



# Full wwPDB X-ray Structure Validation Report ⓘ

Jun 25, 2024 – 05:34 AM EDT

PDB ID : 4V95  
Title : Crystal structure of YAEJ bound to the 70S ribosome  
Authors : Gagnon, M.G.; Seetharaman, S.V.; Bulkley, D.P.; Steitz, T.A.  
Deposited on : 2012-01-27  
Resolution : 3.20 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

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:

MolProbity	:	4.02b-467
Xtriage (Phenix)	:	1.13
EDS	:	2.37.1
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.37.1

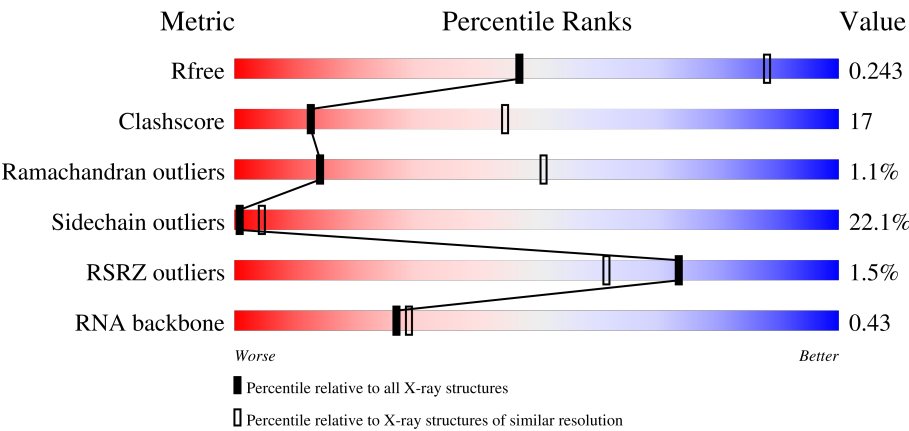
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.20 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.




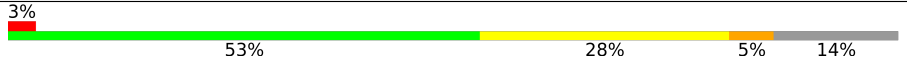







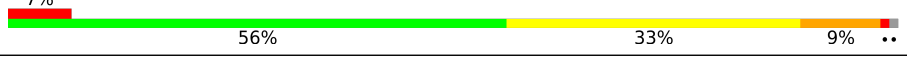
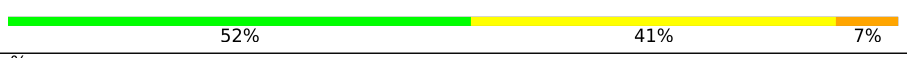
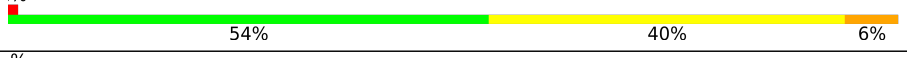

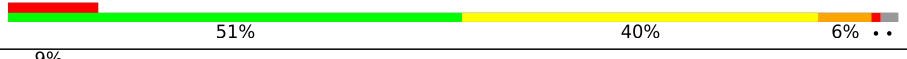

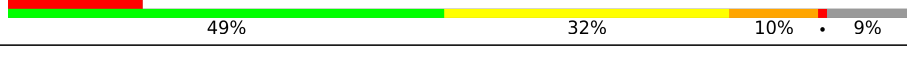




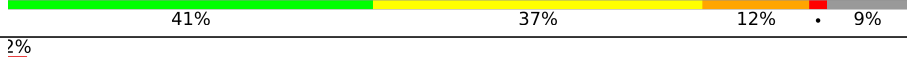
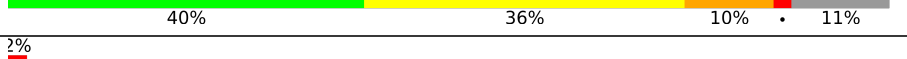



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R <sub>free</sub>	130704	1133 (3.20-3.20)
Clashscore	141614	1253 (3.20-3.20)
Ramachandran outliers	138981	1234 (3.20-3.20)
Sidechain outliers	138945	1233 (3.20-3.20)
RSRZ outliers	127900	1095 (3.20-3.20)
RNA backbone	3102	1010 (3.50-2.90)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 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 electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	1522	<div><div>25%43%23%6%</div><div></div></div>
1	CA	1522	<div><div>2%29%43%20%</div><div></div></div>
2	AB	256	<div><div>36%42%12%9%</div><div></div></div>
2	CB	256	<div><div>4%31%49%11%8%</div><div></div></div>


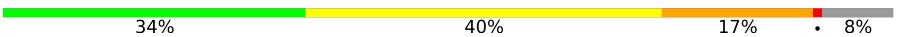



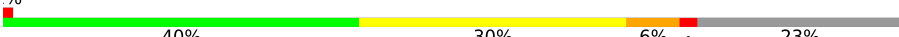
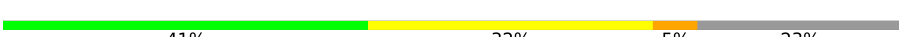

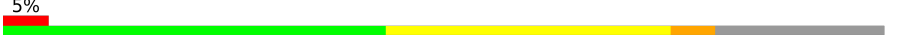

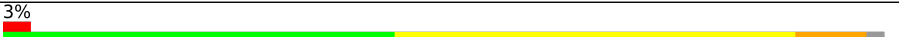


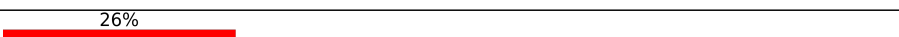
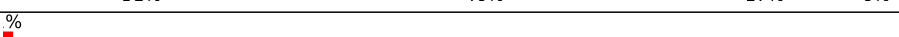
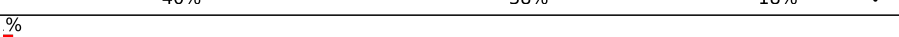
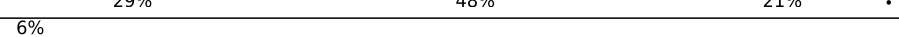


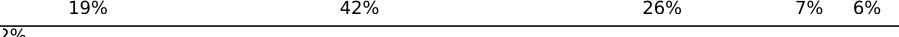
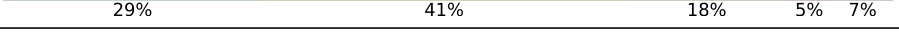
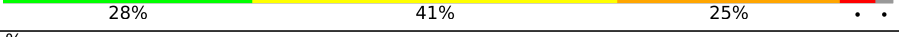
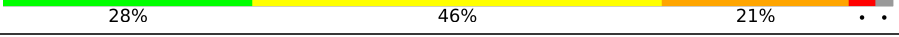


Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	AC	239	
3	CC	239	
4	AD	209	
4	CD	209	
5	AE	162	
5	CE	162	
6	AF	101	
6	CF	101	
7	AG	156	
7	CG	156	
8	AH	138	
8	CH	138	
9	AI	128	
9	CI	128	
10	AJ	105	
10	CJ	105	
11	AK	129	
11	CK	129	
12	AL	132	
12	CL	132	
13	AM	126	
13	CM	126	
14	AN	61	
14	CN	61	
15	AO	89	





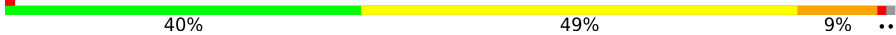


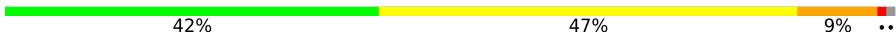
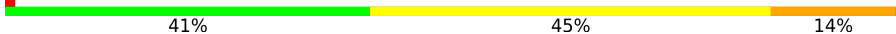

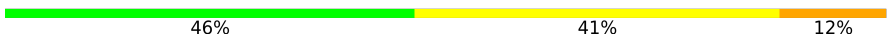














Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	CO	89	
16	AP	88	
16	CP	88	
17	AQ	105	
17	CQ	105	
18	AR	88	
18	CR	88	
19	AS	93	
19	CS	93	
20	AT	106	
20	CT	106	
21	AU	27	
21	CU	27	
22	AY	140	
23	AV	77	
23	CV	77	
24	AX	16	
24	CX	16	
25	BA	2915	
25	DA	2915	
26	BB	122	
26	DB	122	
27	BD	276	
27	DD	276	
28	BE	206	


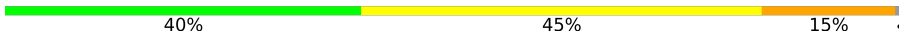





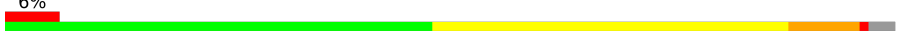



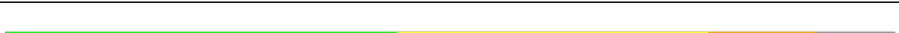













Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	DE	206	
29	BF	210	
29	DF	210	
30	BG	182	
30	DG	182	
31	BH	180	
31	DH	180	
32	BI	148	
32	DI	148	
33	BN	140	
33	DN	140	
34	BO	122	
34	DO	122	
35	BP	150	
35	DP	150	
36	BQ	141	
36	DQ	141	
37	BR	118	
37	DR	118	
38	BS	112	
38	DS	112	
39	BT	146	
39	DT	146	
40	BU	118	
40	DU	118	

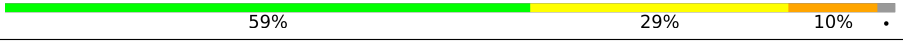

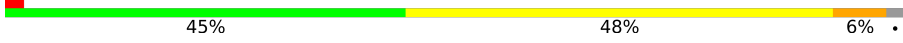


Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
41	BV	101	
41	DV	101	
42	BW	113	
42	DW	113	
43	BX	96	
43	DX	96	
44	BY	110	
44	DY	110	
45	BZ	206	
45	DZ	206	
46	B0	85	
46	D0	85	
47	B1	98	
47	D1	98	
48	B2	72	
48	D2	72	
49	B3	60	
49	D3	60	
50	B4	71	
50	D4	71	
51	B5	60	
51	D5	60	
52	B6	54	
52	D6	54	
53	B7	49	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	D7	49	
54	B8	65	
54	D8	65	
55	B9	37	
55	D9	37	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
56	MG	AA	1620	-	-	-	X
56	MG	AA	1627	-	-	-	X
56	MG	AA	1650	-	-	-	X
56	MG	AA	1658	-	-	-	X
56	MG	AA	1674	-	-	-	X
56	MG	AA	1685	-	-	-	X
56	MG	AA	1686	-	-	-	X
56	MG	AA	1687	-	-	-	X
56	MG	AA	1711	-	-	-	X
56	MG	AA	1715	-	-	-	X
56	MG	AA	1720	-	-	-	X
56	MG	AA	1736	-	-	-	X
56	MG	AA	1737	-	-	-	X
56	MG	AA	1741	-	-	-	X
56	MG	AA	1743	-	-	-	X
56	MG	AA	1749	-	-	-	X
56	MG	AA	1778	-	-	-	X
56	MG	AA	1788	-	-	-	X
56	MG	AA	1803	-	-	-	X
56	MG	AA	1815	-	-	-	X
56	MG	AA	1819	-	-	-	X
56	MG	AA	1823	-	-	-	X
56	MG	AA	1828	-	-	-	X
56	MG	AA	1867	-	-	-	X
56	MG	AE	201	-	-	-	X
56	MG	AK	201	-	-	-	X
56	MG	AV	113	-	-	-	X
56	MG	BA	3025	-	-	-	X

Continued on next page...

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
56	MG	BA	3139	-	-	-	X
56	MG	BA	3258	-	-	-	X
56	MG	BA	3272	-	-	-	X
56	MG	BA	3309	-	-	-	X
56	MG	BA	3342	-	-	-	X
56	MG	BA	3359	-	-	-	X
56	MG	BA	3384	-	-	-	X
56	MG	BA	3440	-	-	-	X
56	MG	BA	3456	-	-	-	X
56	MG	BA	3517	-	-	-	X
56	MG	BA	3523	-	-	-	X
56	MG	BA	3855	-	-	-	X
56	MG	BX	101	-	-	-	X
56	MG	CA	1622	-	-	-	X
56	MG	CA	1638	-	-	-	X
56	MG	CA	1642	-	-	-	X
56	MG	CA	1654	-	-	-	X
56	MG	CA	1675	-	-	-	X
56	MG	CA	1694	-	-	-	X
56	MG	CA	1700	-	-	-	X
56	MG	CA	1708	-	-	-	X
56	MG	CA	1797	-	-	-	X
56	MG	DA	3027	-	-	-	X
56	MG	DA	3029	-	-	-	X
56	MG	DA	3052	-	-	-	X
56	MG	DA	3058	-	-	-	X
56	MG	DA	3081	-	-	-	X
56	MG	DA	3083	-	-	-	X
56	MG	DA	3136	-	-	-	X
56	MG	DA	3166	-	-	-	X
56	MG	DA	3199	-	-	-	X
56	MG	DA	3224	-	-	-	X
56	MG	DA	3258	-	-	-	X
56	MG	DA	3259	-	-	-	X
56	MG	DA	3271	-	-	-	X
56	MG	DA	3278	-	-	-	X
56	MG	DA	3299	-	-	-	X
56	MG	DA	3304	-	-	-	X
56	MG	DA	3309	-	-	-	X
56	MG	DA	3319	-	-	-	X
56	MG	DA	3326	-	-	-	X
56	MG	DA	3335	-	-	-	X

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
56	MG	DA	3341	-	-	-	X
56	MG	DA	3347	-	-	-	X
56	MG	DA	3377	-	-	-	X
56	MG	DA	3379	-	-	-	X
56	MG	DA	3616	-	-	-	X
56	MG	DA	3654	-	-	-	X

## 2 Entry composition

There are 58 unique types of molecules in this entry. The entry contains 284877 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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					ZeroOcc	AltConf	Trace
1	AA	1466	Total	C	N	O	P	0	0	0
			31513	14026	5840	10181	1466			
1	CA	1461	Total	C	N	O	P	0	0	0
			31406	13979	5822	10145	1460			

- Molecule 2 is a protein called 30S Ribosomal Protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	233	Total	C	N	O	S	0	0	0
			1809	1157	322	325	5			
2	CB	235	Total	C	N	O	S	0	0	1
			1817	1160	325	327	5			

- Molecule 3 is a protein called 30S Ribosomal Protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	204	Total	C	N	O	S	0	0	0
			1434	896	277	260	1			
3	CC	206	Total	C	N	O	S	0	0	0
			1453	908	280	264	1			

- Molecule 4 is a protein called 30S Ribosomal Protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AD	208	Total	C	N	O	S	0	0	0
			1520	960	283	272	5			
4	CD	208	Total	C	N	O	S	0	0	0
			1537	968	287	276	6			

- Molecule 5 is a protein called 30S Ribosomal Protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	148	Total	C	N	O	S	0	0	0
			1105	699	204	198	4			
5	CE	149	Total	C	N	O	S	0	0	0
			1115	706	206	199	4			

- Molecule 6 is a protein called 30S Ribosomal Protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	100	Total	C	N	O	S	0	0	0
			781	495	137	146	3			
6	CF	100	Total	C	N	O	S	0	0	0
			784	496	137	148	3			

- Molecule 7 is a protein called 30S Ribosomal Protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	154	Total	C	N	O	S	0	0	0
			1152	716	222	208	6			
7	CG	154	Total	C	N	O	S	0	0	0
			1149	715	222	206	6			

- Molecule 8 is a protein called 30S Ribosomal Protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0	0
			1045	665	188	190	2			
8	CH	138	Total	C	N	O	S	0	0	0
			1049	667	188	192	2			

- Molecule 9 is a protein called 30S Ribosomal Protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	125	Total	C	N	O	0	0	0
			863	542	164	157			
9	CI	125	Total	C	N	O	0	0	0
			849	531	161	157			

- Molecule 10 is a protein called 30S Ribosomal Protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	AJ	96	Total	C	N	O	0	0	0
			659	408	131	120			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	CJ	96	Total	C	N	O	0	0	0
			657	407	129	121			

- Molecule 11 is a protein called 30S Ribosomal Protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	115	Total	C	N	O	S	0	0	0
			843	524	160	156	3			
11	CK	114	Total	C	N	O	S	0	0	0
			828	516	155	154	3			

- Molecule 12 is a protein called 30S Ribosomal Protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	122	Total	C	N	O	S	0	0	0
			909	570	179	159	1			
12	CL	122	Total	C	N	O	S	0	0	0
			905	567	178	159	1			

- Molecule 13 is a protein called 30S Ribosomal Protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	115	Total	C	N	O	S	0	0	0
			814	503	166	144	1			
13	CM	112	Total	C	N	O	S	0	0	0
			784	486	159	138	1			

- Molecule 14 is a protein called 30S Ribosomal Protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	59	Total 473	C 300	N 98	O 71	S 4	0	0	0
14	CN	59	Total 469	C 297	N 97	O 71	S 4	0	0	0

- Molecule 15 is a protein called 30S Ribosomal Protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			724	453	143	126	2			
15	CO	88	Total	C	N	O	S	0	0	0
			724	453	143	126	2			

- Molecule 16 is a protein called 30S Ribosomal Protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	81	Total	C	N	O	S	0	0	0
			646	413	122	110	1			
16	CP	82	Total	C	N	O	S	0	0	0
			661	421	126	113	1			

- Molecule 17 is a protein called 30S Ribosomal Protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
17	CQ	99	Total	C	N	O	S	0	0	0
			819	525	150	142	2			

- Molecule 18 is a protein called 30S Ribosomal Protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	68	Total	C	N	O	0	0	0
			514	329	98	87			
18	CR	68	Total	C	N	O	0	0	0
			514	329	98	87			

- Molecule 19 is a protein called 30S Ribosomal Protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	81	Total	C	N	O	S	0	0	0
			560	351	108	99	2			
19	CS	75	Total	C	N	O	S	0	0	0
			529	332	102	93	2			

- Molecule 20 is a protein called 30S Ribosomal Protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	96	Total	C	N	O	S	0	0	0
			714	438	154	120	2			
20	CT	104	Total	C	N	O	S	0	0	0
			773	476	162	133	2			

- Molecule 21 is a protein called 30S Ribosomal Protein THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AU	25	Total	C	N	O	0	0	0
			217	134	52	31			
21	CU	23	Total	C	N	O	0	0	0
			180	112	41	27			

- Molecule 22 is a protein called YAEJ.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AY	132	Total	C	N	O	S	0	0	0
			1031	638	204	187	2			

- Molecule 23 is a RNA chain called P-site fMet-tRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AV	77	Total	C	N	O	P	0	0	0
			1644	732	297	538	77			
23	CV	77	Total	C	N	O	P	0	0	0
			1644	732	297	538	77			

- Molecule 24 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AX	6	Total	C	N	O	P	0	0	0
			131	59	27	39	6			
24	CX	6	Total	C	N	O	P	0	0	0
			131	59	27	39	6			

- Molecule 25 is a RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BA	2752	Total	C	N	O	P	0	0	0
			59281	26384	11101	19045	2751			
25	DA	2722	Total	C	N	O	P	0	0	0
			58627	26093	10971	18843	2720			

- Molecule 26 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BB	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			
26	DB	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

- Molecule 27 is a protein called 50S Ribosomal Protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BD	275	Total	C	N	O	S	0	0	0
			2131	1346	422	360	3			
27	DD	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 28 is a protein called 50S Ribosomal Protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	BE	204	Total	C	N	O	S	0	0	0
			1555	982	297	270	6			
28	DE	204	Total	C	N	O	S	0	0	0
			1555	982	297	270	6			

- Molecule 29 is a protein called 50S Ribosomal Protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BF	203	Total	C	N	O	S	0	0	1
			1576	1005	297	272	2			
29	DF	203	Total	C	N	O	S	0	0	1
			1578	1007	297	272	2			

- Molecule 30 is a protein called 50S Ribosomal Protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BG	181	Total	C	N	O	S	0	0	0
			1368	879	242	244	3			
30	DG	180	Total	C	N	O	S	0	0	0
			1361	874	241	243	3			

- Molecule 31 is a protein called 50S Ribosomal Protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BH	174	Total	C	N	O	S	0	0	0
			1317	837	243	236	1			
31	DH	174	Total	C	N	O	S	0	0	0
			1317	837	243	236	1			

- Molecule 32 is a protein called 50S Ribosomal Protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BI	147	Total	C	N	O	S	0	0	0
			1066	687	184	194	1			
32	DI	146	Total	C	N	O	S	0	0	0
			1057	682	182	192	1			

- Molecule 33 is a protein called 50S Ribosomal Protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BN	140	Total	C	N	O	S	0	0	0
			1112	717	207	184	4			
33	DN	140	Total	C	N	O	S	0	0	0
			1112	717	207	184	4			

- Molecule 34 is a protein called 50S Ribosomal Protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BO	122	Total	C	N	O	S	0	0	0
			923	583	168	168	4			
34	DO	122	Total	C	N	O	S	0	0	0
			923	583	168	168	4			

- Molecule 35 is a protein called 50S Ribosomal Protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BP	149	Total	C	N	O	S	0	0	0
			1131	703	229	196	3			
35	DP	149	Total	C	N	O	S	0	0	0
			1131	703	229	196	3			

- Molecule 36 is a protein called 50S Ribosomal Protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BQ	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			
36	DQ	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			

- Molecule 37 is a protein called 50S Ribosomal Protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BR	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	DR	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			

- Molecule 38 is a protein called 50S Ribosomal Protein L18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BS	110	Total	C	N	O		0	0	0
			865	544	172	149				
38	DS	110	Total	C	N	O		0	0	0
			873	550	174	149				

- Molecule 39 is a protein called 50S Ribosomal Protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BT	132	Total	C	N	O	S	0	0	0
			1072	672	215	184	1			
39	DT	130	Total	C	N	O	S	0	0	0
			1058	663	212	182	1			

- Molecule 40 is a protein called 50S Ribosomal Protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BU	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
40	DU	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 41 is a protein called 50S Ribosomal Protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BV	100	Total	C	N	O	S	0	0	0
			766	493	139	133	1			
41	DV	100	Total	C	N	O	S	0	0	0
			770	496	140	133	1			

- Molecule 42 is a protein called 50S Ribosomal Protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BW	112	Total	C	N	O	S	0	0	0
			890	560	175	153	2			
42	DW	111	Total	C	N	O	S	0	0	0
			877	552	171	152	2			

- Molecule 43 is a protein called 50S Ribosomal Protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BX	95	Total	C	N	O	S	0	0	0
			742	483	134	124	1			
43	DX	95	Total	C	N	O	S	0	0	0
			732	477	130	124	1			

- Molecule 44 is a protein called 50S Ribosomal Protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BY	107	Total	C	N	O	S	0	0	0
			785	503	145	131	6			
44	DY	107	Total	C	N	O	S	0	0	0
			781	502	145	128	6			

- Molecule 45 is a protein called 50S Ribosomal Protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BZ	186	Total	C	N	O	S	0	0	0
			1454	929	256	267	2			
45	DZ	189	Total	C	N	O	S	0	0	0
			1451	925	253	270	3			

- Molecule 46 is a protein called 50S Ribosomal Protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	B0	76	Total	C	N	O	S	0	0	0
			594	368	125	100	1			
46	D0	77	Total	C	N	O	S	0	0	0
			607	376	126	104	1			

- Molecule 47 is a protein called 50S Ribosomal Protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	B1	97	Total	C	N	O	S	0	0	0
			745	469	144	131	1			
47	D1	97	Total	C	N	O	S	0	0	0
			745	469	144	131	1			

- Molecule 48 is a protein called 50S Ribosomal Protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B2	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
48	D2	71	Total	C	N	O	S	0	0	0
			584	361	118	103	2			

- Molecule 49 is a protein called 50S Ribosomal Protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	B3	59	Total	C	N	O	S	0	0	0
			458	293	87	78				
49	D3	58	Total	C	N	O	S	0	0	0
			453	290	86	77				

- Molecule 50 is a protein called 50S Ribosomal Protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B4	46	Total	C	N	O	S	0	0	0
			349	223	57	64	5			
50	D4	46	Total	C	N	O	S	0	0	0
			349	223	57	64	5			

- Molecule 51 is a protein called 50S Ribosomal Protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B5	59	Total	C	N	O	S	0	0	0
			455	286	90	74	5			
51	D5	59	Total	C	N	O	S	0	0	0
			451	283	89	74	5			

- Molecule 52 is a protein called 50S Ribosomal Protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B6	53	Total	C	N	O	S	0	0	0
			449	278	90	77	4			
52	D6	53	Total	C	N	O	S	0	0	0
			437	272	84	77	4			

- Molecule 53 is a protein called 50S Ribosomal Protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	B7	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	D7	48	Total	C	N	O	S	0	0	0
			402	248	97	55	2			

- Molecule 54 is a protein called 50S Ribosomal Protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	B8	64	Total	C	N	O	S	0	0	0
			509	326	99	82	2			
54	D8	64	Total	C	N	O	S	0	0	0
			509	326	99	82	2			

- Molecule 55 is a protein called 50S Ribosomal Protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	B9	36	Total	C	N	O	S	0	0	0
			297	182	66	46	3			
55	D9	35	Total	C	N	O	S	0	0	0
			292	180	65	44	3			

- Molecule 56 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	AA	348	Total	Mg	0	0
			348	348		
56	AD	2	Total	Mg	0	0
			2	2		
56	AE	1	Total	Mg	0	0
			1	1		
56	AF	1	Total	Mg	0	0
			1	1		
56	AI	2	Total	Mg	0	0
			2	2		
56	AK	1	Total	Mg	0	0
			1	1		
56	AT	1	Total	Mg	0	0
			1	1		
56	AY	1	Total	Mg	0	0
			1	1		
56	AV	18	Total	Mg	0	0
			18	18		
56	BA	896	Total	Mg	0	0
			896	896		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	BB	30	Total 30	Mg 30	0	0
56	BD	5	Total 5	Mg 5	0	0
56	BE	5	Total 5	Mg 5	0	0
56	BF	7	Total 7	Mg 7	0	0
56	BG	2	Total 2	Mg 2	0	0
56	BO	2	Total 2	Mg 2	0	0
56	BP	2	Total 2	Mg 2	0	0
56	BQ	4	Total 4	Mg 4	0	0
56	BR	2	Total 2	Mg 2	0	0
56	BT	1	Total 1	Mg 1	0	0
56	BU	1	Total 1	Mg 1	0	0
56	BV	2	Total 2	Mg 2	0	0
56	BX	1	Total 1	Mg 1	0	0
56	BY	2	Total 2	Mg 2	0	0
56	BZ	2	Total 2	Mg 2	0	0
56	B0	5	Total 5	Mg 5	0	0
56	B1	3	Total 3	Mg 3	0	0
56	B2	2	Total 2	Mg 2	0	0
56	B3	2	Total 2	Mg 2	0	0
56	B5	3	Total 3	Mg 3	0	0
56	B6	1	Total 1	Mg 1	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	B7	1	Total 1	Mg 1	0	0
56	B8	2	Total 2	Mg 2	0	0
56	B9	1	Total 1	Mg 1	0	0
56	CA	219	Total 219	Mg 219	0	0
56	CD	1	Total 1	Mg 1	0	0
56	CT	1	Total 1	Mg 1	0	0
56	CV	10	Total 10	Mg 10	0	0
56	CX	1	Total 1	Mg 1	0	0
56	DA	696	Total 696	Mg 696	0	0
56	DB	16	Total 16	Mg 16	0	0
56	DD	4	Total 4	Mg 4	0	0
56	DE	4	Total 4	Mg 4	0	0
56	DF	3	Total 3	Mg 3	0	0
56	DO	3	Total 3	Mg 3	0	0
56	DQ	2	Total 2	Mg 2	0	0
56	DR	1	Total 1	Mg 1	0	0
56	DT	3	Total 3	Mg 3	0	0
56	DU	1	Total 1	Mg 1	0	0
56	DV	1	Total 1	Mg 1	0	0
56	DX	1	Total 1	Mg 1	0	0
56	D0	4	Total 4	Mg 4	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	D1	1	Total 1	Mg 1	0	0
56	D5	1	Total 1	Mg 1	0	0
56	D6	2	Total 2	Mg 2	0	0
56	D7	1	Total 1	Mg 1	0	0
56	D8	1	Total 1	Mg 1	0	0

- Molecule 57 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	AD	1	Total 1	Zn 1	0	0
57	AN	1	Total 1	Zn 1	0	0
57	BY	1	Total 1	Zn 1	0	0
57	B4	1	Total 1	Zn 1	0	0
57	B5	1	Total 1	Zn 1	0	0
57	B6	1	Total 1	Zn 1	0	0
57	B9	1	Total 1	Zn 1	0	0
57	CD	1	Total 1	Zn 1	0	0
57	CN	1	Total 1	Zn 1	0	0
57	DY	1	Total 1	Zn 1	0	0
57	D4	1	Total 1	Zn 1	0	0
57	D5	1	Total 1	Zn 1	0	0
57	D6	1	Total 1	Zn 1	0	0
57	D9	1	Total 1	Zn 1	0	0

- Molecule 58 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	AA	372	Total O 372 372	0	0
58	AD	2	Total O 2 2	0	0
58	AE	3	Total O 3 3	0	0
58	AI	1	Total O 1 1	0	0
58	AK	2	Total O 2 2	0	0
58	AL	2	Total O 2 2	0	0
58	AN	1	Total O 1 1	0	0
58	AT	5	Total O 5 5	0	0
58	AY	2	Total O 2 2	0	0
58	AV	16	Total O 16 16	0	0
58	AX	1	Total O 1 1	0	0
58	BA	1491	Total O 1491 1491	0	0
58	BB	46	Total O 46 46	0	0
58	BD	10	Total O 10 10	0	0
58	BE	5	Total O 5 5	0	0
58	BF	5	Total O 5 5	0	0
58	BG	5	Total O 5 5	0	0
58	BH	1	Total O 1 1	0	0
58	BN	3	Total O 3 3	0	0
58	BO	3	Total O 3 3	0	0
58	BP	9	Total O 9 9	0	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	BQ	4	Total 4	O 4	0	0
58	BR	7	Total 7	O 7	0	0
58	BT	1	Total 1	O 1	0	0
58	BU	7	Total 7	O 7	0	0
58	BV	1	Total 1	O 1	0	0
58	BW	2	Total 2	O 2	0	0
58	BX	2	Total 2	O 2	0	0
58	BY	1	Total 1	O 1	0	0
58	B0	4	Total 4	O 4	0	0
58	B1	1	Total 1	O 1	0	0
58	B3	1	Total 1	O 1	0	0
58	B6	4	Total 4	O 4	0	0
58	B7	2	Total 2	O 2	0	0
58	B8	4	Total 4	O 4	0	0
58	B9	1	Total 1	O 1	0	0
58	CA	330	Total 330	O 330	0	0
58	CB	1	Total 1	O 1	0	0
58	CC	1	Total 1	O 1	0	0
58	CD	3	Total 3	O 3	0	0
58	CE	1	Total 1	O 1	0	0
58	CK	2	Total 2	O 2	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	CL	3	Total 3	O 3	0	0
58	CN	2	Total 2	O 2	0	0
58	CO	2	Total 2	O 2	0	0
58	CQ	2	Total 2	O 2	0	0
58	CT	2	Total 2	O 2	0	0
58	CV	13	Total 13	O 13	0	0
58	CX	1	Total 1	O 1	0	0
58	DA	1028	Total 1028	O 1028	0	0
58	DB	40	Total 40	O 40	0	0
58	DD	8	Total 8	O 8	0	0
58	DE	11	Total 11	O 11	0	0
58	DF	4	Total 4	O 4	0	0
58	DG	1	Total 1	O 1	0	0
58	DN	3	Total 3	O 3	0	0
58	DO	5	Total 5	O 5	0	0
58	DP	4	Total 4	O 4	0	0
58	DR	5	Total 5	O 5	0	0
58	DT	3	Total 3	O 3	0	0
58	DV	1	Total 1	O 1	0	0
58	DW	1	Total 1	O 1	0	0
58	DY	2	Total 2	O 2	0	0

*Continued on next page...*

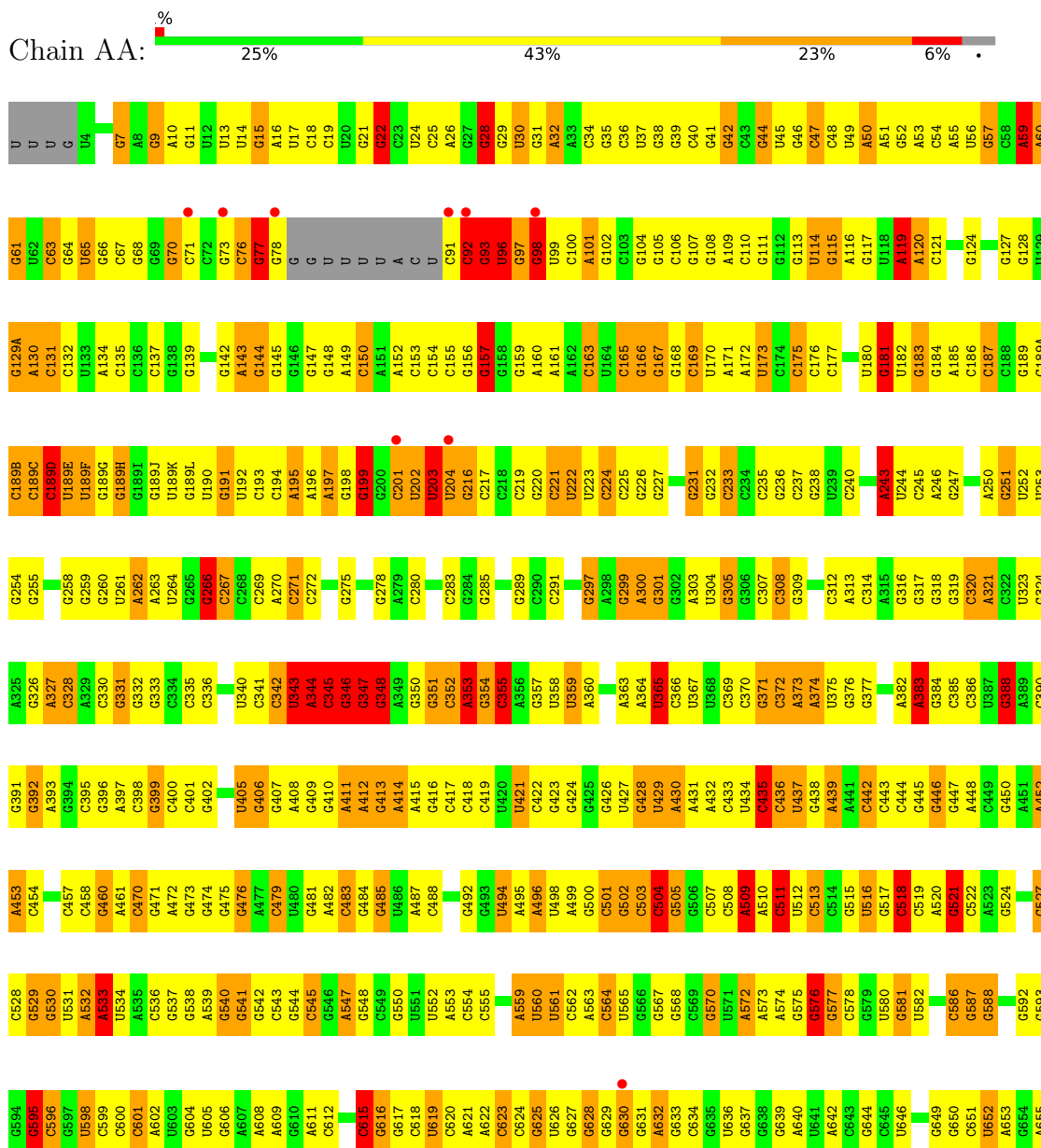
*Continued from previous page...*

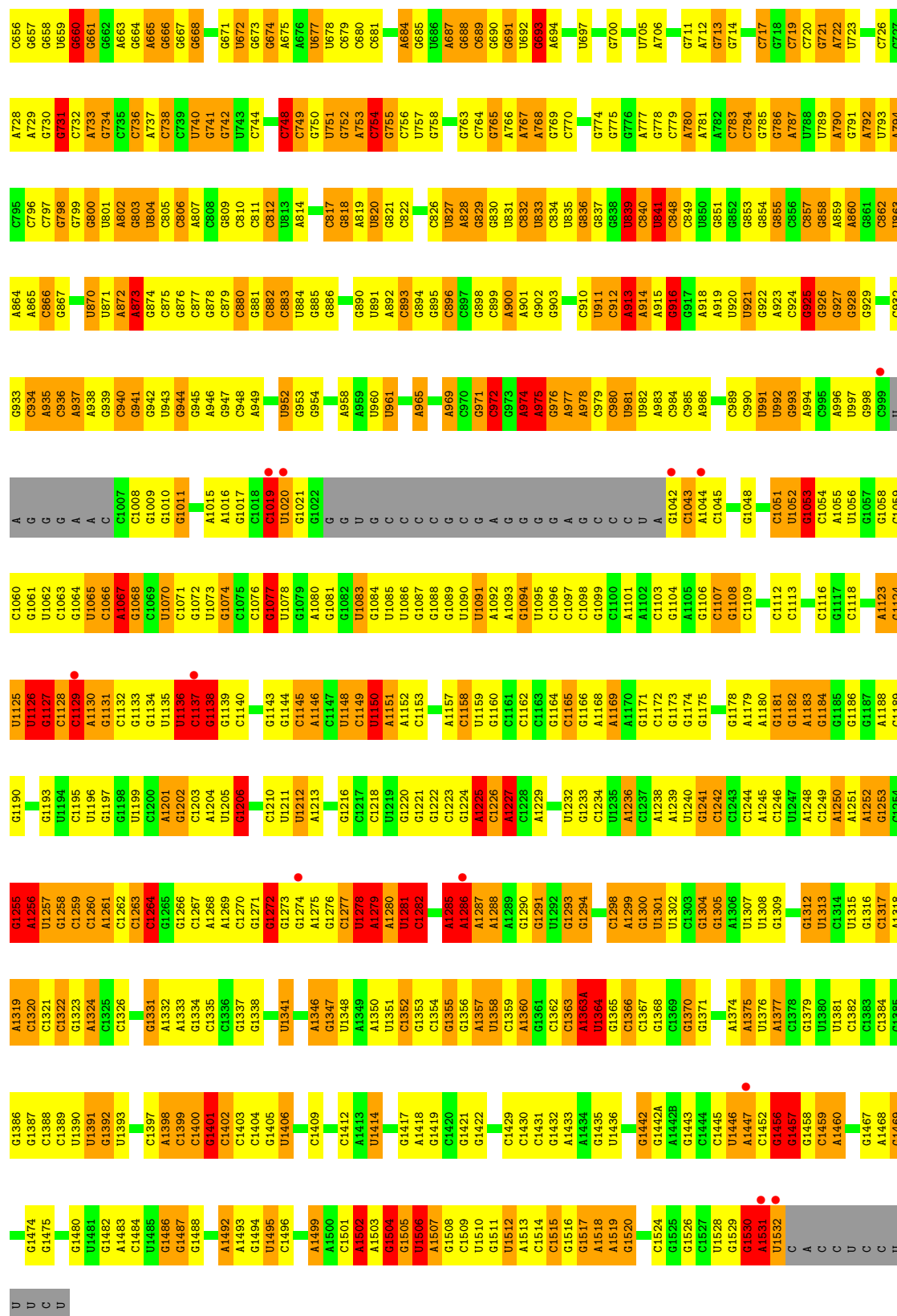
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	D1	3	Total 3	O 3	0	0
58	D3	1	Total 1	O 1	0	0
58	D6	2	Total 2	O 2	0	0
58	D7	2	Total 2	O 2	0	0
58	D8	4	Total 4	O 4	0	0

### 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 electron 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 dot above a residue indicates a poor fit to the electron density ( $RSRZ > 2$ ). 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.

