116.00
26	BB	674	G	N3-C2-N2	7.41	125.09	119.90
1	AA	70	U	C5'-C4'-C3'	-7.41	104.14	116.00
1	AA	1279	G	C5-C6-O6	7.41	133.05	128.60
1	AA	1497	G	N1-C2-N3	-7.41	119.45	123.90
24	AX	44	ARG	NH1-CZ-NH2	-7.41	111.25	119.40
26	BB	146	A	C5-C6-N1	7.41	121.40	117.70
26	BB	413	C	O4'-C1'-N1	7.41	114.13	108.20
26	BB	1403	A	N7-C8-N9	-7.41	110.10	113.80
26	BB	1465	G	N9-C4-C5	-7.41	102.44	105.40
26	BB	1211	C	N3-C2-O2	-7.41	116.72	121.90
26	BB	1892	C	O4'-C1'-N1	7.41	114.13	108.20
26	BB	1897	G	C6-C5-N7	-7.41	125.96	130.40
1	AA	382	A	C3'-C2'-C1'	-7.41	95.58	101.50
1	AA	396	C	C4-C5-C6	7.41	121.10	117.40
1	AA	412	A	C8-N9-C4	-7.41	102.84	105.80
1	AA	926	G	N3-C2-N2	7.41	125.08	119.90
1	AA	926	G	N3-C4-N9	7.41	130.44	126.00
1	AA	1105	A	C8-N9-C4	-7.41	102.84	105.80
1	AA	1108	G	C5-C6-O6	-7.41	124.16	128.60
26	BB	2126	A	N3-C4-C5	7.41	131.98	126.80
26	BB	2633	G	N3-C4-C5	-7.41	124.90	128.60
26	BB	2776	A	C6-N1-C2	-7.41	114.16	118.60
1	AA	808	C	C5-C6-N1	7.40	124.70	121.00
1	AA	1169	A	C6-C5-N7	7.40	137.48	132.30
26	BB	708	G	C6-N1-C2	7.40	129.54	125.10
26	BB	1339	G	N3-C4-C5	-7.40	124.90	128.60
26	BB	2256	G	C4-C5-C6	7.40	123.24	118.80
1	AA	63	C	C6-N1-C2	-7.40	117.34	120.30
1	AA	925	G	C2-N3-C4	7.40	115.60	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	713	G	C6-C5-N7	7.40	134.84	130.40
26	BB	766	U	N1-C2-N3	7.40	119.34	114.90
26	BB	1628	G	N7-C8-N9	-7.40	109.40	113.10
26	BB	2059	A	C3'-C2'-C1'	7.40	107.42	101.50
26	BB	2083	G	C8-N9-C4	-7.40	103.44	106.40
26	BB	2791	G	C5-C6-O6	-7.40	124.16	128.60
1	AA	1014	A	C2'-C3'-O3'	7.40	125.78	109.50
1	AA	1376	U	O4'-C1'-N1	-7.40	102.28	108.20
26	BB	346	A	O4'-C4'-C3'	-7.40	96.60	104.00
26	BB	583	G	N7-C8-N9	7.40	116.80	113.10
26	BB	1241	A	C3'-C2'-C1'	7.40	107.42	101.50
26	BB	1510	G	C5-C6-O6	-7.40	124.16	128.60
26	BB	1590	A	N1-C6-N6	7.40	123.04	118.60
26	BB	1879	C	N3-C4-C5	7.40	124.86	121.90
26	BB	2482	A	C8-N9-C4	-7.40	102.84	105.80
26	BB	2829	A	N1-C6-N6	7.40	123.04	118.60
1	AA	4	U	C5'-C4'-O4'	7.40	117.98	109.10
26	BB	1928	A	C5-C6-N1	-7.40	114.00	117.70
26	BB	2042	A	C5-N7-C8	7.40	107.60	103.90
26	BB	2090	A	C8-N9-C4	-7.40	102.84	105.80
1	AA	555	U	C5-C4-O4	-7.40	121.46	125.90
1	AA	676	A	N1-C6-N6	-7.40	114.16	118.60
1	AA	776	G	N1-C2-N3	-7.40	119.46	123.90
2	AB	14	A	C5-N7-C8	-7.40	100.20	103.90
25	BA	97	C	C2-N3-C4	7.40	123.60	119.90
26	BB	25	U	C5-C4-O4	-7.40	121.46	125.90
26	BB	220	G	C4-C5-C6	7.40	123.24	118.80
26	BB	400	G	N1-C2-N2	-7.40	109.54	116.20
26	BB	947	A	N9-C4-C5	7.40	108.76	105.80
26	BB	1976	U	N3-C2-O2	-7.40	117.02	122.20
26	BB	2645	G	C8-N9-C4	-7.40	103.44	106.40
26	BB	2790	U	N1-C2-N3	7.40	119.34	114.90
1	AA	627	G	N1-C2-N2	7.40	122.86	116.20
4	AD	62	C	N1-C2-O2	7.40	123.34	118.90
25	BA	48	U	C4'-C3'-C2'	-7.40	95.20	102.60
26	BB	2886	A	C4-C5-N7	-7.40	107.00	110.70
1	AA	515	G	C8-N9-C4	-7.39	103.44	106.40
1	AA	1237	C	N1-C2-O2	7.39	123.34	118.90
4	AD	46	G	C5'-C4'-C3'	-7.39	104.17	116.00
26	BB	333	G	C6-N1-C2	-7.39	120.66	125.10
26	BB	1812	U	C5-C6-N1	-7.39	119.00	122.70
26	BB	2525	G	C4-C5-N7	7.39	113.76	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2824	C	N3-C4-C5	-7.39	118.94	121.90
26	BB	2825	G	C4-C5-C6	7.39	123.24	118.80
26	BB	2898	U	P-O5'-C5'	7.39	132.73	120.90
1	AA	444	G	C4-C5-N7	7.39	113.76	110.80
1	AA	510	A	C6-N1-C2	-7.39	114.17	118.60
4	AD	40	C	C2-N3-C4	7.39	123.60	119.90
4	AD	43	G	C4-C5-N7	-7.39	107.84	110.80
26	BB	29	U	O4'-C1'-N1	7.39	114.11	108.20
26	BB	44	A	N3-C4-C5	-7.39	121.62	126.80
26	BB	493	G	N1-C6-O6	-7.39	115.46	119.90
26	BB	1349	C	C5-C6-N1	7.39	124.70	121.00
1	AA	18	C	C5'-C4'-O4'	7.39	117.97	109.10
26	BB	156	A	C8-N9-C4	-7.39	102.84	105.80
26	BB	1604	C	N3-C4-N4	7.39	123.17	118.00
1	AA	127	G	C2-N3-C4	7.39	115.59	111.90
1	AA	530	G	C4-C5-C6	7.39	123.23	118.80
2	AB	56	C	O4'-C1'-N1	7.39	114.11	108.20
26	BB	413	C	C5-C6-N1	-7.39	117.31	121.00
26	BB	699	A	C5-N7-C8	-7.39	100.20	103.90
26	BB	1744	A	N7-C8-N9	-7.39	110.11	113.80
26	BB	1779	U	N1-C2-O2	7.39	127.97	122.80
1	AA	207	C	N1-C2-O2	7.39	123.33	118.90
1	AA	421	U	C5-C4-O4	-7.39	121.47	125.90
1	AA	504	C	C6-N1-C2	-7.39	117.34	120.30
26	BB	2822	G	O4'-C4'-C3'	7.39	112.01	106.10
1	AA	402	G	N1-C2-N3	7.39	128.33	123.90
1	AA	631	C	N3-C4-C5	7.39	124.85	121.90
1	AA	768	A	N3-C4-N9	-7.39	121.49	127.40
1	AA	931	C	N1-C2-O2	7.39	123.33	118.90
26	BB	515	A	C4-C5-N7	-7.39	107.01	110.70
26	BB	629	G	N3-C4-C5	-7.39	124.91	128.60
26	BB	694	U	N3-C4-C5	-7.39	110.17	114.60
26	BB	839	U	P-O3'-C3'	7.39	128.56	119.70
26	BB	1239	G	N9-C4-C5	7.39	108.36	105.40
26	BB	1478	G	C1'-O4'-C4'	-7.39	103.99	109.90
26	BB	1540	G	C8-N9-C4	-7.39	103.45	106.40
26	BB	1875	G	N3-C4-C5	-7.39	124.91	128.60
1	AA	340	U	C4-C5-C6	7.38	124.13	119.70
1	AA	1034	G	C5'-C4'-O4'	7.38	117.96	109.10
26	BB	1297	C	C5'-C4'-O4'	7.38	117.96	109.10
26	BB	1452	G	N3-C4-C5	-7.38	124.91	128.60
26	BB	1542	U	C4-C5-C6	7.38	124.13	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1640	A	C4-C5-N7	-7.38	107.01	110.70
26	BB	2790	U	O4'-C1'-N1	-7.38	102.29	108.20
49	BY	68	PHE	CB-CG-CD1	7.38	125.97	120.80
1	AA	1027	C	C1'-O4'-C4'	-7.38	103.99	109.90
4	AD	35	C	C1'-O4'-C4'	-7.38	103.99	109.90
26	BB	258	G	N3-C4-N9	7.38	130.43	126.00
1	AA	1193	G	C4-C5-N7	-7.38	107.85	110.80
1	AA	1222	G	C5-C6-N1	7.38	115.19	111.50
8	AH	53	ARG	NH1-CZ-NH2	-7.38	111.28	119.40
26	BB	777	G	N7-C8-N9	7.38	116.79	113.10
26	BB	2615	U	C4'-C3'-C2'	-7.38	95.22	102.60
3	AC	16	A	N3-C4-N9	-7.38	121.50	127.40
26	BB	489	G	C2-N3-C4	7.38	115.59	111.90
26	BB	570	G	C3'-C2'-C1'	7.38	107.40	101.50
54	B3	12	ARG	NE-CZ-NH1	7.38	123.99	120.30
1	AA	1168	U	O4'-C1'-N1	7.38	114.10	108.20
1	AA	1489	G	C6-N1-C2	-7.38	120.67	125.10
25	BA	41	G	C3'-C2'-C1'	7.38	107.40	101.50
26	BB	370	G	N3-C4-C5	-7.38	124.91	128.60
26	BB	704	G	O4'-C1'-N9	-7.38	102.30	108.20
26	BB	1264	A	C2-N3-C4	7.38	114.29	110.60
26	BB	1459	G	N3-C4-C5	-7.38	124.91	128.60
26	BB	1482	G	O4'-C1'-N9	7.38	114.10	108.20
1	AA	897	C	C5'-C4'-O4'	7.38	117.95	109.10
1	AA	1228	C	C4-C5-C6	-7.38	113.71	117.40
26	BB	1089	A	C5-C6-N6	-7.38	117.80	123.70
26	BB	1648	U	C5-C6-N1	-7.38	119.01	122.70
26	BB	2256	G	N1-C6-O6	7.38	124.33	119.90
26	BB	2851	A	C6-C5-N7	-7.38	127.14	132.30
1	AA	961	U	C5'-C4'-O4'	7.38	117.95	109.10
26	BB	71	A	C2-N3-C4	7.38	114.29	110.60
26	BB	768	G	C5-C6-O6	-7.38	124.17	128.60
26	BB	1186	G	C2-N3-C4	7.38	115.59	111.90
26	BB	2336	A	C6-C5-N7	7.38	137.46	132.30
56	B5	34	ARG	NE-CZ-NH2	-7.38	116.61	120.30
1	AA	577	G	N7-C8-N9	-7.37	109.41	113.10
1	AA	874	G	C4-C5-N7	-7.37	107.85	110.80
1	AA	897	C	C2-N3-C4	7.37	123.59	119.90
1	AA	1446	A	O4'-C1'-N9	7.37	114.10	108.20
25	BA	65	U	N1-C2-N3	7.37	119.32	114.90
26	BB	10	A	C4-C5-C6	-7.37	113.31	117.00
26	BB	81	G	C5-N7-C8	7.37	107.99	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	187	G	N3-C4-C5	-7.37	124.91	128.60
26	BB	512	G	C5-N7-C8	-7.37	100.61	104.30
26	BB	2683	C	N3-C2-O2	-7.37	116.74	121.90
1	AA	31	G	O4'-C1'-N9	7.37	114.10	108.20
1	AA	220	G	C1'-O4'-C4'	7.37	115.80	109.90
1	AA	698	G	C5-N7-C8	7.37	107.98	104.30
1	AA	858	G	C1'-O4'-C4'	7.37	115.80	109.90
26	BB	1696	G	C4'-C3'-C2'	-7.37	95.23	102.60
26	BB	2815	C	O4'-C1'-N1	7.37	114.10	108.20
26	BB	2854	G	N1-C6-O6	-7.37	115.48	119.90
1	AA	449	G	N7-C8-N9	7.37	116.78	113.10
26	BB	102	U	N3-C4-O4	7.37	124.56	119.40
1	AA	224	U	C2-N3-C4	-7.37	122.58	127.00
1	AA	533	A	C5-C6-N1	7.37	121.39	117.70
1	AA	1131	G	C5-C6-N1	7.37	115.18	111.50
1	AA	1236	A	O4'-C1'-N9	7.37	114.09	108.20
1	AA	1484	C	C6-N1-C2	7.37	123.25	120.30
26	BB	620	G	C5-C6-N1	7.37	115.18	111.50
26	BB	878	A	C5-N7-C8	-7.37	100.22	103.90
26	BB	1027	A	N9-C4-C5	7.37	108.75	105.80
26	BB	1612	C	C2-N3-C4	-7.37	116.22	119.90
26	BB	1895	C	N1-C2-O2	7.37	123.32	118.90
26	BB	2086	U	N3-C4-C5	-7.37	110.18	114.60
26	BB	2182	U	C3'-C2'-C1'	-7.37	95.61	101.50
26	BB	2277	G	O4'-C1'-N9	7.37	114.09	108.20
26	BB	2688	G	C4-C5-C6	7.37	123.22	118.80
38	BN	47	ARG	NE-CZ-NH1	-7.37	116.62	120.30
3	AC	47	C	N3-C4-N4	7.37	123.16	118.00
26	BB	2194	U	C6-N1-C2	-7.37	116.58	121.00
26	BB	2383	G	C5-C6-O6	7.37	133.02	128.60
1	AA	394	G	C5-N7-C8	-7.37	100.62	104.30
1	AA	547	A	C6-N1-C2	-7.37	114.18	118.60
1	AA	986	U	C1'-O4'-C4'	7.37	115.79	109.90
26	BB	1386	C	N3-C2-O2	-7.37	116.75	121.90
26	BB	1420	A	O4'-C1'-N9	7.37	114.09	108.20
26	BB	2639	A	C8-N9-C4	-7.37	102.85	105.80
1	AA	743	A	C5-N7-C8	7.36	107.58	103.90
1	AA	856	C	N3-C4-C5	7.36	124.84	121.90
1	AA	1419	G	O4'-C1'-N9	7.36	114.09	108.20
1	AA	1525	G	O4'-C1'-N9	7.36	114.09	108.20
26	BB	1017	G	C5'-C4'-C3'	-7.36	104.22	116.00
26	BB	1354	A	C5'-C4'-O4'	7.36	117.94	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1573	G	N1-C2-N3	-7.36	119.48	123.90
26	BB	1729	U	N3-C2-O2	-7.36	117.05	122.20
26	BB	1947	C	N1-C2-N3	7.36	124.36	119.20
26	BB	58	G	C5'-C4'-O4'	7.36	117.93	109.10
26	BB	2415	G	C8-N9-C4	-7.36	103.45	106.40
4	AD	40	C	N1-C2-N3	-7.36	114.05	119.20
26	BB	870	U	N3-C2-O2	-7.36	117.05	122.20
26	BB	1031	G	N7-C8-N9	7.36	116.78	113.10
26	BB	2224	G	O4'-C1'-N9	7.36	114.09	108.20
50	BZ	49	ARG	NE-CZ-NH2	7.36	123.98	120.30
1	AA	713	G	N1-C2-N3	-7.36	119.48	123.90
26	BB	1585	C	O4'-C1'-N1	7.36	114.09	108.20
1	AA	191	G	N3-C4-C5	-7.36	124.92	128.60
1	AA	456	A	N9-C4-C5	7.36	108.74	105.80
3	AC	24	A	N9-C4-C5	7.36	108.74	105.80
26	BB	350	G	N3-C4-N9	-7.36	121.58	126.00
26	BB	452	G	N1-C6-O6	-7.36	115.49	119.90
26	BB	489	G	N9-C4-C5	-7.36	102.46	105.40
26	BB	1003	G	N3-C4-N9	-7.36	121.59	126.00
26	BB	1543	G	O4'-C1'-N9	7.36	114.09	108.20
26	BB	2416	C	C2-N3-C4	7.36	123.58	119.90
26	BB	2458	G	N3-C4-C5	-7.36	124.92	128.60
1	AA	10	A	C5-C6-N6	-7.36	117.82	123.70
1	AA	621	A	C4-C5-C6	7.36	120.68	117.00
1	AA	915	A	O4'-C1'-N9	7.36	114.08	108.20
4	AD	30	G	N9-C4-C5	7.36	108.34	105.40
26	BB	17	G	N3-C4-C5	-7.36	124.92	128.60
26	BB	291	G	N9-C4-C5	7.36	108.34	105.40
26	BB	1277	G	C5-C6-O6	-7.36	124.19	128.60
26	BB	1363	C	C2-N3-C4	-7.36	116.22	119.90
26	BB	2792	A	N7-C8-N9	-7.36	110.12	113.80
1	AA	846	G	C4'-C3'-C2'	-7.35	95.25	102.60
25	BA	42	C	N1-C2-O2	7.35	123.31	118.90
26	BB	884	U	C3'-C2'-C1'	7.35	107.38	101.50
26	BB	1085	A	O4'-C4'-C3'	7.35	111.98	106.10
26	BB	1481	U	P-O3'-C3'	7.35	128.52	119.70
26	BB	1505	A	C8-N9-C4	-7.35	102.86	105.80
26	BB	1720	U	C5-C4-O4	7.35	130.31	125.90
26	BB	2814	A	C4-C5-C6	-7.35	113.32	117.00
1	AA	361	G	N1-C6-O6	-7.35	115.49	119.90
1	AA	565	U	O4'-C1'-N1	7.35	114.08	108.20
1	AA	979	C	C2-N3-C4	7.35	123.58	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1146	A	N1-C2-N3	-7.35	125.62	129.30
1	AA	1217	C	C1'-O4'-C4'	7.35	115.78	109.90
26	BB	1297	C	N1-C2-N3	-7.35	114.05	119.20
26	BB	1500	G	C1'-O4'-C4'	7.35	115.78	109.90
26	BB	2517	C	O4'-C1'-N1	7.35	114.08	108.20
26	BB	2735	G	C8-N9-C4	-7.35	103.46	106.40
1	AA	230	G	N1-C6-O6	7.35	124.31	119.90
1	AA	358	U	N1-C2-N3	7.35	119.31	114.90
26	BB	1194	A	N3-C4-N9	-7.35	121.52	127.40
1	AA	116	A	C5-C6-N6	-7.35	117.82	123.70
1	AA	267	C	N1-C2-O2	7.35	123.31	118.90
1	AA	410	G	O4'-C1'-N9	7.35	114.08	108.20
1	AA	1193	G	C8-N9-C4	-7.35	103.46	106.40
26	BB	692	C	C4'-C3'-C2'	-7.35	95.25	102.60
26	BB	877	A	C4'-C3'-C2'	-7.35	95.25	102.60
26	BB	910	A	N9-C4-C5	7.35	108.74	105.80
26	BB	1757	A	C2-N3-C4	7.35	114.28	110.60
26	BB	2054	A	N3-C4-N9	-7.35	121.52	127.40
30	BF	23	PHE	CB-CG-CD2	-7.35	115.66	120.80
1	AA	685	G	C8-N9-C4	-7.35	103.46	106.40
1	AA	1383	C	N3-C4-N4	7.35	123.14	118.00
4	AD	57	C	N3-C4-C5	-7.35	118.96	121.90
19	AS	28	ARG	NE-CZ-NH2	7.35	123.97	120.30
26	BB	125	A	O4'-C1'-N9	7.35	114.08	108.20
26	BB	711	G	C6-C5-N7	7.35	134.81	130.40
26	BB	793	A	N7-C8-N9	7.35	117.47	113.80
26	BB	1018	U	N3-C4-C5	7.35	119.01	114.60
26	BB	1438	U	C5-C4-O4	-7.35	121.49	125.90
26	BB	1728	C	N1-C2-O2	7.35	123.31	118.90
26	BB	2123	G	N7-C8-N9	7.35	116.77	113.10
1	AA	310	G	N9-C4-C5	7.35	108.34	105.40
26	BB	849	A	C5-N7-C8	7.35	107.57	103.90
26	BB	1828	G	C1'-O4'-C4'	-7.35	104.02	109.90
26	BB	2242	G	C6-C5-N7	-7.35	125.99	130.40
1	AA	187	G	C5-N7-C8	-7.34	100.63	104.30
1	AA	558	G	C5-C6-N1	7.34	115.17	111.50
1	AA	777	A	N1-C6-N6	7.34	123.01	118.60
1	AA	890	G	N9-C4-C5	-7.34	102.46	105.40
1	AA	1272	G	P-O3'-C3'	7.34	128.51	119.70
1	AA	1417	G	C5'-C4'-O4'	7.34	117.91	109.10
1	AA	1522	U	C6-N1-C2	7.34	125.41	121.00
26	BB	3	U	C2-N3-C4	-7.34	122.59	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	997	G	C5'-C4'-O4'	7.34	117.91	109.10
26	BB	1056	G	N9-C4-C5	7.34	108.34	105.40
26	BB	1988	G	N3-C4-C5	-7.34	124.93	128.60
26	BB	2063	C	C5-C4-N4	7.34	125.34	120.20
26	BB	2310	C	N1-C2-O2	7.34	123.31	118.90
26	BB	2464	G	C4-C5-N7	-7.34	107.86	110.80
26	BB	2489	U	C5-C6-N1	7.34	126.37	122.70
26	BB	2692	G	C5-C6-O6	-7.34	124.19	128.60
26	BB	2843	G	O4'-C1'-N9	7.34	114.08	108.20
26	BB	2850	A	C6-N1-C2	-7.34	114.19	118.60
33	BI	19	VAL	CG1-CB-CG2	-7.34	99.15	110.90
1	AA	430	A	C2-N3-C4	-7.34	106.93	110.60
26	BB	674	G	C2-N3-C4	7.34	115.57	111.90
26	BB	1002	G	O4'-C1'-N9	7.34	114.08	108.20
26	BB	2792	A	C5-N7-C8	7.34	107.57	103.90
31	BG	21	TYR	CB-CG-CD1	7.34	125.41	121.00
34	BJ	137	ARG	NE-CZ-NH2	-7.34	116.63	120.30
1	AA	754	C	N3-C4-N4	7.34	123.14	118.00
25	BA	2	G	N3-C2-N2	7.34	125.04	119.90
25	BA	43	C	N1-C2-N3	-7.34	114.06	119.20
26	BB	437	U	C4-C5-C6	7.34	124.11	119.70
26	BB	582	A	C8-N9-C4	-7.34	102.86	105.80
26	BB	1697	G	N3-C4-N9	7.34	130.41	126.00
1	AA	39	G	C4-C5-N7	-7.34	107.86	110.80
1	AA	757	U	P-O3'-C3'	7.34	128.51	119.70
1	AA	1084	G	C5-C6-N1	7.34	115.17	111.50
26	BB	220	G	C4'-C3'-C2'	-7.34	95.26	102.60
26	BB	510	C	C6-N1-C2	7.34	123.24	120.30
26	BB	829	A	O4'-C1'-N9	7.34	114.07	108.20
26	BB	1830	C	C2-N3-C4	7.34	123.57	119.90
26	BB	2447	G	C2-N3-C4	7.34	115.57	111.90
2	AB	21	A	C3'-C2'-C1'	7.34	107.37	101.50
26	BB	175	G	N7-C8-N9	7.34	116.77	113.10
26	BB	252	G	C2-N3-C4	7.34	115.57	111.90
26	BB	1574	C	N1-C2-O2	7.34	123.30	118.90
26	BB	1622	G	C5'-C4'-C3'	7.34	127.74	116.00
26	BB	2623	G	C3'-C2'-C1'	-7.34	95.63	101.50
1	AA	417	G	C3'-C2'-C1'	-7.34	95.63	101.50
1	AA	572	A	C4-C5-C6	-7.34	113.33	117.00
2	AB	9	A	C6-C5-N7	7.34	137.44	132.30
2	AB	36	A	C5'-C4'-C3'	-7.34	104.26	116.00
26	BB	1101	U	C5-C6-N1	-7.34	119.03	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1372	U	C4-C5-C6	-7.34	115.30	119.70
26	BB	1635	A	C5'-C4'-O4'	7.34	117.90	109.10
26	BB	2228	G	N1-C2-N3	7.34	128.30	123.90
26	BB	2745	C	C3'-C2'-C1'	7.34	107.37	101.50
56	B5	3	ARG	NE-CZ-NH1	-7.34	116.63	120.30
1	AA	239	U	P-O3'-C3'	7.33	128.50	119.70
1	AA	314	C	C4'-C3'-C2'	-7.33	95.27	102.60
1	AA	422	C	P-O3'-C3'	7.33	128.50	119.70
1	AA	778	G	N3-C2-N2	7.33	125.03	119.90
26	BB	612	G	C5-C6-N1	7.33	115.17	111.50
26	BB	630	G	C8-N9-C4	-7.33	103.47	106.40
1	AA	213	G	O4'-C1'-N9	-7.33	102.33	108.20
26	BB	1783	A	N7-C8-N9	7.33	117.47	113.80
26	BB	2102	G	C5-N7-C8	7.33	107.97	104.30
26	BB	2123	G	C5-N7-C8	-7.33	100.63	104.30
26	BB	2637	U	P-O3'-C3'	7.33	128.50	119.70
26	BB	2735	G	O4'-C1'-N9	7.33	114.07	108.20
1	AA	124	C	C5'-C4'-C3'	-7.33	104.27	116.00
1	AA	191	G	C2-N3-C4	7.33	115.56	111.90
1	AA	252	U	C4'-C3'-C2'	-7.33	95.27	102.60
1	AA	986	U	C6-N1-C2	-7.33	116.60	121.00
1	AA	1403	C	C1'-O4'-C4'	-7.33	104.03	109.90
3	AC	33	A	O4'-C1'-N9	-7.33	102.33	108.20
26	BB	32	C	N3-C4-N4	7.33	123.13	118.00
26	BB	1609	A	O4'-C4'-C3'	7.33	111.97	106.10
26	BB	1824	G	C4-C5-C6	7.33	123.20	118.80
26	BB	2120	G	C4-C5-C6	7.33	123.20	118.80
26	BB	2673	G	N9-C4-C5	-7.33	102.47	105.40
1	AA	652	U	O4'-C1'-N1	7.33	114.06	108.20
26	BB	768	G	N1-C2-N3	-7.33	119.50	123.90
26	BB	1068	G	C2-N3-C4	7.33	115.56	111.90
26	BB	1173	U	N3-C4-C5	-7.33	110.20	114.60
26	BB	1265	A	C8-N9-C4	-7.33	102.87	105.80
1	AA	341	C	C2-N3-C4	7.33	123.56	119.90
1	AA	406	G	C5-C6-O6	-7.33	124.20	128.60
4	AD	18	U	C5'-C4'-O4'	-7.33	100.31	109.10
14	AN	126	ARG	NH1-CZ-NH2	-7.33	111.34	119.40
26	BB	313	G	C4-C5-C6	7.33	123.20	118.80
26	BB	628	G	C2-N3-C4	-7.33	108.23	111.90
26	BB	1462	C	C3'-C2'-C1'	-7.33	95.64	101.50
26	BB	2025	C	O4'-C1'-N1	7.33	114.06	108.20
26	BB	2128	G	C5-N7-C8	-7.33	100.64	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2678	C	C2-N3-C4	7.33	123.56	119.90
26	BB	2697	G	C8-N9-C4	-7.33	103.47	106.40
31	BG	6	TYR	CB-CG-CD1	-7.33	116.60	121.00
1	AA	1233	G	N3-C4-C5	-7.33	124.94	128.60
26	BB	703	U	N1-C1'-C2'	-7.33	103.94	112.00
26	BB	791	C	N1-C1'-C2'	7.33	123.53	114.00
26	BB	1414	C	C4-C5-C6	-7.33	113.74	117.40
26	BB	1803	A	N7-C8-N9	7.33	117.46	113.80
26	BB	1859	U	C2-N3-C4	-7.33	122.60	127.00
26	BB	2430	A	N7-C8-N9	-7.33	110.14	113.80
26	BB	2463	C	N1-C1'-C2'	-7.33	103.94	112.00
2	AB	9	A	C5-C6-N1	7.33	121.36	117.70
26	BB	51	G	P-O3'-C3'	7.33	128.49	119.70
26	BB	100	U	N3-C4-C5	-7.33	110.20	114.60
26	BB	285	G	C5-C6-O6	-7.33	124.20	128.60
26	BB	542	C	N3-C4-C5	-7.33	118.97	121.90
26	BB	920	A	O4'-C1'-N9	7.33	114.06	108.20
26	BB	1088	A	O4'-C1'-N9	7.33	114.06	108.20
26	BB	1177	G	N3-C2-N2	-7.33	114.77	119.90
26	BB	1519	G	C6-N1-C2	-7.33	120.70	125.10
26	BB	2364	C	O4'-C1'-N1	7.33	114.06	108.20
39	BO	125	PRO	O-C-N	7.33	134.42	122.70
1	AA	549	C	C6-N1-C2	-7.32	117.37	120.30
1	AA	827	U	N3-C2-O2	-7.32	117.07	122.20
4	AD	68	C	O4'-C1'-N1	7.32	114.06	108.20
26	BB	111	A	N1-C2-N3	-7.32	125.64	129.30
26	BB	361	G	N9-C4-C5	-7.32	102.47	105.40
26	BB	1884	G	P-O3'-C3'	7.32	128.49	119.70
26	BB	2043	C	C5'-C4'-C3'	-7.32	104.28	116.00
26	BB	1172	C	C1'-O4'-C4'	-7.32	104.04	109.90
26	BB	1647	U	C5-C4-O4	7.32	130.29	125.90
1	AA	707	U	O4'-C1'-N1	7.32	114.06	108.20
1	AA	1106	G	C5-C6-N1	7.32	115.16	111.50
26	BB	309	A	C5'-C4'-O4'	7.32	117.88	109.10
26	BB	2231	U	N1-C2-N3	7.32	119.29	114.90
26	BB	2343	U	N3-C4-O4	7.32	124.52	119.40
26	BB	2434	A	C3'-C2'-C1'	7.32	107.36	101.50
26	BB	2713	U	N3-C4-O4	7.32	124.53	119.40
1	AA	502	A	N7-C8-N9	7.32	117.46	113.80
1	AA	763	G	O4'-C1'-C2'	7.32	114.19	107.60
26	BB	91	A	O4'-C4'-C3'	7.32	111.96	106.10
26	BB	375	G	O4'-C1'-N9	7.32	114.06	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2356	U	N1-C1'-C2'	-7.32	103.95	112.00
1	AA	1005	A	C6-C5-N7	7.32	137.42	132.30
1	AA	1180	A	N9-C4-C5	7.32	108.73	105.80
1	AA	1290	G	C4-C5-C6	-7.32	114.41	118.80
25	BA	92	C	C5-C4-N4	-7.32	115.08	120.20
26	BB	189	G	N3-C2-N2	7.32	125.02	119.90
26	BB	1688	U	C5-C6-N1	-7.32	119.04	122.70
26	BB	1978	A	C6-N1-C2	-7.32	114.21	118.60
26	BB	1994	C	N3-C4-C5	7.32	124.83	121.90
26	BB	2820	A	C4'-C3'-C2'	-7.32	95.28	102.60
1	AA	686	U	C6-N1-C2	-7.32	116.61	121.00
1	AA	1031	C	C2-N3-C4	7.32	123.56	119.90
25	BA	101	A	C5'-C4'-O4'	7.32	117.88	109.10
26	BB	311	A	C4-C5-C6	-7.32	113.34	117.00
26	BB	1024	G	C5-C6-N1	7.32	115.16	111.50
1	AA	373	A	N3-C4-N9	7.31	133.25	127.40
1	AA	380	G	C6-C5-N7	-7.31	126.01	130.40
1	AA	491	G	O4'-C4'-C3'	7.31	111.95	106.10
26	BB	2332	C	C2-N3-C4	7.31	123.56	119.90
26	BB	2835	A	C5-N7-C8	-7.31	100.24	103.90
26	BB	622	G	C5'-C4'-O4'	7.31	117.88	109.10
26	BB	726	G	O4'-C1'-C2'	7.31	114.18	107.60
26	BB	846	U	C5'-C4'-O4'	7.31	117.88	109.10
26	BB	1071	G	N1-C6-O6	-7.31	115.51	119.90
26	BB	2389	G	N1-C6-O6	-7.31	115.51	119.90
1	AA	618	C	N1-C2-N3	-7.31	114.08	119.20
1	AA	1110	A	C8-N9-C4	-7.31	102.88	105.80
1	AA	1476	A	N3-C4-C5	-7.31	121.68	126.80
1	AA	1479	C	C2-N3-C4	7.31	123.56	119.90
26	BB	1526	C	C4-C5-C6	-7.31	113.75	117.40
26	BB	2758	A	N1-C2-N3	7.31	132.96	129.30
1	AA	161	A	C5-N7-C8	-7.31	100.25	103.90
1	AA	1453	G	C5'-C4'-C3'	-7.31	104.31	116.00
26	BB	222	A	N9-C4-C5	7.31	108.72	105.80
26	BB	1057	A	C5-C6-N1	7.31	121.36	117.70
26	BB	2242	G	C5'-C4'-O4'	7.31	117.87	109.10
1	AA	953	G	N9-C4-C5	-7.31	102.48	105.40
1	AA	1151	A	N1-C6-N6	7.31	122.98	118.60
1	AA	1350	A	C2'-C3'-O3'	7.31	125.58	109.50
26	BB	350	G	C8-N9-C4	-7.31	103.48	106.40
26	BB	1462	C	N3-C4-C5	7.31	124.82	121.90
26	BB	2344	U	C4'-C3'-C2'	-7.31	95.29	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	440	C	N1-C2-N3	-7.31	114.09	119.20
1	AA	963	G	C4-C5-C6	7.31	123.18	118.80
1	AA	1343	G	C6-C5-N7	-7.31	126.02	130.40
26	BB	2054	A	C5-N7-C8	-7.31	100.25	103.90
12	AL	5	TYR	CB-CG-CD1	-7.30	116.62	121.00
26	BB	122	G	N7-C8-N9	-7.30	109.45	113.10
26	BB	223	A	O4'-C1'-N9	7.30	114.04	108.20
26	BB	702	U	N1-C2-N3	7.30	119.28	114.90
26	BB	760	G	C5-C6-O6	-7.30	124.22	128.60
26	BB	840	C	C2-N3-C4	7.30	123.55	119.90
26	BB	1103	A	N9-C4-C5	-7.30	102.88	105.80
26	BB	1337	G	N3-C4-C5	-7.30	124.95	128.60
26	BB	1999	C	N1-C2-O2	7.30	123.28	118.90
26	BB	2190	G	N9-C4-C5	7.30	108.32	105.40
1	AA	336	A	C4-C5-N7	-7.30	107.05	110.70
1	AA	1278	G	N3-C4-C5	-7.30	124.95	128.60
26	BB	604	G	O4'-C1'-N9	7.30	114.04	108.20
26	BB	2298	A	C6-N1-C2	-7.30	114.22	118.60
1	AA	466	A	N1-C2-N3	7.30	132.95	129.30
26	BB	421	C	O5'-P-OP2	-7.30	99.13	105.70
26	BB	1368	G	N3-C4-C5	-7.30	124.95	128.60
26	BB	1433	A	C6-N1-C2	7.30	122.98	118.60
26	BB	1649	G	N3-C2-N2	-7.30	114.79	119.90
26	BB	2352	A	N9-C4-C5	7.30	108.72	105.80
1	AA	97	G	C4-C5-N7	-7.30	107.88	110.80
1	AA	276	G	P-O3'-C3'	7.30	128.46	119.70
1	AA	1162	C	N1-C2-O2	7.30	123.28	118.90
2	AB	56	C	C5-C6-N1	-7.30	117.35	121.00
4	AD	22	A	C5-C6-N6	7.30	129.54	123.70
26	BB	1364	G	C3'-C2'-C1'	-7.30	95.66	101.50
26	BB	1888	G	N1-C2-N3	-7.30	119.52	123.90
1	AA	4	U	O4'-C4'-C3'	-7.30	96.70	104.00
1	AA	61	G	N3-C4-N9	-7.30	121.62	126.00
26	BB	422	A	C4-C5-N7	-7.30	107.05	110.70
26	BB	436	C	C2-N3-C4	7.30	123.55	119.90
26	BB	1623	G	N9-C4-C5	7.30	108.32	105.40
26	BB	2554	U	C3'-C2'-C1'	7.30	107.34	101.50
1	AA	54	C	C4-C5-C6	-7.30	113.75	117.40
1	AA	199	A	C5-C6-N6	-7.30	117.86	123.70
1	AA	779	C	N3-C4-N4	7.30	123.11	118.00
1	AA	1149	C	O4'-C1'-N1	7.30	114.04	108.20
26	BB	838	C	N3-C4-C5	-7.30	118.98	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1092	C	N1-C2-O2	7.30	123.28	118.90
26	BB	2320	U	C5-C6-N1	-7.30	119.05	122.70
26	BB	2357	G	N7-C8-N9	7.30	116.75	113.10
1	AA	464	U	N3-C2-O2	-7.29	117.09	122.20
1	AA	618	C	C2-N3-C4	7.29	123.55	119.90
1	AA	622	A	C1'-O4'-C4'	7.29	115.73	109.90
1	AA	1041	G	C8-N9-C4	-7.29	103.48	106.40
26	BB	564	C	N1-C2-O2	7.29	123.28	118.90
26	BB	977	G	C5-C6-O6	-7.29	124.22	128.60
26	BB	1678	A	N9-C4-C5	7.29	108.72	105.80
26	BB	2257	U	O4'-C1'-N1	7.29	114.03	108.20
26	BB	2403	C	N3-C4-C5	-7.29	118.98	121.90
26	BB	2866	U	C6-N1-C2	-7.29	116.62	121.00
1	AA	43	C	N1-C2-O2	7.29	123.27	118.90
1	AA	536	C	O4'-C4'-C3'	7.29	111.93	106.10
1	AA	1098	C	C6-N1-C2	-7.29	117.38	120.30
25	BA	83	G	N1-C2-N3	-7.29	119.53	123.90
26	BB	254	G	O4'-C1'-N9	7.29	114.03	108.20
26	BB	2200	C	N3-C4-N4	7.29	123.10	118.00
1	AA	567	G	O4'-C1'-N9	7.29	114.03	108.20
1	AA	1106	G	C8-N9-C4	-7.29	103.48	106.40
26	BB	934	U	O4'-C1'-N1	7.29	114.03	108.20
1	AA	681	A	C6-C5-N7	-7.29	127.20	132.30
1	AA	861	G	N3-C4-N9	-7.29	121.63	126.00
26	BB	1025	G	N3-C4-N9	-7.29	121.63	126.00
26	BB	1534	U	N1-C2-N3	7.29	119.27	114.90
28	BD	193	GLU	OE1-CD-OE2	7.29	132.05	123.30
1	AA	1047	G	O4'-C1'-N9	7.29	114.03	108.20
1	AA	126	G	N3-C4-N9	7.29	130.37	126.00
1	AA	356	A	C6-N1-C2	-7.29	114.23	118.60
1	AA	895	G	N3-C4-C5	-7.29	124.96	128.60
1	AA	1192	C	C4-C5-C6	-7.29	113.76	117.40
1	AA	1415	G	C5-C6-N1	7.29	115.14	111.50
26	BB	716	A	O4'-C4'-C3'	7.29	111.93	106.10
26	BB	793	A	C5-N7-C8	-7.29	100.26	103.90
26	BB	1031	G	C8-N9-C4	-7.29	103.49	106.40
1	AA	99	C	P-O3'-C3'	7.28	128.44	119.70
1	AA	375	U	C6-N1-C2	-7.28	116.63	121.00
1	AA	746	A	C6-N1-C2	7.28	122.97	118.60
2	AB	15	A	O4'-C1'-N9	7.28	114.03	108.20
26	BB	444	C	C5'-C4'-O4'	7.28	117.84	109.10
26	BB	706	A	N7-C8-N9	-7.28	110.16	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	927	A	C5'-C4'-O4'	7.28	117.84	109.10
26	BB	1793	C	N3-C4-N4	7.28	123.10	118.00
26	BB	2126	A	N3-C4-N9	-7.28	121.57	127.40
26	BB	2441	U	C5'-C4'-O4'	7.28	117.84	109.10
26	BB	2823	A	C3'-C2'-C1'	7.28	107.33	101.50
1	AA	622	A	N1-C2-N3	-7.28	125.66	129.30
1	AA	710	G	N3-C2-N2	-7.28	114.80	119.90
1	AA	1500	A	C6-N1-C2	-7.28	114.23	118.60
26	BB	1177	G	N7-C8-N9	7.28	116.74	113.10
26	BB	2857	G	N1-C2-N2	7.28	122.75	116.20
26	BB	2893	A	C6-N1-C2	-7.28	114.23	118.60
1	AA	1347	G	N3-C4-C5	-7.28	124.96	128.60
1	AA	1494	G	C8-N9-C4	-7.28	103.49	106.40
25	BA	25	U	P-O3'-C3'	7.28	128.44	119.70
25	BA	34	A	C5-N7-C8	7.28	107.54	103.90
26	BB	279	A	N7-C8-N9	-7.28	110.16	113.80
26	BB	928	A	C4-C5-N7	-7.28	107.06	110.70
26	BB	1681	G	C5-N7-C8	7.28	107.94	104.30
26	BB	2468	A	C1'-O4'-C4'	-7.28	104.08	109.90
26	BB	2641	G	N1-C2-N3	-7.28	119.53	123.90
26	BB	2857	G	N1-C6-O6	-7.28	115.53	119.90
26	BB	202	U	C5'-C4'-O4'	7.28	117.83	109.10
26	BB	843	G	C3'-C2'-C1'	-7.28	95.68	101.50
26	BB	1898	U	C6-N1-C2	-7.28	116.63	121.00
1	AA	620	C	N3-C2-O2	-7.28	116.81	121.90
26	BB	321	U	N1-C1'-C2'	7.28	123.46	114.00
26	BB	355	U	C5-C4-O4	-7.28	121.53	125.90
26	BB	532	A	C3'-C2'-C1'	-7.28	95.68	101.50
26	BB	1140	C	C6-N1-C2	-7.28	117.39	120.30
26	BB	1322	A	C4-C5-N7	7.28	114.34	110.70
26	BB	1344	U	C5-C4-O4	-7.28	121.53	125.90
1	AA	1033	G	N7-C8-N9	-7.28	109.46	113.10
1	AA	1343	G	C3'-C2'-C1'	7.28	107.32	101.50
1	AA	1490	U	C4-C5-C6	7.28	124.07	119.70
26	BB	1511	G	C4-C5-C6	-7.28	114.44	118.80
26	BB	1620	G	C5-C6-N1	7.28	115.14	111.50
26	BB	2011	U	N1-C1'-C2'	-7.28	104.00	112.00
26	BB	451	U	N3-C4-C5	7.27	118.97	114.60
26	BB	1356	G	C5'-C4'-O4'	7.27	117.83	109.10
26	BB	1903	G	N9-C4-C5	7.27	108.31	105.40
26	BB	977	G	N3-C2-N2	-7.27	114.81	119.90
26	BB	1182	G	C6-C5-N7	7.27	134.76	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1756	G	C5-N7-C8	-7.27	100.66	104.30
26	BB	2838	G	C4-C5-N7	-7.27	107.89	110.80
1	AA	51	A	N7-C8-N9	7.27	117.44	113.80
1	AA	58	C	C3'-C2'-C1'	-7.27	95.68	101.50
1	AA	385	C	C3'-C2'-C1'	7.27	107.32	101.50
3	AC	26	U	C3'-C2'-C1'	7.27	107.32	101.50
26	BB	331	C	N1-C2-O2	7.27	123.26	118.90
26	BB	453	A	C4-C5-N7	-7.27	107.06	110.70
26	BB	1273	U	C5'-C4'-O4'	7.27	117.83	109.10
30	BF	183	PHE	CB-CG-CD1	-7.27	115.71	120.80
1	AA	450	G	C5'-C4'-O4'	7.27	117.82	109.10
18	AR	76	ARG	NE-CZ-NH2	-7.27	116.67	120.30
26	BB	273	G	N3-C4-N9	7.27	130.36	126.00
26	BB	428	A	N7-C8-N9	7.27	117.44	113.80
26	BB	756	A	N1-C2-N3	-7.27	125.67	129.30
26	BB	1071	G	N3-C4-C5	-7.27	124.97	128.60
26	BB	1805	A	O4'-C1'-N9	7.27	114.02	108.20
26	BB	2241	A	C2-N3-C4	7.27	114.23	110.60
26	BB	2491	U	N3-C2-O2	-7.27	117.11	122.20
26	BB	2516	A	C5-C6-N1	7.27	121.33	117.70
26	BB	2748	A	C5-N7-C8	7.27	107.53	103.90
1	AA	584	G	C2-N3-C4	-7.27	108.27	111.90
1	AA	1039	G	C4-C5-C6	7.27	123.16	118.80
26	BB	1074	G	O4'-C1'-N9	7.27	114.01	108.20
26	BB	1565	C	N1-C2-O2	7.27	123.26	118.90
26	BB	2347	C	N1-C2-O2	7.27	123.26	118.90
26	BB	2725	A	N1-C2-N3	-7.27	125.67	129.30
1	AA	158	G	C5'-C4'-O4'	7.27	117.82	109.10
1	AA	197	A	N9-C4-C5	7.27	108.71	105.80
1	AA	852	G	C8-N9-C4	7.27	109.31	106.40
1	AA	1065	U	P-O3'-C3'	7.27	128.42	119.70
26	BB	194	G	O4'-C1'-N9	7.27	114.01	108.20
26	BB	611	C	O4'-C1'-N1	7.27	114.01	108.20
26	BB	2118	U	N1-C2-O2	7.27	127.89	122.80
1	AA	953	G	C1'-O4'-C4'	-7.26	104.09	109.90
1	AA	1025	U	C1'-O4'-C4'	-7.26	104.09	109.90
6	AF	17	TRP	CB-CG-CD2	7.26	136.04	126.60
26	BB	171	U	C6-N1-C2	-7.26	116.64	121.00
26	BB	264	C	N1-C1'-C2'	-7.26	104.01	112.00
26	BB	317	G	N1-C2-N3	-7.26	119.54	123.90
26	BB	455	C	C5-C6-N1	7.26	124.63	121.00
26	BB	877	A	N1-C2-N3	-7.26	125.67	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	918	A	C4-C5-N7	-7.26	107.07	110.70
3	AC	29	G	N1-C2-N3	-7.26	119.54	123.90
1	AA	103	U	O4'-C1'-N1	7.26	114.01	108.20
1	AA	617	G	O4'-C1'-N9	7.26	114.01	108.20
1	AA	1074	G	N7-C8-N9	7.26	116.73	113.10
26	BB	450	G	N7-C8-N9	7.26	116.73	113.10
26	BB	864	G	N3-C4-N9	7.26	130.36	126.00
26	BB	1287	A	C4-C5-N7	-7.26	107.07	110.70
26	BB	1374	G	O4'-C1'-N9	7.26	114.01	108.20
26	BB	1511	G	N3-C2-N2	-7.26	114.82	119.90
26	BB	1570	A	C5-C6-N1	7.26	121.33	117.70
26	BB	2120	G	C1'-O4'-C4'	7.26	115.71	109.90
1	AA	383	A	P-O3'-C3'	7.26	128.41	119.70
1	AA	526	C	C5'-C4'-C3'	7.26	127.62	116.00
1	AA	1178	G	C5-C6-O6	7.26	132.96	128.60
1	AA	1196	A	N7-C8-N9	-7.26	110.17	113.80
2	AB	13	C	C4-C5-C6	-7.26	113.77	117.40
26	BB	17	G	N7-C8-N9	7.26	116.73	113.10
26	BB	45	G	C5-N7-C8	7.26	107.93	104.30
26	BB	179	C	P-O3'-C3'	-7.26	110.99	119.70
26	BB	261	G	N3-C2-N2	7.26	124.98	119.90
26	BB	1425	G	N1-C2-N3	-7.26	119.54	123.90
26	BB	1964	G	C2-N3-C4	7.26	115.53	111.90
26	BB	2845	U	N3-C4-C5	7.26	118.96	114.60
1	AA	598	U	N3-C4-O4	7.26	124.48	119.40
26	BB	818	G	C4-C5-N7	7.26	113.70	110.80
1	AA	372	C	C2-N3-C4	7.26	123.53	119.90
1	AA	1194	U	C6-N1-C2	-7.26	116.65	121.00
26	BB	1952	A	C4-C5-C6	-7.26	113.37	117.00
26	BB	2186	G	N3-C4-C5	-7.26	124.97	128.60
26	BB	2629	U	C5-C4-O4	-7.26	121.55	125.90
26	BB	2727	A	N1-C6-N6	7.26	122.95	118.60
1	AA	426	U	N1-C2-N3	7.25	119.25	114.90
1	AA	602	A	C1'-O4'-C4'	7.25	115.70	109.90
26	BB	365	U	O4'-C1'-N1	7.25	114.00	108.20
26	BB	1583	A	O4'-C1'-N9	7.25	114.00	108.20
1	AA	710	G	C2-N3-C4	7.25	115.53	111.90
1	AA	730	G	C8-N9-C4	-7.25	103.50	106.40
26	BB	649	G	N3-C2-N2	-7.25	114.82	119.90
26	BB	766	U	C2-N3-C4	-7.25	122.65	127.00
26	BB	1445	G	N1-C2-N3	-7.25	119.55	123.90
26	BB	2831	G	C5'-C4'-O4'	7.25	117.80	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	21	G	C2-N3-C4	7.25	115.53	111.90
26	BB	339	U	C1'-O4'-C4'	-7.25	104.10	109.90
26	BB	1184	U	N1-C2-N3	7.25	119.25	114.90
26	BB	1896	G	C4-C5-N7	7.25	113.70	110.80
26	BB	2059	A	O4'-C1'-C2'	-7.25	98.55	105.80
26	BB	2382	G	C5-N7-C8	-7.25	100.67	104.30
1	AA	10	A	N7-C8-N9	7.25	117.42	113.80
1	AA	470	C	C3'-C2'-C1'	7.25	107.30	101.50
1	AA	620	C	C5'-C4'-O4'	7.25	117.80	109.10
1	AA	1064	G	C4-C5-C6	7.25	123.15	118.80
26	BB	619	G	C1'-O4'-C4'	7.25	115.70	109.90
26	BB	1516	G	N3-C4-C5	-7.25	124.97	128.60
26	BB	1821	A	N1-C6-N6	-7.25	114.25	118.60
26	BB	2048	G	N7-C8-N9	7.25	116.72	113.10
26	BB	2447	G	C1'-O4'-C4'	7.25	115.70	109.90
1	AA	511	C	C1'-O4'-C4'	-7.25	104.10	109.90
1	AA	871	U	C1'-O4'-C4'	-7.25	104.10	109.90
1	AA	1230	C	C1'-O4'-C4'	7.25	115.70	109.90
1	AA	1296	C	C4'-C3'-C2'	7.25	109.85	102.60
25	BA	37	C	N3-C4-C5	-7.25	119.00	121.90
26	BB	172	A	C3'-C2'-C1'	-7.25	95.70	101.50
26	BB	1726	C	C5-C4-N4	-7.25	115.13	120.20
26	BB	2427	C	N3-C4-C5	7.25	124.80	121.90
26	BB	2685	G	C5'-C4'-O4'	7.25	117.80	109.10
26	BB	2826	A	C5-N7-C8	-7.25	100.28	103.90
1	AA	321	A	C1'-O4'-C4'	-7.25	104.10	109.90
6	AF	180	ASP	CB-CG-OD2	-7.25	111.78	118.30
26	BB	816	C	C6-N1-C2	-7.25	117.40	120.30
26	BB	891	G	C4'-C3'-C2'	-7.25	95.35	102.60
26	BB	1829	A	N1-C2-N3	7.25	132.92	129.30
26	BB	1895	C	C5-C4-N4	-7.25	115.13	120.20
15	AO	7	VAL	CA-CB-CG2	7.25	121.77	110.90
26	BB	1300	G	P-O3'-C3'	7.25	128.40	119.70
26	BB	2873	A	N1-C2-N3	7.25	132.92	129.30
1	AA	463	U	C1'-O4'-C4'	-7.24	104.11	109.90
1	AA	1385	G	N1-C2-N2	7.24	122.72	116.20
8	AH	32	PHE	CB-CG-CD1	7.24	125.87	120.80
25	BA	118	C	O4'-C1'-N1	7.24	113.99	108.20
26	BB	876	C	C2-N3-C4	7.24	123.52	119.90
26	BB	1586	A	C1'-O4'-C4'	-7.24	104.11	109.90
1	AA	885	G	N1-C6-O6	7.24	124.25	119.90
1	AA	1155	A	C8-N9-C4	-7.24	102.90	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	53	G	C5'-C4'-O4'	7.24	117.79	109.10
26	BB	1704	C	C5-C6-N1	7.24	124.62	121.00
26	BB	2049	G	C5-N7-C8	-7.24	100.68	104.30
26	BB	2167	U	N3-C4-O4	7.24	124.47	119.40
26	BB	2219	U	N3-C4-O4	-7.24	114.33	119.40
1	AA	240	G	C4-C5-C6	7.24	123.14	118.80
1	AA	471	U	C4'-C3'-C2'	-7.24	95.36	102.60
1	AA	1131	G	C2-N3-C4	7.24	115.52	111.90
1	AA	1382	C	N3-C4-C5	-7.24	119.00	121.90
1	AA	1515	G	O4'-C1'-N9	7.24	113.99	108.20
26	BB	361	G	C4-C5-C6	7.24	123.14	118.80
26	BB	506	G	N3-C4-N9	7.24	130.34	126.00
26	BB	712	G	C4-C5-N7	-7.24	107.90	110.80
26	BB	734	A	C3'-C2'-C1'	7.24	107.29	101.50
1	AA	109	A	C8-N9-C4	-7.24	102.91	105.80
1	AA	308	C	N3-C2-O2	-7.24	116.83	121.90
1	AA	1326	U	O4'-C1'-N1	7.24	113.99	108.20
1	AA	1368	A	C5'-C4'-O4'	7.24	117.79	109.10
1	AA	1457	G	C5-C6-O6	-7.24	124.26	128.60
1	AA	1534	A	C5-C6-N6	-7.24	117.91	123.70
25	BA	109	A	O4'-C1'-N9	7.24	113.99	108.20
26	BB	940	G	N3-C4-C5	-7.24	124.98	128.60
26	BB	1324	G	C5-N7-C8	7.24	107.92	104.30
26	BB	1395	A	O4'-C1'-C2'	-7.24	98.56	105.80
26	BB	1595	C	N1-C2-O2	-7.24	114.56	118.90
26	BB	1055	G	O4'-C1'-N9	7.24	113.99	108.20
26	BB	1702	G	N3-C4-C5	-7.24	124.98	128.60
26	BB	2126	A	C5'-C4'-O4'	7.24	117.78	109.10
1	AA	2	A	C4-C5-N7	-7.24	107.08	110.70
1	AA	1071	C	C4'-C3'-C2'	-7.24	95.36	102.60
1	AA	1349	A	C5'-C4'-C3'	-7.24	104.42	116.00
26	BB	260	G	N3-C4-C5	-7.24	124.98	128.60
26	BB	710	U	O4'-C1'-N1	7.24	113.99	108.20
26	BB	1551	A	N9-C4-C5	-7.24	102.91	105.80
26	BB	2057	G	C5'-C4'-C3'	-7.24	104.42	116.00
26	BB	2328	A	C4-C5-C6	-7.24	113.38	117.00
26	BB	2459	A	C8-N9-C4	-7.24	102.91	105.80
26	BB	2647	U	C1'-O4'-C4'	-7.24	104.11	109.90
4	AD	46	G	C4-C5-N7	-7.23	107.91	110.80
4	AD	74	A	C6-C5-N7	7.23	137.36	132.30
26	BB	131	A	C4'-C3'-C2'	-7.23	95.37	102.60
26	BB	907	G	N3-C2-N2	7.23	124.96	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2121	G	C4-C5-C6	7.23	123.14	118.80
26	BB	2675	A	N1-C2-N3	-7.23	125.68	129.30
1	AA	1007	U	N3-C4-O4	7.23	124.46	119.40
26	BB	283	G	C4-C5-C6	7.23	123.14	118.80
26	BB	1225	G	O4'-C1'-N9	7.23	113.99	108.20
26	BB	1252	G	N3-C2-N2	7.23	124.96	119.90
26	BB	1599	U	N3-C4-O4	7.23	124.46	119.40
26	BB	1619	G	C5-C6-N1	7.23	115.12	111.50
26	BB	2033	A	N1-C6-N6	7.23	122.94	118.60
30	BF	79	ARG	NE-CZ-NH1	7.23	123.92	120.30
1	AA	1200	C	C4-C5-C6	7.23	121.02	117.40
25	BA	119	A	O4'-C1'-C2'	7.23	114.11	107.60
26	BB	25	U	C5-C6-N1	-7.23	119.08	122.70
6	AF	200	TRP	CG-CD1-NE1	-7.23	102.87	110.10
26	BB	505	A	C6-N1-C2	7.23	122.94	118.60
26	BB	962	G	C1'-O4'-C4'	7.23	115.68	109.90
26	BB	1584	U	C5-C6-N1	-7.23	119.09	122.70
26	BB	1591	A	N1-C6-N6	7.23	122.94	118.60
1	AA	566	G	O4'-C1'-N9	7.23	113.98	108.20
1	AA	571	U	N3-C2-O2	-7.23	117.14	122.20
1	AA	714	G	P-O3'-C3'	7.23	128.37	119.70
1	AA	908	A	C6-C5-N7	7.23	137.36	132.30
1	AA	1259	C	N3-C4-C5	7.23	124.79	121.90
26	BB	244	A	N9-C4-C5	7.23	108.69	105.80
26	BB	369	U	C3'-C2'-C1'	7.23	107.28	101.50
26	BB	902	C	C2-N3-C4	7.23	123.51	119.90
26	BB	1036	G	N3-C2-N2	-7.23	114.84	119.90
26	BB	1120	G	O4'-C4'-C3'	7.23	111.88	106.10
26	BB	1444	G	N1-C2-N2	7.23	122.70	116.20
26	BB	1843	C	N1-C2-O2	-7.23	114.56	118.90
26	BB	2180	U	C5-C6-N1	-7.23	119.09	122.70
26	BB	2380	C	C5-C6-N1	7.23	124.61	121.00
26	BB	2628	C	O4'-C1'-C2'	-7.23	98.57	105.80
26	BB	2648	G	C5-C6-N1	-7.23	107.89	111.50
26	BB	2882	A	N7-C8-N9	7.23	117.41	113.80
1	AA	129	A	O4'-C1'-N9	7.23	113.98	108.20
26	BB	1702	G	N1-C6-O6	-7.23	115.56	119.90
1	AA	264	C	N1-C2-N3	-7.22	114.14	119.20
1	AA	726	C	N1-C1'-C2'	-7.22	104.05	112.00
2	AB	10	G	C5-N7-C8	7.22	107.91	104.30
10	AJ	108	ARG	NE-CZ-NH1	7.22	123.91	120.30
26	BB	185	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	BB	1508	A	O4'-C1'-N9	7.22	113.98	108.20
26	BB	1570	A	C6-C5-N7	7.22	137.36	132.30
26	BB	1638	C	N1-C2-O2	7.22	123.23	118.90
26	BB	1828	G	C5-C6-O6	-7.22	124.27	128.60
26	BB	2060	A	C4-C5-N7	7.22	114.31	110.70
26	BB	2096	C	N3-C2-O2	-7.22	116.84	121.90
26	BB	2113	U	C5-C4-O4	-7.22	121.56	125.90
26	BB	2307	G	C4-C5-C6	7.22	123.14	118.80
21	AU	60	ARG	NE-CZ-NH1	7.22	123.91	120.30
26	BB	117	G	N3-C4-N9	7.22	130.33	126.00
26	BB	262	A	C5-C6-N1	7.22	121.31	117.70
26	BB	1157	G	O4'-C4'-C3'	7.22	111.88	106.10
26	BB	1964	G	N1-C6-O6	7.22	124.23	119.90
26	BB	2838	G	O4'-C1'-C2'	-7.22	98.58	105.80
34	BJ	157	VAL	CG1-CB-CG2	-7.22	99.34	110.90
1	AA	1300	G	C1'-O4'-C4'	7.22	115.68	109.90
2	AB	50	G	C4-C5-C6	7.22	123.13	118.80
26	BB	1416	G	N7-C8-N9	7.22	116.71	113.10
26	BB	1482	G	N9-C4-C5	7.22	108.29	105.40
26	BB	2114	A	C6-N1-C2	-7.22	114.27	118.60
26	BB	2115	G	N3-C4-N9	-7.22	121.67	126.00
26	BB	2245	U	N3-C2-O2	-7.22	117.15	122.20
1	AA	158	G	N3-C4-C5	-7.22	124.99	128.60
1	AA	1024	G	C5-C6-N1	7.22	115.11	111.50
26	BB	2555	U	N1-C2-N3	7.22	119.23	114.90
26	BB	2599	G	C5-C6-O6	-7.22	124.27	128.60
26	BB	2744	G	N9-C4-C5	7.22	108.29	105.40
1	AA	99	C	N3-C4-C5	-7.22	119.01	121.90
1	AA	911	U	O4'-C1'-N1	7.22	113.97	108.20
9	AI	70	VAL	CG1-CB-CG2	-7.22	99.35	110.90
26	BB	585	G	C3'-C2'-C1'	7.22	107.27	101.50
26	BB	947	A	O4'-C4'-C3'	7.22	111.87	106.10
26	BB	1093	G	C5'-C4'-O4'	7.22	117.76	109.10
26	BB	2614	A	P-O3'-C3'	7.22	128.36	119.70
1	AA	225	C	N3-C4-N4	7.22	123.05	118.00
1	AA	696	A	N1-C2-N3	-7.22	125.69	129.30
1	AA	1363	A	N9-C1'-C2'	7.22	123.38	114.00
4	AD	3	C	N1-C1'-C2'	-7.22	104.06	112.00
26	BB	305	C	N3-C4-N4	7.22	123.05	118.00
26	BB	1231	U	C2-N3-C4	-7.22	122.67	127.00
26	BB	1506	U	C3'-C2'-C1'	7.22	107.27	101.50
26	BB	1551	A	N1-C2-N3	-7.22	125.69	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1690	A	N9-C1'-C2'	-7.22	104.06	112.00
26	BB	1931	U	C4-C5-C6	-7.22	115.37	119.70
26	BB	2288	A	N1-C2-N3	-7.22	125.69	129.30
26	BB	2377	A	C5-N7-C8	-7.22	100.29	103.90
1	AA	303	A	C5'-C4'-O4'	7.21	117.76	109.10
6	AF	39	ARG	NE-CZ-NH1	7.21	123.91	120.30
17	AQ	74	ARG	NE-CZ-NH1	7.21	123.91	120.30
25	BA	78	A	C8-N9-C4	-7.21	102.91	105.80
26	BB	696	G	N9-C4-C5	-7.21	102.51	105.40
26	BB	1904	G	C6-C5-N7	-7.21	126.07	130.40
26	BB	2124	G	C4-N9-C1'	-7.21	117.12	126.50
26	BB	636	G	C5'-C4'-O4'	7.21	117.76	109.10
26	BB	2825	G	O4'-C1'-N9	7.21	113.97	108.20
1	AA	208	U	C1'-O4'-C4'	7.21	115.67	109.90
1	AA	443	C	C4-C5-C6	-7.21	113.79	117.40
1	AA	801	U	C4-C5-C6	7.21	124.03	119.70
1	AA	806	C	C2-N3-C4	7.21	123.51	119.90
1	AA	865	A	O4'-C1'-N9	7.21	113.97	108.20
1	AA	939	G	N3-C4-C5	-7.21	125.00	128.60
1	AA	992	U	C1'-O4'-C4'	-7.21	104.13	109.90
26	BB	82	U	C2-N3-C4	-7.21	122.67	127.00
26	BB	657	U	C5'-C4'-O4'	7.21	117.75	109.10
26	BB	902	C	C5-C4-N4	7.21	125.25	120.20
26	BB	2361	G	N3-C4-N9	7.21	130.33	126.00
26	BB	2615	U	C4-C5-C6	7.21	124.03	119.70
26	BB	2649	C	N1-C1'-C2'	-7.21	104.07	112.00
26	BB	2811	G	N1-C2-N2	7.21	122.69	116.20
1	AA	1083	U	N3-C2-O2	-7.21	117.15	122.20
1	AA	300	A	N9-C4-C5	7.21	108.68	105.80
1	AA	798	U	O4'-C1'-N1	7.21	113.97	108.20
1	AA	1347	G	C5-N7-C8	-7.21	100.70	104.30
2	AB	19	G	N7-C8-N9	-7.21	109.50	113.10
3	AC	55	A	C3'-C2'-C1'	7.21	107.27	101.50
26	BB	733	G	N3-C4-C5	-7.21	125.00	128.60
26	BB	1486	U	C6-N1-C2	-7.21	116.67	121.00
26	BB	1791	A	N9-C4-C5	7.21	108.68	105.80
26	BB	1812	U	P-O3'-C3'	7.21	128.35	119.70
26	BB	2518	A	N9-C4-C5	-7.21	102.92	105.80
26	BB	2546	U	P-O3'-C3'	7.21	128.35	119.70
26	BB	2569	G	N1-C2-N3	-7.21	119.58	123.90
1	AA	526	C	C4'-C3'-C2'	-7.21	95.39	102.60
1	AA	539	A	C5-N7-C8	-7.21	100.30	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	726	C	C4'-C3'-C2'	-7.21	95.39	102.60
1	AA	1490	U	O4'-C1'-N1	7.21	113.97	108.20
1	AA	1505	G	C5-C6-N1	7.21	115.10	111.50
10	AJ	137	ARG	NE-CZ-NH1	-7.21	116.70	120.30
25	BA	66	A	N1-C6-N6	7.21	122.92	118.60
26	BB	381	G	C2-N3-C4	7.21	115.50	111.90
26	BB	899	A	C6-C5-N7	-7.21	127.26	132.30
26	BB	1131	G	C8-N9-C4	-7.21	103.52	106.40
26	BB	2285	C	C2-N3-C4	7.21	123.50	119.90
26	BB	2377	A	C8-N9-C4	-7.21	102.92	105.80
26	BB	2806	C	N1-C2-O2	7.21	123.22	118.90
1	AA	862	C	N1-C2-O2	7.21	123.22	118.90
1	AA	882	C	C2-N3-C4	7.21	123.50	119.90
26	BB	393	C	C5-C6-N1	7.21	124.60	121.00
26	BB	1975	G	N1-C2-N3	-7.21	119.58	123.90
26	BB	2460	U	C5'-C4'-C3'	-7.21	104.47	116.00
42	BR	58	PHE	CB-CG-CD1	-7.21	115.76	120.80
1	AA	44	A	N3-C4-C5	-7.20	121.76	126.80
1	AA	405	U	N3-C4-C5	-7.20	110.28	114.60
1	AA	440	C	C2-N3-C4	7.20	123.50	119.90
1	AA	932	C	C5-C4-N4	-7.20	115.16	120.20
26	BB	271	G	C6-C5-N7	-7.20	126.08	130.40
26	BB	561	G	C3'-C2'-C1'	7.20	107.26	101.50
26	BB	1644	C	C5-C4-N4	-7.20	115.16	120.20
26	BB	2397	G	O4'-C1'-N9	7.20	113.96	108.20
26	BB	2657	A	C5-N7-C8	7.20	107.50	103.90
26	BB	2811	G	C5-C6-N1	-7.20	107.90	111.50
1	AA	821	G	C5-C6-O6	-7.20	124.28	128.60
1	AA	1485	U	N3-C2-O2	-7.20	117.16	122.20
26	BB	360	U	C2-N3-C4	-7.20	122.68	127.00
26	BB	1862	G	C8-N9-C4	-7.20	103.52	106.40
1	AA	1004	A	C8-N9-C4	7.20	108.68	105.80
1	AA	1446	A	C3'-C2'-C1'	7.20	107.26	101.50
1	AA	1496	C	C5-C4-N4	-7.20	115.16	120.20
4	AD	63	C	C5'-C4'-O4'	7.20	117.74	109.10
26	BB	15	G	C5-C6-O6	-7.20	124.28	128.60
26	BB	1663	G	C5'-C4'-C3'	-7.20	104.48	116.00
26	BB	1762	A	C4-C5-C6	7.20	120.60	117.00
26	BB	2029	G	C5-C6-O6	-7.20	124.28	128.60
26	BB	2631	G	N3-C4-N9	7.20	130.32	126.00
1	AA	470	C	O4'-C1'-N1	7.20	113.96	108.20
1	AA	497	G	P-O3'-C3'	7.20	128.34	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1092	C	C2-N3-C4	-7.20	116.30	119.90
26	BB	2183	A	N1-C6-N6	-7.20	114.28	118.60
1	AA	781	A	O4'-C1'-N9	7.20	113.96	108.20
25	BA	88	C	C3'-C2'-C1'	-7.20	95.74	101.50
26	BB	131	A	C3'-C2'-C1'	7.20	107.26	101.50
26	BB	1985	C	C4-C5-C6	-7.20	113.80	117.40
1	AA	542	G	C6-N1-C2	-7.20	120.78	125.10
1	AA	1175	G	C5-C6-N1	-7.20	107.90	111.50
1	AA	1191	A	N7-C8-N9	7.20	117.40	113.80
1	AA	1316	G	C5-C6-N1	7.20	115.10	111.50
26	BB	70	G	C6-N1-C2	-7.20	120.78	125.10
26	BB	249	C	N3-C4-N4	7.20	123.04	118.00
26	BB	900	A	C5-C6-N1	7.20	121.30	117.70
26	BB	1018	U	C3'-C2'-C1'	7.20	107.26	101.50
26	BB	1215	G	N9-C4-C5	-7.20	102.52	105.40
26	BB	1984	G	C8-N9-C4	7.20	109.28	106.40
26	BB	2259	U	N1-C2-O2	-7.20	117.76	122.80
26	BB	2611	C	C6-N1-C2	-7.20	117.42	120.30
26	BB	2669	G	C6-C5-N7	-7.20	126.08	130.40
1	AA	399	G	C8-N9-C4	7.19	109.28	106.40
1	AA	541	G	C8-N9-C4	-7.19	103.52	106.40
4	AD	6	G	N9-C4-C5	7.19	108.28	105.40
26	BB	536	G	C4-C5-N7	-7.19	107.92	110.80
26	BB	830	G	C4-C5-C6	7.19	123.11	118.80
1	AA	385	C	O4'-C1'-C2'	-7.19	98.61	105.80
1	AA	1367	C	C6-N1-C2	-7.19	117.42	120.30
1	AA	1428	A	C4-C5-C6	-7.19	113.41	117.00
25	BA	7	G	N7-C8-N9	7.19	116.69	113.10
25	BA	79	G	C5-N7-C8	7.19	107.89	104.30
26	BB	30	G	N1-C2-N2	7.19	122.67	116.20
26	BB	160	A	C4-C5-N7	7.19	114.30	110.70
26	BB	437	U	C1'-O4'-C4'	-7.19	104.15	109.90
26	BB	551	G	C8-N9-C4	-7.19	103.52	106.40
26	BB	1646	C	N3-C4-C5	-7.19	119.02	121.90
1	AA	761	G	C6-C5-N7	-7.19	126.09	130.40
1	AA	1141	C	C1'-O4'-C4'	-7.19	104.15	109.90
1	AA	1267	C	C5-C6-N1	7.19	124.59	121.00
26	BB	141	G	C3'-C2'-C1'	7.19	107.25	101.50
26	BB	474	G	C6-C5-N7	-7.19	126.09	130.40
26	BB	881	G	P-O5'-C5'	7.19	132.40	120.90
26	BB	1450	G	N3-C2-N2	7.19	124.93	119.90
26	BB	2825	G	C8-N9-C4	-7.19	103.52	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1012	A	O4'-C1'-N9	7.19	113.95	108.20
4	AD	63	C	C1'-O4'-C4'	7.19	115.65	109.90
26	BB	940	G	C5-N7-C8	-7.19	100.71	104.30
26	BB	973	A	C2-N3-C4	7.19	114.19	110.60
26	BB	1619	G	N3-C4-N9	-7.19	121.69	126.00
26	BB	1707	G	N1-C6-O6	-7.19	115.59	119.90
26	BB	2397	G	C5-C6-N1	7.19	115.09	111.50
26	BB	2472	G	C5-C6-O6	-7.19	124.29	128.60
26	BB	2708	G	C4'-C3'-C2'	-7.19	95.41	102.60
5	AE	122	ASP	CB-CG-OD1	-7.19	111.83	118.30
25	BA	112	G	C8-N9-C4	-7.19	103.53	106.40
26	BB	864	G	C6-N1-C2	-7.19	120.79	125.10
26	BB	2366	A	N9-C1'-C2'	-7.19	104.09	112.00
1	AA	294	U	C3'-C2'-C1'	7.18	107.25	101.50
2	AB	76	A	C6-C5-N7	-7.18	127.27	132.30
26	BB	1079	C	N3-C2-O2	-7.18	116.87	121.90
26	BB	2009	A	C8-N9-C4	-7.18	102.93	105.80
26	BB	2208	C	N3-C2-O2	-7.18	116.87	121.90
26	BB	2459	A	C6-C5-N7	7.18	137.33	132.30
1	AA	125	U	N1-C2-N3	7.18	119.21	114.90
3	AC	16	A	C8-N9-C4	-7.18	102.93	105.80
26	BB	252	G	C5-C6-O6	-7.18	124.29	128.60
26	BB	383	C	N3-C2-O2	-7.18	116.87	121.90
26	BB	1071	G	N7-C8-N9	-7.18	109.51	113.10
26	BB	1410	G	C8-N9-C4	7.18	109.27	106.40
26	BB	1645	G	N3-C4-C5	-7.18	125.01	128.60
26	BB	2403	C	O4'-C1'-N1	7.18	113.94	108.20
26	BB	2841	C	C4-C5-C6	-7.18	113.81	117.40
1	AA	224	U	O4'-C1'-N1	7.18	113.94	108.20
26	BB	1002	G	C4-C5-C6	7.18	123.11	118.80
26	BB	1110	G	C2-N3-C4	-7.18	108.31	111.90
26	BB	2152	G	N1-C6-O6	7.18	124.21	119.90
1	AA	456	A	C8-N9-C4	-7.18	102.93	105.80
1	AA	915	A	N9-C4-C5	7.18	108.67	105.80
26	BB	733	G	C2-N3-C4	7.18	115.49	111.90
26	BB	2301	C	N3-C4-C5	-7.18	119.03	121.90
54	B3	37	HIS	CG-CD2-NE2	-7.18	95.56	109.20
1	AA	1102	A	C5-C6-N1	7.18	121.29	117.70
1	AA	1480	A	C4'-C3'-C2'	-7.18	95.42	102.60
2	AB	73	G	C4-C5-N7	-7.18	107.93	110.80
26	BB	70	G	N1-C2-N2	-7.18	109.74	116.20
26	BB	400	G	N3-C4-N9	7.18	130.31	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1051	G	C5-N7-C8	-7.18	100.71	104.30
26	BB	1707	G	C5-C6-N1	7.18	115.09	111.50
26	BB	1715	G	N7-C8-N9	7.18	116.69	113.10
26	BB	2761	A	C4'-C3'-C2'	-7.18	95.42	102.60
1	AA	426	U	N3-C2-O2	-7.18	117.18	122.20
1	AA	606	G	N1-C2-N3	7.18	128.21	123.90
1	AA	700	G	N9-C4-C5	7.18	108.27	105.40
1	AA	1173	U	N1-C2-O2	7.18	127.82	122.80
26	BB	144	A	N1-C2-N3	-7.18	125.71	129.30
26	BB	558	U	N3-C4-C5	-7.18	110.29	114.60
26	BB	1083	U	C6-N1-C2	-7.18	116.69	121.00
26	BB	1906	G	C3'-C2'-C1'	7.18	107.24	101.50
26	BB	2163	A	N9-C1'-C2'	-7.18	104.11	112.00
1	AA	200	G	N3-C4-C5	-7.17	125.01	128.60
26	BB	28	A	C4-C5-N7	-7.17	107.11	110.70
26	BB	316	C	N1-C2-O2	7.17	123.20	118.90
26	BB	485	C	C6-N1-C1'	-7.17	112.19	120.80
26	BB	817	C	N3-C4-N4	7.17	123.02	118.00
26	BB	1097	U	C5-C4-O4	-7.17	121.59	125.90
26	BB	1217	U	N3-C4-O4	7.17	124.42	119.40
26	BB	1453	A	N3-C4-N9	7.17	133.14	127.40
26	BB	1599	U	C4-C5-C6	7.17	124.00	119.70
26	BB	2041	U	C5-C6-N1	7.17	126.29	122.70
26	BB	2719	G	C5-C6-N1	-7.17	107.91	111.50
42	BR	50	ARG	NE-CZ-NH1	-7.17	116.71	120.30
1	AA	903	G	N7-C8-N9	7.17	116.69	113.10
1	AA	954	G	C5-C6-N1	-7.17	107.91	111.50
25	BA	110	C	C2-N3-C4	7.17	123.49	119.90
26	BB	1295	C	O4'-C1'-N1	7.17	113.94	108.20
26	BB	2357	G	C8-N9-C4	-7.17	103.53	106.40
26	BB	2414	G	C4-C5-N7	7.17	113.67	110.80
1	AA	41	G	C5-C6-O6	-7.17	124.30	128.60
1	AA	743	A	N9-C4-C5	7.17	108.67	105.80
1	AA	1486	G	O4'-C1'-N9	7.17	113.94	108.20
20	AT	26	ARG	NE-CZ-NH2	-7.17	116.71	120.30
25	BA	64	G	C8-N9-C4	-7.17	103.53	106.40
26	BB	430	A	N7-C8-N9	7.17	117.39	113.80
26	BB	649	G	O4'-C1'-N9	7.17	113.94	108.20
26	BB	1600	C	C5-C6-N1	7.17	124.59	121.00
26	BB	1664	A	C1'-O4'-C4'	-7.17	104.16	109.90
1	AA	36	C	N3-C4-C5	-7.17	119.03	121.90
1	AA	143	A	C5'-C4'-O4'	7.17	117.70	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	192	A	C5-C6-N6	-7.17	117.96	123.70
4	AD	26	C	N3-C4-N4	7.17	123.02	118.00
26	BB	2119	A	O4'-C1'-C2'	-7.17	98.63	105.80
1	AA	426	U	C2-N3-C4	-7.17	122.70	127.00
2	AB	22	G	C2-N3-C4	7.17	115.48	111.90
26	BB	585	G	O4'-C4'-C3'	7.17	111.83	106.10
26	BB	1782	U	C6-N1-C2	-7.17	116.70	121.00
26	BB	1829	A	N9-C4-C5	7.17	108.67	105.80
26	BB	2453	A	N9-C4-C5	-7.17	102.93	105.80
26	BB	2454	G	N3-C4-C5	-7.17	125.02	128.60
26	BB	2715	C	N3-C4-N4	7.17	123.02	118.00
1	AA	1153	G	C6-N1-C2	-7.17	120.80	125.10
1	AA	1368	A	C5-C6-N6	-7.17	117.97	123.70
1	AA	1475	G	C8-N9-C4	7.17	109.27	106.40
2	AB	59	G	O4'-C1'-N9	7.17	113.93	108.20
26	BB	267	C	N3-C4-C5	-7.17	119.03	121.90
26	BB	1067	A	C2-N3-C4	7.17	114.18	110.60
26	BB	1799	G	O4'-C4'-C3'	7.17	111.83	106.10
26	BB	1963	U	C4-C5-C6	7.17	124.00	119.70
26	BB	2235	G	C4'-C3'-C2'	-7.17	95.43	102.60
26	BB	2370	G	P-O3'-C3'	7.17	128.30	119.70
26	BB	2565	A	P-O3'-C3'	7.17	128.30	119.70
26	BB	2688	G	N9-C4-C5	7.17	108.27	105.40
1	AA	346	G	C5-C6-O6	7.17	132.90	128.60
1	AA	993	G	C2-N3-C4	7.17	115.48	111.90
2	AB	7	G	O4'-C1'-N9	7.17	113.93	108.20
26	BB	270	A	C1'-O4'-C4'	7.17	115.63	109.90
26	BB	1010	A	C3'-C2'-C1'	-7.17	95.77	101.50
1	AA	337	G	N1-C6-O6	7.16	124.20	119.90
2	AB	31	U	O4'-C1'-N1	7.16	113.93	108.20
26	BB	1207	C	O4'-C1'-N1	7.16	113.93	108.20
26	BB	1634	A	O4'-C4'-C3'	7.16	111.83	106.10
26	BB	1743	G	C8-N9-C4	-7.16	103.53	106.40
26	BB	1831	G	N1-C6-O6	7.16	124.20	119.90
26	BB	2304	G	O4'-C1'-C2'	7.16	114.05	107.60
26	BB	2432	A	C5-C6-N6	-7.16	117.97	123.70
26	BB	2702	G	C1'-O4'-C4'	-7.16	104.17	109.90
1	AA	10	A	N1-C6-N6	7.16	122.90	118.60
1	AA	206	C	C4'-C3'-C2'	-7.16	95.44	102.60
3	AC	21	U	C1'-O4'-C4'	-7.16	104.17	109.90
26	BB	555	G	C5-N7-C8	-7.16	100.72	104.30
26	BB	599	A	C8-N9-C4	-7.16	102.94	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1624	U	C5-C6-N1	-7.16	119.12	122.70
26	BB	2891	U	C4-C5-C6	7.16	124.00	119.70
1	AA	953	G	C4-C5-N7	7.16	113.66	110.80
1	AA	1089	G	O4'-C1'-N9	7.16	113.93	108.20
4	AD	28	U	C5'-C4'-O4'	7.16	117.69	109.10
26	BB	677	A	N9-C1'-C2'	-7.16	104.12	112.00
26	BB	816	C	C5-C6-N1	7.16	124.58	121.00
26	BB	945	A	C2-N3-C4	7.16	114.18	110.60
26	BB	2059	A	C1'-O4'-C4'	7.16	115.63	109.90
26	BB	2072	C	C1'-O4'-C4'	-7.16	104.17	109.90
26	BB	2696	U	C2-N3-C4	-7.16	122.70	127.00
26	BB	2854	G	C5-C6-O6	7.16	132.90	128.60
1	AA	794	A	C5-C6-N6	7.16	129.43	123.70
26	BB	2021	C	C3'-C2'-C1'	7.16	107.23	101.50
26	BB	2039	U	N1-C2-N3	-7.16	110.60	114.90
26	BB	2125	G	C3'-C2'-C1'	7.16	107.23	101.50
26	BB	2879	A	N7-C8-N9	7.16	117.38	113.80
55	B4	39	ASP	CB-CG-OD1	7.16	124.74	118.30
1	AA	405	U	N3-C2-O2	-7.16	117.19	122.20
1	AA	1515	G	C5-N7-C8	7.16	107.88	104.30
26	BB	1954	G	O4'-C4'-C3'	7.16	111.83	106.10
26	BB	2476	A	N1-C6-N6	-7.16	114.31	118.60
1	AA	168	G	C5'-C4'-O4'	7.16	117.69	109.10
1	AA	762	U	N1-C2-O2	-7.16	117.79	122.80
25	BA	66	A	C5-C6-N6	-7.16	117.98	123.70
26	BB	1846	G	C6-N1-C2	-7.16	120.81	125.10
26	BB	1931	U	N3-C4-C5	7.16	118.89	114.60
1	AA	354	G	C5-C6-N1	7.15	115.08	111.50
26	BB	553	G	C4'-C3'-C2'	-7.15	95.45	102.60
26	BB	799	G	N9-C4-C5	7.15	108.26	105.40
26	BB	876	C	C5-C4-N4	-7.15	115.19	120.20
26	BB	1087	G	O4'-C4'-C3'	7.15	111.82	106.10
26	BB	1818	U	N1-C2-O2	-7.15	117.79	122.80
26	BB	2095	A	C5'-C4'-O4'	7.15	117.69	109.10
1	AA	782	A	N1-C2-N3	-7.15	125.72	129.30
4	AD	19	G	C6-C5-N7	-7.15	126.11	130.40
26	BB	1465	G	C4'-C3'-C2'	-7.15	95.45	102.60
26	BB	2816	G	C5-N7-C8	7.15	107.88	104.30
1	AA	536	C	C6-N1-C2	-7.15	117.44	120.30
4	AD	63	C	O4'-C1'-N1	7.15	113.92	108.20
26	BB	597	G	C4-C5-N7	-7.15	107.94	110.80
26	BB	1016	G	C2-N3-C4	7.15	115.47	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2155	U	O4'-C1'-N1	7.15	113.92	108.20
26	BB	77	G	N9-C4-C5	7.15	108.26	105.40
26	BB	718	A	N1-C6-N6	7.15	122.89	118.60
26	BB	1293	C	N3-C2-O2	-7.15	116.90	121.90
26	BB	2623	G	C2-N3-C4	7.15	115.47	111.90
32	BH	57	TYR	CB-CG-CD2	-7.15	116.71	121.00
1	AA	109	A	C3'-C2'-C1'	7.15	107.22	101.50
1	AA	392	C	C5'-C4'-O4'	7.15	117.68	109.10
1	AA	974	A	P-O3'-C3'	7.15	128.28	119.70
1	AA	1214	C	N3-C4-C5	-7.15	119.04	121.90
26	BB	361	G	C4-C5-N7	7.15	113.66	110.80
26	BB	381	G	N3-C4-C5	-7.15	125.03	128.60
26	BB	460	A	N7-C8-N9	-7.15	110.23	113.80
26	BB	535	G	N1-C6-O6	7.15	124.19	119.90
26	BB	686	U	C2-N1-C1'	7.15	126.28	117.70
26	BB	784	G	C8-N9-C4	-7.15	103.54	106.40
26	BB	1464	G	N9-C1'-C2'	-7.15	104.14	112.00
1	AA	1217	C	O4'-C1'-C2'	-7.15	98.65	105.80
26	BB	119	A	N1-C6-N6	-7.15	114.31	118.60
1	AA	637	C	O4'-C1'-N1	7.14	113.92	108.20
25	BA	31	C	C2-N3-C4	7.14	123.47	119.90
26	BB	407	G	C2-N3-C4	7.14	115.47	111.90
26	BB	2292	U	C6-N1-C2	7.14	125.29	121.00
26	BB	2678	C	N3-C4-N4	7.14	123.00	118.00
1	AA	159	G	N9-C1'-C2'	-7.14	104.14	112.00
1	AA	1240	U	C1'-O4'-C4'	-7.14	104.19	109.90
1	AA	1401	G	O4'-C1'-N9	7.14	113.91	108.20
26	BB	833	A	C4-C5-N7	-7.14	107.13	110.70
26	BB	848	C	C4'-C3'-C2'	-7.14	95.46	102.60
26	BB	879	G	C5-C6-O6	-7.14	124.31	128.60
26	BB	1254	A	C4-C5-N7	7.14	114.27	110.70
26	BB	1646	C	C4-C5-C6	-7.14	113.83	117.40
26	BB	2857	G	N1-C2-N3	-7.14	119.61	123.90
1	AA	262	A	C6-C5-N7	7.14	137.30	132.30
1	AA	268	U	N3-C4-O4	7.14	124.40	119.40
26	BB	453	A	C8-N9-C4	-7.14	102.94	105.80
32	BH	78	VAL	CA-CB-CG2	7.14	121.61	110.90
1	AA	143	A	C1'-O4'-C4'	7.14	115.61	109.90
1	AA	276	G	C6-C5-N7	-7.14	126.12	130.40
4	AD	19	G	C4-C5-N7	7.14	113.66	110.80
26	BB	1303	G	N1-C6-O6	7.14	124.18	119.90
26	BB	1443	U	C4-C5-C6	7.14	123.98	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1710	G	N3-C2-N2	-7.14	114.90	119.90
26	BB	1828	G	N9-C4-C5	7.14	108.26	105.40
26	BB	1899	A	O4'-C1'-N9	7.14	113.91	108.20
26	BB	2055	C	N3-C4-C5	7.14	124.76	121.90
26	BB	2308	G	C1'-O4'-C4'	7.14	115.61	109.90
26	BB	6	A	C5-C6-N6	7.14	129.41	123.70
26	BB	371	A	C2-N3-C4	-7.14	107.03	110.60
26	BB	1656	C	N1-C2-O2	7.14	123.18	118.90
26	BB	2308	G	O4'-C1'-N9	7.14	113.91	108.20
1	AA	194	C	C1'-O4'-C4'	7.14	115.61	109.90
2	AB	22	G	O4'-C1'-N9	7.14	113.91	108.20
25	BA	24	G	O4'-C1'-N9	-7.14	102.49	108.20
26	BB	295	G	C5'-C4'-O4'	7.14	117.66	109.10
26	BB	367	G	N1-C2-N3	7.14	128.18	123.90
26	BB	476	G	C8-N9-C4	-7.14	103.55	106.40
26	BB	559	G	C2-N3-C4	7.14	115.47	111.90
26	BB	1559	U	N3-C2-O2	-7.14	117.20	122.20
26	BB	2205	A	N7-C8-N9	7.14	117.37	113.80
26	BB	2404	U	N1-C2-N3	7.14	119.18	114.90
26	BB	2810	A	N1-C6-N6	-7.14	114.32	118.60
1	AA	562	U	C2-N3-C4	-7.13	122.72	127.00
1	AA	1441	A	N9-C4-C5	7.13	108.65	105.80
26	BB	587	C	C1'-O4'-C4'	7.13	115.61	109.90
26	BB	672	C	C5-C4-N4	-7.13	115.21	120.20
26	BB	1607	C	O4'-C1'-N1	7.13	113.91	108.20
26	BB	2151	U	C5-C6-N1	-7.13	119.13	122.70
49	BY	40	ARG	NE-CZ-NH1	7.13	123.87	120.30
1	AA	207	C	C4-C5-C6	-7.13	113.83	117.40
1	AA	359	G	N7-C8-N9	7.13	116.67	113.10
1	AA	1258	G	C6-N1-C2	-7.13	120.82	125.10
4	AD	28	U	C2-N3-C4	-7.13	122.72	127.00
26	BB	1093	G	N9-C4-C5	7.13	108.25	105.40
26	BB	1339	G	N1-C6-O6	-7.13	115.62	119.90
26	BB	1660	G	C6-N1-C2	-7.13	120.82	125.10
26	BB	362	A	C5-C6-N1	7.13	121.27	117.70
26	BB	699	A	C5-C6-N1	7.13	121.27	117.70
26	BB	1101	U	O4'-C1'-N1	7.13	113.91	108.20
26	BB	1339	G	C6-C5-N7	7.13	134.68	130.40
26	BB	1953	A	C2-N3-C4	7.13	114.17	110.60
1	AA	99	C	C6-N1-C2	-7.13	117.45	120.30
1	AA	671	G	C5-N7-C8	7.13	107.86	104.30
1	AA	1076	U	N3-C2-O2	-7.13	117.21	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	3	C	O4'-C1'-N1	7.13	113.90	108.20
25	BA	30	C	C5-C4-N4	-7.13	115.21	120.20
26	BB	1791	A	C4-C5-N7	-7.13	107.14	110.70
26	BB	1849	G	C4-C5-C6	7.13	123.08	118.80
26	BB	2054	A	C4-C5-C6	-7.13	113.44	117.00
1	AA	369	G	N3-C4-C5	-7.13	125.04	128.60
2	AB	18	G	N9-C4-C5	-7.13	102.55	105.40
4	AD	32	G	C1'-O4'-C4'	7.13	115.60	109.90
4	AD	64	G	N1-C2-N3	-7.13	119.62	123.90
25	BA	90	C	N1-C2-N3	-7.13	114.21	119.20
26	BB	331	C	C5-C6-N1	7.13	124.56	121.00
26	BB	432	A	O4'-C1'-N9	7.13	113.90	108.20
26	BB	693	A	P-O3'-C3'	7.13	128.25	119.70
26	BB	1395	A	C8-N9-C4	-7.13	102.95	105.80
26	BB	1740	G	C5-C6-N1	7.13	115.06	111.50
26	BB	1845	G	N7-C8-N9	7.13	116.66	113.10
26	BB	2681	C	N1-C2-O2	7.13	123.18	118.90
1	AA	1005	A	C5-C6-N1	7.13	121.26	117.70
26	BB	90	U	N3-C2-O2	-7.13	117.21	122.20
26	BB	695	G	N1-C2-N2	7.13	122.61	116.20
26	BB	1483	G	N7-C8-N9	7.13	116.66	113.10
1	AA	211	G	C4'-C3'-C2'	-7.12	95.47	102.60
1	AA	1477	U	C1'-O4'-C4'	7.12	115.60	109.90
4	AD	72	C	N1-C2-O2	7.12	123.17	118.90
25	BA	109	A	N9-C4-C5	7.12	108.65	105.80
26	BB	63	A	C5'-C4'-O4'	7.12	117.65	109.10
26	BB	1868	C	C6-N1-C2	7.12	123.15	120.30
1	AA	335	C	C3'-C2'-C1'	-7.12	95.80	101.50
1	AA	681	A	C8-N9-C4	-7.12	102.95	105.80
2	AB	58	A	N7-C8-N9	7.12	117.36	113.80
7	AG	114	ARG	NE-CZ-NH1	7.12	123.86	120.30
26	BB	378	C	C5-C4-N4	-7.12	115.21	120.20
26	BB	581	C	N1-C1'-C2'	-7.12	104.16	112.00
26	BB	661	A	C5-C6-N6	-7.12	118.00	123.70
26	BB	1355	G	C5-C6-N1	7.12	115.06	111.50
26	BB	1615	C	C3'-C2'-C1'	-7.12	95.80	101.50
26	BB	1909	C	N3-C2-O2	-7.12	116.91	121.90
1	AA	240	G	N7-C8-N9	-7.12	109.54	113.10
1	AA	309	A	O4'-C1'-N9	7.12	113.90	108.20
1	AA	317	U	N1-C2-N3	7.12	119.17	114.90
1	AA	327	A	C8-N9-C4	-7.12	102.95	105.80
1	AA	705	G	C6-N1-C2	-7.12	120.83	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1517	G	C2-N3-C4	7.12	115.46	111.90
26	BB	73	A	C6-N1-C2	7.12	122.87	118.60
26	BB	155	A	C4-C5-C6	-7.12	113.44	117.00
26	BB	387	U	N3-C4-O4	7.12	124.39	119.40
26	BB	665	U	C6-N1-C2	-7.12	116.73	121.00
26	BB	814	C	C4-C5-C6	7.12	120.96	117.40
26	BB	1124	G	C6-N1-C2	-7.12	120.83	125.10
26	BB	1280	G	N3-C4-C5	-7.12	125.04	128.60
26	BB	1920	C	C5-C6-N1	7.12	124.56	121.00
26	BB	2212	A	O4'-C1'-N9	7.12	113.90	108.20
1	AA	725	G	N9-C4-C5	7.12	108.25	105.40
1	AA	1348	U	O4'-C4'-C3'	7.12	111.80	106.10
7	AG	96	ARG	NE-CZ-NH2	7.12	123.86	120.30
26	BB	1396	U	N3-C4-C5	7.12	118.87	114.60
26	BB	1586	A	O4'-C1'-C2'	7.12	114.01	107.60
26	BB	1780	A	C4-C5-C6	-7.12	113.44	117.00
26	BB	2616	C	C4-C5-C6	7.12	120.96	117.40
30	BF	69	ARG	NE-CZ-NH2	-7.12	116.74	120.30
1	AA	905	U	N1-C2-N3	7.12	119.17	114.90
1	AA	1040	U	O4'-C1'-N1	7.12	113.89	108.20
1	AA	1130	A	N7-C8-N9	-7.12	110.24	113.80
1	AA	1263	C	N3-C2-O2	-7.12	116.92	121.90
1	AA	1290	G	O4'-C1'-N9	7.12	113.89	108.20
26	BB	462	C	O4'-C1'-N1	7.12	113.89	108.20
26	BB	467	G	C5-N7-C8	7.12	107.86	104.30
26	BB	782	A	C5-N7-C8	7.12	107.46	103.90
26	BB	1817	G	C2-N3-C4	7.12	115.46	111.90
26	BB	2309	A	C4-C5-C6	-7.12	113.44	117.00
1	AA	44	A	N1-C6-N6	7.12	122.87	118.60
1	AA	657	U	C5-C6-N1	-7.12	119.14	122.70
26	BB	1550	C	O4'-C1'-N1	7.12	113.89	108.20
26	BB	2685	G	C1'-O4'-C4'	-7.12	104.21	109.90
1	AA	513	C	C3'-C2'-C1'	7.12	107.19	101.50
1	AA	1125	U	O4'-C4'-C3'	7.12	111.79	106.10
26	BB	40	U	O4'-C1'-N1	7.12	113.89	108.20
26	BB	334	C	C6-N1-C2	-7.12	117.45	120.30
26	BB	693	A	N1-C2-N3	-7.12	125.74	129.30
26	BB	773	U	N3-C4-O4	7.12	124.38	119.40
26	BB	911	A	C4-C5-C6	-7.12	113.44	117.00
26	BB	1109	C	N1-C2-O2	7.12	123.17	118.90
26	BB	1475	G	N3-C4-C5	-7.12	125.04	128.60
26	BB	2271	G	P-O3'-C3'	7.12	128.24	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	BD	270	ARG	NE-CZ-NH2	7.12	123.86	120.30
1	AA	205	A	C4-C5-N7	7.11	114.26	110.70
1	AA	431	A	C4-C5-C6	-7.11	113.44	117.00
1	AA	856	C	O4'-C1'-N1	7.11	113.89	108.20
1	AA	1366	C	C5-C6-N1	-7.11	117.44	121.00
4	AD	13	C	C5-C4-N4	-7.11	115.22	120.20
4	AD	76	C	C5-C4-N4	-7.11	115.22	120.20
26	BB	43	G	C6-C5-N7	-7.11	126.13	130.40
26	BB	174	U	C1'-O4'-C4'	-7.11	104.21	109.90
26	BB	444	C	C3'-C2'-C1'	-7.11	95.81	101.50
26	BB	1546	G	C4-C5-C6	-7.11	114.53	118.80
26	BB	1819	A	C8-N9-C4	-7.11	102.95	105.80
26	BB	1889	A	N3-C4-C5	-7.11	121.82	126.80
26	BB	2110	G	N1-C2-N3	-7.11	119.63	123.90
26	BB	2228	G	C5'-C4'-O4'	7.11	117.64	109.10
3	AC	45	G	N3-C4-N9	7.11	130.27	126.00
1	AA	661	G	C8-N9-C4	-7.11	103.56	106.40
25	BA	17	C	O4'-C1'-N1	7.11	113.89	108.20
26	BB	482	A	C5-C6-N6	-7.11	118.01	123.70
26	BB	1146	C	N1-C1'-C2'	-7.11	104.18	112.00
26	BB	2558	C	C2-N3-C4	-7.11	116.34	119.90
26	BB	2837	A	C5-N7-C8	-7.11	100.34	103.90
1	AA	1177	G	N1-C2-N3	-7.11	119.64	123.90
1	AA	1392	G	C6-C5-N7	-7.11	126.14	130.40
4	AD	2	G	C6-N1-C2	7.11	129.36	125.10
25	BA	54	G	N3-C4-N9	7.11	130.26	126.00
26	BB	90	U	N3-C4-C5	7.11	118.86	114.60
26	BB	1014	A	O4'-C1'-N9	7.11	113.89	108.20
26	BB	2138	G	N7-C8-N9	7.11	116.65	113.10
26	BB	2336	A	C4-C5-C6	-7.11	113.45	117.00
1	AA	1188	A	C2-N3-C4	7.11	114.15	110.60
1	AA	1265	C	C5-C4-N4	7.11	125.17	120.20
1	AA	1499	A	C8-N9-C4	-7.11	102.96	105.80
26	BB	599	A	C2-N3-C4	7.11	114.15	110.60
26	BB	1027	A	C8-N9-C4	-7.11	102.96	105.80
26	BB	1293	C	N3-C4-N4	7.11	122.97	118.00
26	BB	2321	U	C2-N3-C4	-7.11	122.74	127.00
26	BB	2602	A	C2-N3-C4	-7.11	107.05	110.60
26	BB	2643	G	O4'-C1'-N9	-7.11	102.52	108.20
26	BB	2690	U	C2-N3-C4	-7.11	122.74	127.00
25	BA	49	C	C5-C6-N1	7.10	124.55	121.00
26	BB	689	A	C2'-C3'-O3'	7.10	125.13	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2045	C	C4-C5-C6	-7.10	113.85	117.40
26	BB	2382	G	C2-N3-C4	7.10	115.45	111.90
1	AA	26	A	N1-C2-N3	-7.10	125.75	129.30
1	AA	559	A	C5-N7-C8	7.10	107.45	103.90
1	AA	1391	U	C6-N1-C2	-7.10	116.74	121.00
26	BB	1144	A	C3'-C2'-C1'	-7.10	95.82	101.50
26	BB	1607	C	O4'-C4'-C3'	7.10	111.78	106.10
26	BB	1713	A	C5-N7-C8	-7.10	100.35	103.90
26	BB	1876	A	N1-C2-N3	-7.10	125.75	129.30
1	AA	182	A	C5-C6-N1	-7.10	114.15	117.70
1	AA	741	G	C8-N9-C1'	7.10	136.23	127.00
1	AA	1064	G	C6-C5-N7	-7.10	126.14	130.40
26	BB	334	C	O4'-C1'-N1	7.10	113.88	108.20
26	BB	426	C	C5'-C4'-O4'	7.10	117.62	109.10
26	BB	608	A	O3'-P-O5'	-7.10	90.51	104.00
26	BB	2624	G	C6-C5-N7	-7.10	126.14	130.40
1	AA	76	G	C4'-C3'-C2'	-7.10	95.50	102.60
1	AA	457	G	C5-C6-N1	7.10	115.05	111.50
1	AA	734	G	C2-N3-C4	7.10	115.45	111.90
1	AA	1185	G	N3-C4-C5	-7.10	125.05	128.60
1	AA	1228	C	N3-C2-O2	7.10	126.87	121.90
1	AA	1521	C	O4'-C1'-N1	7.10	113.88	108.20
26	BB	678	C	C5'-C4'-O4'	7.10	117.62	109.10
26	BB	778	G	N3-C4-C5	-7.10	125.05	128.60
26	BB	1632	A	N9-C4-C5	7.10	108.64	105.80
26	BB	1761	C	O4'-C1'-N1	7.10	113.88	108.20
26	BB	1822	C	N3-C4-N4	7.10	122.97	118.00
37	BM	70	ARG	CD-NE-CZ	7.10	133.54	123.60
1	AA	688	G	C6-N1-C2	-7.10	120.84	125.10
1	AA	721	G	C1'-O4'-C4'	7.10	115.58	109.90
1	AA	806	C	N1-C2-O2	7.10	123.16	118.90
1	AA	1335	U	P-O3'-C3'	7.10	128.22	119.70
1	AA	1378	C	C2-N3-C4	7.10	123.45	119.90
24	AX	12	ASP	CB-CG-OD2	-7.10	111.91	118.30
26	BB	519	U	N1-C2-N3	7.10	119.16	114.90
26	BB	765	C	C2-N3-C4	7.10	123.45	119.90
1	AA	196	A	C6-N1-C2	-7.10	114.34	118.60
1	AA	500	G	N3-C4-C5	-7.10	125.05	128.60
1	AA	1078	U	O4'-C1'-N1	7.10	113.88	108.20
26	BB	1075	C	C5-C4-N4	7.10	125.17	120.20
26	BB	1110	G	N7-C8-N9	7.10	116.65	113.10
26	BB	1778	U	O4'-C1'-N1	7.10	113.88	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2021	C	P-O3'-C3'	7.10	128.22	119.70
26	BB	2377	A	N9-C4-C5	7.10	108.64	105.80
1	AA	835	U	N1-C2-N3	-7.09	110.64	114.90
5	AE	107	ARG	NE-CZ-NH1	7.09	123.85	120.30
26	BB	1104	C	C4-C5-C6	7.09	120.95	117.40
26	BB	2027	G	C6-N1-C2	7.09	129.36	125.10
26	BB	2323	G	C5-C6-N1	-7.09	107.95	111.50
26	BB	2386	A	C4-C5-C6	-7.09	113.45	117.00
26	BB	2600	A	C1'-O4'-C4'	-7.09	104.22	109.90
30	BF	93	SER	N-CA-CB	-7.09	99.86	110.50
25	BA	44	G	C3'-C2'-C1'	-7.09	95.83	101.50
26	BB	804	A	C5-C6-N1	7.09	121.25	117.70
26	BB	1113	U	N1-C2-N3	7.09	119.16	114.90
26	BB	1572	A	C5-C6-N6	7.09	129.38	123.70
26	BB	2594	C	N1-C2-O2	7.09	123.16	118.90
1	AA	976	G	N9-C4-C5	7.09	108.24	105.40
25	BA	8	C	N3-C4-C5	-7.09	119.06	121.90
26	BB	207	A	C4-C5-C6	7.09	120.55	117.00
26	BB	455	C	O3'-P-O5'	7.09	117.47	104.00
26	BB	477	A	C4-C5-C6	-7.09	113.45	117.00
26	BB	830	G	N3-C2-N2	7.09	124.86	119.90
26	BB	969	G	C4'-C3'-C2'	-7.09	95.51	102.60
26	BB	1101	U	C4-C5-C6	7.09	123.95	119.70
26	BB	1370	C	N1-C1'-C2'	-7.09	104.20	112.00
26	BB	1444	G	C4-C5-C6	7.09	123.06	118.80
26	BB	1447	C	C4-C5-C6	7.09	120.95	117.40
26	BB	1733	G	P-O3'-C3'	7.09	128.21	119.70
26	BB	1853	A	N3-C4-N9	7.09	133.07	127.40
26	BB	2425	A	C2'-C3'-O3'	7.09	125.10	109.50
50	BZ	10	ARG	NE-CZ-NH1	-7.09	116.75	120.30
1	AA	498	A	C5-C6-N1	7.09	121.24	117.70
1	AA	498	A	C6-N1-C2	-7.09	114.35	118.60
1	AA	647	C	N3-C4-C5	-7.09	119.06	121.90
1	AA	776	G	C4-C5-N7	-7.09	107.96	110.80
1	AA	1140	C	C6-N1-C2	-7.09	117.47	120.30
1	AA	1455	G	N3-C4-C5	-7.09	125.06	128.60
3	AC	40	G	N9-C4-C5	7.09	108.24	105.40
21	AU	9	PHE	CB-CG-CD2	-7.09	115.84	120.80
26	BB	888	C	P-O3'-C3'	7.09	128.21	119.70
26	BB	1076	C	N1-C1'-C2'	-7.09	104.20	112.00
26	BB	1909	C	C6-N1-C2	-7.09	117.46	120.30
26	BB	2049	G	O4'-C4'-C3'	7.09	111.77	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2250	G	N3-C4-N9	-7.09	121.75	126.00
1	AA	344	A	N9-C4-C5	-7.09	102.97	105.80
1	AA	1367	C	O4'-C1'-N1	7.09	113.87	108.20
9	AI	38	ARG	NE-CZ-NH1	-7.09	116.76	120.30
26	BB	772	C	N1-C2-O2	7.09	123.15	118.90
26	BB	2347	C	C6-N1-C2	-7.09	117.47	120.30
26	BB	2500	U	C2-N3-C4	-7.09	122.75	127.00
1	AA	417	G	C2-N3-C4	7.09	115.44	111.90
1	AA	1391	U	C4-C5-C6	7.09	123.95	119.70
25	BA	6	G	C1'-O4'-C4'	7.09	115.57	109.90
25	BA	47	C	C1'-O4'-C4'	-7.09	104.23	109.90
26	BB	453	A	P-O3'-C3'	7.09	128.20	119.70
26	BB	503	A	O4'-C1'-C2'	7.09	113.98	107.60
26	BB	690	G	C3'-C2'-C1'	-7.09	95.83	101.50
26	BB	787	C	N3-C4-N4	7.09	122.96	118.00
26	BB	1493	C	N1-C2-O2	7.09	123.15	118.90
26	BB	1649	G	C5'-C4'-O4'	7.09	117.60	109.10
1	AA	480	U	C5'-C4'-C3'	-7.08	104.67	116.00
1	AA	1470	U	C6-N1-C2	-7.08	116.75	121.00
25	BA	13	G	N7-C8-N9	7.08	116.64	113.10
26	BB	645	C	O4'-C1'-N1	7.08	113.87	108.20
26	BB	936	A	C5-N7-C8	7.08	107.44	103.90
26	BB	1210	G	P-O3'-C3'	7.08	128.20	119.70
1	AA	677	U	C5-C6-N1	-7.08	119.16	122.70
1	AA	1152	A	C6-N1-C2	-7.08	114.35	118.60
1	AA	1291	U	O4'-C1'-N1	7.08	113.87	108.20
1	AA	1447	A	C4-C5-C6	-7.08	113.46	117.00
26	BB	428	A	C8-N9-C4	-7.08	102.97	105.80
26	BB	1143	A	N1-C6-N6	7.08	122.85	118.60
26	BB	1252	G	C4-C5-N7	-7.08	107.97	110.80
26	BB	1314	C	O4'-C1'-C2'	-7.08	98.72	105.80
26	BB	1713	A	N7-C8-N9	7.08	117.34	113.80
26	BB	1762	A	C5-C6-N6	7.08	129.37	123.70
26	BB	2287	A	N9-C4-C5	7.08	108.63	105.80
26	BB	2703	C	C3'-C2'-C1'	7.08	107.17	101.50
30	BF	88	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
33	BI	108	VAL	CG1-CB-CG2	-7.08	99.57	110.90
33	BI	123	ARG	NE-CZ-NH2	-7.08	116.76	120.30
1	AA	1018	G	N3-C4-N9	-7.08	121.75	126.00
4	AD	29	C	N1-C1'-C2'	-7.08	104.21	112.00
25	BA	73	A	C2-N3-C4	7.08	114.14	110.60
26	BB	612	G	P-O3'-C3'	7.08	128.20	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	827	U	O4'-C1'-N1	7.08	113.86	108.20
26	BB	1692	U	N3-C2-O2	-7.08	117.24	122.20
26	BB	2114	A	N1-C2-N3	7.08	132.84	129.30
26	BB	2243	U	C4-C5-C6	7.08	123.95	119.70
40	BP	69	ARG	NE-CZ-NH1	7.08	123.84	120.30
1	AA	1361	G	C6-N1-C2	-7.08	120.85	125.10
2	AB	69	C	C5-C4-N4	-7.08	115.24	120.20
26	BB	605	G	C6-N1-C2	-7.08	120.85	125.10
26	BB	2838	G	C1'-O4'-C4'	7.08	115.56	109.90
26	BB	2883	A	C4-C5-C6	-7.08	113.46	117.00
1	AA	433	G	N3-C4-N9	-7.08	121.75	126.00
1	AA	663	A	C8-N9-C4	7.08	108.63	105.80
1	AA	741	G	N7-C8-N9	7.08	116.64	113.10
1	AA	1224	U	C3'-C2'-C1'	7.08	107.16	101.50
1	AA	1438	G	C5-C6-N1	7.08	115.04	111.50
4	AD	43	G	C5-C6-O6	7.08	132.85	128.60
25	BA	119	A	C1'-O4'-C4'	-7.08	104.24	109.90
26	BB	789	A	N7-C8-N9	-7.08	110.26	113.80
26	BB	1760	C	P-O3'-C3'	7.08	128.19	119.70
26	BB	2427	C	C4-C5-C6	-7.08	113.86	117.40
26	BB	2619	C	O4'-C1'-N1	7.08	113.86	108.20
26	BB	2826	A	N1-C6-N6	7.08	122.85	118.60
26	BB	2862	G	N3-C4-C5	-7.08	125.06	128.60
1	AA	94	G	C2-N3-C4	7.08	115.44	111.90
1	AA	1071	C	C2-N3-C4	-7.08	116.36	119.90
1	AA	1156	G	C5-N7-C8	7.08	107.84	104.30
26	BB	919	U	N1-C2-N3	7.08	119.15	114.90
26	BB	1277	G	N3-C2-N2	-7.08	114.95	119.90
26	BB	1893	C	C5-C4-N4	-7.08	115.25	120.20
26	BB	1987	A	N3-C4-C5	-7.08	121.85	126.80
26	BB	2115	G	C4-C5-N7	-7.08	107.97	110.80
1	AA	195	A	C5-C6-N1	-7.08	114.16	117.70
1	AA	222	C	O4'-C1'-N1	7.08	113.86	108.20
1	AA	1324	A	C8-N9-C4	-7.08	102.97	105.80
26	BB	330	A	N1-C2-N3	-7.08	125.76	129.30
26	BB	631	A	N1-C2-N3	7.08	132.84	129.30
26	BB	765	C	N1-C2-O2	7.08	123.14	118.90
26	BB	881	G	N9-C4-C5	7.08	108.23	105.40
26	BB	1921	G	N9-C4-C5	-7.08	102.57	105.40
26	BB	2014	A	C2-N3-C4	7.08	114.14	110.60
26	BB	2394	C	N3-C2-O2	-7.08	116.95	121.90
26	BB	2719	G	N3-C2-N2	-7.08	114.95	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	510	A	C4-C5-N7	-7.07	107.16	110.70
1	AA	1337	G	N1-C6-O6	-7.07	115.66	119.90
26	BB	413	C	C4-C5-C6	7.07	120.94	117.40
26	BB	654	A	C5-N7-C8	-7.07	100.36	103.90
26	BB	763	G	N1-C2-N3	-7.07	119.66	123.90
26	BB	889	C	N3-C2-O2	-7.07	116.95	121.90
26	BB	1842	G	O4'-C1'-N9	7.07	113.86	108.20
26	BB	2183	A	C5-N7-C8	-7.07	100.36	103.90
26	BB	2816	G	C5-C6-O6	7.07	132.84	128.60
26	BB	2852	G	N9-C4-C5	7.07	108.23	105.40
1	AA	1220	G	N7-C8-N9	7.07	116.64	113.10
26	BB	291	G	O4'-C1'-N9	7.07	113.86	108.20
26	BB	1449	G	C8-N9-C4	-7.07	103.57	106.40
26	BB	1483	G	C8-N9-C4	-7.07	103.57	106.40
26	BB	1968	G	N9-C1'-C2'	-7.07	104.22	112.00
26	BB	2419	U	N1-C2-O2	7.07	127.75	122.80
1	AA	513	C	C6-N1-C2	-7.07	117.47	120.30
1	AA	991	U	N3-C4-C5	7.07	118.84	114.60
1	AA	1038	C	C5-C6-N1	7.07	124.53	121.00
1	AA	1366	C	N3-C4-C5	-7.07	119.07	121.90
3	AC	36	U	C5'-C4'-C3'	-7.07	104.69	116.00
26	BB	196	A	N7-C8-N9	7.07	117.33	113.80
26	BB	1341	G	N1-C6-O6	-7.07	115.66	119.90
26	BB	1854	A	C5-C6-N1	7.07	121.24	117.70
26	BB	1887	C	C6-N1-C2	7.07	123.13	120.30
4	AD	7	G	C3'-C2'-C1'	7.07	107.16	101.50
26	BB	258	G	O4'-C1'-N9	7.07	113.86	108.20
26	BB	1614	A	C5'-C4'-O4'	-7.07	100.62	109.10
26	BB	2278	A	N9-C1'-C2'	-7.07	104.22	112.00
26	BB	2665	A	N7-C8-N9	7.07	117.33	113.80
1	AA	120	A	C5'-C4'-O4'	7.07	117.58	109.10
1	AA	345	C	N1-C2-O2	7.07	123.14	118.90
1	AA	1004	A	P-O3'-C3'	7.07	128.18	119.70
1	AA	1183	U	N3-C4-C5	-7.07	110.36	114.60
1	AA	1235	U	C2-N3-C4	-7.07	122.76	127.00
1	AA	1339	A	N1-C6-N6	-7.07	114.36	118.60
25	BA	60	C	O4'-C1'-N1	7.07	113.85	108.20
26	BB	579	G	C6-C5-N7	-7.07	126.16	130.40
26	BB	2250	G	O4'-C1'-C2'	7.07	113.96	107.60
26	BB	2309	A	N9-C4-C5	-7.07	102.97	105.80
26	BB	2760	C	N1-C1'-C2'	-7.07	104.22	112.00
26	BB	2901	C	C1'-O4'-C4'	-7.07	104.25	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	56	U	C6-N1-C2	-7.07	116.76	121.00
26	BB	997	G	N7-C8-N9	-7.07	109.57	113.10
26	BB	1892	C	P-O3'-C3'	7.07	128.18	119.70
26	BB	2688	G	C4-C5-N7	-7.07	107.97	110.80
26	BB	2859	G	C6-C5-N7	-7.07	126.16	130.40
1	AA	1069	C	N1-C2-O2	7.06	123.14	118.90
26	BB	798	G	C6-N1-C2	-7.06	120.86	125.10
26	BB	854	C	C6-N1-C2	-7.06	117.47	120.30
26	BB	1974	C	C4'-C3'-C2'	-7.06	95.54	102.60
26	BB	2203	U	C2-N3-C4	-7.06	122.76	127.00
1	AA	959	A	C3'-C2'-C1'	7.06	107.15	101.50
1	AA	1148	U	O4'-C1'-N1	7.06	113.85	108.20
1	AA	1408	A	C4-C5-C6	-7.06	113.47	117.00
1	AA	1492	A	C4-C5-C6	-7.06	113.47	117.00
25	BA	7	G	C4-C5-N7	7.06	113.62	110.80
26	BB	375	G	N1-C6-O6	7.06	124.14	119.90
26	BB	727	A	N1-C2-N3	-7.06	125.77	129.30
26	BB	1000	A	C2-N3-C4	7.06	114.13	110.60
26	BB	1607	C	N1-C1'-C2'	-7.06	104.23	112.00
26	BB	2029	G	C8-N9-C4	-7.06	103.58	106.40
26	BB	2042	A	C4-C5-N7	-7.06	107.17	110.70
26	BB	2224	G	N1-C2-N3	7.06	128.14	123.90
26	BB	2469	A	C5'-C4'-O4'	7.06	117.58	109.10
26	BB	2699	C	C6-N1-C2	-7.06	117.47	120.30
11	AK	9	MET	CA-CB-CG	-7.06	101.30	113.30
26	BB	74	A	N9-C1'-C2'	7.06	123.18	114.00
26	BB	348	A	C8-N9-C4	-7.06	102.98	105.80
26	BB	2377	A	N7-C8-N9	7.06	117.33	113.80
26	BB	2454	G	C2-N3-C4	7.06	115.43	111.90
26	BB	2506	U	C3'-C2'-C1'	7.06	107.15	101.50
26	BB	2705	A	N7-C8-N9	7.06	117.33	113.80
26	BB	2829	A	C4-C5-N7	-7.06	107.17	110.70
1	AA	397	A	C2-N3-C4	7.06	114.13	110.60
1	AA	1222	G	C2-N3-C4	7.06	115.43	111.90
1	AA	1297	G	C5-C6-N1	7.06	115.03	111.50
26	BB	633	A	C1'-O4'-C4'	7.06	115.55	109.90
26	BB	1047	G	C5-N7-C8	-7.06	100.77	104.30
26	BB	1230	A	C6-C5-N7	-7.06	127.36	132.30
26	BB	1807	G	N3-C2-N2	7.06	124.84	119.90
1	AA	336	A	C5-N7-C8	7.06	107.43	103.90
1	AA	991	U	C5-C4-O4	-7.06	121.67	125.90
1	AA	1260	G	N1-C2-N2	-7.06	109.85	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	88	C	C4-C5-C6	-7.06	113.87	117.40
26	BB	1192	G	N3-C2-N2	-7.06	114.96	119.90
26	BB	1908	C	C2-N3-C4	7.06	123.43	119.90
26	BB	1968	G	N7-C8-N9	7.06	116.63	113.10
26	BB	2560	A	C8-N9-C4	-7.06	102.98	105.80
26	BB	2744	G	C4-C5-C6	7.06	123.03	118.80
26	BB	2814	A	N7-C8-N9	7.06	117.33	113.80
1	AA	49	U	C5-C6-N1	7.06	126.23	122.70
1	AA	455	G	O4'-C1'-N9	7.06	113.84	108.20
4	AD	24	C	O4'-C1'-N1	7.06	113.84	108.20
25	BA	94	A	C5-C6-N1	-7.06	114.17	117.70
26	BB	1251	C	C6-N1-C2	-7.06	117.48	120.30
26	BB	1400	U	C4-C5-C6	7.06	123.93	119.70
26	BB	2555	U	C5-C6-N1	-7.06	119.17	122.70
1	AA	1454	G	N1-C2-N3	-7.05	119.67	123.90
3	AC	52	U	O4'-C4'-C3'	7.05	111.74	106.10
26	BB	47	C	C5-C6-N1	-7.05	117.47	121.00
26	BB	562	U	C5-C4-O4	-7.05	121.67	125.90
26	BB	704	G	C1'-O4'-C4'	-7.05	104.26	109.90
26	BB	1784	A	P-O3'-C3'	7.05	128.16	119.70
26	BB	2516	A	C2-N3-C4	7.05	114.13	110.60
26	BB	2778	A	N3-C4-N9	7.05	133.04	127.40
33	BI	25	TYR	CG-CD1-CE1	-7.05	115.66	121.30
1	AA	242	G	N1-C6-O6	-7.05	115.67	119.90
26	BB	1151	A	C5'-C4'-O4'	7.05	117.56	109.10
26	BB	1388	G	N3-C4-C5	-7.05	125.07	128.60
26	BB	1975	G	C1'-O4'-C4'	-7.05	104.26	109.90
26	BB	2655	G	O4'-C1'-N9	7.05	113.84	108.20
1	AA	568	G	C4-C5-N7	-7.05	107.98	110.80
26	BB	573	U	C2-N3-C4	-7.05	122.77	127.00
26	BB	1175	A	C4-C5-N7	-7.05	107.17	110.70
26	BB	2211	A	N7-C8-N9	7.05	117.33	113.80
33	BI	29	PHE	CB-CG-CD1	7.05	125.74	120.80
1	AA	698	G	C2-N3-C4	-7.05	108.38	111.90
1	AA	1001	C	C1'-O4'-C4'	-7.05	104.26	109.90
1	AA	1387	G	C5-C6-O6	-7.05	124.37	128.60
1	AA	1508	A	C5'-C4'-O4'	7.05	117.56	109.10
20	AT	61	ARG	NE-CZ-NH2	7.05	123.83	120.30
26	BB	189	G	O4'-C1'-N9	7.05	113.84	108.20
26	BB	626	A	O4'-C1'-N9	7.05	113.84	108.20
26	BB	1036	G	C5-C6-O6	-7.05	124.37	128.60
26	BB	2112	G	N3-C4-C5	-7.05	125.08	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2536	G	N3-C2-N2	-7.05	114.97	119.90
26	BB	2579	C	N3-C4-C5	-7.05	119.08	121.90
26	BB	2598	A	C6-C5-N7	-7.05	127.36	132.30
26	BB	2867	G	N3-C4-C5	-7.05	125.08	128.60
26	BB	1629	U	N3-C2-O2	-7.05	117.27	122.20
26	BB	2179	C	N1-C2-O2	7.05	123.13	118.90
1	AA	13	U	C5-C4-O4	-7.05	121.67	125.90
1	AA	419	C	C5-C4-N4	7.05	125.13	120.20
1	AA	1024	G	C4'-C3'-C2'	-7.05	95.55	102.60
1	AA	1401	G	C6-N1-C2	-7.05	120.87	125.10
2	AB	45	U	C5-C6-N1	-7.05	119.18	122.70
26	BB	1745	A	C5-N7-C8	7.05	107.42	103.90
1	AA	136	C	N3-C4-C5	-7.04	119.08	121.90
1	AA	974	A	N3-C4-N9	-7.04	121.76	127.40
3	AC	19	A	C6-N1-C2	7.04	122.83	118.60
26	BB	1378	A	C8-N9-C4	-7.04	102.98	105.80
26	BB	1936	A	C1'-O4'-C4'	7.04	115.54	109.90
26	BB	2651	C	N3-C2-O2	-7.04	116.97	121.90
1	AA	669	G	N1-C2-N3	-7.04	119.67	123.90
4	AD	24	C	N3-C4-C5	7.04	124.72	121.90
26	BB	198	C	N3-C2-O2	-7.04	116.97	121.90
26	BB	1185	G	C4-C5-N7	-7.04	107.98	110.80
26	BB	1513	U	N1-C2-O2	-7.04	117.87	122.80
26	BB	1770	G	C6-C5-N7	-7.04	126.17	130.40
26	BB	2388	A	N9-C4-C5	-7.04	102.98	105.80
26	BB	2716	C	C2-N3-C4	-7.04	116.38	119.90
26	BB	2751	G	C5-C6-O6	-7.04	124.37	128.60
46	BV	12	ARG	NE-CZ-NH2	-7.04	116.78	120.30
26	BB	569	U	N1-C2-N3	-7.04	110.67	114.90
26	BB	577	G	N1-C6-O6	-7.04	115.68	119.90
26	BB	1258	U	N1-C2-N3	7.04	119.12	114.90
26	BB	1494	A	C8-N9-C4	-7.04	102.98	105.80
26	BB	1608	A	C8-N9-C4	-7.04	102.98	105.80
26	BB	1696	G	N3-C4-C5	-7.04	125.08	128.60
26	BB	2015	A	C8-N9-C4	-7.04	102.98	105.80
26	BB	2479	U	O3'-P-O5'	-7.04	90.62	104.00
1	AA	485	U	C4'-C3'-C2'	-7.04	95.56	102.60
1	AA	818	G	C5'-C4'-C3'	-7.04	104.74	116.00
26	BB	913	U	P-O3'-C3'	7.04	128.15	119.70
26	BB	1301	A	C5-C6-N6	7.04	129.33	123.70
26	BB	1740	G	C6-N1-C2	-7.04	120.88	125.10
1	AA	101	A	C8-N9-C4	-7.04	102.98	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	233	C	C5-C4-N4	7.04	125.13	120.20
1	AA	305	G	O4'-C1'-N9	7.04	113.83	108.20
1	AA	621	A	N7-C8-N9	-7.04	110.28	113.80
2	AB	38	A	C3'-C2'-C1'	-7.04	95.87	101.50
26	BB	450	G	O4'-C1'-N9	7.04	113.83	108.20
26	BB	611	C	P-O3'-C3'	7.04	128.15	119.70
26	BB	1693	U	O4'-C1'-N1	7.04	113.83	108.20
26	BB	1786	A	O4'-C1'-C2'	-7.04	98.76	105.80
1	AA	1410	A	C3'-C2'-C1'	7.04	107.13	101.50
3	AC	44	U	C2-N1-C1'	7.04	126.14	117.70
26	BB	917	A	O4'-C1'-N9	7.04	113.83	108.20
26	BB	1528	A	C8-N9-C4	7.04	108.61	105.80
26	BB	420	C	C2-N3-C4	7.04	123.42	119.90
26	BB	488	G	C8-N9-C4	-7.04	103.59	106.40
26	BB	651	G	N7-C8-N9	7.04	116.62	113.10
26	BB	705	A	C5-N7-C8	-7.04	100.38	103.90
26	BB	1509	A	N1-C2-N3	-7.04	125.78	129.30
26	BB	1518	C	C3'-C2'-C1'	-7.04	95.87	101.50
26	BB	1624	U	C6-N1-C2	7.04	125.22	121.00
26	BB	1631	G	N3-C4-C5	-7.04	125.08	128.60
26	BB	1944	U	P-O3'-C3'	7.04	128.14	119.70
26	BB	2824	C	C6-N1-C2	-7.04	117.49	120.30
1	AA	719	C	O4'-C1'-N1	7.03	113.83	108.20
1	AA	1159	U	C1'-O4'-C4'	-7.03	104.27	109.90
1	AA	1370	G	C5-C6-N1	7.03	115.02	111.50
1	AA	1503	A	P-O3'-C3'	7.03	128.14	119.70
14	AN	126	ARG	NE-CZ-NH1	7.03	123.82	120.30
26	BB	497	A	C5-N7-C8	-7.03	100.38	103.90
26	BB	1144	A	C2-N3-C4	7.03	114.12	110.60
26	BB	1356	G	C2-N3-C4	-7.03	108.38	111.90
26	BB	1585	C	C4'-C3'-C2'	-7.03	95.57	102.60
26	BB	2080	A	N9-C4-C5	-7.03	102.99	105.80
26	BB	2276	G	C5'-C4'-C3'	-7.03	104.75	116.00
1	AA	508	U	N1-C2-O2	-7.03	117.88	122.80
2	AB	52	A	O4'-C1'-C2'	-7.03	98.77	105.80
26	BB	2011	U	C6-N1-C2	-7.03	116.78	121.00
1	AA	192	A	N3-C4-C5	-7.03	121.88	126.80
1	AA	1036	A	N7-C8-N9	7.03	117.31	113.80
1	AA	1297	G	N3-C2-N2	-7.03	114.98	119.90
26	BB	165	A	C8-N9-C4	-7.03	102.99	105.80
26	BB	1753	G	N1-C2-N3	7.03	128.12	123.90
26	BB	1777	U	N3-C4-C5	-7.03	110.38	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1786	A	C8-N9-C4	-7.03	102.99	105.80
26	BB	1820	U	P-O3'-C3'	7.03	128.14	119.70
26	BB	1829	A	C3'-C2'-C1'	-7.03	95.88	101.50
52	B1	37	ARG	NE-CZ-NH2	-7.03	116.78	120.30
1	AA	183	C	C4'-C3'-C2'	-7.03	95.57	102.60
1	AA	1178	G	C8-N9-C1'	7.03	136.14	127.00
26	BB	585	G	C4'-C3'-C2'	-7.03	95.57	102.60
26	BB	707	G	O4'-C4'-C3'	7.03	111.72	106.10
26	BB	2484	G	N3-C4-N9	7.03	130.22	126.00
26	BB	2744	G	C6-N1-C2	-7.03	120.88	125.10
1	AA	311	C	C1'-O4'-C4'	7.03	115.52	109.90
26	BB	238	C	N1-C2-N3	7.03	124.12	119.20
26	BB	425	G	N1-C6-O6	7.03	124.12	119.90
26	BB	1302	A	O4'-C1'-C2'	-7.03	98.77	105.80
26	BB	1875	G	C5-N7-C8	-7.03	100.79	104.30
26	BB	2230	G	N9-C4-C5	7.03	108.21	105.40
26	BB	2241	A	O4'-C1'-N9	7.03	113.82	108.20
26	BB	2280	G	C6-N1-C2	-7.03	120.88	125.10
26	BB	2747	G	C5'-C4'-O4'	7.03	117.53	109.10
26	BB	2887	A	C2-N3-C4	7.03	114.11	110.60
42	BR	73	PHE	CB-CG-CD1	-7.03	115.88	120.80
1	AA	280	C	C1'-O4'-C4'	-7.03	104.28	109.90
1	AA	413	G	N3-C4-N9	7.03	130.22	126.00
1	AA	745	G	N9-C1'-C2'	-7.03	104.27	112.00
1	AA	1377	A	P-O3'-C3'	7.03	128.13	119.70
3	AC	30	U	N1-C2-O2	7.03	127.72	122.80
26	BB	248	G	N9-C4-C5	-7.03	102.59	105.40
26	BB	1589	U	C1'-O4'-C4'	-7.03	104.28	109.90
26	BB	1651	G	N9-C4-C5	-7.03	102.59	105.40
26	BB	1836	C	N3-C4-C5	-7.03	119.09	121.90
1	AA	227	G	O4'-C1'-N9	7.02	113.82	108.20
1	AA	423	G	N3-C4-C5	-7.02	125.09	128.60
1	AA	1468	A	C5-N7-C8	7.02	107.41	103.90
3	AC	35	G	C2-N3-C4	7.02	115.41	111.90
26	BB	1435	G	N3-C4-C5	-7.02	125.09	128.60
26	BB	1586	A	C3'-C2'-C1'	-7.02	95.88	101.50
26	BB	1754	A	N1-C6-N6	-7.02	114.39	118.60
26	BB	2470	G	N1-C6-O6	-7.02	115.69	119.90
1	AA	1	A	O4'-C1'-N9	7.02	113.82	108.20
1	AA	1457	G	C6-C5-N7	-7.02	126.19	130.40
1	AA	1491	G	N1-C2-N3	7.02	128.11	123.90
26	BB	1284	A	O4'-C1'-N9	7.02	113.82	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1412	U	C5'-C4'-O4'	7.02	117.53	109.10
26	BB	1692	U	C4'-C3'-C2'	-7.02	95.58	102.60
27	BC	102	ASP	CB-CG-OD2	-7.02	111.98	118.30
1	AA	770	C	O4'-C4'-C3'	7.02	111.72	106.10
1	AA	908	A	C4-C5-C6	-7.02	113.49	117.00
1	AA	1383	C	O4'-C1'-N1	7.02	113.82	108.20
26	BB	1964	G	N3-C4-C5	-7.02	125.09	128.60
26	BB	1978	A	O4'-C1'-N9	7.02	113.82	108.20
1	AA	35	G	N3-C4-C5	-7.02	125.09	128.60
1	AA	59	A	N1-C2-N3	7.02	132.81	129.30
1	AA	530	G	C6-C5-N7	-7.02	126.19	130.40
1	AA	567	G	C6-N1-C2	-7.02	120.89	125.10
1	AA	577	G	C4-C5-N7	-7.02	107.99	110.80
2	AB	50	G	C5-N7-C8	-7.02	100.79	104.30
6	AF	231	ARG	NE-CZ-NH2	-7.02	116.79	120.30
17	AQ	12	ARG	NE-CZ-NH1	7.02	123.81	120.30
26	BB	664	G	C5-N7-C8	-7.02	100.79	104.30
26	BB	944	C	C5-C4-N4	-7.02	115.29	120.20
26	BB	1033	U	C4'-C3'-C2'	-7.02	95.58	102.60
26	BB	1878	G	N9-C4-C5	-7.02	102.59	105.40
26	BB	2144	G	P-O3'-C3'	7.02	128.12	119.70
26	BB	2461	A	C3'-C2'-C1'	7.02	107.11	101.50
26	BB	2767	C	N1-C2-O2	7.02	123.11	118.90
40	BP	80	PHE	CB-CG-CD1	-7.02	115.89	120.80
1	AA	26	A	C3'-C2'-C1'	7.02	107.11	101.50
1	AA	445	G	C6-N1-C2	-7.02	120.89	125.10
2	AB	25	C	N3-C4-C5	-7.02	119.09	121.90
7	AG	103	ARG	NE-CZ-NH2	-7.02	116.79	120.30
26	BB	388	G	N1-C2-N3	-7.02	119.69	123.90
26	BB	712	G	N7-C8-N9	7.02	116.61	113.10
26	BB	954	G	C5-C6-N1	7.02	115.01	111.50
26	BB	1281	G	N7-C8-N9	7.02	116.61	113.10
26	BB	1792	G	C4-C5-N7	-7.02	107.99	110.80
26	BB	2141	G	C2-N3-C4	-7.02	108.39	111.90
1	AA	278	G	C4'-C3'-C2'	-7.02	95.58	102.60
1	AA	1542	A	C3'-C2'-C1'	-7.02	95.89	101.50
26	BB	160	A	C5-N7-C8	-7.02	100.39	103.90
26	BB	324	A	C4-C5-N7	-7.02	107.19	110.70
26	BB	775	G	O4'-C4'-C3'	7.02	111.71	106.10
26	BB	2020	A	C4-C5-N7	7.02	114.21	110.70
26	BB	2702	G	O4'-C4'-C3'	7.02	111.71	106.10
35	BK	66	PHE	CB-CG-CD1	7.02	125.71	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1088	G	C5-C6-N1	7.01	115.01	111.50
12	AL	102	PHE	CB-CG-CD1	7.01	125.71	120.80
25	BA	50	A	C3'-C2'-C1'	7.01	107.11	101.50
26	BB	844	A	N3-C4-C5	-7.01	121.89	126.80
26	BB	924	G	C4-C5-C6	7.01	123.01	118.80
26	BB	1079	C	C4'-C3'-C2'	-7.01	95.58	102.60
26	BB	1135	C	C5'-C4'-O4'	7.01	117.52	109.10
26	BB	1637	A	N1-C6-N6	7.01	122.81	118.60
26	BB	2902	C	C4'-C3'-C2'	-7.01	95.58	102.60
1	AA	267	C	O4'-C1'-N1	7.01	113.81	108.20
26	BB	25	U	N1-C2-O2	7.01	127.71	122.80
26	BB	176	A	N1-C2-N3	7.01	132.81	129.30
26	BB	962	G	C6-C5-N7	-7.01	126.19	130.40
26	BB	2295	C	C5'-C4'-C3'	-7.01	104.78	116.00
1	AA	435	A	C5-C6-N6	-7.01	118.09	123.70
26	BB	391	A	N7-C8-N9	7.01	117.31	113.80
26	BB	419	U	O4'-C1'-N1	7.01	113.81	108.20
26	BB	654	A	C6-C5-N7	7.01	137.21	132.30
26	BB	1256	G	P-O3'-C3'	7.01	128.11	119.70
26	BB	1495	A	C5-N7-C8	-7.01	100.39	103.90
26	BB	1581	G	N1-C2-N2	-7.01	109.89	116.20
26	BB	1604	C	C4-C5-C6	7.01	120.91	117.40
26	BB	1964	G	C5-C6-N1	7.01	115.01	111.50
26	BB	2892	G	C2-N3-C4	7.01	115.41	111.90
1	AA	517	G	N9-C1'-C2'	-7.01	104.29	112.00
1	AA	898	G	O4'-C1'-N9	7.01	113.81	108.20
4	AD	34	U	O4'-C1'-N1	7.01	113.81	108.20
26	BB	322	A	C5-C6-N1	-7.01	114.19	117.70
26	BB	1338	G	N1-C6-O6	-7.01	115.69	119.90
26	BB	2066	C	N1-C1'-C2'	-7.01	104.29	112.00
26	BB	2167	U	C5-C6-N1	-7.01	119.20	122.70
26	BB	2231	U	N3-C4-O4	7.01	124.31	119.40
26	BB	2349	G	C5'-C4'-O4'	7.01	117.51	109.10
26	BB	2823	A	N3-C4-C5	-7.01	121.89	126.80
1	AA	984	C	C5'-C4'-O4'	7.01	117.51	109.10
25	BA	106	G	C4-N9-C1'	-7.01	117.39	126.50
26	BB	2492	U	N1-C2-N3	7.01	119.11	114.90
1	AA	446	G	N1-C6-O6	-7.01	115.70	119.90
1	AA	1341	U	C5'-C4'-O4'	7.01	117.51	109.10
1	AA	1467	C	O4'-C1'-N1	7.01	113.80	108.20
26	BB	144	A	C5'-C4'-O4'	7.01	117.51	109.10
26	BB	952	G	N3-C4-C5	-7.01	125.10	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1511	G	N9-C4-C5	-7.01	102.60	105.40
26	BB	1635	A	N7-C8-N9	7.01	117.30	113.80
26	BB	1824	G	C2-N3-C4	7.01	115.40	111.90
26	BB	2084	C	C1'-O4'-C4'	-7.01	104.30	109.90
26	BB	2121	G	C5-C6-O6	7.01	132.80	128.60
26	BB	2421	G	O4'-C4'-C3'	7.01	111.70	106.10
26	BB	2482	A	C5-C6-N6	7.01	129.31	123.70
1	AA	194	C	C5-C6-N1	-7.00	117.50	121.00
26	BB	1947	C	C5-C4-N4	-7.00	115.30	120.20
26	BB	2085	U	C3'-C2'-C1'	-7.00	95.90	101.50
1	AA	187	G	N7-C8-N9	7.00	116.60	113.10
1	AA	289	G	N1-C6-O6	-7.00	115.70	119.90
1	AA	1077	G	O4'-C4'-C3'	7.00	111.70	106.10
1	AA	1182	G	N9-C4-C5	7.00	108.20	105.40
1	AA	1208	C	C1'-O4'-C4'	-7.00	104.30	109.90
4	AD	77	A	C4-C5-C6	7.00	120.50	117.00
9	AI	89	VAL	CA-CB-CG1	7.00	121.41	110.90
26	BB	97	C	C2-N3-C4	7.00	123.40	119.90
26	BB	1326	U	O4'-C1'-N1	7.00	113.80	108.20
26	BB	1740	G	C6-C5-N7	-7.00	126.20	130.40
26	BB	1921	G	N1-C2-N3	-7.00	119.70	123.90
26	BB	2513	A	P-O3'-C3'	7.00	128.10	119.70
26	BB	2799	A	C8-N9-C4	-7.00	103.00	105.80
1	AA	189	A	N3-C4-N9	7.00	133.00	127.40
1	AA	433	G	N9-C1'-C2'	-7.00	104.30	112.00
1	AA	530	G	C8-N9-C4	-7.00	103.60	106.40
1	AA	588	G	N9-C1'-C2'	-7.00	104.30	112.00
1	AA	610	U	C6-N1-C2	-7.00	116.80	121.00
1	AA	654	G	N1-C2-N2	7.00	122.50	116.20
1	AA	952	U	O4'-C1'-N1	7.00	113.80	108.20
1	AA	1030	U	O4'-C1'-N1	7.00	113.80	108.20
1	AA	1225	A	N7-C8-N9	7.00	117.30	113.80
1	AA	1231	G	C1'-O4'-C4'	-7.00	104.30	109.90
26	BB	553	G	C8-N9-C4	-7.00	103.60	106.40
26	BB	671	C	C3'-C2'-C1'	-7.00	95.90	101.50
26	BB	1072	C	O4'-C1'-N1	7.00	113.80	108.20
26	BB	1518	C	O4'-C1'-N1	7.00	113.80	108.20
26	BB	2071	A	C6-N1-C2	-7.00	114.40	118.60
26	BB	2289	G	C8-N9-C4	-7.00	103.60	106.40
26	BB	2429	G	C6-N1-C2	-7.00	120.90	125.10
26	BB	2436	G	O4'-C1'-N9	7.00	113.80	108.20
1	AA	1302	C	P-O3'-C3'	7.00	128.10	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	308	G	C1'-O4'-C4'	7.00	115.50	109.90
26	BB	1095	A	C8-N9-C4	-7.00	103.00	105.80
26	BB	1286	A	C5-C6-N6	-7.00	118.10	123.70
26	BB	2198	A	C5-C6-N1	7.00	121.20	117.70
26	BB	2284	A	C4-C5-C6	7.00	120.50	117.00
26	BB	2673	G	N3-C4-N9	7.00	130.20	126.00
1	AA	247	G	C4-C5-N7	-7.00	108.00	110.80
1	AA	1097	C	C5-C4-N4	-7.00	115.30	120.20
1	AA	1185	G	N9-C4-C5	7.00	108.20	105.40
1	AA	1188	A	C6-N1-C2	-7.00	114.40	118.60
26	BB	144	A	C8-N9-C4	-7.00	103.00	105.80
26	BB	863	A	N1-C6-N6	7.00	122.80	118.60
26	BB	1529	G	C3'-C2'-C1'	7.00	107.10	101.50
26	BB	1864	U	O4'-C1'-N1	7.00	113.80	108.20
26	BB	2349	G	C4-C5-C6	7.00	123.00	118.80
26	BB	2542	A	C5-C6-N1	7.00	121.20	117.70
1	AA	420	U	C4-C5-C6	7.00	123.90	119.70
1	AA	714	G	O5'-P-OP2	-7.00	99.40	105.70
1	AA	794	A	C4-C5-N7	-7.00	107.20	110.70
1	AA	1221	G	N1-C6-O6	-7.00	115.70	119.90
1	AA	1295	U	C4-C5-C6	-7.00	115.50	119.70
1	AA	1324	A	N1-C2-N3	-7.00	125.80	129.30
17	AQ	60	ARG	NE-CZ-NH2	-7.00	116.80	120.30
26	BB	972	A	N1-C2-N3	-7.00	125.80	129.30
26	BB	1265	A	C5-C6-N1	7.00	121.20	117.70
26	BB	1553	A	N1-C6-N6	7.00	122.80	118.60
26	BB	1608	A	N9-C4-C5	7.00	108.60	105.80
26	BB	2613	U	N1-C2-N3	7.00	119.10	114.90
1	AA	1383	C	C2-N3-C4	7.00	123.40	119.90
26	BB	1985	C	N1-C2-O2	7.00	123.10	118.90
1	AA	51	A	C5'-C4'-O4'	6.99	117.49	109.10
1	AA	646	G	N1-C2-N2	-6.99	109.91	116.20
1	AA	1390	U	O4'-C1'-N1	6.99	113.79	108.20
7	AG	25	ARG	NE-CZ-NH2	-6.99	116.80	120.30
26	BB	499	U	C5'-C4'-O4'	6.99	117.49	109.10
26	BB	816	C	O4'-C1'-N1	6.99	113.80	108.20
26	BB	837	C	C1'-O4'-C4'	-6.99	104.31	109.90
26	BB	2368	C	C4-C5-C6	-6.99	113.90	117.40
26	BB	2555	U	C4-C5-C6	6.99	123.90	119.70
26	BB	2640	G	C2-N3-C4	6.99	115.40	111.90
1	AA	480	U	C4'-C3'-C2'	-6.99	95.61	102.60
26	BB	479	A	N7-C8-N9	6.99	117.30	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	960	A	N9-C4-C5	-6.99	103.00	105.80
26	BB	1753	G	C5'-C4'-C3'	-6.99	104.81	116.00
1	AA	350	G	C4'-C3'-C2'	-6.99	95.61	102.60
1	AA	1172	C	O4'-C1'-N1	6.99	113.79	108.20
1	AA	1323	G	C5-C6-N1	6.99	115.00	111.50
4	AD	34	U	N3-C2-O2	-6.99	117.31	122.20
4	AD	40	C	N1-C1'-C2'	-6.99	104.31	112.00
25	BA	104	A	N1-C6-N6	-6.99	114.41	118.60
26	BB	130	C	C6-N1-C2	-6.99	117.50	120.30
26	BB	482	A	N9-C4-C5	-6.99	103.00	105.80
26	BB	618	G	C5'-C4'-O4'	6.99	117.49	109.10
26	BB	1553	A	C5'-C4'-O4'	6.99	117.49	109.10
26	BB	1595	C	N3-C4-C5	-6.99	119.10	121.90
26	BB	1797	G	C3'-C2'-C1'	6.99	107.09	101.50
26	BB	2088	A	C4'-C3'-C2'	-6.99	95.61	102.60
26	BB	2347	C	N3-C2-O2	-6.99	117.01	121.90
26	BB	2520	C	C6-N1-C2	-6.99	117.50	120.30
26	BB	2562	U	C4-C5-C6	6.99	123.89	119.70
1	AA	876	C	N1-C2-O2	6.99	123.09	118.90
1	AA	1008	U	C5-C6-N1	-6.99	119.21	122.70
1	AA	1368	A	N1-C2-N3	6.99	132.79	129.30
2	AB	44	G	C2-N3-C4	6.99	115.39	111.90
4	AD	4	G	N3-C4-C5	-6.99	125.11	128.60
26	BB	599	A	C1'-O4'-C4'	-6.99	104.31	109.90
26	BB	639	U	C6-N1-C2	-6.99	116.81	121.00
26	BB	1136	G	N9-C1'-C2'	-6.99	104.31	112.00
26	BB	2343	U	P-O3'-C3'	6.99	128.09	119.70
1	AA	1468	A	C4-C5-N7	-6.99	107.21	110.70
26	BB	264	C	N1-C2-O2	6.99	123.09	118.90
26	BB	358	U	C5-C6-N1	6.99	126.19	122.70
26	BB	2392	A	C5'-C4'-O4'	6.99	117.48	109.10
1	AA	67	C	C6-N1-C2	-6.99	117.51	120.30
1	AA	320	A	N9-C4-C5	6.99	108.59	105.80
1	AA	981	U	N3-C4-O4	6.99	124.29	119.40
1	AA	1103	C	N3-C2-O2	-6.99	117.01	121.90
1	AA	1488	G	N1-C6-O6	-6.99	115.71	119.90
26	BB	170	U	N3-C2-O2	-6.99	117.31	122.20
26	BB	548	G	C4-C5-N7	6.99	113.59	110.80
26	BB	795	C	O4'-C1'-N1	6.99	113.79	108.20
26	BB	1260	A	C4-C5-N7	6.99	114.19	110.70
26	BB	2349	G	C6-C5-N7	-6.99	126.21	130.40
1	AA	200	G	C4-C5-C6	6.98	122.99	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	948	C	C5'-C4'-C3'	-6.98	104.83	116.00
1	AA	1278	G	N3-C4-N9	6.98	130.19	126.00
4	AD	54	G	N7-C8-N9	-6.98	109.61	113.10
26	BB	989	G	N3-C4-C5	-6.98	125.11	128.60
26	BB	1426	G	N3-C4-N9	-6.98	121.81	126.00
26	BB	1478	G	C8-N9-C4	-6.98	103.61	106.40
26	BB	2142	A	C8-N9-C4	6.98	108.59	105.80
26	BB	2751	G	N3-C4-N9	6.98	130.19	126.00
26	BB	2802	G	C6-N1-C2	-6.98	120.91	125.10
1	AA	87	C	C2-N1-C1'	-6.98	111.12	118.80
1	AA	517	G	O4'-C1'-N9	6.98	113.79	108.20
1	AA	553	A	O4'-C1'-N9	6.98	113.79	108.20
1	AA	556	C	N3-C2-O2	-6.98	117.01	121.90
1	AA	629	A	O5'-P-OP2	-6.98	99.42	105.70
1	AA	790	A	C6-C5-N7	6.98	137.19	132.30
26	BB	1055	G	C5'-C4'-O4'	6.98	117.48	109.10
26	BB	1230	A	C5'-C4'-O4'	6.98	117.48	109.10
26	BB	1343	G	P-O3'-C3'	6.98	128.08	119.70
26	BB	1387	A	N3-C4-C5	-6.98	121.91	126.80
26	BB	1687	G	N1-C6-O6	-6.98	115.71	119.90
26	BB	2453	A	C8-N9-C4	6.98	108.59	105.80
1	AA	292	G	C8-N9-C4	-6.98	103.61	106.40
1	AA	481	G	N3-C4-C5	-6.98	125.11	128.60
1	AA	874	G	C5'-C4'-O4'	6.98	117.48	109.10
25	BA	90	C	P-O3'-C3'	6.98	128.08	119.70
26	BB	630	G	O4'-C1'-N9	6.98	113.78	108.20
26	BB	1736	U	C4-C5-C6	6.98	123.89	119.70
26	BB	1925	C	C2-N3-C4	6.98	123.39	119.90
26	BB	2416	C	O4'-C1'-N1	6.98	113.78	108.20
1	AA	408	A	C4'-C3'-C2'	-6.98	95.62	102.60
1	AA	507	C	N1-C2-O2	6.98	123.09	118.90
26	BB	159	G	N1-C6-O6	-6.98	115.71	119.90
26	BB	932	U	C2-N1-C1'	6.98	126.08	117.70
1	AA	75	G	C5-N7-C8	-6.98	100.81	104.30
1	AA	1255	G	C8-N9-C4	-6.98	103.61	106.40
1	AA	1485	U	N1-C1'-C2'	-6.98	104.32	112.00
4	AD	58	A	N1-C6-N6	-6.98	114.41	118.60
4	AD	76	C	C1'-O4'-C4'	-6.98	104.32	109.90
25	BA	68	C	C5-C4-N4	-6.98	115.32	120.20
26	BB	805	G	N1-C2-N2	6.98	122.48	116.20
26	BB	1687	G	C4-C5-N7	6.98	113.59	110.80
1	AA	204	G	N1-C2-N3	-6.98	119.71	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	783	A	C5-N7-C8	6.98	107.39	103.90
26	BB	976	G	C8-N9-C4	-6.98	103.61	106.40
26	BB	1117	C	O4'-C1'-N1	6.98	113.78	108.20
26	BB	1711	A	C8-N9-C4	-6.98	103.01	105.80
26	BB	1885	A	C6-N1-C2	6.98	122.79	118.60
26	BB	2693	G	C6-C5-N7	-6.98	126.21	130.40
1	AA	189	A	P-O3'-C3'	6.97	128.07	119.70
1	AA	338	A	C5-N7-C8	-6.97	100.41	103.90
4	AD	23	G	N9-C4-C5	6.97	108.19	105.40
4	AD	48	U	C1'-O4'-C4'	-6.97	104.32	109.90
26	BB	347	A	N9-C4-C5	-6.97	103.01	105.80
26	BB	1258	U	C2-N3-C4	-6.97	122.81	127.00
26	BB	1502	A	C6-N1-C2	6.97	122.78	118.60
26	BB	2162	G	C5-C6-O6	-6.97	124.42	128.60
26	BB	2196	C	N1-C1'-C2'	-6.97	104.33	112.00
1	AA	110	C	C5'-C4'-O4'	6.97	117.47	109.10
1	AA	767	A	C1'-O4'-C4'	-6.97	104.32	109.90
1	AA	1193	G	N3-C4-N9	-6.97	121.82	126.00
1	AA	1224	U	C5-C6-N1	-6.97	119.21	122.70
2	AB	52	A	C4-C5-N7	6.97	114.19	110.70
4	AD	49	C	N3-C2-O2	-6.97	117.02	121.90
9	AI	122	ASP	CB-CG-OD2	-6.97	112.03	118.30
26	BB	508	A	C8-N9-C4	6.97	108.59	105.80
26	BB	787	C	N1-C2-N3	6.97	124.08	119.20
26	BB	1633	G	N3-C2-N2	-6.97	115.02	119.90
26	BB	1783	A	C2-N3-C4	6.97	114.09	110.60
26	BB	1861	G	N1-C2-N2	6.97	122.47	116.20
26	BB	2002	G	C5-C6-O6	-6.97	124.42	128.60
26	BB	2043	C	C3'-C2'-C1'	6.97	107.08	101.50
26	BB	2246	G	N3-C4-N9	6.97	130.18	126.00
26	BB	2413	G	O5'-C5'-C4'	-6.97	98.45	111.70
26	BB	1314	C	C6-N1-C2	-6.97	117.51	120.30
26	BB	1546	G	C4-C5-N7	-6.97	108.01	110.80
26	BB	1784	A	C4'-C3'-C2'	6.97	109.57	102.60
26	BB	2592	G	C6-C5-N7	-6.97	126.22	130.40
26	BB	2647	U	N3-C2-O2	-6.97	117.32	122.20
1	AA	1104	G	N1-C6-O6	6.97	124.08	119.90
1	AA	1201	A	C2'-C3'-O3'	6.97	124.85	113.70
1	AA	1245	C	P-O3'-C3'	6.97	128.06	119.70
26	BB	356	G	C5-C6-N1	6.97	114.98	111.50
26	BB	451	U	C6-N1-C2	-6.97	116.82	121.00
26	BB	1051	G	C6-N1-C2	6.97	129.28	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2803	G	C5'-C4'-O4'	6.97	117.46	109.10
26	BB	760	G	C8-N9-C4	-6.97	103.61	106.40
26	BB	2511	U	C4'-C3'-C2'	-6.97	95.63	102.60
26	BB	2824	C	O4'-C1'-N1	6.97	113.78	108.20
1	AA	187	G	C3'-C2'-C1'	6.97	107.07	101.50
1	AA	494	G	N3-C4-N9	6.97	130.18	126.00
25	BA	52	A	N1-C2-N3	-6.97	125.82	129.30
26	BB	596	U	N3-C2-O2	-6.97	117.32	122.20
26	BB	1360	G	C3'-C2'-C1'	-6.97	95.93	101.50
26	BB	2271	G	N7-C8-N9	6.97	116.58	113.10
1	AA	123	U	O4'-C1'-N1	6.96	113.77	108.20
1	AA	253	A	C1'-O4'-C4'	-6.96	104.33	109.90
1	AA	476	U	N1-C1'-C2'	-6.96	104.34	112.00
1	AA	603	U	O4'-C1'-N1	6.96	113.77	108.20
1	AA	771	G	N7-C8-N9	-6.96	109.62	113.10
1	AA	794	A	N7-C8-N9	6.96	117.28	113.80
1	AA	1408	A	O4'-C1'-N9	6.96	113.77	108.20
21	AU	50	TYR	CB-CG-CD1	6.96	125.18	121.00
25	BA	110	C	N3-C2-O2	-6.96	117.03	121.90
26	BB	638	G	C6-C5-N7	-6.96	126.22	130.40
26	BB	796	C	N1-C1'-C2'	-6.96	104.34	112.00
26	BB	964	C	C5-C6-N1	6.96	124.48	121.00
26	BB	1077	A	C2-N3-C4	6.96	114.08	110.60
26	BB	1627	G	N9-C4-C5	6.96	108.19	105.40
26	BB	1982	U	C2-N3-C4	-6.96	122.82	127.00
26	BB	2858	C	O4'-C4'-C3'	6.96	111.67	106.10
1	AA	968	A	O4'-C1'-N9	6.96	113.77	108.20
2	AB	27	C	C2-N3-C4	6.96	123.38	119.90
26	BB	2345	G	C5-N7-C8	-6.96	100.82	104.30
26	BB	2370	G	C3'-C2'-C1'	-6.96	95.93	101.50
56	B5	5	PHE	CB-CG-CD2	6.96	125.67	120.80
1	AA	285	C	N3-C4-N4	6.96	122.87	118.00
1	AA	941	G	C5'-C4'-C3'	-6.96	104.86	116.00
1	AA	1444	U	C5'-C4'-O4'	6.96	117.45	109.10
26	BB	484	C	C3'-C2'-C1'	6.96	107.07	101.50
26	BB	492	A	O4'-C4'-C3'	6.96	111.67	106.10
26	BB	1252	G	C3'-C2'-C1'	6.96	107.07	101.50
26	BB	1425	G	C2-N3-C4	6.96	115.38	111.90
26	BB	2697	G	C2-N3-C4	6.96	115.38	111.90
1	AA	1085	U	O4'-C4'-C3'	6.96	111.67	106.10
26	BB	514	A	P-O3'-C3'	6.96	128.05	119.70
26	BB	1276	A	N3-C4-C5	6.96	131.67	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1646	C	N3-C2-O2	-6.96	117.03	121.90
26	BB	2074	U	N1-C2-O2	6.96	127.67	122.80
26	BB	2674	G	C3'-C2'-C1'	-6.96	95.93	101.50
26	BB	2718	G	C6-C5-N7	-6.96	126.22	130.40
42	BR	52	ARG	NE-CZ-NH2	-6.96	116.82	120.30
3	AC	14	G	N3-C4-C5	-6.96	125.12	128.60
26	BB	757	G	N9-C1'-C2'	-6.96	104.35	112.00
26	BB	1475	G	O3'-P-O5'	-6.96	90.78	104.00
26	BB	1620	G	N3-C2-N2	-6.96	115.03	119.90
26	BB	1699	G	N3-C2-N2	-6.96	115.03	119.90
26	BB	1889	A	N1-C2-N3	-6.96	125.82	129.30
26	BB	2245	U	C6-N1-C2	-6.96	116.83	121.00
26	BB	2694	G	C6-N1-C2	-6.96	120.92	125.10
1	AA	120	A	C5-C6-N6	6.96	129.26	123.70
1	AA	198	G	C1'-O4'-C4'	-6.96	104.33	109.90
1	AA	391	G	N7-C8-N9	6.96	116.58	113.10
1	AA	913	A	C5-N7-C8	-6.96	100.42	103.90
1	AA	1340	A	N1-C2-N3	-6.96	125.82	129.30
1	AA	1522	U	C5-C6-N1	-6.96	119.22	122.70
25	BA	105	G	N1-C2-N2	6.96	122.46	116.20
26	BB	113	U	O4'-C1'-N1	6.96	113.77	108.20
26	BB	356	G	P-O3'-C3'	6.96	128.05	119.70
26	BB	618	G	C8-N9-C4	-6.96	103.62	106.40
26	BB	820	A	C5-N7-C8	6.96	107.38	103.90
26	BB	1639	C	N1-C2-O2	-6.96	114.73	118.90
26	BB	1823	G	N3-C4-C5	-6.96	125.12	128.60
26	BB	2640	G	N3-C4-C5	-6.96	125.12	128.60
26	BB	2869	G	C5'-C4'-O4'	6.96	117.45	109.10
1	AA	427	U	C4-C5-C6	6.96	123.87	119.70
1	AA	1381	U	C5-C6-N1	-6.96	119.22	122.70
26	BB	2789	C	N1-C2-O2	6.96	123.07	118.90
1	AA	853	C	N3-C4-C5	-6.95	119.12	121.90
1	AA	1018	G	O4'-C1'-N9	6.95	113.76	108.20
1	AA	1387	G	N1-C6-O6	6.95	124.07	119.90
2	AB	56	C	N3-C2-O2	-6.95	117.03	121.90
26	BB	733	G	C8-N9-C1'	6.95	136.04	127.00
26	BB	1382	G	C6-N1-C2	6.95	129.27	125.10
26	BB	1861	G	C5-N7-C8	-6.95	100.82	104.30
26	BB	2020	A	P-O3'-C3'	6.95	128.04	119.70
26	BB	2831	G	C5-C6-O6	-6.95	124.43	128.60
26	BB	2890	G	C8-N9-C4	6.95	109.18	106.40
1	AA	258	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(°)
1	AA	496	A	N7-C8-N9	6.95	117.28	113.80
1	AA	543	U	O4'-C1'-C2'	6.95	113.86	107.60
2	AB	52	A	C5-C6-N1	6.95	121.18	117.70
5	AE	115	ASP	CB-CG-OD1	-6.95	112.04	118.30
26	BB	984	A	C8-N9-C4	-6.95	103.02	105.80
26	BB	1296	G	C4-C5-C6	6.95	122.97	118.80
26	BB	2170	A	N7-C8-N9	6.95	117.28	113.80
26	BB	2570	G	N7-C8-N9	6.95	116.58	113.10
26	BB	2848	G	N7-C8-N9	6.95	116.58	113.10
1	AA	122	G	C6-C5-N7	-6.95	126.23	130.40
1	AA	152	A	C6-N1-C2	6.95	122.77	118.60
1	AA	1182	G	C5-N7-C8	-6.95	100.83	104.30
1	AA	1306	A	N9-C4-C5	6.95	108.58	105.80
26	BB	668	A	C5-C6-N6	-6.95	118.14	123.70
26	BB	874	G	N1-C6-O6	-6.95	115.73	119.90
1	AA	698	G	C6-C5-N7	-6.95	126.23	130.40
26	BB	941	A	O4'-C1'-N9	6.95	113.76	108.20
1	AA	1458	G	C2-N3-C4	6.95	115.37	111.90
26	BB	126	A	C8-N9-C4	-6.95	103.02	105.80
26	BB	976	G	N1-C2-N2	6.95	122.45	116.20
26	BB	1057	A	C4-C5-N7	6.95	114.17	110.70
26	BB	1393	A	N9-C4-C5	6.95	108.58	105.80
26	BB	1407	G	C5-N7-C8	6.95	107.77	104.30
26	BB	1663	G	C5-C6-O6	-6.95	124.43	128.60
26	BB	1765	U	P-O3'-C3'	6.95	128.03	119.70
26	BB	1776	G	C5-N7-C8	6.95	107.77	104.30
26	BB	2762	C	N3-C2-O2	-6.95	117.04	121.90
1	AA	350	G	C3'-C2'-C1'	6.94	107.06	101.50
1	AA	1169	A	N9-C4-C5	6.94	108.58	105.80
10	AJ	84	TYR	CB-CG-CD1	6.94	125.17	121.00
26	BB	113	U	N3-C4-C5	-6.94	110.43	114.60
26	BB	277	G	C5-C6-O6	-6.94	124.43	128.60
26	BB	1054	A	C4-C5-C6	6.94	120.47	117.00
26	BB	1423	G	C8-N9-C1'	6.94	136.03	127.00
26	BB	2349	G	C2-N3-C4	6.94	115.37	111.90
26	BB	2802	G	C5'-C4'-O4'	6.94	117.43	109.10
26	BB	2823	A	C5'-C4'-O4'	6.94	117.43	109.10
1	AA	1	A	C5'-C4'-O4'	6.94	117.43	109.10
1	AA	225	C	N1-C1'-C2'	-6.94	104.36	112.00
1	AA	973	G	P-O3'-C3'	6.94	128.03	119.70
1	AA	1052	U	N3-C2-O2	-6.94	117.34	122.20
1	AA	1253	G	C6-N1-C2	-6.94	120.93	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	AL	69	GLY	C-N-CA	6.94	136.88	122.30
26	BB	768	G	N7-C8-N9	6.94	116.57	113.10
26	BB	926	G	N3-C4-N9	6.94	130.16	126.00
26	BB	940	G	O4'-C1'-C2'	6.94	113.85	107.60
26	BB	1478	G	N3-C4-C5	-6.94	125.13	128.60
26	BB	1497	U	P-O3'-C3'	6.94	128.03	119.70
26	BB	2328	A	N1-C2-N3	-6.94	125.83	129.30
1	AA	187	G	N1-C2-N2	6.94	122.45	116.20
1	AA	1283	U	C5-C4-O4	-6.94	121.73	125.90
1	AA	1350	A	C8-N9-C4	-6.94	103.02	105.80
2	AB	30	G	O4'-C1'-N9	6.94	113.75	108.20
26	BB	432	A	C5'-C4'-O4'	6.94	117.43	109.10
26	BB	742	A	C2-N3-C4	6.94	114.07	110.60
26	BB	1212	G	C6-C5-N7	-6.94	126.24	130.40
26	BB	2005	A	N1-C6-N6	-6.94	114.44	118.60
26	BB	2176	A	C5-C6-N1	6.94	121.17	117.70
55	B4	38	PHE	CB-CG-CD2	-6.94	115.94	120.80
26	BB	2081	U	P-O3'-C3'	6.94	128.03	119.70
56	B5	33	ARG	NE-CZ-NH2	6.94	123.77	120.30
1	AA	14	U	C5-C6-N1	-6.94	119.23	122.70
1	AA	328	C	P-O3'-C3'	6.94	128.03	119.70
1	AA	358	U	C5-C6-N1	-6.94	119.23	122.70
1	AA	869	G	N9-C4-C5	6.94	108.17	105.40
1	AA	1221	G	C1'-O4'-C4'	6.94	115.45	109.90
1	AA	1448	C	C4'-C3'-C2'	-6.94	95.66	102.60
26	BB	218	A	O4'-C1'-C2'	-6.94	98.86	105.80
26	BB	838	C	C4'-C3'-C2'	-6.94	95.66	102.60
26	BB	856	G	O4'-C1'-N9	6.94	113.75	108.20
26	BB	918	A	O4'-C1'-C2'	6.94	113.84	107.60
26	BB	1513	U	C6-N1-C2	-6.94	116.84	121.00
26	BB	1715	G	N3-C2-N2	6.94	124.76	119.90
1	AA	67	C	O4'-C1'-N1	6.94	113.75	108.20
1	AA	280	C	N1-C2-O2	6.94	123.06	118.90
1	AA	303	A	C5-C6-N6	-6.94	118.15	123.70
1	AA	834	U	N1-C2-N3	6.94	119.06	114.90
26	BB	614	A	C5-N7-C8	6.94	107.37	103.90
26	BB	921	C	N1-C1'-C2'	-6.94	104.37	112.00
26	BB	1686	C	N3-C4-C5	6.94	124.67	121.90
26	BB	1857	G	C4-C5-N7	-6.94	108.03	110.80
26	BB	2216	G	N1-C6-O6	-6.94	115.74	119.90
26	BB	2486	C	C5'-C4'-O4'	6.94	117.42	109.10
26	BB	2543	G	C8-N9-C4	-6.94	103.63	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	278	G	N3-C4-C5	-6.93	125.13	128.60
1	AA	339	C	C1'-O4'-C4'	-6.93	104.35	109.90
3	AC	13	A	C5'-C4'-O4'	-6.93	100.78	109.10
12	AL	79	ARG	NE-CZ-NH2	-6.93	116.83	120.30
26	BB	306	U	N3-C4-C5	-6.93	110.44	114.60
26	BB	1438	U	C2-N3-C4	-6.93	122.84	127.00
26	BB	2741	A	C4-C5-C6	-6.93	113.53	117.00
1	AA	86	G	O4'-C1'-N9	6.93	113.75	108.20
1	AA	406	G	N3-C4-N9	6.93	130.16	126.00
1	AA	566	G	N3-C2-N2	6.93	124.75	119.90
1	AA	964	A	C5'-C4'-O4'	6.93	117.42	109.10
1	AA	1340	A	C5-C6-N6	6.93	129.25	123.70
1	AA	1410	A	P-O3'-C3'	6.93	128.02	119.70
3	AC	33	A	N9-C4-C5	6.93	108.57	105.80
26	BB	494	G	N7-C8-N9	-6.93	109.63	113.10
26	BB	1121	C	C6-N1-C2	-6.93	117.53	120.30
26	BB	1969	A	O4'-C1'-N9	-6.93	102.66	108.20
26	BB	2002	G	O4'-C1'-N9	6.93	113.75	108.20
26	BB	2230	G	O5'-P-OP2	-6.93	99.46	105.70
1	AA	50	A	C4-C5-N7	6.93	114.17	110.70
1	AA	51	A	C5-C6-N1	6.93	121.17	117.70
1	AA	505	G	N9-C4-C5	6.93	108.17	105.40
1	AA	568	G	C5-C6-N1	6.93	114.97	111.50
1	AA	1511	G	N3-C2-N2	6.93	124.75	119.90
26	BB	361	G	C6-N1-C2	6.93	129.26	125.10
26	BB	1157	G	C3'-C2'-C1'	6.93	107.04	101.50
43	BS	50	ARG	NE-CZ-NH2	-6.93	116.84	120.30
1	AA	31	G	N1-C2-N3	-6.93	119.74	123.90
1	AA	914	A	C5-C6-N1	6.93	121.16	117.70
26	BB	2291	U	N3-C4-C5	-6.93	110.44	114.60
1	AA	1179	A	C5-N7-C8	6.93	107.36	103.90
1	AA	1328	C	O4'-C1'-N1	6.93	113.74	108.20
1	AA	1392	G	O4'-C1'-N9	6.93	113.74	108.20
26	BB	178	G	C6-N1-C2	-6.93	120.94	125.10
26	BB	282	A	N1-C2-N3	-6.93	125.84	129.30
26	BB	761	A	C5-C6-N1	6.93	121.16	117.70
26	BB	1133	A	C4'-C3'-C2'	6.93	109.53	102.60
26	BB	1215	G	C1'-O4'-C4'	6.93	115.44	109.90
26	BB	1751	U	C6-N1-C2	6.93	125.16	121.00
26	BB	2542	A	C1'-O4'-C4'	-6.93	104.36	109.90
1	AA	24	U	C1'-O4'-C4'	6.92	115.44	109.90
1	AA	736	C	N3-C4-C5	6.92	124.67	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1165	U	C6-N1-C2	6.92	125.16	121.00
1	AA	1176	A	O4'-C1'-N9	6.92	113.74	108.20
1	AA	1413	A	C6-N1-C2	6.92	122.75	118.60
26	BB	247	G	N3-C2-N2	6.92	124.75	119.90
26	BB	868	U	N3-C4-O4	6.92	124.25	119.40
26	BB	1034	G	N9-C1'-C2'	-6.92	104.38	112.00
26	BB	1295	C	C5'-C4'-C3'	-6.92	104.92	116.00
26	BB	1619	G	C8-N9-C1'	6.92	136.00	127.00
40	BP	45	ARG	NE-CZ-NH1	-6.92	116.84	120.30
1	AA	1309	G	C8-N9-C4	-6.92	103.63	106.40
26	BB	854	C	N3-C4-N4	6.92	122.85	118.00
26	BB	2285	C	N3-C4-N4	6.92	122.85	118.00
1	AA	57	G	C3'-C2'-C1'	-6.92	95.96	101.50
1	AA	649	A	P-O3'-C3'	6.92	128.01	119.70
1	AA	909	A	N1-C6-N6	6.92	122.75	118.60
26	BB	1908	C	C5-C6-N1	6.92	124.46	121.00
26	BB	2012	G	N3-C4-C5	-6.92	125.14	128.60
1	AA	338	A	C5'-C4'-O4'	6.92	117.40	109.10
1	AA	376	G	C8-N9-C4	-6.92	103.63	106.40
1	AA	396	C	C5-C6-N1	-6.92	117.54	121.00
1	AA	598	U	C5-C6-N1	-6.92	119.24	122.70
1	AA	1360	A	C4-C5-N7	-6.92	107.24	110.70
3	AC	21	U	N3-C4-C5	-6.92	110.45	114.60
26	BB	296	U	N1-C2-N3	6.92	119.05	114.90
26	BB	766	U	O4'-C1'-N1	6.92	113.73	108.20
26	BB	2703	C	C6-N1-C2	6.92	123.07	120.30
1	AA	1130	A	C4-C5-N7	-6.92	107.24	110.70
1	AA	1217	C	N3-C4-N4	6.92	122.84	118.00
1	AA	1284	C	C6-N1-C2	-6.92	117.53	120.30
1	AA	1303	C	C4-C5-C6	6.92	120.86	117.40
25	BA	100	G	C5-C6-O6	6.92	132.75	128.60
26	BB	261	G	C4-C5-N7	-6.92	108.03	110.80
26	BB	449	A	C1'-O4'-C4'	6.92	115.43	109.90
26	BB	1002	G	C8-N9-C4	-6.92	103.63	106.40
1	AA	859	G	N3-C4-C5	6.92	132.06	128.60
1	AA	1104	G	C5-N7-C8	6.92	107.76	104.30
1	AA	1249	C	C6-N1-C1'	6.92	129.10	120.80
12	AL	5	TYR	CB-CG-CD2	6.92	125.15	121.00
15	AO	13	ARG	NE-CZ-NH2	-6.92	116.84	120.30
26	BB	149	A	N7-C8-N9	6.92	117.26	113.80
26	BB	1268	A	C5-C6-N1	6.92	121.16	117.70
26	BB	1496	A	C8-N9-C4	6.92	108.57	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1803	A	C4'-C3'-C2'	-6.92	95.69	102.60
26	BB	2508	G	N1-C2-N2	-6.92	109.98	116.20
1	AA	21	G	N3-C4-N9	6.91	130.15	126.00
1	AA	665	A	N7-C8-N9	6.91	117.26	113.80
1	AA	700	G	N3-C4-N9	6.91	130.15	126.00
1	AA	841	C	C5-C6-N1	6.91	124.46	121.00
1	AA	1053	G	C8-N9-C1'	6.91	135.99	127.00
12	AL	89	TYR	CB-CG-CD1	6.91	125.15	121.00
26	BB	169	G	N7-C8-N9	6.91	116.56	113.10
26	BB	640	C	N3-C2-O2	6.91	126.74	121.90
26	BB	710	U	N3-C2-O2	-6.91	117.36	122.20
26	BB	1006	C	C5'-C4'-O4'	6.91	117.40	109.10
26	BB	1565	C	N3-C2-O2	-6.91	117.06	121.90
26	BB	1744	A	C5-N7-C8	6.91	107.36	103.90
26	BB	1815	A	N7-C8-N9	6.91	117.26	113.80
26	BB	2295	C	C5-C6-N1	-6.91	117.54	121.00
26	BB	2438	U	N3-C4-C5	-6.91	110.45	114.60
26	BB	2519	U	C4'-C3'-C2'	-6.91	95.69	102.60
3	AC	55	A	N9-C4-C5	6.91	108.56	105.80
26	BB	1624	U	N3-C4-O4	6.91	124.24	119.40
26	BB	2426	A	O4'-C1'-C2'	-6.91	98.89	105.80
1	AA	53	A	C1'-O4'-C4'	-6.91	104.37	109.90
1	AA	485	U	C6-N1-C2	-6.91	116.85	121.00
25	BA	15	A	C3'-C2'-C1'	6.91	107.03	101.50
25	BA	53	A	N1-C6-N6	-6.91	114.45	118.60
26	BB	397	U	C2-N3-C4	-6.91	122.85	127.00
26	BB	569	U	C4-C5-C6	6.91	123.85	119.70
26	BB	1374	G	C4-C5-C6	-6.91	114.65	118.80
26	BB	1894	C	C6-N1-C2	-6.91	117.54	120.30
26	BB	2048	G	O4'-C1'-N9	-6.91	102.67	108.20
26	BB	2148	G	C4-C5-N7	6.91	113.56	110.80
26	BB	2558	C	N1-C2-O2	6.91	123.05	118.90
26	BB	2663	G	C5-C6-N1	6.91	114.95	111.50
26	BB	2782	G	N7-C8-N9	6.91	116.56	113.10
26	BB	2864	G	O4'-C1'-N9	6.91	113.73	108.20
26	BB	2876	G	C8-N9-C4	-6.91	103.64	106.40
1	AA	472	U	C5-C4-O4	6.91	130.04	125.90
1	AA	529	G	C5-C6-N1	-6.91	108.05	111.50
1	AA	542	G	C4'-C3'-C2'	-6.91	95.69	102.60
1	AA	556	C	O4'-C1'-N1	6.91	113.73	108.20
1	AA	697	U	N1-C1'-C2'	-6.91	104.40	112.00
1	AA	771	G	N9-C4-C5	-6.91	102.64	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1006	G	C5-C6-N1	6.91	114.95	111.50
1	AA	1378	C	C6-N1-C2	-6.91	117.54	120.30
26	BB	352	A	C8-N9-C4	-6.91	103.04	105.80
26	BB	1264	A	C5-C6-N1	6.91	121.16	117.70
26	BB	1824	G	C1'-O4'-C4'	6.91	115.43	109.90
26	BB	2043	C	N1-C2-N3	-6.91	114.36	119.20
26	BB	2417	C	O4'-C1'-N1	6.91	113.73	108.20
26	BB	2431	U	C5-C6-N1	6.91	126.15	122.70
26	BB	2515	C	N1-C2-O2	6.91	123.05	118.90
1	AA	364	A	C4-C5-C6	-6.91	113.55	117.00
1	AA	1253	G	P-O3'-C3'	6.91	127.99	119.70
26	BB	214	G	C5'-C4'-O4'	6.91	117.39	109.10
26	BB	1154	G	C5-C6-O6	6.91	132.74	128.60
26	BB	2067	G	O4'-C1'-N9	6.91	113.73	108.20
1	AA	341	C	C6-N1-C2	-6.91	117.54	120.30
1	AA	559	A	C2-N3-C4	-6.91	107.15	110.60
1	AA	765	G	C1'-O4'-C4'	-6.91	104.38	109.90
11	AK	90	GLU	OE1-CD-OE2	6.91	131.59	123.30
15	AO	85	ARG	NE-CZ-NH1	6.91	123.75	120.30
26	BB	2	G	N3-C4-C5	-6.91	125.15	128.60
26	BB	180	G	N7-C8-N9	6.91	116.55	113.10
26	BB	221	A	C6-C5-N7	6.91	137.13	132.30
26	BB	1024	G	C2-N3-C4	6.91	115.35	111.90
26	BB	1050	A	C5-N7-C8	-6.91	100.45	103.90
26	BB	1913	A	N1-C2-N3	6.91	132.75	129.30
26	BB	2227	A	C5-C6-N6	-6.91	118.17	123.70
26	BB	2282	G	N1-C2-N2	6.91	122.41	116.20
26	BB	2467	C	O4'-C1'-N1	6.91	113.72	108.20
1	AA	366	A	O4'-C1'-C2'	-6.90	98.90	105.80
26	BB	905	A	C8-N9-C4	6.90	108.56	105.80
26	BB	1516	G	C8-N9-C1'	6.90	135.97	127.00
52	B1	15	ARG	NE-CZ-NH2	6.90	123.75	120.30
1	AA	107	G	C6-N1-C2	-6.90	120.96	125.10
1	AA	459	A	C4-C5-N7	6.90	114.15	110.70
1	AA	579	A	C6-C5-N7	-6.90	127.47	132.30
1	AA	1124	G	C2-N3-C4	6.90	115.35	111.90
1	AA	1352	C	N3-C4-C5	-6.90	119.14	121.90
9	AI	45	ARG	NE-CZ-NH1	6.90	123.75	120.30
26	BB	869	G	N1-C2-N2	6.90	122.41	116.20
26	BB	1379	U	C6-N1-C2	6.90	125.14	121.00
26	BB	1626	A	O4'-C1'-N9	6.90	113.72	108.20
26	BB	2825	G	C6-C5-N7	-6.90	126.26	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	137	U	C4-C5-C6	6.90	123.84	119.70
1	AA	476	U	N3-C4-O4	6.90	124.23	119.40
1	AA	862	C	C1'-O4'-C4'	-6.90	104.38	109.90
2	AB	35	C	N3-C2-O2	-6.90	117.07	121.90
4	AD	2	G	N3-C2-N2	6.90	124.73	119.90
26	BB	891	G	C3'-C2'-C1'	-6.90	95.98	101.50
26	BB	1003	G	C5-C6-N1	6.90	114.95	111.50
26	BB	1589	U	N1-C2-N3	6.90	119.04	114.90
26	BB	1685	C	N3-C2-O2	-6.90	117.07	121.90
26	BB	2277	G	N7-C8-N9	6.90	116.55	113.10
26	BB	2812	G	N1-C6-O6	-6.90	115.76	119.90
1	AA	713	G	C8-N9-C4	-6.90	103.64	106.40
1	AA	1182	G	C6-C5-N7	-6.90	126.26	130.40
1	AA	1257	A	C5-C6-N1	6.90	121.15	117.70
2	AB	34	C	C5-C6-N1	-6.90	117.55	121.00
26	BB	99	U	O4'-C4'-C3'	6.90	111.62	106.10
26	BB	1349	C	C6-N1-C2	-6.90	117.54	120.30
26	BB	1655	A	C4-C5-N7	6.90	114.15	110.70
26	BB	1662	U	N1-C1'-C2'	-6.90	104.41	112.00
1	AA	558	G	C6-C5-N7	6.90	134.54	130.40
1	AA	1487	G	O4'-C1'-N9	6.90	113.72	108.20
11	AK	113	ARG	NH1-CZ-NH2	-6.90	111.81	119.40
26	BB	582	A	C1'-O4'-C4'	6.90	115.42	109.90
26	BB	1127	A	C5-C6-N1	6.90	121.15	117.70
26	BB	1159	U	N3-C4-C5	6.90	118.74	114.60
26	BB	1206	G	N3-C4-C5	-6.90	125.15	128.60
26	BB	1251	C	C2-N3-C4	-6.90	116.45	119.90
26	BB	1322	A	C4-C5-C6	-6.90	113.55	117.00
26	BB	904	G	N7-C8-N9	6.90	116.55	113.10
26	BB	1364	G	C2-N3-C4	-6.90	108.45	111.90
26	BB	1772	A	N9-C1'-C2'	-6.90	104.42	112.00
26	BB	2502	G	N9-C4-C5	6.90	108.16	105.40
1	AA	803	G	C5-C6-O6	-6.89	124.46	128.60
1	AA	846	G	N9-C4-C5	6.89	108.16	105.40
1	AA	923	A	N7-C8-N9	-6.89	110.35	113.80
1	AA	1144	G	N7-C8-N9	-6.89	109.65	113.10
2	AB	5	G	N3-C4-C5	-6.89	125.15	128.60
4	AD	60	A	C4-C5-C6	-6.89	113.55	117.00
26	BB	88	G	C3'-C2'-C1'	-6.89	95.98	101.50
26	BB	372	G	C6-C5-N7	-6.89	126.26	130.40
26	BB	950	G	C3'-C2'-C1'	-6.89	95.98	101.50
26	BB	1032	A	C5-C6-N6	-6.89	118.19	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1069	A	C1'-O4'-C4'	-6.89	104.39	109.90
26	BB	1142	A	O4'-C1'-N9	6.89	113.72	108.20
26	BB	1272	A	C6-N1-C2	6.89	122.74	118.60
26	BB	1283	G	C5-C6-O6	-6.89	124.46	128.60
26	BB	1569	A	N1-C2-N3	6.89	132.75	129.30
26	BB	1594	U	N1-C1'-C2'	-6.89	104.42	112.00
1	AA	941	G	C3'-C2'-C1'	6.89	107.02	101.50
1	AA	1109	C	O4'-C1'-N1	6.89	113.71	108.20
26	BB	22	C	C4-C5-C6	6.89	120.85	117.40
26	BB	23	G	C3'-C2'-C1'	6.89	107.01	101.50
26	BB	474	G	C6-N1-C2	-6.89	120.97	125.10
26	BB	778	G	C5-C6-N1	6.89	114.95	111.50
26	BB	1550	C	C5-C4-N4	-6.89	115.38	120.20
26	BB	1783	A	C5-C6-N1	6.89	121.15	117.70
26	BB	1984	G	N7-C8-N9	-6.89	109.65	113.10
26	BB	2108	A	C8-N9-C4	-6.89	103.04	105.80
26	BB	2395	C	C5-C4-N4	-6.89	115.38	120.20
26	BB	2426	A	C5-C6-N1	-6.89	114.25	117.70
26	BB	2496	C	C3'-C2'-C1'	6.89	107.01	101.50
1	AA	256	U	C5-C6-N1	-6.89	119.25	122.70
1	AA	1188	A	N9-C4-C5	6.89	108.56	105.80
26	BB	1218	G	N9-C4-C5	6.89	108.16	105.40
26	BB	1504	A	N9-C4-C5	-6.89	103.04	105.80
26	BB	1513	U	C5-C4-O4	-6.89	121.77	125.90
1	AA	355	C	N1-C1'-C2'	-6.89	104.42	112.00
1	AA	567	G	N9-C4-C5	6.89	108.16	105.40
1	AA	1035	A	O4'-C1'-N9	6.89	113.71	108.20
1	AA	1337	G	O4'-C1'-N9	6.89	113.71	108.20
25	BA	41	G	C2-N3-C4	6.89	115.34	111.90
25	BA	74	U	O4'-C1'-N1	6.89	113.71	108.20
26	BB	205	G	C5-C6-O6	6.89	132.73	128.60
26	BB	825	A	C8-N9-C4	-6.89	103.04	105.80
26	BB	974	G	C6-C5-N7	-6.89	126.27	130.40
26	BB	2159	G	N3-C4-C5	-6.89	125.16	128.60
26	BB	2355	G	C5'-C4'-O4'	6.89	117.37	109.10
1	AA	1005	A	N9-C4-C5	6.89	108.56	105.80
1	AA	1167	A	C5-N7-C8	-6.89	100.46	103.90
1	AA	1170	A	C8-N9-C4	-6.89	103.05	105.80
26	BB	248	G	C5'-C4'-O4'	-6.89	100.83	109.10
26	BB	1070	A	N7-C8-N9	-6.89	110.36	113.80
26	BB	1473	G	N3-C4-C5	-6.89	125.16	128.60
1	AA	137	U	C5-C6-N1	-6.89	119.26	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	739	A	C5-N7-C8	-6.89	100.46	103.90
26	BB	1162	G	N3-C4-C5	-6.89	125.16	128.60
26	BB	1690	A	C5-N7-C8	-6.89	100.46	103.90
47	BW	85	ARG	NE-CZ-NH1	6.89	123.74	120.30
1	AA	131	A	O4'-C4'-C3'	6.88	111.61	106.10
1	AA	289	G	C4-C5-C6	6.88	122.93	118.80
1	AA	340	U	O4'-C1'-N1	6.88	113.71	108.20
1	AA	673	A	C8-N9-C4	-6.88	103.05	105.80
1	AA	934	C	N3-C4-C5	-6.88	119.15	121.90
1	AA	1007	U	C5-C4-O4	-6.88	121.77	125.90
1	AA	1219	A	N1-C2-N3	-6.88	125.86	129.30
13	AM	50	THR	CA-CB-CG2	6.88	122.04	112.40
26	BB	37	C	N3-C4-C5	-6.88	119.15	121.90
26	BB	1230	A	O4'-C1'-N9	6.88	113.71	108.20
26	BB	2082	A	C4-C5-N7	6.88	114.14	110.70
1	AA	133	U	N1-C2-N3	6.88	119.03	114.90
26	BB	1974	C	C3'-C2'-C1'	6.88	107.01	101.50
26	BB	2729	G	N9-C4-C5	6.88	108.15	105.40
26	BB	2856	A	C5-N7-C8	-6.88	100.46	103.90
1	AA	50	A	P-O3'-C3'	6.88	127.96	119.70
1	AA	173	U	C5-C6-N1	-6.88	119.26	122.70
1	AA	1450	U	C4-C5-C6	6.88	123.83	119.70
26	BB	49	A	C4-C5-C6	6.88	120.44	117.00
26	BB	412	A	O4'-C4'-C3'	-6.88	97.12	104.00
26	BB	549	G	N3-C4-C5	-6.88	125.16	128.60
26	BB	620	G	C6-N1-C2	-6.88	120.97	125.10
26	BB	1344	U	N3-C2-O2	-6.88	117.38	122.20
26	BB	1514	G	N3-C4-C5	-6.88	125.16	128.60
1	AA	1206	G	N1-C2-N2	-6.88	110.01	116.20
1	AA	1249	C	C3'-C2'-C1'	6.88	107.00	101.50
25	BA	92	C	O4'-C1'-N1	6.88	113.70	108.20
26	BB	357	C	C6-N1-C2	6.88	123.05	120.30
26	BB	1265	A	C6-N1-C2	-6.88	114.47	118.60
1	AA	1384	C	N1-C2-O2	6.88	123.03	118.90
26	BB	21	A	C2-N3-C4	6.88	114.04	110.60
26	BB	2357	G	C4'-C3'-C2'	-6.88	95.72	102.60
26	BB	2898	U	C5-C4-O4	-6.88	121.77	125.90
1	AA	1110	A	N1-C6-N6	-6.88	114.47	118.60
1	AA	1319	A	C5'-C4'-C3'	-6.88	105.00	116.00
1	AA	1325	C	N3-C4-N4	6.88	122.81	118.00
2	AB	1	A	C5-C6-N6	6.88	129.20	123.70
4	AD	50	G	C5-C6-O6	6.88	132.73	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	177	G	C5-N7-C8	6.88	107.74	104.30
26	BB	252	G	C4-C5-C6	-6.88	114.67	118.80
26	BB	328	U	C1'-O4'-C4'	6.88	115.40	109.90
26	BB	1097	U	O3'-P-O5'	6.88	117.06	104.00
26	BB	1216	G	C5-C6-O6	6.88	132.72	128.60
26	BB	1392	A	C6-N1-C2	-6.88	114.47	118.60
26	BB	1826	G	C5'-C4'-C3'	-6.88	105.00	116.00
26	BB	2601	C	C4-C5-C6	6.88	120.84	117.40
37	BM	108	ARG	NE-CZ-NH1	6.88	123.74	120.30
1	AA	273	U	C2-N3-C4	-6.88	122.88	127.00
1	AA	671	G	N9-C4-C5	6.88	108.15	105.40
26	BB	47	C	C5-C4-N4	-6.88	115.39	120.20
26	BB	1693	U	C3'-C2'-C1'	6.88	107.00	101.50
26	BB	2839	G	N1-C2-N3	-6.88	119.78	123.90
1	AA	404	G	C4-C5-C6	6.87	122.92	118.80
1	AA	442	G	C5-C6-O6	-6.87	124.47	128.60
1	AA	847	G	C1'-O4'-C4'	-6.87	104.40	109.90
2	AB	72	U	C5-C6-N1	-6.87	119.26	122.70
26	BB	278	A	N1-C6-N6	-6.87	114.47	118.60
26	BB	1423	G	C4'-C3'-C2'	-6.87	95.73	102.60
26	BB	1438	U	C4'-C3'-C2'	-6.87	95.73	102.60
26	BB	1633	G	C5-N7-C8	-6.87	100.86	104.30
26	BB	1696	G	N3-C4-N9	6.87	130.12	126.00
26	BB	1766	G	C4-C5-N7	-6.87	108.05	110.80
26	BB	2110	G	C6-C5-N7	6.87	134.52	130.40
1	AA	5	U	C5-C6-N1	-6.87	119.26	122.70
1	AA	63	C	C1'-O4'-C4'	-6.87	104.40	109.90
1	AA	1119	C	O4'-C1'-N1	6.87	113.70	108.20
26	BB	850	U	O5'-P-OP1	-6.87	99.52	105.70
26	BB	1133	A	C4-C5-C6	6.87	120.44	117.00
26	BB	1994	C	O4'-C1'-N1	6.87	113.70	108.20
26	BB	2468	A	O4'-C4'-C3'	6.87	111.60	106.10
26	BB	2692	G	C5'-C4'-O4'	6.87	117.34	109.10
1	AA	825	A	C5-C6-N1	6.87	121.14	117.70
1	AA	1493	A	N7-C8-N9	6.87	117.23	113.80
26	BB	2663	G	N1-C2-N2	6.87	122.38	116.20
1	AA	406	G	C8-N9-C4	-6.87	103.65	106.40
1	AA	1040	U	N1-C2-O2	-6.87	117.99	122.80
25	BA	65	U	N3-C2-O2	-6.87	117.39	122.20
26	BB	1996	C	C6-N1-C2	-6.87	117.55	120.30
36	BL	15	TRP	CD1-NE1-CE2	6.87	115.18	109.00
1	AA	361	G	N3-C4-C5	-6.87	125.17	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2137	U	N1-C2-N3	6.87	119.02	114.90
26	BB	2661	G	N3-C4-C5	-6.87	125.17	128.60
26	BB	2850	A	C5-C6-N6	-6.87	118.21	123.70
1	AA	42	G	C5-N7-C8	-6.87	100.87	104.30
1	AA	645	G	N3-C4-N9	6.87	130.12	126.00
1	AA	1175	G	O4'-C1'-N9	6.87	113.69	108.20
26	BB	1591	A	N3-C4-C5	-6.87	122.00	126.80
26	BB	1987	A	C6-C5-N7	-6.87	127.50	132.30
26	BB	2239	G	N3-C2-N2	6.87	124.71	119.90
26	BB	2425	A	C8-N9-C4	-6.87	103.05	105.80
50	BZ	17	ARG	NE-CZ-NH2	6.87	123.73	120.30
1	AA	536	C	C4'-C3'-C2'	-6.86	95.74	102.60
1	AA	752	G	C8-N9-C4	-6.86	103.66	106.40
1	AA	1322	C	N1-C2-O2	6.86	123.02	118.90
25	BA	114	C	C6-N1-C2	-6.86	117.56	120.30
26	BB	458	G	C4-C5-N7	-6.86	108.05	110.80
26	BB	723	C	N3-C2-O2	-6.86	117.10	121.90
26	BB	1542	U	C2-N3-C4	-6.86	122.88	127.00
26	BB	2712	C	N3-C2-O2	-6.86	117.10	121.90
31	BG	98	PHE	CB-CG-CD2	-6.86	116.00	120.80
1	AA	1532	U	N3-C2-O2	-6.86	117.40	122.20
2	AB	67	G	N3-C4-N9	6.86	130.12	126.00
4	AD	30	G	C5-N7-C8	6.86	107.73	104.30
4	AD	53	G	C8-N9-C4	-6.86	103.66	106.40
26	BB	833	A	C8-N9-C4	-6.86	103.06	105.80
26	BB	2813	A	C5'-C4'-O4'	6.86	117.33	109.10
26	BB	2857	G	C8-N9-C4	-6.86	103.66	106.40
51	B0	7	ARG	NE-CZ-NH1	-6.86	116.87	120.30
1	AA	26	A	C4'-C3'-C2'	-6.86	95.74	102.60
1	AA	350	G	C4-C5-C6	6.86	122.92	118.80
1	AA	831	A	O4'-C1'-N9	6.86	113.69	108.20
26	BB	831	G	C6-C5-N7	-6.86	126.28	130.40
26	BB	2880	C	C4-C5-C6	-6.86	113.97	117.40
1	AA	104	G	O4'-C1'-N9	6.86	113.69	108.20
1	AA	207	C	C1'-O4'-C4'	6.86	115.39	109.90
1	AA	448	A	N7-C8-N9	6.86	117.23	113.80
1	AA	1403	C	P-O3'-C3'	6.86	127.93	119.70
26	BB	1104	C	O4'-C1'-N1	6.86	113.69	108.20
26	BB	1210	G	N9-C4-C5	6.86	108.14	105.40
26	BB	1515	A	C1'-O4'-C4'	-6.86	104.41	109.90
26	BB	1558	C	O4'-C1'-N1	6.86	113.69	108.20
26	BB	1959	G	C8-N9-C4	-6.86	103.66	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	BW	54	PRO	N-CD-CG	6.86	113.49	103.20
1	AA	333	U	C5-C4-O4	-6.86	121.79	125.90
1	AA	777	A	N3-C4-C5	-6.86	122.00	126.80
26	BB	57	C	C2-N3-C4	6.86	123.33	119.90
26	BB	325	G	N9-C4-C5	6.86	108.14	105.40
26	BB	790	U	P-O3'-C3'	6.86	127.93	119.70
26	BB	1152	C	N1-C2-N3	6.86	124.00	119.20
26	BB	1171	G	C6-C5-N7	6.86	134.51	130.40
26	BB	1376	C	C5'-C4'-O4'	-6.86	100.87	109.10
26	BB	1766	G	N9-C4-C5	6.86	108.14	105.40
26	BB	1906	G	C8-N9-C4	6.86	109.14	106.40
26	BB	2353	G	C3'-C2'-C1'	-6.86	96.01	101.50
1	AA	180	U	C4'-C3'-C2'	-6.86	95.75	102.60
1	AA	431	A	C5-N7-C8	6.86	107.33	103.90
1	AA	1105	A	O4'-C1'-N9	6.86	113.69	108.20
1	AA	1258	G	C4'-C3'-C2'	-6.86	95.74	102.60
1	AA	1484	C	N1-C2-O2	6.86	123.01	118.90
25	BA	6	G	C5-N7-C8	-6.86	100.87	104.30
26	BB	11	C	C4'-C3'-C2'	-6.86	95.74	102.60
26	BB	653	U	O4'-C1'-N1	6.86	113.68	108.20
26	BB	817	C	C5-C4-N4	-6.86	115.40	120.20
26	BB	1494	A	C4-C5-N7	-6.86	107.27	110.70
26	BB	1725	U	N3-C4-C5	-6.86	110.49	114.60
26	BB	1814	G	P-O3'-C3'	6.86	127.93	119.70
29	BE	59	ARG	NE-CZ-NH1	-6.86	116.87	120.30
39	BO	130	PHE	CB-CG-CD1	6.86	125.60	120.80
26	BB	26	G	C6-N1-C2	-6.85	120.99	125.10
26	BB	1560	G	C6-C5-N7	-6.85	126.29	130.40
26	BB	2080	A	C4-C5-N7	6.85	114.13	110.70
26	BB	2134	A	N1-C6-N6	6.85	122.71	118.60
1	AA	79	G	N1-C6-O6	6.85	124.01	119.90
1	AA	174	A	N1-C2-N3	-6.85	125.87	129.30
1	AA	734	G	N3-C4-C5	-6.85	125.17	128.60
26	BB	24	G	N7-C8-N9	6.85	116.53	113.10
26	BB	1169	A	C8-N9-C4	-6.85	103.06	105.80
26	BB	1410	G	N9-C4-C5	-6.85	102.66	105.40
26	BB	2644	G	O4'-C1'-N9	6.85	113.68	108.20
26	BB	2673	G	C4'-C3'-C2'	-6.85	95.75	102.60
26	BB	2868	A	C2-N3-C4	6.85	114.03	110.60
1	AA	280	C	O4'-C4'-C3'	6.85	111.58	106.10
1	AA	325	A	C4'-C3'-C2'	-6.85	95.75	102.60
1	AA	1534	A	C5-N7-C8	-6.85	100.47	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	348	G	C8-N9-C4	-6.85	103.66	106.40
1	AA	661	G	N7-C8-N9	6.85	116.53	113.10
1	AA	730	G	O4'-C1'-N9	6.85	113.68	108.20
1	AA	1493	A	N1-C2-N3	-6.85	125.88	129.30
26	BB	30	G	C1'-O4'-C4'	-6.85	104.42	109.90
26	BB	816	C	N1-C1'-C2'	-6.85	104.47	112.00
26	BB	1091	G	C8-N9-C4	6.85	109.14	106.40
26	BB	1457	U	N3-C2-O2	-6.85	117.41	122.20
26	BB	2438	U	N3-C4-O4	6.85	124.19	119.40
26	BB	2447	G	N3-C4-C5	-6.85	125.17	128.60
26	BB	2650	U	O4'-C1'-N1	6.85	113.68	108.20
26	BB	2876	G	N3-C4-N9	-6.85	121.89	126.00
1	AA	239	U	C4'-C3'-C2'	-6.85	95.75	102.60
1	AA	1006	G	C6-N1-C2	-6.85	120.99	125.10
1	AA	1369	C	C5-C6-N1	6.85	124.42	121.00
2	AB	18	G	C6-C5-N7	-6.85	126.29	130.40
2	AB	52	A	C5'-C4'-O4'	6.85	117.32	109.10
26	BB	96	C	O4'-C1'-N1	6.85	113.68	108.20
26	BB	1008	A	C3'-C2'-C1'	6.85	106.98	101.50
26	BB	1294	U	C4'-C3'-C2'	-6.85	95.75	102.60
26	BB	1607	C	C4'-C3'-C2'	-6.85	95.75	102.60
26	BB	1924	C	C5-C6-N1	6.85	124.42	121.00
26	BB	2807	U	P-O3'-C3'	6.85	127.92	119.70
26	BB	610	C	C4-C5-C6	-6.85	113.98	117.40
26	BB	2145	C	N1-C2-O2	6.85	123.01	118.90
31	BG	88	VAL	CA-CB-CG1	6.85	121.17	110.90
1	AA	786	G	C5'-C4'-O4'	6.84	117.31	109.10
1	AA	1241	G	N3-C4-N9	-6.84	121.89	126.00
1	AA	1393	U	P-O3'-C3'	6.84	127.91	119.70
1	AA	1435	G	C8-N9-C4	-6.84	103.66	106.40
26	BB	76	C	C5-C6-N1	-6.84	117.58	121.00
26	BB	89	A	C5'-C4'-O4'	6.84	117.31	109.10
26	BB	853	C	N1-C2-O2	6.84	123.01	118.90
26	BB	990	A	O4'-C1'-N9	6.84	113.67	108.20
26	BB	1222	U	N1-C2-N3	6.84	119.01	114.90
26	BB	1339	G	C2-N3-C4	6.84	115.32	111.90
26	BB	2389	G	O3'-P-O5'	-6.84	91.00	104.00
26	BB	2692	G	C6-C5-N7	-6.84	126.29	130.40
1	AA	365	U	C1'-O4'-C4'	-6.84	104.43	109.90
1	AA	665	A	O4'-C4'-C3'	-6.84	97.16	104.00
1	AA	838	G	C5-C6-N1	-6.84	108.08	111.50
26	BB	2444	G	N7-C8-N9	6.84	116.52	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	610	U	O4'-C1'-N1	6.84	113.67	108.20
1	AA	1135	U	C4-C5-C6	6.84	123.81	119.70
1	AA	1333	A	N7-C8-N9	6.84	117.22	113.80
26	BB	83	A	C5'-C4'-O4'	6.84	117.31	109.10
26	BB	944	C	C5-C6-N1	6.84	124.42	121.00
26	BB	1284	A	C4-C5-C6	6.84	120.42	117.00
26	BB	1628	G	C4-C5-N7	-6.84	108.06	110.80
26	BB	1889	A	C8-N9-C4	-6.84	103.06	105.80
26	BB	2414	G	N9-C4-C5	-6.84	102.66	105.40
1	AA	665	A	C4-C5-C6	-6.84	113.58	117.00
10	AJ	159	ARG	NE-CZ-NH2	-6.84	116.88	120.30
19	AS	17	TYR	CB-CG-CD2	-6.84	116.90	121.00
25	BA	4	C	N3-C4-N4	6.84	122.79	118.00
26	BB	187	G	C6-C5-N7	6.84	134.50	130.40
26	BB	694	U	O4'-C1'-N1	6.84	113.67	108.20
26	BB	823	C	C6-N1-C2	-6.84	117.56	120.30
26	BB	1103	A	C2-N3-C4	6.84	114.02	110.60
26	BB	1481	U	N1-C2-O2	6.84	127.59	122.80
26	BB	1792	G	N7-C8-N9	-6.84	109.68	113.10
26	BB	2365	G	C2-N3-C4	6.84	115.32	111.90
26	BB	2455	G	C6-N1-C2	-6.84	121.00	125.10
26	BB	2459	A	C4-C5-C6	-6.84	113.58	117.00
1	AA	900	A	C4-C5-C6	-6.84	113.58	117.00
1	AA	1324	A	C2-N3-C4	6.84	114.02	110.60
25	BA	101	A	C2-N3-C4	6.84	114.02	110.60
26	BB	462	C	C4-C5-C6	-6.84	113.98	117.40
26	BB	517	C	C2-N3-C4	6.84	123.32	119.90
26	BB	1849	G	N3-C4-C5	-6.84	125.18	128.60
26	BB	1992	G	C5-N7-C8	-6.84	100.88	104.30
26	BB	2532	G	C5-N7-C8	6.84	107.72	104.30
26	BB	2597	G	C5-N7-C8	-6.84	100.88	104.30
29	BE	80	TRP	CD1-NE1-CE2	6.84	115.15	109.00
52	B1	7	THR	CA-CB-CG2	6.84	121.97	112.40
1	AA	235	C	N3-C4-N4	6.84	122.78	118.00
1	AA	496	A	C8-N9-C4	-6.84	103.06	105.80
1	AA	502	A	N1-C6-N6	-6.84	114.50	118.60
1	AA	670	G	N3-C4-C5	-6.84	125.18	128.60
1	AA	1026	G	O4'-C1'-N9	6.84	113.67	108.20
1	AA	1115	U	N3-C2-O2	-6.84	117.41	122.20
26	BB	366	C	C2-N3-C4	6.84	123.32	119.90
26	BB	752	A	O4'-C4'-C3'	6.84	111.57	106.10
26	BB	1426	G	C6-C5-N7	-6.84	126.30	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1473	G	C6-N1-C2	-6.84	121.00	125.10
26	BB	2217	G	C5-N7-C8	-6.84	100.88	104.30
26	BB	2316	G	N3-C4-C5	-6.84	125.18	128.60
1	AA	1269	A	N9-C1'-C2'	-6.83	104.48	112.00
26	BB	1056	G	C4-C5-N7	-6.83	108.07	110.80
26	BB	1386	C	C5'-C4'-O4'	6.83	117.30	109.10
26	BB	1961	C	N3-C4-C5	-6.83	119.17	121.90
1	AA	63	C	C5-C4-N4	-6.83	115.42	120.20
1	AA	1319	A	C6-C5-N7	-6.83	127.52	132.30
3	AC	18	A	O4'-C1'-C2'	-6.83	98.97	105.80
4	AD	17	C	O3'-P-O5'	-6.83	91.02	104.00
25	BA	111	U	C5-C4-O4	-6.83	121.80	125.90
26	BB	1546	G	N3-C4-N9	-6.83	121.90	126.00
26	BB	2377	A	C5-C6-N1	-6.83	114.28	117.70
1	AA	378	G	C5-C6-O6	-6.83	124.50	128.60
26	BB	580	U	C2-N3-C4	-6.83	122.90	127.00
26	BB	1232	G	N3-C2-N2	-6.83	115.12	119.90
26	BB	1682	G	N3-C4-N9	6.83	130.10	126.00
26	BB	2162	G	C2-N3-C4	6.83	115.31	111.90
26	BB	2839	G	C5-C6-O6	-6.83	124.50	128.60
51	B0	23	ARG	NH1-CZ-NH2	-6.83	111.89	119.40
1	AA	776	G	N3-C4-N9	-6.83	121.90	126.00
1	AA	1245	C	N3-C2-O2	-6.83	117.12	121.90
1	AA	1468	A	C6-N1-C2	-6.83	114.50	118.60
4	AD	58	A	C5-C6-N6	6.83	129.16	123.70
25	BA	65	U	C6-N1-C2	-6.83	116.90	121.00
26	BB	410	G	C3'-C2'-C1'	-6.83	96.04	101.50
26	BB	446	G	C4-C5-C6	6.83	122.90	118.80
26	BB	1451	C	C2-N3-C4	6.83	123.31	119.90
26	BB	1788	C	C6-N1-C2	-6.83	117.57	120.30
35	BK	133	ARG	NE-CZ-NH1	6.83	123.72	120.30
1	AA	159	G	C8-N9-C4	-6.83	103.67	106.40
1	AA	343	U	C4'-C3'-C2'	-6.83	95.77	102.60
1	AA	406	G	C5-C6-N1	6.83	114.91	111.50
1	AA	554	A	N1-C6-N6	6.83	122.70	118.60
1	AA	1520	C	O4'-C1'-N1	6.83	113.66	108.20
2	AB	44	G	C5-C6-O6	-6.83	124.50	128.60
4	AD	32	G	C8-N9-C4	-6.83	103.67	106.40
26	BB	399	U	O4'-C1'-C2'	6.83	113.75	107.60
26	BB	505	A	C5-C6-N1	-6.83	114.28	117.70
26	BB	604	G	N1-C2-N3	-6.83	119.80	123.90
26	BB	1521	G	N3-C4-C5	-6.83	125.19	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1857	G	N3-C4-N9	6.83	130.10	126.00
1	AA	43	C	N1-C2-N3	-6.83	114.42	119.20
1	AA	504	C	C3'-C2'-C1'	6.83	106.96	101.50
1	AA	1023	U	N1-C2-O2	6.83	127.58	122.80
1	AA	1430	A	C5-C6-N1	6.83	121.11	117.70
26	BB	579	G	C5-C6-N1	6.83	114.91	111.50
26	BB	784	G	O5'-P-OP2	-6.83	99.56	105.70
26	BB	1529	G	N7-C8-N9	6.83	116.51	113.10
1	AA	89	U	C4-C5-C6	6.83	123.80	119.70
1	AA	208	U	C5-C4-O4	-6.83	121.81	125.90
1	AA	322	C	N3-C4-C5	-6.83	119.17	121.90
1	AA	971	G	C5-C6-O6	-6.83	124.50	128.60
1	AA	1068	G	C4-C5-N7	-6.83	108.07	110.80
2	AB	3	G	N1-C6-O6	-6.83	115.81	119.90
4	AD	31	G	N9-C1'-C2'	-6.83	104.49	112.00
26	BB	402	A	N9-C4-C5	6.83	108.53	105.80
26	BB	1187	G	O4'-C4'-C3'	6.83	111.56	106.10
26	BB	1257	C	C6-N1-C2	6.83	123.03	120.30
26	BB	1505	A	C6-N1-C2	6.83	122.69	118.60
26	BB	1608	A	C4-C5-N7	-6.83	107.29	110.70
26	BB	1739	A	C6-C5-N7	6.83	137.08	132.30
42	BR	98	TYR	CB-CG-CD2	-6.83	116.90	121.00
1	AA	1036	A	C4-C5-C6	-6.82	113.59	117.00
1	AA	1338	G	N3-C4-N9	6.82	130.09	126.00
2	AB	30	G	C5-N7-C8	-6.82	100.89	104.30
26	BB	93	G	N3-C4-N9	6.82	130.09	126.00
26	BB	293	U	C3'-C2'-C1'	-6.82	96.04	101.50
26	BB	411	G	N9-C4-C5	-6.82	102.67	105.40
26	BB	1220	G	C4-C5-C6	6.82	122.89	118.80
26	BB	1892	C	C4'-C3'-C2'	-6.82	95.78	102.60
26	BB	1963	U	N3-C2-O2	-6.82	117.42	122.20
26	BB	2397	G	N3-C2-N2	6.82	124.68	119.90
26	BB	2660	A	O4'-C1'-N9	6.82	113.66	108.20
26	BB	2661	G	C2-N3-C4	6.82	115.31	111.90
26	BB	2862	G	C5-N7-C8	-6.82	100.89	104.30
26	BB	2885	G	C2-N3-C4	6.82	115.31	111.90
1	AA	625	U	C4'-C3'-C2'	6.82	109.42	102.60
1	AA	1362	A	N7-C8-N9	6.82	117.21	113.80
1	AA	1517	G	N3-C4-C5	-6.82	125.19	128.60
26	BB	1519	G	N3-C2-N2	-6.82	115.12	119.90
1	AA	93	U	C3'-C2'-C1'	6.82	106.96	101.50
1	AA	128	G	C5-C6-N1	6.82	114.91	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1199	U	O4'-C1'-N1	6.82	113.66	108.20
1	AA	1242	G	C8-N9-C4	-6.82	103.67	106.40
1	AA	1303	C	C6-N1-C2	-6.82	117.57	120.30
1	AA	1450	U	N1-C1'-C2'	-6.82	104.50	112.00
4	AD	6	G	N3-C4-C5	-6.82	125.19	128.60
4	AD	76	C	C5'-C4'-C3'	6.82	126.91	116.00
26	BB	259	G	N3-C4-C5	6.82	132.01	128.60
26	BB	325	G	C5-C6-O6	-6.82	124.51	128.60
26	BB	804	A	N1-C2-N3	-6.82	125.89	129.30
26	BB	1455	G	C6-N1-C2	-6.82	121.01	125.10
26	BB	2135	A	N1-C2-N3	6.82	132.71	129.30
26	BB	2178	C	C5-C6-N1	6.82	124.41	121.00
26	BB	2198	A	C6-C5-N7	6.82	137.07	132.30
26	BB	2310	C	C5'-C4'-O4'	6.82	117.28	109.10
26	BB	2685	G	C6-N1-C2	-6.82	121.01	125.10
1	AA	27	G	C4-C5-C6	6.82	122.89	118.80
3	AC	17	U	C5'-C4'-O4'	6.82	117.28	109.10
26	BB	109	C	C5'-C4'-O4'	6.82	117.28	109.10
1	AA	345	C	N3-C2-O2	-6.82	117.13	121.90
1	AA	913	A	C8-N9-C4	-6.82	103.07	105.80
25	BA	8	C	N3-C4-N4	6.82	122.77	118.00
26	BB	360	U	N1-C2-N3	6.82	118.99	114.90
26	BB	806	C	O4'-C1'-N1	6.82	113.65	108.20
1	AA	698	G	C8-N9-C4	-6.82	103.67	106.40
1	AA	1341	U	C5-C6-N1	6.82	126.11	122.70
2	AB	57	G	C2-N3-C4	-6.82	108.49	111.90
3	AC	29	G	N3-C4-N9	6.82	130.09	126.00
14	AN	68	ARG	NE-CZ-NH2	-6.82	116.89	120.30
25	BA	27	C	O4'-C1'-C2'	6.82	113.73	107.60
26	BB	176	A	C4'-C3'-C2'	-6.82	95.78	102.60
26	BB	724	U	C4'-C3'-C2'	-6.82	95.78	102.60
26	BB	1245	G	C5-C6-O6	-6.82	124.51	128.60
1	AA	616	G	C4-N9-C1'	-6.81	117.64	126.50
26	BB	301	G	C5'-C4'-C3'	-6.81	105.10	116.00
26	BB	312	G	C5-C6-O6	-6.81	124.51	128.60
26	BB	814	C	C5'-C4'-O4'	6.81	117.28	109.10
31	BG	21	TYR	CB-CG-CD2	-6.81	116.91	121.00
1	AA	445	G	N3-C2-N2	-6.81	115.13	119.90
1	AA	1172	C	C5-C6-N1	6.81	124.41	121.00
26	BB	620	G	O4'-C1'-C2'	-6.81	98.99	105.80
26	BB	760	G	C5-C6-N1	6.81	114.91	111.50
26	BB	1663	G	C6-C5-N7	6.81	134.49	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1958	C	C6-N1-C2	-6.81	117.58	120.30
26	BB	2205	A	O4'-C1'-N9	6.81	113.65	108.20
26	BB	2389	G	N1-C2-N2	6.81	122.33	116.20
26	BB	2435	A	C4-C5-C6	-6.81	113.59	117.00
26	BB	2632	A	C5-C6-N1	-6.81	114.29	117.70
26	BB	2785	C	C1'-O4'-C4'	6.81	115.35	109.90
26	BB	2806	C	N1-C2-N3	-6.81	114.43	119.20
1	AA	470	C	C2-N3-C4	6.81	123.31	119.90
1	AA	1057	G	C4-C5-C6	6.81	122.89	118.80
25	BA	101	A	N9-C4-C5	-6.81	103.08	105.80
26	BB	1928	A	O4'-C4'-C3'	6.81	111.55	106.10
26	BB	2298	A	N9-C4-C5	6.81	108.52	105.80
1	AA	1122	U	N1-C2-O2	6.81	127.57	122.80
1	AA	1196	A	C6-C5-N7	6.81	137.07	132.30
2	AB	42	G	N3-C4-C5	-6.81	125.19	128.60
25	BA	59	A	O4'-C1'-N9	6.81	113.65	108.20
26	BB	917	A	C2-N3-C4	6.81	114.00	110.60
26	BB	956	G	C5-C6-O6	6.81	132.69	128.60
26	BB	1043	C	C4'-C3'-C2'	-6.81	95.79	102.60
26	BB	1349	C	N1-C1'-C2'	-6.81	104.51	112.00
26	BB	1564	C	C4-C5-C6	-6.81	114.00	117.40
26	BB	1732	C	C2-N3-C4	6.81	123.30	119.90
26	BB	1940	U	C2-N3-C4	6.81	131.09	127.00
26	BB	2328	A	N7-C8-N9	6.81	117.20	113.80
26	BB	2383	G	O4'-C1'-N9	6.81	113.65	108.20
26	BB	2557	G	N7-C8-N9	-6.81	109.69	113.10
1	AA	553	A	C4-C5-C6	6.81	120.40	117.00
25	BA	48	U	C5-C6-N1	-6.81	119.30	122.70
26	BB	116	C	C4'-C3'-C2'	-6.81	95.79	102.60
26	BB	202	U	C6-N1-C2	-6.81	116.92	121.00
26	BB	390	U	N3-C2-O2	-6.81	117.44	122.20
26	BB	1018	U	N1-C1'-C2'	-6.81	104.51	112.00
26	BB	2505	G	N7-C8-N9	-6.81	109.70	113.10
26	BB	2623	G	O4'-C1'-N9	6.81	113.65	108.20
1	AA	437	U	N3-C4-O4	6.81	124.16	119.40
1	AA	752	G	O4'-C1'-N9	6.81	113.64	108.20
1	AA	1179	A	C3'-C2'-C1'	-6.81	96.06	101.50
26	BB	806	C	N3-C2-O2	-6.81	117.14	121.90
26	BB	1040	A	N9-C4-C5	6.81	108.52	105.80
26	BB	1764	C	N3-C4-C5	-6.81	119.18	121.90
26	BB	2267	A	C4-C5-C6	-6.81	113.60	117.00
1	AA	91	U	N3-C4-O4	-6.80	114.64	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	992	U	P-O3'-C3'	6.80	127.86	119.70
1	AA	1222	G	C6-C5-N7	6.80	134.48	130.40
4	AD	2	G	C4-C5-N7	-6.80	108.08	110.80
26	BB	1252	G	C5-C6-O6	-6.80	124.52	128.60
26	BB	2436	G	C5-C6-O6	6.80	132.68	128.60
26	BB	2709	G	C5-C6-N1	6.80	114.90	111.50
1	AA	172	A	C5'-C4'-O4'	6.80	117.26	109.10
1	AA	589	U	C6-N1-C2	6.80	125.08	121.00
1	AA	1102	A	O4'-C1'-N9	6.80	113.64	108.20
26	BB	429	A	O4'-C1'-N9	6.80	113.64	108.20