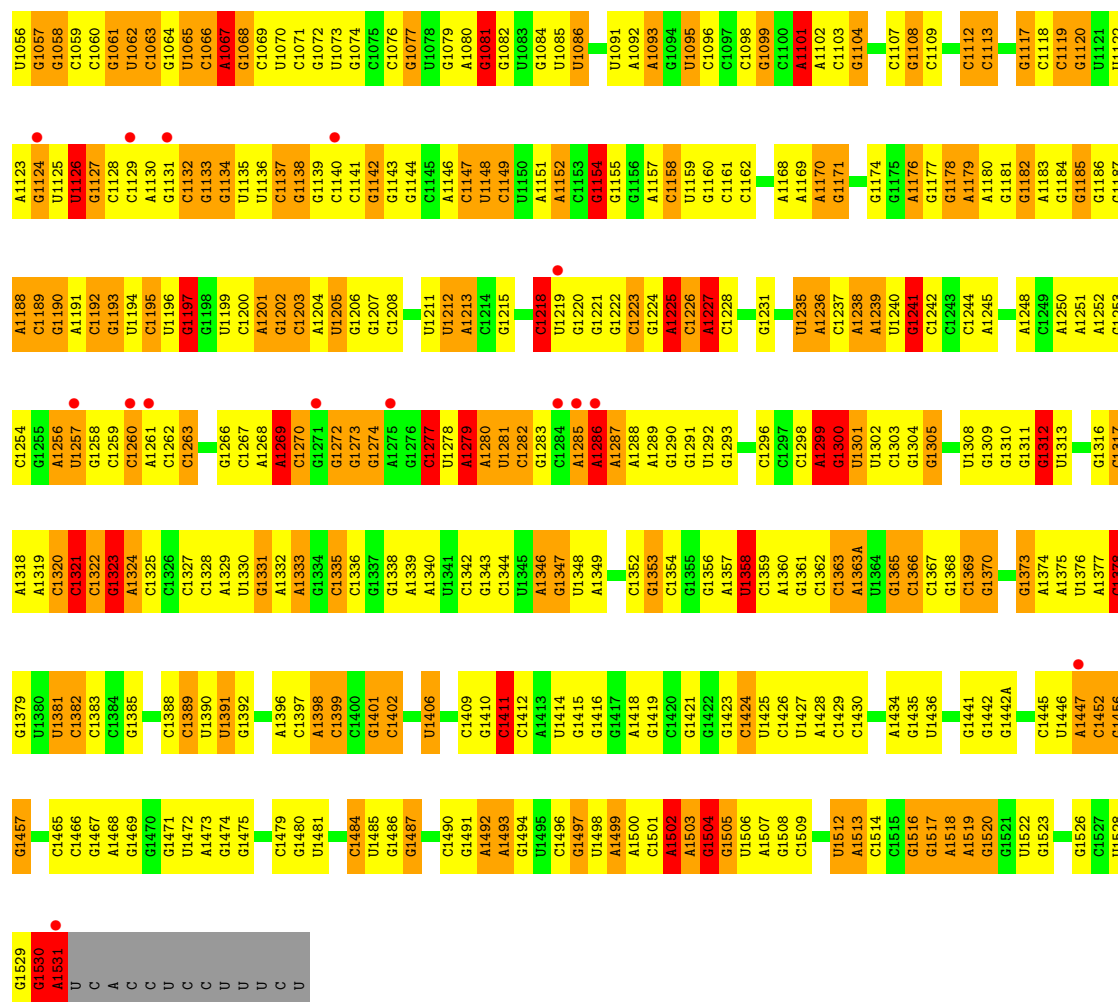
- Molecule 1: 16S Ribosomal RNA



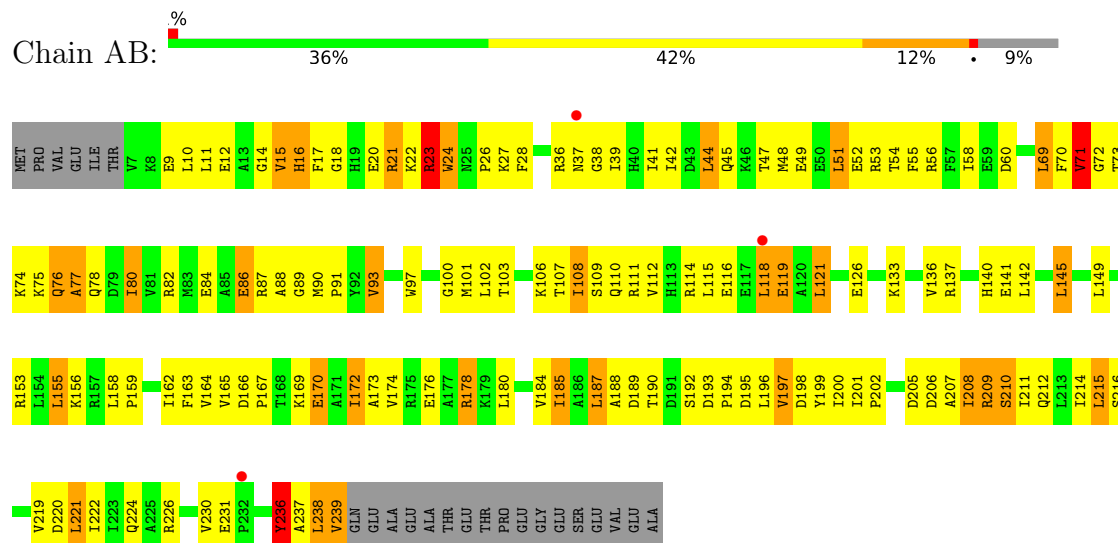


• Molecule 1: 16S Ribosomal RNA



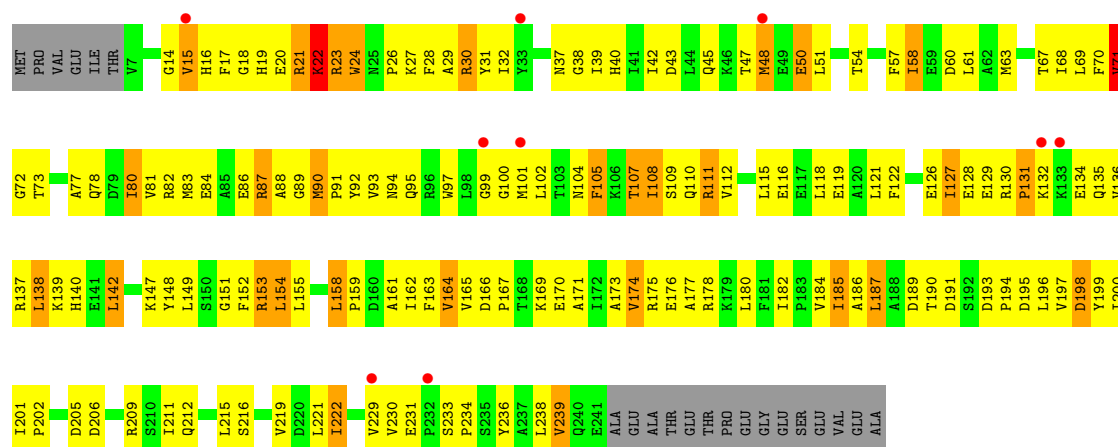


### • Molecule 2: 30S Ribosomal Protein S2

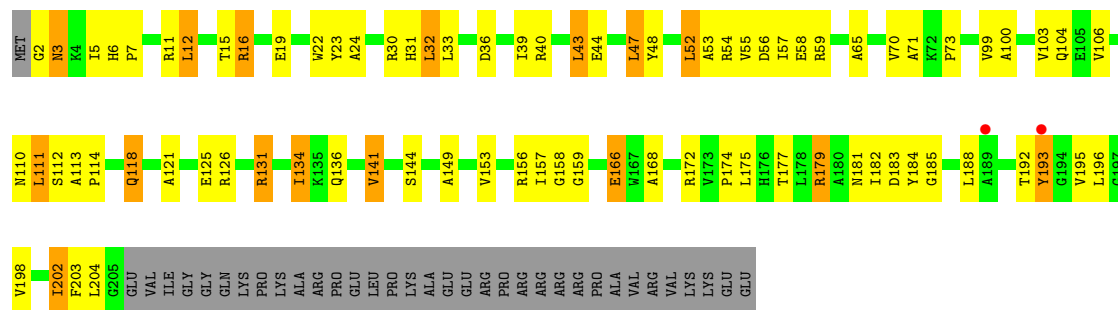


### • Molecule 2: 30S Ribosomal Protein S2

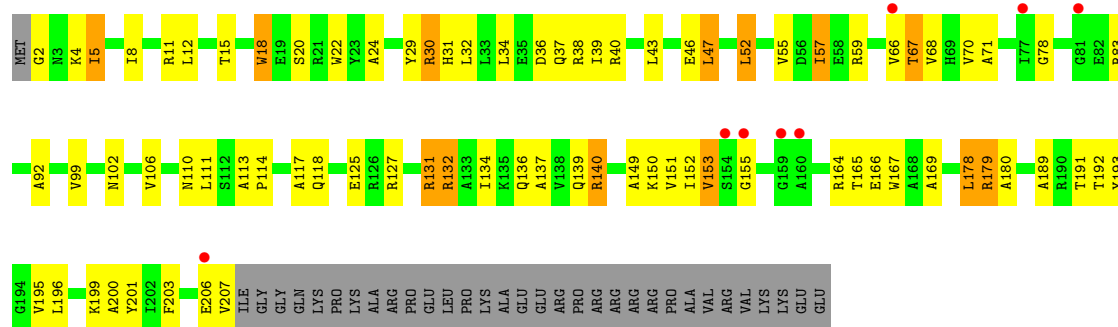




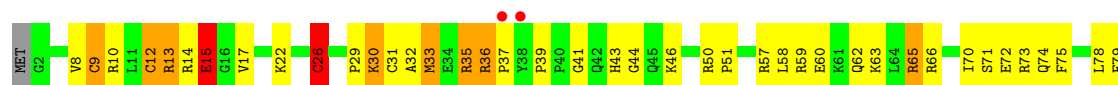
• Molecule 3: 30S Ribosomal Protein S3



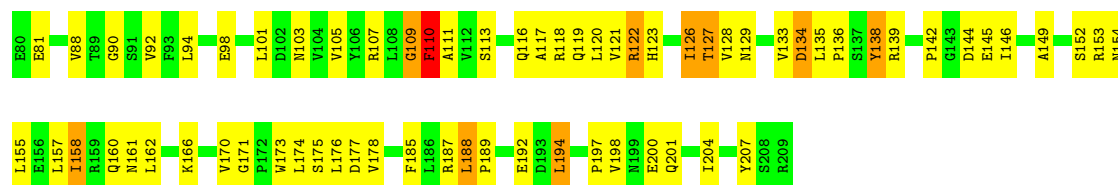
• Molecule 3: 30S Ribosomal Protein S3



• Molecule 4: 30S Ribosomal Protein S4

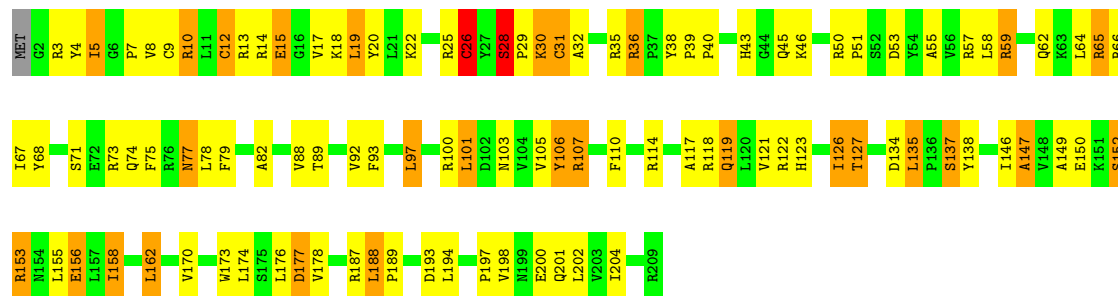






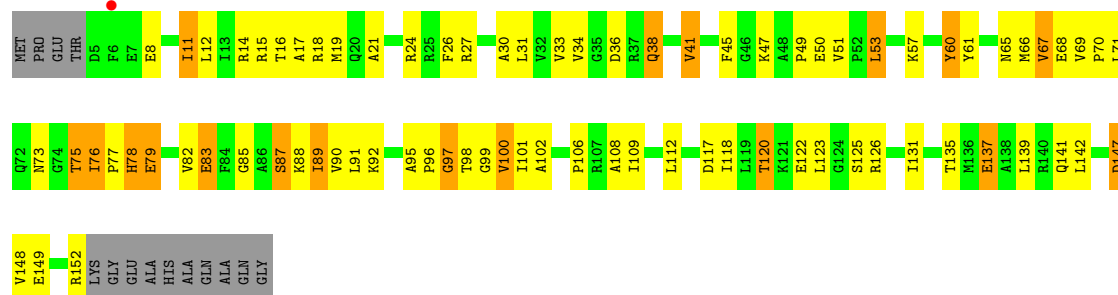
• Molecule 4: 30S Ribosomal Protein S4

Chain CD: 50% 35% 13% .



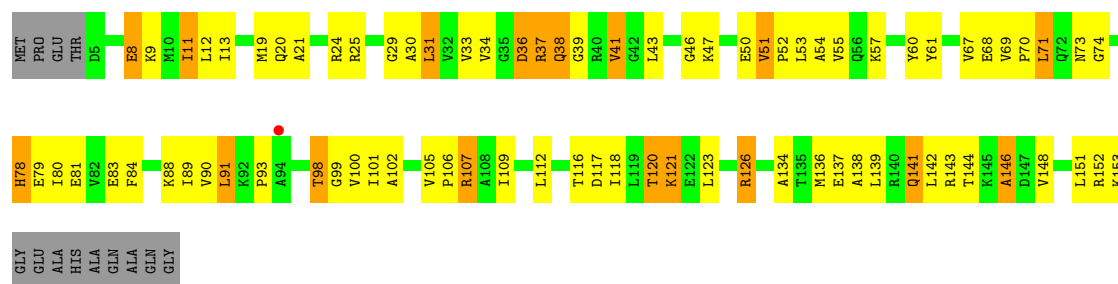
• Molecule 5: 30S Ribosomal Protein S5

Chain AE: % 42% 38% 11% 9%



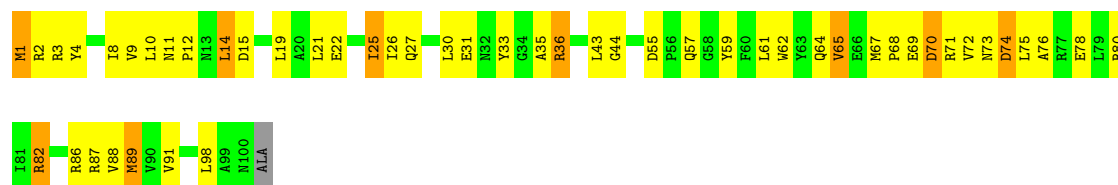
• Molecule 5: 30S Ribosomal Protein S5

Chain CE: % 42% 39% 11% 8%



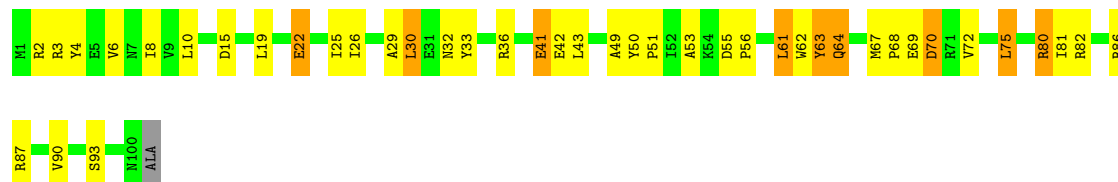
• Molecule 6: 30S Ribosomal Protein S6

Chain AF: 50% 41% 9% .



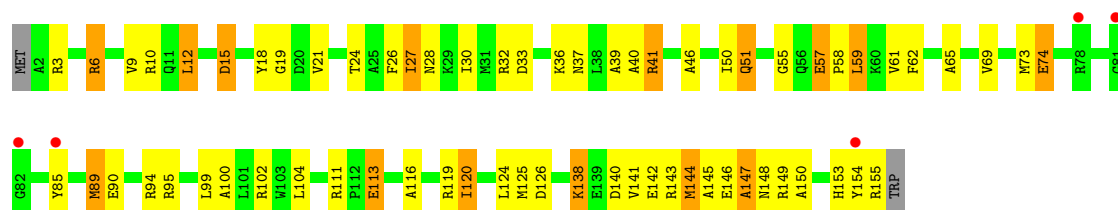
• Molecule 6: 30S Ribosomal Protein S6

Chain CF: 57% 33% 9%



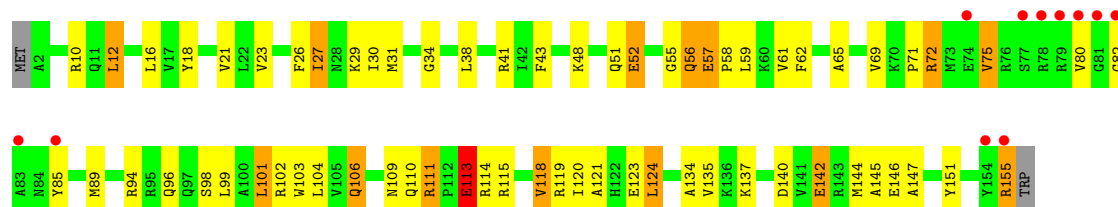
• Molecule 7: 30S Ribosomal Protein S7

Chain AG: 3% 56% 33% 10%



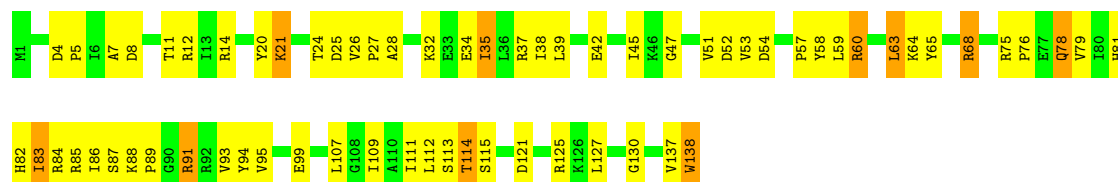
• Molecule 7: 30S Ribosomal Protein S7

Chain CG: 7% 56% 33% 9%

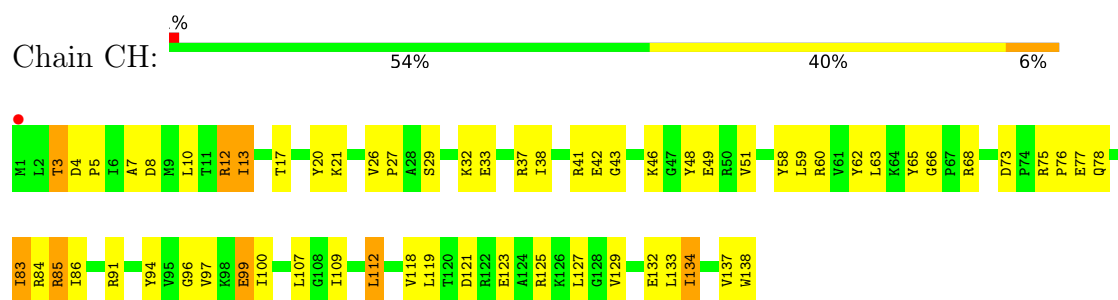


• Molecule 8: 30S Ribosomal Protein S8

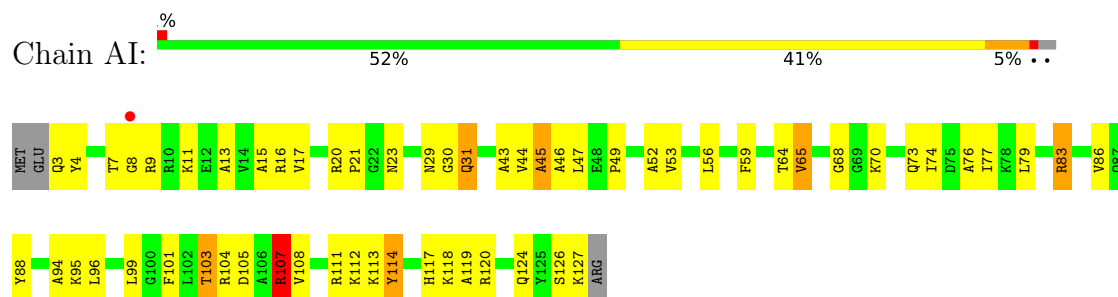
Chain AH: 52% 41% 7%



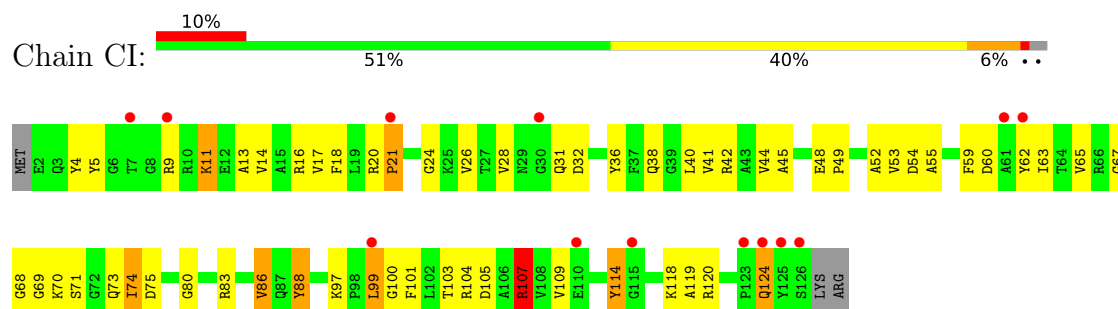
• Molecule 8: 30S Ribosomal Protein S8



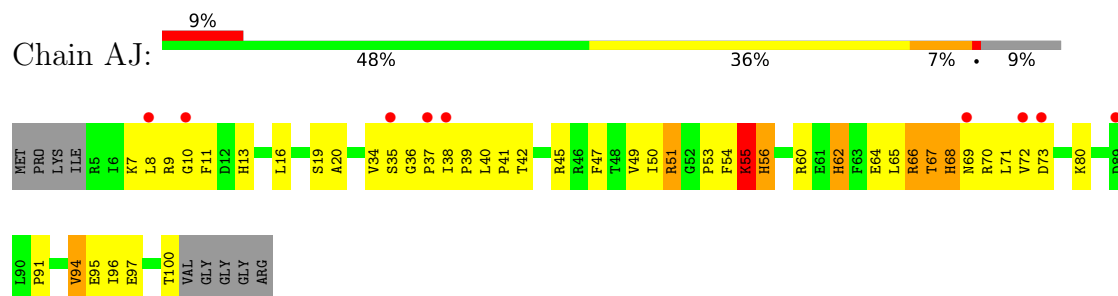
• Molecule 9: 30S Ribosomal Protein S9



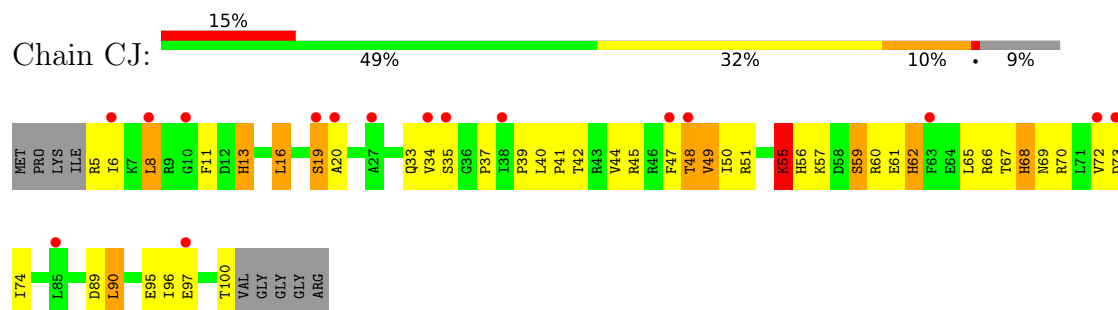
• Molecule 9: 30S Ribosomal Protein S9



• Molecule 10: 30S Ribosomal Protein S10

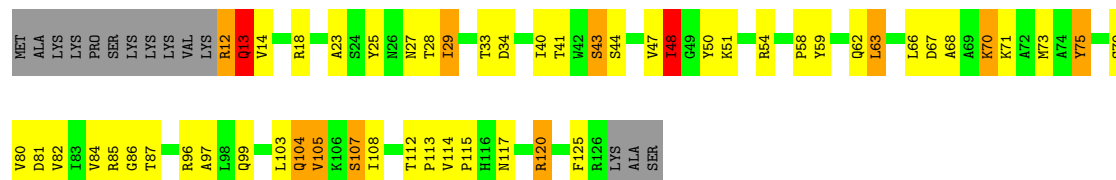


• Molecule 10: 30S Ribosomal Protein S10



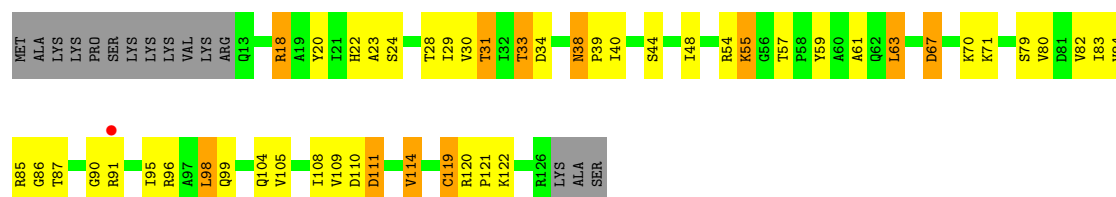
- Molecule 11: 30S Ribosomal Protein S11

Chain AK: 



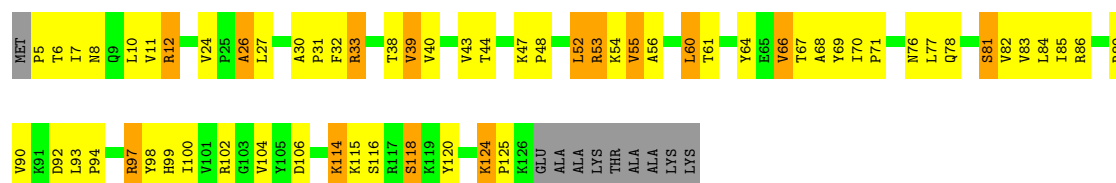
- Molecule 11: 30S Ribosomal Protein S11

Chain CK: 



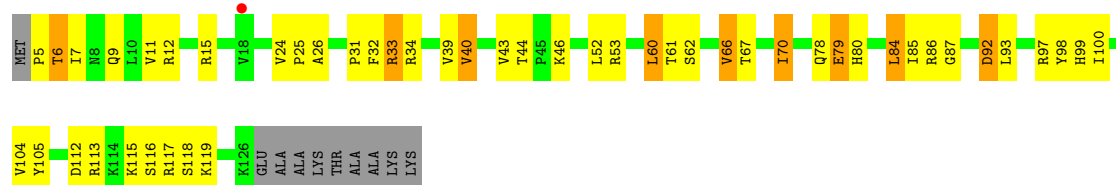
- Molecule 12: 30S Ribosomal Protein S12

Chain AL: 



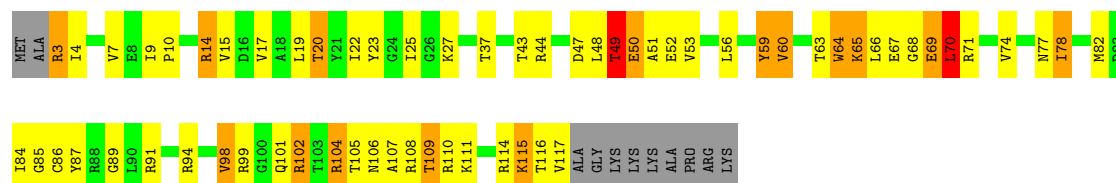
- Molecule 12: 30S Ribosomal Protein S12

Chain CL: 

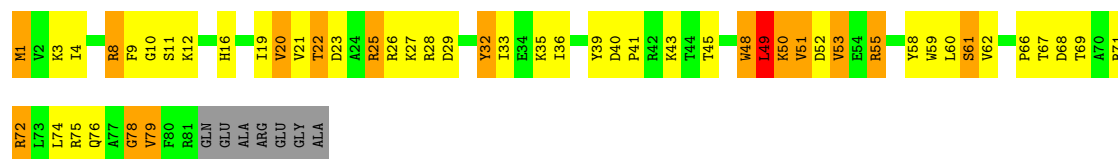


- Molecule 13: 30S Ribosomal Protein S13

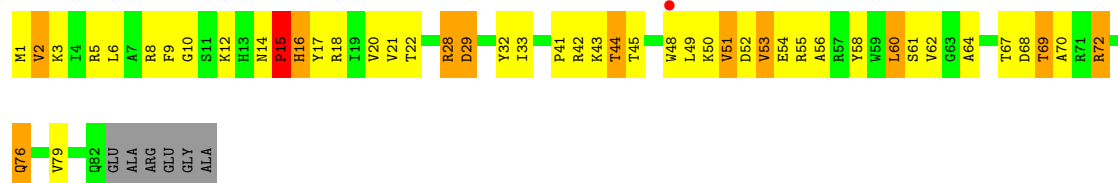
Chain AM: 



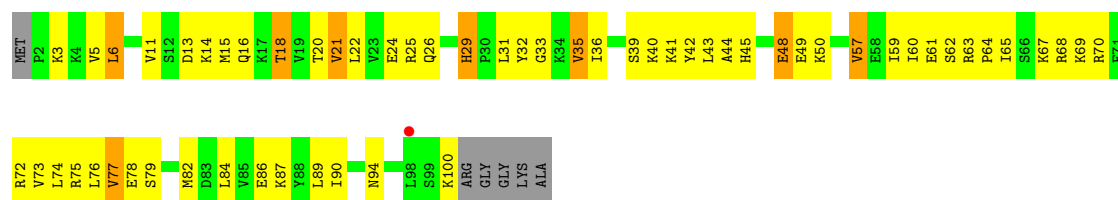




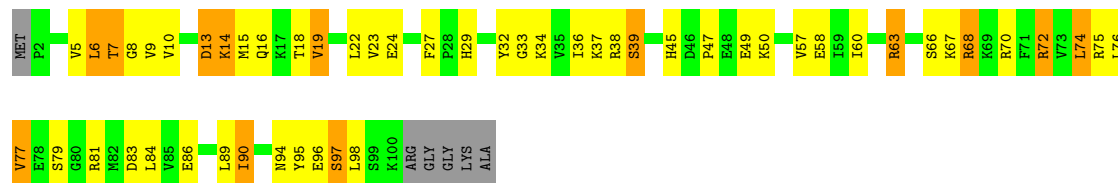
• Molecule 16: 30S Ribosomal Protein S16



• Molecule 17: 30S Ribosomal Protein S17



• Molecule 17: 30S Ribosomal Protein S17

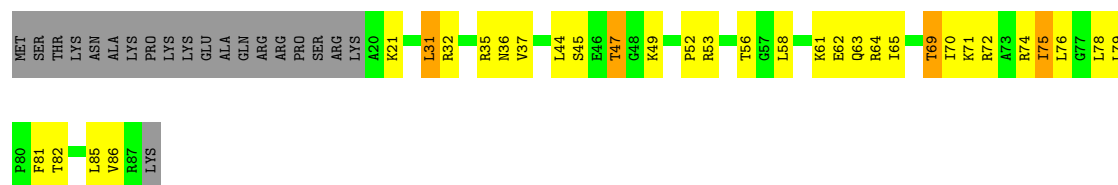


• Molecule 18: 30S Ribosomal Protein S18

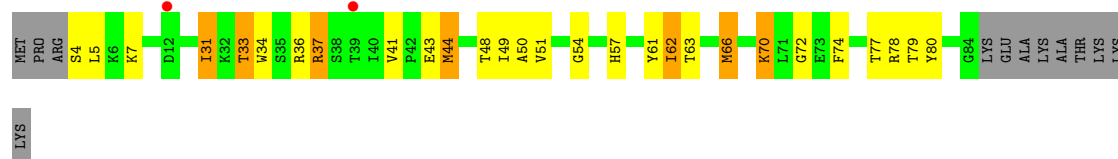


• Molecule 18: 30S Ribosomal Protein S18

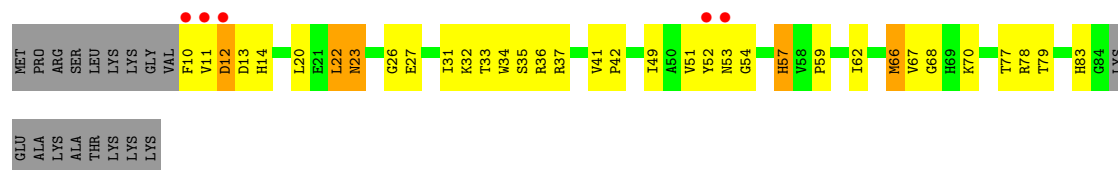
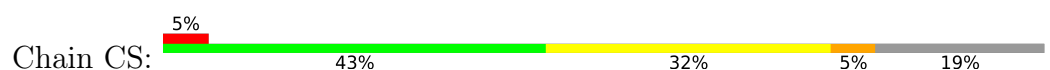




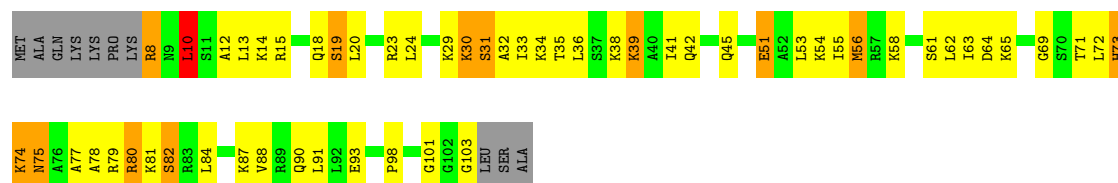
- Molecule 19: 30S Ribosomal Protein S19



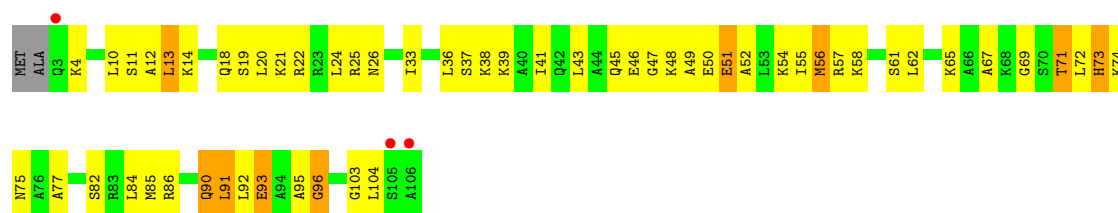
- Molecule 19: 30S Ribosomal Protein S19



- Molecule 20: 30S Ribosomal Protein S20

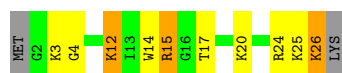


- Molecule 20: 30S Ribosomal Protein S20

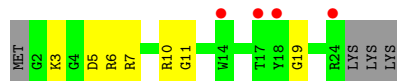


- Molecule 21: 30S Ribosomal Protein THX

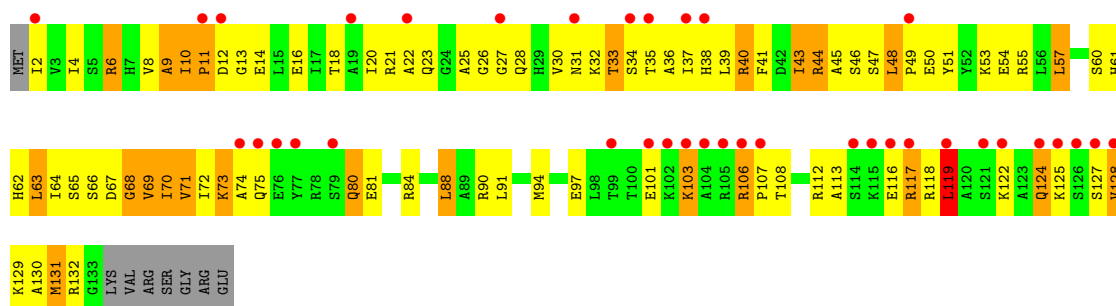




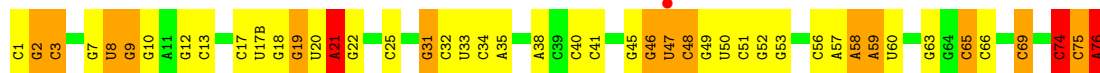
- Molecule 21: 30S Ribosomal Protein THX



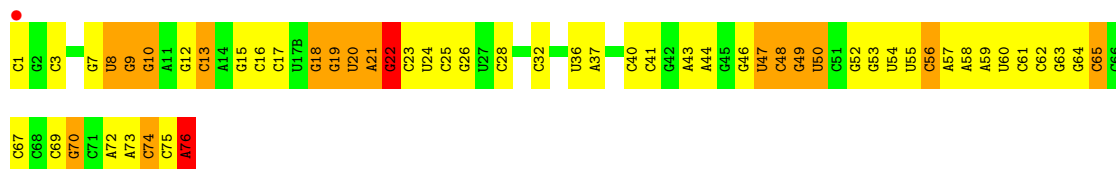
- Molecule 22: YAEJ



- Molecule 23: P-site fMet-tRNA



- Molecule 23: P-site fMet-tRNA



- Molecule 24: mRNA

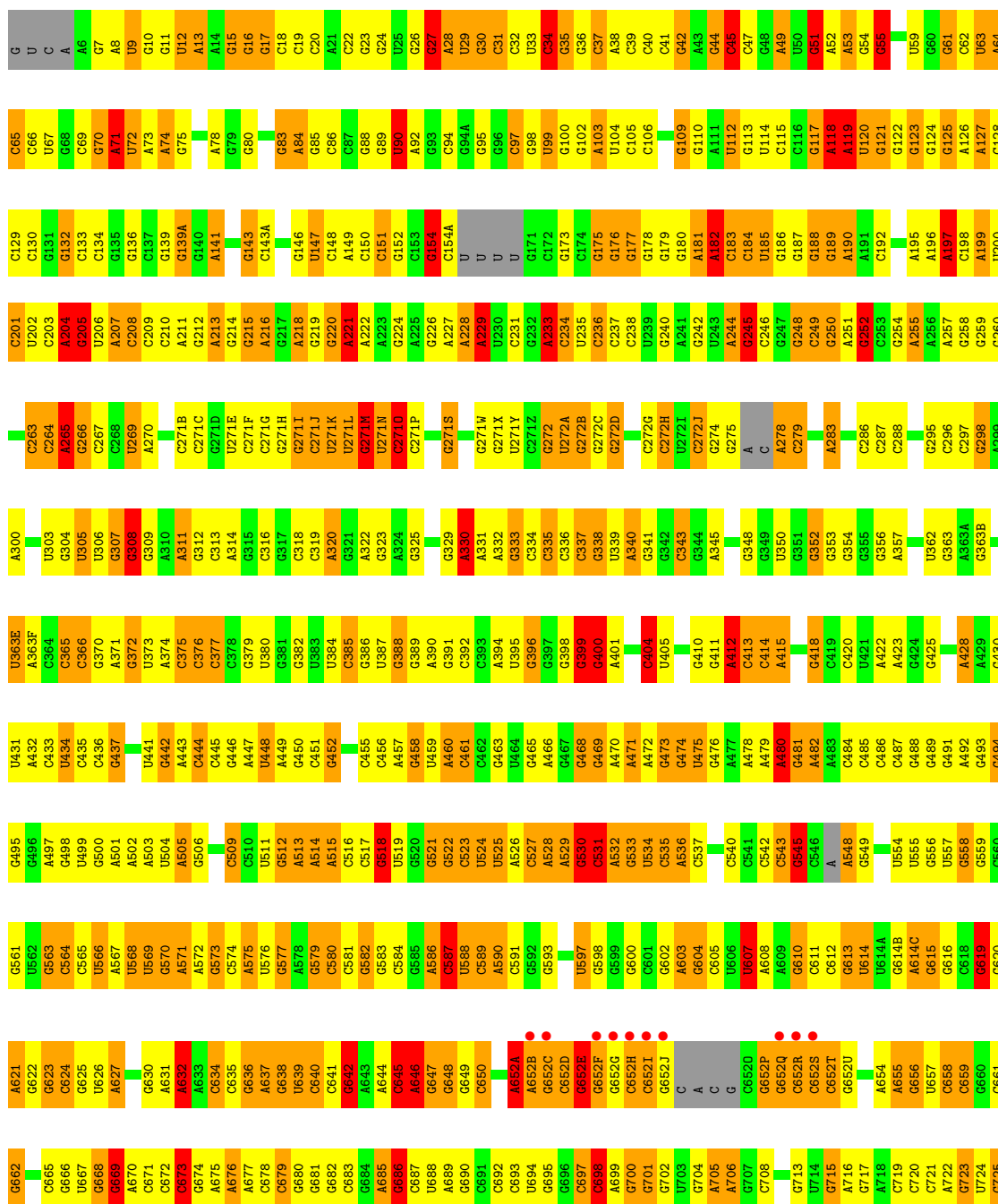
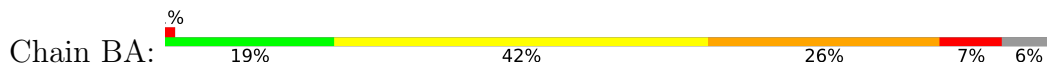


- Molecule 24: mRNA



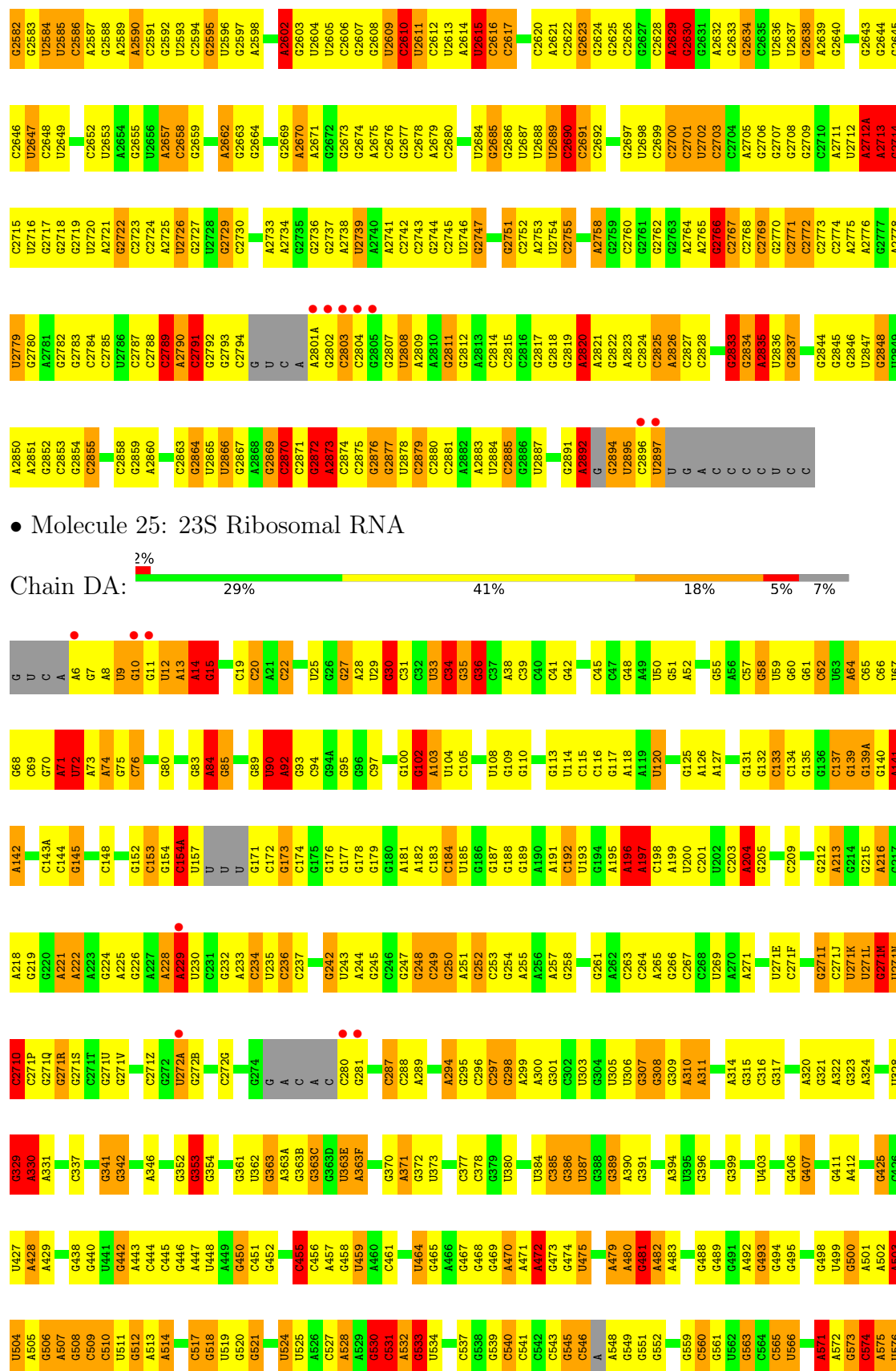


- Molecule 25: 23S Ribosomal RNA



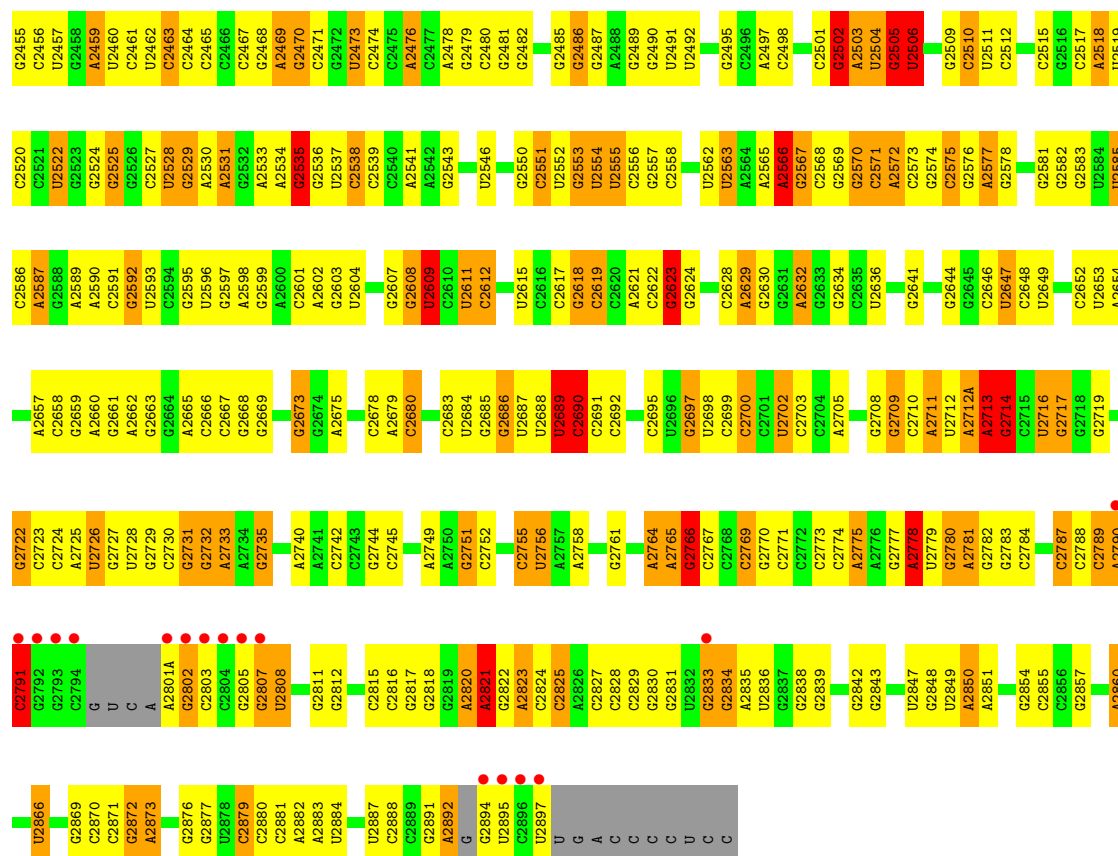


U2519	G2458	G2393	G2331	G2370	U2197	A2015	U1955	C1887	A1812	C1751	C1660	C1598
C2520	A2465	C2394	A2334	G2271	A2196	U2016	U1956	G1888	G1813	C1752	C1661	C1899
C2521	U2460	C2395	G2335	U2272	A2199	U2017	C1957	A1889	G1814	C1753	C1662	C1600
U2522	C2461	G2396	A2336	A2273	C2200	G2018	C1958	A1890	A1815	G1754	C1663	C1601
G2523	U2462	G2397	G2337	A2274	C2201	A2019	G1959	G1891	G1816	A1755	A1664	U1603
G2524	C2463	G2398	G2338	C2275	C2202	A2020	A1960	G1893	G1817	G1756	A1665	A1602
G2525	C2464	G2400	G2339	G2276	A2082	C2021	A1961	G1896	G1818	U1757	G1666	C1604
G2526	C2465	G2401	G2340	G2277	G2083	U2022	C1962	G1897	A1819	G1758	G1667	C1605
C2527	C2466	C2402	G2341	A2278	C2084	G2023	U1963	G1898	U1820	G1759	A1668	G1606
U2528	G2467	G2405	C2342	G2279	C2085	G2024	U1964	U1899	G1823	A1760	A1669	C1607
U2529	A2468	U2406	C2343	G2280	C2086	C2025	U1965	G1900	G1824	A1762	C1670	A1608
A2530	A2469	G2407	C2343	G2281	G2087	C2026	A1966	A1901	G1825	G1763	U1672	A1609
	G2470	U2408	U2344	G2282	G2088	G2027	A1967	G1902	G1826	G1764	U1673	A1610
G2535	C2471	G2283	G2345	C2283	U2089	U2028	C1967	C1902	G1827	C1765	U1674	C1611
G2536	G2472	C2284	A2346	C2284	G2090	G2029	U1968	G1903	G1827	C1766	C1675	C1612
U2537	A2411	C2285	C2347	G2285	U2091	A2030	A1969	G1904	G1828	A1766	C1675	G1613
C2538	C2473	A2412	U2348	A2286	G2092	A2031	A1970	G1905	G1829	C1767	A1674	A1614
C2539	C2474	G2413	G2349	A2287	G2093	G2032	A1971	G1906	C1830	U1768	A1677	C1615
C2540	A2476	A2414	C2350	A2288	G2094	A2033	A1972	G1907	G1831	G1769	A1677	A1616
A2541	C2477	G2289	G2351	A2289	C2095	U2034	G1973	C1908	C1832	C1770	G1678	C1617
A2542	A2478	G2290	A2352	G2290	U2096	G2035	C1974	A1913	U1833	C1771	G1681	A1618
G2543	U2418	C2291	G2353	C2229	C2097	C2036	U1975	C1914	U1834	G1772	G1682	G1619
U2419	C2480	C2292	G2354	G2230	U2098	G2037	U1976	U1915	G1835	A1773	C1683	G1620
G2481	C2481	C2293	C2355	C2231	G2100	G2038	A1977	U1916	C1836	C1774	C1684	U1621
U2545	G2482	G2421	C2356	U2232	G2101	C2039	A1978	U1917	C1837	U1775	C1685	G1622
U2547	C2483	C2295	U2357	U2233	C2102	C2040	G1979	U1918	C1838	G1776		G1623
G2548	G2484	U2296	G2358	G2234	U2102	U2041	U1980	A1918	G1839	U1777	U1689	G1624
G2549	C2485	C2297	C2359	G2235	C2103	A2042	C1981	A1919	G1840	U1778	A1689	C1625
G2550	G2486	A2298	A2360	C2236	C2104	C2043	C1982	C1920	G1841	U1779	A1690	G1626
C2551	C2487	G2299	A2361	G2237	G2105	C2044	C1983	G1921	C1842	A1780	C1691	G1627
U2552	A2488	G2300	G2362	G2238	C2106	C2045	G1984	U1922	G1844	G1781	U1692	G1628
G2553	C2489	C2301	C2363	G2239	G2107	C2046	G1985	U1923	G1845	C1782	U1693	U1629
U2554	G2490	G2302	C2364	G2240	C2108			C1924	G1846	A1783	C1694	G1630
U2555	U2491	A2430	G2365	A2241	C2109	G2049	C1988	U1925	A1847	A1784	G1695	C1631
U2492	U2492	A2431	A2305	A2242	A2110	C2050	C1989	U1926	G1848	A1785	G1696	A1632
G2493	U2493	C2306	C2306	U2243	C2111	A2051	C1990	A1927	G1849	A1786	G1697	A1632
G2494	A2433	G2307	A2369	U2244	C2112	G2052	U1991	A1928	G1850	A1787	A1698	G1633
G2495	A2434	C2308	G2370	U2245	C2113	G2053	G1992	G1929	G1851	C1788	G1699	A1634
C2496	A2435	A2309	G2371	G2246	C2114	A2054	U1993	G1930	A1854	A1789	A1700	G1635
A2497	G2436	A2310	C2372	A2247	C2115	C2055	C1994	U1931	G1855	C1790	A1701	C1636
C2498	U2437	A2311	G2373	C2248	C2116	G2056	U1995	A1932	G1856	A1791	A1637	A1637
C2499	U2438	C2312	C2374	U2249	C2117	A2057	C1996	G1933	G1857	G1792	G1705	C1638
U2500	A2439	C2313	G2375	G2250	C2118	A2058	G1997	G1934	G1858	C1793	U1706	U1639
C2501	C2440	C2314	A2376	G2251	C2119	A2059	G1998	G1935	A1859	U1794	G1707	C1640
G2502	C2441	G2315	A2377	U2252	C2120	A2060	C1999	A1936	G1860	C1795	C1708	A1641
A2503	C2442	C2316	A2378	G2253	C2121	G2061	G2000	A1937	G1862	U1796	U1709	G1642
U2504	C2443	C2317	C2379	C2254	C2122	A2062	A2001	A1938	G1863	C1797	C1710	
G2505	C2444	G2318	C2380	G2255	C2123	C2063	G2002	U1939	G1864	U1798	C1711	G1647
U2506	G2445	G2319	C2381	G2256	G2124	C2064	G2003	U1940	G1865	G1799	G1717	C1648
C2507	U2446	A2320	G2382	U2257	C2125	C2065	G2004	C1941	C1866	C1800	G1718	G1649
G2508	G2447	G2321	G2383	C2258	C2126	C2066	A2005	C1942	A1876	G1801	G1719	G1650
G2509	A2448	A2322	G2384	G2259	C2127	G2067	C2006		A1877	A1802	U1720	G1651
C2510	U2449	G2323	C2385	C2260	C2128	U2068	C2007	G1945	G1878	A1803	U1721	A1652
U2511	A2450	C2324	C2386	C2261	C2129	G2069	C2008	U1946	C1879	C1804	G1722	G1653
U2512	A2451	U2387	G2387	C2262	C2130	G2070	G2009	U1947	C1880	U1805	A1722	A1654
G2513	C2452	G2325	A2388	U2263	C2131	A2071	G2010	G1948	G1881	C1806	U1739	A1655
U2514	A2453	A2327	C2389	A2264	G2122	C2072	U2011	G1949	G1883	G1807		C1656
	G2454	A2328	G2390	A2265	G2123	C2073	U2012	U1950	A1884		G1746	C1657
	C2455	G2329	A2391	A2266	C2124	U2074	A2013	G1961	A1885	A1810		C1658
		G2330	A2392	A2269	C2125	U2075	A2014	A1952	C1886	G1811		U1659

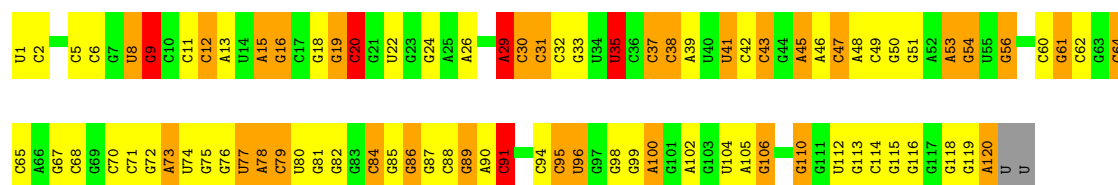


U1390	C1327	C1258	G	C1004	G944	G873	G808	U747	C683	C640	G577
A1393	C1328	G1259	A	C1005	G945	G874	G809	G748	G684	A644	A578
U1394	U1329	G1260	A	C1006	G946	G875	G810	C749	A685	G579	C580
A1395	C1330	C1261	G	C1007	G947	G879	U811		G686	C645	C581
U1396	A1331	U1263	C	C1008	G948	G880	C812	A752	C687	A646	C582
U1397	G1332	U1263	A	A1009	C949		C817	C753	U688	G647	G583
C1403	C1333	A1264	G	A1010	C950	C884	G818	C754	A689	G584	C584
A1404		U1205	C	G1011	G951	C885	A819	C755	G690	G651	
U1405	G1337	C1265	C	U1012	C952	C886	A820	C756	C692	G652	C587
U1406	G1338	C1266	C	C1013	A953	A887	A821	U757	A652A	A652A	U588
C1407	C1339	U1270	U	G1017	G954	C888	U822	C758	G693	G652C	C589
U1408	U1340	A1271	C	C1018	C955	C889		G759		C652D	A590
	U1341	G1272	C	U1019	G956	C890	C825	G760	G696	C652E	C591
A1412		A1273	U	A1020	A957	A890	U826	A761	C697	G	G592
G1413	G1344	C1274	U	A1021	U958	C893	U827	U762	C698	G	G593
	A1345	A1275	A	G1022	U959	C894	U828	G763	A699	G	U594
G1416	G1346	G1276	A	U1023	A960	U895	A829	G765	G700	C	
C1417	G1347	G1277	A	G1024	C961	A896	G830	C766	G701	C	U597
G1418	G1348	C1278	G	G1025	G962	C897	G831	U767	G702	C	G598
A1419	A1349	G1279	A	U1026	C968	C898	G832	G768	U783	A	G599
U1420	C1350	G1280	U	A1027	C965	A899	U833	G769	A705	C	A600
U1421	G1351	U1281	G	A1028		A900	C834	G770	A706	C	C601
G1422	U1352	C1282	C	G1031	U968	A901	A835	G771	G707	C	A602
G1423	A1353	G1283	C	A1032	C970	C902	G836	C772	G708	G	G603
G1424	A1354	A1284	G	U1033	C971	C903	C837	U773	U709	G	G604
G1425	G1355	C1285	U	G1034	G972	C904	C838	A774	C	C	C605
G1426	A1356	G1286	A	U1035	A973	U905	U839	G775	C	C	U606
A1427	U1357	A1287	U	G1038	G974	G906	C840	C776	G652T	G	U607
C1428	C1358	G1288	A	C1039	G975	U907	A841	A777	G652U	G	A608
G1429	A1359	U1289	G	G1040	G976	C908	G842	G778	C652V	G	A609
C1430	A1360	G1290	C	U1041	C977	A909	G843	U779	A653	G	G610
U1431	C1361	C1291	C	C1042	G978	C910	C844	G780	A654	C	C611
U1432	C1362	U1294	U	G1043	G979	C911	G845	A781	A655	C	G612
U1433	C1363	G1295	A	G	G980	C912	U847	A782	G656	C	G613
A1434	G1364	C1296	C	A	A981	C913	G848	A783	U657	C	U614
	A1365	C1297	U	A	C982	C914	A849	A784	C658	C	U614A
C1437	A1366	G1298	G	A	C983	C915	C850	G785	G659	C	G614B
U1438	A1367	C1299	G	A	A983	A917	U851	C786	G660	C	A614C
A1439	G1368	U1300	G	A	A984	A918	G852	U787	C661	C	G615
C1440	C1369	G1238	U	C	C985		G853	A788	G662	C	G616
G1441	C1370	C1239	C	G	C986	G921	G854	A789	G665	C	C618
G1442	U1371	U1240	A	A	G987	U922	G855	C790	G729	C	G619
	U1372	A1241	C	A	A988	C923	C856	C791	C730	C	G620
A1445	A1373	A1242	C	A	G989	C924	C857	G792	U687	C	C624
C1445A	C1374	G1243	C	A	A990	C925	U858	A793	G668	C	
C1446	C1375	A1244	A	G	C991	A926	C859	G794	G669	C	A627
G1447	G1376	G1245	G	G	C992	G927	U860	C795	A670	C	G628
G1448	G1377	A1246	A	A	G993	G928	A861	C796	C671	C	G629
A1449	A1378	U1313	G	A	C994	U930	G862	C797	C672	C	G630
C1450	C1379	C1314	G	G	C995	G931	A863	G798	C673	C	G631
C1450A	G1380	U1188	U	U	A996	G932	G864	G799	G674	C	A631
C1451		A1189	U	U	G997	A933	C865	A800	A675	C	A632
	A1384	G1251	G	G	U998	G934	A866	G801	A676	C	A633
U1452	C1385	G1252	C	C	U999	G935		U802	A677	C	G634
G1455	C1386	A1254	C	C	A1000	G938	G869	U803	G678	C	G635
	C1387	U1255	U	U	A1001	G939	A870	A804	C679	C	G636
C1462	G1388	G1256	U	U	G1002	G940	U871	G805	G680	C	A637
C1463	A1322	C1257	A	A	G1003	A941	A872	U807	G682	C	U639

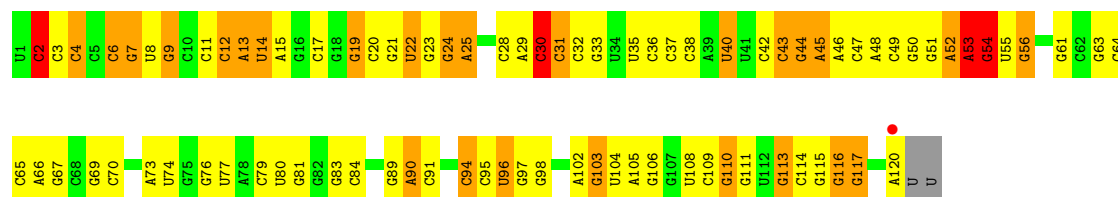




• Molecule 26: 5S Ribosomal RNA

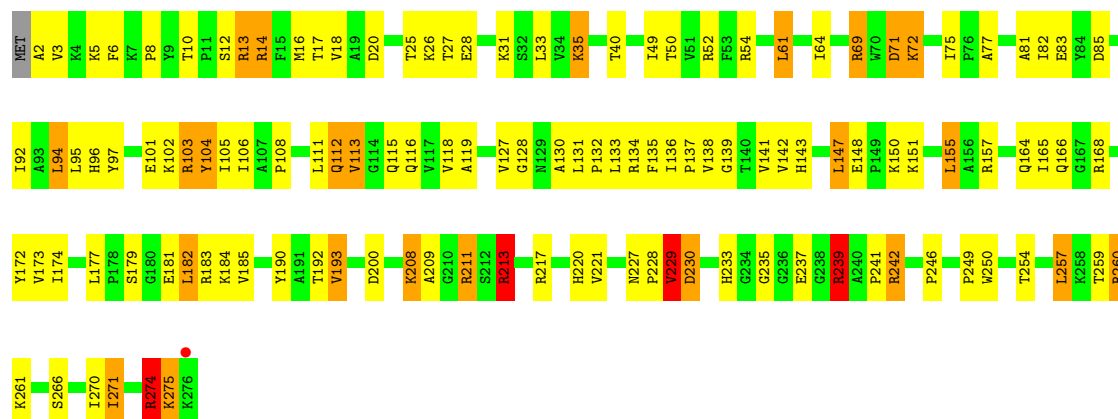


• Molecule 26: 5S Ribosomal RNA

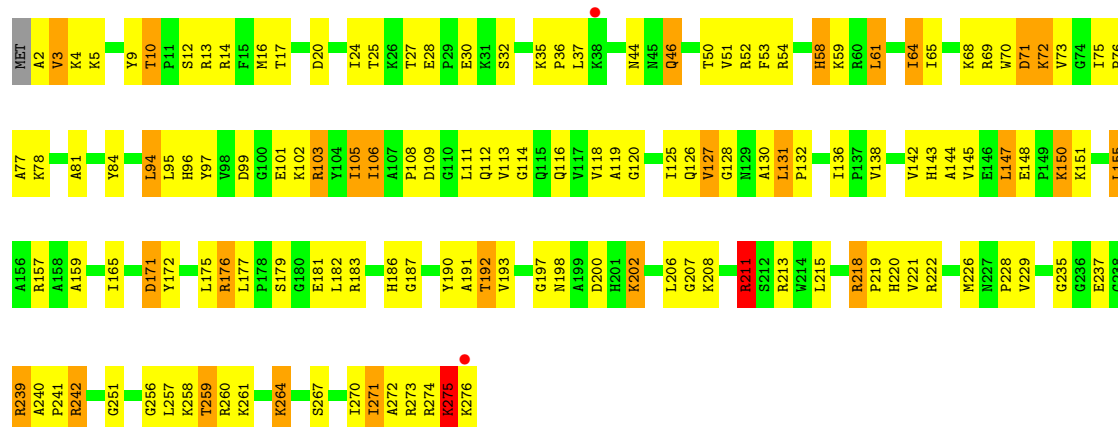


• Molecule 27: 50S Ribosomal Protein L2

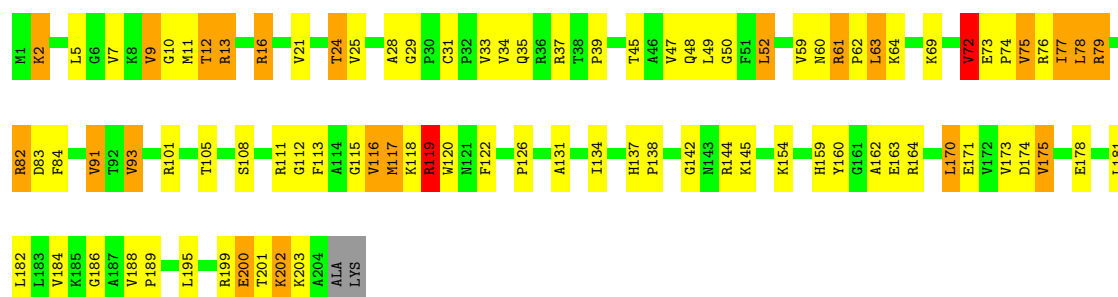




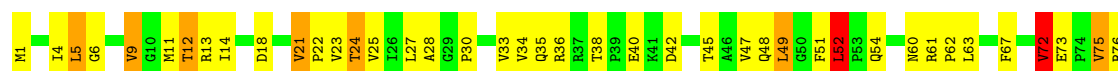
● Molecule 27: 50S Ribosomal Protein L2



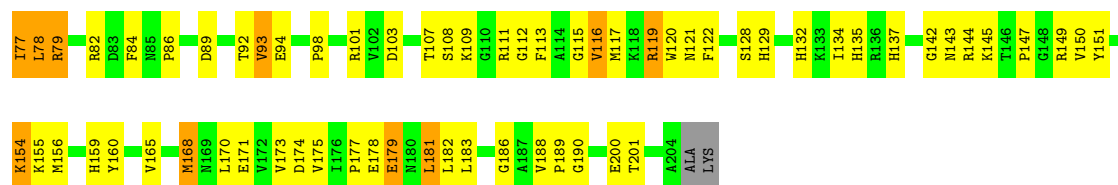
● Molecule 28: 50S Ribosomal Protein L3



● Molecule 28: 50S Ribosomal Protein L3

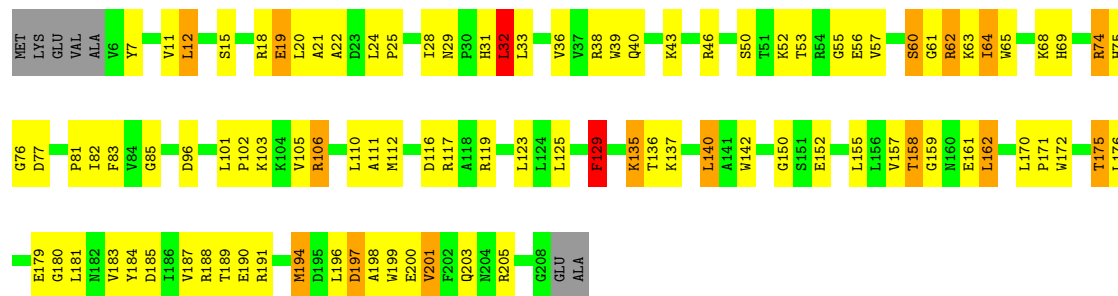






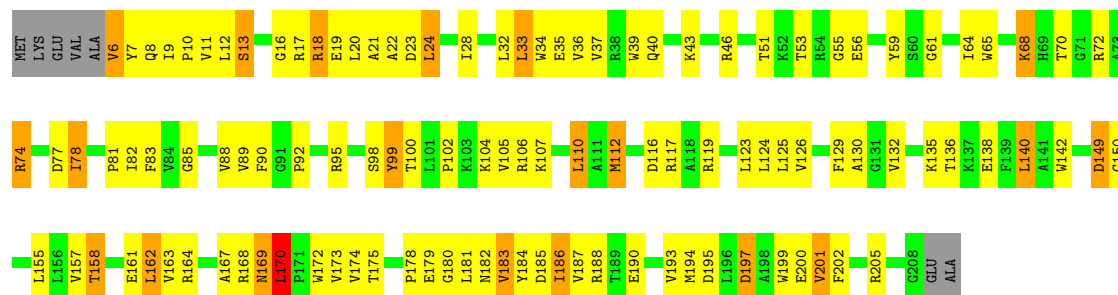
• Molecule 29: 50S Ribosomal Protein L4

Chain BF: 50% 38% 7% ..



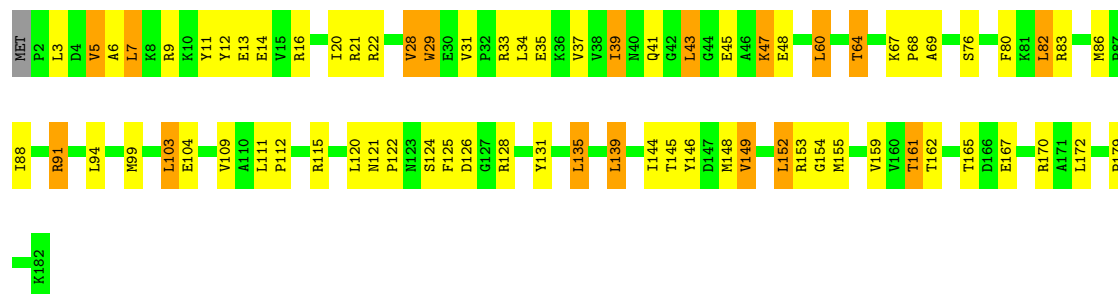
• Molecule 29: 50S Ribosomal Protein L4

Chain DF: 42% 44% 10% .



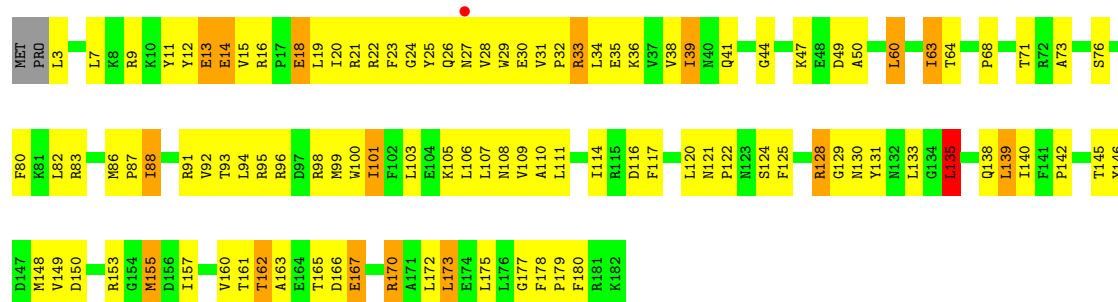
• Molecule 30: 50S Ribosomal Protein L5

Chain BG: 59% 31% 9% .