26	BB	819	A	C5-C6-N6	-6.80	118.26	123.70
26	BB	1029	A	N1-C6-N6	6.80	122.68	118.60
26	BB	2278	A	N1-C2-N3	-6.80	125.90	129.30
4	AD	48	U	C5-C4-O4	-6.80	121.82	125.90
19	AS	2	VAL	CG1-CB-CG2	-6.80	100.02	110.90
26	BB	396	G	C5-C6-O6	-6.80	124.52	128.60
26	BB	1552	A	N9-C4-C5	6.80	108.52	105.80
26	BB	1568	G	C5-C6-N1	6.80	114.90	111.50
26	BB	2492	U	N3-C4-O4	6.80	124.16	119.40
26	BB	2756	U	N3-C4-C5	6.80	118.68	114.60
1	AA	41	G	N1-C2-N3	-6.80	119.82	123.90
1	AA	90	C	O4'-C1'-N1	6.80	113.64	108.20
1	AA	183	C	C5-C6-N1	6.80	124.40	121.00
1	AA	255	G	C1'-O4'-C4'	6.80	115.34	109.90
1	AA	623	C	O4'-C1'-N1	6.80	113.64	108.20
1	AA	798	U	C5-C6-N1	-6.80	119.30	122.70
1	AA	848	C	C2-N3-C4	6.80	123.30	119.90
1	AA	1074	G	N1-C2-N3	-6.80	119.82	123.90
2	AB	3	G	C2-N3-C4	6.80	115.30	111.90
4	AD	75	C	C6-N1-C2	-6.80	117.58	120.30
26	BB	38	A	C1'-O4'-C4'	-6.80	104.46	109.90
49	BY	2	HIS	CA-CB-CG	6.80	125.16	113.60
1	AA	922	G	C5'-C4'-O4'	6.80	117.26	109.10
26	BB	1859	U	N3-C4-O4	6.80	124.16	119.40
26	BB	2855	C	C6-N1-C2	-6.80	117.58	120.30
26	BB	1538	G	N1-C2-N3	-6.80	119.82	123.90
26	BB	2133	G	N1-C2-N2	-6.80	110.08	116.20
26	BB	2432	A	C2'-C3'-O3'	6.80	124.58	113.70
26	BB	2629	U	C1'-O4'-C4'	-6.80	104.46	109.90
26	BB	2798	U	C5-C6-N1	-6.80	119.30	122.70
1	AA	15	G	N1-C6-O6	6.79	123.98	119.90
1	AA	449	G	N9-C4-C5	-6.79	102.68	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	763	G	C4-C5-N7	-6.79	108.08	110.80
1	AA	862	C	C2-N3-C4	6.79	123.30	119.90
1	AA	380	G	C5'-C4'-O4'	6.79	117.25	109.10
1	AA	617	G	C8-N9-C4	-6.79	103.68	106.40
1	AA	1438	G	C6-C5-N7	-6.79	126.32	130.40
26	BB	1210	G	N1-C6-O6	6.79	123.98	119.90
26	BB	1243	C	C2-N1-C1'	-6.79	111.33	118.80
26	BB	1932	A	N1-C2-N3	6.79	132.70	129.30
26	BB	1980	G	C5-N7-C8	-6.79	100.90	104.30
26	BB	2397	G	C5-N7-C8	-6.79	100.90	104.30
26	BB	2454	G	N3-C4-N9	6.79	130.08	126.00
1	AA	391	G	C5-N7-C8	-6.79	100.91	104.30
1	AA	444	G	C5'-C4'-O4'	6.79	117.25	109.10
1	AA	445	G	C8-N9-C4	-6.79	103.68	106.40
1	AA	500	G	N1-C2-N2	-6.79	110.09	116.20
1	AA	1053	G	N9-C4-C5	6.79	108.12	105.40
26	BB	863	A	C4'-C3'-C2'	-6.79	95.81	102.60
26	BB	1055	G	C1'-O4'-C4'	-6.79	104.47	109.90
26	BB	1168	G	C1'-O4'-C4'	6.79	115.33	109.90
26	BB	2491	U	N1-C2-O2	6.79	127.55	122.80
28	BD	101	ARG	NE-CZ-NH2	-6.79	116.90	120.30
26	BB	663	G	N1-C6-O6	6.79	123.97	119.90
26	BB	2215	C	N1-C2-O2	6.79	122.97	118.90
26	BB	2341	G	O4'-C1'-N9	6.79	113.63	108.20
26	BB	2654	A	N1-C6-N6	-6.79	114.53	118.60
1	AA	169	C	C5-C6-N1	-6.79	117.61	121.00
1	AA	701	U	N1-C2-O2	6.79	127.55	122.80
1	AA	1401	G	C5'-C4'-C3'	-6.79	105.14	116.00
17	AQ	62	ARG	NE-CZ-NH2	6.79	123.69	120.30
26	BB	202	U	C4-C5-C6	6.79	123.77	119.70
26	BB	1125	G	C5'-C4'-O4'	6.79	117.25	109.10
26	BB	1213	A	N1-C2-N3	-6.79	125.91	129.30
26	BB	1426	G	N9-C4-C5	6.79	108.11	105.40
26	BB	1816	C	C6-N1-C1'	-6.79	112.65	120.80
26	BB	2592	G	C3'-C2'-C1'	6.79	106.93	101.50
26	BB	2592	G	C5'-C4'-C3'	-6.79	105.14	116.00
26	BB	2627	G	N1-C2-N2	-6.79	110.09	116.20
26	BB	2861	U	C5-C4-O4	-6.79	121.83	125.90
1	AA	27	G	O4'-C1'-C2'	6.79	113.71	107.60
1	AA	138	G	N7-C8-N9	6.79	116.49	113.10
1	AA	464	U	P-O3'-C3'	6.79	127.84	119.70
1	AA	901	A	P-O3'-C3'	6.79	127.84	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1163	A	C5-C6-N1	-6.79	114.31	117.70
26	BB	8	C	C2-N3-C4	6.79	123.29	119.90
26	BB	616	A	C5-C6-N1	6.79	121.09	117.70
26	BB	896	A	N9-C4-C5	6.79	108.52	105.80
26	BB	909	A	C6-C5-N7	6.79	137.05	132.30
26	BB	986	C	C5-C6-N1	6.79	124.39	121.00
26	BB	2716	C	C1'-O4'-C4'	6.79	115.33	109.90
1	AA	58	C	O4'-C1'-N1	6.79	113.63	108.20
1	AA	71	A	O4'-C1'-N9	6.79	113.63	108.20
1	AA	370	C	C6-N1-C2	-6.79	117.59	120.30
1	AA	1171	A	N3-C4-N9	6.79	132.83	127.40
1	AA	1525	G	C6-C5-N7	-6.79	126.33	130.40
25	BA	59	A	C5-N7-C8	-6.79	100.51	103.90
26	BB	1478	G	C6-N1-C2	-6.79	121.03	125.10
26	BB	2358	A	C5-C6-N6	-6.79	118.27	123.70
26	BB	2749	A	N7-C8-N9	6.79	117.19	113.80
1	AA	1520	C	C2-N3-C4	-6.78	116.51	119.90
2	AB	5	G	C1'-O4'-C4'	6.78	115.33	109.90
26	BB	157	C	C1'-O4'-C4'	6.78	115.33	109.90
26	BB	545	U	C5-C4-O4	-6.78	121.83	125.90
26	BB	663	G	C6-C5-N7	-6.78	126.33	130.40
26	BB	775	G	C5-C6-N1	6.78	114.89	111.50
26	BB	998	C	C6-N1-C2	-6.78	117.59	120.30
26	BB	1000	A	C8-N9-C4	-6.78	103.09	105.80
26	BB	1702	G	O4'-C1'-N9	6.78	113.63	108.20
26	BB	2346	A	O4'-C4'-C3'	6.78	111.53	106.10
1	AA	258	G	N9-C1'-C2'	-6.78	104.54	112.00
1	AA	739	C	N1-C2-O2	6.78	122.97	118.90
1	AA	1236	A	C6-N1-C2	-6.78	114.53	118.60
1	AA	1281	C	C5-C4-N4	6.78	124.95	120.20
2	AB	25	C	C4'-C3'-C2'	-6.78	95.82	102.60
26	BB	567	U	N3-C2-O2	-6.78	117.45	122.20
26	BB	614	A	N1-C2-N3	-6.78	125.91	129.30
26	BB	2248	C	C4'-C3'-C2'	-6.78	95.82	102.60
26	BB	2525	G	O4'-C1'-N9	6.78	113.63	108.20
1	AA	37	U	N1-C1'-C2'	-6.78	104.54	112.00
1	AA	195	A	C5-N7-C8	6.78	107.29	103.90
1	AA	632	U	C2-N3-C4	6.78	131.07	127.00
1	AA	851	G	N1-C2-N3	6.78	127.97	123.90
1	AA	1074	G	N3-C4-C5	-6.78	125.21	128.60
1	AA	1465	A	C4'-C3'-C2'	-6.78	95.82	102.60
3	AC	21	U	N3-C4-O4	6.78	124.15	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1613	G	O4'-C1'-N9	6.78	113.62	108.20
26	BB	2462	C	N3-C2-O2	-6.78	117.15	121.90
26	BB	2469	A	C5-N7-C8	-6.78	100.51	103.90
26	BB	2622	U	C3'-C2'-C1'	6.78	106.92	101.50
1	AA	354	G	N3-C2-N2	-6.78	115.16	119.90
26	BB	1562	U	N1-C2-O2	6.78	127.55	122.80
42	BR	26	GLU	OE1-CD-OE2	6.78	131.43	123.30
1	AA	34	C	O4'-C1'-N1	6.78	113.62	108.20
1	AA	855	U	O4'-C1'-N1	6.78	113.62	108.20
1	AA	881	G	C5'-C4'-C3'	-6.78	105.16	116.00
26	BB	22	C	C5-C6-N1	-6.78	117.61	121.00
26	BB	605	G	N3-C4-N9	6.78	130.07	126.00
26	BB	986	C	N3-C4-C5	6.78	124.61	121.90
26	BB	1081	U	C1'-O4'-C4'	-6.78	104.48	109.90
26	BB	2803	G	C3'-C2'-C1'	-6.78	96.08	101.50
1	AA	119	A	C2-N3-C4	6.78	113.99	110.60
1	AA	246	A	C1'-O4'-C4'	6.78	115.32	109.90
1	AA	564	C	C5'-C4'-O4'	6.78	117.23	109.10
1	AA	1090	U	C5'-C4'-O4'	6.78	117.23	109.10
1	AA	1507	A	N9-C4-C5	6.78	108.51	105.80
2	AB	60	U	C5-C4-O4	6.78	129.97	125.90
26	BB	1878	G	C2-N3-C4	6.78	115.29	111.90
26	BB	1996	C	O4'-C4'-C3'	6.78	111.52	106.10
26	BB	2086	U	N3-C4-O4	6.78	124.14	119.40
26	BB	2277	G	C3'-C2'-C1'	-6.78	96.08	101.50
26	BB	2722	G	C5-C6-N1	6.78	114.89	111.50
25	BA	39	A	N3-C4-N9	-6.77	121.98	127.40
26	BB	372	G	N1-C2-N2	-6.77	110.10	116.20
26	BB	764	A	C4'-C3'-C2'	6.77	109.37	102.60
26	BB	1006	C	N1-C2-O2	6.77	122.96	118.90
26	BB	1528	A	N9-C1'-C2'	-6.77	104.55	112.00
26	BB	1562	U	N3-C2-O2	-6.77	117.46	122.20
26	BB	2415	G	C5-C6-N1	6.77	114.89	111.50
1	AA	443	C	C5'-C4'-O4'	6.77	117.23	109.10
1	AA	463	U	N1-C2-N3	6.77	118.96	114.90
1	AA	592	G	C1'-O4'-C4'	-6.77	104.48	109.90
1	AA	912	C	N1-C2-N3	6.77	123.94	119.20
1	AA	948	C	O4'-C1'-N1	6.77	113.62	108.20
4	AD	52	C	N3-C4-C5	-6.77	119.19	121.90
26	BB	255	A	C4-C5-N7	-6.77	107.31	110.70
26	BB	997	G	C5-N7-C8	6.77	107.69	104.30
26	BB	1002	G	N3-C4-N9	6.77	130.06	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1536	C	C5-C4-N4	-6.77	115.46	120.20
26	BB	1692	U	N1-C2-O2	6.77	127.54	122.80
26	BB	1713	A	O4'-C1'-N9	6.77	113.62	108.20
26	BB	2175	C	C1'-O4'-C4'	6.77	115.32	109.90
26	BB	2203	U	N1-C2-N3	6.77	118.96	114.90
1	AA	851	G	N3-C2-N2	-6.77	115.16	119.90
26	BB	1016	G	C8-N9-C4	-6.77	103.69	106.40
26	BB	2024	G	C4'-C3'-C2'	-6.77	95.83	102.60
34	BJ	45	ARG	CD-NE-CZ	6.77	133.08	123.60
1	AA	449	G	C6-C5-N7	-6.77	126.34	130.40
1	AA	605	U	C5-C6-N1	6.77	126.08	122.70
1	AA	812	G	N9-C1'-C2'	6.77	122.80	114.00
1	AA	1388	C	O4'-C1'-N1	6.77	113.61	108.20
26	BB	957	C	O4'-C1'-N1	6.77	113.61	108.20
26	BB	1342	A	N1-C2-N3	-6.77	125.92	129.30
26	BB	2588	G	C5-N7-C8	-6.77	100.92	104.30
26	BB	2693	G	C5-C6-N1	-6.77	108.11	111.50
26	BB	2718	G	N3-C4-C5	-6.77	125.22	128.60
1	AA	183	C	C4-C5-C6	-6.77	114.02	117.40
1	AA	734	G	N3-C2-N2	6.77	124.64	119.90
1	AA	894	G	C8-N9-C4	-6.77	103.69	106.40
1	AA	1079	G	C6-C5-N7	-6.77	126.34	130.40
1	AA	1461	G	C5'-C4'-O4'	6.77	117.22	109.10
26	BB	1237	A	O4'-C1'-N9	6.77	113.61	108.20
26	BB	1768	C	N3-C2-O2	-6.77	117.16	121.90
26	BB	1949	G	C5-N7-C8	6.77	107.68	104.30
26	BB	2033	A	C5-C6-N6	-6.77	118.29	123.70
26	BB	2097	A	C5'-C4'-O4'	6.77	117.22	109.10
26	BB	2354	C	P-O3'-C3'	6.77	127.82	119.70
26	BB	2670	A	N1-C6-N6	6.77	122.66	118.60
26	BB	2801	G	C5'-C4'-O4'	6.77	117.22	109.10
26	BB	2883	A	C6-C5-N7	6.77	137.04	132.30
1	AA	1497	G	C2-N3-C4	6.77	115.28	111.90
1	AA	1531	A	C6-N1-C2	6.77	122.66	118.60
3	AC	17	U	C4'-C3'-C2'	-6.77	95.83	102.60
26	BB	254	G	C3'-C2'-C1'	6.77	106.91	101.50
26	BB	389	G	C6-C5-N7	6.77	134.46	130.40
26	BB	1723	G	O4'-C1'-N9	6.77	113.61	108.20
26	BB	2671	G	N7-C8-N9	6.77	116.48	113.10
26	BB	2734	A	C4'-C3'-C2'	-6.77	95.83	102.60
1	AA	301	G	C2-N3-C4	-6.76	108.52	111.90
1	AA	309	A	N3-C4-N9	6.76	132.81	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1356	G	N7-C8-N9	6.76	116.48	113.10
26	BB	338	G	C5-C6-O6	-6.76	124.54	128.60
26	BB	351	C	N3-C4-N4	6.76	122.74	118.00
26	BB	967	U	C1'-O4'-C4'	6.76	115.31	109.90
26	BB	2077	A	N9-C4-C5	6.76	108.51	105.80
26	BB	2431	U	P-O3'-C3'	6.76	127.82	119.70
45	BU	25	ARG	NE-CZ-NH2	-6.76	116.92	120.30
1	AA	28	A	N9-C4-C5	6.76	108.50	105.80
1	AA	241	G	C3'-C2'-C1'	-6.76	96.09	101.50
26	BB	998	C	C3'-C2'-C1'	6.76	106.91	101.50
26	BB	2232	C	O4'-C1'-N1	6.76	113.61	108.20
1	AA	309	A	C6-C5-N7	-6.76	127.57	132.30
1	AA	1361	G	C8-N9-C1'	6.76	135.79	127.00
2	AB	67	G	C4-C5-N7	-6.76	108.09	110.80
26	BB	499	U	C2-N3-C4	-6.76	122.94	127.00
26	BB	1044	C	C5'-C4'-O4'	6.76	117.21	109.10
26	BB	1057	A	C3'-C2'-C1'	-6.76	96.09	101.50
26	BB	1214	A	N3-C4-C5	-6.76	122.07	126.80
26	BB	1296	G	C6-C5-N7	-6.76	126.34	130.40
26	BB	1473	G	N3-C2-N2	6.76	124.63	119.90
26	BB	1585	C	C5'-C4'-C3'	-6.76	105.18	116.00
26	BB	1731	G	N1-C2-N3	-6.76	119.84	123.90
26	BB	2060	A	C5-N7-C8	-6.76	100.52	103.90
26	BB	2067	G	C5'-C4'-C3'	-6.76	105.18	116.00
26	BB	2890	G	N7-C8-N9	-6.76	109.72	113.10
1	AA	194	C	C6-N1-C2	6.76	123.00	120.30
1	AA	246	A	C8-N9-C4	-6.76	103.10	105.80
1	AA	627	G	C2-N3-C4	6.76	115.28	111.90
1	AA	1176	A	N3-C4-N9	6.76	132.81	127.40
2	AB	29	G	C6-C5-N7	-6.76	126.34	130.40
26	BB	477	A	N1-C6-N6	-6.76	114.54	118.60
26	BB	519	U	C4-C5-C6	6.76	123.75	119.70
26	BB	524	G	O4'-C1'-N9	6.76	113.61	108.20
26	BB	804	A	C8-N9-C4	-6.76	103.10	105.80
26	BB	1015	U	C5-C6-N1	6.76	126.08	122.70
26	BB	2384	U	C4-C5-C6	6.76	123.76	119.70
26	BB	2799	A	C4-C5-N7	-6.76	107.32	110.70
26	BB	2853	C	N3-C4-N4	6.76	122.73	118.00
53	B2	51	VAL	CA-CB-CG2	6.76	121.04	110.90
1	AA	170	U	N3-C4-C5	6.76	118.66	114.60
1	AA	418	C	C6-N1-C2	-6.76	117.60	120.30
1	AA	540	G	C4-C5-C6	6.76	122.86	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	632	U	N3-C4-C5	-6.76	110.55	114.60
1	AA	459	A	N9-C4-C5	-6.76	103.10	105.80
1	AA	534	U	N3-C2-O2	6.76	126.93	122.20
1	AA	585	G	C4-C5-C6	6.76	122.85	118.80
1	AA	627	G	C4-N9-C1'	-6.76	117.72	126.50
1	AA	942	G	C6-N1-C2	-6.76	121.05	125.10
25	BA	106	G	C3'-C2'-C1'	-6.76	96.09	101.50
26	BB	68	G	N7-C8-N9	6.76	116.48	113.10
26	BB	157	C	N1-C2-O2	6.76	122.95	118.90
26	BB	1292	G	N1-C2-N3	-6.76	119.85	123.90
26	BB	1375	U	N1-C1'-C2'	-6.76	104.57	112.00
26	BB	1517	G	C5-C6-O6	6.76	132.65	128.60
26	BB	1722	A	C5-C6-N1	6.76	121.08	117.70
26	BB	2013	A	C8-N9-C4	6.76	108.50	105.80
26	BB	2569	G	N1-C6-O6	6.76	123.95	119.90
4	AD	47	A	C4-C5-C6	-6.75	113.62	117.00
26	BB	15	G	O5'-P-OP1	-6.75	99.62	105.70
26	BB	195	A	C5'-C4'-O4'	6.75	117.21	109.10
26	BB	451	U	O4'-C1'-N1	6.75	113.60	108.20
26	BB	1574	C	P-O3'-C3'	6.75	127.81	119.70
36	BL	99	ARG	NE-CZ-NH2	6.75	123.68	120.30
1	AA	835	U	N3-C4-C5	-6.75	110.55	114.60
4	AD	17	C	N3-C2-O2	-6.75	117.17	121.90
6	AF	41	TYR	CB-CG-CD2	6.75	125.05	121.00
15	AO	120	ARG	NE-CZ-NH2	-6.75	116.92	120.30
26	BB	697	G	N1-C6-O6	-6.75	115.85	119.90
26	BB	915	C	C1'-O4'-C4'	-6.75	104.50	109.90
26	BB	1529	G	C4-C5-N7	-6.75	108.10	110.80
26	BB	1758	U	C4-C5-C6	6.75	123.75	119.70
26	BB	2670	A	C4-C5-C6	6.75	120.38	117.00
1	AA	239	U	C2-N3-C4	-6.75	122.95	127.00
1	AA	301	G	C5-C6-N1	6.75	114.88	111.50
1	AA	337	G	O4'-C1'-N9	6.75	113.60	108.20
1	AA	338	A	C4'-C3'-C2'	-6.75	95.85	102.60
1	AA	567	G	C4-C5-N7	-6.75	108.10	110.80
1	AA	721	G	C6-N1-C2	-6.75	121.05	125.10
1	AA	1336	C	C5-C6-N1	6.75	124.38	121.00
1	AA	1347	G	N1-C2-N3	-6.75	119.85	123.90
1	AA	1380	U	C4-C5-C6	6.75	123.75	119.70
26	BB	28	A	O4'-C1'-C2'	6.75	113.68	107.60
26	BB	1392	A	C8-N9-C4	-6.75	103.10	105.80
26	BB	1563	U	C5-C4-O4	-6.75	121.85	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2526	G	N1-C6-O6	-6.75	115.85	119.90
26	BB	2803	G	C5-C6-O6	-6.75	124.55	128.60
1	AA	205	A	C5-C6-N6	6.75	129.10	123.70
1	AA	300	A	C8-N9-C4	-6.75	103.10	105.80
1	AA	1421	G	C4-C5-C6	6.75	122.85	118.80
26	BB	623	C	C3'-C2'-C1'	-6.75	96.10	101.50
26	BB	1028	A	N7-C8-N9	6.75	117.17	113.80
26	BB	1163	G	N9-C1'-C2'	-6.75	104.58	112.00
26	BB	1685	C	N1-C2-O2	6.75	122.95	118.90
26	BB	1694	C	O4'-C1'-C2'	-6.75	99.05	105.80
1	AA	537	G	C2-N3-C4	6.75	115.27	111.90
3	AC	28	U	C5-C6-N1	-6.75	119.33	122.70
26	BB	489	G	C5-C6-O6	-6.75	124.55	128.60
26	BB	563	A	C4-C5-C6	-6.75	113.63	117.00
26	BB	687	C	C2-N3-C4	-6.75	116.53	119.90
26	BB	860	U	C4-C5-C6	-6.75	115.65	119.70
26	BB	1760	C	C5'-C4'-O4'	-6.75	101.00	109.10
26	BB	2484	G	C4-C5-C6	6.75	122.85	118.80
26	BB	2690	U	N3-C2-O2	-6.75	117.48	122.20
1	AA	102	G	N9-C4-C5	6.75	108.10	105.40
1	AA	647	C	O4'-C1'-N1	6.75	113.60	108.20
1	AA	1048	G	C5'-C4'-O4'	6.75	117.19	109.10
1	AA	1292	G	N3-C2-N2	-6.75	115.18	119.90
1	AA	1320	C	C4-C5-C6	-6.75	114.03	117.40
14	AN	75	GLU	OE1-CD-OE2	6.75	131.40	123.30
25	BA	22	U	O4'-C4'-C3'	6.75	111.50	106.10
26	BB	262	A	C5-N7-C8	-6.75	100.53	103.90
26	BB	356	G	N3-C4-N9	6.75	130.05	126.00
26	BB	700	G	C4-C5-N7	-6.75	108.10	110.80
26	BB	1177	G	C1'-O4'-C4'	-6.75	104.50	109.90
26	BB	1510	G	C6-N1-C2	-6.75	121.05	125.10
26	BB	2101	A	C5-N7-C8	-6.75	100.53	103.90
26	BB	2379	G	C5-C6-N1	6.75	114.87	111.50
26	BB	2494	G	C6-C5-N7	-6.75	126.35	130.40
1	AA	864	A	C6-N1-C2	-6.75	114.55	118.60
10	AJ	154	ARG	NE-CZ-NH2	-6.75	116.93	120.30
26	BB	143	C	C5-C6-N1	6.75	124.37	121.00
26	BB	1228	G	C6-N1-C2	-6.75	121.05	125.10
26	BB	1280	G	C6-C5-N7	-6.75	126.35	130.40
26	BB	1554	U	O4'-C1'-N1	6.75	113.60	108.20
1	AA	1	A	N1-C2-N3	-6.74	125.93	129.30
1	AA	10	A	C4-C5-N7	-6.74	107.33	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	691	G	O4'-C4'-C3'	6.74	111.50	106.10
1	AA	1050	G	O4'-C1'-N9	6.74	113.59	108.20
4	AD	3	C	N1-C2-O2	6.74	122.95	118.90
26	BB	1181	U	O4'-C1'-N1	6.74	113.59	108.20
26	BB	1753	G	C5-C6-N1	6.74	114.87	111.50
26	BB	1756	G	C5-C6-O6	-6.74	124.55	128.60
26	BB	2095	A	N1-C6-N6	-6.74	114.55	118.60
26	BB	2486	C	N3-C2-O2	-6.74	117.18	121.90
26	BB	2856	A	C4-C5-C6	-6.74	113.63	117.00
1	AA	421	U	O4'-C4'-C3'	6.74	111.49	106.10
1	AA	821	G	N9-C4-C5	-6.74	102.70	105.40
1	AA	975	A	N9-C4-C5	-6.74	103.10	105.80
1	AA	1098	C	N3-C4-C5	-6.74	119.20	121.90
6	AF	131	ARG	CD-NE-CZ	6.74	133.04	123.60
25	BA	20	G	N1-C2-N2	6.74	122.27	116.20
26	BB	2455	G	N1-C2-N2	6.74	122.27	116.20
26	BB	2491	U	C4'-C3'-C2'	-6.74	95.86	102.60
26	BB	2886	A	C6-N1-C2	6.74	122.64	118.60
1	AA	392	C	N1-C2-O2	6.74	122.94	118.90
1	AA	761	G	N3-C4-C5	-6.74	125.23	128.60
1	AA	771	G	O5'-P-OP2	-6.74	99.63	105.70
1	AA	804	U	C5-C4-O4	-6.74	121.86	125.90
1	AA	1127	G	C3'-C2'-C1'	6.74	106.89	101.50
1	AA	1139	G	N3-C4-N9	-6.74	121.95	126.00
1	AA	1246	A	C6-N1-C2	-6.74	114.56	118.60
26	BB	300	A	N1-C6-N6	6.74	122.64	118.60
26	BB	743	A	N9-C4-C5	6.74	108.50	105.80
26	BB	987	C	C5-C6-N1	-6.74	117.63	121.00
26	BB	1056	G	C1'-O4'-C4'	6.74	115.29	109.90
26	BB	1070	A	C8-N9-C4	6.74	108.50	105.80
26	BB	1273	U	N1-C2-N3	6.74	118.94	114.90
26	BB	1383	A	C5-C6-N1	6.74	121.07	117.70
26	BB	1476	U	N1-C2-N3	6.74	118.94	114.90
26	BB	2711	A	C1'-O4'-C4'	-6.74	104.51	109.90
1	AA	480	U	C6-N1-C2	-6.74	116.96	121.00
1	AA	812	G	N9-C4-C5	6.74	108.09	105.40
1	AA	1530	G	C5-C6-N1	6.74	114.87	111.50
4	AD	46	G	O3'-P-O5'	-6.74	91.20	104.00
26	BB	1113	U	N3-C4-O4	-6.74	114.68	119.40
1	AA	269	C	C5-C4-N4	6.74	124.92	120.20
1	AA	1218	C	N1-C2-N3	6.74	123.92	119.20
1	AA	1496	C	N3-C2-O2	-6.74	117.18	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	120	U	C5-C4-O4	6.74	129.94	125.90
26	BB	1791	A	C2-N3-C4	6.74	113.97	110.60
1	AA	787	A	C3'-C2'-C1'	-6.74	96.11	101.50
1	AA	1105	A	C4-C5-C6	-6.74	113.63	117.00
1	AA	1437	A	C8-N9-C4	-6.74	103.11	105.80
3	AC	21	U	C4'-C3'-C2'	6.74	109.34	102.60
26	BB	993	G	C6-N1-C2	-6.74	121.06	125.10
38	BN	2	ARG	NH1-CZ-NH2	-6.74	111.99	119.40
1	AA	312	C	C3'-C2'-C1'	6.73	106.89	101.50
1	AA	732	C	C5-C6-N1	-6.73	117.63	121.00
1	AA	1104	G	C5-C6-O6	-6.73	124.56	128.60
26	BB	469	G	N1-C6-O6	-6.73	115.86	119.90
26	BB	2514	U	N3-C2-O2	-6.73	117.49	122.20
1	AA	39	G	O4'-C1'-N9	6.73	113.59	108.20
1	AA	73	C	N3-C4-C5	-6.73	119.21	121.90
1	AA	1171	A	N3-C4-C5	-6.73	122.09	126.80
1	AA	1422	G	N7-C8-N9	6.73	116.47	113.10
2	AB	15	A	C5'-C4'-O4'	6.73	117.18	109.10
4	AD	15	G	N1-C6-O6	-6.73	115.86	119.90
4	AD	75	C	N3-C2-O2	-6.73	117.19	121.90
26	BB	309	A	C2-N3-C4	6.73	113.97	110.60
26	BB	1052	C	O4'-C1'-N1	6.73	113.59	108.20
26	BB	1377	G	C4-C5-C6	-6.73	114.76	118.80
26	BB	2197	U	O4'-C1'-N1	6.73	113.58	108.20
26	BB	2739	U	O4'-C1'-N1	6.73	113.58	108.20
1	AA	1204	A	N9-C4-C5	6.73	108.49	105.80
1	AA	1248	A	C4'-C3'-C2'	-6.73	95.87	102.60
1	AA	1489	G	C4-C5-N7	-6.73	108.11	110.80
2	AB	15	A	C6-N1-C2	6.73	122.64	118.60
26	BB	216	A	N9-C1'-C2'	-6.73	104.59	112.00
26	BB	538	A	C6-N1-C2	-6.73	114.56	118.60
26	BB	716	A	C4'-C3'-C2'	-6.73	95.87	102.60
26	BB	790	U	C2-N1-C1'	6.73	125.78	117.70
26	BB	1307	A	C4-C5-C6	-6.73	113.64	117.00
26	BB	2738	A	C4-C5-C6	-6.73	113.63	117.00
1	AA	190	A	C4-C5-C6	6.73	120.36	117.00
1	AA	965	U	N3-C4-O4	6.73	124.11	119.40
26	BB	1068	G	N1-C2-N3	-6.73	119.86	123.90
26	BB	1567	G	O4'-C1'-C2'	-6.73	99.07	105.80
26	BB	2267	A	C8-N9-C4	-6.73	103.11	105.80
26	BB	2296	U	N1-C2-O2	-6.73	118.09	122.80
26	BB	2448	A	C4-C5-N7	-6.73	107.33	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BN	18	ARG	NE-CZ-NH1	6.73	123.66	120.30
1	AA	102	G	C2-N3-C4	6.73	115.26	111.90
1	AA	546	A	C5-N7-C8	-6.73	100.54	103.90
1	AA	928	G	C4-N9-C1'	-6.73	117.75	126.50
1	AA	1064	G	C2-N3-C4	6.73	115.26	111.90
1	AA	1366	C	C4-C5-C6	6.73	120.76	117.40
1	AA	1448	C	C5-C4-N4	-6.73	115.49	120.20
26	BB	158	U	C6-N1-C2	-6.73	116.96	121.00
26	BB	240	C	O4'-C1'-N1	6.73	113.58	108.20
26	BB	689	A	C5-N7-C8	6.73	107.26	103.90
1	AA	1323	G	C1'-O4'-C4'	-6.73	104.52	109.90
2	AB	13	C	N1-C2-N3	-6.73	114.49	119.20
26	BB	1808	A	C5-C6-N1	6.73	121.06	117.70
26	BB	2705	A	C5-N7-C8	-6.73	100.54	103.90
1	AA	720	C	C1'-O4'-C4'	-6.72	104.52	109.90
1	AA	1005	A	C4-C5-N7	-6.72	107.34	110.70
1	AA	1297	G	C6-C5-N7	6.72	134.43	130.40
1	AA	1308	U	O4'-C1'-N1	6.72	113.58	108.20
1	AA	1386	G	C4-C5-N7	-6.72	108.11	110.80
1	AA	1462	C	N3-C4-C5	-6.72	119.21	121.90
4	AD	35	C	O4'-C4'-C3'	6.72	111.48	106.10
25	BA	4	C	C4-C5-C6	6.72	120.76	117.40
26	BB	1176	U	C3'-C2'-C1'	6.72	106.88	101.50
26	BB	1510	G	C8-N9-C4	-6.72	103.71	106.40
26	BB	1711	A	C1'-O4'-C4'	-6.72	104.52	109.90
26	BB	1931	U	C2-N3-C4	-6.72	122.97	127.00
26	BB	2410	G	N7-C8-N9	6.72	116.46	113.10
37	BM	32	TYR	CG-CD2-CE2	6.72	126.68	121.30
38	BN	41	ARG	NE-CZ-NH1	6.72	123.66	120.30
1	AA	319	G	N9-C1'-C2'	-6.72	104.60	112.00
1	AA	823	C	C3'-C2'-C1'	6.72	106.88	101.50
1	AA	895	G	C5'-C4'-O4'	6.72	117.17	109.10
25	BA	101	A	C5-N7-C8	-6.72	100.54	103.90
26	BB	997	G	N3-C4-C5	-6.72	125.24	128.60
26	BB	1473	G	C4'-C3'-C2'	-6.72	95.88	102.60
26	BB	2765	A	C5'-C4'-O4'	6.72	117.17	109.10
1	AA	11	G	N1-C2-N3	6.72	127.93	123.90
1	AA	116	A	C2-N3-C4	6.72	113.96	110.60
1	AA	355	C	C4-C5-C6	6.72	120.76	117.40
1	AA	1127	G	N7-C8-N9	6.72	116.46	113.10
1	AA	1478	U	C3'-C2'-C1'	6.72	106.88	101.50
4	AD	25	U	OP1-P-OP2	-6.72	109.52	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	130	C	C6-N1-C1'	6.72	128.87	120.80
26	BB	751	A	C4-C5-N7	6.72	114.06	110.70
26	BB	1170	C	C6-N1-C2	-6.72	117.61	120.30
26	BB	1577	C	N3-C2-O2	-6.72	117.19	121.90
26	BB	2297	A	C5'-C4'-C3'	-6.72	105.25	116.00
26	BB	2431	U	C3'-C2'-C1'	-6.72	96.12	101.50
26	BB	2887	A	O4'-C1'-N9	6.72	113.58	108.20
1	AA	485	U	P-O3'-C3'	6.72	127.76	119.70
1	AA	535	A	N9-C4-C5	-6.72	103.11	105.80
4	AD	77	A	C6-C5-N7	-6.72	127.60	132.30
26	BB	51	G	O4'-C1'-N9	6.72	113.58	108.20
26	BB	94	A	C5'-C4'-O4'	6.72	117.16	109.10
26	BB	256	A	C8-N9-C4	-6.72	103.11	105.80
26	BB	927	A	C3'-C2'-C1'	6.72	106.88	101.50
26	BB	1041	G	N9-C1'-C2'	-6.72	104.61	112.00
26	BB	1421	G	C4'-C3'-C2'	-6.72	95.88	102.60
26	BB	2176	A	N1-C2-N3	-6.72	125.94	129.30
26	BB	2325	G	C5'-C4'-O4'	6.72	117.16	109.10
26	BB	2342	C	C4'-C3'-C2'	-6.72	95.88	102.60
1	AA	513	C	C2-N3-C4	6.72	123.26	119.90
26	BB	717	C	O4'-C1'-N1	6.72	113.58	108.20
26	BB	1587	G	C5-C6-O6	-6.72	124.57	128.60
26	BB	2071	A	C1'-O4'-C4'	-6.72	104.53	109.90
26	BB	2136	G	C5-C6-N1	6.72	114.86	111.50
26	BB	2678	C	C5-C4-N4	-6.72	115.50	120.20
1	AA	19	A	C8-N9-C4	6.72	108.49	105.80
1	AA	763	G	C1'-O4'-C4'	-6.72	104.53	109.90
1	AA	786	G	N9-C4-C5	6.72	108.09	105.40
25	BA	46	A	N3-C4-C5	6.72	131.50	126.80
26	BB	712	G	N1-C6-O6	6.72	123.93	119.90
26	BB	1412	U	N3-C4-O4	-6.72	114.70	119.40
26	BB	1607	C	C4-C5-C6	-6.72	114.04	117.40
26	BB	2622	U	O4'-C1'-N1	6.72	113.57	108.20
26	BB	2879	A	C4-C5-N7	6.72	114.06	110.70
27	BC	66	PRO	N-CA-CB	6.72	111.36	103.30
1	AA	352	C	C5-C6-N1	-6.71	117.64	121.00
1	AA	1531	A	N9-C4-C5	6.71	108.48	105.80
3	AC	34	U	O4'-C1'-N1	6.71	113.57	108.20
3	AC	45	G	N1-C6-O6	-6.71	115.87	119.90
7	AG	55	ARG	NE-CZ-NH2	-6.71	116.94	120.30
26	BB	103	A	C5'-C4'-O4'	6.71	117.16	109.10
26	BB	249	C	N3-C2-O2	-6.71	117.20	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	289	G	N9-C4-C5	6.71	108.09	105.40
26	BB	503	A	C6-N1-C2	6.71	122.63	118.60
26	BB	770	G	C5-N7-C8	6.71	107.66	104.30
26	BB	1682	G	N3-C4-C5	-6.71	125.24	128.60
26	BB	1879	C	O4'-C1'-N1	6.71	113.57	108.20
26	BB	1995	U	C3'-C2'-C1'	6.71	106.87	101.50
26	BB	2160	C	C5-C4-N4	-6.71	115.50	120.20
26	BB	2388	A	C6-N1-C2	-6.71	114.57	118.60
26	BB	2618	G	N3-C4-N9	6.71	130.03	126.00
26	BB	2671	G	N3-C4-N9	-6.71	121.97	126.00
26	BB	2836	U	C5-C6-N1	-6.71	119.34	122.70
1	AA	365	U	O4'-C1'-N1	6.71	113.57	108.20
1	AA	520	A	N7-C8-N9	-6.71	110.44	113.80
1	AA	1465	A	P-O3'-C3'	6.71	127.75	119.70
1	AA	1506	U	C5-C4-O4	-6.71	121.87	125.90
26	BB	464	U	N1-C2-N3	6.71	118.93	114.90
26	BB	871	U	O4'-C1'-N1	6.71	113.57	108.20
26	BB	2520	C	C5'-C4'-O4'	6.71	117.16	109.10
26	BB	2633	G	N9-C4-C5	6.71	108.08	105.40
1	AA	6	G	N9-C4-C5	6.71	108.08	105.40
1	AA	52	C	C5-C4-N4	6.71	124.90	120.20
1	AA	612	C	C6-N1-C2	6.71	122.98	120.30
1	AA	802	A	N9-C1'-C2'	-6.71	104.62	112.00
1	AA	1093	A	C4-C5-N7	-6.71	107.34	110.70
1	AA	1187	G	N3-C4-C5	-6.71	125.24	128.60
1	AA	1475	G	P-O3'-C3'	6.71	127.75	119.70
26	BB	1	G	C5'-C4'-O4'	6.71	117.15	109.10
26	BB	266	G	C8-N9-C4	-6.71	103.72	106.40
26	BB	283	G	C5-C6-N1	-6.71	108.14	111.50
26	BB	775	G	N1-C2-N3	6.71	127.93	123.90
26	BB	1538	G	N9-C4-C5	-6.71	102.72	105.40
26	BB	2732	G	C4-C5-N7	6.71	113.48	110.80
1	AA	852	G	N3-C4-C5	-6.71	125.25	128.60
1	AA	1058	G	N9-C1'-C2'	-6.71	104.62	112.00
25	BA	48	U	O4'-C1'-N1	6.71	113.57	108.20
26	BB	43	G	O4'-C1'-N9	6.71	113.57	108.20
26	BB	161	A	N1-C2-N3	-6.71	125.94	129.30
26	BB	414	C	C5-C6-N1	6.71	124.36	121.00
26	BB	1192	G	N1-C6-O6	-6.71	115.87	119.90
26	BB	1365	A	C2-N3-C4	6.71	113.95	110.60
48	BX	2	PHE	CB-CG-CD2	-6.71	116.10	120.80
1	AA	1388	C	C6-N1-C2	-6.71	117.62	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	76	A	N1-C6-N6	6.71	122.63	118.60
3	AC	29	G	N3-C4-C5	-6.71	125.25	128.60
26	BB	438	G	N9-C4-C5	6.71	108.08	105.40
26	BB	1410	G	N1-C6-O6	-6.71	115.88	119.90
26	BB	2481	G	C1'-O4'-C4'	-6.71	104.53	109.90
26	BB	2522	U	C2-N3-C4	-6.71	122.97	127.00
1	AA	235	C	N1-C2-O2	6.71	122.92	118.90
1	AA	403	C	C2-N3-C4	6.71	123.25	119.90
1	AA	1295	U	N3-C2-O2	-6.71	117.51	122.20
1	AA	1342	C	O4'-C1'-N1	6.71	113.57	108.20
1	AA	1373	G	N7-C8-N9	6.71	116.45	113.10
1	AA	1477	U	N3-C4-C5	-6.71	110.58	114.60
4	AD	15	G	C5-C6-N1	6.71	114.85	111.50
26	BB	177	G	C4-C5-C6	6.71	122.82	118.80
26	BB	463	G	N1-C2-N3	-6.71	119.88	123.90
26	BB	907	G	C5'-C4'-O4'	6.71	117.15	109.10
26	BB	989	G	O4'-C1'-C2'	-6.71	99.09	105.80
26	BB	1100	C	P-O3'-C3'	6.71	127.75	119.70
26	BB	1136	G	C2-N3-C4	6.71	115.25	111.90
26	BB	1479	G	C5-N7-C8	-6.71	100.95	104.30
1	AA	179	A	C8-N9-C4	-6.71	103.12	105.80
2	AB	69	C	C4'-C3'-C2'	-6.71	95.89	102.60
26	BB	1004	U	O4'-C4'-C3'	6.71	111.46	106.10
26	BB	1388	G	N3-C4-N9	6.71	130.02	126.00
26	BB	2224	G	N3-C2-N2	-6.71	115.21	119.90
1	AA	364	A	C2-N3-C4	-6.70	107.25	110.60
1	AA	1031	C	P-O3'-C3'	6.70	127.74	119.70
26	BB	324	A	N9-C4-C5	6.70	108.48	105.80
26	BB	355	U	N3-C4-C5	-6.70	110.58	114.60
26	BB	539	G	C8-N9-C4	-6.70	103.72	106.40
26	BB	695	G	C5-N7-C8	6.70	107.65	104.30
26	BB	1159	U	N3-C4-O4	-6.70	114.71	119.40
26	BB	1796	U	O4'-C1'-N1	6.70	113.56	108.20
26	BB	2174	C	N1-C1'-C2'	-6.70	104.63	112.00
26	BB	2217	G	C5'-C4'-O4'	6.70	117.14	109.10
26	BB	2322	A	C4-C5-N7	6.70	114.05	110.70
1	AA	242	G	C6-N1-C2	-6.70	121.08	125.10
1	AA	351	G	C5-N7-C8	-6.70	100.95	104.30
26	BB	195	A	N1-C6-N6	-6.70	114.58	118.60
26	BB	342	A	O4'-C1'-N9	6.70	113.56	108.20
26	BB	1323	C	C1'-O4'-C4'	-6.70	104.54	109.90
26	BB	1527	G	N3-C2-N2	-6.70	115.21	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1569	A	C2-N3-C4	-6.70	107.25	110.60
26	BB	1647	U	O4'-C1'-N1	-6.70	102.84	108.20
26	BB	2892	G	N9-C4-C5	6.70	108.08	105.40
27	BC	119	ASP	CB-CG-OD2	-6.70	112.27	118.30
1	AA	131	A	C4-C5-N7	-6.70	107.35	110.70
1	AA	208	U	N3-C2-O2	-6.70	117.51	122.20
1	AA	682	G	N3-C4-N9	6.70	130.02	126.00
1	AA	824	G	C6-C5-N7	-6.70	126.38	130.40
1	AA	932	C	C6-N1-C2	6.70	122.98	120.30
1	AA	1005	A	C8-N9-C4	-6.70	103.12	105.80
1	AA	1013	G	N3-C4-C5	-6.70	125.25	128.60
26	BB	608	A	C2-N3-C4	-6.70	107.25	110.60
26	BB	1238	G	C5-C6-O6	-6.70	124.58	128.60
26	BB	2410	G	O4'-C1'-N9	6.70	113.56	108.20
26	BB	2507	C	C5-C6-N1	6.70	124.35	121.00
1	AA	13	U	C3'-C2'-C1'	-6.70	96.14	101.50
1	AA	91	U	C5-C4-O4	6.70	129.92	125.90
1	AA	309	A	N7-C8-N9	6.70	117.15	113.80
1	AA	1042	A	O4'-C1'-N9	6.70	113.56	108.20
1	AA	1260	G	C4-C5-N7	6.70	113.48	110.80
1	AA	1535	C	O4'-C1'-N1	6.70	113.56	108.20
26	BB	528	A	C4-C5-N7	6.70	114.05	110.70
26	BB	797	G	C4-C5-N7	6.70	113.48	110.80
26	BB	1613	G	N3-C4-N9	6.70	130.02	126.00
39	BO	44	ARG	NE-CZ-NH1	-6.70	116.95	120.30
1	AA	509	A	C8-N9-C4	-6.70	103.12	105.80
26	BB	637	A	N1-C6-N6	6.70	122.62	118.60
26	BB	733	G	P-O3'-C3'	6.70	127.74	119.70
26	BB	1516	G	C6-N1-C2	6.70	129.12	125.10
26	BB	1744	A	C8-N9-C4	6.70	108.48	105.80
26	BB	2398	U	O4'-C1'-N1	6.70	113.56	108.20
26	BB	2868	A	O4'-C4'-C3'	6.70	111.46	106.10
1	AA	332	G	C2-N3-C4	-6.70	108.55	111.90
1	AA	449	G	O4'-C4'-C3'	6.70	111.46	106.10
1	AA	498	A	N1-C2-N3	6.70	132.65	129.30
1	AA	938	A	C2-N3-C4	6.70	113.95	110.60
1	AA	1167	A	N9-C1'-C2'	-6.70	104.64	112.00
1	AA	1327	C	C6-N1-C2	6.70	122.98	120.30
1	AA	1513	A	C5-C6-N6	6.70	129.06	123.70
26	BB	345	A	C2-N3-C4	6.70	113.95	110.60
26	BB	407	G	O4'-C1'-N9	6.70	113.56	108.20
26	BB	945	A	C8-N9-C4	6.70	108.48	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1335	C	C2-N3-C4	6.70	123.25	119.90
26	BB	1591	A	C5'-C4'-C3'	-6.70	105.29	116.00
26	BB	1782	U	N3-C2-O2	-6.70	117.51	122.20
26	BB	2285	C	C6-N1-C2	-6.70	117.62	120.30
58	B7	5	ALA	CB-CA-C	6.70	120.14	110.10
1	AA	53	A	O4'-C1'-N9	-6.69	102.84	108.20
26	BB	1989	G	C4-C5-C6	6.69	122.82	118.80
26	BB	2511	U	C5'-C4'-C3'	-6.69	105.29	116.00
26	BB	2811	G	C6-N1-C2	6.69	129.12	125.10
1	AA	1454	G	N1-C6-O6	6.69	123.92	119.90
1	AA	1487	G	N7-C8-N9	6.69	116.45	113.10
1	AA	1492	A	C8-N9-C4	-6.69	103.12	105.80
6	AF	17	TRP	CD2-CE2-CZ2	6.69	130.33	122.30
26	BB	131	A	C2-N3-C4	6.69	113.95	110.60
26	BB	686	U	O4'-C1'-N1	6.69	113.56	108.20
26	BB	740	C	C5'-C4'-O4'	6.69	117.13	109.10
26	BB	982	C	N1-C2-O2	6.69	122.92	118.90
26	BB	1076	C	C5-C6-N1	-6.69	117.65	121.00
26	BB	1476	U	C4'-C3'-C2'	-6.69	95.91	102.60
26	BB	2008	C	N3-C2-O2	-6.69	117.22	121.90
1	AA	148	G	C6-C5-N7	-6.69	126.39	130.40
1	AA	169	C	O4'-C1'-N1	6.69	113.55	108.20
1	AA	570	G	P-O3'-C3'	6.69	127.73	119.70
1	AA	1531	A	N1-C6-N6	6.69	122.61	118.60
26	BB	107	G	N7-C8-N9	-6.69	109.75	113.10
26	BB	322	A	OP2-P-O3'	6.69	119.92	105.20
26	BB	2723	C	C6-N1-C2	-6.69	117.62	120.30
26	BB	2811	G	C4-C5-N7	-6.69	108.12	110.80
26	BB	2866	U	O4'-C1'-N1	6.69	113.55	108.20
1	AA	809	G	C4-C5-C6	6.69	122.81	118.80
25	BA	69	G	N9-C4-C5	-6.69	102.72	105.40
26	BB	1453	A	P-O3'-C3'	6.69	127.73	119.70
26	BB	2402	U	C5-C6-N1	-6.69	119.36	122.70
1	AA	54	C	N3-C2-O2	6.69	126.58	121.90
1	AA	496	A	O4'-C1'-N9	6.69	113.55	108.20
1	AA	589	U	C5-C6-N1	-6.69	119.36	122.70
1	AA	749	A	C4'-C3'-C2'	-6.69	95.91	102.60
1	AA	756	C	C6-N1-C2	-6.69	117.62	120.30
1	AA	890	G	P-O3'-C3'	6.69	127.72	119.70
1	AA	1197	A	C4-C5-N7	6.69	114.04	110.70
26	BB	1	G	C5-C6-N1	6.69	114.84	111.50
26	BB	1073	A	C4-C5-C6	-6.69	113.66	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1253	A	O4'-C1'-N9	6.69	113.55	108.20
26	BB	1416	G	C5-C6-N1	6.69	114.84	111.50
26	BB	1486	U	C2-N3-C4	-6.69	122.99	127.00
26	BB	2484	G	C6-C5-N7	-6.69	126.39	130.40
26	BB	2486	C	C3'-C2'-C1'	6.69	106.85	101.50
1	AA	500	G	N1-C6-O6	6.69	123.91	119.90
1	AA	611	C	N1-C1'-C2'	-6.69	104.64	112.00
26	BB	1149	G	C4-C5-C6	6.69	122.81	118.80
26	BB	1439	A	C4-C5-N7	-6.69	107.36	110.70
26	BB	2269	G	C6-N1-C2	-6.69	121.09	125.10
29	BE	80	TRP	CB-CG-CD1	-6.69	118.31	127.00
1	AA	675	A	N1-C2-N3	-6.68	125.96	129.30
1	AA	915	A	C1'-O4'-C4'	-6.68	104.55	109.90
25	BA	61	G	C1'-O4'-C4'	6.68	115.25	109.90
26	BB	213	A	C5-N7-C8	-6.68	100.56	103.90
26	BB	1348	C	C5-C6-N1	6.68	124.34	121.00
26	BB	2318	G	N7-C8-N9	-6.68	109.76	113.10
26	BB	2439	A	O4'-C1'-C2'	-6.68	99.11	105.80
1	AA	506	G	N3-C4-C5	-6.68	125.26	128.60
1	AA	530	G	C5-C6-O6	6.68	132.61	128.60
1	AA	691	G	C4'-C3'-C2'	-6.68	95.92	102.60
1	AA	1057	G	C5'-C4'-O4'	6.68	117.12	109.10
1	AA	1101	A	N9-C4-C5	6.68	108.47	105.80
1	AA	1231	G	C2-N3-C4	6.68	115.24	111.90
1	AA	1458	G	N3-C4-C5	-6.68	125.26	128.60
1	AA	1478	U	O4'-C1'-N1	6.68	113.55	108.20
26	BB	51	G	C8-N9-C4	-6.68	103.73	106.40
26	BB	92	U	C4-C5-C6	6.68	123.71	119.70
26	BB	437	U	N1-C2-O2	6.68	127.48	122.80
26	BB	847	U	C4'-C3'-C2'	-6.68	95.92	102.60
26	BB	1270	C	N3-C2-O2	-6.68	117.22	121.90
26	BB	1389	G	O4'-C1'-N9	6.68	113.55	108.20
26	BB	1452	G	N3-C2-N2	6.68	124.58	119.90
26	BB	2368	C	C5-C6-N1	6.68	124.34	121.00
26	BB	2897	U	C4'-C3'-C2'	-6.68	95.92	102.60
1	AA	838	G	N7-C8-N9	6.68	116.44	113.10
1	AA	1211	U	C4'-C3'-C2'	6.68	109.28	102.60
3	AC	32	U	C5'-C4'-O4'	6.68	117.12	109.10
26	BB	579	G	C4-C5-N7	6.68	113.47	110.80
26	BB	2490	G	P-O5'-C5'	6.68	131.59	120.90
26	BB	2600	A	C5-C6-N6	6.68	129.04	123.70
1	AA	15	G	N9-C4-C5	-6.68	102.73	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	387	U	C3'-C2'-C1'	-6.68	96.16	101.50
1	AA	1026	G	N3-C2-N2	6.68	124.58	119.90
1	AA	1211	U	O4'-C1'-N1	6.68	113.54	108.20
1	AA	1463	U	C4-C5-C6	6.68	123.71	119.70
26	BB	368	A	N9-C4-C5	-6.68	103.13	105.80
26	BB	467	G	O4'-C1'-C2'	-6.68	99.12	105.80
26	BB	789	A	C8-N9-C4	6.68	108.47	105.80
26	BB	1053	C	C5'-C4'-O4'	6.68	117.12	109.10
26	BB	1480	C	O4'-C1'-N1	6.68	113.54	108.20
26	BB	1856	U	N3-C2-O2	-6.68	117.52	122.20
26	BB	1863	G	N3-C4-C5	-6.68	125.26	128.60
1	AA	733	G	O3'-P-O5'	-6.68	91.31	104.00
4	AD	28	U	N3-C2-O2	-6.68	117.53	122.20
4	AD	73	A	N3-C4-N9	6.68	132.74	127.40
26	BB	22	C	C6-N1-C2	6.68	122.97	120.30
26	BB	655	A	N1-C2-N3	-6.68	125.96	129.30
26	BB	1027	A	C4-C5-N7	-6.68	107.36	110.70
26	BB	1723	G	N7-C8-N9	6.68	116.44	113.10
26	BB	2746	U	O4'-C1'-N1	6.68	113.54	108.20
1	AA	417	G	N3-C2-N2	-6.68	115.23	119.90
2	AB	27	C	N3-C2-O2	-6.68	117.23	121.90
26	BB	274	C	C1'-O4'-C4'	-6.68	104.56	109.90
26	BB	353	C	C6-N1-C2	6.68	122.97	120.30
26	BB	604	G	N9-C4-C5	6.68	108.07	105.40
26	BB	1508	A	C3'-C2'-C1'	6.68	106.84	101.50
26	BB	1894	C	C5'-C4'-C3'	-6.68	105.32	116.00
26	BB	2357	G	C5-N7-C8	-6.68	100.96	104.30
26	BB	2435	A	N1-C2-N3	-6.68	125.96	129.30
1	AA	641	U	C5-C6-N1	6.67	126.04	122.70
1	AA	1468	A	C4'-C3'-C2'	-6.67	95.93	102.60
26	BB	804	A	C3'-C2'-C1'	6.67	106.84	101.50
26	BB	833	A	N9-C4-C5	6.67	108.47	105.80
26	BB	1099	G	N1-C6-O6	-6.67	115.89	119.90
26	BB	1205	A	N9-C1'-C2'	-6.67	104.66	112.00
26	BB	1389	G	N9-C1'-C2'	-6.67	104.66	112.00
26	BB	1677	A	N3-C4-N9	6.67	132.74	127.40
26	BB	1888	G	C5-C6-N1	6.67	114.84	111.50
26	BB	437	U	C5-C6-N1	-6.67	119.36	122.70
26	BB	684	G	N9-C4-C5	6.67	108.07	105.40
26	BB	1284	A	N1-C2-N3	6.67	132.64	129.30
26	BB	1807	G	N3-C4-C5	-6.67	125.26	128.60
26	BB	2627	G	N9-C4-C5	-6.67	102.73	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	122	G	P-O3'-C3'	6.67	127.71	119.70
1	AA	268	U	C2-N3-C4	-6.67	123.00	127.00
1	AA	358	U	C4-C5-C6	6.67	123.70	119.70
1	AA	371	A	C1'-O4'-C4'	-6.67	104.56	109.90
4	AD	64	G	O4'-C1'-N9	6.67	113.54	108.20
26	BB	165	A	C2-N3-C4	6.67	113.94	110.60
26	BB	612	G	N9-C4-C5	6.67	108.07	105.40
26	BB	1405	U	C3'-C2'-C1'	6.67	106.84	101.50
26	BB	1497	U	C5-C4-O4	6.67	129.90	125.90
26	BB	1540	G	N7-C8-N9	6.67	116.44	113.10
26	BB	2238	G	C6-N1-C2	-6.67	121.10	125.10
26	BB	2345	G	C2-N3-C4	6.67	115.23	111.90
26	BB	2367	G	C8-N9-C4	-6.67	103.73	106.40
33	BI	31	VAL	CG1-CB-CG2	-6.67	100.23	110.90
26	BB	15	G	C5-N7-C8	6.67	107.64	104.30
26	BB	552	U	C5-C6-N1	6.67	126.03	122.70
26	BB	734	A	N9-C4-C5	6.67	108.47	105.80
26	BB	941	A	C4'-C3'-C2'	-6.67	95.93	102.60
26	BB	1377	G	C2-N3-C4	6.67	115.23	111.90
26	BB	1998	A	C8-N9-C4	-6.67	103.13	105.80
26	BB	2455	G	N3-C4-C5	-6.67	125.27	128.60
28	BD	66	PHE	CG-CD1-CE1	-6.67	113.46	120.80
1	AA	35	G	C3'-C2'-C1'	6.67	106.83	101.50
1	AA	98	A	O4'-C1'-N9	6.67	113.54	108.20
1	AA	288	A	N9-C4-C5	6.67	108.47	105.80
1	AA	561	U	C6-N1-C2	-6.67	117.00	121.00
1	AA	675	A	O4'-C1'-N9	6.67	113.53	108.20
1	AA	1078	U	N1-C2-O2	6.67	127.47	122.80
1	AA	1142	G	C5-C6-N1	6.67	114.83	111.50
25	BA	2	G	C5'-C4'-O4'	6.67	117.10	109.10
26	BB	28	A	N9-C1'-C2'	-6.67	104.67	112.00
26	BB	295	G	C2-N3-C4	6.67	115.23	111.90
26	BB	984	A	O3'-P-O5'	-6.67	91.33	104.00
26	BB	1559	U	O4'-C1'-N1	6.67	113.53	108.20
26	BB	1957	C	N3-C2-O2	-6.67	117.23	121.90
48	BX	77	VAL	CA-CB-CG1	6.67	120.90	110.90
1	AA	700	G	O4'-C1'-N9	-6.67	102.87	108.20
1	AA	841	C	C2-N3-C4	6.67	123.23	119.90
1	AA	1178	G	C2-N3-C4	-6.67	108.57	111.90
1	AA	1265	C	O4'-C1'-N1	6.67	113.53	108.20
1	AA	1434	A	C4'-C3'-C2'	-6.67	95.93	102.60
11	AK	48	PHE	CB-CG-CD2	6.67	125.47	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	577	G	N7-C8-N9	6.67	116.43	113.10
26	BB	602	A	N9-C4-C5	6.67	108.47	105.80
26	BB	1849	G	C5-C6-O6	6.67	132.60	128.60
26	BB	2101	A	C3'-C2'-C1'	-6.67	96.17	101.50
26	BB	2742	G	C5-C6-N1	-6.67	108.17	111.50
26	BB	2879	A	N1-C6-N6	6.67	122.60	118.60
1	AA	295	C	C4-C5-C6	-6.67	114.07	117.40
1	AA	1264	U	C5'-C4'-O4'	6.67	117.10	109.10
1	AA	1492	A	N9-C4-C5	6.67	108.47	105.80
2	AB	43	G	N7-C8-N9	6.67	116.43	113.10
4	AD	9	G	C6-C5-N7	-6.67	126.40	130.40
26	BB	376	G	C8-N9-C4	-6.67	103.73	106.40
26	BB	1216	G	C4'-C3'-C2'	-6.67	95.94	102.60
26	BB	1295	C	N1-C2-O2	6.67	122.90	118.90
26	BB	1719	G	C5-C6-O6	-6.67	124.60	128.60
26	BB	2047	C	N3-C4-C5	6.67	124.57	121.90
26	BB	2484	G	C5-C6-N1	-6.67	108.17	111.50
1	AA	375	U	N1-C2-N3	6.66	118.90	114.90
1	AA	416	G	N3-C4-C5	-6.66	125.27	128.60
1	AA	770	C	C2-N3-C4	6.66	123.23	119.90
2	AB	67	G	C5-C6-N1	6.66	114.83	111.50
26	BB	882	G	C6-C5-N7	-6.66	126.40	130.40
26	BB	956	G	C3'-C2'-C1'	6.66	106.83	101.50
26	BB	1280	G	N3-C2-N2	6.66	124.56	119.90
26	BB	1729	U	N1-C2-N3	6.66	118.90	114.90
26	BB	2032	G	N9-C4-C5	6.66	108.07	105.40
26	BB	2133	G	C6-N1-C2	-6.66	121.10	125.10
26	BB	2293	G	N7-C8-N9	6.66	116.43	113.10
26	BB	2490	G	C8-N9-C4	-6.66	103.73	106.40
26	BB	2685	G	N7-C8-N9	6.66	116.43	113.10
1	AA	1144	G	C4-C5-N7	-6.66	108.14	110.80
1	AA	1279	G	N1-C6-O6	-6.66	115.90	119.90
25	BA	3	C	C6-N1-C2	-6.66	117.64	120.30
26	BB	1795	C	C2-N3-C4	6.66	123.23	119.90
1	AA	923	A	N1-C6-N6	6.66	122.60	118.60
1	AA	1244	G	O4'-C1'-N9	6.66	113.53	108.20
2	AB	53	G	C5-N7-C8	-6.66	100.97	104.30
25	BA	50	A	C4-C5-N7	-6.66	107.37	110.70
26	BB	1374	G	C5-C6-N1	6.66	114.83	111.50
26	BB	1402	U	C5-C6-N1	-6.66	119.37	122.70
26	BB	1418	G	O4'-C1'-N9	-6.66	102.87	108.20
26	BB	1493	C	O4'-C1'-N1	6.66	113.53	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1541	C	N3-C2-O2	-6.66	117.24	121.90
26	BB	2005	A	C8-N9-C4	-6.66	103.14	105.80
26	BB	2463	C	N1-C2-O2	6.66	122.90	118.90
26	BB	2785	C	C4-C5-C6	6.66	120.73	117.40
1	AA	1182	G	O4'-C1'-C2'	6.66	113.59	107.60
1	AA	1288	A	C8-N9-C4	-6.66	103.14	105.80
26	BB	263	G	C4-C5-C6	6.66	122.80	118.80
26	BB	388	G	N3-C4-C5	-6.66	125.27	128.60
26	BB	769	U	C5'-C4'-C3'	-6.66	105.34	116.00
26	BB	1055	G	C8-N9-C4	-6.66	103.74	106.40
26	BB	1568	G	C6-N1-C2	-6.66	121.11	125.10
26	BB	1578	U	O4'-C1'-N1	6.66	113.53	108.20
26	BB	1587	G	C4'-C3'-C2'	-6.66	95.94	102.60
26	BB	2142	A	C5-C6-N1	6.66	121.03	117.70
26	BB	2221	G	N3-C2-N2	6.66	124.56	119.90
26	BB	2225	A	C4'-C3'-C2'	-6.66	95.94	102.60
1	AA	949	A	N9-C4-C5	-6.66	103.14	105.80
1	AA	1224	U	C6-N1-C2	-6.66	117.01	121.00
25	BA	3	C	N3-C4-N4	6.66	122.66	118.00
26	BB	768	G	C3'-C2'-C1'	6.66	106.83	101.50
26	BB	784	G	C4-C5-N7	-6.66	108.14	110.80
26	BB	803	U	N3-C4-O4	6.66	124.06	119.40
26	BB	1371	G	C6-N1-C2	-6.66	121.11	125.10
26	BB	1381	G	O4'-C1'-N9	6.66	113.53	108.20
26	BB	1390	U	C2-N3-C4	-6.66	123.01	127.00
26	BB	2315	G	C2-N3-C4	6.66	115.23	111.90
26	BB	2721	A	O4'-C1'-N9	6.66	113.53	108.20
26	BB	2842	G	C2-N3-C4	6.66	115.23	111.90
1	AA	520	A	C5'-C4'-C3'	-6.66	105.35	116.00
1	AA	594	U	N1-C2-O2	-6.66	118.14	122.80
26	BB	144	A	N1-C6-N6	6.66	122.59	118.60
26	BB	231	A	C2'-C3'-O3'	6.66	124.35	113.70
26	BB	979	A	N9-C4-C5	-6.66	103.14	105.80
26	BB	1450	G	N1-C6-O6	-6.66	115.91	119.90
26	BB	1592	C	O4'-C1'-N1	6.66	113.53	108.20
26	BB	1780	A	N9-C4-C5	-6.66	103.14	105.80
26	BB	1991	U	C2-N3-C4	-6.66	123.01	127.00
26	BB	2097	A	N1-C2-N3	6.66	132.63	129.30
26	BB	2134	A	C5-C6-N6	-6.66	118.38	123.70
26	BB	2266	A	C4'-C3'-C2'	-6.66	95.94	102.60
26	BB	2476	A	C5-N7-C8	6.66	107.23	103.90
26	BB	2636	C	C5-C4-N4	-6.66	115.54	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	9	G	N3-C4-C5	-6.65	125.27	128.60
26	BB	1063	G	N9-C4-C5	-6.65	102.74	105.40
26	BB	1150	C	N1-C1'-C2'	-6.65	104.68	112.00
26	BB	1487	U	O4'-C1'-N1	6.65	113.52	108.20
1	AA	458	U	C3'-C2'-C1'	-6.65	96.18	101.50
1	AA	562	U	C5-C4-O4	6.65	129.89	125.90
1	AA	814	A	C4-C5-C6	-6.65	113.67	117.00
1	AA	897	C	C4-C5-C6	-6.65	114.07	117.40
1	AA	972	C	C2-N3-C4	6.65	123.23	119.90
25	BA	114	C	C2-N1-C1'	6.65	126.12	118.80
26	BB	595	C	C3'-C2'-C1'	6.65	106.82	101.50
26	BB	826	U	N3-C4-O4	6.65	124.06	119.40
1	AA	216	U	C2-N3-C4	-6.65	123.01	127.00
1	AA	553	A	C8-N9-C4	-6.65	103.14	105.80
1	AA	887	G	C5'-C4'-C3'	-6.65	105.36	116.00
1	AA	1119	C	C4-C5-C6	-6.65	114.07	117.40
1	AA	1263	C	O4'-C1'-N1	6.65	113.52	108.20
1	AA	1396	A	O4'-C1'-N9	6.65	113.52	108.20
26	BB	314	C	C3'-C2'-C1'	-6.65	96.18	101.50
26	BB	412	A	N9-C4-C5	-6.65	103.14	105.80
26	BB	1137	G	C5-N7-C8	-6.65	100.97	104.30
26	BB	1195	G	C2-N3-C4	6.65	115.22	111.90
26	BB	1436	G	C5-C6-O6	-6.65	124.61	128.60
26	BB	2615	U	C5-C4-O4	-6.65	121.91	125.90
26	BB	2689	U	C2-N3-C4	-6.65	123.01	127.00
26	BB	2708	G	N1-C2-N3	6.65	127.89	123.90
44	BT	34	GLU	OE1-CD-OE2	6.65	131.28	123.30
1	AA	43	C	O4'-C1'-N1	6.65	113.52	108.20
1	AA	1068	G	N9-C4-C5	6.65	108.06	105.40
1	AA	1192	C	C6-N1-C1'	6.65	128.78	120.80
1	AA	1421	G	C2-N3-C4	6.65	115.22	111.90
26	BB	15	G	C3'-C2'-C1'	6.65	106.82	101.50
1	AA	102	G	N3-C4-N9	6.65	129.99	126.00
1	AA	1281	C	N3-C4-C5	-6.65	119.24	121.90
7	AG	69	ARG	NE-CZ-NH1	6.65	123.62	120.30
26	BB	671	C	C5-C4-N4	-6.65	115.55	120.20
26	BB	684	G	C3'-C2'-C1'	6.65	106.82	101.50
26	BB	711	G	C5-C6-N1	6.65	114.82	111.50
26	BB	1075	C	C2-N3-C4	6.65	123.22	119.90
26	BB	1090	A	N1-C2-N3	-6.65	125.98	129.30
26	BB	1701	A	O4'-C1'-N9	-6.65	102.88	108.20
26	BB	1738	G	C6-N1-C2	6.65	129.09	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1807	G	C2'-C3'-O3'	6.65	124.33	113.70
1	AA	191	G	N7-C8-N9	6.65	116.42	113.10
1	AA	224	U	N1-C2-N3	6.65	118.89	114.90
1	AA	817	C	N3-C4-N4	-6.65	113.35	118.00
1	AA	1511	G	C3'-C2'-C1'	6.65	106.82	101.50
26	BB	536	G	N9-C4-C5	6.65	108.06	105.40
1	AA	5	U	C2-N3-C4	-6.64	123.01	127.00
1	AA	572	A	O4'-C1'-N9	-6.64	102.88	108.20
1	AA	719	C	C4-C5-C6	6.64	120.72	117.40
1	AA	729	A	C5'-C4'-O4'	6.64	117.07	109.10
1	AA	1365	G	C5-C6-N1	6.64	114.82	111.50
4	AD	14	A	C5'-C4'-O4'	6.64	117.07	109.10
26	BB	70	G	C4'-C3'-C2'	-6.64	95.95	102.60
26	BB	277	G	C4-C5-N7	-6.64	108.14	110.80
26	BB	435	C	C2-N3-C4	-6.64	116.58	119.90
26	BB	838	C	C6-N1-C2	-6.64	117.64	120.30
26	BB	1432	G	C4-C5-N7	6.64	113.46	110.80
26	BB	1975	G	N3-C4-C5	-6.64	125.28	128.60
26	BB	2212	A	C5-C6-N1	6.64	121.02	117.70
26	BB	2249	U	C3'-C2'-C1'	6.64	106.81	101.50
26	BB	2727	A	C8-N9-C4	-6.64	103.14	105.80
1	AA	44	A	C3'-C2'-C1'	-6.64	96.19	101.50
1	AA	264	C	O5'-C5'-C4'	6.64	124.32	111.70
1	AA	1152	A	P-O3'-C3'	6.64	127.67	119.70
1	AA	1505	G	C4-C5-N7	-6.64	108.14	110.80
1	AA	1523	G	C2-N3-C4	6.64	115.22	111.90
1	AA	1530	G	C4'-C3'-C2'	-6.64	95.96	102.60
4	AD	14	A	N3-C4-C5	-6.64	122.15	126.80
26	BB	664	G	N1-C2-N3	-6.64	119.92	123.90
26	BB	788	A	C2-N3-C4	-6.64	107.28	110.60
26	BB	895	U	O5'-C5'-C4'	-6.64	99.08	111.70
26	BB	1161	C	N3-C2-O2	-6.64	117.25	121.90
26	BB	1163	G	N1-C6-O6	6.64	123.89	119.90
26	BB	1199	U	C5'-C4'-O4'	6.64	117.07	109.10
26	BB	1955	U	C1'-O4'-C4'	-6.64	104.59	109.90
26	BB	2421	G	O4'-C1'-N9	6.64	113.51	108.20
26	BB	2469	A	C8-N9-C4	-6.64	103.14	105.80
26	BB	2651	C	N1-C2-O2	6.64	122.89	118.90
26	BB	2775	G	N9-C4-C5	6.64	108.06	105.40
26	BB	2864	G	N7-C8-N9	-6.64	109.78	113.10
26	BB	306	U	C4-C5-C6	6.64	123.69	119.70
26	BB	905	A	C5-C6-N6	6.64	129.01	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	910	A	C4'-C3'-C2'	-6.64	95.96	102.60
26	BB	1778	U	N1-C1'-C2'	-6.64	104.69	112.00
26	BB	1957	C	N1-C2-O2	6.64	122.89	118.90
26	BB	2665	A	C4-C5-C6	6.64	120.32	117.00
1	AA	635	A	C4-C5-C6	-6.64	113.68	117.00
1	AA	814	A	C5'-C4'-C3'	6.64	126.62	116.00
1	AA	822	U	O4'-C1'-N1	6.64	113.51	108.20
1	AA	848	C	N1-C2-O2	6.64	122.88	118.90
25	BA	44	G	C8-N9-C4	-6.64	103.74	106.40
25	BA	109	A	N9-C1'-C2'	-6.64	104.70	112.00
26	BB	315	G	C8-N9-C4	-6.64	103.74	106.40
26	BB	347	A	C4-C5-C6	-6.64	113.68	117.00
26	BB	642	U	O4'-C1'-N1	6.64	113.51	108.20
26	BB	1141	U	C5-C4-O4	6.64	129.88	125.90
26	BB	1194	A	C4-C5-C6	-6.64	113.68	117.00
26	BB	1415	U	O4'-C1'-N1	6.64	113.51	108.20
26	BB	1558	C	N3-C4-N4	6.64	122.65	118.00
26	BB	1940	U	O4'-C1'-N1	6.64	113.51	108.20
26	BB	2540	C	C2-N3-C4	6.64	123.22	119.90
26	BB	2774	C	C6-N1-C2	6.64	122.96	120.30
39	BO	50	ARG	NE-CZ-NH1	-6.64	116.98	120.30
46	BV	55	VAL	CG1-CB-CG2	-6.64	100.28	110.90
1	AA	805	C	N3-C4-C5	-6.64	119.25	121.90
1	AA	1099	G	N1-C6-O6	6.64	123.88	119.90
26	BB	1567	G	C4'-C3'-C2'	-6.64	95.96	102.60
26	BB	2086	U	N1-C2-O2	-6.64	118.15	122.80
1	AA	58	C	C6-N1-C2	-6.64	117.64	120.30
1	AA	237	G	C5-C6-N1	6.64	114.82	111.50
1	AA	700	G	C8-N9-C4	-6.64	103.75	106.40
1	AA	1353	G	C1'-O4'-C4'	6.64	115.21	109.90
26	BB	138	U	P-O3'-C3'	6.64	127.66	119.70
26	BB	1154	G	C4-C5-C6	6.64	122.78	118.80
26	BB	2145	C	N3-C2-O2	-6.64	117.25	121.90
26	BB	2312	U	P-O5'-C5'	6.64	131.52	120.90
26	BB	2858	C	C1'-O4'-C4'	-6.64	104.59	109.90
26	BB	2903	U	C5-C4-O4	-6.64	121.92	125.90
1	AA	23	C	C5-C4-N4	-6.63	115.56	120.20
1	AA	63	C	N3-C2-O2	-6.63	117.26	121.90
1	AA	86	G	N3-C4-N9	-6.63	122.02	126.00
1	AA	127	G	N1-C6-O6	-6.63	115.92	119.90
1	AA	631	C	C4-C5-C6	6.63	120.72	117.40
1	AA	896	C	N1-C1'-C2'	-6.63	104.70	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	93	G	C4-C5-C6	6.63	122.78	118.80
26	BB	107	G	C3'-C2'-C1'	-6.63	96.19	101.50
26	BB	322	A	C5-C6-N6	6.63	129.01	123.70
26	BB	408	G	N9-C4-C5	-6.63	102.75	105.40
26	BB	1219	U	C2-N3-C4	-6.63	123.02	127.00
26	BB	1574	C	C4-C5-C6	6.63	120.72	117.40
26	BB	1819	A	C5-N7-C8	-6.63	100.58	103.90
26	BB	2363	G	N3-C4-C5	-6.63	125.28	128.60
26	BB	2553	G	O4'-C1'-N9	6.63	113.51	108.20
26	BB	2852	G	C4-C5-C6	6.63	122.78	118.80
1	AA	152	A	C4-C5-N7	-6.63	107.38	110.70
2	AB	13	C	N3-C4-C5	6.63	124.55	121.90
26	BB	391	A	C5-C6-N1	6.63	121.02	117.70
26	BB	1147	A	C6-N1-C2	6.63	122.58	118.60
26	BB	1364	G	N1-C2-N3	6.63	127.88	123.90
26	BB	2345	G	C5'-C4'-C3'	-6.63	105.39	116.00
1	AA	360	G	O4'-C4'-C3'	6.63	111.41	106.10
3	AC	46	C	C6-N1-C2	-6.63	117.65	120.30
26	BB	31	C	C6-N1-C1'	6.63	128.76	120.80
26	BB	68	G	C6-N1-C2	-6.63	121.12	125.10
26	BB	426	C	O4'-C1'-N1	6.63	113.51	108.20
26	BB	1865	U	N1-C2-N3	6.63	118.88	114.90
26	BB	1988	G	C4'-C3'-C2'	-6.63	95.97	102.60
26	BB	2880	C	C5'-C4'-O4'	6.63	117.06	109.10
1	AA	558	G	C5'-C4'-O4'	6.63	117.06	109.10
4	AD	47	A	C2-N3-C4	6.63	113.92	110.60
25	BA	115	A	N1-C2-N3	-6.63	125.98	129.30
26	BB	2349	G	N7-C8-N9	-6.63	109.78	113.10
1	AA	88	U	C2-N3-C4	-6.63	123.02	127.00
1	AA	522	C	O4'-C1'-N1	6.63	113.50	108.20
1	AA	683	G	C6-N1-C2	-6.63	121.12	125.10
1	AA	1298	U	N1-C2-N3	6.63	118.88	114.90
3	AC	53	G	C5-C6-N1	6.63	114.81	111.50
26	BB	501	A	C5-C6-N1	6.63	121.02	117.70
26	BB	1318	U	N1-C2-O2	-6.63	118.16	122.80
26	BB	1757	A	O3'-P-O5'	6.63	116.59	104.00
26	BB	2013	A	C5'-C4'-O4'	6.63	117.05	109.10
26	BB	2264	C	C4-C5-C6	6.63	120.72	117.40
26	BB	2293	G	N1-C2-N3	6.63	127.88	123.90
26	BB	2341	G	C5'-C4'-C3'	-6.63	105.39	116.00
26	BB	2364	C	N3-C4-C5	-6.63	119.25	121.90
26	BB	2626	C	N3-C4-C5	-6.63	119.25	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2710	C	N1-C2-N3	-6.63	114.56	119.20
39	BO	51	ARG	NE-CZ-NH2	6.63	123.61	120.30
1	AA	320	A	C4'-C3'-C2'	-6.63	95.97	102.60
1	AA	539	A	N9-C4-C5	6.63	108.45	105.80
1	AA	619	U	C1'-O4'-C4'	-6.63	104.60	109.90
1	AA	943	U	C4'-C3'-C2'	-6.63	95.97	102.60
1	AA	1493	A	O4'-C1'-N9	-6.63	102.90	108.20
26	BB	340	A	C4-C5-N7	6.63	114.01	110.70
26	BB	515	A	C6-N1-C2	6.63	122.58	118.60
26	BB	2158	A	C4-C5-C6	-6.63	113.69	117.00
26	BB	2745	C	C1'-O4'-C4'	6.63	115.20	109.90
1	AA	141	G	C8-N9-C4	-6.62	103.75	106.40
1	AA	661	G	N9-C1'-C2'	-6.62	104.71	112.00
26	BB	2561	U	C4-C5-C6	6.62	123.67	119.70
26	BB	2778	A	P-O3'-C3'	6.62	127.65	119.70
1	AA	327	A	N7-C8-N9	6.62	117.11	113.80
1	AA	644	U	N1-C2-N3	6.62	118.87	114.90
1	AA	954	G	C5'-C4'-O4'	6.62	117.05	109.10
1	AA	1432	G	N1-C2-N3	-6.62	119.93	123.90
24	AX	2	VAL	CA-CB-CG2	6.62	120.84	110.90
25	BA	101	A	N7-C8-N9	6.62	117.11	113.80
26	BB	220	G	C5-N7-C8	6.62	107.61	104.30
26	BB	980	A	C5-N7-C8	6.62	107.21	103.90
26	BB	1046	A	C5'-C4'-O4'	6.62	117.05	109.10
26	BB	1351	C	C4'-C3'-C2'	-6.62	95.98	102.60
26	BB	1938	A	C8-N9-C4	-6.62	103.15	105.80
1	AA	117	G	C6-C5-N7	-6.62	126.43	130.40
1	AA	442	G	C8-N9-C4	-6.62	103.75	106.40
1	AA	506	G	C4'-C3'-C2'	-6.62	95.98	102.60
1	AA	830	G	C5-N7-C8	-6.62	100.99	104.30
1	AA	985	C	O4'-C1'-N1	6.62	113.50	108.20
1	AA	1094	G	C5-C6-N1	6.62	114.81	111.50
1	AA	1264	U	N1-C2-N3	6.62	118.87	114.90
1	AA	1521	C	C5-C6-N1	6.62	124.31	121.00
1	AA	1538	C	C3'-C2'-C1'	6.62	106.80	101.50
14	AN	111	ASP	CB-CG-OD2	-6.62	112.34	118.30
25	BA	34	A	C4-C5-C6	6.62	120.31	117.00
26	BB	879	G	N1-C6-O6	6.62	123.87	119.90
26	BB	939	G	N9-C1'-C2'	-6.62	104.72	112.00
26	BB	995	C	P-O3'-C3'	6.62	127.65	119.70
26	BB	1064	C	O5'-P-OP2	-6.62	99.74	105.70
26	BB	1068	G	C8-N9-C4	-6.62	103.75	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1075	C	O4'-C1'-N1	6.62	113.50	108.20
26	BB	1335	C	O4'-C1'-N1	6.62	113.50	108.20
26	BB	2371	G	C5-C6-O6	6.62	132.57	128.60
26	BB	2627	G	C2-N3-C4	-6.62	108.59	111.90
1	AA	1159	U	C2-N1-C1'	-6.62	109.76	117.70
26	BB	1157	G	C5-N7-C8	-6.62	100.99	104.30
26	BB	1617	C	C5-C6-N1	-6.62	117.69	121.00
26	BB	157	C	C3'-C2'-C1'	6.62	106.80	101.50
26	BB	493	G	N7-C8-N9	6.62	116.41	113.10
26	BB	663	G	N9-C4-C5	-6.62	102.75	105.40
26	BB	884	U	N1-C2-O2	6.62	127.43	122.80
26	BB	969	G	C8-N9-C1'	6.62	135.60	127.00
26	BB	1245	G	N1-C6-O6	6.62	123.87	119.90
26	BB	2112	G	C2-N3-C4	6.62	115.21	111.90
1	AA	903	G	C5-C6-O6	-6.62	124.63	128.60
1	AA	1022	A	N1-C6-N6	-6.62	114.63	118.60
17	AQ	75	LYS	CB-CA-C	6.62	123.63	110.40
26	BB	1030	C	C6-N1-C2	-6.62	117.65	120.30
26	BB	1821	A	C2-N3-C4	6.62	113.91	110.60
26	BB	2348	U	C2-N3-C4	-6.62	123.03	127.00
1	AA	111	G	C5-C6-N1	6.62	114.81	111.50
1	AA	742	G	C8-N9-C4	-6.62	103.75	106.40
1	AA	904	U	C4-C5-C6	6.62	123.67	119.70
1	AA	1379	G	N3-C4-C5	6.62	131.91	128.60
25	BA	55	U	N1-C2-O2	-6.62	118.17	122.80
26	BB	57	C	N3-C4-C5	-6.62	119.25	121.90
26	BB	367	G	C5'-C4'-O4'	6.62	117.04	109.10
26	BB	735	A	C8-N9-C4	-6.62	103.15	105.80
26	BB	1204	A	O4'-C1'-N9	6.62	113.49	108.20
26	BB	1377	G	C3'-C2'-C1'	-6.62	96.21	101.50
26	BB	1937	A	C3'-C2'-C1'	-6.62	96.21	101.50
26	BB	1992	G	P-O3'-C3'	6.62	127.64	119.70
26	BB	2644	G	C5-N7-C8	-6.62	100.99	104.30
26	BB	2687	U	N1-C2-O2	-6.62	118.17	122.80
26	BB	2861	U	O4'-C1'-N1	6.62	113.49	108.20
26	BB	2877	G	N3-C2-N2	-6.62	115.27	119.90
1	AA	428	G	C5-N7-C8	-6.61	100.99	104.30
1	AA	1396	A	C4-C5-C6	-6.61	113.69	117.00
1	AA	1463	U	C5-C4-O4	-6.61	121.93	125.90
2	AB	50	G	C4-C5-N7	-6.61	108.16	110.80
26	BB	601	C	C5-C6-N1	6.61	124.31	121.00
26	BB	1387	A	P-O3'-C3'	6.61	127.64	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1560	G	N3-C4-N9	6.61	129.97	126.00
26	BB	1753	G	C4-C5-C6	6.61	122.77	118.80
26	BB	2322	A	C6-C5-N7	-6.61	127.67	132.30
1	AA	353	A	C5-C6-N6	6.61	128.99	123.70
26	BB	489	G	C5-N7-C8	-6.61	100.99	104.30
26	BB	1220	G	N7-C8-N9	6.61	116.41	113.10
26	BB	1504	A	C2-N3-C4	6.61	113.91	110.60
1	AA	786	G	C8-N9-C4	-6.61	103.76	106.40
1	AA	1367	C	C4-C5-C6	6.61	120.70	117.40
16	AP	57	ASP	CB-CG-OD2	-6.61	112.35	118.30
26	BB	304	U	C5-C6-N1	-6.61	119.39	122.70
26	BB	1020	A	N7-C8-N9	6.61	117.11	113.80
26	BB	1444	G	C6-C5-N7	-6.61	126.43	130.40
26	BB	1514	G	C8-N9-C4	-6.61	103.76	106.40
26	BB	1696	G	N9-C1'-C2'	-6.61	104.73	112.00
26	BB	2714	G	O4'-C1'-N9	6.61	113.49	108.20
26	BB	2782	G	C6-C5-N7	6.61	134.37	130.40
31	BG	29	ARG	NE-CZ-NH1	-6.61	117.00	120.30
1	AA	450	G	C2-N3-C4	6.61	115.20	111.90
1	AA	1252	A	N1-C2-N3	6.61	132.60	129.30
26	BB	1015	U	C4-C5-C6	-6.61	115.73	119.70
26	BB	1058	U	N3-C2-O2	-6.61	117.57	122.20
26	BB	1388	G	N3-C2-N2	6.61	124.53	119.90
1	AA	707	U	C2-N3-C4	-6.61	123.03	127.00
1	AA	1216	A	C2-N3-C4	-6.61	107.30	110.60
26	BB	14	A	C8-N9-C4	6.61	108.44	105.80
26	BB	285	G	C5'-C4'-C3'	-6.61	105.43	116.00
26	BB	1453	A	N3-C4-C5	-6.61	122.17	126.80
26	BB	2436	G	C5'-C4'-C3'	-6.61	105.43	116.00
26	BB	2513	A	C4-C5-C6	6.61	120.30	117.00
26	BB	2904	U	N3-C2-O2	-6.61	117.58	122.20
1	AA	406	G	C6-C5-N7	-6.61	126.44	130.40
1	AA	594	U	C2-N3-C4	-6.61	123.04	127.00
1	AA	624	C	O4'-C1'-N1	6.61	113.48	108.20
1	AA	1429	A	C5-C6-N6	-6.61	118.42	123.70
3	AC	39	U	P-O3'-C3'	6.61	127.63	119.70
26	BB	355	U	C6-N1-C2	-6.61	117.04	121.00
26	BB	1188	U	C4'-C3'-C2'	-6.61	95.99	102.60
26	BB	1238	G	C5-N7-C8	-6.61	101.00	104.30
26	BB	1482	G	N3-C2-N2	-6.61	115.28	119.90
26	BB	1779	U	C4-C5-C6	6.61	123.66	119.70
26	BB	2471	A	C3'-C2'-C1'	-6.61	96.22	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	381	C	C4-C5-C6	6.60	120.70	117.40
2	AB	63	C	N1-C1'-C2'	-6.60	104.74	112.00
4	AD	20	G	N3-C2-N2	6.60	124.52	119.90
9	AI	78	PHE	CB-CG-CD1	6.60	125.42	120.80
26	BB	1154	G	N3-C4-N9	6.60	129.96	126.00
26	BB	1363	C	C4-C5-C6	-6.60	114.10	117.40
1	AA	29	U	O5'-C5'-C4'	6.60	124.25	111.70
1	AA	357	G	O4'-C1'-N9	6.60	113.48	108.20
1	AA	588	G	C3'-C2'-C1'	6.60	106.78	101.50
1	AA	1292	G	N3-C4-N9	-6.60	122.04	126.00
26	BB	221	A	C6-N1-C2	-6.60	114.64	118.60
26	BB	881	G	C5-N7-C8	-6.60	101.00	104.30
26	BB	1299	G	C2-N3-C4	6.60	115.20	111.90
26	BB	2227	A	C4-C5-C6	-6.60	113.70	117.00
26	BB	2265	U	C5'-C4'-C3'	-6.60	105.44	116.00
26	BB	2481	G	C5-C6-O6	-6.60	124.64	128.60
1	AA	9	G	O4'-C1'-N9	6.60	113.48	108.20
1	AA	427	U	N1-C2-N3	6.60	118.86	114.90
1	AA	1153	G	C4-C5-C6	6.60	122.76	118.80
26	BB	301	G	C3'-C2'-C1'	6.60	106.78	101.50
26	BB	843	G	C4'-C3'-C2'	6.60	109.20	102.60
26	BB	1238	G	O4'-C1'-N9	6.60	113.48	108.20
26	BB	1511	G	C4-C5-N7	6.60	113.44	110.80
26	BB	1695	G	N1-C6-O6	-6.60	115.94	119.90
26	BB	2271	G	N1-C6-O6	-6.60	115.94	119.90
1	AA	891	U	C5'-C4'-O4'	6.60	117.02	109.10
1	AA	1312	G	O4'-C1'-N9	6.60	113.48	108.20
2	AB	1	A	P-O3'-C3'	6.60	127.62	119.70
2	AB	34	C	C2-N1-C1'	6.60	126.06	118.80
21	AU	50	TYR	CB-CG-CD2	-6.60	117.04	121.00
25	BA	41	G	O4'-C1'-N9	6.60	113.48	108.20
26	BB	858	G	N7-C8-N9	6.60	116.40	113.10
26	BB	1247	A	C8-N9-C4	-6.60	103.16	105.80
26	BB	1344	U	C2-N3-C4	-6.60	123.04	127.00
26	BB	1701	A	N1-C6-N6	-6.60	114.64	118.60
45	BU	88	ARG	NH1-CZ-NH2	-6.60	112.14	119.40
1	AA	85	U	O4'-C1'-N1	6.60	113.48	108.20
1	AA	237	G	N1-C6-O6	-6.60	115.94	119.90
1	AA	520	A	C4-C5-N7	-6.60	107.40	110.70
1	AA	957	U	C3'-C2'-C1'	6.60	106.78	101.50
1	AA	1229	A	N1-C6-N6	6.60	122.56	118.60
1	AA	1288	A	N7-C8-N9	6.60	117.10	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AC	22	G	N3-C4-C5	-6.60	125.30	128.60
26	BB	388	G	C2-N3-C4	6.60	115.20	111.90
26	BB	851	C	C5-C6-N1	6.60	124.30	121.00
26	BB	1323	C	C5-C6-N1	-6.60	117.70	121.00
26	BB	1371	G	N3-C4-N9	-6.60	122.04	126.00
26	BB	1388	G	C2-N3-C4	6.60	115.20	111.90
26	BB	1689	A	C6-C5-N7	-6.60	127.68	132.30
26	BB	2478	A	C5-C6-N6	-6.60	118.42	123.70
26	BB	2513	A	C5-C6-N1	-6.60	114.40	117.70
57	B6	39	ARG	NE-CZ-NH1	-6.60	117.00	120.30
1	AA	102	G	O4'-C4'-C3'	6.60	111.38	106.10
1	AA	344	A	N3-C4-N9	6.60	132.68	127.40
1	AA	1047	G	N7-C8-N9	6.60	116.40	113.10
26	BB	105	C	C6-N1-C2	-6.60	117.66	120.30
26	BB	769	U	C5-C4-O4	6.60	129.86	125.90
26	BB	1367	A	C1'-O4'-C4'	6.60	115.18	109.90
1	AA	22	G	C2-N3-C4	6.59	115.20	111.90
1	AA	60	A	N1-C6-N6	-6.59	114.64	118.60
1	AA	407	U	C4'-C3'-C2'	-6.59	96.00	102.60
26	BB	259	G	C5-C6-O6	6.59	132.56	128.60
26	BB	499	U	N3-C2-O2	-6.59	117.58	122.20
26	BB	1059	G	N3-C4-C5	-6.59	125.30	128.60
26	BB	1449	G	N3-C2-N2	-6.59	115.28	119.90
26	BB	2500	U	N3-C4-O4	-6.59	114.78	119.40
26	BB	2664	G	C3'-C2'-C1'	6.59	106.78	101.50
1	AA	216	U	N1-C2-N3	6.59	118.86	114.90
1	AA	710	G	O4'-C1'-N9	6.59	113.47	108.20
1	AA	1217	C	C5-C4-N4	-6.59	115.58	120.20
26	BB	2253	G	N3-C2-N2	-6.59	115.28	119.90
26	BB	2255	G	C4-C5-N7	-6.59	108.16	110.80
29	BE	82	PHE	CB-CG-CD1	-6.59	116.19	120.80
1	AA	164	G	N1-C2-N2	6.59	122.13	116.20
1	AA	388	G	C4-C5-C6	6.59	122.75	118.80
1	AA	423	G	C4'-C3'-C2'	-6.59	96.01	102.60
1	AA	554	A	C4-C5-N7	-6.59	107.40	110.70
1	AA	668	G	C1'-O4'-C4'	-6.59	104.63	109.90
1	AA	729	A	C1'-O4'-C4'	6.59	115.17	109.90
1	AA	808	C	O4'-C1'-N1	6.59	113.47	108.20
1	AA	1065	U	N1-C2-O2	6.59	127.41	122.80
26	BB	524	G	N9-C1'-C2'	-6.59	104.75	112.00
26	BB	567	U	C5-C4-O4	-6.59	121.94	125.90
26	BB	1090	A	C5-C6-N6	-6.59	118.43	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1982	U	N3-C4-O4	-6.59	114.79	119.40
26	BB	2783	U	O4'-C1'-N1	6.59	113.47	108.20
26	BB	2873	A	C4-C5-C6	6.59	120.30	117.00
1	AA	507	C	C4'-C3'-C2'	-6.59	96.01	102.60
1	AA	579	A	C5-C6-N1	-6.59	114.41	117.70
1	AA	751	U	C5-C6-N1	-6.59	119.41	122.70
1	AA	928	G	C8-N9-C1'	6.59	135.57	127.00
1	AA	1157	A	N9-C4-C5	6.59	108.44	105.80
1	AA	1226	C	N3-C2-O2	-6.59	117.29	121.90
26	BB	11	C	N3-C4-C5	6.59	124.54	121.90
26	BB	337	C	N1-C1'-C2'	-6.59	104.75	112.00
26	BB	380	G	C5-N7-C8	-6.59	101.00	104.30
26	BB	1681	G	C6-C5-N7	6.59	134.35	130.40
26	BB	2015	A	O4'-C1'-N9	6.59	113.47	108.20
26	BB	2031	A	N1-C2-N3	-6.59	126.00	129.30
26	BB	2125	G	O4'-C1'-N9	6.59	113.47	108.20
26	BB	2211	A	C5-C6-N1	-6.59	114.41	117.70
43	BS	101	ASP	CB-CG-OD1	-6.59	112.37	118.30
1	AA	1254	A	C5'-C4'-C3'	6.59	126.54	116.00
1	AA	1410	A	C5-C6-N1	6.59	120.99	117.70
1	AA	1458	G	C5-C6-N1	6.59	114.79	111.50
26	BB	876	C	C3'-C2'-C1'	6.59	106.77	101.50
26	BB	935	C	N1-C1'-C2'	-6.59	104.75	112.00
26	BB	1380	G	N3-C4-C5	-6.59	125.31	128.60
26	BB	2495	G	C4'-C3'-C2'	-6.59	96.01	102.60
1	AA	386	C	N3-C4-C5	-6.59	119.27	121.90
1	AA	1169	A	N1-C2-N3	-6.59	126.01	129.30
1	AA	1513	A	P-O3'-C3'	6.59	127.60	119.70
1	AA	1527	U	O4'-C1'-N1	6.59	113.47	108.20
4	AD	47	A	N1-C6-N6	-6.59	114.65	118.60
9	AI	44	ARG	NE-CZ-NH1	6.59	123.59	120.30
26	BB	307	G	N1-C2-N3	6.59	127.85	123.90
26	BB	556	A	N9-C4-C5	6.59	108.44	105.80
26	BB	597	G	C5-C6-N1	6.59	114.79	111.50
26	BB	870	U	N1-C2-O2	6.59	127.41	122.80
26	BB	911	A	C5-C6-N1	6.59	120.99	117.70
26	BB	916	G	C8-N9-C4	-6.59	103.77	106.40
26	BB	1276	A	C5'-C4'-O4'	6.59	117.00	109.10
26	BB	2328	A	C5-N7-C8	-6.59	100.61	103.90
26	BB	2463	C	C5-C6-N1	-6.59	117.71	121.00
26	BB	2597	G	N3-C2-N2	-6.59	115.29	119.90
26	BB	2617	U	C5-C4-O4	6.59	129.85	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2883	A	C1'-O4'-C4'	6.59	115.17	109.90
2	AB	25	C	C5-C4-N4	6.58	124.81	120.20
26	BB	314	C	C4-C5-C6	6.58	120.69	117.40
26	BB	796	C	O4'-C1'-N1	6.58	113.47	108.20
26	BB	2721	A	P-O3'-C3'	6.58	127.60	119.70
1	AA	56	U	N3-C4-O4	6.58	124.01	119.40
1	AA	142	G	N9-C1'-C2'	-6.58	104.76	112.00
1	AA	182	A	N7-C8-N9	-6.58	110.51	113.80
1	AA	183	C	N3-C2-O2	-6.58	117.29	121.90
1	AA	849	G	C6-N1-C2	-6.58	121.15	125.10
1	AA	861	G	N7-C8-N9	6.58	116.39	113.10
1	AA	1343	G	C8-N9-C4	-6.58	103.77	106.40
25	BA	73	A	C5-C6-N1	6.58	120.99	117.70
26	BB	216	A	C2-N3-C4	6.58	113.89	110.60
26	BB	287	G	C8-N9-C4	-6.58	103.77	106.40
26	BB	783	A	C4'-C3'-C2'	-6.58	96.02	102.60
26	BB	1102	C	C5-C6-N1	6.58	124.29	121.00
26	BB	1734	G	C4-C5-N7	-6.58	108.17	110.80
26	BB	1904	G	O4'-C1'-N9	6.58	113.47	108.20
1	AA	351	G	C2-N3-C4	6.58	115.19	111.90
3	AC	13	A	O4'-C1'-N9	6.58	113.47	108.20
4	AD	4	G	N9-C1'-C2'	-6.58	104.76	112.00
26	BB	1303	G	C5-C6-O6	-6.58	124.65	128.60
26	BB	1594	U	C6-N1-C2	-6.58	117.05	121.00
26	BB	2572	A	N7-C8-N9	6.58	117.09	113.80
26	BB	2854	G	O4'-C1'-N9	6.58	113.47	108.20
1	AA	1131	G	O4'-C1'-N9	6.58	113.46	108.20
1	AA	1253	G	C2'-C3'-O3'	6.58	124.23	113.70
1	AA	1298	U	N1-C1'-C2'	6.58	122.55	114.00
26	BB	198	C	C1'-O4'-C4'	6.58	115.16	109.90
26	BB	1810	A	N7-C8-N9	6.58	117.09	113.80
26	BB	2820	A	C4-C5-C6	6.58	120.29	117.00
1	AA	318	G	C6-N1-C2	6.58	129.05	125.10
1	AA	1209	C	N3-C4-N4	-6.58	113.39	118.00
1	AA	1527	U	N3-C2-O2	-6.58	117.59	122.20
25	BA	92	C	N3-C4-N4	6.58	122.61	118.00
26	BB	270	A	O4'-C1'-N9	6.58	113.46	108.20
26	BB	677	A	C4-C5-N7	-6.58	107.41	110.70
26	BB	1587	G	C4-C5-N7	-6.58	108.17	110.80
26	BB	1617	C	O4'-C1'-C2'	-6.58	99.22	105.80
26	BB	1677	A	C8-N9-C4	-6.58	103.17	105.80
26	BB	1753	G	C6-C5-N7	-6.58	126.45	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2227	A	N1-C2-N3	-6.58	126.01	129.30
26	BB	2259	U	C1'-O4'-C4'	6.58	115.16	109.90
26	BB	2326	C	C1'-O4'-C4'	6.58	115.16	109.90
40	BP	90	ARG	NE-CZ-NH2	-6.58	117.01	120.30
1	AA	364	A	O4'-C1'-N9	6.58	113.46	108.20
26	BB	1132	U	C4-C5-C6	6.58	123.65	119.70
26	BB	1399	C	C5-C4-N4	-6.58	115.60	120.20
26	BB	1411	U	C5'-C4'-O4'	6.58	116.99	109.10
26	BB	1450	G	N9-C1'-C2'	-6.58	104.77	112.00
26	BB	2895	G	N1-C2-N2	6.58	122.12	116.20
1	AA	542	G	C4-C5-C6	6.58	122.75	118.80
1	AA	1452	C	O4'-C4'-C3'	-6.58	97.42	104.00
1	AA	1507	A	C4-C5-C6	-6.58	113.71	117.00
4	AD	10	G	O4'-C4'-C3'	6.58	111.36	106.10
4	AD	75	C	N1-C2-O2	6.58	122.85	118.90
26	BB	188	G	C6-N1-C2	-6.58	121.16	125.10
26	BB	452	G	N9-C4-C5	-6.58	102.77	105.40
26	BB	911	A	C6-C5-N7	6.58	136.90	132.30
26	BB	1927	A	N9-C4-C5	6.58	108.43	105.80
46	BV	77	ARG	NE-CZ-NH2	-6.58	117.01	120.30
1	AA	248	C	C2-N3-C4	6.57	123.19	119.90
1	AA	384	G	O4'-C1'-N9	6.57	113.46	108.20
1	AA	466	A	C4-C5-C6	-6.57	113.71	117.00
1	AA	630	A	C5-C6-N6	6.57	128.96	123.70
1	AA	1320	C	N3-C4-C5	6.57	124.53	121.90
4	AD	65	G	N7-C8-N9	6.57	116.39	113.10
7	AG	110	ARG	NE-CZ-NH1	6.57	123.59	120.30
17	AQ	12	ARG	CD-NE-CZ	6.57	132.80	123.60
25	BA	109	A	C5-C6-N6	-6.57	118.44	123.70
26	BB	59	U	N1-C2-N3	-6.57	110.96	114.90
26	BB	370	G	N3-C2-N2	6.57	124.50	119.90
26	BB	1130	U	C4'-C3'-C2'	-6.57	96.03	102.60
26	BB	1195	G	C5-C6-N1	6.57	114.79	111.50
26	BB	1724	G	C5-C6-O6	-6.57	124.66	128.60
26	BB	2341	G	N3-C4-N9	6.57	129.94	126.00
26	BB	2530	A	C6-C5-N7	6.57	136.90	132.30
1	AA	778	G	N3-C4-C5	-6.57	125.31	128.60
1	AA	1401	G	N3-C4-N9	-6.57	122.06	126.00
1	AA	1509	C	C5'-C4'-O4'	6.57	116.99	109.10
26	BB	1256	G	O4'-C1'-N9	6.57	113.46	108.20
26	BB	2371	G	C2-N3-C4	6.57	115.19	111.90
26	BB	2470	G	C4-C5-N7	6.57	113.43	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	492	C	N1-C2-O2	6.57	122.84	118.90
1	AA	704	A	O4'-C1'-N9	6.57	113.46	108.20
1	AA	930	C	C2-N3-C4	6.57	123.19	119.90
1	AA	938	A	C5-C6-N1	6.57	120.98	117.70
26	BB	217	A	C5'-C4'-O4'	6.57	116.98	109.10
26	BB	740	C	N1-C1'-C2'	6.57	122.54	114.00
26	BB	1241	A	C8-N9-C4	6.57	108.43	105.80
26	BB	1984	G	C4-N9-C1'	-6.57	117.96	126.50
26	BB	2517	C	O4'-C1'-C2'	-6.57	99.23	105.80
1	AA	1542	A	O4'-C1'-N9	-6.57	102.94	108.20
25	BA	34	A	C5-C6-N1	-6.57	114.42	117.70
26	BB	1399	C	N3-C4-N4	6.57	122.60	118.00
26	BB	1524	G	N1-C6-O6	6.57	123.84	119.90
26	BB	2438	U	C6-N1-C2	6.57	124.94	121.00
26	BB	2771	C	C4'-C3'-C2'	-6.57	96.03	102.60
1	AA	312	C	N3-C2-O2	-6.57	117.30	121.90
1	AA	410	G	N1-C2-N2	-6.57	110.29	116.20
1	AA	1509	C	C6-N1-C2	-6.57	117.67	120.30
16	AP	62	PHE	CZ-CE2-CD2	-6.57	112.22	120.10
26	BB	297	G	C6-N1-C2	-6.57	121.16	125.10
26	BB	301	G	N9-C4-C5	6.57	108.03	105.40
26	BB	366	C	N3-C4-C5	-6.57	119.27	121.90
26	BB	2054	A	C6-N1-C2	-6.57	114.66	118.60
26	BB	2254	C	N1-C2-O2	6.57	122.84	118.90
1	AA	72	A	N9-C4-C5	-6.57	103.17	105.80
1	AA	393	A	O4'-C4'-C3'	6.57	111.35	106.10
1	AA	937	A	N7-C8-N9	-6.57	110.52	113.80
1	AA	1422	G	N9-C4-C5	6.57	108.03	105.40
1	AA	1510	C	C4-C5-C6	6.57	120.68	117.40
3	AC	36	U	N3-C2-O2	-6.57	117.61	122.20
26	BB	166	U	N1-C2-O2	6.57	127.40	122.80
26	BB	837	C	O4'-C1'-N1	6.57	113.45	108.20
26	BB	912	C	C5'-C4'-O4'	6.57	116.98	109.10
26	BB	966	G	N3-C4-C5	-6.57	125.32	128.60
26	BB	2088	A	C3'-C2'-C1'	6.57	106.75	101.50
26	BB	2184	A	C4-C5-N7	6.57	113.98	110.70
26	BB	2238	G	O4'-C1'-N9	6.57	113.45	108.20
2	AB	19	G	C4-C5-N7	-6.56	108.17	110.80
4	AD	74	A	C5-N7-C8	6.56	107.18	103.90
26	BB	935	C	P-O3'-C3'	6.56	127.58	119.70
26	BB	1223	G	C5-C6-O6	-6.56	124.66	128.60
26	BB	2091	C	N3-C2-O2	6.56	126.50	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	664	G	C3'-C2'-C1'	-6.56	96.25	101.50
1	AA	968	A	C5-C6-N6	6.56	128.95	123.70
1	AA	1214	C	C5-C6-N1	6.56	124.28	121.00
26	BB	1066	U	C2-N3-C4	-6.56	123.06	127.00
26	BB	1905	C	N3-C4-C5	6.56	124.53	121.90
26	BB	2038	G	C6-N1-C2	-6.56	121.16	125.10
26	BB	2215	C	N1-C2-N3	-6.56	114.61	119.20
26	BB	2389	G	C5-C6-N1	6.56	114.78	111.50
31	BG	162	ASP	CB-CG-OD2	-6.56	112.39	118.30
1	AA	599	C	O4'-C1'-N1	6.56	113.45	108.20
1	AA	644	U	N3-C4-O4	-6.56	114.81	119.40
1	AA	1345	U	N3-C2-O2	-6.56	117.61	122.20
2	AB	28	C	N3-C2-O2	-6.56	117.31	121.90
26	BB	1007	C	C1'-O4'-C4'	-6.56	104.65	109.90
1	AA	577	G	N3-C4-N9	6.56	129.94	126.00
1	AA	1065	U	C5'-C4'-O4'	6.56	116.97	109.10
4	AD	59	A	C1'-O4'-C4'	6.56	115.15	109.90
26	BB	178	G	N9-C1'-C2'	-6.56	104.78	112.00
26	BB	363	G	C3'-C2'-C1'	6.56	106.75	101.50
26	BB	997	G	C6-N1-C2	6.56	129.04	125.10
26	BB	1401	G	C4-C5-C6	6.56	122.74	118.80
26	BB	1506	U	C4'-C3'-C2'	-6.56	96.04	102.60
26	BB	2006	C	C2-N3-C4	6.56	123.18	119.90
26	BB	2710	C	C3'-C2'-C1'	6.56	106.75	101.50
41	BQ	111	ARG	NE-CZ-NH2	-6.56	117.02	120.30
1	AA	159	G	C5-N7-C8	6.56	107.58	104.30
1	AA	525	C	C1'-O4'-C4'	6.56	115.15	109.90
1	AA	1178	G	C4'-C3'-C2'	-6.56	96.04	102.60
10	AJ	79	VAL	CA-CB-CG2	6.56	120.74	110.90
26	BB	438	G	C5-N7-C8	6.56	107.58	104.30
26	BB	850	U	C6-N1-C2	-6.56	117.06	121.00
26	BB	1271	G	N1-C6-O6	6.56	123.83	119.90
26	BB	1387	A	C6-N1-C2	6.56	122.53	118.60
26	BB	1440	U	C3'-C2'-C1'	-6.56	96.25	101.50
26	BB	1757	A	O4'-C1'-N9	6.56	113.45	108.20
26	BB	2071	A	C5-N7-C8	-6.56	100.62	103.90
26	BB	2593	U	C5'-C4'-C3'	-6.56	105.51	116.00
26	BB	2596	U	C4-C5-C6	6.56	123.63	119.70
26	BB	2756	U	C5-C6-N1	-6.56	119.42	122.70
1	AA	509	A	C5-N7-C8	6.56	107.18	103.90
1	AA	1496	C	N1-C2-O2	6.56	122.83	118.90
26	BB	604	G	N3-C4-C5	-6.56	125.32	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	834	G	C4-C5-N7	-6.56	108.18	110.80
26	BB	1201	U	C2-N3-C4	-6.56	123.07	127.00
26	BB	2145	C	C3'-C2'-C1'	-6.56	96.25	101.50
26	BB	2603	G	C3'-C2'-C1'	-6.56	96.25	101.50
26	BB	2755	C	N3-C4-C5	-6.56	119.28	121.90
26	BB	2777	G	N9-C4-C5	6.56	108.02	105.40
1	AA	1403	C	N1-C2-N3	-6.55	114.61	119.20
3	AC	19	A	N7-C8-N9	6.55	117.08	113.80
25	BA	83	G	C4-C5-N7	-6.55	108.18	110.80
26	BB	885	C	P-O5'-C5'	6.55	131.39	120.90
26	BB	1403	A	N1-C2-N3	-6.55	126.02	129.30
26	BB	1689	A	C5-C6-N6	6.55	128.94	123.70
1	AA	175	C	N1-C2-O2	6.55	122.83	118.90
1	AA	773	G	C4-C5-C6	6.55	122.73	118.80
4	AD	62	C	N3-C2-O2	-6.55	117.31	121.90
25	BA	105	G	C4-N9-C1'	-6.55	117.98	126.50
26	BB	824	U	C4'-C3'-C2'	-6.55	96.05	102.60
26	BB	874	G	C5-N7-C8	6.55	107.58	104.30
26	BB	988	A	P-O3'-C3'	6.55	127.56	119.70
26	BB	1512	C	N3-C4-C5	-6.55	119.28	121.90
26	BB	1935	G	C3'-C2'-C1'	-6.55	96.26	101.50
26	BB	2549	G	C5'-C4'-O4'	6.55	116.96	109.10
1	AA	199	A	C4-C5-C6	-6.55	113.72	117.00
1	AA	282	A	N9-C4-C5	6.55	108.42	105.80
1	AA	749	A	N1-C6-N6	-6.55	114.67	118.60
1	AA	1362	A	N1-C6-N6	6.55	122.53	118.60
26	BB	203	A	C8-N9-C4	-6.55	103.18	105.80
26	BB	310	A	O4'-C1'-N9	6.55	113.44	108.20
26	BB	1308	A	C4-C5-N7	-6.55	107.42	110.70
26	BB	2178	C	C6-N1-C2	-6.55	117.68	120.30
26	BB	2579	C	C5'-C4'-O4'	6.55	116.96	109.10
37	BM	49	ARG	NE-CZ-NH1	6.55	123.58	120.30
1	AA	304	U	C3'-C2'-C1'	6.55	106.74	101.50
1	AA	1442	G	C6-C5-N7	-6.55	126.47	130.40
26	BB	125	A	C5-C6-N1	6.55	120.97	117.70
26	BB	455	C	N1-C2-O2	6.55	122.83	118.90
26	BB	1498	C	O4'-C4'-C3'	6.55	111.34	106.10
26	BB	1617	C	N1-C1'-C2'	6.55	122.51	114.00
26	BB	2046	G	N3-C4-N9	6.55	129.93	126.00
26	BB	2576	G	C4-C5-N7	-6.55	108.18	110.80
1	AA	829	G	N7-C8-N9	6.55	116.37	113.10
1	AA	1247	U	C2-N3-C4	-6.55	123.07	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	73	G	O4'-C1'-C2'	-6.55	99.25	105.80
26	BB	122	G	N1-C2-N2	6.55	122.09	116.20
26	BB	296	U	C5'-C4'-O4'	6.55	116.96	109.10
26	BB	457	A	C8-N9-C4	-6.55	103.18	105.80
43	BS	2	ARG	NE-CZ-NH2	6.55	123.57	120.30
1	AA	1166	G	N3-C4-N9	-6.55	122.07	126.00
2	AB	29	G	N1-C2-N3	-6.55	119.97	123.90
2	AB	67	G	C5-C6-O6	-6.55	124.67	128.60
25	BA	94	A	O4'-C4'-C3'	6.55	111.34	106.10
26	BB	185	G	N3-C4-C5	-6.55	125.33	128.60
26	BB	287	G	C6-N1-C2	-6.55	121.17	125.10
26	BB	768	G	N1-C6-O6	6.55	123.83	119.90
26	BB	997	G	N3-C2-N2	6.55	124.48	119.90
26	BB	1778	U	C5-C4-O4	-6.55	121.97	125.90
26	BB	1947	C	N3-C4-N4	6.55	122.58	118.00
26	BB	2752	C	N3-C4-C5	6.55	124.52	121.90
26	BB	711	G	C2-N3-C4	6.54	115.17	111.90
26	BB	919	U	C4-C5-C6	6.54	123.63	119.70
26	BB	1063	G	C4'-C3'-C2'	-6.54	96.06	102.60
26	BB	1882	U	C4-C5-C6	6.54	123.63	119.70
1	AA	1290	G	N9-C4-C5	-6.54	102.78	105.40
2	AB	25	C	C5-C6-N1	6.54	124.27	121.00
26	BB	1148	U	C6-N1-C2	-6.54	117.07	121.00
26	BB	1861	G	N3-C4-N9	6.54	129.93	126.00
26	BB	2170	A	N1-C6-N6	6.54	122.53	118.60
1	AA	53	A	N3-C4-C5	-6.54	122.22	126.80
1	AA	648	A	N1-C2-N3	6.54	132.57	129.30
1	AA	812	G	C2-N3-C4	-6.54	108.63	111.90
1	AA	1011	C	C2-N3-C4	-6.54	116.63	119.90
1	AA	1094	G	N3-C4-C5	-6.54	125.33	128.60
1	AA	1529	G	N9-C4-C5	6.54	108.02	105.40
26	BB	520	G	C8-N9-C4	-6.54	103.78	106.40
26	BB	1998	A	C5'-C4'-O4'	6.54	116.95	109.10
26	BB	2081	U	N1-C2-O2	6.54	127.38	122.80
26	BB	2489	U	C6-N1-C2	-6.54	117.08	121.00
26	BB	2577	A	C4'-C3'-C2'	-6.54	96.06	102.60
28	BD	12	ARG	NE-CZ-NH2	6.54	123.57	120.30
1	AA	52	C	C4-C5-C6	6.54	120.67	117.40
1	AA	190	A	O4'-C1'-N9	6.54	113.43	108.20
1	AA	648	A	N9-C4-C5	-6.54	103.18	105.80
1	AA	776	G	C5-C6-O6	-6.54	124.68	128.60
1	AA	1401	G	N9-C4-C5	6.54	108.02	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	28	C	O4'-C4'-C3'	6.54	111.33	106.10
26	BB	523	C	N3-C4-N4	6.54	122.58	118.00
26	BB	1105	U	C4-C5-C6	6.54	123.62	119.70
26	BB	1510	G	C1'-O4'-C4'	6.54	115.13	109.90
26	BB	1571	A	C5'-C4'-O4'	6.54	116.95	109.10
1	AA	144	G	N9-C4-C5	6.54	108.02	105.40
1	AA	148	G	C4-C5-N7	-6.54	108.19	110.80
1	AA	166	U	C2-N3-C4	-6.54	123.08	127.00
1	AA	221	C	C2-N3-C4	6.54	123.17	119.90
1	AA	312	C	N1-C2-O2	6.54	122.82	118.90
1	AA	370	C	N3-C2-O2	-6.54	117.32	121.90
1	AA	478	A	N1-C2-N3	-6.54	126.03	129.30
1	AA	600	A	C8-N9-C4	-6.54	103.19	105.80
1	AA	746	A	C5-C6-N6	6.54	128.93	123.70
1	AA	836	G	C5-C6-O6	6.54	132.52	128.60
1	AA	1181	G	C6-N1-C2	-6.54	121.18	125.10
1	AA	1228	C	O4'-C1'-N1	6.54	113.43	108.20
4	AD	2	G	O4'-C4'-C3'	6.54	111.33	106.10
25	BA	76	G	C6-C5-N7	-6.54	126.48	130.40
26	BB	65	U	C1'-O4'-C4'	-6.54	104.67	109.90
26	BB	247	G	C1'-O4'-C4'	6.54	115.13	109.90
26	BB	841	G	N1-C6-O6	-6.54	115.98	119.90
26	BB	891	G	O5'-P-OP2	-6.54	99.81	105.70
26	BB	1353	A	O4'-C1'-N9	-6.54	102.97	108.20
26	BB	1643	G	C2-N3-C4	6.54	115.17	111.90
26	BB	1872	A	O4'-C1'-N9	-6.54	102.97	108.20
26	BB	1993	U	C5'-C4'-O4'	-6.54	101.25	109.10
26	BB	2290	G	N3-C4-N9	-6.54	122.08	126.00
26	BB	2330	G	C3'-C2'-C1'	-6.54	96.27	101.50
26	BB	2469	A	C6-N1-C2	6.54	122.52	118.60
26	BB	2782	G	N1-C2-N3	-6.54	119.98	123.90
1	AA	108	G	N1-C2-N2	6.54	122.08	116.20
1	AA	112	G	C6-N1-C2	-6.54	121.18	125.10
1	AA	829	G	C6-C5-N7	-6.54	126.48	130.40
26	BB	43	G	C4-C5-N7	6.54	113.42	110.80
26	BB	297	G	C8-N9-C4	-6.54	103.78	106.40
26	BB	1703	G	C6-C5-N7	-6.54	126.48	130.40
1	AA	793	U	C3'-C2'-C1'	-6.54	96.27	101.50
1	AA	960	U	C4-C5-C6	6.54	123.62	119.70
1	AA	972	C	C2-N1-C1'	-6.54	111.61	118.80
1	AA	1086	U	N1-C2-N3	6.54	118.82	114.90
1	AA	1533	C	N3-C4-N4	6.54	122.58	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	AK	46	GLU	OE1-CD-OE2	6.54	131.14	123.30
26	BB	129	C	N1-C2-N3	-6.54	114.62	119.20
26	BB	796	C	C5-C4-N4	-6.54	115.63	120.20
26	BB	2536	G	C6-N1-C2	-6.54	121.18	125.10
1	AA	401	C	C1'-O4'-C4'	-6.53	104.67	109.90
1	AA	442	G	N1-C6-O6	6.53	123.82	119.90
1	AA	789	U	N3-C4-O4	6.53	123.97	119.40
1	AA	1179	A	N1-C6-N6	6.53	122.52	118.60
1	AA	1211	U	C1'-O4'-C4'	-6.53	104.67	109.90
1	AA	1397	C	C3'-C2'-C1'	6.53	106.73	101.50
22	AV	31	ARG	NE-CZ-NH1	6.53	123.57	120.30
26	BB	177	G	C2-N3-C4	-6.53	108.63	111.90
26	BB	615	U	O4'-C1'-C2'	-6.53	99.27	105.80
26	BB	668	A	C5-C6-N1	6.53	120.97	117.70
26	BB	1055	G	C6-N1-C2	-6.53	121.18	125.10
26	BB	1099	G	C6-N1-C2	-6.53	121.18	125.10
26	BB	1200	C	N3-C2-O2	-6.53	117.33	121.90
26	BB	1209	U	C6-N1-C2	-6.53	117.08	121.00
26	BB	1801	A	C5-N7-C8	-6.53	100.63	103.90
26	BB	1840	G	C5'-C4'-C3'	-6.53	105.55	116.00
26	BB	2524	G	C2-N3-C4	6.53	115.17	111.90
1	AA	122	G	N9-C4-C5	6.53	108.01	105.40
1	AA	255	G	O4'-C1'-C2'	-6.53	99.27	105.80
26	BB	1090	A	C2-N3-C4	6.53	113.87	110.60
26	BB	1821	A	C3'-C2'-C1'	-6.53	96.27	101.50
39	BO	40	ARG	NE-CZ-NH1	-6.53	117.03	120.30
1	AA	58	C	N1-C2-O2	6.53	122.82	118.90
1	AA	120	A	N1-C6-N6	-6.53	114.68	118.60
1	AA	264	C	N3-C4-C5	-6.53	119.29	121.90
1	AA	298	A	C2-N3-C4	6.53	113.86	110.60
2	AB	42	G	C8-N9-C4	-6.53	103.79	106.40
26	BB	27	G	C4-C5-C6	6.53	122.72	118.80
26	BB	690	G	C6-C5-N7	-6.53	126.48	130.40
26	BB	794	A	N9-C4-C5	-6.53	103.19	105.80
26	BB	1582	C	O4'-C1'-C2'	6.53	113.48	107.60
26	BB	1726	C	C4-C5-C6	6.53	120.67	117.40
26	BB	2154	A	C2-N3-C4	-6.53	107.33	110.60
26	BB	2748	A	N9-C4-C5	6.53	108.41	105.80
1	AA	473	U	N3-C2-O2	-6.53	117.63	122.20
1	AA	852	G	C5-C6-O6	-6.53	124.68	128.60
1	AA	914	A	N1-C6-N6	-6.53	114.68	118.60
26	BB	2821	A	C5'-C4'-C3'	-6.53	105.55	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	847	G	O4'-C4'-C3'	6.53	111.32	106.10
1	AA	925	G	N1-C2-N3	-6.53	119.98	123.90
4	AD	49	C	C5'-C4'-C3'	-6.53	105.56	116.00
26	BB	1085	A	C8-N9-C4	6.53	108.41	105.80
26	BB	1614	A	C6-C5-N7	-6.53	127.73	132.30
26	BB	1625	C	N3-C4-N4	6.53	122.57	118.00
1	AA	79	G	N3-C4-C5	-6.53	125.34	128.60
1	AA	311	C	C6-N1-C2	-6.53	117.69	120.30
26	BB	160	A	C5'-C4'-C3'	-6.53	105.56	116.00
26	BB	273	G	C6-N1-C2	-6.53	121.19	125.10
26	BB	1168	G	N3-C4-N9	6.53	129.91	126.00
26	BB	1342	A	N7-C8-N9	-6.53	110.54	113.80
26	BB	1701	A	C1'-O4'-C4'	6.53	115.12	109.90
26	BB	2842	G	C5-C6-N1	6.53	114.76	111.50
30	BF	86	ALA	CB-CA-C	6.53	119.89	110.10
26	BB	2596	U	N3-C4-O4	6.52	123.97	119.40
1	AA	299	G	C5-C6-O6	-6.52	124.69	128.60
1	AA	1012	A	C8-N9-C4	-6.52	103.19	105.80
26	BB	856	G	C4-C5-C6	6.52	122.71	118.80
26	BB	1359	A	C2-N3-C4	6.52	113.86	110.60
26	BB	1791	A	C8-N9-C4	-6.52	103.19	105.80
26	BB	1953	A	N9-C4-C5	6.52	108.41	105.80
26	BB	2120	G	C5'-C4'-O4'	6.52	116.93	109.10
26	BB	2371	G	C6-C5-N7	-6.52	126.49	130.40
26	BB	2463	C	C1'-O4'-C4'	6.52	115.12	109.90
26	BB	2785	C	N3-C4-C5	-6.52	119.29	121.90
1	AA	581	G	C8-N9-C1'	6.52	135.48	127.00
25	BA	116	G	C3'-C2'-C1'	-6.52	96.28	101.50
26	BB	1	G	C4-C5-N7	-6.52	108.19	110.80
26	BB	293	U	N1-C2-O2	6.52	127.36	122.80
26	BB	497	A	C8-N9-C4	-6.52	103.19	105.80
26	BB	1227	G	C5-C6-O6	-6.52	124.69	128.60
1	AA	326	G	N3-C4-C5	-6.52	125.34	128.60
1	AA	1329	A	N9-C4-C5	6.52	108.41	105.80
4	AD	18	U	N1-C2-N3	6.52	118.81	114.90
11	AK	64	TYR	CB-CG-CD1	-6.52	117.09	121.00
26	BB	775	G	C4'-C3'-C2'	-6.52	96.08	102.60
26	BB	1080	A	P-O5'-C5'	6.52	131.33	120.90
26	BB	1133	A	C5-C6-N6	-6.52	118.48	123.70
26	BB	1542	U	C4'-C3'-C2'	-6.52	96.08	102.60
26	BB	1573	G	C4-C5-N7	-6.52	108.19	110.80
26	BB	1960	A	P-O3'-C3'	6.52	127.52	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	85	U	C2-N1-C1'	6.52	125.52	117.70
1	AA	435	A	O4'-C1'-N9	6.52	113.42	108.20
1	AA	511	C	C3'-C2'-C1'	-6.52	96.29	101.50
1	AA	528	C	C5'-C4'-O4'	6.52	116.92	109.10
1	AA	598	U	O5'-P-OP2	-6.52	99.83	105.70
1	AA	621	A	N3-C4-C5	-6.52	122.24	126.80
1	AA	900	A	C1'-O4'-C4'	6.52	115.11	109.90
15	AO	60	PHE	CB-CG-CD2	6.52	125.36	120.80
26	BB	202	U	N3-C2-O2	-6.52	117.64	122.20
26	BB	2072	C	C6-N1-C2	6.52	122.91	120.30
26	BB	2166	U	N3-C2-O2	-6.52	117.64	122.20
26	BB	2388	A	C6-C5-N7	6.52	136.86	132.30
1	AA	346	G	C4-C5-N7	6.52	113.41	110.80
26	BB	408	G	C5-N7-C8	-6.52	101.04	104.30
26	BB	1569	A	C5'-C4'-O4'	6.52	116.92	109.10
26	BB	1796	U	C5'-C4'-O4'	6.52	116.92	109.10
26	BB	1908	C	N3-C4-C5	-6.52	119.29	121.90
1	AA	434	U	C2-N3-C4	-6.51	123.09	127.00
1	AA	926	G	C4-C5-C6	6.51	122.71	118.80
1	AA	1185	G	C4-C5-N7	-6.51	108.19	110.80
1	AA	1457	G	N1-C6-O6	6.51	123.81	119.90
2	AB	25	C	N1-C2-O2	6.51	122.81	118.90
3	AC	54	U	C6-N1-C2	-6.51	117.09	121.00
26	BB	110	G	C5'-C4'-O4'	6.51	116.92	109.10
26	BB	470	A	N1-C6-N6	-6.51	114.69	118.60
26	BB	971	G	C8-N9-C4	-6.51	103.79	106.40
26	BB	984	A	O4'-C1'-N9	6.51	113.41	108.20
26	BB	1046	A	C5-N7-C8	-6.51	100.64	103.90
26	BB	2073	C	C5-C4-N4	-6.51	115.64	120.20
1	AA	47	C	C5'-C4'-C3'	-6.51	105.58	116.00
1	AA	852	G	O4'-C1'-N9	6.51	113.41	108.20
26	BB	199	A	C4'-C3'-C2'	6.51	109.11	102.60
26	BB	1606	C	C3'-C2'-C1'	6.51	106.71	101.50
26	BB	1914	C	N1-C2-O2	6.51	122.81	118.90
26	BB	2760	C	C5-C6-N1	6.51	124.26	121.00
1	AA	573	A	C1'-O4'-C4'	-6.51	104.69	109.90
1	AA	1217	C	N3-C2-O2	-6.51	117.34	121.90
2	AB	76	A	C3'-C2'-C1'	6.51	106.71	101.50
26	BB	489	G	C4'-C3'-C2'	6.51	109.11	102.60
26	BB	916	G	C4-C5-N7	6.51	113.40	110.80
26	BB	1471	G	C6-C5-N7	6.51	134.31	130.40
26	BB	1623	G	C5-C6-N1	6.51	114.76	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2284	A	C5'-C4'-O4'	6.51	116.91	109.10
26	BB	2629	U	O4'-C1'-N1	6.51	113.41	108.20
30	BF	67	ARG	NE-CZ-NH1	6.51	123.56	120.30
1	AA	234	C	N3-C4-C5	-6.51	119.30	121.90
1	AA	845	A	C5-C6-N1	6.51	120.95	117.70
1	AA	1392	G	C4-C5-C6	6.51	122.70	118.80
4	AD	1	C	N1-C2-O2	6.51	122.81	118.90
26	BB	192	C	C5-C6-N1	-6.51	117.75	121.00
26	BB	384	A	C4'-C3'-C2'	-6.51	96.09	102.60
26	BB	1062	G	C2-N3-C4	6.51	115.16	111.90
26	BB	1292	G	O4'-C4'-C3'	6.51	111.31	106.10
26	BB	1362	C	C5'-C4'-O4'	6.51	116.91	109.10
26	BB	1383	A	C4-C5-C6	-6.51	113.75	117.00
26	BB	1817	G	C5-N7-C8	6.51	107.55	104.30
26	BB	2339	C	C5-C4-N4	6.51	124.76	120.20
26	BB	2805	C	O4'-C1'-N1	6.51	113.41	108.20
1	AA	1053	G	C5-C6-N1	6.51	114.75	111.50
1	AA	149	A	C8-N9-C4	6.51	108.40	105.80
1	AA	724	G	N3-C4-N9	6.51	129.90	126.00
1	AA	817	C	O4'-C1'-N1	6.51	113.40	108.20
1	AA	1088	G	O4'-C1'-N9	6.51	113.40	108.20
5	AE	56	LEU	CB-CG-CD1	6.51	122.06	111.00
26	BB	972	A	O4'-C1'-N9	6.51	113.41	108.20
26	BB	1115	G	N7-C8-N9	6.51	116.35	113.10
26	BB	2508	G	C8-N9-C4	-6.51	103.80	106.40
26	BB	2724	U	N1-C1'-C2'	-6.51	104.84	112.00
26	BB	2733	A	C8-N9-C4	6.51	108.40	105.80
1	AA	648	A	C5-C6-N1	6.50	120.95	117.70
1	AA	860	A	C4-C5-N7	-6.50	107.45	110.70
26	BB	221	A	C5-C6-N6	-6.50	118.50	123.70
26	BB	349	U	O4'-C1'-N1	6.50	113.40	108.20
26	BB	490	C	C2-N3-C4	6.50	123.15	119.90
26	BB	1780	A	C4'-C3'-C2'	-6.50	96.09	102.60
26	BB	2553	G	P-O3'-C3'	6.50	127.51	119.70
1	AA	10	A	O4'-C1'-N9	6.50	113.40	108.20
1	AA	282	A	C2-N3-C4	6.50	113.85	110.60
1	AA	654	G	C4-C5-N7	-6.50	108.20	110.80
1	AA	984	C	P-O3'-C3'	6.50	127.50	119.70
1	AA	1246	A	C2-N3-C4	6.50	113.85	110.60
1	AA	1271	A	C6-N1-C2	-6.50	114.70	118.60
2	AB	15	A	N1-C2-N3	-6.50	126.05	129.30
4	AD	10	G	C5'-C4'-O4'	6.50	116.90	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	AJ	1	PRO	CA-N-CD	-6.50	102.39	111.50
26	BB	216	A	N1-C6-N6	-6.50	114.70	118.60
26	BB	245	G	C5-N7-C8	-6.50	101.05	104.30
26	BB	629	G	C2-N3-C4	6.50	115.15	111.90
26	BB	936	A	C4'-C3'-C2'	-6.50	96.10	102.60
26	BB	1331	G	N3-C4-C5	-6.50	125.35	128.60
26	BB	1897	G	O4'-C1'-N9	6.50	113.40	108.20
26	BB	2014	A	N3-C4-C5	-6.50	122.25	126.80
26	BB	2072	C	C5-C6-N1	-6.50	117.75	121.00
26	BB	2164	C	N3-C2-O2	-6.50	117.35	121.90
43	BS	114	ALA	N-CA-CB	6.50	119.20	110.10
1	AA	1065	U	C3'-C2'-C1'	6.50	106.70	101.50
1	AA	1141	C	O4'-C1'-N1	6.50	113.40	108.20
1	AA	1395	C	C5-C4-N4	-6.50	115.65	120.20
4	AD	2	G	C5-C6-N1	-6.50	108.25	111.50
26	BB	371	A	N9-C4-C5	-6.50	103.20	105.80
26	BB	514	A	N3-C4-N9	6.50	132.60	127.40
26	BB	1675	C	C5-C6-N1	6.50	124.25	121.00
26	BB	1683	U	P-O3'-C3'	6.50	127.50	119.70
26	BB	2014	A	C4-C5-C6	6.50	120.25	117.00
26	BB	2756	U	C6-N1-C2	6.50	124.90	121.00
1	AA	41	G	C2-N3-C4	6.50	115.15	111.90
1	AA	1313	U	C4-C5-C6	6.50	123.60	119.70
26	BB	39	G	C8-N9-C4	6.50	109.00	106.40
26	BB	2145	C	C5-C6-N1	-6.50	117.75	121.00
1	AA	158	G	N9-C4-C5	6.50	108.00	105.40
1	AA	785	G	O4'-C1'-N9	6.50	113.40	108.20
25	BA	105	G	C4'-C3'-C2'	-6.50	96.10	102.60
26	BB	379	G	N3-C4-N9	-6.50	122.10	126.00
26	BB	660	C	C5-C4-N4	-6.50	115.65	120.20
26	BB	1510	G	C3'-C2'-C1'	6.50	106.70	101.50
26	BB	1910	G	C5'-C4'-O4'	6.50	116.90	109.10
26	BB	1947	C	C4-C5-C6	6.50	120.65	117.40
26	BB	2713	U	O4'-C1'-N1	6.50	113.40	108.20
26	BB	2801	G	O4'-C1'-N9	6.50	113.40	108.20
1	AA	399	G	C6-N1-C2	-6.50	121.20	125.10
1	AA	1458	G	C4-C5-N7	-6.50	108.20	110.80
22	AV	4	LEU	CB-CG-CD2	6.50	122.04	111.00
26	BB	73	A	C5-N7-C8	-6.50	100.65	103.90
26	BB	100	U	N1-C2-N3	6.50	118.80	114.90
26	BB	548	G	C1'-O4'-C4'	-6.50	104.70	109.90
26	BB	1020	A	N3-C4-C5	-6.50	122.25	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1953	A	O4'-C1'-N9	6.50	113.40	108.20
26	BB	1997	C	C5-C6-N1	6.50	124.25	121.00
26	BB	2280	G	C4'-C3'-C2'	-6.50	96.10	102.60
26	BB	2653	U	C5-C4-O4	-6.50	122.00	125.90
1	AA	111	G	C8-N9-C4	-6.50	103.80	106.40
1	AA	127	G	C6-N1-C2	-6.50	121.20	125.10
4	AD	34	U	C5'-C4'-O4'	6.50	116.89	109.10
26	BB	296	U	C2-N3-C4	-6.50	123.10	127.00
26	BB	297	G	O4'-C1'-N9	6.50	113.40	108.20
26	BB	472	A	C2-N3-C4	6.50	113.85	110.60
26	BB	1937	A	C1'-O4'-C4'	-6.50	104.70	109.90
26	BB	2811	G	N9-C4-C5	6.50	108.00	105.40
1	AA	481	G	C4'-C3'-C2'	-6.49	96.11	102.60
1	AA	850	U	C5'-C4'-C3'	-6.49	105.61	116.00
1	AA	902	G	N7-C8-N9	6.49	116.35	113.10
26	BB	218	A	C3'-C2'-C1'	6.49	106.69	101.50
26	BB	314	C	C6-N1-C2	-6.49	117.70	120.30
26	BB	527	C	P-O3'-C3'	6.49	127.49	119.70
26	BB	1763	G	N9-C4-C5	6.49	108.00	105.40
26	BB	1821	A	C4-C5-C6	-6.49	113.75	117.00
26	BB	1840	G	C4-C5-N7	6.49	113.40	110.80
26	BB	2032	G	C2-N3-C4	6.49	115.15	111.90
26	BB	2728	U	C3'-C2'-C1'	-6.49	96.31	101.50
1	AA	798	U	C2'-C3'-O3'	6.49	124.09	113.70
1	AA	1205	U	C5-C6-N1	-6.49	119.45	122.70
16	AP	97	ARG	NE-CZ-NH2	-6.49	117.05	120.30
26	BB	67	U	C6-N1-C2	-6.49	117.11	121.00
26	BB	1331	G	P-O3'-C3'	6.49	127.49	119.70
1	AA	147	G	N3-C4-N9	-6.49	122.11	126.00
1	AA	559	A	O4'-C1'-N9	6.49	113.39	108.20
1	AA	708	C	C5'-C4'-O4'	6.49	116.89	109.10
1	AA	714	G	C8-N9-C4	6.49	109.00	106.40
1	AA	1309	G	C6-N1-C2	-6.49	121.20	125.10
1	AA	1442	G	N3-C4-C5	-6.49	125.36	128.60
15	AO	37	TYR	CG-CD1-CE1	-6.49	116.11	121.30
26	BB	34	U	N3-C4-O4	6.49	123.94	119.40
26	BB	390	U	C5-C6-N1	-6.49	119.45	122.70
26	BB	590	A	N1-C6-N6	6.49	122.49	118.60
26	BB	835	C	O4'-C1'-N1	6.49	113.39	108.20
26	BB	890	C	C6-N1-C2	-6.49	117.70	120.30
26	BB	1157	G	N1-C2-N3	-6.49	120.01	123.90
26	BB	2242	G	C4-C5-N7	6.49	113.40	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2252	G	C4'-C3'-C2'	-6.49	96.11	102.60
26	BB	2560	A	N1-C6-N6	-6.49	114.71	118.60
26	BB	2891	U	P-O3'-C3'	6.49	127.49	119.70
1	AA	382	A	C4-C5-C6	-6.49	113.76	117.00
1	AA	985	C	C6-N1-C2	6.49	122.90	120.30
1	AA	1300	G	C6-C5-N7	-6.49	126.51	130.40
1	AA	1434	A	C5-C6-N1	-6.49	114.46	117.70
26	BB	51	G	C5-N7-C8	-6.49	101.06	104.30
26	BB	651	G	C5-N7-C8	-6.49	101.06	104.30
26	BB	2154	A	C5'-C4'-C3'	-6.49	105.62	116.00
26	BB	2809	A	C6-N1-C2	6.49	122.49	118.60
1	AA	436	C	N3-C2-O2	-6.49	117.36	121.90
1	AA	851	G	N3-C4-C5	-6.49	125.36	128.60
1	AA	898	G	C4-C5-C6	6.49	122.69	118.80
4	AD	5	G	C4-C5-C6	6.49	122.69	118.80
26	BB	1210	G	O4'-C1'-C2'	6.49	113.44	107.60
26	BB	1292	G	N3-C4-C5	-6.49	125.36	128.60
26	BB	2301	C	O4'-C4'-C3'	6.49	111.29	106.10
1	AA	1506	U	O4'-C1'-N1	6.49	113.39	108.20
1	AA	1520	C	C6-N1-C2	6.49	122.89	120.30
4	AD	45	A	C6-N1-C2	-6.49	114.71	118.60
25	BA	84	G	C4-C5-N7	-6.49	108.21	110.80
26	BB	397	U	C4'-C3'-C2'	-6.49	96.11	102.60
26	BB	954	G	N7-C8-N9	6.49	116.34	113.10
26	BB	2425	A	C5-N7-C8	-6.49	100.66	103.90
26	BB	2497	A	C5-C6-N1	6.49	120.94	117.70
1	AA	97	G	N3-C4-C5	-6.48	125.36	128.60
1	AA	423	G	C5'-C4'-C3'	-6.48	105.63	116.00
26	BB	2208	C	C2-N3-C4	-6.48	116.66	119.90
1	AA	15	G	N3-C2-N2	6.48	124.44	119.90
1	AA	43	C	C6-N1-C2	6.48	122.89	120.30
1	AA	604	G	C3'-C2'-C1'	6.48	106.69	101.50
1	AA	791	G	O4'-C4'-C3'	-6.48	97.52	104.00
1	AA	819	A	C4-C5-N7	6.48	113.94	110.70
1	AA	864	A	C5-C6-N1	6.48	120.94	117.70
1	AA	1103	C	C2-N3-C4	6.48	123.14	119.90
1	AA	1161	C	O4'-C1'-N1	6.48	113.39	108.20
1	AA	1227	A	C5-C6-N1	-6.48	114.46	117.70
1	AA	1532	U	C2-N3-C4	-6.48	123.11	127.00
18	AR	62	ARG	NH1-CZ-NH2	6.48	126.53	119.40
26	BB	663	G	C4-C5-N7	6.48	113.39	110.80
26	BB	1687	G	N3-C2-N2	6.48	124.44	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2047	C	C5-C4-N4	-6.48	115.66	120.20
26	BB	2497	A	C5-C6-N6	-6.48	118.51	123.70
26	BB	2860	A	N9-C4-C5	6.48	108.39	105.80
1	AA	249	U	N1-C2-N3	6.48	118.79	114.90
1	AA	253	A	N9-C4-C5	6.48	108.39	105.80
1	AA	1459	G	O4'-C4'-C3'	6.48	111.28	106.10
2	AB	6	C	C5-C6-N1	6.48	124.24	121.00
26	BB	730	A	N1-C6-N6	-6.48	114.71	118.60
26	BB	946	C	N3-C4-C5	-6.48	119.31	121.90
26	BB	1164	C	C2-N3-C4	6.48	123.14	119.90
26	BB	1598	A	O4'-C4'-C3'	6.48	111.28	106.10
26	BB	1642	G	C2-N3-C4	-6.48	108.66	111.90
26	BB	1981	A	N9-C4-C5	6.48	108.39	105.80
26	BB	2508	G	N1-C2-N3	6.48	127.79	123.90
26	BB	2674	G	O4'-C1'-N9	6.48	113.38	108.20
26	BB	2751	G	C4-C5-N7	6.48	113.39	110.80
4	AD	74	A	C4-C5-C6	-6.48	113.76	117.00
26	BB	149	A	N9-C4-C5	6.48	108.39	105.80
26	BB	308	G	C5-N7-C8	-6.48	101.06	104.30
1	AA	440	C	C5-C6-N1	6.48	124.24	121.00
1	AA	443	C	O4'-C1'-C2'	6.48	113.43	107.60
1	AA	1065	U	N3-C2-O2	-6.48	117.67	122.20
18	AR	83	ARG	NE-CZ-NH2	-6.48	117.06	120.30
25	BA	58	A	C5'-C4'-C3'	6.48	126.36	116.00
26	BB	106	C	C3'-C2'-C1'	-6.48	96.32	101.50
26	BB	794	A	C2-N3-C4	-6.48	107.36	110.60
26	BB	836	G	C5'-C4'-O4'	6.48	116.87	109.10
26	BB	1280	G	N7-C8-N9	6.48	116.34	113.10
26	BB	1410	G	C1'-O4'-C4'	-6.48	104.72	109.90
26	BB	1444	G	O4'-C1'-N9	6.48	113.38	108.20
26	BB	2157	G	C5-N7-C8	-6.48	101.06	104.30
26	BB	2543	G	P-O3'-C3'	6.48	127.47	119.70
1	AA	455	G	C4-C5-N7	6.48	113.39	110.80
1	AA	825	A	N1-C6-N6	-6.48	114.71	118.60
2	AB	19	G	N1-C6-O6	-6.48	116.01	119.90
26	BB	555	G	C2-N3-C4	6.48	115.14	111.90
26	BB	664	G	N7-C8-N9	6.48	116.34	113.10
26	BB	858	G	N9-C4-C5	6.48	107.99	105.40
26	BB	1231	U	C4'-C3'-C2'	-6.48	96.12	102.60
26	BB	1371	G	P-O3'-C3'	6.48	127.47	119.70
26	BB	2509	G	C2-N3-C4	6.48	115.14	111.90
1	AA	105	G	N3-C2-N2	-6.47	115.37	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	404	G	C4-C5-N7	-6.47	108.21	110.80
1	AA	549	C	C1'-O4'-C4'	6.47	115.08	109.90
1	AA	1185	G	C4-C5-C6	6.47	122.68	118.80
26	BB	103	A	N1-C6-N6	-6.47	114.72	118.60
26	BB	273	G	C5'-C4'-O4'	6.47	116.87	109.10
26	BB	1456	G	C5-C6-N1	6.47	114.74	111.50
26	BB	2099	U	N3-C2-O2	6.47	126.73	122.20
26	BB	2712	C	O4'-C1'-N1	6.47	113.38	108.20
1	AA	339	C	N1-C2-N3	-6.47	114.67	119.20
1	AA	1155	A	N1-C2-N3	-6.47	126.06	129.30
1	AA	1208	C	O4'-C1'-C2'	6.47	113.42	107.60
25	BA	95	U	C3'-C2'-C1'	6.47	106.68	101.50
26	BB	395	U	C5-C4-O4	-6.47	122.02	125.90
26	BB	685	A	C6-N1-C2	-6.47	114.72	118.60
26	BB	952	G	C5-N7-C8	6.47	107.54	104.30
26	BB	1116	G	N3-C4-C5	-6.47	125.36	128.60
26	BB	1217	U	C1'-O4'-C4'	6.47	115.08	109.90
26	BB	1287	A	C5-C6-N1	6.47	120.94	117.70
26	BB	2139	U	C4'-C3'-C2'	-6.47	96.13	102.60
1	AA	676	A	C5-C6-N1	6.47	120.94	117.70
3	AC	15	G	C5-C6-N1	6.47	114.74	111.50
26	BB	1299	G	N1-C2-N2	6.47	122.02	116.20
26	BB	2410	G	C2-N3-C4	6.47	115.14	111.90
26	BB	2438	U	C5'-C4'-O4'	6.47	116.86	109.10
32	BH	55	ASP	CB-CG-OD2	-6.47	112.48	118.30
1	AA	88	U	N3-C2-O2	-6.47	117.67	122.20
1	AA	1524	C	P-O3'-C3'	6.47	127.46	119.70
25	BA	108	A	C5'-C4'-O4'	6.47	116.86	109.10
26	BB	1074	G	C4-C5-N7	-6.47	108.21	110.80
26	BB	1190	G	C5'-C4'-O4'	6.47	116.86	109.10
26	BB	1831	G	O4'-C1'-N9	6.47	113.38	108.20
26	BB	2236	U	O4'-C4'-C3'	-6.47	97.53	104.00
26	BB	2677	G	N1-C2-N3	-6.47	120.02	123.90
26	BB	1195	G	C4-C5-C6	6.47	122.68	118.80
26	BB	2151	U	O4'-C1'-N1	6.47	113.38	108.20
26	BB	2706	A	O4'-C1'-N9	6.47	113.38	108.20
1	AA	948	C	C3'-C2'-C1'	6.47	106.67	101.50
16	AP	106	ARG	NE-CZ-NH1	6.47	123.53	120.30
26	BB	103	A	O4'-C4'-C3'	-6.47	97.53	104.00
26	BB	146	A	C5-C6-N6	-6.47	118.53	123.70
26	BB	805	G	N1-C2-N3	-6.47	120.02	123.90
26	BB	1383	A	O4'-C4'-C3'	6.47	111.27	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1420	A	C2-N3-C4	6.47	113.83	110.60
26	BB	1439	A	C1'-O4'-C4'	-6.47	104.73	109.90
26	BB	1580	A	C4-C5-C6	-6.47	113.77	117.00
26	BB	2037	A	C2-N3-C4	6.47	113.83	110.60
26	BB	2860	A	C4-C5-C6	6.47	120.23	117.00
1	AA	534	U	P-O3'-C3'	6.46	127.46	119.70
1	AA	573	A	C6-C5-N7	-6.46	127.78	132.30
1	AA	658	C	N3-C2-O2	-6.46	117.38	121.90
1	AA	660	C	C5'-C4'-O4'	6.46	116.86	109.10
1	AA	1163	A	N1-C2-N3	6.46	132.53	129.30
26	BB	146	A	N1-C2-N3	6.46	132.53	129.30
26	BB	828	U	C3'-C2'-C1'	6.46	106.67	101.50
26	BB	982	C	N3-C2-O2	-6.46	117.38	121.90
26	BB	1135	C	C4'-C3'-C2'	-6.46	96.14	102.60
26	BB	1946	U	N1-C1'-C2'	-6.46	104.89	112.00
26	BB	2323	G	C5-C6-O6	6.46	132.48	128.60
26	BB	2871	U	N1-C2-N3	6.46	118.78	114.90
32	BH	94	ARG	NE-CZ-NH1	6.46	123.53	120.30
35	BK	126	ARG	CD-NE-CZ	6.46	132.65	123.60
1	AA	799	G	C5-C6-N1	6.46	114.73	111.50
8	AH	24	VAL	CA-CB-CG2	6.46	120.59	110.90
26	BB	539	G	O4'-C1'-C2'	6.46	113.42	107.60
26	BB	2236	U	P-O3'-C3'	6.46	127.46	119.70
26	BB	2350	C	N3-C2-O2	-6.46	117.38	121.90
1	AA	23	C	N3-C2-O2	-6.46	117.38	121.90
1	AA	219	U	N1-C2-O2	-6.46	118.28	122.80
1	AA	255	G	C5-C6-O6	6.46	132.48	128.60
1	AA	324	G	C4-C5-C6	6.46	122.68	118.80
1	AA	376	G	N1-C6-O6	6.46	123.78	119.90
1	AA	386	C	N1-C2-O2	6.46	122.78	118.90
1	AA	719	C	C1'-O4'-C4'	-6.46	104.73	109.90
1	AA	730	G	C6-N1-C2	-6.46	121.22	125.10
1	AA	916	U	C1'-O4'-C4'	6.46	115.07	109.90
1	AA	1058	G	C5-N7-C8	6.46	107.53	104.30
1	AA	1142	G	C8-N9-C4	-6.46	103.81	106.40
26	BB	783	A	N3-C4-N9	6.46	132.57	127.40
26	BB	899	A	N3-C4-C5	-6.46	122.28	126.80
26	BB	1235	G	N7-C8-N9	6.46	116.33	113.10
26	BB	1311	G	C4-C5-C6	6.46	122.68	118.80
26	BB	1651	G	C6-C5-N7	-6.46	126.52	130.40
26	BB	2114	A	C8-N9-C4	-6.46	103.22	105.80
26	BB	2148	G	C8-N9-C4	-6.46	103.81	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2195	U	N1-C1'-C2'	-6.46	104.89	112.00
26	BB	2585	U	C3'-C2'-C1'	-6.46	96.33	101.50
26	BB	2604	U	N1-C2-N3	6.46	118.78	114.90
1	AA	53	A	C2-N3-C4	6.46	113.83	110.60
26	BB	417	C	C4'-C3'-C2'	-6.46	96.14	102.60
26	BB	744	U	N1-C1'-C2'	-6.46	104.89	112.00
26	BB	901	C	C6-N1-C2	6.46	122.88	120.30
26	BB	966	G	C5-C6-O6	6.46	132.48	128.60
26	BB	1687	G	C5-N7-C8	-6.46	101.07	104.30
26	BB	2031	A	C8-N9-C4	-6.46	103.22	105.80
26	BB	2168	G	O4'-C1'-N9	6.46	113.37	108.20
26	BB	2294	G	C5'-C4'-C3'	-6.46	105.66	116.00
26	BB	2792	A	O4'-C1'-N9	6.46	113.37	108.20
1	AA	1268	G	N9-C4-C5	6.46	107.98	105.40
1	AA	1463	U	N1-C2-N3	6.46	118.78	114.90
2	AB	57	G	N1-C6-O6	-6.46	116.02	119.90
4	AD	50	G	N9-C4-C5	-6.46	102.82	105.40
26	BB	209	C	O4'-C1'-N1	6.46	113.37	108.20
26	BB	1034	G	N1-C6-O6	6.46	123.78	119.90
26	BB	2427	C	N1-C2-O2	6.46	122.78	118.90
26	BB	2747	G	N1-C6-O6	-6.46	116.03	119.90
31	BG	132	ARG	NE-CZ-NH2	6.46	123.53	120.30
1	AA	677	U	C4-C5-C6	6.46	123.57	119.70
25	BA	21	G	C2-N3-C4	6.46	115.13	111.90
25	BA	23	G	C8-N9-C1'	6.46	135.39	127.00
26	BB	29	U	C3'-C2'-C1'	6.46	106.67	101.50
26	BB	112	U	C6-N1-C2	-6.46	117.13	121.00
26	BB	469	G	C6-N1-C2	-6.46	121.23	125.10
26	BB	489	G	N3-C4-N9	6.46	129.87	126.00
26	BB	759	G	C5-C6-N1	6.46	114.73	111.50
26	BB	1097	U	C1'-O4'-C4'	6.46	115.07	109.90
26	BB	1112	G	C5'-C4'-C3'	-6.46	105.67	116.00
26	BB	1179	G	O4'-C1'-N9	6.46	113.36	108.20
26	BB	1550	C	N1-C2-N3	-6.46	114.68	119.20
26	BB	2430	A	C6-C5-N7	6.46	136.82	132.30
26	BB	908	C	C2-N3-C4	6.46	123.13	119.90
26	BB	996	A	N7-C8-N9	-6.46	110.57	113.80
26	BB	1271	G	N9-C4-C5	6.46	107.98	105.40
26	BB	2162	G	N9-C4-C5	6.46	107.98	105.40
26	BB	2383	G	N3-C2-N2	6.46	124.42	119.90
1	AA	1238	A	N1-C6-N6	6.45	122.47	118.60
1	AA	1343	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(°)
1	AA	1433	A	C5'-C4'-O4'	6.45	116.84	109.10
2	AB	9	A	N1-C2-N3	-6.45	126.07	129.30
25	BA	83	G	N3-C2-N2	-6.45	115.38	119.90
26	BB	520	G	C2-N3-C4	-6.45	108.67	111.90
26	BB	683	U	N3-C2-O2	-6.45	117.68	122.20
26	BB	798	G	C5'-C4'-C3'	-6.45	105.67	116.00
26	BB	853	C	O4'-C1'-N1	6.45	113.36	108.20
26	BB	1446	C	N1-C2-N3	-6.45	114.68	119.20
26	BB	1524	G	C5-C6-O6	-6.45	124.73	128.60
26	BB	1898	U	C2-N3-C4	-6.45	123.13	127.00
26	BB	2102	G	C2-N3-C4	6.45	115.13	111.90
26	BB	2685	G	C4-C5-C6	-6.45	114.93	118.80
26	BB	1802	A	C5-C6-N1	6.45	120.93	117.70
26	BB	2162	G	C6-N1-C2	-6.45	121.23	125.10
26	BB	2854	G	N9-C4-C5	6.45	107.98	105.40
1	AA	98	A	C6-C5-N7	6.45	136.81	132.30
1	AA	1326	U	C2-N3-C4	-6.45	123.13	127.00
1	AA	1462	C	C4-C5-C6	6.45	120.62	117.40
25	BA	84	G	C4-C5-C6	6.45	122.67	118.80
26	BB	431	U	C5'-C4'-O4'	6.45	116.84	109.10
26	BB	1214	A	N7-C8-N9	6.45	117.03	113.80
26	BB	1386	C	C5-C6-N1	-6.45	117.78	121.00
26	BB	1520	U	C2-N3-C4	-6.45	123.13	127.00
26	BB	1528	A	C4-C5-N7	-6.45	107.47	110.70
26	BB	1767	G	N7-C8-N9	6.45	116.33	113.10
26	BB	2315	G	N1-C6-O6	6.45	123.77	119.90
33	BI	46	PHE	CB-CG-CD1	6.45	125.31	120.80
1	AA	234	C	N3-C4-N4	-6.45	113.49	118.00
1	AA	382	A	P-O3'-C3'	6.45	127.44	119.70
1	AA	614	C	C1'-O4'-C4'	6.45	115.06	109.90
1	AA	1041	G	C6-N1-C2	-6.45	121.23	125.10
26	BB	107	G	O4'-C1'-N9	6.45	113.36	108.20
26	BB	1422	G	C6-N1-C2	6.45	128.97	125.10
26	BB	1511	G	C4-N9-C1'	-6.45	118.12	126.50
26	BB	1623	G	N1-C6-O6	-6.45	116.03	119.90
26	BB	2439	A	C1'-O4'-C4'	6.45	115.06	109.90
26	BB	2627	G	C6-C5-N7	-6.45	126.53	130.40
26	BB	2693	G	C5-C6-O6	6.45	132.47	128.60
26	BB	2826	A	N7-C8-N9	6.45	117.02	113.80
33	BI	96	THR	O-C-N	6.45	133.02	122.70
38	BN	60	ARG	NE-CZ-NH1	6.45	123.52	120.30
1	AA	425	G	O3'-P-O5'	-6.45	91.75	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	43	G	P-O3'-C3'	6.45	127.44	119.70
26	BB	169	G	C5'-C4'-O4'	6.45	116.84	109.10
26	BB	404	A	C8-N9-C4	6.45	108.38	105.80
26	BB	818	G	C5-C6-O6	-6.45	124.73	128.60
1	AA	745	G	C4-C5-N7	-6.45	108.22	110.80
1	AA	876	C	C2-N3-C4	-6.45	116.68	119.90
1	AA	1264	U	C5-C6-N1	6.45	125.92	122.70
1	AA	1485	U	C5-C6-N1	6.45	125.92	122.70
2	AB	6	C	P-O3'-C3'	6.45	127.44	119.70
25	BA	34	A	C4'-C3'-C2'	-6.45	96.16	102.60
26	BB	557	C	C4-C5-C6	-6.45	114.18	117.40
26	BB	891	G	O4'-C1'-N9	6.45	113.36	108.20
26	BB	1445	G	N9-C4-C5	-6.45	102.82	105.40
26	BB	1903	G	N1-C2-N2	6.45	122.00	116.20
26	BB	2523	G	N9-C4-C5	-6.45	102.82	105.40
26	BB	2557	G	C1'-O4'-C4'	-6.45	104.74	109.90
26	BB	2847	U	C4-C5-C6	6.45	123.57	119.70
3	AC	13	A	O4'-C4'-C3'	6.44	111.25	106.10
26	BB	687	C	N3-C2-O2	-6.44	117.39	121.90
26	BB	764	A	O4'-C1'-N9	-6.44	103.05	108.20
26	BB	1018	U	P-O3'-C3'	6.44	127.43	119.70
26	BB	1135	C	P-O3'-C3'	6.44	127.43	119.70
26	BB	1255	U	C2-N3-C4	-6.44	123.13	127.00
32	BH	153	PRO	N-CA-CB	6.44	111.03	103.30
46	BV	3	ARG	N-CA-CB	6.44	122.20	110.60
1	AA	115	G	C5'-C4'-C3'	-6.44	105.69	116.00
1	AA	213	G	C2-N3-C4	6.44	115.12	111.90
1	AA	1008	U	N3-C4-O4	6.44	123.91	119.40
1	AA	1273	C	C6-N1-C2	-6.44	117.72	120.30
2	AB	9	A	C4-C5-C6	-6.44	113.78	117.00
8	AH	119	VAL	CA-CB-CG2	6.44	120.56	110.90
26	BB	185	G	C3'-C2'-C1'	-6.44	96.35	101.50
26	BB	1072	C	N1-C2-O2	6.44	122.77	118.90
26	BB	1278	C	C6-N1-C2	6.44	122.88	120.30
26	BB	2120	G	O4'-C1'-C2'	-6.44	99.36	105.80
26	BB	2209	G	C6-N1-C2	-6.44	121.23	125.10
26	BB	2262	U	P-O3'-C3'	6.44	127.43	119.70
26	BB	2332	C	N3-C4-N4	6.44	122.51	118.00
26	BB	2790	U	O4'-C1'-C2'	-6.44	99.36	105.80
1	AA	108	G	N3-C2-N2	-6.44	115.39	119.90
1	AA	467	U	P-O3'-C3'	6.44	127.43	119.70
1	AA	1117	A	N7-C8-N9	6.44	117.02	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1359	C	C3'-C2'-C1'	-6.44	96.35	101.50
26	BB	445	C	C4-C5-C6	6.44	120.62	117.40
26	BB	1137	G	N1-C6-O6	-6.44	116.04	119.90
26	BB	1251	C	P-O3'-C3'	6.44	127.43	119.70
26	BB	1627	G	O4'-C4'-C3'	-6.44	97.56	104.00
26	BB	1739	A	C4-C5-N7	-6.44	107.48	110.70
26	BB	1799	G	C3'-C2'-C1'	6.44	106.65	101.50
26	BB	2361	G	N7-C8-N9	6.44	116.32	113.10
26	BB	2598	A	P-O3'-C3'	6.44	127.43	119.70
26	BB	2640	G	N1-C2-N2	6.44	122.00	116.20
1	AA	530	G	N9-C4-C5	6.44	107.97	105.40
1	AA	1320	C	C6-N1-C2	-6.44	117.72	120.30
25	BA	64	G	N1-C6-O6	-6.44	116.04	119.90
26	BB	2863	C	C5-C6-N1	6.44	124.22	121.00
1	AA	143	A	N9-C1'-C2'	-6.44	104.92	112.00
1	AA	240	G	C3'-C2'-C1'	6.44	106.65	101.50
1	AA	467	U	N1-C2-O2	6.44	127.31	122.80
1	AA	1089	G	C5'-C4'-C3'	-6.44	105.70	116.00
1	AA	1366	C	N1-C2-N3	6.44	123.71	119.20
4	AD	30	G	C5-C6-O6	-6.44	124.74	128.60
4	AD	51	U	C5-C6-N1	-6.44	119.48	122.70
26	BB	344	A	C6-N1-C2	6.44	122.46	118.60
26	BB	456	C	N3-C4-C5	-6.44	119.33	121.90
26	BB	1023	U	N3-C2-O2	-6.44	117.69	122.20
26	BB	1172	C	N3-C2-O2	6.44	126.41	121.90
26	BB	1669	A	O4'-C1'-N9	6.44	113.35	108.20
26	BB	1702	G	C8-N9-C1'	6.44	135.37	127.00
26	BB	1833	C	O4'-C1'-N1	6.44	113.35	108.20
26	BB	1921	G	N3-C4-N9	6.44	129.86	126.00
26	BB	2238	G	C1'-O4'-C4'	-6.44	104.75	109.90
1	AA	4	U	N3-C4-O4	6.44	123.91	119.40
1	AA	146	G	C6-C5-N7	-6.44	126.54	130.40
1	AA	1128	C	N1-C2-N3	6.44	123.70	119.20
26	BB	1103	A	N3-C4-N9	6.44	132.55	127.40
26	BB	2505	G	P-O3'-C3'	6.44	127.42	119.70
1	AA	337	G	N1-C2-N3	-6.43	120.04	123.90
1	AA	866	C	N1-C2-O2	6.43	122.76	118.90
4	AD	30	G	C3'-C2'-C1'	-6.43	96.35	101.50
26	BB	65	U	N1-C1'-C2'	-6.43	104.92	112.00
26	BB	554	U	C4'-C3'-C2'	-6.43	96.17	102.60
26	BB	741	U	O4'-C1'-N1	6.43	113.35	108.20
26	BB	821	A	C3'-C2'-C1'	6.43	106.65	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1552	A	N1-C2-N3	-6.43	126.08	129.30
46	BV	30	ILE	CA-CB-CG2	6.43	123.77	110.90
1	AA	31	G	C4-C5-N7	6.43	113.37	110.80
1	AA	197	A	C1'-O4'-C4'	6.43	115.05	109.90
1	AA	440	C	N1-C2-O2	6.43	122.76	118.90
1	AA	788	U	C2-N3-C4	-6.43	123.14	127.00
1	AA	796	C	C2-N3-C4	6.43	123.12	119.90
1	AA	821	G	N1-C6-O6	6.43	123.76	119.90
1	AA	879	C	C5'-C4'-O4'	6.43	116.82	109.10
1	AA	1108	G	O4'-C1'-N9	6.43	113.34	108.20
1	AA	1270	G	N7-C8-N9	6.43	116.32	113.10
1	AA	1303	C	N3-C2-O2	-6.43	117.40	121.90
1	AA	1386	G	C5-C6-N1	-6.43	108.28	111.50
1	AA	1526	G	N1-C2-N3	6.43	127.76	123.90
4	AD	76	C	N3-C4-N4	6.43	122.50	118.00
26	BB	49	A	N1-C6-N6	6.43	122.46	118.60
26	BB	269	C	N1-C2-O2	6.43	122.76	118.90
26	BB	961	C	C2-N3-C4	6.43	123.12	119.90
26	BB	988	A	N1-C2-N3	-6.43	126.08	129.30
26	BB	1837	C	C5-C6-N1	6.43	124.22	121.00
26	BB	2124	G	N1-C6-O6	6.43	123.76	119.90
1	AA	589	U	N3-C4-C5	6.43	118.46	114.60
1	AA	1153	G	N7-C8-N9	6.43	116.31	113.10
26	BB	90	U	C5'-C4'-O4'	6.43	116.82	109.10
26	BB	97	C	O4'-C1'-N1	6.43	113.34	108.20
26	BB	2416	C	N3-C4-C5	-6.43	119.33	121.90
1	AA	45	G	N9-C4-C5	6.43	107.97	105.40
1	AA	571	U	O4'-C1'-N1	6.43	113.34	108.20
1	AA	873	A	C4'-C3'-C2'	6.43	109.03	102.60
1	AA	964	A	C5-N7-C8	-6.43	100.69	103.90
1	AA	979	C	O4'-C1'-N1	6.43	113.34	108.20
1	AA	1087	G	C5-N7-C8	-6.43	101.08	104.30
1	AA	1424	U	N3-C4-O4	6.43	123.90	119.40
1	AA	1524	C	N3-C2-O2	-6.43	117.40	121.90
2	AB	69	C	N3-C4-N4	6.43	122.50	118.00
4	AD	1	C	N3-C4-C5	6.43	124.47	121.90
26	BB	120	U	C5'-C4'-O4'	6.43	116.82	109.10
26	BB	137	U	O4'-C1'-N1	6.43	113.34	108.20
26	BB	1192	G	C6-N1-C2	-6.43	121.24	125.10
26	BB	1401	G	N3-C4-C5	-6.43	125.39	128.60
26	BB	1759	A	C5-C6-N1	6.43	120.92	117.70
26	BB	2238	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(°)
26	BB	2761	A	C2-N3-C4	6.43	113.81	110.60
32	BH	151	ARG	NE-CZ-NH2	-6.43	117.08	120.30
1	AA	146	G	C4-C5-C6	6.43	122.66	118.80
1	AA	582	C	C4'-C3'-C2'	-6.43	96.17	102.60
1	AA	1468	A	C6-C5-N7	6.43	136.80	132.30
26	BB	989	G	N7-C8-N9	6.43	116.31	113.10
1	AA	246	A	N3-C4-N9	-6.43	122.26	127.40
1	AA	423	G	N9-C4-C5	6.43	107.97	105.40
1	AA	1432	G	C4-C5-C6	6.43	122.66	118.80
19	AS	55	ASP	CB-CG-OD2	-6.43	112.52	118.30
26	BB	54	G	N1-C6-O6	6.43	123.75	119.90
26	BB	146	A	O4'-C1'-C2'	6.43	113.38	107.60
26	BB	299	A	C4'-C3'-C2'	-6.43	96.17	102.60
26	BB	463	G	C5'-C4'-O4'	6.43	116.81	109.10
26	BB	1059	G	C5'-C4'-O4'	6.43	116.81	109.10
26	BB	1408	G	O4'-C1'-N9	6.43	113.34	108.20
26	BB	2288	A	C6-N1-C2	6.43	122.46	118.60
26	BB	2383	G	N7-C8-N9	6.43	116.31	113.10
1	AA	327	A	O4'-C4'-C3'	6.42	111.24	106.10
1	AA	597	G	N7-C8-N9	6.42	116.31	113.10
1	AA	623	C	N1-C2-N3	-6.42	114.70	119.20
1	AA	732	C	N3-C4-C5	-6.42	119.33	121.90
1	AA	1526	G	C5-C6-N1	6.42	114.71	111.50
26	BB	491	G	C5-N7-C8	6.42	107.51	104.30
26	BB	769	U	C1'-O4'-C4'	6.42	115.04	109.90
26	BB	1218	G	C6-C5-N7	6.42	134.25	130.40
26	BB	2029	G	C2-N3-C4	-6.42	108.69	111.90
26	BB	2075	U	C2-N3-C4	-6.42	123.14	127.00
26	BB	2325	G	C2-N3-C4	6.42	115.11	111.90
26	BB	2328	A	C8-N9-C4	-6.42	103.23	105.80
1	AA	204	G	N1-C2-N2	6.42	121.98	116.20
1	AA	1500	A	C3'-C2'-C1'	6.42	106.64	101.50
26	BB	927	A	C1'-O4'-C4'	6.42	115.04	109.90
56	B5	4	THR	CA-CB-CG2	-6.42	103.41	112.40
1	AA	240	G	C4'-C3'-C2'	-6.42	96.18	102.60
1	AA	460	A	C5-C6-N6	6.42	128.84	123.70
26	BB	167	A	C4-C5-N7	6.42	113.91	110.70
26	BB	343	C	N1-C1'-C2'	-6.42	104.94	112.00
26	BB	368	A	C5-C6-N6	-6.42	118.56	123.70
26	BB	1304	A	C5-C6-N6	-6.42	118.56	123.70
26	BB	1390	U	C5-C6-N1	-6.42	119.49	122.70
26	BB	1858	A	C4-C5-N7	-6.42	107.49	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1869	G	C3'-C2'-C1'	-6.42	96.36	101.50
26	BB	2652	C	N1-C2-O2	6.42	122.75	118.90
48	BX	70	ILE	CA-CB-CG1	6.42	123.20	111.00
1	AA	241	G	C5-C6-N1	-6.42	108.29	111.50
1	AA	903	G	N9-C4-C5	6.42	107.97	105.40
7	AG	141	VAL	CA-CB-CG2	6.42	120.53	110.90
26	BB	117	G	O4'-C1'-N9	-6.42	103.06	108.20
26	BB	2010	G	C5'-C4'-C3'	-6.42	105.73	116.00
26	BB	2266	A	C5-N7-C8	-6.42	100.69	103.90
1	AA	1073	U	O4'-C1'-N1	6.42	113.33	108.20
1	AA	1321	U	C6-N1-C2	-6.42	117.15	121.00
26	BB	271	G	N9-C1'-C2'	-6.42	104.94	112.00
26	BB	515	A	C5-C6-N6	6.42	128.84	123.70
26	BB	556	A	N1-C2-N3	-6.42	126.09	129.30
26	BB	612	G	N1-C2-N3	-6.42	120.05	123.90
26	BB	886	A	C8-N9-C4	-6.42	103.23	105.80
26	BB	1182	G	N7-C8-N9	6.42	116.31	113.10
26	BB	2391	G	C4-C5-C6	6.42	122.65	118.80
26	BB	2454	G	C8-N9-C4	-6.42	103.83	106.40
26	BB	2663	G	N1-C2-N3	-6.42	120.05	123.90
1	AA	654	G	C5'-C4'-O4'	-6.42	101.40	109.10
12	AL	39	GLY	C-N-CA	6.42	137.74	121.70
26	BB	751	A	O4'-C1'-C2'	-6.42	99.38	105.80
26	BB	858	G	N3-C4-C5	-6.42	125.39	128.60
26	BB	971	G	C5-N7-C8	6.42	107.51	104.30
26	BB	1491	G	C5-N7-C8	-6.42	101.09	104.30
26	BB	1705	A	C6-N1-C2	-6.42	114.75	118.60
26	BB	1723	G	C6-N1-C2	-6.42	121.25	125.10
26	BB	2367	G	N9-C4-C5	6.42	107.97	105.40
26	BB	2620	C	C4-C5-C6	-6.42	114.19	117.40
1	AA	1066	C	C6-N1-C2	-6.42	117.73	120.30
16	AP	28	ARG	CD-NE-CZ	-6.42	114.62	123.60
26	BB	625	G	C4-C5-C6	6.42	122.65	118.80
26	BB	1104	C	N3-C4-C5	-6.42	119.33	121.90
26	BB	2778	A	N1-C2-N3	-6.42	126.09	129.30
1	AA	104	G	C2-N3-C4	6.41	115.11	111.90
1	AA	187	G	N3-C2-N2	-6.41	115.41	119.90
1	AA	257	G	C1'-O4'-C4'	6.41	115.03	109.90
1	AA	1452	C	C2-N1-C1'	6.41	125.85	118.80
3	AC	38	G	N1-C2-N3	6.41	127.75	123.90
4	AD	15	G	C1'-O4'-C4'	6.41	115.03	109.90
26	BB	3	U	N1-C2-N3	6.41	118.75	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	127	A	O4'-C1'-N9	-6.41	103.07	108.20
26	BB	481	G	N3-C2-N2	-6.41	115.41	119.90
26	BB	524	G	N3-C4-N9	6.41	129.85	126.00
26	BB	1714	U	O4'-C4'-C3'	6.41	111.23	106.10
26	BB	1922	G	N3-C2-N2	6.41	124.39	119.90
26	BB	2071	A	C5-C6-N1	6.41	120.91	117.70
1	AA	765	G	P-O3'-C3'	6.41	127.39	119.70
1	AA	1287	A	C8-N9-C4	-6.41	103.23	105.80
26	BB	1471	G	OP1-P-OP2	-6.41	109.98	119.60
26	BB	1982	U	N3-C4-C5	6.41	118.45	114.60
26	BB	2872	A	N1-C2-N3	-6.41	126.09	129.30
1	AA	7	A	C6-C5-N7	6.41	136.79	132.30
1	AA	392	C	N3-C2-O2	-6.41	117.41	121.90
1	AA	430	A	C4-C5-N7	6.41	113.91	110.70
3	AC	33	A	C8-N9-C4	-6.41	103.24	105.80
12	AL	53	LEU	CB-CG-CD1	6.41	121.90	111.00
26	BB	19	A	C2-N3-C4	-6.41	107.39	110.60
26	BB	96	C	N3-C4-N4	-6.41	113.51	118.00
26	BB	410	G	C4-C5-N7	-6.41	108.24	110.80
26	BB	811	U	N3-C2-O2	-6.41	117.71	122.20
26	BB	1133	A	P-O5'-C5'	6.41	131.16	120.90
26	BB	1177	G	C4'-C3'-C2'	-6.41	96.19	102.60
26	BB	1453	A	C4-C5-C6	6.41	120.21	117.00
26	BB	1699	G	C2-N3-C4	6.41	115.11	111.90
26	BB	1753	G	C4'-C3'-C2'	-6.41	96.19	102.60
26	BB	2134	A	C4-C5-N7	-6.41	107.50	110.70
26	BB	2745	C	N3-C2-O2	6.41	126.39	121.90
26	BB	2811	G	C5'-C4'-C3'	6.41	126.26	116.00
1	AA	87	C	P-O3'-C3'	6.41	127.39	119.70
1	AA	541	G	C2-N3-C4	6.41	115.10	111.90
26	BB	194	G	N1-C6-O6	-6.41	116.06	119.90
26	BB	1698	A	N3-C4-C5	6.41	131.29	126.80
26	BB	1764	C	C5-C4-N4	6.41	124.69	120.20
26	BB	2742	G	O4'-C1'-C2'	6.41	113.37	107.60
1	AA	525	C	C3'-C2'-C1'	6.41	106.62	101.50
1	AA	688	G	C5-C6-N1	6.41	114.70	111.50
26	BB	279	A	O4'-C1'-N9	6.41	113.33	108.20
26	BB	934	U	C1'-O4'-C4'	-6.41	104.77	109.90
1	AA	567	G	C5-C6-N1	6.41	114.70	111.50
1	AA	1127	G	C6-C5-N7	6.41	134.24	130.40
1	AA	1133	G	C4-C5-C6	-6.41	114.96	118.80
3	AC	39	U	O4'-C1'-N1	6.41	113.33	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	5	G	C6-N1-C2	-6.41	121.26	125.10
25	BA	41	G	N9-C4-C5	6.41	107.96	105.40
25	BA	43	C	C3'-C2'-C1'	6.41	106.62	101.50
26	BB	1333	G	C6-C5-N7	-6.41	126.56	130.40
26	BB	1361	G	N3-C2-N2	-6.41	115.42	119.90
26	BB	1526	C	C5-C6-N1	6.41	124.20	121.00
26	BB	2816	G	N7-C8-N9	-6.41	109.90	113.10
43	BS	63	ARG	NH1-CZ-NH2	-6.41	112.35	119.40
1	AA	98	A	C1'-O4'-C4'	-6.40	104.78	109.90
1	AA	1183	U	C3'-C2'-C1'	6.40	106.62	101.50
2	AB	39	A	C4-C5-C6	-6.40	113.80	117.00
26	BB	312	G	N1-C6-O6	6.40	123.74	119.90
26	BB	1153	C	N1-C2-O2	6.40	122.74	118.90
26	BB	1367	A	P-O3'-C3'	6.40	127.39	119.70
26	BB	1533	C	N1-C1'-C2'	-6.40	104.96	112.00
26	BB	1830	C	O4'-C1'-N1	6.40	113.32	108.20
26	BB	1945	G	C8-N9-C4	-6.40	103.84	106.40
1	AA	32	A	P-O5'-C5'	6.40	131.14	120.90
1	AA	617	G	C5-C6-O6	-6.40	124.76	128.60
1	AA	651	C	C5'-C4'-O4'	6.40	116.78	109.10
1	AA	864	A	O4'-C4'-C3'	6.40	111.22	106.10
1	AA	1087	G	C5-C6-O6	-6.40	124.76	128.60
1	AA	1088	G	O4'-C4'-C3'	6.40	111.22	106.10
1	AA	1178	G	N1-C2-N3	6.40	127.74	123.90
1	AA	1315	U	C4'-C3'-C2'	-6.40	96.20	102.60
3	AC	35	G	C8-N9-C1'	6.40	135.32	127.00
26	BB	725	G	N1-C6-O6	-6.40	116.06	119.90
26	BB	869	G	C4'-C3'-C2'	-6.40	96.20	102.60
26	BB	1118	C	C3'-C2'-C1'	6.40	106.62	101.50
26	BB	1150	C	P-O3'-C3'	6.40	127.38	119.70
26	BB	1220	G	C5-C6-O6	-6.40	124.76	128.60
26	BB	1366	A	N9-C1'-C2'	-6.40	104.96	112.00
26	BB	1453	A	C6-C5-N7	-6.40	127.82	132.30
26	BB	1671	U	N1-C2-O2	6.40	127.28	122.80
26	BB	2104	C	C5-C6-N1	6.40	124.20	121.00
26	BB	2171	A	P-O3'-C3'	6.40	127.38	119.70
26	BB	2282	G	N1-C2-N3	-6.40	120.06	123.90
26	BB	2370	G	C5-C6-O6	-6.40	124.76	128.60
26	BB	2397	G	P-O5'-C5'	6.40	131.14	120.90
26	BB	2790	U	N1-C1'-C2'	6.40	122.32	114.00
1	AA	548	G	C1'-O4'-C4'	6.40	115.02	109.90
1	AA	676	A	N3-C4-N9	6.40	132.52	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	700	G	C6-N1-C2	-6.40	121.26	125.10
1	AA	1106	G	P-O3'-C3'	6.40	127.38	119.70
1	AA	1116	U	N1-C2-O2	6.40	127.28	122.80
1	AA	1530	G	O4'-C4'-C3'	6.40	111.22	106.10
4	AD	15	G	C6-N1-C2	-6.40	121.26	125.10
26	BB	327	G	O4'-C1'-N9	6.40	113.32	108.20
26	BB	1209	U	C5-C6-N1	6.40	125.90	122.70
26	BB	1287	A	C5-C6-N6	-6.40	118.58	123.70
26	BB	2062	A	C4'-C3'-C2'	-6.40	96.20	102.60
26	BB	2382	G	N3-C4-N9	6.40	129.84	126.00
26	BB	2735	G	N7-C8-N9	6.40	116.30	113.10
26	BB	2888	C	C4'-C3'-C2'	-6.40	96.20	102.60
28	BD	66	PHE	CB-CG-CD2	-6.40	116.32	120.80
1	AA	301	G	C8-N9-C4	-6.40	103.84	106.40
3	AC	59	A	C4'-C3'-C2'	-6.40	96.20	102.60
25	BA	116	G	N3-C4-C5	-6.40	125.40	128.60
26	BB	924	G	C5'-C4'-C3'	-6.40	105.76	116.00
26	BB	1456	G	O4'-C1'-C2'	6.40	113.36	107.60
26	BB	1528	A	N7-C8-N9	-6.40	110.60	113.80
1	AA	101	A	N9-C4-C5	6.40	108.36	105.80
1	AA	148	G	N9-C1'-C2'	-6.40	104.96	112.00
1	AA	427	U	O4'-C1'-N1	6.40	113.32	108.20
1	AA	495	A	P-O3'-C3'	6.40	127.38	119.70
1	AA	670	G	N3-C4-N9	6.40	129.84	126.00
1	AA	740	U	C4-C5-C6	6.40	123.54	119.70
1	AA	1355	G	N3-C4-N9	-6.40	122.16	126.00
26	BB	669	G	C4-C5-C6	6.40	122.64	118.80
26	BB	1325	U	C5'-C4'-O4'	6.40	116.78	109.10
26	BB	1392	A	N3-C4-C5	-6.40	122.32	126.80
26	BB	2111	U	C6-N1-C2	6.40	124.84	121.00
26	BB	2208	C	N3-C4-C5	6.40	124.46	121.90
26	BB	2259	U	P-O3'-C3'	6.40	127.38	119.70
26	BB	2358	A	C1'-O4'-C4'	-6.40	104.78	109.90
26	BB	2464	G	C6-N1-C2	-6.40	121.26	125.10
26	BB	2699	C	N1-C1'-C2'	-6.40	104.96	112.00
26	BB	2835	A	C8-N9-C4	-6.40	103.24	105.80
56	B5	14	ARG	NE-CZ-NH1	6.40	123.50	120.30
1	AA	453	G	C6-C5-N7	-6.40	126.56	130.40
1	AA	1120	C	C4'-C3'-C2'	-6.40	96.20	102.60
26	BB	708	G	C4-C5-N7	-6.40	108.24	110.80
26	BB	753	A	C5-C6-N1	6.40	120.90	117.70
26	BB	991	C	N1-C2-O2	-6.40	115.06	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2190	G	C4-C5-C6	6.40	122.64	118.80
26	BB	2472	G	C5'-C4'-O4'	6.40	116.78	109.10
1	AA	189	A	C4'-C3'-C2'	-6.39	96.20	102.60
26	BB	503	A	P-O3'-C3'	6.39	127.37	119.70
26	BB	1153	C	N3-C4-C5	6.39	124.46	121.90
26	BB	1908	C	O4'-C1'-N1	6.39	113.32	108.20
26	BB	2819	G	N3-C4-C5	-6.39	125.40	128.60
1	AA	95	C	N3-C2-O2	-6.39	117.42	121.90
1	AA	384	G	N1-C2-N3	6.39	127.74	123.90
1	AA	1150	A	N3-C4-C5	-6.39	122.33	126.80
4	AD	22	A	C2-N3-C4	-6.39	107.40	110.60
26	BB	42	A	N9-C4-C5	6.39	108.36	105.80
26	BB	881	G	N3-C4-N9	6.39	129.84	126.00
26	BB	1148	U	N1-C1'-C2'	-6.39	104.97	112.00
26	BB	1759	A	O4'-C1'-N9	6.39	113.31	108.20
26	BB	1773	A	C5'-C4'-O4'	6.39	116.77	109.10
26	BB	2690	U	O4'-C1'-C2'	6.39	113.35	107.60
39	BO	109	PRO	N-CA-CB	6.39	110.97	103.30
1	AA	290	C	O4'-C1'-N1	6.39	113.31	108.20
1	AA	973	G	C8-N9-C4	6.39	108.96	106.40
1	AA	1020	G	N1-C2-N2	6.39	121.95	116.20
1	AA	1534	A	N3-C4-C5	-6.39	122.33	126.80
2	AB	44	G	C3'-C2'-C1'	6.39	106.61	101.50
19	AS	53	ASP	CB-CG-OD2	-6.39	112.55	118.30
26	BB	1631	G	O4'-C1'-N9	6.39	113.31	108.20
26	BB	1972	G	C2-N3-C4	6.39	115.09	111.90
26	BB	2129	C	N3-C4-N4	6.39	122.47	118.00
26	BB	2488	G	C2-N3-C4	6.39	115.10	111.90
1	AA	19	A	C6-N1-C2	-6.39	114.77	118.60
1	AA	218	U	C1'-O4'-C4'	-6.39	104.79	109.90
1	AA	1032	G	N3-C2-N2	-6.39	115.43	119.90
1	AA	1255	G	O4'-C1'-N9	6.39	113.31	108.20
1	AA	1426	G	N3-C2-N2	6.39	124.37	119.90
26	BB	186	G	C5-C6-N1	6.39	114.69	111.50
26	BB	336	C	C2-N3-C4	6.39	123.09	119.90
26	BB	739	A	O4'-C1'-N9	6.39	113.31	108.20
26	BB	813	U	N1-C2-N3	6.39	118.73	114.90
26	BB	1016	G	C5-C6-N1	6.39	114.69	111.50
26	BB	1693	U	C4-C5-C6	6.39	123.53	119.70
26	BB	2109	U	C4-C5-C6	6.39	123.53	119.70
26	BB	2121	G	N9-C4-C5	6.39	107.96	105.40
26	BB	2385	C	N1-C1'-C2'	-6.39	104.97	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2699	C	C2-N3-C4	6.39	123.09	119.90
1	AA	41	G	C4'-C3'-C2'	-6.39	96.21	102.60
1	AA	385	C	P-O3'-C3'	6.39	127.36	119.70
1	AA	779	C	C5-C6-N1	6.39	124.19	121.00
26	BB	264	C	C2-N3-C4	6.39	123.09	119.90
26	BB	834	G	C5-C6-O6	-6.39	124.77	128.60
26	BB	854	C	C5-C4-N4	-6.39	115.73	120.20
26	BB	1361	G	N3-C4-N9	-6.39	122.17	126.00
26	BB	2788	C	N1-C2-N3	-6.39	114.73	119.20
1	AA	96	U	C2-N3-C4	-6.39	123.17	127.00
1	AA	227	G	O3'-P-O5'	-6.39	91.86	104.00
1	AA	341	C	N1-C2-O2	6.39	122.73	118.90
1	AA	445	G	O4'-C1'-C2'	6.39	113.35	107.60
1	AA	698	G	C5-C6-O6	6.39	132.43	128.60
1	AA	1024	G	N1-C6-O6	-6.39	116.07	119.90
26	BB	507	A	C1'-O4'-C4'	-6.39	104.79	109.90
26	BB	530	G	C5-C6-O6	-6.39	124.77	128.60
26	BB	971	G	C4-C5-N7	-6.39	108.25	110.80
26	BB	1143	A	C5-N7-C8	-6.39	100.71	103.90
26	BB	1400	U	C4'-C3'-C2'	-6.39	96.21	102.60
26	BB	1546	G	C1'-O4'-C4'	-6.39	104.79	109.90
26	BB	1897	G	N1-C2-N2	6.39	121.95	116.20
26	BB	2317	A	O4'-C4'-C3'	6.39	111.21	106.10
1	AA	1221	G	O4'-C1'-C2'	-6.38	99.42	105.80
1	AA	1454	G	N1-C2-N2	6.38	121.95	116.20
1	AA	1525	G	C6-N1-C2	-6.38	121.27	125.10
2	AB	23	A	C4'-C3'-C2'	-6.38	96.22	102.60
3	AC	51	C	C5-C6-N1	6.38	124.19	121.00
25	BA	50	A	C5-C6-N1	6.38	120.89	117.70
26	BB	274	C	O4'-C4'-C3'	6.38	111.21	106.10
26	BB	450	G	C5-N7-C8	-6.38	101.11	104.30
26	BB	481	G	C3'-C2'-C1'	6.38	106.61	101.50
26	BB	1107	G	O4'-C1'-N9	6.38	113.31	108.20
26	BB	1584	U	N3-C4-O4	6.38	123.87	119.40
26	BB	2031	A	C4-C5-N7	-6.38	107.51	110.70
26	BB	2629	U	N1-C2-O2	-6.38	118.33	122.80
1	AA	591	U	N3-C2-O2	-6.38	117.73	122.20
25	BA	85	G	N7-C8-N9	6.38	116.29	113.10
26	BB	1743	G	N3-C2-N2	-6.38	115.43	119.90
26	BB	2167	U	O4'-C1'-N1	6.38	113.31	108.20
26	BB	2240	U	C4-C5-C6	6.38	123.53	119.70
26	BB	2829	A	C4-C5-C6	6.38	120.19	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	981	U	O4'-C4'-C3'	6.38	111.21	106.10
2	AB	34	C	P-O3'-C3'	6.38	127.36	119.70
26	BB	609	A	N7-C8-N9	6.38	116.99	113.80
26	BB	1337	G	C6-N1-C2	-6.38	121.27	125.10
26	BB	1462	C	C5-C6-N1	6.38	124.19	121.00
26	BB	1571	A	N1-C2-N3	-6.38	126.11	129.30
26	BB	1853	A	C6-C5-N7	-6.38	127.83	132.30
28	BD	166	ARG	NE-CZ-NH1	-6.38	117.11	120.30
1	AA	468	A	O4'-C1'-N9	6.38	113.30	108.20
1	AA	542	G	C4-C5-N7	-6.38	108.25	110.80
1	AA	653	U	C5-C4-O4	-6.38	122.07	125.90
1	AA	929	G	C4'-C3'-C2'	-6.38	96.22	102.60
26	BB	900	A	C5-C6-N6	-6.38	118.60	123.70
26	BB	1116	G	N9-C4-C5	6.38	107.95	105.40
26	BB	1580	A	C5-C6-N6	-6.38	118.60	123.70
26	BB	2253	G	C2-N3-C4	6.38	115.09	111.90
26	BB	2526	G	C5-C6-O6	6.38	132.43	128.60
26	BB	2819	G	P-O3'-C3'	6.38	127.36	119.70
1	AA	475	C	C2-N3-C4	6.38	123.09	119.90
1	AA	772	U	C5'-C4'-O4'	6.38	116.75	109.10
25	BA	100	G	C4-C5-C6	6.38	122.63	118.80
26	BB	582	A	C4-C5-N7	-6.38	107.51	110.70
26	BB	595	C	N3-C2-O2	-6.38	117.44	121.90
26	BB	864	G	O4'-C1'-N9	-6.38	103.10	108.20
26	BB	1016	G	N7-C8-N9	6.38	116.29	113.10
26	BB	1260	A	C8-N9-C4	-6.38	103.25	105.80
26	BB	1453	A	N1-C2-N3	-6.38	126.11	129.30
26	BB	1707	G	C2-N3-C4	6.38	115.09	111.90
26	BB	1862	G	N9-C1'-C2'	-6.38	104.98	112.00
26	BB	2331	G	C8-N9-C4	-6.38	103.85	106.40
1	AA	286	C	N3-C4-N4	6.38	122.46	118.00
1	AA	594	U	N1-C2-N3	6.38	118.73	114.90
1	AA	970	C	N3-C4-C5	6.38	124.45	121.90
1	AA	976	G	N3-C4-N9	-6.38	122.17	126.00
1	AA	1308	U	C5-C6-N1	-6.38	119.51	122.70
4	AD	45	A	N3-C4-C5	-6.38	122.34	126.80
6	AF	58	ARG	NE-CZ-NH1	6.38	123.49	120.30
26	BB	328	U	O4'-C1'-N1	6.38	113.30	108.20
26	BB	1812	U	N1-C2-N3	6.38	118.73	114.90
26	BB	1828	G	C5-C6-N1	6.38	114.69	111.50
26	BB	2570	G	O4'-C1'-N9	6.38	113.30	108.20
26	BB	2796	U	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(°)
48	BX	57	TYR	CB-CG-CD1	-6.38	117.17	121.00
1	AA	417	G	N3-C4-N9	6.38	129.82	126.00
1	AA	765	G	N3-C4-C5	-6.38	125.41	128.60
25	BA	44	G	O4'-C1'-N9	6.38	113.30	108.20
26	BB	426	C	C4'-C3'-C2'	-6.38	96.22	102.60
26	BB	1019	U	C3'-C2'-C1'	6.38	106.60	101.50
26	BB	2416	C	C5-C6-N1	6.38	124.19	121.00
26	BB	2694	G	C5-N7-C8	-6.38	101.11	104.30
1	AA	217	C	N3-C2-O2	-6.37	117.44	121.90
1	AA	1421	G	N1-C6-O6	6.37	123.72	119.90
1	AA	1478	U	N3-C4-C5	-6.37	110.78	114.60
25	BA	63	C	O4'-C1'-N1	6.37	113.30	108.20
26	BB	796	C	N3-C4-N4	6.37	122.46	118.00
26	BB	1402	U	C5'-C4'-O4'	6.37	116.75	109.10
26	BB	1406	U	N3-C4-O4	6.37	123.86	119.40
26	BB	1513	U	P-O3'-C3'	6.37	127.35	119.70
26	BB	1945	G	C6-C5-N7	-6.37	126.58	130.40
26	BB	2124	G	C4-C5-N7	-6.37	108.25	110.80
26	BB	2540	C	N3-C4-N4	6.37	122.46	118.00
26	BB	2596	U	C5-C6-N1	-6.37	119.51	122.70
1	AA	905	U	C6-N1-C2	-6.37	117.18	121.00
1	AA	1317	C	N1-C2-O2	6.37	122.72	118.90
26	BB	501	A	N1-C2-N3	-6.37	126.11	129.30
26	BB	1516	G	N9-C4-C5	6.37	107.95	105.40
26	BB	1628	G	O4'-C4'-C3'	-6.37	97.63	104.00
26	BB	2192	U	N3-C4-O4	6.37	123.86	119.40
26	BB	2694	G	C5-C6-N1	6.37	114.69	111.50
1	AA	399	G	N7-C8-N9	-6.37	109.92	113.10
1	AA	1060	U	N1-C2-O2	6.37	127.26	122.80
1	AA	1477	U	O4'-C1'-N1	6.37	113.30	108.20
25	BA	1	U	C4-C5-C6	6.37	123.52	119.70
25	BA	8	C	C5-C6-N1	-6.37	117.81	121.00
26	BB	2067	G	C1'-O4'-C4'	-6.37	104.80	109.90
26	BB	2367	G	C4-C5-N7	-6.37	108.25	110.80
1	AA	133	U	C2-N3-C4	-6.37	123.18	127.00
1	AA	923	A	C5'-C4'-O4'	6.37	116.74	109.10
2	AB	57	G	C3'-C2'-C1'	-6.37	96.41	101.50
9	AI	79	ARG	NE-CZ-NH1	-6.37	117.11	120.30
26	BB	316	C	N3-C2-O2	-6.37	117.44	121.90
26	BB	501	A	C4-C5-C6	-6.37	113.82	117.00
26	BB	1705	A	O4'-C1'-N9	6.37	113.30	108.20
26	BB	2186	G	C5-N7-C8	-6.37	101.12	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2521	C	C3'-C2'-C1'	6.37	106.59	101.50
26	BB	2550	G	N1-C2-N3	-6.37	120.08	123.90
26	BB	2879	A	O3'-P-O5'	-6.37	91.90	104.00
28	BD	247	TRP	CB-CG-CD2	6.37	134.88	126.60
1	AA	690	G	C8-N9-C4	-6.37	103.85	106.40
1	AA	1533	C	C1'-O4'-C4'	6.37	114.99	109.90
25	BA	92	C	C4'-C3'-C2'	-6.37	96.23	102.60
26	BB	35	G	N7-C8-N9	-6.37	109.92	113.10
26	BB	2529	G	N7-C8-N9	6.37	116.28	113.10
26	BB	2823	A	C4-C5-N7	-6.37	107.52	110.70
1	AA	564	C	N3-C2-O2	-6.37	117.44	121.90
1	AA	733	G	O4'-C1'-N9	6.37	113.29	108.20
1	AA	910	C	P-O3'-C3'	6.37	127.34	119.70
1	AA	1528	U	N1-C2-N3	6.37	118.72	114.90
4	AD	26	C	C5-C6-N1	-6.37	117.82	121.00
6	AF	53	ARG	CD-NE-CZ	6.37	132.51	123.60
26	BB	257	C	C4-C5-C6	-6.37	114.22	117.40
26	BB	985	C	C4-C5-C6	-6.37	114.22	117.40
26	BB	1665	A	C2-N3-C4	6.37	113.78	110.60
26	BB	2276	G	O4'-C1'-C2'	-6.37	99.44	105.80
26	BB	2415	G	N3-C4-C5	-6.37	125.42	128.60
26	BB	2585	U	N3-C2-O2	-6.37	117.74	122.20
26	BB	2721	A	C4'-C3'-C2'	-6.37	96.23	102.60
1	AA	80	A	N3-C4-C5	-6.36	122.35	126.80
1	AA	693	G	C5-C6-N1	-6.36	108.32	111.50
1	AA	1294	G	C2-N3-C4	-6.36	108.72	111.90
4	AD	17	C	C1'-O4'-C4'	6.36	114.99	109.90
25	BA	76	G	N1-C2-N2	-6.36	110.47	116.20
26	BB	359	G	C6-C5-N7	-6.36	126.58	130.40
26	BB	896	A	O4'-C1'-N9	6.36	113.29	108.20
26	BB	922	C	C6-N1-C2	-6.36	117.75	120.30
26	BB	970	U	C4-C5-C6	6.36	123.52	119.70
26	BB	972	A	C5-N7-C8	-6.36	100.72	103.90
26	BB	1054	A	N1-C2-N3	-6.36	126.12	129.30
26	BB	1221	C	N3-C4-N4	6.36	122.45	118.00
26	BB	1573	G	N3-C4-N9	6.36	129.82	126.00
26	BB	1625	C	N1-C2-N3	-6.36	114.75	119.20
26	BB	2842	G	N1-C6-O6	-6.36	116.08	119.90
26	BB	2868	A	N1-C2-N3	-6.36	126.12	129.30
1	AA	326	G	N9-C4-C5	6.36	107.94	105.40
1	AA	1013	G	C2-N3-C4	6.36	115.08	111.90
1	AA	1021	A	C4-C5-C6	6.36	120.18	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	273	G	C5-C6-N1	6.36	114.68	111.50
26	BB	1284	A	C5'-C4'-O4'	6.36	116.73	109.10
26	BB	1862	G	N1-C2-N3	-6.36	120.08	123.90
26	BB	1938	A	C1'-O4'-C4'	-6.36	104.81	109.90
26	BB	2738	A	N3-C4-N9	-6.36	122.31	127.40
1	AA	219	U	C5-C4-O4	6.36	129.72	125.90
1	AA	418	C	N1-C2-N3	6.36	123.65	119.20
1	AA	574	A	C5-N7-C8	-6.36	100.72	103.90
1	AA	604	G	N3-C2-N2	-6.36	115.45	119.90
1	AA	1071	C	O4'-C4'-C3'	6.36	111.19	106.10
1	AA	1088	G	C2-N3-C4	-6.36	108.72	111.90
1	AA	1158	C	C1'-O4'-C4'	-6.36	104.81	109.90
1	AA	1189	U	N1-C2-N3	6.36	118.72	114.90
1	AA	1197	A	N9-C4-C5	-6.36	103.26	105.80
1	AA	1238	A	C8-N9-C4	-6.36	103.26	105.80
1	AA	1537	U	N3-C4-C5	-6.36	110.78	114.60
17	AQ	72	PHE	CB-CG-CD1	-6.36	116.35	120.80
26	BB	203	A	O4'-C1'-N9	6.36	113.29	108.20
26	BB	383	C	N3-C4-N4	6.36	122.45	118.00
26	BB	968	C	P-O3'-C3'	6.36	127.33	119.70
26	BB	1371	G	N3-C4-C5	-6.36	125.42	128.60
26	BB	1381	G	N9-C4-C5	6.36	107.94	105.40
26	BB	1749	A	C5'-C4'-O4'	6.36	116.73	109.10
26	BB	1756	G	P-O5'-C5'	6.36	131.08	120.90
26	BB	1782	U	C6-N1-C1'	6.36	130.10	121.20
1	AA	547	A	N3-C4-C5	-6.36	122.35	126.80
1	AA	917	G	O4'-C4'-C3'	6.36	111.19	106.10
1	AA	1084	G	C6-N1-C2	-6.36	121.28	125.10
1	AA	1084	G	N3-C4-C5	-6.36	125.42	128.60
1	AA	1399	C	C2-N3-C4	6.36	123.08	119.90
26	BB	1219	U	N1-C2-N3	6.36	118.72	114.90
26	BB	1415	U	N3-C4-O4	6.36	123.85	119.40
26	BB	1516	G	N1-C2-N3	-6.36	120.08	123.90
26	BB	1916	A	N9-C4-C5	6.36	108.34	105.80
26	BB	2425	A	N9-C1'-C2'	6.36	122.27	114.00
26	BB	2700	A	C4'-C3'-C2'	-6.36	96.24	102.60
26	BB	2751	G	O4'-C1'-C2'	-6.36	99.44	105.80
1	AA	654	G	C8-N9-C4	-6.36	103.86	106.40
1	AA	947	G	C5'-C4'-O4'	-6.36	101.47	109.10
1	AA	1301	U	C5'-C4'-O4'	6.36	116.73	109.10
1	AA	1353	G	O4'-C1'-N9	6.36	113.29	108.20
1	AA	1395	C	C4-C5-C6	-6.36	114.22	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1417	G	N3-C4-N9	6.36	129.81	126.00
3	AC	32	U	C2-N3-C4	-6.36	123.19	127.00
25	BA	85	G	N3-C4-C5	-6.36	125.42	128.60
26	BB	17	G	C2-N3-C4	6.36	115.08	111.90
26	BB	561	G	C5'-C4'-O4'	6.36	116.73	109.10
26	BB	1449	G	C4-C5-C6	6.36	122.61	118.80
26	BB	1846	G	C5-C6-O6	-6.36	124.79	128.60
26	BB	2649	C	C6-N1-C2	-6.36	117.76	120.30
26	BB	2812	G	C8-N9-C4	-6.36	103.86	106.40
1	AA	275	G	C4-C5-N7	-6.36	108.26	110.80
1	AA	789	U	N3-C4-C5	-6.36	110.79	114.60
1	AA	871	U	N1-C2-N3	6.36	118.71	114.90
1	AA	975	A	N1-C2-N3	-6.36	126.12	129.30
2	AB	75	C	C5-C6-N1	-6.36	117.82	121.00
6	AF	142	ARG	NE-CZ-NH1	-6.36	117.12	120.30
26	BB	43	G	C6-N1-C2	-6.36	121.29	125.10
26	BB	182	A	C2-N3-C4	6.36	113.78	110.60
26	BB	270	A	C2-N3-C4	6.36	113.78	110.60
26	BB	279	A	C5-N7-C8	6.36	107.08	103.90
26	BB	289	G	N7-C8-N9	6.36	116.28	113.10
26	BB	1410	G	C5-C6-N1	6.36	114.68	111.50
26	BB	2558	C	O4'-C1'-N1	6.36	113.28	108.20
1	AA	1527	U	C2-N3-C4	-6.35	123.19	127.00
18	AR	83	ARG	NE-CZ-NH1	6.35	123.48	120.30
26	BB	873	C	C4-C5-C6	-6.35	114.22	117.40
26	BB	994	C	C5'-C4'-O4'	6.35	116.72	109.10
26	BB	1193	G	N1-C2-N2	6.35	121.92	116.20
26	BB	1327	A	C5-C6-N6	6.35	128.78	123.70
26	BB	1384	A	N9-C4-C5	6.35	108.34	105.80
26	BB	2027	G	N3-C4-C5	-6.35	125.42	128.60
26	BB	2358	A	N1-C6-N6	6.35	122.41	118.60
26	BB	2429	G	P-O3'-C3'	6.35	127.32	119.70
1	AA	57	G	N7-C8-N9	6.35	116.28	113.10
1	AA	741	G	C4-C5-C6	6.35	122.61	118.80
1	AA	880	C	N3-C4-C5	-6.35	119.36	121.90
1	AA	1482	G	C1'-O4'-C4'	6.35	114.98	109.90
26	BB	17	G	C5'-C4'-O4'	6.35	116.72	109.10
26	BB	373	U	N3-C4-O4	6.35	123.85	119.40
26	BB	408	G	O4'-C1'-N9	6.35	113.28	108.20
26	BB	1716	U	O5'-P-OP1	6.35	118.32	110.70
26	BB	2032	G	C5-C6-N1	6.35	114.68	111.50
26	BB	2126	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(°)
26	BB	2433	A	C8-N9-C4	-6.35	103.26	105.80
26	BB	2869	G	N9-C1'-C2'	-6.35	105.01	112.00
1	AA	885	G	N3-C4-N9	6.35	129.81	126.00
1	AA	1056	U	C6-N1-C2	-6.35	117.19	121.00
1	AA	1344	C	C4'-C3'-C2'	-6.35	96.25	102.60
25	BA	39	A	C4'-C3'-C2'	-6.35	96.25	102.60
26	BB	841	G	N7-C8-N9	6.35	116.28	113.10
26	BB	1419	A	C5-N7-C8	6.35	107.08	103.90
1	AA	18	C	C5-C6-N1	6.35	124.17	121.00
1	AA	180	U	C5-C4-O4	-6.35	122.09	125.90
1	AA	338	A	O4'-C1'-C2'	-6.35	99.45	105.80
1	AA	873	A	C6-C5-N7	6.35	136.75	132.30
1	AA	1022	A	C1'-O4'-C4'	-6.35	104.82	109.90
1	AA	1114	C	C5'-C4'-O4'	6.35	116.72	109.10
26	BB	83	A	N7-C8-N9	6.35	116.97	113.80
26	BB	219	A	C2-N3-C4	-6.35	107.43	110.60
26	BB	500	G	C6-N1-C2	-6.35	121.29	125.10
26	BB	765	C	C3'-C2'-C1'	6.35	106.58	101.50
26	BB	803	U	C3'-C2'-C1'	6.35	106.58	101.50
26	BB	859	G	N1-C6-O6	6.35	123.71	119.90
26	BB	1139	G	O4'-C1'-C2'	6.35	113.31	107.60
26	BB	1179	G	C4-C5-N7	-6.35	108.26	110.80
26	BB	1920	C	C3'-C2'-C1'	6.35	106.58	101.50
26	BB	2874	C	N3-C4-N4	-6.35	113.56	118.00
1	AA	241	G	N1-C2-N2	6.35	121.91	116.20
1	AA	285	C	N1-C2-O2	6.35	122.71	118.90
1	AA	329	A	N1-C6-N6	-6.35	114.79	118.60
1	AA	1178	G	C4-C5-N7	-6.35	108.26	110.80
1	AA	1256	A	O4'-C1'-N9	6.35	113.28	108.20
1	AA	1400	C	C4-C5-C6	-6.35	114.23	117.40
3	AC	24	A	C8-N9-C4	6.35	108.34	105.80
25	BA	42	C	C2'-C3'-O3'	6.35	123.86	113.70
26	BB	493	G	C4-C5-N7	-6.35	108.26	110.80
26	BB	615	U	C2-N1-C1'	6.35	125.32	117.70
26	BB	1142	A	C2-N3-C4	6.35	113.77	110.60
26	BB	1249	U	C5'-C4'-C3'	-6.35	105.84	116.00
26	BB	1374	G	N9-C4-C5	-6.35	102.86	105.40
26	BB	1995	U	C5-C6-N1	-6.35	119.53	122.70
26	BB	2240	U	C2-N3-C4	-6.35	123.19	127.00
1	AA	617	G	N3-C4-C5	6.35	131.77	128.60
1	AA	974	A	N9-C1'-C2'	6.35	122.25	114.00
1	AA	1374	A	N9-C1'-C2'	-6.35	105.02	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1474	U	C3'-C2'-C1'	6.35	106.58	101.50
1	AA	1538	C	C5-C6-N1	-6.35	117.83	121.00
4	AD	32	G	N3-C4-C5	-6.35	125.43	128.60
26	BB	51	G	C2-N3-C4	-6.35	108.73	111.90
26	BB	664	G	C2-N3-C4	6.35	115.07	111.90
26	BB	1813	G	C4'-C3'-C2'	-6.35	96.25	102.60
26	BB	2131	U	N3-C2-O2	-6.35	117.76	122.20
1	AA	680	C	N3-C4-C5	-6.34	119.36	121.90
1	AA	1074	G	N9-C4-C5	6.34	107.94	105.40
1	AA	1316	G	C3'-C2'-C1'	6.34	106.58	101.50
1	AA	1328	C	C6-N1-C2	-6.34	117.76	120.30
14	AN	112	VAL	CA-CB-CG2	6.34	120.42	110.90
26	BB	232	G	O4'-C1'-C2'	6.34	113.31	107.60
26	BB	1333	G	N3-C4-N9	6.34	129.81	126.00
26	BB	1486	U	O4'-C1'-N1	6.34	113.28	108.20
26	BB	2041	U	N3-C2-O2	-6.34	117.76	122.20
26	BB	2270	A	C2-N3-C4	6.34	113.77	110.60
26	BB	2900	A	O4'-C1'-N9	-6.34	103.12	108.20
1	AA	504	C	C5-C4-N4	-6.34	115.76	120.20
1	AA	1336	C	O4'-C1'-N1	6.34	113.28	108.20
25	BA	21	G	C4'-C3'-C2'	-6.34	96.26	102.60
26	BB	560	C	C2-N3-C4	6.34	123.07	119.90
26	BB	795	C	C6-N1-C2	-6.34	117.76	120.30
26	BB	1025	G	N9-C4-C5	6.34	107.94	105.40
26	BB	1885	A	P-O3'-C3'	6.34	127.31	119.70
26	BB	2763	G	O4'-C1'-N9	6.34	113.27	108.20
1	AA	179	A	N3-C4-C5	-6.34	122.36	126.80
1	AA	402	G	N3-C2-N2	6.34	124.34	119.90
1	AA	410	G	O4'-C4'-C3'	6.34	111.17	106.10
1	AA	533	A	C5'-C4'-C3'	-6.34	105.86	116.00
1	AA	945	G	N3-C2-N2	6.34	124.34	119.90
3	AC	44	U	C5'-C4'-O4'	6.34	116.71	109.10
4	AD	39	A	C1'-O4'-C4'	-6.34	104.83	109.90
4	AD	42	C	O4'-C1'-N1	6.34	113.27	108.20
13	AM	16	ARG	CD-NE-CZ	6.34	132.48	123.60
26	BB	1678	A	C4-C5-N7	-6.34	107.53	110.70
26	BB	1769	U	N1-C2-O2	-6.34	118.36	122.80
26	BB	1981	A	N1-C2-N3	-6.34	126.13	129.30
26	BB	2193	G	C4-C5-C6	6.34	122.61	118.80
26	BB	2562	U	C2-N3-C4	-6.34	123.19	127.00
58	B7	10	LEU	CB-CG-CD2	6.34	121.78	111.00
1	AA	674	G	C4-C5-N7	-6.34	108.26	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1118	U	N3-C2-O2	6.34	126.64	122.20
1	AA	1232	U	C2-N3-C4	-6.34	123.20	127.00
3	AC	14	G	C5-C6-O6	-6.34	124.80	128.60
21	AU	42	ARG	NH1-CZ-NH2	-6.34	112.43	119.40
26	BB	196	A	P-O3'-C3'	6.34	127.31	119.70
26	BB	196	A	C4-C5-C6	-6.34	113.83	117.00
26	BB	338	G	C2-N3-C4	6.34	115.07	111.90
26	BB	616	A	C5-C6-N6	-6.34	118.63	123.70
26	BB	1280	G	N3-C4-N9	6.34	129.80	126.00
26	BB	1294	U	C2-N3-C4	6.34	130.80	127.00
26	BB	1522	A	C5-C6-N1	6.34	120.87	117.70
26	BB	1582	C	C5'-C4'-C3'	6.34	126.14	116.00
26	BB	1863	G	C8-N9-C4	-6.34	103.86	106.40
26	BB	2752	C	N3-C2-O2	-6.34	117.46	121.90
27	BC	180	PHE	CB-CG-CD2	6.34	125.24	120.80
1	AA	288	A	C2-N3-C4	6.34	113.77	110.60
1	AA	305	G	N3-C4-N9	-6.34	122.20	126.00
1	AA	472	U	N1-C2-N3	6.34	118.70	114.90
1	AA	1468	A	C5-C6-N1	6.34	120.87	117.70
4	AD	12	G	N3-C4-C5	-6.34	125.43	128.60
26	BB	54	G	C4-C5-N7	-6.34	108.27	110.80
26	BB	359	G	C4-C5-N7	6.34	113.33	110.80
26	BB	758	C	N1-C1'-C2'	-6.34	105.03	112.00
26	BB	1365	A	N9-C4-C5	-6.34	103.27	105.80
26	BB	2004	G	C5'-C4'-O4'	6.34	116.70	109.10
26	BB	2062	A	C3'-C2'-C1'	6.34	106.57	101.50
1	AA	33	A	N7-C8-N9	6.34	116.97	113.80
1	AA	454	G	C6-C5-N7	6.34	134.20	130.40
1	AA	695	A	N3-C4-N9	-6.34	122.33	127.40
1	AA	727	G	N9-C4-C5	-6.34	102.86	105.40
1	AA	806	C	C1'-O4'-C4'	-6.34	104.83	109.90
1	AA	1073	U	N1-C1'-C2'	-6.34	105.03	112.00
1	AA	1214	C	C2-N3-C4	6.34	123.07	119.90
1	AA	1249	C	C5-C4-N4	-6.34	115.77	120.20
1	AA	1260	G	C4'-C3'-C2'	-6.34	96.26	102.60
25	BA	69	G	N7-C8-N9	6.34	116.27	113.10
26	BB	223	A	C8-N9-C4	-6.34	103.27	105.80
26	BB	490	C	C5'-C4'-O4'	6.34	116.70	109.10
26	BB	1981	A	N3-C4-N9	-6.34	122.33	127.40
26	BB	2091	C	C5-C6-N1	-6.34	117.83	121.00
26	BB	2190	G	N3-C4-C5	-6.34	125.43	128.60
26	BB	2513	A	C3'-C2'-C1'	6.34	106.57	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2545	G	C2-N3-C4	6.34	115.07	111.90
26	BB	2623	G	C6-N1-C2	-6.34	121.30	125.10
1	AA	223	A	C8-N9-C4	-6.33	103.27	105.80
1	AA	294	U	C5-C4-O4	-6.33	122.10	125.90
26	BB	1144	A	C5-N7-C8	-6.33	100.73	103.90
26	BB	1583	A	C3'-C2'-C1'	6.33	106.57	101.50
26	BB	2266	A	C5-C6-N6	6.33	128.77	123.70
26	BB	2535	G	O4'-C1'-N9	6.33	113.27	108.20
1	AA	570	G	C5-N7-C8	-6.33	101.13	104.30
1	AA	755	G	C6-C5-N7	-6.33	126.60	130.40
1	AA	837	U	O4'-C1'-N1	6.33	113.27	108.20
1	AA	1417	G	N3-C4-C5	-6.33	125.43	128.60
2	AB	38	A	P-O3'-C3'	6.33	127.30	119.70
22	AV	80	ARG	NE-CZ-NH1	-6.33	117.13	120.30
26	BB	898	C	C4-C5-C6	-6.33	114.23	117.40
26	BB	1469	A	N9-C4-C5	-6.33	103.27	105.80
26	BB	1747	U	C5-C6-N1	-6.33	119.53	122.70
26	BB	1865	U	P-O3'-C3'	6.33	127.30	119.70
26	BB	2128	G	O3'-P-O5'	-6.33	91.97	104.00
26	BB	341	C	O4'-C1'-N1	6.33	113.27	108.20
26	BB	450	G	N3-C4-C5	-6.33	125.43	128.60
26	BB	1470	A	C5-C6-N6	-6.33	118.64	123.70
26	BB	2511	U	C5'-C4'-O4'	6.33	116.70	109.10
26	BB	2553	G	C6-C5-N7	-6.33	126.60	130.40
1	AA	450	G	N3-C4-C5	-6.33	125.44	128.60
1	AA	505	G	C4'-C3'-C2'	-6.33	96.27	102.60
1	AA	571	U	C5-C6-N1	-6.33	119.53	122.70
4	AD	24	C	C2-N3-C4	-6.33	116.73	119.90
26	BB	661	A	N7-C8-N9	-6.33	110.64	113.80
26	BB	839	U	O4'-C4'-C3'	6.33	111.16	106.10
26	BB	1757	A	C8-N9-C4	-6.33	103.27	105.80
26	BB	2544	G	C2-N3-C4	6.33	115.06	111.90
26	BB	2700	A	C3'-C2'-C1'	6.33	106.56	101.50
26	BB	2843	G	C2-N3-C4	6.33	115.06	111.90
26	BB	2903	U	O4'-C1'-N1	6.33	113.26	108.20
1	AA	104	G	C4-C5-N7	-6.33	108.27	110.80
1	AA	251	G	N1-C2-N2	-6.33	110.50	116.20
1	AA	575	G	C5'-C4'-O4'	6.33	116.69	109.10
1	AA	1056	U	N3-C4-C5	-6.33	110.80	114.60
1	AA	1370	G	N1-C2-N2	-6.33	110.50	116.20
25	BA	76	G	N7-C8-N9	6.33	116.26	113.10
26	BB	776	G	C5-C6-N1	6.33	114.66	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	789	A	C5-N7-C8	6.33	107.06	103.90
26	BB	892	A	N1-C6-N6	6.33	122.40	118.60
26	BB	1790	C	N1-C2-N3	-6.33	114.77	119.20
26	BB	2018	G	C4-C5-C6	6.33	122.60	118.80
26	BB	2523	G	C8-N9-C4	6.33	108.93	106.40
26	BB	2571	U	N3-C4-O4	-6.33	114.97	119.40
26	BB	2729	G	C4-C5-C6	6.33	122.60	118.80
1	AA	247	G	N1-C2-N3	6.33	127.70	123.90
1	AA	850	U	C1'-O4'-C4'	-6.33	104.84	109.90
1	AA	1537	U	O4'-C4'-C3'	-6.33	97.67	104.00