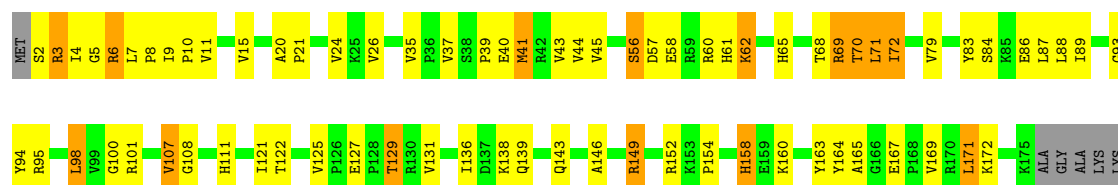
• Molecule 30: 50S Ribosomal Protein L5

Chain DG: 40% 49% 9% ..



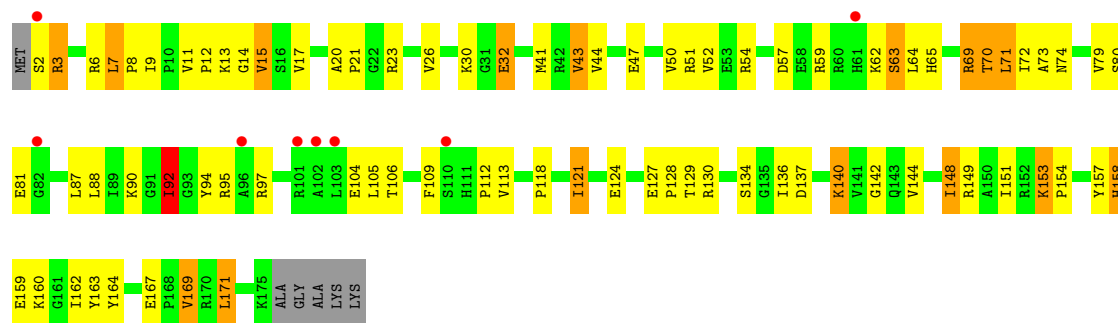
• Molecule 31: 50S Ribosomal Protein L6

Chain BH: 56% 33% 8%



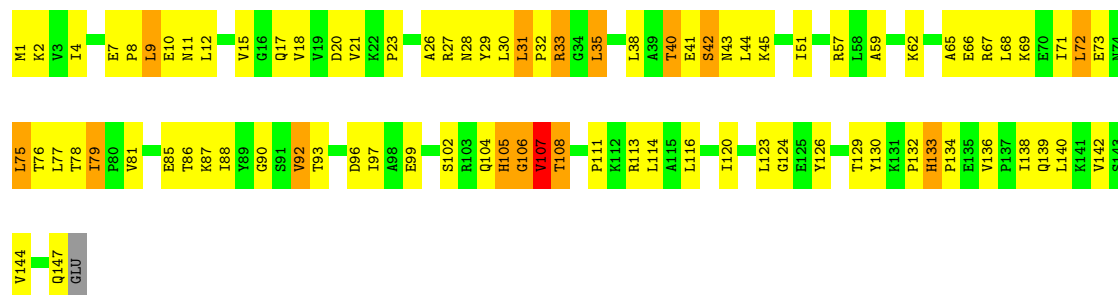
• Molecule 31: 50S Ribosomal Protein L6

Chain DH: 4% 51% 36% 9%



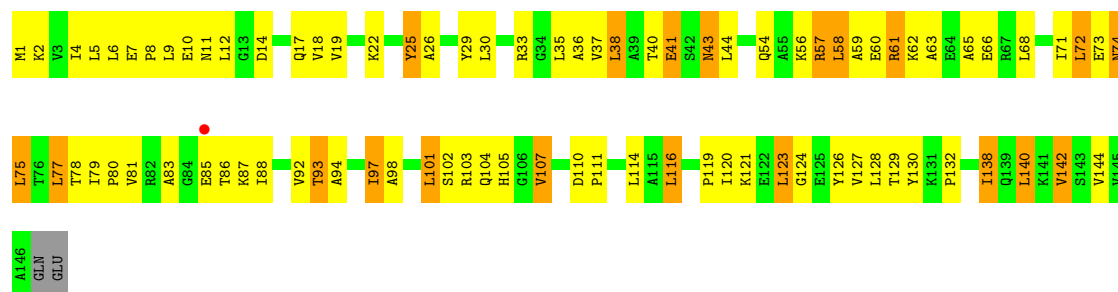
• Molecule 32: 50S Ribosomal Protein L9

Chain BI: 42% 47% 9%



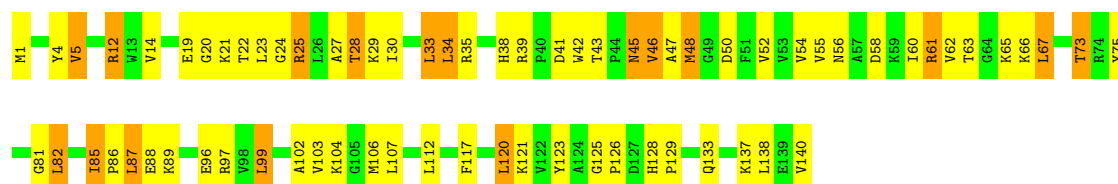
• Molecule 32: 50S Ribosomal Protein L9

Chain DI: 41% 45% 14%



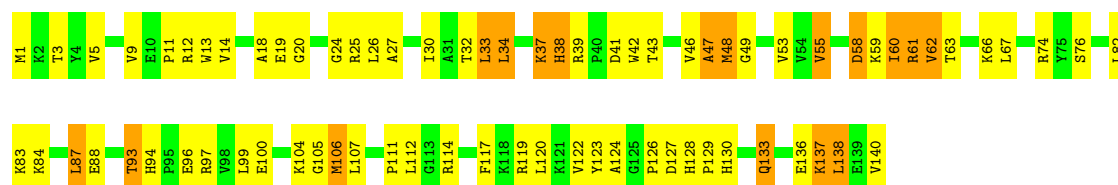
- Molecule 33: 50S Ribosomal Protein L13

Chain BN: 49% 39% 12%



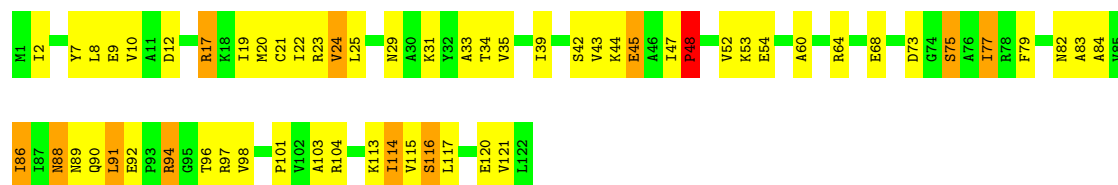
- Molecule 33: 50S Ribosomal Protein L13

Chain DN: 46% 41% 12%



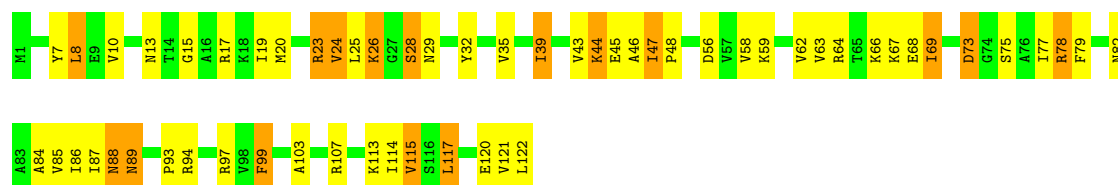
- Molecule 34: 50S Ribosomal Protein L14

Chain BO: 52% 39% 9%



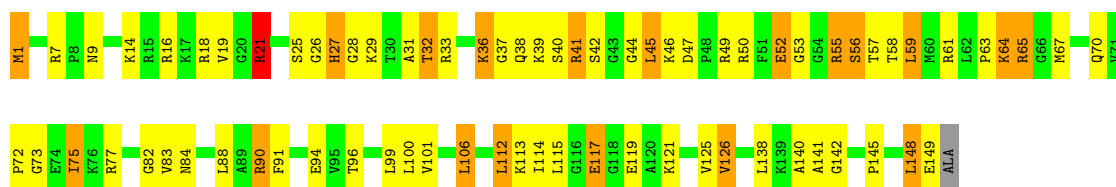
- Molecule 34: 50S Ribosomal Protein L14

Chain DO: 52% 34% 13%



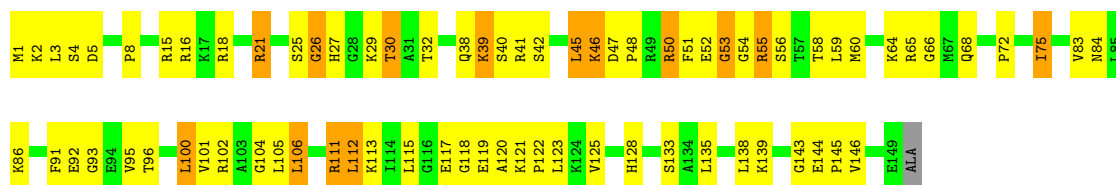
- Molecule 35: 50S Ribosomal Protein L15

Chain BP:  50% 36% 13% ..



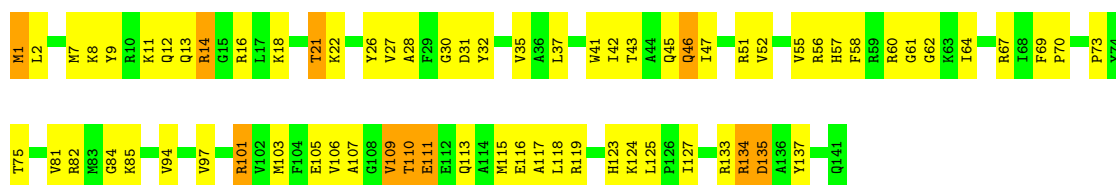
• Molecule 35: 50S Ribosomal Protein L15

Chain DP:  49% 41% 9% .



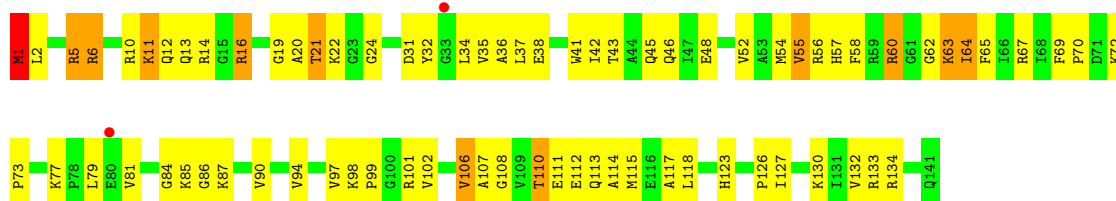
• Molecule 36: 50S Ribosomal Protein L16

Chain BQ:  50% 43% 7%



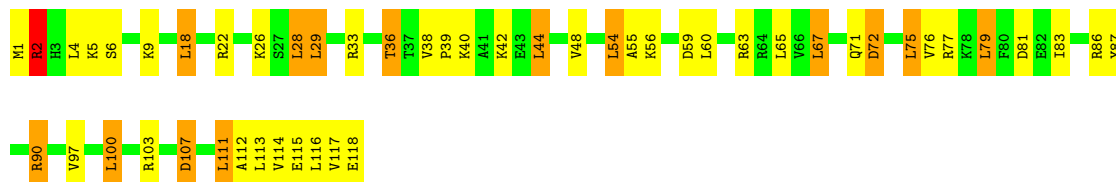
• Molecule 36: 50S Ribosomal Protein L16

Chain DQ:  % 46% 45% 8% .



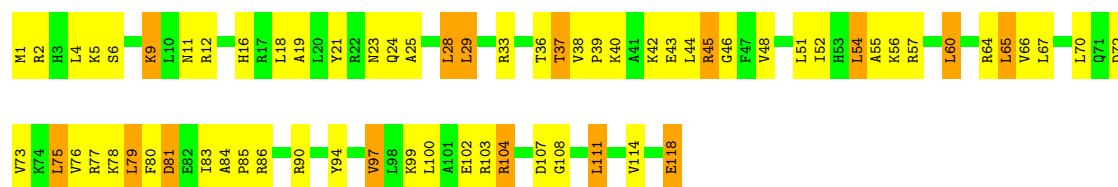
• Molecule 37: 50S Ribosomal Protein L17

Chain BR:  58% 30% 12% .



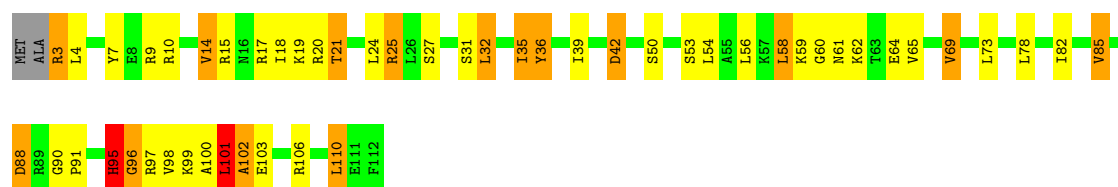
• Molecule 37: 50S Ribosomal Protein L17

Chain DR: 



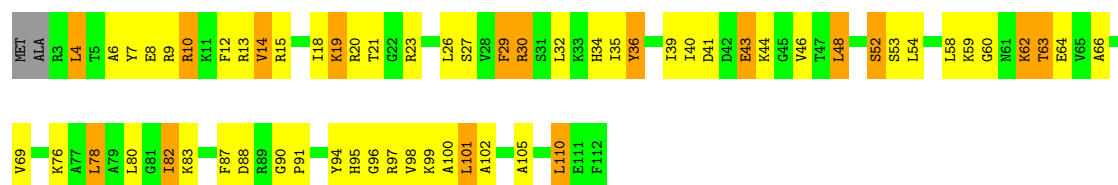
• Molecule 38: 50S Ribosomal Protein L18

Chain BS: 



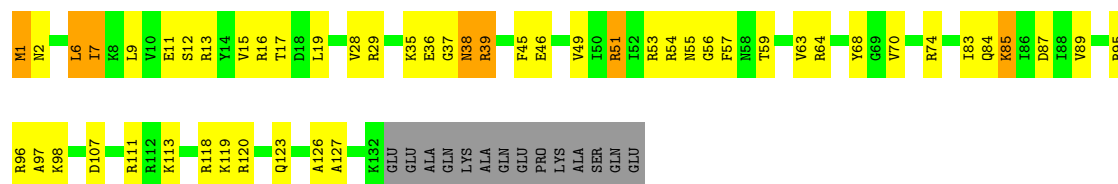
• Molecule 38: 50S Ribosomal Protein L18

Chain DS: 



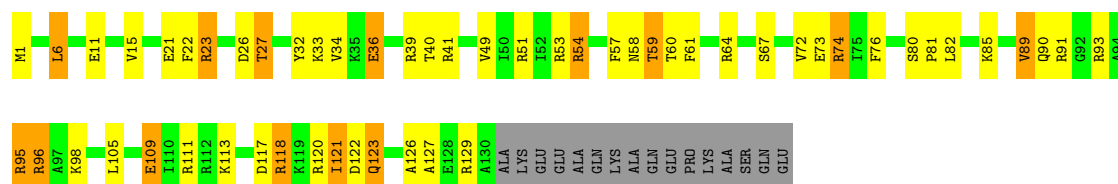
• Molecule 39: 50S Ribosomal Protein L19

Chain BT: 

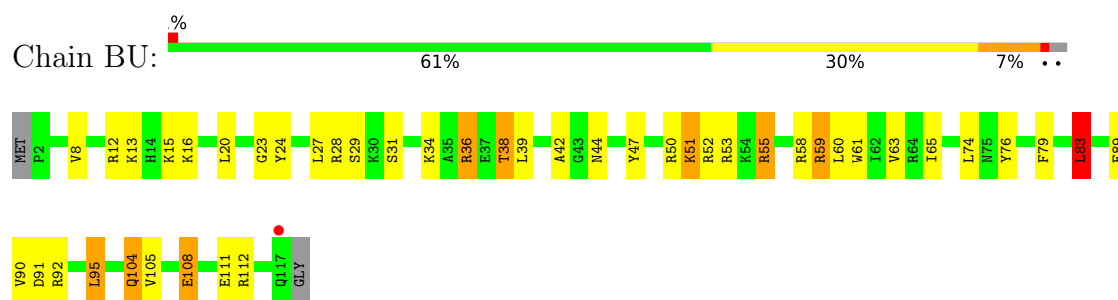


• Molecule 39: 50S Ribosomal Protein L19

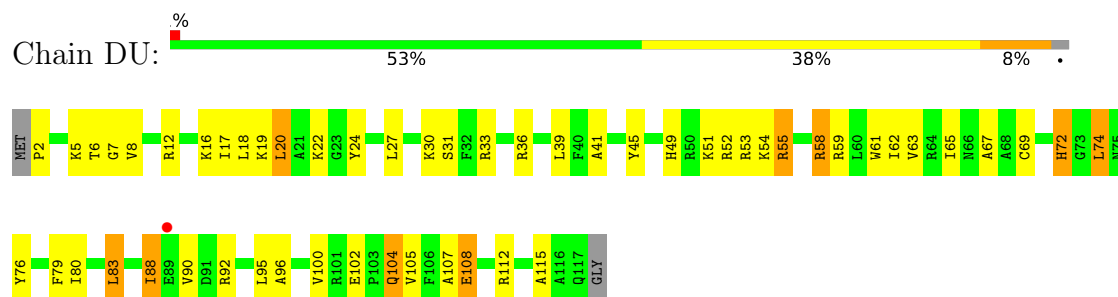
Chain DT: 



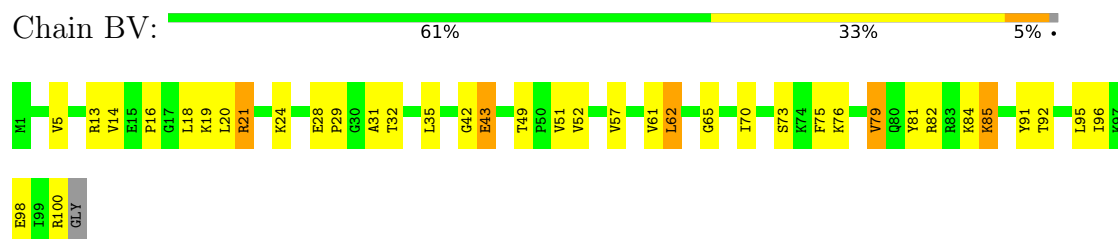
• Molecule 40: 50S Ribosomal Protein L20



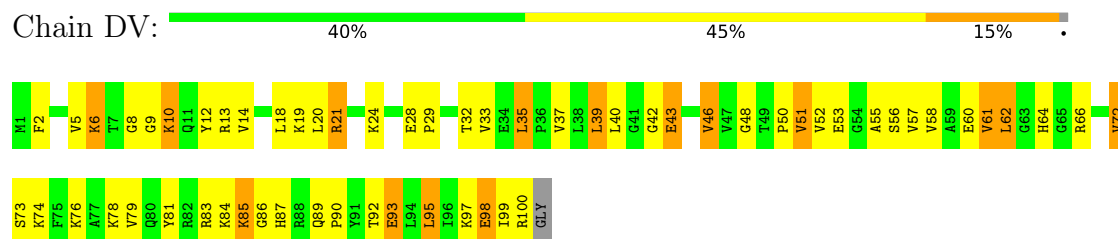
• Molecule 40: 50S Ribosomal Protein L20



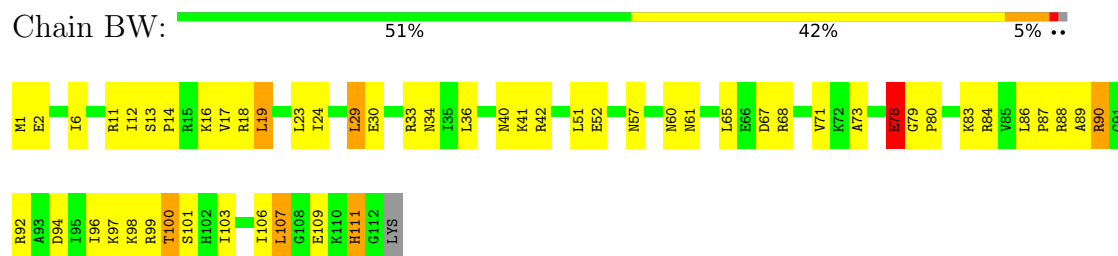
• Molecule 41: 50S Ribosomal Protein L21



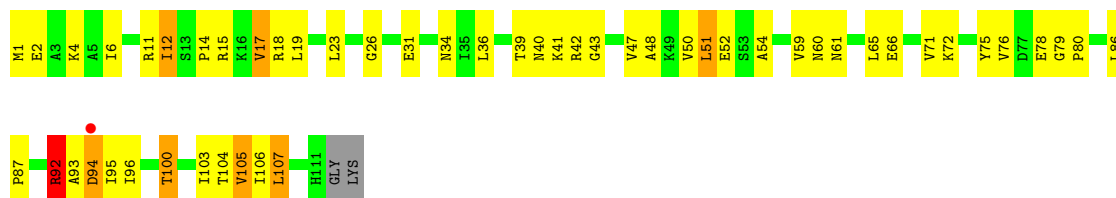
• Molecule 41: 50S Ribosomal Protein L21



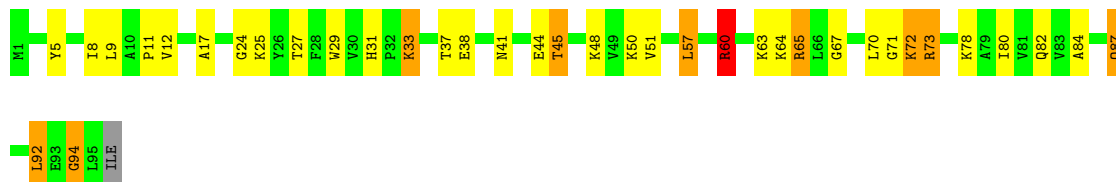
• Molecule 42: 50S Ribosomal Protein L22



• Molecule 42: 50S Ribosomal Protein L22



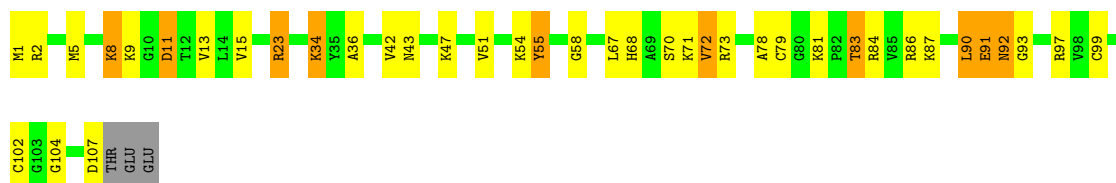
• Molecule 43: 50S Ribosomal Protein L23



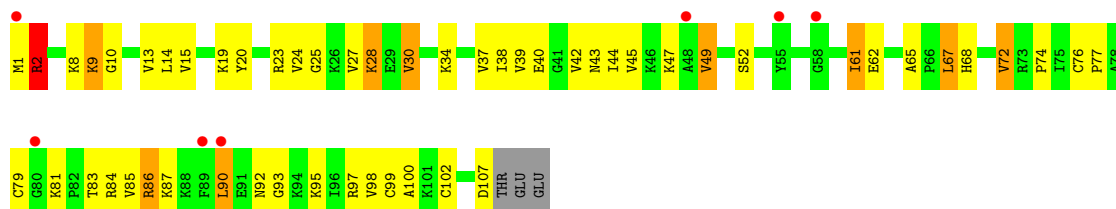
• Molecule 43: 50S Ribosomal Protein L23



• Molecule 44: 50S Ribosomal Protein L24

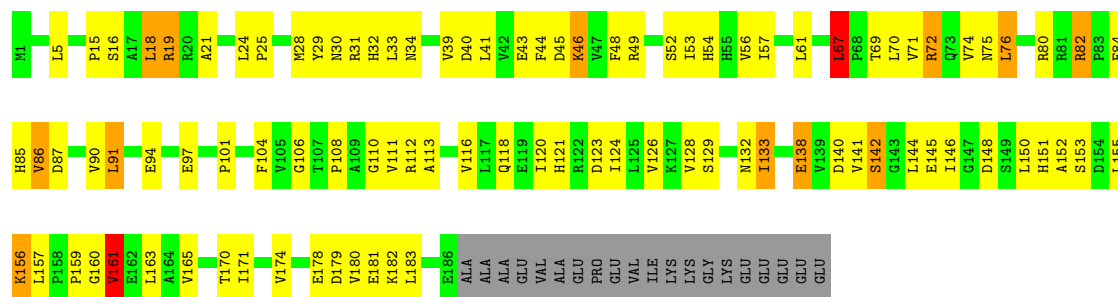


• Molecule 44: 50S Ribosomal Protein L24

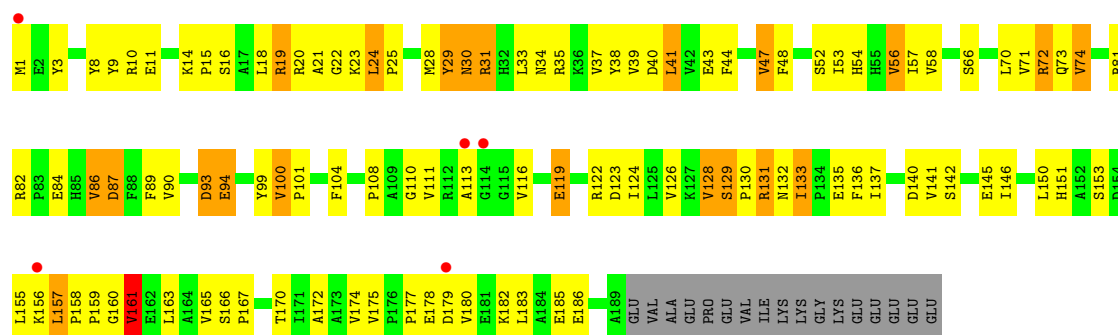


• Molecule 45: 50S Ribosomal Protein L25

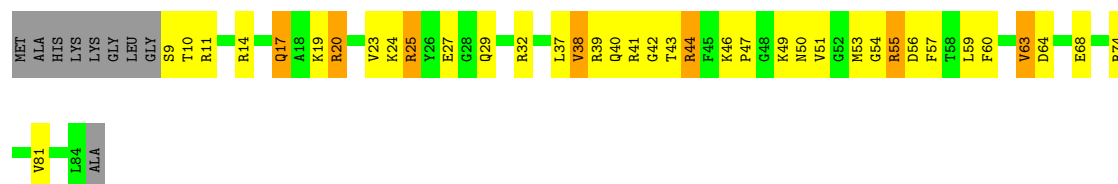




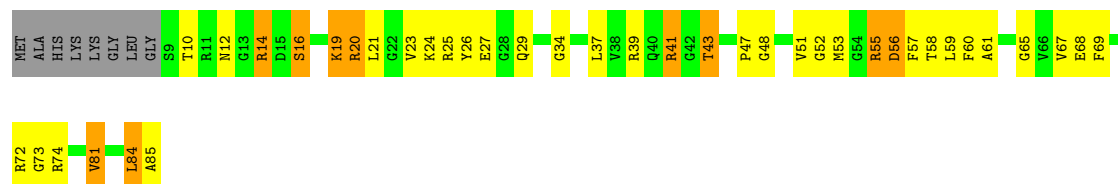
• Molecule 45: 50S Ribosomal Protein L25



• Molecule 46: 50S Ribosomal Protein L27



• Molecule 46: 50S Ribosomal Protein L27



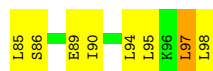
• Molecule 47: 50S Ribosomal Protein L28







## ● Molecule 47: 50S Ribosomal Protein L28



## ● Molecule 48: 50S Ribosomal Protein L29



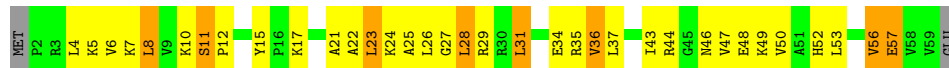
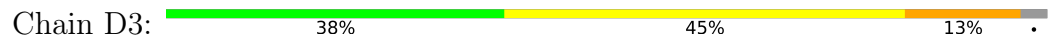
## ● Molecule 48: 50S Ribosomal Protein L29



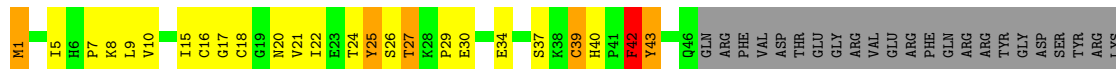
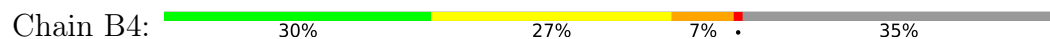
## ● Molecule 49: 50S Ribosomal Protein L30



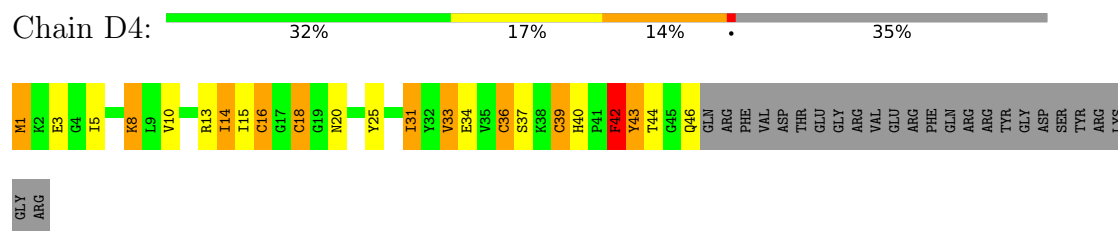
## ● Molecule 49: 50S Ribosomal Protein L30



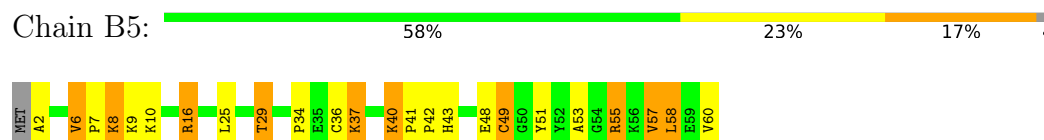
## ● Molecule 50: 50S Ribosomal Protein L31



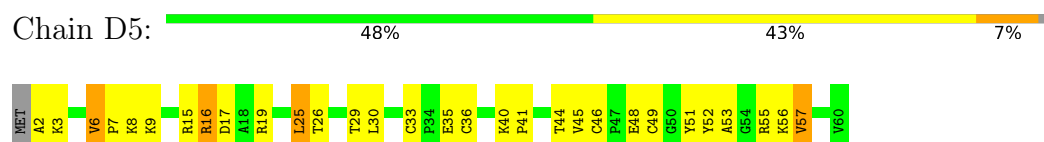
- Molecule 50: 50S Ribosomal Protein L31



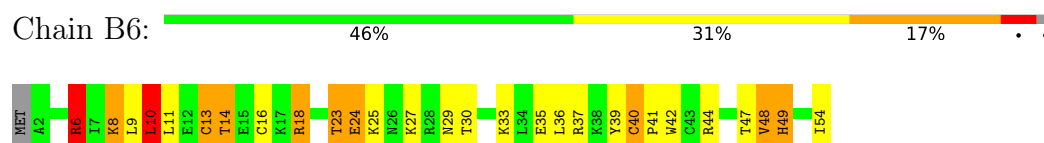
- Molecule 51: 50S Ribosomal Protein L32



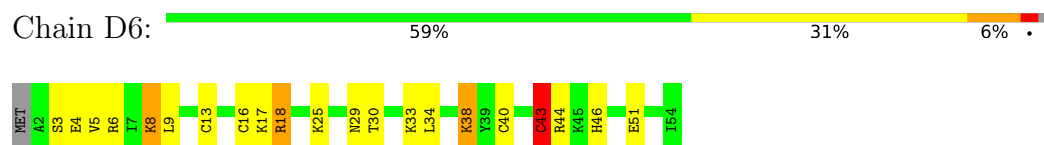
- Molecule 51: 50S Ribosomal Protein L32



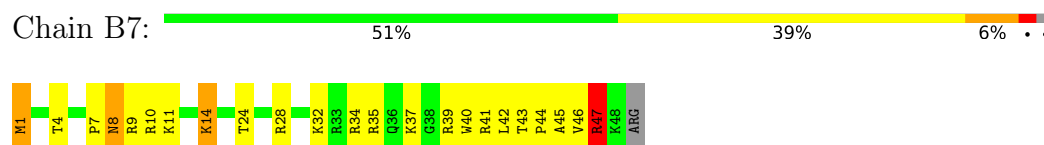
- Molecule 52: 50S Ribosomal Protein L33



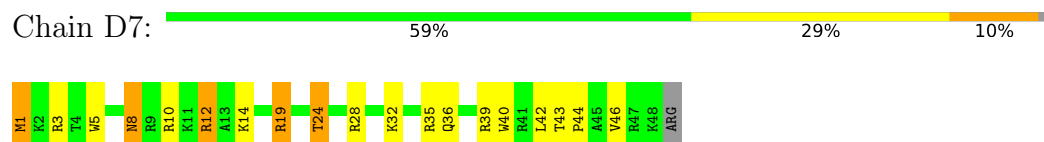
- Molecule 52: 50S Ribosomal Protein L33



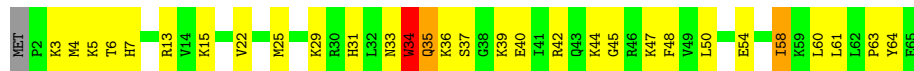
- Molecule 53: 50S Ribosomal Protein L34



- Molecule 53: 50S Ribosomal Protein L34



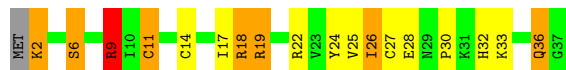
## • Molecule 54: 50S Ribosomal Protein L35

Chain B8:  52% 42% . . .

## • Molecule 54: 50S Ribosomal Protein L35

Chain D8:  2% 45% 48% 6% .

## • Molecule 55: 50S Ribosomal Protein L36

Chain B9:  49% 27% 19% . . .

## • Molecule 55: 50S Ribosomal Protein L36

Chain D9:  8% 41% 49% 5% 5%

## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	209.96Å 448.86Å 624.20Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	34.91 – 3.20 34.91 – 3.20	Depositor EDS
% Data completeness (in resolution range)	99.8 (34.91-3.20) 99.8 (34.91-3.20)	Depositor EDS
$R_{merge}$	0.28	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.32 (at 3.18Å)	Xtriage
Refinement program	PHENIX 1.7.3 _928	Depositor
R, $R_{free}$	0.188 , 0.245 0.186 , 0.243	Depositor DCC
$R_{free}$ test set	48002 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	73.8	Xtriage
Anisotropy	0.161	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.27 , 75.5	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.45$ , $\langle L^2 \rangle = 0.28$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
$F_o, F_c$ correlation	0.94	EDS
Total number of atoms	284877	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	80.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.56% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

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

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	0.97	30/35273 (0.1%)	1.68	779/55046 (1.4%)
1	CA	0.89	15/35152 (0.0%)	1.51	525/54858 (1.0%)
2	AB	0.67	3/1844 (0.2%)	0.87	1/2498 (0.0%)
2	CB	0.55	0/1852	0.79	1/2510 (0.0%)
3	AC	0.56	0/1458	0.84	0/1981
3	CC	0.53	0/1477	0.75	0/2006
4	AD	0.66	2/1550 (0.1%)	0.93	4/2106 (0.2%)
4	CD	0.70	3/1567 (0.2%)	0.95	4/2125 (0.2%)
5	AE	0.64	0/1121	0.90	0/1517
5	CE	0.68	0/1131	0.92	0/1529
6	AF	0.62	0/794	0.86	1/1082 (0.1%)
6	CF	0.60	0/797	0.81	0/1085
7	AG	0.53	0/1169	0.73	0/1580
7	CG	0.53	0/1166	0.77	0/1576
8	AH	0.63	0/1065	0.83	0/1445
8	CH	0.57	0/1069	0.80	0/1450
9	AI	0.60	0/879	0.96	1/1195 (0.1%)
9	CI	0.53	0/864	0.80	1/1177 (0.1%)
10	AJ	0.57	0/672	0.81	0/919
10	CJ	0.55	0/670	0.84	0/917
11	AK	0.70	0/858	0.91	1/1163 (0.1%)
11	CK	0.58	0/843	0.77	0/1144
12	AL	0.70	0/925	0.87	0/1251
12	CL	0.64	0/921	0.88	0/1247
13	AM	0.66	1/824 (0.1%)	0.92	1/1120 (0.1%)
13	CM	0.55	0/794	0.81	1/1081 (0.1%)
14	AN	0.59	0/482	0.86	2/642 (0.3%)
14	CN	0.60	0/478	0.86	0/638
15	AO	0.62	0/735	0.87	1/981 (0.1%)
15	CO	0.59	0/735	0.84	0/981
16	AP	0.60	0/662	0.99	3/898 (0.3%)
16	CP	0.60	0/677	0.91	0/917

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	AQ	0.70	0/836	0.90	0/1117
17	CQ	0.63	0/832	0.84	1/1113 (0.1%)
18	AR	0.64	0/519	0.96	3/699 (0.4%)
18	CR	0.59	0/519	0.79	0/699
19	AS	0.51	0/574	0.83	0/781
19	CS	0.46	0/543	0.73	1/740 (0.1%)
20	AT	0.57	0/716	0.82	0/947
20	CT	0.62	0/776	0.85	0/1026
21	AU	0.66	0/221	0.84	0/288
21	CU	0.60	0/184	0.78	0/244
22	AY	0.78	1/1043 (0.1%)	1.02	5/1399 (0.4%)
23	AV	1.07	3/1836 (0.2%)	1.55	36/2859 (1.3%)
23	CV	0.78	1/1836 (0.1%)	1.29	11/2859 (0.4%)
24	AX	0.94	0/147	1.18	0/227
24	CX	0.85	0/147	1.11	0/227
25	BA	1.52	551/66391 (0.8%)	2.06	3990/103628 (3.9%)
25	DA	1.06	69/65653 (0.1%)	1.63	1707/102473 (1.7%)
26	BB	1.26	6/2878 (0.2%)	1.93	156/4490 (3.5%)
26	DB	0.88	1/2878 (0.0%)	1.42	35/4490 (0.8%)
27	BD	1.02	3/2181 (0.1%)	1.14	8/2940 (0.3%)
27	DD	0.83	3/2186 (0.1%)	0.98	2/2944 (0.1%)
28	BE	0.96	0/1588	1.09	4/2145 (0.2%)
28	DE	0.72	0/1588	0.90	1/2145 (0.0%)
29	BF	0.93	0/1609	0.97	2/2177 (0.1%)
29	DF	0.64	0/1611	0.87	2/2180 (0.1%)
30	BG	0.70	1/1393 (0.1%)	0.92	0/1892
30	DG	0.53	0/1385	0.83	1/1881 (0.1%)
31	BH	0.84	0/1343	0.94	0/1820
31	DH	0.53	0/1343	0.76	1/1820 (0.1%)
32	BI	0.63	0/1081	0.92	2/1477 (0.1%)
32	DI	0.59	0/1072	0.85	1/1465 (0.1%)
33	BN	1.00	0/1139	1.10	3/1538 (0.2%)
33	DN	0.63	0/1139	0.83	0/1538
34	BO	0.96	0/933	1.03	2/1257 (0.2%)
34	DO	0.74	0/933	0.93	2/1257 (0.2%)
35	BP	0.89	0/1148	1.09	5/1529 (0.3%)
35	DP	0.65	0/1148	0.91	2/1529 (0.1%)
36	BQ	1.01	0/1143	1.04	4/1527 (0.3%)
36	DQ	0.67	0/1143	0.89	1/1527 (0.1%)
37	BR	0.90	0/982	1.08	3/1312 (0.2%)
37	DR	0.65	0/982	0.90	0/1312
38	BS	0.80	0/875	1.06	3/1168 (0.3%)
38	DS	0.55	0/883	0.87	0/1176

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
39	BT	0.89	0/1086	1.05	1/1455 (0.1%)
39	DT	0.68	0/1072	0.81	0/1437
40	BU	1.10	1/977 (0.1%)	1.09	5/1301 (0.4%)
40	DU	0.70	0/977	0.87	0/1301
41	BV	1.02	0/777	1.10	1/1044 (0.1%)
41	DV	0.67	0/781	0.86	1/1048 (0.1%)
42	BW	1.05	1/901 (0.1%)	1.10	3/1209 (0.2%)
42	DW	0.77	0/887	0.90	2/1192 (0.2%)
43	BX	0.99	0/756	1.06	2/1016 (0.2%)
43	DX	0.75	0/746	0.88	1/1005 (0.1%)
44	BY	0.85	0/798	1.03	2/1073 (0.2%)
44	DY	0.64	0/794	0.87	0/1067
45	BZ	0.80	0/1486	0.94	2/2022 (0.1%)
45	DZ	0.58	0/1483	0.80	0/2023
46	B0	0.95	0/602	1.10	3/804 (0.4%)
46	D0	0.64	0/615	0.89	0/820
47	B1	0.94	0/752	1.07	1/1003 (0.1%)
47	D1	0.70	0/752	0.92	2/1003 (0.2%)
48	B2	0.96	2/590 (0.3%)	1.00	1/781 (0.1%)
48	D2	0.63	0/586	0.79	1/779 (0.1%)
49	B3	1.02	0/463	1.07	0/623
49	D3	0.57	0/458	0.79	0/616
50	B4	0.62	0/358	0.97	2/487 (0.4%)
50	D4	0.66	0/358	0.82	1/487 (0.2%)
51	B5	1.01	1/469 (0.2%)	1.09	2/634 (0.3%)
51	D5	0.69	0/465	0.90	0/630
52	B6	0.96	0/456	1.09	2/609 (0.3%)
52	D6	0.73	0/444	0.87	0/595
53	B7	1.10	0/426	1.21	4/561 (0.7%)
53	D7	0.78	0/410	0.88	0/543
54	B8	0.99	0/516	1.14	2/679 (0.3%)
54	D8	0.75	0/516	0.93	0/679
55	B9	1.07	1/300 (0.3%)	1.25	3/395 (0.8%)
55	D9	0.68	0/295	0.87	0/390
All	All	1.07	699/303213 (0.2%)	1.58	7364/453838 (1.6%)

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	1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	#Chirality outliers	#Planarity outliers
1	CA	0	1
2	AB	0	4
2	CB	0	2
3	AC	0	2
4	AD	0	4
4	CD	0	5
5	AE	0	2
5	CE	0	1
7	AG	0	1
7	CG	0	1
9	AI	0	3
10	AJ	0	2
10	CJ	0	2
11	AK	0	1
12	AL	0	1
13	AM	0	3
13	CM	0	2
14	CN	0	1
16	CP	0	1
18	AR	0	1
20	AT	0	2
20	CT	0	2
21	CU	0	1
22	AY	0	1
27	BD	0	2
28	BE	0	2
28	DE	0	1
29	BF	0	2
29	DF	0	1
30	DG	0	3
31	DH	0	1
32	BI	0	3
34	BO	0	1
34	DO	0	1
35	BP	0	1
35	DP	0	1
36	BQ	0	2
36	DQ	0	1
38	BS	0	1
38	DS	0	1
39	BT	0	1
39	DT	0	1

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	#Chirality outliers	#Planarity outliers
43	BX	0	1
45	BZ	0	1
47	B1	0	1
47	D1	0	1
48	D2	0	1
50	B4	0	1
50	D4	0	1
51	B5	0	1
52	D6	0	1
All	All	0	82

All (699) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	1142(A)	A	N9-C4	-17.94	1.27	1.37
25	BA	528	A	N9-C4	-17.30	1.27	1.37
1	CA	189(D)	C	N3-C4	-15.70	1.23	1.33
25	BA	676	A	N9-C4	-15.14	1.28	1.37
25	BA	1021	A	N9-C4	-14.78	1.28	1.37
1	CA	129(A)	G	N1-C2	-14.59	1.26	1.37
1	CA	189(D)	C	C2-N3	-13.63	1.24	1.35
1	CA	129(A)	G	C6-N1	-13.61	1.30	1.39
25	BA	2287	A	N9-C4	-12.23	1.30	1.37
25	BA	945	A	C5-C6	-12.10	1.30	1.41
25	BA	1332	G	N9-C4	-12.06	1.28	1.38
1	AA	129(A)	G	C6-N1	-11.38	1.31	1.39
25	BA	330	A	N9-C4	-11.25	1.31	1.37
23	AV	1	C	OP3-P	-10.55	1.48	1.61
23	CV	1	C	OP3-P	-10.44	1.48	1.61
25	BA	1332	G	N3-C4	-10.33	1.28	1.35
25	BA	945	A	N9-C4	-10.15	1.31	1.37
23	AV	76	A	N9-C4	-9.95	1.31	1.37
25	DA	528	A	N9-C4	-9.93	1.31	1.37
25	BA	945	A	N7-C5	-9.84	1.33	1.39
1	AA	189(D)	C	C2-N3	-9.82	1.27	1.35
27	BD	28	GLU	CG-CD	9.38	1.66	1.51
25	BA	676	A	N9-C8	9.36	1.45	1.37
1	AA	129(A)	G	N1-C2	-8.85	1.30	1.37
25	BA	933	A	N9-C4	-8.76	1.32	1.37
25	BA	1676	A	N9-C4	-8.73	1.32	1.37
25	BA	1602	U	C2-N3	-8.70	1.31	1.37
25	BA	197	A	N3-C4	-8.67	1.29	1.34

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	2621	A	N9-C4	-8.66	1.32	1.37
25	BA	933	A	C5-C6	-8.52	1.33	1.41
25	BA	945	A	N3-C4	-8.52	1.29	1.34
27	BD	28	GLU	CB-CG	8.49	1.68	1.52
25	BA	2258	C	N1-C6	-8.48	1.32	1.37
25	BA	2287	A	C5-C6	-8.42	1.33	1.41
4	AD	9	CYS	CB-SG	8.41	1.96	1.82
25	BA	530	G	N3-C4	-8.34	1.29	1.35
25	BA	2502	G	C6-N1	-8.33	1.33	1.39
25	BA	528	A	C5-C6	-8.24	1.33	1.41
25	BA	530	G	N9-C8	8.22	1.43	1.37
25	BA	1210	A	C5-C6	-8.19	1.33	1.41
25	BA	451	C	N1-C6	-8.17	1.32	1.37
25	BA	1614	A	N9-C4	-8.17	1.32	1.37
1	AA	1227	A	N9-C4	-8.16	1.32	1.37
25	BA	676	A	C5-C4	8.14	1.44	1.38
4	CD	12	CYS	CB-SG	8.07	1.96	1.82
25	BA	37	C	N1-C6	-8.06	1.32	1.37
25	BA	2247	A	C6-N1	-8.03	1.29	1.35
25	BA	1569	A	N3-C4	-8.00	1.30	1.34
25	BA	1210	A	N9-C4	-7.95	1.33	1.37
25	BA	2377	A	N9-C4	-7.93	1.33	1.37
25	BA	1378	A	N9-C4	-7.87	1.33	1.37
25	BA	480	A	N7-C5	-7.86	1.34	1.39
1	AA	129(A)	G	C8-N7	7.85	1.35	1.30
25	BA	1251	C	N1-C6	-7.81	1.32	1.37
4	AD	26	CYS	CB-SG	7.80	1.95	1.82
25	BA	2510	C	N1-C6	-7.80	1.32	1.37
25	DA	590	A	N9-C4	-7.79	1.33	1.37
25	BA	502	A	C6-N1	-7.77	1.30	1.35
25	BA	2287	A	N3-C4	-7.76	1.30	1.34
25	BA	820	A	N3-C4	-7.75	1.30	1.34
27	DD	28	GLU	CG-CD	7.75	1.63	1.51
25	BA	1651	G	C6-N1	-7.74	1.34	1.39
25	BA	141	A	C5-C6	-7.74	1.34	1.41
25	BA	746	A	N7-C5	-7.72	1.34	1.39
27	BD	237	GLU	CG-CD	7.69	1.63	1.51
25	DA	1332	G	N9-C4	-7.64	1.31	1.38
25	BA	821	A	N7-C5	-7.63	1.34	1.39
25	BA	2058	A	N3-C4	-7.63	1.30	1.34
25	BA	2009	G	N3-C4	-7.60	1.30	1.35
25	BA	2274	A	N9-C4	-7.54	1.33	1.37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	1332	G	C5-C4	7.54	1.43	1.38
25	BA	697	C	N3-C4	-7.53	1.28	1.33
25	BA	141	A	N7-C5	-7.53	1.34	1.39
25	BA	71	A	N9-C4	-7.47	1.33	1.37
25	BA	587	C	N3-C4	-7.43	1.28	1.33
25	BA	1021	A	C5-C6	-7.43	1.34	1.41
25	BA	848	G	C5-C4	-7.43	1.33	1.38
25	BA	90	U	N3-C4	7.42	1.45	1.38
25	BA	139(A)	G	N3-C4	7.40	1.40	1.35
25	BA	1558	A	C5-C6	-7.40	1.34	1.41
25	BA	2844	G	N9-C8	-7.37	1.32	1.37
25	BA	2570	G	N9-C4	-7.35	1.32	1.38
25	BA	2070	G	N7-C5	-7.33	1.34	1.39
25	BA	2689	U	N3-C4	-7.33	1.31	1.38
1	CA	129(A)	G	C6-O6	7.32	1.30	1.24
25	BA	2826	A	N9-C4	-7.31	1.33	1.37
25	BA	2678	C	N1-C6	-7.28	1.32	1.37
25	DA	2565	A	N9-C4	-7.27	1.33	1.37
25	BA	1890	A	N9-C4	-7.26	1.33	1.37
25	BA	1177	A	N9-C4	7.26	1.42	1.37
25	BA	1977	A	N9-C4	-7.23	1.33	1.37
25	BA	528	A	N7-C5	-7.22	1.34	1.39
25	BA	71	A	N3-C4	-7.21	1.30	1.34
25	DA	761	A	N7-C5	-7.20	1.34	1.39
25	BA	2032	G	N7-C5	-7.20	1.34	1.39
25	BA	330	A	N3-C4	-7.18	1.30	1.34
25	BA	2725	A	N9-C4	-7.15	1.33	1.37
25	DA	2057	A	N3-C4	-7.13	1.30	1.34
25	BA	1332	G	C5-C6	-7.11	1.35	1.42
25	DA	2287	A	N9-C4	-7.08	1.33	1.37
25	BA	2060	A	N9-C4	-7.08	1.33	1.37
25	BA	1217	C	N1-C6	-7.04	1.32	1.37
25	BA	589	C	N3-C4	-7.03	1.29	1.33
1	CA	189(D)	C	N1-C6	7.01	1.41	1.37
25	BA	533	G	C5-C6	-7.00	1.35	1.42
25	BA	2037	G	C8-N7	-7.00	1.26	1.30
25	BA	2442	C	N3-C4	-6.93	1.29	1.33
25	BA	528	A	N3-C4	-6.93	1.30	1.34
25	BA	1384	A	N7-C5	-6.93	1.35	1.39
25	BA	2848	G	N7-C5	-6.91	1.35	1.39
25	BA	2430	A	N9-C4	-6.90	1.33	1.37
25	BA	705	A	C5-C4	-6.89	1.33	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	1384	A	N9-C4	-6.89	1.33	1.37
25	BA	676	A	C5-C6	-6.88	1.34	1.41
25	BA	2046	G	N7-C5	-6.88	1.35	1.39
25	BA	141	A	N9-C4	-6.87	1.33	1.37
25	BA	31	C	N1-C6	-6.84	1.33	1.37
25	BA	1570	A	N9-C4	-6.83	1.33	1.37
25	BA	1198	U	C2-N3	-6.81	1.32	1.37
25	BA	727	A	N9-C4	-6.81	1.33	1.37
25	BA	389	G	N3-C4	-6.78	1.30	1.35
25	BA	2825	C	N1-C6	-6.78	1.33	1.37
25	BA	860	U	C2-N3	-6.77	1.33	1.37
25	BA	983	A	C5-C4	-6.77	1.34	1.38
25	BA	689	A	N3-C4	-6.77	1.30	1.34
25	BA	218	A	N9-C4	-6.76	1.33	1.37
25	BA	652(B)	A	N9-C4	6.75	1.41	1.37
25	BA	697	C	N1-C6	-6.74	1.33	1.37
1	CA	189(D)	C	C4-N4	-6.73	1.27	1.33
25	DA	271(M)	G	N9-C4	6.73	1.43	1.38
25	BA	530	G	N9-C4	-6.72	1.32	1.38
25	BA	1331	A	N3-C4	-6.72	1.30	1.34
25	BA	1573	G	N9-C4	-6.71	1.32	1.38
25	BA	2776	A	N9-C4	-6.70	1.33	1.37
25	BA	465	G	N1-C2	-6.70	1.32	1.37
25	BA	575	A	N3-C4	-6.68	1.30	1.34
25	BA	195	A	N3-C4	-6.67	1.30	1.34
25	BA	314	A	N9-C4	-6.66	1.33	1.37
1	AA	787	A	N3-C4	-6.65	1.30	1.34
25	BA	1786	A	N3-C4	-6.64	1.30	1.34
25	BA	90	U	C2-N3	6.64	1.42	1.37
25	BA	503	A	N3-C4	-6.63	1.30	1.34
25	BA	1235	G	N3-C4	-6.63	1.30	1.35
25	BA	2697	G	N7-C5	-6.60	1.35	1.39
25	BA	265	A	C5-C6	-6.59	1.35	1.41
25	BA	671	C	N1-C6	-6.59	1.33	1.37
25	BA	2440	C	N1-C6	-6.59	1.33	1.37
25	BA	390	A	N9-C4	-6.58	1.33	1.37
27	DD	237	GLU	CB-CG	6.57	1.64	1.52
25	BA	1676	A	N3-C4	-6.57	1.30	1.34
25	BA	582	G	C6-N1	-6.56	1.34	1.39
25	BA	2607	G	C6-N1	-6.56	1.34	1.39
25	BA	2521	C	N1-C6	-6.56	1.33	1.37
25	BA	2203	U	N1-C2	-6.55	1.32	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	129	C	N1-C6	-6.54	1.33	1.37
25	DA	1698	A	N9-C4	-6.54	1.33	1.37
27	DD	28	GLU	CB-CG	6.53	1.64	1.52
25	BA	514	A	C6-N1	-6.52	1.30	1.35
25	BA	2286	A	C5-C4	6.50	1.43	1.38
1	AA	189(D)	C	N3-C4	-6.49	1.29	1.33
25	BA	1969	A	C6-N1	-6.49	1.31	1.35
25	BA	785	G	N9-C4	-6.48	1.32	1.38
25	BA	698	C	N1-C6	-6.48	1.33	1.37
25	BA	266	G	N7-C5	-6.48	1.35	1.39
25	BA	1128	A	C5-C4	-6.48	1.34	1.38
1	CA	115	G	N7-C5	-6.47	1.35	1.39
25	DA	2207	G	N7-C5	-6.46	1.35	1.39
25	BA	1545	A	N9-C4	-6.45	1.33	1.37
25	BA	450	G	N9-C8	-6.43	1.33	1.37
25	BA	1782	C	N1-C6	-6.43	1.33	1.37
25	BA	1698	A	C5-C4	6.42	1.43	1.38
25	BA	2442	C	N1-C6	-6.42	1.33	1.37
25	BA	2399	G	N9-C8	-6.41	1.33	1.37
25	BA	252	G	N3-C4	-6.41	1.30	1.35
25	BA	2073	C	N1-C6	-6.40	1.33	1.37
25	BA	12	U	N1-C2	6.40	1.44	1.38
25	BA	746	A	C5-C6	-6.40	1.35	1.41
25	DA	1689	A	N7-C5	-6.38	1.35	1.39
1	AA	1502	A	C5-C6	-6.38	1.35	1.41
25	BA	1286	A	C6-N1	-6.38	1.31	1.35
25	BA	973	A	N9-C8	-6.36	1.32	1.37
25	BA	2776	A	N3-C4	-6.36	1.31	1.34
25	BA	1332	G	N1-C2	6.36	1.42	1.37
25	BA	2319	G	N3-C4	-6.35	1.31	1.35
25	BA	761	A	N7-C5	-6.35	1.35	1.39
4	CD	26	CYS	CB-SG	6.34	1.93	1.82
25	BA	1803	A	N7-C5	-6.33	1.35	1.39
25	BA	918	A	N9-C4	-6.33	1.34	1.37
25	BA	632	A	C6-N1	-6.32	1.31	1.35
25	BA	2455	G	N3-C4	-6.30	1.31	1.35
25	BA	469	G	C6-N1	-6.29	1.35	1.39
25	BA	706	A	N9-C4	-6.29	1.34	1.37
25	BA	2005	A	N9-C4	-6.28	1.34	1.37
25	DA	1782	C	N1-C6	-6.27	1.33	1.37
25	BA	994	C	N1-C6	-6.26	1.33	1.37
25	BA	2605	U	N3-C4	-6.26	1.32	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	DA	571	A	N9-C4	-6.26	1.34	1.37
25	BA	745	G	N7-C5	-6.25	1.35	1.39
25	DA	1021	A	N9-C4	-6.25	1.34	1.37
25	BA	90	U	C4-O4	6.24	1.28	1.23
1	CA	129(A)	G	C8-N7	6.24	1.34	1.30
25	BA	530	G	N1-C2	6.23	1.42	1.37
25	BA	2319	G	C5-C6	-6.23	1.36	1.42
25	BA	1198	U	C2-O2	-6.23	1.16	1.22
25	BA	271(M)	G	N9-C4	6.22	1.43	1.38
25	BA	1021	A	N7-C5	-6.22	1.35	1.39
25	BA	784	A	C6-N1	-6.22	1.31	1.35
25	BA	2037	G	N1-C2	-6.21	1.32	1.37
25	BA	775	G	N9-C8	-6.21	1.33	1.37
25	BA	676	A	N3-C4	-6.21	1.31	1.34
25	BA	1158	C	C4-N4	-6.21	1.28	1.33
1	AA	1507	A	N9-C4	-6.20	1.34	1.37
25	BA	226	G	C5-C4	-6.19	1.34	1.38
25	BA	975(A)	G	C5-C4	-6.19	1.34	1.38
1	CA	189(D)	C	C2-O2	6.19	1.30	1.24
25	BA	800	A	N3-C4	-6.17	1.31	1.34
25	BA	463	G	C6-N1	-6.17	1.35	1.39
25	BA	1129	A	N9-C4	-6.17	1.34	1.37
25	BA	74	A	N3-C4	-6.17	1.31	1.34
25	BA	216	A	N3-C4	-6.17	1.31	1.34
25	BA	1026	U	N1-C2	6.17	1.44	1.38
25	BA	677	A	N7-C5	-6.16	1.35	1.39
25	BA	1008	C	N1-C6	-6.16	1.33	1.37
25	BA	1607	C	C2-N3	6.15	1.40	1.35
25	BA	70	G	C6-N1	-6.15	1.35	1.39
25	BA	2378	A	N9-C4	-6.14	1.34	1.37
25	BA	2082	A	N9-C4	-6.14	1.34	1.37
1	AA	129(A)	G	N7-C5	-6.14	1.35	1.39
25	BA	975	C	N3-C4	-6.14	1.29	1.33
25	BA	1250	G	N7-C5	-6.14	1.35	1.39
25	BA	127	A	C5-C4	-6.13	1.34	1.38
25	DA	945	A	C5-C6	-6.13	1.35	1.41
25	BA	449	A	C5-C6	-6.12	1.35	1.41
25	BA	2454	G	N1-C2	-6.12	1.32	1.37
25	BA	1145	C	N1-C2	-6.12	1.34	1.40
25	BA	2244	U	N3-C4	-6.10	1.32	1.38
25	BA	1332	G	N7-C5	-6.09	1.35	1.39
25	BA	1661	G	N9-C8	-6.08	1.33	1.37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	2689	U	C3'-O3'	6.08	1.50	1.42
25	BA	2207	G	N7-C5	-6.08	1.35	1.39
25	BA	1021	A	N3-C4	-6.07	1.31	1.34
25	BA	2429	G	N7-C5	-6.07	1.35	1.39
25	BA	973	A	N7-C5	-6.07	1.35	1.39
25	DA	528	A	N3-C4	-6.07	1.31	1.34
25	BA	514	A	C6-N6	-6.07	1.29	1.33
25	DA	2733	A	N9-C4	6.07	1.41	1.37
25	BA	676	A	N1-C2	6.06	1.39	1.34
1	CA	1279	A	N9-C4	6.05	1.41	1.37
25	BA	793	A	N7-C5	-6.04	1.35	1.39
25	BA	2417	C	N1-C6	-6.04	1.33	1.37
25	BA	749	C	N1-C6	-6.03	1.33	1.37
25	BA	215	G	C6-N1	-6.03	1.35	1.39
48	B2	31	GLU	CG-CD	6.02	1.60	1.51
25	BA	265	A	N7-C5	-6.02	1.35	1.39
25	BA	694	U	C2-N3	-6.02	1.33	1.37
25	BA	1564	C	N3-C4	-6.01	1.29	1.33
25	BA	801	G	N9-C8	-6.01	1.33	1.37
25	BA	139(A)	G	N9-C4	6.01	1.42	1.38
25	BA	1614	A	N3-C4	-6.01	1.31	1.34
25	BA	1045	A	N9-C4	6.00	1.41	1.37
25	BA	632	A	C5-C6	-5.99	1.35	1.41
25	BA	2015	A	N9-C4	-5.99	1.34	1.37
25	BA	1785	A	C5-C6	-5.98	1.35	1.41
25	BA	2005	A	C5-C4	-5.98	1.34	1.38
25	BA	2254	C	N1-C6	-5.98	1.33	1.37
25	BA	575	A	N7-C5	-5.98	1.35	1.39
25	BA	610	G	C6-N1	-5.97	1.35	1.39
25	BA	933	A	C6-N6	-5.97	1.29	1.33
25	BA	1948	G	C6-N1	-5.97	1.35	1.39
25	BA	1638	C	N1-C6	-5.96	1.33	1.37
25	BA	1893	C	N1-C6	-5.96	1.33	1.37
25	BA	1235	G	C6-N1	-5.96	1.35	1.39
25	DA	955	C	N3-C4	-5.96	1.29	1.33
25	BA	1890	A	N3-C4	-5.96	1.31	1.34
25	DA	1785	A	N7-C5	-5.95	1.35	1.39
1	CA	969	A	N9-C4	5.95	1.41	1.37
25	BA	2459	A	N9-C4	-5.94	1.34	1.37
25	BA	2869	G	N7-C5	-5.93	1.35	1.39
25	BA	2052	G	C6-O6	-5.92	1.18	1.24
25	BA	2588	G	C6-N1	-5.92	1.35	1.39

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	189	G	N9-C8	-5.92	1.33	1.37
25	BA	2442	C	C2-N3	-5.92	1.31	1.35
25	DA	861	A	N9-C4	5.92	1.41	1.37
25	BA	1648	C	C2-N3	-5.91	1.31	1.35
25	BA	1607	C	N3-C4	5.90	1.38	1.33
25	BA	2705	A	N9-C4	-5.90	1.34	1.37
25	BA	113	G	N9-C4	-5.90	1.33	1.38
25	BA	980	A	N7-C5	-5.90	1.35	1.39
25	BA	481	G	C3'-O3'	5.90	1.50	1.42
25	BA	139(A)	G	C2-N3	5.89	1.37	1.32
25	DA	2207	G	N9-C8	-5.89	1.33	1.37
25	BA	1367	A	N7-C5	-5.89	1.35	1.39
25	BA	1376	C	N1-C6	-5.88	1.33	1.37
25	BA	2027	G	N1-C2	-5.87	1.33	1.37
25	BA	1241	A	N9-C4	-5.87	1.34	1.37
25	BA	1816	G	C2-N3	5.87	1.37	1.32
25	BA	375	C	N1-C6	-5.87	1.33	1.37
25	BA	1660	C	N3-C4	-5.87	1.29	1.33
25	BA	2019	A	C5-C6	-5.87	1.35	1.41
25	BA	1854	A	N9-C4	-5.86	1.34	1.37
25	BA	2368	C	N1-C6	-5.86	1.33	1.37
25	BA	2441	C	N3-C4	-5.86	1.29	1.33
25	BA	1252	G	C5-C4	-5.85	1.34	1.38
25	BA	388	G	N7-C5	-5.85	1.35	1.39
25	BA	1384	A	C5-C4	-5.84	1.34	1.38
25	BA	751	A	N3-C4	-5.84	1.31	1.34
25	BA	1791	A	N3-C4	-5.84	1.31	1.34
25	BA	2000	G	N9-C8	-5.84	1.33	1.37
25	DA	1332	G	C2-N3	-5.84	1.28	1.32
25	BA	449	A	N9-C4	-5.83	1.34	1.37
25	BA	1269	A	C6-N1	-5.83	1.31	1.35
25	BA	1375	C	N1-C6	-5.82	1.33	1.37
25	BA	1216	G	N7-C5	-5.82	1.35	1.39
25	BA	2002	G	C8-N7	-5.82	1.27	1.30
25	BA	832	G	N3-C4	-5.82	1.31	1.35
25	DA	2451	A	N9-C4	-5.81	1.34	1.37
25	DA	2598	A	C5-C6	-5.81	1.35	1.41
25	BA	2454	G	C6-N1	-5.81	1.35	1.39
25	DA	1625	C	N1-C6	-5.81	1.33	1.37
25	BA	2244	U	C2-N3	-5.80	1.33	1.37
25	BA	1678	G	N3-C4	-5.80	1.31	1.35
25	BA	1360	A	N9-C4	-5.79	1.34	1.37

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
48	B2	5	GLU	CG-CD	5.78	1.60	1.51
25	BA	2015	A	N3-C4	-5.78	1.31	1.34
25	BA	2064	C	N1-C6	-5.77	1.33	1.37
25	BA	1773	A	N7-C5	-5.77	1.35	1.39
25	BA	1268	A	C6-N1	-5.76	1.31	1.35
25	BA	2071	A	N9-C4	-5.76	1.34	1.37
25	BA	2453	A	N7-C5	-5.76	1.35	1.39
25	BA	1210	A	N3-C4	-5.76	1.31	1.34
25	BA	1785	A	N7-C5	-5.76	1.35	1.39
25	BA	1210	A	N7-C5	-5.75	1.35	1.39
25	BA	2431	U	C2-N3	-5.75	1.33	1.37
25	BA	2848	G	C6-N1	-5.75	1.35	1.39
25	BA	1275	A	N7-C5	-5.75	1.35	1.39
25	DA	733	G	N7-C5	-5.74	1.35	1.39
25	BA	1961	C	N1-C6	-5.74	1.33	1.37
13	AM	117	VAL	CB-CG1	5.74	1.64	1.52
25	BA	1992	G	C4'-C3'	-5.73	1.46	1.52
25	BA	1253	A	C5-C4	-5.73	1.34	1.38
25	BA	587	C	N1-C6	-5.72	1.33	1.37
25	BA	994	C	N3-C4	-5.71	1.29	1.33
25	BA	382	G	N1-C2	-5.71	1.33	1.37
25	BA	1368	G	N3-C4	-5.71	1.31	1.35
25	DA	1773	A	N3-C4	-5.71	1.31	1.34
25	BA	2588	G	N3-C4	-5.71	1.31	1.35
2	AB	239	VAL	CA-CB	5.70	1.66	1.54
25	DA	753	C	N1-C6	-5.70	1.33	1.37
25	BA	780	G	C6-N1	-5.70	1.35	1.39
25	DA	2689	U	C3'-O3'	5.69	1.50	1.42
1	AA	733	A	C5-C4	-5.69	1.34	1.38
25	BA	229	A	N9-C4	5.69	1.41	1.37
25	BA	988	A	N9-C8	-5.69	1.33	1.37
25	BA	561	G	N1-C2	-5.68	1.33	1.37
25	DA	1142(A)	A	N9-C4	-5.67	1.34	1.37
25	BA	1641	A	N7-C5	-5.67	1.35	1.39
25	BA	973	A	N3-C4	-5.66	1.31	1.34
25	BA	1406	U	C4-O4	-5.66	1.19	1.23
25	BA	1948	G	N1-C2	-5.65	1.33	1.37
25	DA	756	C	N1-C6	-5.65	1.33	1.37
25	BA	823	G	N9-C4	-5.65	1.33	1.38
25	BA	2274	A	C6-N6	-5.65	1.29	1.33
25	BA	1403	C	N1-C6	-5.64	1.33	1.37
25	BA	804	A	N7-C5	-5.64	1.35	1.39

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	1807	G	N7-C5	-5.64	1.35	1.39
25	BA	2377	A	C5-C6	-5.64	1.35	1.41
25	BA	988	A	C5-C4	-5.64	1.34	1.38
25	BA	2588	G	C2-N3	-5.64	1.28	1.32
51	B5	49	CYS	CB-SG	-5.62	1.72	1.81
25	BA	1698	A	C5-C6	-5.62	1.35	1.41
25	BA	1351	C	N3-C4	-5.62	1.30	1.33
25	BA	804	A	N9-C4	-5.60	1.34	1.37
1	AA	787	A	N9-C4	-5.60	1.34	1.37
25	BA	2060	A	P-O5'	-5.60	1.54	1.59
25	BA	492	A	N7-C5	-5.60	1.35	1.39
25	BA	1384	A	N3-C4	-5.59	1.31	1.34
25	BA	2044	C	N1-C6	-5.59	1.33	1.37
25	BA	783	A	C6-N1	-5.59	1.31	1.35
25	DA	2429	G	N7-C5	-5.59	1.35	1.39
25	BA	2819	G	C5-C4	-5.59	1.34	1.38
25	BA	951	C	N3-C4	-5.59	1.30	1.33
25	BA	206	U	C4-O4	-5.58	1.19	1.23
1	AA	768	A	N3-C4	-5.58	1.31	1.34
25	BA	2680	C	N1-C6	-5.58	1.33	1.37
25	BA	2066	C	N1-C6	-5.58	1.33	1.37
25	BA	2510	C	N3-C4	-5.55	1.30	1.33
25	BA	2399	G	C5-C4	-5.55	1.34	1.38
25	BA	2772	C	N1-C6	-5.55	1.33	1.37
25	BA	2287	A	N7-C5	-5.55	1.35	1.39
25	BA	518	G	N9-C8	-5.54	1.33	1.37
25	BA	745	G	C8-N7	-5.54	1.27	1.30
25	DA	1678	G	C6-N1	-5.54	1.35	1.39
25	BA	1393	A	N3-C4	-5.53	1.31	1.34
25	DA	141	A	C5-C6	-5.52	1.36	1.41
25	BA	2536	G	C6-N1	-5.52	1.35	1.39
25	BA	389	G	N9-C4	-5.52	1.33	1.38
25	BA	2541	A	C5-C6	-5.52	1.36	1.41
25	BA	1107	G	N9-C4	5.51	1.42	1.38
25	BA	567	A	N7-C5	-5.51	1.35	1.39
25	BA	1553	A	N3-C4	-5.51	1.31	1.34
25	BA	147	U	C4-O4	5.51	1.28	1.23
25	BA	1384	A	C5-C6	-5.51	1.36	1.41
25	BA	1106	G	C6-N1	-5.50	1.35	1.39
25	BA	1630	G	C6-N1	-5.50	1.35	1.39
25	BA	90	U	N1-C2	5.50	1.43	1.38
26	BB	81	G	N3-C4	-5.50	1.31	1.35

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	2005	A	N3-C4	-5.50	1.31	1.34
25	DA	191	A	N7-C5	-5.50	1.35	1.39
1	AA	1502	A	P-O5'	-5.50	1.54	1.59
1	AA	1530	G	N9-C4	-5.50	1.33	1.38
23	AV	1	C	N1-C6	5.50	1.40	1.37
25	BA	177	G	C6-N1	-5.49	1.35	1.39
25	BA	1831	G	N3-C4	-5.49	1.31	1.35
25	DA	265	A	N7-C5	-5.49	1.35	1.39
25	BA	1442	G	N3-C4	-5.49	1.31	1.35
25	DA	2581	G	C6-N1	-5.49	1.35	1.39
25	BA	34	C	N1-C2	5.49	1.45	1.40
26	BB	53	A	N7-C5	-5.48	1.35	1.39
25	BA	1977	A	N9-C8	-5.48	1.33	1.37
25	BA	1992	G	C3'-C2'	5.48	1.58	1.52
25	BA	1434	A	N9-C4	-5.48	1.34	1.37
25	BA	51	G	N9-C8	-5.48	1.34	1.37
25	BA	465	G	C6-N1	-5.48	1.35	1.39
25	BA	1158	C	N3-C4	-5.48	1.30	1.33
25	BA	1698	A	N9-C4	-5.48	1.34	1.37
25	BA	2346	A	N9-C4	-5.48	1.34	1.37
25	BA	16	G	N3-C4	-5.47	1.31	1.35
25	BA	215	G	N1-C2	-5.47	1.33	1.37
25	BA	2617	C	N1-C6	-5.47	1.33	1.37
25	BA	725	G	C6-O6	5.47	1.29	1.24
25	BA	797	C	N1-C6	-5.47	1.33	1.37
25	BA	632	A	C6-N6	-5.47	1.29	1.33
25	BA	2327	A	C5-C4	-5.47	1.34	1.38
25	BA	2002	G	C5-C4	-5.46	1.34	1.38
25	DA	1698	A	C5-C6	-5.46	1.36	1.41
25	BA	2730	C	N1-C6	-5.46	1.33	1.37
25	DA	1776	G	N7-C5	-5.46	1.35	1.39
25	BA	975(A)	G	N3-C4	-5.46	1.31	1.35
25	BA	1141	U	C2-N3	-5.46	1.33	1.37
25	BA	2520	C	N1-C6	-5.45	1.33	1.37
25	BA	1648	C	N1-C6	-5.45	1.33	1.37
1	CA	129(A)	G	N3-C4	5.44	1.39	1.35
25	DA	1332	G	N3-C4	-5.44	1.31	1.35
25	DA	1669	A	N3-C4	-5.44	1.31	1.34
25	BA	751	A	N9-C4	-5.43	1.34	1.37
25	BA	792	G	N1-C2	-5.43	1.33	1.37
25	BA	2073	C	N3-C4	-5.43	1.30	1.33
55	B9	11	CYS	CB-SG	-5.43	1.73	1.81