26	BB	1140	C	N3-C4-C5	-6.33	119.37	121.90
26	BB	1186	G	P-O3'-C3'	6.33	127.29	119.70
1	AA	252	U	C4-C5-C6	6.33	123.50	119.70
1	AA	1016	A	N9-C4-C5	6.33	108.33	105.80
25	BA	8	C	C6-N1-C2	6.33	122.83	120.30
26	BB	65	U	N1-C2-O2	-6.33	118.37	122.80
26	BB	430	A	N1-C6-N6	-6.33	114.81	118.60
26	BB	636	G	C5-C6-O6	6.33	132.40	128.60
26	BB	701	G	C5-C6-N1	6.33	114.66	111.50
26	BB	1004	U	N3-C4-O4	6.33	123.83	119.40
26	BB	1211	C	C1'-O4'-C4'	6.33	114.96	109.90
26	BB	1404	C	O4'-C1'-N1	6.33	113.26	108.20
26	BB	1839	G	C2-N3-C4	6.33	115.06	111.90
26	BB	2150	C	C2-N3-C4	6.33	123.06	119.90
26	BB	2704	C	C1'-O4'-C4'	-6.33	104.84	109.90
1	AA	1003	G	N1-C2-N2	6.32	121.89	116.20
26	BB	294	A	C5-C6-N6	-6.32	118.64	123.70
26	BB	661	A	C8-N9-C4	6.32	108.33	105.80
26	BB	992	C	C4-C5-C6	6.32	120.56	117.40
26	BB	1048	A	C3'-C2'-C1'	6.32	106.56	101.50
26	BB	1048	A	C5'-C4'-O4'	6.32	116.69	109.10
26	BB	1959	G	N9-C4-C5	6.32	107.93	105.40
26	BB	2065	C	C5-C4-N4	-6.32	115.77	120.20
26	BB	2484	G	N1-C2-N3	-6.32	120.11	123.90
26	BB	2542	A	C8-N9-C4	6.32	108.33	105.80
45	BU	88	ARG	NE-CZ-NH1	6.32	123.46	120.30
1	AA	373	A	C5'-C4'-O4'	6.32	116.69	109.10
1	AA	1018	G	C4-C5-N7	-6.32	108.27	110.80
26	BB	1759	A	C5-N7-C8	6.32	107.06	103.90
26	BB	2627	G	C1'-O4'-C4'	-6.32	104.84	109.90
1	AA	12	U	N1-C2-N3	6.32	118.69	114.90
1	AA	53	A	N1-C6-N6	6.32	122.39	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	904	U	C5-C6-N1	-6.32	119.54	122.70
1	AA	1437	A	C5-C6-N1	-6.32	114.54	117.70
26	BB	176	A	C5-C6-N1	6.32	120.86	117.70
26	BB	553	G	C2-N3-C4	6.32	115.06	111.90
26	BB	617	G	N1-C6-O6	6.32	123.69	119.90
26	BB	630	G	N3-C2-N2	-6.32	115.47	119.90
26	BB	748	G	C5-C6-O6	6.32	132.39	128.60
26	BB	776	G	C5-C6-O6	6.32	132.39	128.60
26	BB	881	G	N7-C8-N9	6.32	116.26	113.10
26	BB	945	A	N9-C4-C5	-6.32	103.27	105.80
26	BB	1061	U	C2-N1-C1'	6.32	125.28	117.70
26	BB	1206	G	N1-C6-O6	6.32	123.69	119.90
26	BB	1702	G	C2-N3-C4	6.32	115.06	111.90
26	BB	2034	U	C2-N3-C4	-6.32	123.21	127.00
26	BB	2673	G	C8-N9-C4	6.32	108.93	106.40
50	BZ	42	GLU	CA-CB-CG	6.32	127.31	113.40
26	BB	49	A	C5-C6-N1	-6.32	114.54	117.70
26	BB	114	U	C4'-C3'-C2'	-6.32	96.28	102.60
26	BB	268	C	N3-C4-N4	6.32	122.42	118.00
26	BB	555	G	C4'-C3'-C2'	-6.32	96.28	102.60
26	BB	1891	G	C5-N7-C8	-6.32	101.14	104.30
26	BB	2506	U	O4'-C1'-N1	6.32	113.25	108.20
1	AA	826	C	N3-C2-O2	-6.32	117.48	121.90
4	AD	15	G	O4'-C1'-N9	6.32	113.25	108.20
26	BB	219	A	C5-C6-N1	6.32	120.86	117.70
26	BB	1251	C	O4'-C1'-N1	-6.32	103.15	108.20
26	BB	1373	A	C5-N7-C8	-6.32	100.74	103.90
26	BB	1497	U	C4-C5-C6	6.32	123.49	119.70
26	BB	1624	U	C2-N1-C1'	-6.32	110.12	117.70
26	BB	1647	U	C4-C5-C6	6.32	123.49	119.70
26	BB	1730	C	C6-N1-C2	-6.32	117.77	120.30
1	AA	325	A	O4'-C1'-N9	6.32	113.25	108.20
1	AA	349	A	N9-C4-C5	6.32	108.33	105.80
1	AA	381	C	C6-N1-C2	-6.32	117.77	120.30
1	AA	468	A	C6-C5-N7	6.32	136.72	132.30
1	AA	848	C	N3-C2-O2	-6.32	117.48	121.90
1	AA	889	A	P-O3'-C3'	6.32	127.28	119.70
1	AA	1389	C	O4'-C1'-N1	6.32	113.25	108.20
1	AA	1433	A	C5-C6-N1	6.32	120.86	117.70
26	BB	764	A	C4-C5-C6	6.32	120.16	117.00
26	BB	829	A	C4-C5-C6	-6.32	113.84	117.00
26	BB	1448	G	N7-C8-N9	6.32	116.26	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1496	A	C5'-C4'-O4'	6.32	116.68	109.10
26	BB	2127	G	C5-C6-O6	-6.32	124.81	128.60
26	BB	2714	G	C1'-O4'-C4'	6.32	114.95	109.90
26	BB	2754	U	N1-C1'-C2'	-6.32	105.05	112.00
1	AA	1494	G	N7-C8-N9	6.31	116.26	113.10
25	BA	23	G	C5'-C4'-O4'	6.31	116.68	109.10
26	BB	113	U	C4-C5-C6	6.31	123.49	119.70
26	BB	511	U	C5-C6-N1	-6.31	119.54	122.70
26	BB	2106	U	C5-C4-O4	-6.31	122.11	125.90
26	BB	2608	G	C5-C6-O6	6.31	132.39	128.60
1	AA	211	G	C6-C5-N7	-6.31	126.61	130.40
1	AA	242	G	C8-N9-C4	-6.31	103.88	106.40
1	AA	722	G	C2'-C3'-O3'	6.31	123.80	113.70
4	AD	31	G	C6-N1-C2	-6.31	121.31	125.10
25	BA	94	A	C5'-C4'-C3'	-6.31	105.90	116.00
26	BB	684	G	N3-C4-N9	-6.31	122.21	126.00
26	BB	705	A	N7-C8-N9	6.31	116.96	113.80
26	BB	1000	A	O4'-C1'-N9	6.31	113.25	108.20
26	BB	1340	U	N1-C2-O2	-6.31	118.38	122.80
26	BB	1379	U	P-O3'-C3'	6.31	127.27	119.70
26	BB	1452	G	N7-C8-N9	6.31	116.26	113.10
26	BB	1703	G	C3'-C2'-C1'	6.31	106.55	101.50
26	BB	2158	A	N1-C6-N6	-6.31	114.81	118.60
26	BB	2214	C	P-O3'-C3'	6.31	127.28	119.70
26	BB	2545	G	C5-N7-C8	-6.31	101.14	104.30
48	BX	72	VAL	CA-CB-CG1	6.31	120.37	110.90
1	AA	98	A	C8-N9-C4	-6.31	103.28	105.80
1	AA	1408	A	C4-C5-N7	-6.31	107.55	110.70
26	BB	1179	G	N7-C8-N9	6.31	116.25	113.10
1	AA	456	A	C4-C5-N7	-6.31	107.55	110.70
1	AA	491	G	N1-C6-O6	-6.31	116.11	119.90
1	AA	611	C	O4'-C4'-C3'	6.31	111.15	106.10
1	AA	794	A	O4'-C1'-N9	6.31	113.25	108.20
1	AA	978	A	P-O3'-C3'	6.31	127.27	119.70
1	AA	986	U	O4'-C4'-C3'	-6.31	97.69	104.00
1	AA	1105	A	C5-N7-C8	-6.31	100.75	103.90
1	AA	1385	G	N3-C2-N2	-6.31	115.48	119.90
25	BA	12	C	C4'-C3'-C2'	-6.31	96.29	102.60
26	BB	797	G	C5-C6-O6	-6.31	124.81	128.60
26	BB	1192	G	C4-C5-N7	-6.31	108.28	110.80
26	BB	1287	A	C2-N3-C4	6.31	113.75	110.60
26	BB	1352	U	C4'-C3'-C2'	-6.31	96.29	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2230	G	N3-C4-C5	-6.31	125.44	128.60
1	AA	844	G	N3-C4-C5	-6.31	125.45	128.60
26	BB	227	A	C1'-O4'-C4'	-6.31	104.85	109.90
26	BB	1198	U	C2-N3-C4	-6.31	123.22	127.00
26	BB	1317	G	C5-C6-N1	6.31	114.65	111.50
26	BB	1731	G	C6-N1-C2	6.31	128.88	125.10
26	BB	1928	A	N3-C4-C5	-6.31	122.39	126.80
1	AA	395	C	C5-C4-N4	-6.31	115.79	120.20
26	BB	625	G	N1-C2-N2	-6.31	110.52	116.20
26	BB	1043	C	P-O3'-C3'	6.31	127.27	119.70
26	BB	1500	G	N3-C4-C5	-6.31	125.45	128.60
26	BB	2451	A	O4'-C1'-N9	6.31	113.24	108.20
1	AA	489	C	C4'-C3'-C2'	-6.30	96.30	102.60
1	AA	537	G	C5-N7-C8	-6.30	101.15	104.30
1	AA	659	U	C2-N3-C4	-6.30	123.22	127.00
1	AA	679	C	O4'-C1'-N1	6.30	113.24	108.20
1	AA	785	G	C5-C6-O6	-6.30	124.82	128.60
1	AA	1188	A	O4'-C1'-N9	6.30	113.24	108.20
1	AA	1340	A	C5'-C4'-O4'	6.30	116.67	109.10
26	BB	468	G	N3-C4-C5	-6.30	125.45	128.60
26	BB	883	G	C5'-C4'-C3'	-6.30	105.91	116.00
26	BB	966	G	C6-C5-N7	-6.30	126.62	130.40
26	BB	1377	G	O4'-C1'-C2'	6.30	113.28	107.60
26	BB	1425	G	O4'-C1'-N9	6.30	113.24	108.20
26	BB	1460	U	C5-C6-N1	-6.30	119.55	122.70
26	BB	1471	G	O4'-C1'-N9	6.30	113.24	108.20
26	BB	1485	U	N3-C4-O4	6.30	123.81	119.40
26	BB	1608	A	C5-N7-C8	6.30	107.05	103.90
26	BB	1668	A	N1-C6-N6	-6.30	114.82	118.60
26	BB	2247	A	C5-C6-N6	-6.30	118.66	123.70
26	BB	2304	G	C1'-O4'-C4'	-6.30	104.86	109.90
26	BB	2446	G	N3-C2-N2	6.30	124.31	119.90
26	BB	2667	C	N3-C4-N4	-6.30	113.59	118.00
26	BB	2770	G	C6-C5-N7	-6.30	126.62	130.40
1	AA	481	G	C5-C6-N1	6.30	114.65	111.50
26	BB	1460	U	P-O3'-C3'	6.30	127.26	119.70
26	BB	2174	C	C6-N1-C2	6.30	122.82	120.30
26	BB	2317	A	O4'-C1'-C2'	6.30	113.27	107.60
1	AA	79	G	N9-C4-C5	6.30	107.92	105.40
1	AA	367	U	C6-N1-C2	-6.30	117.22	121.00
1	AA	540	G	C6-C5-N7	-6.30	126.62	130.40
1	AA	736	C	N3-C2-O2	-6.30	117.49	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1280	A	C4-C5-N7	-6.30	107.55	110.70
1	AA	1382	C	C2-N3-C4	6.30	123.05	119.90
26	BB	58	G	C5-C6-N1	6.30	114.65	111.50
26	BB	89	A	N9-C4-C5	6.30	108.32	105.80
26	BB	164	C	C4'-C3'-C2'	-6.30	96.30	102.60
26	BB	490	C	C4-C5-C6	6.30	120.55	117.40
26	BB	537	G	N7-C8-N9	6.30	116.25	113.10
26	BB	975	A	N1-C2-N3	6.30	132.45	129.30
26	BB	1052	C	C2-N3-C4	-6.30	116.75	119.90
26	BB	1174	U	N3-C4-O4	6.30	123.81	119.40
26	BB	1780	A	C6-N1-C2	6.30	122.38	118.60
26	BB	2494	G	N9-C1'-C2'	-6.30	105.07	112.00
1	AA	387	U	O4'-C1'-N1	6.30	113.24	108.20
1	AA	569	C	C4'-C3'-C2'	-6.30	96.30	102.60
1	AA	1154	G	C4'-C3'-C2'	-6.30	96.30	102.60
1	AA	1187	G	C2-N3-C4	6.30	115.05	111.90
1	AA	1231	G	C8-N9-C1'	6.30	135.19	127.00
26	BB	841	G	O4'-C1'-N9	6.30	113.24	108.20
26	BB	1893	C	N1-C2-O2	6.30	122.68	118.90
26	BB	2070	A	P-O3'-C3'	6.30	127.26	119.70
26	BB	2533	U	O4'-C1'-N1	6.30	113.24	108.20
26	BB	2751	G	P-O3'-C3'	6.30	127.26	119.70
26	BB	2785	C	C3'-C2'-C1'	6.30	106.54	101.50
1	AA	309	A	C4'-C3'-C2'	-6.30	96.30	102.60
1	AA	402	G	N9-C4-C5	6.30	107.92	105.40
1	AA	1147	C	C5'-C4'-O4'	6.30	116.66	109.10
26	BB	394	C	C2-N3-C4	-6.30	116.75	119.90
26	BB	2058	A	C5-C6-N6	-6.30	118.66	123.70
1	AA	407	U	C2-N3-C4	-6.30	123.22	127.00
1	AA	418	C	N1-C2-O2	-6.30	115.12	118.90
1	AA	489	C	O4'-C1'-N1	6.30	113.24	108.20
1	AA	617	G	N3-C4-N9	-6.30	122.22	126.00
1	AA	1069	C	C2-N3-C4	-6.30	116.75	119.90
1	AA	1143	G	N1-C2-N3	-6.30	120.12	123.90
1	AA	1233	G	C8-N9-C4	-6.30	103.88	106.40
10	AJ	77	ARG	NE-CZ-NH1	6.30	123.45	120.30
16	AP	109	LYS	C-N-CA	6.30	135.52	122.30
26	BB	220	G	C1'-O4'-C4'	-6.30	104.86	109.90
26	BB	1406	U	O4'-C1'-C2'	6.30	113.27	107.60
26	BB	2524	G	N1-C6-O6	6.30	123.68	119.90
1	AA	83	C	N3-C4-N4	-6.29	113.59	118.00
1	AA	963	G	P-O3'-C3'	-6.29	112.15	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1287	A	C6-C5-N7	6.29	136.71	132.30
1	AA	1381	U	C5'-C4'-O4'	6.29	116.65	109.10
26	BB	135	U	C2-N3-C4	-6.29	123.22	127.00
26	BB	301	G	O4'-C1'-C2'	-6.29	99.50	105.80
26	BB	1840	G	N7-C8-N9	6.29	116.25	113.10
1	AA	211	G	P-O3'-C3'	6.29	127.25	119.70
1	AA	321	A	C5'-C4'-O4'	-6.29	101.55	109.10
1	AA	618	C	N3-C2-O2	-6.29	117.50	121.90
1	AA	833	G	N3-C4-C5	-6.29	125.45	128.60
1	AA	1023	U	N3-C4-C5	-6.29	110.82	114.60
9	AI	54	LEU	CB-CG-CD2	-6.29	100.30	111.00
26	BB	252	G	C6-C5-N7	6.29	134.18	130.40
26	BB	919	U	N3-C2-O2	-6.29	117.80	122.20
26	BB	1133	A	C5-C6-N1	-6.29	114.55	117.70
26	BB	1214	A	C4-C5-N7	-6.29	107.55	110.70
26	BB	1299	G	N9-C4-C5	6.29	107.92	105.40
26	BB	1445	G	C5-N7-C8	6.29	107.45	104.30
26	BB	2131	U	C6-N1-C2	-6.29	117.22	121.00
26	BB	2331	G	C5-C6-N1	6.29	114.65	111.50
26	BB	2865	U	C5'-C4'-O4'	6.29	116.65	109.10
1	AA	519	C	C6-N1-C2	-6.29	117.78	120.30
1	AA	1053	G	C6-N1-C2	-6.29	121.33	125.10
26	BB	272	A	C2-N3-C4	6.29	113.75	110.60
26	BB	478	A	C6-C5-N7	6.29	136.71	132.30
26	BB	599	A	C5-N7-C8	-6.29	100.75	103.90
26	BB	679	C	C4'-C3'-C2'	-6.29	96.31	102.60
26	BB	792	A	C3'-C2'-C1'	6.29	106.53	101.50
26	BB	1241	A	N9-C4-C5	-6.29	103.28	105.80
26	BB	1637	A	C5'-C4'-O4'	6.29	116.65	109.10
26	BB	2616	C	N1-C2-O2	6.29	122.67	118.90
26	BB	2681	C	C5-C4-N4	-6.29	115.80	120.20
26	BB	2815	C	C2-N3-C4	6.29	123.05	119.90
1	AA	1041	G	C8-N9-C1'	6.29	135.18	127.00
26	BB	502	A	N9-C4-C5	6.29	108.32	105.80
26	BB	552	U	N3-C2-O2	-6.29	117.80	122.20
26	BB	713	G	N7-C8-N9	6.29	116.25	113.10
26	BB	1820	U	C2-N1-C1'	6.29	125.25	117.70
26	BB	2049	G	C4-N9-C1'	-6.29	118.32	126.50
26	BB	2131	U	N1-C2-N3	6.29	118.67	114.90
1	AA	581	G	C4-C5-C6	6.29	122.57	118.80
1	AA	1461	G	N9-C4-C5	6.29	107.92	105.40
4	AD	26	C	O5'-C5'-C4'	-6.29	99.75	111.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	317	G	C8-N9-C4	-6.29	103.89	106.40
26	BB	352	A	C4-C5-N7	-6.29	107.56	110.70
26	BB	520	G	C6-N1-C2	-6.29	121.33	125.10
26	BB	908	C	N1-C2-O2	6.29	122.67	118.90
26	BB	1042	G	N3-C2-N2	6.29	124.30	119.90
26	BB	1051	G	C8-N9-C4	-6.29	103.89	106.40
26	BB	1748	C	N3-C4-C5	-6.29	119.39	121.90
26	BB	2105	U	N3-C4-O4	6.29	123.80	119.40
1	AA	1145	A	P-O3'-C3'	6.29	127.24	119.70
17	AQ	62	ARG	NE-CZ-NH1	-6.29	117.16	120.30
26	BB	1215	G	C8-N9-C4	6.29	108.92	106.40
26	BB	2882	A	C8-N9-C4	-6.29	103.28	105.80
26	BB	602	A	C6-C5-N7	6.29	136.70	132.30
26	BB	726	G	C5-N7-C8	-6.29	101.16	104.30
26	BB	1083	U	N1-C2-N3	6.29	118.67	114.90
26	BB	1093	G	N3-C4-C5	-6.29	125.46	128.60
26	BB	2360	G	C4-C5-C6	6.29	122.57	118.80
26	BB	2436	G	N3-C2-N2	-6.29	115.50	119.90
40	BP	115	LEU	CB-CA-C	6.29	122.14	110.20
1	AA	70	U	O4'-C1'-N1	6.28	113.23	108.20
1	AA	775	G	C2-N3-C4	6.28	115.04	111.90
1	AA	872	A	O4'-C1'-N9	6.28	113.23	108.20
1	AA	1349	A	C4'-C3'-C2'	-6.28	96.32	102.60
1	AA	1361	G	C3'-C2'-C1'	-6.28	96.47	101.50
1	AA	1432	G	C5-C6-O6	-6.28	124.83	128.60
1	AA	1530	G	C1'-O4'-C4'	-6.28	104.87	109.90
26	BB	63	A	C2-N3-C4	-6.28	107.46	110.60
26	BB	378	C	N1-C2-N3	-6.28	114.80	119.20
26	BB	395	U	C5-C6-N1	-6.28	119.56	122.70
26	BB	443	A	C5-C6-N1	-6.28	114.56	117.70
26	BB	554	U	N1-C2-O2	-6.28	118.40	122.80
26	BB	1739	A	N9-C4-C5	6.28	108.31	105.80
26	BB	2227	A	N9-C4-C5	-6.28	103.29	105.80
26	BB	2492	U	O4'-C1'-N1	6.28	113.23	108.20
26	BB	2687	U	N1-C2-N3	6.28	118.67	114.90
1	AA	824	G	C5-N7-C8	-6.28	101.16	104.30
1	AA	916	U	O4'-C1'-N1	6.28	113.23	108.20
1	AA	1238	A	C5'-C4'-O4'	6.28	116.64	109.10
26	BB	283	G	C8-N9-C4	-6.28	103.89	106.40
26	BB	597	G	C8-N9-C4	-6.28	103.89	106.40
26	BB	1115	G	C2-N3-C4	-6.28	108.76	111.90
26	BB	1963	U	N3-C4-O4	6.28	123.80	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2235	G	C3'-C2'-C1'	6.28	106.53	101.50
1	AA	502	A	C2-N3-C4	6.28	113.74	110.60
1	AA	711	G	C8-N9-C4	-6.28	103.89	106.40
1	AA	763	G	N3-C4-C5	-6.28	125.46	128.60
1	AA	950	U	O4'-C1'-N1	6.28	113.22	108.20
1	AA	1005	A	C6-N1-C2	-6.28	114.83	118.60
1	AA	1455	G	N9-C1'-C2'	-6.28	105.09	112.00
26	BB	219	A	N1-C2-N3	6.28	132.44	129.30
26	BB	662	G	C6-C5-N7	6.28	134.17	130.40
26	BB	788	A	N9-C4-C5	6.28	108.31	105.80
26	BB	1314	C	P-O5'-C5'	6.28	130.95	120.90
26	BB	1546	G	N9-C4-C5	6.28	107.91	105.40
26	BB	2190	G	N1-C2-N3	-6.28	120.13	123.90
26	BB	2249	U	C5-C6-N1	6.28	125.84	122.70
26	BB	2443	C	O4'-C1'-N1	6.28	113.22	108.20
26	BB	2598	A	C5-C6-N1	-6.28	114.56	117.70
1	AA	231	U	C4'-C3'-C2'	-6.28	96.32	102.60
1	AA	897	C	N1-C2-N3	-6.28	114.81	119.20
4	AD	20	G	N1-C2-N3	-6.28	120.13	123.90
9	AI	79	ARG	CD-NE-CZ	6.28	132.39	123.60
26	BB	199	A	C3'-C2'-C1'	-6.28	96.48	101.50
26	BB	809	G	C4-C5-N7	6.28	113.31	110.80
1	AA	75	G	C5-C6-O6	6.28	132.37	128.60
1	AA	994	A	O4'-C1'-N9	6.28	113.22	108.20
26	BB	283	G	N7-C8-N9	6.28	116.24	113.10
26	BB	2002	G	N3-C4-N9	6.28	129.77	126.00
26	BB	2447	G	C6-N1-C2	-6.28	121.33	125.10
26	BB	2565	A	C5-C6-N1	6.28	120.84	117.70
36	BL	16	TYR	CB-CG-CD2	-6.28	117.23	121.00
1	AA	202	G	C4-C5-N7	-6.28	108.29	110.80
1	AA	1362	A	C4-C5-N7	-6.28	107.56	110.70
1	AA	1449	C	N3-C4-N4	-6.28	113.61	118.00
3	AC	18	A	N9-C1'-C2'	6.28	122.16	114.00
25	BA	44	G	C5-C6-O6	6.28	132.37	128.60
26	BB	10	A	C4-C5-N7	-6.28	107.56	110.70
26	BB	24	G	C6-C5-N7	-6.28	126.64	130.40
26	BB	308	G	O4'-C1'-N9	6.28	113.22	108.20
26	BB	409	G	N1-C6-O6	6.28	123.67	119.90
26	BB	1352	U	O4'-C1'-N1	6.28	113.22	108.20
26	BB	1644	C	C4'-C3'-C2'	-6.28	96.32	102.60
26	BB	1706	C	N3-C2-O2	-6.28	117.51	121.90
26	BB	899	A	C5-C6-N1	-6.27	114.56	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1565	C	C6-N1-C2	-6.27	117.79	120.30
47	BW	13	LEU	CB-CG-CD1	-6.27	100.33	111.00
1	AA	230	G	C5-C6-O6	-6.27	124.84	128.60
1	AA	560	A	O4'-C1'-N9	-6.27	103.18	108.20
1	AA	743	A	C3'-C2'-C1'	6.27	106.52	101.50
1	AA	777	A	C5-C6-N6	-6.27	118.68	123.70
19	AS	2	VAL	CA-CB-CG1	6.27	120.31	110.90
25	BA	103	U	C5'-C4'-O4'	6.27	116.63	109.10
26	BB	344	A	C6-C5-N7	6.27	136.69	132.30
26	BB	1444	G	N1-C2-N3	-6.27	120.14	123.90
26	BB	2572	A	N3-C4-C5	-6.27	122.41	126.80
26	BB	415	A	C8-N9-C4	-6.27	103.29	105.80
26	BB	491	G	C4-C5-N7	-6.27	108.29	110.80
26	BB	666	A	C8-N9-C4	6.27	108.31	105.80
26	BB	799	G	N1-C2-N3	-6.27	120.14	123.90
26	BB	1107	G	N1-C6-O6	6.27	123.66	119.90
26	BB	1817	G	N7-C8-N9	-6.27	109.97	113.10
26	BB	2668	G	O4'-C1'-N9	6.27	113.22	108.20
1	AA	191	G	O4'-C1'-C2'	-6.27	99.53	105.80
1	AA	451	A	N9-C4-C5	-6.27	103.29	105.80
1	AA	661	G	C5'-C4'-O4'	6.27	116.62	109.10
1	AA	1319	A	C5'-C4'-O4'	6.27	116.62	109.10
1	AA	1494	G	N1-C2-N3	-6.27	120.14	123.90
2	AB	9	A	C8-N9-C4	-6.27	103.29	105.80
19	AS	14	ARG	CD-NE-CZ	6.27	132.38	123.60
26	BB	87	U	C4'-C3'-C2'	-6.27	96.33	102.60
26	BB	405	U	C1'-O4'-C4'	-6.27	104.88	109.90
26	BB	506	G	C4-C5-C6	6.27	122.56	118.80
26	BB	662	G	C4-C5-N7	-6.27	108.29	110.80
26	BB	753	A	C6-N1-C2	-6.27	114.84	118.60
26	BB	1526	C	C2-N1-C1'	-6.27	111.90	118.80
26	BB	1802	A	C3'-C2'-C1'	6.27	106.52	101.50
26	BB	2507	C	O4'-C1'-N1	6.27	113.22	108.20
1	AA	764	C	O4'-C1'-N1	6.27	113.21	108.20
1	AA	772	U	C4-C5-C6	6.27	123.46	119.70
1	AA	791	G	C5'-C4'-O4'	6.27	116.62	109.10
1	AA	873	A	C4-C5-C6	-6.27	113.87	117.00
1	AA	1301	U	O4'-C1'-N1	6.27	113.22	108.20
26	BB	44	A	C5-N7-C8	6.27	107.03	103.90
26	BB	133	U	C4'-C3'-C2'	-6.27	96.33	102.60
26	BB	668	A	C3'-C2'-C1'	-6.27	96.49	101.50
26	BB	1143	A	C5-C6-N6	-6.27	118.69	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1239	G	N3-C4-C5	-6.27	125.47	128.60
26	BB	1701	A	C5'-C4'-O4'	6.27	116.62	109.10
26	BB	1930	G	C4-C5-N7	-6.27	108.29	110.80
26	BB	2026	U	C5-C6-N1	-6.27	119.57	122.70
26	BB	2252	G	N3-C4-C5	-6.27	125.47	128.60
26	BB	2648	G	C1'-O4'-C4'	6.27	114.92	109.90
34	BJ	50	TYR	CB-CG-CD2	6.27	124.76	121.00
1	AA	80	A	C5-C6-N6	-6.27	118.69	123.70
1	AA	1043	G	P-O3'-C3'	6.27	127.22	119.70
1	AA	1357	A	N1-C2-N3	-6.27	126.17	129.30
2	AB	44	G	N1-C6-O6	6.27	123.66	119.90
26	BB	324	A	O4'-C1'-N9	6.27	113.21	108.20
26	BB	1426	G	C5-N7-C8	-6.27	101.17	104.30
1	AA	355	C	C2-N3-C4	-6.26	116.77	119.90
1	AA	395	C	N1-C2-O2	6.26	122.66	118.90
1	AA	403	C	C5-C6-N1	6.26	124.13	121.00
1	AA	1234	C	C5'-C4'-O4'	6.26	116.62	109.10
1	AA	1512	U	C5-C6-N1	-6.26	119.57	122.70
1	AA	1536	C	N3-C4-C5	6.26	124.41	121.90
2	AB	28	C	C5-C6-N1	6.26	124.13	121.00
3	AC	14	G	O4'-C4'-C3'	6.26	111.11	106.10
3	AC	55	A	O4'-C1'-C2'	-6.26	99.53	105.80
26	BB	868	U	N3-C2-O2	-6.26	117.81	122.20
26	BB	1020	A	C8-N9-C4	-6.26	103.29	105.80
26	BB	1147	A	C5-C6-N1	-6.26	114.57	117.70
26	BB	1687	G	N7-C8-N9	6.26	116.23	113.10
26	BB	1798	U	C5-C6-N1	-6.26	119.57	122.70
26	BB	2175	C	N1-C2-O2	-6.26	115.14	118.90
26	BB	2522	U	N1-C2-N3	6.26	118.66	114.90
26	BB	2578	G	C5-N7-C8	-6.26	101.17	104.30
26	BB	89	A	C8-N9-C4	-6.26	103.30	105.80
26	BB	1021	A	N7-C8-N9	6.26	116.93	113.80
26	BB	1043	C	N1-C2-O2	6.26	122.66	118.90
26	BB	2301	C	O4'-C1'-N1	6.26	113.21	108.20
40	BP	118	ARG	NE-CZ-NH1	6.26	123.43	120.30
1	AA	518	C	C4-C5-C6	6.26	120.53	117.40
1	AA	528	C	C5'-C4'-C3'	-6.26	105.98	116.00
1	AA	698	G	C5-C6-N1	-6.26	108.37	111.50
1	AA	873	A	C5-C6-N1	6.26	120.83	117.70
4	AD	69	C	N1-C2-N3	-6.26	114.82	119.20
25	BA	8	C	C1'-O4'-C4'	-6.26	104.89	109.90
26	BB	390	U	C4-C5-C6	6.26	123.46	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1649	G	C8-N9-C1'	6.26	135.14	127.00
26	BB	2851	A	C2-N3-C4	-6.26	107.47	110.60
1	AA	183	C	O4'-C1'-N1	6.26	113.21	108.20
1	AA	678	U	O4'-C1'-N1	6.26	113.21	108.20
1	AA	706	A	N7-C8-N9	6.26	116.93	113.80
1	AA	821	G	C8-N9-C4	6.26	108.90	106.40
1	AA	847	G	N3-C4-C5	-6.26	125.47	128.60
26	BB	101	A	C4-C5-C6	-6.26	113.87	117.00
26	BB	526	A	C3'-C2'-C1'	6.26	106.51	101.50
26	BB	1347	A	C8-N9-C1'	6.26	138.97	127.70
26	BB	1887	C	C5'-C4'-C3'	-6.26	105.99	116.00
26	BB	2755	C	N3-C2-O2	-6.26	117.52	121.90
26	BB	2849	U	O4'-C1'-N1	6.26	113.21	108.20
26	BB	2862	G	N9-C1'-C2'	-6.26	105.11	112.00
37	BM	30	ARG	NE-CZ-NH1	6.26	123.43	120.30
1	AA	445	G	C1'-O4'-C4'	-6.26	104.89	109.90
26	BB	253	C	N3-C4-C5	-6.26	119.40	121.90
26	BB	1566	A	N1-C6-N6	-6.26	114.84	118.60
26	BB	1955	U	O4'-C1'-N1	6.26	113.21	108.20
26	BB	2381	A	N7-C8-N9	6.26	116.93	113.80
26	BB	2609	U	C5'-C4'-O4'	-6.26	101.59	109.10
26	BB	297	G	N9-C4-C5	6.26	107.90	105.40
26	BB	1195	G	C6-C5-N7	-6.26	126.65	130.40
26	BB	1263	U	C2-N3-C4	-6.26	123.25	127.00
26	BB	1429	G	N1-C2-N3	-6.26	120.15	123.90
26	BB	1778	U	C4-C5-C6	6.26	123.45	119.70
26	BB	1965	C	N1-C2-O2	6.26	122.65	118.90
26	BB	2391	G	C5-N7-C8	6.26	107.43	104.30
26	BB	2426	A	C5'-C4'-O4'	6.26	116.61	109.10
26	BB	2592	G	C4-C5-C6	6.26	122.55	118.80
26	BB	1033	U	C5'-C4'-O4'	6.25	116.61	109.10
26	BB	2328	A	C1'-O4'-C4'	6.25	114.90	109.90
26	BB	2377	A	N1-C6-N6	6.25	122.35	118.60
26	BB	2775	G	P-O3'-C3'	6.25	127.21	119.70
1	AA	399	G	C1'-O4'-C4'	6.25	114.90	109.90
1	AA	888	G	N3-C2-N2	6.25	124.28	119.90
1	AA	1330	U	N1-C2-O2	6.25	127.18	122.80
4	AD	6	G	O4'-C1'-N9	6.25	113.20	108.20
13	AM	65	TYR	CB-CG-CD2	-6.25	117.25	121.00
25	BA	64	G	N7-C8-N9	6.25	116.23	113.10
26	BB	162	U	N3-C4-C5	-6.25	110.85	114.60
26	BB	382	A	N9-C4-C5	6.25	108.30	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1076	C	C5-C4-N4	6.25	124.58	120.20
26	BB	1133	A	N9-C4-C5	6.25	108.30	105.80
26	BB	1164	C	N3-C4-C5	-6.25	119.40	121.90
26	BB	1605	C	C5-C4-N4	-6.25	115.82	120.20
26	BB	1703	G	N7-C8-N9	-6.25	109.97	113.10
26	BB	1851	U	N3-C4-C5	-6.25	110.85	114.60
26	BB	2250	G	O4'-C1'-N9	-6.25	103.20	108.20
26	BB	2277	G	N1-C2-N3	-6.25	120.15	123.90
1	AA	563	A	N1-C6-N6	-6.25	114.85	118.60
1	AA	915	A	N1-C6-N6	6.25	122.35	118.60
1	AA	1454	G	C5-N7-C8	-6.25	101.17	104.30
1	AA	1529	G	C1'-O4'-C4'	-6.25	104.90	109.90
4	AD	12	G	N3-C2-N2	6.25	124.28	119.90
25	BA	4	C	O4'-C1'-N1	6.25	113.20	108.20
26	BB	180	G	C6-N1-C2	-6.25	121.35	125.10
26	BB	781	A	C4'-C3'-C2'	-6.25	96.35	102.60
26	BB	930	G	N3-C4-N9	-6.25	122.25	126.00
26	BB	1062	G	C2'-C3'-O3'	6.25	123.70	113.70
26	BB	1341	G	C5'-C4'-C3'	-6.25	106.00	116.00
26	BB	1549	A	C8-N9-C4	6.25	108.30	105.80
26	BB	1730	C	N3-C4-C5	-6.25	119.40	121.90
26	BB	2789	C	C5-C6-N1	-6.25	117.88	121.00
26	BB	2844	G	O5'-P-OP1	-6.25	100.07	105.70
34	BJ	158	ARG	NE-CZ-NH2	-6.25	117.17	120.30
4	AD	31	G	N1-C6-O6	-6.25	116.15	119.90
26	BB	874	G	O4'-C1'-N9	6.25	113.20	108.20
26	BB	1463	C	N3-C2-O2	-6.25	117.53	121.90
26	BB	2492	U	C2-N1-C1'	6.25	125.20	117.70
1	AA	36	C	P-O3'-C3'	6.25	127.20	119.70
1	AA	186	C	N1-C2-O2	6.25	122.65	118.90
1	AA	711	G	N3-C4-N9	6.25	129.75	126.00
1	AA	995	C	C1'-O4'-C4'	6.25	114.90	109.90
2	AB	30	G	N9-C4-C5	6.25	107.90	105.40
26	BB	10	A	C5-N7-C8	6.25	107.03	103.90
26	BB	753	A	C5'-C4'-O4'	6.25	116.60	109.10
26	BB	893	C	C2'-C3'-O3'	6.25	123.70	113.70
26	BB	918	A	O4'-C1'-N9	6.25	113.20	108.20
26	BB	1317	G	P-O3'-C3'	6.25	127.20	119.70
26	BB	1827	U	C4-C5-C6	6.25	123.45	119.70
26	BB	2151	U	C1'-O4'-C4'	6.25	114.90	109.90
26	BB	2301	C	C5-C6-N1	-6.25	117.88	121.00
26	BB	2314	A	C6-C5-N7	6.25	136.67	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2648	G	N7-C8-N9	6.25	116.22	113.10
26	BB	2723	C	C1'-O4'-C4'	6.25	114.90	109.90
26	BB	2748	A	N7-C8-N9	-6.25	110.68	113.80
1	AA	598	U	C5'-C4'-O4'	6.25	116.60	109.10
1	AA	806	C	O4'-C1'-C2'	6.25	113.22	107.60
1	AA	1143	G	C5-C6-N1	6.25	114.62	111.50
1	AA	1362	A	O4'-C4'-C3'	6.25	111.10	106.10
1	AA	1511	G	N1-C2-N2	-6.25	110.58	116.20
2	AB	64	U	C4'-C3'-C2'	-6.25	96.35	102.60
26	BB	624	C	O4'-C1'-N1	6.25	113.20	108.20
26	BB	760	G	C6-N1-C2	-6.25	121.35	125.10
26	BB	1049	C	C5-C6-N1	6.25	124.12	121.00
26	BB	1679	A	O4'-C1'-N9	6.25	113.20	108.20
26	BB	1836	C	C1'-O4'-C4'	-6.25	104.90	109.90
1	AA	73	C	C4-C5-C6	6.25	120.52	117.40
1	AA	638	U	N1-C2-N3	6.25	118.65	114.90
1	AA	1134	G	N3-C4-N9	6.25	129.75	126.00
1	AA	1481	U	C2-N3-C4	-6.25	123.25	127.00
15	AO	37	TYR	CB-CG-CD1	-6.25	117.25	121.00
26	BB	1135	C	C3'-C2'-C1'	6.25	106.50	101.50
26	BB	1442	U	C5-C4-O4	6.25	129.65	125.90
26	BB	2107	G	N9-C1'-C2'	-6.25	105.13	112.00
26	BB	2750	A	N9-C4-C5	-6.25	103.30	105.80
1	AA	249	U	N1-C2-O2	-6.24	118.43	122.80
1	AA	1278	G	C4-C5-C6	6.24	122.55	118.80
26	BB	66	C	C5-C6-N1	6.24	124.12	121.00
26	BB	460	A	C5-C6-N1	-6.24	114.58	117.70
26	BB	837	C	C4'-C3'-C2'	-6.24	96.36	102.60
26	BB	939	G	C6-N1-C2	-6.24	121.35	125.10
26	BB	943	A	C8-N9-C4	-6.24	103.30	105.80
26	BB	1057	A	C2-N3-C4	-6.24	107.48	110.60
26	BB	1084	A	C3'-C2'-C1'	-6.24	96.51	101.50
26	BB	1234	U	C3'-C2'-C1'	6.24	106.50	101.50
26	BB	1873	G	N3-C4-C5	-6.24	125.48	128.60
26	BB	2121	G	C5-C6-N1	-6.24	108.38	111.50
26	BB	2411	A	C3'-C2'-C1'	-6.24	96.50	101.50
26	BB	2567	G	C5'-C4'-O4'	6.24	116.59	109.10
1	AA	823	C	C4'-C3'-C2'	-6.24	96.36	102.60
25	BA	28	C	C2-N3-C4	6.24	123.02	119.90
26	BB	1095	A	C6-N1-C2	6.24	122.34	118.60
26	BB	1126	A	C5-C6-N6	-6.24	118.71	123.70
26	BB	1600	C	N3-C2-O2	-6.24	117.53	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2903	U	C3'-C2'-C1'	6.24	106.49	101.50
1	AA	65	A	N7-C8-N9	6.24	116.92	113.80
1	AA	258	G	C5-N7-C8	-6.24	101.18	104.30
1	AA	792	A	N7-C8-N9	6.24	116.92	113.80
1	AA	1460	C	N1-C2-O2	6.24	122.64	118.90
1	AA	1540	U	C3'-C2'-C1'	6.24	106.49	101.50
2	AB	3	G	C5-C6-N1	6.24	114.62	111.50
26	BB	1304	A	C2-N3-C4	6.24	113.72	110.60
26	BB	1374	G	N3-C4-C5	6.24	131.72	128.60
26	BB	2093	G	N9-C4-C5	6.24	107.90	105.40
26	BB	2167	U	C5-C4-O4	-6.24	122.16	125.90
26	BB	2214	C	N1-C2-O2	6.24	122.64	118.90
26	BB	2235	G	N3-C4-C5	-6.24	125.48	128.60
1	AA	17	U	P-O3'-C3'	6.24	127.19	119.70
1	AA	340	U	C3'-C2'-C1'	-6.24	96.51	101.50
1	AA	560	A	C6-N1-C2	-6.24	114.86	118.60
5	AE	13	VAL	CA-CB-CG2	6.24	120.26	110.90
26	BB	182	A	C8-N9-C4	-6.24	103.31	105.80
26	BB	2018	G	N3-C4-N9	6.24	129.74	126.00
26	BB	2028	U	N1-C1'-C2'	-6.24	105.14	112.00
26	BB	2542	A	C6-N1-C2	-6.24	114.86	118.60
26	BB	2675	A	N3-C4-N9	6.24	132.39	127.40
1	AA	496	A	P-O3'-C3'	6.24	127.19	119.70
1	AA	717	U	O4'-C1'-N1	6.24	113.19	108.20
25	BA	105	G	C8-N9-C1'	6.24	135.11	127.00
26	BB	396	G	C4'-C3'-C2'	-6.24	96.36	102.60
26	BB	446	G	C6-C5-N7	-6.24	126.66	130.40
26	BB	455	C	C2-N3-C4	6.24	123.02	119.90
26	BB	942	G	N3-C2-N2	-6.24	115.53	119.90
26	BB	2108	A	C4-C5-N7	-6.24	107.58	110.70
26	BB	2392	A	C5-C6-N1	6.24	120.82	117.70
1	AA	476	U	C2-N3-C4	6.24	130.74	127.00
1	AA	1045	C	C5'-C4'-O4'	6.24	116.58	109.10
1	AA	1107	C	C5'-C4'-O4'	6.24	116.58	109.10
1	AA	1517	G	N1-C2-N3	-6.24	120.16	123.90
25	BA	67	G	O4'-C4'-C3'	6.24	111.09	106.10
25	BA	106	G	C8-N9-C1'	6.24	135.10	127.00
26	BB	261	G	N1-C2-N2	-6.24	110.59	116.20
26	BB	404	A	N3-C4-N9	6.24	132.39	127.40
26	BB	412	A	N3-C4-C5	6.24	131.16	126.80
26	BB	475	C	C4-C5-C6	-6.24	114.28	117.40
26	BB	702	U	C4-C5-C6	6.24	123.44	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	776	G	N1-C2-N3	-6.24	120.16	123.90
26	BB	798	G	N7-C8-N9	6.24	116.22	113.10
26	BB	1202	G	C6-C5-N7	6.24	134.14	130.40
26	BB	1428	C	O4'-C4'-C3'	6.24	111.09	106.10
26	BB	1775	U	O4'-C4'-C3'	6.24	111.09	106.10
26	BB	1847	A	O4'-C4'-C3'	-6.24	97.77	104.00
26	BB	1986	C	O4'-C1'-N1	6.24	113.19	108.20
26	BB	2037	A	C5-N7-C8	-6.24	100.78	103.90
26	BB	2286	G	C5'-C4'-O4'	6.24	116.58	109.10
26	BB	2411	A	N7-C8-N9	-6.24	110.68	113.80
26	BB	2543	G	C5'-C4'-C3'	-6.24	106.02	116.00
26	BB	2850	A	N1-C2-N3	6.24	132.42	129.30
29	BE	179	ARG	NE-CZ-NH2	-6.24	117.18	120.30
1	AA	306	A	C3'-C2'-C1'	6.23	106.49	101.50
1	AA	502	A	N9-C1'-C2'	-6.23	105.14	112.00
1	AA	1148	U	C5'-C4'-O4'	6.23	116.58	109.10
1	AA	1413	A	C4'-C3'-C2'	-6.23	96.37	102.60
25	BA	110	C	O4'-C1'-N1	6.23	113.19	108.20
1	AA	309	A	C4-C5-N7	6.23	113.82	110.70
1	AA	857	C	C4'-C3'-C2'	-6.23	96.37	102.60
1	AA	1127	G	C8-N9-C4	-6.23	103.91	106.40
1	AA	1236	A	C5-C6-N6	-6.23	118.72	123.70
1	AA	1422	G	O4'-C1'-N9	6.23	113.19	108.20
1	AA	1439	G	N1-C6-O6	6.23	123.64	119.90
26	BB	70	G	C4-C5-N7	-6.23	108.31	110.80
26	BB	389	G	C5-N7-C8	6.23	107.42	104.30
26	BB	414	C	C4-C5-C6	-6.23	114.28	117.40
26	BB	447	A	C4-C5-C6	-6.23	113.88	117.00
26	BB	1914	C	N3-C4-C5	-6.23	119.41	121.90
26	BB	1985	C	C6-N1-C2	6.23	122.79	120.30
26	BB	2663	G	C2-N3-C4	6.23	115.02	111.90
28	BD	132	ARG	NE-CZ-NH1	6.23	123.42	120.30
1	AA	122	G	C4'-C3'-C2'	-6.23	96.37	102.60
1	AA	1416	G	N1-C2-N3	-6.23	120.16	123.90
26	BB	384	A	O4'-C4'-C3'	6.23	111.08	106.10
26	BB	1152	C	N3-C2-O2	-6.23	117.54	121.90
26	BB	1361	G	C4-C5-N7	-6.23	108.31	110.80
26	BB	1478	G	N1-C2-N3	6.23	127.64	123.90
26	BB	1640	A	C2-N3-C4	6.23	113.72	110.60
26	BB	1803	A	N9-C4-C5	6.23	108.29	105.80
26	BB	1813	G	N1-C2-N2	-6.23	110.59	116.20
26	BB	1836	C	C4'-C3'-C2'	-6.23	96.37	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1866	A	C6-C5-N7	6.23	136.66	132.30
26	BB	2034	U	N3-C4-O4	6.23	123.76	119.40
54	B3	37	HIS	ND1-CG-CD2	6.23	117.52	108.80
1	AA	1096	C	C5-C6-N1	6.23	124.11	121.00
1	AA	1419	G	O4'-C4'-C3'	6.23	111.08	106.10
1	AA	1461	G	N3-C4-C5	-6.23	125.48	128.60
26	BB	485	C	C1'-O4'-C4'	6.23	114.88	109.90
26	BB	1223	G	O5'-C5'-C4'	-6.23	99.86	111.70
26	BB	1349	C	C5'-C4'-O4'	6.23	116.57	109.10
26	BB	1626	A	C4-C5-N7	6.23	113.81	110.70
26	BB	2700	A	N3-C4-N9	6.23	132.38	127.40
26	BB	2702	G	N3-C4-C5	-6.23	125.48	128.60
1	AA	287	U	N1-C2-N3	6.23	118.64	114.90
1	AA	305	G	C4-C5-N7	-6.23	108.31	110.80
1	AA	731	G	C4-C5-N7	-6.23	108.31	110.80
1	AA	941	G	C2-N3-C4	6.23	115.01	111.90
1	AA	1461	G	N7-C8-N9	6.23	116.21	113.10
12	AL	37	TYR	CG-CD1-CE1	-6.23	116.32	121.30
13	AM	73	LEU	CB-CG-CD2	-6.23	100.41	111.00
25	BA	107	G	N3-C4-C5	-6.23	125.49	128.60
26	BB	109	C	C4-C5-C6	-6.23	114.29	117.40
26	BB	468	G	N1-C2-N3	6.23	127.64	123.90
26	BB	1397	U	N1-C2-O2	6.23	127.16	122.80
26	BB	1433	A	P-O3'-C3'	6.23	127.17	119.70
26	BB	1697	G	C5-C6-O6	-6.23	124.86	128.60
26	BB	1825	U	C6-N1-C1'	6.23	129.92	121.20
26	BB	1991	U	O4'-C4'-C3'	-6.23	97.77	104.00
26	BB	2400	G	N3-C2-N2	6.23	124.26	119.90
43	BS	110	GLU	OE1-CD-OE2	6.23	130.77	123.30
1	AA	1031	C	N3-C4-N4	6.23	122.36	118.00
26	BB	742	A	N3-C4-N9	6.23	132.38	127.40
26	BB	827	U	C5-C6-N1	6.23	125.81	122.70
26	BB	1427	A	C4-C5-N7	-6.23	107.59	110.70
26	BB	2308	G	N9-C4-C5	6.23	107.89	105.40
26	BB	2834	G	N9-C4-C5	6.23	107.89	105.40
1	AA	125	U	O4'-C1'-N1	6.22	113.18	108.20
1	AA	174	A	C4-C5-N7	6.22	113.81	110.70
5	AE	43	GLU	OE1-CD-OE2	6.22	130.77	123.30
25	BA	70	C	N1-C1'-C2'	-6.22	105.15	112.00
26	BB	653	U	N3-C4-O4	-6.22	115.04	119.40
26	BB	1665	A	N9-C1'-C2'	-6.22	105.15	112.00
26	BB	2642	G	C5-C6-O6	-6.22	124.87	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2693	G	C1'-O4'-C4'	-6.22	104.92	109.90
1	AA	143	A	C4-C5-C6	-6.22	113.89	117.00
1	AA	491	G	C5-N7-C8	-6.22	101.19	104.30
1	AA	664	G	C4-C5-C6	6.22	122.53	118.80
1	AA	987	G	C8-N9-C1'	6.22	135.09	127.00
1	AA	1137	C	N3-C4-C5	-6.22	119.41	121.90
1	AA	1251	A	C3'-C2'-C1'	6.22	106.48	101.50
1	AA	1459	G	C6-N1-C2	-6.22	121.37	125.10
3	AC	30	U	N3-C2-O2	-6.22	117.84	122.20
4	AD	7	G	O5'-C5'-C4'	-6.22	99.88	111.70
25	BA	7	G	C5-N7-C8	-6.22	101.19	104.30
26	BB	1355	G	C8-N9-C4	-6.22	103.91	106.40
44	BT	2	TYR	CD1-CE1-CZ	6.22	125.40	119.80
1	AA	311	C	C5'-C4'-O4'	6.22	116.57	109.10
1	AA	352	C	C5'-C4'-O4'	6.22	116.57	109.10
2	AB	57	G	N1-C2-N3	6.22	127.63	123.90
26	BB	502	A	C8-N9-C4	-6.22	103.31	105.80
1	AA	166	U	N3-C4-C5	6.22	118.33	114.60
1	AA	1127	G	N3-C4-N9	-6.22	122.27	126.00
2	AB	9	A	C2-N3-C4	6.22	113.71	110.60
25	BA	55	U	C5-C4-O4	6.22	129.63	125.90
26	BB	787	C	C4-C5-C6	-6.22	114.29	117.40
26	BB	1225	G	C3'-C2'-C1'	6.22	106.48	101.50
26	BB	1552	A	N9-C1'-C2'	-6.22	105.16	112.00
26	BB	2723	C	N1-C2-O2	-6.22	115.17	118.90
26	BB	2726	A	C8-N9-C4	-6.22	103.31	105.80
1	AA	639	G	O4'-C1'-N9	6.22	113.17	108.20
25	BA	8	C	N1-C2-O2	6.22	122.63	118.90
26	BB	688	U	N1-C1'-C2'	6.22	122.08	114.00
26	BB	827	U	C2-N3-C4	-6.22	123.27	127.00
26	BB	1018	U	C4-C5-C6	-6.22	115.97	119.70
26	BB	2704	C	C5-C6-N1	6.22	124.11	121.00
42	BR	61	ARG	NE-CZ-NH2	6.22	123.41	120.30
1	AA	71	A	C5-C6-N1	6.22	120.81	117.70
1	AA	281	G	C2-N3-C4	6.22	115.01	111.90
1	AA	395	C	N3-C4-N4	6.22	122.35	118.00
1	AA	883	C	N3-C2-O2	-6.22	117.55	121.90
1	AA	1488	G	N9-C1'-C2'	-6.22	105.16	112.00
26	BB	531	C	N1-C2-O2	6.22	122.63	118.90
26	BB	1520	U	N3-C2-O2	-6.22	117.85	122.20
26	BB	1603	A	C5-C6-N6	6.22	128.67	123.70
26	BB	1717	A	C5-C6-N6	-6.22	118.73	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1784	A	C3'-C2'-C1'	-6.22	96.53	101.50
26	BB	2427	C	O3'-P-O5'	6.22	115.81	104.00
26	BB	2557	G	N9-C4-C5	6.22	107.89	105.40
1	AA	46	G	C6-N1-C2	-6.21	121.37	125.10
1	AA	123	U	C5'-C4'-O4'	6.21	116.56	109.10
1	AA	173	U	C5'-C4'-O4'	6.21	116.56	109.10
1	AA	824	G	N9-C1'-C2'	-6.21	105.16	112.00
1	AA	901	A	C5-C6-N6	-6.21	118.73	123.70
1	AA	925	G	C5-C6-N1	6.21	114.61	111.50
1	AA	1243	C	N3-C2-O2	-6.21	117.55	121.90
1	AA	1412	C	C6-N1-C2	6.21	122.79	120.30
1	AA	1438	G	N3-C2-N2	6.21	124.25	119.90
26	BB	797	G	C8-N9-C4	-6.21	103.91	106.40
26	BB	909	A	C5-C6-N1	6.21	120.81	117.70
26	BB	1174	U	C4-C5-C6	6.21	123.43	119.70
26	BB	1237	A	C1'-O4'-C4'	-6.21	104.93	109.90
26	BB	1418	G	C6-N1-C2	-6.21	121.37	125.10
26	BB	1513	U	O4'-C1'-N1	6.21	113.17	108.20
26	BB	1700	A	C5-N7-C8	6.21	107.01	103.90
26	BB	1788	C	N3-C4-N4	6.21	122.35	118.00
26	BB	2086	U	N1-C2-N3	6.21	118.63	114.90
26	BB	2112	G	C6-N1-C2	-6.21	121.37	125.10
26	BB	2221	G	C5'-C4'-O4'	6.21	116.56	109.10
26	BB	2628	C	N3-C4-C5	-6.21	119.41	121.90
26	BB	111	A	O4'-C1'-N9	-6.21	103.23	108.20
1	AA	371	A	O5'-P-OP2	-6.21	100.11	105.70
1	AA	594	U	C5-C6-N1	-6.21	119.59	122.70
1	AA	769	G	C3'-C2'-C1'	-6.21	96.53	101.50
1	AA	1233	G	N1-C6-O6	-6.21	116.17	119.90
26	BB	532	A	C6-N1-C2	6.21	122.33	118.60
26	BB	653	U	C1'-O4'-C4'	-6.21	104.93	109.90
26	BB	895	U	P-O3'-C3'	6.21	127.15	119.70
26	BB	1015	U	N3-C2-O2	-6.21	117.85	122.20
26	BB	1489	C	O4'-C1'-N1	6.21	113.17	108.20
26	BB	1931	U	N3-C4-O4	-6.21	115.05	119.40
26	BB	2045	C	N1-C2-O2	6.21	122.63	118.90
26	BB	2075	U	N1-C1'-C2'	-6.21	105.17	112.00
26	BB	2266	A	C4-C5-C6	-6.21	113.89	117.00
1	AA	423	G	C2-N3-C4	6.21	115.00	111.90
1	AA	849	G	O4'-C1'-N9	6.21	113.17	108.20
1	AA	878	A	C4'-C3'-C2'	-6.21	96.39	102.60
1	AA	1178	G	N7-C8-N9	6.21	116.20	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1225	A	C5-C6-N1	-6.21	114.59	117.70
26	BB	899	A	C8-N9-C4	-6.21	103.32	105.80
26	BB	1251	C	C5'-C4'-O4'	6.21	116.55	109.10
26	BB	1971	U	C4-C5-C6	6.21	123.43	119.70
26	BB	2031	A	N1-C6-N6	-6.21	114.87	118.60
35	BK	116	MET	C-N-CA	6.21	137.23	121.70
1	AA	847	G	C2-N3-C4	6.21	115.00	111.90
1	AA	1284	C	C1'-O4'-C4'	6.21	114.87	109.90
1	AA	1338	G	N7-C8-N9	6.21	116.20	113.10
1	AA	1478	U	C4'-C3'-C2'	-6.21	96.39	102.60
1	AA	1490	U	C1'-O4'-C4'	-6.21	104.93	109.90
3	AC	45	G	C4-C5-C6	6.21	122.53	118.80
10	AJ	1	PRO	N-CD-CG	6.21	112.51	103.20
26	BB	87	U	N1-C2-O2	-6.21	118.45	122.80
26	BB	279	A	C8-N9-C4	6.21	108.28	105.80
26	BB	470	A	C4'-C3'-C2'	-6.21	96.39	102.60
26	BB	847	U	C5'-C4'-O4'	6.21	116.55	109.10
26	BB	1136	G	N7-C8-N9	6.21	116.20	113.10
26	BB	1604	C	C4'-C3'-C2'	-6.21	96.39	102.60
26	BB	1936	A	C5-N7-C8	6.21	107.00	103.90
26	BB	2119	A	C8-N9-C4	-6.21	103.32	105.80
26	BB	2731	G	C6-C5-N7	6.21	134.12	130.40
1	AA	120	A	C4-C5-N7	-6.21	107.60	110.70
1	AA	165	G	C4'-C3'-C2'	-6.21	96.39	102.60
1	AA	274	A	N1-C2-N3	-6.21	126.20	129.30
1	AA	618	C	P-O3'-C3'	6.21	127.15	119.70
1	AA	879	C	N1-C2-O2	6.21	122.62	118.90
1	AA	1022	A	N9-C4-C5	6.21	108.28	105.80
1	AA	1238	A	O3'-P-O5'	6.21	115.79	104.00
1	AA	1432	G	C3'-C2'-C1'	6.21	106.47	101.50
1	AA	1463	U	N1-C1'-C2'	-6.21	105.17	112.00
1	AA	1507	A	C2-N3-C4	6.21	113.70	110.60
26	BB	517	C	C5-C4-N4	6.21	124.54	120.20
26	BB	569	U	C6-N1-C2	6.21	124.72	121.00
26	BB	922	C	C5-C6-N1	6.21	124.10	121.00
26	BB	1506	U	C4-C5-C6	6.21	123.42	119.70
26	BB	2133	G	N3-C4-C5	-6.21	125.50	128.60
26	BB	2414	G	O4'-C1'-N9	6.21	113.17	108.20
26	BB	2741	A	N3-C4-N9	-6.21	122.44	127.40
1	AA	144	G	N7-C8-N9	6.21	116.20	113.10
1	AA	438	U	N1-C2-O2	-6.21	118.46	122.80
1	AA	1124	G	N3-C2-N2	-6.21	115.56	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1489	G	N3-C4-C5	-6.21	125.50	128.60
26	BB	31	C	N3-C2-O2	-6.21	117.56	121.90
26	BB	129	C	C6-N1-C2	6.21	122.78	120.30
26	BB	315	G	N7-C8-N9	6.21	116.20	113.10
26	BB	1666	G	C5-N7-C8	-6.21	101.20	104.30
26	BB	1719	G	N7-C8-N9	6.21	116.20	113.10
26	BB	1863	G	N9-C1'-C2'	-6.21	105.17	112.00
26	BB	2283	C	C4-C5-C6	-6.21	114.30	117.40
26	BB	2584	U	C6-N1-C2	-6.21	117.28	121.00
26	BB	2650	U	N1-C2-N3	6.21	118.62	114.90
26	BB	2673	G	C2-N3-C4	6.21	115.00	111.90
26	BB	2768	U	C3'-C2'-C1'	-6.21	96.54	101.50
1	AA	257	G	N1-C2-N2	-6.20	110.62	116.20
1	AA	333	U	N1-C2-N3	6.20	118.62	114.90
1	AA	681	A	C2'-C3'-O3'	6.20	123.63	113.70
1	AA	1107	C	C5-C4-N4	-6.20	115.86	120.20
1	AA	1162	C	N1-C1'-C2'	-6.20	105.18	112.00
1	AA	1348	U	O4'-C1'-N1	6.20	113.16	108.20
3	AC	20	G	C5-N7-C8	-6.20	101.20	104.30
26	BB	331	C	O4'-C1'-N1	6.20	113.16	108.20
26	BB	1393	A	C5-C6-N6	6.20	128.66	123.70
26	BB	2476	A	C5-C6-N6	6.20	128.66	123.70
26	BB	2524	G	N3-C4-C5	-6.20	125.50	128.60
26	BB	2603	G	C2-N3-C4	6.20	115.00	111.90
1	AA	602	A	N9-C1'-C2'	-6.20	105.18	112.00
1	AA	857	C	C4-C5-C6	-6.20	114.30	117.40
1	AA	1009	U	C5-C4-O4	6.20	129.62	125.90
1	AA	1452	C	C1'-O4'-C4'	6.20	114.86	109.90
2	AB	64	U	O3'-P-O5'	-6.20	92.22	104.00
8	AH	37	VAL	CA-CB-CG2	6.20	120.20	110.90
26	BB	129	C	N3-C4-N4	6.20	122.34	118.00
26	BB	623	C	C1'-O4'-C4'	6.20	114.86	109.90
26	BB	797	G	C5-N7-C8	-6.20	101.20	104.30
26	BB	1664	A	N7-C8-N9	6.20	116.90	113.80
26	BB	2270	A	C6-C5-N7	6.20	136.64	132.30
26	BB	2392	A	N9-C4-C5	6.20	108.28	105.80
26	BB	2509	G	C5-C6-O6	-6.20	124.88	128.60
1	AA	325	A	C2'-C3'-O3'	6.20	123.62	113.70
1	AA	747	A	C6-N1-C2	6.20	122.32	118.60
1	AA	830	G	O4'-C1'-N9	6.20	113.16	108.20
1	AA	1391	U	O4'-C4'-C3'	6.20	111.06	106.10
7	AG	178	GLU	OE1-CD-OE2	6.20	130.74	123.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	86	G	N7-C8-N9	6.20	116.20	113.10
26	BB	325	G	C1'-O4'-C4'	-6.20	104.94	109.90
26	BB	618	G	O4'-C1'-N9	6.20	113.16	108.20
26	BB	823	C	C2-N3-C4	6.20	123.00	119.90
26	BB	926	G	N3-C4-C5	-6.20	125.50	128.60
26	BB	1526	C	C5-C4-N4	-6.20	115.86	120.20
26	BB	1770	G	N3-C4-C5	-6.20	125.50	128.60
26	BB	2590	A	N9-C1'-C2'	-6.20	105.18	112.00
1	AA	601	G	C1'-O4'-C4'	-6.20	104.94	109.90
1	AA	1049	U	N1-C1'-C2'	-6.20	105.18	112.00
1	AA	1057	G	N1-C2-N2	6.20	121.78	116.20
1	AA	1365	G	C2-N3-C4	6.20	115.00	111.90
2	AB	3	G	N3-C4-C5	-6.20	125.50	128.60
25	BA	79	G	C6-N1-C2	-6.20	121.38	125.10
25	BA	98	G	C8-N9-C4	-6.20	103.92	106.40
26	BB	720	U	O4'-C1'-N1	6.20	113.16	108.20
26	BB	816	C	O5'-P-OP2	-6.20	100.12	105.70
26	BB	932	U	C5'-C4'-O4'	-6.20	101.66	109.10
26	BB	1220	G	C6-N1-C2	-6.20	121.38	125.10
26	BB	1858	A	N9-C4-C5	6.20	108.28	105.80
26	BB	2463	C	C2-N3-C4	6.20	123.00	119.90
26	BB	2669	G	C8-N9-C4	-6.20	103.92	106.40
1	AA	947	G	N3-C2-N2	-6.20	115.56	119.90
2	AB	48	U	C5'-C4'-O4'	6.20	116.54	109.10
25	BA	6	G	C4-C5-C6	-6.20	115.08	118.80
26	BB	1395	A	C5'-C4'-O4'	6.20	116.54	109.10
26	BB	1531	C	N3-C4-N4	-6.20	113.66	118.00
26	BB	1874	C	C2-N3-C4	6.20	123.00	119.90
26	BB	2499	C	C2-N3-C4	6.20	123.00	119.90
1	AA	167	A	C6-N1-C2	6.20	122.32	118.60
1	AA	348	G	O4'-C1'-N9	6.20	113.16	108.20
1	AA	458	U	C5'-C4'-C3'	-6.20	106.09	116.00
1	AA	513	C	N1-C2-O2	6.20	122.62	118.90
1	AA	1331	G	N9-C4-C5	6.20	107.88	105.40
26	BB	344	A	C4-C5-C6	-6.20	113.90	117.00
26	BB	759	G	C4-C5-N7	-6.20	108.32	110.80
26	BB	832	U	C5-C6-N1	-6.20	119.60	122.70
26	BB	1346	G	N3-C4-N9	-6.20	122.28	126.00
26	BB	1487	U	C4-C5-C6	-6.20	115.98	119.70
26	BB	1869	G	N1-C6-O6	6.20	123.62	119.90
26	BB	1918	A	C4-C5-C6	-6.20	113.90	117.00
26	BB	2057	G	N3-C4-N9	6.20	129.72	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2685	G	C5-C6-O6	-6.20	124.88	128.60
1	AA	1116	U	O4'-C1'-C2'	-6.19	99.61	105.80
1	AA	1168	U	C2-N3-C4	-6.19	123.28	127.00
1	AA	1216	A	C6-C5-N7	6.19	136.64	132.30
1	AA	1360	A	N3-C4-C5	-6.19	122.46	126.80
26	BB	129	C	O4'-C1'-N1	6.19	113.16	108.20
26	BB	227	A	N1-C6-N6	-6.19	114.88	118.60
26	BB	993	G	N3-C4-C5	-6.19	125.50	128.60
26	BB	1202	G	C5-C6-N1	6.19	114.60	111.50
26	BB	1496	A	C2-N3-C4	6.19	113.70	110.60
1	AA	541	G	N3-C4-C5	-6.19	125.50	128.60
1	AA	1020	G	C5-C6-O6	-6.19	124.88	128.60
1	AA	1076	U	C1'-O4'-C4'	6.19	114.85	109.90
1	AA	1457	G	O4'-C1'-N9	6.19	113.16	108.20
6	AF	176	THR	CA-CB-CG2	6.19	121.07	112.40
25	BA	45	A	N7-C8-N9	-6.19	110.70	113.80
26	BB	187	G	N1-C2-N3	-6.19	120.18	123.90
26	BB	789	A	O4'-C1'-C2'	-6.19	99.61	105.80
26	BB	981	A	N1-C2-N3	-6.19	126.20	129.30
26	BB	1004	U	C1'-O4'-C4'	-6.19	104.95	109.90
26	BB	1346	G	N3-C2-N2	-6.19	115.56	119.90
26	BB	1672	A	C5'-C4'-O4'	6.19	116.53	109.10
26	BB	2074	U	P-O3'-C3'	6.19	127.13	119.70
26	BB	2656	U	C4-C5-C6	6.19	123.42	119.70
26	BB	2728	U	O4'-C1'-N1	6.19	113.15	108.20
27	BC	122	ARG	CD-NE-CZ	6.19	132.27	123.60
1	AA	53	A	C5-C6-N6	-6.19	118.75	123.70
1	AA	722	G	N7-C8-N9	6.19	116.20	113.10
1	AA	932	C	O4'-C1'-C2'	6.19	113.17	107.60
1	AA	1156	G	C1'-O4'-C4'	-6.19	104.95	109.90
2	AB	5	G	O4'-C1'-N9	6.19	113.15	108.20
4	AD	70	C	C1'-O4'-C4'	-6.19	104.95	109.90
26	BB	402	A	C8-N9-C4	-6.19	103.32	105.80
26	BB	500	G	C5-C6-N1	6.19	114.59	111.50
26	BB	1148	U	N3-C4-O4	6.19	123.73	119.40
26	BB	1149	G	C6-C5-N7	-6.19	126.69	130.40
26	BB	1439	A	C8-N9-C4	-6.19	103.32	105.80
26	BB	2125	G	C5-C6-O6	-6.19	124.89	128.60
26	BB	2203	U	N1-C1'-C2'	-6.19	105.19	112.00
26	BB	2318	G	N1-C2-N2	6.19	121.77	116.20
26	BB	2381	A	C5-N7-C8	-6.19	100.81	103.90
1	AA	1305	G	C5-N7-C8	6.19	107.39	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	AK	42	GLU	OE1-CD-OE2	6.19	130.73	123.30
26	BB	1302	A	C5-C6-N1	6.19	120.79	117.70
26	BB	2110	G	O4'-C1'-N9	6.19	113.15	108.20
26	BB	2168	G	C4'-C3'-C2'	-6.19	96.41	102.60
38	BN	5	THR	CA-CB-CG2	6.19	121.06	112.40
1	AA	672	U	C3'-C2'-C1'	6.19	106.45	101.50
1	AA	906	A	N9-C1'-C2'	-6.19	105.19	112.00
1	AA	1272	G	C4-C5-N7	-6.19	108.33	110.80
3	AC	36	U	C6-N1-C2	-6.19	117.29	121.00
4	AD	62	C	C5-C4-N4	-6.19	115.87	120.20
26	BB	270	A	C6-N1-C2	6.19	122.31	118.60
26	BB	315	G	C5-N7-C8	-6.19	101.21	104.30
26	BB	1147	A	C5-N7-C8	-6.19	100.81	103.90
26	BB	1396	U	C1'-O4'-C4'	6.19	114.85	109.90
26	BB	1462	C	C4-C5-C6	-6.19	114.31	117.40
26	BB	1611	C	C6-N1-C2	6.19	122.78	120.30
26	BB	2309	A	C2-N3-C4	-6.19	107.51	110.60
36	BL	133	ALA	N-CA-CB	-6.19	101.44	110.10
1	AA	843	U	O4'-C1'-N1	6.19	113.15	108.20
1	AA	974	A	C8-N9-C4	-6.19	103.33	105.80
4	AD	34	U	C5-C6-N1	6.19	125.79	122.70
26	BB	435	C	O4'-C1'-N1	6.19	113.15	108.20
26	BB	1619	G	C5'-C4'-C3'	-6.19	106.10	116.00
26	BB	1765	U	C5-C4-O4	6.19	129.61	125.90
26	BB	1895	C	C6-N1-C2	6.19	122.77	120.30
1	AA	39	G	C6-N1-C2	-6.18	121.39	125.10
1	AA	445	G	N3-C4-C5	-6.18	125.51	128.60
1	AA	807	A	C6-C5-N7	6.18	136.63	132.30
1	AA	1119	C	N1-C2-O2	6.18	122.61	118.90
1	AA	1422	G	C6-C5-N7	-6.18	126.69	130.40
26	BB	329	G	C4-C5-N7	-6.18	108.33	110.80
26	BB	362	A	N1-C6-N6	-6.18	114.89	118.60
26	BB	1368	G	N3-C4-N9	6.18	129.71	126.00
26	BB	2209	G	N1-C6-O6	-6.18	116.19	119.90
26	BB	2351	G	P-O3'-C3'	6.18	127.12	119.70
26	BB	2573	C	C5'-C4'-O4'	6.18	116.52	109.10
26	BB	2626	C	C2-N1-C1'	-6.18	112.00	118.80
26	BB	2820	A	N3-C4-C5	-6.18	122.47	126.80
1	AA	819	A	C2-N3-C4	-6.18	107.51	110.60
1	AA	938	A	C1'-O4'-C4'	6.18	114.85	109.90
2	AB	76	A	C5-C6-N1	-6.18	114.61	117.70
4	AD	12	G	N1-C2-N2	-6.18	110.64	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	AO	113	ARG	CD-NE-CZ	6.18	132.26	123.60
25	BA	89	U	N1-C1'-C2'	6.18	122.04	114.00
26	BB	198	C	O4'-C1'-N1	6.18	113.15	108.20
26	BB	740	C	N3-C2-O2	-6.18	117.57	121.90
26	BB	916	G	C5'-C4'-O4'	6.18	116.52	109.10
26	BB	990	A	N1-C2-N3	-6.18	126.21	129.30
26	BB	1154	G	N1-C2-N3	-6.18	120.19	123.90
26	BB	1202	G	C4'-C3'-C2'	-6.18	96.42	102.60
26	BB	1495	A	C6-C5-N7	-6.18	127.97	132.30
26	BB	2234	G	N1-C6-O6	6.18	123.61	119.90
26	BB	2350	C	C6-N1-C2	-6.18	117.83	120.30
26	BB	2648	G	C6-N1-C2	6.18	128.81	125.10
40	BP	38	LEU	CB-CG-CD2	-6.18	100.49	111.00
26	BB	529	A	C4-C5-N7	-6.18	107.61	110.70
26	BB	1071	G	C5-C6-N1	6.18	114.59	111.50
26	BB	1077	A	C5'-C4'-O4'	6.18	116.52	109.10
26	BB	2016	U	O4'-C1'-C2'	6.18	113.16	107.60
26	BB	2585	U	C6-N1-C2	6.18	124.71	121.00
1	AA	300	A	C6-C5-N7	6.18	136.62	132.30
1	AA	976	G	N7-C8-N9	6.18	116.19	113.10
1	AA	1515	G	C3'-C2'-C1'	-6.18	96.56	101.50
4	AD	43	G	N1-C2-N2	-6.18	110.64	116.20
17	AQ	53	ASP	CB-CG-OD2	-6.18	112.74	118.30
25	BA	79	G	C2-N3-C4	6.18	114.99	111.90
26	BB	476	G	N7-C8-N9	6.18	116.19	113.10
26	BB	910	A	O4'-C1'-N9	-6.18	103.26	108.20
26	BB	980	A	C6-N1-C2	-6.18	114.89	118.60
26	BB	1339	G	O4'-C1'-N9	6.18	113.14	108.20
26	BB	1702	G	C5-C6-O6	6.18	132.31	128.60
26	BB	2274	A	C6-N1-C2	6.18	122.31	118.60
26	BB	2667	C	C6-N1-C2	-6.18	117.83	120.30
1	AA	641	U	P-O3'-C3'	6.18	127.11	119.70
26	BB	1231	U	N1-C1'-C2'	-6.18	105.20	112.00
26	BB	1785	A	C4'-C3'-C2'	-6.18	96.42	102.60
1	AA	318	G	C4-C5-C6	6.18	122.50	118.80
1	AA	486	U	O4'-C1'-N1	6.18	113.14	108.20
1	AA	677	U	N1-C2-O2	6.18	127.12	122.80
1	AA	717	U	C2-N3-C4	-6.18	123.29	127.00
1	AA	747	A	C5-C6-N1	-6.18	114.61	117.70
1	AA	923	A	P-O3'-C3'	6.18	127.11	119.70
26	BB	61	C	C2-N1-C1'	-6.18	112.01	118.80
26	BB	67	U	O4'-C4'-C3'	6.18	111.04	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	87	U	C2-N3-C4	-6.18	123.30	127.00
26	BB	221	A	C5-N7-C8	6.18	106.99	103.90
26	BB	473	G	C5-C6-O6	-6.18	124.89	128.60
26	BB	727	A	C5'-C4'-O4'	6.18	116.51	109.10
26	BB	850	U	C5-C6-N1	6.18	125.79	122.70
26	BB	1122	G	O4'-C1'-N9	6.18	113.14	108.20
26	BB	1245	G	C4-N9-C1'	-6.18	118.47	126.50
26	BB	1682	G	O4'-C1'-N9	6.18	113.14	108.20
26	BB	1690	A	C5-C6-N1	6.18	120.79	117.70
26	BB	1821	A	C5-N7-C8	6.18	106.99	103.90
26	BB	1991	U	N1-C2-O2	-6.18	118.48	122.80
26	BB	2091	C	C5'-C4'-O4'	6.18	116.51	109.10
26	BB	2194	U	C1'-O4'-C4'	-6.18	104.96	109.90
26	BB	2714	G	C5-C6-N1	6.18	114.59	111.50
1	AA	146	G	N9-C1'-C2'	-6.17	105.21	112.00
1	AA	232	G	C5-C6-N1	6.17	114.59	111.50
1	AA	474	G	N1-C2-N3	-6.17	120.19	123.90
1	AA	530	G	C1'-O4'-C4'	6.17	114.84	109.90
1	AA	1184	G	C2-N3-C4	6.17	114.99	111.90
2	AB	69	C	N1-C2-O2	6.17	122.61	118.90
26	BB	5	A	C5'-C4'-O4'	6.17	116.51	109.10
26	BB	53	A	O4'-C1'-N9	6.17	113.14	108.20
26	BB	94	A	C6-C5-N7	6.17	136.62	132.30
26	BB	165	A	N1-C2-N3	-6.17	126.21	129.30
26	BB	272	A	O4'-C1'-N9	6.17	113.14	108.20
26	BB	413	C	C5-C4-N4	-6.17	115.88	120.20
26	BB	625	G	C6-N1-C2	-6.17	121.39	125.10
26	BB	739	A	C5-C6-N6	-6.17	118.76	123.70
26	BB	799	G	N7-C8-N9	6.17	116.19	113.10
26	BB	1271	G	C8-N9-C4	-6.17	103.93	106.40
26	BB	1427	A	C5-N7-C8	6.17	106.99	103.90
26	BB	1994	C	C4-C5-C6	-6.17	114.31	117.40
26	BB	2305	U	N3-C2-O2	-6.17	117.88	122.20
26	BB	2309	A	O4'-C1'-N9	6.17	113.14	108.20
26	BB	2537	U	C5'-C4'-O4'	6.17	116.51	109.10
26	BB	2889	C	C6-N1-C2	6.17	122.77	120.30
1	AA	179	A	C2-N3-C4	6.17	113.69	110.60
1	AA	446	G	N3-C4-C5	-6.17	125.51	128.60
26	BB	987	C	C2-N3-C4	-6.17	116.81	119.90
26	BB	1438	U	C5-C6-N1	-6.17	119.61	122.70
26	BB	1691	C	C5-C6-N1	6.17	124.09	121.00
26	BB	2107	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	BB	2720	U	C5'-C4'-O4'	6.17	116.51	109.10
1	AA	182	A	C5-N7-C8	6.17	106.98	103.90
1	AA	1177	G	C2-N3-C4	6.17	114.98	111.90
26	BB	148	U	C4-C5-C6	6.17	123.40	119.70
26	BB	454	A	P-O5'-C5'	6.17	130.77	120.90
26	BB	731	C	P-O3'-C3'	6.17	127.11	119.70
26	BB	1292	G	N1-C2-N2	6.17	121.75	116.20
26	BB	2280	G	O4'-C1'-N9	6.17	113.14	108.20
26	BB	2342	C	C2-N3-C4	-6.17	116.81	119.90
26	BB	2548	U	N3-C4-C5	6.17	118.30	114.60
26	BB	2716	C	C5'-C4'-O4'	6.17	116.51	109.10
26	BB	2739	U	C2-N3-C4	6.17	130.70	127.00
33	BI	123	ARG	CD-NE-CZ	6.17	132.24	123.60
1	AA	1032	G	C6-C5-N7	-6.17	126.70	130.40
26	BB	279	A	C2-N3-C4	6.17	113.69	110.60
26	BB	317	G	N7-C8-N9	6.17	116.19	113.10
26	BB	1210	G	C4-C5-N7	-6.17	108.33	110.80
26	BB	1936	A	N3-C4-N9	-6.17	122.46	127.40
1	AA	485	U	O4'-C1'-N1	6.17	113.14	108.20
1	AA	641	U	N1-C2-O2	6.17	127.12	122.80
1	AA	1164	G	N9-C4-C5	-6.17	102.93	105.40
2	AB	2	G	O4'-C1'-N9	6.17	113.14	108.20
26	BB	47	C	C4'-C3'-C2'	6.17	108.77	102.60
26	BB	97	C	C4'-C3'-C2'	-6.17	96.43	102.60
26	BB	372	G	C4-C5-C6	6.17	122.50	118.80
26	BB	529	A	C2-N3-C4	-6.17	107.52	110.60
26	BB	858	G	N1-C6-O6	6.17	123.60	119.90
26	BB	978	G	C4'-C3'-C2'	-6.17	96.43	102.60
26	BB	1268	A	C5-C6-N6	-6.17	118.77	123.70
26	BB	1309	G	N7-C8-N9	-6.17	110.02	113.10
26	BB	1387	A	C2-N3-C4	6.17	113.69	110.60
26	BB	1584	U	N1-C2-N3	6.17	118.60	114.90
26	BB	1696	G	N1-C2-N2	6.17	121.75	116.20
26	BB	2018	G	N1-C2-N3	-6.17	120.20	123.90
26	BB	2318	G	N9-C4-C5	-6.17	102.93	105.40
41	BQ	73	ALA	CB-CA-C	-6.17	100.85	110.10
1	AA	179	A	C5-N7-C8	-6.17	100.82	103.90
1	AA	235	C	N1-C1'-C2'	-6.17	105.22	112.00
1	AA	356	A	C1'-O4'-C4'	-6.17	104.97	109.90
1	AA	984	C	C5-C6-N1	6.17	124.08	121.00
1	AA	1210	C	C5-C6-N1	6.17	124.08	121.00
1	AA	1493	A	C4-C5-N7	6.17	113.78	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AC	16	A	O5'-P-OP1	-6.17	100.15	105.70
7	AG	12	ARG	NE-CZ-NH2	-6.17	117.22	120.30
26	BB	42	A	C5'-C4'-C3'	-6.17	106.13	116.00
26	BB	120	U	C5-C4-O4	6.17	129.60	125.90
26	BB	675	A	N3-C4-C5	-6.17	122.48	126.80
26	BB	713	G	C2-N3-C4	6.17	114.98	111.90
26	BB	1257	C	N3-C4-N4	6.17	122.32	118.00
26	BB	1556	C	O4'-C1'-N1	6.17	113.13	108.20
26	BB	1666	G	C6-C5-N7	6.17	134.10	130.40
26	BB	1679	A	C5-C6-N1	6.17	120.78	117.70
26	BB	1876	A	O4'-C1'-N9	6.17	113.13	108.20
1	AA	1176	A	C8-N9-C4	6.17	108.27	105.80
1	AA	1297	G	N1-C2-N2	6.17	121.75	116.20
4	AD	70	C	C4'-C3'-C2'	-6.17	96.44	102.60
26	BB	801	G	N3-C4-C5	-6.17	125.52	128.60
26	BB	1648	U	C5'-C4'-O4'	6.17	116.50	109.10
26	BB	1652	A	C5-C6-N1	6.17	120.78	117.70
26	BB	2127	G	C5-C6-N1	6.17	114.58	111.50
26	BB	2639	A	C4-C5-C6	-6.17	113.92	117.00
1	AA	710	G	N1-C2-N2	6.16	121.75	116.20
1	AA	1013	G	C8-N9-C4	-6.16	103.94	106.40
1	AA	1123	U	C2-N3-C4	-6.16	123.30	127.00
1	AA	1156	G	N3-C4-C5	-6.16	125.52	128.60
1	AA	1300	G	N7-C8-N9	6.16	116.18	113.10
1	AA	1400	C	N3-C4-C5	6.16	124.36	121.90
4	AD	73	A	P-O3'-C3'	6.16	127.09	119.70
26	BB	38	A	N9-C1'-C2'	-6.16	105.22	112.00
26	BB	1108	U	C6-N1-C2	6.16	124.70	121.00
26	BB	1531	C	N1-C2-O2	6.16	122.60	118.90
26	BB	1672	A	O4'-C1'-N9	-6.16	103.27	108.20
26	BB	1737	G	N9-C4-C5	6.16	107.86	105.40
26	BB	1875	G	C5-C6-N1	6.16	114.58	111.50
26	BB	2522	U	O4'-C1'-N1	6.16	113.13	108.20
26	BB	2586	U	N1-C2-O2	-6.16	118.48	122.80
26	BB	2660	A	C5-N7-C8	-6.16	100.82	103.90
1	AA	1291	U	P-O3'-C3'	6.16	127.09	119.70
45	BU	38	TYR	N-CA-CB	-6.16	99.51	110.60
1	AA	1229	A	O3'-P-O5'	-6.16	92.30	104.00
1	AA	1235	U	C5'-C4'-C3'	-6.16	106.14	116.00
1	AA	1235	U	C5'-C4'-O4'	6.16	116.49	109.10
1	AA	1282	C	C6-N1-C2	6.16	122.76	120.30
1	AA	1484	C	C5-C6-N1	-6.16	117.92	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1504	G	C5-C6-N1	6.16	114.58	111.50
4	AD	59	A	C5-N7-C8	6.16	106.98	103.90
25	BA	12	C	N1-C2-O2	6.16	122.60	118.90
26	BB	250	G	C1'-O4'-C4'	-6.16	104.97	109.90
26	BB	731	C	N1-C2-N3	6.16	123.51	119.20
26	BB	741	U	C5-C6-N1	-6.16	119.62	122.70
26	BB	983	A	O4'-C1'-N9	6.16	113.13	108.20
26	BB	1582	C	N1-C2-N3	6.16	123.51	119.20
26	BB	1710	G	C4-C5-C6	6.16	122.50	118.80
26	BB	2246	G	O4'-C4'-C3'	6.16	111.03	106.10
26	BB	2682	A	C5-C6-N6	-6.16	118.77	123.70
26	BB	2786	U	C1'-O4'-C4'	-6.16	104.97	109.90
1	AA	570	G	C6-N1-C2	-6.16	121.41	125.10
4	AD	9	G	O4'-C1'-N9	6.16	113.13	108.20
4	AD	74	A	C5-C6-N1	6.16	120.78	117.70
25	BA	32	U	C2-N3-C4	-6.16	123.31	127.00
25	BA	62	C	C1'-O4'-C4'	6.16	114.83	109.90
26	BB	10	A	C3'-C2'-C1'	6.16	106.43	101.50
26	BB	190	A	N3-C4-N9	-6.16	122.47	127.40
26	BB	235	U	P-O3'-C3'	6.16	127.09	119.70
26	BB	458	G	O4'-C1'-N9	6.16	113.13	108.20
26	BB	1330	C	N3-C4-C5	-6.16	119.44	121.90
26	BB	1883	U	O4'-C1'-N1	6.16	113.13	108.20
26	BB	1999	C	O4'-C1'-N1	6.16	113.13	108.20
26	BB	2012	G	C4'-C3'-C2'	-6.16	96.44	102.60
26	BB	2358	A	C8-N9-C4	-6.16	103.34	105.80
26	BB	2521	C	C4-C5-C6	-6.16	114.32	117.40
29	BE	188	LEU	CB-CG-CD1	6.16	121.47	111.00
1	AA	25	C	O4'-C4'-C3'	6.16	111.03	106.10
1	AA	889	A	O4'-C1'-N9	6.16	113.13	108.20
3	AC	59	A	C8-N9-C4	-6.16	103.34	105.80
26	BB	881	G	C6-C5-N7	-6.16	126.71	130.40
26	BB	1496	A	N3-C4-N9	6.16	132.32	127.40
26	BB	1728	C	C3'-C2'-C1'	6.16	106.43	101.50
26	BB	2412	A	C5'-C4'-C3'	-6.16	106.15	116.00
26	BB	2791	G	C4-C5-N7	6.16	113.26	110.80
29	BE	141	ARG	NE-CZ-NH1	-6.16	117.22	120.30
43	BS	17	LEU	CB-CG-CD1	-6.16	100.53	111.00
1	AA	122	G	C5-C6-O6	-6.16	124.91	128.60
21	AU	5	ARG	NE-CZ-NH1	6.16	123.38	120.30
26	BB	91	A	N7-C8-N9	6.16	116.88	113.80
26	BB	99	U	C4-C5-C6	6.16	123.39	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	328	U	N3-C4-C5	6.16	118.29	114.60
26	BB	1028	A	C6-N1-C2	6.16	122.29	118.60
26	BB	1282	U	C4'-C3'-C2'	-6.16	96.44	102.60
26	BB	1725	U	C3'-C2'-C1'	6.16	106.42	101.50
26	BB	2106	U	N3-C4-C5	-6.16	110.91	114.60
26	BB	2131	U	C1'-O4'-C4'	6.16	114.83	109.90
26	BB	2378	A	N9-C1'-C2'	-6.16	105.23	112.00
26	BB	2788	C	N1-C2-O2	6.16	122.59	118.90
26	BB	2792	A	C5-C6-N1	-6.16	114.62	117.70
28	BD	181	ARG	NE-CZ-NH2	-6.16	117.22	120.30
42	BR	92	ARG	NE-CZ-NH2	6.16	123.38	120.30
49	BY	62	ALA	CB-CA-C	6.16	119.33	110.10
1	AA	175	C	N3-C2-O2	-6.15	117.59	121.90
1	AA	405	U	C6-N1-C2	-6.15	117.31	121.00
1	AA	442	G	C5'-C4'-O4'	6.15	116.48	109.10
1	AA	626	G	C2-N3-C4	6.15	114.98	111.90
1	AA	1240	U	O4'-C1'-N1	6.15	113.12	108.20
26	BB	35	G	C8-N9-C4	6.15	108.86	106.40
26	BB	1384	A	O4'-C1'-C2'	6.15	113.14	107.60
26	BB	1510	G	N9-C4-C5	6.15	107.86	105.40
26	BB	1837	C	N3-C4-C5	-6.15	119.44	121.90
26	BB	2751	G	C5-N7-C8	-6.15	101.22	104.30
1	AA	358	U	N1-C1'-C2'	-6.15	105.23	112.00
1	AA	1424	U	N3-C4-C5	-6.15	110.91	114.60
3	AC	52	U	C2-N1-C1'	6.15	125.08	117.70
4	AD	26	C	N3-C2-O2	-6.15	117.59	121.90
26	BB	711	G	N1-C2-N3	-6.15	120.21	123.90
26	BB	734	A	O4'-C1'-N9	-6.15	103.28	108.20
26	BB	804	A	C4-C5-N7	-6.15	107.62	110.70
26	BB	1783	A	N9-C4-C5	6.15	108.26	105.80
26	BB	2124	G	C8-N9-C1'	6.15	135.00	127.00
40	BP	71	ARG	NE-CZ-NH2	6.15	123.38	120.30
1	AA	306	A	C5'-C4'-O4'	6.15	116.48	109.10
1	AA	805	C	N1-C2-O2	6.15	122.59	118.90
1	AA	924	C	N3-C4-C5	-6.15	119.44	121.90
1	AA	941	G	C8-N9-C4	-6.15	103.94	106.40
1	AA	996	A	N1-C2-N3	-6.15	126.22	129.30
2	AB	29	G	C4-C5-N7	6.15	113.26	110.80
25	BA	34	A	O4'-C1'-N9	6.15	113.12	108.20
26	BB	443	A	C8-N9-C4	-6.15	103.34	105.80
26	BB	1066	U	C6-N1-C2	-6.15	117.31	121.00
26	BB	1313	U	C2-N1-C1'	6.15	125.08	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1502	A	N9-C1'-C2'	-6.15	105.23	112.00
26	BB	1589	U	C4'-C3'-C2'	-6.15	96.45	102.60
26	BB	2524	G	P-O3'-C3'	6.15	127.08	119.70
26	BB	2572	A	P-O5'-C5'	6.15	130.74	120.90
26	BB	2679	A	C6-C5-N7	6.15	136.60	132.30
29	BE	90	PHE	CB-CG-CD2	6.15	125.11	120.80
1	AA	333	U	N1-C2-O2	6.15	127.10	122.80
1	AA	1448	C	C5'-C4'-C3'	-6.15	106.16	116.00
1	AA	1507	A	N1-C2-N3	-6.15	126.22	129.30
26	BB	130	C	P-O3'-C3'	6.15	127.08	119.70
26	BB	320	A	C2-N3-C4	6.15	113.67	110.60
26	BB	2637	U	C4-C5-C6	-6.15	116.01	119.70
1	AA	120	A	O5'-P-OP2	-6.15	100.17	105.70
1	AA	797	C	C2-N3-C4	-6.15	116.83	119.90
1	AA	1456	A	N9-C1'-C2'	-6.15	105.24	112.00
26	BB	42	A	C8-N9-C4	-6.15	103.34	105.80
26	BB	254	G	N7-C8-N9	6.15	116.17	113.10
26	BB	931	U	N3-C4-O4	6.15	123.70	119.40
26	BB	1400	U	C2'-C3'-O3'	6.15	123.54	113.70
26	BB	1776	G	N3-C4-N9	6.15	129.69	126.00
26	BB	2024	G	P-O3'-C3'	6.15	127.08	119.70
26	BB	2073	C	O4'-C1'-N1	6.15	113.12	108.20
26	BB	2866	U	N1-C2-N3	6.15	118.59	114.90
1	AA	1096	C	N3-C2-O2	-6.15	117.60	121.90
15	AO	98	ARG	NE-CZ-NH2	-6.15	117.23	120.30
26	BB	1169	A	C4'-C3'-C2'	-6.15	96.45	102.60
26	BB	1410	G	N3-C4-N9	6.15	129.69	126.00
1	AA	756	C	C5-C6-N1	6.14	124.07	121.00
1	AA	980	C	C4'-C3'-C2'	-6.14	96.46	102.60
1	AA	1262	C	C5-C6-N1	6.14	124.07	121.00
1	AA	1296	C	O4'-C4'-C3'	-6.14	97.86	104.00
1	AA	1413	A	N7-C8-N9	6.14	116.87	113.80
26	BB	326	G	C4-C5-N7	-6.14	108.34	110.80
26	BB	713	G	C6-N1-C2	-6.14	121.41	125.10
26	BB	1640	A	N3-C4-C5	-6.14	122.50	126.80
26	BB	2107	G	C5'-C4'-O4'	6.14	116.47	109.10
26	BB	2391	G	C6-N1-C2	-6.14	121.41	125.10
26	BB	2476	A	N1-C2-N3	-6.14	126.23	129.30
26	BB	2810	A	N7-C8-N9	6.14	116.87	113.80
1	AA	517	G	C3'-C2'-C1'	6.14	106.41	101.50
1	AA	1503	A	C8-N9-C4	-6.14	103.34	105.80
26	BB	791	C	C6-N1-C2	-6.14	117.84	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	799	G	N3-C4-C5	-6.14	125.53	128.60
26	BB	909	A	P-O3'-C3'	6.14	127.07	119.70
26	BB	2081	U	O4'-C1'-C2'	-6.14	99.66	105.80
26	BB	2450	A	O4'-C1'-N9	6.14	113.11	108.20
26	BB	2643	G	C2-N3-C4	6.14	114.97	111.90
34	BJ	93	ARG	NE-CZ-NH2	-6.14	117.23	120.30
36	BL	17	VAL	CA-CB-CG1	6.14	120.11	110.90
1	AA	319	G	C4-C5-C6	6.14	122.48	118.80
1	AA	404	G	C8-N9-C4	-6.14	103.94	106.40
1	AA	913	A	N7-C8-N9	6.14	116.87	113.80
1	AA	994	A	C8-N9-C4	6.14	108.26	105.80
1	AA	1208	C	C2-N3-C4	-6.14	116.83	119.90
26	BB	13	A	C1'-O4'-C4'	-6.14	104.99	109.90
26	BB	345	A	O4'-C1'-N9	6.14	113.11	108.20
26	BB	503	A	C1'-O4'-C4'	-6.14	104.99	109.90
26	BB	833	A	C5'-C4'-O4'	6.14	116.47	109.10
26	BB	2193	G	C4-C5-N7	-6.14	108.34	110.80
26	BB	2529	G	C4-C5-N7	-6.14	108.34	110.80
26	BB	2692	G	C3'-C2'-C1'	6.14	106.41	101.50
1	AA	51	A	C2-N3-C4	6.14	113.67	110.60
1	AA	346	G	C6-C5-N7	-6.14	126.72	130.40
1	AA	991	U	C2-N3-C4	-6.14	123.32	127.00
1	AA	1015	G	N9-C4-C5	-6.14	102.94	105.40
1	AA	1139	G	C6-C5-N7	6.14	134.08	130.40
1	AA	1383	C	C5-C4-N4	-6.14	115.90	120.20
25	BA	50	A	C6-C5-N7	6.14	136.60	132.30
26	BB	287	G	O4'-C4'-C3'	-6.14	97.86	104.00
26	BB	447	A	C5-C6-N1	6.14	120.77	117.70
26	BB	596	U	C5-C6-N1	6.14	125.77	122.70
26	BB	967	U	C4-C5-C6	6.14	123.38	119.70
26	BB	1129	A	N3-C4-C5	-6.14	122.50	126.80
26	BB	1302	A	C1'-O4'-C4'	6.14	114.81	109.90
26	BB	1658	C	C4'-C3'-C2'	-6.14	96.46	102.60
26	BB	2087	G	C4'-C3'-C2'	-6.14	96.46	102.60
26	BB	2347	C	C2-N3-C4	6.14	122.97	119.90
26	BB	2471	A	C1'-O4'-C4'	-6.14	104.99	109.90
26	BB	2657	A	N7-C8-N9	-6.14	110.73	113.80
26	BB	2752	C	C2-N3-C4	-6.14	116.83	119.90
1	AA	317	U	C4-C5-C6	6.14	123.38	119.70
1	AA	501	C	C5-C6-N1	6.14	124.07	121.00
1	AA	730	G	C5-C6-O6	-6.14	124.92	128.60
1	AA	788	U	O4'-C1'-C2'	6.14	113.12	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	93	C	C4'-C3'-C2'	-6.14	96.46	102.60
26	BB	387	U	N1-C2-O2	6.14	127.10	122.80
26	BB	652	U	C1'-O4'-C4'	-6.14	104.99	109.90
26	BB	1088	A	C6-C5-N7	6.14	136.60	132.30
26	BB	2271	G	N3-C4-C5	-6.14	125.53	128.60
26	BB	2470	G	N3-C4-N9	6.14	129.68	126.00
32	BH	2	ARG	NE-CZ-NH1	-6.14	117.23	120.30
1	AA	731	G	C5-C6-O6	-6.14	124.92	128.60
1	AA	1164	G	C6-C5-N7	-6.14	126.72	130.40
1	AA	1240	U	N1-C2-N3	-6.14	111.22	114.90
1	AA	1340	A	C5'-C4'-C3'	-6.14	106.18	116.00
1	AA	1528	U	C1'-O4'-C4'	-6.14	104.99	109.90
9	AI	24	ARG	NE-CZ-NH2	-6.14	117.23	120.30
26	BB	214	G	C5-C6-N1	6.14	114.57	111.50
26	BB	275	C	C2-N3-C4	6.14	122.97	119.90
26	BB	308	G	P-O3'-C3'	6.14	127.06	119.70
26	BB	342	A	C5'-C4'-O4'	6.14	116.46	109.10
26	BB	589	U	C3'-C2'-C1'	6.14	106.41	101.50
26	BB	606	U	C5-C6-N1	-6.14	119.63	122.70
26	BB	1283	G	N3-C4-N9	-6.14	122.32	126.00
26	BB	2024	G	N3-C4-C5	-6.14	125.53	128.60
26	BB	2066	C	C6-N1-C2	-6.14	117.84	120.30
26	BB	2220	U	C5-C6-N1	-6.14	119.63	122.70
26	BB	2328	A	C5'-C4'-O4'	6.14	116.46	109.10
26	BB	2569	G	C4'-C3'-C2'	-6.14	96.46	102.60
26	BB	2655	G	N9-C4-C5	-6.14	102.95	105.40
26	BB	2792	A	C6-N1-C2	6.14	122.28	118.60
1	AA	911	U	C6-N1-C1'	-6.13	112.61	121.20
1	AA	1196	A	C4-C5-C6	-6.13	113.93	117.00
1	AA	1415	G	N3-C4-C5	-6.13	125.53	128.60
6	AF	30	ASP	CB-CG-OD1	6.13	123.82	118.30
26	BB	759	G	O4'-C1'-N9	6.13	113.11	108.20
26	BB	829	A	P-O3'-C3'	6.13	127.06	119.70
26	BB	984	A	C4-C5-N7	-6.13	107.63	110.70
26	BB	1169	A	C5-C6-N1	-6.13	114.63	117.70
26	BB	1265	A	O4'-C1'-N9	6.13	113.11	108.20
26	BB	1892	C	N1-C2-O2	6.13	122.58	118.90
26	BB	2330	G	C4'-C3'-C2'	6.13	108.73	102.60
26	BB	2357	G	C6-N1-C2	-6.13	121.42	125.10
26	BB	2425	A	P-O3'-C3'	6.13	127.06	119.70
1	AA	786	G	C3'-C2'-C1'	6.13	106.41	101.50
1	AA	793	U	O4'-C1'-C2'	-6.13	99.67	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2276	G	C8-N9-C4	6.13	108.85	106.40
1	AA	1053	G	C4-N9-C1'	-6.13	118.53	126.50
2	AB	4	G	C3'-C2'-C1'	6.13	106.41	101.50
6	AF	28	PHE	CB-CG-CD1	6.13	125.09	120.80
26	BB	1474	U	P-O3'-C3'	6.13	127.06	119.70
26	BB	1979	U	N1-C2-N3	6.13	118.58	114.90
26	BB	2246	G	C5-C6-N1	6.13	114.57	111.50
26	BB	2534	A	C4-C5-N7	6.13	113.77	110.70
26	BB	2564	A	C1'-O4'-C4'	6.13	114.81	109.90
1	AA	674	G	O4'-C1'-N9	6.13	113.10	108.20
26	BB	390	U	O4'-C1'-N1	6.13	113.10	108.20
26	BB	1645	G	C6-C5-N7	-6.13	126.72	130.40
34	BJ	55	ARG	NE-CZ-NH1	-6.13	117.23	120.30
54	B3	19	ASP	CB-CG-OD1	-6.13	112.78	118.30
1	AA	350	G	O5'-P-OP1	6.13	118.06	110.70
1	AA	712	A	N9-C4-C5	6.13	108.25	105.80
1	AA	986	U	O4'-C1'-N1	6.13	113.10	108.20
1	AA	1458	G	N1-C2-N3	-6.13	120.22	123.90
10	AJ	108	ARG	NH1-CZ-NH2	-6.13	112.66	119.40
26	BB	17	G	N9-C4-C5	6.13	107.85	105.40
26	BB	481	G	C4-C5-N7	6.13	113.25	110.80
26	BB	985	C	N1-C2-N3	6.13	123.49	119.20
26	BB	1161	C	O4'-C1'-N1	6.13	113.10	108.20
26	BB	1450	G	N3-C4-N9	-6.13	122.32	126.00
26	BB	1523	U	N3-C2-O2	-6.13	117.91	122.20
26	BB	2332	C	C4-C5-C6	6.13	120.46	117.40
1	AA	38	G	C4-C5-C6	6.13	122.48	118.80
1	AA	179	A	C4-C5-C6	6.13	120.06	117.00
1	AA	634	C	C6-N1-C2	-6.13	117.85	120.30
1	AA	1013	G	C4-C5-N7	-6.13	108.35	110.80
1	AA	1102	A	C2-N3-C4	6.13	113.66	110.60
21	AU	58	ILE	CA-CB-CG2	6.13	123.15	110.90
26	BB	809	G	N1-C2-N2	6.13	121.71	116.20
26	BB	1024	G	N3-C4-C5	-6.13	125.54	128.60
26	BB	1640	A	C8-N9-C4	-6.13	103.35	105.80
26	BB	1887	C	C4'-C3'-C2'	-6.13	96.47	102.60
26	BB	1973	G	C5'-C4'-O4'	6.13	116.45	109.10
26	BB	2275	C	N3-C4-C5	-6.13	119.45	121.90
26	BB	2579	C	C4-C5-C6	6.13	120.46	117.40
26	BB	2660	A	N3-C4-C5	-6.13	122.51	126.80
26	BB	2701	U	C5-C4-O4	-6.13	122.22	125.90
26	BB	2732	G	O4'-C1'-C2'	6.13	113.11	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	495	G	N7-C8-N9	6.12	116.16	113.10
39	BO	109	PRO	CA-N-CD	-6.12	102.92	111.50
1	AA	16	A	N1-C6-N6	-6.12	114.93	118.60
1	AA	307	C	N3-C2-O2	-6.12	117.61	121.90
1	AA	1104	G	N3-C4-N9	6.12	129.67	126.00
1	AA	1113	C	P-O3'-C3'	6.12	127.05	119.70
1	AA	1441	A	N1-C6-N6	6.12	122.27	118.60
1	AA	1460	C	C6-N1-C2	6.12	122.75	120.30
2	AB	35	C	N1-C2-O2	6.12	122.57	118.90
2	AB	43	G	C6-C5-N7	-6.12	126.73	130.40
26	BB	39	G	N7-C8-N9	-6.12	110.04	113.10
26	BB	383	C	O4'-C1'-N1	6.12	113.10	108.20
26	BB	543	G	N1-C2-N3	-6.12	120.23	123.90
26	BB	839	U	C1'-O4'-C4'	-6.12	105.00	109.90
26	BB	1473	G	N7-C8-N9	6.12	116.16	113.10
26	BB	1477	A	C5-N7-C8	-6.12	100.84	103.90
26	BB	1573	G	N7-C8-N9	-6.12	110.04	113.10
26	BB	1663	G	C5-N7-C8	6.12	107.36	104.30
26	BB	2023	C	C2-N3-C4	-6.12	116.84	119.90
26	BB	2100	G	C1'-O4'-C4'	-6.12	105.00	109.90
26	BB	2394	C	C6-N1-C2	-6.12	117.85	120.30
26	BB	2705	A	N9-C4-C5	6.12	108.25	105.80
26	BB	2724	U	C5-C6-N1	-6.12	119.64	122.70
1	AA	222	C	N3-C4-C5	-6.12	119.45	121.90
1	AA	628	G	N7-C8-N9	6.12	116.16	113.10
1	AA	1013	G	O4'-C1'-N9	6.12	113.10	108.20
1	AA	1014	A	N1-C6-N6	-6.12	114.93	118.60
1	AA	1098	C	N3-C4-N4	6.12	122.28	118.00
1	AA	1224	U	C1'-O4'-C4'	6.12	114.80	109.90
1	AA	1366	C	O4'-C1'-N1	6.12	113.10	108.20
2	AB	31	U	C3'-C2'-C1'	-6.12	96.60	101.50
26	BB	195	A	C1'-O4'-C4'	-6.12	105.00	109.90
26	BB	753	A	C8-N9-C4	-6.12	103.35	105.80
26	BB	1537	G	C5-C6-N1	6.12	114.56	111.50
26	BB	2065	C	O4'-C1'-N1	6.12	113.10	108.20
26	BB	2490	G	C4-C5-N7	-6.12	108.35	110.80
26	BB	2511	U	C4-C5-C6	6.12	123.37	119.70
36	BL	116	ARG	NE-CZ-NH1	-6.12	117.24	120.30
1	AA	126	G	N9-C1'-C2'	-6.12	105.27	112.00
1	AA	1177	G	C5'-C4'-C3'	-6.12	106.21	116.00
25	BA	67	G	O4'-C1'-N9	6.12	113.10	108.20
26	BB	94	A	C6-N1-C2	6.12	122.27	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	210	C	C4-C5-C6	-6.12	114.34	117.40
26	BB	587	C	N3-C4-N4	6.12	122.28	118.00
26	BB	1331	G	N3-C4-N9	6.12	129.67	126.00
26	BB	1625	C	P-O5'-C5'	6.12	130.69	120.90
26	BB	2333	A	N7-C8-N9	6.12	116.86	113.80
26	BB	2363	G	N9-C4-C5	6.12	107.85	105.40
1	AA	97	G	C2-N3-C4	6.12	114.96	111.90
1	AA	114	U	N3-C2-O2	-6.12	117.92	122.20
1	AA	463	U	C6-N1-C2	-6.12	117.33	121.00
1	AA	477	C	O5'-P-OP2	-6.12	100.19	105.70
25	BA	85	G	P-O5'-C5'	6.12	130.69	120.90
26	BB	20	C	N3-C2-O2	-6.12	117.62	121.90
26	BB	1057	A	C5'-C4'-O4'	6.12	116.44	109.10
26	BB	1401	G	C6-C5-N7	-6.12	126.73	130.40
26	BB	1567	G	C3'-C2'-C1'	6.12	106.39	101.50
26	BB	1646	C	C6-N1-C2	-6.12	117.85	120.30
26	BB	2421	G	C4-C5-N7	-6.12	108.35	110.80
29	BE	59	ARG	NH1-CZ-NH2	-6.12	112.67	119.40
1	AA	859	G	N3-C2-N2	6.12	124.18	119.90
26	BB	204	A	C4-C5-N7	6.12	113.76	110.70
26	BB	602	A	O4'-C1'-N9	6.12	113.09	108.20
26	BB	619	G	C5'-C4'-O4'	6.12	116.44	109.10
26	BB	923	G	C8-N9-C4	-6.12	103.95	106.40
26	BB	1262	A	N7-C8-N9	6.12	116.86	113.80
26	BB	2058	A	N3-C4-C5	-6.12	122.52	126.80
26	BB	2182	U	O4'-C1'-N1	6.12	113.09	108.20
26	BB	2219	U	N3-C2-O2	-6.12	117.92	122.20
26	BB	2337	G	C4-C5-N7	6.12	113.25	110.80
26	BB	2562	U	C4'-C3'-C2'	-6.12	96.48	102.60
26	BB	2668	G	C8-N9-C4	-6.12	103.95	106.40
1	AA	1163	A	C1'-O4'-C4'	-6.12	105.01	109.90
10	AJ	108	ARG	NE-CZ-NH2	6.12	123.36	120.30
26	BB	145	C	C5-C6-N1	6.12	124.06	121.00
26	BB	585	G	C5-N7-C8	6.12	107.36	104.30
26	BB	1135	C	C2-N3-C4	6.12	122.96	119.90
26	BB	1183	U	C2-N3-C4	-6.12	123.33	127.00
26	BB	1381	G	C4-C5-N7	-6.12	108.35	110.80
26	BB	1391	U	C2-N3-C4	-6.12	123.33	127.00
26	BB	1523	U	C5'-C4'-O4'	6.12	116.44	109.10
26	BB	1872	A	P-O3'-C3'	6.12	127.04	119.70
26	BB	1983	G	C4'-C3'-C2'	-6.12	96.48	102.60
26	BB	2040	G	C5-C6-N1	6.12	114.56	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2181	U	C2-N3-C4	-6.12	123.33	127.00
26	BB	2432	A	C5-C6-N1	6.12	120.76	117.70
26	BB	2787	C	C5-C4-N4	-6.12	115.92	120.20
28	BD	167	ASP	CB-CG-OD2	-6.12	112.80	118.30
1	AA	49	U	N3-C2-O2	-6.11	117.92	122.20
1	AA	227	G	C5-N7-C8	6.11	107.36	104.30
1	AA	259	G	P-O3'-C3'	6.11	127.04	119.70
1	AA	936	C	N1-C2-O2	6.11	122.57	118.90
1	AA	1275	A	C2-N3-C4	6.11	113.66	110.60
26	BB	880	G	C1'-O4'-C4'	6.11	114.79	109.90
26	BB	1310	G	N1-C2-N3	6.11	127.57	123.90
26	BB	2140	G	C4'-C3'-C2'	-6.11	96.49	102.60
26	BB	2777	G	C6-N1-C2	-6.11	121.43	125.10
30	BF	112	LEU	CB-CG-CD2	6.11	121.39	111.00
1	AA	49	U	C2-N1-C1'	6.11	125.03	117.70
1	AA	85	U	O4'-C1'-C2'	-6.11	99.69	105.80
1	AA	621	A	N3-C4-N9	6.11	132.29	127.40
1	AA	882	C	C3'-C2'-C1'	6.11	106.39	101.50
1	AA	1023	U	C3'-C2'-C1'	6.11	106.39	101.50
1	AA	1190	G	N7-C8-N9	6.11	116.16	113.10
4	AD	64	G	N7-C8-N9	-6.11	110.04	113.10
26	BB	16	C	C4'-C3'-C2'	-6.11	96.49	102.60
26	BB	271	G	N3-C2-N2	-6.11	115.62	119.90
26	BB	2002	G	N9-C4-C5	-6.11	102.95	105.40
1	AA	470	C	C5'-C4'-O4'	6.11	116.43	109.10
1	AA	576	C	O4'-C1'-N1	6.11	113.09	108.20
1	AA	1490	U	C6-N1-C2	6.11	124.67	121.00
1	AA	1500	A	O4'-C1'-N9	6.11	113.09	108.20
5	AE	174	GLU	OE1-CD-OE2	6.11	130.63	123.30
26	BB	1080	A	C5-C6-N6	-6.11	118.81	123.70
26	BB	1137	G	C1'-O4'-C4'	6.11	114.79	109.90
26	BB	1231	U	O4'-C1'-C2'	-6.11	99.69	105.80
26	BB	2598	A	N7-C8-N9	-6.11	110.75	113.80
1	AA	347	G	C3'-C2'-C1'	6.11	106.39	101.50
1	AA	630	A	C2-N3-C4	6.11	113.66	110.60
1	AA	673	A	C4-C5-N7	-6.11	107.64	110.70
1	AA	1215	G	N3-C4-C5	-6.11	125.55	128.60
19	AS	28	ARG	CD-NE-CZ	6.11	132.15	123.60
26	BB	420	C	N3-C2-O2	-6.11	117.62	121.90
26	BB	713	G	N3-C4-N9	-6.11	122.33	126.00
26	BB	2292	U	C2-N3-C4	-6.11	123.33	127.00
26	BB	2468	A	O3'-P-O5'	-6.11	92.39	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1	A	N3-C4-C5	-6.11	122.53	126.80
1	AA	12	U	C2-N3-C4	-6.11	123.34	127.00
1	AA	110	C	N3-C2-O2	-6.11	117.62	121.90
1	AA	313	A	C5-C6-N1	-6.11	114.65	117.70
1	AA	771	G	C6-N1-C2	-6.11	121.44	125.10
1	AA	1059	C	O4'-C1'-N1	6.11	113.09	108.20
1	AA	1251	A	C8-N9-C4	-6.11	103.36	105.80
1	AA	1276	G	N9-C4-C5	6.11	107.84	105.40
1	AA	1317	C	C2-N3-C4	6.11	122.95	119.90
26	BB	739	A	N1-C6-N6	6.11	122.26	118.60
26	BB	976	G	N3-C4-N9	6.11	129.66	126.00
26	BB	2194	U	N3-C2-O2	-6.11	117.92	122.20
26	BB	2650	U	C3'-C2'-C1'	6.11	106.39	101.50
40	BP	12	ARG	NE-CZ-NH2	-6.11	117.25	120.30
1	AA	693	G	C2-N3-C4	-6.11	108.85	111.90
1	AA	735	C	C4-C5-C6	-6.11	114.35	117.40
1	AA	763	G	N7-C8-N9	6.11	116.15	113.10
1	AA	809	G	C6-C5-N7	-6.11	126.74	130.40
1	AA	908	A	C5-N7-C8	6.11	106.95	103.90
1	AA	1112	C	O4'-C1'-N1	6.11	113.08	108.20
1	AA	1154	G	C2-N3-C4	6.11	114.95	111.90
1	AA	1369	C	C2-N3-C4	6.11	122.95	119.90
3	AC	23	C	C4'-C3'-C2'	-6.11	96.49	102.60
3	AC	53	G	N3-C4-C5	-6.11	125.55	128.60
13	AM	37	ARG	NE-CZ-NH1	6.11	123.35	120.30
26	BB	879	G	C5-N7-C8	-6.11	101.25	104.30
26	BB	1072	C	N1-C1'-C2'	-6.11	105.28	112.00
26	BB	1288	G	O4'-C4'-C3'	6.11	110.98	106.10
26	BB	1825	U	O3'-P-O5'	-6.11	92.40	104.00
26	BB	1981	A	C8-N9-C1'	6.11	138.69	127.70
26	BB	2508	G	C2-N3-C4	-6.11	108.85	111.90
26	BB	2518	A	C3'-C2'-C1'	-6.11	96.61	101.50
1	AA	545	C	C4'-C3'-C2'	-6.10	96.50	102.60
26	BB	262	A	C5'-C4'-C3'	-6.10	106.23	116.00
26	BB	708	G	N9-C4-C5	6.10	107.84	105.40
26	BB	2225	A	C6-C5-N7	6.10	136.57	132.30
1	AA	275	G	C5'-C4'-O4'	6.10	116.42	109.10
1	AA	609	A	C5'-C4'-O4'	6.10	116.42	109.10
1	AA	978	A	C8-N9-C4	-6.10	103.36	105.80
1	AA	1137	C	N1-C2-O2	6.10	122.56	118.90
2	AB	75	C	P-O3'-C3'	6.10	127.02	119.70
26	BB	363	G	C6-C5-N7	-6.10	126.74	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	819	A	C5'-C4'-O4'	6.10	116.42	109.10
26	BB	927	A	N7-C8-N9	6.10	116.85	113.80
26	BB	1214	A	C5'-C4'-C3'	-6.10	106.24	116.00
26	BB	1331	G	C8-N9-C4	-6.10	103.96	106.40
26	BB	1615	C	N3-C4-N4	6.10	122.27	118.00
26	BB	2165	C	N1-C1'-C2'	6.10	121.93	114.00
26	BB	2657	A	C5'-C4'-O4'	6.10	116.42	109.10
1	AA	494	G	N9-C4-C5	-6.10	102.96	105.40
1	AA	1451	U	N3-C2-O2	-6.10	117.93	122.20
5	AE	22	TRP	CD1-NE1-CE2	6.10	114.49	109.00
26	BB	1734	G	C2-N3-C4	6.10	114.95	111.90
26	BB	2480	C	C6-N1-C2	6.10	122.74	120.30
5	AE	73	ARG	CB-CA-C	6.10	122.60	110.40
21	AU	72	ARG	NE-CZ-NH1	-6.10	117.25	120.30
26	BB	9	G	N1-C2-N3	-6.10	120.24	123.90
26	BB	387	U	C4-C5-C6	6.10	123.36	119.70
26	BB	481	G	C6-C5-N7	-6.10	126.74	130.40
26	BB	982	C	C2-N3-C4	6.10	122.95	119.90
26	BB	1148	U	O4'-C1'-N1	6.10	113.08	108.20
26	BB	1225	G	C5-N7-C8	6.10	107.35	104.30
26	BB	2065	C	C4-C5-C6	6.10	120.45	117.40
26	BB	2540	C	C6-N1-C1'	6.10	128.12	120.80
26	BB	2560	A	C5-C6-N6	6.10	128.58	123.70
26	BB	2588	G	C4-C5-C6	6.10	122.46	118.80
26	BB	2842	G	C5'-C4'-O4'	6.10	116.42	109.10
1	AA	222	C	N1-C1'-C2'	-6.10	105.29	112.00
1	AA	778	G	O4'-C1'-N9	6.10	113.08	108.20
1	AA	867	G	O4'-C1'-N9	6.10	113.08	108.20
1	AA	1437	A	N7-C8-N9	6.10	116.85	113.80
3	AC	37	G	P-O3'-C3'	6.10	127.02	119.70
4	AD	24	C	C5-C6-N1	-6.10	117.95	121.00
26	BB	851	C	N3-C4-N4	6.10	122.27	118.00
26	BB	877	A	C2-N3-C4	6.10	113.65	110.60
26	BB	1153	C	O4'-C1'-N1	6.10	113.08	108.20
26	BB	1268	A	C8-N9-C4	-6.10	103.36	105.80
26	BB	1810	A	C8-N9-C4	-6.10	103.36	105.80
26	BB	1893	C	N3-C2-O2	-6.10	117.63	121.90
26	BB	1997	C	N1-C2-O2	-6.10	115.24	118.90
1	AA	348	G	C6-C5-N7	-6.10	126.74	130.40
1	AA	1218	C	C2-N3-C4	-6.10	116.85	119.90
26	BB	555	G	N1-C6-O6	-6.10	116.24	119.90
26	BB	871	U	C4-C5-C6	6.10	123.36	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1064	C	N3-C4-N4	6.10	122.27	118.00
26	BB	1923	U	N3-C4-O4	6.10	123.67	119.40
1	AA	19	A	C5-C6-N6	-6.09	118.82	123.70
1	AA	22	G	N9-C1'-C2'	-6.09	105.30	112.00
1	AA	309	A	N9-C4-C5	-6.09	103.36	105.80
1	AA	434	U	N1-C2-O2	-6.09	118.53	122.80
1	AA	1212	U	N3-C4-O4	6.09	123.67	119.40
26	BB	85	G	N1-C6-O6	6.09	123.56	119.90
26	BB	111	A	C4-C5-C6	-6.09	113.95	117.00
26	BB	522	A	C1'-O4'-C4'	-6.09	105.02	109.90
26	BB	609	A	O4'-C1'-N9	6.09	113.08	108.20
26	BB	748	G	N1-C6-O6	-6.09	116.24	119.90
26	BB	1125	G	N3-C4-N9	-6.09	122.34	126.00
26	BB	1141	U	C2-N3-C4	-6.09	123.34	127.00
26	BB	1396	U	N3-C2-O2	-6.09	117.93	122.20
26	BB	1477	A	C5'-C4'-O4'	6.09	116.41	109.10
26	BB	1617	C	N1-C2-N3	-6.09	114.93	119.20
26	BB	1789	A	C5'-C4'-C3'	-6.09	106.25	116.00
26	BB	1895	C	P-O3'-C3'	6.09	127.01	119.70
26	BB	2417	C	C5-C4-N4	-6.09	115.93	120.20
1	AA	933	G	C3'-C2'-C1'	6.09	106.37	101.50
1	AA	975	A	C6-N1-C2	6.09	122.26	118.60
1	AA	1088	G	N9-C4-C5	6.09	107.84	105.40
26	BB	524	G	C6-C5-N7	-6.09	126.74	130.40
26	BB	1519	G	C8-N9-C4	-6.09	103.96	106.40
26	BB	2551	C	C3'-C2'-C1'	6.09	106.37	101.50
1	AA	521	G	C4-C5-N7	-6.09	108.36	110.80
1	AA	532	A	C4-C5-C6	-6.09	113.95	117.00
1	AA	1259	C	C5-C4-N4	-6.09	115.94	120.20
9	AI	38	ARG	NE-CZ-NH2	6.09	123.34	120.30
26	BB	538	A	C5'-C4'-O4'	6.09	116.41	109.10
26	BB	671	C	N3-C4-C5	6.09	124.34	121.90
26	BB	784	G	N9-C1'-C2'	-6.09	105.30	112.00
26	BB	1204	A	C2-N3-C4	6.09	113.65	110.60
26	BB	1498	C	C5'-C4'-C3'	-6.09	106.25	116.00
26	BB	1501	G	C8-N9-C4	-6.09	103.96	106.40
26	BB	1990	C	N3-C2-O2	-6.09	117.64	121.90
26	BB	2009	A	N9-C1'-C2'	-6.09	105.30	112.00
26	BB	2676	C	C3'-C2'-C1'	-6.09	96.63	101.50
1	AA	668	G	C4-C5-N7	-6.09	108.36	110.80
1	AA	1461	G	N1-C2-N2	-6.09	110.72	116.20
2	AB	30	G	C5-C6-O6	6.09	132.25	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	463	G	N1-C2-N2	6.09	121.68	116.20
26	BB	908	C	N1-C1'-C2'	-6.09	105.30	112.00
26	BB	966	G	C4-C5-C6	6.09	122.45	118.80
26	BB	1106	G	C3'-C2'-C1'	-6.09	96.63	101.50
26	BB	1239	G	C4-C5-N7	-6.09	108.36	110.80
26	BB	1968	G	N1-C6-O6	-6.09	116.25	119.90
26	BB	2410	G	C6-N1-C2	-6.09	121.45	125.10
26	BB	2421	G	N1-C6-O6	6.09	123.55	119.90
1	AA	430	A	C5-N7-C8	-6.09	100.86	103.90
26	BB	1138	G	C8-N9-C4	6.09	108.83	106.40
26	BB	1634	A	C1'-O4'-C4'	-6.09	105.03	109.90
26	BB	2003	A	N9-C4-C5	-6.09	103.36	105.80
41	BQ	93	ASP	CB-CG-OD1	-6.09	112.82	118.30
1	AA	139	A	N9-C4-C5	-6.09	103.36	105.80
1	AA	1048	G	C5'-C4'-C3'	-6.09	106.26	116.00
1	AA	1191	A	C5'-C4'-O4'	6.09	116.41	109.10
1	AA	1396	A	P-O3'-C3'	6.09	127.00	119.70
4	AD	13	C	N1-C2-O2	6.09	122.55	118.90
26	BB	156	A	C4-C5-N7	-6.09	107.66	110.70
26	BB	485	C	C2-N1-C1'	6.09	125.50	118.80
26	BB	1446	C	C2-N1-C1'	-6.09	112.11	118.80
26	BB	1903	G	C1'-O4'-C4'	-6.09	105.03	109.90
26	BB	2263	C	O4'-C1'-N1	6.09	113.07	108.20
26	BB	2571	U	C1'-O4'-C4'	6.09	114.77	109.90
44	BT	33	VAL	CG1-CB-CG2	6.09	120.64	110.90
1	AA	82	G	C8-N9-C1'	6.08	134.91	127.00
1	AA	945	G	C4-C5-N7	6.08	113.23	110.80
1	AA	1292	G	C6-C5-N7	6.08	134.05	130.40
1	AA	1327	C	N3-C2-O2	-6.08	117.64	121.90
26	BB	1476	U	C2-N3-C4	-6.08	123.35	127.00
26	BB	2625	G	C2-N3-C4	6.08	114.94	111.90
26	BB	2630	G	O4'-C1'-N9	6.08	113.07	108.20
26	BB	2716	C	N3-C2-O2	-6.08	117.64	121.90
1	AA	27	G	N3-C2-N2	-6.08	115.64	119.90
25	BA	100	G	C4'-C3'-C2'	-6.08	96.52	102.60
26	BB	340	A	C5-C6-N1	6.08	120.74	117.70
26	BB	468	G	C5-N7-C8	6.08	107.34	104.30
26	BB	1074	G	C4-C5-C6	6.08	122.45	118.80
26	BB	1247	A	O4'-C1'-N9	-6.08	103.33	108.20
26	BB	1340	U	N3-C4-C5	-6.08	110.95	114.60
26	BB	1711	A	N9-C1'-C2'	-6.08	105.31	112.00
26	BB	2058	A	C1'-O4'-C4'	6.08	114.77	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2084	C	C5'-C4'-C3'	-6.08	106.27	116.00
26	BB	2100	G	N7-C8-N9	6.08	116.14	113.10
26	BB	2467	C	C5-C6-N1	-6.08	117.96	121.00
1	AA	118	U	C5-C6-N1	-6.08	119.66	122.70
1	AA	187	G	P-O3'-C3'	6.08	127.00	119.70
1	AA	191	G	C4-C5-N7	6.08	113.23	110.80
1	AA	1080	A	C4-C5-C6	6.08	120.04	117.00
1	AA	1344	C	N3-C2-O2	-6.08	117.64	121.90
25	BA	107	G	O4'-C1'-N9	6.08	113.06	108.20
26	BB	193	U	N3-C2-O2	6.08	126.46	122.20
26	BB	620	G	C6-C5-N7	6.08	134.05	130.40
26	BB	1319	C	N3-C2-O2	-6.08	117.64	121.90
26	BB	1615	C	N3-C4-C5	-6.08	119.47	121.90
26	BB	1776	G	C4-C5-C6	6.08	122.45	118.80
26	BB	1793	C	N1-C1'-C2'	-6.08	105.31	112.00
26	BB	2336	A	C5-N7-C8	6.08	106.94	103.90
26	BB	2791	G	C4'-C3'-C2'	-6.08	96.52	102.60
39	BO	114	ARG	NE-CZ-NH2	6.08	123.34	120.30
1	AA	215	C	N3-C4-N4	6.08	122.26	118.00
26	BB	55	G	C1'-O4'-C4'	-6.08	105.04	109.90
26	BB	1604	C	C1'-O4'-C4'	-6.08	105.04	109.90
26	BB	2758	A	C5-N7-C8	-6.08	100.86	103.90
1	AA	333	U	N3-C4-O4	6.08	123.66	119.40
1	AA	498	A	N1-C6-N6	-6.08	114.95	118.60
1	AA	895	G	C4-C5-C6	6.08	122.45	118.80
1	AA	956	U	O4'-C1'-N1	6.08	113.06	108.20
1	AA	1017	U	N3-C4-C5	6.08	118.25	114.60
1	AA	1500	A	C4'-C3'-C2'	-6.08	96.52	102.60
26	BB	462	C	C5-C4-N4	-6.08	115.94	120.20
26	BB	673	C	N1-C2-O2	6.08	122.55	118.90
26	BB	1246	A	C8-N9-C4	-6.08	103.37	105.80
26	BB	1517	G	C2-N3-C4	6.08	114.94	111.90
26	BB	1672	A	O4'-C4'-C3'	-6.08	97.92	104.00
47	BW	85	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	AA	73	C	N3-C2-O2	-6.08	117.65	121.90
1	AA	739	C	C5'-C4'-O4'	6.08	116.39	109.10
1	AA	1325	C	C6-N1-C2	-6.08	117.87	120.30
3	AC	40	G	C2-N3-C4	6.08	114.94	111.90
4	AD	45	A	O4'-C1'-N9	6.08	113.06	108.20
7	AG	153	ARG	NE-CZ-NH1	6.08	123.34	120.30
26	BB	359	G	C2-N3-C4	6.08	114.94	111.90
26	BB	400	G	C6-C5-N7	-6.08	126.75	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1416	G	C4'-C3'-C2'	-6.08	96.52	102.60
26	BB	1652	A	P-O3'-C3'	6.08	126.99	119.70
26	BB	2159	G	C4-C5-N7	-6.08	108.37	110.80
26	BB	2875	C	P-O5'-C5'	6.08	130.62	120.90
37	BM	48	PRO	N-CA-CB	6.08	110.59	103.30
1	AA	89	U	C2-N3-C4	-6.08	123.36	127.00
1	AA	144	G	C6-N1-C2	-6.08	121.45	125.10
17	AQ	8	ARG	NE-CZ-NH1	6.08	123.34	120.30
26	BB	1066	U	N3-C4-C5	-6.08	110.95	114.60
26	BB	1422	G	C6-C5-N7	-6.08	126.75	130.40
26	BB	1453	A	C5-C6-N1	-6.08	114.66	117.70
26	BB	1692	U	C5-C4-O4	6.08	129.55	125.90
26	BB	1961	C	N3-C2-O2	6.08	126.15	121.90
26	BB	2470	G	C5-N7-C8	-6.08	101.26	104.30
26	BB	2510	C	C1'-O4'-C4'	6.08	114.76	109.90
26	BB	2692	G	N1-C2-N3	6.08	127.55	123.90
1	AA	1022	A	O4'-C4'-C3'	6.07	110.96	106.10
1	AA	1315	U	N3-C4-O4	6.07	123.65	119.40
4	AD	2	G	N1-C6-O6	6.07	123.55	119.90
7	AG	25	ARG	NE-CZ-NH1	-6.07	117.26	120.30
26	BB	118	A	C5'-C4'-C3'	-6.07	106.28	116.00
26	BB	256	A	C6-C5-N7	6.07	136.55	132.30
26	BB	386	G	C3'-C2'-C1'	6.07	106.36	101.50
26	BB	1351	C	N1-C1'-C2'	-6.07	105.32	112.00
26	BB	1465	G	C1'-O4'-C4'	-6.07	105.04	109.90
26	BB	1756	G	C6-N1-C2	-6.07	121.46	125.10
26	BB	2043	C	C1'-O4'-C4'	6.07	114.76	109.90
26	BB	2327	A	N9-C4-C5	6.07	108.23	105.80
26	BB	2853	C	N3-C4-C5	-6.07	119.47	121.90
1	AA	46	G	N1-C6-O6	-6.07	116.26	119.90
1	AA	610	U	N3-C4-C5	6.07	118.24	114.60
3	AC	25	U	N3-C2-O2	-6.07	117.95	122.20
1	AA	484	G	N9-C4-C5	-6.07	102.97	105.40
1	AA	968	A	N7-C8-N9	6.07	116.84	113.80
1	AA	1270	G	N3-C4-N9	-6.07	122.36	126.00
1	AA	1344	C	O4'-C1'-N1	6.07	113.06	108.20
3	AC	52	U	N3-C2-O2	-6.07	117.95	122.20
25	BA	43	C	N3-C4-N4	6.07	122.25	118.00
26	BB	43	G	N1-C6-O6	-6.07	116.26	119.90
26	BB	74	A	O4'-C1'-N9	-6.07	103.34	108.20
26	BB	232	G	C4-C5-C6	6.07	122.44	118.80
26	BB	514	A	O4'-C4'-C3'	-6.07	97.93	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	606	U	C5'-C4'-O4'	6.07	116.39	109.10
26	BB	1062	G	O4'-C4'-C3'	6.07	110.96	106.10
26	BB	1689	A	N9-C1'-C2'	-6.07	105.32	112.00
26	BB	2893	A	C3'-C2'-C1'	6.07	106.36	101.50
1	AA	362	G	P-O3'-C3'	6.07	126.98	119.70
1	AA	500	G	N9-C4-C5	6.07	107.83	105.40
23	AW	42	ASP	CB-CG-OD2	-6.07	112.84	118.30
25	BA	66	A	P-O3'-C3'	6.07	126.98	119.70
26	BB	283	G	C5-C6-O6	6.07	132.24	128.60
26	BB	813	U	N3-C4-O4	6.07	123.65	119.40
26	BB	930	G	C2-N3-C4	6.07	114.94	111.90
26	BB	1017	G	N9-C1'-C2'	-6.07	105.32	112.00
26	BB	2529	G	C3'-C2'-C1'	6.07	106.36	101.50
26	BB	2813	A	C5-C6-N1	6.07	120.73	117.70
1	AA	32	A	C5'-C4'-O4'	-6.07	101.82	109.10
1	AA	279	A	N7-C8-N9	-6.07	110.77	113.80
1	AA	1026	G	C5-N7-C8	-6.07	101.27	104.30
1	AA	1102	A	N7-C8-N9	-6.07	110.77	113.80
1	AA	1241	G	C3'-C2'-C1'	6.07	106.35	101.50
1	AA	1266	G	C5-N7-C8	6.07	107.33	104.30
1	AA	1442	G	C6-N1-C2	-6.07	121.46	125.10
26	BB	89	A	C5-C6-N1	6.07	120.73	117.70
26	BB	431	U	C4'-C3'-C2'	-6.07	96.53	102.60
26	BB	531	C	C1'-O4'-C4'	-6.07	105.05	109.90
26	BB	1096	A	C8-N9-C4	6.07	108.23	105.80
26	BB	1364	G	N3-C2-N2	-6.07	115.65	119.90
26	BB	1724	G	C4-C5-N7	-6.07	108.37	110.80
26	BB	1807	G	C2-N3-C4	6.07	114.93	111.90
26	BB	2250	G	O4'-C4'-C3'	6.07	110.95	106.10
26	BB	2349	G	C5'-C4'-C3'	-6.07	106.29	116.00
26	BB	2405	G	C5-N7-C8	-6.07	101.27	104.30
26	BB	2455	G	C2-N3-C4	6.07	114.93	111.90
1	AA	179	A	C6-C5-N7	-6.07	128.05	132.30
1	AA	588	G	C5-C6-O6	-6.07	124.96	128.60
1	AA	876	C	C5'-C4'-C3'	-6.07	106.29	116.00
1	AA	1016	A	N3-C4-N9	-6.07	122.55	127.40
1	AA	1234	C	C4-C5-C6	6.07	120.43	117.40
4	AD	4	G	N3-C4-N9	-6.07	122.36	126.00
17	AQ	84	ARG	NE-CZ-NH1	6.07	123.33	120.30
26	BB	597	G	C5'-C4'-O4'	6.07	116.38	109.10
26	BB	806	C	C6-N1-C2	-6.07	117.87	120.30
26	BB	969	G	N7-C8-N9	6.07	116.13	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1173	U	N3-C4-O4	6.07	123.64	119.40
26	BB	1341	G	C6-C5-N7	6.07	134.04	130.40
26	BB	2086	U	O4'-C1'-N1	6.07	113.05	108.20
26	BB	2702	G	C3'-C2'-C1'	6.07	106.35	101.50
26	BB	2747	G	O4'-C1'-N9	6.07	113.05	108.20
26	BB	2803	G	C5-N7-C8	6.07	107.33	104.30
45	BU	65	ASP	CB-CG-OD1	6.07	123.76	118.30
1	AA	304	U	C4-C5-C6	6.06	123.34	119.70
2	AB	2	G	N3-C2-N2	6.06	124.14	119.90
2	AB	35	C	C1'-O4'-C4'	6.06	114.75	109.90
2	AB	45	U	C3'-C2'-C1'	-6.06	96.65	101.50
24	AX	46	ARG	CD-NE-CZ	6.06	132.09	123.60
26	BB	190	A	N9-C1'-C2'	-6.06	105.33	112.00
26	BB	1816	C	O4'-C1'-C2'	-6.06	99.74	105.80
26	BB	2536	G	N3-C4-C5	-6.06	125.57	128.60
26	BB	2741	A	C8-N9-C4	-6.06	103.37	105.80
1	AA	371	A	C8-N9-C4	6.06	108.22	105.80
1	AA	452	A	C3'-C2'-C1'	-6.06	96.65	101.50
1	AA	543	U	C1'-O4'-C4'	-6.06	105.05	109.90
1	AA	649	A	C4-C5-C6	-6.06	113.97	117.00
1	AA	794	A	C6-C5-N7	6.06	136.54	132.30
1	AA	1171	A	C2-N3-C4	6.06	113.63	110.60
26	BB	294	A	N3-C4-C5	-6.06	122.56	126.80
26	BB	645	C	C6-N1-C2	-6.06	117.88	120.30
26	BB	794	A	C6-C5-N7	-6.06	128.06	132.30
26	BB	1047	G	N1-C2-N3	6.06	127.54	123.90
26	BB	1232	G	N3-C4-N9	-6.06	122.36	126.00
26	BB	1538	G	C1'-O4'-C4'	-6.06	105.05	109.90
26	BB	1744	A	C4-C5-N7	-6.06	107.67	110.70
26	BB	1960	A	O4'-C1'-N9	6.06	113.05	108.20
26	BB	2097	A	C6-N1-C2	-6.06	114.96	118.60
26	BB	2383	G	C5'-C4'-C3'	-6.06	106.30	116.00
26	BB	2411	A	N3-C4-N9	6.06	132.25	127.40
26	BB	2646	C	N3-C4-N4	6.06	122.24	118.00
1	AA	374	A	C4'-C3'-C2'	6.06	108.66	102.60
1	AA	1230	C	N1-C1'-C2'	-6.06	105.33	112.00
26	BB	1137	G	N9-C4-C5	6.06	107.82	105.40
26	BB	2364	C	C5-C4-N4	-6.06	115.96	120.20
1	AA	149	A	C5-C6-N6	6.06	128.55	123.70
1	AA	1069	C	C5-C4-N4	-6.06	115.96	120.20
1	AA	1254	A	C5-C6-N6	6.06	128.55	123.70
26	BB	717	C	C4'-C3'-C2'	-6.06	96.54	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1952	A	C4-C5-N7	6.06	113.73	110.70
26	BB	1991	U	C5-C4-O4	-6.06	122.26	125.90
26	BB	2013	A	C4-C5-N7	6.06	113.73	110.70
26	BB	2344	U	C3'-C2'-C1'	6.06	106.35	101.50
26	BB	2471	A	N3-C4-N9	-6.06	122.55	127.40
39	BO	38	ARG	CA-CB-CG	6.06	126.73	113.40
1	AA	282	A	C5-N7-C8	6.06	106.93	103.90
1	AA	1086	U	O4'-C1'-N1	6.06	113.05	108.20
1	AA	1227	A	O4'-C4'-C3'	6.06	110.95	106.10
1	AA	1418	A	N1-C2-N3	-6.06	126.27	129.30
1	AA	1454	G	C6-N1-C2	6.06	128.73	125.10
16	AP	92	ARG	NH1-CZ-NH2	6.06	126.06	119.40
26	BB	171	U	N3-C4-C5	-6.06	110.97	114.60
26	BB	653	U	C5-C4-O4	6.06	129.53	125.90
26	BB	1199	U	N1-C2-O2	6.06	127.04	122.80
26	BB	1673	G	N7-C8-N9	6.06	116.13	113.10
26	BB	2068	U	C6-N1-C2	6.06	124.63	121.00
26	BB	2395	C	C5'-C4'-O4'	6.06	116.37	109.10
26	BB	2477	U	P-O3'-C3'	6.06	126.97	119.70
26	BB	2775	G	C8-N9-C1'	6.06	134.87	127.00
1	AA	843	U	C6-N1-C2	-6.06	117.37	121.00
26	BB	477	A	C3'-C2'-C1'	-6.06	96.66	101.50
26	BB	1386	C	N1-C1'-C2'	-6.06	105.34	112.00
26	BB	1691	C	C6-N1-C2	-6.06	117.88	120.30
26	BB	1926	U	O4'-C1'-N1	6.06	113.05	108.20
26	BB	2194	U	O4'-C1'-N1	6.06	113.05	108.20
1	AA	142	G	N1-C2-N3	-6.05	120.27	123.90
4	AD	34	U	C6-N1-C2	-6.05	117.37	121.00
25	BA	90	C	C5-C4-N4	6.05	124.44	120.20
26	BB	279	A	C4'-C3'-C2'	-6.05	96.55	102.60
26	BB	583	G	C6-N1-C2	-6.05	121.47	125.10
26	BB	1002	G	N1-C6-O6	-6.05	116.27	119.90
26	BB	1437	C	N3-C4-N4	6.05	122.24	118.00
26	BB	1598	A	C4-C5-C6	-6.05	113.97	117.00
26	BB	2127	G	N3-C4-C5	-6.05	125.57	128.60
26	BB	2688	G	N9-C1'-C2'	6.05	121.87	114.00
1	AA	971	G	C8-N9-C4	-6.05	103.98	106.40
1	AA	1065	U	C4'-C3'-C2'	-6.05	96.55	102.60
1	AA	1301	U	C2-N3-C4	-6.05	123.37	127.00
1	AA	1370	G	C5-C6-O6	-6.05	124.97	128.60
26	BB	241	A	C4-C5-N7	6.05	113.73	110.70
26	BB	256	A	C4-C5-C6	-6.05	113.97	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	844	A	O4'-C1'-N9	6.05	113.04	108.20
26	BB	1053	C	N3-C2-O2	-6.05	117.66	121.90
26	BB	1220	G	N3-C2-N2	-6.05	115.66	119.90
26	BB	1526	C	C6-N1-C1'	6.05	128.06	120.80
26	BB	2320	U	N1-C2-O2	6.05	127.04	122.80
32	BH	35	THR	CA-CB-CG2	6.05	120.87	112.40
42	BR	30	TRP	CA-CB-CG	6.05	125.20	113.70
1	AA	297	G	O4'-C1'-N9	6.05	113.04	108.20
1	AA	670	G	C4-N9-C1'	-6.05	118.63	126.50
1	AA	1057	G	C5-C6-N1	-6.05	108.47	111.50
1	AA	1258	G	C5-C6-N1	6.05	114.53	111.50
1	AA	1439	G	C6-C5-N7	-6.05	126.77	130.40
26	BB	443	A	N1-C2-N3	-6.05	126.28	129.30
26	BB	949	G	C2-N3-C4	6.05	114.93	111.90
26	BB	1104	C	O4'-C4'-C3'	6.05	110.94	106.10
26	BB	1389	G	C2-N3-C4	6.05	114.93	111.90
26	BB	1766	G	C6-C5-N7	6.05	134.03	130.40
26	BB	1790	C	N1-C2-O2	6.05	122.53	118.90
26	BB	2171	A	O4'-C1'-C2'	-6.05	99.75	105.80
26	BB	2190	G	C8-N9-C4	-6.05	103.98	106.40
26	BB	2411	A	O4'-C1'-N9	6.05	113.04	108.20
1	AA	23	C	C6-N1-C2	-6.05	117.88	120.30
1	AA	129	A	C5-C6-N6	-6.05	118.86	123.70
2	AB	33	U	N1-C2-N3	6.05	118.53	114.90
4	AD	17	C	O4'-C1'-C2'	-6.05	99.75	105.80
26	BB	742	A	N1-C6-N6	-6.05	114.97	118.60
26	BB	957	C	N3-C2-O2	-6.05	117.67	121.90
26	BB	1404	C	N3-C4-N4	6.05	122.23	118.00
26	BB	1654	A	C5-C6-N1	6.05	120.72	117.70
26	BB	1783	A	N1-C2-N3	-6.05	126.28	129.30
26	BB	1850	G	N3-C4-C5	-6.05	125.58	128.60
26	BB	1924	C	N1-C1'-C2'	-6.05	105.35	112.00
26	BB	2094	A	O4'-C1'-N9	6.05	113.04	108.20
46	BV	40	LYS	O-C-N	-6.05	113.02	122.70
1	AA	376	G	N9-C4-C5	6.05	107.82	105.40
1	AA	1196	A	C5-N7-C8	6.05	106.92	103.90
26	BB	1712	U	N1-C2-O2	-6.05	118.57	122.80
26	BB	1976	U	C5'-C4'-O4'	6.05	116.36	109.10
26	BB	2201	G	N9-C4-C5	6.05	107.82	105.40
1	AA	391	G	C4'-C3'-C2'	-6.05	96.55	102.60
1	AA	597	G	N3-C2-N2	-6.05	115.67	119.90
1	AA	675	A	C3'-C2'-C1'	-6.05	96.66	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	987	G	C4-C5-C6	6.05	122.43	118.80
25	BA	44	G	C2'-C3'-O3'	6.05	123.37	113.70
26	BB	211	C	C4'-C3'-C2'	-6.05	96.55	102.60
26	BB	310	A	C2-N3-C4	-6.05	107.58	110.60
26	BB	1115	G	C5'-C4'-O4'	6.05	116.36	109.10
26	BB	1176	U	N1-C2-N3	6.05	118.53	114.90
26	BB	1512	C	N3-C4-N4	6.05	122.23	118.00
26	BB	1630	A	C8-N9-C4	-6.05	103.38	105.80
26	BB	1811	G	N3-C2-N2	-6.05	115.67	119.90
55	B4	31	GLU	O-C-N	6.05	132.38	122.70
1	AA	1349	A	C6-N1-C2	-6.04	114.97	118.60
26	BB	86	G	C6-N1-C2	-6.04	121.47	125.10
26	BB	505	A	N7-C8-N9	6.04	116.82	113.80
26	BB	606	U	C4-C5-C6	6.04	123.33	119.70
26	BB	1036	G	C3'-C2'-C1'	-6.04	96.66	101.50
26	BB	1761	C	N3-C4-N4	-6.04	113.77	118.00
26	BB	2025	C	C5-C6-N1	6.04	124.02	121.00
26	BB	2426	A	C4-C5-C6	6.04	120.02	117.00
26	BB	2768	U	N1-C2-N3	-6.04	111.27	114.90
1	AA	166	U	C5-C4-O4	-6.04	122.27	125.90
1	AA	202	G	O4'-C1'-N9	6.04	113.03	108.20
1	AA	300	A	C2-N3-C4	6.04	113.62	110.60
1	AA	568	G	C2-N3-C4	6.04	114.92	111.90
1	AA	901	A	N9-C4-C5	6.04	108.22	105.80
1	AA	1016	A	C5-C6-N1	6.04	120.72	117.70
1	AA	1257	A	C8-N9-C4	6.04	108.22	105.80
4	AD	20	G	C6-C5-N7	-6.04	126.77	130.40
8	AH	49	TYR	CB-CG-CD2	-6.04	117.37	121.00
26	BB	465	G	N3-C2-N2	-6.04	115.67	119.90
26	BB	810	U	N3-C4-C5	6.04	118.23	114.60
26	BB	1563	U	C4'-C3'-C2'	-6.04	96.56	102.60
26	BB	1828	G	O4'-C4'-C3'	6.04	110.94	106.10
26	BB	2421	G	C8-N9-C1'	6.04	134.86	127.00
26	BB	2694	G	C8-N9-C1'	6.04	134.86	127.00
26	BB	2847	U	C5-C6-N1	-6.04	119.68	122.70
1	AA	20	U	O4'-C1'-N1	6.04	113.03	108.20
1	AA	399	G	O4'-C1'-C2'	-6.04	99.76	105.80
1	AA	720	C	O4'-C1'-C2'	6.04	113.04	107.60
1	AA	728	A	C6-N1-C2	-6.04	114.97	118.60
1	AA	749	A	C8-N9-C4	-6.04	103.38	105.80
1	AA	1430	A	N1-C6-N6	6.04	122.22	118.60
2	AB	61	C	O5'-C5'-C4'	-6.04	100.22	111.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	62	U	C5-C4-O4	-6.04	122.28	125.90
4	AD	27	G	C5-N7-C8	6.04	107.32	104.30
26	BB	192	C	C4-C5-C6	6.04	120.42	117.40
26	BB	686	U	C5'-C4'-O4'	6.04	116.35	109.10
26	BB	725	G	C8-N9-C4	-6.04	103.98	106.40
26	BB	836	G	C6-N1-C2	-6.04	121.47	125.10
26	BB	855	G	C6-N1-C2	6.04	128.72	125.10
26	BB	1369	G	C5-N7-C8	-6.04	101.28	104.30
26	BB	1428	C	C1'-O4'-C4'	-6.04	105.07	109.90
26	BB	1607	C	N1-C2-O2	6.04	122.53	118.90
26	BB	1632	A	C3'-C2'-C1'	6.04	106.33	101.50
26	BB	2176	A	C4-C5-N7	6.04	113.72	110.70
26	BB	2277	G	N9-C1'-C2'	-6.04	105.35	112.00
26	BB	2365	G	C6-N1-C2	-6.04	121.47	125.10
26	BB	2565	A	O4'-C1'-N9	6.04	113.03	108.20
26	BB	2787	C	N1-C2-N3	-6.04	114.97	119.20
28	BD	211	ARG	NH1-CZ-NH2	-6.04	112.75	119.40
1	AA	1428	A	N1-C6-N6	-6.04	114.98	118.60
3	AC	28	U	N3-C2-O2	-6.04	117.97	122.20
1	AA	503	C	O4'-C1'-N1	6.04	113.03	108.20
1	AA	705	G	C2-N3-C4	6.04	114.92	111.90
1	AA	988	G	C5-N7-C8	-6.04	101.28	104.30
1	AA	1528	U	N1-C2-O2	-6.04	118.57	122.80
26	BB	242	G	C5-C6-O6	-6.04	124.98	128.60
26	BB	276	U	N1-C2-N3	6.04	118.52	114.90
26	BB	604	G	C5-N7-C8	6.04	107.32	104.30
26	BB	1064	C	C5-C6-N1	6.04	124.02	121.00
26	BB	1549	A	N9-C4-C5	-6.04	103.38	105.80
26	BB	1725	U	C6-N1-C2	-6.04	117.38	121.00
26	BB	1805	A	C8-N9-C4	-6.04	103.39	105.80
26	BB	1901	A	C5'-C4'-O4'	6.04	116.34	109.10
26	BB	2173	A	C5'-C4'-O4'	6.04	116.35	109.10
26	BB	2355	G	C6-N1-C2	-6.04	121.48	125.10
26	BB	2639	A	N9-C4-C5	6.04	108.22	105.80
1	AA	815	A	N1-C6-N6	-6.04	114.98	118.60
2	AB	10	G	C8-N9-C4	-6.04	103.98	106.40
26	BB	52	A	C5'-C4'-O4'	6.04	116.34	109.10
26	BB	1475	G	C1'-O4'-C4'	6.04	114.73	109.90
26	BB	1531	C	N3-C2-O2	-6.04	117.67	121.90
26	BB	2254	C	C5-C6-N1	-6.04	117.98	121.00
26	BB	2352	A	C8-N9-C4	-6.04	103.39	105.80
26	BB	2601	C	P-O3'-C3'	6.04	126.94	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	54	C	C5-C4-N4	6.04	124.42	120.20
1	AA	170	U	C2-N3-C4	-6.04	123.38	127.00
1	AA	207	C	C6-N1-C2	6.04	122.71	120.30
1	AA	666	G	N3-C2-N2	-6.04	115.67	119.90
6	AF	163	ARG	NE-CZ-NH2	6.04	123.32	120.30
7	AG	96	ARG	NE-CZ-NH1	-6.04	117.28	120.30
26	BB	71	A	C4'-C3'-C2'	-6.04	96.56	102.60
26	BB	411	G	O4'-C1'-N9	6.04	113.03	108.20
26	BB	1120	G	N9-C4-C5	-6.04	102.99	105.40
26	BB	1172	C	C6-N1-C2	6.04	122.72	120.30
26	BB	1459	G	C1'-O4'-C4'	-6.04	105.07	109.90
26	BB	1527	G	C5-N7-C8	-6.04	101.28	104.30
26	BB	1600	C	C4-C5-C6	-6.04	114.38	117.40
26	BB	1663	G	O4'-C1'-N9	6.04	113.03	108.20
26	BB	2613	U	C5-C4-O4	-6.04	122.28	125.90
1	AA	552	U	N3-C4-O4	6.03	123.62	119.40
1	AA	900	A	C6-N1-C2	-6.03	114.98	118.60
1	AA	996	A	C2-N3-C4	6.03	113.62	110.60
1	AA	1319	A	O4'-C1'-C2'	6.03	113.03	107.60
2	AB	42	G	N1-C2-N2	-6.03	110.77	116.20
26	BB	217	A	N7-C8-N9	6.03	116.82	113.80
26	BB	422	A	C6-C5-N7	6.03	136.52	132.30
26	BB	465	G	O4'-C4'-C3'	-6.03	97.97	104.00
26	BB	825	A	N9-C1'-C2'	-6.03	105.36	112.00
26	BB	1594	U	O5'-P-OP2	-6.03	100.27	105.70
26	BB	1988	G	C2-N3-C4	6.03	114.92	111.90
26	BB	2411	A	C5-N7-C8	6.03	106.92	103.90
26	BB	2602	A	C5-C6-N6	6.03	128.53	123.70
47	BW	66	VAL	CA-CB-CG2	6.03	119.95	110.90
1	AA	104	G	C5-C6-N1	6.03	114.52	111.50
1	AA	424	G	C5-C6-O6	-6.03	124.98	128.60
1	AA	885	G	N1-C2-N3	6.03	127.52	123.90
1	AA	896	C	N1-C2-O2	6.03	122.52	118.90
1	AA	1503	A	O4'-C4'-C3'	6.03	110.93	106.10
26	BB	827	U	N1-C2-O2	-6.03	118.58	122.80
26	BB	1043	C	C5-C6-N1	-6.03	117.98	121.00
26	BB	1287	A	N7-C8-N9	6.03	116.82	113.80
26	BB	1523	U	C5-C6-N1	-6.03	119.68	122.70
26	BB	2285	C	C5'-C4'-O4'	6.03	116.34	109.10
26	BB	2384	U	C6-N1-C2	-6.03	117.38	121.00
1	AA	315	A	C3'-C2'-C1'	-6.03	96.67	101.50
1	AA	478	A	P-O3'-C3'	6.03	126.94	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	560	A	C3'-C2'-C1'	6.03	106.33	101.50
1	AA	574	A	O4'-C1'-N9	6.03	113.02	108.20
1	AA	1221	G	C3'-C2'-C1'	6.03	106.33	101.50
25	BA	27	C	C5-C4-N4	6.03	124.42	120.20
26	BB	466	A	C4'-C3'-C2'	-6.03	96.57	102.60
26	BB	1029	A	C3'-C2'-C1'	6.03	106.32	101.50
26	BB	1164	C	P-O3'-C3'	6.03	126.94	119.70
26	BB	1438	U	C5'-C4'-C3'	-6.03	106.35	116.00
26	BB	1573	G	O4'-C1'-N9	6.03	113.03	108.20
26	BB	1630	A	C3'-C2'-C1'	-6.03	96.68	101.50
26	BB	2188	U	C3'-C2'-C1'	6.03	106.32	101.50
26	BB	2446	G	N9-C1'-C2'	-6.03	105.37	112.00
30	BF	32	VAL	CA-CB-CG1	6.03	119.95	110.90
34	BJ	122	ILE	CA-CB-CG1	6.03	122.46	111.00
26	BB	180	G	C8-N9-C4	-6.03	103.99	106.40
26	BB	999	U	C5-C6-N1	-6.03	119.69	122.70
26	BB	1241	A	C5'-C4'-C3'	-6.03	106.35	116.00
1	AA	113	G	C3'-C2'-C1'	6.03	106.32	101.50
1	AA	1211	U	N1-C1'-C2'	-6.03	105.37	112.00
1	AA	1281	C	O4'-C1'-N1	6.03	113.02	108.20
1	AA	1503	A	C3'-C2'-C1'	-6.03	96.68	101.50
26	BB	53	A	C4-C5-C6	6.03	120.01	117.00
26	BB	1337	G	N3-C2-N2	-6.03	115.68	119.90
26	BB	1555	G	N3-C4-C5	-6.03	125.59	128.60
26	BB	2044	C	C2-N3-C4	6.03	122.91	119.90
26	BB	2680	U	C2-N3-C4	-6.03	123.38	127.00
1	AA	561	U	N1-C2-N3	6.03	118.52	114.90
1	AA	1464	U	C1'-O4'-C4'	6.03	114.72	109.90
10	AJ	122	GLU	OE1-CD-OE2	6.03	130.53	123.30
13	AM	63	ASP	CB-CG-OD2	-6.03	112.88	118.30
26	BB	94	A	P-O3'-C3'	6.03	126.93	119.70
26	BB	565	C	N3-C4-N4	6.03	122.22	118.00
26	BB	763	G	C1'-O4'-C4'	6.03	114.72	109.90
26	BB	968	C	O4'-C4'-C3'	-6.03	97.97	104.00
26	BB	1474	U	N1-C1'-C2'	-6.03	105.37	112.00
26	BB	2140	G	C1'-O4'-C4'	-6.03	105.08	109.90
1	AA	105	G	C4-C5-N7	-6.02	108.39	110.80
1	AA	840	C	P-O3'-C3'	6.02	126.93	119.70
1	AA	1044	A	O4'-C4'-C3'	-6.02	97.98	104.00
1	AA	1397	C	N1-C1'-C2'	6.02	121.83	114.00
1	AA	1540	U	C1'-O4'-C4'	-6.02	105.08	109.90
26	BB	101	A	C4-C5-N7	6.02	113.71	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	341	C	C2-N3-C4	6.02	122.91	119.90
26	BB	342	A	C2-N3-C4	6.02	113.61	110.60
26	BB	1404	C	C2-N3-C4	-6.02	116.89	119.90
26	BB	2177	C	C6-N1-C2	-6.02	117.89	120.30
1	AA	41	G	N3-C2-N2	6.02	124.12	119.90
1	AA	327	A	C5-C6-N6	-6.02	118.88	123.70
1	AA	441	A	C4-C5-C6	6.02	120.01	117.00
1	AA	756	C	C5'-C4'-C3'	-6.02	106.36	116.00
1	AA	870	U	N1-C2-N3	6.02	118.51	114.90
1	AA	945	G	N3-C4-C5	-6.02	125.59	128.60
3	AC	22	G	N3-C2-N2	6.02	124.11	119.90
12	AL	28	VAL	CG1-CB-CG2	-6.02	101.26	110.90
26	BB	46	G	P-O3'-C3'	6.02	126.93	119.70
26	BB	92	U	C5-C4-O4	6.02	129.51	125.90
26	BB	687	C	O4'-C1'-C2'	6.02	113.02	107.60
26	BB	863	A	C3'-C2'-C1'	6.02	106.32	101.50
26	BB	993	G	N3-C2-N2	-6.02	115.68	119.90
26	BB	1921	G	N3-C2-N2	6.02	124.12	119.90
26	BB	2555	U	C4'-C3'-C2'	6.02	108.62	102.60
26	BB	2675	A	P-O3'-C3'	6.02	126.93	119.70
1	AA	662	U	N3-C4-C5	-6.02	110.99	114.60
26	BB	512	G	C3'-C2'-C1'	-6.02	96.68	101.50
26	BB	737	C	N3-C4-N4	6.02	122.22	118.00
26	BB	1380	G	C4-C5-N7	-6.02	108.39	110.80
26	BB	1451	C	N3-C2-O2	-6.02	117.69	121.90
26	BB	1512	C	N1-C2-O2	6.02	122.51	118.90
26	BB	1798	U	N1-C2-O2	6.02	127.02	122.80
26	BB	1880	U	C2-N3-C4	-6.02	123.39	127.00
26	BB	1919	A	C4'-C3'-C2'	-6.02	96.58	102.60
26	BB	1925	C	C6-N1-C2	6.02	122.71	120.30
26	BB	2594	C	C1'-O4'-C4'	-6.02	105.08	109.90
26	BB	2793	C	P-O5'-C5'	6.02	130.53	120.90
1	AA	143	A	O4'-C1'-N9	6.02	113.02	108.20
1	AA	1161	C	C2-N3-C4	6.02	122.91	119.90
8	AH	156	ARG	NE-CZ-NH1	6.02	123.31	120.30
26	BB	153	U	N3-C2-O2	-6.02	117.99	122.20
26	BB	347	A	C5'-C4'-O4'	6.02	116.32	109.10
26	BB	591	U	N3-C4-C5	6.02	118.21	114.60
26	BB	1005	C	N1-C2-O2	6.02	122.51	118.90
26	BB	1250	G	C5'-C4'-C3'	-6.02	106.37	116.00
26	BB	1442	U	C2-N3-C4	-6.02	123.39	127.00
26	BB	1468	U	C6-N1-C2	6.02	124.61	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1946	U	O4'-C1'-N1	6.02	113.02	108.20
26	BB	2550	G	C2-N3-C4	6.02	114.91	111.90
1	AA	850	U	C2-N3-C4	-6.02	123.39	127.00
1	AA	1345	U	N1-C2-N3	6.02	118.51	114.90
1	AA	1460	C	O4'-C4'-C3'	-6.02	97.98	104.00
4	AD	40	C	C4-C5-C6	-6.02	114.39	117.40
26	BB	886	A	C4'-C3'-O3'	6.02	125.03	113.00
26	BB	972	A	C3'-C2'-C1'	6.02	106.31	101.50
26	BB	1100	C	O4'-C1'-N1	6.02	113.01	108.20
26	BB	1350	C	N3-C2-O2	-6.02	117.69	121.90
26	BB	2529	G	O4'-C1'-N9	-6.02	103.39	108.20
1	AA	336	A	O4'-C1'-N9	6.02	113.01	108.20
14	AN	121	ARG	NE-CZ-NH2	-6.02	117.29	120.30
26	BB	1342	A	C1'-O4'-C4'	6.02	114.71	109.90
26	BB	1845	G	O5'-P-OP2	6.02	117.92	110.70
26	BB	2103	C	C5-C6-N1	-6.02	117.99	121.00
26	BB	2785	C	O4'-C1'-C2'	-6.02	99.78	105.80
1	AA	55	A	C8-N9-C4	-6.01	103.39	105.80
1	AA	1051	C	C4'-C3'-C2'	-6.01	96.58	102.60
25	BA	87	U	N3-C2-O2	-6.01	117.99	122.20
25	BA	96	G	N3-C2-N2	6.01	124.11	119.90
26	BB	15	G	N1-C2-N2	6.01	121.61	116.20
26	BB	441	U	C6-N1-C2	-6.01	117.39	121.00
26	BB	686	U	C1'-O4'-C4'	6.01	114.71	109.90
26	BB	883	G	N1-C2-N3	-6.01	120.29	123.90
26	BB	1155	A	C5-C6-N6	6.01	128.51	123.70
26	BB	1611	C	O4'-C1'-N1	6.01	113.01	108.20
26	BB	2044	C	C6-N1-C2	6.01	122.71	120.30
26	BB	2191	A	C8-N9-C4	-6.01	103.39	105.80
26	BB	2329	U	P-O3'-C3'	6.01	126.92	119.70
26	BB	2641	G	N1-C2-N2	6.01	121.61	116.20
1	AA	1180	A	C1'-O4'-C4'	6.01	114.71	109.90
26	BB	214	G	C4-C5-C6	-6.01	115.19	118.80
26	BB	810	U	C5'-C4'-C3'	-6.01	106.38	116.00
26	BB	1117	C	N1-C2-N3	6.01	123.41	119.20
26	BB	1740	G	C2-N3-C4	6.01	114.91	111.90
26	BB	1754	A	C5-N7-C8	6.01	106.91	103.90
26	BB	1982	U	N1-C1'-C2'	-6.01	105.39	112.00
26	BB	2313	C	O4'-C1'-N1	6.01	113.01	108.20
26	BB	2317	A	N9-C4-C5	-6.01	103.39	105.80
26	BB	2851	A	N1-C6-N6	-6.01	114.99	118.60
1	AA	512	U	C5'-C4'-C3'	-6.01	106.38	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	517	G	C6-N1-C2	-6.01	121.49	125.10
1	AA	690	G	C2-N3-C4	6.01	114.91	111.90
1	AA	807	A	C6-N1-C2	6.01	122.21	118.60
1	AA	1024	G	N3-C4-C5	-6.01	125.59	128.60
1	AA	1118	U	O4'-C1'-N1	6.01	113.01	108.20
17	AQ	75	LYS	N-CA-CB	-6.01	99.78	110.60
26	BB	917	A	N1-C2-N3	-6.01	126.29	129.30
26	BB	1379	U	C5-C6-N1	-6.01	119.69	122.70
26	BB	2158	A	C5-C6-N6	6.01	128.51	123.70
1	AA	281	G	N3-C4-C5	-6.01	125.59	128.60
1	AA	283	U	N3-C4-C5	-6.01	111.00	114.60
1	AA	672	U	C5-C6-N1	-6.01	119.69	122.70
1	AA	770	C	C4'-C3'-C2'	-6.01	96.59	102.60
1	AA	791	G	C5-C6-O6	6.01	132.21	128.60
1	AA	1245	C	N1-C2-O2	6.01	122.50	118.90
1	AA	1290	G	N1-C6-O6	-6.01	116.29	119.90
3	AC	15	G	N1-C6-O6	-6.01	116.30	119.90
26	BB	127	A	C8-N9-C4	-6.01	103.40	105.80
26	BB	669	G	C1'-O4'-C4'	-6.01	105.09	109.90
26	BB	1539	U	C4-C5-C6	6.01	123.31	119.70
26	BB	1570	A	C4-C5-C6	-6.01	114.00	117.00
26	BB	1863	G	C2-N3-C4	6.01	114.90	111.90
26	BB	2489	U	O4'-C1'-N1	6.01	113.01	108.20
51	B0	53	VAL	CG1-CB-CG2	-6.01	101.28	110.90
1	AA	29	U	C4'-C3'-C2'	-6.01	96.59	102.60
1	AA	123	U	N3-C2-O2	-6.01	118.00	122.20
26	BB	1009	A	P-O3'-C3'	6.01	126.91	119.70
26	BB	1823	G	O4'-C1'-N9	6.01	113.01	108.20
1	AA	146	G	N7-C8-N9	6.01	116.10	113.10
1	AA	449	G	C1'-O4'-C4'	-6.01	105.09	109.90
1	AA	1137	C	C2-N3-C4	6.01	122.90	119.90
24	AX	70	TYR	CG-CD2-CE2	-6.01	116.49	121.30
25	BA	39	A	C5-N7-C8	6.01	106.90	103.90
26	BB	1013	C	C4-C5-C6	-6.01	114.40	117.40
26	BB	1392	A	N1-C6-N6	-6.01	115.00	118.60
26	BB	1547	C	N1-C2-O2	6.01	122.50	118.90
26	BB	2282	G	O3'-P-O5'	-6.01	92.59	104.00
26	BB	2418	A	N9-C1'-C2'	-6.01	105.39	112.00
26	BB	2602	A	C6-N1-C2	6.01	122.20	118.60
50	BZ	63	ILE	CA-CB-CG1	6.01	122.41	111.00
1	AA	269	C	C3'-C2'-C1'	-6.00	96.70	101.50
1	AA	969	A	O4'-C1'-N9	6.00	113.00	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1211	U	C4-C5-C6	6.00	123.30	119.70
26	BB	523	C	C5-C4-N4	-6.00	116.00	120.20
26	BB	1000	A	O4'-C4'-C3'	-6.00	98.00	104.00
26	BB	1203	U	C4-C5-C6	6.00	123.30	119.70
26	BB	1735	A	C8-N9-C4	-6.00	103.40	105.80
1	AA	703	G	C8-N9-C1'	6.00	134.80	127.00
1	AA	1191	A	C5-C6-N1	6.00	120.70	117.70
1	AA	1246	A	C3'-C2'-C1'	6.00	106.30	101.50
4	AD	26	C	N3-C4-C5	-6.00	119.50	121.90
25	BA	1	U	C5-C6-N1	-6.00	119.70	122.70
25	BA	37	C	C1'-O4'-C4'	-6.00	105.10	109.90
26	BB	482	A	N3-C4-N9	6.00	132.20	127.40
26	BB	892	A	C5-C6-N1	-6.00	114.70	117.70
26	BB	961	C	C5-C6-N1	-6.00	118.00	121.00
26	BB	1698	A	C6-C5-N7	6.00	136.50	132.30
26	BB	2159	G	C2-N3-C4	6.00	114.90	111.90
26	BB	2542	A	O4'-C4'-C3'	6.00	110.90	106.10
58	B7	36	ARG	NH1-CZ-NH2	-6.00	112.80	119.40
1	AA	39	G	C5-C6-N1	6.00	114.50	111.50
1	AA	566	G	N1-C2-N3	-6.00	120.30	123.90
1	AA	1288	A	N9-C1'-C2'	-6.00	105.40	112.00
2	AB	41	C	C2-N1-C1'	-6.00	112.20	118.80
4	AD	41	C	C2-N3-C4	6.00	122.90	119.90
8	AH	127	TYR	CG-CD2-CE2	-6.00	116.50	121.30
11	AK	107	LYS	C-N-CA	6.00	134.90	122.30
26	BB	274	C	C6-N1-C2	-6.00	117.90	120.30
26	BB	392	U	P-O3'-C3'	6.00	126.90	119.70
26	BB	1008	A	C1'-O4'-C4'	6.00	114.70	109.90
26	BB	1110	G	N3-C2-N2	-6.00	115.70	119.90
26	BB	1748	C	C5-C4-N4	6.00	124.40	120.20
26	BB	1818	U	C2-N1-C1'	6.00	124.90	117.70
26	BB	2549	G	C6-C5-N7	6.00	134.00	130.40
26	BB	2549	G	C6-N1-C2	-6.00	121.50	125.10
1	AA	679	C	N3-C4-C5	-6.00	119.50	121.90
1	AA	1304	G	C4'-C3'-C2'	-6.00	96.60	102.60
1	AA	1416	G	N3-C2-N2	-6.00	115.70	119.90
26	BB	82	U	C5-C4-O4	-6.00	122.30	125.90
26	BB	260	G	N9-C1'-C2'	-6.00	105.40	112.00
26	BB	339	U	C2-N3-C4	-6.00	123.40	127.00
1	AA	827	U	C1'-O4'-C4'	6.00	114.70	109.90
26	BB	282	A	C3'-C2'-C1'	6.00	106.30	101.50
26	BB	327	G	N3-C4-C5	-6.00	125.60	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	633	A	N9-C4-C5	-6.00	103.40	105.80
26	BB	841	G	C5-N7-C8	-6.00	101.30	104.30
26	BB	1020	A	N9-C4-C5	6.00	108.20	105.80
26	BB	1590	A	C4-C5-N7	6.00	113.70	110.70
26	BB	1711	A	O4'-C1'-N9	6.00	113.00	108.20
26	BB	2182	U	N1-C2-N3	6.00	118.50	114.90
26	BB	2480	C	P-O3'-C3'	6.00	126.90	119.70
1	AA	968	A	C4-C5-C6	6.00	120.00	117.00
1	AA	1062	U	N3-C4-C5	6.00	118.20	114.60
26	BB	244	A	C1'-O4'-C4'	-6.00	105.10	109.90
26	BB	299	A	O4'-C1'-N9	6.00	113.00	108.20
26	BB	454	A	C3'-C2'-C1'	6.00	106.30	101.50
26	BB	1145	C	C5-C4-N4	6.00	124.40	120.20
26	BB	1183	U	N1-C2-O2	-6.00	118.60	122.80
26	BB	1435	G	C4-C5-C6	6.00	122.40	118.80
26	BB	1933	G	N7-C8-N9	-6.00	110.10	113.10
26	BB	2127	G	C3'-C2'-C1'	6.00	106.30	101.50
26	BB	2272	U	N1-C1'-C2'	6.00	121.80	114.00
26	BB	2279	G	C8-N9-C4	-6.00	104.00	106.40
1	AA	370	C	C5-C6-N1	6.00	124.00	121.00
1	AA	414	A	O4'-C1'-N9	6.00	113.00	108.20
2	AB	33	U	C1'-O4'-C4'	6.00	114.70	109.90
26	BB	463	G	C2-N3-C4	6.00	114.90	111.90
26	BB	1207	C	N3-C4-C5	-6.00	119.50	121.90
26	BB	2092	U	O4'-C1'-N1	6.00	113.00	108.20
26	BB	2785	C	C5-C6-N1	-6.00	118.00	121.00
1	AA	32	A	N9-C4-C5	5.99	108.20	105.80
1	AA	75	G	N7-C8-N9	5.99	116.10	113.10
1	AA	670	G	C1'-O4'-C4'	5.99	114.69	109.90
1	AA	826	C	P-O5'-C5'	5.99	130.49	120.90
1	AA	942	G	C4'-C3'-C2'	-5.99	96.61	102.60
1	AA	1337	G	O3'-P-O5'	-5.99	92.61	104.00
1	AA	1538	C	N3-C4-C5	-5.99	119.50	121.90
3	AC	59	A	C3'-C2'-C1'	5.99	106.30	101.50
8	AH	24	VAL	CG1-CB-CG2	-5.99	101.31	110.90
26	BB	53	A	N9-C1'-C2'	-5.99	105.41	112.00
26	BB	103	A	C1'-O4'-C4'	5.99	114.70	109.90
26	BB	192	C	N3-C4-N4	5.99	122.20	118.00
26	BB	651	G	N1-C6-O6	-5.99	116.30	119.90
26	BB	785	G	C5-N7-C8	-5.99	101.30	104.30
26	BB	1673	G	O3'-P-O5'	5.99	115.39	104.00
26	BB	1821	A	C6-C5-N7	5.99	136.50	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2582	G	C3'-C2'-C1'	5.99	106.30	101.50
26	BB	2837	A	N9-C4-C5	5.99	108.20	105.80
26	BB	2851	A	N9-C4-C5	-5.99	103.40	105.80
3	AC	24	A	O4'-C1'-N9	-5.99	103.41	108.20
3	AC	57	C	N3-C2-O2	-5.99	117.71	121.90
26	BB	516	C	N1-C1'-C2'	-5.99	105.41	112.00
26	BB	1159	U	C3'-C2'-C1'	5.99	106.29	101.50
1	AA	167	A	C5-C6-N1	-5.99	114.70	117.70
1	AA	584	G	N1-C2-N3	5.99	127.49	123.90
1	AA	585	G	N1-C2-N3	5.99	127.49	123.90
1	AA	650	G	N3-C2-N2	5.99	124.09	119.90
1	AA	775	G	C4'-C3'-C2'	-5.99	96.61	102.60
3	AC	20	G	C1'-O4'-C4'	-5.99	105.11	109.90
4	AD	12	G	C5'-C4'-O4'	5.99	116.29	109.10
26	BB	80	G	N1-C6-O6	5.99	123.49	119.90
26	BB	910	A	C4-C5-N7	-5.99	107.70	110.70
26	BB	968	C	C5'-C4'-O4'	5.99	116.29	109.10
26	BB	1866	A	C4-C5-C6	-5.99	114.00	117.00
26	BB	1936	A	N9-C4-C5	5.99	108.20	105.80
26	BB	2386	A	C6-C5-N7	5.99	136.49	132.30
26	BB	2461	A	N1-C2-N3	-5.99	126.31	129.30
26	BB	2553	G	C5-N7-C8	-5.99	101.30	104.30
26	BB	2879	A	N1-C2-N3	-5.99	126.31	129.30
26	BB	2892	G	O5'-C5'-C4'	-5.99	100.32	111.70
54	B3	29	VAL	CA-CB-CG1	5.99	119.89	110.90
1	AA	649	A	N9-C4-C5	-5.99	103.40	105.80
1	AA	955	U	P-O5'-C5'	5.99	130.48	120.90
1	AA	1115	U	N1-C2-N3	5.99	118.49	114.90
3	AC	44	U	C2-N3-C4	-5.99	123.41	127.00
26	BB	52	A	N9-C1'-C2'	-5.99	105.41	112.00
26	BB	495	G	C1'-O4'-C4'	5.99	114.69	109.90
26	BB	518	G	N9-C4-C5	5.99	107.80	105.40
26	BB	1433	A	C6-C5-N7	-5.99	128.11	132.30
26	BB	1686	C	C5-C6-N1	-5.99	118.01	121.00
26	BB	1794	A	C1'-O4'-C4'	-5.99	105.11	109.90
26	BB	1877	A	C5'-C4'-O4'	5.99	116.29	109.10
26	BB	2405	G	N3-C4-C5	-5.99	125.61	128.60
26	BB	2557	G	O4'-C4'-C3'	5.99	110.89	106.10
26	BB	2856	A	C5-C6-N1	5.99	120.69	117.70
30	BF	31	VAL	CG1-CB-CG2	-5.99	101.32	110.90
54	B3	45	ASP	CB-CG-OD1	-5.99	112.91	118.30
1	AA	931	C	N3-C4-N4	5.99	122.19	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1062	G	P-O5'-C5'	-5.99	111.32	120.90
26	BB	1223	G	O4'-C1'-N9	5.99	112.99	108.20
26	BB	2374	C	O3'-P-O5'	-5.99	92.62	104.00
26	BB	2578	G	C5'-C4'-O4'	5.99	116.28	109.10
1	AA	515	G	N7-C8-N9	5.99	116.09	113.10
1	AA	848	C	N3-C4-N4	5.99	122.19	118.00
1	AA	865	A	C4-C5-N7	-5.99	107.71	110.70
1	AA	1159	U	C4-C5-C6	5.99	123.29	119.70
1	AA	1349	A	C4-C5-N7	5.99	113.69	110.70
3	AC	38	G	O4'-C1'-N9	5.99	112.99	108.20
3	AC	44	U	C6-N1-C1'	-5.99	112.82	121.20
26	BB	185	G	O4'-C4'-C3'	-5.99	98.02	104.00
26	BB	239	C	O4'-C1'-N1	5.99	112.99	108.20
26	BB	1734	G	N1-C6-O6	5.99	123.49	119.90
26	BB	1741	C	N3-C2-O2	-5.99	117.71	121.90
26	BB	1942	C	C5'-C4'-C3'	-5.99	106.42	116.00
26	BB	1981	A	O4'-C1'-N9	5.99	112.99	108.20
26	BB	2169	A	C8-N9-C4	-5.99	103.41	105.80
26	BB	2204	G	C5-C6-N1	-5.99	108.51	111.50
26	BB	2469	A	C5-C6-N1	-5.99	114.71	117.70
1	AA	1444	U	N3-C4-O4	-5.98	115.21	119.40
26	BB	227	A	C6-C5-N7	-5.98	128.11	132.30
26	BB	590	A	N9-C4-C5	5.98	108.19	105.80
26	BB	1317	G	N9-C4-C5	-5.98	103.01	105.40
26	BB	1715	G	N3-C4-C5	-5.98	125.61	128.60
26	BB	2068	U	O4'-C1'-N1	-5.98	103.41	108.20
26	BB	2278	A	C5-C6-N1	5.98	120.69	117.70
26	BB	2643	G	C4-C5-C6	5.98	122.39	118.80
28	BD	68	ARG	NE-CZ-NH2	5.98	123.29	120.30
1	AA	590	U	N1-C1'-C2'	-5.98	105.42	112.00
1	AA	685	G	N1-C6-O6	5.98	123.49	119.90
1	AA	898	G	C5-N7-C8	-5.98	101.31	104.30
1	AA	1279	G	N3-C4-C5	-5.98	125.61	128.60
26	BB	50	U	C4-C5-C6	5.98	123.29	119.70
26	BB	131	A	N7-C8-N9	5.98	116.79	113.80
26	BB	274	C	N3-C4-C5	-5.98	119.51	121.90
26	BB	604	G	C4'-C3'-C2'	-5.98	96.62	102.60
26	BB	1011	G	N1-C2-N2	5.98	121.58	116.20
26	BB	1027	A	C6-N1-C2	-5.98	115.01	118.60
26	BB	1120	G	C6-N1-C2	-5.98	121.51	125.10
26	BB	1435	G	C5-C6-N1	-5.98	108.51	111.50
26	BB	1447	C	C5'-C4'-O4'	5.98	116.28	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1660	G	C3'-C2'-C1'	-5.98	96.72	101.50
26	BB	1794	A	C4-C5-C6	-5.98	114.01	117.00
26	BB	2036	C	P-O3'-C3'	5.98	126.88	119.70
44	BT	68	ARG	NE-CZ-NH1	-5.98	117.31	120.30
1	AA	9	G	C6-N1-C2	5.98	128.69	125.10
1	AA	858	G	C5-N7-C8	5.98	107.29	104.30
1	AA	974	A	C4-C5-C6	-5.98	114.01	117.00
1	AA	1184	G	O4'-C1'-N9	5.98	112.98	108.20
26	BB	122	G	C4-C5-N7	-5.98	108.41	110.80
26	BB	145	C	C6-N1-C2	-5.98	117.91	120.30
26	BB	324	A	C2-N3-C4	5.98	113.59	110.60
26	BB	1759	A	C2'-C3'-O3'	5.98	123.27	113.70
26	BB	2047	C	N1-C2-O2	5.98	122.49	118.90
26	BB	2710	C	C4-C5-C6	-5.98	114.41	117.40
30	BF	88	ARG	NE-CZ-NH1	5.98	123.29	120.30
47	BW	66	VAL	CG1-CB-CG2	-5.98	101.33	110.90
1	AA	1082	A	C5-C6-N6	-5.98	118.92	123.70
26	BB	1274	A	C5'-C4'-O4'	5.98	116.28	109.10
26	BB	1889	A	N7-C8-N9	5.98	116.79	113.80
26	BB	2804	U	O4'-C1'-N1	5.98	112.98	108.20
1	AA	49	U	C6-N1-C2	-5.98	117.41	121.00
1	AA	305	G	N3-C2-N2	-5.98	115.72	119.90
4	AD	11	A	C5-C6-N6	-5.98	118.92	123.70
4	AD	45	A	N3-C4-N9	5.98	132.18	127.40
26	BB	232	G	C2-N3-C4	5.98	114.89	111.90
26	BB	561	G	C6-C5-N7	-5.98	126.81	130.40
26	BB	1849	G	C5-C6-N1	-5.98	108.51	111.50
26	BB	2186	G	O4'-C1'-N9	5.98	112.98	108.20
26	BB	2341	G	N7-C8-N9	-5.98	110.11	113.10
26	BB	2362	C	C6-N1-C2	-5.98	117.91	120.30
26	BB	2877	G	N1-C2-N2	5.98	121.58	116.20
1	AA	878	A	C2-N3-C4	5.98	113.59	110.60
1	AA	1097	C	O4'-C1'-N1	5.98	112.98	108.20
26	BB	90	U	C4'-C3'-C2'	-5.98	96.62	102.60
26	BB	636	G	N1-C6-O6	-5.98	116.31	119.90
26	BB	1514	G	O4'-C1'-N9	5.98	112.98	108.20
26	BB	2729	G	N7-C8-N9	5.98	116.09	113.10
1	AA	578	C	C2-N3-C4	5.97	122.89	119.90
1	AA	900	A	C4'-C3'-C2'	-5.97	96.63	102.60
26	BB	265	A	C2'-C3'-O3'	5.97	123.26	113.70
26	BB	430	A	P-O3'-C3'	5.97	126.87	119.70
26	BB	441	U	N3-C4-O4	5.97	123.58	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1807	G	N9-C1'-C2'	-5.97	105.43	112.00
26	BB	2227	A	O4'-C1'-N9	5.97	112.98	108.20
26	BB	2437	G	C4'-C3'-C2'	-5.97	96.62	102.60
26	BB	2574	G	N3-C2-N2	-5.97	115.72	119.90
26	BB	2807	U	C4'-C3'-C2'	-5.97	96.62	102.60
1	AA	847	G	N1-C6-O6	5.97	123.48	119.90
1	AA	928	G	C3'-C2'-C1'	5.97	106.28	101.50
1	AA	1168	U	N3-C2-O2	-5.97	118.02	122.20
16	AP	67	ASP	CB-CG-OD2	-5.97	112.92	118.30
26	BB	208	C	O4'-C1'-N1	5.97	112.98	108.20
26	BB	1212	G	C4-C5-N7	5.97	113.19	110.80
26	BB	1316	U	C5-C4-O4	-5.97	122.32	125.90
26	BB	1360	G	C6-N1-C2	-5.97	121.52	125.10
26	BB	1472	C	O4'-C1'-N1	5.97	112.98	108.20
26	BB	1669	A	N1-C6-N6	5.97	122.18	118.60
26	BB	1843	C	N3-C2-O2	5.97	126.08	121.90
26	BB	2467	C	N3-C4-N4	-5.97	113.82	118.00
26	BB	2478	A	O4'-C1'-N9	5.97	112.98	108.20
50	BZ	71	ARG	NE-CZ-NH2	-5.97	117.31	120.30
15	AO	41	PRO	N-CD-CG	5.97	112.16	103.20
15	AO	123	ALA	CB-CA-C	5.97	119.06	110.10
26	BB	2368	C	C5-C4-N4	-5.97	116.02	120.20
1	AA	472	U	N1-C1'-C2'	5.97	121.76	114.00
1	AA	556	C	N1-C2-O2	5.97	122.48	118.90
1	AA	708	C	C5-C4-N4	-5.97	116.02	120.20
1	AA	1018	G	C5'-C4'-O4'	5.97	116.26	109.10
1	AA	1413	A	C5-N7-C8	-5.97	100.92	103.90
1	AA	1436	U	C5-C4-O4	-5.97	122.32	125.90
2	AB	39	A	C5-C6-N1	5.97	120.69	117.70
3	AC	39	U	C5-C6-N1	-5.97	119.72	122.70
4	AD	36	A	N1-C2-N3	5.97	132.28	129.30
26	BB	60	G	N7-C8-N9	5.97	116.08	113.10
26	BB	191	A	N1-C2-N3	-5.97	126.32	129.30
26	BB	297	G	C2-N3-C4	5.97	114.89	111.90
26	BB	957	C	C4-C5-C6	5.97	120.39	117.40
26	BB	1233	C	N3-C4-C5	5.97	124.29	121.90
26	BB	1532	A	C5'-C4'-O4'	5.97	116.26	109.10
26	BB	2188	U	C2-N3-C4	-5.97	123.42	127.00
26	BB	2464	G	N3-C4-N9	5.97	129.58	126.00
26	BB	2538	C	N3-C4-C5	-5.97	119.51	121.90
26	BB	2875	C	C1'-O4'-C4'	-5.97	105.12	109.90
26	BB	2888	C	N1-C2-O2	5.97	122.48	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	327	A	C1'-O4'-C4'	-5.97	105.12	109.90
1	AA	1281	C	C6-N1-C2	5.97	122.69	120.30
26	BB	110	G	C5-N7-C8	-5.97	101.32	104.30
26	BB	331	C	C4-C5-C6	-5.97	114.42	117.40
26	BB	1147	A	N9-C4-C5	5.97	108.19	105.80
26	BB	1624	U	C1'-O4'-C4'	-5.97	105.13	109.90
26	BB	2177	C	C4-C5-C6	-5.97	114.42	117.40
26	BB	2543	G	N1-C6-O6	-5.97	116.32	119.90
1	AA	416	G	C4-C5-C6	5.97	122.38	118.80
1	AA	786	G	N7-C8-N9	5.97	116.08	113.10
1	AA	920	U	C2-N3-C4	-5.97	123.42	127.00
1	AA	1081	A	C5-N7-C8	-5.97	100.92	103.90
1	AA	1139	G	C3'-C2'-C1'	5.97	106.27	101.50
1	AA	1300	G	N3-C2-N2	5.97	124.08	119.90
1	AA	1531	A	C5-C6-N6	-5.97	118.93	123.70
4	AD	65	G	C5-C6-N1	5.97	114.48	111.50
25	BA	85	G	C8-N9-C4	-5.97	104.01	106.40
26	BB	217	A	C8-N9-C4	-5.97	103.41	105.80
26	BB	259	G	N9-C1'-C2'	-5.97	105.44	112.00
26	BB	556	A	C4'-C3'-C2'	-5.97	96.63	102.60
26	BB	1133	A	O4'-C4'-C3'	-5.97	98.03	104.00
26	BB	1171	G	N3-C2-N2	-5.97	115.72	119.90
26	BB	1186	G	C4-C5-C6	5.97	122.38	118.80
26	BB	1206	G	N7-C8-N9	5.97	116.08	113.10
26	BB	1265	A	P-O3'-C3'	5.97	126.86	119.70
26	BB	1841	U	C4'-C3'-C2'	-5.97	96.63	102.60
26	BB	2225	A	N1-C6-N6	-5.97	115.02	118.60
26	BB	2235	G	C5-N7-C8	5.97	107.28	104.30
26	BB	2424	C	O3'-P-O5'	-5.97	92.67	104.00
26	BB	2640	G	C8-N9-C4	-5.97	104.01	106.40
1	AA	99	C	C3'-C2'-C1'	5.96	106.27	101.50
1	AA	348	G	C3'-C2'-C1'	-5.96	96.73	101.50
1	AA	661	G	C4-C5-C6	5.96	122.38	118.80
1	AA	1075	U	C5'-C4'-O4'	5.96	116.26	109.10
1	AA	1258	G	C2-N3-C4	5.96	114.88	111.90
11	AK	116	ARG	NE-CZ-NH2	-5.96	117.32	120.30
25	BA	105	G	N7-C8-N9	-5.96	110.12	113.10
26	BB	166	U	C5'-C4'-O4'	5.96	116.26	109.10
26	BB	231	A	C8-N9-C4	-5.96	103.42	105.80
26	BB	641	U	C5'-C4'-O4'	5.96	116.26	109.10
26	BB	797	G	C2-N3-C4	5.96	114.88	111.90
26	BB	823	C	C5'-C4'-O4'	5.96	116.26	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1421	G	C3'-C2'-C1'	5.96	106.27	101.50
26	BB	1541	C	C6-N1-C2	5.96	122.69	120.30
26	BB	1845	G	C5-C6-N1	5.96	114.48	111.50
26	BB	2440	C	C2'-C3'-O3'	5.96	123.24	113.70
26	BB	2586	U	C2-N3-C4	-5.96	123.42	127.00
1	AA	974	A	C5'-C4'-O4'	5.96	116.26	109.10
26	BB	1322	A	N9-C4-C5	-5.96	103.42	105.80
26	BB	2433	A	C2-N3-C4	-5.96	107.62	110.60
1	AA	280	C	C6-N1-C2	-5.96	117.92	120.30
1	AA	563	A	C8-N9-C4	-5.96	103.42	105.80
1	AA	710	G	N3-C4-C5	-5.96	125.62	128.60
1	AA	773	G	N1-C2-N2	5.96	121.56	116.20
1	AA	845	A	N9-C4-C5	5.96	108.19	105.80
26	BB	34	U	C2-N3-C4	5.96	130.58	127.00
26	BB	96	C	C5-C4-N4	5.96	124.37	120.20
26	BB	317	G	C4'-C3'-C2'	-5.96	96.64	102.60
26	BB	670	A	C5-N7-C8	-5.96	100.92	103.90
26	BB	708	G	N1-C2-N3	-5.96	120.32	123.90
26	BB	944	C	N3-C2-O2	-5.96	117.73	121.90
26	BB	1060	U	C5-C4-O4	-5.96	122.32	125.90
26	BB	1169	A	C5'-C4'-O4'	-5.96	101.95	109.10
26	BB	1179	G	O4'-C4'-C3'	-5.96	98.04	104.00
26	BB	1472	C	C5'-C4'-O4'	-5.96	101.95	109.10
26	BB	2896	C	C6-N1-C2	5.96	122.68	120.30
28	BD	130	PRO	N-CA-CB	5.96	110.45	103.30
1	AA	1532	U	N3-C4-O4	5.96	123.57	119.40
26	BB	488	G	N7-C8-N9	5.96	116.08	113.10
26	BB	864	G	C5'-C4'-O4'	5.96	116.25	109.10
26	BB	1254	A	N1-C2-N3	-5.96	126.32	129.30
26	BB	1706	C	P-O3'-C3'	5.96	126.85	119.70
26	BB	2212	A	N9-C1'-C2'	5.96	121.75	114.00
26	BB	2237	G	N9-C4-C5	5.96	107.78	105.40
1	AA	583	A	N9-C4-C5	5.96	108.18	105.80
1	AA	666	G	C1'-O4'-C4'	-5.96	105.13	109.90
1	AA	670	G	C5'-C4'-O4'	5.96	116.25	109.10
1	AA	690	G	N1-C2-N3	-5.96	120.33	123.90
1	AA	716	A	O4'-C1'-N9	5.96	112.97	108.20
1	AA	841	C	C5'-C4'-O4'	5.96	116.25	109.10
26	BB	6	A	C5-N7-C8	5.96	106.88	103.90
26	BB	366	C	N1-C2-O2	5.96	122.48	118.90
26	BB	487	C	N3-C4-C5	-5.96	119.52	121.90
26	BB	727	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	BB	1598	A	C6-C5-N7	5.96	136.47	132.30
26	BB	1741	C	N3-C4-N4	5.96	122.17	118.00
26	BB	1746	A	P-O3'-C3'	5.96	126.85	119.70
26	BB	2064	C	C5-C6-N1	-5.96	118.02	121.00
26	BB	2176	A	C5-N7-C8	-5.96	100.92	103.90
26	BB	2551	C	O4'-C4'-C3'	5.96	110.87	106.10
26	BB	2658	C	O4'-C1'-N1	5.96	112.97	108.20
28	BD	136	VAL	CG1-CB-CG2	-5.96	101.37	110.90
52	B1	1	ALA	CB-CA-C	5.96	119.04	110.10
1	AA	633	G	C5-C6-O6	-5.96	125.03	128.60
1	AA	748	G	C8-N9-C4	5.96	108.78	106.40
1	AA	816	A	O5'-P-OP1	-5.96	100.34	105.70
1	AA	835	U	O4'-C1'-N1	5.96	112.97	108.20
1	AA	854	U	P-O3'-C3'	5.96	126.85	119.70
1	AA	924	C	N1-C2-N3	-5.96	115.03	119.20
1	AA	993	G	N3-C4-N9	5.96	129.57	126.00
1	AA	1156	G	N3-C4-N9	5.96	129.57	126.00
1	AA	1488	G	C6-N1-C2	-5.96	121.53	125.10
2	AB	10	G	C4'-C3'-C2'	5.96	108.56	102.60
19	AS	31	ARG	CD-NE-CZ	5.96	131.94	123.60
26	BB	94	A	C4-C5-C6	5.96	119.98	117.00
26	BB	378	C	N1-C2-O2	5.96	122.47	118.90
26	BB	404	A	O4'-C1'-C2'	5.96	112.96	107.60
26	BB	793	A	C5'-C4'-C3'	-5.96	106.47	116.00
26	BB	1190	G	O4'-C1'-N9	5.96	112.96	108.20
26	BB	1669	A	C4'-C3'-C2'	-5.96	96.64	102.60
26	BB	1906	G	N1-C6-O6	-5.96	116.33	119.90
26	BB	2501	C	C4-C5-C6	5.96	120.38	117.40
26	BB	2875	C	O4'-C1'-C2'	5.96	112.96	107.60
29	BE	40	LEU	CB-CG-CD1	5.96	121.12	111.00
34	BJ	158	ARG	NE-CZ-NH1	5.96	123.28	120.30
1	AA	129	A	N1-C2-N3	5.96	132.28	129.30
4	AD	54	G	C4'-C3'-C2'	-5.96	96.64	102.60
7	AG	71	PHE	CG-CD2-CE2	-5.96	114.25	120.80
26	BB	554	U	N1-C2-N3	5.96	118.47	114.90
26	BB	1184	U	C5-C6-N1	-5.96	119.72	122.70
26	BB	2140	G	N9-C4-C5	-5.96	103.02	105.40
26	BB	2418	A	C5-C6-N1	5.96	120.68	117.70
26	BB	2437	G	C4-C5-C6	5.96	122.37	118.80
1	AA	507	C	C3'-C2'-C1'	5.95	106.26	101.50
1	AA	1210	C	C4-C5-C6	-5.95	114.42	117.40
1	AA	1270	G	C6-N1-C2	-5.95	121.53	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1493	A	N3-C4-N9	5.95	132.16	127.40
1	AA	1533	C	C5'-C4'-O4'	5.95	116.24	109.10
26	BB	113	U	O4'-C4'-C3'	-5.95	98.05	104.00
26	BB	651	G	N3-C2-N2	-5.95	115.73	119.90
26	BB	951	C	C2-N3-C4	-5.95	116.92	119.90
26	BB	1166	G	C8-N9-C4	5.95	108.78	106.40
26	BB	1353	A	N3-C4-C5	-5.95	122.63	126.80
26	BB	1611	C	N1-C1'-C2'	-5.95	105.45	112.00
26	BB	1867	G	N3-C4-N9	-5.95	122.43	126.00
26	BB	1935	G	N3-C2-N2	5.95	124.07	119.90
26	BB	2118	U	C4'-C3'-C2'	5.95	108.55	102.60
1	AA	84	U	N1-C2-O2	5.95	126.97	122.80
1	AA	367	U	N1-C2-N3	5.95	118.47	114.90
26	BB	207	A	N3-C4-N9	5.95	132.16	127.40
26	BB	1550	C	N1-C2-O2	5.95	122.47	118.90
1	AA	92	U	N3-C4-O4	5.95	123.57	119.40
1	AA	887	G	C1'-O4'-C4'	-5.95	105.14	109.90
1	AA	949	A	C5-N7-C8	5.95	106.88	103.90
1	AA	1179	A	N9-C4-C5	5.95	108.18	105.80
1	AA	1385	G	N1-C6-O6	-5.95	116.33	119.90
26	BB	282	A	N7-C8-N9	5.95	116.78	113.80
26	BB	827	U	C5-C4-O4	-5.95	122.33	125.90
26	BB	1054	A	N9-C1'-C2'	-5.95	105.45	112.00
26	BB	1094	U	O4'-C1'-N1	5.95	112.96	108.20
26	BB	1614	A	N1-C2-N3	5.95	132.28	129.30
26	BB	2003	A	C4'-C3'-C2'	-5.95	96.65	102.60
26	BB	2236	U	O4'-C1'-N1	5.95	112.96	108.20
26	BB	2315	G	C8-N9-C4	5.95	108.78	106.40
26	BB	2317	A	C4-C5-N7	5.95	113.67	110.70
26	BB	2454	G	C5-N7-C8	-5.95	101.33	104.30
26	BB	2598	A	N1-C2-N3	5.95	132.28	129.30
26	BB	2652	C	OP1-P-O3'	5.95	118.29	105.20
26	BB	2664	G	C4'-C3'-C2'	-5.95	96.65	102.60
1	AA	433	G	C5'-C4'-O4'	5.95	116.24	109.10
1	AA	520	A	C6-C5-N7	5.95	136.46	132.30
1	AA	1373	G	N3-C4-N9	-5.95	122.43	126.00
3	AC	58	C	C4-C5-C6	-5.95	114.43	117.40
26	BB	529	A	N9-C4-C5	5.95	108.18	105.80
26	BB	1295	C	N3-C4-N4	5.95	122.16	118.00
26	BB	1731	G	N3-C2-N2	5.95	124.06	119.90
26	BB	1758	U	C5'-C4'-O4'	-5.95	101.96	109.10
26	BB	1967	C	C5'-C4'-O4'	5.95	116.24	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2153	C	O3'-P-O5'	5.95	115.30	104.00
26	BB	2421	G	C5'-C4'-C3'	-5.95	106.48	116.00
26	BB	2755	C	C6-N1-C2	-5.95	117.92	120.30
26	BB	2900	A	C5-C6-N1	5.95	120.67	117.70
1	AA	1345	U	C2-N3-C4	-5.95	123.43	127.00
2	AB	65	C	O5'-C5'-C4'	5.95	123.00	111.70
26	BB	533	G	C5-C6-O6	5.95	132.17	128.60
26	BB	647	G	C4-C5-N7	-5.95	108.42	110.80
26	BB	659	G	N1-C2-N3	-5.95	120.33	123.90
26	BB	665	U	N3-C4-O4	5.95	123.56	119.40
26	BB	962	G	C8-N9-C4	-5.95	104.02	106.40
26	BB	1121	C	N3-C4-N4	5.95	122.16	118.00
26	BB	1319	C	C5'-C4'-C3'	-5.95	106.48	116.00
26	BB	2204	G	N3-C2-N2	5.95	124.06	119.90
26	BB	2584	U	C2-N3-C4	-5.95	123.43	127.00
1	AA	182	A	C8-N9-C4	5.95	108.18	105.80
1	AA	250	A	O4'-C1'-N9	5.95	112.96	108.20
1	AA	976	G	O4'-C1'-N9	5.95	112.96	108.20
1	AA	1028	C	C5-C4-N4	-5.95	116.04	120.20
26	BB	37	C	C2-N3-C4	5.95	122.87	119.90
26	BB	377	G	N3-C2-N2	5.95	124.06	119.90
26	BB	762	U	C5-C6-N1	-5.95	119.73	122.70
26	BB	815	C	O4'-C4'-C3'	5.95	110.86	106.10
26	BB	1007	C	N1-C2-O2	5.95	122.47	118.90
26	BB	1176	U	C5-C4-O4	5.95	129.47	125.90
26	BB	1469	A	C4'-C3'-C2'	-5.95	96.65	102.60
26	BB	1763	G	C4-C5-C6	5.95	122.37	118.80
26	BB	1927	A	C2'-C3'-O3'	5.95	123.21	113.70
26	BB	2509	G	C5-C6-N1	5.95	114.47	111.50
26	BB	2881	U	C2-N3-C4	-5.95	123.43	127.00
1	AA	286	C	O4'-C1'-C2'	5.94	112.95	107.60
1	AA	705	G	N9-C4-C5	5.94	107.78	105.40
1	AA	785	G	C5-C6-N1	5.94	114.47	111.50
1	AA	1475	G	C4'-C3'-C2'	-5.94	96.66	102.60
26	BB	570	G	C5'-C4'-C3'	-5.94	106.49	116.00
26	BB	1925	C	C5'-C4'-O4'	5.94	116.23	109.10
1	AA	343	U	C3'-C2'-C1'	5.94	106.25	101.50
1	AA	829	G	N1-C2-N3	-5.94	120.33	123.90
1	AA	1034	G	C5-C6-O6	5.94	132.16	128.60
1	AA	1244	G	C6-N1-C2	-5.94	121.53	125.10
1	AA	1341	U	N3-C4-O4	5.94	123.56	119.40
26	BB	67	U	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(°)
26	BB	700	G	C4'-C3'-C2'	-5.94	96.66	102.60
26	BB	1029	A	N1-C2-N3	-5.94	126.33	129.30
26	BB	1189	A	C8-N9-C4	5.94	108.18	105.80
26	BB	1494	A	C5-N7-C8	5.94	106.87	103.90
26	BB	1651	G	P-O3'-C3'	5.94	126.83	119.70
26	BB	1988	G	N9-C1'-C2'	-5.94	105.46	112.00
26	BB	2222	C	N3-C4-N4	5.94	122.16	118.00
26	BB	2856	A	N7-C8-N9	5.94	116.77	113.80
1	AA	212	G	N9-C4-C5	5.94	107.78	105.40
1	AA	320	A	C5'-C4'-O4'	5.94	116.23	109.10
1	AA	524	G	C8-N9-C4	-5.94	104.02	106.40
1	AA	812	G	C8-N9-C4	-5.94	104.02	106.40
1	AA	1027	C	C5-C6-N1	5.94	123.97	121.00
1	AA	1384	C	C5-C6-N1	5.94	123.97	121.00
1	AA	1473	G	N9-C4-C5	5.94	107.78	105.40
5	AE	153	MET	CA-CB-CG	-5.94	103.20	113.30
26	BB	316	C	C4'-C3'-C2'	-5.94	96.66	102.60
26	BB	461	C	O4'-C1'-N1	5.94	112.95	108.20
26	BB	814	C	N3-C4-N4	5.94	122.16	118.00
26	BB	1460	U	N3-C2-O2	-5.94	118.04	122.20
26	BB	1942	C	P-O3'-C3'	5.94	126.83	119.70
26	BB	2077	A	C5-C6-N6	-5.94	118.95	123.70
26	BB	2335	A	C5-C6-N1	5.94	120.67	117.70
26	BB	2630	G	C6-C5-N7	-5.94	126.83	130.40
26	BB	2816	G	N9-C4-C5	5.94	107.78	105.40
1	AA	1003	G	C6-C5-N7	5.94	133.96	130.40
25	BA	87	U	C5-C6-N1	-5.94	119.73	122.70
26	BB	207	A	C6-N1-C2	-5.94	115.04	118.60
26	BB	429	A	C5-N7-C8	-5.94	100.93	103.90
26	BB	1524	G	N3-C4-C5	-5.94	125.63	128.60
1	AA	498	A	C1'-O4'-C4'	-5.94	105.15	109.90
26	BB	136	G	C2-N3-C4	5.94	114.87	111.90
26	BB	195	A	N3-C4-N9	5.94	132.15	127.40
26	BB	253	C	N1-C1'-C2'	-5.94	105.47	112.00
26	BB	424	G	O4'-C1'-N9	5.94	112.95	108.20
26	BB	696	G	C5-N7-C8	-5.94	101.33	104.30
26	BB	962	G	C4'-C3'-C2'	5.94	108.54	102.60
26	BB	978	G	C6-N1-C2	-5.94	121.54	125.10
26	BB	1405	U	C4-C5-C6	-5.94	116.14	119.70
26	BB	1906	G	N3-C4-C5	-5.94	125.63	128.60
26	BB	2027	G	C5-C6-N1	-5.94	108.53	111.50
26	BB	2482	A	C2'-C3'-O3'	5.94	123.20	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2637	U	N3-C4-O4	-5.94	115.24	119.40
26	BB	2640	G	N3-C2-N2	-5.94	115.74	119.90
1	AA	75	G	C6-C5-N7	-5.94	126.84	130.40
1	AA	993	G	C6-C5-N7	-5.94	126.84	130.40
1	AA	1223	C	C4-C5-C6	5.94	120.37	117.40
26	BB	2287	A	N1-C6-N6	-5.94	115.04	118.60
26	BB	2522	U	C6-N1-C2	-5.94	117.44	121.00
26	BB	2811	G	O4'-C1'-C2'	-5.94	99.86	105.80
1	AA	429	U	C4'-C3'-C2'	-5.93	96.67	102.60
1	AA	717	U	N1-C1'-C2'	5.93	121.72	114.00
1	AA	720	C	C4-C5-C6	5.93	120.37	117.40
1	AA	952	U	N3-C4-C5	-5.93	111.04	114.60
1	AA	1443	C	O4'-C1'-N1	5.93	112.95	108.20
1	AA	1476	A	N9-C4-C5	5.93	108.17	105.80
26	BB	1021	A	N1-C2-N3	-5.93	126.33	129.30
26	BB	1403	A	C6-C5-N7	5.93	136.46	132.30
26	BB	1881	C	C4-C5-C6	5.93	120.37	117.40
26	BB	2874	C	C6-N1-C2	-5.93	117.93	120.30
1	AA	43	C	C5-C4-N4	-5.93	116.05	120.20
1	AA	76	G	C1'-O4'-C4'	-5.93	105.16	109.90
1	AA	88	U	N1-C2-N3	5.93	118.46	114.90
1	AA	378	G	C5-C6-N1	5.93	114.47	111.50
1	AA	1492	A	C5'-C4'-O4'	5.93	116.22	109.10
8	AH	9	GLU	OE1-CD-OE2	5.93	130.42	123.30
13	AM	57	VAL	CA-CB-CG1	5.93	119.80	110.90
17	AQ	76	PHE	CG-CD2-CE2	-5.93	114.28	120.80
26	BB	311	A	O4'-C1'-N9	5.93	112.95	108.20
26	BB	347	A	N1-C6-N6	5.93	122.16	118.60
26	BB	461	C	N1-C2-O2	5.93	122.46	118.90
26	BB	494	G	N3-C4-N9	5.93	129.56	126.00
26	BB	570	G	C5-C6-N1	-5.93	108.53	111.50
26	BB	944	C	C5'-C4'-O4'	5.93	116.22	109.10
26	BB	1333	G	N1-C2-N2	5.93	121.54	116.20
26	BB	1533	C	C3'-C2'-C1'	5.93	106.25	101.50
26	BB	2057	G	C6-C5-N7	-5.93	126.84	130.40
26	BB	2677	G	C2-N3-C4	5.93	114.87	111.90
28	BD	219	VAL	CA-CB-CG2	5.93	119.80	110.90
1	AA	6	G	N9-C1'-C2'	-5.93	105.48	112.00
1	AA	336	A	C5'-C4'-O4'	5.93	116.22	109.10
1	AA	614	C	N3-C4-N4	5.93	122.15	118.00
26	BB	583	G	N1-C2-N2	5.93	121.54	116.20
26	BB	1364	G	C6-N1-C2	-5.93	121.54	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2148	G	C5-N7-C8	-5.93	101.33	104.30
29	BE	39	ASP	CB-CG-OD2	-5.93	112.96	118.30
33	BI	97	ARG	NE-CZ-NH2	5.93	123.27	120.30
1	AA	330	C	C6-N1-C2	5.93	122.67	120.30
1	AA	497	G	C5-C6-N1	5.93	114.46	111.50
1	AA	838	G	C5-C6-O6	-5.93	125.04	128.60
1	AA	840	C	N3-C4-C5	-5.93	119.53	121.90
2	AB	18	G	C5'-C4'-O4'	5.93	116.22	109.10
26	BB	307	G	N3-C4-C5	-5.93	125.64	128.60
26	BB	740	C	N3-C4-N4	-5.93	113.85	118.00
26	BB	1765	U	N1-C2-O2	5.93	126.95	122.80
26	BB	2101	A	N3-C4-N9	-5.93	122.66	127.40
26	BB	2192	U	N1-C2-N3	5.93	118.46	114.90
26	BB	2305	U	C5-C6-N1	-5.93	119.74	122.70
26	BB	2392	A	C8-N9-C4	-5.93	103.43	105.80
26	BB	2567	G	N1-C2-N3	-5.93	120.34	123.90
26	BB	2574	G	C2-N3-C4	-5.93	108.94	111.90
45	BU	75	PHE	CB-CG-CD1	-5.93	116.65	120.80
26	BB	75	G	C1'-O4'-C4'	-5.93	105.16	109.90
26	BB	436	C	C5-C4-N4	-5.93	116.05	120.20
26	BB	631	A	C2-N3-C4	-5.93	107.64	110.60
26	BB	844	A	C2-N3-C4	5.93	113.56	110.60
26	BB	891	G	N3-C2-N2	-5.93	115.75	119.90
26	BB	1582	C	C3'-C2'-C1'	-5.93	96.76	101.50
26	BB	1963	U	N1-C2-O2	5.93	126.95	122.80
26	BB	2460	U	C5-C4-O4	-5.93	122.34	125.90
1	AA	164	G	N3-C4-C5	-5.93	125.64	128.60
1	AA	327	A	C5'-C4'-O4'	-5.93	101.99	109.10
1	AA	361	G	C6-C5-N7	5.93	133.96	130.40
1	AA	621	A	C8-N9-C4	5.93	108.17	105.80
1	AA	1039	G	C5-C6-O6	5.93	132.16	128.60
26	BB	113	U	C5'-C4'-O4'	5.93	116.21	109.10
26	BB	2406	A	O4'-C1'-N9	5.93	112.94	108.20
26	BB	2574	G	C4-C5-C6	5.93	122.36	118.80
1	AA	291	U	C2-N3-C4	-5.92	123.44	127.00
1	AA	402	G	C4-C5-N7	-5.92	108.43	110.80
1	AA	547	A	O4'-C1'-C2'	-5.92	99.88	105.80
1	AA	558	G	N3-C4-C5	-5.92	125.64	128.60
1	AA	703	G	N1-C2-N3	-5.92	120.35	123.90
1	AA	758	C	N3-C2-O2	-5.92	117.75	121.90
2	AB	66	C	C4-C5-C6	-5.92	114.44	117.40
26	BB	305	C	C3'-C2'-C1'	5.92	106.24	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	659	G	C6-C5-N7	-5.92	126.85	130.40
26	BB	758	C	O4'-C1'-N1	5.92	112.94	108.20
26	BB	1238	G	N7-C8-N9	5.92	116.06	113.10
1	AA	27	G	C1'-O4'-C4'	-5.92	105.16	109.90
26	BB	652	U	N1-C2-N3	5.92	118.45	114.90
26	BB	1099	G	C5-C6-N1	5.92	114.46	111.50
26	BB	1904	G	C4-C5-N7	5.92	113.17	110.80
26	BB	2323	G	C6-C5-N7	-5.92	126.85	130.40
26	BB	2363	G	C5'-C4'-O4'	5.92	116.21	109.10
1	AA	237	G	N3-C2-N2	-5.92	115.75	119.90
1	AA	488	C	N3-C4-N4	5.92	122.14	118.00
4	AD	32	G	N1-C2-N2	-5.92	110.87	116.20
24	AX	1	PRO	CA-N-CD	-5.92	103.21	111.50
26	BB	534	U	C2'-C3'-O3'	5.92	123.18	113.70
26	BB	666	A	C5-C6-N1	5.92	120.66	117.70
26	BB	807	U	C6-N1-C2	-5.92	117.45	121.00
26	BB	879	G	N3-C4-C5	-5.92	125.64	128.60
26	BB	1291	C	N3-C4-C5	-5.92	119.53	121.90
26	BB	1315	C	O4'-C1'-N1	5.92	112.94	108.20
26	BB	1943	U	C5-C4-O4	-5.92	122.35	125.90
26	BB	1964	G	C8-N9-C1'	5.92	134.70	127.00
26	BB	2230	G	C2-N3-C4	5.92	114.86	111.90
26	BB	2628	C	N3-C2-O2	-5.92	117.75	121.90
26	BB	2662	A	N1-C2-N3	5.92	132.26	129.30
56	B5	18	PHE	CB-CG-CD1	5.92	124.94	120.80
1	AA	325	A	C1'-O4'-C4'	-5.92	105.16	109.90
1	AA	578	C	C5-C6-N1	5.92	123.96	121.00
1	AA	838	G	C6-C5-N7	-5.92	126.85	130.40
26	BB	263	G	N9-C4-C5	5.92	107.77	105.40
26	BB	377	G	C2-N3-C4	5.92	114.86	111.90
26	BB	629	G	C6-N1-C2	-5.92	121.55	125.10
26	BB	1203	U	C6-N1-C2	5.92	124.55	121.00
26	BB	1344	U	C5-C6-N1	5.92	125.66	122.70
1	AA	245	U	O5'-P-OP2	-5.92	100.37	105.70
1	AA	263	A	N9-C4-C5	5.92	108.17	105.80
1	AA	379	C	N1-C2-O2	-5.92	115.35	118.90
1	AA	466	A	C3'-C2'-C1'	5.92	106.23	101.50
1	AA	832	G	N9-C4-C5	5.92	107.77	105.40
26	BB	589	U	O4'-C1'-C2'	-5.92	99.88	105.80
26	BB	859	G	O4'-C1'-N9	5.92	112.94	108.20
26	BB	1764	C	P-O5'-C5'	5.92	130.37	120.90
26	BB	1975	G	N7-C8-N9	5.92	116.06	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2129	C	O4'-C4'-C3'	5.92	110.83	106.10
26	BB	2184	A	C5-N7-C8	-5.92	100.94	103.90
26	BB	2753	A	O4'-C1'-N9	5.92	112.94	108.20
26	BB	2830	C	C4-C5-C6	-5.92	114.44	117.40
26	BB	2830	C	O4'-C1'-N1	5.92	112.94	108.20
1	AA	205	A	C6-C5-N7	-5.92	128.16	132.30
1	AA	1322	C	N3-C2-O2	-5.92	117.76	121.90
1	AA	1438	G	C5'-C4'-O4'	5.92	116.20	109.10
26	BB	185	G	N9-C1'-C2'	-5.92	105.49	112.00
26	BB	828	U	P-O3'-C3'	5.92	126.80	119.70
26	BB	835	C	N3-C4-N4	-5.92	113.86	118.00
26	BB	1877	A	C5-C6-N6	-5.92	118.97	123.70
26	BB	2446	G	C2-N3-C4	5.92	114.86	111.90
26	BB	2749	A	C8-N9-C4	-5.92	103.43	105.80
1	AA	682	G	C6-C5-N7	-5.92	126.85	130.40
1	AA	725	G	P-O3'-C3'	5.92	126.80	119.70
1	AA	1250	A	C5'-C4'-O4'	5.92	116.20	109.10
26	BB	229	C	C5-C4-N4	-5.92	116.06	120.20
26	BB	2441	U	N1-C1'-C2'	-5.92	105.49	112.00
26	BB	2885	G	C4'-C3'-C2'	-5.92	96.69	102.60
43	BS	44	TYR	CB-CG-CD2	-5.92	117.45	121.00
1	AA	1125	U	N3-C2-O2	-5.91	118.06	122.20
1	AA	1269	A	N9-C4-C5	5.91	108.17	105.80
1	AA	1288	A	N3-C4-N9	-5.91	122.67	127.40
1	AA	1468	A	C8-N9-C4	-5.91	103.43	105.80
1	AA	1524	C	C5-C6-N1	5.91	123.96	121.00
26	BB	325	G	C5-C6-N1	5.91	114.46	111.50
26	BB	378	C	C1'-O4'-C4'	-5.91	105.17	109.90
26	BB	533	G	P-O3'-C3'	5.91	126.80	119.70
26	BB	536	G	N3-C2-N2	-5.91	115.76	119.90
26	BB	555	G	C2'-C3'-O3'	5.91	123.16	113.70
26	BB	601	C	C5'-C4'-O4'	5.91	116.19	109.10
26	BB	604	G	C5-C6-O6	-5.91	125.05	128.60
26	BB	1351	C	N3-C4-N4	-5.91	113.86	118.00
26	BB	1369	G	N3-C4-N9	5.91	129.55	126.00
26	BB	2572	A	C5'-C4'-O4'	5.91	116.20	109.10
26	BB	2836	U	N1-C2-N3	5.91	118.45	114.90
26	BB	2839	G	C8-N9-C4	-5.91	104.03	106.40
26	BB	2848	G	C1'-O4'-C4'	-5.91	105.17	109.90
1	AA	148	G	N3-C2-N2	-5.91	115.76	119.90
1	AA	357	G	C4-C5-N7	-5.91	108.44	110.80