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	2059	A	N9-C4	-5.43	1.34	1.37
25	BA	677	A	N3-C4	-5.43	1.31	1.34
25	BA	1570	A	C5-C6	-5.42	1.36	1.41
25	DA	450	G	C6-O6	5.41	1.29	1.24
25	BA	460	A	C6-N1	-5.41	1.31	1.35
25	BA	492	A	N9-C4	-5.41	1.34	1.37
30	BG	29	TRP	CB-CG	-5.41	1.40	1.50
25	BA	824	A	C6-N1	-5.41	1.31	1.35
25	BA	199	A	C5-C4	-5.41	1.34	1.38
25	BA	819	A	C5-C4	-5.40	1.34	1.38
25	BA	1164	G	N9-C8	-5.40	1.34	1.37
25	BA	2711	A	N9-C4	-5.40	1.34	1.37
25	BA	1758	G	N7-C5	-5.40	1.36	1.39
25	BA	2392	A	N7-C5	-5.40	1.36	1.39
40	BU	89	GLU	CG-CD	5.39	1.60	1.51
25	BA	1204	A	N9-C4	-5.39	1.34	1.37
25	BA	1349	A	N9-C4	-5.39	1.34	1.37
25	BA	1966	A	N9-C4	-5.39	1.34	1.37
25	BA	2537	U	C2-N3	-5.38	1.33	1.37
25	BA	687	C	N1-C6	-5.38	1.33	1.37
25	BA	1046	A	N9-C4	5.38	1.41	1.37
25	BA	1616	A	N7-C5	-5.38	1.36	1.39
1	AA	1392	G	N3-C4	-5.37	1.31	1.35
25	BA	1937	A	N9-C8	-5.37	1.33	1.37
25	BA	207	A	N7-C5	-5.37	1.36	1.39
25	BA	88	G	N7-C5	-5.36	1.36	1.39
25	BA	705	A	N3-C4	-5.36	1.31	1.34
1	AA	768	A	N9-C8	-5.36	1.33	1.37
25	BA	933	A	N3-C4	-5.36	1.31	1.34
25	BA	973	A	N9-C4	-5.36	1.34	1.37
25	BA	122	G	N3-C4	-5.35	1.31	1.35
25	BA	734	A	C5-C6	-5.35	1.36	1.41
25	BA	1959	G	C6-N1	-5.35	1.35	1.39
25	BA	2593	U	C2-N3	-5.35	1.34	1.37
25	BA	2873	A	N7-C5	-5.35	1.36	1.39
25	DA	394	A	N7-C5	-5.34	1.36	1.39
25	BA	2608	G	N3-C4	-5.34	1.31	1.35
1	AA	1256	A	N9-C4	5.34	1.41	1.37
2	AB	236	TYR	CE1-CZ	5.34	1.45	1.38
25	BA	2820	A	N9-C4	-5.34	1.34	1.37
26	BB	72	G	N9-C4	-5.33	1.33	1.38
25	BA	2070	G	N9-C8	-5.33	1.34	1.37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	536	A	C6-N1	-5.33	1.31	1.35
25	BA	1363	C	N3-C4	-5.33	1.30	1.33
25	BA	1204	A	N7-C5	-5.33	1.36	1.39
25	BA	781	A	C5-C4	-5.33	1.35	1.38
25	BA	2369	A	N3-C4	-5.33	1.31	1.34
25	BA	214	G	N7-C5	-5.32	1.36	1.39
25	BA	2768	C	N1-C6	-5.32	1.33	1.37
25	BA	2455	G	N9-C4	-5.32	1.33	1.38
25	BA	2589	A	N9-C4	-5.31	1.34	1.37
42	BW	78	GLU	CG-CD	5.31	1.59	1.51
25	BA	1584	C	N1-C6	5.31	1.40	1.37
25	BA	2381	C	N1-C6	-5.31	1.33	1.37
1	AA	26	A	N9-C4	-5.31	1.34	1.37
25	DA	1996	C	N1-C6	-5.31	1.33	1.37
25	BA	810	U	N1-C6	-5.31	1.33	1.38
25	BA	2375	G	C5-C4	-5.31	1.34	1.38
25	BA	127	A	C5-C6	-5.31	1.36	1.41
25	BA	2541	A	N7-C5	-5.30	1.36	1.39
25	BA	213	A	N9-C4	-5.30	1.34	1.37
25	BA	775	G	C5-C4	-5.30	1.34	1.38
1	AA	547	A	N3-C4	-5.30	1.31	1.34
25	DA	1246	A	N9-C4	-5.30	1.34	1.37
25	DA	2001	A	N9-C4	-5.30	1.34	1.37
25	DA	1670	C	N1-C6	-5.29	1.33	1.37
25	BA	86	C	C2-N3	-5.29	1.31	1.35
25	BA	514	A	C5-C4	-5.29	1.35	1.38
25	DA	733	G	C8-N7	-5.29	1.27	1.30
25	BA	1760	A	N7-C5	-5.29	1.36	1.39
25	BA	2010	G	N9-C8	-5.29	1.34	1.37
1	CA	129(A)	G	C5-C4	5.29	1.42	1.38
1	AA	166	G	N9-C4	5.28	1.42	1.38
25	BA	1197	G	C6-N1	-5.28	1.35	1.39
25	BA	2002	G	N7-C5	-5.28	1.36	1.39
25	BA	2481	G	C6-N1	-5.28	1.35	1.39
25	BA	597	U	N1-C2	-5.28	1.33	1.38
25	BA	320	A	N9-C4	-5.27	1.34	1.37
25	BA	1234	U	N1-C6	-5.27	1.33	1.38
25	BA	2052	G	C5-C6	-5.27	1.37	1.42
25	BA	265	A	N9-C4	-5.27	1.34	1.37
25	BA	1125	G	C2-N3	-5.26	1.28	1.32
25	BA	1259	G	N3-C4	-5.26	1.31	1.35
25	BA	141	A	N9-C8	5.25	1.42	1.37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	2873	A	C5-C6	-5.25	1.36	1.41
25	BA	749	C	N3-C4	-5.24	1.30	1.33
25	BA	788	A	N7-C5	-5.24	1.36	1.39
25	BA	481	G	C6-N1	-5.24	1.35	1.39
25	BA	1999	C	N3-C4	-5.24	1.30	1.33
25	DA	838	C	N3-C4	-5.24	1.30	1.33
25	BA	1698	A	N3-C4	-5.23	1.31	1.34
1	AA	156	G	N9-C4	5.23	1.42	1.38
25	BA	2051	A	N7-C5	-5.23	1.36	1.39
25	BA	31	C	N3-C4	-5.23	1.30	1.33
25	BA	975(A)	G	C2-N3	-5.22	1.28	1.32
25	BA	1771	C	N3-C4	-5.22	1.30	1.33
25	BA	1568	G	N3-C4	-5.22	1.31	1.35
25	DA	188	G	N9-C4	-5.22	1.33	1.38
25	BA	765	G	C2-N3	-5.22	1.28	1.32
25	BA	960	A	N9-C4	-5.22	1.34	1.37
25	BA	2051	A	N3-C4	-5.22	1.31	1.34
1	AA	1433	A	N3-C4	-5.21	1.31	1.34
25	BA	139(A)	G	C6-N1	5.21	1.43	1.39
25	BA	2570	G	N9-C8	-5.21	1.34	1.37
25	BA	2286	A	N7-C5	-5.21	1.36	1.39
25	BA	826	U	N1-C6	-5.21	1.33	1.38
25	BA	1028	A	C5-C4	-5.21	1.35	1.38
25	BA	2448	A	N3-C4	-5.21	1.31	1.34
25	BA	1389	G	N3-C4	-5.21	1.31	1.35
25	BA	2730	C	N3-C4	-5.20	1.30	1.33
25	BA	2590	A	N9-C4	-5.20	1.34	1.37
25	BA	189	G	N7-C5	-5.20	1.36	1.39
25	BA	1002	G	N7-C5	-5.20	1.36	1.39
1	AA	344	A	N9-C4	5.20	1.41	1.37
25	BA	141	A	C5-C4	5.19	1.42	1.38
25	BA	1187	G	N3-C4	-5.19	1.31	1.35
25	BA	2039	C	N1-C6	-5.19	1.34	1.37
25	BA	2588	G	C5-C4	-5.19	1.34	1.38
25	DA	465	G	N7-C5	-5.18	1.36	1.39
25	BA	509	C	N3-C4	-5.18	1.30	1.33
25	BA	1289	C	N3-C4	-5.18	1.30	1.33
25	BA	2061	G	N7-C5	-5.18	1.36	1.39
25	DA	676	A	C5-C4	5.18	1.42	1.38
25	BA	509	C	N1-C2	-5.18	1.34	1.40
25	BA	2503	A	C5-C6	-5.18	1.36	1.41
25	BA	2576	G	N9-C4	-5.18	1.33	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	2729	G	C6-N1	-5.18	1.35	1.39
25	BA	1286	A	N3-C4	-5.18	1.31	1.34
25	BA	2753	A	N3-C4	-5.18	1.31	1.34
25	BA	2685	G	N7-C5	-5.18	1.36	1.39
25	BA	750	A	C6-N1	-5.17	1.31	1.35
25	BA	558	G	C5-C4	-5.17	1.34	1.38
26	BB	38	C	N3-C4	-5.17	1.30	1.33
25	BA	1225	G	N3-C4	-5.17	1.31	1.35
25	BA	945	A	C2-N3	5.17	1.38	1.33
25	BA	17	G	N1-C2	-5.16	1.33	1.37
25	DA	204	A	N3-C4	-5.16	1.31	1.34
25	DA	213	A	N9-C4	-5.16	1.34	1.37
25	BA	2081	C	N3-C4	-5.16	1.30	1.33
25	BA	661	C	N1-C6	-5.16	1.34	1.37
25	DA	2765	A	N7-C5	-5.16	1.36	1.39
25	BA	400	G	N7-C5	-5.16	1.36	1.39
25	BA	2308	G	N9-C4	-5.16	1.33	1.38
25	BA	2448	A	C5-C4	-5.16	1.35	1.38
25	BA	2260	C	C2-O2	-5.15	1.19	1.24
25	BA	452	G	N1-C2	-5.15	1.33	1.37
25	BA	394	A	C5-C4	-5.15	1.35	1.38
25	BA	1129	A	N3-C4	-5.14	1.31	1.34
1	AA	1504	G	N3-C4	-5.14	1.31	1.35
25	BA	1219	G	N9-C4	-5.14	1.33	1.38
25	DA	1959	G	N3-C4	-5.14	1.31	1.35
25	BA	668	G	C5-C4	-5.14	1.34	1.38
25	BA	1189	A	N7-C5	-5.14	1.36	1.39
25	BA	1933	G	N7-C5	-5.14	1.36	1.39
25	BA	952	G	N7-C5	-5.13	1.36	1.39
25	BA	1939	U	C4-O4	-5.13	1.19	1.23
4	CD	31	CYS	CB-SG	5.13	1.91	1.82
25	BA	2454	G	N3-C4	-5.13	1.31	1.35
26	DB	53	A	N9-C4	5.13	1.41	1.37
22	AY	101	GLU	CG-CD	5.13	1.59	1.51
25	BA	64	A	C6-N1	-5.12	1.31	1.35
25	BA	1815	A	N3-C4	-5.12	1.31	1.34
25	BA	2247	A	N7-C5	-5.12	1.36	1.39
25	BA	2713	A	N9-C4	-5.12	1.34	1.37
25	BA	984	A	N9-C4	-5.12	1.34	1.37
25	BA	848	G	N1-C2	-5.12	1.33	1.37
25	BA	123	G	N3-C4	-5.12	1.31	1.35
25	BA	2260	C	C2-N3	-5.12	1.31	1.35

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	1969	A	C5-C6	-5.12	1.36	1.41
25	BA	1372	U	C2-N3	5.12	1.41	1.37
25	BA	821	A	N9-C8	-5.11	1.33	1.37
1	AA	791	G	N3-C4	-5.11	1.31	1.35
25	BA	512	G	N1-C2	-5.11	1.33	1.37
25	BA	526	A	C6-N1	-5.11	1.31	1.35
25	DA	509	C	N3-C4	-5.11	1.30	1.33
25	BA	475	U	N1-C6	-5.11	1.33	1.38
26	BB	72	G	C8-N7	-5.11	1.27	1.30
25	BA	1764	G	C6-N1	-5.10	1.35	1.39
25	BA	645	C	N3-C4	5.09	1.37	1.33
25	BA	1331	A	N9-C4	-5.09	1.34	1.37
25	BA	2040	C	C4-C5	-5.09	1.38	1.43
25	BA	1992	G	C3'-O3'	5.09	1.49	1.42
25	BA	123	G	C5-C4	-5.09	1.34	1.38
25	BA	448	U	C2-N3	-5.09	1.34	1.37
25	BA	1672	C	N1-C6	-5.09	1.34	1.37
25	BA	1824	G	C5-C4	-5.09	1.34	1.38
25	BA	127	A	N1-C2	-5.09	1.29	1.34
25	BA	2039	C	C4-C5	-5.09	1.38	1.43
25	DA	2821	A	N9-C4	-5.09	1.34	1.37
25	BA	689	A	C6-N1	-5.09	1.31	1.35
1	AA	893	C	N1-C6	-5.09	1.34	1.37
25	DA	734	A	N9-C4	-5.09	1.34	1.37
25	BA	964	C	N1-C6	-5.08	1.34	1.37
25	BA	432	A	C5-C6	-5.08	1.36	1.41
25	BA	1275	A	N9-C8	-5.08	1.33	1.37
25	DA	2897	U	N1-C2	5.08	1.43	1.38
25	BA	589	C	C2-N3	-5.07	1.31	1.35
25	BA	1268	A	N3-C4	-5.07	1.31	1.34
26	BB	74	U	C2-N3	5.07	1.41	1.37
25	DA	699	A	C5-C4	-5.07	1.35	1.38
25	BA	1359	A	N7-C5	5.07	1.42	1.39
25	BA	2844	G	C5-C4	-5.07	1.34	1.38
1	CA	1513	A	C5-C6	-5.07	1.36	1.41
25	DA	1790	C	N1-C6	-5.07	1.34	1.37
25	BA	2041	U	N1-C6	-5.06	1.33	1.38
25	BA	2488	A	C5-C4	-5.06	1.35	1.38
25	BA	1123	C	N1-C6	-5.06	1.34	1.37
1	AA	810	C	C4-C5	-5.06	1.39	1.43
25	DA	1638	C	N3-C4	-5.06	1.30	1.33
25	DA	1675	C	N3-C4	-5.06	1.30	1.33

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	119	A	N9-C8	-5.06	1.33	1.37
2	AB	236	TYR	CD1-CE1	5.06	1.47	1.39
25	BA	413	C	N1-C6	-5.06	1.34	1.37
25	BA	2572	A	N7-C5	-5.06	1.36	1.39
25	BA	783	A	N7-C5	-5.05	1.36	1.39
25	BA	2411	A	C6-N6	-5.05	1.29	1.33
25	BA	1290	C	N3-C4	-5.04	1.30	1.33
25	BA	497	A	N9-C4	-5.04	1.34	1.37
25	BA	2453	A	C5-C4	-5.04	1.35	1.38
25	DA	84	A	N9-C4	-5.04	1.34	1.37
25	BA	49	A	N9-C4	5.04	1.40	1.37
25	BA	1816	G	C2-N2	5.04	1.39	1.34
1	AA	792	A	C5-C6	-5.04	1.36	1.41
25	BA	2414	G	C6-N1	-5.03	1.36	1.39
25	BA	308	G	N9-C4	5.03	1.42	1.38
25	BA	705	A	C8-N7	-5.03	1.28	1.31
25	BA	939	G	N1-C2	-5.03	1.33	1.37
25	BA	1566	A	N3-C4	5.03	1.37	1.34
25	BA	1619	G	N7-C5	-5.03	1.36	1.39
25	BA	1775	U	N1-C6	-5.03	1.33	1.38
25	BA	2073	C	N1-C2	-5.03	1.35	1.40
25	BA	24	G	C6-O6	5.02	1.28	1.24
25	DA	191	A	C5-C6	-5.02	1.36	1.41
25	BA	1653	G	C6-N1	-5.02	1.36	1.39
25	BA	2883	A	N7-C5	-5.02	1.36	1.39
25	BA	619	G	N9-C8	-5.02	1.34	1.37
25	BA	733	G	C5-C4	-5.02	1.34	1.38
25	BA	1257	C	N3-C4	-5.02	1.30	1.33
25	BA	1827	C	N3-C4	-5.02	1.30	1.33
25	BA	64	A	N3-C4	-5.02	1.31	1.34
25	BA	698	C	C4-C5	-5.02	1.39	1.43
25	DA	530	G	N9-C8	5.02	1.41	1.37
25	DA	1992	G	C3'-O3'	5.02	1.49	1.42
25	BA	390	A	C5-C6	-5.01	1.36	1.41
25	BA	73	A	C6-N1	-5.01	1.32	1.35
25	BA	1799	G	C3'-O3'	5.01	1.49	1.42
25	BA	1223	G	C6-N1	-5.01	1.36	1.39
25	DA	754	C	N1-C6	-5.01	1.34	1.37
1	AA	533	A	N9-C4	5.01	1.40	1.37
25	BA	134	C	N1-C6	-5.01	1.34	1.37
25	BA	2859	G	N7-C5	-5.00	1.36	1.39

All (7364) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	189(D)	C	N3-C4-N4	-102.71	46.10	118.00
1	CA	189(D)	C	N1-C2-O2	44.80	145.78	118.90
1	CA	189(D)	C	N3-C4-N4	-44.60	86.78	118.00
1	AA	189(D)	C	C2-N3-C4	43.68	141.74	119.90
1	AA	189(D)	C	C5-C4-N4	42.13	149.69	120.20
1	AA	189(D)	C	N3-C4-C5	-42.02	105.09	121.90
1	AA	129(A)	G	C5-C6-O6	39.49	152.29	128.60
1	AA	129(A)	G	N1-C6-O6	-38.28	96.93	119.90
1	CA	129(A)	G	N3-C2-N2	37.08	145.85	119.90
1	CA	129(A)	G	C5-C6-O6	36.54	150.53	128.60
1	CA	189(D)	C	C5-C4-N4	34.87	144.61	120.20
1	CA	129(A)	G	N1-C6-O6	-31.33	101.10	119.90
1	AA	189(D)	C	N1-C2-O2	30.45	137.17	118.90
1	CA	129(A)	G	N1-C2-N2	-29.48	89.67	116.20
25	BA	945	A	N1-C6-N6	27.25	134.95	118.60
25	BA	1332	G	C6-C5-N7	-27.14	114.11	130.40
1	AA	129(A)	G	N3-C2-N2	27.08	138.85	119.90
25	BA	1332	G	C2-N3-C4	-26.49	98.65	111.90
25	BA	676	A	C2-N3-C4	-25.74	97.73	110.60
25	BA	945	A	C6-C5-N7	-25.55	114.41	132.30
1	CA	189(D)	C	N3-C2-O2	-25.39	104.13	121.90
25	BA	1021	A	C2-N3-C4	-25.33	97.94	110.60
1	AA	129(A)	G	N1-C2-N2	-25.07	93.64	116.20
25	BA	1332	G	C5-N7-C8	-23.32	92.64	104.30
25	BA	1332	G	N1-C6-O6	22.15	133.19	119.90
25	BA	528	A	C2-N3-C4	-21.71	99.75	110.60
1	AA	1363(A)	A	N1-C6-N6	-21.04	105.98	118.60
1	CA	189(D)	C	C4-C5-C6	-20.88	106.96	117.40
25	BA	676	A	C5-N7-C8	-20.09	93.85	103.90
25	BA	141	A	C5-N7-C8	-20.07	93.87	103.90
25	BA	1142(A)	A	C2-N3-C4	-19.96	100.62	110.60
25	BA	1332	G	C4-C5-N7	19.91	118.77	110.80
1	CA	189(D)	C	C2-N3-C4	19.88	129.84	119.90
25	BA	141	A	N7-C8-N9	19.85	123.72	113.80
25	BA	945	A	C5-N7-C8	-19.58	94.11	103.90
25	BA	1332	G	N7-C8-N9	19.31	122.75	113.10
25	BA	530	G	N3-C4-N9	-18.74	114.76	126.00
25	BA	2287	A	C2-N3-C4	-18.71	101.25	110.60
25	BA	330	A	C2-N3-C4	-18.40	101.40	110.60
25	DA	1332	G	C2-N3-C4	-18.31	102.74	111.90
25	BA	945	A	C4-C5-N7	17.98	119.69	110.70
25	BA	945	A	C4-C5-C6	17.76	125.88	117.00
1	CA	1363(A)	A	N1-C6-N6	-17.69	107.99	118.60

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1332	G	N1-C2-N3	17.57	134.44	123.90
25	BA	945	A	C2-N3-C4	-17.41	101.89	110.60
25	BA	528	A	C5-N7-C8	-17.20	95.30	103.90
25	BA	1698	A	C2-N3-C4	-17.05	102.07	110.60
25	DA	1332	G	N3-C4-C5	16.91	137.05	128.60
25	BA	1781	C	C6-N1-C2	16.77	127.01	120.30
25	BA	141	A	C8-N9-C4	-16.64	99.14	105.80
25	BA	1142(A)	A	N3-C4-C5	16.62	138.43	126.80
25	DA	1332	G	N3-C4-N9	-16.60	116.04	126.00
25	BA	1021	A	C5-N7-C8	-16.39	95.70	103.90
25	BA	1021	A	N1-C6-N6	16.09	128.26	118.60
25	BA	933	A	C5-N7-C8	-16.07	95.86	103.90
25	DA	528	A	C2-N3-C4	-15.85	102.67	110.60
25	BA	528	A	N3-C4-C5	15.80	137.86	126.80
1	CA	189(D)	C	N3-C4-C5	15.74	128.19	121.90
1	AA	189(D)	C	N3-C2-O2	-15.72	110.89	121.90
25	BA	676	A	N3-C4-C5	15.63	137.74	126.80
25	DA	945	A	N1-C6-N6	15.56	127.94	118.60
1	CA	129(A)	G	C6-N1-C2	15.37	134.32	125.10
25	BA	1142(A)	A	N3-C4-N9	-15.37	115.11	127.40
25	BA	141	A	C6-C5-N7	-15.16	121.69	132.30
25	BA	2689	U	N1-C2-N3	15.15	123.99	114.90
25	BA	141	A	N1-C6-N6	14.97	127.58	118.60
25	BA	676	A	C4-C5-N7	14.96	118.18	110.70
25	BA	676	A	N7-C8-N9	14.94	121.27	113.80
25	BA	945	A	C5-C6-N6	-14.92	111.76	123.70
25	BA	1332	G	C5-C6-N1	-14.82	104.09	111.50
25	BA	141	A	C2-N3-C4	-14.70	103.25	110.60
25	DA	141	A	N7-C8-N9	14.62	121.11	113.80
25	BA	1332	G	C4-N9-C1'	14.57	145.45	126.50
25	BA	265	A	C5-N7-C8	-14.55	96.63	103.90
25	BA	528	A	N3-C4-N9	-14.46	115.84	127.40
25	BA	2689	U	N3-C4-O4	-14.26	109.42	119.40
25	BA	1021	A	C5-C6-N1	-14.25	110.58	117.70
25	BA	2286	A	N7-C8-N9	14.24	120.92	113.80
25	BA	530	G	N9-C4-C5	14.15	111.06	105.40
25	BA	141	A	C4-C5-N7	14.10	117.75	110.70
25	BA	528	A	C5-C6-N1	-14.07	110.66	117.70
25	BA	2319	G	N1-C6-O6	14.06	128.33	119.90
1	AA	1502	A	N1-C6-N6	13.97	126.98	118.60
25	BA	1332	G	C4-C5-C6	13.87	127.12	118.80
25	BA	1939	U	C5-C4-O4	-13.86	117.58	125.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1358	U	N3-C4-O4	-13.84	109.71	119.40
25	BA	494	G	C5-C6-O6	-13.82	120.31	128.60
25	BA	528	A	N1-C6-N6	13.77	126.86	118.60
25	BA	1210	A	C2-N3-C4	-13.74	103.73	110.60
25	BA	71	A	C2-N3-C4	-13.72	103.74	110.60
25	DA	141	A	C5-N7-C8	-13.66	97.07	103.90
25	BA	265	A	N7-C8-N9	13.65	120.63	113.80
25	BA	2689	U	C5-C4-O4	13.65	134.09	125.90
25	DA	141	A	N1-C6-N6	13.62	126.77	118.60
25	BA	446	G	N1-C6-O6	13.49	127.99	119.90
25	BA	564	C	C6-N1-C2	-13.47	114.91	120.30
25	BA	139(A)	G	C5-C6-O6	-13.38	120.57	128.60
25	BA	1049	C	C6-N1-C2	-13.36	114.96	120.30
25	BA	945	A	N1-C2-N3	13.34	135.97	129.30
25	BA	1142(A)	A	C5-N7-C8	-13.33	97.23	103.90
25	BA	734	A	N1-C6-N6	13.31	126.59	118.60
25	BA	1142(A)	A	C5-C6-N1	-13.27	111.07	117.70
25	BA	1210	A	C5-N7-C8	-13.23	97.28	103.90
25	BA	1698	A	N1-C6-N6	13.20	126.52	118.60
1	AA	1126	U	C2-N1-C1'	13.12	133.45	117.70
25	BA	614	U	C5-C4-O4	13.11	133.76	125.90
25	BA	308	G	C4-N9-C1'	13.06	143.48	126.50
25	BA	530	G	N3-C2-N2	-13.03	110.78	119.90
1	CA	189(D)	C	N1-C2-N3	-13.03	110.08	119.20
25	BA	681	G	N1-C2-N3	13.01	131.71	123.90
25	BA	784	A	N1-C6-N6	-12.99	110.81	118.60
25	BA	1021	A	N3-C4-C5	12.95	135.86	126.80
25	BA	945	A	N7-C8-N9	12.94	120.27	113.80
25	DA	856	C	C6-N1-C2	-12.94	115.12	120.30
25	BA	975	C	N3-C4-N4	-12.86	109.00	118.00
25	DA	2286	A	N1-C6-N6	12.83	126.30	118.60
25	BA	463	G	N1-C6-O6	-12.82	112.21	119.90
25	BA	474	G	C8-N9-C4	-12.82	101.27	106.40
25	BA	2454	G	N1-C6-O6	-12.77	112.24	119.90
25	BA	308	G	C8-N9-C1'	-12.75	110.42	127.00
25	BA	463	G	C5-C6-O6	12.71	136.22	128.60
25	BA	2689	U	C5-C6-N1	-12.66	116.37	122.70
25	BA	933	A	N7-C8-N9	12.63	120.12	113.80
1	CA	1358	U	N3-C4-O4	-12.61	110.57	119.40
25	BA	1332	G	C8-N9-C1'	-12.57	110.65	127.00
1	AA	266	G	C6-C5-N7	-12.56	122.86	130.40
25	BA	1204	A	C2-N3-C4	-12.54	104.33	110.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	139(A)	G	N3-C4-N9	12.52	133.51	126.00
25	BA	530	G	C8-N9-C4	-12.51	101.40	106.40
25	DA	1698	A	C2-N3-C4	-12.49	104.36	110.60
25	BA	837	C	C6-N1-C2	-12.48	115.31	120.30
25	DA	450	G	C5-C6-N1	-12.47	105.26	111.50
25	BA	34	C	N1-C2-O2	12.46	126.38	118.90
25	BA	1558	A	N1-C6-N6	12.34	126.00	118.60
25	BA	933	A	C4-C5-N7	12.31	116.86	110.70
25	BA	1170	G	C8-N9-C4	-12.25	101.50	106.40
25	BA	2286	A	C8-N9-C4	-12.21	100.92	105.80
25	BA	2287	A	N1-C6-N6	12.21	125.93	118.60
25	DA	141	A	C6-C5-N7	-12.21	123.75	132.30
25	BA	2502	G	N1-C6-O6	-12.21	112.58	119.90
25	DA	1558	A	C2-N3-C4	-12.18	104.51	110.60
25	BA	587	C	C6-N1-C2	-12.18	115.43	120.30
25	BA	1021	A	N1-C2-N3	12.17	135.38	129.30
25	BA	2286	A	C6-C5-N7	-12.16	123.79	132.30
25	BA	847	U	C5-C6-N1	-12.13	116.63	122.70
25	BA	2308	G	C4-C5-N7	12.08	115.63	110.80
25	DA	271(M)	G	N3-C4-N9	12.07	133.24	126.00
25	BA	570	G	N1-C6-O6	-12.06	112.67	119.90
25	BA	2286	A	N1-C2-N3	12.02	135.31	129.30
25	BA	706	A	C8-N9-C4	11.92	110.57	105.80
25	DA	975	C	C2-N1-C1'	11.84	131.82	118.80
25	BA	2442	C	C5-C6-N1	-11.82	115.09	121.00
25	BA	2767	C	N3-C2-O2	-11.81	113.63	121.90
25	BA	330	A	N1-C2-N3	11.77	135.18	129.30
25	BA	2374	C	C6-N1-C2	11.77	125.01	120.30
25	BA	265	A	C2-N3-C4	-11.74	104.73	110.60
25	BA	1021	A	C6-C5-N7	-11.73	124.09	132.30
25	BA	259	G	N1-C6-O6	11.71	126.93	119.90
25	BA	1106	G	C6-N1-C2	-11.69	118.08	125.10
25	BA	528	A	C4-C5-N7	11.69	116.55	110.70
25	BA	676	A	N3-C4-N9	-11.66	118.08	127.40
25	BA	1021	A	N7-C8-N9	11.61	119.61	113.80
25	BA	1948	G	N1-C6-O6	-11.57	112.96	119.90
26	BB	80	U	C5-C4-O4	11.56	132.84	125.90
1	AA	1502	A	C6-C5-N7	-11.56	124.21	132.30
25	BA	1558	A	C2-N3-C4	-11.55	104.82	110.60
25	BA	265	A	C6-C5-N7	-11.52	124.23	132.30
25	BA	676	A	N1-C6-N6	11.48	125.49	118.60
25	BA	1698	A	C6-C5-N7	-11.47	124.27	132.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	494	G	N1-C6-O6	11.46	126.77	119.90
25	BA	2828	C	C6-N1-C2	11.45	124.88	120.30
25	BA	127	A	C8-N9-C4	11.44	110.38	105.80
25	BA	265	A	C8-N9-C4	-11.41	101.24	105.80
26	DB	115	G	C8-N9-C4	11.40	110.96	106.40
25	BA	1021	A	C4-C5-N7	11.39	116.40	110.70
25	DA	2829	C	C6-N1-C2	11.37	124.85	120.30
25	BA	1698	A	C5-N7-C8	-11.36	98.22	103.90
25	BA	2538	C	C6-N1-C2	11.35	124.84	120.30
25	BA	1832	C	C6-N1-C2	-11.32	115.77	120.30
26	BB	64	C	C6-N1-C2	11.29	124.82	120.30
1	AA	1363(A)	A	C5-C6-N6	11.28	132.73	123.70
25	BA	2574	G	C5-C6-O6	-11.28	121.83	128.60
25	BA	1170	G	N7-C8-N9	11.26	118.73	113.10
25	DA	1653	G	N3-C4-N9	11.25	132.75	126.00
25	BA	1106	G	N1-C2-N3	11.24	130.65	123.90
25	BA	1201	C	N3-C2-O2	11.21	129.75	121.90
25	DA	450	G	C4-C5-N7	-11.20	106.32	110.80
25	BA	1983	C	N3-C4-C5	11.19	126.38	121.90
25	BA	2869	G	C8-N9-C4	-11.18	101.93	106.40
25	DA	1021	A	C2-N3-C4	-11.18	105.01	110.60
25	BA	530	G	N3-C4-C5	11.14	134.17	128.60
25	BA	975	C	C5-C6-N1	-11.14	115.43	121.00
25	BA	308	G	N3-C4-N9	11.13	132.68	126.00
1	AA	266	G	N1-C6-O6	11.12	126.57	119.90
25	BA	1372	U	N3-C4-O4	11.08	127.16	119.40
25	BA	2319	G	C5-C6-O6	-11.08	121.95	128.60
25	BA	2624	G	C5-C6-O6	-11.07	121.96	128.60
25	DA	1607	C	N1-C2-O2	11.02	125.51	118.90
25	BA	2286	A	C4-C5-C6	11.01	122.50	117.00
25	BA	1257	C	N3-C2-O2	-11.00	114.20	121.90
25	BA	1989	G	N9-C4-C5	-10.99	101.00	105.40
25	BA	308	G	C6-C5-N7	-10.98	123.81	130.40
25	BA	2319	G	C6-C5-N7	-10.97	123.81	130.40
25	DA	945	A	C6-C5-N7	-10.97	124.62	132.30
25	BA	655	A	N7-C8-N9	10.97	119.28	113.80
25	BA	676	A	N1-C2-N3	10.96	134.78	129.30
25	DA	2326	C	N3-C4-C5	-10.95	117.52	121.90
26	DB	6	C	C6-N1-C2	10.95	124.68	120.30
25	BA	962	G	N1-C6-O6	10.93	126.46	119.90
25	BA	265	A	C4-C5-N7	10.91	116.16	110.70
1	CA	1149	C	C6-N1-C2	-10.89	115.94	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2442	C	C2-N3-C4	-10.89	114.46	119.90
25	BA	1607	C	N3-C4-N4	10.86	125.60	118.00
25	BA	446	G	C5-C6-O6	-10.86	122.08	128.60
26	BB	104	U	C2-N3-C4	-10.86	120.48	127.00
25	BA	527	C	C5-C4-N4	10.85	127.79	120.20
25	DA	2286	A	C6-C5-N7	-10.84	124.71	132.30
26	BB	41	U	N3-C2-O2	-10.84	114.61	122.20
25	BA	2443	C	C5-C4-N4	-10.82	112.62	120.20
25	BA	659	C	C6-N1-C2	10.82	124.63	120.30
25	BA	933	A	C2-N3-C4	-10.81	105.19	110.60
25	BA	2286	A	C5-N7-C8	-10.80	98.50	103.90
25	BA	2002	G	C8-N9-C4	10.80	110.72	106.40
25	BA	271(J)	C	C6-N1-C2	10.78	124.61	120.30
25	BA	133	C	C5-C6-N1	-10.78	115.61	121.00
25	BA	2578	G	C8-N9-C4	10.78	110.71	106.40
25	BA	655	A	C8-N9-C4	-10.77	101.49	105.80
25	BA	856	C	C6-N1-C2	-10.76	116.00	120.30
25	DA	141	A	C4-C5-N7	10.75	116.08	110.70
1	AA	1502	A	C4-C5-N7	10.74	116.07	110.70
25	BA	2503	A	C5-C6-N6	-10.73	115.11	123.70
25	BA	1519	G	C8-N9-C4	-10.71	102.11	106.40
1	CA	728	A	C8-N9-C4	-10.69	101.52	105.80
25	BA	2510	C	C6-N1-C2	10.68	124.57	120.30
23	AV	76	A	C4-C5-C6	-10.66	111.67	117.00
25	BA	133	C	C6-N1-C2	10.66	124.56	120.30
25	BA	2689	U	C2-N3-C4	-10.61	120.63	127.00
25	DA	994	C	C6-N1-C1'	-10.61	108.07	120.80
25	BA	587	C	N3-C2-O2	-10.61	114.47	121.90
1	AA	1502	A	C2-N3-C4	-10.59	105.30	110.60
25	BA	2511	U	C4-C5-C6	10.58	126.05	119.70
25	BA	1204	A	C6-C5-N7	-10.58	124.89	132.30
1	AA	1126	U	C5-C6-N1	10.57	127.99	122.70
25	BA	2441	C	N3-C2-O2	-10.56	114.51	121.90
25	BA	1698	A	N1-C2-N3	10.55	134.57	129.30
25	DA	1210	A	N1-C6-N6	10.55	124.93	118.60
25	BA	1106	G	N3-C4-C5	-10.55	123.33	128.60
25	DA	2628	C	C6-N1-C2	10.54	124.52	120.30
25	BA	528	A	N7-C8-N9	10.53	119.07	113.80
1	AA	344	A	C8-N9-C4	-10.51	101.60	105.80
25	BA	236	C	C5-C6-N1	-10.50	115.75	121.00
25	BA	1343	G	N1-C6-O6	-10.49	113.60	119.90
25	BA	513	A	C8-N9-C4	-10.49	101.60	105.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	928	G	N1-C6-O6	10.48	126.19	119.90
25	BA	2581	G	C8-N9-C4	-10.47	102.21	106.40
25	DA	2587	A	N1-C6-N6	10.46	124.87	118.60
25	DA	932	G	N3-C4-N9	-10.45	119.73	126.00
25	BA	1314	C	N1-C2-O2	10.45	125.17	118.90
25	BA	1939	U	N3-C4-C5	10.44	120.87	114.60
25	BA	645	C	C5-C6-N1	10.43	126.22	121.00
25	BA	827	U	C5-C6-N1	-10.43	117.48	122.70
25	BA	843	G	C8-N9-C4	10.43	110.57	106.40
25	BA	564	C	C5-C6-N1	10.42	126.21	121.00
25	BA	1198	U	N3-C2-O2	-10.41	114.91	122.20
25	BA	330	A	N3-C4-C5	10.39	134.08	126.80
25	BA	220	G	N1-C6-O6	10.39	126.14	119.90
25	BA	45	C	N1-C2-O2	-10.39	112.67	118.90
1	AA	189(D)	C	N1-C2-N3	-10.37	111.94	119.20
1	CA	266	G	C5-N7-C8	-10.37	99.12	104.30
25	BA	2605	U	C5-C4-O4	10.35	132.11	125.90
25	BA	2064	C	C6-N1-C2	10.35	124.44	120.30
25	DA	141	A	C8-N9-C4	-10.33	101.67	105.80
25	BA	1251	C	N3-C4-C5	-10.31	117.78	121.90
1	CA	1363(A)	A	C5-C6-N6	10.31	131.95	123.70
25	DA	676	A	C2-N3-C4	-10.30	105.45	110.60
25	BA	1187	G	C8-N9-C4	-10.30	102.28	106.40
25	BA	761	A	N1-C6-N6	10.29	124.78	118.60
25	DA	748	G	N1-C6-O6	-10.28	113.73	119.90
25	BA	2866	U	C5-C6-N1	-10.28	117.56	122.70
25	BA	1106	G	C5-C6-N1	10.26	116.63	111.50
1	CA	899	C	C6-N1-C2	10.25	124.40	120.30
25	BA	2625	G	N1-C6-O6	-10.24	113.75	119.90
25	BA	437	G	C4-C5-N7	10.23	114.89	110.80
25	BA	1698	A	C5-C6-N1	-10.23	112.59	117.70
1	AA	1145	C	C2-N3-C4	10.20	125.00	119.90
1	AA	1530	G	N3-C4-C5	10.19	133.69	128.60
25	BA	1187	G	N9-C4-C5	10.18	109.47	105.40
25	BA	1619	G	C8-N9-C4	-10.18	102.33	106.40
25	BA	1807	G	N1-C6-O6	10.17	126.00	119.90
25	BA	527	C	N3-C4-N4	-10.17	110.88	118.00
25	BA	2276	G	C8-N9-C4	-10.15	102.34	106.40
25	BA	2380	C	C5-C6-N1	-10.15	115.93	121.00
25	DA	1653	G	C8-N9-C1'	-10.14	113.81	127.00
25	DA	1703	G	N1-C6-O6	10.14	125.99	119.90
25	BA	2350	C	C6-N1-C2	10.14	124.36	120.30

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	567	A	N1-C6-N6	10.13	124.68	118.60
25	BA	1021	A	N3-C4-N9	-10.11	119.31	127.40
1	AA	1506	U	N3-C4-O4	10.09	126.46	119.40
25	BA	2866	U	C4-C5-C6	10.09	125.75	119.70
25	BA	725	G	C5-C6-N1	-10.08	106.46	111.50
25	BA	2363	C	C6-N1-C2	10.07	124.33	120.30
1	CA	299	G	N1-C6-O6	10.07	125.94	119.90
25	BA	205	G	N3-C4-N9	10.06	132.04	126.00
1	AA	896	C	C6-N1-C2	10.06	124.32	120.30
1	AA	1502	A	N9-C4-C5	-10.05	101.78	105.80
25	BA	1210	A	N7-C8-N9	10.05	118.83	113.80
25	DA	945	A	N9-C4-C5	-10.04	101.78	105.80
25	DA	1979	C	C6-N1-C2	-10.03	116.29	120.30
25	BA	86	C	N3-C4-C5	10.03	125.91	121.90
25	BA	2287	A	C5-N7-C8	-10.03	98.89	103.90
1	CA	400	C	C6-N1-C2	10.02	124.31	120.30
1	AA	1358	U	C5-C4-O4	10.00	131.90	125.90
25	BA	1251	C	C4-C5-C6	9.99	122.40	117.40
1	AA	817	C	C6-N1-C2	9.98	124.29	120.30
25	BA	980	A	C8-N9-C4	-9.97	101.81	105.80
25	DA	566	U	C5-C6-N1	-9.97	117.72	122.70
25	DA	994	C	C2-N1-C1'	9.97	129.76	118.80
25	BA	1819	A	N1-C6-N6	-9.96	112.62	118.60
25	BA	1207	C	C5-C6-N1	-9.95	116.02	121.00
1	CA	893	C	C6-N1-C2	9.96	124.28	120.30
25	DA	1332	G	N3-C2-N2	-9.95	112.94	119.90
25	DA	945	A	C4-C5-N7	9.95	115.67	110.70
25	BA	2380	C	C2-N3-C4	-9.93	114.94	119.90
25	BA	2409	G	N1-C6-O6	-9.93	113.94	119.90
25	BA	826	U	C5-C6-N1	-9.93	117.74	122.70
26	BB	81	G	N1-C2-N3	9.91	129.85	123.90
25	DA	1204	A	C2-N3-C4	-9.91	105.65	110.60
26	BB	91	C	C6-N1-C2	9.90	124.26	120.30
25	BA	2371	G	C5-C6-O6	-9.90	122.66	128.60
25	BA	1350	C	N3-C4-C5	9.90	125.86	121.90
25	BA	1295	C	N3-C4-C5	9.89	125.86	121.90
25	BA	575	A	C4-C5-C6	9.89	121.94	117.00
25	DA	1204	A	N1-C6-N6	9.89	124.53	118.60
1	AA	317	G	N1-C6-O6	9.88	125.83	119.90
25	BA	527	C	C6-N1-C2	-9.87	116.35	120.30
25	BA	446	G	N9-C4-C5	-9.86	101.46	105.40
25	BA	2253	G	N1-C6-O6	9.86	125.81	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	271(M)	G	N3-C4-C5	-9.86	123.67	128.60
25	DA	668	G	C2-N3-C4	-9.85	106.97	111.90
25	BA	126	A	C8-N9-C4	-9.85	101.86	105.80
23	CV	76	A	C8-N9-C4	9.84	109.74	105.80
1	AA	1502	A	C5-N7-C8	-9.84	98.98	103.90
26	BB	53	A	C8-N9-C4	-9.83	101.87	105.80
25	DA	2791	C	C6-N1-C2	-9.82	116.37	120.30
25	BA	1332	G	C5-C6-O6	-9.82	122.71	128.60
25	BA	22	C	C6-N1-C2	9.81	124.23	120.30
25	DA	528	A	N1-C2-N3	9.81	134.21	129.30
25	DA	945	A	C2-N3-C4	-9.81	105.70	110.60
25	DA	2751	G	N3-C4-N9	9.79	131.88	126.00
25	BA	652(H)	C	C5-C6-N1	9.79	125.89	121.00
25	DA	1932	A	C8-N9-C4	-9.79	101.89	105.80
1	AA	839	U	N1-C2-O2	9.78	129.65	122.80
25	DA	2056	G	N1-C6-O6	9.78	125.77	119.90
25	BA	265	A	N1-C6-N6	9.78	124.47	118.60
25	BA	2505	G	C5-C6-N1	-9.77	106.61	111.50
25	BA	1295	C	C6-N1-C2	9.77	124.21	120.30
25	DA	1332	G	C8-N9-C1'	9.76	139.69	127.00
1	AA	811	C	C6-N1-C2	9.75	124.20	120.30
25	BA	2308	G	C5-N7-C8	-9.75	99.43	104.30
1	AA	117	G	N1-C6-O6	9.74	125.75	119.90
1	CA	1279	A	C8-N9-C4	-9.74	101.91	105.80
25	DA	676	A	C5-N7-C8	-9.74	99.03	103.90
25	BA	2030	A	C4-C5-C6	9.72	121.86	117.00
25	DA	271(M)	G	C8-N9-C1'	-9.72	114.37	127.00
25	DA	1914	C	N3-C2-O2	-9.71	115.10	121.90
25	DA	480	A	C8-N9-C4	-9.71	101.92	105.80
25	DA	271(M)	G	C4-N9-C1'	9.70	139.12	126.50
25	BA	495	G	N3-C2-N2	-9.70	113.11	119.90
25	BA	2287	A	C6-C5-N7	-9.70	125.51	132.30
1	AA	1126	U	C5-C4-O4	-9.70	120.08	125.90
25	BA	71	A	C5-N7-C8	-9.70	99.05	103.90
25	BA	1983	C	C2-N3-C4	-9.69	115.05	119.90
25	BA	2540	C	C6-N1-C2	9.69	124.18	120.30
25	BA	2040	C	C5-C4-N4	-9.68	113.42	120.20
25	BA	205	G	N9-C4-C5	-9.68	101.53	105.40
25	BA	2037	G	N1-C2-N2	-9.67	107.50	116.20
25	BA	2539	C	C6-N1-C2	9.67	124.17	120.30
25	BA	686	G	C6-C5-N7	-9.67	124.60	130.40
25	BA	693	C	N3-C2-O2	-9.64	115.15	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	676	A	C6-C5-N7	-9.64	125.55	132.30
25	BA	655	A	C5-N7-C8	-9.63	99.08	103.90
1	AA	36	C	C6-N1-C2	-9.62	116.45	120.30
25	DA	459	U	N3-C4-O4	-9.63	112.66	119.40
1	CA	1279	A	N7-C8-N9	9.61	118.61	113.80
25	BA	962	G	C5-C6-O6	-9.60	122.84	128.60
25	BA	745	G	C5-C6-O6	-9.60	122.84	128.60
25	BA	1001	A	N1-C2-N3	-9.60	124.50	129.30
25	DA	330	A	N1-C6-N6	9.58	124.35	118.60
25	BA	1843	C	C6-N1-C2	9.57	124.13	120.30
25	BA	2463	C	C6-N1-C2	9.56	124.12	120.30
25	BA	1333	C	C5-C4-N4	-9.56	113.51	120.20
25	BA	2287	A	N3-C4-C5	9.55	133.49	126.80
25	DA	1698	A	C5-N7-C8	-9.53	99.14	103.90
25	BA	148	C	C5-C6-N1	-9.53	116.24	121.00
25	BA	127	A	N7-C8-N9	-9.53	109.04	113.80
25	BA	945	A	N9-C4-C5	-9.52	101.99	105.80
25	BA	1698	A	C4-C5-N7	9.52	115.46	110.70
25	BA	271(J)	C	N3-C4-C5	9.50	125.70	121.90
25	BA	437	G	C6-C5-N7	-9.50	124.70	130.40
25	DA	504	U	C2-N1-C1'	9.49	129.09	117.70
25	BA	126	A	N9-C4-C5	9.48	109.59	105.80
25	BA	850	C	N3-C4-C5	9.48	125.69	121.90
1	AA	266	G	C4-C5-N7	9.47	114.59	110.80
25	DA	2502	G	C6-C5-N7	-9.47	124.72	130.40
25	BA	2442	C	N3-C4-C5	9.46	125.69	121.90
25	BA	2283	C	N1-C2-O2	-9.46	113.23	118.90
25	DA	1807	G	C8-N9-C4	9.45	110.18	106.40
25	BA	1045	A	C2-N3-C4	9.44	115.32	110.60
25	BA	2375	G	N7-C8-N9	-9.44	108.38	113.10
25	BA	942	G	C4-C5-N7	-9.43	107.03	110.80
25	BA	1201	C	N3-C4-N4	9.43	124.60	118.00
25	BA	199	A	N1-C6-N6	-9.43	112.94	118.60
25	BA	2375	G	C8-N9-C4	9.43	110.17	106.40
25	BA	2443	C	N3-C4-N4	9.41	124.59	118.00
25	BA	2379	G	C8-N9-C4	9.40	110.16	106.40
25	BA	1201	C	C5-C4-N4	-9.40	113.62	120.20
25	BA	1106	G	C8-N9-C4	-9.40	102.64	106.40
25	BA	2053	G	N3-C2-N2	-9.38	113.33	119.90
25	BA	956	G	C5-C6-N1	-9.38	106.81	111.50
1	AA	129(A)	G	C8-N9-C4	-9.37	102.65	106.40
25	BA	848	G	C8-N9-C4	9.37	110.15	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1959	G	N1-C6-O6	-9.37	114.28	119.90
25	BA	694	U	N3-C2-O2	-9.36	115.64	122.20
25	BA	1142(A)	A	C6-N1-C2	9.37	124.22	118.60
26	BB	6	C	C6-N1-C2	9.36	124.05	120.30
25	DA	1269	A	N1-C6-N6	9.36	124.22	118.60
25	BA	186	G	N1-C6-O6	9.36	125.52	119.90
25	BA	652(H)	C	N1-C2-O2	9.36	124.51	118.90
25	DA	2447	G	C5-C6-O6	-9.36	122.99	128.60
25	BA	2426	A	C8-N9-C4	-9.35	102.06	105.80
25	BA	1408	C	N1-C2-O2	-9.35	113.29	118.90
1	CA	266	G	C4-C5-N7	9.35	114.54	110.80
25	BA	2869	G	N9-C4-C5	9.35	109.14	105.40
25	DA	1899	G	C5-C6-O6	-9.34	122.99	128.60
25	BA	1245	G	C4-C5-N7	-9.34	107.06	110.80
25	BA	2379	G	C5-C6-O6	-9.34	123.00	128.60
25	DA	1269	A	C8-N9-C4	9.33	109.53	105.80
25	BA	2002	G	C5-C6-O6	-9.32	123.01	128.60
25	BA	2002	G	N7-C8-N9	-9.32	108.44	113.10
25	BA	141	A	N1-C2-N3	9.31	133.96	129.30
25	BA	1304	C	N3-C4-C5	9.31	125.62	121.90
1	AA	898	G	C8-N9-C4	9.31	110.12	106.40
23	AV	13	C	C6-N1-C2	-9.31	116.58	120.30
25	BA	2319	G	C4-C5-N7	9.31	114.52	110.80
25	BA	74	A	N1-C6-N6	-9.30	113.02	118.60
25	DA	1327	C	C6-N1-C2	-9.31	116.58	120.30
25	BA	814	C	C2-N3-C4	-9.30	115.25	119.90
25	DA	1269	A	N9-C4-C5	-9.30	102.08	105.80
25	BA	1807	G	C5-C6-O6	-9.29	123.02	128.60
25	DA	236	C	C6-N1-C2	9.29	124.02	120.30
1	AA	1195	C	C6-N1-C2	-9.28	116.59	120.30
25	BA	676	A	C5-C6-N1	-9.28	113.06	117.70
25	BA	2354	G	N1-C6-O6	-9.27	114.33	119.90
25	DA	1252	G	C5-C6-O6	-9.27	123.04	128.60
25	BA	942	G	N9-C4-C5	9.26	109.11	105.40
25	BA	2253	G	C5-C6-O6	-9.26	123.04	128.60
53	B7	47	ARG	NE-CZ-NH1	9.26	124.93	120.30
25	BA	472	A	N1-C6-N6	9.25	124.15	118.60
25	BA	1937	A	N1-C2-N3	9.25	133.92	129.30
25	BA	2002	G	N9-C4-C5	-9.25	101.70	105.40
25	BA	474	G	N7-C8-N9	9.24	117.72	113.10
25	BA	1278	A	N1-C2-N3	9.24	133.92	129.30
25	DA	975	C	C6-N1-C1'	-9.24	109.72	120.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1232	G	C5-C6-N1	9.23	116.12	111.50
1	AA	189(D)	C	C6-N1-C2	-9.22	116.61	120.30
25	BA	734	A	C4-C5-N7	9.22	115.31	110.70
25	DA	2599	G	C4-C5-N7	-9.22	107.11	110.80
25	DA	736	C	N3-C2-O2	9.22	128.35	121.90
25	BA	1992	G	N3-C4-C5	-9.22	123.99	128.60
1	AA	266	G	C5-C6-O6	-9.21	123.07	128.60
25	BA	2286	A	N1-C6-N6	9.21	124.13	118.60
25	BA	776	G	C5-C6-O6	9.21	134.12	128.60
25	BA	22	C	C5-C6-N1	-9.20	116.40	121.00
25	DA	337	C	C5-C6-N1	-9.20	116.40	121.00
25	DA	1558	A	C5-C6-N1	-9.20	113.10	117.70
1	CA	194	C	C6-N1-C2	-9.19	116.62	120.30
23	AV	1	C	C6-N1-C2	-9.19	116.62	120.30
25	DA	772	C	N3-C4-C5	9.19	125.58	121.90
25	BA	139(A)	G	N3-C4-C5	-9.19	124.01	128.60
25	BA	1310	G	C5-C6-O6	-9.19	123.09	128.60
1	CA	1112	C	C6-N1-C2	-9.18	116.63	120.30
25	DA	22	C	C6-N1-C2	9.18	123.97	120.30
25	BA	2502	G	N3-C2-N2	9.18	126.32	119.90
25	BA	2058	A	N1-C2-N3	9.17	133.89	129.30
25	DA	1813	G	C5-C6-O6	-9.17	123.10	128.60
25	BA	1314	C	N3-C4-C5	9.16	125.57	121.90
25	BA	2298	A	N1-C6-N6	-9.16	113.10	118.60
25	BA	2378	A	C2-N3-C4	-9.15	106.02	110.60
25	DA	2689	U	C5-C6-N1	-9.15	118.12	122.70
25	BA	1030	G	C8-N9-C4	9.15	110.06	106.40
25	BA	220	G	C5-C6-O6	-9.14	123.11	128.60
25	BA	2287	A	C4-C5-N7	9.13	115.27	110.70
25	BA	1582	C	C6-N1-C2	9.12	123.95	120.30
25	DA	2686	G	C8-N9-C4	-9.12	102.75	106.40
25	BA	627	A	C8-N9-C4	9.12	109.45	105.80
25	BA	2088	G	C2-N3-C4	-9.12	107.34	111.90
25	DA	2058	A	C8-N9-C4	-9.12	102.15	105.80
25	BA	2239	G	C5-C6-O6	-9.12	123.13	128.60
25	DA	2056	G	C5-C6-O6	-9.12	123.13	128.60
25	BA	1348	G	C5-C6-O6	-9.12	123.13	128.60
25	DA	2575	C	N1-C2-O2	9.12	124.37	118.90
25	BA	1939	U	C6-N1-C2	9.10	126.46	121.00
25	BA	1235	G	C5-C6-O6	9.10	134.06	128.60
25	BA	1487	G	C8-N9-C4	-9.10	102.76	106.40
25	BA	1204	A	C5-N7-C8	-9.09	99.35	103.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1769	G	C6-C5-N7	-9.09	124.95	130.40
25	BA	2005	A	C5-C6-N6	-9.08	116.44	123.70
25	BA	833	U	N1-C2-O2	-9.08	116.45	122.80
25	BA	1210	A	C4-C5-N7	9.08	115.24	110.70
25	BA	175	G	C8-N9-C4	9.07	110.03	106.40
25	BA	465	G	N1-C2-N2	-9.06	108.05	116.20
25	DA	298	G	N1-C6-O6	9.06	125.34	119.90
1	AA	483	C	C6-N1-C2	9.06	123.92	120.30
25	DA	2598	A	N1-C6-N6	9.05	124.03	118.60
25	BA	122	G	N1-C6-O6	9.05	125.33	119.90
1	CA	1519	A	C8-N9-C4	-9.05	102.18	105.80
25	DA	530	G	C8-N9-C4	-9.05	102.78	106.40
25	BA	1268	A	C2-N3-C4	-9.04	106.08	110.60
25	BA	2287	A	C5-C6-N1	-9.04	113.18	117.70
25	DA	1332	G	N1-C2-N3	9.04	129.32	123.90
25	BA	1258	C	C6-N1-C2	9.04	123.92	120.30
25	BA	1325	G	C5-C6-O6	-9.04	123.18	128.60
25	BA	24	G	C5-C6-N1	-9.03	106.98	111.50
25	DA	1999	C	C6-N1-C2	9.03	123.91	120.30
25	BA	72	U	C5-C6-N1	-9.03	118.19	122.70
26	BB	100	A	C2-N3-C4	-9.03	106.08	110.60
25	BA	2364	C	C6-N1-C2	9.03	123.91	120.30
25	BA	669	G	C8-N9-C4	9.02	110.01	106.40
1	CA	1358	U	C2-N3-C4	-9.02	121.59	127.00
25	BA	2730	C	C5-C6-N1	-9.01	116.49	121.00
25	BA	815	C	C5-C6-N1	-9.01	116.50	121.00
25	DA	2447	G	N1-C6-O6	9.00	125.30	119.90
25	DA	2751	G	C4-N9-C1'	8.99	138.19	126.50
25	BA	975	C	C5-C4-N4	8.99	126.49	120.20
25	DA	1827	C	N3-C2-O2	-8.99	115.61	121.90
25	BA	645	C	N1-C2-O2	8.98	124.29	118.90
25	BA	1204	A	N1-C2-N3	8.98	133.79	129.30
25	DA	265	A	C6-C5-N7	-8.98	126.02	132.30
25	BA	390	A	C8-N9-C4	8.97	109.39	105.80
25	BA	784	A	N9-C4-C5	8.97	109.39	105.80
25	BA	271(M)	G	N3-C4-N9	8.97	131.38	126.00
1	AA	1414	U	N3-C2-O2	-8.96	115.92	122.20
26	BB	85	G	N3-C4-N9	8.96	131.38	126.00
25	BA	2286	A	C4-N9-C1'	8.96	142.43	126.30
25	BA	2615	U	N3-C4-O4	-8.96	113.13	119.40
25	DA	1210	A	C5-N7-C8	-8.96	99.42	103.90
25	DA	1698	A	C4-C5-N7	8.96	115.18	110.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	461	C	N1-C2-O2	-8.95	113.53	118.90
26	BB	115	G	C8-N9-C4	8.95	109.98	106.40
25	BA	2005	A	N1-C6-N6	8.94	123.96	118.60
25	BA	1049	C	C5-C6-N1	8.93	125.47	121.00
27	BD	239	ARG	N-CA-C	-8.93	86.88	111.00
25	BA	843	G	N7-C8-N9	-8.93	108.64	113.10
25	BA	2574	G	N1-C6-O6	8.93	125.25	119.90
25	DA	1645	G	N1-C6-O6	-8.93	114.55	119.90
25	BA	1210	A	C6-C5-N7	-8.92	126.06	132.30
25	DA	71	A	N7-C8-N9	8.91	118.26	113.80
25	BA	2239	G	C4-C5-N7	8.91	114.36	110.80
25	BA	827	U	C6-N1-C2	8.91	126.34	121.00
1	CA	266	G	N7-C8-N9	8.91	117.55	113.10
25	BA	2772	C	C5-C6-N1	-8.90	116.55	121.00
25	BA	1373	A	C6-N1-C2	-8.90	113.26	118.60
25	BA	798	G	N1-C2-N3	8.90	129.24	123.90
25	DA	912	C	C6-N1-C2	-8.90	116.74	120.30
25	BA	945	A	C8-N9-C1'	-8.90	111.69	127.70
25	BA	2380	C	C6-N1-C2	8.90	123.86	120.30
25	BA	330	A	C5-N7-C8	-8.89	99.45	103.90
25	BA	1219	G	N3-C4-C5	8.89	133.04	128.60
25	BA	1617	C	N1-C2-O2	-8.89	113.57	118.90
25	BA	2026	C	C6-N1-C2	8.87	123.85	120.30
25	BA	2767	C	C4-C5-C6	8.87	121.84	117.40
25	BA	1135	C	C6-N1-C2	8.87	123.85	120.30
25	DA	962	G	C8-N9-C4	-8.87	102.85	106.40
25	DA	2253	G	N9-C4-C5	-8.86	101.85	105.40
25	BA	19	C	N1-C2-O2	-8.86	113.59	118.90
25	DA	145	G	C8-N9-C4	8.86	109.94	106.40
1	AA	1126	U	C6-N1-C1'	-8.85	108.81	121.20
25	BA	1350	C	C6-N1-C2	8.85	123.84	120.30
25	BA	2239	G	N1-C6-O6	8.84	125.20	119.90
25	BA	2622	C	C6-N1-C2	8.84	123.83	120.30
38	BS	96	GLY	N-CA-C	-8.83	91.02	113.10
25	BA	2468	G	N1-C6-O6	8.83	125.20	119.90
25	BA	945	A	C5-C6-N1	-8.83	113.29	117.70
25	BA	1785	A	N1-C6-N6	8.82	123.89	118.60
1	AA	1530	G	C4-N9-C1'	-8.82	115.03	126.50
25	BA	1332	G	N3-C4-C5	8.82	133.01	128.60
25	BA	1721	G	C8-N9-C4	-8.82	102.87	106.40
25	DA	528	A	N3-C4-N9	-8.82	120.35	127.40
25	BA	2442	C	C6-N1-C2	8.81	123.83	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	802	A	C8-N9-C4	-8.81	102.27	105.80
25	BA	204	A	N1-C2-N3	8.81	133.71	129.30
25	BA	645	C	C2-N3-C4	8.81	124.31	119.90
25	BA	1989	G	C6-C5-N7	-8.81	125.11	130.40
25	BA	1290	C	C6-N1-C2	-8.81	116.78	120.30
25	BA	1253	A	C8-N9-C4	8.81	109.32	105.80
25	BA	685	A	C5-N7-C8	-8.80	99.50	103.90
1	AA	804	U	C5-C6-N1	-8.79	118.30	122.70
25	BA	671	C	N3-C4-C5	-8.78	118.39	121.90
25	BA	1989	G	C2-N3-C4	-8.78	107.51	111.90
25	BA	465	G	N3-C2-N2	8.78	126.05	119.90
25	BA	1207	C	C2-N3-C4	-8.78	115.51	119.90
25	BA	2884	U	C2-N1-C1'	-8.78	107.17	117.70
25	BA	734	A	C5-C6-N6	-8.77	116.68	123.70
25	BA	2002	G	N1-C6-O6	8.77	125.16	119.90
25	BA	2502	G	C5-C6-O6	8.77	133.86	128.60
1	AA	1255	G	C6-C5-N7	-8.77	125.14	130.40
1	AA	1358	U	C2-N3-C4	-8.77	121.74	127.00
25	BA	404	C	C2-N1-C1'	-8.77	109.16	118.80
25	BA	975	C	N3-C2-O2	-8.76	115.77	121.90
1	AA	1255	G	N9-C4-C5	-8.76	101.90	105.40
25	BA	1193	G	N1-C2-N3	8.76	129.16	123.90
25	BA	587	C	N1-C2-N3	8.76	125.33	119.20
25	BA	2459	A	C5-N7-C8	-8.76	99.52	103.90
25	DA	933	A	N7-C8-N9	8.76	118.18	113.80
25	BA	530	G	C2-N3-C4	-8.75	107.52	111.90
25	BA	2244	U	C5-C6-N1	-8.75	118.33	122.70
4	CD	188	LEU	CA-CB-CG	8.75	135.42	115.30
25	BA	2040	C	N3-C4-N4	8.74	124.12	118.00
25	BA	90	U	N3-C4-O4	8.74	125.52	119.40
25	BA	1573	G	N3-C4-C5	8.74	132.97	128.60
25	DA	2828	C	C6-N1-C2	8.74	123.80	120.30
26	DB	54	G	C8-N9-C4	-8.74	102.91	106.40
25	BA	1664	A	C8-N9-C4	-8.73	102.31	105.80
25	BA	2239	G	N9-C4-C5	-8.73	101.91	105.40
25	BA	1570	A	N1-C6-N6	8.72	123.83	118.60
25	BA	474	G	N9-C4-C5	8.72	108.89	105.40
25	BA	2052	G	C5-C6-O6	-8.72	123.37	128.60
1	AA	1475	G	C8-N9-C4	-8.72	102.91	106.40
25	BA	1275	A	N1-C6-N6	8.71	123.83	118.60
25	BA	179	G	N1-C2-N3	8.71	129.13	123.90
25	BA	17	G	N1-C6-O6	-8.71	114.67	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	956	G	N1-C6-O6	8.71	125.12	119.90
1	AA	494	U	C5-C4-O4	-8.70	120.68	125.90
25	BA	1519	G	N3-C4-C5	-8.69	124.25	128.60
25	BA	205	G	N3-C2-N2	8.69	125.98	119.90
25	BA	729	G	C5-N7-C8	-8.69	99.96	104.30
25	BA	2720	U	C5-C6-N1	-8.68	118.36	122.70
25	BA	1698	A	N7-C8-N9	8.68	118.14	113.80
25	BA	575	A	C6-N1-C2	-8.68	113.39	118.60
25	DA	1653	G	C4-N9-C1'	8.67	137.78	126.50
25	BA	1201	C	N1-C2-O2	-8.67	113.70	118.90
25	BA	1795	C	N3-C4-C5	8.67	125.37	121.90
25	BA	980	A	N9-C4-C5	8.66	109.27	105.80
25	BA	1204	A	N7-C8-N9	8.66	118.13	113.80
25	DA	1830	C	N3-C4-C5	8.65	125.36	121.90
25	BA	2783	G	C6-C5-N7	-8.65	125.21	130.40
1	AA	1519	A	C4-C5-C6	8.65	121.32	117.00
25	BA	1319	G	N3-C2-N2	-8.64	113.85	119.90
25	BA	533	G	C5-C6-O6	-8.64	123.42	128.60
25	BA	1245	G	N1-C6-O6	-8.64	114.72	119.90
25	BA	2286	A	C2-N3-C4	-8.63	106.28	110.60
23	AV	76	A	N3-C4-C5	8.63	132.84	126.80
25	BA	461	C	N3-C4-C5	-8.62	118.45	121.90
25	BA	2503	A	N1-C6-N6	8.62	123.77	118.60
25	DA	1332	G	C4-N9-C1'	-8.62	115.30	126.50
23	AV	75	C	N1-C2-O2	-8.62	113.73	118.90
25	BA	2463	C	N3-C4-C5	8.62	125.35	121.90
1	AA	890	G	N1-C6-O6	-8.61	114.73	119.90
25	BA	528	A	C6-N1-C2	8.61	123.77	118.60
25	BA	1202	C	N3-C2-O2	8.61	127.93	121.90
25	DA	2457	U	N3-C2-O2	-8.60	116.18	122.20
1	AA	1137	C	C6-N1-C2	-8.60	116.86	120.30
25	DA	2356	C	N1-C2-O2	-8.60	113.74	118.90
1	CA	1381	U	N1-C2-O2	8.59	128.81	122.80
25	BA	1579	A	N1-C6-N6	8.59	123.75	118.60
25	DA	2023	G	N3-C4-C5	-8.59	124.31	128.60
25	BA	2447	G	C5-C6-N1	8.59	115.79	111.50
25	BA	685	A	N7-C8-N9	8.59	118.09	113.80
25	BA	1972	A	C8-N9-C4	-8.59	102.37	105.80
1	CA	899	C	N3-C4-C5	8.59	125.33	121.90
25	BA	1602	U	C6-N1-C2	8.58	126.15	121.00
25	DA	1703	G	C5-C6-O6	-8.58	123.45	128.60
25	BA	729	G	C4-C5-N7	8.58	114.23	110.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	442	C	C6-N1-C2	-8.57	116.87	120.30
25	BA	2546	U	N1-C2-O2	-8.57	116.80	122.80
25	BA	2894	G	C6-C5-N7	-8.57	125.25	130.40
25	BA	1755	A	C8-N9-C4	-8.57	102.37	105.80
25	BA	1839	G	N9-C4-C5	-8.57	101.97	105.40
25	BA	2894	G	N1-C6-O6	8.57	125.04	119.90
25	BA	34	C	N3-C2-O2	-8.57	115.90	121.90
25	BA	461	C	N1-C2-O2	-8.57	113.76	118.90
25	BA	2602	A	N1-C6-N6	8.56	123.74	118.60
1	CA	1267	C	N1-C2-O2	8.56	124.04	118.90
25	BA	933	A	C8-N9-C4	-8.56	102.38	105.80
25	BA	245	G	C5-C6-O6	-8.56	123.47	128.60
25	BA	2760	C	C6-N1-C2	8.56	123.72	120.30
25	DA	994	C	N1-C2-O2	8.55	124.03	118.90
25	BA	2582	G	N1-C6-O6	-8.55	114.77	119.90
25	DA	991	C	C6-N1-C2	-8.55	116.88	120.30
25	BA	38	A	N1-C6-N6	-8.54	113.47	118.60
25	DA	760	G	C8-N9-C4	-8.54	102.98	106.40
23	AV	13	C	C5-C6-N1	8.54	125.27	121.00
25	BA	763	G	N1-C2-N2	-8.54	108.51	116.20
25	BA	827	U	C2-N3-C4	-8.54	121.88	127.00
1	AA	1495	U	N3-C4-C5	-8.53	109.48	114.60
1	AA	1524	C	C6-N1-C2	8.54	123.71	120.30
25	BA	2769	C	C2-N3-C4	-8.54	115.63	119.90
1	CA	1267	C	C2-N1-C1'	8.53	128.18	118.80
25	BA	430	G	N1-C6-O6	8.53	125.02	119.90
25	BA	2823	A	N1-C6-N6	8.53	123.72	118.60
25	DA	1353	A	C8-N9-C4	-8.53	102.39	105.80
25	BA	828	U	C5-C6-N1	-8.52	118.44	122.70
25	BA	568	U	N3-C2-O2	8.52	128.16	122.20
1	CA	839	U	N1-C2-O2	8.51	128.76	122.80
1	AA	1255	G	N1-C6-O6	8.51	125.01	119.90
25	BA	2725	A	C2-N3-C4	-8.51	106.34	110.60
25	BA	446	G	C4-C5-N7	8.51	114.20	110.80
25	BA	527	C	N1-C2-N3	8.51	125.15	119.20
25	DA	2387	U	C5-C6-N1	-8.50	118.45	122.70
25	BA	197	A	C2-N3-C4	-8.50	106.35	110.60
25	BA	456	C	C6-N1-C2	8.50	123.70	120.30
25	DA	2751	G	C8-N9-C1'	-8.50	115.95	127.00
25	BA	500	G	C4-C5-N7	-8.50	107.40	110.80
25	BA	2203	U	N1-C2-O2	-8.50	116.85	122.80
25	BA	1296	G	C2-N3-C4	8.49	116.15	111.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2227	A	N9-C4-C5	8.49	109.20	105.80
1	CA	1358	U	C5-C4-O4	8.48	130.99	125.90
25	DA	733	G	C6-C5-N7	-8.48	125.31	130.40
25	BA	1314	C	N3-C4-N4	-8.47	112.07	118.00
25	BA	1959	G	C5-C6-O6	8.47	133.68	128.60
25	BA	2363	C	C2-N3-C4	-8.47	115.66	119.90
25	BA	72	U	C2-N3-C4	-8.47	121.92	127.00
25	BA	1514	U	N3-C2-O2	-8.46	116.28	122.20
25	BA	2379	G	N9-C4-C5	-8.46	102.02	105.40
25	BA	569	U	N1-C2-N3	8.46	119.97	114.90
25	BA	945	A	C4-N9-C1'	8.46	141.52	126.30
1	CA	129(A)	G	C6-C5-N7	8.46	135.47	130.40
25	DA	528	A	N3-C4-C5	8.46	132.72	126.80
25	DA	92	A	N7-C8-N9	8.45	118.03	113.80
25	BA	1377	G	N1-C6-O6	-8.45	114.83	119.90
25	BA	445	C	C6-N1-C2	-8.45	116.92	120.30
25	BA	569	U	C5-C6-N1	-8.45	118.48	122.70
25	BA	2227	A	C8-N9-C4	-8.45	102.42	105.80
25	BA	17	G	C5-C6-N1	8.44	115.72	111.50
25	BA	1476	C	C6-N1-C2	-8.44	116.92	120.30
25	BA	2276	G	N7-C8-N9	8.44	117.32	113.10
25	BA	484	C	N3-C2-O2	8.44	127.81	121.90
25	BA	589	C	N3-C4-C5	8.44	125.28	121.90
25	BA	1992	G	C2-N3-C4	8.44	116.12	111.90
25	DA	706	A	C8-N9-C4	8.43	109.17	105.80
25	BA	652(S)	C	C2-N3-C4	8.43	124.11	119.90
1	CA	1054	C	C6-N1-C2	-8.42	116.93	120.30
25	DA	765	G	N1-C6-O6	8.42	124.95	119.90
25	BA	1660	C	N3-C2-O2	-8.42	116.01	121.90
25	DA	1142	U	C2-N1-C1'	8.42	127.80	117.70
25	DA	1698	A	N3-C4-C5	8.42	132.69	126.80
25	DA	1966	A	N1-C6-N6	-8.42	113.55	118.60
1	AA	540	G	N3-C4-C5	-8.41	124.39	128.60
25	BA	2037	G	N3-C2-N2	8.41	125.79	119.90
25	BA	2624	G	N1-C6-O6	8.41	124.95	119.90
25	DA	2396	G	N1-C6-O6	8.41	124.95	119.90
25	BA	968	G	C2-N3-C4	-8.41	107.70	111.90
25	DA	2253	G	N1-C6-O6	8.41	124.94	119.90
25	BA	768	G	C8-N9-C4	-8.41	103.04	106.40
25	DA	528	A	C5-N7-C8	-8.41	99.70	103.90
25	BA	790	C	C6-N1-C2	8.40	123.66	120.30
25	BA	2281	C	N3-C2-O2	8.40	127.78	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1332	G	C5-N7-C8	-8.40	100.10	104.30
25	BA	933	A	N1-C6-N6	8.40	123.64	118.60
25	BA	1816	G	N1-C2-N3	-8.40	118.86	123.90
25	DA	1769	G	N1-C6-O6	8.39	124.94	119.90
25	BA	759	G	C5-C6-O6	-8.38	123.57	128.60
1	CA	638	G	C8-N9-C4	8.38	109.75	106.40
25	BA	474	G	N1-C6-O6	-8.38	114.87	119.90
25	BA	1769	G	N3-C4-N9	8.38	131.03	126.00
25	BA	1963	U	C2-N1-C1'	8.38	127.75	117.70
25	DA	2259	G	N1-C6-O6	8.38	124.92	119.90
25	DA	265	A	N7-C8-N9	8.37	117.99	113.80
25	DA	337	C	N3-C4-N4	-8.37	112.14	118.00
25	BA	2030	A	C6-N1-C2	-8.37	113.58	118.60
1	AA	129(A)	G	C4-N9-C1'	8.37	137.38	126.50
25	BA	2511	U	N3-C4-C5	-8.37	109.58	114.60
25	BA	1257	C	N1-C2-O2	8.36	123.92	118.90
25	DA	250	G	C8-N9-C4	-8.37	103.05	106.40
1	CA	1484	C	C6-N1-C2	8.36	123.64	120.30
25	DA	590	A	C2-N3-C4	-8.36	106.42	110.60
25	BA	1141	U	N1-C2-N3	8.36	119.92	114.90
25	BA	1253	A	N7-C8-N9	-8.36	109.62	113.80
25	BA	1210	A	C8-N9-C4	-8.36	102.46	105.80
25	BA	40	C	N1-C2-O2	-8.36	113.89	118.90
25	BA	53	A	N1-C6-N6	8.36	123.61	118.60
26	BB	41	U	N1-C2-N3	8.36	119.91	114.90
25	DA	945	A	C5-C6-N6	-8.36	117.02	123.70
25	BA	190	A	C5-N7-C8	-8.35	99.72	103.90
25	BA	569	U	C2-N3-C4	-8.35	121.99	127.00
25	DA	566	U	C6-N1-C2	8.35	126.01	121.00
25	DA	1558	A	N1-C6-N6	8.35	123.61	118.60