1	AA	826	C	C6-N1-C2	-5.91	117.94	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	12	U	N1-C2-N3	5.91	118.45	114.90
4	AD	37	U	N1-C2-N3	5.91	118.45	114.90
4	AD	40	C	C1'-O4'-C4'	5.91	114.63	109.90
26	BB	130	C	C3'-C2'-C1'	5.91	106.23	101.50
26	BB	285	G	C6-N1-C2	-5.91	121.55	125.10
26	BB	453	A	O5'-C5'-C4'	-5.91	100.47	111.70
26	BB	1707	G	C6-N1-C2	-5.91	121.55	125.10
26	BB	1991	U	C5'-C4'-O4'	5.91	116.19	109.10
26	BB	2054	A	N1-C6-N6	-5.91	115.05	118.60
26	BB	2467	C	C5-C4-N4	5.91	124.34	120.20
1	AA	257	G	P-O3'-C3'	5.91	126.79	119.70
1	AA	600	A	C3'-C2'-C1'	5.91	106.23	101.50
1	AA	963	G	N9-C4-C5	5.91	107.76	105.40
1	AA	1427	C	C6-N1-C2	-5.91	117.94	120.30
26	BB	28	A	C5-N7-C8	5.91	106.86	103.90
26	BB	744	U	C5-C6-N1	-5.91	119.75	122.70
26	BB	1782	U	N1-C2-N3	5.91	118.45	114.90
26	BB	1909	C	N3-C4-C5	-5.91	119.54	121.90
26	BB	2811	G	O4'-C4'-C3'	-5.91	98.09	104.00
31	BG	111	ARG	CD-NE-CZ	5.91	131.88	123.60
1	AA	360	G	C4-C5-N7	-5.91	108.44	110.80
1	AA	546	A	C6-N1-C2	5.91	122.15	118.60
1	AA	849	G	C5-C6-O6	-5.91	125.05	128.60
1	AA	1227	A	C3'-C2'-C1'	5.91	106.23	101.50
1	AA	1524	C	C5-C4-N4	-5.91	116.06	120.20
7	AG	164	ARG	NE-CZ-NH2	5.91	123.25	120.30
26	BB	9	G	C8-N9-C4	-5.91	104.04	106.40
26	BB	24	G	C4-C5-N7	5.91	113.16	110.80
26	BB	170	U	N3-C4-O4	-5.91	115.26	119.40
26	BB	931	U	C3'-C2'-C1'	5.91	106.23	101.50
26	BB	1128	G	N1-C2-N2	5.91	121.52	116.20
26	BB	1413	A	C4-C5-C6	-5.91	114.05	117.00
26	BB	1548	A	C4-C5-C6	-5.91	114.05	117.00
26	BB	1894	C	C5-C6-N1	5.91	123.95	121.00
26	BB	1919	A	C5-C6-N1	5.91	120.66	117.70
26	BB	1990	C	N1-C2-N3	5.91	123.34	119.20
26	BB	2176	A	O4'-C1'-N9	5.91	112.93	108.20
1	AA	882	C	C5'-C4'-O4'	5.91	116.19	109.10
1	AA	1091	U	N1-C2-N3	5.91	118.44	114.90
1	AA	1159	U	C5'-C4'-O4'	5.91	116.19	109.10
3	AC	42	U	N3-C2-O2	-5.91	118.06	122.20
26	BB	248	G	C2-N3-C4	5.91	114.85	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	835	C	N3-C4-C5	-5.91	119.54	121.90
26	BB	1681	G	N3-C4-C5	-5.91	125.65	128.60
26	BB	2399	G	C4-C5-C6	5.91	122.34	118.80
1	AA	567	G	N1-C6-O6	-5.91	116.36	119.90
1	AA	587	G	O4'-C1'-N9	5.91	112.92	108.20
1	AA	1000	A	N1-C2-N3	-5.91	126.35	129.30
1	AA	1015	G	N3-C4-N9	5.91	129.54	126.00
7	AG	25	ARG	NH1-CZ-NH2	5.91	125.90	119.40
25	BA	68	C	C2'-C3'-O3'	5.91	123.15	113.70
26	BB	185	G	C1'-O4'-C4'	5.91	114.62	109.90
26	BB	984	A	C5-C6-N1	5.91	120.65	117.70
26	BB	1283	G	C4-C5-N7	-5.91	108.44	110.80
26	BB	1378	A	P-O3'-C3'	5.91	126.79	119.70
26	BB	1529	G	N3-C4-N9	-5.91	122.46	126.00
26	BB	1714	U	O4'-C1'-N1	5.91	112.92	108.20
26	BB	1983	G	N3-C4-C5	-5.91	125.65	128.60
26	BB	2341	G	C6-N1-C2	-5.91	121.56	125.10
26	BB	2477	U	C5'-C4'-O4'	-5.91	102.02	109.10
26	BB	2590	A	N1-C6-N6	5.91	122.14	118.60
26	BB	2818	U	P-O3'-C3'	5.91	126.79	119.70
26	BB	2835	A	N1-C6-N6	5.91	122.14	118.60
4	AD	2	G	N9-C4-C5	5.90	107.76	105.40
26	BB	436	C	C3'-C2'-C1'	5.90	106.22	101.50
26	BB	1175	A	C5-C6-N6	5.90	128.42	123.70
26	BB	1505	A	C6-C5-N7	5.90	136.43	132.30
26	BB	1642	G	C4-C5-N7	-5.90	108.44	110.80
26	BB	2566	A	O4'-C1'-N9	5.90	112.92	108.20
1	AA	52	C	P-O3'-C3'	5.90	126.78	119.70
1	AA	164	G	N1-C6-O6	5.90	123.44	119.90
1	AA	230	G	C4-C5-N7	5.90	113.16	110.80
1	AA	925	G	C4-C5-N7	-5.90	108.44	110.80
1	AA	1063	C	O3'-P-O5'	5.90	115.22	104.00
1	AA	1185	G	OP2-P-O3'	5.90	118.18	105.20
1	AA	1449	C	C2-N3-C4	5.90	122.85	119.90
1	AA	1493	A	C6-C5-N7	-5.90	128.17	132.30
26	BB	797	G	N3-C4-N9	5.90	129.54	126.00
26	BB	1010	A	C5-C6-N1	-5.90	114.75	117.70
26	BB	1160	G	N1-C2-N3	-5.90	120.36	123.90
26	BB	1447	C	N3-C4-N4	5.90	122.13	118.00
26	BB	2070	A	C3'-C2'-C1'	5.90	106.22	101.50
26	BB	2443	C	N3-C2-O2	-5.90	117.77	121.90
26	BB	2579	C	C5-C4-N4	-5.90	116.07	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2755	C	N3-C4-N4	5.90	122.13	118.00
1	AA	452	A	C4-C5-C6	-5.90	114.05	117.00
1	AA	468	A	C5-N7-C8	5.90	106.85	103.90
1	AA	845	A	O4'-C1'-N9	5.90	112.92	108.20
1	AA	944	G	P-O3'-C3'	5.90	126.78	119.70
1	AA	953	G	N1-C2-N2	5.90	121.51	116.20
1	AA	1261	A	O4'-C1'-C2'	-5.90	99.90	105.80
4	AD	16	C	N1-C2-O2	5.90	122.44	118.90
4	AD	25	U	C6-N1-C2	-5.90	117.46	121.00
26	BB	47	C	C4-C5-C6	5.90	120.35	117.40
26	BB	705	A	C5'-C4'-C3'	-5.90	106.56	116.00
26	BB	809	G	N9-C4-C5	-5.90	103.04	105.40
26	BB	1201	U	O4'-C4'-C3'	-5.90	98.10	104.00
26	BB	1393	A	C2-N3-C4	5.90	113.55	110.60
26	BB	1458	U	O4'-C4'-C3'	5.90	110.82	106.10
26	BB	2288	A	N9-C4-C5	5.90	108.16	105.80
35	BK	61	TYR	CB-CG-CD2	-5.90	117.46	121.00
58	B7	4	ARG	NE-CZ-NH2	5.90	123.25	120.30
4	AD	9	G	C8-N9-C4	-5.90	104.04	106.40
26	BB	32	C	C4-C5-C6	5.90	120.35	117.40
26	BB	818	G	N1-C2-N3	-5.90	120.36	123.90
26	BB	1444	G	N9-C4-C5	5.90	107.76	105.40
26	BB	2383	G	N9-C1'-C2'	-5.90	105.51	112.00
26	BB	2422	C	N1-C2-O2	5.90	122.44	118.90
26	BB	2426	A	C8-N9-C4	-5.90	103.44	105.80
26	BB	2452	C	P-O3'-C3'	5.90	126.78	119.70
1	AA	704	A	C2-N3-C4	-5.90	107.65	110.60
1	AA	1069	C	O4'-C4'-C3'	5.90	110.82	106.10
1	AA	1269	A	C4-C5-N7	-5.90	107.75	110.70
1	AA	1368	A	C6-C5-N7	5.90	136.43	132.30
26	BB	153	U	C4'-C3'-C2'	-5.90	96.70	102.60
26	BB	472	A	O4'-C1'-N9	5.90	112.92	108.20
26	BB	857	G	O4'-C1'-N9	5.90	112.92	108.20
26	BB	956	G	N1-C6-O6	-5.90	116.36	119.90
26	BB	1213	A	C4-C5-C6	-5.90	114.05	117.00
26	BB	1231	U	C1'-O4'-C4'	5.90	114.62	109.90
26	BB	1554	U	C4-C5-C6	5.90	123.24	119.70
26	BB	1702	G	C1'-O4'-C4'	-5.90	105.18	109.90
26	BB	2000	C	C2-N3-C4	5.90	122.85	119.90
26	BB	2182	U	C6-N1-C2	-5.90	117.46	121.00
26	BB	2189	U	C6-N1-C2	5.90	124.54	121.00
26	BB	2410	G	N1-C2-N2	-5.90	110.89	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2461	A	C8-N9-C4	-5.90	103.44	105.80
26	BB	2747	G	C5-C6-O6	5.90	132.14	128.60
1	AA	849	G	C2-N3-C4	5.90	114.85	111.90
1	AA	1033	G	N3-C4-N9	5.90	129.54	126.00
1	AA	1202	U	N1-C2-N3	5.90	118.44	114.90
26	BB	808	G	C5-N7-C8	-5.90	101.35	104.30
26	BB	1556	C	C4'-C3'-C2'	-5.90	96.70	102.60
26	BB	1582	C	C2-N3-C4	-5.90	116.95	119.90
26	BB	1597	A	C3'-C2'-C1'	5.90	106.22	101.50
26	BB	2219	U	N1-C1'-C2'	-5.90	105.51	112.00
26	BB	2352	A	N3-C4-C5	-5.90	122.67	126.80
30	BF	31	VAL	CA-CB-CG1	5.90	119.74	110.90
1	AA	141	G	C5-C6-N1	-5.89	108.55	111.50
1	AA	277	C	O4'-C1'-N1	5.89	112.92	108.20
1	AA	382	A	N9-C4-C5	5.89	108.16	105.80
1	AA	405	U	P-O3'-C3'	5.89	126.77	119.70
1	AA	502	A	C6-N1-C2	-5.89	115.06	118.60
1	AA	953	G	C4-C5-C6	-5.89	115.26	118.80
1	AA	953	G	C5-N7-C8	-5.89	101.35	104.30
1	AA	1372	U	O4'-C1'-N1	5.89	112.92	108.20
2	AB	22	G	N3-C4-C5	-5.89	125.65	128.60
4	AD	63	C	C5-C4-N4	5.89	124.33	120.20
25	BA	9	G	N3-C4-C5	5.89	131.55	128.60
26	BB	120	U	N3-C2-O2	-5.89	118.07	122.20
26	BB	441	U	N3-C4-C5	-5.89	111.06	114.60
26	BB	770	G	C5'-C4'-O4'	5.89	116.17	109.10
26	BB	795	C	N1-C2-N3	5.89	123.33	119.20
26	BB	943	A	C5-C6-N6	5.89	128.42	123.70
26	BB	1214	A	C5-C6-N1	5.89	120.65	117.70
26	BB	1244	A	O4'-C1'-N9	5.89	112.92	108.20
26	BB	1254	A	C5'-C4'-O4'	-5.89	102.03	109.10
26	BB	1712	U	C6-N1-C2	-5.89	117.46	121.00
26	BB	1789	A	C5'-C4'-O4'	5.89	116.17	109.10
26	BB	1811	G	C6-C5-N7	-5.89	126.86	130.40
26	BB	1952	A	C5-C6-N6	-5.89	118.98	123.70
26	BB	2268	A	C8-N9-C4	-5.89	103.44	105.80
26	BB	2410	G	C4-C5-N7	-5.89	108.44	110.80
26	BB	2530	A	C5-C6-N6	-5.89	118.98	123.70
26	BB	2645	G	N3-C2-N2	-5.89	115.77	119.90
26	BB	2779	U	N3-C2-O2	-5.89	118.07	122.20
1	AA	75	G	C1'-O4'-C4'	5.89	114.61	109.90
1	AA	385	C	O4'-C1'-N1	5.89	112.91	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	532	A	C8-N9-C4	-5.89	103.44	105.80
1	AA	593	U	C5-C6-N1	-5.89	119.75	122.70
1	AA	763	G	C5'-C4'-C3'	-5.89	106.57	116.00
3	AC	59	A	N9-C4-C5	5.89	108.16	105.80
26	BB	78	U	C5'-C4'-O4'	5.89	116.17	109.10
26	BB	220	G	C5-C6-N1	-5.89	108.55	111.50
26	BB	968	C	N1-C1'-C2'	-5.89	105.52	112.00
26	BB	1192	G	N3-C4-C5	-5.89	125.65	128.60
26	BB	2123	G	C1'-O4'-C4'	5.89	114.61	109.90
26	BB	2581	G	C8-N9-C4	-5.89	104.04	106.40
1	AA	512	U	C2-N3-C4	-5.89	123.47	127.00
1	AA	563	A	C4-C5-C6	-5.89	114.05	117.00
1	AA	953	G	C6-N1-C2	5.89	128.63	125.10
1	AA	1124	G	C4-C5-C6	5.89	122.33	118.80
1	AA	1330	U	C3'-C2'-C1'	5.89	106.21	101.50
1	AA	1340	A	C5-C6-N1	-5.89	114.75	117.70
1	AA	1428	A	N9-C1'-C2'	-5.89	105.52	112.00
4	AD	23	G	C5-C6-N1	5.89	114.44	111.50
26	BB	934	U	O4'-C1'-C2'	5.89	112.90	107.60
26	BB	1865	U	C4-C5-C6	5.89	123.23	119.70
26	BB	2412	A	C5'-C4'-O4'	5.89	116.17	109.10
1	AA	727	G	N3-C4-N9	5.89	129.53	126.00
2	AB	12	U	P-O3'-C3'	5.89	126.77	119.70
2	AB	26	A	C5'-C4'-C3'	-5.89	106.58	116.00
17	AQ	19	TYR	CB-CG-CD2	-5.89	117.47	121.00
25	BA	93	C	N3-C4-C5	-5.89	119.54	121.90
26	BB	43	G	P-O3'-C3'	5.89	126.77	119.70
26	BB	248	G	N3-C4-C5	-5.89	125.66	128.60
26	BB	366	C	N3-C4-N4	5.89	122.12	118.00
26	BB	1063	G	C1'-O4'-C4'	-5.89	105.19	109.90
26	BB	1484	U	C5-C6-N1	-5.89	119.75	122.70
26	BB	1862	G	C3'-C2'-C1'	-5.89	96.79	101.50
26	BB	2018	G	C4-C5-N7	-5.89	108.44	110.80
26	BB	2153	C	C5-C4-N4	-5.89	116.08	120.20
26	BB	2270	A	N7-C8-N9	5.89	116.75	113.80
26	BB	2290	G	C4-C5-C6	-5.89	115.27	118.80
26	BB	2383	G	C6-C5-N7	5.89	133.93	130.40
42	BR	102	ARG	NE-CZ-NH2	-5.89	117.36	120.30
1	AA	278	G	C6-N1-C2	-5.89	121.57	125.10
1	AA	462	G	C6-N1-C2	-5.89	121.57	125.10
26	BB	303	G	N1-C2-N3	-5.89	120.37	123.90
26	BB	1249	U	C5-C6-N1	-5.89	119.76	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1440	U	C5'-C4'-O4'	5.89	116.17	109.10
26	BB	1512	C	C2-N3-C4	5.89	122.84	119.90
26	BB	1943	U	N3-C4-C5	5.89	118.13	114.60
26	BB	1965	C	C6-N1-C2	5.89	122.66	120.30
1	AA	51	A	O4'-C1'-C2'	-5.89	99.91	105.80
1	AA	82	G	C5-C6-O6	-5.89	125.07	128.60
1	AA	163	C	N3-C4-C5	-5.89	119.55	121.90
1	AA	306	A	N9-C4-C5	5.89	108.15	105.80
1	AA	339	C	C4-C5-C6	-5.89	114.46	117.40
1	AA	418	C	N3-C4-C5	-5.89	119.55	121.90
1	AA	440	C	N3-C4-N4	5.89	122.12	118.00
1	AA	962	C	O4'-C4'-C3'	5.89	110.81	106.10
25	BA	88	C	N3-C4-C5	5.89	124.25	121.90
26	BB	200	U	C5-C6-N1	-5.89	119.76	122.70
26	BB	1348	C	O4'-C1'-C2'	-5.89	99.91	105.80
26	BB	1425	G	N7-C8-N9	5.89	116.04	113.10
26	BB	1479	G	O4'-C1'-N9	5.89	112.91	108.20
26	BB	1723	G	C2'-C3'-O3'	5.89	123.12	113.70
26	BB	2035	G	C3'-C2'-C1'	-5.89	96.79	101.50
26	BB	2479	U	P-O3'-C3'	5.89	126.76	119.70
26	BB	2738	A	O4'-C1'-N9	-5.89	103.49	108.20
38	BN	139	GLY	O-C-N	-5.89	113.19	123.20
1	AA	712	A	N1-C6-N6	5.88	122.13	118.60
1	AA	771	G	N1-C2-N3	-5.88	120.37	123.90
1	AA	1288	A	C5-N7-C8	-5.88	100.96	103.90
3	AC	18	A	P-O3'-C3'	5.88	126.76	119.70
26	BB	180	G	C4-C5-C6	5.88	122.33	118.80
26	BB	353	C	C2-N3-C4	-5.88	116.96	119.90
26	BB	736	C	C2-N3-C4	5.88	122.84	119.90
27	BC	33	LEU	CB-CG-CD2	5.88	121.00	111.00
27	BC	174	THR	CA-CB-CG2	5.88	120.64	112.40
1	AA	196	A	O4'-C4'-C3'	5.88	110.81	106.10
1	AA	262	A	N3-C4-N9	-5.88	122.69	127.40
1	AA	1180	A	C6-C5-N7	5.88	136.42	132.30
1	AA	1487	G	C2-N3-C4	5.88	114.84	111.90
26	BB	29	U	C5'-C4'-O4'	5.88	116.16	109.10
26	BB	51	G	C5-C6-O6	5.88	132.13	128.60
26	BB	1275	A	N1-C2-N3	-5.88	126.36	129.30
26	BB	2070	A	C5-N7-C8	-5.88	100.96	103.90
26	BB	2278	A	O4'-C1'-N9	5.88	112.91	108.20
26	BB	2859	G	C4-C5-C6	5.88	122.33	118.80
1	AA	264	C	C5'-C4'-O4'	-5.88	102.04	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	373	A	C4-C5-N7	5.88	113.64	110.70
1	AA	517	G	N1-C2-N2	-5.88	110.91	116.20
1	AA	524	G	C2-N3-C4	5.88	114.84	111.90
1	AA	565	U	N1-C1'-C2'	-5.88	105.53	112.00
1	AA	608	A	C5-C6-N6	-5.88	118.99	123.70
25	BA	74	U	C1'-O4'-C4'	-5.88	105.19	109.90
25	BA	107	G	C6-C5-N7	-5.88	126.87	130.40
26	BB	117	G	N9-C4-C5	-5.88	103.05	105.40
26	BB	1223	G	N3-C2-N2	5.88	124.02	119.90
26	BB	1853	A	N7-C8-N9	-5.88	110.86	113.80
26	BB	2183	A	O4'-C1'-N9	-5.88	103.50	108.20
26	BB	2369	A	N1-C6-N6	5.88	122.13	118.60
26	BB	2396	G	N9-C4-C5	-5.88	103.05	105.40
1	AA	755	G	C5'-C4'-O4'	5.88	116.16	109.10
1	AA	1230	C	N3-C2-O2	-5.88	117.78	121.90
26	BB	1608	A	O5'-P-OP2	-5.88	100.41	105.70
26	BB	1987	A	C5'-C4'-O4'	5.88	116.16	109.10
1	AA	315	A	O4'-C1'-N9	5.88	112.90	108.20
1	AA	433	G	N3-C4-C5	5.88	131.54	128.60
1	AA	1254	A	C8-N9-C4	-5.88	103.45	105.80
4	AD	50	G	N1-C6-O6	-5.88	116.37	119.90
26	BB	131	A	C8-N9-C4	-5.88	103.45	105.80
26	BB	271	G	N1-C6-O6	5.88	123.43	119.90
26	BB	577	G	N3-C4-N9	5.88	129.53	126.00
26	BB	721	A	C2-N3-C4	5.88	113.54	110.60
26	BB	1880	U	N3-C4-O4	5.88	123.52	119.40
26	BB	2353	G	C5-N7-C8	-5.88	101.36	104.30
26	BB	2395	C	O4'-C4'-C3'	-5.88	98.12	104.00
26	BB	2654	A	C6-N1-C2	-5.88	115.07	118.60
27	BC	56	ASP	CB-CG-OD1	-5.88	113.01	118.30
44	BT	77	PHE	CB-CG-CD2	-5.88	116.69	120.80
1	AA	154	U	N3-C2-O2	-5.88	118.09	122.20
1	AA	162	A	C4-C5-N7	-5.88	107.76	110.70
1	AA	455	G	N9-C4-C5	-5.88	103.05	105.40
1	AA	648	A	C3'-C2'-C1'	-5.88	96.80	101.50
1	AA	720	C	C6-N1-C2	-5.88	117.95	120.30
1	AA	1046	A	C5-C6-N6	-5.88	119.00	123.70
1	AA	1255	G	N7-C8-N9	5.88	116.04	113.10
1	AA	1514	G	N9-C1'-C2'	-5.88	105.54	112.00
2	AB	53	G	C6-C5-N7	-5.88	126.87	130.40
4	AD	28	U	C4-C5-C6	5.88	123.23	119.70
15	AO	120	ARG	NE-CZ-NH1	-5.88	117.36	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	40	U	N3-C4-O4	-5.88	115.29	119.40
26	BB	100	U	P-O3'-C3'	5.88	126.75	119.70
26	BB	246	C	C2-N3-C4	5.88	122.84	119.90
26	BB	326	G	O4'-C1'-N9	5.88	112.90	108.20
26	BB	789	A	C4'-C3'-C2'	-5.88	96.72	102.60
26	BB	985	C	O4'-C4'-C3'	5.88	110.80	106.10
26	BB	1073	A	N1-C6-N6	-5.88	115.07	118.60
26	BB	1441	G	O4'-C4'-C3'	5.88	110.80	106.10
26	BB	1572	A	N9-C4-C5	5.88	108.15	105.80
26	BB	1996	C	C1'-O4'-C4'	-5.88	105.20	109.90
26	BB	2218	G	N3-C4-N9	5.88	129.53	126.00
26	BB	2554	U	O4'-C1'-C2'	-5.88	99.92	105.80
26	BB	2679	A	C8-N9-C4	-5.88	103.45	105.80
26	BB	2760	C	N3-C4-C5	-5.88	119.55	121.90
1	AA	1226	C	C6-N1-C2	-5.88	117.95	120.30
2	AB	42	G	C6-N1-C2	-5.88	121.58	125.10
26	BB	246	C	C4'-C3'-C2'	5.88	108.47	102.60
26	BB	1809	A	N1-C6-N6	-5.88	115.08	118.60
26	BB	2373	G	C8-N9-C1'	5.88	134.64	127.00
26	BB	2374	C	N1-C2-O2	5.88	122.42	118.90
26	BB	2617	U	O4'-C1'-N1	5.88	112.90	108.20
26	BB	2838	G	N3-C2-N2	-5.88	115.79	119.90
1	AA	94	G	N1-C2-N2	5.87	121.49	116.20
1	AA	196	A	O4'-C1'-N9	5.87	112.90	108.20
1	AA	264	C	N3-C4-N4	5.87	122.11	118.00
1	AA	359	G	C8-N9-C4	-5.87	104.05	106.40
1	AA	411	A	C5'-C4'-O4'	-5.87	102.05	109.10
1	AA	412	A	C4'-C3'-C2'	5.87	108.47	102.60
1	AA	602	A	C5'-C4'-C3'	-5.87	106.60	116.00
1	AA	1348	U	C5-C6-N1	-5.87	119.76	122.70
1	AA	1497	G	C6-C5-N7	-5.87	126.88	130.40
4	AD	19	G	P-O3'-C3'	5.87	126.75	119.70
4	AD	41	C	C5-C4-N4	5.87	124.31	120.20
26	BB	306	U	C1'-O4'-C4'	-5.87	105.20	109.90
26	BB	409	G	C8-N9-C1'	5.87	134.63	127.00
26	BB	465	G	P-O3'-C3'	5.87	126.75	119.70
26	BB	1020	A	P-O3'-C3'	5.87	126.75	119.70
26	BB	1299	G	C8-N9-C4	-5.87	104.05	106.40
26	BB	1635	A	N9-C4-C5	5.87	108.15	105.80
26	BB	2137	U	N3-C4-C5	5.87	118.12	114.60
26	BB	2666	C	C6-N1-C2	5.87	122.65	120.30
40	BP	22	ARG	NE-CZ-NH1	5.87	123.24	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	817	C	C3'-C2'-C1'	-5.87	96.80	101.50
1	AA	940	C	N1-C1'-C2'	-5.87	105.54	112.00
1	AA	1260	G	C6-N1-C2	-5.87	121.58	125.10
4	AD	11	A	N9-C1'-C2'	-5.87	105.54	112.00
4	AD	11	A	O4'-C4'-C3'	5.87	110.80	106.10
19	AS	16	PHE	CB-CG-CD1	-5.87	116.69	120.80
25	BA	119	A	C4-C5-N7	-5.87	107.76	110.70
26	BB	274	C	N3-C2-O2	-5.87	117.79	121.90
26	BB	392	U	O4'-C1'-C2'	-5.87	99.93	105.80
26	BB	694	U	C2-N3-C4	5.87	130.52	127.00
26	BB	823	C	C5-C4-N4	5.87	124.31	120.20
26	BB	874	G	C4'-C3'-C2'	-5.87	96.73	102.60
26	BB	1185	G	C8-N9-C4	-5.87	104.05	106.40
26	BB	1325	U	N1-C2-N3	5.87	118.42	114.90
26	BB	1432	G	N3-C4-N9	5.87	129.52	126.00
26	BB	1826	G	N3-C2-N2	-5.87	115.79	119.90
26	BB	1968	G	O4'-C1'-N9	5.87	112.90	108.20
26	BB	2468	A	C5-C6-N6	5.87	128.40	123.70
1	AA	244	U	O5'-P-OP1	-5.87	100.42	105.70
1	AA	866	C	P-O5'-C5'	5.87	130.29	120.90
1	AA	1216	A	C4-C5-C6	-5.87	114.06	117.00
4	AD	57	C	N3-C4-N4	5.87	122.11	118.00
25	BA	84	G	C5'-C4'-O4'	5.87	116.14	109.10
26	BB	102	U	C5-C6-N1	-5.87	119.77	122.70
26	BB	1177	G	N9-C1'-C2'	-5.87	105.54	112.00
26	BB	1541	C	O4'-C1'-N1	5.87	112.90	108.20
26	BB	1709	U	N3-C4-O4	5.87	123.51	119.40
26	BB	2002	G	N3-C2-N2	-5.87	115.79	119.90
26	BB	2025	C	C5'-C4'-O4'	5.87	116.14	109.10
26	BB	2269	G	N3-C2-N2	5.87	124.01	119.90
26	BB	2311	A	C5-C6-N1	5.87	120.64	117.70
26	BB	2473	U	C6-N1-C2	-5.87	117.48	121.00
26	BB	2839	G	N9-C4-C5	5.87	107.75	105.40
1	AA	112	G	C4-C5-C6	5.87	122.32	118.80
1	AA	204	G	N3-C4-N9	5.87	129.52	126.00
1	AA	640	A	C8-N9-C4	-5.87	103.45	105.80
1	AA	1476	A	N1-C2-N3	5.87	132.23	129.30
1	AA	1501	C	O4'-C1'-C2'	5.87	112.88	107.60
4	AD	54	G	O5'-P-OP1	-5.87	100.42	105.70
25	BA	69	G	N1-C2-N2	5.87	121.48	116.20
25	BA	99	A	C8-N9-C4	5.87	108.15	105.80
26	BB	72	U	N1-C2-N3	5.87	118.42	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1264	A	C5-N7-C8	-5.87	100.97	103.90
26	BB	1509	A	C5'-C4'-O4'	5.87	116.14	109.10
26	BB	1773	A	N9-C4-C5	-5.87	103.45	105.80
26	BB	1859	U	N3-C2-O2	-5.87	118.09	122.20
26	BB	1904	G	C5-C6-N1	5.87	114.43	111.50
26	BB	2562	U	C3'-C2'-C1'	5.87	106.19	101.50
37	BM	105	ARG	NE-CZ-NH1	5.87	123.23	120.30
1	AA	354	G	N3-C4-C5	-5.87	125.67	128.60
26	BB	2156	G	C6-N1-C2	-5.87	121.58	125.10
26	BB	2709	G	C5'-C4'-C3'	-5.87	106.61	116.00
26	BB	2889	C	N3-C4-C5	5.87	124.25	121.90
1	AA	831	A	C5-C6-N1	5.87	120.63	117.70
1	AA	1103	C	N3-C4-C5	-5.87	119.55	121.90
1	AA	1272	G	C2-N3-C4	5.87	114.83	111.90
1	AA	1537	U	N1-C2-N3	5.87	118.42	114.90
26	BB	736	C	C5-C4-N4	5.87	124.31	120.20
26	BB	950	G	C8-N9-C4	-5.87	104.05	106.40
26	BB	1625	C	C2-N3-C4	5.87	122.83	119.90
26	BB	2069	7MG	P-O3'-C3'	5.87	126.74	119.70
26	BB	2201	G	C4'-C3'-C2'	-5.87	96.73	102.60
34	BJ	28	ASP	CB-CG-OD1	-5.87	113.02	118.30
1	AA	32	A	N1-C2-N3	-5.86	126.37	129.30
1	AA	134	G	C5-N7-C8	-5.86	101.37	104.30
1	AA	247	G	N3-C2-N2	-5.86	115.80	119.90
1	AA	282	A	N3-C4-C5	-5.86	122.69	126.80
1	AA	442	G	C1'-O4'-C4'	5.86	114.59	109.90
1	AA	686	U	C5-C4-O4	-5.86	122.38	125.90
1	AA	878	A	N1-C2-N3	-5.86	126.37	129.30
1	AA	916	U	N1-C2-N3	5.86	118.42	114.90
1	AA	1258	G	O4'-C4'-C3'	5.86	110.79	106.10
1	AA	1335	U	N3-C2-O2	-5.86	118.09	122.20
1	AA	1526	G	N3-C4-C5	-5.86	125.67	128.60
2	AB	38	A	C4-C5-N7	5.86	113.63	110.70
26	BB	687	C	N3-C4-N4	-5.86	113.89	118.00
26	BB	1345	C	N1-C2-N3	-5.86	115.09	119.20
26	BB	1433	A	C3'-C2'-C1'	-5.86	96.81	101.50
26	BB	1548	A	C3'-C2'-C1'	5.86	106.19	101.50
26	BB	2007	U	C5'-C4'-C3'	-5.86	106.62	116.00
33	BI	130	VAL	CG1-CB-CG2	-5.86	101.52	110.90
1	AA	109	A	C5'-C4'-C3'	-5.86	106.62	116.00
1	AA	1067	A	N9-C4-C5	-5.86	103.45	105.80
1	AA	1293	C	N3-C2-O2	-5.86	117.80	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AC	16	A	C3'-C2'-C1'	5.86	106.19	101.50
26	BB	669	G	C4-C5-N7	-5.86	108.45	110.80
26	BB	1297	C	C5'-C4'-C3'	-5.86	106.62	116.00
26	BB	1483	G	C5-N7-C8	-5.86	101.37	104.30
26	BB	1527	G	C5-C6-N1	-5.86	108.57	111.50
26	BB	1759	A	N1-C2-N3	-5.86	126.37	129.30
1	AA	129	A	O4'-C4'-C3'	5.86	110.79	106.10
1	AA	178	C	O4'-C1'-N1	5.86	112.89	108.20
1	AA	261	U	C3'-C2'-C1'	5.86	106.19	101.50
1	AA	731	G	C8-N9-C4	-5.86	104.06	106.40
1	AA	1212	U	C5-C4-O4	-5.86	122.38	125.90
1	AA	1228	C	C4'-C3'-C2'	-5.86	96.74	102.60
1	AA	1438	G	N3-C4-N9	5.86	129.52	126.00
25	BA	10	G	C8-N9-C4	-5.86	104.06	106.40
26	BB	79	C	C4-C5-C6	-5.86	114.47	117.40
26	BB	546	U	O4'-C1'-N1	5.86	112.89	108.20
26	BB	630	G	C5-C6-N1	5.86	114.43	111.50
26	BB	698	C	C2-N1-C1'	-5.86	112.35	118.80
26	BB	717	C	N1-C2-O2	5.86	122.42	118.90
26	BB	887	U	C4-C5-C6	5.86	123.22	119.70
26	BB	1077	A	N1-C2-N3	-5.86	126.37	129.30
38	BN	48	ARG	NE-CZ-NH2	5.86	123.23	120.30
39	BO	108	VAL	CA-CB-CG2	5.86	119.69	110.90
1	AA	1530	G	C6-N1-C2	-5.86	121.58	125.10
4	AD	67	C	C4'-C3'-C2'	-5.86	96.74	102.60
15	AO	44	PRO	N-CA-CB	5.86	110.33	103.30
25	BA	15	A	C6-N1-C2	5.86	122.12	118.60
26	BB	113	U	P-O3'-C3'	5.86	126.73	119.70
26	BB	386	G	C2-N3-C4	5.86	114.83	111.90
26	BB	862	G	N7-C8-N9	5.86	116.03	113.10
26	BB	1278	C	P-O3'-C3'	5.86	126.73	119.70
26	BB	1439	A	N9-C4-C5	5.86	108.14	105.80
26	BB	2355	G	C5-N7-C8	5.86	107.23	104.30
26	BB	2412	A	C4-C5-N7	-5.86	107.77	110.70
1	AA	16	A	C8-N9-C4	-5.86	103.46	105.80
1	AA	74	A	C5'-C4'-O4'	5.86	116.13	109.10
1	AA	378	G	N9-C1'-C2'	-5.86	105.56	112.00
1	AA	1517	G	C8-N9-C1'	5.86	134.62	127.00
2	AB	59	G	N1-C6-O6	-5.86	116.39	119.90
11	AK	77	VAL	CA-CB-CG2	5.86	119.69	110.90
26	BB	23	G	C8-N9-C4	-5.86	104.06	106.40
26	BB	46	G	O4'-C4'-C3'	-5.86	98.14	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	620	G	O3'-P-O5'	5.86	115.13	104.00
26	BB	1395	A	C4-C5-N7	-5.86	107.77	110.70
26	BB	1609	A	C2-N3-C4	5.86	113.53	110.60
26	BB	1877	A	P-O3'-C3'	5.86	126.73	119.70
26	BB	2075	U	C1'-O4'-C4'	-5.86	105.22	109.90
54	B3	50	GLY	C-N-CA	5.86	136.34	121.70
1	AA	14	U	C5'-C4'-O4'	5.86	116.13	109.10
1	AA	37	U	O4'-C1'-N1	5.86	112.89	108.20
1	AA	137	U	N1-C2-N3	5.86	118.41	114.90
1	AA	188	C	P-O3'-C3'	5.86	126.73	119.70
1	AA	508	U	C2-N3-C4	-5.86	123.49	127.00
1	AA	629	A	C5'-C4'-O4'	5.86	116.13	109.10
1	AA	962	C	C3'-C2'-C1'	5.86	106.18	101.50
1	AA	1427	C	N1-C1'-C2'	-5.86	105.56	112.00
4	AD	35	C	C5-C4-N4	5.86	124.30	120.20
22	AV	40	PHE	CD1-CE1-CZ	-5.86	113.07	120.10
26	BB	1029	A	N7-C8-N9	5.86	116.73	113.80
26	BB	1255	U	N1-C2-N3	5.86	118.41	114.90
26	BB	1345	C	C2-N3-C4	5.86	122.83	119.90
26	BB	1973	G	C2-N3-C4	5.86	114.83	111.90
26	BB	2140	G	N3-C4-N9	5.86	129.51	126.00
27	BC	162	ARG	CD-NE-CZ	5.86	131.80	123.60
1	AA	287	U	C2-N3-C4	-5.85	123.49	127.00
1	AA	1106	G	C4'-C3'-C2'	-5.85	96.75	102.60
1	AA	1394	A	C6-N1-C2	5.85	122.11	118.60
26	BB	122	G	N1-C2-N3	-5.85	120.39	123.90
26	BB	567	U	N3-C4-C5	-5.85	111.09	114.60
26	BB	1498	C	C4-C5-C6	-5.85	114.47	117.40
46	BV	76	ARG	NH1-CZ-NH2	-5.85	112.96	119.40
1	AA	59	A	C4-C5-C6	5.85	119.93	117.00
1	AA	149	A	N1-C2-N3	-5.85	126.37	129.30
1	AA	184	G	O4'-C1'-N9	5.85	112.88	108.20
1	AA	407	U	N3-C4-O4	5.85	123.50	119.40
1	AA	775	G	N3-C4-C5	-5.85	125.67	128.60
7	AG	64	TYR	CB-CG-CD2	-5.85	117.49	121.00
26	BB	74	A	C8-N9-C4	-5.85	103.46	105.80
26	BB	383	C	C5-C4-N4	-5.85	116.10	120.20
26	BB	495	G	C6-N1-C2	-5.85	121.59	125.10
26	BB	565	C	C5-C4-N4	-5.85	116.10	120.20
26	BB	1241	A	C5'-C4'-O4'	5.85	116.12	109.10
26	BB	1475	G	C8-N9-C1'	5.85	134.61	127.00
26	BB	1629	U	C2-N3-C4	-5.85	123.49	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1642	G	O4'-C1'-N9	5.85	112.88	108.20
26	BB	1864	U	N3-C2-O2	-5.85	118.10	122.20
26	BB	1956	U	C1'-O4'-C4'	-5.85	105.22	109.90
26	BB	1972	G	C4'-C3'-C2'	-5.85	96.75	102.60
26	BB	2428	G	C5-C6-O6	5.85	132.11	128.60
26	BB	2502	G	C8-N9-C4	-5.85	104.06	106.40
26	BB	2893	A	P-O3'-C3'	5.85	126.72	119.70
32	BH	125	PRO	N-CA-CB	5.85	110.32	103.30
1	AA	39	G	C2-N3-C4	5.85	114.83	111.90
1	AA	336	A	C6-N1-C2	-5.85	115.09	118.60
26	BB	379	G	C5-N7-C8	5.85	107.23	104.30
26	BB	926	G	C4'-C3'-C2'	-5.85	96.75	102.60
26	BB	1967	C	C5'-C4'-C3'	-5.85	106.64	116.00
26	BB	2168	G	C6-C5-N7	-5.85	126.89	130.40
26	BB	2673	G	C3'-C2'-C1'	5.85	106.18	101.50
1	AA	94	G	N3-C4-C5	-5.85	125.67	128.60
1	AA	484	G	N9-C1'-C2'	-5.85	105.57	112.00
1	AA	721	G	N1-C2-N3	5.85	127.41	123.90
1	AA	742	G	C6-N1-C2	-5.85	121.59	125.10
1	AA	768	A	C5'-C4'-O4'	5.85	116.12	109.10
1	AA	884	U	N3-C2-O2	-5.85	118.11	122.20
26	BB	113	U	C5'-C4'-C3'	-5.85	106.64	116.00
26	BB	114	U	O4'-C4'-C3'	5.85	110.78	106.10
26	BB	211	C	C2-N3-C4	-5.85	116.97	119.90
26	BB	742	A	N3-C4-C5	-5.85	122.70	126.80
26	BB	743	A	C5'-C4'-C3'	-5.85	106.64	116.00
26	BB	749	A	C4-C5-C6	-5.85	114.08	117.00
26	BB	1818	U	N3-C4-O4	5.85	123.50	119.40
26	BB	2162	G	C6-C5-N7	5.85	133.91	130.40
26	BB	2350	C	C3'-C2'-C1'	-5.85	96.82	101.50
1	AA	71	A	C3'-C2'-C1'	5.85	106.18	101.50
1	AA	716	A	C5'-C4'-O4'	5.85	116.12	109.10
1	AA	793	U	C6-N1-C2	-5.85	117.49	121.00
1	AA	1494	G	P-O3'-C3'	5.85	126.72	119.70
4	AD	64	G	C6-N1-C2	5.85	128.61	125.10
25	BA	109	A	N1-C6-N6	5.85	122.11	118.60
26	BB	67	U	C4-C5-C6	-5.85	116.19	119.70
26	BB	123	G	O4'-C1'-N9	5.85	112.88	108.20
26	BB	232	G	C1'-O4'-C4'	-5.85	105.22	109.90
26	BB	262	A	C4-C5-C6	-5.85	114.08	117.00
26	BB	303	G	C8-N9-C4	-5.85	104.06	106.40
26	BB	1571	A	C2-N3-C4	5.85	113.52	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1983	G	O4'-C4'-C3'	5.85	110.78	106.10
26	BB	2094	A	C4'-C3'-C2'	-5.85	96.75	102.60
26	BB	2110	G	N3-C2-N2	5.85	123.99	119.90
26	BB	2246	G	C4'-C3'-C2'	-5.85	96.75	102.60
26	BB	2330	G	C8-N9-C4	-5.85	104.06	106.40
26	BB	2474	U	N1-C2-N3	-5.85	111.39	114.90
26	BB	2569	G	N3-C4-N9	5.85	129.51	126.00
26	BB	2842	G	C1'-O4'-C4'	-5.85	105.22	109.90
40	BP	45	ARG	NE-CZ-NH2	5.85	123.22	120.30
1	AA	115	G	O4'-C4'-C3'	5.85	110.78	106.10
1	AA	1304	G	OP2-P-O3'	5.85	118.06	105.20
26	BB	155	A	N7-C8-N9	-5.85	110.88	113.80
26	BB	392	U	C2-N3-C4	-5.85	123.49	127.00
26	BB	1129	A	C4-C5-C6	5.85	119.92	117.00
26	BB	2006	C	C4-C5-C6	5.85	120.32	117.40
26	BB	2326	C	N1-C2-O2	5.85	122.41	118.90
26	BB	2854	G	N1-C2-N3	-5.85	120.39	123.90
38	BN	59	ARG	NH1-CZ-NH2	-5.85	112.97	119.40
1	AA	11	G	O4'-C1'-N9	5.84	112.88	108.20
1	AA	1104	G	N9-C4-C5	5.84	107.74	105.40
26	BB	420	C	C5-C6-N1	5.84	123.92	121.00
26	BB	438	G	C4-C5-C6	5.84	122.31	118.80
26	BB	546	U	C2-N3-C4	5.84	130.51	127.00
26	BB	1310	G	C8-N9-C1'	5.84	134.60	127.00
26	BB	2201	G	N3-C4-C5	-5.84	125.68	128.60
26	BB	2540	C	N1-C2-O2	5.84	122.41	118.90
26	BB	2582	G	N7-C8-N9	5.84	116.02	113.10
26	BB	2587	A	C8-N9-C4	-5.84	103.46	105.80
26	BB	2837	A	C3'-C2'-C1'	5.84	106.18	101.50
26	BB	2865	U	N3-C4-O4	-5.84	115.31	119.40
40	BP	12	ARG	NE-CZ-NH1	5.84	123.22	120.30
48	BX	51	GLN	N-CA-CB	-5.84	100.08	110.60
1	AA	234	C	P-O3'-C3'	5.84	126.71	119.70
1	AA	869	G	O4'-C4'-C3'	5.84	110.78	106.10
1	AA	1123	U	N1-C2-N3	5.84	118.41	114.90
26	BB	555	G	N1-C2-N3	-5.84	120.39	123.90
26	BB	648	G	C5-N7-C8	-5.84	101.38	104.30
26	BB	2717	C	N3-C4-N4	5.84	122.09	118.00
26	BB	2742	G	C2-N3-C4	-5.84	108.98	111.90
1	AA	144	G	C5-N7-C8	-5.84	101.38	104.30
1	AA	149	A	N1-C6-N6	-5.84	115.09	118.60
1	AA	727	G	C6-C5-N7	-5.84	126.89	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	749	A	C3'-C2'-C1'	5.84	106.17	101.50
1	AA	802	A	N1-C2-N3	-5.84	126.38	129.30
1	AA	836	G	C4-C5-N7	-5.84	108.46	110.80
1	AA	877	G	C5-C6-N1	5.84	114.42	111.50
1	AA	913	A	C4-C5-C6	-5.84	114.08	117.00
1	AA	963	G	C5'-C4'-O4'	5.84	116.11	109.10
1	AA	1077	G	N3-C4-C5	-5.84	125.68	128.60
1	AA	1226	C	N1-C2-O2	5.84	122.41	118.90
1	AA	1231	G	N1-C2-N2	-5.84	110.94	116.20
15	AO	52	CYS	O-C-N	5.84	132.04	122.70
25	BA	83	G	O4'-C1'-N9	5.84	112.87	108.20
26	BB	44	A	C2-N3-C4	5.84	113.52	110.60
26	BB	821	A	N3-C4-C5	-5.84	122.71	126.80
26	BB	1021	A	O4'-C1'-C2'	-5.84	99.96	105.80
26	BB	1049	C	N3-C4-N4	5.84	122.09	118.00
26	BB	1090	A	N7-C8-N9	-5.84	110.88	113.80
26	BB	1281	G	C2-N3-C4	5.84	114.82	111.90
26	BB	1418	G	C5-C6-O6	-5.84	125.09	128.60
26	BB	1530	G	N7-C8-N9	5.84	116.02	113.10
26	BB	2058	A	O4'-C1'-N9	5.84	112.87	108.20
26	BB	2070	A	O4'-C1'-N9	5.84	112.87	108.20
26	BB	2081	U	N1-C1'-C2'	-5.84	105.57	112.00
26	BB	2572	A	C2-N3-C4	5.84	113.52	110.60
26	BB	2871	U	C5-C6-N1	5.84	125.62	122.70
1	AA	61	G	C8-N9-C4	-5.84	104.06	106.40
1	AA	70	U	C6-N1-C2	5.84	124.50	121.00
1	AA	1200	C	N1-C2-O2	5.84	122.40	118.90
1	AA	1268	G	N3-C4-N9	-5.84	122.50	126.00
3	AC	25	U	C6-N1-C2	-5.84	117.50	121.00
6	AF	92	ASP	CB-CG-OD1	-5.84	113.04	118.30
26	BB	389	G	N1-C2-N3	-5.84	120.40	123.90
26	BB	435	C	N3-C4-C5	5.84	124.24	121.90
26	BB	445	C	N3-C4-C5	-5.84	119.56	121.90
26	BB	725	G	N1-C2-N3	-5.84	120.40	123.90
26	BB	882	G	C4-C5-C6	5.84	122.30	118.80
26	BB	945	A	C5-C6-N6	-5.84	119.03	123.70
26	BB	2066	C	N3-C4-C5	-5.84	119.56	121.90
26	BB	2137	U	N3-C2-O2	-5.84	118.11	122.20
26	BB	2300	C	C1'-O4'-C4'	-5.84	105.23	109.90
1	AA	142	G	O4'-C4'-C3'	5.84	110.77	106.10
1	AA	281	G	O4'-C1'-N9	5.84	112.87	108.20
1	AA	1351	U	N3-C2-O2	-5.84	118.11	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	403	U	C3'-C2'-C1'	-5.84	96.83	101.50
26	BB	1275	A	C6-N1-C2	5.84	122.10	118.60
26	BB	1385	A	O5'-P-OP1	-5.84	100.45	105.70
26	BB	2505	G	C4-C5-N7	-5.84	108.47	110.80
1	AA	136	C	C1'-O4'-C4'	-5.84	105.23	109.90
1	AA	190	A	P-O3'-C3'	5.84	126.70	119.70
1	AA	617	G	C5-C6-N1	5.84	114.42	111.50
1	AA	804	U	C4'-C3'-C2'	-5.84	96.76	102.60
3	AC	22	G	C4'-C3'-C2'	5.84	108.44	102.60
18	AR	53	ARG	NE-CZ-NH2	5.84	123.22	120.30
25	BA	61	G	C8-N9-C4	-5.84	104.06	106.40
26	BB	95	A	C5'-C4'-O4'	5.84	116.10	109.10
26	BB	295	G	N1-C2-N2	5.84	121.45	116.20
26	BB	345	A	N3-C4-C5	-5.84	122.72	126.80
26	BB	589	U	N1-C1'-C2'	-5.84	105.58	112.00
26	BB	892	A	C6-N1-C2	5.84	122.10	118.60
26	BB	1985	C	O4'-C1'-N1	5.84	112.87	108.20
26	BB	1994	C	C2-N3-C4	-5.84	116.98	119.90
26	BB	2276	G	C3'-C2'-C1'	5.84	106.17	101.50
26	BB	2376	A	C6-N1-C2	-5.84	115.10	118.60
36	BL	4	PHE	CG-CD2-CE2	-5.84	114.38	120.80
2	AB	23	A	C1'-O4'-C4'	-5.83	105.23	109.90
26	BB	24	G	C5'-C4'-C3'	-5.83	106.66	116.00
26	BB	691	C	N3-C4-N4	5.83	122.08	118.00
26	BB	929	U	C3'-C2'-C1'	-5.83	96.83	101.50
26	BB	1042	G	C5'-C4'-O4'	5.83	116.10	109.10
26	BB	1103	A	C8-N9-C4	5.83	108.13	105.80
26	BB	1664	A	C2-N3-C4	5.83	113.52	110.60
26	BB	1801	A	C5-C6-N1	5.83	120.62	117.70
1	AA	104	G	C6-N1-C2	-5.83	121.60	125.10
1	AA	277	C	P-O3'-C3'	5.83	126.70	119.70
1	AA	660	C	N3-C4-N4	5.83	122.08	118.00
1	AA	1222	G	N9-C4-C5	5.83	107.73	105.40
2	AB	71	C	C5'-C4'-C3'	-5.83	106.67	116.00
25	BA	116	G	N1-C2-N2	5.83	121.45	116.20
26	BB	47	C	C3'-C2'-C1'	-5.83	96.83	101.50
26	BB	197	A	C4-C5-N7	5.83	113.62	110.70
26	BB	320	A	N1-C2-N3	-5.83	126.38	129.30
26	BB	1082	U	P-O3'-C3'	5.83	126.70	119.70
1	AA	107	G	C3'-C2'-C1'	-5.83	96.83	101.50
1	AA	446	G	O4'-C1'-N9	5.83	112.87	108.20
1	AA	588	G	N1-C6-O6	5.83	123.40	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	620	C	N3-C4-C5	-5.83	119.57	121.90
1	AA	1213	A	N1-C2-N3	-5.83	126.38	129.30
1	AA	1425	U	N1-C2-O2	-5.83	118.72	122.80
26	BB	77	G	N3-C4-C5	-5.83	125.68	128.60
26	BB	530	G	C6-N1-C2	-5.83	121.60	125.10
26	BB	1381	G	N9-C1'-C2'	-5.83	105.59	112.00
26	BB	1789	A	C5-C6-N1	-5.83	114.78	117.70
26	BB	2166	U	C2-N3-C4	-5.83	123.50	127.00
26	BB	2476	A	N7-C8-N9	-5.83	110.88	113.80
26	BB	2711	A	C4-C5-C6	-5.83	114.08	117.00
26	BB	2852	G	C4-C5-N7	-5.83	108.47	110.80
26	BB	2886	A	N9-C4-C5	5.83	108.13	105.80
43	BS	57	ARG	NE-CZ-NH1	5.83	123.22	120.30
1	AA	805	C	C3'-C2'-C1'	5.83	106.16	101.50
25	BA	81	G	C5'-C4'-C3'	-5.83	106.67	116.00
26	BB	516	C	N3-C2-O2	-5.83	117.82	121.90
26	BB	675	A	N9-C4-C5	5.83	108.13	105.80
26	BB	681	G	O4'-C1'-N9	5.83	112.86	108.20
26	BB	875	G	C5-N7-C8	-5.83	101.39	104.30
26	BB	2454	G	C6-N1-C2	-5.83	121.60	125.10
26	BB	2793	C	N1-C2-O2	5.83	122.40	118.90
1	AA	376	G	C4-C5-N7	-5.83	108.47	110.80
1	AA	572	A	C6-N1-C2	5.83	122.10	118.60
1	AA	929	G	N3-C2-N2	-5.83	115.82	119.90
1	AA	1302	C	C4-C5-C6	5.83	120.31	117.40
10	AJ	125	ASP	CB-CG-OD1	5.83	123.55	118.30
26	BB	92	U	C4'-C3'-C2'	-5.83	96.77	102.60
26	BB	114	U	N1-C1'-C2'	5.83	121.58	114.00
26	BB	189	G	C8-N9-C4	-5.83	104.07	106.40
26	BB	260	G	C6-N1-C2	-5.83	121.60	125.10
26	BB	415	A	C5-C6-N6	-5.83	119.04	123.70
26	BB	752	A	C2-N3-C4	5.83	113.51	110.60
26	BB	933	A	C6-C5-N7	-5.83	128.22	132.30
26	BB	1082	U	C2-N3-C4	-5.83	123.50	127.00
26	BB	1667	G	C1'-O4'-C4'	5.83	114.56	109.90
26	BB	1729	U	C2-N3-C4	-5.83	123.50	127.00
26	BB	1839	G	N1-C2-N3	-5.83	120.40	123.90
26	BB	1873	G	C4-C5-N7	-5.83	108.47	110.80
26	BB	1926	U	N3-C4-O4	5.83	123.48	119.40
26	BB	2147	A	O4'-C4'-C3'	5.83	110.76	106.10
26	BB	2517	C	C5-C4-N4	-5.83	116.12	120.20
26	BB	2565	A	O4'-C4'-C3'	-5.83	98.17	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	B5	41	ARG	CD-NE-CZ	5.83	131.76	123.60
1	AA	780	A	C5'-C4'-O4'	5.83	116.09	109.10
1	AA	1479	C	C5-C6-N1	-5.83	118.09	121.00
1	AA	1524	C	N1-C2-O2	5.83	122.40	118.90
8	AH	75	LEU	CB-CG-CD2	-5.83	101.09	111.00
25	BA	46	A	C5-C6-N1	5.83	120.61	117.70
25	BA	66	A	C2-N3-C4	5.83	113.51	110.60
26	BB	675	A	O4'-C1'-N9	-5.83	103.54	108.20
26	BB	1088	A	O4'-C1'-C2'	-5.83	99.97	105.80
26	BB	2301	C	C1'-O4'-C4'	-5.83	105.24	109.90
1	AA	119	A	O4'-C1'-N9	5.83	112.86	108.20
1	AA	350	G	C8-N9-C4	-5.83	104.07	106.40
1	AA	786	G	C1'-O4'-C4'	5.83	114.56	109.90
1	AA	926	G	C4'-C3'-O3'	5.83	124.65	113.00
1	AA	1203	C	C4'-C3'-C2'	-5.83	96.78	102.60
26	BB	314	C	C2-N3-C4	5.83	122.81	119.90
26	BB	1312	U	C5-C6-N1	-5.83	119.79	122.70
26	BB	1384	A	C2-N3-C4	5.83	113.51	110.60
26	BB	1870	C	C3'-C2'-C1'	5.83	106.16	101.50
26	BB	2256	G	N9-C4-C5	5.83	107.73	105.40
26	BB	2434	A	N7-C8-N9	5.83	116.71	113.80
41	BQ	100	HIS	CA-CB-CG	5.83	123.50	113.60
1	AA	796	C	N3-C4-N4	5.82	122.08	118.00
1	AA	850	U	N3-C4-O4	5.82	123.48	119.40
1	AA	890	G	C4-C5-N7	5.82	113.13	110.80
1	AA	1156	G	O4'-C1'-C2'	5.82	112.84	107.60
16	AP	19	THR	CA-CB-CG2	5.82	120.55	112.40
26	BB	774	G	P-O3'-C3'	5.82	126.69	119.70
26	BB	2275	C	C2-N3-C4	-5.82	116.99	119.90
26	BB	2650	U	C2-N3-C4	-5.82	123.51	127.00
26	BB	2655	G	C6-C5-N7	-5.82	126.91	130.40
47	BW	94	PHE	CB-CG-CD2	5.82	124.88	120.80
1	AA	682	G	N7-C8-N9	5.82	116.01	113.10
4	AD	4	G	O4'-C1'-N9	5.82	112.86	108.20
26	BB	539	G	C6-C5-N7	5.82	133.89	130.40
26	BB	1041	G	C4'-C3'-C2'	-5.82	96.78	102.60
26	BB	2144	G	N9-C4-C5	5.82	107.73	105.40
26	BB	2277	G	C5-N7-C8	-5.82	101.39	104.30
26	BB	2805	C	C5'-C4'-O4'	5.82	116.09	109.10
1	AA	362	G	O4'-C1'-N9	5.82	112.86	108.20
1	AA	406	G	C2-N3-C4	5.82	114.81	111.90
1	AA	1014	A	C6-C5-N7	5.82	136.38	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1125	U	C5-C6-N1	5.82	125.61	122.70
1	AA	1270	G	C4-C5-N7	-5.82	108.47	110.80
1	AA	1301	U	C3'-C2'-C1'	-5.82	96.84	101.50
19	AS	56	ARG	NE-CZ-NH1	5.82	123.21	120.30
20	AT	75	VAL	CB-CA-C	5.82	122.46	111.40
25	BA	67	G	N1-C6-O6	5.82	123.39	119.90
26	BB	144	A	C5-C6-N1	-5.82	114.79	117.70
26	BB	290	U	O4'-C1'-N1	5.82	112.86	108.20
26	BB	474	G	O4'-C1'-N9	5.82	112.86	108.20
26	BB	587	C	O4'-C1'-C2'	-5.82	99.98	105.80
26	BB	727	A	C5-C6-N1	-5.82	114.79	117.70
26	BB	1116	G	C4'-C3'-C2'	-5.82	96.78	102.60
26	BB	1177	G	C5-C6-N1	5.82	114.41	111.50
26	BB	2569	G	C1'-O4'-C4'	-5.82	105.24	109.90
26	BB	2625	G	C1'-O4'-C4'	-5.82	105.24	109.90
26	BB	2718	G	C2-N3-C4	5.82	114.81	111.90
26	BB	2732	G	N1-C6-O6	-5.82	116.41	119.90
36	BL	42	ALA	N-CA-CB	-5.82	101.95	110.10
1	AA	45	G	O4'-C1'-N9	5.82	112.86	108.20
1	AA	506	G	C6-N1-C2	-5.82	121.61	125.10
1	AA	764	C	N1-C1'-C2'	-5.82	105.60	112.00
1	AA	1254	A	C4-C5-C6	5.82	119.91	117.00
12	AL	86	LEU	CB-CG-CD2	5.82	120.89	111.00
26	BB	857	G	C5'-C4'-O4'	5.82	116.08	109.10
26	BB	1142	A	O3'-P-O5'	5.82	115.06	104.00
26	BB	1203	U	C2-N3-C4	-5.82	123.51	127.00
26	BB	2202	U	C5'-C4'-C3'	-5.82	106.69	116.00
26	BB	2344	U	O3'-P-O5'	5.82	115.06	104.00
26	BB	2489	U	O4'-C4'-C3'	5.82	110.75	106.10
1	AA	15	G	C8-N9-C4	5.82	108.73	106.40
1	AA	441	A	N1-C6-N6	5.82	122.09	118.60
1	AA	523	A	C6-N1-C2	-5.82	115.11	118.60
1	AA	548	G	C5-C6-N1	-5.82	108.59	111.50
1	AA	664	G	C2-N3-C4	-5.82	108.99	111.90
19	AS	5	ARG	NE-CZ-NH2	-5.82	117.39	120.30
26	BB	234	U	C2-N3-C4	-5.82	123.51	127.00
26	BB	300	A	N9-C4-C5	-5.82	103.47	105.80
26	BB	702	U	P-O3'-C3'	5.82	126.68	119.70
26	BB	1128	G	N9-C4-C5	5.82	107.73	105.40
26	BB	1325	U	C6-N1-C2	-5.82	117.51	121.00
26	BB	1409	U	C5-C4-O4	-5.82	122.41	125.90
26	BB	1482	G	N3-C4-C5	-5.82	125.69	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1586	A	C5-C6-N1	-5.82	114.79	117.70
26	BB	2319	G	N3-C4-C5	-5.82	125.69	128.60
26	BB	2320	U	C1'-O4'-C4'	-5.82	105.25	109.90
26	BB	2380	C	O4'-C4'-C3'	-5.82	98.18	104.00
26	BB	2543	G	C5-C6-O6	5.82	132.09	128.60
26	BB	2557	G	C4'-C3'-C2'	-5.82	96.78	102.60
26	BB	2880	C	C5-C6-N1	5.82	123.91	121.00
39	BO	59	ARG	CD-NE-CZ	5.82	131.74	123.60
43	BS	100	PHE	CB-CG-CD2	-5.82	116.73	120.80
44	BT	53	PHE	CB-CG-CD1	-5.82	116.73	120.80
1	AA	245	U	C4'-C3'-C2'	-5.82	96.78	102.60
1	AA	583	A	N1-C2-N3	5.82	132.21	129.30
1	AA	676	A	C1'-O4'-C4'	5.82	114.55	109.90
1	AA	715	A	C6-N1-C2	-5.82	115.11	118.60
1	AA	1481	U	P-O3'-C3'	5.82	126.68	119.70
3	AC	37	G	N1-C6-O6	5.82	123.39	119.90
26	BB	129	C	N1-C1'-C2'	-5.82	105.60	112.00
26	BB	301	G	P-O3'-C3'	5.82	126.68	119.70
26	BB	760	G	N7-C8-N9	5.82	116.01	113.10
26	BB	1998	A	C4'-C3'-C2'	-5.82	96.78	102.60
26	BB	2098	U	C5'-C4'-O4'	5.82	116.08	109.10
26	BB	2241	A	N1-C2-N3	-5.82	126.39	129.30
26	BB	2269	G	N9-C1'-C2'	-5.82	105.60	112.00
26	BB	2777	G	P-O3'-C3'	5.82	126.68	119.70
26	BB	2838	G	C5-N7-C8	5.82	107.21	104.30
47	BW	33	VAL	CA-CB-CG2	5.82	119.62	110.90
1	AA	164	G	N1-C2-N3	-5.81	120.41	123.90
1	AA	180	U	C5'-C4'-O4'	5.81	116.08	109.10
1	AA	250	A	N7-C8-N9	5.81	116.71	113.80
1	AA	1002	G	C5-C6-N1	5.81	114.41	111.50
1	AA	1404	C	N3-C4-C5	-5.81	119.57	121.90
2	AB	25	C	C4-C5-C6	-5.81	114.49	117.40
4	AD	53	G	O4'-C1'-N9	5.81	112.85	108.20
26	BB	97	C	O3'-P-O5'	5.81	115.05	104.00
26	BB	2676	C	P-O5'-C5'	5.81	130.20	120.90
1	AA	212	G	C2-N3-C4	5.81	114.81	111.90
1	AA	438	U	N3-C2-O2	5.81	126.27	122.20
1	AA	972	C	C6-N1-C1'	5.81	127.77	120.80
1	AA	1011	C	C5'-C4'-O4'	5.81	116.08	109.10
1	AA	1021	A	N3-C4-N9	-5.81	122.75	127.40
1	AA	1194	U	N1-C2-N3	5.81	118.39	114.90
1	AA	1312	G	C4'-C3'-C2'	-5.81	96.79	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	37	U	O4'-C1'-N1	5.81	112.85	108.20
23	AW	35	TYR	CB-CG-CD2	-5.81	117.51	121.00
25	BA	113	C	O4'-C1'-N1	5.81	112.85	108.20
26	BB	45	G	N7-C8-N9	-5.81	110.19	113.10
26	BB	205	G	O4'-C1'-N9	5.81	112.85	108.20
26	BB	1838	C	C5-C4-N4	-5.81	116.13	120.20
26	BB	2778	A	N9-C4-C5	-5.81	103.47	105.80
26	BB	2852	G	C2'-C3'-O3'	5.81	123.00	113.70
26	BB	2873	A	C6-N1-C2	-5.81	115.11	118.60
37	BM	8	LEU	O-C-N	-5.81	113.40	122.70
1	AA	281	G	C5'-C4'-O4'	5.81	116.07	109.10
1	AA	1003	G	O4'-C1'-N9	-5.81	103.55	108.20
26	BB	325	G	O4'-C1'-C2'	5.81	112.83	107.60
26	BB	502	A	N9-C1'-C2'	-5.81	105.61	112.00
26	BB	917	A	C4-C5-N7	-5.81	107.80	110.70
26	BB	1407	G	C4-C5-N7	-5.81	108.48	110.80
26	BB	1791	A	C6-C5-N7	5.81	136.37	132.30
26	BB	1959	G	N9-C1'-C2'	-5.81	105.61	112.00
26	BB	1964	G	N3-C2-N2	-5.81	115.83	119.90
26	BB	2124	G	C5-N7-C8	5.81	107.20	104.30
26	BB	2796	U	C4-C5-C6	5.81	123.19	119.70
1	AA	6	G	P-O5'-C5'	5.81	130.20	120.90
1	AA	347	G	N3-C4-N9	-5.81	122.52	126.00
1	AA	833	G	N3-C4-N9	5.81	129.49	126.00
1	AA	1530	G	O5'-C5'-C4'	-5.81	100.66	111.70
3	AC	43	U	N3-C4-O4	5.81	123.47	119.40
26	BB	379	G	C4-C5-C6	-5.81	115.31	118.80
26	BB	821	A	C5'-C4'-C3'	-5.81	106.70	116.00
26	BB	829	A	O4'-C1'-C2'	-5.81	99.99	105.80
26	BB	1141	U	C5'-C4'-C3'	-5.81	106.71	116.00
26	BB	1628	G	N3-C4-N9	5.81	129.49	126.00
26	BB	1715	G	C5-N7-C8	-5.81	101.39	104.30
26	BB	1946	U	C4-C5-C6	-5.81	116.21	119.70
26	BB	2521	C	O5'-P-OP2	5.81	117.67	110.70
26	BB	2608	G	N3-C2-N2	-5.81	115.83	119.90
26	BB	2691	C	C4'-C3'-C2'	-5.81	96.79	102.60
26	BB	2834	G	N1-C6-O6	-5.81	116.41	119.90
49	BY	50	VAL	CA-CB-CG1	5.81	119.61	110.90
1	AA	243	A	C4'-C3'-C2'	5.81	108.41	102.60
1	AA	564	C	C4-C5-C6	5.81	120.30	117.40
1	AA	874	G	N3-C2-N2	-5.81	115.83	119.90
1	AA	1088	G	C6-N1-C2	-5.81	121.61	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1274	A	C5'-C4'-O4'	5.81	116.07	109.10
26	BB	367	G	C1'-O4'-C4'	5.81	114.55	109.90
26	BB	458	G	C5'-C4'-C3'	-5.81	106.71	116.00
26	BB	1413	A	N1-C2-N3	5.81	132.20	129.30
26	BB	1760	C	N3-C4-C5	-5.81	119.58	121.90
26	BB	1879	C	N1-C2-N3	5.81	123.27	119.20
26	BB	2131	U	N3-C4-O4	5.81	123.47	119.40
26	BB	2350	C	C5-C6-N1	5.81	123.90	121.00
26	BB	2841	C	N3-C4-C5	5.81	124.22	121.90
34	BJ	50	TYR	CG-CD2-CE2	5.81	125.94	121.30
1	AA	800	G	C8-N9-C4	-5.81	104.08	106.40
1	AA	1306	A	C5-N7-C8	-5.81	101.00	103.90
26	BB	263	G	P-O3'-C3'	5.81	126.67	119.70
26	BB	328	U	C5-C4-O4	-5.81	122.42	125.90
26	BB	1182	G	C6-N1-C2	-5.81	121.62	125.10
26	BB	1644	C	N1-C2-O2	5.81	122.38	118.90
26	BB	2031	A	C5-C6-N1	5.81	120.60	117.70
26	BB	2304	G	O4'-C1'-N9	5.81	112.84	108.20
26	BB	2598	A	C4'-C3'-C2'	-5.81	96.79	102.60
1	AA	27	G	C5-N7-C8	5.80	107.20	104.30
1	AA	51	A	N3-C4-C5	-5.80	122.74	126.80
1	AA	251	G	C8-N9-C4	-5.80	104.08	106.40
1	AA	947	G	C2-N3-C4	5.80	114.80	111.90
1	AA	956	U	P-O3'-C3'	5.80	126.67	119.70
1	AA	1003	G	P-O3'-C3'	5.80	126.67	119.70
1	AA	1120	C	C5'-C4'-C3'	-5.80	106.71	116.00
1	AA	1127	G	C8-N9-C1'	5.80	134.55	127.00
1	AA	1157	A	C4-C5-N7	-5.80	107.80	110.70
1	AA	1194	U	C3'-C2'-C1'	5.80	106.14	101.50
1	AA	1311	A	O4'-C1'-N9	5.80	112.84	108.20
26	BB	83	A	N1-C2-N3	5.80	132.20	129.30
26	BB	331	C	O4'-C1'-C2'	5.80	112.83	107.60
26	BB	469	G	C8-N9-C4	-5.80	104.08	106.40
26	BB	682	G	N3-C2-N2	5.80	123.96	119.90
26	BB	1359	A	C1'-O4'-C4'	-5.80	105.26	109.90
26	BB	1382	G	N9-C1'-C2'	-5.80	105.61	112.00
1	AA	1214	C	C6-N1-C1'	5.80	127.76	120.80
1	AA	1397	C	O4'-C1'-N1	-5.80	103.56	108.20
26	BB	1098	A	O5'-P-OP1	-5.80	100.48	105.70
1	AA	553	A	C5-C6-N6	5.80	128.34	123.70
1	AA	843	U	C5'-C4'-C3'	-5.80	106.72	116.00
1	AA	864	A	N1-C6-N6	-5.80	115.12	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1365	G	O4'-C1'-N9	5.80	112.84	108.20
3	AC	23	C	C3'-C2'-C1'	5.80	106.14	101.50
14	AN	104	PHE	CZ-CE2-CD2	-5.80	113.14	120.10
26	BB	136	G	N3-C4-N9	5.80	129.48	126.00
26	BB	489	G	C6-N1-C2	-5.80	121.62	125.10
26	BB	566	U	N1-C2-N3	5.80	118.38	114.90
26	BB	654	A	C5-C6-N1	5.80	120.60	117.70
26	BB	684	G	O4'-C4'-C3'	5.80	110.74	106.10
26	BB	851	C	C5-C4-N4	-5.80	116.14	120.20
26	BB	1084	A	C5-C6-N1	-5.80	114.80	117.70
26	BB	1108	U	N3-C4-O4	-5.80	115.34	119.40
26	BB	1275	A	N7-C8-N9	-5.80	110.90	113.80
26	BB	1354	A	N9-C1'-C2'	-5.80	105.62	112.00
26	BB	1652	A	N9-C4-C5	5.80	108.12	105.80
26	BB	1859	U	O4'-C1'-N1	5.80	112.84	108.20
26	BB	2780	G	N3-C4-C5	-5.80	125.70	128.60
42	BR	88	ARG	NE-CZ-NH2	5.80	123.20	120.30
1	AA	320	A	C3'-C2'-C1'	5.80	106.14	101.50
1	AA	654	G	C2-N3-C4	-5.80	109.00	111.90
25	BA	20	G	O4'-C1'-N9	5.80	112.84	108.20
26	BB	60	G	C6-C5-N7	5.80	133.88	130.40
26	BB	123	G	N3-C4-C5	5.80	131.50	128.60
26	BB	935	C	C4-C5-C6	-5.80	114.50	117.40
26	BB	2418	A	C5-N7-C8	5.80	106.80	103.90
26	BB	2555	U	C2-N3-C4	-5.80	123.52	127.00
1	AA	417	G	N1-C2-N2	5.80	121.42	116.20
25	BA	46	A	C4-C5-N7	5.80	113.60	110.70
26	BB	6	A	C5-C6-N1	-5.80	114.80	117.70
26	BB	1361	G	O4'-C1'-N9	5.80	112.84	108.20
26	BB	1429	G	N1-C6-O6	5.80	123.38	119.90
26	BB	1726	C	C6-N1-C2	-5.80	117.98	120.30
26	BB	1912	A	C5'-C4'-C3'	-5.80	106.72	116.00
26	BB	2223	G	C5-N7-C8	5.80	107.20	104.30
34	BJ	30	ARG	CB-CA-C	5.80	122.00	110.40
1	AA	541	G	N1-C2-N2	-5.80	110.98	116.20
1	AA	681	A	N1-C6-N6	-5.80	115.12	118.60
1	AA	737	C	C5'-C4'-C3'	-5.80	106.72	116.00
1	AA	1139	G	C1'-O4'-C4'	5.80	114.54	109.90
1	AA	1316	G	C5-N7-C8	-5.80	101.40	104.30
4	AD	24	C	C6-N1-C2	5.80	122.62	120.30
26	BB	687	C	N1-C2-N3	5.80	123.26	119.20
26	BB	810	U	N1-C2-O2	-5.80	118.74	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1844	C	O4'-C1'-C2'	-5.80	100.00	105.80
26	BB	1865	U	N3-C4-C5	-5.80	111.12	114.60
26	BB	2012	G	C4-C5-N7	-5.80	108.48	110.80
26	BB	2551	C	N3-C4-N4	5.80	122.06	118.00
1	AA	115	G	C8-N9-C4	-5.79	104.08	106.40
1	AA	213	G	C5-C6-N1	5.79	114.40	111.50
1	AA	1153	G	O3'-P-O5'	5.79	115.01	104.00
1	AA	1221	G	N3-C4-C5	-5.79	125.70	128.60
3	AC	33	A	C1'-O4'-C4'	-5.79	105.26	109.90
26	BB	1996	C	N3-C2-O2	-5.79	117.84	121.90
26	BB	2047	C	O4'-C4'-C3'	5.79	110.74	106.10
1	AA	313	A	C5-N7-C8	-5.79	101.00	103.90
1	AA	731	G	C5-N7-C8	5.79	107.20	104.30
1	AA	1002	G	C4-C5-N7	-5.79	108.48	110.80
1	AA	1196	A	N1-C6-N6	-5.79	115.12	118.60
1	AA	1354	U	N3-C2-O2	-5.79	118.14	122.20
1	AA	1458	G	N1-C6-O6	-5.79	116.42	119.90
2	AB	67	G	C5'-C4'-O4'	5.79	116.05	109.10
25	BA	22	U	N3-C2-O2	-5.79	118.14	122.20
26	BB	1607	C	C5-C4-N4	-5.79	116.14	120.20
26	BB	2435	A	C4'-C3'-C2'	-5.79	96.81	102.60
26	BB	2528	U	N3-C4-C5	-5.79	111.12	114.60
26	BB	2595	G	N7-C8-N9	5.79	116.00	113.10
58	B7	5	ALA	N-CA-CB	-5.79	101.99	110.10
1	AA	573	A	O4'-C1'-C2'	5.79	112.81	107.60
1	AA	1467	C	N3-C2-O2	-5.79	117.85	121.90
25	BA	28	C	C6-N1-C2	-5.79	117.98	120.30
26	BB	242	G	C8-N9-C4	-5.79	104.08	106.40
26	BB	399	U	C6-N1-C2	5.79	124.47	121.00
26	BB	455	C	C6-N1-C2	-5.79	117.98	120.30
26	BB	657	U	P-O3'-C3'	5.79	126.65	119.70
26	BB	1502	A	O4'-C1'-N9	5.79	112.83	108.20
26	BB	1796	U	N3-C2-O2	-5.79	118.15	122.20
26	BB	1922	G	C1'-O4'-C4'	-5.79	105.27	109.90
26	BB	1938	A	N9-C4-C5	5.79	108.12	105.80
26	BB	1975	G	N3-C4-N9	5.79	129.47	126.00
26	BB	2216	G	N1-C2-N3	5.79	127.38	123.90
1	AA	38	G	N1-C6-O6	5.79	123.37	119.90
1	AA	268	U	O4'-C1'-N1	5.79	112.83	108.20
1	AA	1453	G	O4'-C4'-C3'	5.79	110.73	106.10
4	AD	32	G	C6-N1-C2	-5.79	121.63	125.10
25	BA	7	G	C5-C6-N1	5.79	114.39	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	11	C	C5-C6-N1	5.79	123.89	121.00
26	BB	48	G	N1-C2-N3	-5.79	120.43	123.90
26	BB	575	A	N7-C8-N9	-5.79	110.91	113.80
26	BB	792	A	C6-C5-N7	5.79	136.35	132.30
26	BB	1209	U	C5-C4-O4	5.79	129.37	125.90
26	BB	1213	A	C6-N1-C2	5.79	122.07	118.60
26	BB	1289	C	O4'-C1'-N1	5.79	112.83	108.20
26	BB	1351	C	C1'-O4'-C4'	-5.79	105.27	109.90
26	BB	1660	G	O4'-C1'-N9	5.79	112.83	108.20
26	BB	1690	A	C6-N1-C2	-5.79	115.13	118.60
26	BB	1697	G	N1-C6-O6	5.79	123.37	119.90
26	BB	2237	G	C8-N9-C4	-5.79	104.08	106.40
26	BB	2750	A	C4-C5-C6	-5.79	114.11	117.00
1	AA	12	U	C5-C6-N1	-5.79	119.81	122.70
1	AA	176	C	C2-N3-C4	5.79	122.79	119.90
1	AA	205	A	C5-C6-N1	-5.79	114.81	117.70
1	AA	492	C	C1'-O4'-C4'	-5.79	105.27	109.90
1	AA	760	G	N1-C2-N2	5.79	121.41	116.20
1	AA	1055	A	C8-N9-C4	-5.79	103.48	105.80
1	AA	1101	A	C8-N9-C4	-5.79	103.48	105.80
1	AA	1116	U	C5-C6-N1	5.79	125.59	122.70
1	AA	1453	G	C8-N9-C4	-5.79	104.08	106.40
15	AO	8	ARG	NE-CZ-NH2	-5.79	117.41	120.30
25	BA	2	G	C6-C5-N7	-5.79	126.93	130.40
25	BA	82	U	C6-N1-C2	5.79	124.47	121.00
26	BB	198	C	C2-N3-C4	-5.79	117.01	119.90
26	BB	711	G	C4-C5-N7	-5.79	108.48	110.80
26	BB	776	G	N3-C2-N2	5.79	123.95	119.90
26	BB	1134	A	N1-C2-N3	-5.79	126.41	129.30
26	BB	1715	G	N9-C1'-C2'	5.79	121.52	114.00
26	BB	2231	U	O4'-C1'-N1	5.79	112.83	108.20
26	BB	2337	G	C2-N3-C4	-5.79	109.01	111.90
26	BB	2492	U	N1-C2-O2	-5.79	118.75	122.80
1	AA	419	C	C4-C5-C6	5.79	120.29	117.40
1	AA	574	A	C3'-C2'-C1'	-5.79	96.87	101.50
1	AA	878	A	N7-C8-N9	5.79	116.69	113.80
1	AA	1506	U	N1-C2-N3	5.79	118.37	114.90
7	AG	16	THR	CA-CB-CG2	5.79	120.50	112.40
26	BB	699	A	C2-N3-C4	-5.79	107.71	110.60
26	BB	1324	G	C2-N3-C4	5.79	114.79	111.90
1	AA	211	G	C5-C6-O6	-5.79	125.13	128.60
1	AA	488	C	N1-C1'-C2'	-5.79	105.64	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	506	G	N1-C2-N3	-5.79	120.43	123.90
1	AA	833	G	O4'-C1'-N9	5.79	112.83	108.20
1	AA	994	A	C2-N3-C4	-5.79	107.71	110.60
1	AA	1392	G	C5-C6-O6	5.79	132.07	128.60
13	AM	31	ARG	NE-CZ-NH1	5.79	123.19	120.30
25	BA	84	G	C2-N3-C4	5.79	114.79	111.90
26	BB	37	C	C5'-C4'-O4'	5.79	116.04	109.10
26	BB	356	G	N3-C4-C5	-5.79	125.71	128.60
26	BB	648	G	N3-C4-C5	5.79	131.49	128.60
26	BB	684	G	C6-C5-N7	5.79	133.87	130.40
26	BB	733	G	N3-C2-N2	5.79	123.95	119.90
26	BB	1162	G	N1-C2-N2	5.79	121.41	116.20
26	BB	1214	A	N9-C4-C5	5.79	108.11	105.80
26	BB	1282	U	N1-C2-O2	5.79	126.85	122.80
26	BB	1659	G	N3-C2-N2	5.79	123.95	119.90
26	BB	2278	A	C4-C5-C6	-5.79	114.11	117.00
26	BB	2749	A	C1'-O4'-C4'	5.79	114.53	109.90
26	BB	2897	U	N3-C4-O4	5.79	123.45	119.40
1	AA	1259	C	C5'-C4'-C3'	-5.78	106.75	116.00
11	AK	79	ARG	CD-NE-CZ	5.78	131.70	123.60
26	BB	185	G	C8-N9-C4	5.78	108.71	106.40
26	BB	214	G	C5-N7-C8	-5.78	101.41	104.30
26	BB	230	G	N1-C2-N3	-5.78	120.43	123.90
26	BB	256	A	N1-C6-N6	-5.78	115.13	118.60
26	BB	848	C	N1-C1'-C2'	-5.78	105.64	112.00
26	BB	994	C	N1-C1'-C2'	-5.78	105.64	112.00
26	BB	1245	G	C4-C5-N7	5.78	113.11	110.80
26	BB	2095	A	C2-N3-C4	5.78	113.49	110.60
26	BB	2164	C	C5'-C4'-O4'	5.78	116.04	109.10
26	BB	2220	U	C5-C4-O4	-5.78	122.43	125.90
26	BB	2747	G	N3-C4-C5	-5.78	125.71	128.60
50	BZ	9	LYS	CB-CA-C	5.78	121.97	110.40
1	AA	16	A	N9-C4-C5	5.78	108.11	105.80
1	AA	832	G	C5'-C4'-O4'	5.78	116.04	109.10
1	AA	859	G	C4-C5-N7	5.78	113.11	110.80
1	AA	986	U	N1-C2-N3	5.78	118.37	114.90
25	BA	49	C	N3-C4-N4	-5.78	113.95	118.00
26	BB	218	A	C6-N1-C2	-5.78	115.13	118.60
26	BB	358	U	C4'-C3'-C2'	-5.78	96.82	102.60
26	BB	382	A	C5-C6-N6	5.78	128.33	123.70
26	BB	1422	G	N7-C8-N9	5.78	115.99	113.10
30	BF	25	GLU	N-CA-CB	5.78	121.01	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	263	A	N7-C8-N9	5.78	116.69	113.80
1	AA	491	G	N7-C8-N9	5.78	115.99	113.10
1	AA	696	A	O4'-C1'-N9	5.78	112.82	108.20
1	AA	960	U	O4'-C1'-N1	5.78	112.83	108.20
1	AA	1320	C	C5-C6-N1	5.78	123.89	121.00
1	AA	1527	U	N3-C4-O4	-5.78	115.35	119.40
26	BB	20	C	C3'-C2'-C1'	-5.78	96.88	101.50
26	BB	20	C	C5-C6-N1	-5.78	118.11	121.00
26	BB	258	G	N1-C2-N3	-5.78	120.43	123.90
26	BB	327	G	C5-N7-C8	5.78	107.19	104.30
26	BB	506	G	O4'-C1'-N9	5.78	112.82	108.20
26	BB	1103	A	C5-C6-N6	5.78	128.32	123.70
26	BB	1269	A	N9-C4-C5	-5.78	103.49	105.80
26	BB	1713	A	N1-C2-N3	-5.78	126.41	129.30
26	BB	2110	G	C2-N3-C4	5.78	114.79	111.90
26	BB	2346	A	C4-C5-C6	-5.78	114.11	117.00
26	BB	2352	A	C5-C6-N6	-5.78	119.08	123.70
26	BB	2422	C	N3-C2-O2	-5.78	117.85	121.90
1	AA	269	C	P-O3'-C3'	5.78	126.63	119.70
1	AA	690	G	O5'-C5'-C4'	-5.78	100.72	111.70
1	AA	822	U	N3-C2-O2	-5.78	118.16	122.20
1	AA	1355	G	C8-N9-C1'	5.78	134.51	127.00
1	AA	1472	U	N1-C1'-C2'	-5.78	105.64	112.00
1	AA	1473	G	O4'-C1'-N9	-5.78	103.58	108.20
2	AB	12	U	N3-C4-O4	5.78	123.44	119.40
26	BB	830	G	N1-C2-N2	-5.78	111.00	116.20
26	BB	1781	U	N3-C2-O2	-5.78	118.16	122.20
26	BB	2064	C	C4'-C3'-C2'	-5.78	96.82	102.60
26	BB	2479	U	C5-C6-N1	-5.78	119.81	122.70
27	BC	223	ALA	CB-CA-C	5.78	118.77	110.10
26	BB	213	A	C5-C6-N6	-5.78	119.08	123.70
26	BB	443	A	N7-C8-N9	5.78	116.69	113.80
26	BB	758	C	N3-C2-O2	-5.78	117.86	121.90
26	BB	883	G	O4'-C1'-N9	-5.78	103.58	108.20
26	BB	920	A	N7-C8-N9	5.78	116.69	113.80
26	BB	1127	A	C5-C6-N6	-5.78	119.08	123.70
26	BB	1312	U	C4-C5-C6	5.78	123.17	119.70
26	BB	1422	G	C8-N9-C4	-5.78	104.09	106.40
26	BB	1807	G	N1-C2-N2	-5.78	111.00	116.20
26	BB	2202	U	C6-N1-C2	-5.78	117.53	121.00
26	BB	2716	C	O4'-C1'-C2'	-5.78	100.02	105.80
1	AA	213	G	C6-N1-C2	-5.78	121.64	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	266	G	C8-N9-C4	5.78	108.71	106.40
1	AA	424	G	C3'-C2'-C1'	5.78	106.12	101.50
1	AA	439	U	C2-N3-C4	-5.78	123.53	127.00
1	AA	732	C	N1-C2-N3	-5.78	115.16	119.20
1	AA	1190	G	C5-C6-N1	5.78	114.39	111.50
1	AA	1251	A	O4'-C1'-N9	5.78	112.82	108.20
25	BA	79	G	N3-C4-N9	5.78	129.47	126.00
26	BB	151	C	C4'-C3'-C2'	-5.78	96.82	102.60
26	BB	200	U	C5'-C4'-O4'	5.78	116.03	109.10
26	BB	238	C	N1-C1'-C2'	-5.78	105.65	112.00
26	BB	586	A	O4'-C1'-N9	-5.78	103.58	108.20
26	BB	718	A	O3'-P-O5'	-5.78	93.03	104.00
26	BB	934	U	N1-C2-N3	5.78	118.37	114.90
26	BB	1532	A	C5-C6-N1	5.78	120.59	117.70
26	BB	1652	A	C4-C5-C6	-5.78	114.11	117.00
26	BB	1821	A	N1-C2-N3	-5.78	126.41	129.30
26	BB	1885	A	C5-C6-N1	-5.78	114.81	117.70
26	BB	1887	C	N1-C2-O2	5.78	122.37	118.90
26	BB	2221	G	N9-C4-C5	-5.78	103.09	105.40
26	BB	2428	G	C4-C5-N7	-5.78	108.49	110.80
1	AA	1110	A	C5-N7-C8	-5.77	101.01	103.90
1	AA	1184	G	N3-C2-N2	-5.77	115.86	119.90
1	AA	1500	A	C5'-C4'-O4'	5.77	116.03	109.10
3	AC	46	C	C4-C5-C6	5.77	120.29	117.40
26	BB	186	G	C6-N1-C2	-5.77	121.64	125.10
26	BB	445	C	N3-C4-N4	5.77	122.04	118.00
26	BB	1275	A	C2-N3-C4	5.77	113.49	110.60
1	AA	71	A	N9-C1'-C2'	-5.77	105.65	112.00
1	AA	809	G	C3'-C2'-C1'	-5.77	96.88	101.50
1	AA	1150	A	OP1-P-OP2	-5.77	110.94	119.60
1	AA	1165	U	C5-C4-O4	-5.77	122.44	125.90
26	BB	1023	U	N1-C2-O2	5.77	126.84	122.80
26	BB	1322	A	P-O3'-C3'	5.77	126.63	119.70
26	BB	1662	U	C1'-O4'-C4'	5.77	114.52	109.90
26	BB	1681	G	C3'-C2'-C1'	-5.77	96.88	101.50
26	BB	1986	C	N1-C2-N3	-5.77	115.16	119.20
26	BB	2107	G	C8-N9-C4	-5.77	104.09	106.40
26	BB	2312	U	O4'-C4'-C3'	5.77	110.72	106.10
26	BB	2784	U	P-O3'-C3'	5.77	126.63	119.70
1	AA	401	C	C3'-C2'-C1'	5.77	106.12	101.50
1	AA	728	A	N1-C2-N3	-5.77	126.42	129.30
1	AA	844	G	N3-C4-N9	5.77	129.46	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1134	G	P-O3'-C3'	5.77	126.62	119.70
8	AH	30	PHE	CB-CG-CD2	5.77	124.84	120.80
26	BB	1722	A	N9-C1'-C2'	5.77	121.50	114.00
26	BB	2405	G	C1'-O4'-C4'	5.77	114.52	109.90
1	AA	139	A	C2-N3-C4	-5.77	107.72	110.60
1	AA	324	G	C6-C5-N7	-5.77	126.94	130.40
1	AA	335	C	C2-N1-C1'	5.77	125.15	118.80
1	AA	474	G	C5-C6-O6	5.77	132.06	128.60
1	AA	528	C	C2'-C3'-O3'	5.77	122.93	113.70
1	AA	594	U	P-O3'-C3'	5.77	126.62	119.70
1	AA	944	G	C2'-C3'-O3'	5.77	122.93	113.70
1	AA	1142	G	C2-N3-C4	5.77	114.78	111.90
2	AB	18	G	C6-N1-C2	-5.77	121.64	125.10
3	AC	13	A	N1-C6-N6	-5.77	115.14	118.60
26	BB	559	G	C5-N7-C8	-5.77	101.42	104.30
26	BB	848	C	C5'-C4'-O4'	5.77	116.02	109.10
26	BB	1234	U	OP2-P-O3'	5.77	117.89	105.20
26	BB	1633	G	C5-C6-O6	-5.77	125.14	128.60
26	BB	2359	C	P-O3'-C3'	5.77	126.62	119.70
26	BB	2410	G	C1'-O4'-C4'	5.77	114.52	109.90
26	BB	2614	A	C5-N7-C8	-5.77	101.02	103.90
26	BB	2661	G	N9-C1'-C2'	-5.77	105.65	112.00
26	BB	2721	A	C4-C5-C6	5.77	119.89	117.00
26	BB	2754	U	C5-C6-N1	-5.77	119.81	122.70
1	AA	120	A	N9-C4-C5	5.77	108.11	105.80
1	AA	330	C	O4'-C1'-N1	5.77	112.81	108.20
1	AA	431	A	C5-C6-N1	5.77	120.58	117.70
1	AA	464	U	C4'-C3'-C2'	-5.77	96.83	102.60
1	AA	491	G	N9-C4-C5	5.77	107.71	105.40
1	AA	503	C	N1-C2-O2	5.77	122.36	118.90
1	AA	1077	G	N1-C6-O6	5.77	123.36	119.90
1	AA	1244	G	C4-C5-N7	-5.77	108.49	110.80
1	AA	1303	C	O4'-C1'-N1	5.77	112.81	108.20
26	BB	10	A	C5-C6-N1	5.77	120.58	117.70
26	BB	240	C	O4'-C1'-C2'	-5.77	100.03	105.80
26	BB	254	G	N1-C2-N3	-5.77	120.44	123.90
26	BB	439	A	N9-C1'-C2'	-5.77	105.66	112.00
26	BB	1007	C	N3-C2-O2	-5.77	117.86	121.90
26	BB	1526	C	O4'-C1'-N1	5.77	112.81	108.20
26	BB	1556	C	C4-C5-C6	-5.77	114.52	117.40
26	BB	1634	A	C8-N9-C4	-5.77	103.49	105.80
26	BB	1847	A	N1-C2-N3	-5.77	126.42	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2893	A	N9-C4-C5	-5.77	103.49	105.80
1	AA	702	A	C8-N9-C4	-5.77	103.49	105.80
26	BB	498	G	C4'-C3'-C2'	-5.77	96.83	102.60
26	BB	933	A	C6-N1-C2	-5.77	115.14	118.60
26	BB	2232	C	N1-C2-N3	-5.77	115.16	119.20
1	AA	426	U	C4-C5-C6	5.76	123.16	119.70
1	AA	707	U	N1-C2-N3	5.76	118.36	114.90
1	AA	1092	A	C8-N9-C4	-5.76	103.50	105.80
2	AB	40	C	N3-C2-O2	-5.76	117.86	121.90
3	AC	30	U	N1-C1'-C2'	5.76	121.49	114.00
25	BA	76	G	N3-C4-C5	-5.76	125.72	128.60
25	BA	87	U	O4'-C1'-N1	5.76	112.81	108.20
26	BB	167	A	C5-C6-N1	-5.76	114.82	117.70
26	BB	940	G	C5'-C4'-C3'	-5.76	106.78	116.00
26	BB	1492	G	C3'-C2'-C1'	-5.76	96.89	101.50
26	BB	1546	G	N3-C2-N2	-5.76	115.86	119.90
26	BB	1588	G	C3'-C2'-C1'	5.76	106.11	101.50
26	BB	2155	U	N3-C2-O2	-5.76	118.17	122.20
26	BB	2219	U	C5-C4-O4	5.76	129.36	125.90
26	BB	2304	G	C5-C6-O6	-5.76	125.14	128.60
26	BB	2389	G	C3'-C2'-C1'	5.76	106.11	101.50
26	BB	2415	G	C5'-C4'-O4'	5.76	116.02	109.10
1	AA	764	C	C3'-C2'-C1'	-5.76	96.89	101.50
1	AA	783	C	N1-C2-N3	-5.76	115.17	119.20
1	AA	830	G	O4'-C1'-C2'	-5.76	100.04	105.80
1	AA	1189	U	N1-C2-O2	-5.76	118.77	122.80
3	AC	46	C	C4'-C3'-C2'	-5.76	96.84	102.60
26	BB	170	U	C1'-O4'-C4'	-5.76	105.29	109.90
26	BB	548	G	C6-N1-C2	-5.76	121.64	125.10
26	BB	1495	A	N1-C2-N3	-5.76	126.42	129.30
26	BB	1701	A	C4'-C3'-C2'	-5.76	96.84	102.60
26	BB	1853	A	C4'-C3'-C2'	-5.76	96.84	102.60
26	BB	2859	G	N7-C8-N9	5.76	115.98	113.10
1	AA	81	A	C5'-C4'-C3'	5.76	125.22	116.00
1	AA	112	G	N3-C4-N9	5.76	129.46	126.00
1	AA	1195	C	N3-C4-C5	-5.76	119.59	121.90
3	AC	38	G	C5-N7-C8	-5.76	101.42	104.30
4	AD	67	C	N3-C4-N4	5.76	122.03	118.00
6	AF	167	TYR	CB-CG-CD1	-5.76	117.54	121.00
26	BB	360	U	C5-C6-N1	-5.76	119.82	122.70
26	BB	405	U	C3'-C2'-C1'	-5.76	96.89	101.50
26	BB	537	G	O4'-C1'-N9	-5.76	103.59	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	699	A	N1-C6-N6	-5.76	115.14	118.60
26	BB	1008	A	O4'-C1'-C2'	-5.76	100.04	105.80
26	BB	2060	A	C6-C5-N7	-5.76	128.27	132.30
26	BB	2541	A	C2'-C3'-O3'	5.76	122.92	113.70
31	BG	173	ASP	CB-CG-OD2	5.76	123.49	118.30
1	AA	539	A	C4'-C3'-C2'	-5.76	96.84	102.60
1	AA	1063	C	P-O3'-C3'	5.76	126.61	119.70
1	AA	1154	G	O4'-C1'-N9	5.76	112.81	108.20
1	AA	1297	G	C6-N1-C2	-5.76	121.64	125.10
1	AA	1348	U	C4'-C3'-C2'	-5.76	96.84	102.60
26	BB	15	G	P-O3'-C3'	5.76	126.61	119.70
26	BB	486	C	C3'-C2'-C1'	-5.76	96.89	101.50
26	BB	550	C	C6-N1-C2	5.76	122.60	120.30
26	BB	579	G	N1-C2-N3	5.76	127.36	123.90
26	BB	685	A	C3'-C2'-C1'	5.76	106.11	101.50
26	BB	700	G	C5-N7-C8	5.76	107.18	104.30
26	BB	1527	G	N1-C6-O6	-5.76	116.44	119.90
26	BB	1548	A	C6-C5-N7	5.76	136.33	132.30
26	BB	1627	G	N3-C2-N2	-5.76	115.87	119.90
26	BB	1632	A	C4-C5-N7	-5.76	107.82	110.70
26	BB	2681	C	C5'-C4'-C3'	-5.76	106.78	116.00
26	BB	2869	G	N1-C6-O6	5.76	123.36	119.90
1	AA	373	A	O4'-C4'-C3'	-5.76	98.24	104.00
1	AA	379	C	N1-C2-N3	5.76	123.23	119.20
1	AA	1177	G	N3-C4-N9	5.76	129.46	126.00
1	AA	1523	G	N3-C4-C5	-5.76	125.72	128.60
26	BB	568	U	C6-N1-C2	-5.76	117.55	121.00
26	BB	1769	U	C4'-C3'-C2'	-5.76	96.84	102.60
26	BB	1786	A	N1-C6-N6	-5.76	115.14	118.60
1	AA	83	C	C3'-C2'-C1'	5.76	106.11	101.50
1	AA	182	A	C5'-C4'-C3'	-5.76	106.79	116.00
1	AA	509	A	O4'-C4'-C3'	-5.76	98.24	104.00
1	AA	1139	G	C5'-C4'-O4'	5.76	116.01	109.10
1	AA	1231	G	O4'-C4'-C3'	5.76	110.70	106.10
1	AA	1368	A	C2-N3-C4	-5.76	107.72	110.60
26	BB	337	C	C5'-C4'-C3'	5.76	125.21	116.00
26	BB	389	G	O4'-C1'-N9	5.76	112.81	108.20
26	BB	422	A	N7-C8-N9	-5.76	110.92	113.80
26	BB	870	U	N3-C4-O4	5.76	123.43	119.40
26	BB	964	C	C3'-C2'-C1'	-5.76	96.89	101.50
26	BB	1202	G	OP2-P-O3'	5.76	117.86	105.20
26	BB	1384	A	C4'-C3'-C2'	5.76	108.36	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1721	G	N1-C6-O6	-5.76	116.45	119.90
26	BB	1837	C	C5-C4-N4	5.76	124.23	120.20
26	BB	2017	U	N3-C4-C5	-5.76	111.15	114.60
26	BB	2127	G	C4-C5-N7	-5.76	108.50	110.80
26	BB	2274	A	C4-C5-N7	-5.76	107.82	110.70
26	BB	2428	G	N1-C6-O6	-5.76	116.45	119.90
26	BB	2494	G	N7-C8-N9	5.76	115.98	113.10
26	BB	2635	A	C4-C5-C6	-5.76	114.12	117.00
34	BJ	93	ARG	NE-CZ-NH1	-5.76	117.42	120.30
1	AA	354	G	C5-N7-C8	-5.75	101.42	104.30
1	AA	580	C	N1-C1'-C2'	-5.75	105.67	112.00
1	AA	987	G	N3-C4-C5	-5.75	125.72	128.60
1	AA	1187	G	N7-C8-N9	5.75	115.98	113.10
25	BA	40	U	C2-N1-C1'	5.75	124.61	117.70
26	BB	1483	G	P-O3'-C3'	5.75	126.61	119.70
26	BB	1554	U	C4'-C3'-C2'	5.75	108.36	102.60
26	BB	1718	G	C5-N7-C8	-5.75	101.42	104.30
48	BX	93	ARG	NH1-CZ-NH2	-5.75	113.07	119.40
1	AA	11	G	C6-C5-N7	-5.75	126.95	130.40
1	AA	38	G	C4-C5-N7	-5.75	108.50	110.80
1	AA	873	A	N1-C6-N6	-5.75	115.15	118.60
1	AA	1262	C	O4'-C1'-N1	5.75	112.80	108.20
1	AA	1284	C	N1-C2-O2	5.75	122.35	118.90
2	AB	72	U	C2-N3-C4	-5.75	123.55	127.00
26	BB	112	U	N1-C2-N3	5.75	118.35	114.90
26	BB	123	G	C2-N3-C4	-5.75	109.02	111.90
26	BB	398	C	N1-C1'-C2'	-5.75	105.67	112.00
26	BB	1129	A	N7-C8-N9	5.75	116.68	113.80
26	BB	1301	A	N1-C6-N6	-5.75	115.15	118.60
26	BB	1629	U	C3'-C2'-C1'	-5.75	96.90	101.50
26	BB	1858	A	N3-C4-C5	-5.75	122.77	126.80
26	BB	1936	A	C4-C5-N7	-5.75	107.82	110.70
26	BB	2216	G	N9-C4-C5	5.75	107.70	105.40
26	BB	2511	U	O3'-P-O5'	-5.75	93.07	104.00
1	AA	225	C	N3-C4-C5	5.75	124.20	121.90
1	AA	592	G	N3-C2-N2	-5.75	115.87	119.90
1	AA	1437	A	O5'-C5'-C4'	5.75	122.63	111.70
4	AD	73	A	C5-N7-C8	-5.75	101.03	103.90
26	BB	114	U	C3'-C2'-C1'	-5.75	96.90	101.50
26	BB	610	C	C5'-C4'-O4'	5.75	116.00	109.10
26	BB	1447	C	O4'-C1'-N1	5.75	112.80	108.20
26	BB	1540	G	C4'-C3'-C2'	-5.75	96.85	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1869	G	C5'-C4'-O4'	5.75	116.00	109.10
26	BB	2469	A	N9-C4-C5	5.75	108.10	105.80
1	AA	930	C	P-O3'-C3'	5.75	126.60	119.70
4	AD	32	G	N3-C4-N9	5.75	129.45	126.00
25	BA	88	C	O4'-C4'-C3'	-5.75	98.25	104.00
26	BB	217	A	C1'-O4'-C4'	-5.75	105.30	109.90
26	BB	524	G	C4-C5-N7	5.75	113.10	110.80
26	BB	625	G	C5-N7-C8	-5.75	101.42	104.30
26	BB	876	C	C5'-C4'-C3'	-5.75	106.80	116.00
26	BB	1007	C	C5-C4-N4	-5.75	116.17	120.20
1	AA	485	U	N1-C2-O2	5.75	126.82	122.80
1	AA	493	A	N1-C2-N3	-5.75	126.43	129.30
1	AA	570	G	N3-C4-C5	-5.75	125.73	128.60
1	AA	571	U	N1-C2-O2	5.75	126.82	122.80
1	AA	846	G	C5-N7-C8	-5.75	101.42	104.30
1	AA	937	A	C2-N3-C4	5.75	113.47	110.60
1	AA	1199	U	C4-C5-C6	5.75	123.15	119.70
2	AB	2	G	C5'-C4'-O4'	5.75	116.00	109.10
2	AB	59	G	C6-C5-N7	-5.75	126.95	130.40
4	AD	13	C	N3-C2-O2	-5.75	117.88	121.90
26	BB	224	U	C5'-C4'-O4'	5.75	116.00	109.10
26	BB	388	G	C4-C5-N7	-5.75	108.50	110.80
26	BB	1179	G	N3-C2-N2	5.75	123.92	119.90
26	BB	1187	G	N3-C4-C5	-5.75	125.73	128.60
26	BB	1332	G	P-O3'-C3'	5.75	126.60	119.70
26	BB	1434	A	N1-C2-N3	5.75	132.17	129.30
26	BB	1612	C	N3-C4-C5	5.75	124.20	121.90
26	BB	2339	C	C5-C6-N1	5.75	123.87	121.00
26	BB	2423	U	C5-C4-O4	-5.75	122.45	125.90
26	BB	2839	G	O4'-C1'-N9	-5.75	103.60	108.20
26	BB	2869	G	N3-C4-C5	-5.75	125.73	128.60
1	AA	755	G	O5'-P-OP2	-5.75	100.53	105.70
1	AA	792	A	C6-C5-N7	5.75	136.32	132.30
25	BA	50	A	O4'-C1'-N9	5.75	112.80	108.20
26	BB	208	C	N1-C2-O2	5.75	122.35	118.90
26	BB	358	U	O4'-C4'-C3'	5.75	110.70	106.10
26	BB	1194	A	C6-N1-C2	5.75	122.05	118.60
26	BB	2240	U	N3-C2-O2	-5.75	118.18	122.20
26	BB	2635	A	C6-N1-C2	-5.75	115.15	118.60
26	BB	2875	C	N1-C2-O2	5.75	122.35	118.90
1	AA	122	G	C6-N1-C2	-5.75	121.65	125.10
1	AA	1238	A	O4'-C1'-N9	5.75	112.80	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1435	G	N1-C2-N3	-5.75	120.45	123.90
1	AA	1480	A	C5-C6-N1	-5.75	114.83	117.70
26	BB	88	G	C5'-C4'-C3'	-5.75	106.81	116.00
26	BB	252	G	C8-N9-C4	-5.75	104.10	106.40
26	BB	1210	G	C2-N3-C4	5.75	114.77	111.90
26	BB	2885	G	N1-C2-N3	-5.75	120.45	123.90
27	BC	102	ASP	CB-CG-OD1	5.75	123.47	118.30
1	AA	215	C	C3'-C2'-C1'	-5.74	96.91	101.50
1	AA	777	A	C5-N7-C8	5.74	106.77	103.90
1	AA	790	A	C4-C5-C6	-5.74	114.13	117.00
5	AE	31	PHE	CB-CG-CD2	5.74	124.82	120.80
25	BA	87	U	O4'-C1'-C2'	-5.74	100.06	105.80
26	BB	140	C	C3'-C2'-C1'	5.74	106.09	101.50
26	BB	162	U	C4-C5-C6	5.74	123.15	119.70
26	BB	493	G	N9-C4-C5	5.74	107.70	105.40
26	BB	496	G	C6-N1-C2	5.74	128.55	125.10
26	BB	706	A	N1-C2-N3	-5.74	126.43	129.30
26	BB	750	A	C2-N3-C4	-5.74	107.73	110.60
26	BB	1097	U	N3-C4-O4	5.74	123.42	119.40
26	BB	1220	G	P-O5'-C5'	5.74	130.09	120.90
26	BB	1231	U	C5-C6-N1	-5.74	119.83	122.70
26	BB	1633	G	C5-C6-N1	5.74	114.37	111.50
26	BB	2023	C	N3-C4-N4	-5.74	113.98	118.00
26	BB	2090	A	N3-C4-C5	-5.74	122.78	126.80
26	BB	2212	A	N1-C2-N3	5.74	132.17	129.30
26	BB	2754	U	O4'-C1'-N1	5.74	112.79	108.20
26	BB	2903	U	C5-C6-N1	-5.74	119.83	122.70
1	AA	539	A	N1-C2-N3	-5.74	126.43	129.30
26	BB	981	A	O4'-C4'-C3'	5.74	110.69	106.10
26	BB	1288	G	C5-C6-N1	5.74	114.37	111.50
26	BB	1562	U	O4'-C1'-N1	5.74	112.79	108.20
26	BB	1603	A	N9-C4-C5	-5.74	103.50	105.80
27	BC	43	ASP	CB-CG-OD2	-5.74	113.13	118.30
1	AA	282	A	C4-C5-N7	-5.74	107.83	110.70
1	AA	310	G	N1-C6-O6	5.74	123.34	119.90
1	AA	395	C	C6-N1-C2	-5.74	118.00	120.30
1	AA	529	G	O4'-C1'-N9	5.74	112.79	108.20
1	AA	1249	C	P-O3'-C3'	5.74	126.59	119.70
1	AA	1301	U	N3-C4-O4	5.74	123.42	119.40
1	AA	1328	C	C3'-C2'-C1'	-5.74	96.91	101.50
26	BB	56	A	N9-C1'-C2'	-5.74	105.69	112.00
26	BB	267	C	N1-C2-O2	5.74	122.34	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	714	U	C5-C6-N1	5.74	125.57	122.70
26	BB	899	A	N9-C1'-C2'	-5.74	105.69	112.00
26	BB	966	G	C5'-C4'-O4'	5.74	115.99	109.10
26	BB	1116	G	C5-C6-N1	5.74	114.37	111.50
26	BB	1285	A	C5'-C4'-C3'	-5.74	106.81	116.00
26	BB	2024	G	C5-N7-C8	5.74	107.17	104.30
26	BB	2204	G	O4'-C4'-C3'	5.74	110.69	106.10
26	BB	2216	G	C4-C5-N7	-5.74	108.50	110.80
26	BB	2413	G	C5-C6-N1	-5.74	108.63	111.50
26	BB	2474	U	C6-N1-C2	5.74	124.44	121.00
26	BB	2767	C	C2-N1-C1'	-5.74	112.49	118.80
26	BB	2773	C	C1'-O4'-C4'	5.74	114.49	109.90
32	BH	150	TYR	CB-CG-CD1	-5.74	117.56	121.00
40	BP	97	ILE	CA-CB-CG1	5.74	121.91	111.00
46	BV	55	VAL	CA-CB-CG2	5.74	119.51	110.90
1	AA	168	G	O5'-P-OP2	-5.74	100.53	105.70
1	AA	255	G	C3'-C2'-C1'	5.74	106.09	101.50
1	AA	766	A	C5'-C4'-C3'	-5.74	106.82	116.00
1	AA	816	A	C6-C5-N7	-5.74	128.28	132.30
1	AA	1104	G	C4-C5-N7	-5.74	108.50	110.80
1	AA	1126	U	O5'-P-OP1	5.74	117.59	110.70
1	AA	1192	C	C5'-C4'-O4'	5.74	115.99	109.10
1	AA	1495	U	C1'-O4'-C4'	5.74	114.49	109.90
2	AB	59	G	N7-C8-N9	5.74	115.97	113.10
25	BA	25	U	N3-C4-C5	-5.74	111.16	114.60
26	BB	566	U	O4'-C4'-C3'	5.74	110.69	106.10
26	BB	1149	G	O4'-C1'-N9	5.74	112.79	108.20
26	BB	1197	G	C5-C6-O6	5.74	132.04	128.60
26	BB	1456	G	C8-N9-C1'	5.74	134.46	127.00
26	BB	1644	C	N3-C4-N4	5.74	122.02	118.00
26	BB	1832	C	C5'-C4'-O4'	5.74	115.99	109.10
26	BB	2100	G	N3-C4-N9	5.74	129.44	126.00
26	BB	2238	G	N7-C8-N9	5.74	115.97	113.10
26	BB	2452	C	N3-C4-C5	-5.74	119.60	121.90
33	BI	61	VAL	CA-CB-CG1	5.74	119.51	110.90
1	AA	737	C	C3'-C2'-C1'	5.74	106.09	101.50
1	AA	1037	C	C3'-C2'-C1'	5.74	106.09	101.50
1	AA	1512	U	N1-C2-N3	5.74	118.34	114.90
2	AB	24	G	N1-C2-N2	5.74	121.36	116.20
26	BB	315	G	C5-C6-N1	5.74	114.37	111.50
26	BB	503	A	N1-C6-N6	5.74	122.04	118.60
26	BB	1522	A	N3-C4-N9	-5.74	122.81	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1850	G	N3-C2-N2	5.74	123.92	119.90
26	BB	1933	G	N1-C2-N3	5.74	127.34	123.90
26	BB	2424	C	C5-C4-N4	-5.74	116.18	120.20
1	AA	101	A	C6-N1-C2	5.74	122.04	118.60
1	AA	523	A	P-O5'-C5'	5.74	130.08	120.90
1	AA	929	G	N1-C2-N2	5.74	121.36	116.20
1	AA	1112	C	C4-C5-C6	-5.74	114.53	117.40
1	AA	1343	G	O4'-C4'-C3'	5.74	110.69	106.10
26	BB	535	G	N3-C2-N2	-5.74	115.89	119.90
26	BB	608	A	C5'-C4'-O4'	5.74	115.98	109.10
26	BB	762	U	C2-N1-C1'	-5.74	110.82	117.70
26	BB	2399	G	O4'-C1'-N9	-5.74	103.61	108.20
1	AA	185	U	N3-C4-O4	5.73	123.41	119.40
26	BB	826	U	C3'-C2'-C1'	5.73	106.09	101.50
26	BB	1634	A	C5'-C4'-O4'	5.73	115.98	109.10
26	BB	1997	C	C2-N3-C4	-5.73	117.03	119.90
26	BB	2211	A	N9-C4-C5	5.73	108.09	105.80
26	BB	2268	A	N3-C4-C5	-5.73	122.79	126.80
26	BB	2366	A	N7-C8-N9	5.73	116.67	113.80
25	BA	50	A	P-O3'-C3'	5.73	126.58	119.70
26	BB	9	G	N9-C4-C5	5.73	107.69	105.40
26	BB	212	G	N3-C2-N2	-5.73	115.89	119.90
26	BB	227	A	C5-C6-N1	5.73	120.57	117.70
26	BB	610	C	N1-C2-N3	-5.73	115.19	119.20
26	BB	921	C	C1'-O4'-C4'	5.73	114.49	109.90
26	BB	949	G	C6-C5-N7	-5.73	126.96	130.40
26	BB	984	A	C3'-C2'-C1'	5.73	106.09	101.50
26	BB	1388	G	C6-C5-N7	-5.73	126.96	130.40
26	BB	1567	G	C5-N7-C8	-5.73	101.43	104.30
26	BB	1622	G	N3-C4-C5	-5.73	125.73	128.60
26	BB	1840	G	C5-N7-C8	-5.73	101.43	104.30
26	BB	2406	A	C3'-C2'-C1'	5.73	106.09	101.50
26	BB	2620	C	N1-C2-O2	5.73	122.34	118.90
26	BB	2736	A	C5'-C4'-C3'	-5.73	106.83	116.00
1	AA	262	A	N1-C6-N6	5.73	122.04	118.60
1	AA	551	U	N3-C2-O2	-5.73	118.19	122.20
1	AA	753	A	O5'-P-OP2	-5.73	100.54	105.70
1	AA	818	G	C5-C6-N1	-5.73	108.64	111.50
1	AA	1423	G	N1-C2-N3	-5.73	120.46	123.90
1	AA	1528	U	O4'-C4'-C3'	5.73	110.68	106.10
2	AB	38	A	N1-C6-N6	-5.73	115.16	118.60
7	AG	127	ARG	CD-NE-CZ	5.73	131.62	123.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	AH	44	ARG	NE-CZ-NH2	-5.73	117.44	120.30
23	AW	50	PHE	CG-CD2-CE2	-5.73	114.50	120.80
26	BB	8	C	C5'-C4'-O4'	5.73	115.98	109.10
26	BB	60	G	C5'-C4'-C3'	-5.73	106.83	116.00
26	BB	110	G	N3-C4-C5	-5.73	125.73	128.60
26	BB	423	A	C8-N9-C4	5.73	108.09	105.80
26	BB	798	G	N9-C4-C5	5.73	107.69	105.40
26	BB	2008	C	P-O5'-C5'	5.73	130.07	120.90
26	BB	2261	C	C4-C5-C6	-5.73	114.53	117.40
26	BB	2631	G	C6-C5-N7	-5.73	126.96	130.40
26	BB	2731	G	C2-N3-C4	5.73	114.77	111.90
1	AA	289	G	N3-C2-N2	-5.73	115.89	119.90
1	AA	566	G	C8-N9-C4	-5.73	104.11	106.40
1	AA	583	A	C5'-C4'-O4'	5.73	115.97	109.10
1	AA	651	C	C6-N1-C2	-5.73	118.01	120.30
1	AA	721	G	C8-N9-C4	-5.73	104.11	106.40
1	AA	761	G	C4-C5-C6	5.73	122.24	118.80
1	AA	1297	G	O4'-C1'-C2'	-5.73	100.07	105.80
6	AF	202	PHE	CB-CG-CD1	5.73	124.81	120.80
26	BB	281	C	O4'-C1'-N1	5.73	112.78	108.20
26	BB	693	A	C8-N9-C4	-5.73	103.51	105.80
26	BB	988	A	N9-C4-C5	5.73	108.09	105.80
26	BB	1738	G	C2-N3-C4	5.73	114.77	111.90
26	BB	2006	C	N1-C2-O2	5.73	122.34	118.90
26	BB	2545	G	N3-C4-C5	-5.73	125.73	128.60
26	BB	2588	G	C4-C5-N7	-5.73	108.51	110.80
26	BB	2669	G	C4-C5-C6	5.73	122.24	118.80
1	AA	604	G	C5-C6-O6	-5.73	125.16	128.60
1	AA	749	A	C4'-C3'-O3'	5.73	124.45	113.00
1	AA	777	A	C4-C5-N7	-5.73	107.84	110.70
1	AA	852	G	N9-C4-C5	-5.73	103.11	105.40
1	AA	915	A	C4-C5-N7	-5.73	107.84	110.70
1	AA	950	U	N3-C4-O4	5.73	123.41	119.40
1	AA	1229	A	C6-C5-N7	5.73	136.31	132.30
4	AD	59	A	C5-C6-N6	-5.73	119.12	123.70
26	BB	1335	C	C5-C6-N1	5.73	123.86	121.00
26	BB	1359	A	C5'-C4'-C3'	-5.73	106.83	116.00
26	BB	1579	A	N7-C8-N9	-5.73	110.94	113.80
26	BB	1693	U	O4'-C4'-C3'	5.73	110.68	106.10
26	BB	1814	G	N7-C8-N9	-5.73	110.24	113.10
26	BB	1976	U	P-O3'-C3'	5.73	126.57	119.70
26	BB	2430	A	C5-C6-N1	5.73	120.56	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2761	A	C8-N9-C4	-5.73	103.51	105.80
26	BB	2832	U	C5-C6-N1	-5.73	119.84	122.70
1	AA	177	G	N1-C6-O6	-5.73	116.47	119.90
1	AA	747	A	N1-C2-N3	-5.73	126.44	129.30
1	AA	1413	A	C8-N9-C4	-5.73	103.51	105.80
25	BA	3	C	O5'-P-OP2	-5.73	100.55	105.70
26	BB	479	A	C2-N3-C4	-5.73	107.74	110.60
26	BB	739	A	C4-C5-C6	-5.73	114.14	117.00
26	BB	1100	C	C5'-C4'-O4'	5.73	115.97	109.10
26	BB	2324	U	N3-C2-O2	-5.73	118.19	122.20
26	BB	2870	C	C5-C4-N4	5.73	124.21	120.20
1	AA	115	G	C6-N1-C2	-5.72	121.67	125.10
1	AA	399	G	P-O3'-C3'	5.72	126.57	119.70
1	AA	906	A	N9-C4-C5	-5.72	103.51	105.80
1	AA	1311	A	C6-C5-N7	-5.72	128.29	132.30
1	AA	1475	G	C1'-O4'-C4'	-5.72	105.32	109.90
1	AA	1539	C	C2-N3-C4	5.72	122.76	119.90
2	AB	38	A	C8-N9-C4	-5.72	103.51	105.80
26	BB	13	A	N1-C6-N6	-5.72	115.17	118.60
26	BB	214	G	N1-C2-N3	-5.72	120.47	123.90
26	BB	238	C	C3'-C2'-C1'	-5.72	96.92	101.50
26	BB	406	G	C8-N9-C4	-5.72	104.11	106.40
26	BB	491	G	C5-C6-O6	-5.72	125.17	128.60
26	BB	1491	G	C5'-C4'-O4'	5.72	115.97	109.10
26	BB	1714	U	C2-N1-C1'	5.72	124.57	117.70
26	BB	2138	G	C6-N1-C2	5.72	128.53	125.10
26	BB	2158	A	P-O3'-C3'	5.72	126.57	119.70
26	BB	2211	A	C4-C5-C6	5.72	119.86	117.00
26	BB	2331	G	N3-C2-N2	5.72	123.91	119.90
1	AA	278	G	O4'-C4'-C3'	5.72	110.68	106.10
1	AA	349	A	O4'-C1'-N9	5.72	112.78	108.20
1	AA	749	A	C5-C6-N1	5.72	120.56	117.70
1	AA	1051	C	O4'-C1'-N1	5.72	112.78	108.20
25	BA	42	C	P-O3'-C3'	5.72	126.57	119.70
25	BA	93	C	C2-N3-C4	5.72	122.76	119.90
26	BB	391	A	N1-C6-N6	-5.72	115.17	118.60
26	BB	675	A	C5'-C4'-O4'	5.72	115.97	109.10
26	BB	1010	A	N1-C2-N3	-5.72	126.44	129.30
26	BB	1325	U	C1'-O4'-C4'	5.72	114.48	109.90
26	BB	1441	G	N1-C2-N3	-5.72	120.47	123.90
26	BB	1476	U	N3-C2-O2	-5.72	118.19	122.20
26	BB	1733	G	C4-C5-N7	-5.72	108.51	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1789	A	N3-C4-C5	5.72	130.81	126.80
26	BB	1871	A	O4'-C1'-N9	5.72	112.78	108.20
26	BB	2554	U	C4-C5-C6	5.72	123.13	119.70
26	BB	2875	C	N3-C4-N4	-5.72	113.99	118.00
1	AA	471	U	N1-C2-O2	5.72	126.81	122.80
4	AD	28	U	C1'-O4'-C4'	5.72	114.48	109.90
26	BB	326	G	N9-C4-C5	5.72	107.69	105.40
26	BB	330	A	P-O3'-C3'	5.72	126.57	119.70
26	BB	458	G	N9-C1'-C2'	5.72	121.44	114.00
26	BB	825	A	O4'-C1'-N9	5.72	112.78	108.20
26	BB	1811	G	C4-C5-C6	5.72	122.23	118.80
28	BD	247	TRP	NE1-CE2-CD2	-5.72	101.58	107.30
1	AA	168	G	C8-N9-C4	-5.72	104.11	106.40
1	AA	671	G	C8-N9-C4	-5.72	104.11	106.40
1	AA	775	G	C1'-O4'-C4'	-5.72	105.32	109.90
1	AA	893	C	C4'-C3'-C2'	-5.72	96.88	102.60
1	AA	898	G	C4-C5-N7	5.72	113.09	110.80
1	AA	1035	A	C2-N3-C4	5.72	113.46	110.60
26	BB	338	G	N3-C4-N9	5.72	129.43	126.00
26	BB	744	U	C4-C5-C6	5.72	123.13	119.70
26	BB	1107	G	C4-C5-N7	-5.72	108.51	110.80
26	BB	1335	C	C5-C4-N4	5.72	124.20	120.20
26	BB	1337	G	C2-N3-C4	5.72	114.76	111.90
26	BB	1637	A	C5-C6-N6	-5.72	119.12	123.70
26	BB	1798	U	C3'-C2'-C1'	5.72	106.08	101.50
26	BB	1842	G	N7-C8-N9	5.72	115.96	113.10
26	BB	1952	A	C5-N7-C8	-5.72	101.04	103.90
26	BB	2458	G	C6-C5-N7	-5.72	126.97	130.40
1	AA	716	A	C4-C5-N7	5.72	113.56	110.70
10	AJ	52	ARG	NE-CZ-NH1	5.72	123.16	120.30
26	BB	689	A	N7-C8-N9	-5.72	110.94	113.80
26	BB	1382	G	C6-C5-N7	-5.72	126.97	130.40
26	BB	1421	G	C8-N9-C4	-5.72	104.11	106.40
26	BB	1436	G	N3-C4-N9	5.72	129.43	126.00
26	BB	2528	U	C4-C5-C6	5.72	123.13	119.70
32	BH	42	VAL	CA-CB-CG1	5.72	119.48	110.90
1	AA	345	C	P-O3'-C3'	5.72	126.56	119.70
1	AA	547	A	C1'-O4'-C4'	5.72	114.47	109.90
1	AA	807	A	N7-C8-N9	5.72	116.66	113.80
1	AA	912	C	C5-C4-N4	-5.72	116.20	120.20
1	AA	914	A	N3-C4-C5	-5.72	122.80	126.80
1	AA	936	C	C6-N1-C1'	5.72	127.66	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1084	G	C4'-C3'-C2'	-5.72	96.88	102.60
1	AA	1303	C	N1-C2-O2	5.72	122.33	118.90
2	AB	56	C	P-O3'-C3'	5.72	126.56	119.70
11	AK	65	PHE	CB-CG-CD1	-5.72	116.80	120.80
12	AL	63	TYR	CB-CG-CD2	5.72	124.43	121.00
24	AX	66	ARG	CA-CB-CG	5.72	125.98	113.40
26	BB	54	G	C8-N9-C1'	5.72	134.43	127.00
26	BB	586	A	C8-N9-C4	-5.72	103.51	105.80
26	BB	655	A	C4-C5-C6	-5.72	114.14	117.00
26	BB	782	A	N1-C2-N3	-5.72	126.44	129.30
26	BB	1678	A	C4-C5-C6	5.72	119.86	117.00
26	BB	2253	G	C5-N7-C8	5.72	107.16	104.30
26	BB	2829	A	N3-C4-C5	-5.72	122.80	126.80
1	AA	294	U	O4'-C4'-C3'	5.71	110.67	106.10
1	AA	758	C	C4-C5-C6	-5.71	114.54	117.40
1	AA	895	G	C5-C6-O6	5.71	132.03	128.60
1	AA	1376	U	C2-N3-C4	-5.71	123.57	127.00
2	AB	38	A	O4'-C1'-C2'	5.71	112.74	107.60
3	AC	48	C	C4-C5-C6	5.71	120.26	117.40
26	BB	205	G	C5-N7-C8	-5.71	101.44	104.30
26	BB	342	A	C5'-C4'-C3'	-5.71	106.86	116.00
26	BB	558	U	C4-C5-C6	5.71	123.13	119.70
26	BB	618	G	C4-C5-N7	-5.71	108.51	110.80
26	BB	966	G	N1-C6-O6	-5.71	116.47	119.90
26	BB	1085	A	C1'-O4'-C4'	-5.71	105.33	109.90
26	BB	1194	A	N1-C2-N3	-5.71	126.44	129.30
26	BB	1744	A	C6-C5-N7	5.71	136.30	132.30
26	BB	1889	A	C1'-O4'-C4'	5.71	114.47	109.90
26	BB	2122	U	C4'-C3'-C2'	-5.71	96.89	102.60
26	BB	2306	C	C6-N1-C2	-5.71	118.01	120.30
26	BB	2397	G	C5'-C4'-O4'	5.71	115.96	109.10
26	BB	2639	A	C6-C5-N7	5.71	136.30	132.30
26	BB	2758	A	O3'-P-O5'	-5.71	93.14	104.00
26	BB	2861	U	C5'-C4'-O4'	5.71	115.96	109.10
1	AA	694	A	N1-C6-N6	5.71	122.03	118.60
1	AA	774	G	P-O3'-C3'	-5.71	112.84	119.70
1	AA	805	C	O4'-C1'-N1	5.71	112.77	108.20
1	AA	1124	G	N1-C2-N2	5.71	121.34	116.20
1	AA	1250	A	N1-C6-N6	-5.71	115.17	118.60
26	BB	406	G	C2-N3-C4	-5.71	109.04	111.90
26	BB	929	U	C5'-C4'-O4'	5.71	115.96	109.10
26	BB	2131	U	C4-C5-C6	5.71	123.13	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2230	G	C4-C5-C6	5.71	122.23	118.80
26	BB	2501	C	C4'-C3'-C2'	5.71	108.31	102.60
1	AA	1433	A	C1'-O4'-C4'	5.71	114.47	109.90
1	AA	1512	U	O4'-C1'-N1	5.71	112.77	108.20
2	AB	9	A	O4'-C4'-C3'	5.71	110.67	106.10
6	AF	178	ARG	C-N-CA	5.71	135.98	121.70
26	BB	213	A	C5-C6-N1	5.71	120.56	117.70
26	BB	1289	C	C5-C6-N1	5.71	123.86	121.00
26	BB	2599	G	C5-C6-N1	5.71	114.36	111.50
26	BB	2745	C	O4'-C1'-N1	5.71	112.77	108.20
27	BC	71	ARG	NE-CZ-NH1	5.71	123.16	120.30
1	AA	140	U	C5-C6-N1	-5.71	119.84	122.70
1	AA	154	U	C5-C4-O4	-5.71	122.47	125.90
1	AA	287	U	C4'-C3'-C2'	-5.71	96.89	102.60
1	AA	1080	A	N7-C8-N9	5.71	116.66	113.80
1	AA	1208	C	C5-C4-N4	-5.71	116.20	120.20
26	BB	464	U	C6-N1-C2	-5.71	117.57	121.00
26	BB	1523	U	N3-C4-O4	5.71	123.40	119.40
26	BB	2246	G	C3'-C2'-C1'	5.71	106.07	101.50
26	BB	2266	A	N7-C8-N9	5.71	116.66	113.80
26	BB	2461	A	N9-C4-C5	5.71	108.08	105.80
1	AA	347	G	N9-C1'-C2'	-5.71	105.72	112.00
1	AA	735	C	N1-C2-O2	5.71	122.33	118.90
1	AA	779	C	C5-C4-N4	-5.71	116.20	120.20
1	AA	975	A	C5'-C4'-C3'	-5.71	106.87	116.00
1	AA	1368	A	C5-C6-N1	5.71	120.56	117.70
3	AC	50	U	P-O3'-C3'	5.71	126.55	119.70
25	BA	108	A	O4'-C1'-N9	5.71	112.77	108.20
26	BB	69	C	N3-C2-O2	-5.71	117.90	121.90
26	BB	100	U	C5'-C4'-O4'	5.71	115.95	109.10
26	BB	148	U	C5'-C4'-O4'	5.71	115.95	109.10
26	BB	214	G	C8-N9-C4	-5.71	104.12	106.40
26	BB	570	G	N1-C2-N3	-5.71	120.47	123.90
26	BB	1393	A	C8-N9-C4	-5.71	103.52	105.80
26	BB	1667	G	N7-C8-N9	5.71	115.95	113.10
26	BB	1820	U	C6-N1-C2	-5.71	117.58	121.00
26	BB	2889	C	N1-C2-O2	5.71	122.33	118.90
1	AA	715	A	C2-N3-C4	5.71	113.45	110.60
1	AA	904	U	C2-N3-C4	-5.71	123.58	127.00
1	AA	974	A	C5-C6-N6	5.71	128.26	123.70
1	AA	1475	G	C5-C6-N1	-5.71	108.65	111.50
1	AA	1530	G	N3-C4-N9	5.71	129.42	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	220	G	C5-C6-O6	5.71	132.02	128.60
26	BB	605	G	C4-C5-C6	5.71	122.22	118.80
26	BB	697	G	N9-C4-C5	5.71	107.68	105.40
26	BB	1001	A	P-O3'-C3'	5.71	126.55	119.70
26	BB	1544	A	O4'-C1'-N9	5.71	112.77	108.20
26	BB	2036	C	C4-C5-C6	5.71	120.25	117.40
1	AA	1007	U	C2-N1-C1'	5.71	124.55	117.70
1	AA	1093	A	N9-C1'-C2'	-5.71	105.72	112.00
26	BB	133	U	P-O3'-C3'	5.71	126.55	119.70
26	BB	378	C	C2-N3-C4	5.71	122.75	119.90
26	BB	380	G	N9-C1'-C2'	-5.71	105.72	112.00
26	BB	566	U	O4'-C1'-N1	5.71	112.76	108.20
26	BB	1207	C	C4-C5-C6	-5.71	114.55	117.40
26	BB	1330	C	N3-C2-O2	-5.71	117.91	121.90
26	BB	2404	U	N1-C2-O2	-5.71	118.81	122.80
1	AA	700	G	N3-C2-N2	-5.70	115.91	119.90
1	AA	721	G	O4'-C1'-N9	5.70	112.76	108.20
1	AA	980	C	O4'-C1'-N1	5.70	112.76	108.20
1	AA	1442	G	C5-N7-C8	-5.70	101.45	104.30
4	AD	64	G	C1'-O4'-C4'	5.70	114.46	109.90
25	BA	70	C	C2-N3-C4	-5.70	117.05	119.90
26	BB	23	G	N1-C6-O6	-5.70	116.48	119.90
26	BB	418	C	C5-C6-N1	5.70	123.85	121.00
26	BB	1058	U	N1-C2-N3	5.70	118.32	114.90
26	BB	1089	A	N1-C6-N6	5.70	122.02	118.60
26	BB	1137	G	C5-C6-N1	5.70	114.35	111.50
26	BB	1863	G	O4'-C1'-C2'	5.70	112.73	107.60
26	BB	2084	C	C5'-C4'-O4'	5.70	115.94	109.10
26	BB	2667	C	C3'-C2'-C1'	5.70	106.06	101.50
26	BB	2822	G	N1-C2-N2	-5.70	111.07	116.20
1	AA	97	G	C5'-C4'-O4'	5.70	115.94	109.10
1	AA	732	C	N1-C2-O2	5.70	122.32	118.90
26	BB	590	A	C4-C5-N7	-5.70	107.85	110.70
26	BB	1338	G	C2-N3-C4	5.70	114.75	111.90
26	BB	1470	A	C4-C5-N7	-5.70	107.85	110.70
26	BB	1843	C	C5-C6-N1	-5.70	118.15	121.00
26	BB	1954	G	C2-N3-C4	5.70	114.75	111.90
26	BB	2188	U	C5-C4-O4	-5.70	122.48	125.90
46	BV	69	ARG	NE-CZ-NH2	-5.70	117.45	120.30
1	AA	537	G	N3-C4-C5	-5.70	125.75	128.60
1	AA	543	U	N1-C2-N3	5.70	118.32	114.90
1	AA	708	C	C4-C5-C6	5.70	120.25	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	799	G	O3'-P-O5'	-5.70	93.17	104.00
1	AA	1021	A	C5-C6-N1	-5.70	114.85	117.70
1	AA	1333	A	O4'-C1'-C2'	5.70	112.73	107.60
6	AF	64	ARG	NE-CZ-NH2	-5.70	117.45	120.30
16	AP	41	ASP	CB-CG-OD2	-5.70	113.17	118.30
26	BB	460	A	C8-N9-C4	5.70	108.08	105.80
26	BB	548	G	C3'-C2'-C1'	-5.70	96.94	101.50
26	BB	1529	G	C6-C5-N7	5.70	133.82	130.40
26	BB	2314	A	O5'-C5'-C4'	-5.70	100.87	111.70
29	BE	73	VAL	CA-CB-CG2	5.70	119.45	110.90
50	BZ	2	ARG	NE-CZ-NH1	-5.70	117.45	120.30
1	AA	145	G	N9-C4-C5	5.70	107.68	105.40
1	AA	191	G	C4-C5-C6	5.70	122.22	118.80
1	AA	281	G	C5-C6-O6	-5.70	125.18	128.60
1	AA	436	C	N1-C2-O2	5.70	122.32	118.90
1	AA	1431	A	C5-C6-N1	-5.70	114.85	117.70
1	AA	1458	G	O4'-C4'-C3'	5.70	110.66	106.10
26	BB	7	G	N1-C2-N2	5.70	121.33	116.20
26	BB	415	A	N1-C2-N3	-5.70	126.45	129.30
26	BB	1273	U	C6-N1-C2	-5.70	117.58	121.00
26	BB	1508	A	C2-N3-C4	5.70	113.45	110.60
26	BB	1622	G	C6-N1-C2	-5.70	121.68	125.10
26	BB	1623	G	C6-C5-N7	5.70	133.82	130.40
26	BB	1867	G	C2-N3-C4	-5.70	109.05	111.90
26	BB	2173	A	O4'-C1'-N9	5.70	112.76	108.20
26	BB	2738	A	C5-C6-N6	5.70	128.26	123.70
26	BB	2750	A	C2-N3-C4	5.70	113.45	110.60
11	AK	127	TYR	CA-CB-CG	5.70	124.22	113.40
26	BB	157	C	C2-N3-C4	-5.70	117.05	119.90
26	BB	158	U	N1-C1'-C2'	-5.70	105.73	112.00
26	BB	1213	A	O4'-C1'-N9	-5.70	103.64	108.20
26	BB	1895	C	N3-C2-O2	-5.70	117.91	121.90
26	BB	2254	C	N3-C4-C5	-5.70	119.62	121.90
26	BB	2291	U	P-O3'-C3'	5.70	126.54	119.70
26	BB	2353	G	C8-N9-C1'	5.70	134.41	127.00
1	AA	820	U	N3-C4-C5	5.70	118.02	114.60
1	AA	893	C	N3-C4-N4	5.70	121.99	118.00
2	AB	67	G	N7-C8-N9	-5.70	110.25	113.10
26	BB	52	A	C6-N1-C2	5.70	122.02	118.60
26	BB	840	C	C6-N1-C2	-5.70	118.02	120.30
26	BB	1260	A	N7-C8-N9	5.70	116.65	113.80
26	BB	1319	C	N1-C2-O2	5.70	122.32	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1776	G	C5-C6-O6	-5.70	125.18	128.60
26	BB	2107	G	C6-C5-N7	-5.70	126.98	130.40
26	BB	2241	A	C6-N1-C2	-5.70	115.18	118.60
26	BB	2887	A	N9-C1'-C2'	-5.70	105.73	112.00
28	BD	176	ARG	NH1-CZ-NH2	5.70	125.67	119.40
1	AA	126	G	N3-C4-C5	-5.69	125.75	128.60
1	AA	426	U	C6-N1-C2	-5.69	117.58	121.00
1	AA	971	G	N3-C2-N2	5.69	123.89	119.90
1	AA	1276	G	C8-N9-C4	-5.69	104.12	106.40
1	AA	1512	U	O4'-C4'-C3'	-5.69	98.31	104.00
25	BA	35	C	P-O3'-C3'	5.69	126.53	119.70
25	BA	83	G	C6-N1-C2	5.69	128.52	125.10
26	BB	192	C	C3'-C2'-C1'	5.69	106.06	101.50
26	BB	1766	G	C5-C6-N1	5.69	114.35	111.50
26	BB	1813	G	O4'-C1'-N9	5.69	112.76	108.20
26	BB	2382	G	C5-C6-N1	5.69	114.35	111.50
26	BB	2416	C	C6-N1-C2	-5.69	118.02	120.30
26	BB	2426	A	C5-C6-N6	-5.69	119.14	123.70
1	AA	570	G	O4'-C1'-N9	5.69	112.75	108.20
1	AA	598	U	O4'-C1'-C2'	-5.69	100.11	105.80
1	AA	927	G	C5-C6-O6	5.69	132.01	128.60
1	AA	942	G	C1'-O4'-C4'	-5.69	105.35	109.90
1	AA	1170	A	C1'-O4'-C4'	-5.69	105.35	109.90
26	BB	167	A	C6-C5-N7	-5.69	128.31	132.30
26	BB	223	A	N7-C8-N9	5.69	116.65	113.80
26	BB	263	G	C6-C5-N7	-5.69	126.98	130.40
26	BB	334	C	N3-C2-O2	-5.69	117.92	121.90
26	BB	379	G	C4'-C3'-C2'	-5.69	96.91	102.60
26	BB	423	A	C5-C6-N1	-5.69	114.85	117.70
26	BB	528	A	O4'-C1'-C2'	5.69	112.72	107.60
26	BB	756	A	C4'-C3'-C2'	-5.69	96.91	102.60
26	BB	1143	A	N7-C8-N9	5.69	116.65	113.80
26	BB	1475	G	O4'-C1'-C2'	-5.69	100.11	105.80
26	BB	1657	U	C5'-C4'-O4'	5.69	115.93	109.10
26	BB	1671	U	O4'-C1'-N1	5.69	112.75	108.20
26	BB	2128	G	P-O5'-C5'	5.69	130.01	120.90
26	BB	2143	C	N1-C2-O2	5.69	122.32	118.90
26	BB	2377	A	C6-C5-N7	-5.69	128.31	132.30
26	BB	2495	G	C4-C5-N7	-5.69	108.52	110.80
26	BB	2632	A	C5'-C4'-O4'	5.69	115.93	109.10
1	AA	731	G	N3-C4-C5	-5.69	125.75	128.60
1	AA	1505	G	C5-C6-O6	-5.69	125.19	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	AK	50	VAL	O-C-N	5.69	131.81	122.70
26	BB	214	G	C2-N3-C4	5.69	114.75	111.90
26	BB	219	A	O4'-C4'-C3'	5.69	110.65	106.10
26	BB	493	G	P-O3'-C3'	5.69	126.53	119.70
26	BB	620	G	P-O3'-C3'	5.69	126.53	119.70
26	BB	1206	G	C5-N7-C8	-5.69	101.45	104.30
26	BB	1370	C	N3-C2-O2	-5.69	117.92	121.90
26	BB	1764	C	C2-N3-C4	5.69	122.75	119.90
26	BB	2539	C	N3-C4-C5	-5.69	119.62	121.90
26	BB	2561	U	C2-N3-C4	-5.69	123.59	127.00
26	BB	2742	G	N3-C2-N2	-5.69	115.92	119.90
26	BB	2743	U	C5'-C4'-C3'	-5.69	106.89	116.00
32	BH	93	TYR	CG-CD1-CE1	-5.69	116.75	121.30
1	AA	733	G	C5-C6-N1	5.69	114.34	111.50
1	AA	1432	G	C4'-C3'-C2'	-5.69	96.91	102.60
1	AA	1489	G	C1'-O4'-C4'	-5.69	105.35	109.90
26	BB	94	A	C5-C6-N1	-5.69	114.86	117.70
26	BB	1445	G	P-O5'-C5'	5.69	130.00	120.90
26	BB	1468	U	C5'-C4'-O4'	5.69	115.93	109.10
26	BB	1780	A	C4-C5-N7	5.69	113.55	110.70
26	BB	2829	A	C5-N7-C8	5.69	106.74	103.90
1	AA	286	C	C3'-C2'-C1'	-5.69	96.95	101.50
1	AA	442	G	N1-C2-N2	5.69	121.32	116.20
1	AA	507	C	O4'-C1'-C2'	-5.69	100.11	105.80
1	AA	770	C	N1-C1'-C2'	5.69	121.39	114.00
1	AA	953	G	O4'-C1'-N9	5.69	112.75	108.20
2	AB	43	G	C5-C6-O6	-5.69	125.19	128.60
4	AD	66	C	C6-N1-C2	-5.69	118.03	120.30
26	BB	538	A	C2-N3-C4	5.69	113.44	110.60
26	BB	623	C	C5-C4-N4	-5.69	116.22	120.20
26	BB	846	U	O3'-P-O5'	-5.69	93.19	104.00
26	BB	899	A	C2-N3-C4	5.69	113.44	110.60
26	BB	2065	C	C4'-C3'-C2'	-5.69	96.91	102.60
26	BB	2073	C	C3'-C2'-C1'	5.69	106.05	101.50
26	BB	2488	G	C5-C6-O6	-5.69	125.19	128.60
26	BB	2493	U	N3-C4-O4	5.69	123.38	119.40
26	BB	2640	G	C6-C5-N7	5.69	133.81	130.40
26	BB	2751	G	C6-N1-C2	-5.69	121.69	125.10
33	BI	49	ALA	N-CA-CB	-5.69	102.14	110.10
1	AA	41	G	C5-C6-N1	5.69	114.34	111.50
1	AA	656	G	N3-C4-C5	-5.69	125.76	128.60
1	AA	985	C	C2-N3-C4	5.69	122.74	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	354	A	P-O3'-C3'	5.69	126.52	119.70
26	BB	676	A	C5'-C4'-O4'	-5.69	102.28	109.10
26	BB	803	U	P-O3'-C3'	5.69	126.52	119.70
26	BB	1383	A	C8-N9-C4	-5.69	103.53	105.80
26	BB	1465	G	N3-C4-C5	-5.69	125.76	128.60
26	BB	2513	A	C4'-C3'-C2'	-5.69	96.91	102.60
1	AA	364	A	N9-C4-C5	-5.68	103.53	105.80
1	AA	832	G	C4-C5-N7	-5.68	108.53	110.80
1	AA	1049	U	C1'-O4'-C4'	5.68	114.45	109.90
2	AB	44	G	C8-N9-C1'	5.68	134.39	127.00
26	BB	102	U	C2-N3-C4	-5.68	123.59	127.00
26	BB	251	A	O4'-C1'-N9	5.68	112.75	108.20
26	BB	495	G	N3-C4-N9	5.68	129.41	126.00
26	BB	528	A	N1-C2-N3	5.68	132.14	129.30
26	BB	661	A	O4'-C1'-N9	5.68	112.75	108.20
26	BB	689	A	C8-N9-C4	5.68	108.07	105.80
26	BB	2136	G	C3'-C2'-C1'	-5.68	96.95	101.50
26	BB	2213	U	O4'-C1'-N1	5.68	112.75	108.20
26	BB	2303	G	C6-N1-C2	-5.68	121.69	125.10
26	BB	2379	G	N3-C2-N2	5.68	123.88	119.90
26	BB	2418	A	C5-C6-N6	-5.68	119.15	123.70
26	BB	2844	G	C5-C6-N1	5.68	114.34	111.50
57	B6	59	ALA	CB-CA-C	-5.68	101.57	110.10
1	AA	103	U	O4'-C4'-C3'	5.68	110.65	106.10
1	AA	391	G	C2-N3-C4	5.68	114.74	111.90
1	AA	492	C	P-O3'-C3'	5.68	126.52	119.70
1	AA	654	G	C4-C5-C6	-5.68	115.39	118.80
1	AA	735	C	C5-C6-N1	5.68	123.84	121.00
1	AA	1088	G	C5-N7-C8	5.68	107.14	104.30
1	AA	1500	A	N3-C4-N9	5.68	131.94	127.40
15	AO	116	TYR	CB-CG-CD1	-5.68	117.59	121.00
25	BA	70	C	N3-C2-O2	-5.68	117.92	121.90
25	BA	116	G	N7-C8-N9	5.68	115.94	113.10
26	BB	100	U	O4'-C1'-C2'	-5.68	100.12	105.80
26	BB	500	G	C5'-C4'-C3'	-5.68	106.91	116.00
26	BB	562	U	N3-C4-C5	5.68	118.01	114.60
26	BB	702	U	C5'-C4'-O4'	5.68	115.92	109.10
26	BB	961	C	N3-C2-O2	-5.68	117.92	121.90
26	BB	1878	G	C3'-C2'-C1'	-5.68	96.95	101.50
26	BB	2701	U	O4'-C1'-N1	5.68	112.75	108.20
26	BB	2781	A	O4'-C1'-N9	5.68	112.75	108.20
26	BB	2807	U	C2-N3-C4	-5.68	123.59	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	117	G	N7-C8-N9	5.68	115.94	113.10
1	AA	372	C	C6-N1-C1'	-5.68	113.98	120.80
1	AA	464	U	C3'-C2'-C1'	5.68	106.04	101.50
1	AA	680	C	C4-C5-C6	5.68	120.24	117.40
1	AA	1334	G	C8-N9-C4	-5.68	104.13	106.40
15	AO	27	PRO	N-CD-CG	5.68	111.72	103.20
26	BB	1611	C	C2-N3-C4	5.68	122.74	119.90
26	BB	2033	A	N9-C4-C5	5.68	108.07	105.80
26	BB	2336	A	C5-C6-N6	-5.68	119.16	123.70
26	BB	2571	U	N3-C4-C5	5.68	118.01	114.60
26	BB	2703	C	C5'-C4'-C3'	5.68	125.09	116.00
32	BH	132	LEU	CB-CG-CD1	5.68	120.66	111.00
37	BM	95	ILE	CA-CB-CG1	5.68	121.79	111.00
1	AA	654	G	N7-C8-N9	5.68	115.94	113.10
1	AA	1225	A	N1-C2-N3	5.68	132.14	129.30
3	AC	14	G	C6-N1-C2	-5.68	121.69	125.10
26	BB	195	A	O4'-C4'-C3'	5.68	110.64	106.10
26	BB	656	G	N3-C4-N9	-5.68	122.59	126.00
26	BB	1719	G	C8-N9-C4	-5.68	104.13	106.40
26	BB	2041	U	C6-N1-C2	-5.68	117.59	121.00
46	BV	3	ARG	NE-CZ-NH1	5.68	123.14	120.30
1	AA	322	C	O4'-C1'-N1	5.68	112.74	108.20
26	BB	367	G	C5-N7-C8	-5.68	101.46	104.30
26	BB	1003	G	C6-N1-C2	-5.68	121.69	125.10
26	BB	1022	G	N1-C2-N2	5.68	121.31	116.20
26	BB	2462	C	N3-C4-C5	-5.68	119.63	121.90
1	AA	254	G	N1-C6-O6	5.68	123.31	119.90
1	AA	1204	A	N1-C6-N6	5.68	122.01	118.60
26	BB	390	U	C2-N3-C4	-5.68	123.59	127.00
26	BB	414	C	C4'-C3'-C2'	-5.68	96.92	102.60
26	BB	615	U	C6-N1-C2	-5.68	117.59	121.00
26	BB	1057	A	C5'-C4'-C3'	-5.68	106.92	116.00
26	BB	1262	A	C5-N7-C8	-5.68	101.06	103.90
26	BB	1389	G	N3-C2-N2	5.68	123.87	119.90
26	BB	1406	U	C4-C5-C6	5.68	123.11	119.70
26	BB	1450	G	C6-N1-C2	-5.68	121.69	125.10
26	BB	1552	A	C1'-O4'-C4'	-5.68	105.36	109.90
26	BB	1626	A	C5'-C4'-O4'	5.68	115.91	109.10
26	BB	1820	U	N3-C4-O4	5.68	123.37	119.40
26	BB	2113	U	C4'-C3'-C2'	-5.68	96.92	102.60
26	BB	2604	U	C6-N1-C2	-5.68	117.59	121.00
26	BB	2678	C	C3'-C2'-C1'	5.68	106.04	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1	A	C5'-C4'-C3'	-5.67	106.92	116.00
1	AA	157	U	O4'-C1'-N1	5.67	112.74	108.20
1	AA	168	G	C3'-C2'-C1'	-5.67	96.96	101.50
1	AA	394	G	N7-C8-N9	5.67	115.94	113.10
1	AA	1254	A	N1-C6-N6	-5.67	115.19	118.60
1	AA	1375	A	C5-N7-C8	-5.67	101.06	103.90
2	AB	76	A	C4-C5-C6	5.67	119.84	117.00
4	AD	39	A	C2-N3-C4	5.67	113.44	110.60
26	BB	67	U	N1-C2-N3	5.67	118.31	114.90
26	BB	598	U	C3'-C2'-C1'	-5.67	96.96	101.50
26	BB	979	A	N7-C8-N9	-5.67	110.96	113.80
26	BB	1301	A	N7-C8-N9	-5.67	110.96	113.80
26	BB	1355	G	O4'-C1'-N9	5.67	112.74	108.20
26	BB	1520	U	N3-C4-C5	-5.67	111.19	114.60
26	BB	1737	G	C1'-O4'-C4'	5.67	114.44	109.90
26	BB	1756	G	C4-C5-N7	5.67	113.07	110.80
26	BB	2155	U	N1-C1'-C2'	-5.67	105.76	112.00
26	BB	2439	A	C4-C5-N7	-5.67	107.86	110.70
1	AA	267	C	C2-N3-C4	5.67	122.74	119.90
1	AA	1358	U	C4-C5-C6	5.67	123.10	119.70
4	AD	14	A	C5-N7-C8	5.67	106.74	103.90
26	BB	280	U	O4'-C1'-N1	5.67	112.74	108.20
26	BB	293	U	C4'-C3'-C2'	5.67	108.27	102.60
26	BB	447	A	C8-N9-C4	5.67	108.07	105.80
26	BB	805	G	C8-N9-C4	-5.67	104.13	106.40
26	BB	1277	G	C5-N7-C8	-5.67	101.46	104.30
26	BB	1529	G	C5-C6-N1	5.67	114.34	111.50
26	BB	2780	G	C6-N1-C2	-5.67	121.70	125.10
1	AA	44	A	C5-C6-N1	-5.67	114.86	117.70
1	AA	241	G	C8-N9-C1'	5.67	134.37	127.00
1	AA	316	C	N3-C4-N4	5.67	121.97	118.00
1	AA	824	G	C6-N1-C2	-5.67	121.70	125.10
1	AA	1429	A	C3'-C2'-C1'	-5.67	96.96	101.50
4	AD	64	G	C5'-C4'-O4'	5.67	115.91	109.10
26	BB	164	C	N1-C2-O2	5.67	122.30	118.90
26	BB	174	U	N1-C1'-C2'	-5.67	105.76	112.00
26	BB	550	C	O3'-P-O5'	-5.67	93.22	104.00
26	BB	1008	A	C5-N7-C8	5.67	106.74	103.90
26	BB	1482	G	C4-C5-C6	5.67	122.20	118.80
26	BB	1577	C	C4'-C3'-C2'	-5.67	96.93	102.60
26	BB	1580	A	C2-N3-C4	5.67	113.44	110.60
26	BB	2130	U	C2-N1-C1'	5.67	124.50	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2450	A	C5-C6-N1	-5.67	114.86	117.70
26	BB	2466	C	O4'-C1'-N1	5.67	112.74	108.20
26	BB	2484	G	C8-N9-C4	-5.67	104.13	106.40
40	BP	17	ARG	NE-CZ-NH2	-5.67	117.46	120.30
1	AA	130	A	C2-N3-C4	-5.67	107.77	110.60
3	AC	32	U	C5'-C4'-C3'	-5.67	106.93	116.00
26	BB	237	C	O4'-C1'-N1	5.67	112.74	108.20
26	BB	2116	G	P-O3'-C3'	5.67	126.50	119.70
1	AA	717	U	C4'-C3'-C2'	-5.67	96.93	102.60
1	AA	1290	G	N3-C4-N9	5.67	129.40	126.00
4	AD	9	G	N7-C8-N9	5.67	115.93	113.10
4	AD	35	C	C5-C6-N1	5.67	123.83	121.00
26	BB	177	G	N1-C2-N2	-5.67	111.10	116.20
26	BB	196	A	C5'-C4'-O4'	5.67	115.90	109.10
26	BB	260	G	O4'-C1'-C2'	5.67	112.70	107.60
26	BB	912	C	N3-C4-C5	-5.67	119.63	121.90
26	BB	1250	G	N3-C4-C5	-5.67	125.77	128.60
26	BB	1635	A	C2-N3-C4	5.67	113.43	110.60
26	BB	2240	U	C5-C6-N1	-5.67	119.86	122.70
26	BB	2490	G	N1-C2-N3	5.67	127.30	123.90
26	BB	2664	G	C6-N1-C2	-5.67	121.70	125.10
26	BB	2726	A	N3-C4-C5	-5.67	122.83	126.80
36	BL	124	VAL	CG1-CB-CG2	-5.67	101.83	110.90
37	BM	105	ARG	NE-CZ-NH2	-5.67	117.47	120.30
40	BP	96	ARG	NE-CZ-NH2	5.67	123.14	120.30
1	AA	145	G	C6-N1-C2	-5.67	121.70	125.10
1	AA	424	G	C5-N7-C8	-5.67	101.47	104.30
1	AA	492	C	C4'-C3'-C2'	-5.67	96.93	102.60
1	AA	600	A	N1-C2-N3	-5.67	126.47	129.30
1	AA	951	G	O4'-C4'-C3'	-5.67	98.33	104.00
2	AB	65	C	C5'-C4'-O4'	5.67	115.90	109.10
3	AC	53	G	P-O3'-C3'	5.67	126.50	119.70
26	BB	166	U	N1-C2-N3	5.67	118.30	114.90
26	BB	324	A	C5'-C4'-O4'	5.67	115.90	109.10
26	BB	430	A	C4-C5-N7	5.67	113.53	110.70
26	BB	666	A	C4-C5-C6	-5.67	114.17	117.00
26	BB	985	C	C1'-O4'-C4'	-5.67	105.37	109.90
26	BB	1061	U	N3-C2-O2	-5.67	118.23	122.20
26	BB	1545	A	C6-C5-N7	5.67	136.27	132.30
26	BB	1704	C	O4'-C1'-C2'	5.67	112.70	107.60
26	BB	1760	C	C6-N1-C2	-5.67	118.03	120.30
26	BB	2065	C	N3-C4-N4	5.67	121.97	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2148	G	C6-C5-N7	-5.67	127.00	130.40
26	BB	2759	G	N1-C6-O6	-5.67	116.50	119.90
26	BB	2829	A	N1-C2-N3	5.67	132.13	129.30
1	AA	271	C	C5'-C4'-O4'	5.67	115.90	109.10
1	AA	382	A	C6-N1-C2	5.67	122.00	118.60
1	AA	611	C	C4-C5-C6	-5.67	114.57	117.40
1	AA	1397	C	C6-N1-C2	5.67	122.57	120.30
1	AA	1459	G	P-O5'-C5'	5.67	129.96	120.90
26	BB	86	G	C4-C5-C6	5.67	122.20	118.80
26	BB	180	G	C5-C6-O6	5.67	132.00	128.60
26	BB	269	C	P-O5'-C5'	5.67	129.97	120.90
26	BB	423	A	C4-C5-N7	-5.67	107.87	110.70
26	BB	435	C	N1-C2-N3	5.67	123.17	119.20
26	BB	1159	U	N1-C2-N3	5.67	118.30	114.90
26	BB	1479	G	C5-C6-O6	-5.67	125.20	128.60
26	BB	2157	G	N7-C8-N9	5.67	115.93	113.10
26	BB	2746	U	P-O5'-C5'	5.67	129.96	120.90
51	B0	7	ARG	CD-NE-CZ	5.67	131.53	123.60
52	B1	29	ARG	NE-CZ-NH2	5.67	123.13	120.30
1	AA	379	C	C2-N3-C4	-5.66	117.07	119.90
1	AA	782	A	O4'-C1'-N9	5.66	112.73	108.20
1	AA	939	G	N3-C4-N9	5.66	129.40	126.00
1	AA	1254	A	C5-N7-C8	5.66	106.73	103.90
1	AA	1292	G	N1-C2-N2	5.66	121.30	116.20
24	AX	64	ALA	CB-CA-C	5.66	118.59	110.10
26	BB	19	A	C5-N7-C8	-5.66	101.07	103.90
26	BB	215	G	N3-C4-C5	-5.66	125.77	128.60
26	BB	327	G	C5-C6-N1	-5.66	108.67	111.50
26	BB	695	G	N1-C2-N3	-5.66	120.50	123.90
26	BB	1042	G	C4-C5-N7	-5.66	108.53	110.80
26	BB	1048	A	N1-C6-N6	5.66	122.00	118.60
26	BB	1164	C	N1-C1'-C2'	-5.66	105.77	112.00
26	BB	1491	G	C6-N1-C2	-5.66	121.70	125.10
26	BB	1738	G	N7-C8-N9	5.66	115.93	113.10
26	BB	1739	A	O4'-C1'-N9	5.66	112.73	108.20
26	BB	1801	A	N1-C2-N3	-5.66	126.47	129.30
26	BB	2447	G	C5-C6-N1	5.66	114.33	111.50
26	BB	2644	G	C4-C5-C6	5.66	122.20	118.80
33	BI	27	ARG	NE-CZ-NH2	5.66	123.13	120.30
1	AA	234	C	C2-N3-C4	5.66	122.73	119.90
1	AA	346	G	C5-N7-C8	-5.66	101.47	104.30
26	BB	765	C	N1-C2-N3	-5.66	115.24	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	888	C	C2'-C3'-O3'	5.66	122.76	113.70
26	BB	907	G	C5-C6-O6	-5.66	125.20	128.60
26	BB	1449	G	C5-C6-N1	-5.66	108.67	111.50
26	BB	1466	U	O3'-P-O5'	-5.66	93.24	104.00
1	AA	1099	G	C5-C6-N1	-5.66	108.67	111.50
1	AA	1356	G	C2-N3-C4	5.66	114.73	111.90
1	AA	1459	G	C1'-O4'-C4'	-5.66	105.37	109.90
2	AB	42	G	C1'-O4'-C4'	5.66	114.43	109.90
4	AD	32	G	O4'-C4'-C3'	-5.66	98.34	104.00
9	AI	42	TRP	NE1-CE2-CZ2	5.66	136.63	130.40
25	BA	57	A	C2'-C3'-O3'	5.66	122.76	113.70
26	BB	398	C	C5'-C4'-C3'	-5.66	106.94	116.00
26	BB	926	G	C1'-O4'-C4'	-5.66	105.37	109.90
26	BB	1765	U	N3-C4-O4	5.66	123.36	119.40
26	BB	1826	G	N1-C2-N2	5.66	121.29	116.20
26	BB	2103	C	N3-C4-N4	5.66	121.96	118.00
1	AA	106	C	C5'-C4'-C3'	5.66	125.05	116.00
1	AA	181	A	N7-C8-N9	5.66	116.63	113.80
1	AA	324	G	C2-N3-C4	5.66	114.73	111.90
1	AA	456	A	C5-N7-C8	5.66	106.73	103.90
1	AA	558	G	O4'-C1'-N9	5.66	112.73	108.20
1	AA	656	G	N3-C2-N2	5.66	123.86	119.90
26	BB	505	A	C4-C5-N7	5.66	113.53	110.70
26	BB	619	G	N1-C6-O6	-5.66	116.50	119.90
26	BB	1040	A	C8-N9-C4	-5.66	103.54	105.80
26	BB	2428	G	N9-C1'-C2'	-5.66	105.78	112.00
26	BB	2589	A	C5'-C4'-O4'	5.66	115.89	109.10
26	BB	2661	G	N3-C4-N9	5.66	129.40	126.00
26	BB	2823	A	O4'-C1'-N9	5.66	112.73	108.20
1	AA	131	A	C4-C5-C6	5.66	119.83	117.00
1	AA	234	C	C5-C6-N1	5.66	123.83	121.00
1	AA	1419	G	C5-C6-O6	5.66	131.99	128.60
25	BA	40	U	C6-N1-C2	-5.66	117.61	121.00
26	BB	667	U	N1-C2-N3	5.66	118.29	114.90
26	BB	699	A	N1-C2-N3	5.66	132.13	129.30
26	BB	711	G	C8-N9-C4	5.66	108.66	106.40
26	BB	810	U	P-O3'-C3'	5.66	126.49	119.70
26	BB	1434	A	P-O3'-C3'	5.66	126.49	119.70
26	BB	1498	C	C4'-C3'-C2'	-5.66	96.94	102.60
26	BB	2200	C	N1-C2-N3	-5.66	115.24	119.20
26	BB	2239	G	C1'-O4'-C4'	5.66	114.43	109.90
26	BB	2644	G	C4-C5-N7	5.66	113.06	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2647	U	C3'-C2'-C1'	5.66	106.03	101.50
26	BB	2810	A	N1-C2-N3	-5.66	126.47	129.30
1	AA	273	U	N3-C4-C5	5.66	117.99	114.60
1	AA	461	A	C5'-C4'-C3'	-5.66	106.95	116.00
1	AA	583	A	O4'-C1'-N9	5.66	112.72	108.20
1	AA	615	G	N1-C2-N3	-5.66	120.51	123.90
1	AA	902	G	C5-C6-O6	-5.66	125.21	128.60
3	AC	58	C	C4'-C3'-C2'	5.66	108.25	102.60
26	BB	8	C	C6-N1-C2	5.66	122.56	120.30
26	BB	129	C	C5'-C4'-O4'	5.66	115.89	109.10
26	BB	532	A	N3-C4-N9	5.66	131.93	127.40
26	BB	562	U	N1-C1'-C2'	-5.66	105.78	112.00
26	BB	1067	A	C5-C6-N1	5.66	120.53	117.70
26	BB	1972	G	C5-C6-N1	5.66	114.33	111.50
26	BB	2694	G	N1-C2-N3	5.66	127.29	123.90
37	BM	120	PRO	N-CD-CG	5.66	111.68	103.20
38	BN	64	PHE	CD1-CE1-CZ	5.66	126.89	120.10
1	AA	177	G	O4'-C1'-C2'	-5.65	100.15	105.80
1	AA	403	C	N1-C2-O2	5.65	122.29	118.90
1	AA	787	A	C4-C5-C6	5.65	119.83	117.00
1	AA	845	A	N3-C4-C5	-5.65	122.84	126.80
1	AA	1461	G	C5-C6-O6	-5.65	125.21	128.60
3	AC	28	U	C2-N3-C4	-5.65	123.61	127.00
26	BB	686	U	C5-C4-O4	-5.65	122.51	125.90
26	BB	1296	G	C5-N7-C8	-5.65	101.47	104.30
26	BB	1521	G	O4'-C1'-N9	5.65	112.72	108.20
26	BB	1627	G	C5-C6-N1	5.65	114.33	111.50
39	BO	117	PHE	CZ-CE2-CD2	-5.65	113.32	120.10
1	AA	104	G	N7-C8-N9	5.65	115.93	113.10
1	AA	604	G	C4-C5-C6	5.65	122.19	118.80
1	AA	1099	G	C2-N3-C4	5.65	114.73	111.90
1	AA	1302	C	N1-C2-O2	5.65	122.29	118.90
1	AA	1396	A	C5-C6-N1	5.65	120.53	117.70
16	AP	112	ARG	NE-CZ-NH1	-5.65	117.47	120.30
21	AU	30	ASN	O-C-N	5.65	131.74	122.70
25	BA	17	C	C6-N1-C2	-5.65	118.04	120.30
26	BB	532	A	C5-C6-N1	-5.65	114.87	117.70
26	BB	1111	A	N1-C6-N6	5.65	121.99	118.60
26	BB	1125	G	N3-C4-C5	-5.65	125.77	128.60
26	BB	1154	G	C5'-C4'-O4'	5.65	115.88	109.10
26	BB	1194	A	N9-C1'-C2'	-5.65	105.78	112.00
26	BB	1442	U	N3-C2-O2	-5.65	118.24	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1580	A	N1-C2-N3	-5.65	126.47	129.30
26	BB	1763	G	N7-C8-N9	5.65	115.93	113.10
26	BB	1867	G	O4'-C4'-C3'	5.65	110.62	106.10
26	BB	2415	G	C3'-C2'-C1'	5.65	106.02	101.50
26	BB	2656	U	C5-C4-O4	5.65	129.29	125.90
26	BB	2772	C	O3'-P-O5'	-5.65	93.26	104.00
1	AA	203	G	N3-C2-N2	-5.65	115.94	119.90
1	AA	670	G	C4-C5-N7	-5.65	108.54	110.80
1	AA	732	C	N3-C4-N4	5.65	121.96	118.00
1	AA	887	G	N7-C8-N9	5.65	115.92	113.10
1	AA	1068	G	N3-C4-C5	-5.65	125.77	128.60
1	AA	1108	G	O4'-C1'-C2'	-5.65	100.15	105.80
1	AA	1212	U	C5-C6-N1	5.65	125.53	122.70
1	AA	1249	C	C4'-C3'-C2'	-5.65	96.95	102.60
4	AD	68	C	C4-C5-C6	-5.65	114.58	117.40
26	BB	15	G	C1'-O4'-C4'	5.65	114.42	109.90
26	BB	95	A	C5-C6-N1	5.65	120.53	117.70
26	BB	628	G	C2'-C3'-O3'	5.65	122.74	113.70
26	BB	705	A	O4'-C4'-C3'	5.65	110.62	106.10
26	BB	935	C	C5-C6-N1	5.65	123.83	121.00
26	BB	1660	G	N9-C1'-C2'	-5.65	105.78	112.00
26	BB	1796	U	C3'-C2'-C1'	5.65	106.02	101.50
26	BB	2050	C	C5-C6-N1	-5.65	118.17	121.00
26	BB	2375	G	C3'-C2'-C1'	5.65	106.02	101.50
26	BB	2669	G	C5-N7-C8	-5.65	101.47	104.30
26	BB	2889	C	P-O5'-C5'	5.65	129.94	120.90
1	AA	621	A	C5-N7-C8	5.65	106.72	103.90
1	AA	760	G	C3'-C2'-C1'	-5.65	96.98	101.50
8	AH	111	ARG	NE-CZ-NH1	5.65	123.12	120.30
26	BB	572	A	C1'-O4'-C4'	5.65	114.42	109.90
26	BB	1031	G	O3'-P-O5'	-5.65	93.27	104.00
26	BB	1336	A	N1-C2-N3	-5.65	126.47	129.30
26	BB	1995	U	C4-C5-C6	5.65	123.09	119.70
26	BB	2809	A	C5'-C4'-O4'	5.65	115.88	109.10
1	AA	137	U	N1-C1'-C2'	-5.65	105.79	112.00
1	AA	249	U	C6-N1-C2	-5.65	117.61	121.00
1	AA	522	C	C5-C4-N4	5.65	124.15	120.20
1	AA	778	G	C5'-C4'-C3'	-5.65	106.96	116.00
1	AA	846	G	N1-C6-O6	-5.65	116.51	119.90
1	AA	937	A	C5'-C4'-O4'	5.65	115.88	109.10
26	BB	153	U	O5'-P-OP2	-5.65	100.62	105.70
26	BB	214	G	N1-C6-O6	-5.65	116.51	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	850	U	N3-C4-C5	-5.65	111.21	114.60
26	BB	1054	A	N3-C4-C5	-5.65	122.85	126.80
26	BB	1204	A	C4-C5-N7	5.65	113.52	110.70
26	BB	1250	G	O3'-P-O5'	-5.65	93.27	104.00
26	BB	1391	U	N3-C2-O2	-5.65	118.25	122.20
26	BB	1611	C	N1-C2-N3	-5.65	115.25	119.20
26	BB	1761	C	N3-C4-C5	5.65	124.16	121.90
26	BB	1964	G	C6-C5-N7	5.65	133.79	130.40
26	BB	1972	G	N3-C4-C5	-5.65	125.78	128.60
26	BB	2301	C	C5-C4-N4	5.65	124.15	120.20
26	BB	2623	G	C8-N9-C4	5.65	108.66	106.40
26	BB	2696	U	C4-C5-C6	5.65	123.09	119.70
26	BB	2766	A	C5'-C4'-O4'	5.65	115.88	109.10
26	BB	2876	G	O4'-C4'-C3'	-5.65	98.35	104.00
31	BG	70	ARG	NE-CZ-NH2	5.65	123.12	120.30
38	BN	69	ARG	CA-CB-CG	5.65	125.83	113.40
42	BR	27	VAL	O-C-N	5.65	131.74	122.70
1	AA	129	A	C3'-C2'-C1'	5.65	106.02	101.50
1	AA	654	G	C5-C6-N1	5.65	114.32	111.50
1	AA	937	A	N1-C2-N3	-5.65	126.48	129.30
26	BB	87	U	OP1-P-O3'	5.65	117.62	105.20
26	BB	1879	C	N3-C2-O2	-5.65	117.95	121.90
45	BU	110	ARG	NE-CZ-NH1	-5.65	117.48	120.30
1	AA	33	A	N9-C4-C5	5.64	108.06	105.80
1	AA	301	G	C6-N1-C2	-5.64	121.71	125.10
1	AA	468	A	C2-N3-C4	5.64	113.42	110.60
1	AA	750	C	C5'-C4'-C3'	-5.64	106.97	116.00
3	AC	35	G	N9-C4-C5	5.64	107.66	105.40
4	AD	14	A	O4'-C1'-N9	5.64	112.72	108.20
5	AE	22	TRP	NE1-CE2-CZ2	5.64	136.61	130.40
26	BB	1064	C	N3-C4-C5	-5.64	119.64	121.90
26	BB	1295	C	C3'-C2'-C1'	5.64	106.02	101.50
26	BB	1842	G	C5'-C4'-O4'	5.64	115.87	109.10
26	BB	1903	G	N1-C6-O6	-5.64	116.51	119.90
26	BB	1966	A	O4'-C1'-N9	5.64	112.72	108.20
26	BB	2447	G	C5'-C4'-O4'	5.64	115.87	109.10
26	BB	2668	G	N3-C4-N9	5.64	129.39	126.00
1	AA	429	U	C5-C6-N1	-5.64	119.88	122.70
1	AA	519	C	N3-C4-N4	-5.64	114.05	118.00
1	AA	718	A	N1-C2-N3	-5.64	126.48	129.30
1	AA	799	G	C5-N7-C8	-5.64	101.48	104.30
1	AA	876	C	C6-N1-C2	5.64	122.56	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	918	A	O4'-C1'-N9	5.64	112.71	108.20
1	AA	926	G	N9-C4-C5	5.64	107.66	105.40
26	BB	982	C	C5-C4-N4	5.64	124.15	120.20
26	BB	1450	G	N9-C4-C5	5.64	107.66	105.40
26	BB	1883	U	C5'-C4'-C3'	-5.64	106.97	116.00
26	BB	2010	G	C8-N9-C4	-5.64	104.14	106.40
26	BB	2118	U	N1-C1'-C2'	-5.64	105.79	112.00
26	BB	2269	G	N1-C2-N2	-5.64	111.12	116.20
26	BB	2380	C	C1'-O4'-C4'	-5.64	105.39	109.90
26	BB	2862	G	C6-N1-C2	-5.64	121.71	125.10
1	AA	128	G	N3-C2-N2	-5.64	115.95	119.90
1	AA	1349	A	N9-C4-C5	-5.64	103.54	105.80
13	AM	7	ARG	NE-CZ-NH1	5.64	123.12	120.30
25	BA	40	U	C5-C4-O4	5.64	129.28	125.90
26	BB	30	G	O4'-C1'-C2'	5.64	112.68	107.60
26	BB	335	C	O5'-P-OP1	-5.64	100.62	105.70
26	BB	1469	A	C5-C6-N6	5.64	128.21	123.70
26	BB	1801	A	N7-C8-N9	5.64	116.62	113.80
26	BB	1802	A	C5'-C4'-O4'	5.64	115.87	109.10
1	AA	334	C	C1'-O4'-C4'	-5.64	105.39	109.90
1	AA	683	G	N7-C8-N9	5.64	115.92	113.10
1	AA	972	C	O4'-C4'-C3'	5.64	110.61	106.10
1	AA	1107	C	N3-C4-C5	-5.64	119.64	121.90
1	AA	1304	G	C6-N1-C2	-5.64	121.72	125.10
3	AC	33	A	N3-C4-C5	-5.64	122.85	126.80
26	BB	150	U	N3-C2-O2	-5.64	118.25	122.20
26	BB	274	C	O4'-C1'-N1	5.64	112.71	108.20
26	BB	407	G	C5'-C4'-O4'	-5.64	102.33	109.10
26	BB	537	G	C5-C6-N1	-5.64	108.68	111.50
26	BB	618	G	C5-N7-C8	-5.64	101.48	104.30
26	BB	724	U	N1-C2-O2	-5.64	118.85	122.80
26	BB	807	U	C1'-O4'-C4'	-5.64	105.39	109.90
26	BB	891	G	N1-C2-N2	5.64	121.28	116.20
26	BB	991	C	C5'-C4'-O4'	5.64	115.87	109.10
26	BB	1419	A	N7-C8-N9	-5.64	110.98	113.80
26	BB	1760	C	C5-C6-N1	5.64	123.82	121.00
26	BB	1860	G	C6-N1-C2	-5.64	121.72	125.10
26	BB	2742	G	N1-C2-N3	5.64	127.28	123.90
1	AA	203	G	N1-C2-N2	5.64	121.27	116.20
1	AA	1192	C	N3-C4-C5	-5.64	119.64	121.90
2	AB	57	G	N3-C2-N2	-5.64	115.95	119.90
5	AE	221	ARG	NE-CZ-NH1	5.64	123.12	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	AK	23	ALA	N-CA-CB	-5.64	102.21	110.10
25	BA	3	C	N1-C2-O2	5.64	122.28	118.90
26	BB	244	A	C4'-C3'-C2'	-5.64	96.96	102.60
26	BB	1516	G	C8-N9-C4	-5.64	104.14	106.40
26	BB	1632	A	C5'-C4'-O4'	5.64	115.86	109.10
26	BB	2048	G	C4'-C3'-C2'	-5.64	96.96	102.60
29	BE	80	TRP	CG-CD2-CE3	5.64	138.97	133.90
1	AA	32	A	C6-N1-C2	5.64	121.98	118.60
1	AA	441	A	C5-C6-N1	-5.64	114.88	117.70
1	AA	501	C	C1'-O4'-C4'	5.64	114.41	109.90
1	AA	542	G	N3-C4-N9	5.64	129.38	126.00
1	AA	588	G	C2-N3-C4	5.64	114.72	111.90
1	AA	636	U	C2-N3-C4	-5.64	123.62	127.00
1	AA	672	U	O4'-C1'-N1	5.64	112.71	108.20
1	AA	1190	G	N9-C4-C5	5.64	107.65	105.40
1	AA	1191	A	C5-N7-C8	-5.64	101.08	103.90
1	AA	1504	G	C6-C5-N7	-5.64	127.02	130.40
2	AB	47	U	O4'-C1'-C2'	-5.64	100.16	105.80
26	BB	27	G	C6-C5-N7	-5.64	127.02	130.40
26	BB	614	A	O4'-C1'-N9	5.64	112.71	108.20
26	BB	625	G	C4-C5-N7	-5.64	108.55	110.80
26	BB	697	G	C8-N9-C4	-5.64	104.14	106.40
26	BB	1120	G	C3'-C2'-C1'	5.64	106.01	101.50
26	BB	1610	A	O5'-C5'-C4'	5.64	122.41	111.70
26	BB	1871	A	C1'-O4'-C4'	5.64	114.41	109.90
26	BB	1968	G	C8-N9-C4	-5.64	104.14	106.40
26	BB	2141	G	C4-C5-C6	5.64	122.18	118.80
26	BB	2405	G	C3'-C2'-C1'	5.64	106.01	101.50
26	BB	2513	A	O4'-C1'-N9	5.64	112.71	108.20
26	BB	2717	C	C6-N1-C2	5.64	122.55	120.30
26	BB	2758	A	C4-C5-N7	5.64	113.52	110.70
26	BB	2832	U	N3-C4-C5	-5.64	111.22	114.60
1	AA	353	A	O4'-C1'-C2'	-5.63	100.17	105.80
1	AA	934	C	O4'-C4'-C3'	5.63	110.61	106.10
1	AA	1150	A	N3-C4-N9	5.63	131.91	127.40
1	AA	1329	A	N1-C6-N6	5.63	121.98	118.60
1	AA	1329	A	O4'-C1'-N9	5.63	112.71	108.20
1	AA	1398	A	O4'-C1'-N9	-5.63	103.69	108.20
2	AB	67	G	C1'-O4'-C4'	5.63	114.41	109.90
26	BB	140	C	C4-C5-C6	-5.63	114.58	117.40
26	BB	187	G	C4-N9-C1'	5.63	133.82	126.50
26	BB	486	C	C5-C4-N4	-5.63	116.26	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	510	C	C1'-O4'-C4'	5.63	114.41	109.90
26	BB	611	C	C2'-C3'-O3'	5.63	122.72	113.70
26	BB	612	G	C6-N1-C2	-5.63	121.72	125.10
26	BB	661	A	C5-C6-N1	5.63	120.52	117.70
26	BB	683	U	C4-C5-C6	5.63	123.08	119.70
26	BB	859	G	C5-C6-N1	-5.63	108.68	111.50
26	BB	924	G	C4'-C3'-C2'	-5.63	96.97	102.60
26	BB	1426	G	C4'-C3'-C2'	-5.63	96.97	102.60
26	BB	1713	A	N9-C4-C5	-5.63	103.55	105.80
26	BB	1927	A	C5'-C4'-O4'	5.63	115.86	109.10
36	BL	52	ASP	CB-CG-OD1	-5.63	113.23	118.30
42	BR	100	ARG	NE-CZ-NH2	5.63	123.12	120.30
1	AA	893	C	C6-N1-C2	5.63	122.55	120.30
2	AB	58	A	C5'-C4'-O4'	5.63	115.86	109.10
3	AC	54	U	C5-C4-O4	-5.63	122.52	125.90
4	AD	7	G	N3-C4-C5	-5.63	125.78	128.60
4	AD	74	A	C5-C6-N6	5.63	128.21	123.70
11	AK	113	ARG	NE-CZ-NH2	5.63	123.12	120.30
26	BB	770	G	N3-C4-C5	-5.63	125.78	128.60
26	BB	976	G	N1-C6-O6	5.63	123.28	119.90
26	BB	1363	C	C6-N1-C2	5.63	122.55	120.30
26	BB	1883	U	C3'-C2'-C1'	5.63	106.01	101.50
26	BB	2085	U	C5'-C4'-C3'	-5.63	106.99	116.00
26	BB	2447	G	C3'-C2'-C1'	5.63	106.01	101.50
1	AA	27	G	C6-N1-C2	-5.63	121.72	125.10
1	AA	186	C	O3'-P-O5'	-5.63	93.30	104.00
1	AA	447	G	C4-C5-C6	5.63	122.18	118.80
1	AA	1214	C	C5-C4-N4	5.63	124.14	120.20
1	AA	1219	A	C5'-C4'-C3'	-5.63	106.99	116.00
1	AA	1538	C	N1-C2-N3	-5.63	115.26	119.20
12	AL	100	ALA	N-CA-CB	-5.63	102.22	110.10
22	AV	2	ARG	CD-NE-CZ	5.63	131.49	123.60
26	BB	35	G	N9-C1'-C2'	-5.63	105.81	112.00
26	BB	98	G	C4-C5-N7	-5.63	108.55	110.80
26	BB	667	U	N3-C2-O2	-5.63	118.26	122.20
26	BB	1781	U	C2-N3-C4	5.63	130.38	127.00
26	BB	1805	A	C4-C5-N7	-5.63	107.88	110.70
26	BB	1831	G	C6-C5-N7	-5.63	127.02	130.40
26	BB	1878	G	N1-C2-N2	5.63	121.27	116.20
26	BB	2093	G	C8-N9-C4	-5.63	104.15	106.40
26	BB	2562	U	O4'-C1'-N1	5.63	112.70	108.20
33	BI	53	GLU	OE1-CD-OE2	5.63	130.06	123.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	391	G	N9-C4-C5	5.63	107.65	105.40
2	AB	33	U	C6-N1-C2	-5.63	117.62	121.00
4	AD	22	A	N3-C4-N9	-5.63	122.90	127.40
4	AD	73	A	N9-C4-C5	-5.63	103.55	105.80
26	BB	9	G	N3-C2-N2	5.63	123.84	119.90
26	BB	607	U	N1-C2-O2	-5.63	118.86	122.80
26	BB	613	A	P-O3'-C3'	5.63	126.46	119.70
26	BB	1521	G	N1-C6-O6	-5.63	116.52	119.90
26	BB	1890	A	C3'-C2'-C1'	-5.63	97.00	101.50
26	BB	2183	A	C5-C6-N6	5.63	128.20	123.70
26	BB	2531	A	C5-N7-C8	5.63	106.72	103.90
26	BB	2589	A	O5'-P-OP2	-5.63	100.63	105.70
26	BB	2593	U	C5'-C4'-O4'	5.63	115.86	109.10
26	BB	2628	C	N1-C2-O2	5.63	122.28	118.90
1	AA	137	U	N3-C4-C5	-5.63	111.22	114.60
1	AA	202	G	C4'-C3'-C2'	-5.63	96.97	102.60
1	AA	572	A	N3-C4-N9	-5.63	122.90	127.40
1	AA	1298	U	O4'-C1'-C2'	-5.63	100.17	105.80
4	AD	19	G	C1'-O4'-C4'	-5.63	105.40	109.90
4	AD	57	C	N1-C2-O2	5.63	122.28	118.90
17	AQ	80	ARG	NE-CZ-NH2	5.63	123.11	120.30
26	BB	108	G	P-O5'-C5'	5.63	129.91	120.90
26	BB	423	A	C6-N1-C2	5.63	121.98	118.60
26	BB	599	A	O4'-C1'-C2'	5.63	112.67	107.60
26	BB	606	U	P-O3'-C3'	5.63	126.45	119.70
26	BB	751	A	C4-C5-C6	-5.63	114.19	117.00
26	BB	815	C	C5'-C4'-C3'	-5.63	106.99	116.00
26	BB	1469	A	C6-C5-N7	-5.63	128.36	132.30
26	BB	1823	G	C1'-O4'-C4'	-5.63	105.40	109.90
26	BB	1953	A	N3-C4-C5	-5.63	122.86	126.80
26	BB	2146	C	N1-C2-N3	-5.63	115.26	119.20
26	BB	2297	A	N1-C6-N6	-5.63	115.22	118.60
26	BB	2303	G	N3-C4-C5	-5.63	125.79	128.60
26	BB	2378	A	N1-C6-N6	-5.63	115.22	118.60
26	BB	2783	U	C5-C6-N1	-5.63	119.89	122.70
1	AA	85	U	C2-N3-C4	-5.63	123.62	127.00
1	AA	155	A	C5-C6-N1	5.63	120.51	117.70
1	AA	522	C	O5'-C5'-C4'	5.63	122.39	111.70
1	AA	855	U	O4'-C1'-C2'	-5.63	100.17	105.80
1	AA	1368	A	N9-C1'-C2'	-5.63	105.81	112.00
2	AB	35	C	O4'-C1'-C2'	-5.63	100.17	105.80
4	AD	77	A	C5-C6-N6	5.63	128.20	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	115	A	C5'-C4'-C3'	-5.63	107.00	116.00
26	BB	4	U	C2-N1-C1'	-5.63	110.95	117.70
26	BB	56	A	O4'-C1'-C2'	5.63	112.66	107.60
26	BB	239	C	C1'-O4'-C4'	5.63	114.40	109.90
26	BB	727	A	C3'-C2'-C1'	5.63	106.00	101.50
26	BB	1043	C	N3-C4-N4	-5.63	114.06	118.00
26	BB	1256	G	N7-C8-N9	5.63	115.91	113.10
26	BB	1396	U	C2-N3-C4	-5.63	123.62	127.00
26	BB	1484	U	N1-C2-N3	5.63	118.28	114.90
26	BB	2567	G	N3-C4-C5	-5.63	125.79	128.60
26	BB	2686	G	N3-C2-N2	-5.63	115.96	119.90
26	BB	2864	G	N1-C6-O6	-5.63	116.52	119.90
1	AA	184	G	C5'-C4'-O4'	5.62	115.85	109.10
1	AA	241	G	C4-N9-C1'	-5.62	119.19	126.50
1	AA	1422	G	C4-C5-C6	5.62	122.17	118.80
4	AD	68	C	N1-C2-N3	-5.62	115.26	119.20
12	AL	10	ARG	NE-CZ-NH1	5.62	123.11	120.30
26	BB	771	G	N3-C4-C5	-5.62	125.79	128.60
26	BB	2110	G	C5'-C4'-O4'	-5.62	102.35	109.10
26	BB	2867	G	C3'-C2'-C1'	-5.62	97.00	101.50
1	AA	490	C	C5-C4-N4	-5.62	116.26	120.20
1	AA	570	G	N9-C4-C5	-5.62	103.15	105.40
1	AA	1296	C	C2-N3-C4	5.62	122.71	119.90
15	AO	8	ARG	C-N-CA	5.62	135.76	121.70
21	AU	63	TYR	CB-CG-CD1	-5.62	117.63	121.00
25	BA	4	C	C5-C4-N4	-5.62	116.26	120.20
25	BA	100	G	N1-C6-O6	-5.62	116.53	119.90
26	BB	155	A	N1-C6-N6	-5.62	115.23	118.60
26	BB	442	G	N9-C4-C5	5.62	107.65	105.40
26	BB	787	C	C5'-C4'-O4'	5.62	115.85	109.10
26	BB	847	U	P-O3'-C3'	5.62	126.45	119.70
26	BB	883	G	C4-C5-C6	-5.62	115.43	118.80
26	BB	1014	A	C6-C5-N7	5.62	136.24	132.30
26	BB	1123	C	C1'-O4'-C4'	5.62	114.40	109.90
26	BB	1619	G	O4'-C1'-N9	-5.62	103.70	108.20
26	BB	1776	G	C5'-C4'-O4'	5.62	115.85	109.10
26	BB	1817	G	N3-C4-C5	-5.62	125.79	128.60
26	BB	2024	G	N9-C4-C5	5.62	107.65	105.40
26	BB	2608	G	O5'-P-OP1	5.62	117.45	110.70
26	BB	2877	G	O4'-C4'-C3'	5.62	110.60	106.10
1	AA	295	C	O4'-C1'-N1	5.62	112.70	108.20
1	AA	388	G	C5-C6-O6	-5.62	125.23	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	406	G	N3-C4-C5	-5.62	125.79	128.60
1	AA	695	A	P-O3'-C3'	5.62	126.45	119.70
1	AA	885	G	C5-C6-O6	-5.62	125.23	128.60
25	BA	52	A	N7-C8-N9	-5.62	110.99	113.80
26	BB	897	C	C3'-C2'-C1'	5.62	106.00	101.50
26	BB	1220	G	N1-C2-N3	5.62	127.27	123.90
26	BB	1419	A	C4-C5-N7	-5.62	107.89	110.70
26	BB	1637	A	C8-N9-C4	-5.62	103.55	105.80
26	BB	2009	A	C3'-C2'-C1'	5.62	106.00	101.50
26	BB	2670	A	N9-C4-C5	5.62	108.05	105.80
26	BB	2736	A	C5'-C4'-O4'	5.62	115.85	109.10
1	AA	1146	A	N9-C4-C5	-5.62	103.55	105.80
25	BA	56	G	O4'-C4'-C3'	5.62	110.60	106.10
26	BB	24	G	C5-C6-O6	-5.62	125.23	128.60
26	BB	334	C	P-O3'-C3'	5.62	126.44	119.70
26	BB	489	G	C6-C5-N7	5.62	133.77	130.40
26	BB	1143	A	O3'-P-O5'	-5.62	93.32	104.00
26	BB	1382	G	N7-C8-N9	5.62	115.91	113.10
26	BB	2093	G	C5-C6-N1	5.62	114.31	111.50
26	BB	2674	G	C1'-O4'-C4'	-5.62	105.40	109.90
1	AA	7	A	N9-C4-C5	5.62	108.05	105.80
1	AA	294	U	N1-C2-N3	5.62	118.27	114.90
1	AA	551	U	C5-C4-O4	-5.62	122.53	125.90
1	AA	833	G	C4'-C3'-C2'	-5.62	96.98	102.60
1	AA	963	G	N3-C4-N9	5.62	129.37	126.00
1	AA	1151	A	N3-C4-C5	5.62	130.73	126.80
1	AA	1238	A	C1'-O4'-C4'	5.62	114.39	109.90
3	AC	49	U	C5'-C4'-O4'	5.62	115.84	109.10
8	AH	68	ARG	NH1-CZ-NH2	-5.62	113.22	119.40
25	BA	39	A	C2-N3-C4	-5.62	107.79	110.60
26	BB	573	U	C5'-C4'-O4'	5.62	115.84	109.10
26	BB	712	G	N9-C4-C5	5.62	107.65	105.40
26	BB	780	G	C5-N7-C8	-5.62	101.49	104.30
26	BB	2234	G	N1-C2-N3	-5.62	120.53	123.90
26	BB	2472	G	N1-C2-N3	5.62	127.27	123.90
1	AA	102	G	N1-C2-N2	-5.62	111.14	116.20
1	AA	115	G	N9-C4-C5	5.62	107.65	105.40
1	AA	291	U	N3-C2-O2	-5.62	118.27	122.20
1	AA	1102	A	N9-C4-C5	-5.62	103.55	105.80
18	AR	87	ARG	NE-CZ-NH1	5.62	123.11	120.30
26	BB	1279	G	C5-N7-C8	5.62	107.11	104.30
26	BB	1763	G	N3-C2-N2	5.62	123.83	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2217	G	N3-C2-N2	5.62	123.83	119.90
28	BD	105	ALA	N-CA-CB	5.62	117.96	110.10
38	BN	116	VAL	CA-CB-CG2	5.62	119.33	110.90
1	AA	114	U	N1-C2-O2	5.62	126.73	122.80
1	AA	242	G	C8-N9-C1'	5.62	134.30	127.00
1	AA	1219	A	N1-C6-N6	5.62	121.97	118.60
6	AF	171	ARG	NH1-CZ-NH2	-5.62	113.22	119.40
18	AR	52	ARG	NE-CZ-NH1	-5.62	117.49	120.30
25	BA	15	A	N9-C4-C5	5.62	108.05	105.80
26	BB	33	C	N3-C4-N4	5.62	121.93	118.00
26	BB	105	C	O4'-C1'-C2'	-5.62	100.19	105.80
26	BB	147	C	N1-C1'-C2'	-5.62	105.82	112.00
26	BB	301	G	N1-C6-O6	5.62	123.27	119.90
26	BB	302	C	C2-N3-C4	5.62	122.71	119.90
26	BB	513	A	C8-N9-C4	-5.62	103.55	105.80
26	BB	636	G	C8-N9-C4	5.62	108.65	106.40
26	BB	905	A	C5'-C4'-O4'	5.62	115.84	109.10
26	BB	1092	C	N3-C4-C5	5.62	124.15	121.90
26	BB	1434	A	C5-C6-N6	-5.62	119.21	123.70
26	BB	1488	C	C5'-C4'-O4'	5.62	115.84	109.10
26	BB	1827	U	N3-C4-C5	-5.62	111.23	114.60
26	BB	2183	A	C5'-C4'-O4'	5.62	115.84	109.10
26	BB	2624	G	C3'-C2'-C1'	-5.62	97.01	101.50
26	BB	2635	A	N7-C8-N9	5.62	116.61	113.80
26	BB	2828	G	N1-C6-O6	-5.62	116.53	119.90
26	BB	2860	A	C2-N3-C4	-5.62	107.79	110.60
1	AA	174	A	C2-N3-C4	5.61	113.41	110.60
1	AA	262	A	C5-C6-N6	-5.61	119.21	123.70
1	AA	412	A	N3-C4-C5	-5.61	122.87	126.80
1	AA	693	G	C6-C5-N7	-5.61	127.03	130.40
1	AA	935	A	C8-N9-C4	-5.61	103.56	105.80
1	AA	1009	U	C3'-C2'-C1'	-5.61	97.01	101.50
1	AA	1142	G	C6-N1-C2	-5.61	121.73	125.10
1	AA	1385	G	C5-C6-O6	5.61	131.97	128.60
25	BA	60	C	C6-N1-C2	-5.61	118.05	120.30
26	BB	205	G	N1-C6-O6	-5.61	116.53	119.90
26	BB	551	G	C2'-C3'-O3'	5.61	122.68	113.70
26	BB	700	G	O4'-C1'-N9	5.61	112.69	108.20
26	BB	753	A	C3'-C2'-C1'	-5.61	97.01	101.50
26	BB	791	C	C5-C6-N1	5.61	123.81	121.00
26	BB	1043	C	N3-C2-O2	-5.61	117.97	121.90
26	BB	1537	G	N3-C2-N2	-5.61	115.97	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1542	U	N1-C2-N3	5.61	118.27	114.90
26	BB	1614	A	C5-N7-C8	-5.61	101.09	103.90
26	BB	1653	G	N3-C4-C5	-5.61	125.79	128.60
26	BB	2034	U	N1-C2-N3	5.61	118.27	114.90
26	BB	2081	U	C1'-O4'-C4'	5.61	114.39	109.90
26	BB	2140	G	C5-C6-O6	-5.61	125.23	128.60
26	BB	2396	G	N9-C1'-C2'	-5.61	105.83	112.00
26	BB	2410	G	C5-C6-N1	5.61	114.31	111.50
49	BY	29	SER	N-CA-CB	-5.61	102.08	110.50
25	BA	22	U	C3'-C2'-C1'	-5.61	97.01	101.50
26	BB	247	G	O3'-P-O5'	-5.61	93.34	104.00
26	BB	858	G	C5-N7-C8	-5.61	101.49	104.30
26	BB	1039	A	C5-C6-N1	5.61	120.51	117.70
26	BB	2056	G	N3-C2-N2	-5.61	115.97	119.90
1	AA	263	A	C2-N3-C4	5.61	113.41	110.60
1	AA	394	G	N9-C1'-C2'	-5.61	105.83	112.00
1	AA	410	G	N1-C6-O6	5.61	123.27	119.90
1	AA	1321	U	C5-C6-N1	5.61	125.50	122.70
1	AA	1511	G	O4'-C1'-N9	5.61	112.69	108.20
25	BA	38	C	N3-C2-O2	-5.61	117.97	121.90
26	BB	42	A	C4'-C3'-C2'	-5.61	96.99	102.60
26	BB	912	C	C4-C5-C6	-5.61	114.59	117.40
26	BB	1207	C	C4'-C3'-C2'	5.61	108.21	102.60
26	BB	1236	G	C8-N9-C4	-5.61	104.16	106.40
26	BB	1298	C	C5'-C4'-O4'	5.61	115.83	109.10
26	BB	1313	U	N1-C2-N3	5.61	118.27	114.90
26	BB	1534	U	N3-C4-C5	5.61	117.97	114.60
26	BB	1663	G	C3'-C2'-C1'	5.61	105.99	101.50
26	BB	1825	U	C2-N1-C1'	-5.61	110.97	117.70
26	BB	1945	G	C5'-C4'-O4'	5.61	115.83	109.10
26	BB	2627	G	C8-N9-C4	5.61	108.64	106.40
26	BB	2649	C	N3-C4-C5	-5.61	119.66	121.90
26	BB	2694	G	N1-C2-N2	-5.61	111.15	116.20
33	BI	142	VAL	CA-CB-CG2	5.61	119.32	110.90
1	AA	1309	G	C4-C5-C6	5.61	122.17	118.80
1	AA	1507	A	C6-C5-N7	5.61	136.23	132.30
26	BB	795	C	N1-C2-O2	5.61	122.27	118.90
26	BB	1648	U	N1-C2-N3	-5.61	111.53	114.90
26	BB	2481	G	N1-C6-O6	5.61	123.27	119.90
29	BE	100	LEU	CB-CG-CD2	-5.61	101.46	111.00
31	BG	31	GLU	OE1-CD-OE2	5.61	130.03	123.30
49	BY	52	CYS	CA-CB-SG	-5.61	103.90	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	581	G	N1-C6-O6	-5.61	116.54	119.90
1	AA	715	A	C4-C5-N7	-5.61	107.90	110.70
1	AA	818	G	C8-N9-C1'	5.61	134.29	127.00
1	AA	1081	A	O4'-C1'-C2'	5.61	112.65	107.60
1	AA	1230	C	O4'-C4'-C3'	-5.61	98.39	104.00
1	AA	1334	G	N9-C4-C5	5.61	107.64	105.40
1	AA	1356	G	C4-C5-C6	-5.61	115.44	118.80
13	AM	48	ARG	CD-NE-CZ	5.61	131.45	123.60
25	BA	13	G	C8-N9-C4	-5.61	104.16	106.40
26	BB	95	A	N1-C2-N3	5.61	132.10	129.30
26	BB	194	G	N1-C2-N3	5.61	127.26	123.90
26	BB	530	G	N1-C2-N3	-5.61	120.53	123.90
26	BB	941	A	C5-C6-N1	5.61	120.50	117.70
26	BB	945	A	C4-C5-C6	-5.61	114.20	117.00
26	BB	1096	A	C5-N7-C8	-5.61	101.10	103.90
26	BB	1120	G	N1-C2-N2	-5.61	111.15	116.20
26	BB	1244	A	P-O3'-C3'	5.61	126.43	119.70
26	BB	2122	U	O4'-C1'-N1	5.61	112.69	108.20
26	BB	2280	G	N1-C2-N3	5.61	127.27	123.90
26	BB	2612	C	C5'-C4'-O4'	5.61	115.83	109.10
1	AA	9	G	C1'-O4'-C4'	-5.61	105.42	109.90
1	AA	95	C	N1-C2-O2	5.61	122.26	118.90
1	AA	150	U	O4'-C1'-N1	5.61	112.69	108.20
1	AA	893	C	N3-C2-O2	-5.61	117.98	121.90
1	AA	1119	C	P-O5'-C5'	5.61	129.87	120.90
1	AA	1128	C	C4'-C3'-C2'	-5.61	96.99	102.60
1	AA	1490	U	P-O5'-C5'	5.61	129.87	120.90
5	AE	144	GLU	OE1-CD-OE2	5.61	130.03	123.30
26	BB	1089	A	O4'-C4'-C3'	5.61	110.58	106.10
26	BB	1184	U	C4-C5-C6	5.61	123.06	119.70
26	BB	2056	G	C5'-C4'-O4'	5.61	115.83	109.10
26	BB	2427	C	C5-C6-N1	5.61	123.80	121.00
26	BB	2781	A	N9-C1'-C2'	-5.61	105.83	112.00
26	BB	2879	A	C6-N1-C2	5.61	121.96	118.60
26	BB	695	G	N3-C2-N2	-5.60	115.98	119.90
26	BB	1404	C	C4'-C3'-C2'	-5.60	97.00	102.60
26	BB	1674	G	C5-C6-N1	5.60	114.30	111.50
26	BB	1764	C	C5-C6-N1	5.60	123.80	121.00
26	BB	1828	G	C3'-C2'-C1'	-5.60	97.02	101.50
1	AA	13	U	P-O3'-C3'	5.60	126.42	119.70
1	AA	148	G	C1'-O4'-C4'	-5.60	105.42	109.90
1	AA	472	U	N3-C2-O2	-5.60	118.28	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	763	G	P-O3'-C3'	5.60	126.42	119.70
1	AA	1088	G	N7-C8-N9	-5.60	110.30	113.10
1	AA	1329	A	N7-C8-N9	5.60	116.60	113.80
1	AA	1341	U	C5-C4-O4	-5.60	122.54	125.90
2	AB	31	U	N3-C2-O2	-5.60	118.28	122.20
3	AC	14	G	N3-C4-N9	5.60	129.36	126.00
9	AI	41	ASP	CB-CG-OD2	-5.60	113.26	118.30
26	BB	103	A	C5-C6-N6	5.60	128.18	123.70
26	BB	237	C	OP1-P-OP2	5.60	128.00	119.60
26	BB	1083	U	N3-C2-O2	-5.60	118.28	122.20
26	BB	1283	G	C5-C6-N1	-5.60	108.70	111.50
26	BB	1356	G	C6-N1-C2	5.60	128.46	125.10
26	BB	1746	A	C2-N3-C4	5.60	113.40	110.60
26	BB	1794	A	N1-C6-N6	-5.60	115.24	118.60
26	BB	2057	G	O4'-C1'-N9	5.60	112.68	108.20
26	BB	2155	U	N1-C2-O2	5.60	126.72	122.80
26	BB	2290	G	C5'-C4'-C3'	-5.60	107.04	116.00
26	BB	2397	G	N1-C2-N3	-5.60	120.54	123.90
26	BB	2625	G	N1-C6-O6	-5.60	116.54	119.90
26	BB	2661	G	O4'-C1'-N9	5.60	112.68	108.20
26	BB	2679	A	C4-C5-C6	-5.60	114.20	117.00
26	BB	2726	A	C4'-C3'-C2'	5.60	108.20	102.60
46	BV	12	ARG	CD-NE-CZ	-5.60	115.76	123.60
26	BB	257	C	N1-C1'-C2'	-5.60	105.84	112.00
26	BB	1139	G	N9-C1'-C2'	-5.60	105.84	112.00
26	BB	1456	G	C1'-O4'-C4'	-5.60	105.42	109.90
26	BB	2087	G	C6-N1-C2	-5.60	121.74	125.10
26	BB	2242	G	N3-C4-N9	5.60	129.36	126.00
1	AA	443	C	O4'-C1'-N1	5.60	112.68	108.20
1	AA	588	G	C5-N7-C8	-5.60	101.50	104.30
1	AA	691	G	N9-C4-C5	5.60	107.64	105.40
1	AA	791	G	N1-C6-O6	-5.60	116.54	119.90
1	AA	901	A	C4-C5-N7	-5.60	107.90	110.70
1	AA	1283	U	O4'-C1'-N1	5.60	112.68	108.20
3	AC	35	G	N9-C1'-C2'	-5.60	105.84	112.00
26	BB	77	G	C5-C6-N1	5.60	114.30	111.50
26	BB	367	G	C6-N1-C2	-5.60	121.74	125.10
26	BB	443	A	P-O3'-C3'	5.60	126.42	119.70
26	BB	607	U	C5-C6-N1	-5.60	119.90	122.70
26	BB	619	G	O4'-C4'-C3'	-5.60	98.40	104.00
26	BB	1299	G	C1'-O4'-C4'	5.60	114.38	109.90
26	BB	1329	U	OP1-P-OP2	-5.60	111.20	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1396	U	P-O3'-C3'	5.60	126.42	119.70
26	BB	1779	U	C5-C6-N1	-5.60	119.90	122.70
26	BB	2125	G	N1-C6-O6	5.60	123.26	119.90
26	BB	2249	U	O4'-C4'-C3'	5.60	110.58	106.10
26	BB	2743	U	N1-C1'-C2'	-5.60	105.84	112.00
26	BB	2791	G	N7-C8-N9	5.60	115.90	113.10
1	AA	177	G	N7-C8-N9	5.60	115.90	113.10
1	AA	361	G	N1-C2-N2	5.60	121.24	116.20
1	AA	1058	G	C4'-C3'-C2'	5.60	108.20	102.60
13	AM	60	ASP	CB-CG-OD2	-5.60	113.26	118.30
26	BB	309	A	C8-N9-C4	-5.60	103.56	105.80
26	BB	340	A	N7-C8-N9	-5.60	111.00	113.80
26	BB	532	A	N3-C4-C5	-5.60	122.88	126.80
26	BB	563	A	C5-C6-N1	5.60	120.50	117.70
26	BB	1016	G	O4'-C4'-C3'	5.60	110.58	106.10
26	BB	2102	G	C4-C5-N7	-5.60	108.56	110.80
26	BB	2158	A	N3-C4-N9	-5.60	122.92	127.40
26	BB	2372	U	C5-C6-N1	-5.60	119.90	122.70
26	BB	2382	G	O4'-C1'-N9	5.60	112.68	108.20
26	BB	2456	C	C3'-C2'-C1'	5.60	105.98	101.50
26	BB	2801	G	C5-C6-O6	5.60	131.96	128.60
39	BO	31	PHE	CB-CG-CD1	5.60	124.72	120.80
1	AA	105	G	C4'-C3'-C2'	-5.60	97.00	102.60
1	AA	403	C	N1-C1'-C2'	-5.60	105.84	112.00
1	AA	802	A	N9-C4-C5	-5.60	103.56	105.80
1	AA	958	A	N9-C4-C5	-5.60	103.56	105.80
26	BB	476	G	N3-C2-N2	5.60	123.82	119.90
26	BB	773	U	OP1-P-OP2	-5.60	111.21	119.60
26	BB	1584	U	C2-N3-C4	-5.60	123.64	127.00
26	BB	1826	G	C4'-C3'-C2'	-5.60	97.00	102.60
26	BB	1897	G	N3-C4-N9	5.60	129.36	126.00
47	BW	80	ASP	CB-CG-OD1	5.60	123.34	118.30
1	AA	301	G	N1-C2-N2	-5.59	111.16	116.20
1	AA	429	U	C4-C5-C6	5.59	123.06	119.70
1	AA	646	G	C4-N9-C1'	-5.59	119.23	126.50
1	AA	712	A	C2-N3-C4	5.59	113.40	110.60
26	BB	23	G	O4'-C1'-N9	5.59	112.68	108.20
26	BB	33	C	C5-C6-N1	5.59	123.80	121.00
26	BB	488	G	O5'-C5'-C4'	-5.59	101.07	111.70
26	BB	539	G	N3-C2-N2	-5.59	115.98	119.90
26	BB	856	G	C3'-C2'-C1'	5.59	105.97	101.50
26	BB	1385	A	C5-N7-C8	-5.59	101.10	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1936	A	C2-N3-C4	-5.59	107.80	110.60
26	BB	1981	A	N7-C8-N9	5.59	116.60	113.80
26	BB	2119	A	C2-N3-C4	5.59	113.40	110.60
26	BB	2164	C	C3'-C2'-C1'	5.59	105.98	101.50
26	BB	2480	C	N1-C2-O2	5.59	122.26	118.90
26	BB	2687	U	C5'-C4'-O4'	5.59	115.81	109.10
43	BS	109	VAL	CG1-CB-CG2	-5.59	101.95	110.90
1	AA	438	U	O4'-C1'-N1	5.59	112.67	108.20
1	AA	881	G	N3-C2-N2	-5.59	115.98	119.90
1	AA	936	C	C2-N3-C4	5.59	122.70	119.90
1	AA	1252	A	C6-N1-C2	-5.59	115.24	118.60
26	BB	369	U	C5-C4-O4	-5.59	122.54	125.90
26	BB	488	G	C5-C6-O6	5.59	131.96	128.60
26	BB	752	A	N9-C4-C5	5.59	108.04	105.80
26	BB	1790	C	C5'-C4'-C3'	-5.59	107.05	116.00
26	BB	2608	G	C6-C5-N7	-5.59	127.04	130.40
26	BB	2688	G	C5-N7-C8	5.59	107.10	104.30
26	BB	2806	C	N3-C4-C5	-5.59	119.66	121.90
44	BT	54	VAL	CA-CB-CG1	5.59	119.29	110.90
1	AA	1155	A	N7-C8-N9	5.59	116.60	113.80
1	AA	1198	G	C1'-O4'-C4'	-5.59	105.43	109.90
3	AC	35	G	N1-C2-N2	5.59	121.23	116.20
11	AK	2	MET	CG-SD-CE	5.59	109.15	100.20
25	BA	20	G	N1-C2-N3	-5.59	120.55	123.90
26	BB	374	A	C3'-C2'-C1'	-5.59	97.03	101.50
26	BB	502	A	N7-C8-N9	5.59	116.60	113.80
26	BB	876	C	O4'-C4'-C3'	5.59	110.57	106.10
26	BB	2304	G	N9-C4-C5	-5.59	103.16	105.40
26	BB	2570	G	C5-C6-N1	5.59	114.30	111.50
1	AA	82	G	N1-C6-O6	5.59	123.25	119.90
1	AA	657	U	C1'-O4'-C4'	5.59	114.37	109.90
1	AA	1099	G	O4'-C1'-N9	5.59	112.67	108.20
1	AA	1204	A	C5'-C4'-O4'	5.59	115.81	109.10
3	AC	53	G	N3-C4-N9	5.59	129.35	126.00
4	AD	71	G	N9-C1'-C2'	-5.59	105.85	112.00
6	AF	131	ARG	NE-CZ-NH1	5.59	123.09	120.30
26	BB	246	C	N3-C4-C5	-5.59	119.66	121.90
26	BB	1071	G	N3-C4-N9	5.59	129.35	126.00
26	BB	1144	A	N1-C2-N3	-5.59	126.50	129.30
26	BB	1216	G	N3-C4-N9	5.59	129.35	126.00
26	BB	1528	A	C5-N7-C8	5.59	106.69	103.90
26	BB	1813	G	N7-C8-N9	-5.59	110.31	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1867	G	C8-N9-C4	-5.59	104.16	106.40
26	BB	1896	G	N9-C4-C5	5.59	107.64	105.40
26	BB	2025	C	N3-C2-O2	-5.59	117.99	121.90
26	BB	2087	G	C5-C6-O6	-5.59	125.25	128.60
26	BB	2235	G	O5'-C5'-C4'	-5.59	101.08	111.70
37	BM	78	ARG	NE-CZ-NH1	5.59	123.09	120.30
1	AA	1036	A	N1-C2-N3	-5.59	126.51	129.30
1	AA	1086	U	C6-N1-C2	-5.59	117.65	121.00
2	AB	59	G	N3-C2-N2	5.59	123.81	119.90
10	AJ	160	SER	CB-CA-C	5.59	120.72	110.10
25	BA	22	U	C6-N1-C2	-5.59	117.65	121.00
26	BB	180	G	N3-C2-N2	-5.59	115.99	119.90
26	BB	282	A	O4'-C1'-N9	5.59	112.67	108.20
26	BB	315	G	N9-C4-C5	5.59	107.64	105.40
26	BB	384	A	C1'-O4'-C4'	-5.59	105.43	109.90
26	BB	927	A	C8-N9-C4	-5.59	103.56	105.80
26	BB	1840	G	O4'-C1'-N9	5.59	112.67	108.20
26	BB	2246	G	C2-N3-C4	5.59	114.69	111.90
26	BB	2357	G	C2-N3-C4	5.59	114.69	111.90
1	AA	441	A	C2-N3-C4	-5.59	107.81	110.60
4	AD	38	A	C6-N1-C2	-5.59	115.25	118.60
25	BA	61	G	N9-C1'-C2'	-5.59	105.86	112.00
26	BB	820	A	C3'-C2'-C1'	-5.59	97.03	101.50
26	BB	1351	C	C3'-C2'-C1'	5.59	105.97	101.50
26	BB	1505	A	N7-C8-N9	5.59	116.59	113.80
26	BB	2106	U	P-O3'-C3'	5.59	126.40	119.70
26	BB	2226	C	C5-C6-N1	5.59	123.79	121.00
26	BB	2294	G	C4-C5-C6	5.59	122.15	118.80
26	BB	2569	G	C2-N3-C4	5.59	114.69	111.90
26	BB	2780	G	C8-N9-C4	-5.59	104.17	106.40
1	AA	266	G	C5-C6-O6	-5.58	125.25	128.60
1	AA	1342	C	N1-C2-O2	5.58	122.25	118.90
1	AA	1512	U	C5-C4-O4	-5.58	122.55	125.90
26	BB	176	A	P-O5'-C5'	5.58	129.84	120.90
26	BB	481	G	N3-C4-C5	-5.58	125.81	128.60
26	BB	602	A	C5'-C4'-O4'	5.58	115.80	109.10
26	BB	794	A	C5-C6-N1	-5.58	114.91	117.70
26	BB	1045	C	C2-N3-C4	5.58	122.69	119.90
26	BB	1210	G	C4'-C3'-C2'	5.58	108.19	102.60
26	BB	1677	A	C5-C6-N6	-5.58	119.23	123.70
26	BB	1984	G	N3-C4-N9	5.58	129.35	126.00
1	AA	272	C	C2-N3-C4	5.58	122.69	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	500	G	C1'-O4'-C4'	-5.58	105.43	109.90
1	AA	1300	G	P-O5'-C5'	5.58	129.83	120.90
1	AA	1494	G	N1-C6-O6	5.58	123.25	119.90
26	BB	181	A	C2-N3-C4	5.58	113.39	110.60
26	BB	289	G	C4-C5-N7	-5.58	108.57	110.80
26	BB	1033	U	N1-C2-N3	5.58	118.25	114.90
26	BB	1351	C	N1-C2-O2	5.58	122.25	118.90
26	BB	1623	G	C8-N9-C4	-5.58	104.17	106.40
26	BB	1907	G	N1-C2-N2	5.58	121.22	116.20
26	BB	2168	G	N3-C4-N9	5.58	129.35	126.00
26	BB	2337	G	C3'-C2'-C1'	-5.58	97.03	101.50
26	BB	2470	G	C4-C5-C6	-5.58	115.45	118.80
1	AA	11	G	C4'-C3'-C2'	-5.58	97.02	102.60
1	AA	109	A	C4'-C3'-C2'	-5.58	97.02	102.60
1	AA	343	U	P-O3'-C3'	5.58	126.40	119.70
1	AA	642	A	N1-C2-N3	-5.58	126.51	129.30
1	AA	1007	U	N1-C1'-C2'	5.58	121.26	114.00
1	AA	1179	A	C5'-C4'-O4'	5.58	115.80	109.10
1	AA	1333	A	C5-C6-N1	5.58	120.49	117.70
2	AB	31	U	O4'-C1'-C2'	5.58	112.62	107.60
2	AB	68	C	O4'-C1'-N1	5.58	112.67	108.20
3	AC	39	U	C4'-C3'-O3'	5.58	124.16	113.00
26	BB	23	G	C5'-C4'-O4'	5.58	115.80	109.10
26	BB	599	A	C3'-C2'-C1'	-5.58	97.03	101.50
26	BB	1389	G	C8-N9-C4	-5.58	104.17	106.40
26	BB	2068	U	C5-C6-N1	-5.58	119.91	122.70
26	BB	2151	U	N3-C2-O2	-5.58	118.29	122.20
26	BB	2238	G	N3-C4-N9	5.58	129.35	126.00
26	BB	2614	A	C2-N3-C4	5.58	113.39	110.60
26	BB	2707	U	C6-N1-C2	-5.58	117.65	121.00
1	AA	177	G	O4'-C4'-C3'	-5.58	98.42	104.00
1	AA	1122	U	C6-N1-C2	-5.58	117.65	121.00
1	AA	1415	G	N9-C4-C5	5.58	107.63	105.40
26	BB	2527	C	C5-C6-N1	-5.58	118.21	121.00
1	AA	297	G	N9-C4-C5	5.58	107.63	105.40
1	AA	1150	A	C2-N3-C4	5.58	113.39	110.60
25	BA	32	U	N3-C4-C5	5.58	117.95	114.60
26	BB	522	A	N9-C1'-C2'	-5.58	105.86	112.00
26	BB	523	C	C4-C5-C6	-5.58	114.61	117.40
26	BB	886	A	C6-C5-N7	-5.58	128.40	132.30
26	BB	935	C	N3-C4-C5	5.58	124.13	121.90
26	BB	1138	G	C4-C5-N7	5.58	113.03	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1161	C	N3-C4-N4	5.58	121.91	118.00
26	BB	1534	U	O4'-C4'-C3'	5.58	110.56	106.10
26	BB	1993	U	N1-C2-N3	5.58	118.25	114.90
26	BB	2025	C	C3'-C2'-C1'	-5.58	97.04	101.50
26	BB	2105	U	C4-C5-C6	5.58	123.05	119.70
26	BB	2290	G	C4-C5-N7	5.58	113.03	110.80
26	BB	2574	G	C5-C6-N1	5.58	114.29	111.50
26	BB	2765	A	C8-N9-C4	-5.58	103.57	105.80
26	BB	2850	A	C5-N7-C8	5.58	106.69	103.90
42	BR	58	PHE	CG-CD2-CE2	-5.58	114.66	120.80
1	AA	152	A	O4'-C1'-N9	5.58	112.66	108.20
1	AA	389	A	C1'-O4'-C4'	-5.58	105.44	109.90
1	AA	453	G	C8-N9-C4	-5.58	104.17	106.40
1	AA	1472	U	N1-C2-N3	5.58	118.25	114.90
2	AB	3	G	N9-C1'-C2'	-5.58	105.86	112.00
11	AK	52	GLY	C-N-CA	5.58	135.64	121.70
26	BB	22	C	N3-C4-N4	5.58	121.90	118.00
26	BB	276	U	C2-N1-C1'	5.58	124.39	117.70
26	BB	297	G	C5-C6-N1	5.58	114.29	111.50
26	BB	358	U	N1-C2-N3	5.58	118.25	114.90
26	BB	512	G	N1-C2-N3	-5.58	120.55	123.90
26	BB	1276	A	N1-C6-N6	-5.58	115.25	118.60
26	BB	1885	A	C1'-O4'-C4'	5.58	114.36	109.90
1	AA	39	G	N9-C4-C5	5.58	107.63	105.40
1	AA	283	U	C4-C5-C6	5.58	123.05	119.70
1	AA	410	G	C3'-C2'-C1'	5.58	105.96	101.50
1	AA	1502	A	C4'-C3'-C2'	-5.58	97.02	102.60
26	BB	68	G	C5-C6-N1	5.58	114.29	111.50
26	BB	346	A	C4-C5-N7	-5.58	107.91	110.70
26	BB	1206	G	C1'-O4'-C4'	-5.58	105.44	109.90
26	BB	2402	U	N1-C2-N3	5.58	118.25	114.90
26	BB	2407	A	O4'-C1'-N9	5.58	112.66	108.20
26	BB	2501	C	N3-C2-O2	-5.58	118.00	121.90
26	BB	2608	G	N9-C1'-C2'	-5.58	105.87	112.00
1	AA	69	G	C5-C6-N1	5.57	114.29	111.50
1	AA	241	G	O4'-C1'-N9	5.57	112.66	108.20
1	AA	457	G	C8-N9-C4	-5.57	104.17	106.40
1	AA	957	U	P-O3'-C3'	5.57	126.39	119.70
1	AA	1231	G	O4'-C1'-C2'	5.57	112.61	107.60
1	AA	1279	G	C1'-O4'-C4'	-5.57	105.44	109.90
1	AA	1486	G	C5'-C4'-O4'	5.57	115.79	109.10
2	AB	12	U	C4'-C3'-C2'	-5.57	97.03	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	718	A	C1'-O4'-C4'	-5.57	105.44	109.90
26	BB	950	G	C4-C5-C6	5.57	122.14	118.80
26	BB	1036	G	O4'-C1'-N9	5.57	112.66	108.20
26	BB	1071	G	N9-C1'-C2'	-5.57	105.87	112.00
26	BB	1445	G	N3-C4-C5	-5.57	125.81	128.60
26	BB	1464	G	O5'-C5'-C4'	-5.57	101.11	111.70
26	BB	1817	G	C6-C5-N7	-5.57	127.06	130.40
26	BB	1896	G	C8-N9-C1'	5.57	134.25	127.00
26	BB	2021	C	C6-N1-C2	5.57	122.53	120.30
26	BB	2096	C	C4-C5-C6	5.57	120.19	117.40
26	BB	2314	A	C2-N3-C4	5.57	113.39	110.60
26	BB	2841	C	N3-C4-N4	-5.57	114.10	118.00
26	BB	2873	A	N1-C6-N6	5.57	121.94	118.60
1	AA	65	A	N9-C4-C5	-5.57	103.57	105.80
1	AA	444	G	N1-C2-N3	-5.57	120.56	123.90
1	AA	661	G	C6-C5-N7	-5.57	127.06	130.40
1	AA	1206	G	C4-C5-N7	-5.57	108.57	110.80
2	AB	6	C	N1-C1'-C2'	-5.57	105.87	112.00
26	BB	99	U	C6-N1-C1'	-5.57	113.40	121.20
26	BB	374	A	C1'-O4'-C4'	-5.57	105.44	109.90
26	BB	610	C	C2-N1-C1'	-5.57	112.67	118.80
26	BB	1194	A	C4-C5-N7	-5.57	107.91	110.70
26	BB	1529	G	C8-N9-C1'	5.57	134.24	127.00
26	BB	1877	A	O3'-P-O5'	-5.57	93.41	104.00
26	BB	2077	A	O4'-C1'-N9	5.57	112.66	108.20
39	BO	35	ALA	CB-CA-C	-5.57	101.74	110.10
1	AA	303	A	C8-N9-C4	-5.57	103.57	105.80
1	AA	354	G	N7-C8-N9	5.57	115.89	113.10
1	AA	836	G	C4-C5-C6	5.57	122.14	118.80
1	AA	860	A	C6-C5-N7	5.57	136.20	132.30
1	AA	1185	G	N1-C2-N3	-5.57	120.56	123.90
1	AA	1237	C	N1-C2-N3	-5.57	115.30	119.20
1	AA	1288	A	N3-C4-C5	5.57	130.70	126.80
26	BB	34	U	C5-C6-N1	5.57	125.48	122.70
26	BB	684	G	N1-C2-N3	-5.57	120.56	123.90
26	BB	694	U	N3-C4-O4	5.57	123.30	119.40
26	BB	1238	G	C5-C6-N1	5.57	114.28	111.50
26	BB	1971	U	C5'-C4'-O4'	5.57	115.78	109.10
26	BB	2273	A	O4'-C1'-N9	5.57	112.66	108.20
26	BB	2351	G	C3'-C2'-C1'	5.57	105.96	101.50
26	BB	2867	G	N1-C6-O6	-5.57	116.56	119.90
37	BM	60	ALA	N-CA-CB	-5.57	102.30	110.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1091	G	C5-C6-N1	5.57	114.28	111.50
26	BB	1239	G	N1-C2-N3	-5.57	120.56	123.90
26	BB	1384	A	C3'-C2'-C1'	-5.57	97.05	101.50
26	BB	1478	G	N3-C2-N2	-5.57	116.00	119.90
26	BB	1515	A	C5-N7-C8	-5.57	101.12	103.90
26	BB	1518	C	C2-N3-C4	5.57	122.69	119.90
26	BB	1759	A	N3-C4-C5	-5.57	122.90	126.80
1	AA	130	A	O4'-C4'-C3'	5.57	110.55	106.10
1	AA	164	G	C4-C5-C6	5.57	122.14	118.80
1	AA	462	G	N3-C4-C5	-5.57	125.82	128.60
1	AA	543	U	C3'-C2'-C1'	-5.57	97.05	101.50
1	AA	623	C	C5'-C4'-O4'	5.57	115.78	109.10
1	AA	673	A	N1-C2-N3	-5.57	126.52	129.30
1	AA	738	C	C5'-C4'-C3'	-5.57	107.09	116.00
1	AA	971	G	C6-N1-C2	-5.57	121.76	125.10
1	AA	1007	U	C5'-C4'-O4'	5.57	115.78	109.10
1	AA	1137	C	C2-N1-C1'	-5.57	112.67	118.80
1	AA	1319	A	C1'-O4'-C4'	-5.57	105.45	109.90
1	AA	1486	G	N9-C1'-C2'	-5.57	105.88	112.00
4	AD	16	C	C5-C4-N4	5.57	124.10	120.20
26	BB	116	C	C2-N3-C4	5.57	122.68	119.90
26	BB	323	C	C1'-O4'-C4'	5.57	114.35	109.90
26	BB	508	A	C4'-C3'-C2'	-5.57	97.03	102.60
26	BB	775	G	C1'-O4'-C4'	-5.57	105.45	109.90
26	BB	865	C	C2-N1-C1'	5.57	124.92	118.80
26	BB	1540	G	N3-C2-N2	-5.57	116.00	119.90
26	BB	2593	U	C5-C6-N1	-5.57	119.92	122.70
26	BB	2714	G	OP1-P-O3'	5.57	117.45	105.20
26	BB	2862	G	C5'-C4'-C3'	5.57	124.91	116.00
56	B5	8	SER	O-C-N	5.57	131.61	122.70
1	AA	357	G	C4-C5-C6	5.57	122.14	118.80
1	AA	974	A	N3-C4-C5	5.57	130.69	126.80
1	AA	1371	G	C4-C5-N7	5.57	113.03	110.80
2	AB	6	C	C4-C5-C6	-5.57	114.62	117.40
25	BA	61	G	N1-C6-O6	-5.57	116.56	119.90
26	BB	5	A	C8-N9-C4	-5.57	103.57	105.80
26	BB	780	G	C6-C5-N7	-5.57	127.06	130.40
26	BB	1025	G	C6-C5-N7	5.57	133.74	130.40
26	BB	1419	A	C4'-C3'-C2'	-5.57	97.03	102.60
26	BB	1426	G	C4-C5-N7	5.57	113.03	110.80
26	BB	1591	A	C2-N3-C4	5.57	113.38	110.60
26	BB	1868	C	O4'-C1'-N1	5.57	112.65	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2043	C	P-O3'-C3'	5.57	126.38	119.70
26	BB	2140	G	N3-C2-N2	-5.57	116.00	119.90
28	BD	76	VAL	CA-CB-CG2	5.57	119.25	110.90
45	BU	29	VAL	CA-CB-CG1	5.57	119.25	110.90
1	AA	45	G	N3-C4-C5	-5.56	125.82	128.60
1	AA	85	U	C5-C4-O4	-5.56	122.56	125.90
1	AA	153	C	O5'-P-OP2	-5.56	100.69	105.70
1	AA	275	G	C2'-C3'-O3'	5.56	122.60	113.70
26	BB	1132	U	P-O3'-C3'	5.56	126.38	119.70
26	BB	1455	G	C5-C6-N1	5.56	114.28	111.50
1	AA	241	G	N7-C8-N9	-5.56	110.32	113.10
1	AA	361	G	C5'-C4'-O4'	5.56	115.77	109.10
1	AA	636	U	N1-C2-N3	5.56	118.24	114.90
1	AA	822	U	C2-N3-C4	-5.56	123.66	127.00
1	AA	867	G	N9-C4-C5	5.56	107.62	105.40
1	AA	992	U	C5'-C4'-O4'	5.56	115.77	109.10
1	AA	1032	G	N1-C2-N2	5.56	121.21	116.20
1	AA	1193	G	C5-N7-C8	5.56	107.08	104.30
1	AA	1293	C	C5-C4-N4	5.56	124.09	120.20
1	AA	1308	U	N1-C2-O2	-5.56	118.91	122.80
25	BA	105	G	O4'-C4'-C3'	5.56	110.55	106.10
26	BB	7	G	C1'-O4'-C4'	-5.56	105.45	109.90
26	BB	79	C	C5'-C4'-O4'	5.56	115.78	109.10
26	BB	272	A	C5'-C4'-O4'	5.56	115.77	109.10
26	BB	302	C	N3-C4-N4	5.56	121.89	118.00
26	BB	2061	G	C5-C6-N1	5.56	114.28	111.50
26	BB	2349	G	N1-C6-O6	-5.56	116.56	119.90
26	BB	2510	C	C6-N1-C2	-5.56	118.08	120.30
26	BB	2608	G	N1-C2-N3	5.56	127.24	123.90
34	BJ	52	ARG	CD-NE-CZ	5.56	131.39	123.60
36	BL	44	TYR	CB-CG-CD2	5.56	124.34	121.00
1	AA	74	A	N9-C1'-C2'	-5.56	105.88	112.00
1	AA	423	G	N9-C1'-C2'	-5.56	105.88	112.00
1	AA	860	A	N1-C2-N3	5.56	132.08	129.30
1	AA	991	U	N3-C2-O2	-5.56	118.31	122.20
1	AA	1133	G	N1-C2-N2	5.56	121.20	116.20
1	AA	1348	U	P-O3'-C3'	5.56	126.37	119.70
13	AM	89	ARG	NE-CZ-NH2	-5.56	117.52	120.30
26	BB	131	A	N1-C2-N3	-5.56	126.52	129.30
26	BB	305	C	C5-C6-N1	5.56	123.78	121.00
26	BB	367	G	C8-N9-C4	-5.56	104.18	106.40
26	BB	569	U	C5-C4-O4	-5.56	122.56	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1032	A	N7-C8-N9	-5.56	111.02	113.80
26	BB	1573	G	N1-C2-N2	5.56	121.20	116.20
26	BB	1693	U	C5-C6-N1	-5.56	119.92	122.70
26	BB	1755	A	C2-N3-C4	5.56	113.38	110.60
26	BB	2013	A	N3-C4-C5	5.56	130.69	126.80
1	AA	158	G	C5-C6-O6	-5.56	125.26	128.60
1	AA	367	U	N3-C4-C5	-5.56	111.26	114.60
1	AA	1046	A	C6-C5-N7	5.56	136.19	132.30
1	AA	1165	U	C3'-C2'-C1'	5.56	105.95	101.50
26	BB	363	G	N1-C6-O6	5.56	123.24	119.90
26	BB	1404	C	C5-C6-N1	5.56	123.78	121.00
26	BB	2423	U	N1-C2-N3	5.56	118.24	114.90
1	AA	40	C	N3-C4-C5	-5.56	119.68	121.90
1	AA	66	A	C5'-C4'-C3'	5.56	124.89	116.00
1	AA	670	G	C2-N3-C4	5.56	114.68	111.90
1	AA	824	G	C4-C5-N7	5.56	113.02	110.80
1	AA	878	A	C5-N7-C8	-5.56	101.12	103.90
1	AA	891	U	C4-C5-C6	5.56	123.03	119.70
1	AA	949	A	C4-C5-C6	-5.56	114.22	117.00
1	AA	1075	U	O4'-C1'-C2'	-5.56	100.24	105.80
1	AA	1203	C	C6-N1-C2	-5.56	118.08	120.30
1	AA	1301	U	N1-C2-N3	5.56	118.23	114.90
10	AJ	90	VAL	CA-CB-CG1	5.56	119.24	110.90
25	BA	97	C	N1-C2-N3	-5.56	115.31	119.20
26	BB	124	G	C2-N3-C4	5.56	114.68	111.90
26	BB	271	G	C1'-O4'-C4'	-5.56	105.45	109.90
26	BB	881	G	P-O3'-C3'	5.56	126.37	119.70
26	BB	1443	U	N1-C2-O2	-5.56	118.91	122.80
29	BE	104	VAL	CA-CB-CG2	5.56	119.24	110.90
31	BG	114	ARG	NH1-CZ-NH2	-5.56	113.29	119.40
38	BN	127	VAL	CA-CB-CG1	5.56	119.24	110.90
1	AA	490	C	C5-C6-N1	5.56	123.78	121.00
1	AA	1335	U	C5-C4-O4	5.56	129.23	125.90
26	BB	144	A	C1'-O4'-C4'	5.56	114.34	109.90
26	BB	833	A	O4'-C1'-N9	5.56	112.64	108.20
26	BB	1141	U	N3-C4-O4	-5.56	115.51	119.40
26	BB	1342	A	C5'-C4'-O4'	5.56	115.77	109.10
26	BB	1412	U	C5-C6-N1	-5.56	119.92	122.70
26	BB	1414	C	C3'-C2'-C1'	-5.56	97.06	101.50
26	BB	1751	U	N1-C1'-C2'	-5.56	105.89	112.00
26	BB	2204	G	C8-N9-C4	-5.56	104.18	106.40
44	BT	21	ARG	NE-CZ-NH2	-5.56	117.52	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	148	G	N1-C2-N2	5.55	121.20	116.20
1	AA	1037	C	C2-N3-C4	5.55	122.68	119.90
1	AA	1053	G	C3'-C2'-C1'	-5.55	97.06	101.50
26	BB	285	G	C5-C6-N1	5.55	114.28	111.50
26	BB	658	U	C5-C6-N1	5.55	125.48	122.70
26	BB	970	U	C3'-C2'-C1'	5.55	105.94	101.50
26	BB	988	A	N3-C4-C5	-5.55	122.91	126.80
26	BB	1253	A	N9-C4-C5	5.55	108.02	105.80
26	BB	1331	G	C5-C6-O6	-5.55	125.27	128.60
26	BB	1705	A	N9-C4-C5	5.55	108.02	105.80
26	BB	2098	U	N1-C2-N3	5.55	118.23	114.90
26	BB	2462	C	C6-N1-C2	-5.55	118.08	120.30
26	BB	2828	G	C5-C6-O6	5.55	131.93	128.60
44	BT	40	MET	CA-CB-CG	5.55	122.74	113.30
1	AA	266	G	N3-C4-C5	-5.55	125.82	128.60
1	AA	722	G	N3-C4-N9	5.55	129.33	126.00
1	AA	764	C	C2'-C3'-O3'	5.55	122.58	113.70
26	BB	256	A	N9-C4-C5	5.55	108.02	105.80
26	BB	1312	U	N3-C4-C5	-5.55	111.27	114.60
26	BB	2573	C	C6-N1-C2	5.55	122.52	120.30
26	BB	2630	G	C3'-C2'-C1'	-5.55	97.06	101.50
1	AA	268	U	N3-C4-C5	5.55	117.93	114.60
1	AA	358	U	C5'-C4'-O4'	5.55	115.76	109.10
1	AA	1143	G	C8-N9-C1'	5.55	134.22	127.00
1	AA	1258	G	O4'-C1'-N9	5.55	112.64	108.20
1	AA	1374	A	C5-N7-C8	5.55	106.67	103.90
1	AA	1438	G	N3-C4-C5	-5.55	125.83	128.60
4	AD	74	A	N1-C2-N3	-5.55	126.52	129.30
26	BB	702	U	N1-C2-O2	-5.55	118.91	122.80
26	BB	707	G	C5'-C4'-C3'	-5.55	107.12	116.00
26	BB	1031	G	C4-C5-C6	5.55	122.13	118.80
26	BB	2186	G	N1-C2-N3	-5.55	120.57	123.90
26	BB	2468	A	C5-C6-N1	5.55	120.48	117.70
26	BB	2515	C	C4-C5-C6	-5.55	114.62	117.40
1	AA	99	C	O4'-C1'-N1	-5.55	103.76	108.20
1	AA	101	A	C4-C5-N7	-5.55	107.93	110.70
1	AA	271	C	P-O3'-C3'	5.55	126.36	119.70
1	AA	364	A	N3-C4-N9	-5.55	122.96	127.40
1	AA	445	G	N1-C6-O6	-5.55	116.57	119.90
1	AA	490	C	C4-C5-C6	-5.55	114.62	117.40
1	AA	925	G	N7-C8-N9	-5.55	110.33	113.10
1	AA	1188	A	N3-C4-C5	-5.55	122.92	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1417	G	C5-N7-C8	-5.55	101.53	104.30
1	AA	1423	G	N7-C8-N9	-5.55	110.33	113.10
1	AA	1460	C	C2-N3-C4	5.55	122.67	119.90
9	AI	16	GLU	OE1-CD-OE2	5.55	129.96	123.30
10	AJ	125	ASP	CB-CG-OD2	-5.55	113.31	118.30
25	BA	46	A	C3'-C2'-C1'	-5.55	97.06	101.50
26	BB	32	C	C5-C6-N1	-5.55	118.22	121.00
26	BB	319	G	C1'-O4'-C4'	5.55	114.34	109.90
26	BB	611	C	C4'-C3'-C2'	-5.55	97.05	102.60
26	BB	744	U	C5'-C4'-O4'	5.55	115.76	109.10
26	BB	856	G	C4'-C3'-C2'	-5.55	97.05	102.60
26	BB	1265	A	C1'-O4'-C4'	5.55	114.34	109.90
26	BB	1676	A	N3-C4-N9	5.55	131.84	127.40
26	BB	2403	C	C5'-C4'-O4'	5.55	115.76	109.10
26	BB	2632	A	C5'-C4'-C3'	-5.55	107.12	116.00
26	BB	2901	C	C4-C5-C6	-5.55	114.62	117.40
27	BC	212	VAL	CA-CB-CG2	5.55	119.22	110.90
32	BH	95	ALA	CB-CA-C	5.55	118.42	110.10
36	BL	14	ASP	CB-CG-OD2	-5.55	113.31	118.30
50	BZ	4	CYS	CA-CB-SG	-5.55	104.01	114.00
1	AA	473	U	C5-C4-O4	5.55	129.23	125.90
1	AA	716	A	C5-N7-C8	-5.55	101.13	103.90
1	AA	814	A	C3'-C2'-C1'	5.55	105.94	101.50
26	BB	1400	U	C6-N1-C2	-5.55	117.67	121.00
26	BB	2822	G	N1-C2-N3	5.55	127.23	123.90
1	AA	92	U	N1-C2-N3	5.55	118.23	114.90
1	AA	535	A	N3-C4-N9	5.55	131.84	127.40
1	AA	1055	A	C2-N3-C4	5.55	113.37	110.60
1	AA	1498	UR3	OP1-P-O3'	5.55	117.40	105.20
1	AA	1510	C	C5-C4-N4	5.55	124.08	120.20
2	AB	59	G	C5-C6-O6	5.55	131.93	128.60
21	AU	6	ARG	NE-CZ-NH2	5.55	123.07	120.30
25	BA	2	G	C8-N9-C4	-5.55	104.18	106.40
25	BA	73	A	N1-C2-N3	-5.55	126.53	129.30
26	BB	215	G	N3-C4-N9	5.55	129.33	126.00
26	BB	904	G	C5-N7-C8	-5.55	101.53	104.30
26	BB	1106	G	C2-N3-C4	5.55	114.67	111.90
26	BB	1111	A	O4'-C1'-C2'	5.55	112.59	107.60
26	BB	1718	G	N7-C8-N9	5.55	115.87	113.10
26	BB	1785	A	C5-C6-N6	-5.55	119.26	123.70
26	BB	2273	A	N7-C8-N9	5.55	116.57	113.80
26	BB	2513	A	O4'-C1'-C2'	-5.55	100.25	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1	A	C1'-O4'-C4'	-5.54	105.46	109.90
1	AA	368	U	C5-C4-O4	-5.54	122.57	125.90
4	AD	3	C	C1'-O4'-C4'	5.54	114.34	109.90
26	BB	45	G	C4-N9-C1'	-5.54	119.29	126.50
26	BB	1403	A	N9-C4-C5	-5.54	103.58	105.80
26	BB	1968	G	N1-C2-N2	-5.54	111.21	116.20
30	BF	39	ALA	CB-CA-C	5.54	118.42	110.10
1	AA	115	G	N3-C4-C5	-5.54	125.83	128.60
1	AA	591	U	O4'-C1'-N1	5.54	112.64	108.20
1	AA	730	G	N3-C2-N2	-5.54	116.02	119.90
1	AA	790	A	O4'-C1'-N9	5.54	112.63	108.20
1	AA	826	C	N1-C2-O2	5.54	122.23	118.90
1	AA	1028	C	N3-C4-N4	5.54	121.88	118.00
2	AB	34	C	N3-C4-N4	5.54	121.88	118.00
2	AB	69	C	C1'-O4'-C4'	5.54	114.33	109.90
4	AD	12	G	C6-N1-C2	5.54	128.43	125.10
26	BB	360	U	C3'-C2'-C1'	5.54	105.94	101.50
26	BB	790	U	N3-C4-O4	5.54	123.28	119.40
26	BB	917	A	C5-N7-C8	5.54	106.67	103.90
26	BB	1401	G	C1'-O4'-C4'	5.54	114.33	109.90
26	BB	1860	G	C5-C6-N1	5.54	114.27	111.50
26	BB	2027	G	C3'-C2'-C1'	5.54	105.94	101.50
1	AA	94	G	C5-C6-O6	-5.54	125.28	128.60
1	AA	142	G	O4'-C1'-N9	5.54	112.63	108.20
1	AA	185	U	C1'-O4'-C4'	5.54	114.33	109.90
1	AA	297	G	C4-C5-N7	-5.54	108.58	110.80
1	AA	700	G	C5-N7-C8	-5.54	101.53	104.30
1	AA	742	G	P-O3'-C3'	5.54	126.35	119.70
1	AA	1077	G	C5-C6-N1	-5.54	108.73	111.50
2	AB	2	G	C4-C5-N7	5.54	113.02	110.80
4	AD	47	A	C3'-C2'-C1'	5.54	105.93	101.50
6	AF	200	TRP	CD2-CE2-CZ2	5.54	128.95	122.30
26	BB	306	U	O4'-C1'-N1	5.54	112.63	108.20
26	BB	349	U	C4'-C3'-C2'	-5.54	97.06	102.60
26	BB	854	C	C4'-C3'-C2'	-5.54	97.06	102.60
26	BB	1105	U	C5-C6-N1	-5.54	119.93	122.70
26	BB	1208	C	C6-N1-C2	-5.54	118.08	120.30
26	BB	1423	G	C8-N9-C4	-5.54	104.18	106.40
26	BB	1590	A	C1'-O4'-C4'	-5.54	105.47	109.90
26	BB	1714	U	C2-N3-C4	-5.54	123.67	127.00
26	BB	1867	G	C4'-C3'-C2'	-5.54	97.06	102.60
26	BB	2129	C	C2-N3-C4	5.54	122.67	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2512	C	P-O3'-C3'	5.54	126.35	119.70
54	B3	30	ASP	CB-CG-OD2	5.54	123.29	118.30
1	AA	400	C	O3'-P-O5'	-5.54	93.47	104.00
1	AA	1281	C	N1-C2-N3	-5.54	115.32	119.20
1	AA	1481	U	P-O5'-C5'	5.54	129.76	120.90
3	AC	16	A	C6-N1-C2	-5.54	115.28	118.60
3	AC	31	U	C3'-C2'-C1'	5.54	105.93	101.50
26	BB	909	A	C4'-C3'-C2'	-5.54	97.06	102.60
26	BB	1512	C	C6-N1-C2	-5.54	118.08	120.30
26	BB	1572	A	O4'-C1'-N9	-5.54	103.77	108.20
26	BB	2884	U	C5'-C4'-C3'	-5.54	107.14	116.00
26	BB	2897	U	N3-C2-O2	-5.54	118.32	122.20
1	AA	328	C	N3-C4-N4	5.54	121.88	118.00
1	AA	463	U	N3-C4-O4	5.54	123.28	119.40
1	AA	556	C	C4'-C3'-C2'	-5.54	97.06	102.60
1	AA	583	A	N1-C6-N6	-5.54	115.28	118.60
1	AA	856	C	C2-N3-C4	-5.54	117.13	119.90
1	AA	1027	C	C6-N1-C1'	5.54	127.45	120.80
1	AA	1338	G	C5'-C4'-O4'	5.54	115.75	109.10
1	AA	1348	U	N1-C2-N3	-5.54	111.58	114.90
10	AJ	137	ARG	NE-CZ-NH2	5.54	123.07	120.30
26	BB	1007	C	O4'-C4'-C3'	5.54	110.53	106.10
26	BB	1169	A	P-O3'-C3'	5.54	126.35	119.70
26	BB	1171	G	C5-C6-O6	-5.54	125.28	128.60
26	BB	1359	A	C5-C6-N1	5.54	120.47	117.70
26	BB	1664	A	C3'-C2'-C1'	-5.54	97.07	101.50
26	BB	1790	C	C5-C4-N4	5.54	124.08	120.20
26	BB	1927	A	N3-C4-C5	-5.54	122.92	126.80
26	BB	2080	A	O4'-C1'-N9	5.54	112.63	108.20
26	BB	2729	G	N1-C2-N3	-5.54	120.58	123.90
30	BF	102	ARG	NE-CZ-NH1	-5.54	117.53	120.30
37	BM	76	VAL	CA-CB-CG1	5.54	119.21	110.90
1	AA	669	G	P-O3'-C3'	5.54	126.34	119.70
1	AA	1114	C	C2-N3-C4	5.54	122.67	119.90
1	AA	1372	U	C5-C6-N1	5.54	125.47	122.70
3	AC	48	C	P-O3'-C3'	5.54	126.34	119.70
12	AL	110	VAL	CA-CB-CG1	5.54	119.20	110.90
26	BB	325	G	C5-N7-C8	-5.54	101.53	104.30
26	BB	332	A	C8-N9-C4	-5.54	103.58	105.80
26	BB	433	C	C1'-O4'-C4'	5.54	114.33	109.90
26	BB	669	G	O3'-P-O5'	5.54	114.52	104.00
26	BB	1234	U	O3'-P-O5'	-5.54	93.48	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2051	A	C4-C5-N7	5.54	113.47	110.70
26	BB	2618	G	C2-N3-C4	5.54	114.67	111.90
26	BB	2692	G	C4'-C3'-C2'	-5.54	97.06	102.60
26	BB	2833	U	N3-C4-O4	-5.54	115.52	119.40
42	BR	16	VAL	CA-CB-CG1	5.54	119.21	110.90
1	AA	421	U	N1-C2-O2	5.54	126.67	122.80
1	AA	989	U	O4'-C1'-C2'	5.54	112.58	107.60
1	AA	1080	A	N3-C4-C5	-5.54	122.93	126.80
1	AA	1191	A	C5-C6-N6	-5.54	119.27	123.70
1	AA	1264	U	N3-C2-O2	-5.54	118.33	122.20
26	BB	714	U	O4'-C1'-N1	5.54	112.63	108.20
26	BB	828	U	N1-C2-N3	5.54	118.22	114.90
26	BB	1002	G	C3'-C2'-C1'	-5.54	97.07	101.50
26	BB	1065	U	C4-C5-C6	5.54	123.02	119.70
26	BB	1132	U	C4'-C3'-C2'	-5.54	97.06	102.60
26	BB	1180	U	N3-C4-C5	-5.54	111.28	114.60
26	BB	1736	U	N3-C4-C5	-5.54	111.28	114.60
26	BB	1993	U	C6-N1-C2	-5.54	117.68	121.00
26	BB	2115	G	C6-N1-C2	-5.54	121.78	125.10
1	AA	80	A	N9-C4-C5	5.53	108.01	105.80
1	AA	116	A	C5-C6-N1	5.53	120.47	117.70
1	AA	375	U	N3-C2-O2	-5.53	118.33	122.20
1	AA	565	U	C5'-C4'-O4'	-5.53	102.46	109.10
1	AA	643	C	C5-C4-N4	-5.53	116.33	120.20
1	AA	802	A	C4-C5-N7	5.53	113.47	110.70
4	AD	7	G	N9-C4-C5	5.53	107.61	105.40
4	AD	67	C	N1-C2-N3	-5.53	115.33	119.20
26	BB	2	G	C4'-C3'-C2'	-5.53	97.07	102.60
26	BB	397	U	N1-C2-O2	-5.53	118.93	122.80
26	BB	439	A	O5'-C5'-C4'	-5.53	101.19	111.70
26	BB	614	A	O4'-C1'-C2'	-5.53	100.27	105.80
26	BB	1122	G	C5'-C4'-O4'	5.53	115.74	109.10
26	BB	1182	G	C1'-O4'-C4'	-5.53	105.47	109.90
26	BB	1960	A	C6-N1-C2	5.53	121.92	118.60
26	BB	2472	G	C2-N3-C4	5.53	114.67	111.90
26	BB	2502	G	C5-N7-C8	-5.53	101.53	104.30
26	BB	2704	C	N3-C2-O2	-5.53	118.03	121.90
1	AA	1339	A	C5-C6-N1	5.53	120.47	117.70
17	AQ	76	PHE	CB-CG-CD2	-5.53	116.93	120.80
26	BB	544	C	C2-N3-C4	5.53	122.67	119.90
26	BB	579	G	C6-N1-C2	-5.53	121.78	125.10
26	BB	730	A	N7-C8-N9	5.53	116.57	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2512	C	O5'-P-OP2	5.53	117.34	110.70
26	BB	2527	C	O4'-C1'-N1	5.53	112.62	108.20
26	BB	2702	G	C6-N1-C2	-5.53	121.78	125.10
26	BB	2863	C	C6-N1-C2	-5.53	118.09	120.30
1	AA	363	A	C5'-C4'-O4'	5.53	115.74	109.10
1	AA	456	A	N3-C4-N9	-5.53	122.98	127.40
1	AA	1002	G	C2-N3-C4	5.53	114.67	111.90
1	AA	1022	A	C5-C6-N6	5.53	128.12	123.70
1	AA	1043	G	P-O5'-C5'	5.53	129.75	120.90
1	AA	1104	G	C3'-C2'-C1'	5.53	105.92	101.50
1	AA	1169	A	N7-C8-N9	-5.53	111.03	113.80
1	AA	1257	A	C4'-C3'-C2'	5.53	108.13	102.60
1	AA	1369	C	O4'-C4'-C3'	5.53	110.52	106.10
1	AA	1392	G	C5-C6-N1	-5.53	108.73	111.50
24	AX	65	ARG	NE-CZ-NH1	5.53	123.07	120.30
26	BB	4	U	C6-N1-C1'	5.53	128.94	121.20
26	BB	241	A	C2-N3-C4	5.53	113.36	110.60
26	BB	383	C	C5'-C4'-C3'	-5.53	107.15	116.00
26	BB	407	G	C4'-C3'-C2'	-5.53	97.07	102.60
26	BB	742	A	O4'-C4'-C3'	5.53	110.53	106.10
26	BB	1042	G	N7-C8-N9	-5.53	110.33	113.10
26	BB	1760	C	O4'-C4'-C3'	5.53	110.53	106.10
26	BB	1815	A	P-O3'-C3'	5.53	126.34	119.70
26	BB	2564	A	O4'-C1'-N9	5.53	112.62	108.20
26	BB	2669	G	N3-C4-C5	-5.53	125.83	128.60
42	BR	30	TRP	CE2-CD2-CG	5.53	111.72	107.30
1	AA	578	C	OP1-P-O3'	5.53	117.36	105.20
1	AA	1310	G	C4'-C3'-C2'	-5.53	97.07	102.60
1	AA	1511	G	N1-C6-O6	5.53	123.22	119.90
7	AG	101	VAL	CA-CB-CG1	5.53	119.19	110.90
26	BB	234	U	P-O5'-C5'	5.53	129.75	120.90
26	BB	2079	U	N1-C1'-C2'	-5.53	105.92	112.00
26	BB	2133	G	C5'-C4'-O4'	5.53	115.73	109.10
26	BB	2162	G	C4'-C3'-C2'	-5.53	97.07	102.60
1	AA	453	G	N1-C6-O6	5.53	123.22	119.90
1	AA	525	C	O4'-C1'-C2'	-5.53	100.27	105.80
1	AA	709	U	O4'-C1'-N1	5.53	112.62	108.20
1	AA	927	G	C5'-C4'-O4'	5.53	115.73	109.10
1	AA	1069	C	N3-C4-N4	5.53	121.87	118.00
1	AA	1350	A	N1-C2-N3	5.53	132.06	129.30
25	BA	46	A	N3-C4-N9	-5.53	122.98	127.40
26	BB	333	G	N1-C2-N3	5.53	127.22	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	855	G	C3'-C2'-C1'	-5.53	97.08	101.50
26	BB	1376	C	O4'-C1'-N1	5.53	112.62	108.20
26	BB	1476	U	P-O3'-C3'	5.53	126.33	119.70
26	BB	1545	A	N9-C1'-C2'	-5.53	105.92	112.00
26	BB	2560	A	C1'-O4'-C4'	-5.53	105.48	109.90
26	BB	2642	G	N1-C2-N3	5.53	127.22	123.90
26	BB	2669	G	C5-C6-O6	5.53	131.92	128.60
1	AA	35	G	O4'-C1'-N9	5.53	112.62	108.20
1	AA	84	U	O4'-C4'-C3'	5.53	110.52	106.10
1	AA	147	G	P-O3'-C3'	5.53	126.33	119.70
1	AA	447	G	N3-C4-N9	5.53	129.31	126.00
2	AB	49	G	N3-C4-N9	5.53	129.31	126.00
4	AD	1	C	C6-N1-C1'	5.53	127.43	120.80
4	AD	53	G	O5'-P-OP1	-5.53	100.73	105.70
25	BA	49	C	C2-N3-C4	5.53	122.66	119.90
25	BA	106	G	O4'-C4'-C3'	-5.53	98.47	104.00
26	BB	205	G	P-O3'-C3'	5.53	126.33	119.70
26	BB	373	U	N1-C1'-C2'	-5.53	105.92	112.00
26	BB	592	A	C1'-O4'-C4'	5.53	114.32	109.90
26	BB	845	A	C4-C5-N7	5.53	113.46	110.70
26	BB	866	A	C2-N3-C4	-5.53	107.84	110.60
26	BB	1240	U	C2-N3-C4	5.53	130.31	127.00
26	BB	1637	A	N7-C8-N9	5.53	116.56	113.80
26	BB	1758	U	O4'-C1'-C2'	-5.53	100.28	105.80
26	BB	2157	G	O4'-C1'-C2'	-5.53	100.28	105.80
26	BB	2418	A	N9-C4-C5	5.53	108.01	105.80
31	BG	139	GLU	OE1-CD-OE2	5.53	129.93	123.30
1	AA	255	G	C5-C6-N1	-5.52	108.74	111.50
1	AA	573	A	C3'-C2'-C1'	-5.52	97.08	101.50
1	AA	1351	U	C5-C6-N1	-5.52	119.94	122.70
7	AG	103	ARG	NE-CZ-NH1	-5.52	117.54	120.30
13	AM	29	ALA	C-N-CA	5.52	135.51	121.70
26	BB	209	C	C6-N1-C2	5.52	122.51	120.30
26	BB	578	G	C4-C5-N7	-5.52	108.59	110.80
26	BB	1041	G	C5-C6-N1	5.52	114.26	111.50
26	BB	1336	A	N9-C4-C5	5.52	108.01	105.80
26	BB	1591	A	O4'-C1'-N9	5.52	112.62	108.20
26	BB	2056	G	C6-N1-C2	-5.52	121.79	125.10
26	BB	2281	A	N7-C8-N9	5.52	116.56	113.80
1	AA	100	G	C5-C6-N1	5.52	114.26	111.50
1	AA	687	A	C2-N3-C4	-5.52	107.84	110.60
1	AA	763	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(°)
1	AA	851	G	C8-N9-C1'	5.52	134.18	127.00
1	AA	1440	U	N3-C4-O4	5.52	123.27	119.40
2	AB	39	A	C4-C5-N7	5.52	113.46	110.70
19	AS	45	GLU	CB-CA-C	5.52	121.45	110.40
25	BA	58	A	P-O5'-C5'	5.52	129.74	120.90
25	BA	86	G	C2-N3-C4	5.52	114.66	111.90
26	BB	223	A	C6-N1-C2	-5.52	115.29	118.60
26	BB	233	A	C2-N3-C4	5.52	113.36	110.60
26	BB	285	G	O4'-C1'-N9	5.52	112.62	108.20
26	BB	312	G	C2-N3-C4	5.52	114.66	111.90
26	BB	600	G	C2-N3-C4	-5.52	109.14	111.90
26	BB	758	C	C3'-C2'-C1'	-5.52	97.08	101.50
26	BB	1309	G	C5'-C4'-C3'	5.52	124.83	116.00
26	BB	1934	C	N3-C4-N4	5.52	121.87	118.00
26	BB	2002	G	C2-N3-C4	5.52	114.66	111.90
26	BB	2099	U	C5-C6-N1	-5.52	119.94	122.70
26	BB	2198	A	N9-C4-C5	5.52	108.01	105.80
26	BB	2548	U	O4'-C1'-N1	5.52	112.62	108.20
26	BB	2724	U	C2'-C3'-O3'	5.52	122.54	113.70
1	AA	181	A	C8-N9-C4	-5.52	103.59	105.80
1	AA	359	G	N9-C1'-C2'	-5.52	105.93	112.00
1	AA	1370	G	C6-N1-C2	-5.52	121.79	125.10
26	BB	49	A	O4'-C1'-N9	5.52	112.62	108.20
26	BB	325	G	C6-N1-C2	-5.52	121.79	125.10
26	BB	363	G	C4'-C3'-C2'	-5.52	97.08	102.60
26	BB	1296	G	O4'-C1'-C2'	5.52	112.57	107.60
26	BB	2217	G	N3-C4-C5	-5.52	125.84	128.60
1	AA	388	G	N1-C6-O6	5.52	123.21	119.90
1	AA	1015	G	N7-C8-N9	5.52	115.86	113.10
4	AD	1	C	O4'-C4'-C3'	-5.52	98.48	104.00
14	AN	6	ARG	N-CA-CB	5.52	120.53	110.60
26	BB	91	A	N9-C4-C5	-5.52	103.59	105.80
26	BB	98	G	C5-C6-O6	-5.52	125.29	128.60
26	BB	265	A	C5'-C4'-C3'	-5.52	107.17	116.00
26	BB	283	G	C1'-O4'-C4'	-5.52	105.48	109.90
26	BB	633	A	O4'-C1'-N9	5.52	112.62	108.20
26	BB	655	A	C5-C6-N1	5.52	120.46	117.70
26	BB	1674	G	N9-C4-C5	-5.52	103.19	105.40
26	BB	1844	C	O4'-C1'-N1	5.52	112.61	108.20
26	BB	1986	C	C5'-C4'-O4'	5.52	115.72	109.10
26	BB	2170	A	N1-C2-N3	5.52	132.06	129.30
1	AA	436	C	N3-C4-C5	-5.52	119.69	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1514	G	O4'-C1'-N9	5.52	112.61	108.20
1	AA	1525	G	C5-C6-N1	5.52	114.26	111.50
4	AD	38	A	C4-C5-N7	5.52	113.46	110.70
26	BB	508	A	C6-C5-N7	5.52	136.16	132.30
26	BB	771	G	C4-C5-C6	5.52	122.11	118.80
26	BB	1470	A	C2-N3-C4	5.52	113.36	110.60
26	BB	1515	A	C5'-C4'-O4'	5.52	115.72	109.10
26	BB	1634	A	C2-N3-C4	5.52	113.36	110.60
26	BB	1741	C	N1-C2-O2	5.52	122.21	118.90
26	BB	2278	A	C8-N9-C4	5.52	108.01	105.80
26	BB	2408	U	C2-N3-C4	-5.52	123.69	127.00
26	BB	2754	U	C5-C4-O4	5.52	129.21	125.90
32	BH	89	VAL	C-N-CA	5.52	133.89	122.30
26	BB	1309	G	C4-N9-C1'	-5.52	119.33	126.50
26	BB	1642	G	C5-N7-C8	5.52	107.06	104.30
26	BB	2174	C	O5'-P-OP2	-5.52	100.74	105.70
1	AA	301	G	N7-C8-N9	5.51	115.86	113.10
1	AA	553	A	C1'-O4'-C4'	5.51	114.31	109.90
1	AA	573	A	N3-C4-C5	5.51	130.66	126.80
1	AA	909	A	P-O3'-C3'	5.51	126.32	119.70
1	AA	1513	A	C5'-C4'-O4'	5.51	115.72	109.10
1	AA	1514	G	N1-C6-O6	-5.51	116.59	119.90
2	AB	24	G	N3-C2-N2	-5.51	116.04	119.90
2	AB	66	C	C5-C6-N1	5.51	123.76	121.00
26	BB	64	A	N1-C6-N6	-5.51	115.29	118.60
26	BB	211	C	C6-N1-C2	-5.51	118.09	120.30
26	BB	639	U	N1-C2-N3	5.51	118.21	114.90
26	BB	676	A	C5-N7-C8	-5.51	101.14	103.90
26	BB	740	C	C2-N3-C4	-5.51	117.14	119.90
26	BB	1013	C	N3-C2-O2	-5.51	118.04	121.90
26	BB	1193	G	N3-C4-C5	-5.51	125.84	128.60
26	BB	1250	G	N3-C4-N9	5.51	129.31	126.00
26	BB	1354	A	N1-C2-N3	5.51	132.06	129.30
26	BB	1395	A	C2'-C3'-O3'	5.51	122.52	113.70
26	BB	1501	G	C5-C6-N1	5.51	114.26	111.50
26	BB	2314	A	N9-C1'-C2'	-5.51	105.94	112.00
26	BB	2320	U	C4'-C3'-C2'	-5.51	97.08	102.60
26	BB	2730	C	C5-C4-N4	5.51	124.06	120.20
26	BB	2826	A	C5'-C4'-O4'	5.51	115.72	109.10
1	AA	352	C	C4-C5-C6	5.51	120.16	117.40
1	AA	997	U	N3-C2-O2	-5.51	118.34	122.20
1	AA	1392	G	C5-N7-C8	-5.51	101.54	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	305	C	N1-C2-O2	-5.51	115.59	118.90
26	BB	409	G	N1-C2-N2	5.51	121.16	116.20
26	BB	1544	A	N9-C1'-C2'	-5.51	105.94	112.00
26	BB	2741	A	C2-N3-C4	5.51	113.36	110.60
1	AA	113	G	N3-C2-N2	-5.51	116.04	119.90
1	AA	158	G	N9-C1'-C2'	-5.51	105.94	112.00
1	AA	307	C	N1-C2-O2	5.51	122.21	118.90
1	AA	1202	U	C2-N3-C4	-5.51	123.69	127.00
1	AA	1441	A	O4'-C1'-N9	5.51	112.61	108.20
1	AA	1515	G	C5-C6-O6	-5.51	125.29	128.60
3	AC	56	G	N9-C4-C5	5.51	107.61	105.40
15	AO	120	ARG	NH1-CZ-NH2	5.51	125.46	119.40
26	BB	287	G	C5-C6-N1	5.51	114.26	111.50
26	BB	1047	G	C5'-C4'-C3'	-5.51	107.18	116.00
26	BB	1062	G	N9-C4-C5	5.51	107.61	105.40
26	BB	1447	C	N1-C2-O2	5.51	122.21	118.90
26	BB	1828	G	C5'-C4'-C3'	-5.51	107.18	116.00
26	BB	2371	G	N1-C6-O6	-5.51	116.59	119.90
26	BB	2723	C	N1-C2-N3	5.51	123.06	119.20
26	BB	2876	G	C1'-O4'-C4'	5.51	114.31	109.90
26	BB	2897	U	C5-C6-N1	5.51	125.46	122.70
1	AA	243	A	C1'-O4'-C4'	-5.51	105.49	109.90
1	AA	337	G	C4-C5-C6	5.51	122.11	118.80
1	AA	382	A	C6-C5-N7	5.51	136.16	132.30
1	AA	1040	U	C6-N1-C2	-5.51	117.69	121.00
1	AA	1218	C	C5'-C4'-O4'	5.51	115.71	109.10
3	AC	22	G	P-O3'-C3'	5.51	126.31	119.70
8	AH	68	ARG	CA-CB-CG	5.51	125.52	113.40
25	BA	30	C	C2-N3-C4	5.51	122.65	119.90
25	BA	57	A	C4'-C3'-C2'	-5.51	97.09	102.60
25	BA	95	U	O4'-C1'-N1	5.51	112.61	108.20
26	BB	918	A	C4-C5-N7	-5.51	107.95	110.70
26	BB	1010	A	C4-C5-C6	5.51	119.75	117.00
26	BB	1185	G	C5'-C4'-C3'	-5.51	107.18	116.00
26	BB	1335	C	C4-C5-C6	-5.51	114.64	117.40
26	BB	1472	C	C2-N3-C4	-5.51	117.14	119.90
26	BB	1935	G	O4'-C1'-N9	5.51	112.61	108.20
26	BB	1944	U	N3-C4-C5	-5.51	111.29	114.60
26	BB	2196	C	N1-C2-O2	5.51	122.21	118.90
26	BB	2700	A	O4'-C1'-N9	5.51	112.61	108.20
26	BB	2759	G	C2-N3-C4	5.51	114.66	111.90
1	AA	102	G	C5-N7-C8	5.51	107.05	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	232	G	C6-N1-C2	-5.51	121.80	125.10
1	AA	1376	U	N3-C2-O2	-5.51	118.34	122.20
1	AA	1512	U	C5'-C4'-O4'	5.51	115.71	109.10
3	AC	24	A	C2-N3-C4	5.51	113.35	110.60
26	BB	293	U	N3-C2-O2	-5.51	118.34	122.20
26	BB	946	C	C4-C5-C6	5.51	120.15	117.40
26	BB	1922	G	O4'-C1'-N9	5.51	112.61	108.20
26	BB	2714	G	C4'-C3'-C2'	5.51	108.11	102.60
43	BS	69	ARG	NE-CZ-NH2	5.51	123.05	120.30
1	AA	227	G	C4'-C3'-C2'	-5.51	97.09	102.60
1	AA	337	G	C6-N1-C2	5.51	128.40	125.10
1	AA	347	G	N1-C6-O6	5.51	123.20	119.90
1	AA	542	G	C5'-C4'-C3'	-5.51	107.19	116.00
1	AA	840	C	N3-C2-O2	-5.51	118.05	121.90
1	AA	1024	G	C2-N3-C4	5.51	114.65	111.90
1	AA	1084	G	N3-C2-N2	5.51	123.75	119.90
25	BA	100	G	N1-C2-N3	-5.51	120.60	123.90
26	BB	69	C	N1-C2-N3	5.51	123.05	119.20
26	BB	500	G	N1-C2-N3	5.51	127.20	123.90
26	BB	1180	U	C6-N1-C2	-5.51	117.70	121.00
26	BB	1452	G	N1-C6-O6	-5.51	116.60	119.90
26	BB	1712	U	C5-C6-N1	5.51	125.45	122.70
26	BB	1789	A	N1-C2-N3	5.51	132.05	129.30
26	BB	2465	C	N1-C2-O2	5.51	122.20	118.90
29	BE	125	TRP	CB-CG-CD1	-5.51	119.84	127.00
48	BX	92	VAL	CA-CB-CG1	5.51	119.16	110.90
1	AA	179	A	N7-C8-N9	5.50	116.55	113.80
1	AA	972	C	N3-C4-C5	-5.50	119.70	121.90
1	AA	1426	G	O4'-C4'-C3'	5.50	110.50	106.10
26	BB	353	C	N3-C4-N4	-5.50	114.15	118.00
26	BB	505	A	C5-N7-C8	-5.50	101.15	103.90
26	BB	821	A	C5-C6-N1	5.50	120.45	117.70
26	BB	996	A	C2-N3-C4	-5.50	107.85	110.60
26	BB	1149	G	C5'-C4'-O4'	5.50	115.71	109.10
26	BB	1245	G	C5'-C4'-O4'	5.50	115.71	109.10
26	BB	1513	U	N3-C2-O2	5.50	126.05	122.20
26	BB	2439	A	C5-N7-C8	5.50	106.65	103.90
1	AA	187	G	C4-C5-N7	5.50	113.00	110.80
1	AA	230	G	C6-C5-N7	-5.50	127.10	130.40
1	AA	240	G	N3-C4-C5	-5.50	125.85	128.60
1	AA	921	U	N1-C1'-C2'	-5.50	105.94	112.00
2	AB	28	C	C6-N1-C2	-5.50	118.10	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	45	U	C6-N1-C1'	5.50	128.91	121.20
4	AD	75	C	O4'-C4'-C3'	5.50	110.50	106.10
26	BB	202	U	N1-C2-N3	5.50	118.20	114.90
26	BB	284	U	C2-N3-C4	-5.50	123.70	127.00
26	BB	529	A	C4'-C3'-C2'	-5.50	97.10	102.60
26	BB	555	G	N7-C8-N9	5.50	115.85	113.10
26	BB	768	G	C5-N7-C8	-5.50	101.55	104.30
26	BB	1445	G	C6-N1-C2	5.50	128.40	125.10
26	BB	2195	U	C5'-C4'-O4'	5.50	115.70	109.10
26	BB	2534	A	C6-N1-C2	-5.50	115.30	118.60
26	BB	2679	A	N9-C4-C5	5.50	108.00	105.80
26	BB	2742	G	C4-C5-C6	5.50	122.10	118.80
32	BH	93	TYR	CD1-CG-CD2	5.50	123.95	117.90
1	AA	834	U	C5'-C4'-O4'	5.50	115.70	109.10
1	AA	924	C	C4-C5-C6	-5.50	114.65	117.40
1	AA	1211	U	C5-C6-N1	-5.50	119.95	122.70
1	AA	1239	A	O3'-P-O5'	5.50	114.45	104.00
1	AA	1428	A	C5-C6-N1	5.50	120.45	117.70
1	AA	1435	G	C3'-C2'-C1'	5.50	105.90	101.50
1	AA	1438	G	N9-C1'-C2'	-5.50	105.95	112.00
2	AB	67	G	N1-C2-N2	5.50	121.15	116.20
11	AK	92	PRO	N-CA-CB	5.50	109.90	103.30
18	AR	79	ARG	NE-CZ-NH1	-5.50	117.55	120.30
26	BB	161	A	C6-C5-N7	-5.50	128.45	132.30
26	BB	796	C	P-O3'-C3'	5.50	126.30	119.70
26	BB	1012	U	C5-C6-N1	-5.50	119.95	122.70
26	BB	1540	G	N3-C4-N9	5.50	129.30	126.00
26	BB	1638	C	N3-C4-N4	-5.50	114.15	118.00
26	BB	1763	G	C2-N3-C4	5.50	114.65	111.90
26	BB	1914	C	O4'-C1'-N1	5.50	112.60	108.20
26	BB	2335	A	O4'-C1'-N9	5.50	112.60	108.20
26	BB	2395	C	C5'-C4'-C3'	-5.50	107.20	116.00
26	BB	2717	C	O4'-C1'-N1	5.50	112.60	108.20
30	BF	35	TYR	CZ-CE2-CD2	-5.50	114.85	119.80
39	BO	16	ARG	NE-CZ-NH1	5.50	123.05	120.30
1	AA	599	C	C5'-C4'-C3'	-5.50	107.20	116.00
1	AA	826	C	N3-C4-C5	5.50	124.10	121.90
1	AA	933	G	N7-C8-N9	5.50	115.85	113.10
1	AA	1196	A	C5-C6-N6	5.50	128.10	123.70
1	AA	1475	G	C5-C6-O6	5.50	131.90	128.60
9	AI	24	ARG	CD-NE-CZ	5.50	131.30	123.60
25	BA	69	G	N1-C6-O6	-5.50	116.60	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	219	A	C5'-C4'-O4'	-5.50	102.50	109.10
26	BB	244	A	C6-C5-N7	5.50	136.15	132.30
26	BB	518	G	C4'-C3'-C2'	-5.50	97.10	102.60
26	BB	1108	U	N1-C1'-C2'	-5.50	105.95	112.00
26	BB	1146	C	C4-C5-C6	5.50	120.15	117.40
26	BB	1641	A	C4-C5-C6	5.50	119.75	117.00
26	BB	2226	C	C5'-C4'-O4'	-5.50	102.50	109.10
26	BB	2336	A	N7-C8-N9	-5.50	111.05	113.80
26	BB	2386	A	C5'-C4'-C3'	-5.50	107.20	116.00
26	BB	2389	G	N7-C8-N9	-5.50	110.35	113.10
26	BB	2446	G	N1-C6-O6	-5.50	116.60	119.90
47	BW	47	PRO	N-CD-CG	5.50	111.45	103.20
1	AA	124	C	P-O3'-C3'	5.50	126.30	119.70
1	AA	542	G	C5'-C4'-O4'	5.50	115.70	109.10
1	AA	1455	G	C5-C6-N1	5.50	114.25	111.50
3	AC	13	A	N7-C8-N9	-5.50	111.05	113.80
3	AC	28	U	O4'-C1'-N1	5.50	112.60	108.20
26	BB	53	A	N1-C2-N3	-5.50	126.55	129.30
26	BB	86	G	C5-C6-N1	5.50	114.25	111.50
26	BB	278	A	O4'-C1'-N9	5.50	112.60	108.20
26	BB	457	A	C5-N7-C8	-5.50	101.15	103.90
26	BB	487	C	C3'-C2'-C1'	-5.50	97.10	101.50
26	BB	603	A	C1'-O4'-C4'	-5.50	105.50	109.90
26	BB	1042	G	C6-C5-N7	5.50	133.70	130.40
26	BB	1113	U	N1-C2-O2	-5.50	118.95	122.80
26	BB	1187	G	C1'-O4'-C4'	-5.50	105.50	109.90
26	BB	1942	C	O4'-C1'-N1	5.50	112.60	108.20
26	BB	2079	U	C2'-C3'-O3'	5.50	122.50	113.70
26	BB	2426	A	N9-C4-C5	5.50	108.00	105.80
30	BF	4	VAL	C-N-CA	5.50	135.45	121.70
25	BA	85	G	C6-N1-C2	-5.50	121.80	125.10
25	BA	94	A	C5-C6-N6	-5.50	119.30	123.70
26	BB	70	G	C2-N3-C4	-5.50	109.15	111.90
26	BB	133	U	N3-C2-O2	-5.50	118.35	122.20
26	BB	527	C	C5'-C4'-O4'	-5.50	102.50	109.10
26	BB	915	C	C2-N3-C4	5.50	122.65	119.90
26	BB	1071	G	C6-N1-C2	-5.50	121.80	125.10
26	BB	1928	A	C4'-C3'-C2'	-5.50	97.10	102.60
26	BB	2230	G	O4'-C1'-N9	5.50	112.60	108.20
26	BB	2531	A	C5-C6-N1	5.50	120.45	117.70
26	BB	2592	G	N3-C4-N9	5.50	129.30	126.00
26	BB	2710	C	O4'-C1'-N1	5.50	112.60	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2740	A	C1'-O4'-C4'	-5.50	105.50	109.90
1	AA	100	G	N1-C2-N3	5.50	127.20	123.90
1	AA	424	G	C4'-C3'-C2'	-5.50	97.11	102.60
1	AA	459	A	O3'-P-O5'	5.50	114.44	104.00
1	AA	727	G	O3'-P-O5'	-5.50	93.56	104.00
1	AA	765	G	N9-C4-C5	5.50	107.60	105.40
1	AA	859	G	N3-C4-N9	-5.50	122.70	126.00
1	AA	1356	G	C6-N1-C2	-5.50	121.80	125.10
25	BA	29	A	N1-C6-N6	-5.50	115.30	118.60
26	BB	1796	U	C4'-C3'-C2'	-5.50	97.11	102.60
26	BB	2287	A	N3-C4-C5	-5.50	122.95	126.80
26	BB	2572	A	C6-C5-N7	5.50	136.15	132.30
26	BB	2666	C	P-O3'-C3'	5.50	126.30	119.70
34	BJ	34	VAL	CG1-CB-CG2	-5.50	102.11	110.90
1	AA	219	U	C5'-C4'-O4'	5.49	115.69	109.10
1	AA	492	C	C4-C5-C6	5.49	120.15	117.40
1	AA	564	C	N1-C1'-C2'	-5.49	105.96	112.00
1	AA	833	G	O4'-C4'-C3'	5.49	110.50	106.10
1	AA	1110	A	C1'-O4'-C4'	5.49	114.30	109.90
1	AA	1143	G	N1-C6-O6	-5.49	116.60	119.90
1	AA	1159	U	C2-N3-C4	-5.49	123.70	127.00
1	AA	1422	G	N3-C4-C5	-5.49	125.85	128.60
5	AE	95	TRP	CB-CG-CD1	-5.49	119.86	127.00
6	AF	106	ARG	NE-CZ-NH2	5.49	123.05	120.30
26	BB	175	G	C5-C6-N1	-5.49	108.75	111.50
26	BB	408	G	C4'-C3'-C2'	-5.49	97.11	102.60
26	BB	758	C	P-O3'-C3'	5.49	126.29	119.70
26	BB	1531	C	C4'-C3'-C2'	-5.49	97.11	102.60
26	BB	1954	G	C8-N9-C4	-5.49	104.20	106.40
26	BB	2014	A	N1-C6-N6	-5.49	115.30	118.60
26	BB	2046	G	C5-C6-N1	5.49	114.25	111.50
26	BB	2282	G	P-O3'-C3'	5.49	126.29	119.70
26	BB	2824	C	N3-C2-O2	-5.49	118.06	121.90
30	BF	61	ARG	CD-NE-CZ	5.49	131.29	123.60
1	AA	479	U	O4'-C1'-C2'	5.49	112.54	107.60
1	AA	503	C	O5'-C5'-C4'	-5.49	101.27	111.70
1	AA	916	U	C5-C4-O4	5.49	129.19	125.90
26	BB	476	G	C5-C6-N1	5.49	114.25	111.50
26	BB	570	G	O5'-P-OP1	-5.49	100.76	105.70
26	BB	605	G	C6-C5-N7	-5.49	127.11	130.40
26	BB	1366	A	N7-C8-N9	5.49	116.55	113.80
26	BB	2852	G	N9-C1'-C2'	-5.49	105.96	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	22	G	N3-C4-C5	-5.49	125.85	128.60
1	AA	101	A	C3'-C2'-C1'	-5.49	97.11	101.50
1	AA	166	U	P-O3'-C3'	5.49	126.29	119.70
1	AA	355	C	C5-C6-N1	-5.49	118.25	121.00
1	AA	601	G	N3-C4-C5	-5.49	125.86	128.60
1	AA	963	G	OP2-P-O3'	5.49	117.28	105.20
1	AA	1096	C	C3'-C2'-C1'	5.49	105.89	101.50
1	AA	1381	U	C3'-C2'-C1'	-5.49	97.11	101.50
1	AA	1439	G	C4'-C3'-C2'	-5.49	97.11	102.60
26	BB	264	C	C5-C6-N1	5.49	123.75	121.00
26	BB	659	G	C5'-C4'-C3'	-5.49	107.21	116.00
26	BB	1071	G	C3'-C2'-C1'	-5.49	97.11	101.50
26	BB	1129	A	C1'-O4'-C4'	-5.49	105.51	109.90
26	BB	1516	G	C4-N9-C1'	-5.49	119.36	126.50
26	BB	1697	G	C2-N3-C4	5.49	114.65	111.90
26	BB	1872	A	C3'-C2'-C1'	-5.49	97.11	101.50
26	BB	1988	G	C4-N9-C1'	-5.49	119.36	126.50
26	BB	2553	G	C1'-O4'-C4'	5.49	114.29	109.90
26	BB	2898	U	C2-N3-C4	-5.49	123.71	127.00
1	AA	40	C	P-O3'-C3'	5.49	126.29	119.70
1	AA	101	A	C5'-C4'-O4'	5.49	115.69	109.10
1	AA	537	G	P-O3'-C3'	5.49	126.29	119.70
4	AD	15	G	N3-C2-N2	5.49	123.74	119.90
5	AE	133	ALA	N-CA-CB	5.49	117.78	110.10
6	AF	182	ASP	CB-CG-OD2	-5.49	113.36	118.30
26	BB	1	G	N3-C4-C5	-5.49	125.86	128.60
26	BB	302	C	N3-C4-C5	-5.49	119.70	121.90
26	BB	665	U	C5-C4-O4	-5.49	122.61	125.90
26	BB	706	A	C5'-C4'-O4'	5.49	115.69	109.10
26	BB	761	A	C6-N1-C2	-5.49	115.31	118.60
26	BB	1292	G	P-O3'-C3'	5.49	126.29	119.70
26	BB	1349	C	C4'-C3'-C2'	-5.49	97.11	102.60
26	BB	1624	U	N1-C2-O2	5.49	126.64	122.80
26	BB	1989	G	N1-C6-O6	-5.49	116.61	119.90
26	BB	2136	G	N1-C6-O6	-5.49	116.61	119.90
26	BB	2525	G	P-O3'-C3'	5.49	126.29	119.70
26	BB	2596	U	P-O3'-C3'	5.49	126.29	119.70
26	BB	2725	A	P-O3'-C3'	5.49	126.29	119.70
1	AA	29	U	C5-C4-O4	-5.49	122.61	125.90
1	AA	1130	A	N3-C4-C5	-5.49	122.96	126.80
26	BB	277	G	N9-C4-C5	5.49	107.59	105.40
26	BB	497	A	C3'-C2'-C1'	-5.49	97.11	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1635	A	P-O3'-C3'	5.49	126.28	119.70
26	BB	2082	A	C5'-C4'-C3'	-5.49	107.22	116.00
26	BB	2851	A	C5-C6-N1	5.49	120.44	117.70
49	BY	29	SER	CB-CA-C	5.49	120.53	110.10
50	BZ	73	ARG	NH1-CZ-NH2	-5.49	113.36	119.40
1	AA	41	G	C1'-O4'-C4'	-5.49	105.51	109.90
1	AA	231	U	N1-C2-O2	5.49	126.64	122.80
1	AA	310	G	C6-N1-C2	-5.49	121.81	125.10
1	AA	616	G	C5-C6-N1	5.49	114.24	111.50
1	AA	900	A	C3'-C2'-C1'	5.49	105.89	101.50
1	AA	1215	G	O5'-P-OP1	-5.49	100.76	105.70
1	AA	1240	U	C5'-C4'-O4'	-5.49	102.52	109.10
1	AA	1257	A	N3-C4-C5	-5.49	122.96	126.80
1	AA	1299	A	C5-N7-C8	-5.49	101.16	103.90
1	AA	1316	G	O4'-C1'-N9	5.49	112.59	108.20
1	AA	1385	G	C4'-C3'-C2'	-5.49	97.11	102.60
1	AA	1482	G	C8-N9-C4	-5.49	104.21	106.40
8	AH	49	TYR	CB-CG-CD1	5.49	124.29	121.00
8	AH	67	ARG	NE-CZ-NH2	5.49	123.04	120.30
26	BB	433	C	C6-N1-C2	-5.49	118.11	120.30
26	BB	1654	A	C5'-C4'-C3'	-5.49	107.22	116.00
26	BB	2881	U	N3-C4-O4	5.49	123.24	119.40
30	BF	162	ARG	NE-CZ-NH2	5.49	123.04	120.30
1	AA	15	G	N7-C8-N9	-5.48	110.36	113.10
1	AA	1177	G	N9-C1'-C2'	-5.48	105.97	112.00
1	AA	1476	A	N9-C1'-C2'	-5.48	105.97	112.00
26	BB	923	G	C4-C5-C6	5.48	122.09	118.80
26	BB	1708	C	P-O5'-C5'	5.48	129.68	120.90
26	BB	2352	A	C2-N3-C4	5.48	113.34	110.60
26	BB	2368	C	C1'-O4'-C4'	-5.48	105.51	109.90
1	AA	53	A	P-O3'-C3'	5.48	126.28	119.70
1	AA	276	G	N7-C8-N9	5.48	115.84	113.10
1	AA	1106	G	C4-C5-N7	-5.48	108.61	110.80
1	AA	1533	C	C6-N1-C2	5.48	122.49	120.30
3	AC	22	G	C5-C6-N1	5.48	114.24	111.50
9	AI	116	PHE	CB-CG-CD1	-5.48	116.96	120.80
25	BA	56	G	N3-C2-N2	-5.48	116.06	119.90
26	BB	685	A	N3-C4-C5	-5.48	122.96	126.80
26	BB	685	A	N9-C4-C5	5.48	107.99	105.80
26	BB	1080	A	C5-N7-C8	-5.48	101.16	103.90
26	BB	1209	U	C5'-C4'-O4'	5.48	115.68	109.10
26	BB	1890	A	C5-C6-N1	5.48	120.44	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2189	U	N1-C2-O2	5.48	126.64	122.80
1	AA	72	A	N1-C6-N6	-5.48	115.31	118.60
1	AA	112	G	C2-N3-C4	5.48	114.64	111.90
1	AA	131	A	C5'-C4'-C3'	-5.48	107.23	116.00
1	AA	1026	G	C4-C5-C6	5.48	122.09	118.80
4	AD	16	C	P-O3'-C3'	5.48	126.28	119.70
24	AX	59	LEU	CB-CG-CD1	5.48	120.32	111.00
26	BB	762	U	C1'-O4'-C4'	5.48	114.28	109.90
26	BB	1003	G	N3-C4-C5	5.48	131.34	128.60
26	BB	1051	G	C4-C5-N7	5.48	112.99	110.80
26	BB	1061	U	C6-N1-C2	-5.48	117.71	121.00
26	BB	1740	G	C3'-C2'-C1'	-5.48	97.12	101.50
26	BB	2511	U	N1-C2-N3	5.48	118.19	114.90
26	BB	2589	A	C4'-C3'-C2'	-5.48	97.12	102.60
27	BC	150	ALA	N-CA-CB	-5.48	102.43	110.10
28	BD	18	VAL	CA-CB-CG1	5.48	119.12	110.90
1	AA	261	U	C1'-O4'-C4'	-5.48	105.52	109.90
1	AA	841	C	N3-C4-C5	-5.48	119.71	121.90
1	AA	1237	C	N3-C4-C5	5.48	124.09	121.90
26	BB	491	G	C5'-C4'-O4'	5.48	115.67	109.10
26	BB	554	U	N3-C4-O4	5.48	123.24	119.40
26	BB	1813	G	C6-C5-N7	5.48	133.69	130.40
26	BB	2090	A	C5-C6-N6	-5.48	119.32	123.70
26	BB	2823	A	N9-C4-C5	5.48	107.99	105.80
1	AA	286	C	C5-C4-N4	-5.48	116.37	120.20
1	AA	329	A	P-O3'-C3'	5.48	126.27	119.70
1	AA	607	A	C4-C5-C6	-5.48	114.26	117.00
1	AA	922	G	O4'-C1'-N9	5.48	112.58	108.20
1	AA	1032	G	N3-C4-N9	5.48	129.29	126.00
1	AA	1119	C	N3-C2-O2	-5.48	118.07	121.90
1	AA	1331	G	C4-C5-N7	-5.48	108.61	110.80
11	AK	85	TYR	CB-CG-CD2	-5.48	117.71	121.00
26	BB	136	G	C4-C5-C6	5.48	122.09	118.80
26	BB	485	C	C5'-C4'-O4'	5.48	115.67	109.10
26	BB	1113	U	C5-C4-O4	5.48	129.19	125.90
26	BB	1120	G	P-O3'-C3'	5.48	126.27	119.70
26	BB	1411	U	N1-C1'-C2'	-5.48	105.97	112.00
26	BB	1555	G	N1-C6-O6	5.48	123.19	119.90
26	BB	1599	U	N3-C4-C5	-5.48	111.31	114.60
26	BB	2222	C	C4'-C3'-C2'	-5.48	97.12	102.60
26	BB	2227	A	C5-C6-N1	5.48	120.44	117.70
26	BB	2561	U	C5-C4-O4	-5.48	122.61	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2686	G	P-O3'-C3'	5.48	126.27	119.70
26	BB	2729	G	C8-N9-C1'	5.48	134.12	127.00
26	BB	2838	G	C6-N1-C2	5.48	128.39	125.10
1	AA	35	G	C4'-C3'-C2'	-5.48	97.12	102.60
1	AA	415	A	C4-C5-N7	5.48	113.44	110.70
2	AB	52	A	C2-N3-C4	-5.48	107.86	110.60
4	AD	37	U	C4'-C3'-C2'	-5.48	97.12	102.60
26	BB	894	U	C4'-C3'-C2'	-5.48	97.12	102.60
26	BB	1129	A	C6-N1-C2	5.48	121.89	118.60
26	BB	1558	C	O4'-C1'-C2'	5.48	112.53	107.60
26	BB	1920	C	N3-C4-C5	-5.48	119.71	121.90
26	BB	2694	G	C4-C5-N7	5.48	112.99	110.80
30	BF	55	SER	C-N-CA	5.48	133.80	122.30
1	AA	53	A	C5'-C4'-C3'	-5.47	107.24	116.00
1	AA	90	C	C5-C4-N4	-5.47	116.37	120.20
1	AA	200	G	C4-C5-N7	5.47	112.99	110.80
1	AA	301	G	C3'-C2'-C1'	5.47	105.88	101.50
1	AA	373	A	O4'-C1'-N9	-5.47	103.82	108.20
1	AA	518	C	C6-N1-C2	5.47	122.49	120.30
1	AA	612	C	N1-C2-O2	5.47	122.18	118.90
1	AA	712	A	C8-N9-C4	-5.47	103.61	105.80
1	AA	986	U	N3-C2-O2	-5.47	118.37	122.20
1	AA	1482	G	O5'-P-OP1	5.47	117.27	110.70
19	AS	16	PHE	N-CA-CB	-5.47	100.75	110.60
26	BB	212	G	N1-C2-N2	5.47	121.13	116.20
26	BB	236	C	P-O3'-C3'	5.47	126.27	119.70
26	BB	285	G	C2-N3-C4	-5.47	109.16	111.90
26	BB	347	A	C5-C6-N1	5.47	120.44	117.70
26	BB	511	U	C2-N3-C4	-5.47	123.72	127.00
26	BB	777	G	P-O3'-C3'	5.47	126.27	119.70
26	BB	880	G	C5-N7-C8	-5.47	101.56	104.30
26	BB	999	U	C4-C5-C6	5.47	122.98	119.70
26	BB	1464	G	C6-C5-N7	-5.47	127.11	130.40
26	BB	1620	G	N7-C8-N9	-5.47	110.36	113.10
26	BB	2512	C	C4'-C3'-C2'	-5.47	97.12	102.60
26	BB	2652	C	C4-C5-C6	-5.47	114.66	117.40
26	BB	2847	U	C5'-C4'-O4'	5.47	115.67	109.10
1	AA	142	G	N7-C8-N9	5.47	115.84	113.10
1	AA	640	A	P-O3'-C3'	5.47	126.27	119.70
1	AA	1039	G	N3-C4-N9	5.47	129.28	126.00
1	AA	1511	G	C5'-C4'-C3'	-5.47	107.25	116.00
1	AA	1529	G	C5'-C4'-O4'	-5.47	102.53	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	69	C	C1'-O4'-C4'	5.47	114.28	109.90
26	BB	162	U	N3-C2-O2	-5.47	118.37	122.20
26	BB	234	U	C5-C6-N1	-5.47	119.96	122.70
26	BB	240	C	C3'-C2'-C1'	5.47	105.88	101.50
26	BB	433	C	N3-C4-C5	-5.47	119.71	121.90
26	BB	446	G	C5-C6-O6	5.47	131.88	128.60
26	BB	636	G	C4-C5-N7	5.47	112.99	110.80
26	BB	1445	G	C1'-O4'-C4'	5.47	114.28	109.90
26	BB	1631	G	C5'-C4'-O4'	5.47	115.67	109.10
26	BB	2475	C	N1-C2-O2	5.47	122.18	118.90
26	BB	2535	G	C5'-C4'-O4'	5.47	115.67	109.10
26	BB	2864	G	C1'-O4'-C4'	-5.47	105.52	109.90
1	AA	318	G	C5-C6-O6	-5.47	125.32	128.60
1	AA	475	C	N1-C2-N3	-5.47	115.37	119.20
1	AA	500	G	O4'-C4'-C3'	5.47	110.48	106.10
1	AA	1490	U	O4'-C4'-C3'	-5.47	98.53	104.00
4	AD	11	A	C2-N3-C4	5.47	113.34	110.60
26	BB	398	C	O4'-C1'-N1	5.47	112.58	108.20
26	BB	1395	A	N1-C2-N3	5.47	132.03	129.30
26	BB	1745	A	C5-C6-N1	-5.47	114.97	117.70
26	BB	2039	U	N3-C4-O4	-5.47	115.57	119.40
26	BB	2181	U	C5'-C4'-O4'	5.47	115.67	109.10
26	BB	2456	C	C5-C6-N1	5.47	123.73	121.00
26	BB	2668	G	N3-C2-N2	-5.47	116.07	119.90
26	BB	2787	C	C2-N3-C4	5.47	122.64	119.90
1	AA	51	A	C1'-O4'-C4'	5.47	114.28	109.90
1	AA	113	G	C5'-C4'-O4'	5.47	115.66	109.10
1	AA	159	G	P-O5'-C5'	5.47	129.65	120.90
1	AA	524	G	P-O5'-C5'	5.47	129.65	120.90
1	AA	709	U	N1-C2-N3	5.47	118.18	114.90
1	AA	728	A	C5-N7-C8	-5.47	101.17	103.90
1	AA	771	G	C8-N9-C4	5.47	108.59	106.40
1	AA	875	U	C5'-C4'-O4'	5.47	115.66	109.10
1	AA	989	U	C3'-C2'-C1'	-5.47	97.12	101.50
1	AA	1017	U	C5-C4-O4	-5.47	122.62	125.90
1	AA	1210	C	C5-C4-N4	-5.47	116.37	120.20
1	AA	1471	U	C5-C6-N1	-5.47	119.97	122.70
25	BA	81	G	O5'-P-OP2	-5.47	100.78	105.70
26	BB	187	G	C8-N9-C4	-5.47	104.21	106.40
26	BB	272	A	N9-C1'-C2'	-5.47	105.98	112.00
26	BB	827	U	P-O3'-C3'	5.47	126.26	119.70
26	BB	1338	G	C4-C5-N7	-5.47	108.61	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1408	G	N9-C1'-C2'	-5.47	105.98	112.00
26	BB	1490	A	N9-C4-C5	-5.47	103.61	105.80
26	BB	2025	C	C2-N1-C1'	-5.47	112.78	118.80
26	BB	2454	G	C6-C5-N7	-5.47	127.12	130.40
26	BB	2845	U	N3-C2-O2	-5.47	118.37	122.20
1	AA	54	C	N1-C1'-C2'	-5.47	105.98	112.00
1	AA	537	G	N1-C2-N3	-5.47	120.62	123.90
1	AA	605	U	O4'-C1'-N1	5.47	112.57	108.20
1	AA	877	G	N3-C4-C5	-5.47	125.87	128.60
1	AA	1190	G	O4'-C1'-N9	5.47	112.57	108.20
1	AA	1356	G	O3'-P-O5'	-5.47	93.61	104.00
26	BB	415	A	N1-C6-N6	5.47	121.88	118.60
26	BB	438	G	C1'-O4'-C4'	5.47	114.28	109.90
26	BB	851	C	C3'-C2'-C1'	5.47	105.87	101.50
26	BB	987	C	N1-C2-O2	5.47	122.18	118.90
26	BB	1091	G	N3-C4-C5	-5.47	125.87	128.60
26	BB	1281	G	C4-C5-N7	-5.47	108.61	110.80
26	BB	1387	A	N1-C2-N3	-5.47	126.57	129.30
26	BB	1948	G	C1'-O4'-C4'	-5.47	105.53	109.90
26	BB	2031	A	C6-C5-N7	5.47	136.13	132.30
26	BB	2786	U	N3-C4-C5	-5.47	111.32	114.60
26	BB	2864	G	C6-N1-C2	-5.47	121.82	125.10
50	BZ	64	ASP	CB-CG-OD2	5.47	123.22	118.30
1	AA	276	G	C8-N9-C4	-5.47	104.21	106.40
1	AA	282	A	P-O3'-C3'	5.47	126.26	119.70
1	AA	319	G	O4'-C1'-N9	5.47	112.57	108.20
1	AA	783	C	C6-N1-C2	5.47	122.49	120.30
1	AA	916	U	C5-C6-N1	-5.47	119.97	122.70
1	AA	949	A	C4-C5-N7	5.47	113.43	110.70
1	AA	1354	U	C4-C5-C6	5.47	122.98	119.70
1	AA	1375	A	C6-N1-C2	-5.47	115.32	118.60
26	BB	155	A	C5'-C4'-O4'	5.47	115.66	109.10
26	BB	325	G	N3-C4-N9	-5.47	122.72	126.00
26	BB	1038	G	C2-N3-C4	-5.47	109.17	111.90
26	BB	1549	A	C4'-C3'-C2'	-5.47	97.13	102.60
26	BB	2023	C	C2-N1-C1'	-5.47	112.79	118.80
26	BB	2320	U	N1-C1'-C2'	5.47	121.11	114.00
26	BB	2626	C	N3-C4-N4	5.47	121.83	118.00
26	BB	2862	G	C4-C5-C6	5.47	122.08	118.80
1	AA	87	C	N3-C4-N4	5.46	121.83	118.00
1	AA	128	G	O4'-C4'-C3'	-5.46	98.53	104.00
1	AA	667	G	N3-C2-N2	-5.46	116.07	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	845	A	C3'-C2'-C1'	5.46	105.87	101.50
2	AB	69	C	N3-C2-O2	-5.46	118.08	121.90
3	AC	34	U	C5-C4-O4	5.46	129.18	125.90
6	AF	167	TYR	CD1-CE1-CZ	5.46	124.72	119.80
26	BB	454	A	N3-C4-C5	-5.46	122.97	126.80
26	BB	1037	G	N9-C1'-C2'	-5.46	105.99	112.00
26	BB	1513	U	N3-C4-O4	5.46	123.22	119.40
26	BB	1810	A	O4'-C4'-C3'	5.46	110.47	106.10
26	BB	1843	C	N3-C4-C5	-5.46	119.71	121.90
26	BB	1943	U	C3'-C2'-C1'	-5.46	97.13	101.50
26	BB	2003	A	C3'-C2'-C1'	5.46	105.87	101.50
26	BB	2087	G	C6-C5-N7	5.46	133.68	130.40
26	BB	2148	G	O5'-P-OP2	5.46	117.26	110.70
26	BB	2281	A	O4'-C1'-N9	5.46	112.57	108.20
26	BB	2323	G	C2-N3-C4	-5.46	109.17	111.90
26	BB	2556	C	N3-C4-C5	-5.46	119.71	121.90
26	BB	2763	G	N1-C6-O6	-5.46	116.62	119.90
39	BO	91	TYR	CB-CG-CD1	5.46	124.28	121.00
1	AA	666	G	C6-C5-N7	-5.46	127.12	130.40
1	AA	1092	A	C4-C5-C6	-5.46	114.27	117.00
1	AA	1239	A	C5-N7-C8	-5.46	101.17	103.90
25	BA	116	G	C8-N9-C1'	5.46	134.10	127.00
26	BB	697	G	C4-C5-N7	-5.46	108.61	110.80
26	BB	1086	A	N1-C2-N3	-5.46	126.57	129.30
26	BB	1535	A	N7-C8-N9	-5.46	111.07	113.80
26	BB	2056	G	C4-C5-N7	-5.46	108.61	110.80
26	BB	2120	G	C6-N1-C2	-5.46	121.82	125.10
26	BB	2262	U	C6-N1-C2	-5.46	117.72	121.00
1	AA	80	A	C4-C5-C6	5.46	119.73	117.00
1	AA	693	G	C4-C5-C6	5.46	122.08	118.80
1	AA	802	A	C5-C6-N1	-5.46	114.97	117.70
1	AA	1477	U	O4'-C4'-C3'	-5.46	98.54	104.00
3	AC	37	G	C5'-C4'-O4'	5.46	115.65	109.10
26	BB	171	U	C5-C6-N1	-5.46	119.97	122.70
26	BB	572	A	C8-N9-C4	-5.46	103.62	105.80
26	BB	697	G	N3-C4-C5	-5.46	125.87	128.60
26	BB	797	G	O4'-C1'-N9	5.46	112.57	108.20
26	BB	1522	A	C6-C5-N7	5.46	136.12	132.30
26	BB	1685	C	N3-C4-N4	5.46	121.82	118.00
26	BB	1693	U	N3-C4-C5	-5.46	111.32	114.60
26	BB	2746	U	C5-C6-N1	-5.46	119.97	122.70
1	AA	683	G	N1-C2-N2	-5.46	111.29	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	76	C	P-O3'-C3'	5.46	126.25	119.70
26	BB	93	G	O4'-C1'-C2'	-5.46	100.34	105.80
26	BB	105	C	C4'-C3'-C2'	-5.46	97.14	102.60
26	BB	783	A	N1-C6-N6	-5.46	115.32	118.60
26	BB	1228	G	N9-C1'-C2'	-5.46	105.99	112.00
26	BB	1420	A	N7-C8-N9	-5.46	111.07	113.80
26	BB	2317	A	C4-C5-C6	5.46	119.73	117.00
26	BB	2414	G	C5'-C4'-O4'	5.46	115.65	109.10
26	BB	2536	G	C4-C5-N7	5.46	112.98	110.80
26	BB	2755	C	C4-C5-C6	5.46	120.13	117.40
1	AA	215	C	C6-N1-C2	-5.46	118.12	120.30
1	AA	538	G	O4'-C1'-N9	5.46	112.57	108.20
1	AA	783	C	O4'-C1'-N1	5.46	112.57	108.20
1	AA	843	U	C5-C6-N1	5.46	125.43	122.70
1	AA	1043	G	O4'-C1'-N9	5.46	112.57	108.20
1	AA	1295	U	N1-C2-O2	5.46	126.62	122.80
1	AA	1348	U	C6-N1-C2	5.46	124.28	121.00
4	AD	19	G	N3-C4-N9	5.46	129.28	126.00
4	AD	50	G	C6-C5-N7	-5.46	127.12	130.40
14	AN	11	VAL	CG1-CB-CG2	-5.46	102.17	110.90
20	AT	61	ARG	NH1-CZ-NH2	-5.46	113.39	119.40
25	BA	15	A	N3-C4-C5	-5.46	122.98	126.80
26	BB	206	U	O4'-C1'-N1	5.46	112.57	108.20
26	BB	432	A	C5-N7-C8	5.46	106.63	103.90
26	BB	437	U	P-O3'-C3'	5.46	126.25	119.70
26	BB	603	A	C4'-C3'-C2'	-5.46	97.14	102.60
26	BB	818	G	C4-C5-C6	-5.46	115.53	118.80
26	BB	1089	A	C5-N7-C8	-5.46	101.17	103.90
26	BB	1775	U	O4'-C1'-N1	5.46	112.57	108.20
26	BB	2374	C	C5'-C4'-O4'	5.46	115.65	109.10
26	BB	2460	U	O5'-C5'-C4'	5.46	122.07	111.70
1	AA	989	U	N1-C2-O2	-5.46	118.98	122.80
1	AA	1045	C	N3-C4-C5	-5.46	119.72	121.90
5	AE	62	ARG	CD-NE-CZ	5.46	131.24	123.60
26	BB	52	A	N9-C4-C5	5.46	107.98	105.80
26	BB	620	G	C5'-C4'-O4'	5.46	115.65	109.10
26	BB	837	C	O4'-C4'-C3'	5.46	110.47	106.10
26	BB	1203	U	C3'-C2'-C1'	5.46	105.86	101.50
26	BB	1253	A	O4'-C4'-C3'	5.46	110.47	106.10
26	BB	1514	G	N1-C6-O6	5.46	123.17	119.90
26	BB	1517	G	N1-C2-N3	-5.46	120.63	123.90
26	BB	1777	U	C5'-C4'-C3'	-5.46	107.27	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2024	G	N7-C8-N9	-5.46	110.37	113.10
26	BB	2531	A	N7-C8-N9	-5.46	111.07	113.80
26	BB	2890	G	C4-C5-N7	-5.46	108.62	110.80
37	BM	79	PHE	CB-CG-CD1	5.46	124.62	120.80
1	AA	439	U	O4'-C1'-N1	5.46	112.56	108.20
1	AA	1162	C	C3'-C2'-C1'	-5.46	97.14	101.50
25	BA	41	G	C5-C6-N1	5.46	114.23	111.50
26	BB	541	A	O4'-C4'-C3'	5.46	110.46	106.10
26	BB	2422	C	C1'-O4'-C4'	5.46	114.26	109.90
1	AA	195	A	C5'-C4'-C3'	-5.45	107.27	116.00
1	AA	825	A	C6-N1-C2	-5.45	115.33	118.60
1	AA	1334	G	N1-C2-N3	-5.45	120.63	123.90
3	AC	39	U	C5'-C4'-C3'	-5.45	107.28	116.00
18	AR	63	ARG	NE-CZ-NH2	-5.45	117.57	120.30
26	BB	103	A	C5'-C4'-C3'	-5.45	107.27	116.00
26	BB	763	G	O4'-C1'-C2'	-5.45	100.35	105.80
26	BB	1535	A	P-O3'-C3'	5.45	126.24	119.70
26	BB	1925	C	N1-C2-N3	-5.45	115.38	119.20
26	BB	1955	U	O4'-C1'-C2'	-5.45	100.35	105.80
26	BB	1999	C	C5'-C4'-C3'	-5.45	107.27	116.00
26	BB	2010	G	O4'-C1'-N9	5.45	112.56	108.20
26	BB	2032	G	N9-C1'-C2'	5.45	121.09	114.00
26	BB	2342	C	N3-C4-C5	5.45	124.08	121.90
56	B5	21	ARG	NE-CZ-NH2	5.45	123.03	120.30
1	AA	488	C	P-O3'-C3'	5.45	126.24	119.70
1	AA	1328	C	C5-C4-N4	5.45	124.02	120.20
26	BB	330	A	C3'-C2'-C1'	5.45	105.86	101.50
26	BB	830	G	C5'-C4'-O4'	5.45	115.64	109.10
26	BB	1106	G	C8-N9-C4	-5.45	104.22	106.40
26	BB	1410	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	BB	1654	A	N9-C4-C5	-5.45	103.62	105.80
26	BB	1811	G	C5-C6-N1	5.45	114.23	111.50
26	BB	2714	G	N3-C2-N2	5.45	123.72	119.90
26	BB	2883	A	N7-C8-N9	5.45	116.53	113.80
1	AA	863	U	C6-N1-C2	-5.45	117.73	121.00
1	AA	906	A	C3'-C2'-C1'	-5.45	97.14	101.50
1	AA	1071	C	N3-C4-N4	-5.45	114.18	118.00
1	AA	1105	A	N7-C8-N9	5.45	116.53	113.80
1	AA	1126	U	C2-N3-C4	5.45	130.27	127.00
1	AA	1317	C	N3-C4-C5	-5.45	119.72	121.90
4	AD	47	A	C5'-C4'-C3'	5.45	124.72	116.00
26	BB	110	G	P-O3'-C3'	5.45	126.24	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	123	G	N9-C4-C5	-5.45	103.22	105.40
26	BB	317	G	N9-C1'-C2'	-5.45	106.00	112.00
26	BB	347	A	O4'-C1'-N9	5.45	112.56	108.20
26	BB	390	U	N1-C2-N3	5.45	118.17	114.90
26	BB	1377	G	C5-C6-O6	-5.45	125.33	128.60
26	BB	1452	G	N9-C4-C5	5.45	107.58	105.40
26	BB	1538	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	BB	1879	C	C6-N1-C2	-5.45	118.12	120.30
26	BB	2421	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	BB	2578	G	N1-C6-O6	-5.45	116.63	119.90
26	BB	2622	U	C2-N3-C4	-5.45	123.73	127.00
1	AA	72	A	N3-C4-C5	5.45	130.61	126.80
1	AA	534	U	C4'-C3'-C2'	-5.45	97.15	102.60
1	AA	611	C	C3'-C2'-C1'	5.45	105.86	101.50
1	AA	804	U	P-O3'-C3'	5.45	126.24	119.70
1	AA	962	C	C2-N3-C4	-5.45	117.18	119.90
1	AA	1455	G	N1-C2-N2	5.45	121.10	116.20
25	BA	59	A	C5-C6-N1	5.45	120.42	117.70
26	BB	69	C	O4'-C1'-N1	5.45	112.56	108.20
26	BB	170	U	N3-C4-C5	5.45	117.87	114.60
26	BB	400	G	N3-C4-C5	-5.45	125.88	128.60
26	BB	458	G	O4'-C1'-C2'	-5.45	100.35	105.80
26	BB	888	C	C5-C4-N4	5.45	124.01	120.20
26	BB	1228	G	N7-C8-N9	-5.45	110.38	113.10
26	BB	1572	A	N7-C8-N9	5.45	116.52	113.80
26	BB	1733	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	BB	2172	U	C2-N3-C4	-5.45	123.73	127.00
26	BB	2196	C	C5-C4-N4	5.45	124.01	120.20
26	BB	2630	G	N9-C4-C5	-5.45	103.22	105.40
26	BB	2883	A	C5-C6-N1	5.45	120.42	117.70
43	BS	7	VAL	CA-CB-CG2	5.45	119.07	110.90
26	BB	283	G	N3-C2-N2	-5.45	116.09	119.90
26	BB	400	G	C6-N1-C2	-5.45	121.83	125.10
26	BB	1491	G	N1-C2-N3	5.45	127.17	123.90
26	BB	2396	G	N7-C8-N9	5.45	115.82	113.10
26	BB	2812	G	C8-N9-C1'	5.45	134.08	127.00
1	AA	242	G	N3-C4-C5	-5.45	125.88	128.60
1	AA	325	A	C3'-C2'-C1'	5.45	105.86	101.50
1	AA	458	U	N3-C4-O4	5.45	123.21	119.40
1	AA	491	G	O4'-C1'-N9	5.45	112.56	108.20
1	AA	514	C	N3-C4-N4	-5.45	114.19	118.00
1	AA	723	U	N1-C1'-C2'	-5.45	106.01	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1030	U	O4'-C1'-C2'	-5.45	100.36	105.80
1	AA	1053	G	O4'-C1'-N9	5.45	112.56	108.20
1	AA	1086	U	C2-N1-C1'	5.45	124.23	117.70
26	BB	23	G	C4-N9-C1'	5.45	133.58	126.50
26	BB	97	C	C5-C4-N4	5.45	124.01	120.20
26	BB	384	A	C2-N3-C4	5.45	113.32	110.60
26	BB	1138	G	C4'-C3'-C2'	-5.45	97.15	102.60
26	BB	1163	G	C5-C6-O6	-5.45	125.33	128.60
26	BB	1279	G	N3-C2-N2	-5.45	116.09	119.90
26	BB	1418	G	N1-C2-N3	5.45	127.17	123.90
26	BB	1429	G	C4-C5-C6	5.45	122.07	118.80
26	BB	1496	A	C1'-O4'-C4'	5.45	114.26	109.90
26	BB	1523	U	C2-N3-C4	-5.45	123.73	127.00
26	BB	1634	A	N9-C4-C5	5.45	107.98	105.80
26	BB	1791	A	N9-C1'-C2'	-5.45	106.01	112.00
26	BB	1999	C	C5'-C4'-O4'	5.45	115.63	109.10
26	BB	2021	C	N1-C2-N3	-5.45	115.39	119.20
1	AA	201	G	N9-C4-C5	-5.44	103.22	105.40
1	AA	819	A	P-O3'-C3'	5.44	126.23	119.70
3	AC	56	G	N7-C8-N9	5.44	115.82	113.10
26	BB	52	A	N7-C8-N9	5.44	116.52	113.80
26	BB	232	G	C4-C5-N7	-5.44	108.62	110.80
26	BB	403	U	P-O3'-C3'	5.44	126.23	119.70
26	BB	460	A	C5-N7-C8	5.44	106.62	103.90
26	BB	1288	G	N3-C4-N9	5.44	129.27	126.00
26	BB	1375	U	C5-C6-N1	5.44	125.42	122.70
26	BB	1475	G	C6-C5-N7	-5.44	127.13	130.40
26	BB	1531	C	C2-N3-C4	5.44	122.62	119.90
26	BB	1684	G	N3-C4-C5	-5.44	125.88	128.60
26	BB	2298	A	N9-C1'-C2'	-5.44	106.01	112.00
1	AA	46	G	N9-C4-C5	5.44	107.58	105.40
1	AA	93	U	C4'-C3'-C2'	-5.44	97.16	102.60
1	AA	116	A	C4-C5-N7	-5.44	107.98	110.70
1	AA	167	A	O4'-C1'-N9	5.44	112.56	108.20
1	AA	276	G	N1-C6-O6	5.44	123.17	119.90
1	AA	371	A	N9-C4-C5	-5.44	103.62	105.80
1	AA	446	G	C5-C6-O6	5.44	131.87	128.60
1	AA	689	C	O4'-C1'-N1	5.44	112.55	108.20
1	AA	719	C	N3-C4-N4	-5.44	114.19	118.00
1	AA	727	G	C4-C5-N7	5.44	112.98	110.80
1	AA	986	U	C2-N3-C4	-5.44	123.73	127.00
1	AA	1192	C	C4'-C3'-O3'	5.44	123.89	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	AL	37	TYR	CG-CD2-CE2	-5.44	116.94	121.30
22	AV	54	ARG	NE-CZ-NH1	-5.44	117.58	120.30
26	BB	416	U	N1-C2-O2	-5.44	118.99	122.80
26	BB	435	C	C4-C5-C6	-5.44	114.68	117.40
26	BB	459	U	O4'-C1'-N1	5.44	112.55	108.20
26	BB	1099	G	N3-C2-N2	-5.44	116.09	119.90
26	BB	1261	C	C5-C4-N4	-5.44	116.39	120.20
26	BB	1362	C	N3-C4-C5	-5.44	119.72	121.90
26	BB	1448	G	C8-N9-C4	-5.44	104.22	106.40
26	BB	1552	A	C4-C5-N7	-5.44	107.98	110.70
26	BB	1861	G	C5-C6-O6	-5.44	125.33	128.60
26	BB	1914	C	C5-C4-N4	5.44	124.01	120.20
26	BB	1971	U	O4'-C4'-C3'	5.44	110.45	106.10
26	BB	2831	G	N9-C4-C5	5.44	107.58	105.40
56	B5	35	ARG	NH1-CZ-NH2	-5.44	113.41	119.40
1	AA	379	C	O5'-C5'-C4'	5.44	122.04	111.70
1	AA	668	G	C4'-C3'-C2'	-5.44	97.16	102.60
6	AF	17	TRP	CE2-CD2-CE3	-5.44	112.17	118.70
26	BB	226	A	N1-C6-N6	5.44	121.86	118.60
26	BB	414	C	N3-C2-O2	-5.44	118.09	121.90
26	BB	1202	G	C3'-C2'-C1'	5.44	105.85	101.50
26	BB	1419	A	C8-N9-C4	5.44	107.98	105.80
26	BB	2290	G	N7-C8-N9	5.44	115.82	113.10
26	BB	2730	C	N3-C4-N4	-5.44	114.19	118.00
26	BB	2745	C	N1-C2-O2	-5.44	115.64	118.90
26	BB	2770	G	C1'-O4'-C4'	5.44	114.25	109.90
26	BB	2822	G	O4'-C1'-C2'	-5.44	100.36	105.80
26	BB	2876	G	C4-C5-N7	-5.44	108.62	110.80
39	BO	94	ALA	CB-CA-C	5.44	118.26	110.10
1	AA	1049	U	C2-N1-C1'	-5.44	111.17	117.70
1	AA	1358	U	C5-C6-N1	-5.44	119.98	122.70
26	BB	447	A	N3-C4-N9	5.44	131.75	127.40
26	BB	1432	G	N1-C6-O6	-5.44	116.64	119.90
26	BB	2253	G	C6-N1-C2	-5.44	121.84	125.10
26	BB	2323	G	C3'-C2'-C1'	5.44	105.85	101.50
32	BH	73	SER	O-C-N	5.44	131.40	122.70
1	AA	11	G	N3-C2-N2	-5.44	116.09	119.90
1	AA	616	G	C8-N9-C4	5.44	108.58	106.40
1	AA	783	C	C5'-C4'-O4'	5.44	115.63	109.10
1	AA	1278	G	N7-C8-N9	5.44	115.82	113.10
1	AA	1297	G	C2-N3-C4	5.44	114.62	111.90
22	AV	54	ARG	CD-NE-CZ	5.44	131.21	123.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	95	U	C4'-C3'-C2'	-5.44	97.16	102.60
26	BB	385	C	N1-C2-N3	-5.44	115.39	119.20
26	BB	817	C	C5'-C4'-O4'	5.44	115.63	109.10
26	BB	1249	U	O4'-C4'-C3'	5.44	110.45	106.10
26	BB	1271	G	O4'-C4'-C3'	-5.44	98.56	104.00
26	BB	1283	G	C8-N9-C1'	5.44	134.07	127.00
26	BB	1954	G	N1-C2-N3	-5.44	120.64	123.90
26	BB	2256	G	N9-C1'-C2'	-5.44	106.02	112.00
26	BB	2628	C	C2-N3-C4	5.44	122.62	119.90
26	BB	2849	U	O5'-C5'-C4'	-5.44	101.37	111.70
32	BH	93	TYR	CB-CG-CD2	-5.44	117.74	121.00
44	BT	35	PHE	CB-CG-CD2	5.44	124.61	120.80
1	AA	648	A	C4-C5-C6	-5.44	114.28	117.00
1	AA	677	U	N3-C4-O4	5.44	123.20	119.40
1	AA	991	U	C5-C6-N1	-5.44	119.98	122.70
1	AA	1171	A	C1'-O4'-C4'	-5.44	105.55	109.90
26	BB	484	C	C4'-C3'-C2'	-5.44	97.16	102.60
26	BB	1242	U	N3-C4-C5	-5.44	111.34	114.60
26	BB	1723	G	C5-C6-N1	5.44	114.22	111.50
26	BB	2043	C	N1-C2-O2	5.44	122.16	118.90
1	AA	457	G	C4-C5-C6	5.43	122.06	118.80
1	AA	481	G	C5'-C4'-O4'	5.43	115.62	109.10
1	AA	870	U	P-O3'-C3'	5.43	126.22	119.70
1	AA	924	C	C5-C6-N1	5.43	123.72	121.00
1	AA	1202	U	N3-C2-O2	-5.43	118.39	122.20
1	AA	1272	G	N1-C6-O6	5.43	123.16	119.90
1	AA	1465	A	C2-N3-C4	5.43	113.32	110.60
1	AA	1515	G	C6-C5-N7	5.43	133.66	130.40
2	AB	30	G	C6-N1-C2	5.43	128.36	125.10
2	AB	74	C	N3-C4-N4	-5.43	114.19	118.00
18	AR	44	GLU	N-CA-CB	-5.43	100.82	110.60
25	BA	21	G	C1'-O4'-C4'	-5.43	105.55	109.90
26	BB	615	U	C5-C6-N1	-5.43	119.98	122.70
26	BB	624	C	C4'-C3'-C2'	-5.43	97.17	102.60
26	BB	787	C	N3-C4-C5	5.43	124.07	121.90
26	BB	862	G	O4'-C1'-N9	5.43	112.55	108.20
26	BB	865	C	C1'-O4'-C4'	5.43	114.25	109.90
26	BB	873	C	C5-C4-N4	-5.43	116.40	120.20
26	BB	1173	U	P-O3'-C3'	5.43	126.22	119.70
26	BB	1480	C	N3-C4-C5	5.43	124.07	121.90
26	BB	1941	C	C4-C5-C6	5.43	120.12	117.40
26	BB	2144	G	O4'-C1'-N9	-5.43	103.85	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2283	C	OP1-P-OP2	5.43	127.75	119.60
26	BB	2389	G	C5-N7-C8	5.43	107.02	104.30
26	BB	2397	G	N3-C4-C5	-5.43	125.88	128.60
26	BB	2424	C	N1-C2-N3	5.43	123.00	119.20
26	BB	2494	G	C6-N1-C2	-5.43	121.84	125.10
26	BB	2736	A	C6-C5-N7	5.43	136.10	132.30
1	AA	76	G	N7-C8-N9	5.43	115.82	113.10
1	AA	157	U	C6-N1-C2	-5.43	117.74	121.00
1	AA	224	U	N3-C2-O2	-5.43	118.40	122.20
1	AA	348	G	N7-C8-N9	5.43	115.82	113.10
1	AA	803	G	C5-C6-N1	5.43	114.22	111.50
1	AA	1041	G	C5-C6-N1	5.43	114.22	111.50
1	AA	1241	G	C5-N7-C8	5.43	107.02	104.30
11	AK	10	LEU	CB-CG-CD2	5.43	120.23	111.00
21	AU	31	TYR	CD1-CE1-CZ	5.43	124.69	119.80
25	BA	6	G	C8-N9-C4	-5.43	104.23	106.40
26	BB	8	C	N1-C2-N3	-5.43	115.40	119.20
26	BB	23	G	O4'-C4'-C3'	5.43	110.45	106.10
26	BB	47	C	N3-C2-O2	-5.43	118.10	121.90
26	BB	107	G	N1-C6-O6	5.43	123.16	119.90
26	BB	171	U	C5'-C4'-O4'	5.43	115.62	109.10
26	BB	239	C	C2-N3-C4	-5.43	117.18	119.90
26	BB	352	A	C5'-C4'-C3'	-5.43	107.31	116.00
26	BB	439	A	O4'-C1'-N9	5.43	112.55	108.20
26	BB	638	G	C4-C5-N7	5.43	112.97	110.80
26	BB	788	A	C4-C5-C6	5.43	119.72	117.00
26	BB	824	U	C1'-O4'-C4'	-5.43	105.55	109.90
26	BB	857	G	N1-C6-O6	-5.43	116.64	119.90
26	BB	960	A	P-O3'-C3'	5.43	126.22	119.70
26	BB	2130	U	N1-C2-O2	5.43	126.60	122.80
26	BB	2207	C	N1-C2-O2	5.43	122.16	118.90
26	BB	2371	G	N3-C4-C5	-5.43	125.88	128.60
26	BB	2602	A	C4-C5-N7	-5.43	107.98	110.70
26	BB	2618	G	O3'-P-O5'	-5.43	93.68	104.00
26	BB	2648	G	N9-C1'-C2'	-5.43	106.02	112.00
1	AA	772	U	N1-C2-O2	5.43	126.60	122.80
1	AA	1054	C	O4'-C1'-N1	5.43	112.54	108.20
25	BA	16	G	N1-C2-N3	5.43	127.16	123.90
26	BB	89	A	C5'-C4'-C3'	-5.43	107.31	116.00
26	BB	222	A	N3-C4-C5	-5.43	123.00	126.80
26	BB	923	G	C5-N7-C8	5.43	107.02	104.30
26	BB	1913	A	C5'-C4'-O4'	5.43	115.62	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1920	C	O4'-C1'-C2'	-5.43	100.37	105.80
26	BB	2150	C	C5-C4-N4	5.43	124.00	120.20
1	AA	28	A	C8-N9-C4	-5.43	103.63	105.80
1	AA	171	A	N7-C8-N9	5.43	116.52	113.80
1	AA	428	G	C2-N3-C4	5.43	114.61	111.90
1	AA	1246	A	C5-C6-N1	5.43	120.42	117.70
3	AC	40	G	N1-C2-N3	-5.43	120.64	123.90
4	AD	75	C	C2-N3-C4	-5.43	117.19	119.90
26	BB	115	C	C6-N1-C2	5.43	122.47	120.30
26	BB	579	G	N7-C8-N9	5.43	115.81	113.10
26	BB	1248	G	C5-C6-N1	5.43	114.22	111.50
26	BB	1550	C	N3-C4-N4	5.43	121.80	118.00
26	BB	2281	A	N9-C4-C5	5.43	107.97	105.80
26	BB	2728	U	C2-N3-C4	-5.43	123.74	127.00
26	BB	2858	C	C5-C4-N4	5.43	124.00	120.20
27	BC	15	VAL	CA-CB-CG1	5.43	119.04	110.90
29	BE	125	TRP	CB-CG-CD2	5.43	133.66	126.60
1	AA	56	U	N1-C2-N3	5.43	118.16	114.90
1	AA	149	A	C1'-O4'-C4'	-5.43	105.56	109.90
1	AA	495	A	C3'-C2'-C1'	-5.43	97.16	101.50
1	AA	814	A	C5-C6-N6	5.43	128.04	123.70
4	AD	54	G	C5-C6-N1	5.43	114.21	111.50
6	AF	200	TRP	NE1-CE2-CD2	-5.43	101.87	107.30
26	BB	1620	G	C4-N9-C1'	-5.43	119.44	126.50
26	BB	2358	A	N9-C4-C5	5.43	107.97	105.80
1	AA	112	G	C6-C5-N7	-5.43	127.14	130.40
1	AA	333	U	O4'-C1'-N1	5.43	112.54	108.20
1	AA	337	G	N9-C4-C5	5.43	107.57	105.40
1	AA	391	G	C4-C5-C6	5.43	122.06	118.80
1	AA	414	A	C3'-C2'-C1'	-5.43	97.16	101.50
1	AA	749	A	C6-N1-C2	-5.43	115.34	118.60
1	AA	1066	C	C4-C5-C6	5.43	120.11	117.40
2	AB	66	C	C1'-O4'-C4'	5.43	114.24	109.90
7	AG	106	PHE	C-N-CA	5.43	133.70	122.30
26	BB	162	U	C2-N3-C4	-5.43	123.74	127.00
26	BB	217	A	C5'-C4'-C3'	-5.43	107.32	116.00
26	BB	392	U	N1-C2-O2	-5.43	119.00	122.80
26	BB	590	A	C8-N9-C4	-5.43	103.63	105.80
26	BB	893	C	O4'-C1'-N1	5.43	112.54	108.20
26	BB	1783	A	C5-N7-C8	-5.43	101.19	103.90
26	BB	2084	C	N3-C2-O2	-5.43	118.10	121.90
26	BB	2451	A	C4'-C3'-C2'	-5.43	97.17	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2562	U	C5-C6-N1	-5.43	119.99	122.70
26	BB	2617	U	N1-C2-O2	5.43	126.60	122.80
26	BB	2802	G	O4'-C1'-N9	5.43	112.54	108.20
42	BR	42	PHE	CB-CG-CD1	-5.43	117.00	120.80
1	AA	107	G	N9-C1'-C2'	-5.42	106.03	112.00
1	AA	523	A	N1-C2-N3	5.42	132.01	129.30
1	AA	962	C	C6-N1-C2	5.42	122.47	120.30
1	AA	1121	U	C5'-C4'-O4'	5.42	115.61	109.10
1	AA	1134	G	N1-C6-O6	-5.42	116.64	119.90
1	AA	1514	G	C4-C5-C6	-5.42	115.55	118.80
4	AD	53	G	C5-C6-O6	5.42	131.85	128.60
13	AM	97	ASP	CB-CG-OD2	5.42	123.18	118.30
25	BA	72	G	C4-C5-C6	-5.42	115.55	118.80
26	BB	262	A	O4'-C1'-N9	5.42	112.54	108.20
26	BB	529	A	N1-C2-N3	5.42	132.01	129.30
26	BB	688	U	C5-C6-N1	-5.42	119.99	122.70
26	BB	1248	G	C4-C5-N7	-5.42	108.63	110.80
26	BB	1296	G	N7-C8-N9	5.42	115.81	113.10
26	BB	1581	G	C5-C6-N1	5.42	114.21	111.50
26	BB	2236	U	C4-C5-C6	5.42	122.95	119.70
26	BB	2250	G	N1-C2-N3	-5.42	120.64	123.90
26	BB	2607	G	N3-C2-N2	5.42	123.70	119.90
26	BB	2661	G	N7-C8-N9	5.42	115.81	113.10
1	AA	61	G	C5'-C4'-O4'	5.42	115.61	109.10
1	AA	869	G	C5-C6-N1	5.42	114.21	111.50
25	BA	18	G	C3'-C2'-C1'	-5.42	97.16	101.50
26	BB	27	G	C2-N3-C4	-5.42	109.19	111.90
26	BB	294	A	C2-N3-C4	5.42	113.31	110.60
26	BB	1264	A	N7-C8-N9	5.42	116.51	113.80
26	BB	1866	A	C5'-C4'-O4'	5.42	115.61	109.10
26	BB	2389	G	C6-N1-C2	-5.42	121.85	125.10
43	BS	116	LEU	CB-CG-CD1	5.42	120.22	111.00
1	AA	167	A	C5-N7-C8	-5.42	101.19	103.90
1	AA	262	A	C3'-C2'-C1'	5.42	105.84	101.50
1	AA	537	G	N7-C8-N9	5.42	115.81	113.10
1	AA	1295	U	N3-C4-C5	5.42	117.85	114.60
1	AA	1328	C	N3-C4-N4	-5.42	114.20	118.00
1	AA	1333	A	N9-C1'-C2'	-5.42	106.04	112.00
1	AA	1398	A	C3'-C2'-C1'	-5.42	97.16	101.50
1	AA	1500	A	O5'-C5'-C4'	-5.42	101.40	111.70
17	AQ	64	ARG	NE-CZ-NH1	-5.42	117.59	120.30
26	BB	73	A	O4'-C4'-C3'	5.42	110.44	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	778	G	N1-C6-O6	-5.42	116.65	119.90
26	BB	995	C	C2-N3-C4	5.42	122.61	119.90
26	BB	1241	A	N7-C8-N9	-5.42	111.09	113.80
26	BB	1246	A	C4'-C3'-C2'	-5.42	97.18	102.60
26	BB	1477	A	C5-C6-N6	5.42	128.04	123.70
26	BB	1705	A	C5-C6-N6	-5.42	119.36	123.70
26	BB	1739	A	C1'-O4'-C4'	-5.42	105.56	109.90
26	BB	1839	G	C5-C6-N1	5.42	114.21	111.50
26	BB	1923	U	C5'-C4'-O4'	5.42	115.61	109.10
26	BB	2344	U	C5-C6-N1	-5.42	119.99	122.70
27	BC	112	ASP	CB-CG-OD2	-5.42	113.42	118.30
1	AA	645	G	C6-C5-N7	-5.42	127.15	130.40
1	AA	1195	C	N1-C2-O2	5.42	122.15	118.90
26	BB	473	G	C5'-C4'-C3'	-5.42	107.33	116.00
26	BB	688	U	N3-C2-O2	-5.42	118.41	122.20
26	BB	870	U	C5'-C4'-O4'	5.42	115.60	109.10
26	BB	1359	A	C4'-C3'-C2'	-5.42	97.18	102.60
26	BB	1360	G	C6-C5-N7	-5.42	127.15	130.40
26	BB	1980	G	C4-C5-N7	5.42	112.97	110.80
26	BB	2208	C	C4-C5-C6	-5.42	114.69	117.40
26	BB	2505	G	C5-N7-C8	5.42	107.01	104.30
1	AA	8	A	C5-C6-N1	-5.42	114.99	117.70
1	AA	162	A	C2-N3-C4	5.42	113.31	110.60
1	AA	218	U	C4'-C3'-C2'	-5.42	97.18	102.60
1	AA	314	C	O4'-C1'-N1	5.42	112.53	108.20
1	AA	505	G	N3-C4-C5	-5.42	125.89	128.60
1	AA	714	G	N3-C2-N2	5.42	123.69	119.90
1	AA	734	G	C1'-O4'-C4'	5.42	114.23	109.90
1	AA	1037	C	P-O5'-C5'	5.42	129.57	120.90
1	AA	1426	G	N9-C1'-C2'	-5.42	106.04	112.00
2	AB	66	C	N1-C2-N3	-5.42	115.41	119.20
11	AK	76	ARG	NE-CZ-NH2	5.42	123.01	120.30
26	BB	49	A	C8-N9-C4	-5.42	103.63	105.80
26	BB	540	C	C3'-C2'-C1'	5.42	105.84	101.50
26	BB	718	A	C4'-C3'-C2'	-5.42	97.18	102.60
26	BB	968	C	C5-C6-N1	5.42	123.71	121.00
26	BB	996	A	P-O3'-C3'	5.42	126.20	119.70
26	BB	1124	G	N9-C1'-C2'	-5.42	106.04	112.00
26	BB	2092	U	N3-C4-C5	5.42	117.85	114.60
26	BB	2106	U	C2'-C3'-O3'	5.42	122.37	113.70
26	BB	2321	U	C2-N1-C1'	5.42	124.20	117.70
26	BB	2713	U	N3-C2-O2	-5.42	118.41	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	BH	109	SER	N-CA-CB	-5.42	102.37	110.50
1	AA	31	G	C6-N1-C2	5.42	128.35	125.10
1	AA	748	G	N9-C1'-C2'	-5.42	106.04	112.00
1	AA	792	A	C4-C5-N7	-5.42	107.99	110.70
1	AA	1105	A	O3'-P-O5'	5.42	114.29	104.00
1	AA	1227	A	C5'-C4'-C3'	-5.42	107.33	116.00
26	BB	47	C	C2-N3-C4	-5.42	117.19	119.90
26	BB	52	A	N1-C2-N3	-5.42	126.59	129.30
26	BB	248	G	N1-C2-N3	-5.42	120.65	123.90
26	BB	397	U	P-O3'-C3'	5.42	126.20	119.70
26	BB	1093	G	C4-C5-C6	5.42	122.05	118.80
26	BB	1313	U	C6-N1-C1'	-5.42	113.62	121.20
26	BB	1619	G	N3-C4-C5	-5.42	125.89	128.60
26	BB	2147	A	C5'-C4'-O4'	-5.42	102.60	109.10
37	BM	10	VAL	CG1-CB-CG2	-5.42	102.23	110.90
1	AA	757	U	C3'-C2'-C1'	5.42	105.83	101.50
2	AB	26	A	C8-N9-C4	-5.42	103.63	105.80
10	AJ	88	VAL	CA-CB-CG1	5.42	119.02	110.90
25	BA	104	A	O4'-C1'-N9	5.42	112.53	108.20
26	BB	2127	G	C6-N1-C2	-5.42	121.85	125.10
26	BB	2770	G	C8-N9-C4	-5.42	104.23	106.40
1	AA	8	A	O4'-C1'-N9	5.41	112.53	108.20
1	AA	55	A	C5'-C4'-O4'	-5.41	102.60	109.10
1	AA	131	A	C5-C6-N6	-5.41	119.37	123.70
1	AA	220	G	O4'-C4'-C3'	-5.41	98.59	104.00
1	AA	259	G	C5-N7-C8	-5.41	101.59	104.30
1	AA	274	A	O4'-C1'-N9	5.41	112.53	108.20
1	AA	506	G	N1-C2-N2	5.41	121.07	116.20
1	AA	566	G	N9-C4-C5	5.41	107.57	105.40
1	AA	639	G	N3-C4-N9	-5.41	122.75	126.00
1	AA	1371	G	N3-C2-N2	-5.41	116.11	119.90
1	AA	1405	G	C3'-C2'-C1'	-5.41	97.17	101.50
26	BB	442	G	C5'-C4'-O4'	5.41	115.59	109.10
26	BB	631	A	P-O3'-C3'	5.41	126.19	119.70
26	BB	880	G	C8-N9-C4	-5.41	104.23	106.40
26	BB	1175	A	C5-N7-C8	5.41	106.61	103.90
26	BB	1521	G	N1-C2-N3	-5.41	120.65	123.90
26	BB	1792	G	C3'-C2'-C1'	5.41	105.83	101.50
40	BP	60	VAL	CA-CB-CG2	5.41	119.02	110.90
1	AA	269	C	C5'-C4'-O4'	5.41	115.59	109.10
1	AA	422	C	C2-N3-C4	5.41	122.61	119.90
1	AA	1414	U	N3-C2-O2	-5.41	118.41	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1403	A	O4'-C1'-N9	5.41	112.53	108.20
26	BB	1475	G	C5'-C4'-O4'	5.41	115.59	109.10
26	BB	1865	U	C1'-O4'-C4'	-5.41	105.57	109.90
1	AA	617	G	C6-N1-C2	-5.41	121.85	125.10
1	AA	790	A	C5'-C4'-O4'	5.41	115.59	109.10
1	AA	809	G	N3-C4-C5	-5.41	125.89	128.60
1	AA	1041	G	N3-C2-N2	-5.41	116.11	119.90
4	AD	26	C	C6-N1-C2	5.41	122.46	120.30
9	AI	97	THR	CA-CB-CG2	-5.41	104.82	112.40
26	BB	45	G	C1'-O4'-C4'	-5.41	105.57	109.90
26	BB	957	C	N1-C2-N3	5.41	122.99	119.20
26	BB	1704	C	O4'-C4'-C3'	5.41	110.43	106.10
26	BB	1705	A	P-O3'-C3'	5.41	126.19	119.70
26	BB	2170	A	C8-N9-C4	-5.41	103.64	105.80
29	BE	116	LYS	CA-CB-CG	5.41	125.31	113.40
1	AA	66	A	C1'-O4'-C4'	5.41	114.23	109.90
1	AA	112	G	P-O3'-C3'	5.41	126.19	119.70
1	AA	236	A	C6-N1-C2	-5.41	115.36	118.60
1	AA	577	G	C4-C5-C6	5.41	122.05	118.80
1	AA	848	C	C4-C5-C6	5.41	120.10	117.40
1	AA	848	C	C5'-C4'-C3'	-5.41	107.35	116.00
1	AA	890	G	O4'-C1'-N9	5.41	112.53	108.20
1	AA	1378	C	N1-C1'-C2'	-5.41	106.05	112.00
1	AA	1512	U	C1'-O4'-C4'	5.41	114.23	109.90
1	AA	1523	G	C6-C5-N7	-5.41	127.16	130.40
4	AD	38	A	N9-C4-C5	-5.41	103.64	105.80
17	AQ	68	ARG	NE-CZ-NH2	-5.41	117.60	120.30
26	BB	46	G	N3-C4-N9	5.41	129.25	126.00
26	BB	176	A	C6-N1-C2	-5.41	115.36	118.60
26	BB	335	C	C2-N3-C4	5.41	122.61	119.90
26	BB	670	A	O3'-P-O5'	-5.41	93.72	104.00
26	BB	773	U	C4'-C3'-C2'	5.41	108.01	102.60
26	BB	935	C	N3-C2-O2	-5.41	118.11	121.90
26	BB	1670	C	C2-N3-C4	5.41	122.60	119.90
26	BB	1832	C	N3-C2-O2	-5.41	118.11	121.90
26	BB	1998	A	C2-N3-C4	5.41	113.30	110.60
26	BB	2720	U	C5-C4-O4	5.41	129.15	125.90
26	BB	2816	G	C6-N1-C2	-5.41	121.86	125.10
38	BN	21	ARG	NE-CZ-NH2	5.41	123.00	120.30
1	AA	102	G	C5'-C4'-O4'	5.41	115.59	109.10
1	AA	313	A	C5-C6-N6	5.41	128.03	123.70
1	AA	415	A	O4'-C1'-N9	5.41	112.53	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	553	A	C6-N1-C2	-5.41	115.36	118.60
1	AA	634	C	C5-C6-N1	5.41	123.70	121.00
1	AA	1220	G	C3'-C2'-C1'	5.41	105.83	101.50
2	AB	31	U	C5'-C4'-O4'	5.41	115.59	109.10
2	AB	34	C	C6-N1-C1'	-5.41	114.31	120.80
15	AO	51	VAL	CA-CB-CG2	5.41	119.01	110.90
26	BB	417	C	N3-C4-C5	-5.41	119.74	121.90
26	BB	733	G	C5-C6-N1	5.41	114.20	111.50
26	BB	983	A	P-O3'-C3'	5.41	126.19	119.70
26	BB	1391	U	C5-C4-O4	-5.41	122.66	125.90
26	BB	1400	U	C3'-C2'-C1'	5.41	105.83	101.50
26	BB	1756	G	N9-C4-C5	-5.41	103.24	105.40
26	BB	1852	U	C2-N1-C1'	5.41	124.19	117.70
26	BB	2318	G	C8-N9-C4	5.41	108.56	106.40
1	AA	528	C	N3-C2-O2	-5.41	118.12	121.90
1	AA	781	A	C4'-C3'-C2'	-5.41	97.19	102.60
1	AA	1025	U	P-O3'-C3'	5.41	126.19	119.70
1	AA	1183	U	O4'-C1'-C2'	-5.41	100.39	105.80
1	AA	1239	A	C5-C6-N6	-5.41	119.38	123.70
1	AA	1536	C	C4-C5-C6	-5.41	114.70	117.40
26	BB	230	G	N3-C4-N9	5.41	129.24	126.00
26	BB	603	A	C5'-C4'-O4'	5.41	115.59	109.10
26	BB	832	U	C4-C5-C6	5.41	122.94	119.70
26	BB	1512	C	C5-C6-N1	5.41	123.70	121.00
26	BB	2614	A	C8-N9-C4	-5.41	103.64	105.80
1	AA	170	U	C5-C4-O4	-5.40	122.66	125.90
1	AA	998	C	C4-C5-C6	-5.40	114.70	117.40
1	AA	1233	G	C4'-C3'-C2'	-5.40	97.20	102.60
1	AA	1410	A	C6-N1-C2	-5.40	115.36	118.60
25	BA	117	G	C4'-C3'-C2'	-5.40	97.20	102.60
26	BB	448	U	C2-N3-C4	-5.40	123.76	127.00
26	BB	691	C	C3'-C2'-C1'	5.40	105.82	101.50
26	BB	731	C	N3-C4-N4	5.40	121.78	118.00
26	BB	750	A	N1-C2-N3	5.40	132.00	129.30
26	BB	1180	U	C5-C6-N1	5.40	125.40	122.70
26	BB	1590	A	N9-C4-C5	-5.40	103.64	105.80
26	BB	1885	A	C8-N9-C4	-5.40	103.64	105.80
26	BB	2140	G	N7-C8-N9	5.40	115.80	113.10
50	BZ	29	LEU	CB-CG-CD1	5.40	120.19	111.00
1	AA	161	A	O4'-C4'-C3'	5.40	110.42	106.10
1	AA	330	C	N1-C2-O2	5.40	122.14	118.90
1	AA	376	G	C4'-C3'-C2'	-5.40	97.20	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	748	G	C5-C6-N1	5.40	114.20	111.50
1	AA	1217	C	C6-N1-C2	-5.40	118.14	120.30
1	AA	1226	C	C5-C6-N1	5.40	123.70	121.00
18	AR	56	LEU	CB-CG-CD2	-5.40	101.82	111.00
25	BA	9	G	C1'-O4'-C4'	-5.40	105.58	109.90
26	BB	19	A	C4-C5-C6	-5.40	114.30	117.00
26	BB	1022	G	C4-C5-N7	5.40	112.96	110.80
26	BB	1063	G	C6-C5-N7	-5.40	127.16	130.40
26	BB	1168	G	N9-C4-C5	5.40	107.56	105.40
26	BB	2288	A	C4-C5-C6	-5.40	114.30	117.00
26	BB	2321	U	C5-C4-O4	5.40	129.14	125.90
26	BB	2395	C	C5-C6-N1	5.40	123.70	121.00
26	BB	2497	A	O5'-C5'-C4'	-5.40	101.44	111.70
26	BB	2781	A	C4-C5-C6	-5.40	114.30	117.00
1	AA	123	U	C4-C5-C6	5.40	122.94	119.70
1	AA	179	A	N1-C2-N3	-5.40	126.60	129.30
1	AA	445	G	C6-C5-N7	-5.40	127.16	130.40
1	AA	785	G	N1-C2-N2	5.40	121.06	116.20
1	AA	1138	G	C8-N9-C4	-5.40	104.24	106.40
10	AJ	74	VAL	CA-CB-CG1	5.40	119.00	110.90
25	BA	109	A	N3-C4-C5	-5.40	123.02	126.80
26	BB	294	A	C6-N1-C2	-5.40	115.36	118.60
26	BB	504	A	C5-C6-N6	-5.40	119.38	123.70
26	BB	774	G	C8-N9-C4	-5.40	104.24	106.40
26	BB	1033	U	C2-N3-C4	-5.40	123.76	127.00
26	BB	1175	A	C5-C6-N1	-5.40	115.00	117.70
26	BB	1300	G	C5'-C4'-O4'	5.40	115.58	109.10
26	BB	1549	A	N1-C6-N6	5.40	121.84	118.60
26	BB	2173	A	C5-N7-C8	5.40	106.60	103.90
26	BB	2369	A	C5-N7-C8	5.40	106.60	103.90
26	BB	2386	A	O4'-C1'-N9	5.40	112.52	108.20
26	BB	2674	G	O4'-C1'-C2'	5.40	112.46	107.60
1	AA	789	U	C4-C5-C6	5.40	122.94	119.70
7	AG	196	GLU	O-C-N	-5.40	114.06	122.70
25	BA	41	G	O4'-C4'-C3'	5.40	110.42	106.10
25	BA	66	A	C5'-C4'-O4'	5.40	115.58	109.10
26	BB	561	G	C4'-C3'-C2'	-5.40	97.20	102.60
26	BB	1339	G	N9-C1'-C2'	-5.40	106.06	112.00
26	BB	1617	C	O4'-C1'-N1	5.40	112.52	108.20
1	AA	61	G	C3'-C2'-C1'	-5.40	97.18	101.50
1	AA	288	A	C5'-C4'-O4'	5.40	115.58	109.10
1	AA	510	A	C4-C5-C6	-5.40	114.30	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	754	C	C5'-C4'-C3'	-5.40	107.37	116.00
1	AA	930	C	C5-C6-N1	-5.40	118.30	121.00
1	AA	983	A	N9-C4-C5	5.40	107.96	105.80
1	AA	1255	G	N9-C1'-C2'	-5.40	106.06	112.00
1	AA	1383	C	C5-C6-N1	5.40	123.70	121.00
26	BB	522	A	C5'-C4'-O4'	5.40	115.58	109.10
26	BB	1511	G	C8-N9-C1'	5.40	134.02	127.00
26	BB	1646	C	P-O3'-C3'	5.40	126.18	119.70
26	BB	2151	U	C3'-C2'-C1'	5.40	105.82	101.50
26	BB	2294	G	C2-N3-C4	5.40	114.60	111.90
26	BB	2351	G	C5'-C4'-O4'	5.40	115.58	109.10
26	BB	2646	C	C5'-C4'-O4'	5.40	115.58	109.10
26	BB	2669	G	N3-C4-N9	5.40	129.24	126.00
26	BB	2761	A	C3'-C2'-C1'	5.40	105.82	101.50
48	BX	90	ASP	CB-CG-OD1	-5.40	113.44	118.30
1	AA	347	G	P-O5'-C5'	5.40	129.53	120.90
1	AA	694	A	P-O3'-C3'	5.40	126.17	119.70
1	AA	1208	C	C3'-C2'-C1'	-5.40	97.18	101.50
1	AA	1403	C	N3-C4-C5	-5.40	119.74	121.90
1	AA	1429	A	O4'-C1'-N9	5.40	112.52	108.20
4	AD	37	U	N3-C4-O4	5.40	123.18	119.40
25	BA	58	A	C5-N7-C8	-5.40	101.20	103.90
26	BB	42	A	N1-C2-N3	-5.40	126.60	129.30
26	BB	1081	U	N1-C2-N3	5.40	118.14	114.90
26	BB	1104	C	C1'-O4'-C4'	-5.40	105.58	109.90
26	BB	1576	U	C3'-C2'-C1'	5.40	105.82	101.50
26	BB	1689	A	C4-C5-N7	5.40	113.40	110.70
26	BB	1743	G	P-O3'-C3'	5.40	126.18	119.70
26	BB	2003	A	C5-N7-C8	-5.40	101.20	103.90
26	BB	2052	A	C4-C5-C6	-5.40	114.30	117.00
1	AA	5	U	C6-N1-C2	5.39	124.24	121.00
1	AA	1256	A	C1'-O4'-C4'	5.39	114.22	109.90
2	AB	34	C	C6-N1-C2	-5.39	118.14	120.30
7	AG	203	TYR	CB-CG-CD1	-5.39	117.76	121.00
26	BB	298	G	C4-C5-N7	5.39	112.96	110.80
26	BB	413	C	N3-C4-N4	5.39	121.78	118.00
26	BB	500	G	N3-C2-N2	-5.39	116.12	119.90
26	BB	713	G	C8-N9-C1'	5.39	134.01	127.00
26	BB	762	U	N1-C2-N3	5.39	118.14	114.90
26	BB	1052	C	C4'-C3'-O3'	5.39	123.79	113.00
26	BB	1655	A	C5'-C4'-C3'	-5.39	107.37	116.00
26	BB	1710	G	C3'-C2'-C1'	-5.39	97.19	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1730	C	N3-C2-O2	-5.39	118.12	121.90
26	BB	1753	G	C8-N9-C1'	5.39	134.01	127.00
26	BB	2553	G	N9-C4-C5	5.39	107.56	105.40
26	BB	2759	G	N3-C2-N2	-5.39	116.12	119.90
1	AA	64	G	N9-C4-C5	5.39	107.56	105.40
1	AA	65	A	N3-C4-N9	5.39	131.71	127.40
1	AA	241	G	N1-C2-N3	-5.39	120.67	123.90
1	AA	339	C	C4'-C3'-C2'	-5.39	97.21	102.60
1	AA	441	A	C8-N9-C4	-5.39	103.64	105.80
1	AA	1274	A	C5-C6-N1	-5.39	115.00	117.70
1	AA	1372	U	N3-C2-O2	-5.39	118.43	122.20
4	AD	4	G	C4-C5-C6	5.39	122.04	118.80
25	BA	55	U	C3'-C2'-C1'	5.39	105.81	101.50
25	BA	63	C	N3-C2-O2	5.39	125.67	121.90
26	BB	20	C	C4-C5-C6	5.39	120.10	117.40
26	BB	137	U	C4'-C3'-C2'	-5.39	97.21	102.60
26	BB	180	G	N1-C2-N3	5.39	127.14	123.90
26	BB	186	G	N7-C8-N9	5.39	115.80	113.10
26	BB	266	G	N1-C2-N3	-5.39	120.66	123.90
26	BB	272	A	C8-N9-C4	-5.39	103.64	105.80
26	BB	635	C	C5'-C4'-O4'	5.39	115.57	109.10
26	BB	1033	U	N3-C2-O2	-5.39	118.42	122.20
26	BB	1063	G	N1-C2-N2	5.39	121.05	116.20
26	BB	1169	A	N7-C8-N9	-5.39	111.10	113.80
26	BB	1787	A	C6-C5-N7	-5.39	128.53	132.30
26	BB	1928	A	N9-C1'-C2'	-5.39	106.07	112.00
26	BB	2179	C	P-O3'-C3'	-5.39	113.23	119.70
26	BB	2372	U	N1-C1'-C2'	-5.39	106.07	112.00
1	AA	177	G	C5-N7-C8	-5.39	101.61	104.30
1	AA	430	A	N1-C6-N6	5.39	121.83	118.60
1	AA	676	A	O4'-C1'-N9	5.39	112.51	108.20
1	AA	883	C	N3-C4-N4	-5.39	114.23	118.00
1	AA	899	C	P-O3'-C3'	5.39	126.17	119.70
1	AA	1254	A	C2-N3-C4	5.39	113.30	110.60
1	AA	1260	G	N3-C2-N2	5.39	123.67	119.90
26	BB	13	A	N3-C4-C5	-5.39	123.03	126.80
26	BB	135	U	C2-N1-C1'	-5.39	111.23	117.70
26	BB	1665	A	C4-C5-N7	5.39	113.39	110.70
1	AA	228	A	C6-N1-C2	5.39	121.83	118.60
1	AA	389	A	C3'-C2'-C1'	-5.39	97.19	101.50
1	AA	780	A	C2-N3-C4	5.39	113.29	110.60
1	AA	922	G	P-O3'-C3'	5.39	126.17	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1051	C	N1-C2-O2	5.39	122.13	118.90
1	AA	1227	A	C4'-C3'-C2'	-5.39	97.21	102.60
1	AA	1324	A	C4-C5-N7	5.39	113.39	110.70
14	AN	55	ARG	CB-CA-C	5.39	121.18	110.40
24	AX	70	TYR	CD1-CG-CD2	5.39	123.83	117.90
26	BB	540	C	C4-C5-C6	-5.39	114.70	117.40
26	BB	552	U	C5'-C4'-O4'	5.39	115.57	109.10
26	BB	559	G	C8-N9-C1'	5.39	134.01	127.00
26	BB	603	A	C2-N3-C4	5.39	113.29	110.60
26	BB	1160	G	C2-N3-C4	5.39	114.59	111.90
26	BB	1208	C	C2-N3-C4	-5.39	117.20	119.90
26	BB	1679	A	O4'-C1'-C2'	5.39	112.45	107.60
26	BB	1697	G	N3-C2-N2	5.39	123.67	119.90
26	BB	1762	A	N7-C8-N9	-5.39	111.11	113.80
26	BB	1974	C	O4'-C1'-N1	5.39	112.51	108.20
26	BB	2618	G	N3-C2-N2	-5.39	116.13	119.90
26	BB	2864	G	C6-C5-N7	-5.39	127.17	130.40
26	BB	2874	C	C5-C4-N4	5.39	123.97	120.20
48	BX	41	GLU	C-N-CA	5.39	135.18	121.70
56	B5	18	PHE	CB-CG-CD2	-5.39	117.03	120.80
1	AA	27	G	C4-C5-N7	-5.39	108.64	110.80
1	AA	168	G	C5'-C4'-C3'	-5.39	107.38	116.00
1	AA	285	C	N1-C2-N3	-5.39	115.43	119.20
1	AA	807	A	N3-C4-N9	-5.39	123.09	127.40
1	AA	1228	C	N3-C4-C5	-5.39	119.75	121.90
26	BB	325	G	O5'-C5'-C4'	-5.39	101.46	111.70
26	BB	649	G	C6-N1-C2	-5.39	121.87	125.10
26	BB	1543	G	C5'-C4'-O4'	5.39	115.57	109.10
26	BB	1719	G	C2-N3-C4	5.39	114.59	111.90
26	BB	2248	C	C5-C4-N4	-5.39	116.43	120.20
42	BR	54	LEU	CB-CA-C	5.39	120.44	110.20
1	AA	21	G	N3-C2-N2	5.39	123.67	119.90
1	AA	244	U	C3'-C2'-C1'	5.39	105.81	101.50
1	AA	291	U	N1-C2-N3	5.39	118.13	114.90
1	AA	619	U	C5-C6-N1	-5.39	120.01	122.70
1	AA	1156	G	N1-C2-N3	5.39	127.13	123.90
1	AA	1158	C	C3'-C2'-C1'	5.39	105.81	101.50
1	AA	1343	G	C2-N3-C4	5.39	114.59	111.90
1	AA	1373	G	C5-N7-C8	-5.39	101.61	104.30
25	BA	18	G	C5-C6-N1	5.39	114.19	111.50
25	BA	27	C	O4'-C1'-N1	5.39	112.51	108.20
26	BB	63	A	C6-N1-C2	5.39	121.83	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	475	C	N1-C2-N3	-5.39	115.43	119.20
26	BB	684	G	C4'-C3'-C2'	-5.39	97.21	102.60
26	BB	718	A	C5-N7-C8	-5.39	101.21	103.90
26	BB	885	C	C4'-C3'-O3'	5.39	123.77	113.00
26	BB	1262	A	P-O3'-C3'	5.39	126.16	119.70
26	BB	1831	G	C8-N9-C4	-5.39	104.25	106.40
26	BB	1848	A	C1'-O4'-C4'	-5.39	105.59	109.90
26	BB	2334	U	C6-N1-C2	-5.39	117.77	121.00
26	BB	2786	U	C5-C6-N1	-5.39	120.01	122.70
26	BB	2817	U	C5'-C4'-O4'	5.39	115.56	109.10
1	AA	184	G	P-O3'-C3'	5.38	126.16	119.70
1	AA	429	U	O4'-C4'-C3'	5.38	110.41	106.10
1	AA	539	A	O5'-P-OP2	-5.38	100.85	105.70
1	AA	688	G	C3'-C2'-C1'	-5.38	97.19	101.50
1	AA	874	G	P-O3'-C3'	5.38	126.16	119.70
1	AA	1041	G	N1-C6-O6	5.38	123.13	119.90
1	AA	1491	G	C5-C6-N1	5.38	114.19	111.50
2	AB	5	G	C2-N3-C4	5.38	114.59	111.90
26	BB	94	A	N7-C8-N9	-5.38	111.11	113.80
26	BB	128	C	O4'-C4'-C3'	5.38	110.41	106.10
26	BB	556	A	C4-C5-N7	-5.38	108.01	110.70
26	BB	637	A	C6-C5-N7	-5.38	128.53	132.30
26	BB	1046	A	O4'-C1'-N9	5.38	112.51	108.20
26	BB	1083	U	C5-C4-O4	-5.38	122.67	125.90
26	BB	1535	A	C8-N9-C4	5.38	107.95	105.80
26	BB	1704	C	C4-C5-C6	-5.38	114.71	117.40
26	BB	1737	G	P-O3'-C3'	5.38	126.16	119.70
26	BB	2006	C	O4'-C1'-N1	5.38	112.51	108.20
26	BB	2050	C	N3-C4-C5	5.38	124.05	121.90
26	BB	2291	U	C4-C5-C6	5.38	122.93	119.70
26	BB	2343	U	O4'-C1'-N1	5.38	112.51	108.20
26	BB	2441	U	C4-C5-C6	5.38	122.93	119.70
26	BB	2638	G	N7-C8-N9	5.38	115.79	113.10
26	BB	2657	A	C3'-C2'-C1'	-5.38	97.19	101.50
26	BB	2665	A	C5-C6-N1	-5.38	115.01	117.70
1	AA	339	C	N1-C2-O2	5.38	122.13	118.90
1	AA	683	G	N9-C1'-C2'	-5.38	106.08	112.00
1	AA	1336	C	P-O3'-C3'	5.38	126.16	119.70
25	BA	77	U	C6-N1-C2	-5.38	117.77	121.00
26	BB	183	C	O4'-C1'-C2'	5.38	112.44	107.60
26	BB	2248	C	N3-C4-N4	5.38	121.77	118.00
26	BB	2795	C	N1-C2-N3	-5.38	115.43	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	140	U	C4-C5-C6	5.38	122.93	119.70
1	AA	637	C	N3-C4-N4	5.38	121.77	118.00
1	AA	708	C	C5-C6-N1	-5.38	118.31	121.00
1	AA	1394	A	C5-C6-N1	-5.38	115.01	117.70
26	BB	239	C	C6-N1-C2	-5.38	118.15	120.30
26	BB	279	A	N3-C4-N9	5.38	131.71	127.40
26	BB	454	A	N3-C4-N9	5.38	131.71	127.40
26	BB	889	C	N3-C4-N4	5.38	121.77	118.00
26	BB	1045	C	N3-C2-O2	-5.38	118.13	121.90
26	BB	1096	A	O4'-C1'-N9	5.38	112.50	108.20
26	BB	1271	G	P-O5'-C5'	5.38	129.51	120.90
26	BB	1446	C	C2-N3-C4	5.38	122.59	119.90
26	BB	1484	U	C6-N1-C2	-5.38	117.77	121.00
26	BB	2451	A	N9-C4-C5	-5.38	103.65	105.80
26	BB	2535	G	C5-N7-C8	-5.38	101.61	104.30
29	BE	103	ASP	CB-CG-OD1	-5.38	113.46	118.30
30	BF	84	THR	CA-CB-CG2	5.38	119.93	112.40
1	AA	925	G	N3-C4-C5	-5.38	125.91	128.60
1	AA	1030	U	C4'-C3'-C2'	5.38	107.98	102.60
1	AA	1187	G	C4-C5-N7	-5.38	108.65	110.80
1	AA	1379	G	C6-C5-N7	5.38	133.63	130.40
4	AD	5	G	C4-C5-N7	-5.38	108.65	110.80
25	BA	55	U	N3-C4-O4	-5.38	115.63	119.40
26	BB	330	A	C4-C5-C6	-5.38	114.31	117.00
26	BB	1059	G	C1'-O4'-C4'	-5.38	105.60	109.90
26	BB	2160	C	N3-C4-N4	5.38	121.77	118.00
26	BB	2275	C	N1-C2-O2	-5.38	115.67	118.90
1	AA	1211	U	C5-C4-O4	5.38	129.13	125.90
1	AA	1423	G	N1-C2-N2	5.38	121.04	116.20
2	AB	61	C	N3-C4-N4	5.38	121.77	118.00
15	AO	41	PRO	CA-N-CD	-5.38	103.97	111.50
26	BB	636	G	N3-C4-N9	5.38	129.23	126.00
26	BB	686	U	N1-C2-N3	5.38	118.13	114.90
26	BB	983	A	C5'-C4'-O4'	5.38	115.56	109.10
26	BB	1031	G	C2-N3-C4	5.38	114.59	111.90
26	BB	1355	G	C6-N1-C2	-5.38	121.87	125.10
26	BB	1630	A	N3-C4-N9	-5.38	123.10	127.40
26	BB	1765	U	C3'-C2'-C1'	-5.38	97.20	101.50
26	BB	1841	U	N1-C1'-C2'	-5.38	106.08	112.00
26	BB	1936	A	O4'-C4'-C3'	-5.38	98.62	104.00
26	BB	2544	G	C4-C5-C6	5.38	122.03	118.80
26	BB	2791	G	C8-N9-C4	-5.38	104.25	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2841	C	O4'-C4'-C3'	5.38	110.40	106.10
26	BB	2897	U	C4-C5-C6	-5.38	116.47	119.70
29	BE	128	ARG	NE-CZ-NH1	5.38	122.99	120.30
56	B5	28	ARG	CB-CA-C	5.38	121.16	110.40
1	AA	298	A	N7-C8-N9	5.38	116.49	113.80
1	AA	787	A	C8-N9-C4	-5.38	103.65	105.80
11	AK	83	ARG	NE-CZ-NH1	5.38	122.99	120.30
25	BA	74	U	C6-N1-C2	5.38	124.23	121.00
26	BB	19	A	N1-C6-N6	-5.38	115.37	118.60
26	BB	24	G	C5'-C4'-O4'	5.38	115.55	109.10
26	BB	236	C	C6-N1-C2	5.38	122.45	120.30
26	BB	265	A	C6-N1-C2	5.38	121.83	118.60
26	BB	922	C	N3-C2-O2	5.38	125.66	121.90
26	BB	1077	A	N9-C4-C5	5.38	107.95	105.80
26	BB	1514	G	C2'-C3'-O3'	5.38	122.30	113.70
26	BB	1557	C	C4'-C3'-C2'	-5.38	97.22	102.60
26	BB	1782	U	C4-C5-C6	5.38	122.93	119.70
26	BB	1853	A	C5-C6-N1	-5.38	115.01	117.70
26	BB	1954	G	C4-C5-N7	5.38	112.95	110.80
26	BB	2510	C	C4-C5-C6	-5.38	114.71	117.40
26	BB	2566	A	C1'-O4'-C4'	-5.38	105.60	109.90
26	BB	2595	G	N3-C2-N2	5.38	123.66	119.90
42	BR	71	ARG	NE-CZ-NH2	5.38	122.99	120.30
1	AA	203	G	C5'-C4'-O4'	5.38	115.55	109.10
1	AA	256	U	N3-C2-O2	-5.38	118.44	122.20
1	AA	1133	G	N1-C6-O6	-5.38	116.67	119.90
1	AA	1184	G	N3-C4-C5	-5.38	125.91	128.60
3	AC	32	U	O4'-C4'-C3'	-5.38	98.62	104.00
6	AF	183	TYR	CB-CG-CD2	5.38	124.22	121.00
21	AU	26	ALA	N-CA-CB	-5.38	102.58	110.10
26	BB	338	G	N7-C8-N9	-5.38	110.41	113.10
26	BB	578	G	O3'-P-O5'	-5.38	93.79	104.00
26	BB	774	G	N9-C4-C5	5.38	107.55	105.40
26	BB	983	A	C1'-O4'-C4'	5.38	114.20	109.90
26	BB	1683	U	C3'-C2'-C1'	5.38	105.80	101.50
1	AA	36	C	C2-N3-C4	5.37	122.59	119.90
1	AA	87	C	C6-N1-C2	5.37	122.45	120.30
1	AA	146	G	N1-C6-O6	5.37	123.12	119.90
1	AA	335	C	P-O3'-C3'	5.37	126.15	119.70
1	AA	709	U	N3-C4-C5	5.37	117.82	114.60
1	AA	1091	U	C5'-C4'-O4'	5.37	115.55	109.10
1	AA	1197	A	O4'-C1'-N9	5.37	112.50	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1323	G	C4'-C3'-C2'	-5.37	97.23	102.60
1	AA	1464	U	C6-N1-C2	-5.37	117.78	121.00
26	BB	27	G	N3-C4-N9	-5.37	122.78	126.00
26	BB	664	G	C5'-C4'-O4'	5.37	115.55	109.10
26	BB	1094	U	C2-N1-C1'	5.37	124.15	117.70
26	BB	1786	A	C2-N3-C4	5.37	113.29	110.60
26	BB	2052	A	P-O3'-C3'	5.37	126.15	119.70
26	BB	2345	G	P-O3'-C3'	5.37	126.15	119.70
26	BB	2696	U	C5'-C4'-O4'	5.37	115.55	109.10
26	BB	2792	A	N1-C6-N6	5.37	121.82	118.60
31	BG	101	ARG	NE-CZ-NH1	5.37	122.99	120.30
53	B2	57	VAL	CA-CB-CG1	5.37	118.96	110.90
1	AA	639	G	N9-C1'-C2'	-5.37	106.09	112.00
1	AA	981	U	N1-C2-O2	-5.37	119.04	122.80
1	AA	1005	A	C2-N3-C4	5.37	113.29	110.60
1	AA	1379	G	C1'-O4'-C4'	-5.37	105.60	109.90
1	AA	1523	G	N1-C2-N3	-5.37	120.68	123.90
1	AA	1529	G	C2-N3-C4	5.37	114.59	111.90
26	BB	539	G	N1-C6-O6	-5.37	116.68	119.90
26	BB	1093	G	C6-N1-C2	-5.37	121.88	125.10
26	BB	1381	G	C2-N3-C4	5.37	114.59	111.90
26	BB	1676	A	C8-N9-C4	-5.37	103.65	105.80
26	BB	1832	C	C1'-O4'-C4'	-5.37	105.60	109.90
26	BB	1978	A	C5-C6-N1	5.37	120.39	117.70
26	BB	2017	U	C3'-C2'-C1'	5.37	105.80	101.50
26	BB	2171	A	C4'-C3'-C2'	-5.37	97.23	102.60
26	BB	2781	A	C8-N9-C4	-5.37	103.65	105.80
26	BB	2785	C	N1-C1'-C2'	-5.37	106.09	112.00
1	AA	200	G	C1'-O4'-C4'	5.37	114.20	109.90
1	AA	211	G	N1-C6-O6	5.37	123.12	119.90
1	AA	422	C	C5-C6-N1	5.37	123.69	121.00
1	AA	824	G	C8-N9-C4	-5.37	104.25	106.40
1	AA	981	U	P-O3'-C3'	5.37	126.14	119.70
1	AA	1101	A	O5'-C5'-C4'	5.37	121.90	111.70
1	AA	1466	C	O4'-C1'-N1	5.37	112.50	108.20
2	AB	10	G	N3-C4-C5	-5.37	125.92	128.60
2	AB	42	G	C5-C6-N1	5.37	114.19	111.50
13	AM	102	LEU	CB-CG-CD1	5.37	120.13	111.00
26	BB	908	C	N3-C4-N4	5.37	121.76	118.00
26	BB	1820	U	N1-C1'-C2'	-5.37	106.09	112.00
26	BB	1854	A	C6-C5-N7	5.37	136.06	132.30
26	BB	2896	C	C3'-C2'-C1'	5.37	105.80	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	BH	136	ASP	CB-CG-OD1	5.37	123.13	118.30
1	AA	52	C	C5'-C4'-O4'	5.37	115.54	109.10
1	AA	480	U	N1-C2-O2	-5.37	119.04	122.80
1	AA	633	G	O4'-C1'-N9	5.37	112.50	108.20
1	AA	1445	U	C5-C4-O4	-5.37	122.68	125.90
25	BA	43	C	C6-N1-C2	5.37	122.45	120.30
26	BB	339	U	O4'-C1'-C2'	5.37	112.43	107.60
26	BB	385	C	C2-N3-C4	5.37	122.58	119.90
26	BB	574	A	C1'-O4'-C4'	-5.37	105.61	109.90
26	BB	652	U	C2-N3-C4	-5.37	123.78	127.00
26	BB	1268	A	C4'-C3'-C2'	-5.37	97.23	102.60
26	BB	1325	U	N1-C1'-C2'	5.37	120.98	114.00
26	BB	1429	G	C4-C5-N7	-5.37	108.65	110.80
26	BB	1744	A	C4'-C3'-C2'	-5.37	97.23	102.60
26	BB	2017	U	C4'-C3'-C2'	-5.37	97.23	102.60
26	BB	2082	A	N1-C2-N3	-5.37	126.62	129.30
26	BB	2209	G	C5-N7-C8	-5.37	101.62	104.30
26	BB	2870	C	C6-N1-C1'	5.37	127.24	120.80
30	BF	21	ARG	NE-CZ-NH1	-5.37	117.62	120.30
37	BM	61	VAL	CA-CB-CG1	-5.37	102.85	110.90
1	AA	269	C	C2-N3-C4	-5.37	117.22	119.90
1	AA	1056	U	N3-C4-O4	5.37	123.16	119.40
1	AA	1093	A	C5'-C4'-O4'	5.37	115.54	109.10
26	BB	301	G	C4'-C3'-C2'	-5.37	97.23	102.60
26	BB	424	G	O4'-C1'-C2'	5.37	112.43	107.60
26	BB	556	A	C2-N3-C4	5.37	113.28	110.60
26	BB	1767	G	N3-C4-C5	-5.37	125.92	128.60
26	BB	1990	C	O4'-C1'-C2'	-5.37	100.43	105.80
26	BB	2296	U	N1-C2-N3	5.37	118.12	114.90
26	BB	2319	G	N9-C4-C5	5.37	107.55	105.40
31	BG	5	ASP	CB-CG-OD2	5.37	123.13	118.30
1	AA	452	A	C4-C5-N7	-5.37	108.02	110.70
1	AA	509	A	N3-C4-C5	-5.37	123.04	126.80
1	AA	750	C	C5-C6-N1	5.37	123.68	121.00
1	AA	871	U	C6-N1-C2	-5.37	117.78	121.00
1	AA	1125	U	C6-N1-C2	-5.37	117.78	121.00
1	AA	1341	U	C5'-C4'-C3'	-5.37	107.42	116.00
26	BB	53	A	C4'-C3'-C2'	-5.37	97.23	102.60
26	BB	183	C	C2-N3-C4	5.37	122.58	119.90
26	BB	440	C	N3-C4-C5	-5.37	119.75	121.90
26	BB	453	A	C6-N1-C2	5.37	121.82	118.60
26	BB	539	G	N9-C4-C5	5.37	107.55	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	651	G	N1-C2-N3	-5.37	120.68	123.90
26	BB	804	A	N9-C4-C5	5.37	107.95	105.80
26	BB	1115	G	C4-C5-N7	-5.37	108.65	110.80
26	BB	1404	C	C5-C4-N4	-5.37	116.44	120.20
26	BB	1505	A	C5-C6-N6	-5.37	119.41	123.70
26	BB	2200	C	C1'-O4'-C4'	5.37	114.19	109.90
26	BB	2537	U	C5-C4-O4	-5.37	122.68	125.90
26	BB	2566	A	N1-C6-N6	5.37	121.82	118.60
26	BB	2641	G	N3-C4-C5	-5.37	125.92	128.60
26	BB	2893	A	N1-C2-N3	5.37	131.98	129.30
1	AA	368	U	N3-C2-O2	-5.36	118.45	122.20
1	AA	622	A	C8-N9-C4	-5.36	103.66	105.80
1	AA	689	C	N3-C4-C5	5.36	124.05	121.90
1	AA	1069	C	O4'-C1'-N1	5.36	112.49	108.20
1	AA	1083	U	O4'-C1'-N1	5.36	112.49	108.20
1	AA	1212	U	N1-C2-O2	-5.36	119.05	122.80
1	AA	1439	G	N7-C8-N9	5.36	115.78	113.10
9	AI	112	ARG	NH1-CZ-NH2	5.36	125.30	119.40
26	BB	356	G	C4-C5-C6	-5.36	115.58	118.80
26	BB	1307	A	C4-C5-N7	5.36	113.38	110.70
26	BB	1679	A	C6-N1-C2	-5.36	115.38	118.60
26	BB	2009	A	C1'-O4'-C4'	5.36	114.19	109.90
26	BB	2352	A	C6-N1-C2	-5.36	115.38	118.60
26	BB	2640	G	C1'-O4'-C4'	-5.36	105.61	109.90
26	BB	2709	G	N9-C4-C5	-5.36	103.25	105.40
26	BB	2713	U	N3-C4-C5	-5.36	111.38	114.60
1	AA	553	A	N1-C2-N3	5.36	131.98	129.30
1	AA	1378	C	O4'-C1'-N1	5.36	112.49	108.20
25	BA	109	A	N7-C8-N9	-5.36	111.12	113.80
26	BB	331	C	C5'-C4'-O4'	5.36	115.53	109.10
26	BB	708	G	C4-C5-C6	5.36	122.02	118.80
26	BB	730	A	C3'-C2'-C1'	-5.36	97.21	101.50
26	BB	2367	G	N1-C2-N3	-5.36	120.68	123.90
26	BB	2584	U	C1'-O4'-C4'	5.36	114.19	109.90
26	BB	2604	U	N1-C2-O2	-5.36	119.05	122.80
36	BL	96	ARG	NH1-CZ-NH2	5.36	125.30	119.40
1	AA	14	U	C3'-C2'-C1'	-5.36	97.21	101.50
1	AA	1080	A	O4'-C1'-C2'	5.36	112.42	107.60
1	AA	1246	A	C4'-C3'-C2'	-5.36	97.24	102.60
1	AA	1278	G	P-O5'-C5'	5.36	129.47	120.90
4	AD	76	C	C4'-C3'-C2'	-5.36	97.24	102.60
25	BA	84	G	C4'-C3'-C2'	-5.36	97.24	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	100	G	N9-C4-C5	5.36	107.54	105.40
26	BB	213	A	C2-N3-C4	5.36	113.28	110.60
26	BB	437	U	C4'-C3'-C2'	-5.36	97.24	102.60
26	BB	594	U	N3-C4-O4	5.36	123.15	119.40
26	BB	1032	A	C8-N9-C4	5.36	107.94	105.80
26	BB	1213	A	C4'-C3'-C2'	-5.36	97.24	102.60
26	BB	1500	G	N9-C4-C5	5.36	107.54	105.40
26	BB	1756	G	N3-C4-N9	5.36	129.22	126.00
26	BB	1811	G	N1-C2-N2	5.36	121.03	116.20
26	BB	2005	A	C5'-C4'-C3'	-5.36	107.42	116.00
26	BB	2225	A	C6-N1-C2	-5.36	115.38	118.60
26	BB	2255	G	C5'-C4'-O4'	5.36	115.53	109.10
26	BB	2337	G	C5'-C4'-O4'	5.36	115.53	109.10
26	BB	2549	G	N3-C2-N2	-5.36	116.15	119.90
33	BI	86	ASP	CB-CG-OD1	-5.36	113.48	118.30
55	B4	50	GLU	CB-CA-C	5.36	121.12	110.40
1	AA	219	U	N3-C4-C5	-5.36	111.39	114.60
1	AA	283	U	N3-C4-O4	5.36	123.15	119.40
26	BB	5	A	C5-C6-N6	-5.36	119.41	123.70
26	BB	61	C	N3-C4-C5	-5.36	119.76	121.90
26	BB	560	C	C4-C5-C6	-5.36	114.72	117.40
26	BB	1442	U	N1-C2-N3	5.36	118.12	114.90
26	BB	1688	U	C6-N1-C2	5.36	124.22	121.00
26	BB	2521	C	C5'-C4'-O4'	5.36	115.53	109.10
1	AA	400	C	O4'-C1'-N1	5.36	112.49	108.20
1	AA	531	U	C2-N1-C1'	5.36	124.13	117.70
1	AA	1413	A	O4'-C4'-C3'	5.36	110.39	106.10
1	AA	1414	U	C5-C6-N1	5.36	125.38	122.70
3	AC	56	G	N1-C6-O6	5.36	123.11	119.90
4	AD	37	U	N3-C4-C5	5.36	117.81	114.60
25	BA	107	G	N1-C2-N3	5.36	127.11	123.90
26	BB	67	U	O4'-C1'-N1	5.36	112.49	108.20
26	BB	77	G	N1-C2-N3	-5.36	120.69	123.90
26	BB	292	U	N3-C4-O4	-5.36	115.65	119.40
26	BB	295	G	O4'-C1'-N9	5.36	112.48	108.20
26	BB	1048	A	N3-C4-C5	-5.36	123.05	126.80
26	BB	1140	C	C2-N3-C4	5.36	122.58	119.90
26	BB	1185	G	N3-C4-C5	-5.36	125.92	128.60
26	BB	1596	A	C5'-C4'-O4'	-5.36	102.67	109.10
26	BB	1730	C	C5'-C4'-O4'	5.36	115.53	109.10
26	BB	2029	G	O4'-C1'-C2'	-5.36	100.44	105.80
26	BB	2082	A	N9-C4-C5	-5.36	103.66	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2132	U	O4'-C1'-N1	5.36	112.49	108.20
26	BB	2150	C	C5'-C4'-C3'	5.36	124.57	116.00
26	BB	2231	U	C2-N3-C4	-5.36	123.79	127.00
26	BB	2561	U	N1-C2-N3	5.36	118.11	114.90
43	BS	23	TYR	CG-CD2-CE2	-5.36	117.01	121.30
1	AA	741	G	C2-N3-C4	5.36	114.58	111.90
6	AF	200	TRP	CA-CB-CG	5.36	123.87	113.70
17	AQ	45	LEU	C-N-CA	5.36	135.09	121.70
26	BB	44	A	C4'-C3'-C2'	5.36	107.95	102.60
26	BB	249	C	C3'-C2'-C1'	5.36	105.78	101.50
26	BB	513	A	C5'-C4'-O4'	5.36	115.53	109.10
26	BB	556	A	N3-C4-C5	-5.36	123.05	126.80
26	BB	752	A	C1'-O4'-C4'	-5.36	105.62	109.90
26	BB	937	C	C4'-C3'-C2'	-5.36	97.24	102.60
26	BB	2408	U	O4'-C1'-C2'	-5.36	100.44	105.80
26	BB	2872	A	C4'-C3'-C2'	-5.36	97.25	102.60
56	B5	24	THR	CA-CB-CG2	5.36	119.90	112.40
1	AA	1120	C	N3-C4-C5	-5.35	119.76	121.90
1	AA	1193	G	O4'-C1'-N9	5.35	112.48	108.20
1	AA	1455	G	N3-C4-N9	5.35	129.21	126.00
3	AC	40	G	C8-N9-C4	-5.35	104.26	106.40
26	BB	1281	G	C5'-C4'-O4'	-5.35	102.67	109.10
26	BB	2110	G	C5-C6-O6	-5.35	125.39	128.60
26	BB	2608	G	N1-C6-O6	-5.35	116.69	119.90
1	AA	388	G	O4'-C1'-N9	5.35	112.48	108.20
1	AA	572	A	C5-C6-N6	-5.35	119.42	123.70
1	AA	705	G	C5-N7-C8	-5.35	101.62	104.30
1	AA	714	G	C5-N7-C8	-5.35	101.62	104.30
1	AA	722	G	N9-C4-C5	-5.35	103.26	105.40
1	AA	725	G	C3'-C2'-C1'	5.35	105.78	101.50
1	AA	763	G	C3'-C2'-C1'	-5.35	97.22	101.50
1	AA	1358	U	C2-N3-C4	-5.35	123.79	127.00
1	AA	1485	U	O5'-P-OP1	-5.35	100.88	105.70
25	BA	8	C	C4'-C3'-C2'	-5.35	97.25	102.60
26	BB	99	U	N3-C4-O4	-5.35	115.65	119.40
26	BB	326	G	C2'-C3'-O3'	5.35	122.26	113.70
26	BB	1324	G	C5-C6-N1	5.35	114.18	111.50
26	BB	1400	U	O4'-C1'-C2'	-5.35	100.45	105.80
26	BB	1457	U	C5'-C4'-O4'	5.35	115.52	109.10
26	BB	1916	A	O4'-C4'-C3'	5.35	110.38	106.10
26	BB	1918	A	O4'-C1'-C2'	-5.35	100.45	105.80
26	BB	2017	U	P-O3'-C3'	5.35	126.12	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2186	G	N9-C4-C5	5.35	107.54	105.40
26	BB	2525	G	C4-C5-C6	-5.35	115.59	118.80
26	BB	2708	G	N3-C4-C5	-5.35	125.92	128.60
1	AA	30	U	C1'-O4'-C4'	-5.35	105.62	109.90
1	AA	306	A	C6-C5-N7	5.35	136.05	132.30
1	AA	1092	A	N7-C8-N9	5.35	116.48	113.80
1	AA	1200	C	C4'-C3'-C2'	-5.35	97.25	102.60
26	BB	738	G	P-O3'-C3'	5.35	126.12	119.70
26	BB	1354	A	C5-C6-N6	-5.35	119.42	123.70
26	BB	1608	A	O4'-C1'-N9	5.35	112.48	108.20
26	BB	2473	U	O4'-C4'-C3'	5.35	110.38	106.10
26	BB	2534	A	N9-C1'-C2'	-5.35	106.11	112.00
26	BB	2820	A	O4'-C1'-C2'	-5.35	100.45	105.80
1	AA	623	C	O3'-P-O5'	-5.35	93.84	104.00
1	AA	668	G	N1-C6-O6	5.35	123.11	119.90
1	AA	765	G	C2-N3-C4	5.35	114.58	111.90
1	AA	781	A	C4-C5-N7	-5.35	108.03	110.70
15	AO	116	TYR	CB-CG-CD2	5.35	124.21	121.00
22	AV	33	TRP	NE1-CE2-CZ2	5.35	136.28	130.40
25	BA	59	A	C4-C5-N7	5.35	113.38	110.70
25	BA	96	G	OP1-P-OP2	-5.35	111.58	119.60
26	BB	343	C	N3-C2-O2	-5.35	118.16	121.90
26	BB	834	G	C4-C5-C6	5.35	122.01	118.80
26	BB	926	G	C2-N3-C4	5.35	114.57	111.90
26	BB	1018	U	C2-N3-C4	-5.35	123.79	127.00
26	BB	1018	U	N1-C2-O2	5.35	126.54	122.80
26	BB	1065	U	C5-C4-O4	5.35	129.11	125.90
26	BB	1732	C	N1-C1'-C2'	5.35	120.95	114.00
26	BB	1765	U	N3-C2-O2	-5.35	118.46	122.20
26	BB	2232	C	C4-C5-C6	5.35	120.07	117.40
26	BB	2601	C	N1-C2-N3	5.35	122.94	119.20
26	BB	2890	G	N9-C1'-C2'	-5.35	106.12	112.00
32	BH	51	PHE	CB-CG-CD1	-5.35	117.06	120.80
1	AA	1287	A	N3-C4-N9	-5.35	123.12	127.40
1	AA	1379	G	C5-C6-O6	5.35	131.81	128.60
1	AA	1505	G	C4-C5-C6	-5.35	115.59	118.80
26	BB	50	U	C3'-C2'-C1'	-5.35	97.22	101.50
26	BB	1087	G	C5-N7-C8	5.35	106.97	104.30
26	BB	1234	U	P-O3'-C3'	5.35	126.12	119.70
26	BB	1380	G	C4-C5-C6	5.35	122.01	118.80
26	BB	1381	G	N1-C6-O6	5.35	123.11	119.90
26	BB	1404	C	N1-C2-N3	5.35	122.94	119.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1717	A	N7-C8-N9	5.35	116.47	113.80
26	BB	1741	C	N3-C4-C5	5.35	124.04	121.90
52	B1	3	THR	CA-CB-CG2	5.35	119.89	112.40
1	AA	5	U	P-O3'-C3'	5.35	126.12	119.70
1	AA	509	A	N7-C8-N9	-5.35	111.13	113.80
5	AE	197	PHE	CB-CG-CD1	-5.35	117.06	120.80
26	BB	1745	A	N3-C4-C5	5.35	130.54	126.80
26	BB	1952	A	N1-C6-N6	5.35	121.81	118.60
26	BB	2091	C	C2-N3-C4	-5.35	117.23	119.90
26	BB	2476	A	O4'-C1'-N9	5.35	112.48	108.20
26	BB	2757	A	N9-C1'-C2'	-5.35	106.12	112.00
26	BB	2832	U	C2-N1-C1'	5.35	124.11	117.70
1	AA	142	G	N1-C6-O6	5.34	123.11	119.90
1	AA	360	G	N9-C4-C5	5.34	107.54	105.40
1	AA	494	G	C4'-C3'-C2'	5.34	107.94	102.60
1	AA	548	G	O5'-P-OP1	-5.34	100.89	105.70
1	AA	761	G	N3-C4-N9	5.34	129.21	126.00
1	AA	1125	U	C4'-C3'-C2'	-5.34	97.25	102.60
1	AA	1219	A	C4'-C3'-C2'	-5.34	97.26	102.60
1	AA	1228	C	C6-N1-C2	5.34	122.44	120.30
1	AA	1298	U	C5-C4-O4	5.34	129.11	125.90
1	AA	1395	C	O4'-C1'-N1	5.34	112.48	108.20
1	AA	1403	C	C5'-C4'-C3'	-5.34	107.45	116.00
1	AA	1454	G	C4-C5-N7	5.34	112.94	110.80
26	BB	252	G	C5'-C4'-O4'	5.34	115.52	109.10
26	BB	743	A	C4'-C3'-O3'	5.34	123.69	113.00
26	BB	863	A	O3'-P-O5'	-5.34	93.84	104.00
26	BB	1343	G	N3-C2-N2	-5.34	116.16	119.90
26	BB	1587	G	N3-C2-N2	-5.34	116.16	119.90
26	BB	1740	G	C5-N7-C8	-5.34	101.63	104.30
26	BB	2222	C	C2-N3-C4	-5.34	117.23	119.90
26	BB	2343	U	O5'-P-OP2	-5.34	100.89	105.70
43	BS	23	TYR	CD1-CE1-CZ	5.34	124.61	119.80
1	AA	124	C	C4-C5-C6	5.34	120.07	117.40
1	AA	161	A	C4-C5-N7	5.34	113.37	110.70
1	AA	597	G	C6-C5-N7	-5.34	127.19	130.40
1	AA	627	G	C8-N9-C4	5.34	108.54	106.40
1	AA	723	U	C4'-C3'-C2'	-5.34	97.26	102.60
1	AA	1132	C	C4'-C3'-C2'	-5.34	97.26	102.60
1	AA	1212	U	C6-N1-C2	-5.34	117.79	121.00
1	AA	1242	G	N3-C4-N9	-5.34	122.79	126.00
2	AB	15	A	C4-C5-N7	5.34	113.37	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1023	U	P-O3'-C3'	5.34	126.11	119.70
26	BB	1262	A	C5-C6-N1	5.34	120.37	117.70
26	BB	1454	C	N3-C2-O2	-5.34	118.16	121.90
26	BB	1680	U	O4'-C1'-N1	5.34	112.47	108.20
26	BB	2749	A	C4-C5-N7	-5.34	108.03	110.70
34	BJ	93	ARG	NH1-CZ-NH2	5.34	125.28	119.40
1	AA	129	A	OP1-P-OP2	-5.34	111.59	119.60
1	AA	165	G	C5-N7-C8	-5.34	101.63	104.30
1	AA	393	A	N7-C8-N9	5.34	116.47	113.80
1	AA	534	U	C5-C6-N1	-5.34	120.03	122.70
1	AA	948	C	C4-C5-C6	5.34	120.07	117.40
1	AA	1072	G	C8-N9-C4	-5.34	104.26	106.40
4	AD	28	U	C5-C4-O4	-5.34	122.69	125.90
4	AD	75	C	C5-C6-N1	5.34	123.67	121.00
5	AE	86	CYS	CA-CB-SG	-5.34	104.39	114.00
8	AH	22	LYS	CA-CB-CG	-5.34	101.65	113.40
26	BB	512	G	C4-C5-C6	-5.34	115.60	118.80
26	BB	780	G	O5'-P-OP2	-5.34	100.89	105.70
26	BB	854	C	C1'-O4'-C4'	-5.34	105.63	109.90
26	BB	1294	U	N3-C4-C5	-5.34	111.39	114.60
26	BB	1328	A	N3-C4-N9	-5.34	123.13	127.40
26	BB	1418	G	N1-C2-N2	-5.34	111.39	116.20
26	BB	1514	G	C4'-C3'-C2'	-5.34	97.26	102.60
26	BB	1855	U	N1-C2-O2	5.34	126.54	122.80
26	BB	2200	C	C4-C5-C6	-5.34	114.73	117.40
26	BB	2241	A	C5'-C4'-O4'	5.34	115.51	109.10
26	BB	2864	G	N3-C4-N9	5.34	129.21	126.00
1	AA	229	U	O4'-C1'-C2'	-5.34	100.46	105.80
1	AA	324	G	N7-C8-N9	-5.34	110.43	113.10
1	AA	379	C	C6-N1-C2	-5.34	118.16	120.30
1	AA	424	G	C6-N1-C2	-5.34	121.90	125.10
1	AA	935	A	C6-N1-C2	-5.34	115.40	118.60
1	AA	972	C	N1-C2-O2	5.34	122.10	118.90
1	AA	1009	U	N3-C4-O4	-5.34	115.66	119.40
1	AA	1333	A	N1-C6-N6	-5.34	115.40	118.60
26	BB	120	U	C4-C5-C6	5.34	122.90	119.70
26	BB	405	U	C5-C6-N1	5.34	125.37	122.70
26	BB	430	A	O4'-C1'-N9	5.34	112.47	108.20
26	BB	538	A	C4'-C3'-C2'	-5.34	97.26	102.60
26	BB	1465	G	C6-C5-N7	-5.34	127.20	130.40
26	BB	1678	A	C3'-C2'-C1'	-5.34	97.23	101.50
26	BB	1980	G	N1-C2-N3	-5.34	120.70	123.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2099	U	C4'-C3'-C2'	-5.34	97.26	102.60
26	BB	2394	C	N1-C2-O2	5.34	122.10	118.90
26	BB	2651	C	N3-C4-C5	5.34	124.04	121.90
26	BB	2896	C	N1-C2-O2	5.34	122.10	118.90
1	AA	482	A	N1-C6-N6	5.34	121.80	118.60
1	AA	542	G	N1-C2-N3	5.34	127.10	123.90
1	AA	760	G	O4'-C4'-C3'	-5.34	98.66	104.00
1	AA	1338	G	C2'-C3'-O3'	5.34	122.24	113.70
4	AD	51	U	C4-C5-C6	5.34	122.90	119.70
26	BB	152	A	C5'-C4'-C3'	-5.34	107.46	116.00
26	BB	220	G	C6-N1-C2	5.34	128.30	125.10
26	BB	236	C	C5-C4-N4	-5.34	116.46	120.20
26	BB	510	C	C5-C6-N1	-5.34	118.33	121.00
26	BB	1163	G	C4-C5-N7	-5.34	108.67	110.80
26	BB	1689	A	C8-N9-C4	5.34	107.94	105.80
26	BB	2686	G	N1-C2-N2	5.34	121.00	116.20
1	AA	216	U	O4'-C1'-N1	5.34	112.47	108.20
1	AA	269	C	C6-N1-C2	-5.34	118.17	120.30
1	AA	471	U	O4'-C1'-N1	5.34	112.47	108.20
1	AA	565	U	N3-C2-O2	-5.34	118.47	122.20
1	AA	656	G	O4'-C1'-N9	5.34	112.47	108.20
1	AA	1280	A	C6-C5-N7	5.34	136.03	132.30
1	AA	1478	U	C6-N1-C2	5.34	124.20	121.00
26	BB	289	G	C8-N9-C1'	5.34	133.94	127.00
26	BB	469	G	P-O3'-C3'	5.34	126.10	119.70
26	BB	620	G	C8-N9-C4	-5.34	104.27	106.40
26	BB	1036	G	N9-C1'-C2'	-5.34	106.13	112.00
26	BB	1524	G	C2-N3-C4	5.34	114.57	111.90
26	BB	1975	G	O4'-C4'-C3'	5.34	110.37	106.10
26	BB	2241	A	C5-N7-C8	5.34	106.57	103.90
26	BB	2817	U	N1-C1'-C2'	-5.34	106.13	112.00
37	BM	107	LEU	CB-CG-CD1	5.34	120.07	111.00
1	AA	662	U	N3-C2-O2	-5.33	118.47	122.20
1	AA	1419	G	N1-C6-O6	-5.33	116.70	119.90
1	AA	1444	U	N1-C2-O2	-5.33	119.07	122.80
4	AD	54	G	N3-C4-C5	-5.33	125.93	128.60
26	BB	263	G	C4'-C3'-C2'	-5.33	97.27	102.60
26	BB	284	U	N3-C4-O4	-5.33	115.67	119.40
26	BB	533	G	C5-C6-N1	-5.33	108.83	111.50
26	BB	540	C	N1-C2-O2	5.33	122.10	118.90
26	BB	734	A	C8-N9-C4	-5.33	103.67	105.80
26	BB	779	U	N3-C4-O4	5.33	123.13	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1214	A	C6-C5-N7	5.33	136.03	132.30
26	BB	1399	C	C3'-C2'-C1'	-5.33	97.23	101.50
26	BB	2027	G	C4-C5-C6	5.33	122.00	118.80
26	BB	2369	A	N3-C4-N9	-5.33	123.13	127.40
26	BB	2440	C	P-O3'-C3'	5.33	126.10	119.70
26	BB	2857	G	C4-C5-N7	5.33	112.93	110.80
36	BL	15	TRP	NE1-CE2-CD2	-5.33	101.97	107.30
1	AA	192	A	C5-C6-N1	5.33	120.37	117.70
1	AA	375	U	C5'-C4'-C3'	-5.33	107.47	116.00
1	AA	499	A	C4-C5-C6	-5.33	114.33	117.00
1	AA	512	U	O4'-C1'-C2'	-5.33	100.47	105.80
1	AA	817	C	C5-C4-N4	5.33	123.93	120.20
1	AA	825	A	C4-C5-C6	-5.33	114.33	117.00
1	AA	829	G	C1'-O4'-C4'	-5.33	105.63	109.90
1	AA	1270	G	C5'-C4'-O4'	5.33	115.50	109.10
1	AA	1376	U	P-O3'-C3'	5.33	126.10	119.70
17	AQ	19	TYR	CG-CD2-CE2	-5.33	117.03	121.30
25	BA	93	C	C6-N1-C2	-5.33	118.17	120.30
25	BA	113	C	N3-C2-O2	5.33	125.63	121.90
26	BB	772	C	N3-C2-O2	-5.33	118.17	121.90
26	BB	974	G	N1-C6-O6	-5.33	116.70	119.90
26	BB	1867	G	C1'-O4'-C4'	-5.33	105.63	109.90
26	BB	2337	G	C4-C5-C6	5.33	122.00	118.80
26	BB	2388	A	C5-C6-N6	-5.33	119.43	123.70
1	AA	19	A	C5'-C4'-O4'	5.33	115.50	109.10
1	AA	320	A	O4'-C4'-C3'	5.33	110.36	106.10
1	AA	505	G	P-O3'-C3'	5.33	126.10	119.70
1	AA	650	G	C2-N3-C4	5.33	114.56	111.90
1	AA	805	C	C2-N3-C4	5.33	122.57	119.90
1	AA	888	G	C4'-C3'-C2'	-5.33	97.27	102.60
1	AA	1304	G	N3-C4-C5	5.33	131.27	128.60
2	AB	15	A	C8-N9-C4	-5.33	103.67	105.80
25	BA	71	C	C4-C5-C6	-5.33	114.73	117.40
26	BB	21	A	C5'-C4'-O4'	5.33	115.50	109.10
26	BB	48	G	C4'-C3'-C2'	-5.33	97.27	102.60
26	BB	54	G	N9-C4-C5	5.33	107.53	105.40
26	BB	114	U	O4'-C1'-N1	5.33	112.47	108.20
26	BB	505	A	N9-C4-C5	-5.33	103.67	105.80
26	BB	821	A	N1-C2-N3	-5.33	126.63	129.30
26	BB	1062	G	C6-C5-N7	-5.33	127.20	130.40
26	BB	1115	G	N1-C2-N2	-5.33	111.40	116.20
26	BB	1694	C	C6-N1-C1'	-5.33	114.40	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1811	G	C8-N9-C1'	5.33	133.93	127.00
26	BB	1927	A	P-O3'-C3'	5.33	126.10	119.70
53	B2	21	VAL	CA-CB-CG1	5.33	118.90	110.90
1	AA	268	U	C4'-C3'-C2'	-5.33	97.27	102.60
1	AA	604	G	C2-N3-C4	-5.33	109.23	111.90
3	AC	47	C	N3-C2-O2	-5.33	118.17	121.90
26	BB	178	G	N3-C2-N2	-5.33	116.17	119.90
26	BB	1113	U	C6-N1-C2	-5.33	117.80	121.00
26	BB	1192	G	O5'-P-OP2	-5.33	100.90	105.70
26	BB	1582	C	N1-C2-O2	-5.33	115.70	118.90
26	BB	2348	U	N1-C2-O2	5.33	126.53	122.80
46	BV	85	VAL	CA-CB-CG1	-5.33	102.91	110.90
1	AA	397	A	N1-C6-N6	-5.33	115.40	118.60
1	AA	713	G	N3-C2-N2	5.33	123.63	119.90
1	AA	732	C	C5-C4-N4	-5.33	116.47	120.20
1	AA	1248	A	P-O3'-C3'	5.33	126.09	119.70
1	AA	1299	A	C1'-O4'-C4'	-5.33	105.64	109.90
1	AA	1374	A	C5-C6-N1	5.33	120.36	117.70
1	AA	1514	G	N3-C2-N2	-5.33	116.17	119.90
2	AB	2	G	C5-C6-N1	5.33	114.16	111.50
10	AJ	91	ARG	CD-NE-CZ	5.33	131.06	123.60
26	BB	26	G	C5'-C4'-O4'	5.33	115.50	109.10
26	BB	50	U	N1-C2-O2	5.33	126.53	122.80
26	BB	379	G	C6-N1-C2	5.33	128.30	125.10
26	BB	413	C	O3'-P-O5'	-5.33	93.88	104.00
26	BB	474	G	N1-C2-N2	5.33	121.00	116.20
26	BB	584	C	C3'-C2'-C1'	5.33	105.76	101.50
26	BB	1076	C	N3-C4-C5	-5.33	119.77	121.90
26	BB	1198	U	N1-C2-N3	5.33	118.10	114.90
26	BB	1223	G	C4'-C3'-C2'	-5.33	97.27	102.60
26	BB	1262	A	C5'-C4'-O4'	5.33	115.50	109.10
26	BB	1304	A	C8-N9-C4	-5.33	103.67	105.80
26	BB	1463	C	C1'-O4'-C4'	5.33	114.16	109.90
26	BB	1652	A	C6-C5-N7	5.33	136.03	132.30
26	BB	1966	A	C5'-C4'-C3'	-5.33	107.47	116.00
26	BB	2128	G	N3-C4-C5	-5.33	125.94	128.60
26	BB	2270	A	C4-C5-N7	-5.33	108.04	110.70
26	BB	2286	G	C5-N7-C8	5.33	106.97	104.30
26	BB	2540	C	C5'-C4'-O4'	5.33	115.49	109.10
1	AA	487	A	N1-C6-N6	-5.33	115.40	118.60
26	BB	802	A	N7-C8-N9	-5.33	111.14	113.80
26	BB	1438	U	C4-C5-C6	5.33	122.90	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1699	G	N1-C2-N2	5.33	120.99	116.20
26	BB	2036	C	O4'-C1'-N1	5.33	112.46	108.20
26	BB	2105	U	C5-C6-N1	-5.33	120.04	122.70
26	BB	2428	G	C4-C5-C6	5.33	122.00	118.80
1	AA	68	G	C4-C5-C6	5.33	122.00	118.80
1	AA	150	U	N1-C2-O2	-5.33	119.07	122.80
1	AA	266	G	N1-C2-N3	-5.33	120.70	123.90
1	AA	330	C	C5'-C4'-O4'	5.33	115.49	109.10
1	AA	548	G	N1-C2-N3	5.33	127.09	123.90
1	AA	707	U	P-O3'-C3'	5.33	126.09	119.70
3	AC	44	U	O4'-C1'-N1	5.33	112.46	108.20
4	AD	63	C	C5-C6-N1	5.33	123.66	121.00
14	AN	97	ARG	CD-NE-CZ	5.33	131.06	123.60
26	BB	1651	G	C5'-C4'-C3'	-5.33	107.48	116.00
26	BB	2427	C	N3-C4-N4	-5.33	114.27	118.00
1	AA	68	G	C5-N7-C8	5.32	106.96	104.30
1	AA	722	G	C8-N9-C4	-5.32	104.27	106.40
1	AA	1182	G	C4-C5-C6	5.32	122.00	118.80
1	AA	1440	U	N3-C4-C5	5.32	117.79	114.60
2	AB	75	C	C5-C4-N4	5.32	123.93	120.20
3	AC	23	C	C6-N1-C2	-5.32	118.17	120.30
25	BA	79	G	N7-C8-N9	-5.32	110.44	113.10
26	BB	1043	C	C6-N1-C2	5.32	122.43	120.30
26	BB	1051	G	N7-C8-N9	5.32	115.76	113.10
26	BB	1384	A	N3-C4-C5	-5.32	123.07	126.80
26	BB	2141	G	C4-C5-N7	-5.32	108.67	110.80
26	BB	2207	C	C2-N3-C4	5.32	122.56	119.90
26	BB	2370	G	N3-C4-N9	5.32	129.19	126.00
3	AC	49	U	C2-N3-C4	-5.32	123.81	127.00
26	BB	158	U	N1-C2-N3	5.32	118.09	114.90
26	BB	334	C	C6-N1-C1'	5.32	127.19	120.80
26	BB	1056	G	C8-N9-C4	-5.32	104.27	106.40
26	BB	1374	G	N1-C2-N3	5.32	127.09	123.90
26	BB	2796	U	C5-C6-N1	-5.32	120.04	122.70
1	AA	223	A	P-O3'-C3'	5.32	126.08	119.70
1	AA	820	U	O4'-C4'-C3'	5.32	110.36	106.10
1	AA	843	U	C4-C5-C6	-5.32	116.51	119.70
1	AA	1287	A	C4'-C3'-C2'	-5.32	97.28	102.60
1	AA	1450	U	N3-C2-O2	-5.32	118.47	122.20
26	BB	216	A	N9-C4-C5	-5.32	103.67	105.80
26	BB	444	C	C5'-C4'-C3'	-5.32	107.49	116.00
26	BB	474	G	N1-C6-O6	5.32	123.09	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	506	G	C2-N3-C4	5.32	114.56	111.90
26	BB	1049	C	N3-C2-O2	5.32	125.62	121.90
26	BB	1524	G	C1'-O4'-C4'	-5.32	105.64	109.90
26	BB	2092	U	O4'-C1'-C2'	-5.32	100.48	105.80
26	BB	2436	G	N1-C2-N2	5.32	120.99	116.20
26	BB	2649	C	N3-C4-N4	-5.32	114.28	118.00
26	BB	2683	C	N1-C2-N3	5.32	122.92	119.20
26	BB	2807	U	O4'-C1'-N1	5.32	112.46	108.20
26	BB	2855	C	C5-C6-N1	5.32	123.66	121.00
27	BC	94	LEU	CB-CG-CD1	5.32	120.05	111.00
32	BH	146	ASP	CB-CG-OD1	-5.32	113.51	118.30
41	BQ	3	LYS	CA-CB-CG	5.32	125.11	113.40
13	AM	13	PHE	CB-CG-CD2	5.32	124.52	120.80
26	BB	356	G	N1-C2-N3	-5.32	120.71	123.90
26	BB	983	A	C4-C5-C6	5.32	119.66	117.00
26	BB	1014	A	C1'-O4'-C4'	-5.32	105.64	109.90
26	BB	1251	C	O3'-P-O5'	-5.32	93.89	104.00
26	BB	1564	C	C2-N1-C1'	5.32	124.65	118.80
26	BB	1816	C	N1-C2-O2	5.32	122.09	118.90
26	BB	1842	G	C5-C6-N1	5.32	114.16	111.50
26	BB	2161	C	N1-C2-O2	5.32	122.09	118.90
26	BB	2659	G	N1-C2-N2	-5.32	111.41	116.20
36	BL	80	HIS	O-C-N	5.32	131.21	122.70
1	AA	358	U	N3-C4-O4	-5.32	115.68	119.40
1	AA	391	G	C8-N9-C1'	5.32	133.91	127.00
1	AA	481	G	C6-N1-C2	-5.32	121.91	125.10
1	AA	561	U	C5-C4-O4	5.32	129.09	125.90
1	AA	733	G	C6-C5-N7	5.32	133.59	130.40
1	AA	813	U	C5-C6-N1	-5.32	120.04	122.70
1	AA	1121	U	C4'-C3'-C2'	-5.32	97.28	102.60
1	AA	1447	A	N3-C4-C5	5.32	130.52	126.80
15	AO	39	THR	CA-CB-OG1	5.32	120.17	109.00
26	BB	190	A	N1-C2-N3	-5.32	126.64	129.30
26	BB	220	G	C8-N9-C1'	5.32	133.91	127.00
26	BB	340	A	O4'-C1'-N9	-5.32	103.94	108.20
26	BB	1347	A	C4'-C3'-C2'	-5.32	97.28	102.60
26	BB	1384	A	C5-C6-N1	5.32	120.36	117.70
26	BB	1538	G	N1-C6-O6	-5.32	116.71	119.90
26	BB	2178	C	N1-C2-N3	-5.32	115.48	119.20
26	BB	2361	G	C5-C6-O6	-5.32	125.41	128.60
26	BB	2464	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	BB	2878	U	N3-C4-C5	5.32	117.79	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	BD	151	GLY	O-C-N	5.32	131.21	122.70
1	AA	133	U	C6-N1-C2	-5.32	117.81	121.00
1	AA	352	C	C5-C4-N4	-5.32	116.48	120.20
1	AA	380	G	N3-C2-N2	-5.32	116.18	119.90
1	AA	478	A	C6-N1-C2	5.32	121.79	118.60
1	AA	579	A	C5-C6-N6	-5.32	119.45	123.70
1	AA	617	G	C4-C5-C6	-5.32	115.61	118.80
1	AA	1050	G	C3'-C2'-C1'	5.32	105.75	101.50
1	AA	1173	U	N3-C4-O4	5.32	123.12	119.40
1	AA	1253	G	N3-C4-C5	-5.32	125.94	128.60
1	AA	1267	C	C3'-C2'-C1'	-5.32	97.25	101.50
1	AA	1533	C	C2-N3-C4	5.32	122.56	119.90
4	AD	36	A	C6-C5-N7	5.32	136.02	132.30
13	AM	96	VAL	CA-CB-CG1	5.32	118.87	110.90
25	BA	69	G	N3-C4-N9	5.32	129.19	126.00
26	BB	56	A	C4-C5-C6	-5.32	114.34	117.00
26	BB	192	C	N3-C4-C5	-5.32	119.77	121.90
26	BB	387	U	C1'-O4'-C4'	-5.32	105.65	109.90
26	BB	1031	G	N9-C4-C5	5.32	107.53	105.40
26	BB	1050	A	C4-C5-C6	-5.32	114.34	117.00
26	BB	1272	A	C2-N3-C4	5.32	113.26	110.60
26	BB	1542	U	N1-C1'-C2'	-5.32	106.15	112.00
26	BB	1756	G	C5'-C4'-O4'	5.32	115.48	109.10
26	BB	1918	A	C6-N1-C2	-5.32	115.41	118.60
26	BB	1949	G	C4'-C3'-C2'	-5.32	97.28	102.60
26	BB	1959	G	N1-C6-O6	5.32	123.09	119.90
43	BS	31	TYR	CG-CD1-CE1	-5.32	117.05	121.30
1	AA	1398	A	C5-N7-C8	-5.31	101.24	103.90
2	AB	60	U	N3-C2-O2	-5.31	118.48	122.20
12	AL	50	PRO	CA-N-CD	-5.31	104.06	111.50
26	BB	211	C	P-O3'-C3'	5.31	126.08	119.70
26	BB	298	G	C5-C6-N1	5.31	114.16	111.50
26	BB	430	A	O4'-C4'-C3'	5.31	110.35	106.10
26	BB	655	A	O4'-C1'-N9	-5.31	103.95	108.20
26	BB	995	C	C5-C4-N4	-5.31	116.48	120.20
26	BB	1037	G	C5'-C4'-O4'	5.31	115.48	109.10
26	BB	2029	G	N7-C8-N9	5.31	115.76	113.10
26	BB	2329	U	N3-C4-O4	5.31	123.12	119.40
43	BS	49	ARG	CB-CA-C	5.31	121.03	110.40
45	BU	46	LEU	CA-CB-CG	-5.31	103.08	115.30
1	AA	230	G	C3'-C2'-C1'	-5.31	97.25	101.50
1	AA	376	G	C8-N9-C1'	5.31	133.91	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	392	C	N3-C4-N4	5.31	121.72	118.00
1	AA	498	A	P-O3'-C3'	5.31	126.07	119.70
1	AA	572	A	P-O3'-C3'	5.31	126.07	119.70
1	AA	752	G	N3-C4-C5	-5.31	125.94	128.60
1	AA	913	A	N9-C4-C5	5.31	107.92	105.80
1	AA	1466	C	C5-C4-N4	-5.31	116.48	120.20
2	AB	68	C	C5-C6-N1	5.31	123.66	121.00
12	AL	6	TYR	CZ-CE2-CD2	-5.31	115.02	119.80
26	BB	81	G	N3-C2-N2	5.31	123.62	119.90
26	BB	645	C	N3-C4-C5	-5.31	119.78	121.90
26	BB	691	C	C1'-O4'-C4'	5.31	114.15	109.90
26	BB	766	U	C1'-O4'-C4'	5.31	114.15	109.90
26	BB	1002	G	C4-C5-N7	-5.31	108.67	110.80
26	BB	1239	G	C2-N3-C4	5.31	114.56	111.90
26	BB	2035	G	N1-C2-N3	-5.31	120.71	123.90
26	BB	2197	U	C1'-O4'-C4'	5.31	114.15	109.90
26	BB	2482	A	N3-C4-C5	-5.31	123.08	126.80
26	BB	2618	G	C5-N7-C8	-5.31	101.64	104.30
26	BB	2704	C	O4'-C1'-C2'	5.31	112.38	107.60
29	BE	84	LEU	CB-CG-CD1	5.31	120.03	111.00
1	AA	302	G	C6-N1-C2	-5.31	121.91	125.10
1	AA	1395	C	O3'-P-O5'	5.31	114.09	104.00
1	AA	1514	G	N7-C8-N9	5.31	115.76	113.10
2	AB	62	U	O5'-P-OP2	-5.31	100.92	105.70
12	AL	40	ARG	NE-CZ-NH1	5.31	122.96	120.30
26	BB	330	A	C6-C5-N7	5.31	136.02	132.30
26	BB	503	A	C4'-C3'-C2'	5.31	107.91	102.60
26	BB	548	G	N9-C1'-C2'	5.31	120.90	114.00
26	BB	609	A	C5-N7-C8	-5.31	101.24	103.90
26	BB	663	G	N7-C8-N9	-5.31	110.44	113.10
26	BB	677	A	P-O3'-C3'	5.31	126.07	119.70
26	BB	1095	A	C5-C6-N6	5.31	127.95	123.70
26	BB	1696	G	C4-C5-C6	5.31	121.99	118.80
26	BB	1878	G	N3-C4-N9	5.31	129.19	126.00
26	BB	2320	U	O4'-C4'-C3'	5.31	110.35	106.10
26	BB	2633	G	N1-C2-N2	5.31	120.98	116.20
26	BB	2848	G	O4'-C4'-C3'	5.31	110.35	106.10
1	AA	705	G	C5'-C4'-C3'	-5.31	107.51	116.00
1	AA	777	A	N1-C2-N3	5.31	131.95	129.30
1	AA	944	G	C4'-C3'-C2'	-5.31	97.29	102.60
1	AA	1070	U	C4-C5-C6	5.31	122.89	119.70
1	AA	1236	A	N1-C6-N6	5.31	121.78	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1463	U	C2-N1-C1'	5.31	124.07	117.70
1	AA	1513	A	C6-N1-C2	-5.31	115.41	118.60
13	AM	7	ARG	CD-NE-CZ	5.31	131.03	123.60
14	AN	8	ARG	CD-NE-CZ	5.31	131.03	123.60
25	BA	100	G	P-O3'-C3'	5.31	126.07	119.70
26	BB	1614	A	C2'-C3'-O3'	5.31	122.19	113.70
26	BB	1623	G	C6-N1-C2	-5.31	121.92	125.10
26	BB	2289	G	C3'-C2'-C1'	-5.31	97.25	101.50
26	BB	2351	G	C5-C6-O6	-5.31	125.41	128.60
26	BB	2582	G	N3-C2-N2	-5.31	116.18	119.90
26	BB	2648	G	C4-C5-C6	5.31	121.98	118.80
36	BL	120	ARG	NE-CZ-NH2	5.31	122.95	120.30
1	AA	145	G	C5-C6-N1	5.31	114.15	111.50
1	AA	164	G	O4'-C4'-C3'	5.31	110.35	106.10
1	AA	374	A	C3'-C2'-C1'	-5.31	97.25	101.50
1	AA	952	U	C4'-C3'-C2'	-5.31	97.29	102.60
1	AA	1032	G	C2-N3-C4	5.31	114.55	111.90
1	AA	1322	C	C6-N1-C1'	-5.31	114.43	120.80
2	AB	30	G	N3-C4-C5	-5.31	125.95	128.60
26	BB	109	C	C2-N3-C4	5.31	122.55	119.90
26	BB	203	A	P-O3'-C3'	5.31	126.07	119.70
26	BB	962	G	C5-C6-O6	5.31	131.78	128.60
26	BB	1081	U	O4'-C4'-C3'	5.31	110.34	106.10
26	BB	1146	C	N1-C2-O2	5.31	122.08	118.90
26	BB	1402	U	P-O3'-C3'	5.31	126.07	119.70
26	BB	1552	A	C5-N7-C8	5.31	106.55	103.90
26	BB	1596	A	C5-C6-N1	5.31	120.35	117.70
26	BB	1927	A	N1-C2-N3	5.31	131.95	129.30
26	BB	2211	A	N1-C6-N6	5.31	121.78	118.60
26	BB	2465	C	O4'-C1'-N1	5.31	112.45	108.20
26	BB	2657	A	C5'-C4'-C3'	-5.31	107.51	116.00
31	BG	133	GLU	OE1-CD-OE2	5.31	129.67	123.30
1	AA	140	U	N3-C4-O4	5.31	123.11	119.40
1	AA	650	G	C5-C6-O6	-5.31	125.42	128.60
1	AA	828	U	N1-C2-N3	5.31	118.08	114.90
1	AA	1073	U	C2-N3-C4	-5.31	123.82	127.00
26	BB	1308	A	N1-C6-N6	5.31	121.78	118.60
26	BB	1337	G	O4'-C1'-N9	5.31	112.44	108.20
26	BB	1396	U	C4-C5-C6	-5.31	116.52	119.70
26	BB	1456	G	C3'-C2'-C1'	-5.31	97.25	101.50
26	BB	1938	A	C5-C6-N1	-5.31	115.05	117.70
26	BB	2708	G	C1'-O4'-C4'	-5.31	105.66	109.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	531	U	N3-C4-O4	5.30	123.11	119.40
1	AA	653	U	O4'-C4'-C3'	5.30	110.34	106.10
1	AA	716	A	C4-C5-C6	-5.30	114.35	117.00
1	AA	808	C	C1'-O4'-C4'	-5.30	105.66	109.90
1	AA	1221	G	O4'-C1'-N9	5.30	112.44	108.20
4	AD	41	C	C4'-C3'-C2'	-5.30	97.30	102.60
4	AD	48	U	C5'-C4'-C3'	5.30	124.49	116.00
26	BB	17	G	N1-C6-O6	-5.30	116.72	119.90
26	BB	84	A	C8-N9-C4	5.30	107.92	105.80
26	BB	130	C	C2-N3-C4	5.30	122.55	119.90
26	BB	172	A	C4'-C3'-C2'	5.30	107.91	102.60
26	BB	1375	U	N3-C4-O4	5.30	123.11	119.40
26	BB	1682	G	N1-C6-O6	5.30	123.08	119.90
26	BB	2010	G	C1'-O4'-C4'	-5.30	105.66	109.90
26	BB	2840	C	O3'-P-O5'	-5.30	93.92	104.00
26	BB	2893	A	O4'-C4'-C3'	5.30	110.34	106.10
30	BF	19	PHE	CB-CG-CD1	-5.30	117.09	120.80
31	BG	83	PRO	N-CD-CG	5.30	111.16	103.20
1	AA	221	C	N1-C2-O2	5.30	122.08	118.90
1	AA	250	A	C6-C5-N7	5.30	136.01	132.30
1	AA	366	A	O4'-C1'-N9	5.30	112.44	108.20
25	BA	28	C	N3-C4-N4	-5.30	114.29	118.00
26	BB	6	A	C6-C5-N7	-5.30	128.59	132.30
26	BB	102	U	C4-C5-C6	5.30	122.88	119.70
26	BB	328	U	N1-C2-N3	5.30	118.08	114.90
26	BB	403	U	N3-C4-C5	-5.30	111.42	114.60
26	BB	554	U	C5-C4-O4	-5.30	122.72	125.90
26	BB	594	U	C5-C4-O4	-5.30	122.72	125.90
26	BB	623	C	N3-C4-N4	5.30	121.71	118.00
26	BB	711	G	N1-C2-N2	5.30	120.97	116.20
26	BB	1106	G	C1'-O4'-C4'	-5.30	105.66	109.90
26	BB	2481	G	O4'-C1'-C2'	5.30	112.37	107.60
1	AA	111	G	C6-N1-C2	-5.30	121.92	125.10
1	AA	596	A	N9-C1'-C2'	5.30	120.89	114.00
1	AA	1043	G	N9-C4-C5	5.30	107.52	105.40
1	AA	1091	U	C4'-C3'-C2'	-5.30	97.30	102.60
24	AX	17	ARG	NH1-CZ-NH2	5.30	125.23	119.40
26	BB	472	A	C6-N1-C2	5.30	121.78	118.60
26	BB	574	A	C3'-C2'-C1'	5.30	105.74	101.50
26	BB	739	A	C3'-C2'-C1'	5.30	105.74	101.50
26	BB	1131	G	C5-N7-C8	-5.30	101.65	104.30
26	BB	1181	U	C4-C5-C6	5.30	122.88	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2072	C	O4'-C4'-C3'	5.30	110.34	106.10
26	BB	2228	G	N3-C4-N9	-5.30	122.82	126.00
1	AA	5	U	C5'-C4'-C3'	-5.30	107.52	116.00
1	AA	9	G	N1-C2-N3	-5.30	120.72	123.90
1	AA	65	A	C5'-C4'-O4'	5.30	115.46	109.10
1	AA	165	G	C6-C5-N7	-5.30	127.22	130.40
1	AA	539	A	C5'-C4'-O4'	-5.30	102.74	109.10
1	AA	888	G	C4-C5-C6	5.30	121.98	118.80
1	AA	1125	U	C3'-C2'-C1'	5.30	105.74	101.50
7	AG	134	TYR	CD1-CG-CD2	5.30	123.73	117.90
26	BB	317	G	C5-N7-C8	-5.30	101.65	104.30
26	BB	524	G	C6-N1-C2	-5.30	121.92	125.10
26	BB	714	U	C6-N1-C2	-5.30	117.82	121.00
26	BB	989	G	N3-C4-N9	-5.30	122.82	126.00
26	BB	1439	A	C5-C6-N1	-5.30	115.05	117.70
26	BB	1649	G	P-O3'-C3'	5.30	126.06	119.70
26	BB	1649	G	C5-C6-N1	-5.30	108.85	111.50
26	BB	1711	A	P-O3'-C3'	5.30	126.06	119.70
26	BB	1716	U	O4'-C1'-N1	5.30	112.44	108.20
26	BB	2135	A	C2-N3-C4	-5.30	107.95	110.60
26	BB	2504	PSU	P-O3'-C3'	5.30	126.06	119.70
26	BB	2819	G	C2-N3-C4	5.30	114.55	111.90
1	AA	52	C	N3-C4-N4	-5.30	114.29	118.00
4	AD	3	C	C3'-C2'-C1'	5.30	105.74	101.50
26	BB	23	G	C4'-C3'-C2'	-5.30	97.30	102.60
26	BB	101	A	N1-C6-N6	-5.30	115.42	118.60
26	BB	714	U	N1-C2-O2	5.30	126.51	122.80
26	BB	977	G	C6-N1-C2	5.30	128.28	125.10
26	BB	1651	G	N3-C2-N2	5.30	123.61	119.90
26	BB	2072	C	N3-C4-C5	5.30	124.02	121.90
26	BB	2238	G	C4-C5-C6	5.30	121.98	118.80
26	BB	2725	A	O4'-C1'-N9	5.30	112.44	108.20
26	BB	2757	A	C5'-C4'-O4'	5.30	115.46	109.10
1	AA	82	G	O4'-C1'-N9	5.30	112.44	108.20
1	AA	83	C	N3-C4-C5	5.30	124.02	121.90
1	AA	973	G	O4'-C1'-N9	5.30	112.44	108.20
1	AA	1069	C	C5-C6-N1	-5.30	118.35	121.00
1	AA	1324	A	OP1-P-OP2	-5.30	111.65	119.60
1	AA	1391	U	N3-C4-O4	5.30	123.11	119.40
4	AD	38	A	C5'-C4'-O4'	5.30	115.45	109.10
7	AG	138	PRO	N-CD-CG	5.30	111.14	103.20
26	BB	55	G	C4-C5-C6	5.30	121.98	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	472	A	N3-C4-C5	-5.30	123.09	126.80
26	BB	879	G	N3-C4-N9	5.30	129.18	126.00
26	BB	1229	C	C1'-O4'-C4'	5.30	114.14	109.90
26	BB	1649	G	C4-C5-C6	5.30	121.98	118.80
26	BB	2071	A	O4'-C1'-N9	5.30	112.44	108.20
26	BB	2119	A	O4'-C1'-N9	5.30	112.44	108.20
26	BB	2508	G	N1-C6-O6	5.30	123.08	119.90
26	BB	2598	A	C4-C5-C6	5.30	119.65	117.00
26	BB	2793	C	N1-C1'-C2'	-5.30	106.17	112.00
1	AA	834	U	O4'-C1'-N1	5.29	112.44	108.20
1	AA	1097	C	N3-C4-N4	5.29	121.71	118.00
1	AA	1159	U	C5-C6-N1	-5.29	120.05	122.70
26	BB	323	C	C3'-C2'-C1'	5.29	105.74	101.50
26	BB	355	U	N1-C1'-C2'	-5.29	106.17	112.00
26	BB	547	A	N3-C4-N9	5.29	131.64	127.40
26	BB	636	G	C6-C5-N7	-5.29	127.22	130.40
26	BB	873	C	N3-C4-C5	5.29	124.02	121.90
26	BB	935	C	O4'-C1'-N1	5.29	112.44	108.20
26	BB	1007	C	N3-C4-C5	-5.29	119.78	121.90
27	BC	8	MET	CG-SD-CE	5.29	108.67	100.20
52	B1	39	ASP	CB-CG-OD2	5.29	123.06	118.30
1	AA	261	U	C4'-C3'-C2'	-5.29	97.31	102.60
1	AA	266	G	N9-C4-C5	-5.29	103.28	105.40
1	AA	375	U	C2-N3-C4	-5.29	123.82	127.00
1	AA	557	G	C5-C6-N1	5.29	114.15	111.50
1	AA	845	A	C5-N7-C8	5.29	106.55	103.90
1	AA	1434	A	C6-N1-C2	5.29	121.78	118.60
4	AD	42	C	C4-C5-C6	-5.29	114.75	117.40
26	BB	31	C	C5'-C4'-C3'	-5.29	107.53	116.00
26	BB	226	A	C6-N1-C2	-5.29	115.42	118.60
26	BB	294	A	C5'-C4'-O4'	5.29	115.45	109.10
26	BB	450	G	C8-N9-C4	-5.29	104.28	106.40
26	BB	559	G	N1-C2-N3	-5.29	120.72	123.90
26	BB	710	U	C4'-C3'-C2'	-5.29	97.31	102.60
26	BB	839	U	N3-C4-C5	5.29	117.78	114.60
26	BB	1000	A	C6-N1-C2	5.29	121.78	118.60
26	BB	1269	A	C6-C5-N7	-5.29	128.59	132.30
26	BB	1340	U	C5-C6-N1	-5.29	120.05	122.70
26	BB	1645	G	C5-C6-O6	5.29	131.78	128.60
26	BB	1845	G	C5-N7-C8	-5.29	101.65	104.30
26	BB	1880	U	C1'-O4'-C4'	-5.29	105.67	109.90
26	BB	1903	G	N3-C2-N2	-5.29	116.19	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2110	G	O4'-C4'-C3'	5.29	110.33	106.10
26	BB	2120	G	N9-C4-C5	5.29	107.52	105.40
26	BB	2357	G	N1-C6-O6	-5.29	116.72	119.90
26	BB	2538	C	C1'-O4'-C4'	-5.29	105.67	109.90
26	BB	2703	C	C2-N3-C4	-5.29	117.25	119.90
1	AA	449	G	N3-C4-N9	5.29	129.18	126.00
1	AA	1205	U	C1'-O4'-C4'	-5.29	105.67	109.90
3	AC	41	A	N1-C2-N3	-5.29	126.65	129.30
6	AF	71	ARG	NH1-CZ-NH2	5.29	125.22	119.40
9	AI	38	ARG	CD-NE-CZ	5.29	131.01	123.60
15	AO	44	PRO	CA-N-CD	-5.29	104.09	111.50
25	BA	6	G	N9-C4-C5	-5.29	103.28	105.40
25	BA	32	U	C1'-O4'-C4'	-5.29	105.67	109.90
26	BB	1426	G	C2-N3-C4	-5.29	109.25	111.90
26	BB	1564	C	N3-C4-C5	-5.29	119.78	121.90
26	BB	1718	G	N3-C2-N2	5.29	123.60	119.90
26	BB	1747	U	C3'-C2'-C1'	5.29	105.73	101.50
1	AA	180	U	C5-C6-N1	-5.29	120.06	122.70
1	AA	676	A	N3-C4-C5	-5.29	123.10	126.80
1	AA	1176	A	C4-C5-N7	5.29	113.34	110.70
1	AA	1255	G	N3-C2-N2	5.29	123.60	119.90
26	BB	207	A	N9-C4-C5	5.29	107.92	105.80
26	BB	965	C	N3-C2-O2	-5.29	118.20	121.90
26	BB	1393	A	C4-C5-N7	-5.29	108.06	110.70
26	BB	1831	G	C4-C5-N7	-5.29	108.68	110.80
26	BB	2460	U	O4'-C1'-N1	5.29	112.43	108.20
26	BB	2564	A	C2-N3-C4	5.29	113.25	110.60
26	BB	2707	U	C5-C4-O4	-5.29	122.73	125.90
1	AA	192	A	C6-N1-C2	-5.29	115.43	118.60
1	AA	238	A	O4'-C1'-N9	5.29	112.43	108.20
1	AA	859	G	N9-C1'-C2'	-5.29	106.18	112.00
1	AA	1463	U	C4'-C3'-C2'	-5.29	97.31	102.60
1	AA	1526	G	C5'-C4'-O4'	5.29	115.45	109.10
26	BB	79	C	C5-C6-N1	5.29	123.64	121.00
26	BB	232	G	P-O3'-C3'	5.29	126.05	119.70
26	BB	1091	G	P-O3'-C3'	5.29	126.05	119.70
26	BB	1128	G	C8-N9-C4	-5.29	104.28	106.40
26	BB	1217	U	C5'-C4'-O4'	5.29	115.45	109.10
26	BB	1391	U	N1-C2-N3	5.29	118.07	114.90
26	BB	1394	U	N1-C2-O2	5.29	126.50	122.80
26	BB	1417	C	N3-C4-N4	5.29	121.70	118.00
26	BB	1863	G	N9-C4-C5	5.29	107.52	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2106	U	N3-C2-O2	-5.29	118.50	122.20
26	BB	2220	U	C4'-C3'-C2'	-5.29	97.31	102.60
26	BB	2375	G	C4'-C3'-C2'	-5.29	97.31	102.60
26	BB	2541	A	P-O3'-C3'	5.29	126.05	119.70
26	BB	2591	C	C4'-C3'-C2'	-5.29	97.31	102.60
26	BB	2901	C	O4'-C1'-N1	5.29	112.43	108.20
27	BC	164	ARG	NH1-CZ-NH2	5.29	125.22	119.40
28	BD	28	PRO	CA-N-CD	-5.29	104.10	111.50
26	BB	203	A	C5'-C4'-O4'	5.29	115.44	109.10
26	BB	804	A	N1-C6-N6	-5.29	115.43	118.60
26	BB	1744	A	P-O3'-C3'	5.29	126.04	119.70
1	AA	109	A	N1-C2-N3	-5.29	126.66	129.30
1	AA	616	G	C4-C5-C6	5.29	121.97	118.80
1	AA	1019	A	N9-C1'-C2'	-5.29	106.19	112.00
1	AA	1030	U	N1-C2-N3	5.29	118.07	114.90
1	AA	1473	G	C6-N1-C2	-5.29	121.93	125.10
2	AB	7	G	N3-C2-N2	-5.29	116.20	119.90
2	AB	27	C	P-O5'-C5'	5.29	129.35	120.90
2	AB	67	G	C6-C5-N7	5.29	133.57	130.40
4	AD	23	G	N1-C6-O6	-5.29	116.73	119.90
18	AR	13	GLU	OE1-CD-OE2	5.29	129.64	123.30
26	BB	60	G	N3-C4-C5	-5.29	125.96	128.60
26	BB	124	G	C6-N1-C2	-5.29	121.93	125.10
26	BB	229	C	O4'-C1'-N1	5.29	112.43	108.20
26	BB	1172	C	P-O3'-C3'	5.29	126.04	119.70
26	BB	2115	G	C5'-C4'-O4'	5.29	115.44	109.10
26	BB	2234	G	C5'-C4'-O4'	5.29	115.44	109.10
26	BB	2361	G	N1-C2-N2	5.29	120.96	116.20
26	BB	2417	C	N1-C2-O2	5.29	122.07	118.90
26	BB	2514	U	N1-C1'-C2'	-5.29	106.19	112.00
37	BM	80	ASP	CB-CG-OD2	-5.29	113.54	118.30
1	AA	155	A	N1-C6-N6	-5.28	115.43	118.60
1	AA	281	G	O3'-P-O5'	-5.28	93.96	104.00
1	AA	339	C	O4'-C4'-C3'	5.28	110.33	106.10
1	AA	350	G	N3-C4-C5	-5.28	125.96	128.60
1	AA	454	G	P-O3'-C3'	5.28	126.04	119.70
1	AA	606	G	C6-C5-N7	5.28	133.57	130.40
1	AA	736	C	N1-C2-O2	5.28	122.07	118.90
1	AA	1057	G	C4'-C3'-C2'	-5.28	97.32	102.60
1	AA	1290	G	C4-C5-N7	5.28	112.91	110.80
1	AA	1393	U	N1-C1'-C2'	-5.28	106.19	112.00
1	AA	1522	U	O4'-C4'-C3'	5.28	110.33	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	AO	30	ARG	NE-CZ-NH1	5.28	122.94	120.30
26	BB	229	C	C6-N1-C2	5.28	122.41	120.30
26	BB	2204	G	C6-N1-C2	5.28	128.27	125.10
26	BB	2531	A	C3'-C2'-C1'	5.28	105.73	101.50
1	AA	771	G	N3-C4-C5	-5.28	125.96	128.60
1	AA	1114	C	C5'-C4'-C3'	-5.28	107.55	116.00
1	AA	1248	A	O4'-C4'-C3'	5.28	110.33	106.10
2	AB	27	C	P-O3'-C3'	5.28	126.04	119.70
2	AB	53	G	N7-C8-N9	5.28	115.74	113.10
25	BA	43	C	C2-N3-C4	5.28	122.54	119.90
26	BB	1433	A	N7-C8-N9	5.28	116.44	113.80
26	BB	2309	A	C5-C6-N6	5.28	127.92	123.70
26	BB	2537	U	O4'-C1'-N1	5.28	112.42	108.20
48	BX	57	TYR	CG-CD1-CE1	-5.28	117.07	121.30
51	B0	56	LEU	CB-CG-CD2	5.28	119.98	111.00
1	AA	46	G	N9-C1'-C2'	-5.28	106.19	112.00
1	AA	139	A	O4'-C1'-N9	5.28	112.42	108.20
1	AA	181	A	N1-C2-N3	-5.28	126.66	129.30
1	AA	380	G	N1-C2-N2	5.28	120.95	116.20
1	AA	437	U	C5-C6-N1	5.28	125.34	122.70
1	AA	452	A	C5-C6-N1	5.28	120.34	117.70
1	AA	842	U	O4'-C1'-N1	5.28	112.42	108.20
1	AA	969	A	C8-N9-C4	-5.28	103.69	105.80
1	AA	1006	G	C5-C6-O6	-5.28	125.43	128.60
1	AA	1042	A	C3'-C2'-C1'	-5.28	97.28	101.50
1	AA	1073	U	C5-C4-O4	-5.28	122.73	125.90
1	AA	1145	A	C5-N7-C8	-5.28	101.26	103.90
1	AA	1287	A	N1-C6-N6	5.28	121.77	118.60
1	AA	1312	G	C5-C6-N1	5.28	114.14	111.50
1	AA	1535	C	N1-C2-N3	-5.28	115.50	119.20
2	AB	50	G	N3-C2-N2	-5.28	116.20	119.90
26	BB	544	C	N3-C2-O2	-5.28	118.20	121.90
26	BB	777	G	C5-N7-C8	-5.28	101.66	104.30
26	BB	811	U	O4'-C4'-C3'	5.28	110.33	106.10
26	BB	860	U	O4'-C1'-N1	5.28	112.42	108.20
26	BB	1799	G	C5-C6-O6	-5.28	125.43	128.60
26	BB	1920	C	C1'-O4'-C4'	-5.28	105.68	109.90
26	BB	2252	G	C4-C5-C6	5.28	121.97	118.80
26	BB	2676	C	C6-N1-C2	-5.28	118.19	120.30
26	BB	2722	G	C1'-O4'-C4'	5.28	114.12	109.90
26	BB	2811	G	N3-C4-C5	-5.28	125.96	128.60
30	BF	19	PHE	CB-CG-CD2	5.28	124.50	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	64	G	C3'-C2'-C1'	5.28	105.72	101.50
1	AA	968	A	N1-C6-N6	-5.28	115.43	118.60
4	AD	51	U	P-O3'-C3'	5.28	126.03	119.70
26	BB	2	G	O4'-C1'-N9	5.28	112.42	108.20
26	BB	608	A	C5-N7-C8	-5.28	101.26	103.90
26	BB	1021	A	C4'-C3'-C2'	-5.28	97.32	102.60
26	BB	2627	G	N3-C4-C5	-5.28	125.96	128.60
1	AA	40	C	C5-C4-N4	-5.28	116.51	120.20
1	AA	119	A	C3'-C2'-C1'	5.28	105.72	101.50
1	AA	191	G	C5-C6-O6	5.28	131.77	128.60
1	AA	296	U	N3-C4-C5	5.28	117.77	114.60
1	AA	457	G	N3-C2-N2	5.28	123.59	119.90
1	AA	600	A	C5-C6-N1	-5.28	115.06	117.70
1	AA	606	G	C5-C6-O6	-5.28	125.43	128.60
1	AA	677	U	N3-C2-O2	-5.28	118.51	122.20
1	AA	1197	A	C5-N7-C8	-5.28	101.26	103.90
26	BB	317	G	C3'-C2'-C1'	5.28	105.72	101.50
26	BB	572	A	N1-C6-N6	5.28	121.77	118.60
26	BB	1823	G	C6-C5-N7	-5.28	127.23	130.40
26	BB	2249	U	N3-C4-O4	5.28	123.09	119.40
26	BB	2336	A	P-O3'-C3'	5.28	126.03	119.70
26	BB	2383	G	N3-C4-C5	-5.28	125.96	128.60
56	B5	27	GLY	O-C-N	-5.28	114.26	122.70
1	AA	41	G	N9-C1'-C2'	-5.28	106.20	112.00
1	AA	768	A	C5-N7-C8	-5.28	101.26	103.90
25	BA	16	G	C6-N1-C2	-5.28	121.94	125.10
25	BA	63	C	N3-C4-N4	5.28	121.69	118.00
26	BB	675	A	P-O3'-C3'	5.28	126.03	119.70
26	BB	952	G	N3-C4-N9	-5.28	122.83	126.00
26	BB	1260	A	C5-N7-C8	-5.28	101.26	103.90
26	BB	1360	G	P-O5'-C5'	5.28	129.34	120.90
26	BB	1874	C	C4'-C3'-C2'	-5.28	97.33	102.60
26	BB	1891	G	N9-C4-C5	5.28	107.51	105.40
26	BB	2800	A	N9-C1'-C2'	-5.28	106.20	112.00
1	AA	912	C	N3-C4-C5	5.27	124.01	121.90
1	AA	1002	G	C6-N1-C2	-5.27	121.94	125.10
25	BA	99	A	C5-C6-N6	5.27	127.92	123.70
26	BB	404	A	C5'-C4'-O4'	-5.27	102.77	109.10
26	BB	614	A	C5'-C4'-C3'	-5.27	107.56	116.00
26	BB	1260	A	C5-C6-N1	5.27	120.34	117.70
26	BB	1545	A	N3-C4-N9	-5.27	123.18	127.40
26	BB	2108	A	N7-C8-N9	5.27	116.44	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	238	A	N3-C4-N9	5.27	131.62	127.40
1	AA	744	C	C2'-C3'-O3'	5.27	122.14	113.70
1	AA	845	A	C6-N1-C2	-5.27	115.44	118.60
1	AA	874	G	N7-C8-N9	5.27	115.74	113.10
1	AA	937	A	O4'-C1'-N9	5.27	112.42	108.20
3	AC	34	U	C6-N1-C2	-5.27	117.84	121.00
6	AF	153	SER	N-CA-CB	-5.27	102.59	110.50
25	BA	57	A	O3'-P-O5'	-5.27	93.98	104.00
26	BB	595	C	N1-C2-O2	5.27	122.06	118.90
26	BB	607	U	N3-C2-O2	5.27	125.89	122.20
26	BB	663	G	N1-C2-N2	5.27	120.94	116.20
26	BB	859	G	C8-N9-C4	-5.27	104.29	106.40
26	BB	896	A	O4'-C1'-C2'	-5.27	100.53	105.80
26	BB	993	G	C6-C5-N7	5.27	133.56	130.40
26	BB	993	G	O4'-C1'-N9	5.27	112.42	108.20
26	BB	1640	A	C5'-C4'-O4'	5.27	115.43	109.10
26	BB	1882	U	C5-C4-O4	5.27	129.06	125.90
26	BB	2146	C	C6-N1-C1'	-5.27	114.47	120.80
26	BB	2809	A	C2-N3-C4	5.27	113.24	110.60
39	BO	93	VAL	CA-CB-CG1	5.27	118.81	110.90
48	BX	77	VAL	CA-CB-CG2	-5.27	102.99	110.90
1	AA	1052	U	N3-C4-C5	5.27	117.76	114.60
1	AA	1143	G	N3-C4-C5	-5.27	125.96	128.60
1	AA	1450	U	C5-C4-O4	5.27	129.06	125.90
25	BA	65	U	C4-C5-C6	5.27	122.86	119.70
26	BB	23	G	N9-C4-C5	5.27	107.51	105.40
26	BB	98	G	N9-C4-C5	5.27	107.51	105.40
26	BB	643	A	N9-C4-C5	5.27	107.91	105.80
26	BB	2095	A	O4'-C4'-C3'	5.27	110.32	106.10
26	BB	2711	A	C4'-C3'-C2'	-5.27	97.33	102.60
26	BB	2725	A	C4-C5-C6	-5.27	114.36	117.00
1	AA	445	G	N9-C1'-C2'	-5.27	106.20	112.00
1	AA	462	G	C5-C6-N1	5.27	114.14	111.50
1	AA	1071	C	C1'-O4'-C4'	-5.27	105.68	109.90
1	AA	1240	U	C4-C5-C6	-5.27	116.54	119.70
1	AA	1454	G	C5-C6-O6	-5.27	125.44	128.60
1	AA	1523	G	N9-C4-C5	5.27	107.51	105.40
12	AL	46	VAL	O-C-N	5.27	131.13	122.70
26	BB	45	G	C8-N9-C1'	5.27	133.85	127.00
26	BB	52	A	C5-C6-N1	-5.27	115.07	117.70
26	BB	215	G	O4'-C4'-C3'	-5.27	98.73	104.00
26	BB	885	C	C6-N1-C1'	-5.27	114.48	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1185	G	C2-N3-C4	5.27	114.53	111.90
26	BB	1312	U	C5-C4-O4	-5.27	122.74	125.90
26	BB	1623	G	N3-C4-N9	-5.27	122.84	126.00
26	BB	1687	G	C5'-C4'-O4'	5.27	115.42	109.10
26	BB	1741	C	O4'-C4'-C3'	5.27	110.31	106.10
26	BB	1919	A	N9-C4-C5	-5.27	103.69	105.80
26	BB	2344	U	N1-C2-O2	5.27	126.49	122.80
26	BB	2655	G	C4-C5-N7	5.27	112.91	110.80
26	BB	2787	C	P-O3'-C3'	5.27	126.02	119.70
32	BH	156	TYR	CG-CD2-CE2	-5.27	117.08	121.30
1	AA	230	G	N7-C8-N9	5.27	115.73	113.10
1	AA	548	G	C4-C5-C6	5.27	121.96	118.80
1	AA	553	A	N9-C4-C5	5.27	107.91	105.80
1	AA	864	A	C1'-O4'-C4'	-5.27	105.69	109.90
1	AA	949	A	N1-C2-N3	-5.27	126.67	129.30
1	AA	1009	U	O4'-C1'-N1	5.27	112.41	108.20
1	AA	1462	C	C5-C4-N4	5.27	123.89	120.20
1	AA	1467	C	C4-C5-C6	-5.27	114.77	117.40
1	AA	1473	G	C8-N9-C1'	5.27	133.85	127.00
6	AF	126	ARG	CD-NE-CZ	5.27	130.97	123.60
21	AU	9	PHE	CG-CD1-CE1	-5.27	115.00	120.80
22	AV	31	ARG	NE-CZ-NH2	-5.27	117.67	120.30
26	BB	509	C	O5'-P-OP2	-5.27	100.96	105.70
26	BB	987	C	O4'-C1'-N1	5.27	112.41	108.20
26	BB	1484	U	C2-N3-C4	-5.27	123.84	127.00
26	BB	2139	U	C5-C4-O4	-5.27	122.74	125.90
26	BB	2508	G	C6-C5-N7	-5.27	127.24	130.40
26	BB	2511	U	P-O3'-C3'	5.27	126.02	119.70
26	BB	2638	G	C2-N3-C4	5.27	114.53	111.90
26	BB	2638	G	N3-C4-C5	-5.27	125.97	128.60
26	BB	2852	G	N3-C4-N9	5.27	129.16	126.00
45	BU	17	VAL	CA-CB-CG2	-5.27	103.00	110.90
1	AA	14	U	N3-C2-O2	-5.27	118.51	122.20
1	AA	67	C	C4'-C3'-C2'	-5.27	97.33	102.60
1	AA	482	A	N1-C2-N3	5.27	131.93	129.30
26	BB	392	U	C3'-C2'-C1'	5.27	105.71	101.50
26	BB	452	G	N3-C4-C5	-5.27	125.97	128.60
26	BB	1493	C	C6-N1-C2	-5.27	118.19	120.30
26	BB	1590	A	O4'-C4'-C3'	5.27	110.31	106.10
26	BB	1766	G	C5-C6-O6	-5.27	125.44	128.60
26	BB	2654	A	N3-C4-N9	5.27	131.61	127.40
40	BP	64	ARG	NE-CZ-NH2	-5.27	117.67	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	164	G	C5'-C4'-O4'	5.26	115.42	109.10
1	AA	323	U	C4'-C3'-C2'	-5.26	97.34	102.60
1	AA	738	C	N1-C2-O2	5.26	122.06	118.90
1	AA	768	A	N1-C6-N6	-5.26	115.44	118.60
1	AA	860	A	O4'-C1'-N9	5.26	112.41	108.20
1	AA	915	A	C5-C6-N6	-5.26	119.49	123.70
1	AA	980	C	C5-C6-N1	5.26	123.63	121.00
26	BB	918	A	C3'-C2'-C1'	-5.26	97.29	101.50
26	BB	1299	G	C4'-C3'-C2'	5.26	107.86	102.60
26	BB	1375	U	N1-C2-N3	5.26	118.06	114.90
26	BB	1388	G	O4'-C4'-C3'	5.26	110.31	106.10
26	BB	1845	G	C5-C6-O6	-5.26	125.44	128.60
26	BB	1860	G	C4-C5-C6	-5.26	115.64	118.80
26	BB	1985	C	N1-C2-N3	-5.26	115.52	119.20
26	BB	2010	G	C2-N3-C4	5.26	114.53	111.90
26	BB	2093	G	N1-C2-N2	5.26	120.94	116.20
26	BB	2222	C	N3-C4-C5	5.26	124.01	121.90
26	BB	2270	A	O4'-C1'-C2'	-5.26	100.53	105.80
26	BB	2708	G	P-O5'-C5'	5.26	129.32	120.90
26	BB	2817	U	N3-C2-O2	-5.26	118.52	122.20
26	BB	2892	G	C6-N1-C2	-5.26	121.94	125.10
1	AA	345	C	C6-N1-C2	-5.26	118.19	120.30
1	AA	390	U	C6-N1-C2	-5.26	117.84	121.00
1	AA	757	U	C5-C6-N1	-5.26	120.07	122.70
1	AA	1134	G	C6-N1-C2	-5.26	121.94	125.10
3	AC	43	U	O4'-C4'-C3'	5.26	110.31	106.10
13	AM	84	VAL	CG1-CB-CG2	-5.26	102.48	110.90
25	BA	88	C	C5'-C4'-O4'	5.26	115.42	109.10
26	BB	1303	G	N7-C8-N9	-5.26	110.47	113.10
26	BB	1416	G	C1'-O4'-C4'	-5.26	105.69	109.90
26	BB	1989	G	C8-N9-C4	-5.26	104.30	106.40
26	BB	2750	A	N1-C2-N3	-5.26	126.67	129.30
36	BL	75	TYR	CB-CG-CD2	5.26	124.16	121.00
1	AA	167	A	N9-C1'-C2'	-5.26	106.21	112.00
1	AA	882	C	C6-N1-C2	5.26	122.41	120.30
1	AA	1084	G	C5-C6-O6	5.26	131.76	128.60
1	AA	1227	A	C5-C6-N6	5.26	127.91	123.70
26	BB	405	U	C6-N1-C2	-5.26	117.84	121.00
26	BB	549	G	N1-C2-N2	5.26	120.94	116.20
26	BB	1095	A	N3-C4-N9	-5.26	123.19	127.40
26	BB	1109	C	N3-C4-N4	5.26	121.68	118.00
26	BB	1146	C	P-O3'-C3'	5.26	126.01	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1216	G	C2-N3-C4	-5.26	109.27	111.90
26	BB	1635	A	O4'-C4'-C3'	5.26	110.31	106.10
26	BB	1755	A	C1'-O4'-C4'	-5.26	105.69	109.90
26	BB	1846	G	N1-C2-N3	-5.26	120.74	123.90
26	BB	2099	U	C5-C4-O4	-5.26	122.74	125.90
26	BB	2305	U	C5'-C4'-O4'	5.26	115.42	109.10
35	BK	37	PHE	CB-CG-CD1	-5.26	117.12	120.80
57	B6	44	ARG	NH1-CZ-NH2	-5.26	113.61	119.40
1	AA	235	C	C6-N1-C2	5.26	122.40	120.30
1	AA	586	C	C1'-O4'-C4'	-5.26	105.69	109.90
1	AA	652	U	N3-C4-C5	-5.26	111.44	114.60
1	AA	694	A	C5-C6-N1	5.26	120.33	117.70
1	AA	724	G	N1-C2-N3	-5.26	120.74	123.90
1	AA	844	G	N1-C2-N3	5.26	127.06	123.90
1	AA	1094	G	O5'-C5'-C4'	5.26	121.69	111.70
1	AA	1351	U	C4-C5-C6	5.26	122.86	119.70
1	AA	1388	C	O5'-P-OP2	-5.26	100.97	105.70
1	AA	1477	U	C5'-C4'-O4'	5.26	115.41	109.10
26	BB	210	C	C5-C4-N4	-5.26	116.52	120.20
26	BB	295	G	N9-C4-C5	5.26	107.50	105.40
26	BB	381	G	C5'-C4'-C3'	-5.26	107.59	116.00
26	BB	862	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	BB	916	G	C2-N3-C4	5.26	114.53	111.90
26	BB	1395	A	N3-C4-N9	-5.26	123.19	127.40
26	BB	2011	U	C3'-C2'-C1'	5.26	105.71	101.50
26	BB	2162	G	N3-C4-C5	-5.26	125.97	128.60
26	BB	2454	G	C5'-C4'-O4'	5.26	115.41	109.10
26	BB	2729	G	N1-C6-O6	5.26	123.06	119.90
1	AA	399	G	C2-N3-C4	5.26	114.53	111.90
1	AA	858	G	C5'-C4'-O4'	5.26	115.41	109.10
1	AA	941	G	C5-N7-C8	-5.26	101.67	104.30
4	AD	2	G	C5'-C4'-C3'	-5.26	107.59	116.00
26	BB	901	C	C5-C6-N1	-5.26	118.37	121.00
26	BB	1327	A	C3'-C2'-C1'	-5.26	97.29	101.50
1	AA	85	U	C6-N1-C1'	-5.26	113.84	121.20
1	AA	517	G	C5'-C4'-O4'	5.26	115.41	109.10
1	AA	1177	G	N3-C4-C5	-5.26	125.97	128.60
1	AA	1277	C	C4-C5-C6	5.26	120.03	117.40
1	AA	1354	U	C5'-C4'-O4'	5.26	115.41	109.10
1	AA	1395	C	C5-C6-N1	5.26	123.63	121.00
25	BA	68	C	C4'-C3'-C2'	-5.26	97.34	102.60
26	BB	49	A	N9-C4-C5	5.26	107.90	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	313	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	BB	601	C	C6-N1-C2	-5.26	118.20	120.30
26	BB	606	U	N1-C2-N3	5.26	118.05	114.90
26	BB	684	G	C6-N1-C2	5.26	128.25	125.10
26	BB	769	U	C5'-C4'-O4'	5.26	115.41	109.10
26	BB	1149	G	C4'-C3'-C2'	-5.26	97.34	102.60
26	BB	1216	G	C8-N9-C4	5.26	108.50	106.40
26	BB	1326	U	C5-C4-O4	-5.26	122.75	125.90
26	BB	1866	A	C5-C6-N1	5.26	120.33	117.70
26	BB	2013	A	N7-C8-N9	-5.26	111.17	113.80
26	BB	2392	A	O5'-P-OP1	5.26	117.01	110.70
26	BB	2726	A	N7-C8-N9	5.26	116.43	113.80
26	BB	2852	G	O4'-C1'-N9	5.26	112.41	108.20
34	BJ	40	LEU	CB-CG-CD2	5.26	119.94	111.00
1	AA	1370	G	N1-C2-N3	-5.25	120.75	123.90
26	BB	687	C	C3'-C2'-C1'	-5.25	97.30	101.50
26	BB	1270	C	N3-C4-C5	5.25	124.00	121.90
26	BB	2159	G	C1'-O4'-C4'	-5.25	105.70	109.90
1	AA	499	A	C4'-C3'-C2'	-5.25	97.35	102.60
1	AA	1149	C	O4'-C1'-C2'	-5.25	100.55	105.80
1	AA	1282	C	N1-C2-N3	-5.25	115.52	119.20
24	AX	32	ARG	CD-NE-CZ	5.25	130.96	123.60
25	BA	66	A	C6-N1-C2	5.25	121.75	118.60
26	BB	265	A	C4-C5-C6	-5.25	114.37	117.00
26	BB	502	A	P-O3'-C3'	5.25	126.00	119.70
26	BB	1218	G	N1-C6-O6	-5.25	116.75	119.90
26	BB	1333	G	C4-C5-C6	5.25	121.95	118.80
26	BB	1466	U	C2-N3-C4	-5.25	123.85	127.00
26	BB	1482	G	N1-C6-O6	-5.25	116.75	119.90
26	BB	1675	C	C4-C5-C6	-5.25	114.77	117.40
26	BB	1773	A	C4'-C3'-C2'	-5.25	97.35	102.60
26	BB	1990	C	C1'-O4'-C4'	5.25	114.10	109.90
26	BB	2509	G	C6-N1-C2	-5.25	121.95	125.10
26	BB	2568	U	C5'-C4'-O4'	5.25	115.41	109.10
34	BJ	111	ALA	CB-CA-C	5.25	117.98	110.10
45	BU	95	ARG	CB-CG-CD	5.25	125.26	111.60
1	AA	363	A	C4-C5-N7	5.25	113.33	110.70
1	AA	841	C	N1-C1'-C2'	-5.25	106.22	112.00
1	AA	885	G	C6-C5-N7	-5.25	127.25	130.40
1	AA	1092	A	C5-N7-C8	-5.25	101.28	103.90
1	AA	1222	G	N3-C4-C5	-5.25	125.97	128.60
1	AA	1397	C	P-O3'-C3'	5.25	126.00	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AC	30	U	C4'-C3'-C2'	-5.25	97.35	102.60
26	BB	153	U	C6-N1-C2	-5.25	117.85	121.00
26	BB	221	A	N3-C4-C5	-5.25	123.12	126.80
26	BB	393	C	C4'-C3'-O3'	5.25	123.50	113.00
26	BB	669	G	N1-C2-N2	5.25	120.93	116.20
26	BB	675	A	C4'-C3'-C2'	-5.25	97.35	102.60
26	BB	1030	C	O4'-C1'-N1	5.25	112.40	108.20
26	BB	1069	A	C3'-C2'-C1'	5.25	105.70	101.50
26	BB	1286	A	P-O3'-C3'	5.25	126.00	119.70
26	BB	1315	C	P-O3'-C3'	5.25	126.00	119.70
26	BB	1499	C	C5-C6-N1	5.25	123.63	121.00
26	BB	1548	A	C5-N7-C8	5.25	106.53	103.90
26	BB	1660	G	C4-C5-N7	5.25	112.90	110.80
26	BB	1714	U	C6-N1-C1'	-5.25	113.85	121.20
26	BB	2454	G	C4'-C3'-C2'	-5.25	97.35	102.60
26	BB	2557	G	N1-C2-N2	5.25	120.93	116.20
39	BO	59	ARG	NE-CZ-NH1	5.25	122.93	120.30
41	BQ	64	TYR	CZ-CE2-CD2	5.25	124.53	119.80
41	BQ	99	TYR	CB-CG-CD1	-5.25	117.85	121.00
1	AA	1457	G	C5-N7-C8	-5.25	101.67	104.30
25	BA	104	A	C1'-O4'-C4'	-5.25	105.70	109.90
26	BB	68	G	N3-C4-C5	5.25	131.22	128.60
26	BB	585	G	C5-C6-O6	-5.25	125.45	128.60
26	BB	1042	G	N1-C2-N3	-5.25	120.75	123.90
26	BB	2427	C	O5'-C5'-C4'	5.25	121.67	111.70
26	BB	2870	C	C4'-C3'-C2'	5.25	107.85	102.60
1	AA	962	C	N3-C4-C5	5.25	124.00	121.90
1	AA	1284	C	N3-C4-C5	-5.25	119.80	121.90
1	AA	1520	C	N3-C2-O2	-5.25	118.23	121.90
26	BB	215	G	O4'-C1'-N9	5.25	112.40	108.20
26	BB	295	G	C5-C6-N1	5.25	114.12	111.50
26	BB	466	A	O4'-C1'-N9	5.25	112.40	108.20
26	BB	531	C	O3'-P-O5'	-5.25	94.03	104.00
26	BB	883	G	C5-C6-O6	-5.25	125.45	128.60
26	BB	1000	A	N9-C4-C5	5.25	107.90	105.80
26	BB	1346	G	C6-C5-N7	-5.25	127.25	130.40
26	BB	1466	U	C5-C6-N1	-5.25	120.08	122.70
26	BB	1494	A	C5'-C4'-O4'	5.25	115.40	109.10
26	BB	1540	G	C5-N7-C8	-5.25	101.68	104.30
26	BB	1723	G	C5-N7-C8	-5.25	101.68	104.30
26	BB	1747	U	C4-C5-C6	5.25	122.85	119.70
26	BB	1773	A	C5-N7-C8	-5.25	101.28	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1971	U	O4'-C1'-N1	5.25	112.40	108.20
26	BB	2123	G	O4'-C1'-N9	5.25	112.40	108.20
26	BB	2150	C	C2-N1-C1'	-5.25	113.03	118.80
26	BB	2271	G	C6-N1-C2	-5.25	121.95	125.10
26	BB	2651	C	P-O3'-C3'	5.25	126.00	119.70
1	AA	159	G	C3'-C2'-C1'	5.25	105.70	101.50
1	AA	597	G	O4'-C1'-N9	5.25	112.40	108.20
1	AA	794	A	C6-N1-C2	5.25	121.75	118.60
1	AA	814	A	N9-C1'-C2'	-5.25	106.23	112.00
1	AA	1178	G	C6-N1-C2	-5.25	121.95	125.10
1	AA	1304	G	C5-C6-N1	5.25	114.12	111.50
2	AB	51	G	N3-C2-N2	-5.25	116.23	119.90
10	AJ	60	ALA	N-CA-CB	-5.25	102.75	110.10
26	BB	24	G	N3-C2-N2	5.25	123.57	119.90
26	BB	271	G	N1-C2-N2	5.25	120.92	116.20
26	BB	364	C	C1'-O4'-C4'	-5.25	105.70	109.90
26	BB	1156	A	C6-C5-N7	5.25	135.97	132.30
26	BB	1431	A	C5'-C4'-O4'	5.25	115.40	109.10
26	BB	1478	G	C2-N3-C4	-5.25	109.28	111.90
26	BB	1485	U	C5-C4-O4	-5.25	122.75	125.90
26	BB	1528	A	N1-C6-N6	5.25	121.75	118.60
26	BB	1536	C	N3-C2-O2	-5.25	118.23	121.90
26	BB	1591	A	N9-C4-C5	5.25	107.90	105.80
26	BB	1613	G	C8-N9-C4	-5.25	104.30	106.40
26	BB	1706	C	O4'-C4'-C3'	5.25	110.30	106.10
26	BB	1712	U	C4'-C3'-C2'	-5.25	97.35	102.60
26	BB	2166	U	N1-C2-N3	5.25	118.05	114.90
26	BB	2542	A	N9-C4-C5	-5.25	103.70	105.80
26	BB	2689	U	C5-C6-N1	-5.25	120.08	122.70
26	BB	2698	U	N3-C4-O4	5.25	123.07	119.40
1	AA	667	G	C6-N1-C2	-5.25	121.95	125.10
4	AD	70	C	C5-C4-N4	-5.25	116.53	120.20
14	AN	57	SER	CB-CA-C	5.25	120.07	110.10
26	BB	613	A	C8-N9-C4	-5.25	103.70	105.80
26	BB	1101	U	N1-C1'-C2'	-5.25	106.23	112.00
26	BB	1744	A	N9-C1'-C2'	-5.25	106.23	112.00
26	BB	2277	G	O4'-C1'-C2'	5.25	112.32	107.60
26	BB	2777	G	N3-C4-N9	5.25	129.15	126.00
26	BB	2836	U	C4-C5-C6	5.25	122.85	119.70
1	AA	164	G	C4'-C3'-C2'	-5.24	97.36	102.60
1	AA	221	C	C5-C6-N1	5.24	123.62	121.00
1	AA	290	C	N1-C2-O2	5.24	122.05	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	299	G	N1-C2-N3	-5.24	120.75	123.90
1	AA	643	C	C5'-C4'-O4'	5.24	115.39	109.10
1	AA	890	G	C5-N7-C8	-5.24	101.68	104.30
1	AA	890	G	N3-C4-N9	5.24	129.15	126.00
1	AA	970	C	N1-C2-O2	5.24	122.05	118.90
1	AA	1258	G	O5'-C5'-C4'	5.24	121.66	111.70
1	AA	1363	A	C5-C6-N1	-5.24	115.08	117.70
6	AF	200	TRP	CE2-CD2-CE3	-5.24	112.41	118.70
7	AG	75	TYR	CB-CG-CD1	-5.24	117.85	121.00
26	BB	368	A	C3'-C2'-C1'	-5.24	97.31	101.50
26	BB	454	A	C2-N3-C4	5.24	113.22	110.60
26	BB	607	U	C4'-C3'-C2'	-5.24	97.36	102.60
26	BB	641	U	N3-C2-O2	-5.24	118.53	122.20
26	BB	758	C	C2-N3-C4	5.24	122.52	119.90
26	BB	861	A	C4-C5-C6	-5.24	114.38	117.00
26	BB	1072	C	C5-C4-N4	5.24	123.87	120.20
26	BB	1316	U	C2-N3-C4	-5.24	123.85	127.00
26	BB	1373	A	N1-C2-N3	-5.24	126.68	129.30
26	BB	1610	A	C5-C6-N6	5.24	127.89	123.70
26	BB	1642	G	N3-C4-N9	-5.24	122.85	126.00
26	BB	1842	G	C4'-C3'-C2'	-5.24	97.36	102.60
26	BB	2294	G	C1'-O4'-C4'	-5.24	105.70	109.90
26	BB	2296	U	C5-C4-O4	5.24	129.05	125.90
26	BB	2326	C	N1-C2-N3	-5.24	115.53	119.20
26	BB	2341	G	N3-C4-C5	-5.24	125.98	128.60
26	BB	2481	G	C5'-C4'-C3'	-5.24	107.61	116.00
26	BB	2698	U	N3-C2-O2	-5.24	118.53	122.20
1	AA	1051	C	C6-N1-C1'	5.24	127.09	120.80
1	AA	1453	G	C4-C5-C6	5.24	121.94	118.80
4	AD	30	G	N3-C4-N9	5.24	129.15	126.00
26	BB	1137	G	C4'-C3'-C2'	-5.24	97.36	102.60
26	BB	1589	U	C2-N3-C4	-5.24	123.86	127.00
26	BB	1591	A	C4-C5-C6	5.24	119.62	117.00
26	BB	2287	A	O4'-C4'-C3'	5.24	110.29	106.10
26	BB	2312	U	C5'-C4'-O4'	-5.24	102.81	109.10
1	AA	48	C	OP2-P-O3'	5.24	116.73	105.20
1	AA	268	U	C5'-C4'-O4'	5.24	115.39	109.10
1	AA	535	A	N1-C6-N6	5.24	121.74	118.60
1	AA	1390	U	C6-N1-C2	-5.24	117.86	121.00
2	AB	42	G	O4'-C1'-N9	5.24	112.39	108.20
4	AD	19	G	C4'-C3'-C2'	-5.24	97.36	102.60
25	BA	112	G	N1-C6-O6	-5.24	116.76	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	138	U	O4'-C1'-C2'	-5.24	100.56	105.80
26	BB	145	C	C3'-C2'-C1'	-5.24	97.31	101.50
26	BB	196	A	C1'-O4'-C4'	-5.24	105.71	109.90
26	BB	696	G	N3-C2-N2	-5.24	116.23	119.90
26	BB	1444	G	N3-C2-N2	-5.24	116.23	119.90
26	BB	2109	U	C6-N1-C2	-5.24	117.86	121.00
26	BB	2391	G	N1-C2-N3	5.24	127.05	123.90
26	BB	2631	G	N1-C2-N2	5.24	120.92	116.20
1	AA	217	C	C2-N3-C4	-5.24	117.28	119.90
1	AA	1167	A	P-O3'-C3'	5.24	125.99	119.70
1	AA	1482	G	C4-C5-C6	5.24	121.94	118.80
4	AD	54	G	C8-N9-C4	5.24	108.50	106.40
26	BB	17	G	C5-C6-N1	5.24	114.12	111.50
26	BB	64	A	P-O3'-C3'	5.24	125.99	119.70
26	BB	125	A	C8-N9-C4	-5.24	103.70	105.80
26	BB	136	G	C4'-C3'-C2'	-5.24	97.36	102.60
26	BB	154	U	C5-C6-N1	-5.24	120.08	122.70
26	BB	303	G	C3'-C2'-C1'	-5.24	97.31	101.50
26	BB	537	G	C8-N9-C1'	5.24	133.81	127.00
26	BB	579	G	O4'-C1'-C2'	5.24	112.31	107.60
26	BB	768	G	O5'-P-OP2	-5.24	100.98	105.70
26	BB	873	C	N3-C2-O2	-5.24	118.23	121.90
26	BB	1777	U	C4-C5-C6	5.24	122.84	119.70
26	BB	1826	G	C5'-C4'-O4'	5.24	115.39	109.10
26	BB	1997	C	C5-C4-N4	-5.24	116.53	120.20
26	BB	2467	C	O3'-P-O5'	-5.24	94.05	104.00
26	BB	2536	G	C4'-C3'-C2'	-5.24	97.36	102.60
26	BB	2588	G	C2-N3-C4	5.24	114.52	111.90
31	BG	173	ASP	C-N-CA	5.24	134.80	121.70
1	AA	198	G	C4'-C3'-C2'	-5.24	97.36	102.60
1	AA	927	G	N7-C8-N9	-5.24	110.48	113.10
1	AA	1503	A	N3-C4-C5	-5.24	123.13	126.80
4	AD	26	C	P-O3'-C3'	5.24	125.98	119.70
4	AD	48	U	O4'-C1'-C2'	5.24	112.31	107.60
26	BB	159	G	C5-C6-N1	5.24	114.12	111.50
26	BB	286	U	C4'-C3'-C2'	-5.24	97.36	102.60
26	BB	688	U	N1-C2-N3	5.24	118.04	114.90
26	BB	1102	C	C5'-C4'-C3'	-5.24	107.62	116.00
26	BB	1605	C	C6-N1-C2	5.24	122.39	120.30
26	BB	2002	G	C4'-C3'-C2'	-5.24	97.36	102.60
26	BB	2578	G	C6-N1-C2	-5.24	121.96	125.10
1	AA	237	G	C2-N3-C4	5.24	114.52	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	373	A	C5-N7-C8	-5.24	101.28	103.90
1	AA	443	C	C5-C6-N1	5.24	123.62	121.00
1	AA	1008	U	N1-C2-N3	5.24	118.04	114.90
1	AA	1223	C	C2-N3-C4	-5.24	117.28	119.90
4	AD	5	G	C8-N9-C1'	5.24	133.81	127.00
10	AJ	72	VAL	CA-CB-CG1	5.24	118.75	110.90
12	AL	37	TYR	CD1-CG-CD2	5.24	123.66	117.90
26	BB	298	G	N1-C2-N3	-5.24	120.76	123.90
26	BB	459	U	C5-C6-N1	-5.24	120.08	122.70
26	BB	782	A	N9-C4-C5	-5.24	103.70	105.80
26	BB	841	G	C5-C6-O6	5.24	131.74	128.60
26	BB	886	A	C5'-C4'-C3'	-5.24	107.62	116.00
26	BB	1015	U	N1-C2-O2	5.24	126.47	122.80
26	BB	1151	A	N1-C2-N3	-5.24	126.68	129.30
26	BB	1242	U	C2-N3-C4	-5.24	123.86	127.00
26	BB	2423	U	N3-C4-C5	5.24	117.74	114.60
26	BB	2848	G	C3'-C2'-C1'	-5.24	97.31	101.50
1	AA	554	A	C5-N7-C8	5.23	106.52	103.90
1	AA	647	C	C2-N3-C4	5.23	122.52	119.90
1	AA	689	C	C2-N3-C4	-5.23	117.28	119.90
1	AA	842	U	C5-C4-O4	-5.23	122.76	125.90
3	AC	51	C	O4'-C1'-N1	5.23	112.39	108.20
26	BB	180	G	O4'-C4'-C3'	-5.23	98.77	104.00
26	BB	1541	C	C3'-C2'-C1'	5.23	105.69	101.50
26	BB	2233	U	O4'-C1'-N1	5.23	112.39	108.20
26	BB	2334	U	C5-C4-O4	-5.23	122.76	125.90
26	BB	2340	A	C5-N7-C8	-5.23	101.28	103.90
26	BB	2349	G	C4'-C3'-O3'	5.23	123.47	113.00
26	BB	2791	G	N1-C6-O6	-5.23	116.76	119.90
37	BM	69	VAL	CA-CB-CG2	5.23	118.75	110.90
1	AA	156	C	P-O3'-C3'	5.23	125.98	119.70
1	AA	734	G	N7-C8-N9	5.23	115.72	113.10
1	AA	1275	A	C8-N9-C4	-5.23	103.71	105.80
4	AD	69	C	O4'-C1'-C2'	-5.23	100.57	105.80
26	BB	3	U	N1-C2-O2	5.23	126.46	122.80
26	BB	634	C	O4'-C1'-N1	5.23	112.39	108.20
26	BB	735	A	C5-N7-C8	-5.23	101.28	103.90
26	BB	789	A	O4'-C1'-N9	5.23	112.39	108.20
26	BB	859	G	O3'-P-O5'	-5.23	94.06	104.00
26	BB	1004	U	N1-C1'-C2'	-5.23	106.24	112.00
26	BB	1201	U	O3'-P-O5'	-5.23	94.06	104.00
26	BB	1448	G	C5-C6-N1	5.23	114.12	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1481	U	N1-C2-N3	5.23	118.04	114.90
26	BB	1572	A	N1-C2-N3	-5.23	126.68	129.30
26	BB	1622	G	N1-C6-O6	-5.23	116.76	119.90
26	BB	2461	A	C2-N3-C4	5.23	113.22	110.60
26	BB	2880	C	C3'-C2'-C1'	-5.23	97.31	101.50
1	AA	102	G	C5-C6-N1	5.23	114.11	111.50
1	AA	334	C	C2-N1-C1'	-5.23	113.05	118.80
1	AA	532	A	C4-C5-N7	-5.23	108.08	110.70
1	AA	551	U	O4'-C1'-N1	5.23	112.38	108.20
1	AA	904	U	N1-C2-O2	-5.23	119.14	122.80
1	AA	907	A	C5-C6-N1	-5.23	115.08	117.70
1	AA	962	C	C1'-O4'-C4'	-5.23	105.72	109.90
1	AA	1030	U	P-O3'-C3'	5.23	125.98	119.70
1	AA	1160	G	C8-N9-C4	-5.23	104.31	106.40
1	AA	1201	A	C5'-C4'-C3'	-5.23	107.63	116.00
1	AA	1411	C	P-O3'-C3'	5.23	125.98	119.70
1	AA	1471	U	N3-C4-O4	-5.23	115.74	119.40
2	AB	53	G	N3-C4-C5	-5.23	125.98	128.60
25	BA	56	G	N1-C6-O6	-5.23	116.76	119.90
26	BB	262	A	C6-C5-N7	5.23	135.96	132.30
26	BB	766	U	N3-C2-O2	5.23	125.86	122.20
26	BB	1021	A	C6-C5-N7	5.23	135.96	132.30
26	BB	1039	A	C8-N9-C4	-5.23	103.71	105.80
26	BB	1092	C	C5'-C4'-O4'	5.23	115.38	109.10
26	BB	1272	A	P-O3'-C3'	5.23	125.98	119.70
26	BB	1734	G	O4'-C1'-N9	5.23	112.38	108.20
26	BB	2055	C	C1'-O4'-C4'	-5.23	105.72	109.90
26	BB	2071	A	N1-C2-N3	5.23	131.91	129.30
26	BB	2228	G	N9-C4-C5	5.23	107.49	105.40
26	BB	2255	G	N7-C8-N9	5.23	115.72	113.10
26	BB	2312	U	P-O3'-C3'	5.23	125.98	119.70
26	BB	2397	G	N3-C4-N9	5.23	129.14	126.00
1	AA	236	A	C5'-C4'-O4'	5.23	115.38	109.10
1	AA	911	U	C4'-C3'-C2'	5.23	107.83	102.60
5	AE	14	HIS	N-CA-CB	-5.23	101.19	110.60
9	AI	89	VAL	CB-CA-C	5.23	121.33	111.40
25	BA	24	G	P-O3'-C3'	5.23	125.97	119.70
26	BB	553	G	N1-C2-N2	5.23	120.91	116.20
26	BB	1448	G	P-O3'-C3'	5.23	125.97	119.70
26	BB	1797	G	N7-C8-N9	5.23	115.71	113.10
26	BB	1938	A	N9-C1'-C2'	5.23	120.80	114.00
26	BB	2047	C	P-O3'-C3'	5.23	125.97	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2209	G	O4'-C1'-N9	5.23	112.38	108.20
26	BB	2221	G	C5-N7-C8	-5.23	101.69	104.30
26	BB	2236	U	C1'-O4'-C4'	5.23	114.08	109.90
26	BB	2650	U	O4'-C1'-C2'	-5.23	100.57	105.80
1	AA	573	A	C5-N7-C8	-5.23	101.29	103.90
1	AA	757	U	C4-C5-C6	5.23	122.84	119.70
1	AA	1084	G	C5-N7-C8	5.23	106.91	104.30
1	AA	1104	G	N7-C8-N9	-5.23	110.49	113.10
1	AA	1278	G	C5'-C4'-O4'	5.23	115.37	109.10
1	AA	1389	C	C4-C5-C6	5.23	120.01	117.40
7	AG	46	ARG	NE-CZ-NH1	-5.23	117.69	120.30
26	BB	1	G	C6-C5-N7	5.23	133.54	130.40
26	BB	292	U	C1'-O4'-C4'	-5.23	105.72	109.90
26	BB	660	C	O3'-P-O5'	-5.23	94.07	104.00
26	BB	1087	G	N3-C4-N9	-5.23	122.86	126.00
26	BB	1182	G	N3-C4-N9	5.23	129.14	126.00
26	BB	1519	G	C1'-O4'-C4'	5.23	114.08	109.90
26	BB	2155	U	C5-C4-O4	-5.23	122.76	125.90
26	BB	2633	G	C5-C6-N1	5.23	114.11	111.50
40	BP	120	GLU	OE1-CD-OE2	5.23	129.57	123.30
43	BS	116	LEU	CB-CG-CD2	-5.23	102.11	111.00
1	AA	200	G	C8-N9-C4	-5.23	104.31	106.40
1	AA	501	C	C6-N1-C2	-5.23	118.21	120.30
1	AA	753	A	N1-C2-N3	-5.23	126.69	129.30
1	AA	979	C	N1-C2-O2	5.23	122.04	118.90
1	AA	1255	G	C4-C5-N7	5.23	112.89	110.80
25	BA	46	A	C5'-C4'-O4'	5.23	115.37	109.10
26	BB	467	G	C1'-O4'-C4'	5.23	114.08	109.90
26	BB	1426	G	O4'-C1'-C2'	-5.23	100.57	105.80
26	BB	2022	U	N1-C2-N3	5.23	118.03	114.90
26	BB	2581	G	C4-C5-C6	5.23	121.94	118.80
47	BW	5	ARG	NE-CZ-NH1	5.23	122.91	120.30
1	AA	852	G	C2-N3-C4	5.22	114.51	111.90
1	AA	987	G	P-O3'-C3'	5.22	125.97	119.70
1	AA	1006	G	C1'-O4'-C4'	5.22	114.08	109.90
1	AA	1238	A	C5-C6-N6	-5.22	119.52	123.70
1	AA	1289	A	N1-C6-N6	-5.22	115.47	118.60
1	AA	1528	U	C2-N1-C1'	5.22	123.97	117.70
1	AA	1542	A	N9-C1'-C2'	5.22	120.79	114.00
4	AD	18	U	C5-C4-O4	5.22	129.03	125.90
4	AD	22	A	P-O3'-C3'	5.22	125.97	119.70
26	BB	21	A	C6-N1-C2	-5.22	115.47	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	30	G	C5-N7-C8	-5.22	101.69	104.30
26	BB	75	G	N1-C2-N2	5.22	120.90	116.20
26	BB	109	C	N1-C2-N3	-5.22	115.54	119.20
26	BB	255	A	C2-N3-C4	-5.22	107.99	110.60
26	BB	674	G	N3-C4-N9	-5.22	122.86	126.00
26	BB	1095	A	N9-C4-C5	5.22	107.89	105.80
26	BB	1258	U	O4'-C1'-N1	5.22	112.38	108.20
26	BB	1315	C	C3'-C2'-C1'	-5.22	97.32	101.50
26	BB	1378	A	N9-C4-C5	5.22	107.89	105.80
26	BB	1393	A	N1-C6-N6	-5.22	115.47	118.60
26	BB	1503	A	C3'-C2'-C1'	5.22	105.68	101.50
26	BB	1577	C	N1-C2-O2	5.22	122.03	118.90
26	BB	1677	A	C5-N7-C8	-5.22	101.29	103.90
26	BB	1840	G	N9-C4-C5	-5.22	103.31	105.40
26	BB	1895	C	C3'-C2'-C1'	5.22	105.68	101.50
26	BB	2642	G	C8-N9-C4	-5.22	104.31	106.40
26	BB	2849	U	N3-C4-C5	-5.22	111.47	114.60
32	BH	75	VAL	CG1-CB-CG2	-5.22	102.54	110.90
35	BK	100	ILE	CA-CB-CG2	5.22	121.35	110.90
1	AA	208	U	C5-C6-N1	-5.22	120.09	122.70
1	AA	227	G	N3-C2-N2	5.22	123.56	119.90
1	AA	378	G	C4-C5-N7	-5.22	108.71	110.80
1	AA	781	A	O5'-C5'-C4'	5.22	121.62	111.70
1	AA	1136	C	N3-C4-C5	-5.22	119.81	121.90
1	AA	1317	C	N3-C2-O2	-5.22	118.24	121.90
1	AA	1322	C	C2-N3-C4	5.22	122.51	119.90
1	AA	1349	A	N1-C6-N6	-5.22	115.47	118.60
4	AD	69	C	C3'-C2'-C1'	5.22	105.68	101.50
26	BB	234	U	C5'-C4'-C3'	5.22	124.36	116.00
26	BB	583	G	N1-C6-O6	-5.22	116.77	119.90
26	BB	1109	C	N3-C4-C5	-5.22	119.81	121.90
26	BB	1261	C	N3-C4-N4	5.22	121.66	118.00
26	BB	1406	U	C5-C6-N1	-5.22	120.09	122.70
26	BB	1758	U	C6-N1-C2	-5.22	117.87	121.00
26	BB	1988	G	C5-C6-N1	5.22	114.11	111.50
26	BB	2316	G	N3-C2-N2	5.22	123.56	119.90
26	BB	2784	U	C5-C6-N1	-5.22	120.09	122.70
26	BB	2818	U	N1-C2-N3	5.22	118.03	114.90
26	BB	2862	G	N9-C4-C5	5.22	107.49	105.40
44	BT	51	VAL	CA-CB-CG2	5.22	118.73	110.90
1	AA	652	U	O4'-C1'-C2'	-5.22	100.58	105.80
1	AA	685	G	N7-C8-N9	5.22	115.71	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	893	C	C5-C4-N4	-5.22	116.55	120.20
18	AR	20	ASP	O-C-N	5.22	131.05	122.70
25	BA	55	U	C5'-C4'-C3'	-5.22	107.65	116.00
26	BB	1168	G	C4'-C3'-C2'	5.22	107.82	102.60
26	BB	2306	C	N1-C2-N3	5.22	122.86	119.20
26	BB	2772	C	C5-C4-N4	-5.22	116.55	120.20
1	AA	457	G	N1-C2-N3	5.22	127.03	123.90
1	AA	1081	A	N9-C1'-C2'	-5.22	106.26	112.00
1	AA	1180	A	C2-N3-C4	5.22	113.21	110.60
1	AA	1297	G	C4-C5-N7	-5.22	108.71	110.80
1	AA	1300	G	OP1-P-O3'	5.22	116.69	105.20
1	AA	1348	U	N1-C2-O2	5.22	126.45	122.80
4	AD	65	G	C5'-C4'-O4'	-5.22	102.84	109.10
22	AV	47	THR	CA-CB-CG2	5.22	119.71	112.40
26	BB	403	U	C2-N3-C4	5.22	130.13	127.00
26	BB	548	G	C8-N9-C4	-5.22	104.31	106.40
26	BB	792	A	O4'-C4'-C3'	5.22	110.28	106.10
26	BB	908	C	C6-N1-C1'	-5.22	114.54	120.80
26	BB	1082	U	C5-C4-O4	5.22	129.03	125.90
26	BB	1093	G	N1-C2-N3	5.22	127.03	123.90
26	BB	1474	U	N1-C2-N3	5.22	118.03	114.90
26	BB	1489	C	C6-N1-C2	-5.22	118.21	120.30
26	BB	1770	G	C4-C5-N7	-5.22	108.71	110.80
26	BB	1798	U	N3-C2-O2	-5.22	118.55	122.20
26	BB	2143	C	C5-C6-N1	5.22	123.61	121.00
26	BB	2280	G	C2-N3-C4	-5.22	109.29	111.90
26	BB	2745	C	C5'-C4'-O4'	5.22	115.36	109.10
1	AA	729	A	N9-C4-C5	5.22	107.89	105.80
1	AA	805	C	N1-C1'-C2'	-5.22	106.26	112.00
1	AA	879	C	O4'-C1'-N1	5.22	112.37	108.20
1	AA	1316	G	C6-N1-C2	-5.22	121.97	125.10
2	AB	19	G	C2-N3-C4	5.22	114.51	111.90
26	BB	778	G	N3-C2-N2	-5.22	116.25	119.90
26	BB	973	A	C3'-C2'-C1'	5.22	105.67	101.50
26	BB	1261	C	C2-N3-C4	5.22	122.51	119.90
26	BB	1602	U	C6-N1-C2	5.22	124.13	121.00
26	BB	1819	A	N1-C2-N3	5.22	131.91	129.30
26	BB	2850	A	C4'-C3'-C2'	-5.22	97.38	102.60
43	BS	23	TYR	CZ-CE2-CD2	5.22	124.50	119.80
1	AA	322	C	C4'-C3'-C2'	-5.22	97.38	102.60
1	AA	358	U	C3'-C2'-C1'	-5.22	97.33	101.50
1	AA	432	A	N7-C8-N9	5.22	116.41	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1094	G	C6-C5-N7	5.22	133.53	130.40
1	AA	1294	G	O4'-C1'-N9	5.22	112.37	108.20
1	AA	1302	C	O3'-P-O5'	-5.22	94.09	104.00
3	AC	21	U	N1-C2-O2	5.22	126.45	122.80
26	BB	484	C	C2-N3-C4	-5.22	117.29	119.90
26	BB	783	A	N3-C4-C5	-5.22	123.15	126.80
26	BB	1266	G	N1-C6-O6	-5.22	116.77	119.90
26	BB	1299	G	O4'-C1'-N9	5.22	112.37	108.20
26	BB	1464	G	C5-C6-O6	5.22	131.73	128.60
26	BB	1535	A	C4-C5-N7	5.22	113.31	110.70
26	BB	1922	G	C4'-C3'-C2'	-5.22	97.38	102.60
26	BB	1922	G	C6-C5-N7	-5.22	127.27	130.40
26	BB	2247	A	C5-C6-N1	5.22	120.31	117.70
26	BB	2252	G	N9-C4-C5	5.22	107.49	105.40
26	BB	2548	U	C4-C5-C6	-5.22	116.57	119.70
26	BB	2755	C	C1'-O4'-C4'	5.22	114.07	109.90
26	BB	2819	G	O4'-C1'-N9	5.22	112.37	108.20
1	AA	559	A	C4-C5-C6	-5.21	114.39	117.00
1	AA	764	C	OP1-P-O3'	5.21	116.67	105.20
1	AA	862	C	N1-C2-N3	-5.21	115.55	119.20
1	AA	985	C	C4-C5-C6	-5.21	114.79	117.40
1	AA	1171	A	C5'-C4'-C3'	-5.21	107.66	116.00
3	AC	55	A	O4'-C1'-N9	5.21	112.37	108.20
6	AF	192	TYR	CB-CG-CD2	-5.21	117.87	121.00
17	AQ	23	ARG	CD-NE-CZ	5.21	130.90	123.60
26	BB	663	G	C4'-C3'-C2'	-5.21	97.39	102.60
26	BB	844	A	N1-C6-N6	5.21	121.73	118.60
26	BB	866	A	N9-C4-C5	-5.21	103.71	105.80
26	BB	1098	A	C5'-C4'-O4'	5.21	115.36	109.10
26	BB	1280	G	O4'-C1'-N9	5.21	112.37	108.20
26	BB	1316	U	N3-C2-O2	-5.21	118.55	122.20
26	BB	1497	U	C6-N1-C1'	-5.21	113.90	121.20
26	BB	1737	G	C8-N9-C4	-5.21	104.31	106.40
26	BB	1775	U	C6-N1-C2	-5.21	117.87	121.00
26	BB	1871	A	C5'-C4'-O4'	5.21	115.36	109.10
26	BB	2042	A	N1-C2-N3	-5.21	126.69	129.30
26	BB	2615	U	N3-C4-O4	5.21	123.05	119.40
38	BN	41	ARG	CA-CB-CG	5.21	124.87	113.40
1	AA	271	C	N1-C2-N3	5.21	122.85	119.20
1	AA	477	C	O4'-C1'-N1	5.21	112.37	108.20
1	AA	1033	G	C4-N9-C1'	-5.21	119.72	126.50
3	AC	32	U	N1-C2-N3	5.21	118.03	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	59	U	O4'-C1'-N1	5.21	112.37	108.20
26	BB	359	G	O4'-C1'-N9	5.21	112.37	108.20
26	BB	471	A	N1-C6-N6	5.21	121.73	118.60
26	BB	834	G	C8-N9-C1'	5.21	133.78	127.00
26	BB	873	C	C2-N1-C1'	5.21	124.53	118.80
49	BY	23	LYS	CA-C-N	-5.21	105.73	117.20
1	AA	38	G	N9-C1'-C2'	-5.21	106.27	112.00
1	AA	592	G	C5'-C4'-O4'	5.21	115.35	109.10
1	AA	1447	A	P-O5'-C5'	5.21	129.24	120.90
26	BB	112	U	C5-C6-N1	5.21	125.31	122.70
26	BB	188	G	C6-C5-N7	5.21	133.53	130.40
26	BB	300	A	N3-C4-N9	5.21	131.57	127.40
26	BB	390	U	N1-C1'-C2'	5.21	120.77	114.00
26	BB	885	C	O4'-C1'-C2'	-5.21	100.59	105.80
26	BB	1175	A	C3'-C2'-C1'	-5.21	97.33	101.50
26	BB	1792	G	N1-C2-N3	-5.21	120.77	123.90
26	BB	1801	A	C5'-C4'-O4'	5.21	115.35	109.10
26	BB	2411	A	N9-C4-C5	-5.21	103.72	105.80
26	BB	2533	U	C6-N1-C2	-5.21	117.87	121.00
26	BB	2726	A	C6-C5-N7	-5.21	128.65	132.30
26	BB	2827	C	C6-N1-C2	-5.21	118.22	120.30
50	BZ	50	VAL	CG1-CB-CG2	-5.21	102.56	110.90
58	B7	30	GLU	CA-CB-CG	5.21	124.87	113.40
1	AA	1472	U	P-O3'-C3'	5.21	125.95	119.70
3	AC	41	A	N3-C4-C5	-5.21	123.15	126.80
4	AD	39	A	O4'-C1'-C2'	5.21	112.29	107.60
26	BB	302	C	C2-N1-C1'	-5.21	113.07	118.80
26	BB	387	U	N1-C2-N3	5.21	118.03	114.90
26	BB	672	C	N3-C4-C5	-5.21	119.82	121.90
26	BB	1288	G	N1-C6-O6	-5.21	116.77	119.90
26	BB	1385	A	N1-C2-N3	-5.21	126.69	129.30
26	BB	2885	G	C5-C6-O6	-5.21	125.47	128.60
1	AA	36	C	N1-C2-N3	-5.21	115.55	119.20
1	AA	95	C	C5'-C4'-C3'	-5.21	107.67	116.00
1	AA	182	A	C4-C5-C6	5.21	119.60	117.00
1	AA	364	A	C5-N7-C8	-5.21	101.30	103.90
2	AB	61	C	N3-C2-O2	-5.21	118.25	121.90
4	AD	4	G	P-O3'-C3'	5.21	125.95	119.70
26	BB	255	A	C4-C5-C6	5.21	119.60	117.00
26	BB	716	A	C6-C5-N7	5.21	135.94	132.30
26	BB	723	C	C5-C6-N1	-5.21	118.40	121.00
26	BB	1280	G	C4-C5-C6	5.21	121.93	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1391	U	C3'-C2'-C1'	-5.21	97.33	101.50
26	BB	1719	G	N3-C4-C5	-5.21	126.00	128.60
26	BB	1867	G	O4'-C1'-N9	-5.21	104.03	108.20
26	BB	1884	G	N7-C8-N9	5.21	115.70	113.10
26	BB	2639	A	C5-C6-N6	-5.21	119.53	123.70
1	AA	168	G	N7-C8-N9	5.21	115.70	113.10
1	AA	1094	G	O4'-C1'-N9	5.21	112.37	108.20
1	AA	1171	A	O4'-C1'-C2'	5.21	112.28	107.60
4	AD	63	C	C2-N3-C4	5.21	122.50	119.90
26	BB	10	A	P-O5'-C5'	5.21	129.23	120.90
26	BB	86	G	O4'-C4'-C3'	-5.21	98.79	104.00
26	BB	512	G	N3-C4-C5	5.21	131.20	128.60
26	BB	705	A	C5-C6-N1	5.21	120.30	117.70
26	BB	818	G	N3-C4-C5	-5.21	126.00	128.60
26	BB	904	G	C8-N9-C1'	5.21	133.77	127.00
26	BB	1747	U	N3-C4-O4	5.21	123.05	119.40
26	BB	2031	A	C2-N3-C4	5.21	113.20	110.60
26	BB	2057	G	N3-C4-C5	-5.21	126.00	128.60
26	BB	2074	U	C5'-C4'-C3'	-5.21	107.67	116.00
26	BB	2322	A	C2-N3-C4	5.21	113.20	110.60
26	BB	2668	G	N7-C8-N9	5.21	115.70	113.10
26	BB	2887	A	C5'-C4'-C3'	-5.21	107.67	116.00
1	AA	335	C	N1-C2-O2	5.21	122.02	118.90
1	AA	490	C	C6-N1-C2	-5.21	118.22	120.30
25	BA	12	C	C5-C4-N4	-5.21	116.56	120.20
26	BB	920	A	C2-N3-C4	-5.21	108.00	110.60
26	BB	1051	G	N3-C4-N9	-5.21	122.88	126.00
26	BB	1925	C	O4'-C1'-N1	5.21	112.36	108.20
26	BB	2009	A	C5-C6-N1	5.21	120.30	117.70
26	BB	2584	U	N3-C2-O2	5.21	125.84	122.20
43	BS	24	TYR	CG-CD1-CE1	5.21	125.46	121.30
1	AA	772	U	C4'-C3'-C2'	-5.20	97.40	102.60
1	AA	1224	U	C2-N3-C4	-5.20	123.88	127.00
25	BA	115	A	C5-C6-N1	-5.20	115.10	117.70
26	BB	61	C	C2-N3-C4	5.20	122.50	119.90
26	BB	479	A	P-O3'-C3'	5.20	125.94	119.70
26	BB	703	U	O4'-C1'-N1	5.20	112.36	108.20
26	BB	811	U	C2-N3-C4	-5.20	123.88	127.00
26	BB	2267	A	P-O3'-C3'	5.20	125.94	119.70
26	BB	2572	A	C5-C6-N1	5.20	120.30	117.70
26	BB	2715	C	C6-N1-C2	-5.20	118.22	120.30
26	BB	2804	U	N1-C2-O2	-5.20	119.16	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	BJ	61	ARG	NE-CZ-NH1	-5.20	117.70	120.30
1	AA	148	G	P-O3'-C3'	5.20	125.94	119.70
1	AA	487	A	C5-N7-C8	5.20	106.50	103.90
1	AA	648	A	P-O3'-C3'	5.20	125.94	119.70
1	AA	1342	C	C4'-C3'-C2'	-5.20	97.40	102.60
1	AA	1528	U	N3-C4-C5	-5.20	111.48	114.60
25	BA	60	C	C5-C4-N4	5.20	123.84	120.20
26	BB	124	G	O4'-C1'-N9	-5.20	104.04	108.20
26	BB	337	C	N1-C2-O2	5.20	122.02	118.90
26	BB	481	G	C4'-C3'-C2'	-5.20	97.40	102.60
26	BB	481	G	C5'-C4'-O4'	-5.20	102.86	109.10
26	BB	1324	G	N3-C2-N2	-5.20	116.26	119.90
26	BB	2249	U	C4-C5-C6	-5.20	116.58	119.70
26	BB	2256	G	C4-C5-N7	-5.20	108.72	110.80
26	BB	2511	U	O5'-C5'-C4'	5.20	121.58	111.70
1	AA	114	U	N3-C4-C5	-5.20	111.48	114.60
1	AA	125	U	C2-N3-C4	-5.20	123.88	127.00
1	AA	329	A	N7-C8-N9	5.20	116.40	113.80
1	AA	550	G	N3-C2-N2	5.20	123.54	119.90
1	AA	628	G	C5'-C4'-O4'	5.20	115.34	109.10
1	AA	903	G	N3-C4-N9	-5.20	122.88	126.00
1	AA	955	U	C5-C6-N1	-5.20	120.10	122.70
1	AA	1128	C	C2-N3-C4	-5.20	117.30	119.90
1	AA	1316	G	N3-C2-N2	-5.20	116.26	119.90
1	AA	1524	C	C4'-C3'-C2'	-5.20	97.40	102.60
6	AF	69	THR	CA-CB-CG2	5.20	119.68	112.40
7	AG	135	GLN	CB-CA-C	5.20	120.80	110.40
20	AT	31	PRO	N-CA-CB	5.20	109.54	103.30
23	AW	63	LYS	C-N-CA	5.20	133.22	122.30
25	BA	99	A	N9-C4-C5	-5.20	103.72	105.80
25	BA	108	A	C5-C6-N1	5.20	120.30	117.70
26	BB	256	A	O4'-C1'-C2'	5.20	112.28	107.60
26	BB	467	G	O4'-C1'-N9	5.20	112.36	108.20
26	BB	553	G	C4-C5-N7	-5.20	108.72	110.80
26	BB	770	G	O4'-C1'-N9	5.20	112.36	108.20
26	BB	1037	G	C5-N7-C8	-5.20	101.70	104.30
26	BB	1460	U	N3-C4-C5	5.20	117.72	114.60
26	BB	1983	G	C5'-C4'-C3'	-5.20	107.68	116.00
26	BB	2139	U	O4'-C1'-N1	5.20	112.36	108.20
26	BB	2543	G	C5-N7-C8	-5.20	101.70	104.30
1	AA	102	G	N1-C2-N3	5.20	127.02	123.90
1	AA	252	U	C3'-C2'-C1'	5.20	105.66	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	529	G	C4-C5-C6	5.20	121.92	118.80
1	AA	628	G	C5-N7-C8	-5.20	101.70	104.30
1	AA	948	C	N3-C4-N4	5.20	121.64	118.00
1	AA	1043	G	C4-C5-N7	-5.20	108.72	110.80
1	AA	1467	C	C2-N3-C4	5.20	122.50	119.90
1	AA	1491	G	C3'-C2'-C1'	5.20	105.66	101.50
2	AB	47	U	C5'-C4'-C3'	-5.20	107.68	116.00
19	AS	44	SER	CB-CA-C	5.20	119.98	110.10
26	BB	243	U	C2-N3-C4	5.20	130.12	127.00
26	BB	306	U	C5-C4-O4	5.20	129.02	125.90
26	BB	591	U	C4-C5-C6	-5.20	116.58	119.70
26	BB	712	G	C1'-O4'-C4'	-5.20	105.74	109.90
26	BB	964	C	C6-N1-C2	-5.20	118.22	120.30
26	BB	1193	G	C4'-C3'-C2'	-5.20	97.40	102.60
26	BB	1225	G	O4'-C4'-C3'	5.20	110.26	106.10
26	BB	1280	G	N1-C6-O6	5.20	123.02	119.90
26	BB	1555	G	C4'-C3'-C2'	-5.20	97.40	102.60
26	BB	1690	A	C4-C5-N7	5.20	113.30	110.70
26	BB	1705	A	C4'-C3'-C2'	-5.20	97.40	102.60
26	BB	1781	U	C5'-C4'-O4'	5.20	115.34	109.10
26	BB	1989	G	N9-C4-C5	5.20	107.48	105.40
26	BB	2317	A	C5-N7-C8	-5.20	101.30	103.90
26	BB	2352	A	C3'-C2'-C1'	5.20	105.66	101.50
1	AA	106	C	C5-C6-N1	5.20	123.60	121.00
1	AA	126	G	O4'-C1'-C2'	5.20	112.28	107.60
1	AA	1196	A	N1-C2-N3	5.20	131.90	129.30
26	BB	640	C	C5'-C4'-O4'	5.20	115.34	109.10
26	BB	1160	G	C8-N9-C4	5.20	108.48	106.40
26	BB	1190	G	C4-C5-N7	-5.20	108.72	110.80
26	BB	1438	U	O4'-C1'-N1	5.20	112.36	108.20
26	BB	1487	U	N3-C4-C5	5.20	117.72	114.60
26	BB	1794	A	C3'-C2'-C1'	-5.20	97.34	101.50
26	BB	2374	C	OP2-P-O3'	5.20	116.63	105.20
26	BB	2572	A	N9-C4-C5	5.20	107.88	105.80
26	BB	2873	A	N3-C4-C5	-5.20	123.16	126.80
26	BB	2892	G	N3-C4-C5	-5.20	126.00	128.60
43	BS	9	ALA	N-CA-CB	-5.20	102.83	110.10
1	AA	155	A	C6-C5-N7	5.20	135.94	132.30
1	AA	387	U	C1'-O4'-C4'	-5.20	105.74	109.90
1	AA	388	G	P-O3'-C3'	5.20	125.93	119.70
1	AA	459	A	N3-C4-N9	-5.20	123.24	127.40
1	AA	799	G	C4-C5-N7	5.20	112.88	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	812	G	N3-C4-N9	-5.20	122.88	126.00
1	AA	855	U	C1'-O4'-C4'	5.20	114.06	109.90
4	AD	52	C	C5-C6-N1	5.20	123.60	121.00
5	AE	161	PHE	CB-CG-CD2	-5.20	117.16	120.80
25	BA	107	G	C4-C5-C6	5.20	121.92	118.80
26	BB	170	U	C2-N3-C4	-5.20	123.88	127.00
26	BB	266	G	N3-C2-N2	5.20	123.54	119.90
26	BB	390	U	P-O3'-C3'	5.20	125.94	119.70
26	BB	805	G	C6-N1-C2	5.20	128.22	125.10
26	BB	1102	C	C2-N1-C1'	-5.20	113.08	118.80
26	BB	1263	U	P-O3'-C3'	5.20	125.93	119.70
26	BB	1505	A	C3'-C2'-C1'	-5.20	97.34	101.50
26	BB	2237	G	C4-C5-N7	-5.20	108.72	110.80
26	BB	2610	C	C3'-C2'-C1'	5.20	105.66	101.50
26	BB	2691	C	C5-C6-N1	-5.20	118.40	121.00
26	BB	2755	C	C3'-C2'-C1'	-5.20	97.34	101.50
26	BB	2785	C	P-O3'-C3'	5.20	125.93	119.70
26	BB	2842	G	C4'-C3'-O3'	5.20	123.39	113.00
33	BI	50	ARG	NE-CZ-NH2	5.20	122.90	120.30
1	AA	305	G	C5-C6-N1	5.19	114.10	111.50
1	AA	1036	A	C6-N1-C2	5.19	121.72	118.60
4	AD	73	A	N3-C4-C5	-5.19	123.16	126.80
26	BB	1121	C	C5-C4-N4	-5.19	116.56	120.20
26	BB	1981	A	C5'-C4'-O4'	5.19	115.33	109.10
37	BM	31	ARG	NH1-CZ-NH2	-5.19	113.69	119.40
41	BQ	64	TYR	CB-CG-CD1	5.19	124.12	121.00
1	AA	178	C	C5'-C4'-O4'	5.19	115.33	109.10
1	AA	722	G	C5-N7-C8	-5.19	101.70	104.30
1	AA	765	G	O5'-P-OP2	-5.19	101.03	105.70
1	AA	774	G	C4-N9-C1'	-5.19	119.75	126.50
1	AA	865	A	N1-C2-N3	5.19	131.90	129.30
1	AA	1138	G	N1-C2-N3	-5.19	120.78	123.90
1	AA	1270	G	N9-C4-C5	5.19	107.48	105.40
3	AC	18	A	O3'-P-O5'	-5.19	94.14	104.00
7	AG	160	LEU	CB-CG-CD2	5.19	119.83	111.00
17	AQ	85	GLU	OE1-CD-OE2	5.19	129.53	123.30
26	BB	175	G	C8-N9-C4	-5.19	104.32	106.40
26	BB	428	A	C4-C5-N7	5.19	113.30	110.70
26	BB	575	A	C1'-O4'-C4'	-5.19	105.75	109.90
26	BB	626	A	C5-C6-N1	5.19	120.30	117.70
26	BB	797	G	C3'-C2'-C1'	5.19	105.65	101.50
26	BB	1127	A	C5-N7-C8	-5.19	101.30	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1282	U	C6-N1-C2	-5.19	117.89	121.00
26	BB	1488	C	N1-C2-N3	5.19	122.83	119.20
26	BB	1498	C	C5-C4-N4	-5.19	116.57	120.20
26	BB	1546	G	O4'-C1'-N9	5.19	112.35	108.20
26	BB	1549	A	P-O3'-C3'	5.19	125.93	119.70
26	BB	1645	G	N3-C2-N2	-5.19	116.27	119.90
26	BB	2138	G	P-O5'-C5'	5.19	129.21	120.90
26	BB	2464	G	O4'-C4'-C3'	-5.19	98.81	104.00
26	BB	2744	G	N1-C6-O6	-5.19	116.78	119.90
56	B5	44	VAL	CG1-CB-CG2	-5.19	102.59	110.90
1	AA	998	C	C1'-O4'-C4'	-5.19	105.75	109.90
1	AA	1147	C	N3-C4-C5	-5.19	119.82	121.90
1	AA	1237	C	C5-C4-N4	-5.19	116.57	120.20
1	AA	1492	A	C5-N7-C8	5.19	106.50	103.90
2	AB	43	G	O4'-C1'-C2'	-5.19	100.61	105.80
25	BA	34	A	C4'-C3'-O3'	5.19	123.38	113.00
26	BB	86	G	N1-C6-O6	-5.19	116.79	119.90
26	BB	188	G	C2-N3-C4	5.19	114.50	111.90
26	BB	669	G	C5'-C4'-O4'	5.19	115.33	109.10
26	BB	938	G	N9-C4-C5	5.19	107.48	105.40
26	BB	1292	G	C5-C6-N1	5.19	114.09	111.50
26	BB	1486	U	C5-C4-O4	5.19	129.01	125.90
26	BB	1650	A	N1-C6-N6	-5.19	115.49	118.60
26	BB	1781	U	P-O3'-C3'	5.19	125.93	119.70
26	BB	2022	U	P-O3'-C3'	5.19	125.93	119.70
26	BB	2124	G	N7-C8-N9	-5.19	110.50	113.10
26	BB	2708	G	C3'-C2'-C1'	5.19	105.65	101.50
30	BF	67	ARG	NH1-CZ-NH2	-5.19	113.69	119.40
1	AA	109	A	C4-C5-C6	-5.19	114.41	117.00
1	AA	237	G	N3-C4-C5	-5.19	126.00	128.60
1	AA	493	A	C2-N3-C4	5.19	113.19	110.60
1	AA	647	C	N3-C2-O2	-5.19	118.27	121.90
1	AA	872	A	C6-N1-C2	5.19	121.71	118.60
1	AA	940	C	C5'-C4'-O4'	5.19	115.33	109.10
25	BA	35	C	C4-C5-C6	-5.19	114.81	117.40
26	BB	363	G	C5'-C4'-C3'	-5.19	107.70	116.00
26	BB	682	G	C6-C5-N7	-5.19	127.29	130.40
26	BB	1100	C	N3-C4-N4	-5.19	114.37	118.00
26	BB	1844	C	C2-N3-C4	5.19	122.50	119.90
26	BB	1888	G	N7-C8-N9	5.19	115.69	113.10
26	BB	1888	G	N9-C4-C5	5.19	107.48	105.40
26	BB	2391	G	N1-C2-N2	-5.19	111.53	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2720	U	C5'-C4'-C3'	-5.19	107.70	116.00
27	BC	166	ASP	CB-CG-OD1	-5.19	113.63	118.30
1	AA	181	A	C1'-O4'-C4'	-5.19	105.75	109.90
1	AA	217	C	C5-C4-N4	-5.19	116.57	120.20
1	AA	332	G	C8-N9-C4	-5.19	104.33	106.40
1	AA	380	G	N3-C4-C5	-5.19	126.01	128.60
1	AA	598	U	O3'-P-O5'	-5.19	94.14	104.00
1	AA	704	A	N3-C4-C5	5.19	130.43	126.80
1	AA	1257	A	C6-N1-C2	-5.19	115.49	118.60
4	AD	53	G	C5'-C4'-O4'	5.19	115.32	109.10
25	BA	115	A	C1'-O4'-C4'	-5.19	105.75	109.90
26	BB	165	A	C5'-C4'-O4'	5.19	115.32	109.10
26	BB	214	G	C4-C5-N7	5.19	112.88	110.80
26	BB	896	A	N1-C2-N3	-5.19	126.71	129.30
26	BB	930	G	N1-C6-O6	5.19	123.01	119.90
26	BB	979	A	C4'-C3'-C2'	-5.19	97.41	102.60
26	BB	1013	C	C1'-O4'-C4'	-5.19	105.75	109.90
26	BB	1190	G	O4'-C1'-C2'	5.19	112.27	107.60
26	BB	2017	U	C2-N3-C4	5.19	130.11	127.00
26	BB	2055	C	O5'-C5'-C4'	5.19	121.56	111.70
26	BB	2482	A	C2-N3-C4	5.19	113.19	110.60
38	BN	27	LEU	CB-CG-CD2	-5.19	102.18	111.00
1	AA	579	A	N3-C4-C5	-5.19	123.17	126.80
26	BB	136	G	N1-C2-N3	-5.19	120.79	123.90
26	BB	1563	U	C3'-C2'-C1'	5.19	105.65	101.50
26	BB	1578	U	P-O3'-C3'	5.19	125.92	119.70
26	BB	1631	G	C2-N3-C4	5.19	114.49	111.90
26	BB	1862	G	C5-C6-O6	-5.19	125.49	128.60
26	BB	1931	U	C3'-C2'-C1'	5.19	105.65	101.50
32	BH	71	LEU	CB-CG-CD2	5.19	119.82	111.00
1	AA	160	A	C1'-O4'-C4'	-5.18	105.75	109.90
1	AA	561	U	O4'-C1'-N1	5.18	112.35	108.20
1	AA	878	A	C5'-C4'-C3'	-5.18	107.70	116.00
1	AA	928	G	N3-C2-N2	5.18	123.53	119.90
1	AA	1102	A	N3-C4-N9	5.18	131.55	127.40
1	AA	1360	A	N9-C4-C5	5.18	107.87	105.80
1	AA	1431	A	O4'-C1'-N9	5.18	112.35	108.20
4	AD	9	G	C6-N1-C2	-5.18	121.99	125.10
25	BA	60	C	N1-C2-O2	-5.18	115.79	118.90
26	BB	203	A	C2-N3-C4	5.18	113.19	110.60
26	BB	363	G	N9-C4-C5	5.18	107.47	105.40
26	BB	496	G	O4'-C1'-N9	5.18	112.35	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	579	G	N3-C2-N2	-5.18	116.27	119.90
26	BB	587	C	N3-C4-C5	-5.18	119.83	121.90
26	BB	738	G	C4-C5-N7	-5.18	108.73	110.80
26	BB	760	G	C5'-C4'-O4'	5.18	115.32	109.10
26	BB	782	A	C6-N1-C2	5.18	121.71	118.60
26	BB	909	A	N1-C2-N3	-5.18	126.71	129.30
26	BB	1144	A	C4'-C3'-C2'	5.18	107.78	102.60
26	BB	1493	C	P-O5'-C5'	5.18	129.19	120.90
26	BB	1807	G	C6-C5-N7	-5.18	127.29	130.40
26	BB	1936	A	C6-C5-N7	5.18	135.93	132.30
26	BB	2008	C	N3-C4-C5	5.18	123.97	121.90
26	BB	2101	A	N1-C6-N6	5.18	121.71	118.60
26	BB	2116	G	N7-C8-N9	5.18	115.69	113.10
26	BB	2180	U	N1-C2-O2	-5.18	119.17	122.80
26	BB	2839	G	N3-C4-C5	-5.18	126.01	128.60
26	BB	2854	G	N3-C4-N9	-5.18	122.89	126.00
52	B1	57	GLU	CA-CB-CG	5.18	124.81	113.40
56	B5	22	MET	CA-CB-CG	5.18	122.11	113.30
1	AA	326	G	N7-C8-N9	5.18	115.69	113.10
1	AA	336	A	N9-C4-C5	5.18	107.87	105.80
1	AA	1183	U	N1-C2-O2	5.18	126.43	122.80
1	AA	1215	G	C6-N1-C2	5.18	128.21	125.10
1	AA	1358	U	N1-C2-O2	-5.18	119.17	122.80
2	AB	47	U	C6-N1-C2	5.18	124.11	121.00
26	BB	183	C	C1'-O4'-C4'	-5.18	105.75	109.90
26	BB	282	A	C4'-C3'-C2'	-5.18	97.42	102.60
26	BB	1083	U	C4'-C3'-C2'	-5.18	97.42	102.60
26	BB	1111	A	N9-C1'-C2'	-5.18	106.30	112.00
26	BB	1563	U	C5'-C4'-C3'	-5.18	107.71	116.00
26	BB	1776	G	N9-C4-C5	5.18	107.47	105.40
26	BB	2087	G	C4-C5-C6	-5.18	115.69	118.80
26	BB	2555	U	C6-N1-C2	-5.18	117.89	121.00
26	BB	2782	G	N3-C2-N2	-5.18	116.27	119.90
1	AA	161	A	C4-C5-C6	-5.18	114.41	117.00
1	AA	454	G	C5'-C4'-O4'	5.18	115.32	109.10
1	AA	1385	G	C4-C5-C6	5.18	121.91	118.80
15	AO	46	SER	C-N-CA	5.18	134.65	121.70
26	BB	164	C	C4-C5-C6	-5.18	114.81	117.40
26	BB	2087	G	C2'-C3'-O3'	5.18	121.99	113.70
26	BB	2363	G	N9-C1'-C2'	-5.18	106.30	112.00
26	BB	2364	C	P-O3'-C3'	5.18	125.92	119.70
26	BB	2411	A	O5'-P-OP1	-5.18	101.04	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2579	C	C4'-C3'-O3'	5.18	123.36	113.00
1	AA	549	C	C5'-C4'-C3'	-5.18	107.71	116.00
1	AA	784	A	C4-C5-C6	-5.18	114.41	117.00
1	AA	822	U	C5-C4-O4	-5.18	122.79	125.90
1	AA	921	U	P-O5'-C5'	5.18	129.19	120.90
6	AF	17	TRP	NE1-CE2-CD2	-5.18	102.12	107.30
9	AI	123	ASP	CB-CG-OD2	-5.18	113.64	118.30
26	BB	25	U	C2-N3-C4	-5.18	123.89	127.00
26	BB	1651	G	O4'-C1'-C2'	5.18	112.26	107.60
26	BB	1653	G	C2-N3-C4	5.18	114.49	111.90
1	AA	521	G	N1-C2-N2	5.18	120.86	116.20
1	AA	532	A	O3'-P-O5'	-5.18	94.16	104.00
1	AA	667	G	C1'-O4'-C4'	5.18	114.04	109.90
1	AA	839	C	O3'-P-O5'	5.18	113.84	104.00
1	AA	880	C	C2-N3-C4	5.18	122.49	119.90
1	AA	1114	C	O4'-C1'-N1	5.18	112.34	108.20
1	AA	1253	G	C1'-O4'-C4'	-5.18	105.76	109.90
26	BB	707	G	O4'-C1'-N9	5.18	112.34	108.20
26	BB	924	G	C6-N1-C2	-5.18	121.99	125.10
26	BB	1483	G	C6-C5-N7	-5.18	127.29	130.40
26	BB	1862	G	N3-C4-C5	-5.18	126.01	128.60
26	BB	1999	C	C4-C5-C6	5.18	119.99	117.40
26	BB	2009	A	C5-N7-C8	-5.18	101.31	103.90
26	BB	2469	A	P-O3'-C3'	5.18	125.91	119.70
26	BB	2469	A	N3-C4-N9	-5.18	123.26	127.40
27	BC	84	ALA	CB-CA-C	5.18	117.87	110.10
1	AA	10	A	C8-N9-C1'	5.18	137.02	127.70
1	AA	23	C	C4-C5-C6	-5.18	114.81	117.40
1	AA	229	U	N1-C2-O2	5.18	126.42	122.80
1	AA	346	G	N7-C8-N9	5.18	115.69	113.10
1	AA	829	G	C6-N1-C2	-5.18	122.00	125.10
2	AB	70	C	N3-C2-O2	-5.18	118.28	121.90
4	AD	3	C	N3-C2-O2	-5.18	118.28	121.90
18	AR	48	ASP	CB-CG-OD1	-5.18	113.64	118.30
21	AU	72	ARG	NE-CZ-NH2	5.18	122.89	120.30
26	BB	144	A	N3-C4-N9	-5.18	123.26	127.40
26	BB	501	A	N3-C4-C5	5.18	130.42	126.80
26	BB	554	U	O4'-C4'-C3'	5.18	110.24	106.10
26	BB	632	A	C5-C6-N1	-5.18	115.11	117.70
26	BB	879	G	C8-N9-C4	-5.18	104.33	106.40
26	BB	1148	U	N3-C4-C5	-5.18	111.49	114.60
26	BB	1423	G	C4-N9-C1'	-5.18	119.77	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1750	G	C5'-C4'-O4'	5.18	115.31	109.10
26	BB	1820	U	C3'-C2'-C1'	-5.18	97.36	101.50
26	BB	1844	C	N3-C2-O2	-5.18	118.28	121.90
26	BB	2211	A	O4'-C1'-C2'	-5.18	100.62	105.80
26	BB	2315	G	C6-N1-C2	-5.18	122.00	125.10
26	BB	2324	U	C2-N3-C4	-5.18	123.89	127.00
26	BB	2776	A	N3-C4-C5	-5.18	123.18	126.80
1	AA	152	A	N9-C4-C5	5.17	107.87	105.80
1	AA	178	C	C5'-C4'-C3'	5.17	124.28	116.00
1	AA	786	G	P-O3'-C3'	5.17	125.91	119.70
1	AA	886	G	N1-C2-N3	-5.17	120.80	123.90
1	AA	948	C	C4'-C3'-C2'	-5.17	97.43	102.60
1	AA	1525	G	C5-C6-O6	-5.17	125.50	128.60
25	BA	112	G	N1-C2-N2	-5.17	111.54	116.20
26	BB	227	A	C5-N7-C8	-5.17	101.31	103.90
26	BB	377	G	O4'-C1'-N9	5.17	112.34	108.20
26	BB	760	G	N1-C2-N2	-5.17	111.54	116.20
26	BB	1190	G	N3-C2-N2	-5.17	116.28	119.90
26	BB	1317	G	N1-C6-O6	-5.17	116.80	119.90
26	BB	1366	A	N1-C2-N3	-5.17	126.71	129.30
26	BB	1603	A	C4'-C3'-C2'	-5.17	97.42	102.60
26	BB	1674	G	C6-N1-C2	-5.17	122.00	125.10
26	BB	1699	G	C4'-C3'-O3'	-5.17	98.53	109.40
26	BB	2036	C	C5'-C4'-O4'	5.17	115.31	109.10
26	BB	2678	C	O4'-C4'-C3'	-5.17	98.83	104.00
26	BB	2773	C	C5-C6-N1	-5.17	118.41	121.00
34	BJ	83	TYR	CB-CG-CD1	-5.17	117.89	121.00
49	BY	18	LYS	C-N-CA	5.17	134.64	121.70
1	AA	31	G	N3-C4-N9	5.17	129.10	126.00
1	AA	68	G	O4'-C1'-N9	5.17	112.34	108.20
1	AA	932	C	C2-N3-C4	-5.17	117.31	119.90
1	AA	1275	A	C5-N7-C8	-5.17	101.31	103.90
2	AB	75	C	O5'-P-OP1	-5.17	101.04	105.70
3	AC	33	A	N1-C6-N6	-5.17	115.50	118.60
25	BA	68	C	C4-C5-C6	5.17	119.99	117.40
26	BB	340	A	N3-C4-N9	5.17	131.54	127.40
26	BB	785	G	N3-C4-C5	-5.17	126.01	128.60
26	BB	929	U	O4'-C1'-N1	5.17	112.34	108.20
26	BB	1222	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	BB	1374	G	C4-C5-N7	5.17	112.87	110.80
26	BB	1844	C	N1-C2-O2	5.17	122.00	118.90
26	BB	1963	U	N1-C1'-C2'	-5.17	106.31	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2022	U	C5-C4-O4	-5.17	122.80	125.90
1	AA	404	G	C5-C6-N1	-5.17	108.91	111.50
1	AA	666	G	C5-N7-C8	-5.17	101.71	104.30
1	AA	781	A	P-O3'-C3'	5.17	125.91	119.70
1	AA	819	A	C3'-C2'-C1'	5.17	105.64	101.50
1	AA	1204	A	C4-C5-C6	-5.17	114.42	117.00
26	BB	899	A	N7-C8-N9	-5.17	111.21	113.80
26	BB	1054	A	C5-C6-N6	-5.17	119.56	123.70
26	BB	1102	C	N1-C1'-C2'	-5.17	106.31	112.00
26	BB	1105	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	BB	1304	A	C4-C5-N7	-5.17	108.11	110.70
26	BB	1346	G	N1-C2-N3	5.17	127.00	123.90
26	BB	1462	C	P-O3'-C3'	5.17	125.91	119.70
26	BB	1718	G	N1-C2-N2	-5.17	111.55	116.20
26	BB	2380	C	C5'-C4'-O4'	5.17	115.31	109.10
25	BA	78	A	N7-C8-N9	5.17	116.39	113.80
26	BB	1617	C	C5-C4-N4	5.17	123.82	120.20
26	BB	2817	U	N1-C2-O2	5.17	126.42	122.80
1	AA	183	C	N3-C4-C5	5.17	123.97	121.90
1	AA	197	A	C4'-C3'-O3'	-5.17	98.55	109.40
1	AA	445	G	N9-C4-C5	5.17	107.47	105.40
3	AC	44	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	BB	44	A	N7-C8-N9	-5.17	111.22	113.80
26	BB	575	A	N9-C1'-C2'	-5.17	106.31	112.00
26	BB	577	G	N3-C2-N2	-5.17	116.28	119.90
26	BB	639	U	C4'-C3'-C2'	5.17	107.77	102.60
26	BB	907	G	C8-N9-C4	5.17	108.47	106.40
26	BB	1226	A	C5-C6-N1	-5.17	115.12	117.70
26	BB	1798	U	N1-C1'-C2'	-5.17	106.31	112.00
26	BB	1926	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	BB	2375	G	N3-C4-N9	5.17	129.10	126.00
26	BB	2528	U	C4'-C3'-C2'	-5.17	97.43	102.60
26	BB	2739	U	C1'-O4'-C4'	5.17	114.03	109.90
26	BB	2899	A	N3-C4-C5	-5.17	123.18	126.80
1	AA	194	C	O4'-C1'-N1	5.17	112.33	108.20
1	AA	514	C	C2-N3-C4	-5.17	117.32	119.90
1	AA	562	U	C3'-C2'-C1'	5.17	105.63	101.50
1	AA	612	C	C5-C6-N1	-5.17	118.42	121.00
1	AA	785	G	N7-C8-N9	5.17	115.68	113.10
1	AA	1064	G	C5'-C4'-C3'	-5.17	107.73	116.00
1	AA	1150	A	C1'-O4'-C4'	-5.17	105.77	109.90
1	AA	1209	C	N3-C2-O2	-5.17	118.28	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1264	U	C2-N3-C4	-5.17	123.90	127.00
1	AA	1294	G	C8-N9-C4	-5.17	104.33	106.40
25	BA	85	G	N3-C4-N9	5.17	129.10	126.00
26	BB	92	U	O4'-C4'-C3'	5.17	110.23	106.10
26	BB	164	C	N3-C2-O2	-5.17	118.28	121.90
26	BB	432	A	N9-C4-C5	5.17	107.87	105.80
26	BB	492	A	C4'-C3'-C2'	-5.17	97.43	102.60
26	BB	543	G	O4'-C1'-N9	5.17	112.33	108.20
26	BB	651	G	C6-N1-C2	-5.17	122.00	125.10
26	BB	739	A	N7-C8-N9	5.17	116.38	113.80
26	BB	974	G	C4-C5-C6	5.17	121.90	118.80
26	BB	979	A	N1-C6-N6	5.17	121.70	118.60
26	BB	1105	U	N3-C2-O2	-5.17	118.58	122.20
26	BB	1671	U	C4-C5-C6	5.17	122.80	119.70
26	BB	2070	A	C5-C6-N1	5.17	120.28	117.70
26	BB	8	C	N3-C4-C5	-5.17	119.83	121.90
26	BB	134	G	C3'-C2'-C1'	5.17	105.63	101.50
26	BB	152	A	C6-C5-N7	-5.17	128.69	132.30
26	BB	161	A	N9-C1'-C2'	-5.17	106.32	112.00
26	BB	232	G	N1-C2-N2	-5.17	111.55	116.20
26	BB	300	A	N9-C1'-C2'	-5.17	106.32	112.00
26	BB	777	G	C6-C5-N7	-5.17	127.30	130.40
26	BB	1391	U	C1'-O4'-C4'	-5.17	105.77	109.90
26	BB	1644	C	N1-C2-N3	-5.17	115.58	119.20
26	BB	1960	A	C1'-O4'-C4'	5.17	114.03	109.90
26	BB	2894	G	C3'-C2'-C1'	-5.17	97.37	101.50
1	AA	246	A	C2-N3-C4	-5.16	108.02	110.60
1	AA	345	C	O4'-C1'-N1	5.16	112.33	108.20
1	AA	537	G	C4'-C3'-C2'	-5.16	97.44	102.60
1	AA	819	A	C5'-C4'-O4'	5.16	115.30	109.10
1	AA	1088	G	N1-C6-O6	-5.16	116.80	119.90
1	AA	1177	G	C6-C5-N7	-5.16	127.30	130.40
1	AA	1508	A	C5-C6-N1	5.16	120.28	117.70
3	AC	13	A	C4'-C3'-C2'	-5.16	97.44	102.60
25	BA	119	A	N3-C4-C5	-5.16	123.19	126.80
26	BB	510	C	P-O3'-C3'	5.16	125.90	119.70
26	BB	692	C	C5-C4-N4	5.16	123.81	120.20
26	BB	837	C	C5'-C4'-O4'	5.16	115.30	109.10
26	BB	1017	G	N3-C4-C5	5.16	131.18	128.60
26	BB	1128	G	C4-C5-C6	5.16	121.90	118.80
26	BB	1162	G	N3-C4-N9	5.16	129.10	126.00
26	BB	1477	A	C6-N1-C2	5.16	121.70	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1811	G	N7-C8-N9	-5.16	110.52	113.10
26	BB	1961	C	C1'-O4'-C4'	-5.16	105.77	109.90
26	BB	2065	C	C2-N1-C1'	-5.16	113.12	118.80
26	BB	2105	U	O3'-P-O5'	-5.16	94.19	104.00
26	BB	2344	U	N1-C1'-C2'	5.16	120.71	114.00
26	BB	2648	G	C6-C5-N7	-5.16	127.30	130.40
1	AA	834	U	P-O3'-C3'	5.16	125.89	119.70
1	AA	1027	C	C2-N1-C1'	-5.16	113.12	118.80
1	AA	1218	C	N3-C2-O2	-5.16	118.29	121.90
1	AA	1294	G	C8-N9-C1'	5.16	133.71	127.00
1	AA	1494	G	C5-C6-N1	-5.16	108.92	111.50
4	AD	71	G	N7-C8-N9	5.16	115.68	113.10
26	BB	11	C	C5-C6-N1	-5.16	118.42	121.00
26	BB	259	G	C2-N3-C4	-5.16	109.32	111.90
26	BB	1058	U	N3-C4-O4	-5.16	115.79	119.40
26	BB	1574	C	C4'-C3'-C2'	-5.16	97.44	102.60
26	BB	1989	G	C2-N3-C4	5.16	114.48	111.90
1	AA	288	A	C1'-O4'-C4'	-5.16	105.77	109.90
1	AA	428	G	C5'-C4'-O4'	5.16	115.29	109.10
1	AA	499	A	O3'-P-O5'	-5.16	94.20	104.00
1	AA	506	G	C5-C6-O6	-5.16	125.50	128.60
1	AA	583	A	C1'-O4'-C4'	-5.16	105.77	109.90
1	AA	633	G	C5'-C4'-O4'	5.16	115.29	109.10
1	AA	643	C	N3-C4-N4	5.16	121.61	118.00
1	AA	888	G	P-O3'-C3'	5.16	125.89	119.70
1	AA	963	G	N9-C1'-C2'	-5.16	106.32	112.00
1	AA	1338	G	N9-C4-C5	5.16	107.46	105.40
1	AA	1485	U	C2-N3-C4	-5.16	123.90	127.00
25	BA	115	A	C2-N3-C4	5.16	113.18	110.60
25	BA	119	A	O4'-C4'-C3'	5.16	110.23	106.10
26	BB	452	G	C6-C5-N7	-5.16	127.30	130.40
26	BB	597	G	N7-C8-N9	5.16	115.68	113.10
26	BB	780	G	C4-C5-N7	5.16	112.86	110.80
26	BB	784	G	C5'-C4'-C3'	-5.16	107.74	116.00
26	BB	1010	A	C6-C5-N7	-5.16	128.69	132.30
26	BB	1140	C	C5'-C4'-O4'	5.16	115.29	109.10
26	BB	1432	G	C3'-C2'-C1'	-5.16	97.37	101.50
26	BB	1631	G	N9-C1'-C2'	-5.16	106.32	112.00
26	BB	1796	U	C2-N3-C4	-5.16	123.90	127.00
26	BB	1908	C	C5'-C4'-C3'	-5.16	107.74	116.00
26	BB	1969	A	O5'-P-OP2	-5.16	101.06	105.70
26	BB	2489	U	O4'-C1'-C2'	-5.16	100.64	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2644	G	C4'-C3'-C2'	-5.16	97.44	102.60
50	BZ	44	ARG	N-CA-CB	-5.16	101.31	110.60
1	AA	360	G	C4'-C3'-C2'	-5.16	97.44	102.60
1	AA	1221	G	C8-N9-C4	-5.16	104.34	106.40
1	AA	1277	C	O3'-P-O5'	-5.16	94.20	104.00
1	AA	1388	C	N1-C2-O2	5.16	122.00	118.90
1	AA	1534	A	N7-C8-N9	5.16	116.38	113.80
4	AD	15	G	N1-C2-N2	-5.16	111.56	116.20
6	AF	218	LYS	CB-CA-C	5.16	120.72	110.40
26	BB	140	C	O5'-P-OP2	-5.16	101.06	105.70
26	BB	200	U	N3-C2-O2	-5.16	118.59	122.20
26	BB	321	U	N3-C4-O4	-5.16	115.79	119.40
26	BB	925	A	C5-N7-C8	-5.16	101.32	103.90
26	BB	1084	A	C4-C5-N7	-5.16	108.12	110.70
26	BB	1500	G	C6-C5-N7	-5.16	127.31	130.40
26	BB	1861	G	N3-C2-N2	-5.16	116.29	119.90
26	BB	2010	G	N9-C4-C5	5.16	107.46	105.40
26	BB	2077	A	P-O3'-C3'	5.16	125.89	119.70
26	BB	2304	G	N3-C4-N9	5.16	129.09	126.00
27	BC	204	ALA	CB-CA-C	5.16	117.84	110.10
28	BD	247	TRP	CG-CD2-CE3	-5.16	129.26	133.90
33	BI	75	LEU	CB-CG-CD2	5.16	119.77	111.00
1	AA	1323	G	C5-C6-O6	-5.16	125.51	128.60
26	BB	125	A	C5-C6-N6	-5.16	119.58	123.70
26	BB	221	A	O5'-P-OP2	-5.16	101.06	105.70
26	BB	271	G	C5-C6-O6	-5.16	125.51	128.60
26	BB	776	G	C2-N3-C4	5.16	114.48	111.90
26	BB	1171	G	C1'-O4'-C4'	-5.16	105.77	109.90
26	BB	1269	A	C5'-C4'-O4'	5.16	115.29	109.10
26	BB	2080	A	C2-N3-C4	5.16	113.18	110.60
26	BB	2277	G	C2'-C3'-O3'	5.16	121.95	113.70
26	BB	2388	A	C8-N9-C4	5.16	107.86	105.80
26	BB	2418	A	O4'-C1'-N9	5.16	112.33	108.20
27	BC	178	VAL	CA-CB-CG2	5.16	118.64	110.90
1	AA	20	U	C4-C5-C6	-5.16	116.61	119.70
1	AA	171	A	C5-C6-N1	5.16	120.28	117.70
1	AA	276	G	N3-C4-C5	5.16	131.18	128.60
1	AA	387	U	C6-N1-C2	-5.16	117.91	121.00
1	AA	592	G	C6-N1-C2	-5.16	122.01	125.10
1	AA	1379	G	N1-C6-O6	-5.16	116.81	119.90
3	AC	42	U	C1'-O4'-C4'	5.16	114.03	109.90
11	AK	80	PRO	N-CD-CG	5.16	110.93	103.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	AO	64	SER	CB-CA-C	5.16	119.89	110.10
26	BB	295	G	C5-N7-C8	-5.16	101.72	104.30
26	BB	554	U	C3'-C2'-C1'	5.16	105.62	101.50
26	BB	658	U	N1-C2-O2	5.16	126.41	122.80
26	BB	700	G	P-O3'-C3'	5.16	125.89	119.70
26	BB	1178	C	N1-C2-N3	5.16	122.81	119.20
26	BB	1411	U	O4'-C1'-N1	5.16	112.32	108.20
26	BB	1752	C	C4'-C3'-C2'	-5.16	97.44	102.60
26	BB	2258	C	C4-C5-C6	5.16	119.98	117.40
26	BB	2385	C	C1'-O4'-C4'	-5.16	105.78	109.90
26	BB	2474	U	N3-C2-O2	5.16	125.81	122.20
26	BB	2641	G	C1'-O4'-C4'	5.16	114.02	109.90
26	BB	2655	G	C1'-O4'-C4'	-5.16	105.78	109.90
26	BB	2712	C	C5-C6-N1	5.16	123.58	121.00
26	BB	2764	A	N1-C2-N3	-5.16	126.72	129.30
26	BB	2788	C	N1-C1'-C2'	-5.16	106.33	112.00
26	BB	2892	G	C6-C5-N7	5.16	133.49	130.40
45	BU	14	ALA	N-CA-CB	-5.16	102.88	110.10
2	AB	44	G	N3-C2-N2	5.15	123.51	119.90
7	AG	17	ASP	CB-CG-OD1	-5.15	113.66	118.30
10	AJ	111	GLY	O-C-N	5.15	130.95	122.70
26	BB	921	C	N3-C4-N4	5.15	121.61	118.00
26	BB	1530	G	C6-C5-N7	-5.15	127.31	130.40
26	BB	1659	G	C5-C6-O6	-5.15	125.51	128.60
26	BB	2430	A	C6-N1-C2	-5.15	115.51	118.60
26	BB	2551	C	C5-C4-N4	-5.15	116.59	120.20
26	BB	2738	A	C2-N3-C4	5.15	113.18	110.60
28	BD	263	ASP	CB-CG-OD2	-5.15	113.66	118.30
1	AA	362	G	P-O5'-C5'	5.15	129.14	120.90
1	AA	703	G	N7-C8-N9	5.15	115.68	113.10
2	AB	67	G	P-O3'-C3'	5.15	125.88	119.70
4	AD	19	G	O4'-C1'-N9	-5.15	104.08	108.20
26	BB	215	G	C6-N1-C2	-5.15	122.01	125.10
26	BB	364	C	O4'-C1'-N1	5.15	112.32	108.20
26	BB	727	A	N1-C6-N6	5.15	121.69	118.60
26	BB	900	A	C5-N7-C8	5.15	106.48	103.90
26	BB	924	G	O4'-C1'-N9	5.15	112.32	108.20
26	BB	1044	C	C4-C5-C6	-5.15	114.82	117.40
26	BB	1120	G	O4'-C1'-N9	5.15	112.32	108.20
26	BB	1158	C	C5'-C4'-O4'	5.15	115.28	109.10
26	BB	1207	C	C2'-C3'-O3'	5.15	121.94	113.70
26	BB	1211	C	C5-C6-N1	-5.15	118.42	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1261	C	N1-C2-O2	5.15	121.99	118.90
26	BB	1439	A	N3-C4-C5	-5.15	123.19	126.80
26	BB	1445	G	N7-C8-N9	-5.15	110.52	113.10
26	BB	1543	G	N1-C6-O6	-5.15	116.81	119.90
26	BB	2584	U	O4'-C1'-C2'	-5.15	100.65	105.80
26	BB	2837	A	N1-C6-N6	-5.15	115.51	118.60
1	AA	94	G	N1-C2-N3	-5.15	120.81	123.90
1	AA	194	C	C5-C4-N4	-5.15	116.59	120.20
1	AA	796	C	N1-C2-O2	-5.15	115.81	118.90
1	AA	941	G	N9-C1'-C2'	-5.15	106.33	112.00
1	AA	969	A	C2-N3-C4	-5.15	108.03	110.60
2	AB	64	U	O4'-C4'-C3'	5.15	110.22	106.10
4	AD	28	U	N3-C4-O4	5.15	123.00	119.40
7	AG	103	ARG	NH1-CZ-NH2	5.15	125.06	119.40
26	BB	37	C	OP1-P-OP2	-5.15	111.87	119.60
26	BB	210	C	O4'-C1'-N1	5.15	112.32	108.20
26	BB	867	C	C2-N3-C4	5.15	122.47	119.90
26	BB	1932	A	C6-N1-C2	-5.15	115.51	118.60
26	BB	2308	G	C2-N3-C4	5.15	114.48	111.90
26	BB	2607	G	N3-C4-C5	-5.15	126.03	128.60
26	BB	2724	U	N1-C2-O2	-5.15	119.19	122.80
26	BB	2828	G	N9-C1'-C2'	-5.15	106.33	112.00
39	BO	10	ARG	NH1-CZ-NH2	5.15	125.07	119.40
1	AA	92	U	C5-C6-N1	-5.15	120.13	122.70
1	AA	611	C	C1'-O4'-C4'	-5.15	105.78	109.90
1	AA	1262	C	O5'-C5'-C4'	-5.15	101.92	111.70
3	AC	24	A	C6-C5-N7	5.15	135.90	132.30
4	AD	39	A	C5-N7-C8	-5.15	101.33	103.90
26	BB	954	G	N1-C6-O6	-5.15	116.81	119.90
26	BB	1281	G	N9-C4-C5	5.15	107.46	105.40
26	BB	1502	A	N1-C2-N3	-5.15	126.73	129.30
26	BB	1811	G	O4'-C1'-N9	5.15	112.32	108.20
26	BB	1886	U	O4'-C1'-N1	5.15	112.32	108.20
26	BB	2499	C	C6-N1-C2	-5.15	118.24	120.30
26	BB	2759	G	N7-C8-N9	5.15	115.67	113.10
1	AA	467	U	N3-C4-C5	-5.15	111.51	114.60
1	AA	650	G	C4'-C3'-C2'	-5.15	97.45	102.60
1	AA	779	C	C3'-C2'-C1'	-5.15	97.38	101.50
1	AA	828	U	C6-N1-C2	-5.15	117.91	121.00
1	AA	1437	A	C5-C6-N6	-5.15	119.58	123.70
1	AA	1469	C	O4'-C1'-C2'	5.15	112.23	107.60
2	AB	10	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(°)
21	AU	72	ARG	CA-CB-CG	5.15	124.72	113.40
25	BA	71	C	C5-C4-N4	-5.15	116.60	120.20
26	BB	180	G	C6-C5-N7	-5.15	127.31	130.40
26	BB	292	U	C2-N3-C4	-5.15	123.91	127.00
26	BB	619	G	N9-C1'-C2'	-5.15	106.34	112.00
26	BB	976	G	N3-C2-N2	-5.15	116.30	119.90
26	BB	1097	U	C3'-C2'-C1'	-5.15	97.38	101.50
26	BB	1189	A	C1'-O4'-C4'	5.15	114.02	109.90
26	BB	1270	C	C3'-C2'-C1'	5.15	105.62	101.50
26	BB	1869	G	C5-C6-O6	-5.15	125.51	128.60
26	BB	2117	A	N9-C4-C5	-5.15	103.74	105.80
26	BB	2252	G	N3-C2-N2	-5.15	116.30	119.90
26	BB	2294	G	P-O3'-C3'	5.15	125.88	119.70
26	BB	2302	U	O4'-C1'-N1	5.15	112.32	108.20
26	BB	2401	U	N3-C2-O2	-5.15	118.60	122.20
26	BB	2530	A	N9-C4-C5	5.15	107.86	105.80
26	BB	2540	C	C4'-C3'-C2'	-5.15	97.45	102.60
26	BB	2760	C	O5'-P-OP2	-5.15	101.07	105.70
26	BB	2786	U	OP2-P-O3'	5.15	116.53	105.20
48	BX	56	PHE	CB-CG-CD1	-5.15	117.20	120.80
51	B0	52	ARG	CD-NE-CZ	5.15	130.81	123.60
1	AA	814	A	O4'-C1'-C2'	-5.15	100.65	105.80
1	AA	1142	G	N1-C6-O6	-5.15	116.81	119.90
1	AA	1300	G	P-O3'-C3'	5.15	125.88	119.70
4	AD	28	U	C5'-C4'-C3'	-5.15	107.77	116.00
4	AD	44	A	N7-C8-N9	-5.15	111.23	113.80
26	BB	651	G	P-O3'-C3'	5.15	125.88	119.70
26	BB	898	C	C5-C4-N4	-5.15	116.60	120.20
26	BB	1966	A	O4'-C1'-C2'	-5.15	100.65	105.80
1	AA	557	G	C2-N3-C4	5.14	114.47	111.90
1	AA	667	G	C5-C6-N1	5.14	114.07	111.50
1	AA	888	G	N3-C4-C5	-5.14	126.03	128.60
1	AA	1050	G	N1-C2-N2	-5.14	111.57	116.20
1	AA	1087	G	C5'-C4'-O4'	5.14	115.27	109.10
1	AA	1325	C	C2-N3-C4	-5.14	117.33	119.90
2	AB	52	A	C8-N9-C4	5.14	107.86	105.80
3	AC	21	U	C2-N3-C4	5.14	130.09	127.00
26	BB	424	G	C5-C6-O6	-5.14	125.51	128.60
26	BB	485	C	O4'-C4'-C3'	-5.14	98.86	104.00
26	BB	495	G	P-O3'-C3'	5.14	125.87	119.70
26	BB	557	C	C4'-C3'-C2'	-5.14	97.45	102.60
26	BB	564	C	C4-C5-C6	-5.14	114.83	117.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1263	U	C4'-C3'-C2'	5.14	107.75	102.60
26	BB	1349	C	C3'-C2'-C1'	5.14	105.61	101.50
26	BB	1425	G	O4'-C1'-C2'	5.14	112.23	107.60
26	BB	1501	G	C4-C5-N7	5.14	112.86	110.80
26	BB	2116	G	C6-N1-C2	5.14	128.19	125.10
26	BB	2645	G	N1-C2-N2	5.14	120.83	116.20
26	BB	2841	C	N3-C2-O2	-5.14	118.30	121.90
29	BE	90	PHE	N-CA-CB	5.14	119.86	110.60
1	AA	34	C	C2-N3-C4	-5.14	117.33	119.90
1	AA	99	C	C2-N3-C4	5.14	122.47	119.90
1	AA	127	G	C4-N9-C1'	-5.14	119.81	126.50
1	AA	330	C	C2-N3-C4	5.14	122.47	119.90
1	AA	481	G	N1-C2-N2	-5.14	111.57	116.20
1	AA	633	G	N1-C6-O6	5.14	122.99	119.90
1	AA	666	G	O4'-C4'-C3'	5.14	110.21	106.10
1	AA	670	G	C5-N7-C8	5.14	106.87	104.30
1	AA	733	G	N3-C4-C5	-5.14	126.03	128.60
1	AA	953	G	C2-N3-C4	5.14	114.47	111.90
1	AA	1429	A	C2-N3-C4	5.14	113.17	110.60
1	AA	1536	C	C4'-C3'-C2'	-5.14	97.46	102.60
22	AV	35	ARG	NE-CZ-NH1	-5.14	117.73	120.30
26	BB	568	U	O4'-C1'-C2'	5.14	112.23	107.60
26	BB	954	G	C5-N7-C8	-5.14	101.73	104.30
26	BB	1479	G	P-O3'-C3'	5.14	125.87	119.70
26	BB	1710	G	O4'-C1'-N9	5.14	112.31	108.20
26	BB	1766	G	N3-C4-C5	-5.14	126.03	128.60
26	BB	1938	A	O4'-C1'-N9	5.14	112.31	108.20
26	BB	2133	G	C2-N3-C4	5.14	114.47	111.90
26	BB	2430	A	C1'-O4'-C4'	-5.14	105.79	109.90
26	BB	2473	U	C2'-C3'-O3'	5.14	121.93	113.70
26	BB	2493	U	N3-C2-O2	-5.14	118.60	122.20
26	BB	2650	U	C1'-O4'-C4'	5.14	114.01	109.90
26	BB	2717	C	N1-C1'-C2'	-5.14	106.34	112.00
1	AA	17	U	C1'-O4'-C4'	5.14	114.01	109.90
1	AA	51	A	C6-N1-C2	-5.14	115.52	118.60
1	AA	531	U	N1-C2-N3	5.14	117.98	114.90
1	AA	566	G	N1-C6-O6	5.14	122.98	119.90
1	AA	733	G	C5-C6-O6	-5.14	125.52	128.60
1	AA	1186	G	C5-N7-C8	-5.14	101.73	104.30
1	AA	1511	G	C5'-C4'-O4'	5.14	115.27	109.10
1	AA	1540	U	N1-C2-N3	5.14	117.98	114.90
26	BB	421	C	N3-C4-C5	5.14	123.96	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	572	A	O4'-C1'-C2'	-5.14	100.66	105.80
26	BB	678	C	C4-C5-C6	-5.14	114.83	117.40
26	BB	763	G	C2'-C3'-O3'	5.14	121.93	113.70
26	BB	1026	G	C6-N1-C2	-5.14	122.02	125.10
26	BB	1126	A	P-O3'-C3'	5.14	125.87	119.70
26	BB	1497	U	C2-N3-C4	5.14	130.08	127.00
26	BB	1617	C	C4-C5-C6	5.14	119.97	117.40
26	BB	2395	C	N3-C2-O2	-5.14	118.30	121.90
26	BB	2574	G	N3-C4-C5	-5.14	126.03	128.60
1	AA	94	G	C5-N7-C8	-5.14	101.73	104.30
1	AA	160	A	C6-N1-C2	-5.14	115.52	118.60
1	AA	409	U	C5-C6-N1	5.14	125.27	122.70
1	AA	460	A	C2-N3-C4	-5.14	108.03	110.60
1	AA	476	U	OP2-P-O3'	5.14	116.51	105.20
1	AA	580	C	N1-C2-O2	5.14	121.98	118.90
4	AD	43	G	C4-N9-C1'	-5.14	119.82	126.50
25	BA	51	G	N3-C4-N9	5.14	129.08	126.00
26	BB	548	G	O5'-P-OP2	-5.14	101.08	105.70
26	BB	724	U	C5-C4-O4	-5.14	122.82	125.90
26	BB	818	G	N9-C1'-C2'	-5.14	106.35	112.00
26	BB	1685	C	O3'-P-O5'	5.14	113.77	104.00
26	BB	1818	U	C6-N1-C1'	-5.14	114.00	121.20
26	BB	1859	U	C5'-C4'-O4'	5.14	115.27	109.10
26	BB	2310	C	N1-C1'-C2'	5.14	120.68	114.00
26	BB	2624	G	N3-C4-C5	-5.14	126.03	128.60
26	BB	2702	G	C5-C6-O6	5.14	131.68	128.60
1	AA	120	A	C5-N7-C8	5.14	106.47	103.90
1	AA	641	U	C5-C4-O4	5.14	128.98	125.90
1	AA	977	A	O4'-C1'-N9	5.14	112.31	108.20
1	AA	1521	C	C1'-O4'-C4'	-5.14	105.79	109.90
12	AL	17	ARG	NE-CZ-NH2	-5.14	117.73	120.30
18	AR	56	LEU	CB-CG-CD1	5.14	119.73	111.00
25	BA	52	A	C5-N7-C8	5.14	106.47	103.90
26	BB	2049	G	C5-C6-N1	5.14	114.07	111.50
26	BB	2486	C	C4'-C3'-C2'	-5.14	97.46	102.60
26	BB	2728	U	N3-C2-O2	-5.14	118.60	122.20
1	AA	60	A	C8-N9-C4	-5.14	103.75	105.80
1	AA	348	G	C6-N1-C2	-5.14	122.02	125.10
1	AA	614	C	O4'-C4'-C3'	-5.14	98.86	104.00
1	AA	1090	U	C5-C6-N1	-5.14	120.13	122.70
1	AA	1343	G	C4-C5-C6	5.14	121.88	118.80
1	AA	1475	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(°)
3	AC	16	A	C4'-C3'-C2'	-5.14	97.46	102.60
4	AD	68	C	O5'-P-OP2	-5.14	101.08	105.70
4	AD	71	G	C5-C6-N1	-5.14	108.93	111.50
23	AW	14	GLU	OE1-CD-OE2	5.14	129.46	123.30
26	BB	532	A	C5'-C4'-C3'	-5.14	107.78	116.00
26	BB	686	U	C6-N1-C2	-5.14	117.92	121.00
26	BB	1074	G	N1-C6-O6	5.14	122.98	119.90
26	BB	1082	U	C5'-C4'-C3'	-5.14	107.78	116.00
26	BB	1250	G	C1'-O4'-C4'	5.14	114.01	109.90
26	BB	1260	A	C5'-C4'-O4'	5.14	115.26	109.10
26	BB	1590	A	C5-N7-C8	-5.14	101.33	103.90
26	BB	2505	G	OP2-P-O3'	5.14	116.50	105.20
26	BB	2808	G	N3-C4-C5	5.14	131.17	128.60
31	BG	166	ARG	NH1-CZ-NH2	-5.14	113.75	119.40
1	AA	13	U	N3-C4-C5	5.13	117.68	114.60
1	AA	33	A	P-O3'-C3'	5.13	125.86	119.70
1	AA	67	C	N3-C2-O2	-5.13	118.31	121.90
1	AA	156	C	N1-C2-O2	5.13	121.98	118.90
1	AA	293	G	C5-C6-O6	5.13	131.68	128.60
1	AA	377	G	P-O5'-C5'	5.13	129.12	120.90
1	AA	538	G	N7-C8-N9	5.13	115.67	113.10
1	AA	637	C	N3-C2-O2	-5.13	118.31	121.90
1	AA	812	G	O3'-P-O5'	-5.13	94.25	104.00
1	AA	912	C	O4'-C4'-C3'	-5.13	98.86	104.00
1	AA	990	C	P-O3'-C3'	5.13	125.86	119.70
1	AA	1248	A	C3'-C2'-C1'	5.13	105.61	101.50
1	AA	1419	G	N1-C2-N2	5.13	120.82	116.20
1	AA	1494	G	C6-N1-C2	5.13	128.18	125.10
26	BB	126	A	C2'-C3'-O3'	5.13	121.92	113.70
26	BB	466	A	C5-N7-C8	-5.13	101.33	103.90
26	BB	1330	C	O4'-C1'-N1	5.13	112.31	108.20
26	BB	1408	G	C6-N1-C2	-5.13	122.02	125.10
26	BB	1610	A	C8-N9-C4	-5.13	103.75	105.80
26	BB	2557	G	C5'-C4'-O4'	5.13	115.26	109.10
26	BB	2739	U	C5'-C4'-O4'	5.13	115.26	109.10
26	BB	2743	U	C2-N3-C4	-5.13	123.92	127.00
26	BB	2756	U	N1-C2-O2	5.13	126.39	122.80
44	BT	38	VAL	CB-CA-C	5.13	121.16	111.40
52	B1	37	ARG	NE-CZ-NH1	5.13	122.87	120.30
1	AA	548	G	C5-N7-C8	-5.13	101.73	104.30
1	AA	746	A	C4-C5-C6	-5.13	114.43	117.00
15	AO	114	SER	O-C-N	5.13	130.91	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	32	C	C5-C4-N4	-5.13	116.61	120.20
26	BB	122	G	C4'-C3'-C2'	-5.13	97.47	102.60
26	BB	503	A	C3'-C2'-C1'	-5.13	97.39	101.50
26	BB	725	G	C5-C6-O6	5.13	131.68	128.60
26	BB	888	C	N1-C1'-C2'	-5.13	106.35	112.00
26	BB	989	G	C1'-O4'-C4'	-5.13	105.79	109.90
26	BB	2321	U	N1-C2-O2	-5.13	119.21	122.80
26	BB	2699	C	N3-C4-N4	5.13	121.59	118.00
1	AA	201	G	N9-C1'-C2'	-5.13	106.36	112.00
1	AA	380	G	C5-C6-N1	-5.13	108.93	111.50
1	AA	407	U	C5'-C4'-C3'	-5.13	107.79	116.00
1	AA	410	G	O4'-C1'-C2'	-5.13	100.67	105.80
1	AA	471	U	O3'-P-O5'	5.13	113.75	104.00
1	AA	879	C	C6-N1-C2	-5.13	118.25	120.30
1	AA	1151	A	C8-N9-C4	-5.13	103.75	105.80
1	AA	1418	A	N1-C6-N6	5.13	121.68	118.60
26	BB	218	A	N1-C6-N6	5.13	121.68	118.60
26	BB	354	A	N7-C8-N9	5.13	116.36	113.80
26	BB	467	G	C5-C6-N1	-5.13	108.93	111.50
26	BB	642	U	N3-C4-O4	-5.13	115.81	119.40
26	BB	1077	A	C3'-C2'-C1'	-5.13	97.39	101.50
26	BB	1106	G	N3-C4-C5	-5.13	126.03	128.60
26	BB	1272	A	C3'-C2'-C1'	5.13	105.61	101.50
26	BB	1431	A	C1'-O4'-C4'	5.13	114.00	109.90
26	BB	1797	G	C4'-C3'-C2'	-5.13	97.47	102.60
26	BB	1844	C	O4'-C4'-C3'	-5.13	98.87	104.00
26	BB	2065	C	C5-C6-N1	-5.13	118.43	121.00
30	BF	186	VAL	CB-CA-C	5.13	121.15	111.40
31	BG	158	THR	CA-CB-OG1	5.13	119.78	109.00
36	BL	99	ARG	CD-NE-CZ	5.13	130.78	123.60
1	AA	422	C	N1-C2-N3	-5.13	115.61	119.20
1	AA	585	G	O4'-C1'-N9	5.13	112.30	108.20
1	AA	876	C	C6-N1-C1'	5.13	126.96	120.80
1	AA	1009	U	C2-N3-C4	-5.13	123.92	127.00
1	AA	1441	A	C5'-C4'-O4'	5.13	115.26	109.10
18	AR	62	ARG	NE-CZ-NH1	-5.13	117.73	120.30
26	BB	531	C	N3-C2-O2	-5.13	118.31	121.90
26	BB	538	A	C5'-C4'-C3'	-5.13	107.79	116.00
26	BB	573	U	N3-C4-O4	-5.13	115.81	119.40
26	BB	781	A	C5-N7-C8	-5.13	101.33	103.90
26	BB	1653	G	N1-C6-O6	-5.13	116.82	119.90
26	BB	2447	G	N9-C1'-C2'	5.13	120.67	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2903	U	C2-N3-C4	-5.13	123.92	127.00
33	BI	63	ALA	CB-CA-C	5.13	117.79	110.10
34	BJ	63	VAL	CG1-CB-CG2	5.13	119.11	110.90
1	AA	38	G	N1-C2-N2	-5.13	111.58	116.20
1	AA	89	U	N3-C4-C5	-5.13	111.52	114.60
1	AA	155	A	C5-N7-C8	-5.13	101.34	103.90
1	AA	155	A	O5'-P-OP2	-5.13	101.08	105.70
1	AA	222	C	C5-C4-N4	-5.13	116.61	120.20
1	AA	491	G	P-O3'-C3'	5.13	125.86	119.70
1	AA	985	C	C3'-C2'-C1'	-5.13	97.40	101.50
1	AA	1380	U	C3'-C2'-C1'	-5.13	97.40	101.50
4	AD	57	C	C2-N3-C4	5.13	122.46	119.90
26	BB	262	A	N1-C2-N3	5.13	131.87	129.30
26	BB	392	U	C4-C5-C6	5.13	122.78	119.70
26	BB	772	C	O4'-C1'-N1	5.13	112.30	108.20
26	BB	1555	G	C2-N3-C4	5.13	114.46	111.90
26	BB	1654	A	N1-C2-N3	5.13	131.86	129.30
26	BB	1786	A	C4-C5-N7	5.13	113.26	110.70
26	BB	1860	G	C4-C5-N7	5.13	112.85	110.80
26	BB	2331	G	C6-N1-C2	-5.13	122.02	125.10
26	BB	2373	G	O4'-C1'-N9	5.13	112.30	108.20
26	BB	2545	G	N1-C6-O6	-5.13	116.82	119.90
26	BB	2756	U	P-O3'-C3'	5.13	125.85	119.70
26	BB	2773	C	N1-C2-O2	5.13	121.98	118.90
26	BB	2807	U	N3-C4-C5	5.13	117.68	114.60
26	BB	2846	G	C5'-C4'-O4'	5.13	115.25	109.10
49	BY	38	ARG	NE-CZ-NH1	5.13	122.86	120.30
1	AA	119	A	O4'-C4'-C3'	5.13	110.20	106.10
1	AA	187	G	C2'-C3'-O3'	5.13	121.90	113.70
1	AA	209	U	C4-C5-C6	5.13	122.78	119.70
1	AA	349	A	C4-C5-N7	-5.13	108.14	110.70
1	AA	356	A	C5'-C4'-O4'	5.13	115.25	109.10
18	AR	7	THR	CA-CB-CG2	5.13	119.58	112.40
26	BB	156	A	C3'-C2'-C1'	-5.13	97.40	101.50
26	BB	192	C	N1-C2-N3	-5.13	115.61	119.20
26	BB	385	C	O4'-C4'-C3'	5.13	110.20	106.10
26	BB	408	G	C4-C5-N7	5.13	112.85	110.80
26	BB	717	C	N1-C2-N3	5.13	122.79	119.20
26	BB	839	U	N3-C4-O4	-5.13	115.81	119.40
26	BB	840	C	N3-C2-O2	-5.13	118.31	121.90
26	BB	1660	G	N7-C8-N9	5.13	115.66	113.10
26	BB	1669	A	C8-N9-C4	-5.13	103.75	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2181	U	N3-C2-O2	-5.13	118.61	122.20
26	BB	2295	C	C4-C5-C6	5.13	119.96	117.40
26	BB	2344	U	O4'-C1'-C2'	-5.13	100.67	105.80
26	BB	2560	A	O4'-C1'-C2'	5.13	112.21	107.60
26	BB	2625	G	C6-N1-C2	-5.13	122.02	125.10
32	BH	96	ALA	N-CA-CB	-5.13	102.92	110.10
2	AB	73	G	C2-N3-C4	5.12	114.46	111.90
26	BB	1020	A	N1-C2-N3	-5.12	126.74	129.30
26	BB	1022	G	C5'-C4'-C3'	-5.12	107.80	116.00
26	BB	2268	A	C4'-C3'-C2'	-5.12	97.47	102.60
1	AA	62	U	C2'-C3'-O3'	5.12	121.90	113.70
1	AA	605	U	N1-C1'-C2'	-5.12	106.36	112.00
1	AA	724	G	O5'-P-OP2	-5.12	101.09	105.70
1	AA	840	C	N1-C2-O2	5.12	121.97	118.90
1	AA	997	U	P-O3'-C3'	5.12	125.85	119.70
1	AA	1033	G	C4-C5-C6	5.12	121.88	118.80
1	AA	1046	A	N3-C4-C5	-5.12	123.21	126.80
1	AA	1292	G	C4'-C3'-C2'	-5.12	97.48	102.60
2	AB	71	C	O4'-C1'-N1	5.12	112.30	108.20
7	AG	125	ASN	N-CA-CB	5.12	119.82	110.60
9	AI	123	ASP	CB-CG-OD1	5.12	122.91	118.30
12	AL	6	TYR	CG-CD2-CE2	5.12	125.40	121.30
26	BB	1544	A	C8-N9-C4	-5.12	103.75	105.80
26	BB	1727	C	N3-C2-O2	-5.12	118.31	121.90
26	BB	1785	A	N3-C4-C5	-5.12	123.21	126.80
26	BB	1992	G	N3-C2-N2	-5.12	116.31	119.90
26	BB	2424	C	N3-C2-O2	-5.12	118.31	121.90
26	BB	2831	G	N3-C4-C5	-5.12	126.04	128.60
1	AA	122	G	N1-C2-N2	-5.12	111.59	116.20
1	AA	704	A	C1'-O4'-C4'	5.12	114.00	109.90
1	AA	926	G	N1-C2-N2	-5.12	111.59	116.20
1	AA	1184	G	N1-C2-N2	5.12	120.81	116.20
1	AA	1280	A	C5-C6-N6	-5.12	119.60	123.70
1	AA	1327	C	C2-N1-C1'	-5.12	113.17	118.80
1	AA	1429	A	N3-C4-C5	-5.12	123.22	126.80
25	BA	117	G	N1-C2-N2	5.12	120.81	116.20
26	BB	152	A	C8-N9-C4	-5.12	103.75	105.80
26	BB	250	G	C8-N9-C1'	5.12	133.66	127.00
26	BB	277	G	N1-C6-O6	5.12	122.97	119.90
26	BB	626	A	N1-C6-N6	5.12	121.67	118.60
26	BB	905	A	C5-N7-C8	5.12	106.46	103.90
26	BB	1321	A	N1-C2-N3	-5.12	126.74	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1599	U	O4'-C4'-C3'	5.12	110.20	106.10
26	BB	1699	G	N3-C4-N9	5.12	129.07	126.00
26	BB	1965	C	C5-C6-N1	5.12	123.56	121.00
26	BB	1980	G	N3-C4-N9	5.12	129.07	126.00
26	BB	2001	C	C5-C6-N1	-5.12	118.44	121.00
26	BB	2001	C	N3-C4-C5	-5.12	119.85	121.90
26	BB	2182	U	C1'-O4'-C4'	-5.12	105.80	109.90
26	BB	2342	C	C5-C4-N4	-5.12	116.61	120.20
26	BB	2493	U	P-O3'-C3'	-5.12	113.55	119.70
26	BB	2749	A	OP2-P-O3'	5.12	116.47	105.20
57	B6	22	LYS	CA-CB-CG	5.12	124.67	113.40
1	AA	881	G	N3-C4-N9	5.12	129.07	126.00
1	AA	1130	A	C6-C5-N7	5.12	135.88	132.30
1	AA	1508	A	C5-C6-N6	-5.12	119.60	123.70
2	AB	11	U	C4'-C3'-C2'	-5.12	97.48	102.60
26	BB	295	G	C1'-O4'-C4'	-5.12	105.80	109.90
26	BB	413	C	N3-C4-C5	-5.12	119.85	121.90
26	BB	670	A	C8-N9-C4	-5.12	103.75	105.80
26	BB	871	U	C4'-C3'-C2'	-5.12	97.48	102.60
26	BB	898	C	N1-C2-O2	5.12	121.97	118.90
26	BB	2160	C	C5'-C4'-O4'	5.12	115.24	109.10
39	BO	96	ILE	CA-CB-CG1	5.12	120.73	111.00
1	AA	113	G	C4'-C3'-C2'	-5.12	97.48	102.60
1	AA	135	C	C5'-C4'-O4'	5.12	115.24	109.10
1	AA	198	G	C5-C6-N1	5.12	114.06	111.50
1	AA	265	G	C4'-C3'-C2'	5.12	107.72	102.60
1	AA	1114	C	P-O3'-C3'	5.12	125.84	119.70
1	AA	1181	G	C4'-C3'-C2'	-5.12	97.48	102.60
1	AA	1336	C	N1-C2-N3	5.12	122.78	119.20
1	AA	1404	C	C3'-C2'-C1'	5.12	105.59	101.50
1	AA	1502	A	C5-C6-N1	5.12	120.26	117.70
6	AF	137	VAL	CA-CB-CG1	5.12	118.58	110.90
26	BB	216	A	C4-C5-N7	5.12	113.26	110.70
26	BB	594	U	C2-N3-C4	-5.12	123.93	127.00
26	BB	696	G	C3'-C2'-C1'	5.12	105.59	101.50
26	BB	743	A	C3'-C2'-C1'	-5.12	97.41	101.50
26	BB	1194	A	C4'-C3'-C2'	-5.12	97.48	102.60
26	BB	1271	G	C5-C6-N1	-5.12	108.94	111.50
26	BB	1845	G	C2'-C3'-O3'	5.12	121.89	113.70
26	BB	1850	G	C4-C5-N7	-5.12	108.75	110.80
26	BB	2446	G	N1-C2-N3	-5.12	120.83	123.90
26	BB	2493	U	N1-C2-N3	5.12	117.97	114.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2582	G	C5-C6-N1	-5.12	108.94	111.50
1	AA	150	U	C5'-C4'-C3'	5.12	124.19	116.00
1	AA	742	G	C8-N9-C1'	5.12	133.65	127.00
1	AA	1193	G	C5'-C4'-O4'	5.12	115.24	109.10
26	BB	862	G	P-O3'-C3'	5.12	125.84	119.70
26	BB	1129	A	C4-C5-N7	-5.12	108.14	110.70
26	BB	2725	A	N9-C4-C5	-5.12	103.75	105.80
26	BB	2808	G	C6-C5-N7	-5.12	127.33	130.40
50	BZ	38	TRP	NE1-CE2-CD2	-5.12	102.18	107.30
1	AA	192	A	N1-C6-N6	5.12	121.67	118.60
1	AA	290	C	N3-C4-N4	5.12	121.58	118.00
1	AA	494	G	N1-C6-O6	-5.12	116.83	119.90
1	AA	560	A	N3-C4-C5	5.12	130.38	126.80
1	AA	689	C	N3-C2-O2	-5.12	118.32	121.90
1	AA	933	G	C4'-C3'-C2'	-5.12	97.48	102.60
1	AA	1381	U	C2-N3-C4	-5.12	123.93	127.00
6	AF	166	TRP	CZ3-CH2-CZ2	-5.12	115.46	121.60
22	AV	13	HIS	CA-C-O	-5.12	109.36	120.10
26	BB	11	C	C3'-C2'-C1'	5.12	105.59	101.50
26	BB	382	A	P-O3'-C3'	5.12	125.84	119.70
26	BB	2398	U	C6-N1-C2	-5.12	117.93	121.00
26	BB	2732	G	C5-C6-O6	-5.12	125.53	128.60
31	BG	98	PHE	CB-CG-CD1	5.12	124.38	120.80
45	BU	59	GLU	OE1-CD-OE2	5.12	129.44	123.30
1	AA	142	G	C5-C6-N1	5.11	114.06	111.50
1	AA	287	U	C4-C5-C6	5.11	122.77	119.70
1	AA	369	G	C4-C5-N7	-5.11	108.75	110.80
1	AA	422	C	O4'-C1'-C2'	-5.11	100.69	105.80
1	AA	500	G	C2-N3-C4	5.11	114.46	111.90
1	AA	590	U	C5'-C4'-O4'	5.11	115.24	109.10
1	AA	788	U	N3-C4-O4	-5.11	115.82	119.40
1	AA	814	A	C1'-O4'-C4'	5.11	113.99	109.90
1	AA	1158	C	C5-C4-N4	-5.11	116.62	120.20
1	AA	1484	C	C5-C4-N4	-5.11	116.62	120.20
14	AN	74	LYS	CB-CA-C	5.11	120.63	110.40
21	AU	69	TYR	CG-CD2-CE2	-5.11	117.21	121.30
25	BA	106	G	C4-C5-N7	5.11	112.84	110.80
26	BB	255	A	C5-C6-N1	5.11	120.26	117.70
26	BB	667	U	N3-C4-C5	5.11	117.67	114.60
26	BB	1086	A	P-O3'-C3'	5.11	125.84	119.70
26	BB	1117	C	P-O3'-C3'	5.11	125.83	119.70
26	BB	1275	A	C5-N7-C8	5.11	106.46	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1324	G	N1-C2-N2	5.11	120.80	116.20
26	BB	1342	A	C5-N7-C8	5.11	106.46	103.90
26	BB	1814	G	C6-C5-N7	-5.11	127.33	130.40
26	BB	1949	G	C5'-C4'-O4'	5.11	115.24	109.10
26	BB	1967	C	N1-C2-O2	5.11	121.97	118.90
26	BB	2322	A	P-O3'-C3'	5.11	125.84	119.70
26	BB	2450	A	C5-C6-N6	-5.11	119.61	123.70
26	BB	2692	G	O4'-C1'-N9	5.11	112.29	108.20
1	AA	1186	G	O4'-C4'-C3'	5.11	110.19	106.10
14	AN	15	VAL	CG1-CB-CG2	-5.11	102.72	110.90
26	BB	545	U	C2-N1-C1'	5.11	123.83	117.70
26	BB	780	G	C5-C6-N1	5.11	114.06	111.50
26	BB	1280	G	N1-C2-N3	-5.11	120.83	123.90
26	BB	1396	U	C5'-C4'-C3'	5.11	124.18	116.00
1	AA	251	G	N9-C4-C5	5.11	107.44	105.40
1	AA	413	G	C8-N9-C1'	5.11	133.64	127.00
1	AA	958	A	C4-C5-C6	-5.11	114.44	117.00
1	AA	1165	U	C4'-C3'-C2'	-5.11	97.49	102.60
1	AA	1245	C	C5-C4-N4	5.11	123.78	120.20
4	AD	30	G	C6-N1-C2	-5.11	122.03	125.10
24	AX	9	GLU	OE1-CD-OE2	5.11	129.43	123.30
26	BB	81	G	C4-C5-C6	5.11	121.87	118.80
26	BB	463	G	C8-N9-C4	-5.11	104.36	106.40
26	BB	700	G	N3-C2-N2	-5.11	116.32	119.90
26	BB	789	A	C4-C5-N7	-5.11	108.14	110.70
26	BB	865	C	C6-N1-C2	-5.11	118.26	120.30
26	BB	892	A	N1-C2-N3	-5.11	126.75	129.30
26	BB	1012	U	N3-C4-O4	5.11	122.98	119.40
26	BB	1041	G	C4-C5-N7	5.11	112.84	110.80
26	BB	1972	G	C6-N1-C2	-5.11	122.03	125.10
26	BB	2485	G	C4'-C3'-C2'	-5.11	97.49	102.60
30	BF	83	VAL	CA-CB-CG1	5.11	118.56	110.90
41	BQ	30	ARG	NE-CZ-NH1	5.11	122.86	120.30
42	BR	106	ALA	CB-CA-C	5.11	117.77	110.10
1	AA	616	G	C8-N9-C1'	5.11	133.64	127.00
1	AA	1515	G	N9-C1'-C2'	-5.11	106.38	112.00
26	BB	187	G	N9-C1'-C2'	-5.11	106.38	112.00
26	BB	342	A	N9-C4-C5	-5.11	103.76	105.80
26	BB	565	C	N1-C2-O2	5.11	121.97	118.90
26	BB	607	U	P-O3'-C3'	5.11	125.83	119.70
26	BB	2540	C	C6-N1-C2	-5.11	118.26	120.30
26	BB	2583	G	C5'-C4'-O4'	5.11	115.23	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	55	A	N3-C4-N9	-5.11	123.31	127.40
1	AA	116	A	N1-C6-N6	5.11	121.66	118.60
1	AA	215	C	N3-C2-O2	-5.11	118.32	121.90
1	AA	316	C	C4'-C3'-C2'	5.11	107.71	102.60
1	AA	886	G	C3'-C2'-C1'	5.11	105.59	101.50
1	AA	1115	U	C4'-C3'-C2'	-5.11	97.49	102.60
4	AD	49	C	C6-N1-C1'	-5.11	114.67	120.80
8	AH	143	LEU	CB-CA-C	5.11	119.90	110.20
26	BB	298	G	C2-N3-C4	5.11	114.45	111.90
26	BB	1291	C	N1-C2-O2	5.11	121.96	118.90
26	BB	1398	C	C4-C5-C6	5.11	119.95	117.40
26	BB	1862	G	N9-C4-C5	5.11	107.44	105.40
26	BB	2525	G	N3-C4-N9	-5.11	122.94	126.00
1	AA	108	G	C2-N3-C4	5.11	114.45	111.90
1	AA	285	C	C4'-C3'-C2'	-5.11	97.50	102.60
1	AA	670	G	P-O3'-C3'	5.11	125.83	119.70
1	AA	844	G	P-O3'-C3'	5.11	125.83	119.70
1	AA	1072	G	N3-C4-N9	5.11	129.06	126.00
1	AA	1162	C	N3-C2-O2	-5.11	118.33	121.90
1	AA	1494	G	C5'-C4'-C3'	-5.11	107.83	116.00
2	AB	28	C	C5-C4-N4	5.11	123.77	120.20
3	AC	25	U	N1-C1'-C2'	-5.11	106.39	112.00
25	BA	65	U	N3-C4-O4	-5.11	115.83	119.40
26	BB	80	G	C2-N3-C4	5.11	114.45	111.90
26	BB	441	U	P-O3'-C3'	5.11	125.83	119.70
26	BB	722	A	C3'-C2'-C1'	-5.11	97.42	101.50
26	BB	920	A	N1-C6-N6	5.11	121.66	118.60
26	BB	1016	G	C5'-C4'-O4'	5.11	115.23	109.10
26	BB	1289	C	C2-N3-C4	5.11	122.45	119.90
26	BB	1309	G	N3-C4-C5	-5.11	126.05	128.60
26	BB	1419	A	O4'-C1'-C2'	5.11	112.19	107.60
26	BB	1599	U	C1'-O4'-C4'	-5.11	105.82	109.90
26	BB	2145	C	C5'-C4'-C3'	-5.11	107.83	116.00
26	BB	2365	G	O4'-C1'-N9	5.11	112.28	108.20
26	BB	2427	C	P-O5'-C5'	5.11	129.07	120.90
26	BB	2472	G	N9-C4-C5	5.11	107.44	105.40
26	BB	2865	U	C4-C5-C6	5.11	122.76	119.70
1	AA	204	G	P-O3'-C3'	5.10	125.83	119.70
1	AA	248	C	N1-C2-O2	5.10	121.96	118.90
1	AA	514	C	N1-C2-O2	-5.10	115.84	118.90
1	AA	534	U	OP2-P-O3'	5.10	116.43	105.20
1	AA	793	U	C5'-C4'-O4'	5.10	115.22	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1227	A	C4-C5-C6	5.10	119.55	117.00
26	BB	2204	G	C5'-C4'-O4'	5.10	115.22	109.10
1	AA	87	C	N3-C4-C5	-5.10	119.86	121.90
1	AA	338	A	C8-N9-C4	-5.10	103.76	105.80
1	AA	433	G	C8-N9-C4	-5.10	104.36	106.40
1	AA	627	G	C8-N9-C1'	5.10	133.63	127.00
1	AA	740	U	C6-N1-C2	5.10	124.06	121.00
1	AA	791	G	N9-C4-C5	5.10	107.44	105.40
2	AB	51	G	C2-N3-C4	5.10	114.45	111.90
2	AB	61	C	C2-N3-C4	5.10	122.45	119.90
12	AL	54	VAL	CG1-CB-CG2	5.10	119.06	110.90
25	BA	88	C	P-O5'-C5'	5.10	129.06	120.90
25	BA	102	G	O4'-C1'-C2'	-5.10	100.70	105.80
26	BB	55	G	C5'-C4'-O4'	5.10	115.22	109.10
26	BB	453	A	C4'-C3'-O3'	5.10	123.21	113.00
26	BB	512	G	C8-N9-C4	-5.10	104.36	106.40
26	BB	934	U	N3-C2-O2	-5.10	118.63	122.20
26	BB	1011	G	C4-N9-C1'	-5.10	119.87	126.50
26	BB	2200	C	N1-C2-O2	5.10	121.96	118.90
26	BB	2376	A	N1-C2-N3	5.10	131.85	129.30
26	BB	2523	G	C2-N3-C4	5.10	114.45	111.90
1	AA	867	G	N7-C8-N9	-5.10	110.55	113.10
1	AA	900	A	C5-C6-N1	5.10	120.25	117.70
1	AA	1337	G	C4-C5-N7	-5.10	108.76	110.80
25	BA	34	A	N7-C8-N9	-5.10	111.25	113.80
28	BD	3	VAL	CG1-CB-CG2	-5.10	102.74	110.90
1	AA	488	C	C5-C6-N1	5.10	123.55	121.00
1	AA	821	G	C4-C5-N7	5.10	112.84	110.80
1	AA	946	A	N1-C2-N3	-5.10	126.75	129.30
9	AI	64	VAL	O-C-N	5.10	130.86	122.70
25	BA	38	C	O4'-C1'-N1	5.10	112.28	108.20
26	BB	134	G	C6-C5-N7	5.10	133.46	130.40
26	BB	161	A	C4-C5-C6	5.10	119.55	117.00
26	BB	204	A	C4'-C3'-C2'	-5.10	97.50	102.60
26	BB	267	C	C4'-C3'-C2'	-5.10	97.50	102.60
26	BB	513	A	O3'-P-O5'	-5.10	94.31	104.00
26	BB	739	A	O4'-C4'-C3'	5.10	110.18	106.10
26	BB	742	A	C4'-C3'-C2'	-5.10	97.50	102.60
26	BB	915	C	N3-C2-O2	-5.10	118.33	121.90
26	BB	998	C	C2'-C3'-O3'	5.10	121.86	113.70
26	BB	1633	G	N1-C2-N3	5.10	126.96	123.90
26	BB	1890	A	N9-C4-C5	5.10	107.84	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2173	A	C1'-O4'-C4'	-5.10	105.82	109.90
26	BB	2604	U	C5'-C4'-O4'	5.10	115.22	109.10
26	BB	2657	A	C1'-O4'-C4'	-5.10	105.82	109.90
1	AA	200	G	N7-C8-N9	5.10	115.65	113.10
1	AA	297	G	N3-C4-N9	-5.10	122.94	126.00
1	AA	605	U	C4-C5-C6	-5.10	116.64	119.70
1	AA	801	U	N1-C2-O2	-5.10	119.23	122.80
1	AA	1281	C	C2-N3-C4	5.10	122.45	119.90
25	BA	45	A	N1-C6-N6	5.10	121.66	118.60
26	BB	318	C	O4'-C1'-C2'	-5.10	100.70	105.80
26	BB	825	A	C4-C5-N7	-5.10	108.15	110.70
26	BB	928	A	C4'-C3'-C2'	-5.10	97.50	102.60
26	BB	1019	U	P-O3'-C3'	5.10	125.82	119.70
26	BB	1040	A	N1-C2-N3	-5.10	126.75	129.30
26	BB	1257	C	N3-C4-C5	-5.10	119.86	121.90
26	BB	1437	C	C4-C5-C6	-5.10	114.85	117.40
26	BB	1523	U	C5-C4-O4	-5.10	122.84	125.90
26	BB	1954	G	O3'-P-O5'	-5.10	94.31	104.00
26	BB	1974	C	N1-C2-N3	-5.10	115.63	119.20
26	BB	2475	C	N3-C4-N4	5.10	121.57	118.00
26	BB	2667	C	N1-C2-O2	-5.10	115.84	118.90
1	AA	496	A	N9-C1'-C2'	5.10	120.62	114.00
1	AA	918	A	C6-C5-N7	5.10	135.87	132.30
1	AA	1035	A	N9-C4-C5	5.10	107.84	105.80
26	BB	916	G	N3-C4-N9	5.10	129.06	126.00
1	AA	79	G	C4-N9-C1'	-5.09	119.88	126.50
1	AA	293	G	O4'-C1'-N9	5.09	112.28	108.20
1	AA	369	G	C4-C5-C6	5.09	121.86	118.80
1	AA	596	A	C5'-C4'-O4'	5.09	115.21	109.10
1	AA	907	A	OP2-P-O3'	5.09	116.41	105.20
1	AA	1167	A	N1-C2-N3	-5.09	126.75	129.30
23	AW	28	ARG	NE-CZ-NH1	5.09	122.85	120.30
25	BA	34	A	C4-C5-N7	-5.09	108.15	110.70
25	BA	87	U	N1-C1'-C2'	5.09	120.62	114.00
26	BB	185	G	C5'-C4'-O4'	5.09	115.21	109.10
26	BB	295	G	N3-C4-C5	-5.09	126.05	128.60
26	BB	583	G	C4-C5-C6	5.09	121.86	118.80
26	BB	709	U	N3-C2-O2	-5.09	118.63	122.20
26	BB	953	G	C5-N7-C8	-5.09	101.75	104.30
26	BB	1050	A	C4'-C3'-C2'	-5.09	97.50	102.60
26	BB	1071	G	P-O3'-C3'	5.09	125.81	119.70
26	BB	1227	G	N3-C4-C5	-5.09	126.05	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1367	A	O4'-C1'-C2'	-5.09	100.70	105.80
26	BB	1369	G	C5-C6-O6	5.09	131.66	128.60
26	BB	2035	G	C6-C5-N7	5.09	133.46	130.40
26	BB	2081	U	N3-C2-O2	-5.09	118.63	122.20
26	BB	2824	C	C2-N1-C1'	-5.09	113.20	118.80
38	BN	58	TYR	CG-CD1-CE1	5.09	125.38	121.30
48	BX	66	ASP	CB-CG-OD1	-5.09	113.71	118.30
51	B0	56	LEU	C-N-CA	5.09	134.44	121.70
1	AA	1426	G	C2-N3-C4	5.09	114.45	111.90
26	BB	710	U	C2-N3-C4	-5.09	123.94	127.00
26	BB	789	A	C2-N3-C4	-5.09	108.05	110.60
26	BB	875	G	O5'-P-OP2	-5.09	101.12	105.70
26	BB	883	G	N1-C6-O6	-5.09	116.84	119.90
26	BB	964	C	C6-N1-C1'	5.09	126.91	120.80
26	BB	1063	G	P-O5'-C5'	5.09	129.05	120.90
26	BB	1348	C	P-O3'-C3'	5.09	125.81	119.70
26	BB	2337	G	N1-C2-N2	-5.09	111.62	116.20
26	BB	2403	C	C4'-C3'-C2'	-5.09	97.51	102.60
26	BB	2597	G	C2-N3-C4	5.09	114.45	111.90
26	BB	2858	C	C5'-C4'-C3'	-5.09	107.85	116.00
34	BJ	59	LEU	CB-CA-C	5.09	119.88	110.20
51	B0	29	ARG	NE-CZ-NH2	5.09	122.85	120.30
1	AA	68	G	N1-C2-N2	5.09	120.78	116.20
1	AA	470	C	C5'-C4'-C3'	-5.09	107.85	116.00
1	AA	493	A	C4-C5-C6	5.09	119.55	117.00
1	AA	578	C	C3'-C2'-C1'	-5.09	97.43	101.50
1	AA	783	C	C2-N3-C4	5.09	122.44	119.90
1	AA	832	G	O4'-C1'-N9	5.09	112.27	108.20
1	AA	847	G	C4'-C3'-O3'	5.09	123.18	113.00
1	AA	1020	G	C3'-C2'-C1'	5.09	105.57	101.50
1	AA	1026	G	C6-C5-N7	-5.09	127.34	130.40
1	AA	1323	G	N9-C1'-C2'	-5.09	106.40	112.00
26	BB	74	A	N9-C4-C5	5.09	107.84	105.80
26	BB	285	G	C5'-C4'-O4'	5.09	115.21	109.10
26	BB	1305	C	O4'-C1'-C2'	5.09	112.18	107.60
26	BB	1398	C	C4'-C3'-O3'	5.09	123.18	113.00
26	BB	1472	C	C3'-C2'-C1'	5.09	105.57	101.50
26	BB	1496	A	N9-C4-C5	-5.09	103.76	105.80
26	BB	1548	A	C5-C6-N1	5.09	120.25	117.70
26	BB	1579	A	N1-C2-N3	5.09	131.84	129.30
26	BB	1702	G	C5'-C4'-C3'	-5.09	107.85	116.00
26	BB	1749	A	C4-C5-N7	-5.09	108.15	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1989	G	N3-C4-N9	5.09	129.06	126.00
26	BB	2279	G	N9-C4-C5	5.09	107.44	105.40
26	BB	2515	C	C5'-C4'-O4'	5.09	115.21	109.10
31	BG	30	VAL	CA-CB-CG2	5.09	118.54	110.90
38	BN	74	THR	CA-CB-CG2	5.09	119.53	112.40
1	AA	131	A	N3-C4-N9	-5.09	123.33	127.40
1	AA	178	C	N3-C2-O2	-5.09	118.34	121.90
13	AM	57	VAL	O-C-N	5.09	130.84	122.70
25	BA	17	C	C5-C6-N1	5.09	123.55	121.00
26	BB	73	A	C4'-C3'-C2'	-5.09	97.51	102.60
26	BB	122	G	C5'-C4'-O4'	5.09	115.21	109.10
26	BB	134	G	N7-C8-N9	5.09	115.64	113.10
26	BB	390	U	P-O5'-C5'	5.09	129.04	120.90
26	BB	440	C	O4'-C1'-N1	5.09	112.27	108.20
26	BB	442	G	C6-N1-C2	-5.09	122.05	125.10
26	BB	488	G	C6-C5-N7	-5.09	127.35	130.40
26	BB	1848	A	N3-C4-C5	-5.09	123.24	126.80
26	BB	2107	G	O4'-C1'-N9	5.09	112.27	108.20
26	BB	2223	G	N3-C2-N2	-5.09	116.34	119.90
26	BB	2227	A	O4'-C1'-C2'	5.09	112.18	107.60
26	BB	2604	U	C1'-O4'-C4'	-5.09	105.83	109.90
30	BF	7	ASP	C-N-CA	5.09	134.43	121.70
50	BZ	70	LEU	CB-CG-CD1	-5.09	102.35	111.00
1	AA	504	C	C1'-O4'-C4'	5.09	113.97	109.90
1	AA	1143	G	C1'-O4'-C4'	5.09	113.97	109.90
26	BB	89	A	C5-N7-C8	-5.09	101.36	103.90
26	BB	1183	U	C5'-C4'-O4'	5.09	115.21	109.10
26	BB	1214	A	C2-N3-C4	5.09	113.14	110.60
26	BB	1331	G	C5-C6-N1	5.09	114.04	111.50
26	BB	1434	A	C6-N1-C2	-5.09	115.55	118.60
26	BB	1564	C	P-O3'-C3'	5.09	125.81	119.70
26	BB	2528	U	C5-C4-O4	-5.09	122.85	125.90
27	BC	180	PHE	CB-CG-CD1	-5.09	117.24	120.80
1	AA	99	C	C5-C4-N4	-5.09	116.64	120.20
1	AA	412	A	C3'-C2'-C1'	-5.09	97.43	101.50
1	AA	457	G	N1-C6-O6	-5.09	116.85	119.90
1	AA	775	G	C6-N1-C2	-5.09	122.05	125.10
1	AA	847	G	C8-N9-C1'	5.09	133.61	127.00
1	AA	938	A	C6-N1-C2	-5.09	115.55	118.60
1	AA	1031	C	O4'-C1'-N1	5.09	112.27	108.20
1	AA	1224	U	N3-C4-C5	-5.09	111.55	114.60
1	AA	1261	A	C3'-C2'-C1'	5.09	105.57	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1326	U	C5-C6-N1	-5.09	120.16	122.70
4	AD	43	G	C4'-C3'-O3'	5.09	123.17	113.00
25	BA	78	A	O5'-P-OP1	5.09	116.80	110.70
26	BB	114	U	N3-C4-O4	5.09	122.96	119.40
26	BB	482	A	C2-N3-C4	5.09	113.14	110.60
26	BB	640	C	N1-C2-N3	-5.09	115.64	119.20
26	BB	949	G	C6-N1-C2	-5.09	122.05	125.10
26	BB	1177	G	C3'-C2'-C1'	5.09	105.57	101.50
26	BB	1328	A	C4'-C3'-C2'	-5.09	97.51	102.60
26	BB	1338	G	C5-C6-O6	5.09	131.65	128.60
26	BB	1904	G	N1-C6-O6	-5.09	116.85	119.90
26	BB	2211	A	OP1-P-OP2	5.09	127.23	119.60
26	BB	2217	G	C4-C5-C6	5.09	121.85	118.80
26	BB	2288	A	C5-N7-C8	5.09	106.44	103.90
26	BB	2309	A	C5'-C4'-C3'	-5.09	107.86	116.00
26	BB	2390	U	N3-C4-C5	-5.09	111.55	114.60
26	BB	2639	A	N1-C6-N6	-5.09	115.55	118.60
26	BB	2765	A	N3-C4-C5	-5.09	123.24	126.80
26	BB	2876	G	C5-N7-C8	5.09	106.84	104.30
46	BV	41	ALA	CA-C-N	-5.09	106.01	117.20
1	AA	137	U	C5-C4-O4	-5.08	122.85	125.90
1	AA	739	C	C4'-C3'-C2'	-5.08	97.52	102.60
1	AA	1035	A	C6-N1-C2	5.08	121.65	118.60
26	BB	180	G	C4'-C3'-C2'	5.08	107.69	102.60
26	BB	1347	A	O4'-C1'-N9	5.08	112.27	108.20
26	BB	2649	C	N3-C2-O2	-5.08	118.34	121.90
26	BB	2821	A	C3'-C2'-C1'	-5.08	97.43	101.50
28	BD	120	ASP	CB-CG-OD2	5.08	122.88	118.30
43	BS	100	PHE	CB-CG-CD1	5.08	124.36	120.80
1	AA	114	U	C2-N3-C4	5.08	130.05	127.00
1	AA	777	A	C5'-C4'-C3'	-5.08	107.87	116.00
1	AA	1026	G	C1'-O4'-C4'	-5.08	105.83	109.90
1	AA	1215	G	C5-C6-N1	-5.08	108.96	111.50
1	AA	1321	U	N1-C1'-C2'	5.08	120.61	114.00
1	AA	1362	A	C5-C6-N1	-5.08	115.16	117.70
1	AA	1458	G	C4'-C3'-C2'	-5.08	97.52	102.60
26	BB	311	A	C5'-C4'-O4'	5.08	115.20	109.10
26	BB	479	A	C5-C6-N1	-5.08	115.16	117.70
26	BB	885	C	C6-N1-C2	5.08	122.33	120.30
26	BB	1146	C	C5'-C4'-O4'	5.08	115.20	109.10
26	BB	1238	G	N3-C4-N9	5.08	129.05	126.00
26	BB	1413	A	C5'-C4'-C3'	5.08	124.13	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2399	G	C8-N9-C4	-5.08	104.37	106.40
26	BB	2473	U	C4-C5-C6	5.08	122.75	119.70
26	BB	2553	G	C5'-C4'-O4'	5.08	115.20	109.10
26	BB	2722	G	P-O5'-C5'	5.08	129.03	120.90
40	BP	95	THR	O-C-N	5.08	130.83	122.70
1	AA	28	A	N1-C2-N3	5.08	131.84	129.30
1	AA	166	U	C4-C5-C6	-5.08	116.65	119.70
1	AA	251	G	N9-C1'-C2'	5.08	120.61	114.00
1	AA	929	G	C3'-C2'-C1'	5.08	105.57	101.50
1	AA	1021	A	C5'-C4'-O4'	5.08	115.20	109.10
1	AA	1047	G	C8-N9-C4	-5.08	104.37	106.40
1	AA	1072	G	C5'-C4'-O4'	5.08	115.20	109.10
1	AA	1101	A	C4-C5-N7	-5.08	108.16	110.70
1	AA	1156	G	C6-N1-C2	-5.08	122.05	125.10
1	AA	1186	G	C4-N9-C1'	-5.08	119.89	126.50
1	AA	1204	A	C5-N7-C8	-5.08	101.36	103.90
1	AA	1222	G	C4'-C3'-C2'	5.08	107.68	102.60
1	AA	1261	A	C1'-O4'-C4'	5.08	113.97	109.90
1	AA	1332	A	N9-C4-C5	5.08	107.83	105.80
1	AA	1499	A	N7-C8-N9	5.08	116.34	113.80
2	AB	22	G	N3-C2-N2	-5.08	116.34	119.90
26	BB	806	C	N1-C2-O2	5.08	121.95	118.90
26	BB	809	G	P-O5'-C5'	5.08	129.03	120.90
26	BB	1126	A	C6-C5-N7	5.08	135.86	132.30
26	BB	1380	G	N7-C8-N9	5.08	115.64	113.10
26	BB	1432	G	C1'-O4'-C4'	-5.08	105.83	109.90
26	BB	1838	C	C4'-C3'-O3'	-5.08	98.73	109.40
26	BB	2027	G	N1-C2-N3	-5.08	120.85	123.90
26	BB	2144	G	C6-C5-N7	5.08	133.45	130.40
26	BB	2751	G	C6-C5-N7	-5.08	127.35	130.40
26	BB	2805	C	N1-C2-O2	5.08	121.95	118.90
57	B6	1	PRO	CA-N-CD	-5.08	104.39	111.50
1	AA	26	A	C5-C6-N1	5.08	120.24	117.70
1	AA	121	U	O4'-C1'-C2'	-5.08	100.72	105.80
1	AA	357	G	N3-C4-N9	5.08	129.05	126.00
1	AA	691	G	C6-N1-C2	-5.08	122.05	125.10
1	AA	1467	C	C2-N1-C1'	-5.08	113.21	118.80
5	AE	94	ARG	CD-NE-CZ	5.08	130.71	123.60
25	BA	44	G	C4'-C3'-C2'	5.08	107.68	102.60
26	BB	99	U	C4'-C3'-C2'	-5.08	97.52	102.60
26	BB	1265	A	O5'-C5'-C4'	-5.08	102.05	111.70
26	BB	1451	C	O4'-C1'-N1	5.08	112.26	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2746	U	P-O3'-C3'	5.08	125.80	119.70
28	BD	216	ARG	NE-CZ-NH2	-5.08	117.76	120.30
53	B2	49	ARG	NH1-CZ-NH2	5.08	124.99	119.40
1	AA	81	A	N7-C8-N9	5.08	116.34	113.80
1	AA	523	A	C8-N9-C4	-5.08	103.77	105.80
1	AA	753	A	N9-C4-C5	5.08	107.83	105.80
1	AA	1121	U	P-O3'-C3'	5.08	125.80	119.70
10	AJ	101	ARG	NE-CZ-NH2	-5.08	117.76	120.30
25	BA	30	C	C4'-C3'-C2'	-5.08	97.52	102.60
26	BB	13	A	N3-C4-N9	5.08	131.46	127.40
26	BB	294	A	P-O3'-C3'	5.08	125.80	119.70
26	BB	721	A	N3-C4-N9	5.08	131.46	127.40
26	BB	735	A	C6-N1-C2	-5.08	115.55	118.60
26	BB	1268	A	O5'-P-OP2	-5.08	101.13	105.70
26	BB	1287	A	N1-C2-N3	-5.08	126.76	129.30
26	BB	1632	A	C5-N7-C8	5.08	106.44	103.90
26	BB	1794	A	C6-N1-C2	-5.08	115.55	118.60
26	BB	1913	A	N9-C4-C5	5.08	107.83	105.80
26	BB	2340	A	C8-N9-C4	-5.08	103.77	105.80
26	BB	2399	G	C5-C6-N1	5.08	114.04	111.50
26	BB	2519	U	O4'-C4'-C3'	5.08	110.16	106.10
26	BB	2549	G	C5-N7-C8	5.08	106.84	104.30
26	BB	2794	C	N1-C2-O2	5.08	121.95	118.90
4	AD	53	G	C4'-C3'-C2'	-5.08	97.52	102.60
26	BB	159	G	N9-C4-C5	5.08	107.43	105.40
26	BB	346	A	N1-C2-N3	5.08	131.84	129.30
26	BB	681	G	C3'-C2'-C1'	5.08	105.56	101.50
26	BB	1029	A	O4'-C1'-N9	5.08	112.26	108.20
26	BB	1907	G	N1-C6-O6	-5.08	116.85	119.90
26	BB	2231	U	C1'-O4'-C4'	-5.08	105.84	109.90
26	BB	2240	U	C5-C4-O4	5.08	128.95	125.90
26	BB	2788	C	O3'-P-O5'	5.08	113.65	104.00
1	AA	196	A	C5-N7-C8	-5.08	101.36	103.90
1	AA	408	A	C5-C6-N1	5.08	120.24	117.70
1	AA	556	C	O4'-C4'-C3'	5.08	110.16	106.10
1	AA	646	G	C8-N9-C1'	5.08	133.60	127.00
1	AA	733	G	C2-N3-C4	5.08	114.44	111.90
1	AA	1360	A	N1-C6-N6	-5.08	115.55	118.60
25	BA	9	G	C2-N3-C4	-5.08	109.36	111.90
26	BB	11	C	C5-C4-N4	-5.08	116.65	120.20
26	BB	270	A	C4-C5-C6	-5.08	114.46	117.00
26	BB	405	U	C5-C4-O4	5.08	128.94	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	422	A	C2-N3-C4	5.08	113.14	110.60
26	BB	466	A	C5-C6-N1	5.08	120.24	117.70
26	BB	561	G	C8-N9-C4	5.08	108.43	106.40
26	BB	834	G	C2-N3-C4	5.08	114.44	111.90
26	BB	879	G	C2-N3-C4	5.08	114.44	111.90
26	BB	883	G	C4'-C3'-C2'	-5.08	97.53	102.60
26	BB	976	G	C5'-C4'-O4'	5.08	115.19	109.10
26	BB	2027	G	C4-C5-N7	-5.08	108.77	110.80
26	BB	2164	C	N1-C1'-C2'	-5.08	106.42	112.00
26	BB	2464	G	C6-C5-N7	5.08	133.45	130.40
26	BB	2743	U	C4'-C3'-C2'	-5.08	97.52	102.60
26	BB	2844	G	C5-N7-C8	-5.08	101.76	104.30
52	B1	54	VAL	CB-CA-C	-5.08	101.75	111.40
53	B2	56	ARG	CG-CD-NE	-5.08	101.14	111.80
1	AA	17	U	C5'-C4'-O4'	5.07	115.19	109.10
1	AA	57	G	O4'-C1'-N9	-5.07	104.14	108.20
1	AA	491	G	C4'-C3'-C2'	-5.07	97.53	102.60
1	AA	745	G	O3'-P-O5'	-5.07	94.36	104.00
1	AA	939	G	O4'-C1'-N9	5.07	112.26	108.20
1	AA	1413	A	O4'-C1'-N9	5.07	112.26	108.20
26	BB	350	G	C4-N9-C1'	5.07	133.09	126.50
26	BB	830	G	N1-C6-O6	5.07	122.94	119.90
26	BB	1223	G	N3-C4-N9	5.07	129.04	126.00
26	BB	1580	A	C1'-O4'-C4'	-5.07	105.84	109.90
26	BB	1585	C	P-O3'-C3'	5.07	125.79	119.70
26	BB	1626	A	C5-C6-N6	-5.07	119.64	123.70
26	BB	2211	A	C2-N3-C4	5.07	113.14	110.60
26	BB	2239	G	N3-C4-C5	-5.07	126.06	128.60
26	BB	2307	G	N7-C8-N9	-5.07	110.56	113.10
26	BB	2496	C	N1-C2-N3	-5.07	115.65	119.20
26	BB	2773	C	N3-C2-O2	-5.07	118.35	121.90
26	BB	2777	G	OP2-P-O3'	5.07	116.36	105.20
41	BQ	117	PHE	CB-CG-CD2	-5.07	117.25	120.80
1	AA	187	G	N1-C6-O6	-5.07	116.86	119.90
1	AA	255	G	N9-C1'-C2'	-5.07	106.42	112.00
1	AA	693	G	C1'-O4'-C4'	-5.07	105.84	109.90
25	BA	9	G	C5-C6-O6	-5.07	125.56	128.60
26	BB	446	G	N3-C4-C5	-5.07	126.06	128.60
26	BB	721	A	N3-C4-C5	-5.07	123.25	126.80
26	BB	1853	A	C4-C5-C6	5.07	119.54	117.00
26	BB	2692	G	C2-N3-C4	-5.07	109.36	111.90
26	BB	2700	A	N1-C2-N3	-5.07	126.76	129.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	48	C	C6-N1-C1'	5.07	126.89	120.80
1	AA	253	A	C5'-C4'-O4'	5.07	115.19	109.10
1	AA	593	U	C3'-C2'-C1'	5.07	105.56	101.50
1	AA	829	G	N3-C4-N9	5.07	129.04	126.00
1	AA	1143	G	N3-C2-N2	5.07	123.45	119.90
1	AA	1173	U	C5-C4-O4	-5.07	122.86	125.90
1	AA	1265	C	C4'-C3'-C2'	-5.07	97.53	102.60
1	AA	1391	U	C4'-C3'-C2'	-5.07	97.53	102.60
2	AB	19	G	N9-C4-C5	5.07	107.43	105.40
26	BB	918	A	N1-C2-N3	-5.07	126.76	129.30
26	BB	1285	A	O5'-P-OP1	-5.07	101.14	105.70
26	BB	1413	A	C2-N3-C4	-5.07	108.06	110.60
26	BB	1423	G	N3-C4-C5	-5.07	126.06	128.60
26	BB	1631	G	N1-C2-N2	-5.07	111.64	116.20
26	BB	2104	C	C4'-C3'-C2'	-5.07	97.53	102.60
26	BB	2312	U	C4'-C3'-C2'	-5.07	97.53	102.60
26	BB	2407	A	N7-C8-N9	5.07	116.33	113.80
26	BB	2772	C	N3-C4-C5	5.07	123.93	121.90
26	BB	2828	G	P-O3'-C3'	5.07	125.78	119.70
1	AA	1331	G	C5-C6-O6	5.07	131.64	128.60
26	BB	1026	G	C5-C6-O6	-5.07	125.56	128.60
26	BB	1264	A	N3-C4-C5	-5.07	123.25	126.80
26	BB	1288	G	N9-C4-C5	-5.07	103.37	105.40
26	BB	1954	G	O4'-C1'-C2'	5.07	112.16	107.60
26	BB	2693	G	C4-C5-N7	5.07	112.83	110.80
33	BI	21	VAL	CA-CB-CG1	5.07	118.50	110.90
1	AA	116	A	C6-C5-N7	5.07	135.85	132.30
1	AA	319	G	C8-N9-C1'	5.07	133.59	127.00
1	AA	533	A	O4'-C1'-C2'	-5.07	100.73	105.80
1	AA	1047	G	C2'-C3'-O3'	5.07	121.81	113.70
1	AA	1081	A	C8-N9-C4	-5.07	103.77	105.80
1	AA	1357	A	C5-C6-N6	5.07	127.75	123.70
2	AB	28	C	O5'-P-OP1	-5.07	101.14	105.70
3	AC	55	A	C1'-O4'-C4'	-5.07	105.85	109.90
26	BB	786	C	C5-C4-N4	-5.07	116.65	120.20
26	BB	972	A	C5-C6-N6	-5.07	119.65	123.70
26	BB	1338	G	C6-N1-C2	-5.07	122.06	125.10
26	BB	1459	G	C5-N7-C8	-5.07	101.77	104.30
26	BB	1666	G	N9-C4-C5	-5.07	103.37	105.40
26	BB	2250	G	C8-N9-C1'	5.07	133.59	127.00
26	BB	2358	A	C4-C5-N7	-5.07	108.17	110.70
26	BB	2438	U	P-O3'-C3'	5.07	125.78	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	BG	169	LEU	CB-CA-C	5.07	119.83	110.20
34	BJ	99	ALA	N-CA-CB	-5.07	103.01	110.10
1	AA	18	C	C5-C4-N4	5.07	123.75	120.20
1	AA	35	G	O3'-P-O5'	-5.07	94.38	104.00
1	AA	71	A	O5'-C5'-C4'	-5.07	102.08	111.70
1	AA	257	G	C4'-C3'-C2'	-5.07	97.53	102.60
1	AA	517	G	C4'-C3'-C2'	-5.07	97.53	102.60
1	AA	807	A	N1-C2-N3	-5.07	126.77	129.30
1	AA	993	G	P-O3'-C3'	5.07	125.78	119.70
1	AA	1095	U	O4'-C4'-C3'	5.07	110.15	106.10
1	AA	1386	G	N7-C8-N9	-5.07	110.57	113.10
4	AD	41	C	C6-N1-C2	5.07	122.33	120.30
10	AJ	67	ASN	N-CA-CB	-5.07	101.48	110.60
25	BA	91	C	N3-C2-O2	-5.07	118.36	121.90
26	BB	66	C	C4'-C3'-C2'	-5.07	97.53	102.60
26	BB	369	U	O4'-C4'-C3'	5.07	110.15	106.10
26	BB	511	U	C4'-C3'-C2'	-5.07	97.53	102.60
26	BB	615	U	C3'-C2'-C1'	5.07	105.55	101.50
26	BB	617	G	C2-N3-C4	5.07	114.43	111.90
26	BB	621	A	C5-N7-C8	-5.07	101.37	103.90
26	BB	992	C	C6-N1-C2	-5.07	118.27	120.30
26	BB	1252	G	C4-C5-C6	5.07	121.84	118.80
26	BB	1515	A	C4-C5-N7	5.07	113.23	110.70
26	BB	1785	A	C5'-C4'-O4'	5.07	115.18	109.10
26	BB	2034	U	O4'-C1'-C2'	5.07	112.16	107.60
26	BB	2067	G	N9-C1'-C2'	-5.07	106.43	112.00
26	BB	2148	G	P-O3'-C3'	5.07	125.78	119.70
26	BB	2356	U	C5-C4-O4	-5.07	122.86	125.90
26	BB	2372	U	N3-C2-O2	-5.07	118.65	122.20
26	BB	2899	A	C6-C5-N7	-5.07	128.75	132.30
30	BF	154	ASP	CB-CG-OD2	-5.07	113.74	118.30
1	AA	237	G	N1-C2-N2	5.06	120.76	116.20
1	AA	295	C	C1'-O4'-C4'	5.06	113.95	109.90
1	AA	932	C	C5-C6-N1	-5.06	118.47	121.00
1	AA	1074	G	O4'-C1'-N9	5.06	112.25	108.20
1	AA	1222	G	N7-C8-N9	5.06	115.63	113.10
25	BA	113	C	C4-C5-C6	5.06	119.93	117.40
26	BB	215	G	P-O3'-C3'	5.06	125.78	119.70
26	BB	1194	A	OP1-P-OP2	-5.06	112.00	119.60
26	BB	1815	A	C1'-O4'-C4'	5.06	113.95	109.90
26	BB	1957	C	C5'-C4'-C3'	-5.06	107.90	116.00
26	BB	2020	A	C8-N9-C4	-5.06	103.77	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2660	A	C3'-C2'-C1'	5.06	105.55	101.50
26	BB	2784	U	C5'-C4'-O4'	5.06	115.18	109.10
43	BS	101	ASP	OD1-CG-OD2	5.06	132.92	123.30
1	AA	234	C	C3'-C2'-C1'	-5.06	97.45	101.50
1	AA	376	G	N3-C4-C5	-5.06	126.07	128.60
1	AA	399	G	C5'-C4'-O4'	5.06	115.17	109.10
1	AA	447	G	N3-C4-C5	-5.06	126.07	128.60
1	AA	482	A	C5-C6-N6	-5.06	119.65	123.70
1	AA	672	U	N3-C4-C5	-5.06	111.56	114.60
1	AA	790	A	C5-N7-C8	5.06	106.43	103.90
1	AA	849	G	N3-C4-N9	5.06	129.04	126.00
1	AA	1122	U	C3'-C2'-C1'	-5.06	97.45	101.50
2	AB	76	A	C8-N9-C4	-5.06	103.78	105.80
3	AC	51	C	C2-N1-C1'	5.06	124.37	118.80
25	BA	66	A	C4'-C3'-O3'	5.06	123.12	113.00
26	BB	230	G	N1-C2-N2	5.06	120.76	116.20
26	BB	324	A	N1-C6-N6	5.06	121.64	118.60
26	BB	343	C	N1-C2-O2	5.06	121.94	118.90
26	BB	837	C	N1-C2-N3	5.06	122.74	119.20
26	BB	971	G	C8-N9-C1'	5.06	133.58	127.00
26	BB	1038	G	C5-N7-C8	-5.06	101.77	104.30
26	BB	1434	A	N9-C1'-C2'	-5.06	106.43	112.00
26	BB	1757	A	N7-C8-N9	5.06	116.33	113.80
26	BB	1775	U	C5-C4-O4	5.06	128.94	125.90
26	BB	1899	A	N3-C4-N9	-5.06	123.35	127.40
26	BB	1907	G	C4-C5-C6	5.06	121.84	118.80
26	BB	2262	U	N1-C2-N3	5.06	117.94	114.90
26	BB	2689	U	C5-C4-O4	-5.06	122.86	125.90
33	BI	108	VAL	CB-CA-C	5.06	121.02	111.40
38	BN	105	ILE	O-C-N	5.06	130.80	122.70
1	AA	924	C	C2-N1-C1'	-5.06	113.23	118.80
1	AA	1260	G	C5'-C4'-O4'	5.06	115.17	109.10
26	BB	89	A	C6-N1-C2	-5.06	115.56	118.60
26	BB	720	U	N1-C1'-C2'	-5.06	106.43	112.00
26	BB	1359	A	C6-N1-C2	-5.06	115.56	118.60
26	BB	1456	G	C6-N1-C2	-5.06	122.06	125.10
26	BB	2127	G	C5'-C4'-O4'	5.06	115.17	109.10
26	BB	2622	U	N1-C2-O2	-5.06	119.26	122.80
1	AA	187	G	C4-C5-C6	-5.06	115.76	118.80
1	AA	197	A	C5'-C4'-O4'	5.06	115.17	109.10
1	AA	206	C	C6-N1-C2	-5.06	118.28	120.30
1	AA	673	A	N9-C4-C5	5.06	107.82	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	956	U	O4'-C4'-C3'	5.06	110.15	106.10
1	AA	1011	C	C5-C6-N1	-5.06	118.47	121.00
1	AA	1164	G	C5-N7-C8	-5.06	101.77	104.30
1	AA	1194	U	C1'-O4'-C4'	5.06	113.95	109.90
1	AA	1333	A	C3'-C2'-C1'	-5.06	97.45	101.50
1	AA	1405	G	C8-N9-C4	-5.06	104.38	106.40
1	AA	1522	U	C5-C4-O4	5.06	128.94	125.90
26	BB	79	C	C5-C4-N4	-5.06	116.66	120.20
26	BB	257	C	C1'-O4'-C4'	5.06	113.95	109.90
26	BB	332	A	C1'-O4'-C4'	5.06	113.95	109.90
26	BB	388	G	N1-C6-O6	5.06	122.94	119.90
26	BB	410	G	C5'-C4'-C3'	5.06	124.10	116.00
26	BB	532	A	C5-C6-N6	5.06	127.75	123.70
26	BB	622	G	C8-N9-C4	-5.06	104.38	106.40
26	BB	700	G	C8-N9-C4	-5.06	104.38	106.40
26	BB	843	G	N9-C4-C5	5.06	107.42	105.40
26	BB	970	U	C5-C6-N1	-5.06	120.17	122.70
26	BB	1459	G	N7-C8-N9	5.06	115.63	113.10
26	BB	1615	C	O4'-C1'-C2'	-5.06	100.74	105.80
26	BB	1680	U	N3-C4-O4	5.06	122.94	119.40
26	BB	1933	G	C5-N7-C8	5.06	106.83	104.30
26	BB	2145	C	O4'-C1'-N1	5.06	112.25	108.20
26	BB	2376	A	C6-C5-N7	-5.06	128.76	132.30
26	BB	2560	A	OP2-P-O3'	5.06	116.33	105.20
28	BD	101	ARG	NE-CZ-NH1	5.06	122.83	120.30
30	BF	119	ILE	CA-CB-CG2	5.06	121.02	110.90
1	AA	172	A	C5-N7-C8	5.06	106.43	103.90
1	AA	432	A	O5'-C5'-C4'	5.06	121.31	111.70
1	AA	665	A	N1-C2-N3	-5.06	126.77	129.30
1	AA	884	U	C6-N1-C2	-5.06	117.97	121.00
1	AA	1072	G	O4'-C1'-N9	5.06	112.25	108.20
1	AA	1269	A	C6-C5-N7	5.06	135.84	132.30
26	BB	6	A	N9-C4-C5	-5.06	103.78	105.80
26	BB	105	C	C5-C6-N1	5.06	123.53	121.00
26	BB	150	U	C2-N3-C4	-5.06	123.97	127.00
26	BB	245	G	O4'-C1'-N9	5.06	112.25	108.20
26	BB	386	G	C4-N9-C1'	-5.06	119.92	126.50
26	BB	546	U	C3'-C2'-C1'	5.06	105.55	101.50
26	BB	693	A	C5-N7-C8	-5.06	101.37	103.90
26	BB	804	A	N7-C8-N9	5.06	116.33	113.80
26	BB	815	C	C4-C5-C6	5.06	119.93	117.40
26	BB	999	U	C4'-C3'-C2'	-5.06	97.54	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1243	C	C6-N1-C2	5.06	122.32	120.30
26	BB	1354	A	N1-C6-N6	5.06	121.64	118.60
26	BB	1726	C	O4'-C1'-N1	5.06	112.25	108.20
26	BB	1763	G	C2'-C3'-O3'	5.06	121.79	113.70
26	BB	1767	G	O4'-C1'-N9	5.06	112.25	108.20
26	BB	2077	A	N9-C1'-C2'	-5.06	106.44	112.00
26	BB	2155	U	C2-N3-C4	-5.06	123.97	127.00
26	BB	2385	C	N3-C4-N4	5.06	121.54	118.00
26	BB	2473	U	N3-C4-O4	5.06	122.94	119.40
26	BB	2733	A	C4-C5-N7	-5.06	108.17	110.70
26	BB	2841	C	O5'-C5'-C4'	-5.06	102.09	111.70
33	BI	3	VAL	CA-CB-CG2	5.06	118.48	110.90
34	BJ	54	VAL	CG1-CB-CG2	-5.06	102.81	110.90
47	BW	99	SER	CB-CA-C	5.06	119.71	110.10
54	B3	9	ARG	NE-CZ-NH1	-5.06	117.77	120.30
1	AA	570	G	C4-C5-C6	5.06	121.83	118.80
1	AA	1247	U	C5'-C4'-O4'	5.06	115.17	109.10
3	AC	45	G	C5-C6-O6	5.06	131.63	128.60
26	BB	486	C	N3-C4-C5	5.06	123.92	121.90
26	BB	1817	G	C8-N9-C1'	5.06	133.57	127.00
1	AA	38	G	N1-C2-N3	5.05	126.93	123.90
1	AA	146	G	C4'-C3'-C2'	-5.05	97.55	102.60
1	AA	181	A	N9-C4-C5	5.05	107.82	105.80
1	AA	939	G	P-O3'-C3'	5.05	125.77	119.70
1	AA	970	C	C5-C4-N4	-5.05	116.66	120.20
1	AA	1472	U	C6-N1-C2	-5.05	117.97	121.00
2	AB	9	A	C4'-C3'-O3'	5.05	123.11	113.00
25	BA	107	G	N7-C8-N9	5.05	115.63	113.10
26	BB	203	A	N9-C4-C5	5.05	107.82	105.80
26	BB	387	U	C2-N3-C4	-5.05	123.97	127.00
26	BB	551	G	C5-C6-N1	5.05	114.03	111.50
26	BB	895	U	C3'-C2'-C1'	5.05	105.54	101.50
26	BB	1173	U	O4'-C1'-N1	5.05	112.24	108.20
26	BB	1528	A	C8-N9-C1'	-5.05	118.60	127.70
26	BB	1764	C	P-O3'-C3'	5.05	125.77	119.70
26	BB	1784	A	C5-C6-N1	5.05	120.23	117.70
26	BB	1906	G	C5-C6-O6	-5.05	125.57	128.60
26	BB	2054	A	C5'-C4'-O4'	5.05	115.17	109.10
26	BB	2128	G	C6-C5-N7	-5.05	127.37	130.40
26	BB	2235	G	N1-C6-O6	-5.05	116.87	119.90
26	BB	2326	C	C5-C4-N4	-5.05	116.66	120.20
26	BB	2382	G	O5'-P-OP1	5.05	116.77	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2459	A	O4'-C1'-N9	5.05	112.24	108.20
26	BB	2467	C	O5'-P-OP2	-5.05	101.15	105.70
26	BB	2522	U	N1-C2-O2	-5.05	119.26	122.80
26	BB	2649	C	OP2-P-O3'	5.05	116.32	105.20
36	BL	113	PRO	N-CD-CG	5.05	110.78	103.20
1	AA	1401	G	C4-N9-C1'	5.05	133.07	126.50
26	BB	652	U	N3-C2-O2	-5.05	118.66	122.20
26	BB	705	A	C8-N9-C4	-5.05	103.78	105.80
26	BB	716	A	C4-C5-N7	-5.05	108.17	110.70
26	BB	1070	A	C4-C5-N7	-5.05	108.17	110.70
26	BB	1728	C	C6-N1-C2	5.05	122.32	120.30
26	BB	2194	U	N3-C4-O4	-5.05	115.86	119.40
26	BB	2408	U	C4-C5-C6	5.05	122.73	119.70
26	BB	2892	G	C8-N9-C1'	5.05	133.57	127.00
1	AA	239	U	O4'-C4'-C3'	5.05	110.14	106.10
1	AA	325	A	N9-C1'-C2'	-5.05	106.44	112.00
1	AA	351	G	N1-C6-O6	-5.05	116.87	119.90
1	AA	444	G	N3-C4-C5	5.05	131.13	128.60
1	AA	691	G	O5'-C5'-C4'	-5.05	102.10	111.70
1	AA	1040	U	C2-N3-C4	-5.05	123.97	127.00
1	AA	1064	G	O4'-C1'-N9	5.05	112.24	108.20
1	AA	1166	G	N7-C8-N9	5.05	115.63	113.10
1	AA	1416	G	O5'-C5'-C4'	5.05	121.30	111.70
2	AB	45	U	C2-N3-C4	-5.05	123.97	127.00
25	BA	23	G	C2-N3-C4	-5.05	109.37	111.90
25	BA	69	G	C5-C6-N1	5.05	114.03	111.50
26	BB	163	C	C6-N1-C2	-5.05	118.28	120.30
26	BB	325	G	C3'-C2'-C1'	-5.05	97.46	101.50
26	BB	553	G	N3-C2-N2	-5.05	116.36	119.90
26	BB	1301	A	C4-C5-C6	5.05	119.53	117.00
26	BB	1939	5MU	OP2-P-O3'	5.05	116.31	105.20
26	BB	1956	U	C4-C5-C6	5.05	122.73	119.70
26	BB	2025	C	O3'-P-O5'	5.05	113.60	104.00
26	BB	2702	G	N3-C4-N9	5.05	129.03	126.00
26	BB	2726	A	N9-C4-C5	5.05	107.82	105.80
1	AA	62	U	N1-C2-O2	-5.05	119.27	122.80
1	AA	179	A	N9-C4-C5	5.05	107.82	105.80
1	AA	419	C	C6-N1-C1'	5.05	126.86	120.80
1	AA	496	A	C5'-C4'-O4'	5.05	115.16	109.10
1	AA	922	G	C8-N9-C1'	5.05	133.56	127.00
1	AA	1117	A	C2-N3-C4	5.05	113.12	110.60
1	AA	1231	G	C4-C5-C6	5.05	121.83	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1460	C	N3-C4-C5	-5.05	119.88	121.90
4	AD	23	G	C8-N9-C1'	5.05	133.56	127.00
4	AD	36	A	C4'-C3'-C2'	5.05	107.65	102.60
26	BB	157	C	O5'-P-OP2	-5.05	101.16	105.70
26	BB	609	A	OP1-P-O3'	5.05	116.31	105.20
26	BB	660	C	O4'-C1'-N1	5.05	112.24	108.20
26	BB	1102	C	C6-N1-C1'	5.05	126.86	120.80
26	BB	1253	A	C5-C6-N1	5.05	120.22	117.70
26	BB	1325	U	N3-C2-O2	-5.05	118.67	122.20
26	BB	1381	G	C8-N9-C4	-5.05	104.38	106.40
26	BB	1408	G	C5-C6-O6	-5.05	125.57	128.60
26	BB	1613	G	N1-C2-N3	-5.05	120.87	123.90
26	BB	1632	A	C5-C6-N1	5.05	120.22	117.70
26	BB	1745	A	C4'-C3'-C2'	-5.05	97.55	102.60
26	BB	1778	U	C5'-C4'-C3'	-5.05	107.92	116.00
26	BB	1910	G	C3'-C2'-C1'	-5.05	97.46	101.50
26	BB	2596	U	N3-C2-O2	-5.05	118.67	122.20
1	AA	71	A	C5-C6-N6	5.05	127.74	123.70
1	AA	148	G	N1-C6-O6	5.05	122.93	119.90
1	AA	615	G	C6-N1-C2	-5.05	122.07	125.10
1	AA	711	G	C5'-C4'-C3'	-5.05	107.92	116.00
1	AA	1472	U	C4-C5-C6	5.05	122.73	119.70
25	BA	46	A	C2-N3-C4	-5.05	108.08	110.60
26	BB	841	G	C2-N3-C4	5.05	114.42	111.90
26	BB	917	A	C4-C5-C6	-5.05	114.48	117.00
26	BB	1063	G	N3-C2-N2	-5.05	116.37	119.90
26	BB	1125	G	C5-N7-C8	-5.05	101.78	104.30
26	BB	1491	G	C1'-O4'-C4'	5.05	113.94	109.90
26	BB	1734	G	N1-C2-N3	-5.05	120.87	123.90
26	BB	2886	A	N9-C1'-C2'	-5.05	106.45	112.00
1	AA	34	C	C3'-C2'-C1'	5.05	105.54	101.50
1	AA	303	A	C6-N1-C2	-5.05	115.57	118.60
1	AA	874	G	C2-N3-C4	5.05	114.42	111.90
1	AA	1389	C	N3-C4-N4	5.05	121.53	118.00
7	AG	14	GLU	OE1-CD-OE2	5.05	129.35	123.30
25	BA	116	G	N9-C4-C5	5.05	107.42	105.40
26	BB	48	G	C4-N9-C1'	-5.05	119.94	126.50
26	BB	55	G	O4'-C1'-N9	5.05	112.24	108.20
26	BB	346	A	O4'-C1'-N9	5.05	112.24	108.20
26	BB	453	A	C3'-C2'-C1'	-5.05	97.46	101.50
26	BB	544	C	C1'-O4'-C4'	-5.05	105.86	109.90
26	BB	716	A	O4'-C1'-C2'	-5.05	100.75	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1559	U	C5'-C4'-O4'	5.05	115.16	109.10
26	BB	1847	A	P-O3'-C3'	5.05	125.76	119.70
26	BB	1945	G	N3-C4-C5	-5.05	126.08	128.60
26	BB	2067	G	N1-C6-O6	-5.05	116.87	119.90
26	BB	2082	A	C5-C6-N6	-5.05	119.66	123.70
26	BB	2288	A	N3-C4-N9	-5.05	123.36	127.40
26	BB	2619	C	C5'-C4'-O4'	5.05	115.16	109.10
26	BB	2780	G	O4'-C1'-C2'	-5.05	100.75	105.80
43	BS	41	ALA	CB-CA-C	5.05	117.67	110.10
49	BY	10	ARG	NE-CZ-NH1	5.05	122.82	120.30
1	AA	98	A	N1-C2-N3	-5.04	126.78	129.30
1	AA	606	G	C4-C5-N7	-5.04	108.78	110.80
1	AA	1401	G	C3'-C2'-C1'	-5.04	97.46	101.50
26	BB	411	G	N1-C2-N3	-5.04	120.87	123.90
26	BB	973	A	C4-C5-C6	5.04	119.52	117.00
26	BB	977	G	C5-C6-N1	-5.04	108.98	111.50
26	BB	1633	G	C1'-O4'-C4'	5.04	113.94	109.90
26	BB	1672	A	N3-C4-C5	-5.04	123.27	126.80
26	BB	1817	G	C4-C5-C6	5.04	121.83	118.80
26	BB	2880	C	C2-N3-C4	5.04	122.42	119.90
1	AA	90	C	N1-C1'-C2'	-5.04	106.45	112.00
1	AA	198	G	N1-C2-N2	5.04	120.74	116.20
1	AA	304	U	C6-N1-C2	-5.04	117.97	121.00
1	AA	346	G	N9-C4-C5	-5.04	103.38	105.40
1	AA	438	U	N3-C4-O4	5.04	122.93	119.40
1	AA	548	G	C6-N1-C2	-5.04	122.07	125.10
1	AA	894	G	C5'-C4'-C3'	-5.04	107.93	116.00
1	AA	1049	U	C3'-C2'-C1'	-5.04	97.47	101.50
1	AA	1356	G	C5-N7-C8	-5.04	101.78	104.30
1	AA	1431	A	C5-C6-N6	-5.04	119.67	123.70
4	AD	42	C	N3-C4-C5	-5.04	119.88	121.90
26	BB	7	G	N7-C8-N9	5.04	115.62	113.10
26	BB	247	G	N1-C2-N2	-5.04	111.66	116.20
26	BB	748	G	C1'-O4'-C4'	-5.04	105.86	109.90
26	BB	826	U	N1-C2-O2	5.04	126.33	122.80
26	BB	933	A	N9-C4-C5	-5.04	103.78	105.80
26	BB	1149	G	C5-C6-O6	5.04	131.63	128.60
26	BB	1304	A	C5-C6-N1	5.04	120.22	117.70
26	BB	1451	C	C4-C5-C6	-5.04	114.88	117.40
26	BB	1675	C	C5'-C4'-C3'	-5.04	107.93	116.00
26	BB	1710	G	C5-C6-N1	-5.04	108.98	111.50
26	BB	1859	U	C5-C4-O4	-5.04	122.87	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2105	U	OP1-P-O3'	5.04	116.29	105.20
26	BB	2109	U	C3'-C2'-C1'	5.04	105.53	101.50
26	BB	2134	A	O4'-C4'-C3'	5.04	110.13	106.10
26	BB	2248	C	O4'-C1'-C2'	-5.04	100.76	105.80
26	BB	2314	A	C5-N7-C8	-5.04	101.38	103.90
26	BB	2437	G	N3-C2-N2	5.04	123.43	119.90
26	BB	2621	G	C4-C5-N7	-5.04	108.78	110.80
26	BB	2761	A	C6-C5-N7	-5.04	128.77	132.30
54	B3	52	LYS	CB-CA-C	5.04	120.49	110.40
1	AA	271	C	C3'-C2'-C1'	-5.04	97.47	101.50
1	AA	408	A	O4'-C1'-N9	5.04	112.23	108.20
1	AA	889	A	N7-C8-N9	-5.04	111.28	113.80
1	AA	941	G	C4'-C3'-C2'	-5.04	97.56	102.60
1	AA	1017	U	C4-C5-C6	-5.04	116.67	119.70
1	AA	1171	A	C8-N9-C4	5.04	107.82	105.80
1	AA	1329	A	C5-C6-N1	-5.04	115.18	117.70
1	AA	1456	A	C5'-C4'-O4'	5.04	115.15	109.10
1	AA	1486	G	C4-C5-C6	5.04	121.83	118.80
2	AB	22	G	C5-C6-N1	-5.04	108.98	111.50
25	BA	97	C	C3'-C2'-C1'	5.04	105.53	101.50
26	BB	14	A	C5-C6-N1	5.04	120.22	117.70
26	BB	167	A	C5-C6-N6	5.04	127.73	123.70
26	BB	400	G	C5-C6-N1	5.04	114.02	111.50
26	BB	674	G	C5'-C4'-O4'	5.04	115.15	109.10
26	BB	717	C	C5-C4-N4	5.04	123.73	120.20
26	BB	767	U	C6-N1-C2	-5.04	117.97	121.00
26	BB	814	C	N1-C1'-C2'	-5.04	106.45	112.00
26	BB	887	U	N3-C4-C5	-5.04	111.58	114.60
26	BB	1010	A	C8-N9-C1'	5.04	136.77	127.70
26	BB	1423	G	C6-C5-N7	5.04	133.42	130.40
26	BB	1595	C	C5-C6-N1	-5.04	118.48	121.00
26	BB	2688	G	C8-N9-C1'	5.04	133.56	127.00
26	BB	2838	G	C2'-C3'-O3'	5.04	121.77	113.70
30	BF	101	TYR	CA-CB-CG	5.04	122.98	113.40
1	AA	86	G	N3-C4-C5	5.04	131.12	128.60
1	AA	592	G	C4-C5-C6	5.04	121.82	118.80
1	AA	650	G	N7-C8-N9	5.04	115.62	113.10
1	AA	1501	C	N3-C4-C5	5.04	123.92	121.90
26	BB	519	U	N3-C4-O4	5.04	122.93	119.40
26	BB	1154	G	C4'-C3'-O3'	5.04	123.08	113.00
26	BB	1985	C	C1'-O4'-C4'	-5.04	105.87	109.90
26	BB	2255	G	C8-N9-C1'	5.04	133.55	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2599	G	C4-N9-C1'	-5.04	119.95	126.50
26	BB	2707	U	N3-C4-O4	5.04	122.93	119.40
1	AA	59	A	C2-N3-C4	-5.04	108.08	110.60
1	AA	356	A	P-O5'-C5'	5.04	128.96	120.90
1	AA	413	G	N9-C1'-C2'	5.04	120.55	114.00
1	AA	825	A	C6-C5-N7	5.04	135.83	132.30
1	AA	964	A	C8-N9-C4	-5.04	103.78	105.80
1	AA	1015	G	C6-C5-N7	-5.04	127.38	130.40
1	AA	1094	G	N1-C6-O6	-5.04	116.88	119.90
1	AA	1478	U	C4-C5-C6	5.04	122.72	119.70
1	AA	1488	G	C5-C6-N1	5.04	114.02	111.50
2	AB	65	C	N1-C2-O2	5.04	121.92	118.90
26	BB	255	A	N9-C4-C5	5.04	107.81	105.80
26	BB	271	G	C4-C5-N7	-5.04	108.78	110.80
26	BB	292	U	N1-C1'-C2'	-5.04	106.46	112.00
26	BB	376	G	C5-C6-N1	5.04	114.02	111.50
26	BB	1029	A	C5-C6-N6	-5.04	119.67	123.70
26	BB	1109	C	C2-N3-C4	5.04	122.42	119.90
26	BB	1328	A	C2-N3-C4	-5.04	108.08	110.60
26	BB	1416	G	C4-C5-N7	-5.04	108.78	110.80
26	BB	2224	G	C2-N3-C4	-5.04	109.38	111.90
26	BB	2570	G	C5-C6-O6	-5.04	125.58	128.60
26	BB	2809	A	C5-C6-N1	-5.04	115.18	117.70
1	AA	64	G	O4'-C4'-C3'	5.04	110.13	106.10
1	AA	159	G	N1-C2-N3	-5.04	120.88	123.90
1	AA	1357	A	O5'-P-OP2	5.04	116.75	110.70
1	AA	1529	G	O4'-C4'-C3'	5.04	110.13	106.10
3	AC	29	G	O4'-C4'-C3'	-5.04	98.96	104.00
25	BA	5	U	C3'-C2'-C1'	5.04	105.53	101.50
26	BB	1253	A	C1'-O4'-C4'	-5.04	105.87	109.90
26	BB	1741	C	N1-C1'-C2'	-5.04	106.46	112.00
26	BB	2330	G	C8-N9-C1'	5.04	133.55	127.00
1	AA	773	G	N3-C4-C5	-5.04	126.08	128.60
1	AA	810	C	N3-C2-O2	-5.04	118.38	121.90
1	AA	1289	A	P-O3'-C3'	5.04	125.74	119.70
1	AA	1500	A	C5'-C4'-C3'	-5.04	107.94	116.00
1	AA	1531	A	C4'-C3'-C2'	-5.04	97.56	102.60
2	AB	39	A	C2-N3-C4	5.04	113.12	110.60
25	BA	22	U	P-O5'-C5'	5.04	128.96	120.90
25	BA	69	G	O4'-C1'-N9	5.04	112.23	108.20
26	BB	54	G	C2-N3-C4	-5.04	109.38	111.90
26	BB	367	G	P-O3'-C3'	5.04	125.74	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	499	U	C4-C5-C6	-5.04	116.68	119.70
26	BB	788	A	O5'-P-OP1	-5.04	101.17	105.70
26	BB	890	C	C5-C4-N4	5.04	123.72	120.20
26	BB	1065	U	N3-C4-C5	-5.04	111.58	114.60
26	BB	1309	G	C6-N1-C2	-5.04	122.08	125.10
26	BB	1360	G	N3-C2-N2	-5.04	116.38	119.90
26	BB	2340	A	P-O3'-C3'	5.04	125.74	119.70
26	BB	2785	C	C5'-C4'-O4'	5.04	115.14	109.10
26	BB	2814	A	C4-C5-N7	-5.04	108.18	110.70
26	BB	2823	A	O3'-P-O5'	5.04	113.57	104.00
1	AA	444	G	O4'-C1'-N9	5.03	112.23	108.20
1	AA	540	G	N1-C2-N2	5.03	120.73	116.20
1	AA	630	A	C5-N7-C8	-5.03	101.38	103.90
2	AB	44	G	C4-N9-C1'	-5.03	119.95	126.50
3	AC	41	A	N7-C8-N9	5.03	116.32	113.80
4	AD	77	A	C5-C6-N1	-5.03	115.18	117.70
20	AT	72	TRP	CH2-CZ2-CE2	5.03	122.43	117.40
21	AU	71	ASP	OD1-CG-OD2	5.03	132.86	123.30
26	BB	145	C	C2-N3-C4	5.03	122.42	119.90
26	BB	582	A	P-O5'-C5'	5.03	128.95	120.90
26	BB	734	A	C5-C6-N6	5.03	127.73	123.70
26	BB	963	U	C5'-C4'-C3'	-5.03	107.95	116.00
26	BB	1312	U	P-O3'-C3'	5.03	125.74	119.70
26	BB	1408	G	C5-N7-C8	5.03	106.82	104.30
26	BB	2202	U	N1-C1'-C2'	-5.03	106.46	112.00
26	BB	2413	G	C8-N9-C4	5.03	108.41	106.40
26	BB	2594	C	C2-N3-C4	5.03	122.42	119.90
26	BB	2819	G	C4-C5-N7	-5.03	108.79	110.80
33	BI	68	ARG	NE-CZ-NH1	5.03	122.82	120.30
40	BP	109	PRO	N-CA-CB	5.03	109.34	103.30
1	AA	144	G	C5-C6-N1	5.03	114.02	111.50
1	AA	213	G	C5'-C4'-O4'	5.03	115.14	109.10
3	AC	49	U	C1'-O4'-C4'	-5.03	105.87	109.90
25	BA	54	G	C5-C6-O6	-5.03	125.58	128.60
26	BB	122	G	C1'-O4'-C4'	-5.03	105.87	109.90
26	BB	1102	C	N3-C4-C5	-5.03	119.89	121.90
26	BB	2416	C	N3-C4-N4	5.03	121.52	118.00
26	BB	2892	G	N7-C8-N9	5.03	115.62	113.10
1	AA	185	U	C5'-C4'-C3'	-5.03	107.95	116.00
1	AA	242	G	C4-C5-N7	5.03	112.81	110.80
1	AA	530	G	C5-C6-N1	-5.03	108.98	111.50
1	AA	541	G	N9-C1'-C2'	-5.03	106.47	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	732	C	O5'-C5'-C4'	-5.03	102.14	111.70
1	AA	777	A	N7-C8-N9	-5.03	111.28	113.80
1	AA	821	G	C6-C5-N7	-5.03	127.38	130.40
1	AA	915	A	C5'-C4'-O4'	5.03	115.14	109.10
1	AA	1265	C	N3-C4-C5	-5.03	119.89	121.90
1	AA	1268	G	P-O3'-C3'	5.03	125.74	119.70
2	AB	7	G	N1-C2-N2	5.03	120.73	116.20
2	AB	58	A	C5-N7-C8	-5.03	101.39	103.90
9	AI	121	ALA	N-CA-CB	5.03	117.14	110.10
26	BB	612	G	N1-C2-N2	5.03	120.73	116.20
26	BB	674	G	N9-C4-C5	5.03	107.41	105.40
26	BB	888	C	N3-C4-N4	-5.03	114.48	118.00
26	BB	1053	C	C1'-O4'-C4'	-5.03	105.88	109.90
26	BB	1171	G	C8-N9-C4	-5.03	104.39	106.40
26	BB	1218	G	C5-C6-N1	5.03	114.02	111.50
26	BB	1482	G	C5-C6-O6	5.03	131.62	128.60
26	BB	1487	U	N1-C1'-C2'	-5.03	106.47	112.00
26	BB	1546	G	N1-C2-N2	5.03	120.73	116.20
26	BB	1806	C	C1'-O4'-C4'	5.03	113.92	109.90
26	BB	2033	A	O4'-C1'-N9	-5.03	104.18	108.20
26	BB	2047	C	C5'-C4'-O4'	5.03	115.14	109.10
26	BB	2056	G	C5-N7-C8	5.03	106.82	104.30
26	BB	2242	G	P-O3'-C3'	5.03	125.74	119.70
26	BB	2257	U	C5-C4-O4	5.03	128.92	125.90
26	BB	2267	A	N9-C4-C5	5.03	107.81	105.80
26	BB	2782	G	C6-N1-C2	-5.03	122.08	125.10
26	BB	2844	G	C5'-C4'-O4'	5.03	115.14	109.10
28	BD	170	TYR	CG-CD1-CE1	-5.03	117.28	121.30
32	BH	108	PHE	CD1-CE1-CZ	-5.03	114.06	120.10
1	AA	343	U	C5-C6-N1	-5.03	120.19	122.70
1	AA	529	G	O4'-C4'-C3'	5.03	110.12	106.10
1	AA	582	C	C2'-C3'-O3'	5.03	121.75	113.70
1	AA	642	A	C4'-C3'-C2'	-5.03	97.57	102.60
1	AA	826	C	C2-N3-C4	-5.03	117.39	119.90
1	AA	1188	A	C5-C6-N6	-5.03	119.68	123.70
1	AA	1455	G	C5-C6-O6	-5.03	125.58	128.60
26	BB	41	C	P-O3'-C3'	5.03	125.73	119.70
26	BB	529	A	C3'-C2'-C1'	-5.03	97.48	101.50
26	BB	849	A	N1-C2-N3	-5.03	126.78	129.30
26	BB	1215	G	C5'-C4'-O4'	5.03	115.14	109.10
26	BB	1548	A	C4'-C3'-C2'	-5.03	97.57	102.60
26	BB	2718	G	N3-C4-N9	5.03	129.02	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2816	G	N1-C2-N2	5.03	120.73	116.20
1	AA	328	C	C3'-C2'-C1'	5.03	105.52	101.50
1	AA	383	A	N9-C1'-C2'	-5.03	106.47	112.00
1	AA	413	G	N3-C2-N2	-5.03	116.38	119.90
1	AA	983	A	C3'-C2'-C1'	5.03	105.52	101.50
25	BA	86	G	C4'-C3'-C2'	-5.03	97.57	102.60
26	BB	409	G	N3-C2-N2	-5.03	116.38	119.90
26	BB	899	A	P-O5'-C5'	5.03	128.94	120.90
26	BB	1072	C	C4'-C3'-C2'	5.03	107.63	102.60
26	BB	1117	C	N1-C2-O2	5.03	121.92	118.90
26	BB	1182	G	C4-C5-N7	-5.03	108.79	110.80
26	BB	1521	G	C5-C6-N1	5.03	114.01	111.50
26	BB	1609	A	C4'-C3'-C2'	-5.03	97.57	102.60
26	BB	1741	C	P-O3'-C3'	5.03	125.73	119.70
26	BB	1849	G	C5'-C4'-O4'	5.03	115.13	109.10
26	BB	1977	A	C5-N7-C8	-5.03	101.39	103.90
26	BB	2115	G	C2-N3-C4	5.03	114.41	111.90
26	BB	2140	G	C4-N9-C1'	-5.03	119.97	126.50
26	BB	2526	G	N3-C4-N9	-5.03	122.98	126.00
26	BB	2587	A	C4-C5-C6	-5.03	114.49	117.00
26	BB	2879	A	C5'-C4'-O4'	5.03	115.13	109.10
28	BD	202	ARG	CD-NE-CZ	5.03	130.64	123.60
39	BO	103	TYR	CB-CG-CD1	-5.03	117.98	121.00
1	AA	83	C	C4'-C3'-C2'	-5.03	97.57	102.60
1	AA	261	U	O4'-C1'-N1	5.03	112.22	108.20
1	AA	271	C	C2-N3-C4	-5.03	117.39	119.90
1	AA	454	G	C4-C5-C6	-5.03	115.78	118.80
1	AA	1294	G	C4-C5-C6	5.03	121.81	118.80
1	AA	1386	G	C6-N1-C2	5.03	128.12	125.10
1	AA	1444	U	N1-C2-N3	5.03	117.92	114.90
25	BA	74	U	N1-C2-O2	5.03	126.32	122.80
26	BB	28	A	C1'-O4'-C4'	-5.03	105.88	109.90
26	BB	156	A	C1'-O4'-C4'	-5.03	105.88	109.90
26	BB	308	G	N3-C4-N9	-5.03	122.98	126.00
26	BB	437	U	C5'-C4'-C3'	-5.03	107.96	116.00
26	BB	477	A	C5-N7-C8	-5.03	101.39	103.90
26	BB	696	G	C6-N1-C2	-5.03	122.08	125.10
26	BB	878	A	N1-C2-N3	5.03	131.81	129.30
26	BB	907	G	N9-C1'-C2'	-5.03	106.47	112.00
26	BB	978	G	C5-N7-C8	-5.03	101.79	104.30
26	BB	1036	G	N1-C6-O6	5.03	122.92	119.90
26	BB	1259	G	C3'-C2'-C1'	5.03	105.52	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1604	C	C5'-C4'-C3'	-5.03	107.96	116.00
26	BB	1607	C	N3-C2-O2	-5.03	118.38	121.90
26	BB	1781	U	N1-C2-O2	5.03	126.32	122.80
26	BB	2358	A	N3-C4-C5	-5.03	123.28	126.80
33	BI	56	ALA	N-CA-CB	5.03	117.14	110.10
1	AA	172	A	N3-C4-N9	-5.02	123.38	127.40
1	AA	436	C	C5-C4-N4	5.02	123.72	120.20
1	AA	1448	C	C1'-O4'-C4'	-5.02	105.88	109.90
26	BB	83	A	N9-C4-C5	5.02	107.81	105.80
26	BB	2363	G	O4'-C1'-N9	-5.02	104.18	108.20
26	BB	2866	U	N3-C4-C5	-5.02	111.58	114.60
1	AA	88	U	P-O3'-C3'	5.02	125.73	119.70
1	AA	154	U	N1-C2-N3	5.02	117.91	114.90
1	AA	397	A	C3'-C2'-C1'	5.02	105.52	101.50
1	AA	403	C	C5-C4-N4	-5.02	116.69	120.20
1	AA	533	A	C4'-C3'-C2'	-5.02	97.58	102.60
1	AA	587	G	N7-C8-N9	5.02	115.61	113.10
1	AA	662	U	C5'-C4'-O4'	5.02	115.13	109.10
1	AA	733	G	N7-C8-N9	5.02	115.61	113.10
1	AA	874	G	O4'-C1'-N9	5.02	112.22	108.20
1	AA	913	A	C4'-C3'-C2'	-5.02	97.58	102.60
1	AA	1278	G	C1'-O4'-C4'	-5.02	105.88	109.90
1	AA	1297	G	P-O3'-C3'	5.02	125.73	119.70
1	AA	1435	G	N9-C4-C5	-5.02	103.39	105.40
1	AA	1479	C	C4-C5-C6	5.02	119.91	117.40
14	AN	14	GLN	CB-CA-C	5.02	120.44	110.40
25	BA	63	C	C1'-O4'-C4'	-5.02	105.88	109.90
26	BB	2	G	N1-C6-O6	-5.02	116.89	119.90
26	BB	235	U	C1'-O4'-C4'	5.02	113.92	109.90
26	BB	336	C	N1-C2-N3	-5.02	115.69	119.20
26	BB	394	C	C5-C4-N4	-5.02	116.68	120.20
26	BB	842	U	C4-C5-C6	5.02	122.71	119.70
26	BB	1313	U	C3'-C2'-C1'	5.02	105.52	101.50
26	BB	1775	U	N3-C4-C5	-5.02	111.59	114.60
26	BB	1855	U	N3-C4-C5	-5.02	111.59	114.60
26	BB	2117	A	C5'-C4'-C3'	5.02	124.04	116.00
26	BB	2310	C	C4-C5-C6	5.02	119.91	117.40
26	BB	2719	G	C1'-O4'-C4'	-5.02	105.88	109.90
26	BB	2719	G	C6-C5-N7	-5.02	127.39	130.40
44	BT	84	ARG	CB-CA-C	5.02	120.44	110.40
1	AA	789	U	N3-C2-O2	-5.02	118.69	122.20
1	AA	988	G	C6-C5-N7	-5.02	127.39	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1456	A	C1'-O4'-C4'	-5.02	105.88	109.90
25	BA	51	G	N1-C6-O6	-5.02	116.89	119.90
25	BA	66	A	C5-N7-C8	-5.02	101.39	103.90
26	BB	1190	G	N1-C2-N2	5.02	120.72	116.20
26	BB	1462	C	C1'-O4'-C4'	-5.02	105.88	109.90
26	BB	2221	G	N1-C2-N3	-5.02	120.89	123.90
26	BB	2361	G	C5-N7-C8	-5.02	101.79	104.30
1	AA	186	C	N3-C4-N4	5.02	121.51	118.00
1	AA	297	G	C6-N1-C2	-5.02	122.09	125.10
1	AA	1015	G	O4'-C1'-N9	5.02	112.22	108.20
1	AA	1185	G	C8-N9-C1'	5.02	133.53	127.00
1	AA	1203	C	C5-C6-N1	5.02	123.51	121.00
1	AA	1437	A	P-O3'-C3'	5.02	125.72	119.70
2	AB	35	C	C5-C6-N1	5.02	123.51	121.00
10	AJ	3	ARG	NH1-CZ-NH2	-5.02	113.88	119.40
25	BA	52	A	O4'-C1'-N9	5.02	112.22	108.20
25	BA	95	U	C2-N3-C4	5.02	130.01	127.00
26	BB	228	C	P-O3'-C3'	5.02	125.72	119.70
26	BB	443	A	C5-C6-N6	5.02	127.72	123.70
26	BB	938	G	C8-N9-C4	-5.02	104.39	106.40
26	BB	950	G	N3-C2-N2	-5.02	116.39	119.90
26	BB	1179	G	N1-C2-N3	-5.02	120.89	123.90
26	BB	1462	C	O4'-C1'-N1	5.02	112.22	108.20
26	BB	1511	G	N1-C6-O6	-5.02	116.89	119.90
26	BB	1733	G	C5'-C4'-O4'	5.02	115.12	109.10
26	BB	1944	U	C4-C5-C6	5.02	122.71	119.70
26	BB	1961	C	C5-C6-N1	-5.02	118.49	121.00
26	BB	2556	C	C2-N3-C4	5.02	122.41	119.90
1	AA	261	U	P-O3'-C3'	5.02	125.72	119.70
1	AA	428	G	C8-N9-C4	5.02	108.41	106.40
1	AA	823	C	C6-N1-C2	-5.02	118.29	120.30
1	AA	991	U	N1-C2-O2	5.02	126.31	122.80
25	BA	102	G	O4'-C1'-N9	5.02	112.21	108.20
26	BB	398	C	C2-N3-C4	-5.02	117.39	119.90
26	BB	911	A	C5-C6-N6	-5.02	119.69	123.70
26	BB	1193	G	C4-N9-C1'	-5.02	119.98	126.50
26	BB	1226	A	C5-N7-C8	-5.02	101.39	103.90
26	BB	1469	A	O4'-C4'-C3'	5.02	110.11	106.10
26	BB	1936	A	C5'-C4'-O4'	5.02	115.12	109.10
26	BB	2004	G	C5'-C4'-C3'	-5.02	107.97	116.00
26	BB	2006	C	C5'-C4'-O4'	5.02	115.12	109.10
26	BB	2436	G	N1-C6-O6	-5.02	116.89	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BK	84	GLY	CA-C-O	-5.02	111.57	120.60
1	AA	711	G	N7-C8-N9	5.02	115.61	113.10
1	AA	1044	A	C6-N1-C2	5.02	121.61	118.60
1	AA	1075	U	C5-C6-N1	-5.02	120.19	122.70
1	AA	1277	C	C6-N1-C2	5.02	122.31	120.30
1	AA	1432	G	O4'-C1'-C2'	-5.02	100.78	105.80
3	AC	18	A	N1-C6-N6	5.02	121.61	118.60
3	AC	23	C	O4'-C4'-C3'	5.02	110.11	106.10
4	AD	26	C	C5-C4-N4	-5.02	116.69	120.20
26	BB	698	C	O5'-C5'-C4'	-5.02	102.17	111.70
26	BB	931	U	C4'-C3'-O3'	-5.02	98.87	109.40
26	BB	1622	G	C3'-C2'-C1'	-5.02	97.49	101.50
26	BB	1679	A	C3'-C2'-C1'	-5.02	97.49	101.50
26	BB	1949	G	N9-C1'-C2'	-5.02	106.48	112.00
26	BB	2464	G	N9-C4-C5	5.02	107.41	105.40
26	BB	2600	A	C4-C5-C6	-5.02	114.49	117.00
26	BB	2791	G	C4-C5-C6	-5.02	115.79	118.80
1	AA	82	G	C4-C5-C6	5.01	121.81	118.80
1	AA	258	G	C8-N9-C1'	5.01	133.52	127.00
1	AA	794	A	N3-C4-N9	-5.01	123.39	127.40
1	AA	897	C	C4'-C3'-C2'	-5.01	97.59	102.60
24	AX	6	ARG	CA-CB-CG	5.01	124.43	113.40
25	BA	73	A	N7-C8-N9	5.01	116.31	113.80
26	BB	141	G	N3-C4-C5	-5.01	126.09	128.60
26	BB	527	C	C4-C5-C6	-5.01	114.89	117.40
26	BB	917	A	C5-C6-N1	5.01	120.21	117.70
26	BB	1032	A	C4'-C3'-O3'	5.01	123.03	113.00
26	BB	1523	U	C5'-C4'-C3'	-5.01	107.98	116.00
26	BB	1830	C	C6-N1-C2	5.01	122.31	120.30
26	BB	2052	A	N1-C6-N6	-5.01	115.59	118.60
26	BB	2072	C	N3-C4-N4	5.01	121.51	118.00
26	BB	2345	G	C5-C6-O6	-5.01	125.59	128.60
26	BB	2711	A	C3'-C2'-C1'	5.01	105.51	101.50
1	AA	16	A	C5-N7-C8	5.01	106.41	103.90
1	AA	423	G	N7-C8-N9	5.01	115.61	113.10
1	AA	1015	G	C8-N9-C1'	5.01	133.52	127.00
1	AA	1348	U	C5-C4-O4	-5.01	122.89	125.90
11	AK	83	ARG	NE-CZ-NH2	-5.01	117.79	120.30
26	BB	340	A	C4'-C3'-C2'	-5.01	97.59	102.60
26	BB	406	G	N3-C4-N9	-5.01	122.99	126.00
26	BB	1024	G	C1'-O4'-C4'	5.01	113.91	109.90
26	BB	1130	U	N1-C1'-C2'	5.01	120.52	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1190	G	C2-N3-C4	5.01	114.41	111.90
26	BB	1729	U	C6-N1-C2	-5.01	117.99	121.00
26	BB	1858	A	N9-C1'-C2'	-5.01	106.48	112.00
26	BB	2192	U	O4'-C1'-C2'	-5.01	100.79	105.80
26	BB	2356	U	C2'-C3'-O3'	5.01	121.72	113.70
26	BB	2601	C	C6-N1-C1'	5.01	126.82	120.80
41	BQ	49	VAL	CG1-CB-CG2	5.01	118.92	110.90
1	AA	92	U	C5'-C4'-C3'	-5.01	107.98	116.00
1	AA	326	G	N3-C2-N2	5.01	123.41	119.90
1	AA	442	G	N3-C4-C5	-5.01	126.09	128.60
1	AA	616	G	O4'-C1'-C2'	5.01	112.11	107.60
1	AA	758	C	N1-C2-O2	5.01	121.91	118.90
1	AA	884	U	O4'-C1'-N1	5.01	112.21	108.20
1	AA	897	C	C3'-C2'-C1'	5.01	105.51	101.50
1	AA	1181	G	C5-N7-C8	5.01	106.81	104.30
3	AC	57	C	N1-C2-N3	5.01	122.71	119.20
4	AD	10	G	C6-N1-C2	-5.01	122.09	125.10
25	BA	39	A	C8-N9-C4	-5.01	103.80	105.80
26	BB	364	C	C2-N3-C4	-5.01	117.39	119.90
26	BB	1015	U	C4'-C3'-C2'	-5.01	97.59	102.60
26	BB	1026	G	C4-N9-C1'	-5.01	119.98	126.50
26	BB	1153	C	N3-C2-O2	-5.01	118.39	121.90
26	BB	1179	G	C2-N3-C4	5.01	114.41	111.90
26	BB	1325	U	C2-N3-C4	-5.01	123.99	127.00
26	BB	1358	G	C6-N1-C2	-5.01	122.09	125.10
26	BB	1675	C	C5-C4-N4	5.01	123.71	120.20
26	BB	1950	G	N1-C2-N3	-5.01	120.89	123.90
26	BB	2042	A	N3-C4-C5	-5.01	123.29	126.80
26	BB	2254	C	C2-N3-C4	5.01	122.41	119.90
26	BB	2260	C	C3'-C2'-C1'	-5.01	97.49	101.50
26	BB	2627	G	C6-N1-C2	-5.01	122.09	125.10
26	BB	2654	A	C4-C5-N7	5.01	113.21	110.70
26	BB	2785	C	O4'-C1'-N1	5.01	112.21	108.20
1	AA	129	A	C6-C5-N7	5.01	135.81	132.30
1	AA	222	C	C4'-C3'-C2'	-5.01	97.59	102.60
1	AA	314	C	N3-C4-C5	-5.01	119.90	121.90
1	AA	575	G	P-O3'-C3'	5.01	125.71	119.70
1	AA	1093	A	C1'-O4'-C4'	-5.01	105.89	109.90
2	AB	18	G	C4-C5-C6	5.01	121.81	118.80
3	AC	24	A	O4'-C4'-C3'	-5.01	98.99	104.00
25	BA	36	C	N3-C4-N4	5.01	121.51	118.00
25	BA	95	U	C4-C5-C6	5.01	122.71	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	44	A	C4-C5-C6	5.01	119.50	117.00
26	BB	46	G	C6-N1-C2	-5.01	122.09	125.10
26	BB	382	A	O4'-C4'-C3'	-5.01	98.99	104.00
26	BB	477	A	C4-C5-N7	5.01	113.20	110.70
26	BB	655	A	C1'-O4'-C4'	-5.01	105.89	109.90
26	BB	1011	G	N1-C2-N3	-5.01	120.89	123.90
26	BB	1485	U	C4-C5-C6	5.01	122.70	119.70
26	BB	1657	U	C5-C4-O4	5.01	128.91	125.90
26	BB	1695	G	C8-N9-C1'	-5.01	120.49	127.00
26	BB	1938	A	C5-C6-N6	5.01	127.71	123.70
26	BB	2181	U	C5-C6-N1	-5.01	120.20	122.70
26	BB	2265	U	C2-N3-C4	5.01	130.00	127.00
26	BB	2328	A	P-O3'-C3'	5.01	125.71	119.70
26	BB	2694	G	C4'-C3'-C2'	5.01	107.61	102.60
26	BB	2762	C	N3-C4-N4	-5.01	114.49	118.00
28	BD	2	VAL	CA-CB-CG2	5.01	118.42	110.90
29	BE	46	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
49	BY	22	VAL	CA-CB-CG1	5.01	118.41	110.90
1	AA	617	G	C1'-O4'-C4'	5.01	113.91	109.90
25	BA	69	G	C4-C5-C6	-5.01	115.80	118.80
26	BB	194	G	N3-C4-C5	-5.01	126.10	128.60
26	BB	235	U	N1-C2-O2	5.01	126.31	122.80
26	BB	958	U	P-O3'-C3'	5.01	125.71	119.70
1	AA	682	G	C2'-C3'-O3'	5.01	121.71	113.70
1	AA	1536	C	O4'-C4'-C3'	5.01	110.11	106.10
7	AG	64	TYR	CZ-CE2-CD2	5.01	124.31	119.80
9	AI	110	ARG	CD-NE-CZ	5.01	130.61	123.60
9	AI	121	ALA	C-N-CA	5.01	134.22	121.70
26	BB	227	A	N3-C4-N9	5.01	131.41	127.40
26	BB	421	C	N1-C2-O2	5.01	121.90	118.90
26	BB	466	A	C3'-C2'-C1'	5.01	105.51	101.50
26	BB	586	A	C6-C5-N7	-5.01	128.79	132.30
26	BB	765	C	P-O3'-C3'	5.01	125.71	119.70
26	BB	981	A	C1'-O4'-C4'	-5.01	105.89	109.90
26	BB	1013	C	O4'-C4'-C3'	5.01	110.11	106.10
26	BB	1149	G	C8-N9-C4	-5.01	104.40	106.40
26	BB	1501	G	N3-C4-C5	-5.01	126.10	128.60
26	BB	2110	G	O5'-P-OP2	5.01	116.71	110.70
26	BB	2196	C	O4'-C1'-N1	5.01	112.20	108.20
26	BB	2314	A	N7-C8-N9	5.01	116.30	113.80
26	BB	2574	G	C8-N9-C1'	5.01	133.51	127.00
1	AA	92	U	O4'-C4'-C3'	-5.00	99.00	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	58	A	C4-C5-C6	-5.00	114.50	117.00
25	BA	48	U	C6-N1-C2	5.00	124.00	121.00
26	BB	1103	A	N7-C8-N9	-5.00	111.30	113.80
26	BB	1250	G	C6-C5-N7	-5.00	127.40	130.40
26	BB	1803	A	N1-C2-N3	-5.00	126.80	129.30
26	BB	2831	G	O3'-P-O5'	-5.00	94.49	104.00
1	AA	17	U	C5'-C4'-C3'	-5.00	107.99	116.00
1	AA	208	U	C5'-C4'-O4'	5.00	115.10	109.10
1	AA	610	U	C5-C6-N1	5.00	125.20	122.70
1	AA	1047	G	C5-C6-N1	5.00	114.00	111.50
1	AA	1085	U	C6-N1-C2	5.00	124.00	121.00
4	AD	5	G	C8-N9-C4	-5.00	104.40	106.40
25	BA	28	C	C4'-C3'-C2'	-5.00	97.60	102.60
26	BB	439	A	O4'-C1'-C2'	5.00	112.10	107.60
26	BB	612	G	C5-N7-C8	-5.00	101.80	104.30
26	BB	662	G	N1-C6-O6	-5.00	116.90	119.90
26	BB	1375	U	N1-C2-O2	-5.00	119.30	122.80
26	BB	1461	C	N3-C4-C5	5.00	123.90	121.90
26	BB	1709	U	C5-C4-O4	-5.00	122.90	125.90
26	BB	1972	G	O4'-C1'-N9	5.00	112.20	108.20
26	BB	2032	G	C4-N9-C1'	5.00	133.00	126.50
26	BB	2404	U	C5-C4-O4	5.00	128.90	125.90
26	BB	2501	C	C5'-C4'-C3'	5.00	124.01	116.00
35	BK	115	ASP	CB-CG-OD2	-5.00	113.80	118.30
1	AA	144	G	N1-C6-O6	-5.00	116.90	119.90
1	AA	393	A	C4-C5-C6	-5.00	114.50	117.00
1	AA	398	U	C1'-O4'-C4'	-5.00	105.90	109.90
1	AA	433	G	C5-C6-O6	-5.00	125.60	128.60
1	AA	872	A	C2-N3-C4	-5.00	108.10	110.60
1	AA	1131	G	N1-C6-O6	-5.00	116.90	119.90
2	AB	33	U	C5'-C4'-O4'	5.00	115.10	109.10
4	AD	36	A	N3-C4-N9	-5.00	123.40	127.40
26	BB	325	G	O3'-P-O5'	5.00	113.50	104.00
26	BB	339	U	C3'-C2'-C1'	-5.00	97.50	101.50
26	BB	1133	A	C5-N7-C8	5.00	106.40	103.90
26	BB	1251	C	N1-C1'-C2'	5.00	120.50	114.00
26	BB	1742	U	C2-N3-C4	5.00	130.00	127.00
26	BB	1969	A	C4-C5-N7	-5.00	108.20	110.70
26	BB	2158	A	O5'-C5'-C4'	5.00	121.20	111.70
26	BB	2228	G	N1-C2-N2	-5.00	111.70	116.20
26	BB	2534	A	C1'-O4'-C4'	-5.00	105.90	109.90
26	BB	2633	G	N3-C2-N2	-5.00	116.40	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BL	69	ARG	NE-CZ-NH1	5.00	122.80	120.30
47	BW	98	ASN	N-CA-CB	-5.00	101.60	110.60

There are no chirality outliers.

All (2927) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	100	G	Sidechain
1	AA	1002	G	Sidechain
1	AA	1004	A	Sidechain
1	AA	1005	A	Sidechain
1	AA	1006	G	Sidechain
1	AA	1008	U	Sidechain
1	AA	1009	U	Sidechain
1	AA	101	A	Sidechain
1	AA	1010	U	Sidechain
1	AA	1012	A	Sidechain
1	AA	1013	G	Sidechain
1	AA	1014	A	Sidechain
1	AA	1017	U	Sidechain
1	AA	1018	G	Sidechain
1	AA	102	G	Sidechain
1	AA	1029	U	Sidechain
1	AA	1032	G	Sidechain
1	AA	1033	G	Sidechain
1	AA	1037	C	Sidechain
1	AA	1040	U	Sidechain
1	AA	1042	A	Sidechain
1	AA	1045	C	Sidechain
1	AA	1046	A	Sidechain
1	AA	1047	G	Sidechain
1	AA	1048	G	Sidechain
1	AA	1049	U	Sidechain
1	AA	1050	G	Sidechain
1	AA	1051	C	Sidechain
1	AA	1054	C	Sidechain
1	AA	1057	G	Sidechain
1	AA	1061	G	Sidechain
1	AA	1064	G	Sidechain
1	AA	1066	C	Sidechain
1	AA	1067	A	Sidechain
1	AA	1068	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1069	C	Sidechain
1	AA	107	G	Sidechain
1	AA	1070	U	Sidechain
1	AA	1073	U	Sidechain
1	AA	1075	U	Sidechain
1	AA	1077	G	Sidechain
1	AA	1079	G	Sidechain
1	AA	108	G	Sidechain
1	AA	1081	A	Sidechain
1	AA	1082	A	Sidechain
1	AA	1085	U	Sidechain
1	AA	1089	G	Sidechain
1	AA	1092	A	Sidechain
1	AA	1093	A	Sidechain
1	AA	1094	G	Sidechain
1	AA	1095	U	Sidechain
1	AA	1096	C	Sidechain
1	AA	1097	C	Sidechain
1	AA	1099	G	Sidechain
1	AA	11	G	Sidechain
1	AA	110	C	Sidechain
1	AA	1101	A	Sidechain
1	AA	1104	G	Sidechain
1	AA	1105	A	Sidechain
1	AA	1106	G	Sidechain
1	AA	1108	G	Sidechain
1	AA	1109	C	Sidechain
1	AA	111	G	Sidechain
1	AA	1110	A	Sidechain
1	AA	1112	C	Sidechain
1	AA	1113	C	Sidechain
1	AA	1117	A	Sidechain
1	AA	1118	U	Sidechain
1	AA	1120	C	Sidechain
1	AA	1122	U	Sidechain
1	AA	1124	G	Sidechain
1	AA	1125	U	Sidechain
1	AA	1127	G	Sidechain
1	AA	113	G	Sidechain
1	AA	1130	A	Sidechain
1	AA	1131	G	Sidechain
1	AA	1132	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1133	G	Sidechain
1	AA	1134	G	Sidechain
1	AA	1136	C	Sidechain
1	AA	1137	C	Sidechain
1	AA	1138	G	Sidechain
1	AA	1139	G	Sidechain
1	AA	1141	C	Sidechain
1	AA	1143	G	Sidechain
1	AA	1144	G	Sidechain
1	AA	1148	U	Sidechain
1	AA	1149	C	Sidechain
1	AA	115	G	Sidechain
1	AA	1151	A	Sidechain
1	AA	1152	A	Sidechain
1	AA	1153	G	Sidechain
1	AA	1155	A	Sidechain
1	AA	1156	G	Sidechain
1	AA	1157	A	Sidechain
1	AA	116	A	Sidechain
1	AA	1162	C	Sidechain
1	AA	1164	G	Sidechain
1	AA	1166	G	Sidechain
1	AA	1168	U	Sidechain
1	AA	1169	A	Sidechain
1	AA	1170	A	Sidechain
1	AA	1171	A	Sidechain
1	AA	1173	U	Sidechain
1	AA	1174	G	Sidechain
1	AA	1175	G	Sidechain
1	AA	1177	G	Sidechain
1	AA	1178	G	Sidechain
1	AA	1180	A	Sidechain
1	AA	1182	G	Sidechain
1	AA	1183	U	Sidechain
1	AA	1184	G	Sidechain
1	AA	1185	G	Sidechain
1	AA	1186	G	Sidechain
1	AA	1187	G	Sidechain
1	AA	1188	A	Sidechain
1	AA	1189	U	Sidechain
1	AA	1190	G	Sidechain
1	AA	1191	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1193	G	Sidechain
1	AA	1194	U	Sidechain
1	AA	1198	G	Sidechain
1	AA	1199	U	Sidechain
1	AA	12	U	Sidechain
1	AA	1200	C	Sidechain
1	AA	1201	A	Sidechain
1	AA	1202	U	Sidechain
1	AA	1204	A	Sidechain
1	AA	1205	U	Sidechain
1	AA	1206	G	Sidechain
1	AA	121	U	Sidechain
1	AA	1210	C	Sidechain
1	AA	1212	U	Sidechain
1	AA	1213	A	Sidechain
1	AA	1214	C	Sidechain
1	AA	1215	G	Sidechain
1	AA	1216	A	Sidechain
1	AA	1217	C	Sidechain
1	AA	1219	A	Sidechain
1	AA	122	G	Sidechain
1	AA	1220	G	Sidechain
1	AA	1221	G	Sidechain
1	AA	1222	G	Sidechain
1	AA	1225	A	Sidechain
1	AA	1226	C	Sidechain
1	AA	123	U	Sidechain
1	AA	1230	C	Sidechain
1	AA	1232	U	Sidechain
1	AA	1233	G	Sidechain
1	AA	1234	C	Sidechain
1	AA	1236	A	Sidechain
1	AA	1237	C	Sidechain
1	AA	1239	A	Sidechain
1	AA	1240	U	Sidechain
1	AA	1241	G	Sidechain
1	AA	1243	C	Sidechain
1	AA	1244	G	Sidechain
1	AA	1247	U	Sidechain
1	AA	125	U	Sidechain
1	AA	1253	G	Sidechain
1	AA	1255	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1257	A	Sidechain
1	AA	1258	G	Sidechain
1	AA	126	G	Sidechain
1	AA	1261	A	Sidechain
1	AA	1263	C	Sidechain
1	AA	1264	U	Sidechain
1	AA	1266	G	Sidechain
1	AA	1268	G	Sidechain
1	AA	1269	A	Sidechain
1	AA	127	G	Sidechain
1	AA	1270	G	Sidechain
1	AA	1274	A	Sidechain
1	AA	1275	A	Sidechain
1	AA	1276	G	Sidechain
1	AA	1278	G	Sidechain
1	AA	128	G	Sidechain
1	AA	1280	A	Sidechain
1	AA	1281	C	Sidechain
1	AA	1284	C	Sidechain
1	AA	1286	U	Sidechain
1	AA	1289	A	Sidechain
1	AA	129	A	Sidechain
1	AA	1290	G	Sidechain
1	AA	1291	U	Sidechain
1	AA	1292	G	Sidechain
1	AA	1293	C	Sidechain
1	AA	1295	U	Sidechain
1	AA	1297	G	Sidechain
1	AA	1298	U	Sidechain
1	AA	1302	C	Sidechain
1	AA	1304	G	Sidechain
1	AA	1308	U	Sidechain
1	AA	1309	G	Sidechain
1	AA	131	A	Sidechain
1	AA	1310	G	Sidechain
1	AA	1312	G	Sidechain
1	AA	1313	U	Sidechain
1	AA	1315	U	Sidechain
1	AA	1316	G	Sidechain
1	AA	1317	C	Sidechain
1	AA	1318	A	Sidechain
1	AA	132	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1320	C	Sidechain
1	AA	1321	U	Sidechain
1	AA	1328	C	Sidechain
1	AA	133	U	Sidechain
1	AA	1330	U	Sidechain
1	AA	1333	A	Sidechain
1	AA	1334	G	Sidechain
1	AA	1336	C	Sidechain
1	AA	134	G	Sidechain
1	AA	1340	A	Sidechain
1	AA	1343	G	Sidechain
1	AA	1344	C	Sidechain
1	AA	1346	A	Sidechain
1	AA	1347	G	Sidechain
1	AA	1348	U	Sidechain
1	AA	135	C	Sidechain
1	AA	1351	U	Sidechain
1	AA	1353	G	Sidechain
1	AA	1356	G	Sidechain
1	AA	1357	A	Sidechain
1	AA	1358	U	Sidechain
1	AA	136	C	Sidechain
1	AA	1360	A	Sidechain
1	AA	1361	G	Sidechain
1	AA	1362	A	Sidechain
1	AA	1363	A	Sidechain
1	AA	1364	U	Sidechain
1	AA	1366	C	Sidechain
1	AA	1368	A	Sidechain
1	AA	1369	C	Sidechain
1	AA	1370	G	Sidechain
1	AA	1371	G	Sidechain
1	AA	1373	G	Sidechain
1	AA	1375	A	Sidechain
1	AA	1376	U	Sidechain
1	AA	1377	A	Sidechain
1	AA	1379	G	Sidechain
1	AA	1381	U	Sidechain
1	AA	1382	C	Sidechain
1	AA	1383	C	Sidechain
1	AA	1385	G	Sidechain
1	AA	139	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1391	U	Sidechain
1	AA	1392	G	Sidechain
1	AA	1393	U	Sidechain
1	AA	1394	A	Sidechain
1	AA	1395	C	Sidechain
1	AA	1399	C	Sidechain
1	AA	14	U	Sidechain
1	AA	140	U	Sidechain
1	AA	1403	C	Sidechain
1	AA	1405	G	Sidechain
1	AA	1406	U	Sidechain
1	AA	141	G	Sidechain
1	AA	1411	C	Sidechain
1	AA	1412	C	Sidechain
1	AA	1413	A	Sidechain
1	AA	1415	G	Sidechain
1	AA	1416	G	Sidechain
1	AA	1417	G	Sidechain
1	AA	1419	G	Sidechain
1	AA	142	G	Sidechain
1	AA	1420	U	Sidechain
1	AA	1421	G	Sidechain
1	AA	1425	U	Sidechain
1	AA	1428	A	Sidechain
1	AA	143	A	Sidechain
1	AA	1430	A	Sidechain
1	AA	1432	G	Sidechain
1	AA	1433	A	Sidechain
1	AA	1434	A	Sidechain
1	AA	1436	U	Sidechain
1	AA	1437	A	Sidechain
1	AA	144	G	Sidechain
1	AA	1440	U	Sidechain
1	AA	1443	C	Sidechain
1	AA	1445	U	Sidechain
1	AA	1450	U	Sidechain
1	AA	1452	C	Sidechain
1	AA	1453	G	Sidechain
1	AA	1454	G	Sidechain
1	AA	1455	G	Sidechain
1	AA	1456	A	Sidechain
1	AA	1457	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1458	G	Sidechain
1	AA	146	G	Sidechain
1	AA	1460	C	Sidechain
1	AA	1461	G	Sidechain
1	AA	1463	U	Sidechain
1	AA	1464	U	Sidechain
1	AA	1465	A	Sidechain
1	AA	1466	C	Sidechain
1	AA	1467	C	Sidechain
1	AA	1469	C	Sidechain
1	AA	147	G	Sidechain
1	AA	1470	U	Sidechain
1	AA	1471	U	Sidechain
1	AA	1472	U	Sidechain
1	AA	1473	G	Sidechain
1	AA	1475	G	Sidechain
1	AA	1477	U	Sidechain
1	AA	148	G	Sidechain
1	AA	1480	A	Sidechain
1	AA	1481	U	Sidechain
1	AA	1482	G	Sidechain
1	AA	1483	A	Sidechain
1	AA	1485	U	Sidechain
1	AA	1486	G	Sidechain
1	AA	1487	G	Sidechain
1	AA	1488	G	Sidechain
1	AA	1489	G	Sidechain
1	AA	1490	U	Sidechain
1	AA	1494	G	Sidechain
1	AA	1499	A	Sidechain
1	AA	1501	C	Sidechain
1	AA	1503	A	Sidechain
1	AA	1504	G	Sidechain
1	AA	1506	U	Sidechain
1	AA	1508	A	Sidechain
1	AA	151	A	Sidechain
1	AA	1513	A	Sidechain
1	AA	1514	G	Sidechain
1	AA	1517	G	Sidechain
1	AA	152	A	Sidechain
1	AA	1521	C	Sidechain
1	AA	1522	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1523	G	Sidechain
1	AA	1525	G	Sidechain
1	AA	1527	U	Sidechain
1	AA	1528	U	Sidechain
1	AA	153	C	Sidechain
1	AA	1530	G	Sidechain
1	AA	1531	A	Sidechain
1	AA	1535	C	Sidechain
1	AA	1536	C	Sidechain
1	AA	1541	U	Sidechain
1	AA	156	C	Sidechain
1	AA	157	U	Sidechain
1	AA	158	G	Sidechain
1	AA	159	G	Sidechain
1	AA	160	A	Sidechain
1	AA	161	A	Sidechain
1	AA	165	G	Sidechain
1	AA	166	U	Sidechain
1	AA	168	G	Sidechain
1	AA	171	A	Sidechain
1	AA	172	A	Sidechain
1	AA	173	U	Sidechain
1	AA	174	A	Sidechain
1	AA	176	C	Sidechain
1	AA	177	G	Sidechain
1	AA	178	C	Sidechain
1	AA	179	A	Sidechain
1	AA	180	U	Sidechain
1	AA	182	A	Sidechain
1	AA	183	C	Sidechain
1	AA	184	G	Sidechain
1	AA	186	C	Sidechain
1	AA	191	G	Sidechain
1	AA	195	A	Sidechain
1	AA	196	A	Sidechain
1	AA	198	G	Sidechain
1	AA	199	A	Sidechain
1	AA	200	G	Sidechain
1	AA	201	G	Sidechain
1	AA	202	G	Sidechain
1	AA	203	G	Sidechain
1	AA	204	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	208	U	Sidechain
1	AA	21	G	Sidechain
1	AA	210	C	Sidechain
1	AA	211	G	Sidechain
1	AA	212	G	Sidechain
1	AA	213	G	Sidechain
1	AA	214	C	Sidechain
1	AA	215	C	Sidechain
1	AA	217	C	Sidechain
1	AA	219	U	Sidechain
1	AA	22	G	Sidechain
1	AA	220	G	Sidechain
1	AA	221	C	Sidechain
1	AA	224	U	Sidechain
1	AA	225	C	Sidechain
1	AA	228	A	Sidechain
1	AA	229	U	Sidechain
1	AA	23	C	Sidechain
1	AA	230	G	Sidechain
1	AA	231	U	Sidechain
1	AA	232	G	Sidechain
1	AA	233	C	Sidechain
1	AA	236	A	Sidechain
1	AA	237	G	Sidechain
1	AA	238	A	Sidechain
1	AA	24	U	Sidechain
1	AA	240	G	Sidechain
1	AA	241	G	Sidechain
1	AA	242	G	Sidechain
1	AA	244	U	Sidechain
1	AA	245	U	Sidechain
1	AA	246	A	Sidechain
1	AA	247	G	Sidechain
1	AA	249	U	Sidechain
1	AA	250	A	Sidechain
1	AA	251	G	Sidechain
1	AA	252	U	Sidechain
1	AA	253	A	Sidechain
1	AA	254	G	Sidechain
1	AA	256	U	Sidechain
1	AA	257	G	Sidechain
1	AA	258	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	259	G	Sidechain
1	AA	260	G	Sidechain
1	AA	261	U	Sidechain
1	AA	265	G	Sidechain
1	AA	266	G	Sidechain
1	AA	267	C	Sidechain
1	AA	27	G	Sidechain
1	AA	271	C	Sidechain
1	AA	272	C	Sidechain
1	AA	275	G	Sidechain
1	AA	279	A	Sidechain
1	AA	280	C	Sidechain
1	AA	281	G	Sidechain
1	AA	283	U	Sidechain
1	AA	284	C	Sidechain
1	AA	285	C	Sidechain
1	AA	288	A	Sidechain
1	AA	293	G	Sidechain
1	AA	294	U	Sidechain
1	AA	297	G	Sidechain
1	AA	298	A	Sidechain
1	AA	299	G	Sidechain
1	AA	3	A	Sidechain
1	AA	300	A	Sidechain
1	AA	301	G	Sidechain
1	AA	304	U	Sidechain
1	AA	306	A	Sidechain
1	AA	308	C	Sidechain
1	AA	310	G	Sidechain
1	AA	312	C	Sidechain
1	AA	313	A	Sidechain
1	AA	315	A	Sidechain
1	AA	316	C	Sidechain
1	AA	317	U	Sidechain
1	AA	318	G	Sidechain
1	AA	320	A	Sidechain
1	AA	321	A	Sidechain
1	AA	322	C	Sidechain
1	AA	323	U	Sidechain
1	AA	324	G	Sidechain
1	AA	326	G	Sidechain
1	AA	328	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	329	A	Sidechain
1	AA	33	A	Sidechain
1	AA	331	G	Sidechain
1	AA	332	G	Sidechain
1	AA	334	C	Sidechain
1	AA	335	C	Sidechain
1	AA	337	G	Sidechain
1	AA	338	A	Sidechain
1	AA	342	C	Sidechain
1	AA	343	U	Sidechain
1	AA	345	C	Sidechain
1	AA	346	G	Sidechain
1	AA	348	G	Sidechain
1	AA	35	G	Sidechain
1	AA	350	G	Sidechain
1	AA	352	C	Sidechain
1	AA	355	C	Sidechain
1	AA	356	A	Sidechain
1	AA	357	G	Sidechain
1	AA	358	U	Sidechain
1	AA	359	G	Sidechain
1	AA	360	G	Sidechain
1	AA	362	G	Sidechain
1	AA	364	A	Sidechain
1	AA	365	U	Sidechain
1	AA	367	U	Sidechain
1	AA	37	U	Sidechain
1	AA	371	A	Sidechain
1	AA	373	A	Sidechain
1	AA	375	U	Sidechain
1	AA	376	G	Sidechain
1	AA	378	G	Sidechain
1	AA	379	C	Sidechain
1	AA	38	G	Sidechain
1	AA	380	G	Sidechain
1	AA	381	C	Sidechain
1	AA	382	A	Sidechain
1	AA	383	A	Sidechain
1	AA	387	U	Sidechain
1	AA	388	G	Sidechain
1	AA	39	G	Sidechain
1	AA	390	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	391	G	Sidechain
1	AA	394	G	Sidechain
1	AA	395	C	Sidechain
1	AA	399	G	Sidechain
1	AA	4	U	Sidechain
1	AA	40	C	Sidechain
1	AA	401	C	Sidechain
1	AA	402	G	Sidechain
1	AA	403	C	Sidechain
1	AA	404	G	Sidechain
1	AA	409	U	Sidechain
1	AA	41	G	Sidechain
1	AA	411	A	Sidechain
1	AA	413	G	Sidechain
1	AA	416	G	Sidechain
1	AA	417	G	Sidechain
1	AA	418	C	Sidechain
1	AA	42	G	Sidechain
1	AA	420	U	Sidechain
1	AA	421	U	Sidechain
1	AA	423	G	Sidechain
1	AA	424	G	Sidechain
1	AA	425	G	Sidechain
1	AA	426	U	Sidechain
1	AA	427	U	Sidechain
1	AA	429	U	Sidechain
1	AA	43	C	Sidechain
1	AA	430	A	Sidechain
1	AA	432	A	Sidechain
1	AA	433	G	Sidechain
1	AA	434	U	Sidechain
1	AA	437	U	Sidechain
1	AA	44	A	Sidechain
1	AA	440	C	Sidechain
1	AA	442	G	Sidechain
1	AA	445	G	Sidechain
1	AA	446	G	Sidechain
1	AA	449	G	Sidechain
1	AA	450	G	Sidechain
1	AA	457	G	Sidechain
1	AA	459	A	Sidechain
1	AA	46	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	461	A	Sidechain
1	AA	463	U	Sidechain
1	AA	464	U	Sidechain
1	AA	466	A	Sidechain
1	AA	468	A	Sidechain
1	AA	469	C	Sidechain
1	AA	47	C	Sidechain
1	AA	470	C	Sidechain
1	AA	474	G	Sidechain
1	AA	476	U	Sidechain
1	AA	478	A	Sidechain
1	AA	481	G	Sidechain
1	AA	483	C	Sidechain
1	AA	484	G	Sidechain
1	AA	488	C	Sidechain
1	AA	489	C	Sidechain
1	AA	49	U	Sidechain
1	AA	493	A	Sidechain
1	AA	495	A	Sidechain
1	AA	499	A	Sidechain
1	AA	50	A	Sidechain
1	AA	500	G	Sidechain
1	AA	504	C	Sidechain
1	AA	505	G	Sidechain
1	AA	508	U	Sidechain
1	AA	509	A	Sidechain
1	AA	511	C	Sidechain
1	AA	517	G	Sidechain
1	AA	519	C	Sidechain
1	AA	520	A	Sidechain
1	AA	521	G	Sidechain
1	AA	523	A	Sidechain
1	AA	524	G	Sidechain
1	AA	528	C	Sidechain
1	AA	529	G	Sidechain
1	AA	53	A	Sidechain
1	AA	530	G	Sidechain
1	AA	534	U	Sidechain
1	AA	536	C	Sidechain
1	AA	537	G	Sidechain
1	AA	538	G	Sidechain
1	AA	539	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	540	G	Sidechain
1	AA	541	G	Sidechain
1	AA	542	G	Sidechain
1	AA	543	U	Sidechain
1	AA	545	C	Sidechain
1	AA	548	G	Sidechain
1	AA	550	G	Sidechain
1	AA	551	U	Sidechain
1	AA	552	U	Sidechain
1	AA	553	A	Sidechain
1	AA	554	A	Sidechain
1	AA	557	G	Sidechain
1	AA	558	G	Sidechain
1	AA	56	U	Sidechain
1	AA	560	A	Sidechain
1	AA	562	U	Sidechain
1	AA	566	G	Sidechain
1	AA	574	A	Sidechain
1	AA	578	C	Sidechain
1	AA	579	A	Sidechain
1	AA	58	C	Sidechain
1	AA	580	C	Sidechain
1	AA	581	G	Sidechain
1	AA	584	G	Sidechain
1	AA	585	G	Sidechain
1	AA	587	G	Sidechain
1	AA	588	G	Sidechain
1	AA	590	U	Sidechain
1	AA	592	G	Sidechain
1	AA	598	U	Sidechain
1	AA	6	G	Sidechain
1	AA	600	A	Sidechain
1	AA	602	A	Sidechain
1	AA	603	U	Sidechain
1	AA	604	G	Sidechain
1	AA	606	G	Sidechain
1	AA	609	A	Sidechain
1	AA	61	G	Sidechain
1	AA	610	U	Sidechain
1	AA	611	C	Sidechain
1	AA	612	C	Sidechain
1	AA	614	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	615	G	Sidechain
1	AA	616	G	Sidechain
1	AA	617	G	Sidechain
1	AA	618	C	Sidechain
1	AA	620	C	Sidechain
1	AA	621	A	Sidechain
1	AA	622	A	Sidechain
1	AA	623	C	Sidechain
1	AA	624	C	Sidechain
1	AA	625	U	Sidechain
1	AA	628	G	Sidechain
1	AA	63	C	Sidechain
1	AA	630	A	Sidechain
1	AA	631	C	Sidechain
1	AA	633	G	Sidechain
1	AA	634	C	Sidechain
1	AA	635	A	Sidechain
1	AA	637	C	Sidechain
1	AA	639	G	Sidechain
1	AA	64	G	Sidechain
1	AA	644	U	Sidechain
1	AA	645	G	Sidechain
1	AA	646	G	Sidechain
1	AA	648	A	Sidechain
1	AA	65	A	Sidechain
1	AA	650	G	Sidechain
1	AA	652	U	Sidechain
1	AA	654	G	Sidechain
1	AA	656	G	Sidechain
1	AA	657	U	Sidechain
1	AA	659	U	Sidechain
1	AA	66	A	Sidechain
1	AA	666	G	Sidechain
1	AA	668	G	Sidechain
1	AA	669	G	Sidechain
1	AA	670	G	Sidechain
1	AA	671	G	Sidechain
1	AA	674	G	Sidechain
1	AA	676	A	Sidechain
1	AA	677	U	Sidechain
1	AA	678	U	Sidechain
1	AA	679	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	68	G	Sidechain
1	AA	680	C	Sidechain
1	AA	681	A	Sidechain
1	AA	684	U	Sidechain
1	AA	685	G	Sidechain
1	AA	686	U	Sidechain
1	AA	69	G	Sidechain
1	AA	690	G	Sidechain
1	AA	691	G	Sidechain
1	AA	692	U	Sidechain
1	AA	695	A	Sidechain
1	AA	696	A	Sidechain
1	AA	697	U	Sidechain
1	AA	698	G	Sidechain
1	AA	7	A	Sidechain
1	AA	70	U	Sidechain
1	AA	700	G	Sidechain
1	AA	702	A	Sidechain
1	AA	703	G	Sidechain
1	AA	704	A	Sidechain
1	AA	705	G	Sidechain
1	AA	706	A	Sidechain
1	AA	707	U	Sidechain
1	AA	708	C	Sidechain
1	AA	71	A	Sidechain
1	AA	711	G	Sidechain
1	AA	713	G	Sidechain
1	AA	717	U	Sidechain
1	AA	718	A	Sidechain
1	AA	719	C	Sidechain
1	AA	72	A	Sidechain
1	AA	720	C	Sidechain
1	AA	723	U	Sidechain
1	AA	724	G	Sidechain
1	AA	726	C	Sidechain
1	AA	727	G	Sidechain
1	AA	729	A	Sidechain
1	AA	730	G	Sidechain
1	AA	731	G	Sidechain
1	AA	734	G	Sidechain
1	AA	74	A	Sidechain
1	AA	740	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	741	G	Sidechain
1	AA	744	C	Sidechain
1	AA	747	A	Sidechain
1	AA	749	A	Sidechain
1	AA	75	G	Sidechain
1	AA	750	C	Sidechain
1	AA	751	U	Sidechain
1	AA	752	G	Sidechain
1	AA	753	A	Sidechain
1	AA	755	G	Sidechain
1	AA	757	U	Sidechain
1	AA	758	C	Sidechain
1	AA	759	A	Sidechain
1	AA	76	G	Sidechain
1	AA	762	U	Sidechain
1	AA	763	G	Sidechain
1	AA	764	C	Sidechain
1	AA	765	G	Sidechain
1	AA	766	A	Sidechain
1	AA	77	A	Sidechain
1	AA	770	C	Sidechain
1	AA	771	G	Sidechain
1	AA	773	G	Sidechain
1	AA	774	G	Sidechain
1	AA	775	G	Sidechain
1	AA	778	G	Sidechain
1	AA	78	A	Sidechain
1	AA	781	A	Sidechain
1	AA	785	G	Sidechain
1	AA	786	G	Sidechain
1	AA	787	A	Sidechain
1	AA	789	U	Sidechain
1	AA	79	G	Sidechain
1	AA	791	G	Sidechain
1	AA	793	U	Sidechain
1	AA	794	A	Sidechain
1	AA	795	C	Sidechain
1	AA	796	C	Sidechain
1	AA	80	A	Sidechain
1	AA	800	G	Sidechain
1	AA	801	U	Sidechain
1	AA	802	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	803	G	Sidechain
1	AA	804	U	Sidechain
1	AA	805	C	Sidechain
1	AA	81	A	Sidechain
1	AA	810	C	Sidechain
1	AA	811	C	Sidechain
1	AA	812	G	Sidechain
1	AA	813	U	Sidechain
1	AA	815	A	Sidechain
1	AA	816	A	Sidechain
1	AA	818	G	Sidechain
1	AA	819	A	Sidechain
1	AA	820	U	Sidechain
1	AA	821	G	Sidechain
1	AA	822	U	Sidechain
1	AA	825	A	Sidechain
1	AA	829	G	Sidechain
1	AA	83	C	Sidechain
1	AA	830	G	Sidechain
1	AA	832	G	Sidechain
1	AA	833	G	Sidechain
1	AA	835	U	Sidechain
1	AA	842	U	Sidechain
1	AA	843	U	Sidechain
1	AA	844	G	Sidechain
1	AA	846	G	Sidechain
1	AA	847	G	Sidechain
1	AA	849	G	Sidechain
1	AA	85	U	Sidechain
1	AA	854	U	Sidechain
1	AA	855	U	Sidechain
1	AA	856	C	Sidechain
1	AA	858	G	Sidechain
1	AA	859	G	Sidechain
1	AA	86	G	Sidechain
1	AA	860	A	Sidechain
1	AA	861	G	Sidechain
1	AA	862	C	Sidechain
1	AA	863	U	Sidechain
1	AA	864	A	Sidechain
1	AA	866	C	Sidechain
1	AA	869	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	87	C	Sidechain
1	AA	870	U	Sidechain
1	AA	871	U	Sidechain
1	AA	872	A	Sidechain
1	AA	874	G	Sidechain
1	AA	875	U	Sidechain
1	AA	877	G	Sidechain
1	AA	878	A	Sidechain
1	AA	879	C	Sidechain
1	AA	88	U	Sidechain
1	AA	881	G	Sidechain
1	AA	883	C	Sidechain
1	AA	884	U	Sidechain
1	AA	885	G	Sidechain
1	AA	886	G	Sidechain
1	AA	887	G	Sidechain
1	AA	888	G	Sidechain
1	AA	889	A	Sidechain
1	AA	89	U	Sidechain
1	AA	890	G	Sidechain
1	AA	895	G	Sidechain
1	AA	898	G	Sidechain
1	AA	9	G	Sidechain
1	AA	90	C	Sidechain
1	AA	900	A	Sidechain
1	AA	901	A	Sidechain
1	AA	902	G	Sidechain
1	AA	903	G	Sidechain
1	AA	905	U	Sidechain
1	AA	906	A	Sidechain
1	AA	907	A	Sidechain
1	AA	908	A	Sidechain
1	AA	910	C	Sidechain
1	AA	914	A	Sidechain
1	AA	916	U	Sidechain
1	AA	919	A	Sidechain
1	AA	92	U	Sidechain
1	AA	920	U	Sidechain
1	AA	922	G	Sidechain
1	AA	923	A	Sidechain
1	AA	924	C	Sidechain
1	AA	925	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	926	G	Sidechain
1	AA	928	G	Sidechain
1	AA	929	G	Sidechain
1	AA	933	G	Sidechain
1	AA	934	C	Sidechain
1	AA	937	A	Sidechain
1	AA	938	A	Sidechain
1	AA	939	G	Sidechain
1	AA	94	G	Sidechain
1	AA	941	G	Sidechain
1	AA	942	G	Sidechain
1	AA	943	U	Sidechain
1	AA	944	G	Sidechain
1	AA	945	G	Sidechain
1	AA	946	A	Sidechain
1	AA	947	G	Sidechain
1	AA	949	A	Sidechain
1	AA	95	C	Sidechain
1	AA	950	U	Sidechain
1	AA	951	G	Sidechain
1	AA	953	G	Sidechain
1	AA	954	G	Sidechain
1	AA	957	U	Sidechain
1	AA	958	A	Sidechain
1	AA	960	U	Sidechain
1	AA	961	U	Sidechain
1	AA	962	C	Sidechain
1	AA	963	G	Sidechain
1	AA	965	U	Sidechain
1	AA	968	A	Sidechain
1	AA	97	G	Sidechain
1	AA	970	C	Sidechain
1	AA	971	G	Sidechain
1	AA	972	C	Sidechain
1	AA	973	G	Sidechain
1	AA	974	A	Sidechain
1	AA	975	A	Sidechain
1	AA	976	G	Sidechain
1	AA	977	A	Sidechain
1	AA	978	A	Sidechain
1	AA	98	A	Sidechain
1	AA	981	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	982	U	Sidechain
1	AA	983	A	Sidechain
1	AA	984	C	Sidechain
1	AA	986	U	Sidechain
1	AA	987	G	Sidechain
1	AA	989	U	Sidechain
1	AA	99	C	Sidechain
1	AA	991	U	Sidechain
1	AA	992	U	Sidechain
1	AA	994	A	Sidechain
1	AA	995	C	Sidechain
1	AA	996	A	Sidechain
1	AA	998	C	Sidechain
2	AB	1	A	Sidechain
2	AB	10	G	Sidechain
2	AB	11	U	Sidechain
2	AB	12	U	Sidechain
2	AB	13	C	Sidechain
2	AB	15	A	Sidechain
2	AB	19	G	Sidechain
2	AB	2	G	Sidechain
2	AB	21	A	Sidechain
2	AB	22	G	Sidechain
2	AB	23	A	Sidechain
2	AB	24	G	Sidechain
2	AB	26	A	Sidechain
2	AB	27	C	Sidechain
2	AB	29	G	Sidechain
2	AB	31	U	Sidechain
2	AB	34	C	Sidechain
2	AB	35	C	Sidechain
2	AB	36	A	Sidechain
2	AB	4	G	Sidechain
2	AB	41	C	Sidechain
2	AB	43	G	Sidechain
2	AB	44	G	Sidechain
2	AB	45	U	Sidechain
2	AB	47	U	Sidechain
2	AB	49	G	Sidechain
2	AB	50	G	Sidechain
2	AB	56	C	Sidechain
2	AB	58	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
2	AB	60	U	Sidechain
2	AB	61	C	Sidechain
2	AB	62	U	Sidechain
2	AB	63	C	Sidechain
2	AB	65	C	Sidechain
2	AB	66	C	Sidechain
2	AB	67	G	Sidechain
2	AB	7	G	Sidechain
2	AB	72	U	Sidechain
2	AB	9	A	Sidechain
3	AC	14	G	Sidechain
3	AC	17	U	Sidechain
3	AC	18	A	Sidechain
3	AC	22	G	Sidechain
3	AC	25	U	Sidechain
3	AC	26	U	Sidechain
3	AC	27	A	Sidechain
3	AC	28	U	Sidechain
3	AC	31	U	Sidechain
3	AC	33	A	Sidechain
3	AC	35	G	Sidechain
3	AC	37	G	Sidechain
3	AC	38	G	Sidechain
3	AC	40	G	Sidechain
3	AC	42	U	Sidechain
3	AC	49	U	Sidechain
3	AC	51	C	Sidechain
3	AC	52	U	Sidechain
3	AC	53	G	Sidechain
3	AC	54	U	Sidechain
3	AC	55	A	Sidechain
3	AC	56	G	Sidechain
3	AC	59	A	Sidechain
4	AD	10	G	Sidechain
4	AD	14	A	Sidechain
4	AD	15	G	Sidechain
4	AD	17	C	Sidechain
4	AD	19	G	Sidechain
4	AD	20	G	Sidechain
4	AD	22	A	Sidechain
4	AD	23	G	Sidechain
4	AD	27	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
4	AD	28	U	Sidechain
4	AD	29	C	Sidechain
4	AD	3	C	Sidechain
4	AD	30	G	Sidechain
4	AD	31	G	Sidechain
4	AD	32	G	Sidechain
4	AD	35	C	Sidechain
4	AD	36	A	Sidechain
4	AD	38	A	Sidechain
4	AD	4	G	Sidechain
4	AD	46	G	Sidechain
4	AD	47	A	Sidechain
4	AD	49	C	Sidechain
4	AD	50	G	Sidechain
4	AD	52	C	Sidechain
4	AD	54	G	Sidechain
4	AD	58	A	Sidechain
4	AD	6	G	Sidechain
4	AD	60	A	Sidechain
4	AD	7	G	Sidechain
4	AD	70	C	Sidechain
4	AD	74	A	Sidechain
4	AD	75	C	Sidechain
4	AD	76	C	Sidechain
4	AD	9	G	Sidechain
5	AE	212	TYR	Sidechain
5	AE	221	ARG	Sidechain
5	AE	29	PHE	Sidechain
5	AE	34	ARG	Sidechain
5	AE	85	SER	Mainchain
5	AE	86	CYS	Peptide
6	AF	10	ARG	Peptide
6	AF	112	ALA	Mainchain
6	AF	125	ARG	Sidechain
6	AF	168	ARG	Sidechain
6	AF	183	TYR	Sidechain
6	AF	202	PHE	Sidechain
6	AF	228	ARG	Sidechain
6	AF	39	ARG	Sidechain
7	AG	102	TYR	Sidechain
7	AG	106	PHE	Mainchain,Peptide
7	AG	12	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
7	AG	13	ARG	Sidechain
7	AG	187	ARG	Sidechain
7	AG	50	TYR	Sidechain
7	AG	62	ARG	Sidechain
7	AG	67	LEU	Mainchain
7	AG	75	TYR	Sidechain
7	AG	81	LEU	Peptide
8	AH	127	TYR	Mainchain
8	AH	19	ARG	Sidechain
8	AH	49	TYR	Sidechain
8	AH	67	ARG	Sidechain
8	AH	92	ARG	Sidechain
9	AI	109	ARG	Sidechain
9	AI	111	GLU	Peptide
9	AI	113	ARG	Sidechain
9	AI	25	TYR	Sidechain
9	AI	38	ARG	Sidechain
9	AI	49	TYR	Sidechain
9	AI	59	TYR	Sidechain
9	AI	79	ARG	Sidechain
9	AI	80	PHE	Sidechain
9	AI	86	ARG	Sidechain
9	AI	91	ARG	Sidechain
10	AJ	101	ARG	Sidechain
10	AJ	141	HIS	Sidechain
10	AJ	142	ARG	Sidechain
10	AJ	153	TYR	Sidechain
10	AJ	154	ARG	Sidechain
10	AJ	163	HIS	Sidechain
11	AK	127	TYR	Sidechain
11	AK	14	ARG	Sidechain
11	AK	79	ARG	Peptide
12	AL	108	ARG	Sidechain
12	AL	123	ARG	Sidechain
12	AL	126	PHE	Sidechain
12	AL	89	TYR	Sidechain
12	AL	94	ARG	Sidechain
13	AM	53	ILE	Mainchain
13	AM	65	TYR	Sidechain
13	AM	89	ARG	Sidechain
13	AM	9	ARG	Sidechain
14	AN	10	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
14	AN	12	ARG	Sidechain
14	AN	37	GLN	Peptide
14	AN	52	ARG	Sidechain
14	AN	68	ARG	Sidechain
15	AO	11	ARG	Sidechain
15	AO	37	TYR	Sidechain
16	AP	13	HIS	Sidechain
16	AP	56	ARG	Sidechain
16	AP	69	ARG	Sidechain
17	AQ	99	SER	Mainchain
19	AS	17	TYR	Sidechain
19	AS	28	ARG	Sidechain
19	AS	33	ILE	Mainchain
20	AT	39	ARG	Sidechain
21	AU	10	CYS	Peptide
21	AU	11	ARG	Sidechain
21	AU	3	TYR	Sidechain
21	AU	4	PHE	Sidechain
21	AU	62	ARG	Sidechain
21	AU	7	ARG	Sidechain
23	AW	23	ARG	Sidechain
23	AW	28	ARG	Sidechain
24	AX	17	ARG	Sidechain
51	B0	21	LEU	Mainchain
51	B0	46	VAL	Mainchain
52	B1	30	ARG	Sidechain
52	B1	52	PHE	Sidechain
53	B2	63	ARG	Sidechain
55	B4	20	TYR	Sidechain
55	B4	38	PHE	Sidechain
55	B4	48	TYR	Sidechain
56	B5	28	ARG	Sidechain
57	B6	13	PHE	Sidechain
57	B6	21	PHE	Sidechain
57	B6	63	TYR	Sidechain
58	B7	19	ARG	Sidechain
25	BA	10	G	Sidechain
25	BA	100	G	Sidechain
25	BA	104	A	Sidechain
25	BA	105	G	Sidechain
25	BA	106	G	Sidechain
25	BA	108	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
25	BA	109	A	Sidechain
25	BA	11	C	Sidechain
25	BA	110	C	Sidechain
25	BA	114	C	Sidechain
25	BA	117	G	Sidechain
25	BA	119	A	Sidechain
25	BA	12	C	Sidechain
25	BA	120	U	Sidechain
25	BA	13	G	Sidechain
25	BA	14	U	Sidechain
25	BA	15	A	Sidechain
25	BA	18	G	Sidechain
25	BA	19	C	Sidechain
25	BA	2	G	Sidechain
25	BA	20	G	Sidechain
25	BA	24	G	Sidechain
25	BA	25	U	Sidechain
25	BA	26	C	Sidechain
25	BA	27	C	Sidechain
25	BA	30	C	Sidechain
25	BA	32	U	Sidechain
25	BA	33	G	Sidechain
25	BA	34	A	Sidechain
25	BA	35	C	Sidechain
25	BA	37	C	Sidechain
25	BA	39	A	Sidechain
25	BA	41	G	Sidechain
25	BA	42	C	Sidechain
25	BA	44	G	Sidechain
25	BA	45	A	Sidechain
25	BA	47	C	Sidechain
25	BA	48	U	Sidechain
25	BA	5	U	Sidechain
25	BA	50	A	Sidechain
25	BA	52	A	Sidechain
25	BA	53	A	Sidechain
25	BA	54	G	Sidechain
25	BA	55	U	Sidechain
25	BA	6	G	Sidechain
25	BA	60	C	Sidechain
25	BA	61	G	Sidechain
25	BA	64	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
25	BA	66	A	Sidechain
25	BA	67	G	Sidechain
25	BA	69	G	Sidechain
25	BA	72	G	Sidechain
25	BA	73	A	Sidechain
25	BA	74	U	Sidechain
25	BA	76	G	Sidechain
25	BA	78	A	Sidechain
25	BA	8	C	Sidechain
25	BA	81	G	Sidechain
25	BA	82	U	Sidechain
25	BA	83	G	Sidechain
25	BA	84	G	Sidechain
25	BA	85	G	Sidechain
25	BA	86	G	Sidechain
25	BA	87	U	Sidechain
25	BA	88	C	Sidechain
25	BA	89	U	Sidechain
25	BA	91	C	Sidechain
25	BA	95	U	Sidechain
25	BA	96	G	Sidechain
25	BA	97	C	Sidechain
25	BA	98	G	Sidechain
26	BB	1	G	Sidechain
26	BB	100	U	Sidechain
26	BB	1000	A	Sidechain
26	BB	1001	A	Sidechain
26	BB	1002	G	Sidechain
26	BB	1004	U	Sidechain
26	BB	1005	C	Sidechain
26	BB	1007	C	Sidechain
26	BB	1008	A	Sidechain
26	BB	1010	A	Sidechain
26	BB	1011	G	Sidechain
26	BB	1012	U	Sidechain
26	BB	1013	C	Sidechain
26	BB	1014	A	Sidechain
26	BB	1015	U	Sidechain
26	BB	1016	G	Sidechain
26	BB	1019	U	Sidechain
26	BB	1020	A	Sidechain
26	BB	1021	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1022	G	Sidechain
26	BB	1023	U	Sidechain
26	BB	1024	G	Sidechain
26	BB	1025	G	Sidechain
26	BB	1027	A	Sidechain
26	BB	1028	A	Sidechain
26	BB	1031	G	Sidechain
26	BB	1037	G	Sidechain
26	BB	1038	G	Sidechain
26	BB	1039	A	Sidechain
26	BB	1040	A	Sidechain
26	BB	1041	G	Sidechain
26	BB	1043	C	Sidechain
26	BB	1045	C	Sidechain
26	BB	1047	G	Sidechain
26	BB	1050	A	Sidechain
26	BB	1053	C	Sidechain
26	BB	1055	G	Sidechain
26	BB	1056	G	Sidechain
26	BB	1057	A	Sidechain
26	BB	1058	U	Sidechain
26	BB	1059	G	Sidechain
26	BB	106	C	Sidechain
26	BB	1060	U	Sidechain
26	BB	1061	U	Sidechain
26	BB	1062	G	Sidechain
26	BB	1063	G	Sidechain
26	BB	1065	U	Sidechain
26	BB	1066	U	Sidechain
26	BB	1068	G	Sidechain
26	BB	107	G	Sidechain
26	BB	1072	C	Sidechain
26	BB	1073	A	Sidechain
26	BB	1078	U	Sidechain
26	BB	1079	C	Sidechain
26	BB	1080	A	Sidechain
26	BB	1081	U	Sidechain
26	BB	1083	U	Sidechain
26	BB	1084	A	Sidechain
26	BB	1087	G	Sidechain
26	BB	1089	A	Sidechain
26	BB	109	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1090	A	Sidechain
26	BB	1092	C	Sidechain
26	BB	1093	G	Sidechain
26	BB	1094	U	Sidechain
26	BB	1096	A	Sidechain
26	BB	1097	U	Sidechain
26	BB	1099	G	Sidechain
26	BB	11	C	Sidechain
26	BB	110	G	Sidechain
26	BB	1100	C	Sidechain
26	BB	1106	G	Sidechain
26	BB	1107	G	Sidechain
26	BB	1109	C	Sidechain
26	BB	1110	G	Sidechain
26	BB	1111	A	Sidechain
26	BB	1112	G	Sidechain
26	BB	1113	U	Sidechain
26	BB	1115	G	Sidechain
26	BB	1116	G	Sidechain
26	BB	1119	U	Sidechain
26	BB	1121	C	Sidechain
26	BB	1122	G	Sidechain
26	BB	1125	G	Sidechain
26	BB	1126	A	Sidechain
26	BB	1127	A	Sidechain
26	BB	113	U	Sidechain
26	BB	1131	G	Sidechain
26	BB	1132	U	Sidechain
26	BB	1134	A	Sidechain
26	BB	1136	G	Sidechain
26	BB	1137	G	Sidechain
26	BB	1138	G	Sidechain
26	BB	1139	G	Sidechain
26	BB	114	U	Sidechain
26	BB	1141	U	Sidechain
26	BB	1142	A	Sidechain
26	BB	1143	A	Sidechain
26	BB	1149	G	Sidechain
26	BB	115	C	Sidechain
26	BB	1152	C	Sidechain
26	BB	1155	A	Sidechain
26	BB	1156	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1157	G	Sidechain
26	BB	1162	G	Sidechain
26	BB	1165	A	Sidechain
26	BB	1167	C	Sidechain
26	BB	1168	G	Sidechain
26	BB	1169	A	Sidechain
26	BB	1170	C	Sidechain
26	BB	1171	G	Sidechain
26	BB	1173	U	Sidechain
26	BB	1175	A	Sidechain
26	BB	1176	U	Sidechain
26	BB	1177	G	Sidechain
26	BB	1178	C	Sidechain
26	BB	1179	G	Sidechain
26	BB	118	A	Sidechain
26	BB	1181	U	Sidechain
26	BB	1182	G	Sidechain
26	BB	1183	U	Sidechain
26	BB	1185	G	Sidechain
26	BB	1186	G	Sidechain
26	BB	1187	G	Sidechain
26	BB	1190	G	Sidechain
26	BB	1192	G	Sidechain
26	BB	1193	G	Sidechain
26	BB	1194	A	Sidechain
26	BB	1195	G	Sidechain
26	BB	1197	G	Sidechain
26	BB	1198	U	Sidechain
26	BB	12	U	Sidechain
26	BB	120	U	Sidechain
26	BB	1200	C	Sidechain
26	BB	1201	U	Sidechain
26	BB	1202	G	Sidechain
26	BB	1203	U	Sidechain
26	BB	1205	A	Sidechain
26	BB	1206	G	Sidechain
26	BB	1208	C	Sidechain
26	BB	1209	U	Sidechain
26	BB	1210	G	Sidechain
26	BB	1211	C	Sidechain
26	BB	1212	G	Sidechain
26	BB	1213	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1214	A	Sidechain
26	BB	1215	G	Sidechain
26	BB	1218	G	Sidechain
26	BB	1220	G	Sidechain
26	BB	1221	C	Sidechain
26	BB	1222	U	Sidechain
26	BB	1223	G	Sidechain
26	BB	1226	A	Sidechain
26	BB	1227	G	Sidechain
26	BB	1228	G	Sidechain
26	BB	1229	C	Sidechain
26	BB	123	G	Sidechain
26	BB	1230	A	Sidechain
26	BB	1231	U	Sidechain
26	BB	1235	G	Sidechain
26	BB	1236	G	Sidechain
26	BB	1238	G	Sidechain
26	BB	124	G	Sidechain
26	BB	1242	U	Sidechain
26	BB	1243	C	Sidechain
26	BB	1244	A	Sidechain
26	BB	1245	G	Sidechain
26	BB	1246	A	Sidechain
26	BB	1248	G	Sidechain
26	BB	1249	U	Sidechain
26	BB	125	A	Sidechain
26	BB	1250	G	Sidechain
26	BB	1252	G	Sidechain
26	BB	1253	A	Sidechain
26	BB	1254	A	Sidechain
26	BB	1255	U	Sidechain
26	BB	1256	G	Sidechain
26	BB	1258	U	Sidechain
26	BB	1259	G	Sidechain
26	BB	126	A	Sidechain
26	BB	1261	C	Sidechain
26	BB	1262	A	Sidechain
26	BB	1263	U	Sidechain
26	BB	1264	A	Sidechain
26	BB	1265	A	Sidechain
26	BB	1266	G	Sidechain
26	BB	1267	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1268	A	Sidechain
26	BB	127	A	Sidechain
26	BB	1271	G	Sidechain
26	BB	1273	U	Sidechain
26	BB	1275	A	Sidechain
26	BB	1276	A	Sidechain
26	BB	1277	G	Sidechain
26	BB	1279	G	Sidechain
26	BB	1280	G	Sidechain
26	BB	1281	G	Sidechain
26	BB	1282	U	Sidechain
26	BB	1283	G	Sidechain
26	BB	1284	A	Sidechain
26	BB	1287	A	Sidechain
26	BB	1288	G	Sidechain
26	BB	129	C	Sidechain
26	BB	1290	C	Sidechain
26	BB	1292	G	Sidechain
26	BB	1293	C	Sidechain
26	BB	1294	U	Sidechain
26	BB	1295	C	Sidechain
26	BB	1296	G	Sidechain
26	BB	1297	C	Sidechain
26	BB	1298	C	Sidechain
26	BB	1299	G	Sidechain
26	BB	1300	G	Sidechain
26	BB	1301	A	Sidechain
26	BB	1302	A	Sidechain
26	BB	1305	C	Sidechain
26	BB	1306	C	Sidechain
26	BB	1307	A	Sidechain
26	BB	1309	G	Sidechain
26	BB	1311	G	Sidechain
26	BB	1313	U	Sidechain
26	BB	1316	U	Sidechain
26	BB	1317	G	Sidechain
26	BB	1319	C	Sidechain
26	BB	132	G	Sidechain
26	BB	1321	A	Sidechain
26	BB	1325	U	Sidechain
26	BB	1326	U	Sidechain
26	BB	1327	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	133	U	Sidechain
26	BB	1332	G	Sidechain
26	BB	1334	G	Sidechain
26	BB	1336	A	Sidechain
26	BB	1338	G	Sidechain
26	BB	1339	G	Sidechain
26	BB	1340	U	Sidechain
26	BB	1341	G	Sidechain
26	BB	1343	G	Sidechain
26	BB	1345	C	Sidechain
26	BB	1349	C	Sidechain
26	BB	135	U	Sidechain
26	BB	1350	C	Sidechain
26	BB	1353	A	Sidechain
26	BB	1354	A	Sidechain
26	BB	1355	G	Sidechain
26	BB	1356	G	Sidechain
26	BB	1359	A	Sidechain
26	BB	136	G	Sidechain
26	BB	1360	G	Sidechain
26	BB	1361	G	Sidechain
26	BB	1362	C	Sidechain
26	BB	1365	A	Sidechain
26	BB	1366	A	Sidechain
26	BB	1367	A	Sidechain
26	BB	1368	G	Sidechain
26	BB	1369	G	Sidechain
26	BB	137	U	Sidechain
26	BB	1370	C	Sidechain
26	BB	1371	G	Sidechain
26	BB	1374	G	Sidechain
26	BB	1375	U	Sidechain
26	BB	1376	C	Sidechain
26	BB	1377	G	Sidechain
26	BB	1380	G	Sidechain
26	BB	1381	G	Sidechain
26	BB	1382	G	Sidechain
26	BB	1383	A	Sidechain
26	BB	1385	A	Sidechain
26	BB	1386	C	Sidechain
26	BB	1388	G	Sidechain
26	BB	1389	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1390	U	Sidechain
26	BB	1392	A	Sidechain
26	BB	1393	A	Sidechain
26	BB	1394	U	Sidechain
26	BB	1395	A	Sidechain
26	BB	1396	U	Sidechain
26	BB	1397	U	Sidechain
26	BB	1398	C	Sidechain
26	BB	14	A	Sidechain
26	BB	1401	G	Sidechain
26	BB	1402	U	Sidechain
26	BB	1404	C	Sidechain
26	BB	1405	U	Sidechain
26	BB	1406	U	Sidechain
26	BB	1407	G	Sidechain
26	BB	1408	G	Sidechain
26	BB	1409	U	Sidechain
26	BB	141	G	Sidechain
26	BB	1410	G	Sidechain
26	BB	1411	U	Sidechain
26	BB	1412	U	Sidechain
26	BB	1413	A	Sidechain
26	BB	1414	C	Sidechain
26	BB	1416	G	Sidechain
26	BB	1417	C	Sidechain
26	BB	1418	G	Sidechain
26	BB	1419	A	Sidechain
26	BB	1420	A	Sidechain
26	BB	1423	G	Sidechain
26	BB	1424	G	Sidechain
26	BB	1426	G	Sidechain
26	BB	1427	A	Sidechain
26	BB	1428	C	Sidechain
26	BB	1429	G	Sidechain
26	BB	143	C	Sidechain
26	BB	1430	G	Sidechain
26	BB	1432	G	Sidechain
26	BB	1433	A	Sidechain
26	BB	1434	A	Sidechain
26	BB	1435	G	Sidechain
26	BB	1436	G	Sidechain
26	BB	1438	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1439	A	Sidechain
26	BB	144	A	Sidechain
26	BB	1440	U	Sidechain
26	BB	1443	U	Sidechain
26	BB	1444	G	Sidechain
26	BB	1448	G	Sidechain
26	BB	1452	G	Sidechain
26	BB	1453	A	Sidechain
26	BB	1454	C	Sidechain
26	BB	1457	U	Sidechain
26	BB	1459	G	Sidechain
26	BB	1460	U	Sidechain
26	BB	1461	C	Sidechain
26	BB	1464	G	Sidechain
26	BB	1466	U	Sidechain
26	BB	1467	U	Sidechain
26	BB	1468	U	Sidechain
26	BB	1470	A	Sidechain
26	BB	1471	G	Sidechain
26	BB	1473	G	Sidechain
26	BB	1474	U	Sidechain
26	BB	1477	A	Sidechain
26	BB	1478	G	Sidechain
26	BB	148	U	Sidechain
26	BB	1480	C	Sidechain
26	BB	1482	G	Sidechain
26	BB	1483	G	Sidechain
26	BB	1484	U	Sidechain
26	BB	1485	U	Sidechain
26	BB	1487	U	Sidechain
26	BB	1488	C	Sidechain
26	BB	1491	G	Sidechain
26	BB	1492	G	Sidechain
26	BB	1493	C	Sidechain
26	BB	1494	A	Sidechain
26	BB	1495	A	Sidechain
26	BB	1498	C	Sidechain
26	BB	150	U	Sidechain
26	BB	1507	C	Sidechain
26	BB	1510	G	Sidechain
26	BB	1511	G	Sidechain
26	BB	1513	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1514	G	Sidechain
26	BB	1518	C	Sidechain
26	BB	1522	A	Sidechain
26	BB	1523	U	Sidechain
26	BB	1524	G	Sidechain
26	BB	1528	A	Sidechain
26	BB	1529	G	Sidechain
26	BB	1533	C	Sidechain
26	BB	1535	A	Sidechain
26	BB	1536	C	Sidechain
26	BB	1538	G	Sidechain
26	BB	1539	U	Sidechain
26	BB	154	U	Sidechain
26	BB	1540	G	Sidechain
26	BB	1542	U	Sidechain
26	BB	1544	A	Sidechain
26	BB	1546	G	Sidechain
26	BB	1548	A	Sidechain
26	BB	155	A	Sidechain
26	BB	1551	A	Sidechain
26	BB	1552	A	Sidechain
26	BB	1553	A	Sidechain
26	BB	1556	C	Sidechain
26	BB	1559	U	Sidechain
26	BB	1560	G	Sidechain
26	BB	1563	U	Sidechain
26	BB	1565	C	Sidechain
26	BB	1566	A	Sidechain
26	BB	1567	G	Sidechain
26	BB	1569	A	Sidechain
26	BB	157	C	Sidechain
26	BB	1572	A	Sidechain
26	BB	1574	C	Sidechain
26	BB	1577	C	Sidechain
26	BB	158	U	Sidechain
26	BB	1580	A	Sidechain
26	BB	1581	G	Sidechain
26	BB	1583	A	Sidechain
26	BB	1584	U	Sidechain
26	BB	1587	G	Sidechain
26	BB	1588	G	Sidechain
26	BB	1589	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1590	A	Sidechain
26	BB	1591	A	Sidechain
26	BB	1594	U	Sidechain
26	BB	1598	A	Sidechain
26	BB	1599	U	Sidechain
26	BB	16	C	Sidechain
26	BB	160	A	Sidechain
26	BB	1601	G	Sidechain
26	BB	1603	A	Sidechain
26	BB	1604	C	Sidechain
26	BB	1605	C	Sidechain
26	BB	1607	C	Sidechain
26	BB	1608	A	Sidechain
26	BB	1612	C	Sidechain
26	BB	1617	C	Sidechain
26	BB	1619	G	Sidechain
26	BB	162	U	Sidechain
26	BB	1620	G	Sidechain
26	BB	1622	G	Sidechain
26	BB	1623	G	Sidechain
26	BB	1624	U	Sidechain
26	BB	1626	A	Sidechain
26	BB	1627	G	Sidechain
26	BB	1628	G	Sidechain
26	BB	1631	G	Sidechain
26	BB	1633	G	Sidechain
26	BB	1634	A	Sidechain
26	BB	1635	A	Sidechain
26	BB	1636	U	Sidechain
26	BB	1637	A	Sidechain
26	BB	1638	C	Sidechain
26	BB	1639	C	Sidechain
26	BB	1640	A	Sidechain
26	BB	1641	A	Sidechain
26	BB	1645	G	Sidechain
26	BB	1646	C	Sidechain
26	BB	1648	U	Sidechain
26	BB	165	A	Sidechain
26	BB	1651	G	Sidechain
26	BB	1652	A	Sidechain
26	BB	1654	A	Sidechain
26	BB	1655	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1656	C	Sidechain
26	BB	1658	C	Sidechain
26	BB	1659	G	Sidechain
26	BB	166	U	Sidechain
26	BB	1660	G	Sidechain
26	BB	1661	G	Sidechain
26	BB	1662	U	Sidechain
26	BB	1663	G	Sidechain
26	BB	1664	A	Sidechain
26	BB	1665	A	Sidechain
26	BB	1666	G	Sidechain
26	BB	1667	G	Sidechain
26	BB	1668	A	Sidechain
26	BB	1669	A	Sidechain
26	BB	1671	U	Sidechain
26	BB	1672	A	Sidechain
26	BB	1678	A	Sidechain
26	BB	1680	U	Sidechain
26	BB	1681	G	Sidechain
26	BB	1682	G	Sidechain
26	BB	1687	G	Sidechain
26	BB	1691	C	Sidechain
26	BB	1693	U	Sidechain
26	BB	1694	C	Sidechain
26	BB	1695	G	Sidechain
26	BB	1696	G	Sidechain
26	BB	170	U	Sidechain
26	BB	1700	A	Sidechain
26	BB	1703	G	Sidechain
26	BB	1706	C	Sidechain
26	BB	1708	C	Sidechain
26	BB	1709	U	Sidechain
26	BB	171	U	Sidechain
26	BB	1713	A	Sidechain
26	BB	1715	G	Sidechain
26	BB	172	A	Sidechain
26	BB	1720	U	Sidechain
26	BB	1721	G	Sidechain
26	BB	1724	G	Sidechain
26	BB	1725	U	Sidechain
26	BB	1727	C	Sidechain
26	BB	1728	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1729	U	Sidechain
26	BB	1735	A	Sidechain
26	BB	1736	U	Sidechain
26	BB	1737	G	Sidechain
26	BB	1738	G	Sidechain
26	BB	1739	A	Sidechain
26	BB	174	U	Sidechain
26	BB	1740	G	Sidechain
26	BB	1745	A	Sidechain
26	BB	1746	A	Sidechain
26	BB	1747	U	Sidechain
26	BB	1748	C	Sidechain
26	BB	175	G	Sidechain
26	BB	1750	G	Sidechain
26	BB	1751	U	Sidechain
26	BB	1752	C	Sidechain
26	BB	1753	G	Sidechain
26	BB	1754	A	Sidechain
26	BB	1755	A	Sidechain
26	BB	1756	G	Sidechain
26	BB	1758	U	Sidechain
26	BB	1759	A	Sidechain
26	BB	176	A	Sidechain
26	BB	1761	C	Sidechain
26	BB	1764	C	Sidechain
26	BB	1765	U	Sidechain
26	BB	1766	G	Sidechain
26	BB	1768	C	Sidechain
26	BB	1769	U	Sidechain
26	BB	177	G	Sidechain
26	BB	1770	G	Sidechain
26	BB	1772	A	Sidechain
26	BB	1773	A	Sidechain
26	BB	1775	U	Sidechain
26	BB	1777	U	Sidechain
26	BB	1778	U	Sidechain
26	BB	178	G	Sidechain
26	BB	1780	A	Sidechain
26	BB	1782	U	Sidechain
26	BB	1784	A	Sidechain
26	BB	1789	A	Sidechain
26	BB	179	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1792	G	Sidechain
26	BB	1795	C	Sidechain
26	BB	1796	U	Sidechain
26	BB	1797	G	Sidechain
26	BB	18	U	Sidechain
26	BB	180	G	Sidechain
26	BB	1800	C	Sidechain
26	BB	1801	A	Sidechain
26	BB	1802	A	Sidechain
26	BB	1803	A	Sidechain
26	BB	1805	A	Sidechain
26	BB	1808	A	Sidechain
26	BB	1810	A	Sidechain
26	BB	1811	G	Sidechain
26	BB	1812	U	Sidechain
26	BB	1813	G	Sidechain
26	BB	1814	G	Sidechain
26	BB	1815	A	Sidechain
26	BB	1817	G	Sidechain
26	BB	182	A	Sidechain
26	BB	1820	U	Sidechain
26	BB	1822	C	Sidechain
26	BB	1823	G	Sidechain
26	BB	1824	G	Sidechain
26	BB	1826	G	Sidechain
26	BB	1828	G	Sidechain
26	BB	1829	A	Sidechain
26	BB	183	C	Sidechain
26	BB	1831	G	Sidechain
26	BB	1832	C	Sidechain
26	BB	1833	C	Sidechain
26	BB	1836	C	Sidechain
26	BB	1837	C	Sidechain
26	BB	1838	C	Sidechain
26	BB	184	C	Sidechain
26	BB	1840	G	Sidechain
26	BB	1841	U	Sidechain
26	BB	1842	G	Sidechain
26	BB	1845	G	Sidechain
26	BB	1846	G	Sidechain
26	BB	1849	G	Sidechain
26	BB	185	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1850	G	Sidechain
26	BB	1851	U	Sidechain
26	BB	1853	A	Sidechain
26	BB	1855	U	Sidechain
26	BB	1857	G	Sidechain
26	BB	1859	U	Sidechain
26	BB	186	G	Sidechain
26	BB	1863	G	Sidechain
26	BB	1865	U	Sidechain
26	BB	1867	G	Sidechain
26	BB	1868	C	Sidechain
26	BB	1869	G	Sidechain
26	BB	1871	A	Sidechain
26	BB	1872	A	Sidechain
26	BB	1875	G	Sidechain
26	BB	188	G	Sidechain
26	BB	1884	G	Sidechain
26	BB	1885	A	Sidechain
26	BB	1886	U	Sidechain
26	BB	1888	G	Sidechain
26	BB	1889	A	Sidechain
26	BB	189	G	Sidechain
26	BB	1890	A	Sidechain
26	BB	1891	G	Sidechain
26	BB	1894	C	Sidechain
26	BB	1895	C	Sidechain
26	BB	1897	G	Sidechain
26	BB	1898	U	Sidechain
26	BB	1899	A	Sidechain
26	BB	190	A	Sidechain
26	BB	1901	A	Sidechain
26	BB	1902	C	Sidechain
26	BB	1904	G	Sidechain
26	BB	1907	G	Sidechain
26	BB	1908	C	Sidechain
26	BB	1909	C	Sidechain
26	BB	1910	G	Sidechain
26	BB	1912	A	Sidechain
26	BB	1913	A	Sidechain
26	BB	1914	C	Sidechain
26	BB	1918	A	Sidechain
26	BB	1919	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1920	C	Sidechain
26	BB	1921	G	Sidechain
26	BB	1923	U	Sidechain
26	BB	1924	C	Sidechain
26	BB	1929	G	Sidechain
26	BB	193	U	Sidechain
26	BB	1930	G	Sidechain
26	BB	1931	U	Sidechain
26	BB	1932	A	Sidechain
26	BB	1934	C	Sidechain
26	BB	1935	G	Sidechain
26	BB	1936	A	Sidechain
26	BB	1938	A	Sidechain
26	BB	194	G	Sidechain
26	BB	1944	U	Sidechain
26	BB	1948	G	Sidechain
26	BB	1949	G	Sidechain
26	BB	195	A	Sidechain
26	BB	1952	A	Sidechain
26	BB	1954	G	Sidechain
26	BB	1955	U	Sidechain
26	BB	1959	G	Sidechain
26	BB	196	A	Sidechain
26	BB	1960	A	Sidechain
26	BB	1963	U	Sidechain
26	BB	1964	G	Sidechain
26	BB	1968	G	Sidechain
26	BB	1969	A	Sidechain
26	BB	1970	A	Sidechain
26	BB	1971	U	Sidechain
26	BB	1975	G	Sidechain
26	BB	1976	U	Sidechain
26	BB	1980	G	Sidechain
26	BB	1983	G	Sidechain
26	BB	1984	G	Sidechain
26	BB	1987	A	Sidechain
26	BB	1988	G	Sidechain
26	BB	1989	G	Sidechain
26	BB	199	A	Sidechain
26	BB	1990	C	Sidechain
26	BB	1991	U	Sidechain
26	BB	1992	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	1994	C	Sidechain
26	BB	1995	U	Sidechain
26	BB	1997	C	Sidechain
26	BB	1999	C	Sidechain
26	BB	2	G	Sidechain
26	BB	20	C	Sidechain
26	BB	200	U	Sidechain
26	BB	2000	C	Sidechain
26	BB	2002	G	Sidechain
26	BB	2005	A	Sidechain
26	BB	2008	C	Sidechain
26	BB	201	C	Sidechain
26	BB	2010	G	Sidechain
26	BB	2016	U	Sidechain
26	BB	202	U	Sidechain
26	BB	2021	C	Sidechain
26	BB	2022	U	Sidechain
26	BB	2023	C	Sidechain
26	BB	2024	G	Sidechain
26	BB	2026	U	Sidechain
26	BB	2027	G	Sidechain
26	BB	2029	G	Sidechain
26	BB	2031	A	Sidechain
26	BB	2034	U	Sidechain
26	BB	2036	C	Sidechain
26	BB	2037	A	Sidechain
26	BB	204	A	Sidechain
26	BB	2040	G	Sidechain
26	BB	2042	A	Sidechain
26	BB	2043	C	Sidechain
26	BB	2044	C	Sidechain
26	BB	2048	G	Sidechain
26	BB	2049	G	Sidechain
26	BB	205	G	Sidechain
26	BB	2055	C	Sidechain
26	BB	2056	G	Sidechain
26	BB	2057	G	Sidechain
26	BB	2059	A	Sidechain
26	BB	206	U	Sidechain
26	BB	2060	A	Sidechain
26	BB	2061	G	Sidechain
26	BB	2064	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2065	C	Sidechain
26	BB	2066	C	Sidechain
26	BB	2068	U	Sidechain
26	BB	207	A	Sidechain
26	BB	2070	A	Sidechain
26	BB	2071	A	Sidechain
26	BB	2072	C	Sidechain
26	BB	2073	C	Sidechain
26	BB	2074	U	Sidechain
26	BB	2076	U	Sidechain
26	BB	208	C	Sidechain
26	BB	2086	U	Sidechain
26	BB	2087	G	Sidechain
26	BB	2090	A	Sidechain
26	BB	2091	C	Sidechain
26	BB	2092	U	Sidechain
26	BB	2093	G	Sidechain
26	BB	2094	A	Sidechain
26	BB	2098	U	Sidechain
26	BB	2099	U	Sidechain
26	BB	21	A	Sidechain
26	BB	210	C	Sidechain
26	BB	2102	G	Sidechain
26	BB	2103	C	Sidechain
26	BB	2105	U	Sidechain
26	BB	2106	U	Sidechain
26	BB	2107	G	Sidechain
26	BB	2108	A	Sidechain
26	BB	211	C	Sidechain
26	BB	2111	U	Sidechain
26	BB	2112	G	Sidechain
26	BB	2113	U	Sidechain
26	BB	2114	A	Sidechain
26	BB	2115	G	Sidechain
26	BB	2117	A	Sidechain
26	BB	2118	U	Sidechain
26	BB	212	G	Sidechain
26	BB	2120	G	Sidechain
26	BB	2121	G	Sidechain
26	BB	2122	U	Sidechain
26	BB	2124	G	Sidechain
26	BB	2125	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2126	A	Sidechain
26	BB	2128	G	Sidechain
26	BB	2129	C	Sidechain
26	BB	2130	U	Sidechain
26	BB	2131	U	Sidechain
26	BB	2132	U	Sidechain
26	BB	2133	G	Sidechain
26	BB	2134	A	Sidechain
26	BB	2136	G	Sidechain
26	BB	2138	G	Sidechain
26	BB	214	G	Sidechain
26	BB	2143	C	Sidechain
26	BB	2144	G	Sidechain
26	BB	2146	C	Sidechain
26	BB	2147	A	Sidechain
26	BB	2150	C	Sidechain
26	BB	2151	U	Sidechain
26	BB	2152	G	Sidechain
26	BB	2153	C	Sidechain
26	BB	2156	G	Sidechain
26	BB	2157	G	Sidechain
26	BB	2160	C	Sidechain
26	BB	2163	A	Sidechain
26	BB	2166	U	Sidechain
26	BB	2167	U	Sidechain
26	BB	2168	G	Sidechain
26	BB	2169	A	Sidechain
26	BB	2174	C	Sidechain
26	BB	2181	U	Sidechain
26	BB	2183	A	Sidechain
26	BB	2184	A	Sidechain
26	BB	2186	G	Sidechain
26	BB	2188	U	Sidechain
26	BB	219	A	Sidechain
26	BB	2190	G	Sidechain
26	BB	2191	A	Sidechain
26	BB	2193	G	Sidechain
26	BB	2196	C	Sidechain
26	BB	2197	U	Sidechain
26	BB	2198	A	Sidechain
26	BB	2200	C	Sidechain
26	BB	2204	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2209	G	Sidechain
26	BB	221	A	Sidechain
26	BB	2210	U	Sidechain
26	BB	2213	U	Sidechain
26	BB	2214	C	Sidechain
26	BB	2216	G	Sidechain
26	BB	2217	G	Sidechain
26	BB	2218	G	Sidechain
26	BB	2221	G	Sidechain
26	BB	2224	G	Sidechain
26	BB	2228	G	Sidechain
26	BB	2229	U	Sidechain
26	BB	2233	U	Sidechain
26	BB	2234	G	Sidechain
26	BB	2237	G	Sidechain
26	BB	2239	G	Sidechain
26	BB	2242	G	Sidechain
26	BB	2243	U	Sidechain
26	BB	2244	U	Sidechain
26	BB	2246	G	Sidechain
26	BB	2248	C	Sidechain
26	BB	225	C	Sidechain
26	BB	2250	G	Sidechain
26	BB	2252	G	Sidechain
26	BB	2253	G	Sidechain
26	BB	2255	G	Sidechain
26	BB	2257	U	Sidechain
26	BB	2258	C	Sidechain
26	BB	2259	U	Sidechain
26	BB	226	A	Sidechain
26	BB	2264	C	Sidechain
26	BB	2267	A	Sidechain
26	BB	2268	A	Sidechain
26	BB	2269	G	Sidechain
26	BB	227	A	Sidechain
26	BB	2270	A	Sidechain
26	BB	2273	A	Sidechain
26	BB	2277	G	Sidechain
26	BB	2279	G	Sidechain
26	BB	2281	A	Sidechain
26	BB	2282	G	Sidechain
26	BB	2283	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2284	A	Sidechain
26	BB	2285	C	Sidechain
26	BB	2289	G	Sidechain
26	BB	229	C	Sidechain
26	BB	2290	G	Sidechain
26	BB	2291	U	Sidechain
26	BB	2293	G	Sidechain
26	BB	2296	U	Sidechain
26	BB	2297	A	Sidechain
26	BB	2298	A	Sidechain
26	BB	2299	U	Sidechain
26	BB	230	G	Sidechain
26	BB	2300	C	Sidechain
26	BB	2303	G	Sidechain
26	BB	2304	G	Sidechain
26	BB	2305	U	Sidechain
26	BB	2306	C	Sidechain
26	BB	2308	G	Sidechain
26	BB	2309	A	Sidechain
26	BB	2311	A	Sidechain
26	BB	2312	U	Sidechain
26	BB	2313	C	Sidechain
26	BB	2315	G	Sidechain
26	BB	2316	G	Sidechain
26	BB	2318	G	Sidechain
26	BB	232	G	Sidechain
26	BB	2320	U	Sidechain
26	BB	2321	U	Sidechain
26	BB	2323	G	Sidechain
26	BB	2325	G	Sidechain
26	BB	2326	C	Sidechain
26	BB	2327	A	Sidechain
26	BB	2328	A	Sidechain
26	BB	2329	U	Sidechain
26	BB	2330	G	Sidechain
26	BB	2332	C	Sidechain
26	BB	2333	A	Sidechain
26	BB	2334	U	Sidechain
26	BB	2336	A	Sidechain
26	BB	2339	C	Sidechain
26	BB	234	U	Sidechain
26	BB	2340	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2341	G	Sidechain
26	BB	2344	U	Sidechain
26	BB	2345	G	Sidechain
26	BB	2348	U	Sidechain
26	BB	2349	G	Sidechain
26	BB	2350	C	Sidechain
26	BB	2353	G	Sidechain
26	BB	2355	G	Sidechain
26	BB	2358	A	Sidechain
26	BB	2360	G	Sidechain
26	BB	2361	G	Sidechain
26	BB	2363	G	Sidechain
26	BB	2364	C	Sidechain
26	BB	2365	G	Sidechain
26	BB	2366	A	Sidechain
26	BB	2367	G	Sidechain
26	BB	2368	C	Sidechain
26	BB	237	C	Sidechain
26	BB	2370	G	Sidechain
26	BB	2371	G	Sidechain
26	BB	2373	G	Sidechain
26	BB	2375	G	Sidechain
26	BB	2376	A	Sidechain
26	BB	2377	A	Sidechain
26	BB	2379	G	Sidechain
26	BB	238	C	Sidechain
26	BB	2383	G	Sidechain
26	BB	2385	C	Sidechain
26	BB	2386	A	Sidechain
26	BB	2388	A	Sidechain
26	BB	2390	U	Sidechain
26	BB	2391	G	Sidechain
26	BB	2393	U	Sidechain
26	BB	2396	G	Sidechain
26	BB	240	C	Sidechain
26	BB	2401	U	Sidechain
26	BB	2404	U	Sidechain
26	BB	2405	G	Sidechain
26	BB	2408	U	Sidechain
26	BB	2409	G	Sidechain
26	BB	2410	G	Sidechain
26	BB	2411	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2412	A	Sidechain
26	BB	2413	G	Sidechain
26	BB	2414	G	Sidechain
26	BB	2418	A	Sidechain
26	BB	2419	U	Sidechain
26	BB	242	G	Sidechain
26	BB	2421	G	Sidechain
26	BB	2423	U	Sidechain
26	BB	2425	A	Sidechain
26	BB	2427	C	Sidechain
26	BB	2428	G	Sidechain
26	BB	2429	G	Sidechain
26	BB	2432	A	Sidechain
26	BB	2433	A	Sidechain
26	BB	2435	A	Sidechain
26	BB	2436	G	Sidechain
26	BB	2437	G	Sidechain
26	BB	2438	U	Sidechain
26	BB	2439	A	Sidechain
26	BB	2440	C	Sidechain
26	BB	2443	C	Sidechain
26	BB	2444	G	Sidechain
26	BB	2447	G	Sidechain
26	BB	2448	A	Sidechain
26	BB	245	G	Sidechain
26	BB	2450	A	Sidechain
26	BB	2451	A	Sidechain
26	BB	2456	C	Sidechain
26	BB	2458	G	Sidechain
26	BB	2459	A	Sidechain
26	BB	246	C	Sidechain
26	BB	2462	C	Sidechain
26	BB	2464	G	Sidechain
26	BB	2466	C	Sidechain
26	BB	2468	A	Sidechain
26	BB	2469	A	Sidechain
26	BB	247	G	Sidechain
26	BB	2470	G	Sidechain
26	BB	2471	A	Sidechain
26	BB	2474	U	Sidechain
26	BB	2476	A	Sidechain
26	BB	2478	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2479	U	Sidechain
26	BB	248	G	Sidechain
26	BB	2480	C	Sidechain
26	BB	2485	G	Sidechain
26	BB	2486	C	Sidechain
26	BB	2487	G	Sidechain
26	BB	2488	G	Sidechain
26	BB	2489	U	Sidechain
26	BB	2490	G	Sidechain
26	BB	2491	U	Sidechain
26	BB	2492	U	Sidechain
26	BB	2493	U	Sidechain
26	BB	2495	G	Sidechain
26	BB	2499	C	Sidechain
26	BB	25	U	Sidechain
26	BB	250	G	Sidechain
26	BB	2500	U	Sidechain
26	BB	2502	G	Sidechain
26	BB	2505	G	Sidechain
26	BB	2506	U	Sidechain
26	BB	2508	G	Sidechain
26	BB	2509	G	Sidechain
26	BB	251	A	Sidechain
26	BB	2510	C	Sidechain
26	BB	2512	C	Sidechain
26	BB	2514	U	Sidechain
26	BB	2515	C	Sidechain
26	BB	2517	C	Sidechain
26	BB	2519	U	Sidechain
26	BB	252	G	Sidechain
26	BB	2521	C	Sidechain
26	BB	2525	G	Sidechain
26	BB	2526	G	Sidechain
26	BB	2528	U	Sidechain
26	BB	253	C	Sidechain
26	BB	2530	A	Sidechain
26	BB	2532	G	Sidechain
26	BB	2533	U	Sidechain
26	BB	2535	G	Sidechain
26	BB	2537	U	Sidechain
26	BB	2538	C	Sidechain
26	BB	2539	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	254	G	Sidechain
26	BB	2540	C	Sidechain
26	BB	2543	G	Sidechain
26	BB	2544	G	Sidechain
26	BB	2547	A	Sidechain
26	BB	2548	U	Sidechain
26	BB	2549	G	Sidechain
26	BB	2550	G	Sidechain
26	BB	2553	G	Sidechain
26	BB	2555	U	Sidechain
26	BB	2556	C	Sidechain
26	BB	2559	C	Sidechain
26	BB	2561	U	Sidechain
26	BB	2562	U	Sidechain
26	BB	2563	U	Sidechain
26	BB	2564	A	Sidechain
26	BB	2569	G	Sidechain
26	BB	257	C	Sidechain
26	BB	2570	G	Sidechain
26	BB	2572	A	Sidechain
26	BB	2574	G	Sidechain
26	BB	2576	G	Sidechain
26	BB	2582	G	Sidechain
26	BB	2583	G	Sidechain
26	BB	2584	U	Sidechain
26	BB	2585	U	Sidechain
26	BB	2586	U	Sidechain
26	BB	2588	G	Sidechain
26	BB	259	G	Sidechain
26	BB	2592	G	Sidechain
26	BB	2593	U	Sidechain
26	BB	2596	U	Sidechain
26	BB	2597	G	Sidechain
26	BB	2598	A	Sidechain
26	BB	2599	G	Sidechain
26	BB	260	G	Sidechain
26	BB	2600	A	Sidechain
26	BB	2603	G	Sidechain
26	BB	2606	C	Sidechain
26	BB	2607	G	Sidechain
26	BB	261	G	Sidechain
26	BB	2610	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2611	C	Sidechain
26	BB	2613	U	Sidechain
26	BB	2615	U	Sidechain
26	BB	2616	C	Sidechain
26	BB	2618	G	Sidechain
26	BB	262	A	Sidechain
26	BB	2620	C	Sidechain
26	BB	2621	G	Sidechain
26	BB	2624	G	Sidechain
26	BB	2626	C	Sidechain
26	BB	2628	C	Sidechain
26	BB	263	G	Sidechain
26	BB	2630	G	Sidechain
26	BB	2631	G	Sidechain
26	BB	2633	G	Sidechain
26	BB	2634	A	Sidechain
26	BB	2637	U	Sidechain
26	BB	2638	G	Sidechain
26	BB	2639	A	Sidechain
26	BB	264	C	Sidechain
26	BB	2640	G	Sidechain
26	BB	2641	G	Sidechain
26	BB	2642	G	Sidechain
26	BB	2643	G	Sidechain
26	BB	2644	G	Sidechain
26	BB	2645	G	Sidechain
26	BB	2647	U	Sidechain
26	BB	265	A	Sidechain
26	BB	2655	G	Sidechain
26	BB	2657	A	Sidechain
26	BB	2658	C	Sidechain
26	BB	2659	G	Sidechain
26	BB	266	G	Sidechain
26	BB	2660	A	Sidechain
26	BB	2661	G	Sidechain
26	BB	2662	A	Sidechain
26	BB	2663	G	Sidechain
26	BB	2664	G	Sidechain
26	BB	2665	A	Sidechain
26	BB	2668	G	Sidechain
26	BB	2669	G	Sidechain
26	BB	267	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2671	G	Sidechain
26	BB	2672	U	Sidechain
26	BB	2673	G	Sidechain
26	BB	2674	G	Sidechain
26	BB	2675	A	Sidechain
26	BB	2676	C	Sidechain
26	BB	2681	C	Sidechain
26	BB	2683	C	Sidechain
26	BB	2684	U	Sidechain
26	BB	2685	G	Sidechain
26	BB	2686	G	Sidechain
26	BB	2687	U	Sidechain
26	BB	2688	G	Sidechain
26	BB	2689	U	Sidechain
26	BB	269	C	Sidechain
26	BB	2690	U	Sidechain
26	BB	2691	C	Sidechain
26	BB	2692	G	Sidechain
26	BB	2694	G	Sidechain
26	BB	2696	U	Sidechain
26	BB	2697	G	Sidechain
26	BB	2698	U	Sidechain
26	BB	2699	C	Sidechain
26	BB	27	G	Sidechain
26	BB	270	A	Sidechain
26	BB	2702	G	Sidechain
26	BB	2704	C	Sidechain
26	BB	2706	A	Sidechain
26	BB	2707	U	Sidechain
26	BB	2708	G	Sidechain
26	BB	2709	G	Sidechain
26	BB	271	G	Sidechain
26	BB	2710	C	Sidechain
26	BB	2712	C	Sidechain
26	BB	2713	U	Sidechain
26	BB	2717	C	Sidechain
26	BB	2718	G	Sidechain
26	BB	2719	G	Sidechain
26	BB	272	A	Sidechain
26	BB	2721	A	Sidechain
26	BB	2722	G	Sidechain
26	BB	2723	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2724	U	Sidechain
26	BB	2725	A	Sidechain
26	BB	2726	A	Sidechain
26	BB	2728	U	Sidechain
26	BB	2729	G	Sidechain
26	BB	273	G	Sidechain
26	BB	2730	C	Sidechain
26	BB	2731	G	Sidechain
26	BB	2732	G	Sidechain
26	BB	2733	A	Sidechain
26	BB	2734	A	Sidechain
26	BB	2737	G	Sidechain
26	BB	2740	A	Sidechain
26	BB	2742	G	Sidechain
26	BB	2744	G	Sidechain
26	BB	2745	C	Sidechain
26	BB	2751	G	Sidechain
26	BB	2752	C	Sidechain
26	BB	2753	A	Sidechain
26	BB	2754	U	Sidechain
26	BB	2755	C	Sidechain
26	BB	2756	U	Sidechain
26	BB	2757	A	Sidechain
26	BB	2758	A	Sidechain
26	BB	2759	G	Sidechain
26	BB	2760	C	Sidechain
26	BB	2761	A	Sidechain
26	BB	2762	C	Sidechain
26	BB	2763	G	Sidechain
26	BB	2764	A	Sidechain
26	BB	2767	C	Sidechain
26	BB	2769	U	Sidechain
26	BB	277	G	Sidechain
26	BB	2770	G	Sidechain
26	BB	2771	C	Sidechain
26	BB	2773	C	Sidechain
26	BB	2776	A	Sidechain
26	BB	2777	G	Sidechain
26	BB	2778	A	Sidechain
26	BB	278	A	Sidechain
26	BB	2780	G	Sidechain
26	BB	2781	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2782	G	Sidechain
26	BB	2783	U	Sidechain
26	BB	2784	U	Sidechain
26	BB	2785	C	Sidechain
26	BB	2786	U	Sidechain
26	BB	2787	C	Sidechain
26	BB	2791	G	Sidechain
26	BB	2793	C	Sidechain
26	BB	2794	C	Sidechain
26	BB	2795	C	Sidechain
26	BB	2797	U	Sidechain
26	BB	2798	U	Sidechain
26	BB	2802	G	Sidechain
26	BB	2804	U	Sidechain
26	BB	2806	C	Sidechain
26	BB	2807	U	Sidechain
26	BB	2808	G	Sidechain
26	BB	2809	A	Sidechain
26	BB	2810	A	Sidechain
26	BB	2816	G	Sidechain
26	BB	2819	G	Sidechain
26	BB	282	A	Sidechain
26	BB	2820	A	Sidechain
26	BB	2822	G	Sidechain
26	BB	2823	A	Sidechain
26	BB	2824	C	Sidechain
26	BB	2828	G	Sidechain
26	BB	2831	G	Sidechain
26	BB	2832	U	Sidechain
26	BB	2834	G	Sidechain
26	BB	2835	A	Sidechain
26	BB	2836	U	Sidechain
26	BB	2838	G	Sidechain
26	BB	2839	G	Sidechain
26	BB	2842	G	Sidechain
26	BB	2844	G	Sidechain
26	BB	2846	G	Sidechain
26	BB	2848	G	Sidechain
26	BB	2849	U	Sidechain
26	BB	285	G	Sidechain
26	BB	2853	C	Sidechain
26	BB	2854	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	2857	G	Sidechain
26	BB	2858	C	Sidechain
26	BB	2859	G	Sidechain
26	BB	2860	A	Sidechain
26	BB	2861	U	Sidechain
26	BB	2863	C	Sidechain
26	BB	2864	G	Sidechain
26	BB	2865	U	Sidechain
26	BB	2867	G	Sidechain
26	BB	287	G	Sidechain
26	BB	2871	U	Sidechain
26	BB	2873	A	Sidechain
26	BB	2876	G	Sidechain
26	BB	2877	G	Sidechain
26	BB	2887	A	Sidechain
26	BB	2888	C	Sidechain
26	BB	2890	G	Sidechain
26	BB	2891	U	Sidechain
26	BB	2892	G	Sidechain
26	BB	2894	G	Sidechain
26	BB	2895	G	Sidechain
26	BB	2896	C	Sidechain
26	BB	2897	U	Sidechain
26	BB	2898	U	Sidechain
26	BB	2899	A	Sidechain
26	BB	2900	A	Sidechain
26	BB	2903	U	Sidechain
26	BB	291	G	Sidechain
26	BB	293	U	Sidechain
26	BB	295	G	Sidechain
26	BB	297	G	Sidechain
26	BB	30	G	Sidechain
26	BB	300	A	Sidechain
26	BB	302	C	Sidechain
26	BB	303	G	Sidechain
26	BB	304	U	Sidechain
26	BB	308	G	Sidechain
26	BB	31	C	Sidechain
26	BB	310	A	Sidechain
26	BB	311	A	Sidechain
26	BB	312	G	Sidechain
26	BB	313	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	314	C	Sidechain
26	BB	315	G	Sidechain
26	BB	317	G	Sidechain
26	BB	32	C	Sidechain
26	BB	320	A	Sidechain
26	BB	321	U	Sidechain
26	BB	322	A	Sidechain
26	BB	325	G	Sidechain
26	BB	327	G	Sidechain
26	BB	329	G	Sidechain
26	BB	330	A	Sidechain
26	BB	331	C	Sidechain
26	BB	333	G	Sidechain
26	BB	334	C	Sidechain
26	BB	336	C	Sidechain
26	BB	337	C	Sidechain
26	BB	338	G	Sidechain
26	BB	339	U	Sidechain
26	BB	340	A	Sidechain
26	BB	341	C	Sidechain
26	BB	342	A	Sidechain
26	BB	343	C	Sidechain
26	BB	346	A	Sidechain
26	BB	347	A	Sidechain
26	BB	348	A	Sidechain
26	BB	349	U	Sidechain
26	BB	35	G	Sidechain
26	BB	350	G	Sidechain
26	BB	352	A	Sidechain
26	BB	353	C	Sidechain
26	BB	355	U	Sidechain
26	BB	356	G	Sidechain
26	BB	358	U	Sidechain
26	BB	359	G	Sidechain
26	BB	360	U	Sidechain
26	BB	361	G	Sidechain
26	BB	362	A	Sidechain
26	BB	365	U	Sidechain
26	BB	366	C	Sidechain
26	BB	368	A	Sidechain
26	BB	370	G	Sidechain
26	BB	372	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	373	U	Sidechain
26	BB	376	G	Sidechain
26	BB	377	G	Sidechain
26	BB	379	G	Sidechain
26	BB	38	A	Sidechain
26	BB	380	G	Sidechain
26	BB	381	G	Sidechain
26	BB	383	C	Sidechain
26	BB	386	G	Sidechain
26	BB	387	U	Sidechain
26	BB	389	G	Sidechain
26	BB	39	G	Sidechain
26	BB	392	U	Sidechain
26	BB	393	C	Sidechain
26	BB	395	U	Sidechain
26	BB	396	G	Sidechain
26	BB	397	U	Sidechain
26	BB	398	C	Sidechain
26	BB	4	U	Sidechain
26	BB	40	U	Sidechain
26	BB	403	U	Sidechain
26	BB	404	A	Sidechain
26	BB	406	G	Sidechain
26	BB	407	G	Sidechain
26	BB	408	G	Sidechain
26	BB	409	G	Sidechain
26	BB	41	C	Sidechain
26	BB	412	A	Sidechain
26	BB	418	C	Sidechain
26	BB	42	A	Sidechain
26	BB	420	C	Sidechain
26	BB	424	G	Sidechain
26	BB	425	G	Sidechain
26	BB	426	C	Sidechain
26	BB	428	A	Sidechain
26	BB	43	G	Sidechain
26	BB	430	A	Sidechain
26	BB	431	U	Sidechain
26	BB	432	A	Sidechain
26	BB	434	U	Sidechain
26	BB	436	C	Sidechain
26	BB	44	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	441	U	Sidechain
26	BB	443	A	Sidechain
26	BB	448	U	Sidechain
26	BB	449	A	Sidechain
26	BB	45	G	Sidechain
26	BB	450	G	Sidechain
26	BB	451	U	Sidechain
26	BB	452	G	Sidechain
26	BB	453	A	Sidechain
26	BB	454	A	Sidechain
26	BB	455	C	Sidechain
26	BB	457	A	Sidechain
26	BB	458	G	Sidechain
26	BB	461	C	Sidechain
26	BB	462	C	Sidechain
26	BB	464	U	Sidechain
26	BB	465	G	Sidechain
26	BB	467	G	Sidechain
26	BB	468	G	Sidechain
26	BB	469	G	Sidechain
26	BB	47	C	Sidechain
26	BB	471	A	Sidechain
26	BB	474	G	Sidechain
26	BB	475	C	Sidechain
26	BB	476	G	Sidechain
26	BB	477	A	Sidechain
26	BB	479	A	Sidechain
26	BB	48	G	Sidechain
26	BB	480	A	Sidechain
26	BB	481	G	Sidechain
26	BB	483	A	Sidechain
26	BB	484	C	Sidechain
26	BB	488	G	Sidechain
26	BB	489	G	Sidechain
26	BB	49	A	Sidechain
26	BB	490	C	Sidechain
26	BB	491	G	Sidechain
26	BB	493	G	Sidechain
26	BB	494	G	Sidechain
26	BB	496	G	Sidechain
26	BB	497	A	Sidechain
26	BB	498	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	499	U	Sidechain
26	BB	5	A	Sidechain
26	BB	50	U	Sidechain
26	BB	500	G	Sidechain
26	BB	501	A	Sidechain
26	BB	504	A	Sidechain
26	BB	505	A	Sidechain
26	BB	506	G	Sidechain
26	BB	509	C	Sidechain
26	BB	51	G	Sidechain
26	BB	510	C	Sidechain
26	BB	512	G	Sidechain
26	BB	514	A	Sidechain
26	BB	516	C	Sidechain
26	BB	518	G	Sidechain
26	BB	519	U	Sidechain
26	BB	522	A	Sidechain
26	BB	523	C	Sidechain
26	BB	524	G	Sidechain
26	BB	525	U	Sidechain
26	BB	526	A	Sidechain
26	BB	53	A	Sidechain
26	BB	530	G	Sidechain
26	BB	532	A	Sidechain
26	BB	533	G	Sidechain
26	BB	534	U	Sidechain
26	BB	535	G	Sidechain
26	BB	54	G	Sidechain
26	BB	540	C	Sidechain
26	BB	541	A	Sidechain
26	BB	542	C	Sidechain
26	BB	543	G	Sidechain
26	BB	544	C	Sidechain
26	BB	547	A	Sidechain
26	BB	548	G	Sidechain
26	BB	549	G	Sidechain
26	BB	55	G	Sidechain
26	BB	550	C	Sidechain
26	BB	551	G	Sidechain
26	BB	553	G	Sidechain
26	BB	554	U	Sidechain
26	BB	556	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	558	U	Sidechain
26	BB	559	G	Sidechain
26	BB	56	A	Sidechain
26	BB	561	G	Sidechain
26	BB	563	A	Sidechain
26	BB	566	U	Sidechain
26	BB	57	C	Sidechain
26	BB	570	G	Sidechain
26	BB	571	U	Sidechain
26	BB	572	A	Sidechain
26	BB	573	U	Sidechain
26	BB	574	A	Sidechain
26	BB	576	U	Sidechain
26	BB	577	G	Sidechain
26	BB	579	G	Sidechain
26	BB	580	U	Sidechain
26	BB	583	G	Sidechain
26	BB	586	A	Sidechain
26	BB	589	U	Sidechain
26	BB	59	U	Sidechain
26	BB	590	A	Sidechain
26	BB	591	U	Sidechain
26	BB	595	C	Sidechain
26	BB	598	U	Sidechain
26	BB	599	A	Sidechain
26	BB	60	G	Sidechain
26	BB	601	C	Sidechain
26	BB	604	G	Sidechain
26	BB	605	G	Sidechain
26	BB	606	U	Sidechain
26	BB	607	U	Sidechain
26	BB	608	A	Sidechain
26	BB	614	A	Sidechain
26	BB	615	U	Sidechain
26	BB	617	G	Sidechain
26	BB	618	G	Sidechain
26	BB	619	G	Sidechain
26	BB	62	U	Sidechain
26	BB	620	G	Sidechain
26	BB	623	C	Sidechain
26	BB	624	C	Sidechain
26	BB	625	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	626	A	Sidechain
26	BB	628	G	Sidechain
26	BB	630	G	Sidechain
26	BB	631	A	Sidechain
26	BB	632	A	Sidechain
26	BB	633	A	Sidechain
26	BB	636	G	Sidechain
26	BB	637	A	Sidechain
26	BB	638	G	Sidechain
26	BB	64	A	Sidechain
26	BB	640	C	Sidechain
26	BB	641	U	Sidechain
26	BB	642	U	Sidechain
26	BB	643	A	Sidechain
26	BB	644	A	Sidechain
26	BB	647	G	Sidechain
26	BB	648	G	Sidechain
26	BB	652	U	Sidechain
26	BB	654	A	Sidechain
26	BB	655	A	Sidechain
26	BB	656	G	Sidechain
26	BB	659	G	Sidechain
26	BB	660	C	Sidechain
26	BB	662	G	Sidechain
26	BB	664	G	Sidechain
26	BB	665	U	Sidechain
26	BB	666	A	Sidechain
26	BB	67	U	Sidechain
26	BB	674	G	Sidechain
26	BB	676	A	Sidechain
26	BB	677	A	Sidechain
26	BB	678	C	Sidechain
26	BB	68	G	Sidechain
26	BB	683	U	Sidechain
26	BB	684	G	Sidechain
26	BB	689	A	Sidechain
26	BB	69	C	Sidechain
26	BB	690	G	Sidechain
26	BB	691	C	Sidechain
26	BB	694	U	Sidechain
26	BB	695	G	Sidechain
26	BB	697	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	698	C	Sidechain
26	BB	699	A	Sidechain
26	BB	70	G	Sidechain
26	BB	700	G	Sidechain
26	BB	701	G	Sidechain
26	BB	702	U	Sidechain
26	BB	705	A	Sidechain
26	BB	706	A	Sidechain
26	BB	707	G	Sidechain
26	BB	708	G	Sidechain
26	BB	709	U	Sidechain
26	BB	711	G	Sidechain
26	BB	712	G	Sidechain
26	BB	713	G	Sidechain
26	BB	715	A	Sidechain
26	BB	716	A	Sidechain
26	BB	717	C	Sidechain
26	BB	718	A	Sidechain
26	BB	720	U	Sidechain
26	BB	726	G	Sidechain
26	BB	729	G	Sidechain
26	BB	731	C	Sidechain
26	BB	736	C	Sidechain
26	BB	737	C	Sidechain
26	BB	739	A	Sidechain
26	BB	741	U	Sidechain
26	BB	744	U	Sidechain
26	BB	749	A	Sidechain
26	BB	75	G	Sidechain
26	BB	750	A	Sidechain
26	BB	752	A	Sidechain
26	BB	756	A	Sidechain
26	BB	757	G	Sidechain
26	BB	758	C	Sidechain
26	BB	759	G	Sidechain
26	BB	760	G	Sidechain
26	BB	761	A	Sidechain
26	BB	762	U	Sidechain
26	BB	763	G	Sidechain
26	BB	764	A	Sidechain
26	BB	765	C	Sidechain
26	BB	766	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	767	U	Sidechain
26	BB	768	G	Sidechain
26	BB	77	G	Sidechain
26	BB	771	G	Sidechain
26	BB	772	C	Sidechain
26	BB	774	G	Sidechain
26	BB	775	G	Sidechain
26	BB	776	G	Sidechain
26	BB	777	G	Sidechain
26	BB	778	G	Sidechain
26	BB	780	G	Sidechain
26	BB	781	A	Sidechain
26	BB	783	A	Sidechain
26	BB	785	G	Sidechain
26	BB	788	A	Sidechain
26	BB	789	A	Sidechain
26	BB	799	G	Sidechain
26	BB	800	A	Sidechain
26	BB	801	G	Sidechain
26	BB	802	A	Sidechain
26	BB	804	A	Sidechain
26	BB	805	G	Sidechain
26	BB	806	C	Sidechain
26	BB	807	U	Sidechain
26	BB	809	G	Sidechain
26	BB	81	G	Sidechain
26	BB	811	U	Sidechain
26	BB	812	C	Sidechain
26	BB	814	C	Sidechain
26	BB	817	C	Sidechain
26	BB	818	G	Sidechain
26	BB	819	A	Sidechain
26	BB	820	A	Sidechain
26	BB	821	A	Sidechain
26	BB	824	U	Sidechain
26	BB	826	U	Sidechain
26	BB	828	U	Sidechain
26	BB	829	A	Sidechain
26	BB	83	A	Sidechain
26	BB	830	G	Sidechain
26	BB	831	G	Sidechain
26	BB	832	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	834	G	Sidechain
26	BB	835	C	Sidechain
26	BB	836	G	Sidechain
26	BB	838	C	Sidechain
26	BB	839	U	Sidechain
26	BB	84	A	Sidechain
26	BB	840	C	Sidechain
26	BB	841	G	Sidechain
26	BB	842	U	Sidechain
26	BB	844	A	Sidechain
26	BB	845	A	Sidechain
26	BB	846	U	Sidechain
26	BB	847	U	Sidechain
26	BB	848	C	Sidechain
26	BB	849	A	Sidechain
26	BB	850	U	Sidechain
26	BB	851	C	Sidechain
26	BB	852	U	Sidechain
26	BB	853	C	Sidechain
26	BB	856	G	Sidechain
26	BB	857	G	Sidechain
26	BB	860	U	Sidechain
26	BB	861	A	Sidechain
26	BB	865	C	Sidechain
26	BB	866	A	Sidechain
26	BB	867	C	Sidechain
26	BB	868	U	Sidechain
26	BB	869	G	Sidechain
26	BB	87	U	Sidechain
26	BB	870	U	Sidechain
26	BB	871	U	Sidechain
26	BB	875	G	Sidechain
26	BB	876	C	Sidechain
26	BB	877	A	Sidechain
26	BB	879	G	Sidechain
26	BB	88	G	Sidechain
26	BB	881	G	Sidechain
26	BB	883	G	Sidechain
26	BB	886	A	Sidechain
26	BB	889	C	Sidechain
26	BB	893	C	Sidechain
26	BB	894	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	896	A	Sidechain
26	BB	897	C	Sidechain
26	BB	898	C	Sidechain
26	BB	9	G	Sidechain
26	BB	900	A	Sidechain
26	BB	901	C	Sidechain
26	BB	902	C	Sidechain
26	BB	903	C	Sidechain
26	BB	904	G	Sidechain
26	BB	907	G	Sidechain
26	BB	91	A	Sidechain
26	BB	910	A	Sidechain
26	BB	912	C	Sidechain
26	BB	914	G	Sidechain
26	BB	916	G	Sidechain
26	BB	918	A	Sidechain
26	BB	92	U	Sidechain
26	BB	920	A	Sidechain
26	BB	923	G	Sidechain
26	BB	924	G	Sidechain
26	BB	926	G	Sidechain
26	BB	927	A	Sidechain
26	BB	930	G	Sidechain
26	BB	931	U	Sidechain
26	BB	932	U	Sidechain
26	BB	934	U	Sidechain
26	BB	936	A	Sidechain
26	BB	937	C	Sidechain
26	BB	938	G	Sidechain
26	BB	94	A	Sidechain
26	BB	940	G	Sidechain
26	BB	941	A	Sidechain
26	BB	943	A	Sidechain
26	BB	944	C	Sidechain
26	BB	946	C	Sidechain
26	BB	950	G	Sidechain
26	BB	951	C	Sidechain
26	BB	952	G	Sidechain
26	BB	953	G	Sidechain
26	BB	954	G	Sidechain
26	BB	957	C	Sidechain
26	BB	958	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
26	BB	959	A	Sidechain
26	BB	961	C	Sidechain
26	BB	962	G	Sidechain
26	BB	963	U	Sidechain
26	BB	966	G	Sidechain
26	BB	968	C	Sidechain
26	BB	969	G	Sidechain
26	BB	97	C	Sidechain
26	BB	970	U	Sidechain
26	BB	971	G	Sidechain
26	BB	975	A	Sidechain
26	BB	976	G	Sidechain
26	BB	977	G	Sidechain
26	BB	978	G	Sidechain
26	BB	98	G	Sidechain
26	BB	984	A	Sidechain
26	BB	985	C	Sidechain
26	BB	989	G	Sidechain
26	BB	99	U	Sidechain
26	BB	990	A	Sidechain
26	BB	991	C	Sidechain
26	BB	993	G	Sidechain
26	BB	997	G	Sidechain
27	BC	177	LYS	Mainchain,Peptide
27	BC	220	ALA	Peptide
27	BC	7	ARG	Sidechain
28	BD	101	ARG	Sidechain
28	BD	12	ARG	Sidechain
28	BD	199	HIS	Sidechain
28	BD	229	HIS	Sidechain
28	BD	232	GLY	Peptide
28	BD	24	HIS	Sidechain
28	BD	261	ARG	Sidechain
28	BD	50	THR	Mainchain
28	BD	51	ARG	Sidechain
28	BD	57	HIS	Sidechain
28	BD	95	TYR	Sidechain
29	BE	113	SER	Peptide
29	BE	119	ALA	Peptide
29	BE	124	ARG	Sidechain
29	BE	179	ARG	Peptide
29	BE	59	ARG	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
29	BE	77	ARG	Sidechain
29	BE	83	ARG	Sidechain
30	BF	102	ARG	Sidechain
30	BF	119	ILE	Peptide
30	BF	162	ARG	Sidechain
30	BF	23	PHE	Sidechain
30	BF	35	TYR	Sidechain
30	BF	85	PHE	Sidechain
31	BG	109	ARG	Sidechain
31	BG	149	ARG	Peptide
31	BG	151	LEU	Peptide
31	BG	176	PHE	Sidechain
31	BG	21	TYR	Sidechain
31	BG	7	TYR	Sidechain
31	BG	82	TYR	Sidechain
31	BG	87	LYS	Peptide
32	BH	108	PHE	Sidechain
32	BH	2	ARG	Sidechain
32	BH	57	TYR	Sidechain
34	BJ	129	PRO	Peptide
34	BJ	131	TYR	Sidechain
34	BJ	137	ARG	Sidechain
34	BJ	18	ALA	Peptide
34	BJ	50	TYR	Sidechain
34	BJ	53	VAL	Peptide
36	BL	125	TYR	Sidechain
36	BL	35	ARG	Sidechain
36	BL	53	TYR	Sidechain
36	BL	7	LYS	Mainchain
36	BL	75	TYR	Sidechain
36	BL	98	GLU	Peptide
37	BM	31	ARG	Sidechain
37	BM	41	ILE	Peptide
37	BM	98	ARG	Peptide
38	BN	47	ARG	Sidechain
38	BN	60	ARG	Sidechain
38	BN	66	PHE	Sidechain
39	BO	117	PHE	Sidechain
39	BO	40	ARG	Sidechain
40	BP	112	TYR	Sidechain
40	BP	119	SER	Mainchain
40	BP	3	HIS	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
40	BP	45	ARG	Sidechain
40	BP	94	TYR	Sidechain
40	BP	96	ARG	Sidechain
41	BQ	111	ARG	Sidechain
41	BQ	13	ARG	Sidechain
41	BQ	34	HIS	Sidechain
41	BQ	36	TYR	Sidechain
42	BR	104	GLY	Mainchain,Peptide
42	BR	38	ARG	Sidechain
42	BR	97	TYR	Sidechain
43	BS	44	TYR	Sidechain
43	BS	49	ARG	Sidechain
43	BS	5	ARG	Peptide
43	BS	63	ARG	Sidechain
43	BS	75	TYR	Sidechain
44	BT	93	PHE	Sidechain
45	BU	4	ILE	Peptide
45	BU	88	ARG	Sidechain
45	BU	92	ARG	Sidechain
47	BW	10	VAL	Mainchain,Peptide
48	BX	21	ARG	Sidechain
48	BX	31	TYR	Sidechain
48	BX	56	PHE	Sidechain
49	BY	13	ARG	Peptide
49	BY	14	ASP	Peptide
49	BY	16	GLU	Peptide
49	BY	38	ARG	Sidechain
49	BY	81	ILE	Peptide
50	BZ	27	ARG	Sidechain
50	BZ	44	ARG	Sidechain
50	BZ	73	ARG	Sidechain
50	BZ	77	TYR	Sidechain

5.2 Too-close contacts [i](#)

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	AA	33089	0	16610	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	AB	1627	0	843	0	0
3	AC	993	0	497	0	0
4	AD	1641	0	841	0	0
5	AE	1872	0	1885	0	0
6	AF	1822	0	1913	0	0
7	AG	1643	0	1710	0	0
8	AH	1225	0	1273	0	0
9	AI	1101	0	1050	0	0
10	AJ	1400	0	1449	0	0
11	AK	979	0	1034	0	0
12	AL	1036	0	1084	0	0
13	AM	825	0	865	0	0
14	AN	965	0	997	0	0
15	AO	955	0	1019	0	0
16	AP	910	0	981	0	0
17	AQ	805	0	847	0	0
18	AR	716	0	742	0	0
19	AS	649	0	666	0	0
20	AT	672	0	716	0	0
21	AU	626	0	651	0	0
22	AV	727	0	769	0	0
23	AW	670	0	722	0	0
24	AX	590	0	631	0	0
25	BA	2566	0	1302	0	0
26	BB	62351	0	31246	0	0
27	BC	1733	0	1824	0	0
28	BD	2092	0	2170	0	0
29	BE	1565	0	1616	0	0
30	BF	1552	0	1619	0	0
31	BG	1420	0	1460	0	0
32	BH	1323	0	1374	0	0
33	BI	1111	0	1148	0	0
34	BJ	1233	0	1283	0	0
35	BK	1032	0	1088	0	0
36	BL	1129	0	1162	0	0
37	BM	947	0	1023	0	0
38	BN	1053	0	1129	0	0
39	BO	1074	0	1157	0	0
40	BP	1008	0	1045	0	0
41	BQ	900	0	935	0	0
42	BR	917	0	965	0	0
43	BS	947	0	1022	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
44	BT	816	0	839	0	0
45	BU	857	0	922	0	0
46	BV	787	0	846	0	0
47	BW	789	0	847	0	0
48	BX	753	0	780	0	0
49	BY	634	0	656	0	0
50	BZ	625	0	655	0	0
51	B0	509	0	543	0	0
52	B1	449	0	491	0	0
53	B2	549	0	552	0	0
54	B3	444	0	461	0	0
55	B4	441	0	485	0	0
56	B5	377	0	418	0	0
57	B6	504	0	574	0	0
58	B7	302	0	343	0	0
59	AB	14	0	9	0	0
60	BB	10	0	10	0	0
All	All	152351	0	103794	0	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). Clashscore could not be calculated for this entry.

There are no clashes within the asymmetric unit.

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	
5	AE	238/240 (99%)	221 (93%)	13 (6%)	4 (2%)	9	42
6	AF	230/232 (99%)	200 (87%)	25 (11%)	5 (2%)	6	35
7	AG	203/205 (99%)	180 (89%)	18 (9%)	5 (2%)	5	32
8	AH	164/166 (99%)	141 (86%)	19 (12%)	4 (2%)	6	33

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	AI	133/135 (98%)	118 (89%)	11 (8%)	4 (3%)	4	28
10	AJ	176/178 (99%)	164 (93%)	11 (6%)	1 (1%)	25	66
11	AK	127/129 (98%)	114 (90%)	11 (9%)	2 (2%)	9	44
12	AL	127/129 (98%)	109 (86%)	17 (13%)	1 (1%)	19	60
13	AM	101/103 (98%)	90 (89%)	7 (7%)	4 (4%)	3	23
14	AN	126/128 (98%)	105 (83%)	18 (14%)	3 (2%)	6	33
15	AO	121/123 (98%)	102 (84%)	16 (13%)	3 (2%)	5	32
16	AP	115/117 (98%)	104 (90%)	10 (9%)	1 (1%)	17	57
17	AQ	98/100 (98%)	84 (86%)	10 (10%)	4 (4%)	3	23
18	AR	86/88 (98%)	80 (93%)	6 (7%)	0	100	100
19	AS	80/82 (98%)	69 (86%)	9 (11%)	2 (2%)	5	32
20	AT	81/83 (98%)	71 (88%)	10 (12%)	0	100	100
21	AU	72/74 (97%)	63 (88%)	6 (8%)	3 (4%)	3	22
22	AV	89/91 (98%)	78 (88%)	10 (11%)	1 (1%)	14	52
23	AW	84/86 (98%)	79 (94%)	4 (5%)	1 (1%)	13	50
24	AX	68/70 (97%)	55 (81%)	9 (13%)	4 (6%)	1	17
27	BC	232/234 (99%)	208 (90%)	20 (9%)	4 (2%)	9	42
28	BD	270/272 (99%)	227 (84%)	37 (14%)	6 (2%)	6	35
29	BE	207/209 (99%)	171 (83%)	25 (12%)	11 (5%)	2	19
30	BF	199/201 (99%)	167 (84%)	26 (13%)	6 (3%)	4	28
31	BG	176/178 (99%)	144 (82%)	19 (11%)	13 (7%)	1	14
32	BH	174/176 (99%)	149 (86%)	16 (9%)	9 (5%)	2	19
33	BI	147/149 (99%)	132 (90%)	12 (8%)	3 (2%)	7	38
34	BJ	162/164 (99%)	140 (86%)	16 (10%)	6 (4%)	3	24
35	BK	139/141 (99%)	128 (92%)	9 (6%)	2 (1%)	11	46
36	BL	140/142 (99%)	118 (84%)	18 (13%)	4 (3%)	4	29
37	BM	121/123 (98%)	102 (84%)	14 (12%)	5 (4%)	3	23
38	BN	142/144 (99%)	113 (80%)	25 (18%)	4 (3%)	5	30
39	BO	134/136 (98%)	120 (90%)	13 (10%)	1 (1%)	22	63
40	BP	125/127 (98%)	116 (93%)	9 (7%)	0	100	100
41	BQ	115/117 (98%)	103 (90%)	12 (10%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
42	BR	112/114 (98%)	90 (80%)	16 (14%)	6 (5%)	2	19
43	BS	115/117 (98%)	105 (91%)	7 (6%)	3 (3%)	5	31
44	BT	101/103 (98%)	92 (91%)	8 (8%)	1 (1%)	15	55
45	BU	108/110 (98%)	100 (93%)	4 (4%)	4 (4%)	3	24
46	BV	98/100 (98%)	85 (87%)	12 (12%)	1 (1%)	15	55
47	BW	101/103 (98%)	84 (83%)	15 (15%)	2 (2%)	7	38
48	BX	92/94 (98%)	79 (86%)	11 (12%)	2 (2%)	6	35
49	BY	82/84 (98%)	64 (78%)	15 (18%)	3 (4%)	3	24
50	BZ	75/77 (97%)	63 (84%)	9 (12%)	3 (4%)	3	23
51	B0	61/63 (97%)	53 (87%)	6 (10%)	2 (3%)	4	26
52	B1	56/58 (97%)	55 (98%)	1 (2%)	0	100	100
53	B2	68/70 (97%)	51 (75%)	12 (18%)	5 (7%)	1	14
54	B3	54/56 (96%)	38 (70%)	14 (26%)	2 (4%)	3	24
55	B4	52/54 (96%)	47 (90%)	4 (8%)	1 (2%)	8	38
56	B5	44/46 (96%)	39 (89%)	4 (9%)	1 (2%)	6	34
57	B6	62/64 (97%)	59 (95%)	3 (5%)	0	100	100
58	B7	36/38 (95%)	28 (78%)	6 (17%)	2 (6%)	2	19
All	All	6319/6423 (98%)	5497 (87%)	658 (10%)	164 (3%)	8	31

All (164) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	AE	84	LEU
5	AE	93	HIS
7	AG	3	TYR
8	AH	77	ASN
9	AI	99	ALA
14	AN	125	LYS
24	AX	24	LYS
28	BD	8	THR
28	BD	64	VAL
30	BF	62	GLN
31	BG	88	VAL
31	BG	103	ILE
31	BG	148	VAL
31	BG	174	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	BH	8	VAL
32	BH	94	ARG
35	BK	3	LYS
38	BN	94	THR
42	BR	25	VAL
47	BW	52	ASN
49	BY	36	ILE
53	B2	9	TYR
54	B3	2	VAL
54	B3	51	ARG
55	B4	52	LYS
5	AE	128	LEU
6	AF	47	ALA
7	AG	27	ILE
9	AI	39	LEU
15	AO	87	LYS
15	AO	118	VAL
19	AS	80	LYS
24	AX	3	ILE
28	BD	77	VAL
29	BE	37	VAL
29	BE	109	VAL
30	BF	96	VAL
31	BG	66	ILE
31	BG	79	ARG
31	BG	80	GLN
31	BG	145	VAL
31	BG	170	ALA
32	BH	45	ALA
32	BH	170	THR
33	BI	3	VAL
33	BI	75	LEU
34	BJ	113	GLU
36	BL	126	ALA
37	BM	71	ARG
38	BN	22	GLY
39	BO	59	ARG
42	BR	32	VAL
43	BS	87	VAL
47	BW	97	SER
50	BZ	16	ASN
50	BZ	27	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	B0	46	VAL
5	AE	94	ARG
6	AF	14	VAL
7	AG	41	GLY
8	AH	22	LYS
11	AK	69	ALA
13	AM	95	GLY
14	AN	108	ASN
15	AO	121	PRO
22	AV	31	ARG
23	AW	67	HIS
28	BD	94	LEU
29	BE	43	ASP
29	BE	119	ALA
29	BE	170	VAL
29	BE	173	GLN
30	BF	54	GLY
30	BF	153	LEU
30	BF	174	GLY
31	BG	35	LEU
32	BH	29	ASN
32	BH	84	LYS
36	BL	120	ARG
37	BM	72	PRO
45	BU	65	ASP
45	BU	80	PRO
46	BV	35	ALA
49	BY	41	GLY
51	B0	57	LEU
53	B2	41	HIS
58	B7	6	SER
7	AG	29	THR
8	AH	7	ALA
8	AH	53	ARG
9	AI	54	LEU
11	AK	80	PRO
12	AL	120	ALA
13	AM	52	LEU
13	AM	58	ASN
17	AQ	52	ARG
17	AQ	65	GLN
17	AQ	70	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AS	49	GLY
21	AU	20	ILE
27	BC	159	GLY
29	BE	97	SER
29	BE	191	GLY
31	BG	20	ASN
31	BG	81	GLY
32	BH	56	GLY
32	BH	80	GLU
32	BH	175	LYS
34	BJ	31	GLY
34	BJ	33	THR
37	BM	46	ALA
37	BM	89	ASN
38	BN	99	ASN
38	BN	117	THR
42	BR	86	LYS
42	BR	110	LYS
43	BS	101	ASP
44	BT	91	GLN
48	BX	71	LYS
50	BZ	2	ARG
53	B2	43	PHE
56	B5	16	HIS
6	AF	6	PRO
7	AG	22	SER
9	AI	127	GLY
10	AJ	81	GLY
14	AN	116	PRO
16	AP	22	TYR
21	AU	11	ARG
27	BC	20	GLN
27	BC	66	PRO
28	BD	254	LYS
34	BJ	87	HIS
34	BJ	102	ASN
45	BU	89	ALA
49	BY	5	ALA
53	B2	21	VAL
58	B7	16	ILE
6	AF	104	GLU
17	AQ	39	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	AX	9	GLU
29	BE	131	ASP
35	BK	18	ASN
36	BL	3	THR
36	BL	96	ARG
45	BU	61	ASN
30	BF	64	GLY
33	BI	9	VAL
34	BJ	14	VAL
37	BM	93	GLN
24	AX	26	GLY
28	BD	205	GLY
29	BE	205	PRO
42	BR	89	GLY
43	BS	93	ILE
53	B2	5	ILE
6	AF	144	GLY
13	AM	74	VAL
21	AU	40	PRO
27	BC	91	GLY
29	BE	122	VAL
42	BR	63	ILE
31	BG	84	ILE
48	BX	37	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	
5	AE	198/198 (100%)	193 (98%)	5 (2%)	47	68
6	AF	189/189 (100%)	181 (96%)	8 (4%)	30	54
7	AG	172/172 (100%)	164 (95%)	8 (5%)	26	51
8	AH	125/125 (100%)	121 (97%)	4 (3%)	39	61
9	AI	116/116 (100%)	110 (95%)	6 (5%)	23	48

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
10	AJ	146/146 (100%)	140 (96%)	6 (4%)	30	55
11	AK	104/104 (100%)	98 (94%)	6 (6%)	20	45
12	AL	106/106 (100%)	103 (97%)	3 (3%)	43	65
13	AM	90/90 (100%)	84 (93%)	6 (7%)	16	41
14	AN	98/98 (100%)	94 (96%)	4 (4%)	30	55
15	AO	103/103 (100%)	100 (97%)	3 (3%)	42	64
16	AP	95/95 (100%)	90 (95%)	5 (5%)	22	47
17	AQ	83/83 (100%)	80 (96%)	3 (4%)	35	59
18	AR	76/76 (100%)	75 (99%)	1 (1%)	69	81
19	AS	65/65 (100%)	63 (97%)	2 (3%)	40	62
20	AT	77/77 (100%)	73 (95%)	4 (5%)	23	48
21	AU	64/64 (100%)	59 (92%)	5 (8%)	12	36
22	AV	78/78 (100%)	71 (91%)	7 (9%)	9	30
23	AW	65/65 (100%)	64 (98%)	1 (2%)	65	80
24	AX	60/60 (100%)	58 (97%)	2 (3%)	38	61
27	BC	181/181 (100%)	172 (95%)	9 (5%)	24	49
28	BD	217/217 (100%)	204 (94%)	13 (6%)	19	44
29	BE	164/164 (100%)	150 (92%)	14 (8%)	10	33
30	BF	165/165 (100%)	154 (93%)	11 (7%)	16	41
31	BG	149/149 (100%)	138 (93%)	11 (7%)	13	38
32	BH	137/137 (100%)	129 (94%)	8 (6%)	20	45
33	BI	114/114 (100%)	108 (95%)	6 (5%)	22	47
34	BJ	122/122 (100%)	116 (95%)	6 (5%)	25	50
35	BK	109/109 (100%)	105 (96%)	4 (4%)	34	58
36	BL	116/116 (100%)	113 (97%)	3 (3%)	46	66
37	BM	104/104 (100%)	101 (97%)	3 (3%)	42	64
38	BN	103/103 (100%)	96 (93%)	7 (7%)	16	41
39	BO	109/109 (100%)	106 (97%)	3 (3%)	43	65
40	BP	103/103 (100%)	98 (95%)	5 (5%)	25	50
41	BQ	87/87 (100%)	84 (97%)	3 (3%)	37	60
42	BR	99/99 (100%)	93 (94%)	6 (6%)	18	44

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
43	BS	89/89 (100%)	87 (98%)	2 (2%)	52	71
44	BT	84/84 (100%)	79 (94%)	5 (6%)	19	44
45	BU	93/93 (100%)	90 (97%)	3 (3%)	39	61
46	BV	84/84 (100%)	77 (92%)	7 (8%)	11	34
47	BW	84/84 (100%)	80 (95%)	4 (5%)	25	51
48	BX	78/78 (100%)	73 (94%)	5 (6%)	17	42
49	BY	62/62 (100%)	60 (97%)	2 (3%)	39	61
50	BZ	67/67 (100%)	63 (94%)	4 (6%)	19	44
51	B0	55/55 (100%)	52 (94%)	3 (6%)	21	47
52	B1	48/48 (100%)	46 (96%)	2 (4%)	30	54
53	B2	62/62 (100%)	57 (92%)	5 (8%)	11	35
54	B3	47/47 (100%)	46 (98%)	1 (2%)	53	72
55	B4	48/48 (100%)	48 (100%)	0	100	100
56	B5	38/38 (100%)	37 (97%)	1 (3%)	46	66
57	B6	51/51 (100%)	48 (94%)	3 (6%)	19	45
58	B7	34/34 (100%)	33 (97%)	1 (3%)	42	64
All	All	5213/5213 (100%)	4964 (95%)	249 (5%)	29	51

All (249) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
5	AE	91	VAL
5	AE	121	GLN
5	AE	157	PRO
5	AE	170	ILE
5	AE	209	VAL
6	AF	44	LYS
6	AF	58	ARG
6	AF	68	HIS
6	AF	123	LEU
6	AF	168	ARG
6	AF	178	ARG
6	AF	215	GLN
6	AF	229	LYS
7	AG	46	ARG
7	AG	57	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	58	GLN
7	AG	89	LEU
7	AG	119	HIS
7	AG	138	PRO
7	AG	147	LYS
7	AG	191	SER
8	AH	47	PHE
8	AH	51	LYS
8	AH	53	ARG
8	AH	141	ASP
9	AI	9	MET
9	AI	12	PRO
9	AI	33	GLU
9	AI	86	ARG
9	AI	89	VAL
9	AI	102	MET
10	AJ	22	LEU
10	AJ	74	VAL
10	AJ	135	LYS
10	AJ	150	PHE
10	AJ	156	LEU
10	AJ	170	LYS
11	AK	47	ASP
11	AK	55	LYS
11	AK	60	LEU
11	AK	64	TYR
11	AK	66	GLN
11	AK	98	LEU
12	AL	59	LYS
12	AL	61	ASP
12	AL	108	ARG
13	AM	4	GLN
13	AM	48	ARG
13	AM	50	THR
13	AM	52	LEU
13	AM	59	LYS
13	AM	100	ILE
14	AN	6	ARG
14	AN	52	ARG
14	AN	88	PRO
14	AN	128	VAL
15	AO	14	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	AO	28	GLN
15	AO	29	LYS
16	AP	13	HIS
16	AP	15	VAL
16	AP	41	ASP
16	AP	69	ARG
16	AP	85	TYR
17	AQ	60	ARG
17	AQ	68	ARG
17	AQ	95	LEU
18	AR	55	LEU
19	AS	18	GLN
19	AS	55	ASP
20	AT	3	LYS
20	AT	19	SER
20	AT	75	VAL
20	AT	76	ARG
21	AU	2	ARG
21	AU	39	VAL
21	AU	49	LYS
21	AU	56	ARG
21	AU	59	LYS
22	AV	4	LEU
22	AV	33	TRP
22	AV	35	ARG
22	AV	52	ASN
22	AV	54	ARG
22	AV	56	HIS
22	AV	80	ARG
23	AW	58	ASP
24	AX	6	ARG
24	AX	34	ARG
27	BC	4	LEU
27	BC	7	ARG
27	BC	16	ASP
27	BC	41	SER
27	BC	98	GLU
27	BC	108	GLU
27	BC	109	MET
27	BC	112	ASP
27	BC	131	LEU
28	BD	80	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	BD	155	ARG
28	BD	173	LEU
28	BD	176	ARG
28	BD	188	ARG
28	BD	198	GLU
28	BD	212	TRP
28	BD	231	HIS
28	BD	235	GLU
28	BD	239	PHE
28	BD	260	LYS
28	BD	265	PHE
28	BD	270	ARG
29	BE	2	ILE
29	BE	24	VAL
29	BE	33	ARG
29	BE	40	LEU
29	BE	46	ARG
29	BE	56	LYS
29	BE	74	GLU
29	BE	84	LEU
29	BE	97	SER
29	BE	107	VAL
29	BE	110	THR
29	BE	114	LYS
29	BE	164	GLN
29	BE	169	ARG
30	BF	2	GLU
30	BF	13	THR
30	BF	17	THR
30	BF	31	VAL
30	BF	74	LYS
30	BF	78	TRP
30	BF	88	ARG
30	BF	90	GLN
30	BF	97	ASN
30	BF	139	LYS
30	BF	163	ASN
31	BG	9	ASP
31	BG	32	LYS
31	BG	48	LEU
31	BG	68	LYS
31	BG	70	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BG	91	ARG
31	BG	103	ILE
31	BG	111	ARG
31	BG	132	ARG
31	BG	139	GLU
31	BG	146	ASP
32	BH	70	LEU
32	BH	74	MET
32	BH	106	LEU
32	BH	110	HIS
32	BH	123	GLU
32	BH	156	TYR
32	BH	166	GLU
32	BH	171	LYS
33	BI	79	THR
33	BI	87	GLU
33	BI	89	LYS
33	BI	114	GLU
33	BI	129	GLU
33	BI	142	VAL
34	BJ	15	SER
34	BJ	36	LYS
34	BJ	39	GLU
34	BJ	87	HIS
34	BJ	105	PHE
34	BJ	128	LEU
35	BK	9	LYS
35	BK	33	ASN
35	BK	48	ILE
35	BK	129	GLU
36	BL	12	LYS
36	BL	43	GLU
36	BL	136	GLN
37	BM	2	ILE
37	BM	37	ASP
37	BM	65	THR
38	BN	2	ARG
38	BN	41	ARG
38	BN	57	LEU
38	BN	58	TYR
38	BN	69	ARG
38	BN	99	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	BN	115	GLU
39	BO	38	ARG
39	BO	58	LYS
39	BO	123	LYS
40	BP	8	ARG
40	BP	9	GLN
40	BP	14	SER
40	BP	16	HIS
40	BP	97	ILE
41	BQ	3	LYS
41	BQ	30	ARG
41	BQ	94	ARG
42	BR	14	GLN
42	BR	15	ASP
42	BR	43	GLU
42	BR	52	ARG
42	BR	55	HIS
42	BR	91	VAL
43	BS	8	ILE
43	BS	39	ILE
44	BT	23	GLU
44	BT	40	MET
44	BT	51	VAL
44	BT	78	ARG
44	BT	97	LYS
45	BU	22	ASP
45	BU	72	THR
45	BU	95	ARG
46	BV	15	HIS
46	BV	24	MET
46	BV	25	GLU
46	BV	28	ASN
46	BV	32	LEU
46	BV	80	TRP
46	BV	82	LYS
47	BW	48	VAL
47	BW	81	ARG
47	BW	94	PHE
47	BW	98	ASN
48	BX	9	ARG
48	BX	44	HIS
48	BX	70	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	BX	73	LYS
48	BX	86	LEU
49	BY	16	GLU
49	BY	38	ARG
50	BZ	10	ARG
50	BZ	33	HIS
50	BZ	55	MET
50	BZ	59	ASP
51	B0	1	MET
51	B0	43	LEU
51	B0	55	THR
52	B1	16	LEU
52	B1	29	ARG
53	B2	3	LYS
53	B2	11	GLU
53	B2	22	MET
53	B2	43	PHE
53	B2	45	THR
54	B3	41	HIS
56	B5	43	THR
57	B6	42	HIS
57	B6	46	LYS
57	B6	49	VAL
58	B7	12	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1538/1542 (99%)	287 (18%)	93 (6%)
2	AB	74/76 (97%)	23 (31%)	7 (9%)
25	BA	119/120 (99%)	20 (16%)	13 (10%)
26	BB	2898/2904 (99%)	536 (18%)	180 (6%)
3	AC	47/47 (100%)	26 (55%)	14 (29%)
4	AD	76/77 (98%)	13 (17%)	4 (5%)
All	All	4752/4766 (99%)	905 (19%)	311 (6%)

All (905) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	2	A
1	AA	6	G
1	AA	32	A
1	AA	36	C
1	AA	48	C
1	AA	52	C
1	AA	53	A
1	AA	54	C
1	AA	60	A
1	AA	61	G
1	AA	83	C
1	AA	84	U
1	AA	98	A
1	AA	108	G
1	AA	122	G
1	AA	123	U
1	AA	129	A
1	AA	131	A
1	AA	153	C
1	AA	164	G
1	AA	166	U
1	AA	171	A
1	AA	174	A
1	AA	182	A
1	AA	183	C
1	AA	184	G
1	AA	188	C
1	AA	197	A
1	AA	204	G
1	AA	210	C
1	AA	212	G
1	AA	225	C
1	AA	228	A
1	AA	229	U
1	AA	240	G
1	AA	244	U
1	AA	245	U
1	AA	247	G
1	AA	250	A
1	AA	251	G
1	AA	252	U
1	AA	262	A
1	AA	266	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	267	C
1	AA	272	C
1	AA	280	C
1	AA	289	G
1	AA	293	G
1	AA	306	A
1	AA	316	C
1	AA	317	U
1	AA	319	G
1	AA	328	C
1	AA	329	A
1	AA	330	C
1	AA	344	A
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	372	C
1	AA	373	A
1	AA	374	A
1	AA	381	C
1	AA	382	A
1	AA	384	G
1	AA	389	A
1	AA	390	U
1	AA	392	C
1	AA	395	C
1	AA	398	U
1	AA	406	G
1	AA	411	A
1	AA	413	G
1	AA	415	A
1	AA	421	U
1	AA	422	C
1	AA	429	U
1	AA	444	G
1	AA	463	U
1	AA	464	U
1	AA	466	A
1	AA	467	U
1	AA	468	A
1	AA	479	U
1	AA	481	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	485	U
1	AA	486	U
1	AA	494	G
1	AA	496	A
1	AA	497	G
1	AA	498	A
1	AA	505	G
1	AA	508	U
1	AA	510	A
1	AA	518	C
1	AA	528	C
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	535	A
1	AA	547	A
1	AA	552	U
1	AA	553	A
1	AA	561	U
1	AA	566	G
1	AA	572	A
1	AA	573	A
1	AA	575	G
1	AA	576	C
1	AA	577	G
1	AA	578	C
1	AA	583	A
1	AA	615	G
1	AA	631	C
1	AA	632	U
1	AA	633	G
1	AA	636	U
1	AA	641	U
1	AA	642	A
1	AA	650	G
1	AA	653	U
1	AA	654	G
1	AA	687	A
1	AA	688	G
1	AA	695	A
1	AA	702	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	704	A
1	AA	718	A
1	AA	721	G
1	AA	724	G
1	AA	755	G
1	AA	760	G
1	AA	765	G
1	AA	766	A
1	AA	770	C
1	AA	777	A
1	AA	783	C
1	AA	790	A
1	AA	791	G
1	AA	805	C
1	AA	810	C
1	AA	812	G
1	AA	817	C
1	AA	819	A
1	AA	821	G
1	AA	828	U
1	AA	829	G
1	AA	834	U
1	AA	840	C
1	AA	841	C
1	AA	842	U
1	AA	843	U
1	AA	846	G
1	AA	870	U
1	AA	873	A
1	AA	874	G
1	AA	876	C
1	AA	890	G
1	AA	899	C
1	AA	900	A
1	AA	910	C
1	AA	914	A
1	AA	926	G
1	AA	927	G
1	AA	933	G
1	AA	938	A
1	AA	939	G
1	AA	945	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	960	U
1	AA	961	U
1	AA	962	C
1	AA	968	A
1	AA	969	A
1	AA	973	G
1	AA	974	A
1	AA	975	A
1	AA	978	A
1	AA	981	U
1	AA	984	C
1	AA	993	G
1	AA	994	A
1	AA	995	C
1	AA	1004	A
1	AA	1006	G
1	AA	1014	A
1	AA	1015	G
1	AA	1026	G
1	AA	1028	C
1	AA	1030	U
1	AA	1031	C
1	AA	1050	G
1	AA	1054	C
1	AA	1064	G
1	AA	1065	U
1	AA	1081	A
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1118	U
1	AA	1126	U
1	AA	1127	G
1	AA	1137	C
1	AA	1139	G
1	AA	1148	U
1	AA	1149	C
1	AA	1152	A
1	AA	1154	G
1	AA	1159	U
1	AA	1168	U
1	AA	1181	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1183	U
1	AA	1184	G
1	AA	1190	G
1	AA	1197	A
1	AA	1198	G
1	AA	1200	C
1	AA	1201	A
1	AA	1202	U
1	AA	1208	C
1	AA	1212	U
1	AA	1214	C
1	AA	1215	G
1	AA	1224	U
1	AA	1226	C
1	AA	1227	A
1	AA	1228	C
1	AA	1238	A
1	AA	1240	U
1	AA	1241	G
1	AA	1250	A
1	AA	1253	G
1	AA	1254	A
1	AA	1256	A
1	AA	1264	U
1	AA	1270	G
1	AA	1278	G
1	AA	1279	G
1	AA	1280	A
1	AA	1281	C
1	AA	1286	U
1	AA	1290	G
1	AA	1297	G
1	AA	1300	G
1	AA	1301	U
1	AA	1303	C
1	AA	1305	G
1	AA	1315	U
1	AA	1317	C
1	AA	1318	A
1	AA	1319	A
1	AA	1322	C
1	AA	1336	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1340	A
1	AA	1345	U
1	AA	1346	A
1	AA	1347	G
1	AA	1348	U
1	AA	1360	A
1	AA	1362	A
1	AA	1363	A
1	AA	1368	A
1	AA	1378	C
1	AA	1397	C
1	AA	1398	A
1	AA	1401	G
1	AA	1431	A
1	AA	1432	G
1	AA	1437	A
1	AA	1446	A
1	AA	1448	C
1	AA	1454	G
1	AA	1490	U
1	AA	1492	A
1	AA	1493	A
1	AA	1494	G
1	AA	1502	A
1	AA	1503	A
1	AA	1505	G
1	AA	1506	U
1	AA	1517	G
1	AA	1520	C
1	AA	1529	G
1	AA	1530	G
1	AA	1534	A
1	AA	1535	C
1	AA	1540	U
2	AB	8	4SU
2	AB	9	A
2	AB	10	G
2	AB	11	U
2	AB	17	H2U
2	AB	23	A
2	AB	24	G
2	AB	34	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	35	C
2	AB	36	A
2	AB	46	7MG
2	AB	47	U
2	AB	48	U
2	AB	49	G
2	AB	58	A
2	AB	59	G
2	AB	60	U
2	AB	61	C
2	AB	65	C
2	AB	73	G
2	AB	74	C
2	AB	75	C
2	AB	76	A
3	AC	14	G
3	AC	15	G
3	AC	17	U
3	AC	18	A
3	AC	21	U
3	AC	22	G
3	AC	23	C
3	AC	25	U
3	AC	26	U
3	AC	27	A
3	AC	28	U
3	AC	29	G
3	AC	31	U
3	AC	32	U
3	AC	34	U
3	AC	40	G
3	AC	41	A
3	AC	44	U
3	AC	45	G
3	AC	47	C
3	AC	50	U
3	AC	51	C
3	AC	52	U
3	AC	53	G
3	AC	54	U
3	AC	56	G
4	AD	8	4SU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	9	G
4	AD	10	G
4	AD	18	U
4	AD	19	G
4	AD	20	G
4	AD	22	A
4	AD	38	A
4	AD	49	C
4	AD	50	G
4	AD	73	A
4	AD	76	C
4	AD	77	A
25	BA	9	G
25	BA	13	G
25	BA	14	U
25	BA	15	A
25	BA	16	G
25	BA	25	U
25	BA	26	C
25	BA	35	C
25	BA	41	G
25	BA	44	G
25	BA	51	G
25	BA	58	A
25	BA	66	A
25	BA	67	G
25	BA	73	A
25	BA	87	U
25	BA	88	C
25	BA	89	U
25	BA	90	C
25	BA	99	A
26	BB	13	A
26	BB	14	A
26	BB	18	U
26	BB	30	G
26	BB	34	U
26	BB	42	A
26	BB	43	G
26	BB	45	G
26	BB	46	G
26	BB	49	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	50	U
26	BB	71	A
26	BB	72	U
26	BB	75	G
26	BB	88	G
26	BB	91	A
26	BB	95	A
26	BB	100	U
26	BB	101	A
26	BB	103	A
26	BB	115	C
26	BB	119	A
26	BB	120	U
26	BB	125	A
26	BB	126	A
26	BB	128	C
26	BB	181	A
26	BB	194	G
26	BB	196	A
26	BB	197	A
26	BB	199	A
26	BB	204	A
26	BB	205	G
26	BB	215	G
26	BB	216	A
26	BB	218	A
26	BB	219	A
26	BB	222	A
26	BB	224	U
26	BB	225	C
26	BB	228	C
26	BB	232	G
26	BB	242	G
26	BB	243	U
26	BB	248	G
26	BB	249	C
26	BB	250	G
26	BB	255	A
26	BB	265	A
26	BB	266	G
26	BB	267	C
26	BB	271	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	277	G
26	BB	294	A
26	BB	295	G
26	BB	311	A
26	BB	321	U
26	BB	322	A
26	BB	330	A
26	BB	332	A
26	BB	333	G
26	BB	338	G
26	BB	368	A
26	BB	369	U
26	BB	371	A
26	BB	372	G
26	BB	386	G
26	BB	389	G
26	BB	390	U
26	BB	391	A
26	BB	396	G
26	BB	403	U
26	BB	404	A
26	BB	405	U
26	BB	406	G
26	BB	411	G
26	BB	424	G
26	BB	428	A
26	BB	429	A
26	BB	431	U
26	BB	436	C
26	BB	451	U
26	BB	452	G
26	BB	454	A
26	BB	456	C
26	BB	472	A
26	BB	479	A
26	BB	480	A
26	BB	481	G
26	BB	484	C
26	BB	489	G
26	BB	490	C
26	BB	504	A
26	BB	505	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	508	A
26	BB	509	C
26	BB	527	C
26	BB	532	A
26	BB	545	U
26	BB	546	U
26	BB	550	C
26	BB	562	U
26	BB	563	A
26	BB	570	G
26	BB	571	U
26	BB	573	U
26	BB	574	A
26	BB	575	A
26	BB	602	A
26	BB	603	A
26	BB	604	G
26	BB	612	G
26	BB	635	C
26	BB	637	A
26	BB	644	A
26	BB	645	C
26	BB	652	U
26	BB	653	U
26	BB	654	A
26	BB	655	A
26	BB	656	G
26	BB	671	C
26	BB	675	A
26	BB	686	U
26	BB	696	G
26	BB	718	A
26	BB	719	C
26	BB	728	G
26	BB	730	A
26	BB	732	C
26	BB	736	C
26	BB	747	5MU
26	BB	751	A
26	BB	752	A
26	BB	753	A
26	BB	758	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	762	U
26	BB	763	G
26	BB	764	A
26	BB	775	G
26	BB	782	A
26	BB	784	G
26	BB	786	C
26	BB	789	A
26	BB	793	A
26	BB	805	G
26	BB	812	C
26	BB	830	G
26	BB	846	U
26	BB	847	U
26	BB	848	C
26	BB	859	G
26	BB	870	U
26	BB	887	U
26	BB	889	C
26	BB	894	U
26	BB	896	A
26	BB	897	C
26	BB	901	C
26	BB	910	A
26	BB	914	G
26	BB	915	C
26	BB	925	A
26	BB	932	U
26	BB	933	A
26	BB	938	G
26	BB	941	A
26	BB	945	A
26	BB	946	C
26	BB	957	C
26	BB	961	C
26	BB	973	A
26	BB	974	G
26	BB	980	A
26	BB	982	C
26	BB	985	C
26	BB	986	C
26	BB	990	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	991	C
26	BB	995	C
26	BB	996	A
26	BB	1002	G
26	BB	1003	G
26	BB	1005	C
26	BB	1008	A
26	BB	1010	A
26	BB	1013	C
26	BB	1022	G
26	BB	1025	G
26	BB	1034	G
26	BB	1044	C
26	BB	1048	A
26	BB	1052	C
26	BB	1060	U
26	BB	1061	U
26	BB	1062	G
26	BB	1069	A
26	BB	1070	A
26	BB	1073	A
26	BB	1078	U
26	BB	1081	U
26	BB	1085	A
26	BB	1087	G
26	BB	1098	A
26	BB	1104	C
26	BB	1109	C
26	BB	1110	G
26	BB	1112	G
26	BB	1123	C
26	BB	1129	A
26	BB	1130	U
26	BB	1132	U
26	BB	1134	A
26	BB	1135	C
26	BB	1142	A
26	BB	1143	A
26	BB	1157	G
26	BB	1158	C
26	BB	1173	U
26	BB	1175	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	1177	G
26	BB	1184	U
26	BB	1204	A
26	BB	1211	C
26	BB	1236	G
26	BB	1237	A
26	BB	1238	G
26	BB	1239	G
26	BB	1241	A
26	BB	1253	A
26	BB	1254	A
26	BB	1255	U
26	BB	1256	G
26	BB	1266	G
26	BB	1272	A
26	BB	1273	U
26	BB	1274	A
26	BB	1275	A
26	BB	1283	G
26	BB	1284	A
26	BB	1287	A
26	BB	1288	G
26	BB	1289	C
26	BB	1300	G
26	BB	1301	A
26	BB	1302	A
26	BB	1303	G
26	BB	1307	A
26	BB	1308	A
26	BB	1318	U
26	BB	1321	A
26	BB	1322	A
26	BB	1323	C
26	BB	1329	U
26	BB	1340	U
26	BB	1341	G
26	BB	1349	C
26	BB	1354	A
26	BB	1362	C
26	BB	1363	C
26	BB	1365	A
26	BB	1368	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	1378	A
26	BB	1379	U
26	BB	1383	A
26	BB	1385	A
26	BB	1386	C
26	BB	1392	A
26	BB	1395	A
26	BB	1396	U
26	BB	1416	G
26	BB	1417	C
26	BB	1420	A
26	BB	1421	G
26	BB	1453	A
26	BB	1458	U
26	BB	1459	G
26	BB	1460	U
26	BB	1461	C
26	BB	1482	G
26	BB	1509	A
26	BB	1510	G
26	BB	1514	G
26	BB	1515	A
26	BB	1522	A
26	BB	1523	U
26	BB	1524	G
26	BB	1552	A
26	BB	1558	C
26	BB	1565	C
26	BB	1566	A
26	BB	1567	G
26	BB	1578	U
26	BB	1584	U
26	BB	1585	C
26	BB	1607	C
26	BB	1608	A
26	BB	1610	A
26	BB	1612	C
26	BB	1616	A
26	BB	1617	C
26	BB	1619	G
26	BB	1627	G
26	BB	1635	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	1636	U
26	BB	1646	C
26	BB	1648	U
26	BB	1669	A
26	BB	1670	C
26	BB	1674	G
26	BB	1676	A
26	BB	1694	C
26	BB	1713	A
26	BB	1714	U
26	BB	1715	G
26	BB	1724	G
26	BB	1739	A
26	BB	1763	G
26	BB	1764	C
26	BB	1773	A
26	BB	1781	U
26	BB	1786	A
26	BB	1787	A
26	BB	1800	C
26	BB	1801	A
26	BB	1808	A
26	BB	1809	A
26	BB	1815	A
26	BB	1816	C
26	BB	1817	G
26	BB	1818	U
26	BB	1825	U
26	BB	1830	C
26	BB	1831	G
26	BB	1833	C
26	BB	1851	U
26	BB	1856	U
26	BB	1873	G
26	BB	1900	A
26	BB	1906	G
26	BB	1912	A
26	BB	1913	A
26	BB	1914	C
26	BB	1918	A
26	BB	1928	A
26	BB	1930	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	1937	A
26	BB	1941	C
26	BB	1944	U
26	BB	1945	G
26	BB	1952	A
26	BB	1953	A
26	BB	1955	U
26	BB	1963	U
26	BB	1964	G
26	BB	1965	C
26	BB	1967	C
26	BB	1968	G
26	BB	1970	A
26	BB	1971	U
26	BB	1972	G
26	BB	1982	U
26	BB	1993	U
26	BB	1996	C
26	BB	2004	G
26	BB	2012	G
26	BB	2020	A
26	BB	2021	C
26	BB	2022	U
26	BB	2023	C
26	BB	2031	A
26	BB	2032	G
26	BB	2034	U
26	BB	2040	G
26	BB	2043	C
26	BB	2056	G
26	BB	2059	A
26	BB	2061	G
26	BB	2069	7MG
26	BB	2093	G
26	BB	2095	A
26	BB	2107	G
26	BB	2111	U
26	BB	2112	G
26	BB	2118	U
26	BB	2119	A
26	BB	2120	G
26	BB	2126	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	2127	G
26	BB	2128	G
26	BB	2129	C
26	BB	2130	U
26	BB	2131	U
26	BB	2132	U
26	BB	2134	A
26	BB	2137	U
26	BB	2143	C
26	BB	2148	G
26	BB	2154	A
26	BB	2158	A
26	BB	2164	C
26	BB	2173	A
26	BB	2198	A
26	BB	2199	A
26	BB	2204	G
26	BB	2211	A
26	BB	2212	A
26	BB	2213	U
26	BB	2214	C
26	BB	2215	C
26	BB	2224	G
26	BB	2225	A
26	BB	2226	C
26	BB	2237	G
26	BB	2238	G
26	BB	2239	G
26	BB	2246	G
26	BB	2249	U
26	BB	2250	G
26	BB	2266	A
26	BB	2267	A
26	BB	2282	G
26	BB	2283	C
26	BB	2287	A
26	BB	2288	A
26	BB	2306	C
26	BB	2309	A
26	BB	2321	U
26	BB	2322	A
26	BB	2325	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	2335	A
26	BB	2340	A
26	BB	2345	G
26	BB	2346	A
26	BB	2347	C
26	BB	2350	C
26	BB	2354	C
26	BB	2358	A
26	BB	2383	G
26	BB	2385	C
26	BB	2389	G
26	BB	2406	A
26	BB	2407	A
26	BB	2411	A
26	BB	2426	A
26	BB	2427	C
26	BB	2428	G
26	BB	2429	G
26	BB	2433	A
26	BB	2435	A
26	BB	2441	U
26	BB	2450	A
26	BB	2451	A
26	BB	2452	C
26	BB	2453	A
26	BB	2472	G
26	BB	2478	A
26	BB	2486	C
26	BB	2491	U
26	BB	2494	G
26	BB	2501	C
26	BB	2502	G
26	BB	2504	PSU
26	BB	2505	G
26	BB	2515	C
26	BB	2516	A
26	BB	2518	A
26	BB	2519	U
26	BB	2530	A
26	BB	2547	A
26	BB	2554	U
26	BB	2566	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	2567	G
26	BB	2572	A
26	BB	2573	C
26	BB	2576	G
26	BB	2577	A
26	BB	2586	U
26	BB	2599	G
26	BB	2602	A
26	BB	2603	G
26	BB	2606	C
26	BB	2610	C
26	BB	2611	C
26	BB	2613	U
26	BB	2616	C
26	BB	2628	C
26	BB	2629	U
26	BB	2639	A
26	BB	2654	A
26	BB	2655	G
26	BB	2656	U
26	BB	2660	A
26	BB	2664	G
26	BB	2685	G
26	BB	2689	U
26	BB	2690	U
26	BB	2714	G
26	BB	2737	G
26	BB	2739	U
26	BB	2742	G
26	BB	2744	G
26	BB	2755	C
26	BB	2757	A
26	BB	2765	A
26	BB	2766	A
26	BB	2769	U
26	BB	2771	C
26	BB	2774	C
26	BB	2777	G
26	BB	2778	A
26	BB	2779	U
26	BB	2780	G
26	BB	2782	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	2791	G
26	BB	2797	U
26	BB	2800	A
26	BB	2807	U
26	BB	2825	G
26	BB	2832	U
26	BB	2833	U
26	BB	2842	G
26	BB	2849	U
26	BB	2850	A
26	BB	2861	U
26	BB	2864	G
26	BB	2867	G
26	BB	2868	A
26	BB	2879	A
26	BB	2880	C
26	BB	2883	A
26	BB	2886	A
26	BB	2889	C
26	BB	2893	A
26	BB	2895	G
26	BB	2903	U

All (311) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	4	U
1	AA	5	U
1	AA	39	G
1	AA	51	A
1	AA	65	A
1	AA	97	G
1	AA	101	A
1	AA	128	G
1	AA	173	U
1	AA	178	C
1	AA	187	G
1	AA	206	C
1	AA	224	U
1	AA	239	U
1	AA	243	A
1	AA	244	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	251	G
1	AA	256	U
1	AA	272	C
1	AA	279	A
1	AA	328	C
1	AA	372	C
1	AA	410	G
1	AA	421	U
1	AA	429	U
1	AA	467	U
1	AA	497	G
1	AA	533	A
1	AA	552	U
1	AA	582	C
1	AA	632	U
1	AA	653	U
1	AA	681	A
1	AA	682	G
1	AA	700	G
1	AA	717	U
1	AA	719	C
1	AA	721	G
1	AA	744	C
1	AA	764	C
1	AA	765	G
1	AA	782	A
1	AA	815	A
1	AA	819	A
1	AA	840	C
1	AA	870	U
1	AA	872	A
1	AA	897	C
1	AA	899	C
1	AA	907	A
1	AA	926	G
1	AA	931	C
1	AA	937	A
1	AA	944	G
1	AA	960	U
1	AA	968	A
1	AA	974	A
1	AA	992	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	993	G
1	AA	994	A
1	AA	1014	A
1	AA	1029	U
1	AA	1030	U
1	AA	1101	A
1	AA	1108	G
1	AA	1126	U
1	AA	1167	A
1	AA	1183	U
1	AA	1201	A
1	AA	1211	U
1	AA	1213	A
1	AA	1214	C
1	AA	1226	C
1	AA	1253	G
1	AA	1263	C
1	AA	1278	G
1	AA	1289	A
1	AA	1297	G
1	AA	1302	C
1	AA	1313	U
1	AA	1318	A
1	AA	1346	A
1	AA	1347	G
1	AA	1362	A
1	AA	1369	C
1	AA	1384	C
1	AA	1452	C
1	AA	1491	G
1	AA	1502	A
1	AA	1509	C
1	AA	1512	U
1	AA	1529	G
1	AA	1538	C
2	AB	9	A
2	AB	34	C
2	AB	38	A
2	AB	47	U
2	AB	58	A
2	AB	59	G
2	AB	75	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	13	A
3	AC	14	G
3	AC	16	A
3	AC	18	A
3	AC	20	G
3	AC	21	U
3	AC	26	U
3	AC	27	A
3	AC	39	U
3	AC	43	U
3	AC	44	U
3	AC	52	U
3	AC	53	G
3	AC	55	A
4	AD	9	G
4	AD	17	C
4	AD	22	A
4	AD	76	C
25	BA	14	U
25	BA	15	A
25	BA	25	U
25	BA	34	A
25	BA	35	C
25	BA	36	C
25	BA	41	G
25	BA	44	G
25	BA	57	A
25	BA	66	A
25	BA	88	C
25	BA	89	U
25	BA	106	G
26	BB	13	A
26	BB	46	G
26	BB	49	A
26	BB	63	A
26	BB	71	A
26	BB	94	A
26	BB	100	U
26	BB	114	U
26	BB	125	A
26	BB	196	A
26	BB	199	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	218	A
26	BB	219	A
26	BB	228	C
26	BB	231	A
26	BB	241	A
26	BB	242	G
26	BB	249	C
26	BB	265	A
26	BB	321	U
26	BB	332	A
26	BB	347	A
26	BB	368	A
26	BB	388	G
26	BB	389	G
26	BB	390	U
26	BB	404	A
26	BB	428	A
26	BB	451	U
26	BB	453	A
26	BB	463	G
26	BB	479	A
26	BB	489	G
26	BB	503	A
26	BB	534	U
26	BB	545	U
26	BB	561	G
26	BB	569	U
26	BB	570	G
26	BB	572	A
26	BB	574	A
26	BB	575	A
26	BB	603	A
26	BB	611	C
26	BB	620	G
26	BB	628	G
26	BB	635	C
26	BB	649	G
26	BB	702	U
26	BB	748	G
26	BB	751	A
26	BB	762	U
26	BB	776	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	829	A
26	BB	846	U
26	BB	847	U
26	BB	870	U
26	BB	888	C
26	BB	900	A
26	BB	941	A
26	BB	945	A
26	BB	990	A
26	BB	1012	U
26	BB	1043	C
26	BB	1061	U
26	BB	1069	A
26	BB	1070	A
26	BB	1095	A
26	BB	1129	A
26	BB	1133	A
26	BB	1134	A
26	BB	1142	A
26	BB	1157	G
26	BB	1210	G
26	BB	1211	C
26	BB	1239	G
26	BB	1240	U
26	BB	1248	G
26	BB	1254	A
26	BB	1272	A
26	BB	1274	A
26	BB	1288	G
26	BB	1300	G
26	BB	1329	U
26	BB	1348	C
26	BB	1351	C
26	BB	1386	C
26	BB	1391	U
26	BB	1392	A
26	BB	1395	A
26	BB	1451	C
26	BB	1460	U
26	BB	1509	A
26	BB	1567	G
26	BB	1608	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	1609	A
26	BB	1626	A
26	BB	1634	A
26	BB	1649	G
26	BB	1693	U
26	BB	1697	G
26	BB	1699	G
26	BB	1701	A
26	BB	1715	G
26	BB	1723	G
26	BB	1778	U
26	BB	1784	A
26	BB	1786	A
26	BB	1816	C
26	BB	1862	G
26	BB	1901	A
26	BB	1912	A
26	BB	1927	A
26	BB	1939	5MU
26	BB	1940	U
26	BB	1944	U
26	BB	1952	A
26	BB	1955	U
26	BB	2019	A
26	BB	2031	A
26	BB	2060	A
26	BB	2068	U
26	BB	2079	U
26	BB	2092	U
26	BB	2098	U
26	BB	2106	U
26	BB	2113	U
26	BB	2118	U
26	BB	2125	G
26	BB	2129	C
26	BB	2130	U
26	BB	2159	G
26	BB	2173	A
26	BB	2194	U
26	BB	2198	A
26	BB	2223	G
26	BB	2225	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	2236	U
26	BB	2238	G
26	BB	2249	U
26	BB	2264	C
26	BB	2282	G
26	BB	2287	A
26	BB	2385	C
26	BB	2425	A
26	BB	2426	A
26	BB	2427	C
26	BB	2429	G
26	BB	2432	A
26	BB	2434	A
26	BB	2440	C
26	BB	2441	U
26	BB	2468	A
26	BB	2485	G
26	BB	2491	U
26	BB	2500	U
26	BB	2515	C
26	BB	2555	U
26	BB	2571	U
26	BB	2581	G
26	BB	2586	U
26	BB	2587	A
26	BB	2602	A
26	BB	2610	C
26	BB	2613	U
26	BB	2615	U
26	BB	2628	C
26	BB	2655	G
26	BB	2663	G
26	BB	2756	U
26	BB	2771	C
26	BB	2777	G
26	BB	2780	G
26	BB	2791	G
26	BB	2802	G
26	BB	2806	C
26	BB	2835	A
26	BB	2842	G
26	BB	2867	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	2879	A

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

49 non-standard protein/DNA/RNA residues are 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
2	MIA	AB	37	2	24,31,32	1.68	3 (12%)	26,44,47	3.01	9 (34%)
26	5MU	BB	1939	26	19,22,23	1.43	4 (21%)	28,32,35	2.03	11 (39%)
4	PSU	AD	56	4	18,21,22	1.81	6 (33%)	22,30,33	1.33	3 (13%)
1	UR3	AA	1498	1	19,22,23	1.12	1 (5%)	26,32,35	1.55	6 (23%)
1	4OC	AA	1402	-	20,23,24	1.32	3 (15%)	26,32,35	1.45	4 (15%)
1	MA6	AA	1518	1	18,26,27	1.84	5 (27%)	19,38,41	1.83	4 (21%)
26	OMU	BB	2552	26	19,22,23	1.50	4 (21%)	26,31,34	2.10	8 (30%)
2	7MG	AB	46	2	22,26,27	4.77	5 (22%)	29,39,42	1.93	7 (24%)
1	2MG	AA	1207	1	18,26,27	1.84	2 (11%)	16,38,41	1.37	1 (6%)
26	H2U	BB	2449	26	18,21,22	1.61	3 (16%)	21,30,33	1.77	4 (19%)
1	7MG	AA	527	1	22,26,27	4.13	6 (27%)	29,39,42	2.04	6 (20%)
26	6MZ	BB	2030	26	18,25,26	1.03	1 (5%)	16,36,39	1.54	3 (18%)
4	H2U	AD	21	4	18,21,22	1.38	3 (16%)	21,30,33	2.19	5 (23%)
4	4SU	AD	8	4	18,21,22	1.76	4 (22%)	26,30,33	2.03	7 (26%)
26	CH	BB	2575	26	16,21,22	1.54	3 (18%)	20,30,33	2.28	7 (35%)
26	3TD	BB	1915	26	18,22,23	1.84	6 (33%)	22,32,35	1.17	0
1	5MC	AA	967	1	18,22,23	1.32	2 (11%)	26,32,35	1.20	1 (3%)
26	PSU	BB	2457	26	18,21,22	1.12	2 (11%)	22,30,33	2.40	9 (40%)
26	1MG	BB	745	26	18,26,27	1.84	3 (16%)	19,39,42	1.81	6 (31%)
26	2MG	BB	2445	26	18,26,27	2.20	6 (33%)	16,38,41	2.89	5 (31%)
26	5MC	BB	1962	26	18,22,23	1.70	6 (33%)	26,32,35	1.66	6 (23%)
26	PSU	BB	2504	26	18,21,22	1.38	3 (16%)	22,30,33	1.87	7 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	H2U	AB	17	2	18,21,22	1.35	3 (16%)	21,30,33	2.11	3 (14%)
26	PSU	BB	955	26	18,21,22	1.70	3 (16%)	22,30,33	1.37	3 (13%)
26	PSU	BB	2605	26	18,21,22	1.67	4 (22%)	22,30,33	1.75	3 (13%)
26	OMC	BB	2498	26	19,22,23	1.19	2 (10%)	26,31,34	1.34	3 (11%)
4	OMC	AD	33	4	19,22,23	1.46	3 (15%)	26,31,34	1.38	5 (19%)
26	PSU	BB	746	26	18,21,22	2.32	8 (44%)	22,30,33	2.14	8 (36%)
26	PSU	BB	1911	26	18,21,22	1.54	4 (22%)	22,30,33	2.16	3 (13%)
4	5MU	AD	55	4	19,22,23	1.33	4 (21%)	28,32,35	2.14	6 (21%)
26	7MG	BB	2069	26	22,26,27	4.26	4 (18%)	29,39,42	1.87	7 (24%)
26	PSU	BB	2580	26	18,21,22	1.49	2 (11%)	22,30,33	1.75	9 (40%)
2	4SU	AB	8	2	18,21,22	1.71	2 (11%)	26,30,33	1.95	5 (19%)
26	OMG	BB	2251	26	18,26,27	1.53	4 (22%)	19,38,41	1.54	2 (10%)
1	5MC	AA	1407	1	18,22,23	1.44	2 (11%)	26,32,35	1.96	5 (19%)
2	H2U	AB	16	2	18,21,22	1.42	1 (5%)	21,30,33	1.89	7 (33%)
1	2MG	AA	1516	1	18,26,27	2.19	8 (44%)	16,38,41	1.27	3 (18%)
2	H2U	AB	20	2	18,21,22	1.49	3 (16%)	21,30,33	1.55	4 (19%)
26	5MU	BB	747	26	19,22,23	1.17	1 (5%)	28,32,35	1.62	7 (25%)
26	6MZ	BB	1618	26	18,25,26	1.85	4 (22%)	16,36,39	2.35	4 (25%)
26	2MG	BB	1835	26	18,26,27	1.59	3 (16%)	16,38,41	1.97	5 (31%)
1	2MG	AA	966	1	18,26,27	1.34	3 (16%)	16,38,41	2.60	5 (31%)
1	MA6	AA	1519	1	18,26,27	1.54	3 (16%)	19,38,41	1.79	8 (42%)
2	PSU	AB	55	2	18,21,22	1.49	3 (16%)	22,30,33	2.26	7 (31%)
26	2MA	BB	2503	26	17,25,26	2.08	7 (41%)	17,37,40	1.27	1 (5%)
2	5MU	AB	54	2	19,22,23	0.95	1 (5%)	28,32,35	1.49	6 (21%)
2	OMC	AB	32	2	19,22,23	1.49	4 (21%)	26,31,34	1.62	5 (19%)
1	PSU	AA	516	1	18,21,22	1.39	3 (16%)	22,30,33	2.88	7 (31%)
26	PSU	BB	1917	26	18,21,22	1.45	3 (16%)	22,30,33	1.53	4 (18%)

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
2	MIA	AB	37	2	-	0/11/33/34	0/3/3/3
26	5MU	BB	1939	26	-	0/7/25/26	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	PSU	AD	56	4	-	0/7/25/26	0/2/2/2
1	UR3	AA	1498	1	-	2/7/25/26	0/2/2/2
1	4OC	AA	1402	-	-	0/9/29/30	0/2/2/2
1	MA6	AA	1518	1	-	2/7/29/30	0/3/3/3
26	OMU	BB	2552	26	-	0/9/27/28	0/2/2/2
2	7MG	AB	46	2	-	3/7/37/38	0/3/3/3
1	2MG	AA	1207	1	-	1/5/27/28	0/3/3/3
26	H2U	BB	2449	26	-	2/7/38/39	0/2/2/2
1	7MG	AA	527	1	-	2/7/37/38	0/3/3/3
26	6MZ	BB	2030	26	-	2/5/27/28	0/3/3/3
4	H2U	AD	21	4	-	0/7/38/39	0/2/2/2
4	4SU	AD	8	4	-	0/7/25/26	0/2/2/2
26	CH	BB	2575	26	-	0/5/25/26	0/2/2/2
26	3TD	BB	1915	26	-	2/7/25/26	0/2/2/2
1	5MC	AA	967	1	-	0/7/25/26	0/2/2/2
26	PSU	BB	2457	26	-	0/7/25/26	0/2/2/2
26	1MG	BB	745	26	-	0/3/25/26	0/3/3/3
26	2MG	BB	2445	26	-	0/5/27/28	0/3/3/3
26	5MC	BB	1962	26	-	1/7/25/26	0/2/2/2
26	PSU	BB	2504	26	-	0/7/25/26	0/2/2/2
2	H2U	AB	17	2	-	1/7/38/39	0/2/2/2
26	PSU	BB	955	26	-	0/7/25/26	0/2/2/2
26	PSU	BB	2605	26	-	0/7/25/26	0/2/2/2
26	OMC	BB	2498	26	-	0/9/27/28	0/2/2/2
4	OMC	AD	33	4	-	0/9/27/28	0/2/2/2
26	PSU	BB	746	26	-	0/7/25/26	0/2/2/2
26	PSU	BB	1911	26	-	1/7/25/26	0/2/2/2
4	5MU	AD	55	4	-	0/7/25/26	0/2/2/2
26	7MG	BB	2069	26	-	0/7/37/38	0/3/3/3
26	PSU	BB	2580	26	-	5/7/25/26	0/2/2/2
2	4SU	AB	8	2	-	5/7/25/26	0/2/2/2
26	OMG	BB	2251	26	-	0/5/27/28	0/3/3/3
1	5MC	AA	1407	1	-	0/7/25/26	0/2/2/2
2	H2U	AB	16	2	-	0/7/38/39	0/2/2/2
1	2MG	AA	1516	1	-	0/5/27/28	0/3/3/3
2	H2U	AB	20	2	-	0/7/38/39	0/2/2/2
26	5MU	BB	747	26	-	0/7/25/26	0/2/2/2
26	6MZ	BB	1618	26	-	1/5/27/28	0/3/3/3
26	2MG	BB	1835	26	-	0/5/27/28	0/3/3/3
1	2MG	AA	966	1	-	0/5/27/28	0/3/3/3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	MA6	AA	1519	1	-	0/7/29/30	0/3/3/3
2	PSU	AB	55	2	-	1/7/25/26	0/2/2/2
26	2MA	BB	2503	26	-	0/3/25/26	0/3/3/3
2	5MU	AB	54	2	-	1/7/25/26	0/2/2/2
2	OMC	AB	32	2	-	0/9/27/28	0/2/2/2
1	PSU	AA	516	1	-	0/7/25/26	0/2/2/2
26	PSU	BB	1917	26	-	3/7/25/26	0/2/2/2

All (173) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	46	7MG	C8-N9	-20.90	1.34	1.46
26	BB	2069	7MG	C8-N9	-18.88	1.35	1.46
1	AA	527	7MG	C8-N9	-18.03	1.35	1.46
26	BB	955	PSU	C2-N1	6.15	1.45	1.36
26	BB	745	1MG	C8-N7	-6.03	1.24	1.35
26	BB	2445	2MG	C8-N7	-5.30	1.26	1.35
26	BB	746	PSU	C2-N1	5.16	1.43	1.36
2	AB	8	4SU	C5-C4	-4.90	1.36	1.42
26	BB	2503	2MA	C8-N7	-4.87	1.26	1.35
1	AA	1516	2MG	CM2-N2	4.85	1.54	1.45
1	AA	1207	2MG	C2-N1	4.64	1.44	1.36
2	AB	16	H2U	C2-N3	-4.53	1.29	1.38
2	AB	37	MIA	C2-S10	4.50	1.79	1.75
26	BB	1618	6MZ	C6-N1	4.49	1.40	1.34
1	AA	1207	2MG	C8-N7	-4.32	1.27	1.35
4	AD	8	4SU	C5-C4	-4.17	1.37	1.42
26	BB	2449	H2U	C2-N1	3.98	1.41	1.35
26	BB	2445	2MG	O4'-C1'	3.97	1.46	1.41
26	BB	1939	5MU	O4'-C1'	3.81	1.51	1.42
26	BB	2552	OMU	O5'-C5'	-3.74	1.35	1.44
4	AD	33	OMC	O4'-C4'	-3.65	1.36	1.45
1	AA	1516	2MG	C5-C6	-3.64	1.40	1.47
2	AB	46	7MG	O4'-C4'	-3.61	1.36	1.45
1	AA	1407	5MC	O4'-C4'	-3.60	1.37	1.45
26	BB	2503	2MA	C6-N1	-3.59	1.30	1.38
26	BB	1915	3TD	C6-N1	3.58	1.42	1.36
2	AB	37	MIA	C8-N7	-3.58	1.28	1.34
26	BB	2605	PSU	C6-N1	3.56	1.42	1.36
26	BB	2251	OMG	C8-N7	-3.56	1.29	1.35
26	BB	1962	5MC	O5'-C5'	-3.54	1.36	1.44
1	AA	1519	MA6	C8-N7	-3.47	1.28	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	AD	56	PSU	O4'-C4'	-3.45	1.37	1.45
2	AB	37	MIA	C5'-C4'	3.43	1.62	1.51
26	BB	2580	PSU	O4'-C1'	-3.43	1.39	1.43
4	AD	8	4SU	O4'-C4'	-3.40	1.37	1.45
26	BB	1915	3TD	C10-N3	3.40	1.53	1.47
26	BB	1618	6MZ	C2-N3	3.38	1.37	1.32
26	BB	2575	CH	C4-N3	3.37	1.41	1.37
4	AD	56	PSU	C2-N3	3.36	1.43	1.37
26	BB	2575	CH	C5-C4	3.36	1.44	1.39
26	BB	746	PSU	C3'-C2'	3.35	1.62	1.53
2	AB	46	7MG	C4-N3	3.32	1.42	1.34
1	AA	1516	2MG	C2-N1	3.29	1.42	1.36
26	BB	746	PSU	C6-C5	3.28	1.39	1.35
26	BB	746	PSU	O2'-C2'	-3.27	1.35	1.43
1	AA	1518	MA6	C4-N3	3.22	1.40	1.35
26	BB	1911	PSU	C4-N3	3.22	1.44	1.38
26	BB	747	5MU	O2'-C2'	-3.20	1.35	1.43
1	AA	527	7MG	O6-C6	-3.18	1.17	1.23
1	AA	1498	UR3	C2-N1	3.18	1.43	1.38
1	AA	1518	MA6	C2'-C1'	-3.14	1.49	1.53
1	AA	1519	MA6	C6-N1	3.14	1.37	1.33
26	BB	2503	2MA	C2'-C1'	3.12	1.58	1.53
2	AB	46	7MG	C5-N7	3.11	1.39	1.35
1	AA	516	PSU	C6-C5	3.10	1.38	1.35
26	BB	746	PSU	C5'-C4'	3.10	1.61	1.51
2	AB	55	PSU	C2-N1	3.07	1.40	1.36
26	BB	1618	6MZ	O4'-C4'	-3.07	1.38	1.45
4	AD	8	4SU	O4'-C1'	3.06	1.49	1.42
2	AB	32	OMC	C2-N3	3.05	1.42	1.36
2	AB	20	H2U	C5-C4	3.02	1.57	1.50
1	AA	527	7MG	C4-N9	-3.02	1.34	1.37
1	AA	1518	MA6	C8-N7	-3.02	1.29	1.34
26	BB	2552	OMU	C5'-C4'	3.01	1.61	1.51
26	BB	1962	5MC	O3'-C3'	-2.97	1.36	1.43
2	AB	32	OMC	C2'-C1'	2.96	1.60	1.53
2	AB	20	H2U	C1'-N1	-2.93	1.41	1.46
4	AD	56	PSU	O5'-C5'	-2.93	1.37	1.44
1	AA	1519	MA6	O4'-C1'	2.93	1.45	1.41
26	BB	2251	OMG	O4'-C1'	2.89	1.45	1.41
26	BB	2605	PSU	C2'-C1'	2.89	1.57	1.53
2	AB	32	OMC	C3'-C2'	2.88	1.59	1.52
2	AB	20	H2U	C4-N3	-2.87	1.32	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	2457	PSU	C2-N1	2.87	1.40	1.36
1	AA	966	2MG	CM2-N2	2.87	1.50	1.45
4	AD	56	PSU	C2'-C1'	-2.86	1.50	1.53
26	BB	2498	OMC	C5'-C4'	2.85	1.60	1.51
26	BB	2445	2MG	C5-C6	-2.84	1.41	1.47
26	BB	1835	2MG	O4'-C1'	2.81	1.45	1.41
26	BB	1835	2MG	O3'-C3'	2.81	1.49	1.43
26	BB	1962	5MC	C6-N1	-2.79	1.33	1.38
1	AA	1516	2MG	C6-N1	2.78	1.42	1.37
26	BB	1915	3TD	C2-N1	2.78	1.40	1.37
26	BB	1911	PSU	C2-N1	2.77	1.40	1.36
26	BB	2069	7MG	C5'-C4'	2.76	1.60	1.51
2	AB	17	H2U	C6-N1	-2.75	1.42	1.47
26	BB	1917	PSU	C4-N3	2.75	1.43	1.38
4	AD	55	5MU	O4'-C1'	-2.74	1.35	1.42
26	BB	2449	H2U	C6-N1	-2.74	1.42	1.47
1	AA	967	5MC	C4-N3	2.73	1.38	1.34
26	BB	2445	2MG	C5-C4	-2.73	1.36	1.43
26	BB	2504	PSU	O4'-C4'	-2.71	1.38	1.45
26	BB	1939	5MU	C3'-C4'	2.71	1.59	1.53
26	BB	2030	6MZ	C8-N7	-2.70	1.29	1.34
1	AA	1516	2MG	C5'-C4'	2.70	1.60	1.51
26	BB	1917	PSU	C2-N1	2.70	1.40	1.36
26	BB	1618	6MZ	O4'-C1'	2.67	1.44	1.41
26	BB	2445	2MG	C2'-C3'	2.66	1.60	1.53
26	BB	2449	H2U	C1'-N1	2.65	1.51	1.46
4	AD	56	PSU	C1'-C5	2.62	1.56	1.50
4	AD	21	H2U	C2-N1	2.61	1.39	1.35
2	AB	55	PSU	O5'-C5'	-2.60	1.38	1.44
26	BB	2552	OMU	O4'-C4'	-2.60	1.39	1.45
1	AA	1402	4OC	C4-N3	2.60	1.37	1.32
26	BB	746	PSU	O5'-C5'	-2.59	1.38	1.44
1	AA	516	PSU	O4-C4	2.59	1.28	1.23
1	AA	1518	MA6	C3'-C4'	2.57	1.59	1.53
1	AA	527	7MG	C6-N1	-2.56	1.34	1.38
26	BB	746	PSU	C6-N1	2.55	1.40	1.36
4	AD	55	5MU	C4-N3	-2.50	1.34	1.38
4	AD	8	4SU	C1'-N1	2.48	1.54	1.47
26	BB	2580	PSU	C4-C5	2.48	1.51	1.44
4	AD	21	H2U	O3'-C3'	-2.47	1.37	1.43
1	AA	527	7MG	C1'-N9	2.46	1.51	1.46
26	BB	1917	PSU	O4'-C1'	-2.45	1.40	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1915	3TD	C1'-C5	2.44	1.55	1.50
26	BB	2445	2MG	O5'-C5'	-2.44	1.38	1.44
26	BB	2504	PSU	O3'-C3'	-2.40	1.37	1.43
26	BB	2605	PSU	C4-N3	-2.40	1.34	1.38
1	AA	967	5MC	CM5-C5	2.39	1.56	1.50
26	BB	2552	OMU	C3'-C2'	-2.39	1.47	1.52
26	BB	745	1MG	O5'-C5'	-2.38	1.38	1.44
26	BB	2503	2MA	O5'-C5'	-2.38	1.38	1.44
26	BB	1939	5MU	C4-C5	2.37	1.48	1.44
26	BB	745	1MG	O2'-C2'	-2.35	1.37	1.43
26	BB	1911	PSU	C6-C5	2.34	1.38	1.35
1	AA	1402	4OC	O5'-C5'	-2.31	1.39	1.44
1	AA	1518	MA6	C6-N1	2.31	1.36	1.33
26	BB	1835	2MG	CM2-N2	2.29	1.49	1.45
1	AA	516	PSU	C3'-C4'	2.29	1.58	1.53
26	BB	1915	3TD	C2-N3	2.29	1.43	1.38
4	AD	33	OMC	C1'-N1	2.29	1.54	1.47
26	BB	2069	7MG	C4-N9	-2.29	1.35	1.37
2	AB	54	5MU	O4'-C4'	-2.28	1.39	1.45
26	BB	2069	7MG	O6-C6	2.28	1.27	1.23
1	AA	527	7MG	C4-N3	2.27	1.39	1.34
26	BB	1911	PSU	O5'-C5'	-2.27	1.39	1.44
26	BB	2503	2MA	C5-C4	-2.26	1.37	1.43
26	BB	2605	PSU	O4'-C1'	-2.25	1.40	1.43
26	BB	2498	OMC	C3'-C4'	-2.24	1.47	1.53
26	BB	955	PSU	C1'-C5	2.23	1.55	1.50
4	AD	55	5MU	C6-N1	2.23	1.41	1.38
26	BB	955	PSU	O4'-C4'	-2.21	1.40	1.45
26	BB	1962	5MC	O4'-C4'	-2.21	1.40	1.45
1	AA	966	2MG	C5-C6	-2.20	1.42	1.47
26	BB	2251	OMG	O4'-C4'	-2.18	1.40	1.45
4	AD	21	H2U	C2'-C3'	2.18	1.59	1.53
2	AB	55	PSU	C2'-C1'	2.18	1.56	1.53
2	AB	8	4SU	C1'-N1	2.17	1.53	1.47
2	AB	17	H2U	C2'-C3'	-2.16	1.47	1.53
26	BB	2575	CH	C2'-C1'	-2.15	1.50	1.53
1	AA	1516	2MG	O4'-C4'	-2.14	1.40	1.45
26	BB	2251	OMG	C5'-C4'	2.14	1.58	1.51
4	AD	33	OMC	C6-N1	-2.14	1.32	1.38
1	AA	1407	5MC	C5'-C4'	2.13	1.58	1.51
1	AA	1516	2MG	C2-N2	2.11	1.38	1.33
1	AA	966	2MG	C2-N2	2.09	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BB	1962	5MC	O4'-C1'	-2.09	1.37	1.42
26	BB	1962	5MC	C6-C5	2.09	1.38	1.34
1	AA	1516	2MG	C5-C4	-2.09	1.37	1.43
2	AB	17	H2U	C2-N3	-2.09	1.34	1.38
26	BB	1939	5MU	C2-N1	2.09	1.41	1.38
26	BB	2457	PSU	O4'-C4'	2.09	1.49	1.45
4	AD	55	5MU	O4-C4	-2.08	1.19	1.23
2	AB	46	7MG	C4-N9	2.06	1.40	1.37
26	BB	746	PSU	O4'-C1'	2.05	1.46	1.43
26	BB	2503	2MA	C6-N6	2.04	1.36	1.28
2	AB	32	OMC	O4'-C4'	-2.04	1.40	1.45
26	BB	2504	PSU	O4'-C1'	-2.02	1.41	1.43
1	AA	1402	4OC	O2'-C2'	2.02	1.47	1.42
4	AD	56	PSU	O2-C2	-2.02	1.19	1.23
26	BB	2503	2MA	O4'-C1'	-2.01	1.38	1.41
26	BB	1915	3TD	C2'-C1'	-2.00	1.51	1.53

All (254) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	37	MIA	C11-S10-C2	12.41	111.53	102.27
26	BB	2445	2MG	O6-C6-N1	-8.97	110.06	120.65
2	AB	17	H2U	O4'-C1'-N1	8.59	121.00	109.30
1	AA	516	PSU	C6-C5-C4	8.47	124.12	118.20
26	BB	1911	PSU	C6-C5-C4	8.33	124.02	118.20
26	BB	1618	6MZ	C9-N6-C6	7.48	129.31	122.87
2	AB	46	7MG	N9-C8-N7	6.92	113.28	103.38
26	BB	2552	OMU	C6-C5-C4	6.36	128.21	119.52
1	AA	966	2MG	O6-C6-N1	-6.23	113.29	120.65
1	AA	966	2MG	O6-C6-C5	5.87	135.83	124.37
26	BB	2605	PSU	C6-N1-C2	-5.79	116.76	122.68
1	AA	1407	5MC	C5-C6-N1	-5.69	117.48	123.34
4	AD	8	4SU	S4-C4-N3	5.59	125.71	120.21
1	AA	516	PSU	O2-C2-N1	-5.52	116.71	122.79
26	BB	2575	CH	C5-C4-N4	-5.50	118.53	123.88
4	AD	55	5MU	O4'-C1'-N1	5.49	120.91	108.36
2	AB	8	4SU	C4-N3-C2	-5.49	122.01	127.34
26	BB	2457	PSU	C6-C5-C4	5.43	121.99	118.20
1	AA	527	7MG	N9-C8-N7	5.42	111.13	103.38
4	AD	21	H2U	O4'-C1'-N1	5.39	116.65	109.30
2	AB	55	PSU	C6-C5-C4	5.20	121.84	118.20
26	BB	2069	7MG	N9-C8-N7	5.12	110.70	103.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	1939	5MU	O4'-C4'-C5'	4.76	125.05	109.37
4	AD	21	H2U	C5-C4-N3	-4.74	111.32	116.65
4	AD	55	5MU	C2'-C3'-C4'	-4.64	93.62	102.64
26	BB	2457	PSU	C6-N1-C2	-4.57	118.01	122.68
26	BB	2575	CH	C4'-O4'-C1'	-4.50	105.57	109.85
1	AA	1518	MA6	N1-C6-N6	4.43	121.72	117.06
26	BB	747	5MU	C6-C5-C4	4.37	121.68	118.03
2	AB	8	4SU	C5-C4-N3	4.36	118.73	114.69
2	AB	55	PSU	C6-N1-C2	4.30	127.08	122.68
26	BB	2457	PSU	N1-C2-N3	4.28	119.98	115.13
4	AD	55	5MU	C5-C6-N1	-4.28	118.94	123.34
2	AB	55	PSU	N1-C2-N3	-4.18	110.40	115.13
4	AD	8	4SU	C5-C4-S4	-4.17	119.09	124.47
2	AB	55	PSU	C5-C6-N1	-4.11	115.95	122.11
26	BB	746	PSU	C6-C5-C4	4.09	121.06	118.20
26	BB	2445	2MG	O6-C6-C5	4.08	132.34	124.37
2	AB	16	H2U	O4-C4-N3	4.06	126.72	120.28
26	BB	2504	PSU	C6-N1-C2	4.05	126.82	122.68
4	AD	8	4SU	C6-C5-C4	3.97	123.39	119.95
26	BB	2449	H2U	C4-N3-C2	3.97	129.08	125.79
1	AA	516	PSU	C5-C6-N1	-3.96	116.18	122.11
26	BB	2552	OMU	C5-C6-N1	-3.96	115.18	121.81
2	AB	20	H2U	C4-N3-C2	3.94	129.06	125.79
26	BB	2069	7MG	O4'-C1'-N9	-3.93	103.94	109.30
26	BB	2504	PSU	O2-C2-N1	-3.92	118.47	122.79
26	BB	746	PSU	C6-N1-C2	3.91	126.68	122.68
4	AD	21	H2U	O4-C4-N3	3.91	126.47	120.28
26	BB	1917	PSU	C6-C5-C4	3.90	120.92	118.20
26	BB	2449	H2U	O3'-C3'-C4'	-3.88	99.83	111.05
2	AB	8	4SU	S4-C4-N3	-3.87	116.40	120.21
26	BB	1962	5MC	C5-C6-N1	-3.87	119.36	123.34
2	AB	37	MIA	C5-C6-N1	-3.86	117.61	120.81
2	AB	32	OMC	O3'-C3'-C2'	3.83	122.05	111.17
2	AB	20	H2U	N3-C2-N1	-3.69	112.76	116.65
26	BB	745	1MG	C3'-C2'-C1'	3.64	106.46	100.98
2	AB	16	H2U	C2'-C3'-C4'	-3.61	95.63	102.64
26	BB	2445	2MG	C2'-C3'-C4'	-3.59	95.66	102.64
4	AD	55	5MU	C5M-C5-C6	-3.59	118.05	122.85
1	AA	527	7MG	C2-N1-C6	-3.56	118.60	125.10
2	AB	32	OMC	O2-C2-N3	-3.55	116.56	122.33
4	AD	55	5MU	C6-C5-C4	3.53	120.98	118.03
2	AB	46	7MG	O5'-C5'-C4'	3.52	120.96	108.99

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2251	OMG	O3'-C3'-C4'	3.52	121.22	111.05
1	AA	527	7MG	O4'-C1'-N9	-3.51	104.51	109.30
26	BB	1939	5MU	C4-N3-C2	-3.49	122.84	127.35
1	AA	1498	UR3	C6-N1-C2	-3.45	118.70	121.79
2	AB	55	PSU	O2-C2-N1	3.38	126.51	122.79
4	AD	8	4SU	O4'-C1'-N1	3.38	116.08	108.36
1	AA	516	PSU	O4-C4-N3	-3.37	113.65	120.12
26	BB	1835	2MG	O6-C6-C5	3.37	130.96	124.37
1	AA	1407	5MC	CM5-C5-C6	-3.35	118.37	122.85
26	BB	746	PSU	C5-C6-N1	-3.34	117.11	122.11
1	AA	1518	MA6	C4-C5-N7	-3.32	105.94	109.40
2	AB	54	5MU	C4-N3-C2	-3.32	123.06	127.35
26	BB	2504	PSU	O2-C2-N3	3.31	128.05	121.82
26	BB	2457	PSU	O2-C2-N3	-3.31	115.58	121.82
4	AD	33	OMC	O2-C2-N3	-3.30	116.96	122.33
1	AA	967	5MC	O4'-C4'-C5'	3.30	120.23	109.37
26	BB	1939	5MU	C6-C5-C4	3.28	120.78	118.03
26	BB	2498	OMC	O2'-C2'-C1'	3.28	115.48	109.08
26	BB	1911	PSU	C5-C6-N1	-3.26	117.22	122.11
4	AD	21	H2U	O4'-C4'-C3'	-3.26	98.67	105.11
26	BB	2457	PSU	O2'-C2'-C1'	-3.24	103.50	111.23
1	AA	1402	4OC	CM4-N4-C4	3.24	128.78	122.45
2	AB	32	OMC	O4'-C4'-C3'	3.23	111.50	105.11
26	BB	2069	7MG	C2-N3-C4	3.22	118.04	112.30
1	AA	1519	MA6	C3'-C2'-C1'	3.21	105.82	100.98
26	BB	1835	2MG	C2'-C3'-C4'	-3.21	96.40	102.64
26	BB	2030	6MZ	O4'-C1'-C2'	-3.20	102.24	106.93
26	BB	746	PSU	C2'-C3'-C4'	-3.20	96.42	102.64
26	BB	746	PSU	O2-C2-N1	3.20	126.31	122.79
26	BB	1962	5MC	CM5-C5-C6	-3.19	118.58	122.85
26	BB	2575	CH	O4'-C1'-C2'	3.19	111.59	106.93
1	AA	527	7MG	N1-C2-N3	3.18	129.26	123.32
26	BB	2457	PSU	C3'-C2'-C1'	3.17	105.33	101.64
1	AA	516	PSU	O4-C4-C5	3.17	132.35	124.05
2	AB	37	MIA	C12-N6-C6	3.16	127.22	122.55
1	AA	1407	5MC	C5-C4-N4	-3.13	116.79	121.48
1	AA	516	PSU	O5'-C5'-C4'	3.11	119.58	108.99
26	BB	1962	5MC	O4'-C1'-N1	3.08	115.40	108.36
26	BB	747	5MU	C2'-C3'-C4'	-3.08	96.66	102.64
1	AA	1498	UR3	C1'-N1-C2	3.06	122.16	116.99
2	AB	46	7MG	O3'-C3'-C2'	3.06	121.72	111.82
26	BB	1835	2MG	O4'-C4'-C3'	3.03	111.12	105.11

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	516	PSU	O2'-C2'-C1'	-3.03	104.01	111.23
26	BB	2575	CH	C3'-C2'-C1'	-3.01	96.45	100.98
26	BB	2251	OMG	N2-C2-N3	3.00	125.59	119.74
1	AA	527	7MG	O3'-C3'-C4'	3.00	119.72	111.05
26	BB	955	PSU	N1-C2-N3	-2.99	111.75	115.13
1	AA	527	7MG	O4'-C4'-C3'	2.97	111.00	105.11
1	AA	1207	2MG	O2'-C2'-C3'	2.97	121.42	111.82
26	BB	1835	2MG	O6-C6-N1	-2.92	117.20	120.65
26	BB	2069	7MG	C5'-C4'-C3'	-2.92	104.23	115.18
2	AB	32	OMC	C2'-C3'-C4'	-2.91	95.68	101.99
26	BB	1939	5MU	C5-C6-N1	-2.88	120.37	123.34
26	BB	2580	PSU	O4-C4-N3	-2.87	114.61	120.12
26	BB	745	1MG	O4'-C1'-C2'	-2.86	102.75	106.93
2	AB	55	PSU	O4'-C1'-C2'	2.85	109.16	105.14
2	AB	16	H2U	C5-C4-N3	-2.85	113.45	116.65
2	AB	37	MIA	C4-C5-N7	-2.84	106.44	109.40
1	AA	1498	UR3	O3'-C3'-C4'	2.83	119.25	111.05
26	BB	2552	OMU	O4-C4-N3	2.81	123.44	119.31
26	BB	2504	PSU	C6-C5-C4	2.81	120.16	118.20
26	BB	2498	OMC	C3'-C2'-C1'	-2.81	97.61	102.89
26	BB	2503	2MA	O4'-C4'-C5'	2.80	118.59	109.37
26	BB	746	PSU	O3'-C3'-C4'	2.80	119.14	111.05
26	BB	1618	6MZ	O4'-C1'-C2'	-2.79	102.84	106.93
26	BB	2445	2MG	C8-N7-C5	2.78	108.28	102.99
26	BB	746	PSU	C3'-C2'-C1'	2.77	104.86	101.64
26	BB	2552	OMU	N3-C2-N1	2.77	118.57	114.89
1	AA	1402	4OC	C5-C4-N4	-2.76	116.98	122.61
26	BB	2552	OMU	O4'-C1'-N1	2.76	114.66	108.36
26	BB	2552	OMU	O5'-C5'-C4'	2.75	118.34	108.99
26	BB	1939	5MU	O2-C2-N3	-2.74	116.41	121.50
26	BB	2580	PSU	O4-C4-C5	2.73	131.21	124.05
26	BB	745	1MG	C2-N1-C6	2.73	123.16	120.95
1	AA	1519	MA6	O3'-C3'-C4'	2.72	118.91	111.05
4	AD	33	OMC	O2'-C2'-C1'	2.72	114.38	109.08
26	BB	1939	5MU	O4'-C1'-C2'	-2.69	100.78	106.64
1	AA	1519	MA6	N3-C2-N1	-2.69	124.48	128.68
26	BB	746	PSU	N1-C2-N3	-2.67	112.10	115.13
2	AB	16	H2U	O3'-C3'-C4'	2.67	118.76	111.05
26	BB	2457	PSU	C4-N3-C2	-2.66	122.51	126.34
26	BB	745	1MG	C5-C6-N1	-2.65	109.92	113.90
4	AD	8	4SU	O2'-C2'-C1'	2.62	118.79	110.02
1	AA	1518	MA6	N3-C2-N1	-2.60	124.61	128.68

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2457	PSU	O3'-C3'-C2'	2.60	120.23	111.82
2	AB	17	H2U	O5'-C5'-C4'	2.59	117.79	108.99
26	BB	955	PSU	C6-C5-C4	2.57	120.00	118.20
2	AB	54	5MU	O4-C4-N3	-2.57	115.18	120.12
26	BB	1939	5MU	N3-C2-N1	2.57	118.30	114.89
26	BB	2575	CH	C5-C4-N3	2.56	119.50	118.04
4	AD	56	PSU	O4-C4-N3	2.55	125.00	120.12
26	BB	2030	6MZ	C1'-N9-C4	-2.53	122.19	126.64
26	BB	747	5MU	O3'-C3'-C2'	2.53	120.01	111.82
26	BB	1917	PSU	C6-N1-C2	2.52	125.26	122.68
26	BB	2580	PSU	O2-C2-N1	-2.51	120.02	122.79
1	AA	1402	4OC	O2'-C2'-C1'	2.51	113.97	109.08
26	BB	1835	2MG	O2'-C2'-C3'	2.50	119.92	111.82
4	AD	21	H2U	O3'-C3'-C2'	2.50	119.91	111.82
26	BB	1962	5MC	O2-C2-N3	-2.50	118.27	122.33
4	AD	56	PSU	O3'-C3'-C4'	2.50	118.28	111.05
2	AB	32	OMC	O4'-C1'-N1	2.50	114.07	108.36
2	AB	8	4SU	C6-C5-C4	-2.49	117.79	119.95
26	BB	1939	5MU	C1'-N1-C6	-2.49	116.98	121.12
1	AA	1519	MA6	C2'-C3'-C4'	-2.49	97.81	102.64
26	BB	745	1MG	CM1-N1-C6	-2.48	114.14	117.55
2	AB	37	MIA	C16-C14-C15	-2.45	109.18	114.60
2	AB	54	5MU	C5-C4-N3	2.45	117.40	115.31
2	AB	20	H2U	O4'-C1'-N1	2.45	112.63	109.30
4	AD	8	4SU	C4-N3-C2	-2.44	124.97	127.34
26	BB	2030	6MZ	O4'-C4'-C5'	2.44	117.40	109.37
26	BB	2580	PSU	N1-C2-N3	2.44	117.89	115.13
26	BB	2504	PSU	N1-C2-N3	-2.44	112.37	115.13
2	AB	55	PSU	O3'-C3'-C4'	2.44	118.09	111.05
1	AA	966	2MG	C2'-C3'-C4'	2.43	107.37	102.64
26	BB	1618	6MZ	O3'-C3'-C4'	-2.43	104.01	111.05
2	AB	37	MIA	C12-C13-C14	-2.42	122.44	127.14
26	BB	955	PSU	C4-N3-C2	2.42	129.82	126.34
1	AA	966	2MG	O4'-C4'-C3'	-2.40	100.37	105.11
26	BB	2575	CH	N4-C4-N3	2.39	121.97	117.23
26	BB	2449	H2U	O4-C4-N3	2.38	124.06	120.28
2	AB	54	5MU	O4'-C1'-N1	2.38	113.80	108.36
26	BB	1917	PSU	O4'-C1'-C2'	2.38	108.50	105.14
2	AB	46	7MG	C3'-C2'-C1'	-2.38	96.91	101.43
26	BB	1939	5MU	C1'-N1-C2	2.38	121.87	117.57
26	BB	747	5MU	C5-C6-N1	-2.37	120.90	123.34
26	BB	2498	OMC	O4'-C1'-N1	2.37	113.78	108.36

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2580	PSU	C6-C5-C4	2.37	119.85	118.20
4	AD	33	OMC	O5'-C5'-C4'	2.34	116.97	108.99
26	BB	2069	7MG	C5-C4-N3	-2.33	123.69	128.13
26	BB	2580	PSU	O4'-C1'-C2'	2.31	108.40	105.14
2	AB	17	H2U	C3'-C2'-C1'	2.31	105.81	101.43
26	BB	2580	PSU	C4-N3-C2	-2.30	123.03	126.34
26	BB	745	1MG	O6-C6-C5	2.29	128.25	124.19
26	BB	2575	CH	O2-C2-N1	2.29	126.96	120.81
1	AA	1407	5MC	C6-N1-C2	2.29	124.04	120.87
1	AA	1407	5MC	C1'-N1-C2	-2.29	113.32	118.42
1	AA	1518	MA6	C9-N6-C6	2.28	126.43	119.51
2	AB	37	MIA	C2-N3-C4	-2.28	112.18	115.32
1	AA	1498	UR3	C3'-C2'-C1'	-2.26	97.14	101.43
26	BB	747	5MU	C5-C4-N3	-2.26	113.39	115.31
2	AB	46	7MG	O4'-C1'-C2'	2.25	111.55	106.64
1	AA	1519	MA6	C5'-C4'-C3'	2.25	123.63	115.18
2	AB	20	H2U	O2-C2-N1	2.23	125.91	123.11
26	BB	1618	6MZ	N3-C2-N1	2.23	132.16	128.68
26	BB	2449	H2U	O4-C4-C5	-2.22	117.42	122.17
26	BB	2552	OMU	C4-N3-C2	-2.22	123.65	126.58
4	AD	33	OMC	O4'-C1'-N1	2.22	113.45	108.36
26	BB	747	5MU	C5M-C5-C4	-2.22	116.32	118.77
1	AA	1519	MA6	C1'-N9-C4	-2.22	122.74	126.64
26	BB	2580	PSU	C5-C6-N1	-2.22	118.78	122.11
1	AA	1519	MA6	C10-N6-C6	2.22	126.24	119.51
26	BB	1962	5MC	O4'-C4'-C3'	2.21	109.48	105.11
2	AB	16	H2U	C5-C6-N1	-2.20	104.36	111.61
4	AD	8	4SU	O4'-C4'-C3'	2.20	109.47	105.11
26	BB	2445	2MG	O5'-C5'-C4'	2.19	116.45	108.99
26	BB	747	5MU	O4'-C4'-C3'	2.19	109.45	105.11
26	BB	2605	PSU	O2-C2-N1	-2.18	120.39	122.79
4	AD	56	PSU	C3'-C2'-C1'	-2.17	99.11	101.64
4	AD	33	OMC	C3'-C2'-C1'	-2.17	98.81	102.89
1	AA	1516	2MG	O4'-C4'-C5'	2.16	116.48	109.37
26	BB	2552	OMU	C3'-C2'-C1'	-2.15	98.84	102.89
1	AA	1519	MA6	C10-N6-C9	-2.15	109.19	116.12
1	AA	1402	4OC	C2'-C3'-C4'	-2.15	97.33	101.99
2	AB	16	H2U	O4'-C4'-C5'	2.15	116.43	109.37
2	AB	16	H2U	O5'-C5'-C4'	-2.14	101.71	108.99
26	BB	1917	PSU	N1-C2-N3	-2.14	112.71	115.13
26	BB	2457	PSU	O4'-C1'-C2'	2.13	108.14	105.14
2	AB	54	5MU	C5-C6-N1	-2.12	121.16	123.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	2504	PSU	O3'-C3'-C4'	2.12	117.17	111.05
26	BB	2504	PSU	C2'-C3'-C4'	-2.11	98.54	102.64
1	AA	1498	UR3	O4'-C4'-C5'	2.11	116.32	109.37
26	BB	2069	7MG	N1-C2-N3	-2.10	119.41	123.32
26	BB	1911	PSU	O3'-C3'-C4'	2.10	117.12	111.05
1	AA	1516	2MG	O4'-C4'-C3'	-2.09	100.97	105.11
4	AD	55	5MU	N3-C2-N1	2.09	117.67	114.89
2	AB	54	5MU	O4-C4-C5	2.09	127.32	124.90
2	AB	37	MIA	C2'-C3'-C4'	-2.09	98.59	102.64
2	AB	37	MIA	S10-C2-N1	-2.07	108.86	116.01
26	BB	2580	PSU	O3'-C3'-C4'	2.07	117.03	111.05
26	BB	1939	5MU	O4-C4-C5	-2.06	122.51	124.90
26	BB	2605	PSU	N1-C2-N3	2.06	117.46	115.13
26	BB	2069	7MG	O2'-C2'-C3'	-2.05	105.19	111.82
2	AB	46	7MG	N1-C2-N3	2.05	127.15	123.32
26	BB	1962	5MC	C4-N3-C2	-2.05	117.92	120.69
1	AA	1498	UR3	C3U-N3-C2	2.05	120.90	117.31
26	BB	1939	5MU	C5'-C4'-C3'	-2.05	107.51	115.18
2	AB	46	7MG	O4'-C4'-C3'	-2.04	101.08	105.11
2	AB	8	4SU	O2'-C2'-C1'	-2.03	103.23	110.02
1	AA	966	2MG	C5-C6-N1	-2.03	110.37	113.95
1	AA	1516	2MG	O6-C6-N1	2.02	123.03	120.65

There are no chirality outliers.

All (35) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	AA	1207	2MG	N3-C2-N2-CM2
2	AB	8	4SU	C2'-C1'-N1-C2
2	AB	8	4SU	C2'-C1'-N1-C6
2	AB	46	7MG	C4'-C5'-O5'-P
26	BB	1915	3TD	C2'-C1'-C5-C4
26	BB	1915	3TD	C2'-C1'-C5-C6
26	BB	1917	PSU	C2'-C1'-C5-C4
26	BB	1917	PSU	C2'-C1'-C5-C6
26	BB	2580	PSU	O4'-C1'-C5-C4
26	BB	2580	PSU	C2'-C1'-C5-C6
26	BB	2580	PSU	O4'-C1'-C5-C6
26	BB	2030	6MZ	O4'-C4'-C5'-O5'
26	BB	2030	6MZ	C3'-C4'-C5'-O5'
26	BB	2580	PSU	C3'-C4'-C5'-O5'
1	AA	1518	MA6	N1-C6-N6-C10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
1	AA	1518	MA6	C5-C6-N6-C10
1	AA	1498	UR3	C3'-C4'-C5'-O5'
26	BB	2449	H2U	O4'-C4'-C5'-O5'
2	AB	8	4SU	C4'-C5'-O5'-P
1	AA	527	7MG	C4'-C5'-O5'-P
26	BB	2580	PSU	O4'-C4'-C5'-O5'
2	AB	8	4SU	O4'-C1'-N1-C6
2	AB	46	7MG	O4'-C4'-C5'-O5'
2	AB	55	PSU	O4'-C1'-C5-C4
26	BB	1911	PSU	O4'-C1'-C5-C4
26	BB	1917	PSU	O4'-C1'-C5-C4
1	AA	1498	UR3	O4'-C4'-C5'-O5'
1	AA	527	7MG	O4'-C4'-C5'-O5'
2	AB	54	5MU	O4'-C4'-C5'-O5'
26	BB	1962	5MC	O4'-C1'-N1-C6
26	BB	1618	6MZ	O4'-C4'-C5'-O5'
2	AB	46	7MG	C2'-C1'-N9-C8
2	AB	8	4SU	O4'-C1'-N1-C2
26	BB	2449	H2U	C3'-C4'-C5'-O5'
2	AB	17	H2U	O4'-C4'-C5'-O5'

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates

There are no monosaccharides in this entry.

5.6 Ligand geometry

2 ligands are 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	TRP	AB	101	60,2	14,15,16	1.53	2 (14%)	13,20,22	2.28	7 (53%)
60	FME	BB	3001	59	8,9,10	1.63	1 (12%)	7,9,11	2.00	3 (42%)

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	TRP	AB	101	60,2	-	2/5/6/8	0/2/2/2
60	FME	BB	3001	59	-	2/7/9/11	-

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	AB	101	TRP	OXT-C	-3.96	1.25	1.42
60	BB	3001	FME	CA-N	-3.74	1.41	1.46
59	AB	101	TRP	C-CA	2.56	1.56	1.52

All (10) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	AB	101	TRP	CB-CG-CD1	-3.98	123.06	127.97
60	BB	3001	FME	CG-CB-CA	3.44	122.50	112.95
59	AB	101	TRP	CZ3-CE3-CD2	3.18	125.30	120.89
59	AB	101	TRP	CZ2-CE2-NE1	2.88	138.77	130.80
59	AB	101	TRP	CH2-CZ2-CE2	2.70	123.97	120.08
59	AB	101	TRP	CH2-CZ3-CE3	-2.57	116.83	120.44
60	BB	3001	FME	O-C-CA	-2.29	118.77	124.78
59	AB	101	TRP	CB-CG-CD2	2.24	129.74	126.25
59	AB	101	TRP	CZ2-CE2-CD2	-2.16	116.81	120.76
60	BB	3001	FME	C-CA-N	2.15	113.61	109.73

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
60	BB	3001	FME	O1-CN-N-CA
60	BB	3001	FME	CB-CG-SD-CE
59	AB	101	TRP	N-CA-CB-CG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
59	AB	101	TRP	CA-CB-CG-CD1

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
26	BB	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	BB	1614:A	O3'	1615:C	P	1.76

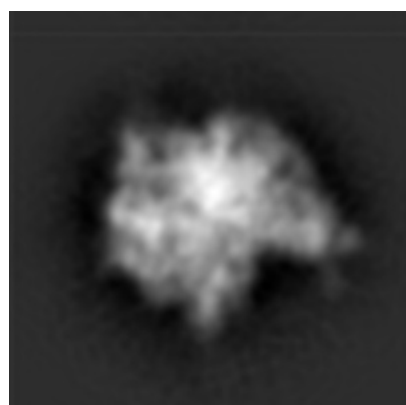
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5359. These allow visual inspection of the internal detail of the map and identification of artifacts.

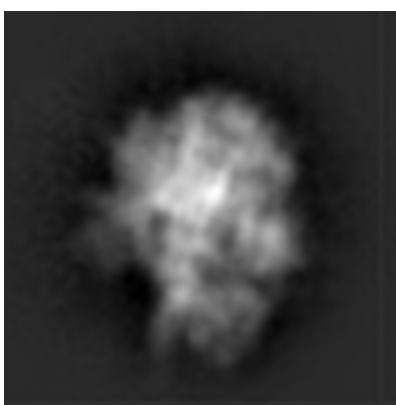
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

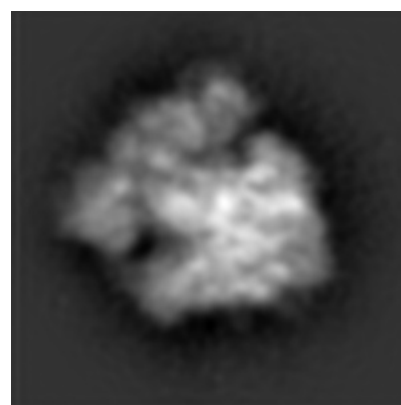
6.1.1 Primary map



X



Y

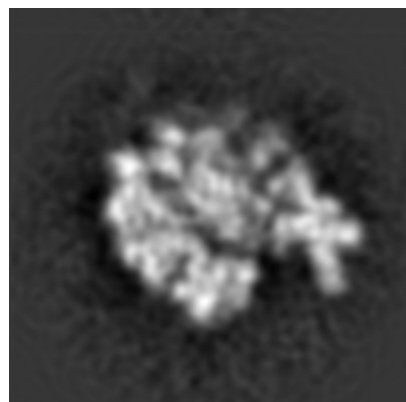


Z

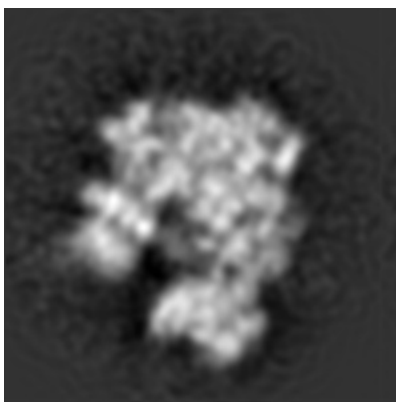
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

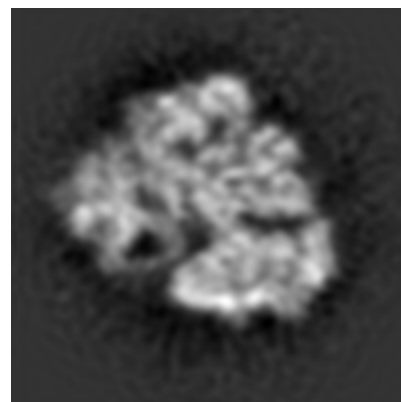
6.2.1 Primary map



X Index: 125



Y Index: 125

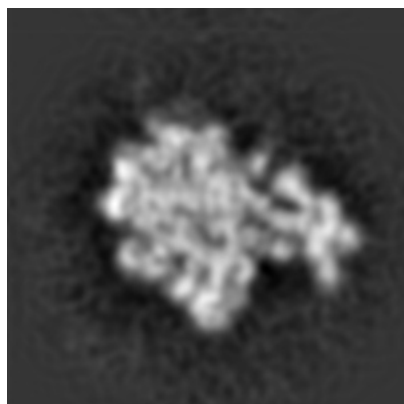


Z Index: 125

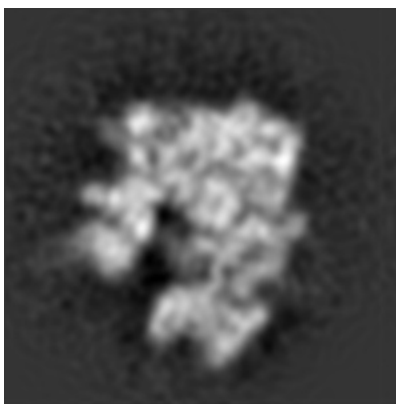
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

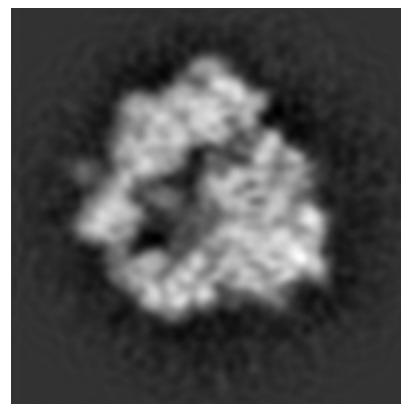
6.3.1 Primary map



X Index: 131



Y Index: 129

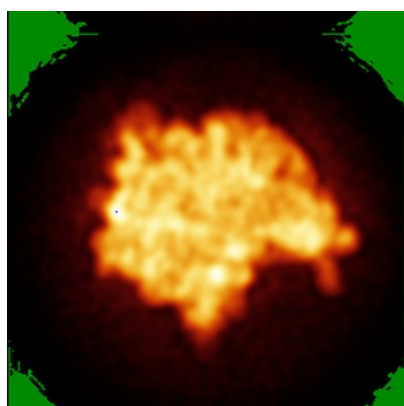


Z Index: 114

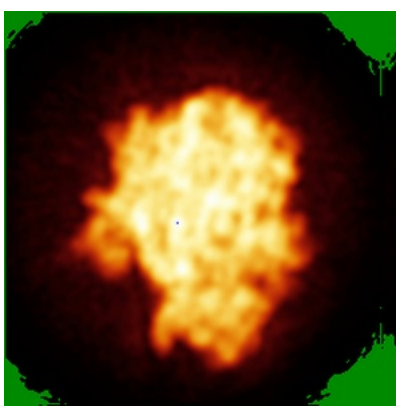
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

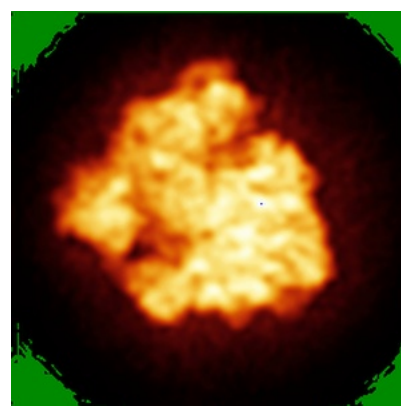
6.4.1 Primary map



X



Y

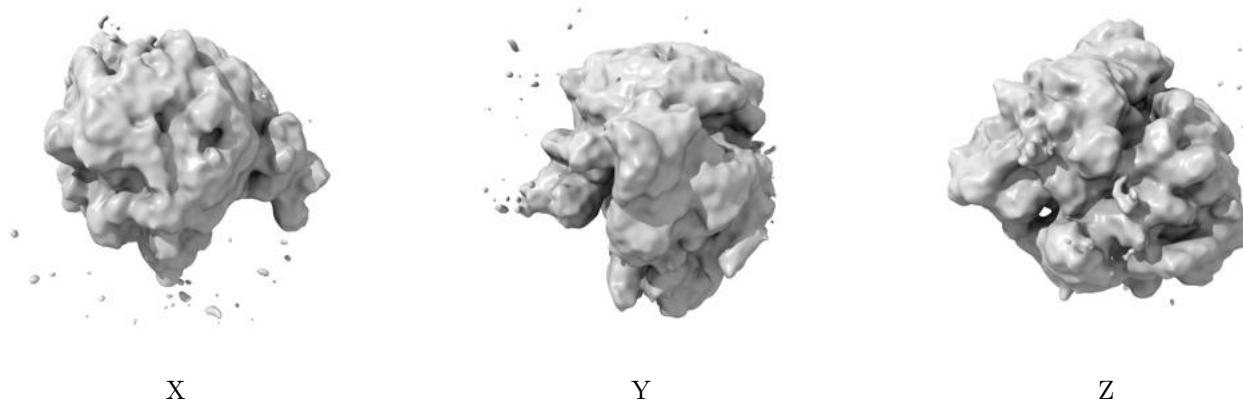


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

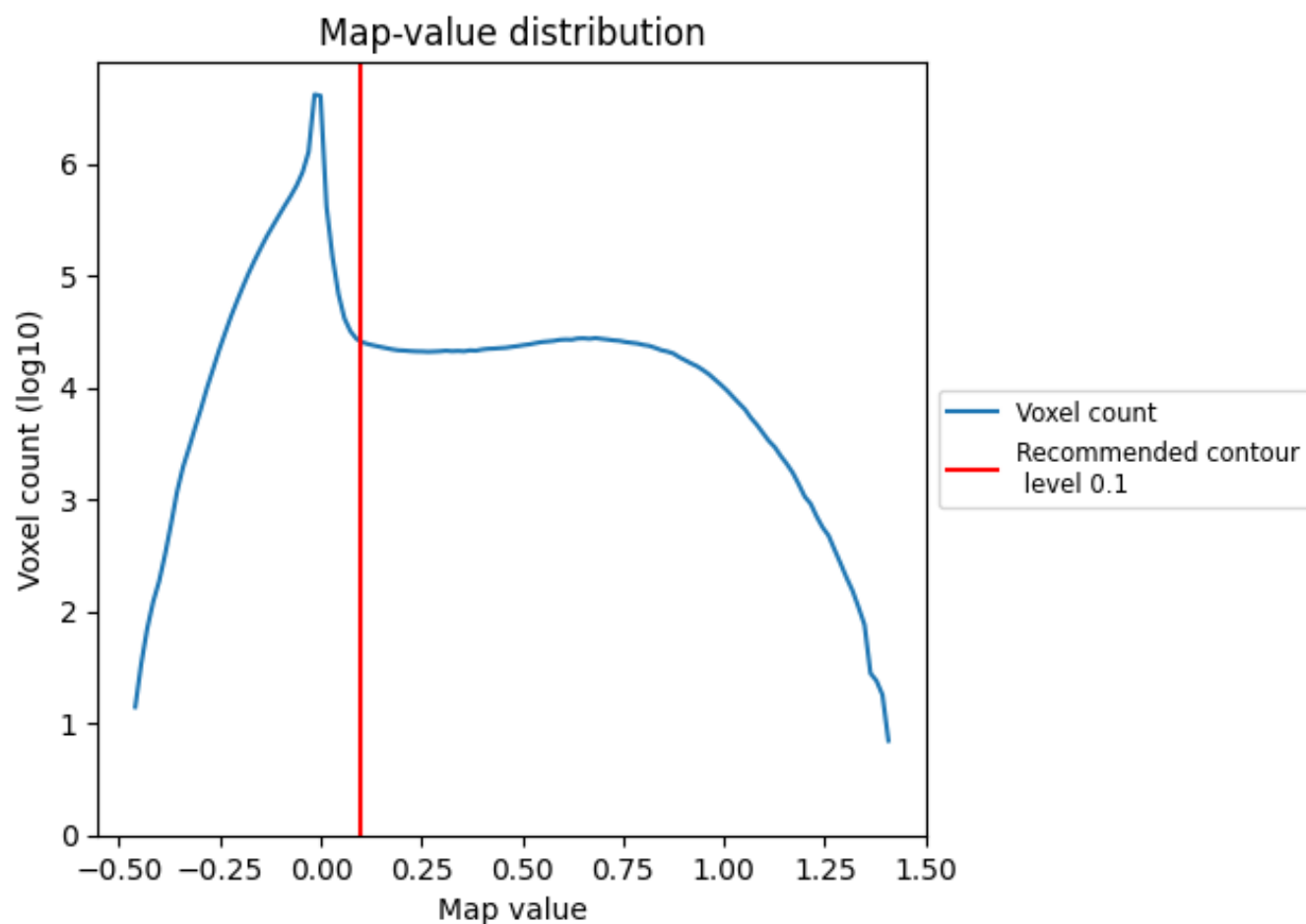
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

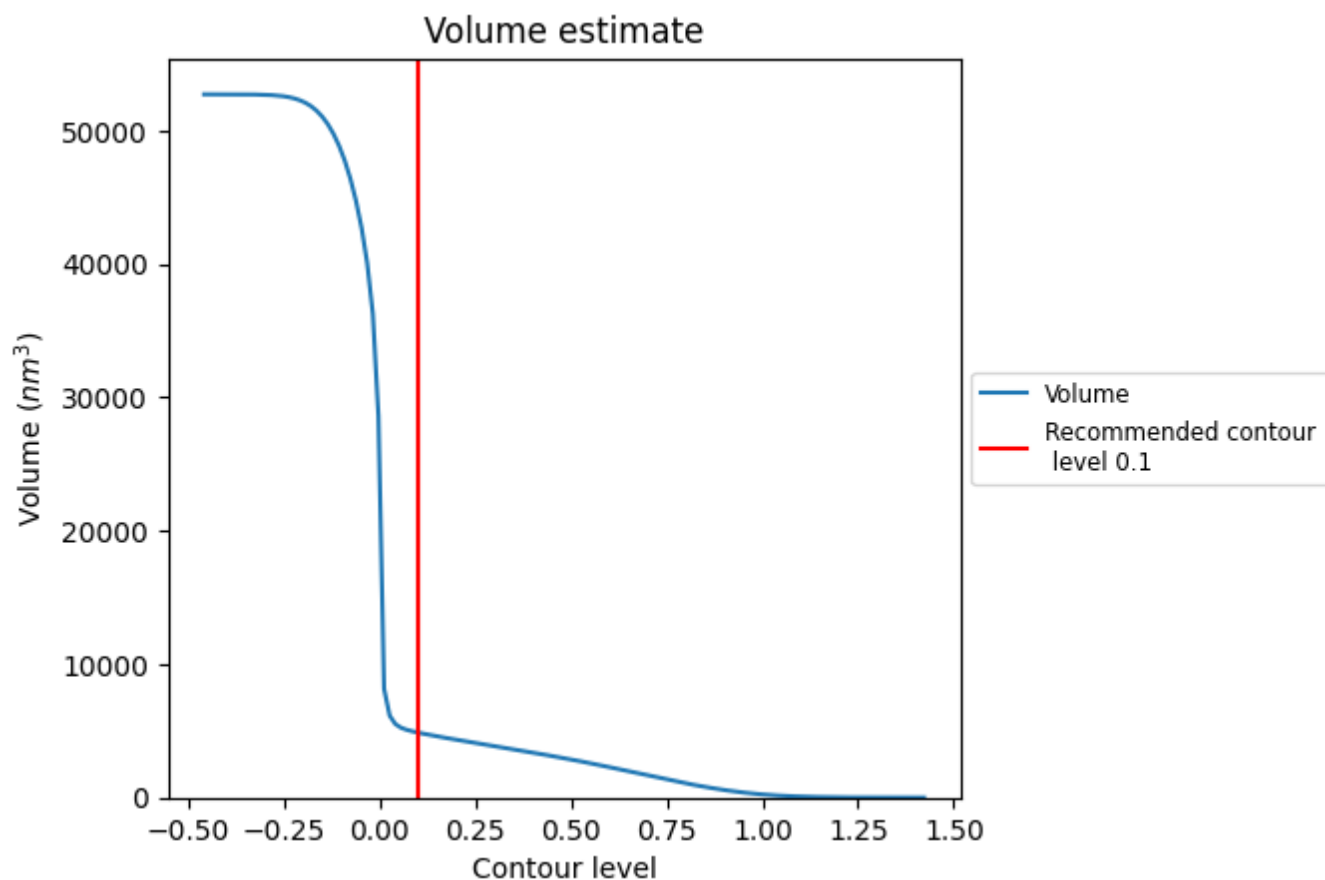
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

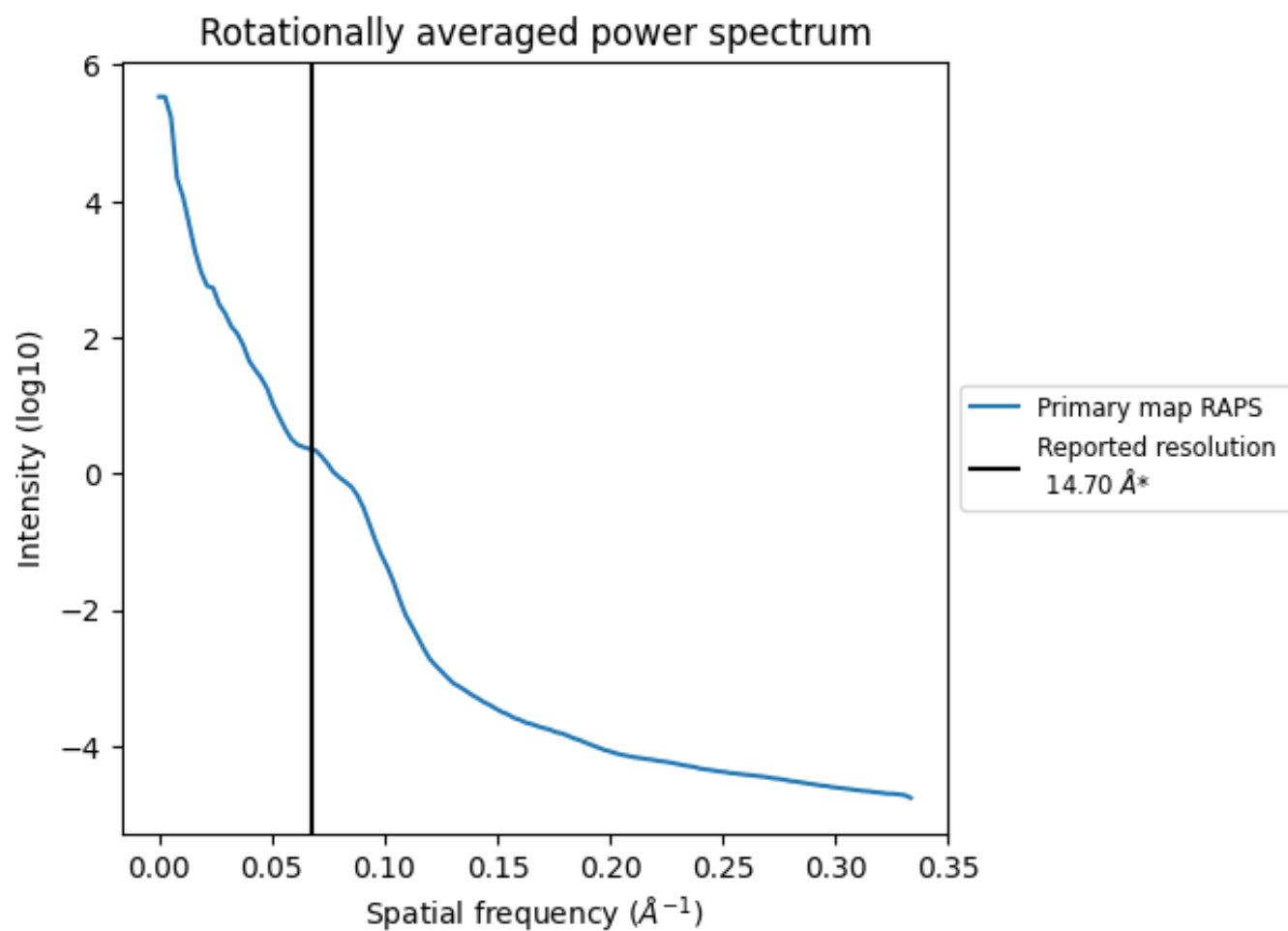
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 4871 nm^3 ; this corresponds to an approximate mass of 4400 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [i](#)



*Reported resolution corresponds to spatial frequency of 0.068 Å⁻¹

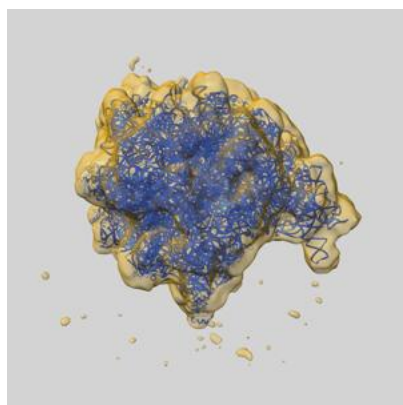
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

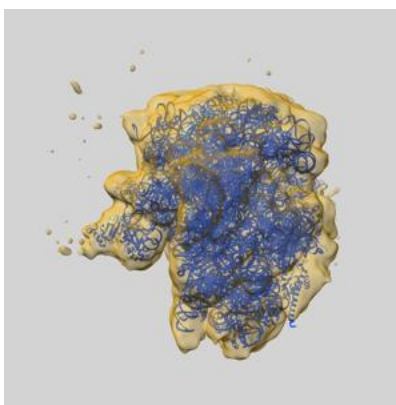
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-5359 and PDB model 4V6O. Per-residue inclusion information can be found in [section 3](#) on [page 15](#).

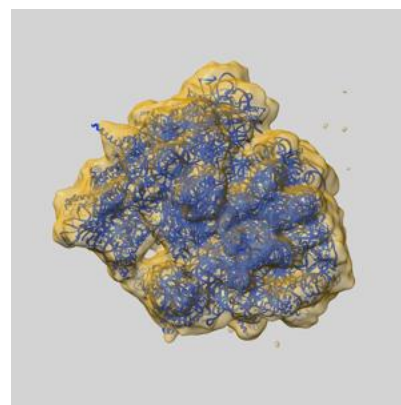
9.1 Map-model overlay [i](#)



X



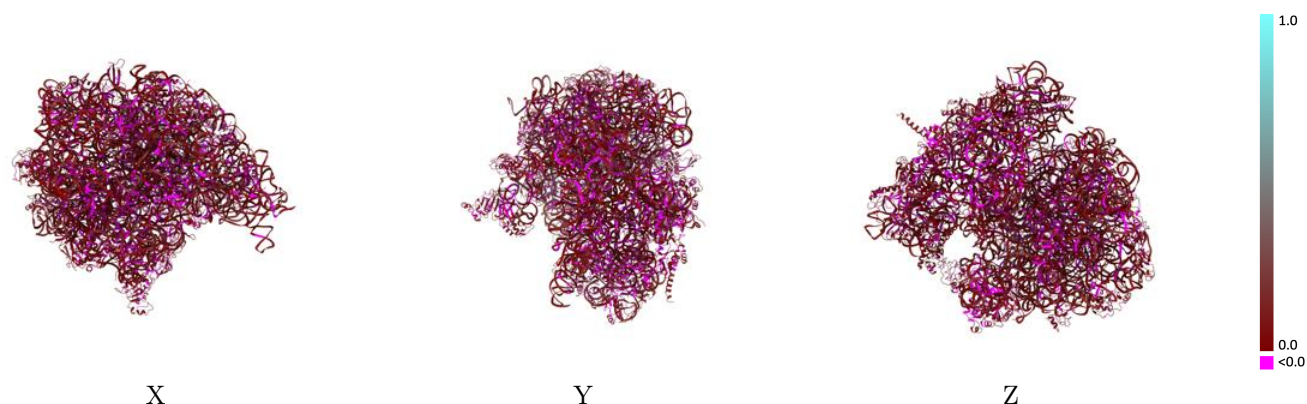
Y



Z

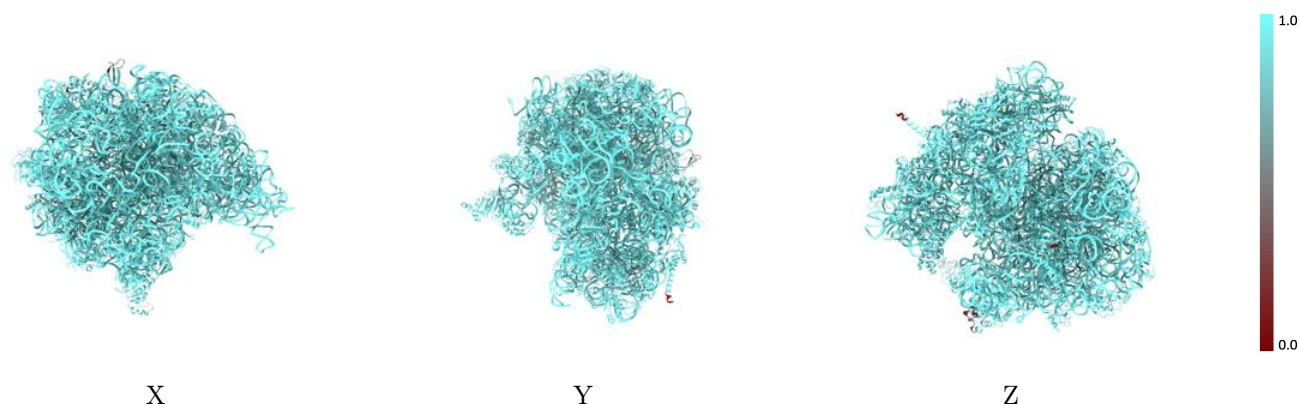
The images above show the 3D surface view of the map at the recommended contour level 0.1 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



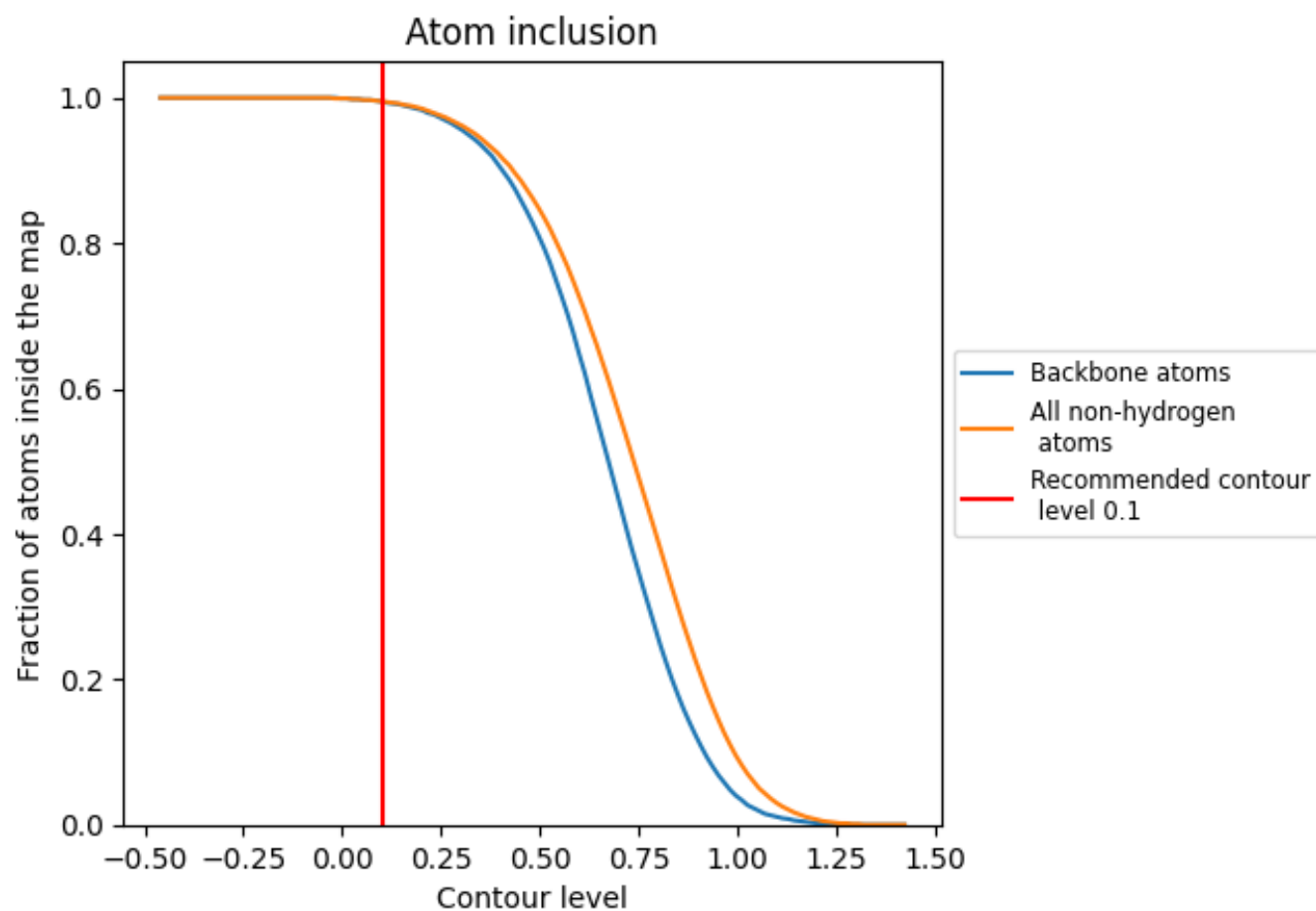
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.1).







































































9.4 Atom inclusion ⓘ



At the recommended contour level, 100% of all backbone atoms, 100% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

















































The table lists the average atom inclusion at the recommended contour level (0.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9950	 0.0650
AA	 1.0000	 0.0830
AB	 0.9690	 0.0430
AC	 0.8940	 -0.0220
AD	 0.9520	 0.0710
AE	 0.9670	 0.0380
AF	 0.9970	 0.0560
AG	 1.0000	 0.0330
AH	 0.9980	 0.0240
AI	 0.9970	 0.0450
AJ	 1.0000	 0.0640
AK	 1.0000	 0.0190
AL	 0.9890	 0.0450
AM	 1.0000	 0.0320
AN	 0.9960	 0.0540
AO	 0.9890	 0.0180
AP	 0.9980	 0.0630
AQ	 1.0000	 0.0310
AR	 1.0000	 0.0320
AS	 1.0000	 0.0250
AT	 1.0000	 0.0470
AU	 1.0000	 0.0490
AV	 1.0000	 0.0290
AW	 1.0000	 0.0250
AX	 0.9980	 0.0020
B0	 1.0000	 0.0290
B1	 0.9950	 0.0370
B2	 0.9960	 0.0110
B3	 1.0000	 0.0300
B4	 1.0000	 0.0400
B5	 1.0000	 0.0280
B6	 1.0000	 0.0010
B7	 1.0000	 0.0530
BA	 1.0000	 0.0950
BB	 1.0000	 0.0830



Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
BC	 0.9100	 0.0280
BD	 1.0000	 0.0180
BE	 0.9990	 0.0270
BF	 1.0000	 0.0500
BG	 1.0000	 0.0610
BH	 0.9990	 0.0300
BI	 0.8800	 0.0350
BJ	 0.9880	 0.0510
BK	 0.9760	 0.0350
BL	 1.0000	 0.0130
BM	 0.9900	 0.0300
BN	 1.0000	 0.0050
BO	 1.0000	 0.0130
BP	 1.0000	 0.0190
BQ	 0.9950	 0.0460
BR	 0.9920	 0.0300
BS	 1.0000	 0.0050
BT	 0.9990	 0.0530
BU	 0.9990	 0.0180
BV	 1.0000	 0.0110
BW	 1.0000	 0.0510
BX	 1.0000	 0.0520
BY	 1.0000	 -0.0050
BZ	 1.0000	 0.0250