25	DA	1653	G	N9-C4-C5	-8.35	102.06	105.40
25	BA	2807	G	N1-C6-O6	-8.35	114.89	119.90
25	DA	481	G	C8-N9-C4	-8.35	103.06	106.40
25	BA	676	A	C8-N9-C4	-8.34	102.46	105.80
25	BA	2318	G	C6-C5-N7	-8.34	125.40	130.40
25	DA	1914	C	N1-C2-O2	8.34	123.90	118.90
25	BA	2058	A	C2-N3-C4	-8.34	106.43	110.60
25	BA	2436	G	C6-N1-C2	-8.34	120.10	125.10
25	DA	2563	U	C5-C6-N1	-8.34	118.53	122.70
25	DA	1767	C	C5-C6-N1	-8.33	116.83	121.00
25	BA	931	G	N1-C6-O6	-8.33	114.90	119.90
26	BB	18	G	C5-C6-O6	-8.33	123.60	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1787	A	N1-C2-N3	8.32	133.46	129.30
1	AA	421	U	C2-N1-C1'	8.32	127.69	117.70
25	BA	259	G	C8-N9-C4	8.32	109.73	106.40
26	BB	89	G	C6-C5-N7	-8.32	125.41	130.40
25	BA	2512	C	C6-N1-C2	8.32	123.63	120.30
25	BA	2459	A	N7-C8-N9	8.32	117.96	113.80
25	BA	2585	U	N1-C2-O2	8.32	128.62	122.80
1	AA	189(D)	C	C4-C5-C6	8.32	121.56	117.40
25	BA	2820	A	N9-C4-C5	-8.31	102.47	105.80
25	BA	236	C	C6-N1-C2	8.31	123.62	120.30
25	BA	1106	G	N7-C8-N9	8.31	117.25	113.10
1	CA	317	G	C8-N9-C4	-8.31	103.08	106.40
25	BA	500	G	C5-C6-O6	8.31	133.59	128.60
25	BA	681	G	C2-N3-C4	-8.31	107.75	111.90
26	BB	41	U	C5-C6-N1	-8.31	118.55	122.70
25	DA	71	A	C5-N7-C8	-8.31	99.75	103.90
25	BA	2489	G	N1-C2-N2	-8.30	108.73	116.20
25	BA	1133	U	C2-N3-C4	-8.30	122.02	127.00
25	DA	1313	U	C6-N1-C2	-8.30	116.02	121.00
25	BA	2015	A	C2-N3-C4	-8.30	106.45	110.60
25	BA	390	A	N1-C6-N6	8.29	123.58	118.60
25	BA	1598	C	N1-C2-O2	-8.29	113.92	118.90
1	AA	1459	C	C6-N1-C2	8.29	123.62	120.30
25	BA	2690	C	N3-C4-C5	-8.29	118.58	121.90
25	BA	1558	A	C6-C5-N7	-8.29	126.50	132.30
25	BA	2074	U	C6-N1-C2	-8.29	116.03	121.00
25	BA	814	C	C5-C6-N1	-8.28	116.86	121.00
25	BA	694	U	C5-C4-O4	8.28	130.87	125.90
25	BA	313	C	N3-C4-C5	8.27	125.21	121.90
1	CA	839	U	N3-C2-O2	-8.27	116.41	122.20
25	BA	1989	G	C4-C5-N7	8.27	114.11	110.80
1	CA	841	U	C5-C6-N1	8.27	126.84	122.70
25	BA	645	C	C2-N1-C1'	8.27	127.89	118.80
25	BA	2030	A	N1-C2-N3	8.27	133.43	129.30
25	BA	2625	G	N9-C4-C5	8.27	108.71	105.40
25	DA	2286	A	C5-N7-C8	-8.27	99.77	103.90
25	DA	1558	A	N1-C2-N3	8.27	133.43	129.30
1	AA	928	G	N1-C6-O6	8.26	124.86	119.90
25	BA	298	G	N1-C6-O6	8.26	124.86	119.90
25	BA	2021	C	C6-N1-C2	8.26	123.60	120.30
25	DA	583	G	N1-C6-O6	8.26	124.86	119.90
25	BA	1154	G	C8-N9-C4	-8.26	103.10	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1558	A	C6-C5-N7	-8.26	126.52	132.30
25	BA	1033	U	C5-C6-N1	-8.26	118.57	122.70
25	BA	570	G	C5-C6-O6	8.25	133.55	128.60
25	BA	1790	C	N3-C4-C5	8.25	125.20	121.90
25	DA	2286	A	C4-C5-C6	8.25	121.12	117.00
23	AV	76	A	C8-N9-C4	8.24	109.10	105.80
25	BA	2105	C	C2-N3-C4	8.24	124.02	119.90
25	DA	385	C	N3-C2-O2	-8.23	116.14	121.90
25	BA	272(D)	G	C8-N9-C4	8.23	109.69	106.40
25	DA	645	C	C2-N1-C1'	8.23	127.86	118.80
25	BA	210	C	C5-C6-N1	-8.23	116.89	121.00
25	BA	2429	G	C8-N9-C4	-8.22	103.11	106.40
1	CA	1381	U	N3-C2-O2	-8.22	116.44	122.20
25	BA	730	C	N3-C4-C5	8.22	125.19	121.90
25	BA	2768	C	C2-N3-C4	-8.22	115.79	119.90
25	BA	2522	U	C5-C4-O4	-8.22	120.97	125.90
25	DA	1776	G	N1-C6-O6	8.22	124.83	119.90
1	CA	960	U	C2-N1-C1'	8.22	127.56	117.70
25	DA	1257	C	C6-N1-C2	-8.22	117.01	120.30
25	BA	134	C	C6-N1-C2	-8.21	117.02	120.30
1	CA	1158	C	N1-C2-O2	8.21	123.82	118.90
25	BA	1336	A	C5-C6-N1	8.20	121.80	117.70
25	BA	1967	C	C5-C6-N1	-8.20	116.90	121.00
25	BA	522	G	C6-C5-N7	-8.20	125.48	130.40
25	BA	2063	C	N3-C2-O2	8.20	127.64	121.90
25	DA	330	A	C4-C5-N7	8.20	114.80	110.70
25	BA	1377	G	C4-C5-N7	-8.20	107.52	110.80
25	BA	2791	C	C2-N1-C1'	8.19	127.81	118.80
25	DA	467	G	C8-N9-C4	8.18	109.67	106.40
25	BA	2499	C	N3-C4-C5	-8.18	118.63	121.90
25	DA	2286	A	C5-C6-N1	-8.18	113.61	117.70
25	BA	106	C	N1-C2-O2	-8.18	113.99	118.90
25	BA	933	A	C6-C5-N7	-8.18	126.58	132.30
25	BA	2877	G	C2-N3-C4	-8.17	107.81	111.90
25	BA	1823	G	C4-C5-N7	8.17	114.07	110.80
1	AA	1414	U	N1-C2-O2	8.17	128.52	122.80
25	BA	575	A	N1-C2-N3	8.17	133.38	129.30
26	BB	104	U	C5-C4-O4	-8.16	121.00	125.90
25	BA	912	C	C6-N1-C2	-8.16	117.04	120.30
25	DA	2206	G	C8-N9-C4	8.16	109.66	106.40
25	BA	671	C	C4-C5-C6	8.16	121.48	117.40
25	BA	1210	A	C5-C6-N1	-8.15	113.62	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1839	G	C4-C5-N7	8.15	114.06	110.80
25	BA	2037	G	N1-C6-O6	-8.15	115.01	119.90
25	BA	732	C	N1-C2-O2	-8.15	114.01	118.90
25	BA	1992	G	C5-C6-N1	8.15	115.57	111.50
25	BA	198	C	N3-C4-C5	8.14	125.16	121.90
25	BA	1108	U	N3-C2-O2	-8.14	116.50	122.20
25	BA	1997	G	N1-C2-N3	8.14	128.79	123.90
25	DA	1252	G	N1-C6-O6	8.14	124.79	119.90
25	DA	1813	G	N1-C6-O6	8.14	124.79	119.90
1	AA	900	A	C5-N7-C8	-8.14	99.83	103.90
25	BA	2441	C	N3-C4-N4	-8.14	112.30	118.00
25	BA	1208	C	C5-C6-N1	-8.14	116.93	121.00
25	DA	932	G	C6-C5-N7	8.14	135.28	130.40
25	DA	1998	G	N7-C8-N9	-8.14	109.03	113.10
25	BA	567	A	C6-C5-N7	-8.13	126.61	132.30
25	BA	1141	U	N3-C2-O2	-8.13	116.51	122.20
1	CA	40	C	N1-C2-O2	8.13	123.78	118.90
25	BA	400	G	N3-C2-N2	-8.13	114.21	119.90
25	BA	1447	G	C8-N9-C4	-8.13	103.15	106.40
25	BA	1586	A	N7-C8-N9	8.13	117.86	113.80
25	DA	216	A	C2-N3-C4	-8.13	106.54	110.60
25	BA	1708	C	C6-N1-C2	8.12	123.55	120.30
25	BA	2014	A	N1-C6-N6	8.12	123.47	118.60
25	DA	329	G	N3-C4-C5	-8.12	124.54	128.60
1	AA	1506	U	C5-C4-O4	-8.12	121.03	125.90
25	BA	622	G	C8-N9-C4	8.12	109.65	106.40
25	BA	1377	G	C5-C6-O6	8.12	133.47	128.60
25	BA	2041	U	C5-C6-N1	-8.12	118.64	122.70
1	AA	738	C	C6-N1-C2	-8.12	117.05	120.30
25	BA	141	A	C5-C6-N6	-8.11	117.21	123.70
25	DA	1314	C	C2-N1-C1'	8.11	127.72	118.80
25	BA	1332	G	N9-C4-C5	-8.11	102.16	105.40
1	AA	1518	A	C5-C6-N1	-8.10	113.65	117.70
25	DA	2538	C	C6-N1-C2	8.10	123.54	120.30
25	BA	126	A	N1-C6-N6	-8.10	113.74	118.60
25	DA	127	A	N1-C6-N6	8.10	123.46	118.60
25	BA	2022	U	C2-N3-C4	-8.10	122.14	127.00
25	BA	148	C	C6-N1-C2	8.09	123.54	120.30
25	BA	1251	C	N3-C4-N4	8.09	123.66	118.00
25	BA	1972	A	C5-C6-N1	8.09	121.75	117.70
25	DA	1210	A	C6-C5-N7	-8.09	126.64	132.30
25	BA	372	G	N1-C6-O6	-8.09	115.05	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	514	A	N1-C6-N6	-8.09	113.75	118.60
25	BA	1405	U	C5-C6-N1	-8.08	118.66	122.70
25	DA	1307	A	N1-C6-N6	-8.08	113.75	118.60
25	BA	1145	C	N1-C2-O2	-8.08	114.05	118.90
25	BA	1204	A	N1-C6-N6	8.08	123.45	118.60
25	BA	2319	G	C5-N7-C8	-8.08	100.26	104.30
25	DA	236	C	N3-C4-C5	8.08	125.13	121.90
25	DA	1204	A	C4-C5-N7	8.08	114.74	110.70
25	BA	679	C	C2-N3-C4	-8.07	115.86	119.90
1	AA	586	C	C6-N1-C2	8.07	123.53	120.30
1	CA	1499	A	C8-N9-C4	8.07	109.03	105.80
25	BA	271(X)	G	C5-C6-N1	-8.07	107.47	111.50
25	BA	1573	G	C2-N3-C4	-8.07	107.87	111.90
25	BA	2318	G	C8-N9-C4	-8.07	103.17	106.40
25	BA	2743	C	C5-C6-N1	-8.07	116.97	121.00
25	BA	2380	C	N3-C4-C5	8.06	125.12	121.90
25	DA	530	G	N1-C6-O6	-8.06	115.06	119.90
25	DA	1670	C	C4-C5-C6	8.06	121.43	117.40
25	DA	2765	A	C8-N9-C4	-8.06	102.58	105.80
25	DA	1210	A	N7-C8-N9	8.06	117.83	113.80
25	DA	2103	C	C5-C4-N4	8.06	125.84	120.20
1	AA	166	G	N3-C4-C5	-8.06	124.57	128.60
1	AA	1467	G	N9-C4-C5	8.06	108.62	105.40
25	BA	972	G	C5-C6-O6	8.06	133.43	128.60
25	BA	1624	G	C5-C6-O6	-8.06	123.77	128.60
25	BA	2826	A	C2-N3-C4	-8.06	106.57	110.60
25	BA	1450(A)	C	C6-N1-C2	8.05	123.52	120.30
25	BA	2363	C	N3-C4-C5	8.05	125.12	121.90
25	DA	737	C	C6-N1-C2	8.05	123.52	120.30
25	BA	530	G	C5-C6-O6	8.05	133.43	128.60
25	BA	2324	C	C6-N1-C2	8.05	123.52	120.30
25	DA	671	C	N3-C4-C5	-8.04	118.68	121.90
23	AV	9	G	N9-C4-C5	8.04	108.62	105.40
25	BA	130	C	C2-N3-C4	-8.04	115.88	119.90
25	BA	2370	G	C8-N9-C4	8.04	109.62	106.40
25	BA	772	C	C6-N1-C2	8.04	123.52	120.30
1	CA	1366	C	C2-N3-C4	8.04	123.92	119.90
1	AA	1113	C	C6-N1-C2	-8.04	117.09	120.30
25	BA	1184	G	N3-C2-N2	-8.03	114.28	119.90
25	BA	2308	G	C5-C6-O6	-8.04	123.78	128.60
25	BA	2587	A	C6-N1-C2	-8.03	113.78	118.60
26	BB	38	C	N3-C4-N4	-8.03	112.38	118.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1658	C	N1-C2-O2	-8.03	114.08	118.90
25	BA	1669	A	C4-C5-C6	8.03	121.01	117.00
25	BA	2370	G	N9-C4-C5	-8.03	102.19	105.40
25	BA	1245	G	N9-C4-C5	8.02	108.61	105.40
25	BA	1904	G	C8-N9-C4	8.02	109.61	106.40
25	BA	2615	U	N3-C4-C5	8.02	119.41	114.60
25	BA	1632	A	N1-C6-N6	8.02	123.41	118.60
1	AA	1474	G	C8-N9-C4	8.01	109.61	106.40
25	DA	2287	A	C2-N3-C4	-8.01	106.59	110.60
1	AA	1091	U	N3-C2-O2	-8.01	116.59	122.20
25	BA	514	A	C5-C6-N1	8.01	121.70	117.70
1	CA	129(A)	G	C4-C5-N7	-8.01	107.60	110.80
1	AA	1375	A	C8-N9-C4	-8.01	102.60	105.80
25	DA	2751	G	N3-C4-C5	-8.01	124.60	128.60
25	BA	2371	G	C5-C6-N1	8.00	115.50	111.50
25	BA	2377	A	C8-N9-C4	8.00	109.00	105.80
25	DA	1553	A	C8-N9-C4	-8.00	102.60	105.80
25	BA	2383	G	C8-N9-C4	7.99	109.60	106.40
25	DA	265	A	N1-C6-N6	7.99	123.39	118.60
25	BA	1570	A	C8-N9-C4	7.99	109.00	105.80
25	BA	1827	C	N3-C2-O2	-7.99	116.31	121.90
25	DA	1254	A	C8-N9-C4	-7.99	102.61	105.80
25	BA	1781	C	N3-C2-O2	7.99	127.49	121.90
1	CA	1119	C	C6-N1-C2	-7.98	117.11	120.30
25	DA	1767	C	C2-N3-C4	-7.98	115.91	119.90
1	AA	540	G	C8-N9-C4	-7.98	103.21	106.40
25	BA	1607	C	C5-C4-N4	-7.98	114.61	120.20
25	BA	770	G	C5-C6-N1	7.98	115.49	111.50
1	AA	768	A	C6-N1-C2	-7.98	113.81	118.60
25	BA	1997	G	C6-N1-C2	-7.98	120.31	125.10
1	AA	266	G	C5-N7-C8	-7.97	100.31	104.30
25	BA	2625	G	C6-C5-N7	7.97	135.18	130.40
25	DA	2897	U	C2-N1-C1'	7.97	127.27	117.70
25	BA	766	C	C6-N1-C2	-7.97	117.11	120.30
25	BA	2017	U	C4-C5-C6	7.97	124.48	119.70
25	BA	2508	G	C5-C6-O6	-7.97	123.82	128.60
25	BA	2004	G	C2-N3-C4	-7.96	107.92	111.90
25	BA	2287	A	N1-C2-N3	7.96	133.28	129.30
25	BA	20	C	C2-N3-C4	-7.96	115.92	119.90
25	BA	208	C	C6-N1-C2	7.96	123.48	120.30
25	BA	1026	U	N1-C2-O2	7.96	128.37	122.80
25	BA	390	A	N9-C4-C5	-7.95	102.62	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	445	C	C5-C6-N1	7.95	124.98	121.00
25	BA	192	C	C2-N3-C4	-7.95	115.92	119.90
25	BA	530	G	N7-C8-N9	7.95	117.08	113.10
25	BA	1216	G	N1-C6-O6	7.95	124.67	119.90
25	BA	2377	A	C2-N3-C4	-7.95	106.62	110.60
25	BA	1695	G	N3-C2-N2	7.95	125.46	119.90
25	BA	2625	G	C5-C6-O6	7.95	133.37	128.60
25	BA	34	C	C2-N1-C1'	7.95	127.54	118.80
25	BA	926	A	C5-C6-N6	-7.95	117.34	123.70
25	DA	1791	A	C8-N9-C4	-7.95	102.62	105.80
1	AA	576	G	C4-N9-C1'	7.94	136.82	126.50
1	AA	1467	G	C5-C6-O6	7.94	133.36	128.60
25	DA	2498	C	C6-N1-C2	7.94	123.48	120.30
25	BA	15	G	C5-C6-N1	-7.94	107.53	111.50
26	DB	43	C	C6-N1-C2	-7.94	117.12	120.30
25	BA	1620	G	C8-N9-C4	7.94	109.58	106.40
25	DA	972	G	C5-C6-O6	7.94	133.36	128.60
25	BA	961	C	N3-C2-O2	-7.94	116.34	121.90
25	BA	2088	G	C5-C6-N1	-7.94	107.53	111.50
25	BA	1839	G	N3-C4-N9	7.93	130.76	126.00
1	CA	1197	G	N3-C4-N9	7.93	130.76	126.00
1	AA	997	U	C5-C4-O4	7.93	130.66	125.90
25	DA	788	A	N1-C6-N6	7.93	123.36	118.60
25	DA	888	C	C6-N1-C2	-7.93	117.13	120.30
25	BA	1121	C	C2-N3-C4	-7.93	115.94	119.90
1	CA	1133	G	N3-C4-N9	-7.93	121.24	126.00
25	BA	446	G	C8-N9-C4	7.93	109.57	106.40
25	BA	1812	A	N1-C6-N6	-7.93	113.84	118.60
25	BA	2381	C	C5-C6-N1	-7.93	117.04	121.00
1	AA	1417	G	N3-C4-N9	7.92	130.75	126.00
25	DA	1302	A	N1-C6-N6	-7.92	113.85	118.60
25	DA	528	A	C5-C6-N1	-7.92	113.74	117.70
1	AA	882	C	C6-N1-C2	-7.92	117.13	120.30
25	DA	2286	A	N7-C8-N9	7.92	117.76	113.80
25	DA	975	C	N1-C2-O2	7.92	123.65	118.90
25	BA	2274	A	C5-N7-C8	-7.92	99.94	103.90
25	BA	665	C	C6-N1-C2	7.91	123.46	120.30
25	BA	975	C	C6-N1-C2	7.91	123.46	120.30
25	BA	1336	A	C6-N1-C2	-7.91	113.85	118.60
25	DA	2035	G	C4-C5-N7	-7.91	107.64	110.80
25	BA	1839	G	N3-C2-N2	7.91	125.44	119.90
25	BA	308	G	N3-C2-N2	7.90	125.43	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1034	G	N1-C6-O6	7.90	124.64	119.90
26	BB	89	G	C4-N9-C1'	7.90	136.77	126.50
25	BA	414	C	N3-C4-C5	7.90	125.06	121.90
25	BA	729	G	N7-C8-N9	7.90	117.05	113.10
25	BA	2557	G	N1-C6-O6	7.89	124.64	119.90
1	CA	398	C	N3-C4-N4	-7.89	112.47	118.00
25	BA	1760	A	N1-C6-N6	7.89	123.34	118.60
25	BA	1774	C	N1-C2-O2	7.89	123.63	118.90
25	BA	649	G	N1-C6-O6	7.89	124.63	119.90
25	BA	734	A	N9-C4-C5	-7.89	102.64	105.80
25	BA	1497	U	C5-C4-O4	7.89	130.63	125.90
25	BA	2505	G	C2-N3-C4	-7.89	107.96	111.90
26	BB	75	G	C6-C5-N7	-7.88	125.67	130.40
25	BA	460	A	N1-C2-N3	7.88	133.24	129.30
25	BA	271(M)	G	N3-C4-C5	-7.87	124.66	128.60
25	DA	733	G	N1-C6-O6	7.87	124.62	119.90
25	DA	1914	C	C6-N1-C2	-7.87	117.15	120.30
25	BA	568	U	C6-N1-C2	7.87	125.72	121.00
25	DA	2326	C	C6-N1-C2	-7.87	117.15	120.30
25	BA	210	C	C6-N1-C2	7.86	123.45	120.30
25	BA	848	G	N7-C8-N9	-7.86	109.17	113.10
1	AA	1512	U	C5-C6-N1	-7.86	118.77	122.70
25	BA	1047	G	N3-C4-C5	-7.86	124.67	128.60
25	BA	1279	G	N3-C4-C5	-7.86	124.67	128.60
25	BA	122	G	C8-N9-C4	7.85	109.54	106.40
25	BA	2431	U	C5-C6-N1	-7.85	118.77	122.70
25	BA	1128	A	N7-C8-N9	-7.85	109.88	113.80
25	BA	1337	G	C6-N1-C2	-7.84	120.39	125.10
25	DA	2412	A	N1-C6-N6	-7.84	113.89	118.60
25	BA	481	G	N3-C4-C5	-7.84	124.68	128.60
25	DA	2396	G	C4-C5-N7	7.84	113.94	110.80
25	DA	811	U	N3-C4-O4	-7.84	113.91	119.40
25	DA	2452	C	N3-C4-N4	7.84	123.49	118.00
25	BA	139(A)	G	C5-C6-N1	7.83	115.42	111.50
25	DA	676	A	N7-C8-N9	7.83	117.72	113.80
25	BA	1443	G	N1-C6-O6	7.83	124.60	119.90
25	BA	1839	G	C8-N9-C1'	-7.83	116.82	127.00
25	DA	504	U	C5-C6-N1	7.83	126.61	122.70
25	BA	44	G	N1-C6-O6	-7.83	115.20	119.90
25	BA	2768	C	C6-N1-C2	7.83	123.43	120.30
26	BB	81	G	N3-C2-N2	-7.83	114.42	119.90
1	CA	1149	C	C5-C6-N1	7.83	124.91	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	92	A	C8-N9-C4	-7.83	102.67	105.80
25	DA	676	A	C4-C5-N7	7.83	114.61	110.70
25	BA	2044	C	C2-N3-C4	-7.82	115.99	119.90
25	DA	2876	G	C5-C6-O6	-7.82	123.91	128.60
1	CA	960	U	N1-C2-O2	7.82	128.27	122.80
25	DA	2253	G	C8-N9-C4	7.82	109.53	106.40
1	AA	365	U	C5-C6-N1	-7.82	118.79	122.70
25	BA	952	G	N1-C6-O6	7.82	124.59	119.90
25	DA	71	A	C6-C5-N7	-7.81	126.83	132.30
25	DA	736	C	N1-C2-O2	-7.81	114.21	118.90
25	DA	2056	G	C6-C5-N7	-7.81	125.71	130.40
25	BA	1665	A	N1-C6-N6	-7.81	113.92	118.60
25	BA	681	G	C6-N1-C2	-7.81	120.42	125.10
25	BA	2318	G	N7-C8-N9	7.81	117.00	113.10
25	BA	734	A	C5-N7-C8	-7.80	100.00	103.90
25	DA	1998	G	C8-N9-C4	7.80	109.52	106.40
25	BA	460	A	C2-N3-C4	-7.80	106.70	110.60
25	BA	567	A	C5-C6-N6	-7.80	117.46	123.70
25	DA	450	G	N3-C2-N2	-7.80	114.44	119.90
25	DA	798	G	N3-C2-N2	-7.80	114.44	119.90
25	DA	2439	A	C8-N9-C4	-7.80	102.68	105.80
1	AA	990	C	C6-N1-C2	-7.80	117.18	120.30
25	DA	533	G	C2-N3-C4	-7.80	108.00	111.90
25	DA	2218	U	N1-C2-O2	7.79	128.25	122.80
25	BA	2064	C	C5-C6-N1	-7.79	117.10	121.00
25	DA	102	G	C8-N9-C4	-7.79	103.28	106.40
1	AA	615	C	C6-N1-C2	-7.79	117.19	120.30
25	BA	944	G	N7-C8-N9	7.79	116.99	113.10
25	BA	1813	G	C8-N9-C4	7.79	109.52	106.40
26	DB	54	G	N7-C8-N9	7.79	116.99	113.10
1	AA	344	A	N7-C8-N9	7.79	117.69	113.80
25	DA	1653	G	N1-C2-N2	-7.79	109.19	116.20
25	BA	2614	A	C8-N9-C4	7.78	108.91	105.80
25	BA	117	G	N9-C4-C5	-7.78	102.29	105.40
1	AA	1486	G	C5-C6-O6	-7.78	123.93	128.60
25	BA	1319	G	N1-C2-N3	7.78	128.57	123.90
25	BA	2093	G	C2-N3-C4	-7.78	108.01	111.90
25	BA	15	G	N1-C6-O6	7.78	124.56	119.90
25	BA	531	C	N1-C2-O2	-7.78	114.23	118.90
25	BA	2429	G	N9-C4-C5	7.78	108.51	105.40
1	AA	22	G	C4-C5-N7	7.77	113.91	110.80
1	AA	1255	G	C5-C6-O6	-7.77	123.94	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	71	A	C5-C6-N1	-7.77	113.81	117.70
25	DA	1934	C	C6-N1-C2	7.77	123.41	120.30
25	BA	12	U	N3-C2-O2	-7.77	116.76	122.20
25	BA	1796	U	C5-C4-O4	-7.77	121.24	125.90
25	BA	1012	U	N3-C4-C5	-7.77	109.94	114.60
35	BP	45	LEU	CA-CB-CG	-7.77	97.44	115.30
25	BA	1142(A)	A	N7-C8-N9	7.76	117.68	113.80
25	DA	686	G	C2-N3-C4	-7.76	108.02	111.90
25	DA	1776	G	C5-C6-O6	-7.76	123.94	128.60
1	CA	599	C	C6-N1-C2	7.76	123.41	120.30
1	CA	1321	C	C6-N1-C2	-7.76	117.19	120.30
25	BA	1602	U	N3-C4-O4	-7.76	113.97	119.40
25	BA	2203	U	N3-C2-O2	7.76	127.63	122.20
25	DA	932	G	C5-C6-O6	7.75	133.25	128.60
25	BA	528	A	C6-C5-N7	-7.75	126.87	132.30
25	BA	761	A	C6-C5-N7	-7.75	126.87	132.30
25	BA	1708	C	N3-C4-C5	7.75	125.00	121.90
25	BA	27	G	C8-N9-C4	-7.75	103.30	106.40
25	BA	399	G	C2-N3-C4	-7.75	108.03	111.90
25	DA	2877	G	N1-C6-O6	7.75	124.55	119.90
25	DA	1992	G	C8-N9-C4	-7.75	103.30	106.40
25	BA	1216	G	C6-C5-N7	-7.74	125.75	130.40
25	BA	2093	G	N1-C2-N3	7.74	128.54	123.90
28	BE	119	ARG	NE-CZ-NH1	7.74	124.17	120.30
25	BA	1823	G	N3-C2-N2	7.74	125.32	119.90
25	BA	2585	U	C6-N1-C1'	-7.74	110.36	121.20
25	BA	2454	G	C5-C6-O6	7.74	133.24	128.60
25	DA	540	C	C6-N1-C2	-7.74	117.21	120.30
25	DA	2599	G	N9-C4-C5	7.74	108.49	105.40
25	DA	2848	G	C4-C5-N7	-7.74	107.71	110.80
25	BA	2578	G	N7-C8-N9	-7.73	109.23	113.10
25	BA	706	A	N9-C4-C5	-7.73	102.71	105.80
25	BA	745	G	C4-C5-N7	7.73	113.89	110.80
25	BA	534	U	C4-C5-C6	7.73	124.34	119.70
25	BA	2289	G	N1-C2-N3	-7.73	119.26	123.90
25	BA	2082	A	N1-C6-N6	7.73	123.24	118.60
1	CA	372	C	C6-N1-C2	7.72	123.39	120.30
25	BA	659	C	C2-N1-C1'	-7.72	110.31	118.80
25	BA	715	G	C6-C5-N7	-7.72	125.77	130.40
25	BA	805	G	C8-N9-C4	-7.72	103.31	106.40
25	BA	814	C	N3-C4-C5	7.72	124.99	121.90
25	BA	2430	A	C2-N3-C4	-7.72	106.74	110.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	347	G	N3-C4-N9	7.72	130.63	126.00
25	BA	1033	U	C6-N1-C2	7.71	125.63	121.00
25	BA	2244	U	N3-C4-O4	-7.71	114.00	119.40
25	BA	2772	C	C6-N1-C2	7.71	123.39	120.30
25	DA	811	U	C5-C4-O4	7.71	130.53	125.90
1	CA	1077	G	C8-N9-C4	7.71	109.48	106.40
25	DA	2224	G	C5-C6-N1	-7.71	107.64	111.50
25	BA	715	G	N3-C4-N9	7.71	130.63	126.00
25	BA	1819	A	N9-C4-C5	7.71	108.89	105.80
25	DA	102	G	N9-C4-C5	7.71	108.48	105.40
25	BA	514	A	C6-N1-C2	-7.71	113.97	118.60
26	BB	102	A	C2-N3-C4	-7.71	106.75	110.60
25	DA	1579	A	N1-C6-N6	7.71	123.22	118.60
1	AA	839	U	N3-C2-O2	-7.71	116.81	122.20
25	DA	811	U	C5-C6-N1	-7.71	118.85	122.70
25	DA	1313	U	C2-N1-C1'	7.70	126.94	117.70
25	BA	652(H)	C	C6-N1-C2	-7.70	117.22	120.30
25	BA	2378	A	C8-N9-C4	7.70	108.88	105.80
25	BA	561	G	C2-N3-C4	7.69	115.75	111.90
25	BA	1939	U	N1-C2-N3	-7.69	110.29	114.90
1	AA	898	G	N9-C4-C5	-7.69	102.32	105.40
25	BA	531	C	C4-C5-C6	7.69	121.24	117.40
25	DA	924	C	C6-N1-C2	7.69	123.38	120.30
25	BA	139(A)	G	C4-C5-N7	7.69	113.87	110.80
25	BA	2354	G	C5-C6-N1	7.69	115.34	111.50
25	DA	2235	G	N1-C6-O6	7.69	124.51	119.90
25	DA	2473	U	C2-N1-C1'	7.69	126.92	117.70
25	BA	1315	C	N3-C2-O2	-7.68	116.52	121.90
25	BA	2689	U	C2-N1-C1'	-7.68	108.48	117.70
25	BA	975	C	N1-C2-O2	7.68	123.51	118.90
25	BA	860	U	N3-C4-O4	-7.68	114.03	119.40
1	CA	513	C	N1-C2-O2	7.68	123.51	118.90
1	AA	529	G	C5-C6-O6	-7.68	123.99	128.60
25	BA	545	G	C4-C5-N7	7.68	113.87	110.80
25	DA	933	A	C5-N7-C8	-7.68	100.06	103.90
25	DA	949	C	N1-C2-O2	-7.68	114.29	118.90
25	BA	1198	U	N1-C2-N3	7.67	119.50	114.90
25	BA	1180	C	C6-N1-C2	7.67	123.37	120.30
25	BA	2030	A	N1-C6-N6	7.66	123.20	118.60
25	DA	265	A	C5-N7-C8	-7.66	100.07	103.90
25	BA	1315	C	C2-N3-C4	-7.66	116.07	119.90
25	DA	1294	U	N1-C2-O2	-7.66	117.44	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	509	A	C8-N9-C4	-7.66	102.74	105.80
25	BA	71	A	N1-C2-N3	7.66	133.13	129.30
25	BA	1350	C	C5-C6-N1	-7.66	117.17	121.00
25	DA	1377	G	N3-C4-N9	7.66	130.60	126.00
25	BA	1390	U	C5-C4-O4	-7.66	121.31	125.90
1	AA	576	G	N3-C4-C5	-7.66	124.77	128.60
25	BA	173	G	N1-C6-O6	7.66	124.49	119.90
25	DA	298	G	N3-C4-C5	7.66	132.43	128.60
25	BA	2450	A	C8-N9-C4	-7.65	102.74	105.80
25	BA	1106	G	C4-N9-C1'	7.65	136.44	126.50
25	BA	535	C	N1-C2-O2	-7.64	114.31	118.90
25	BA	1324	G	N1-C6-O6	7.64	124.49	119.90
25	BA	790	C	N3-C2-O2	7.64	127.25	121.90
25	BA	1257	C	C4-C5-C6	7.64	121.22	117.40
25	BA	494	G	N3-C2-N2	-7.64	114.55	119.90
25	BA	535	C	C4-C5-C6	7.64	121.22	117.40
1	AA	803	G	C5-C6-O6	7.63	133.18	128.60
25	BA	1792	G	C5-C6-N1	7.63	115.32	111.50
25	BA	2866	U	C5-C4-O4	7.63	130.48	125.90
1	AA	625	G	C8-N9-C4	-7.63	103.35	106.40
25	BA	1506	C	C2-N1-C1'	7.63	127.19	118.80
25	DA	204	A	N9-C4-C5	7.63	108.85	105.80
25	DA	735	A	C8-N9-C4	7.63	108.85	105.80
25	DA	1962	C	N3-C2-O2	7.63	127.24	121.90
25	BA	568	U	N1-C2-O2	-7.63	117.46	122.80
25	BA	1831	G	N1-C6-O6	7.63	124.48	119.90
1	CA	1441	G	C8-N9-C4	-7.63	103.35	106.40
25	DA	1313	U	C5-C6-N1	7.63	126.51	122.70
25	BA	837	C	C5-C6-N1	7.62	124.81	121.00
25	BA	2507	C	C6-N1-C2	-7.62	117.25	120.30
26	BB	72	G	C8-N9-C4	7.62	109.45	106.40
25	DA	1677	A	C8-N9-C4	7.62	108.85	105.80
25	DA	1698	A	N1-C6-N6	7.62	123.17	118.60
25	BA	2045	C	C6-N1-C2	7.61	123.34	120.30
25	BA	796	C	C2-N3-C4	-7.61	116.09	119.90
25	DA	676	A	N1-C6-N6	7.61	123.17	118.60
1	AA	1366	C	N3-C4-C5	-7.61	118.86	121.90
25	BA	29	U	N3-C4-C5	7.61	119.16	114.60
25	BA	932	G	C4-C5-N7	-7.61	107.76	110.80
25	DA	1327	C	N1-C2-O2	-7.61	114.33	118.90
25	BA	2475	C	N1-C2-O2	-7.61	114.34	118.90
25	BA	522	G	C4-C5-N7	7.60	113.84	110.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2598	A	C4-C5-N7	7.60	114.50	110.70
25	BA	692	C	C2-N3-C4	-7.60	116.10	119.90
25	BA	2689	U	N1-C2-O2	-7.60	117.48	122.80
25	DA	22	C	C5-C6-N1	-7.60	117.20	121.00
1	AA	1107	C	C6-N1-C2	-7.60	117.26	120.30
25	BA	1216	G	C5-C6-O6	-7.60	124.04	128.60
25	BA	1774	C	N3-C2-O2	-7.60	116.58	121.90
25	DA	1204	A	C5-N7-C8	-7.60	100.10	103.90
25	BA	2581	G	C5-C6-O6	7.59	133.16	128.60
25	BA	1342	A	C6-N1-C2	-7.59	114.05	118.60
25	BA	1488	G	C8-N9-C4	-7.59	103.36	106.40
25	BA	2017	U	N1-C2-N3	7.59	119.45	114.90
25	BA	991	C	N3-C4-C5	7.59	124.93	121.90
25	BA	1968	G	C8-N9-C4	-7.59	103.36	106.40
25	BA	1755	A	N9-C4-C5	7.58	108.83	105.80
25	BA	804	A	C2-N3-C4	-7.58	106.81	110.60
25	BA	523	C	N3-C4-C5	7.58	124.93	121.90
25	BA	2083	G	N1-C6-O6	7.58	124.45	119.90
25	BA	1573	G	N3-C4-N9	-7.58	121.45	126.00
25	BA	389	G	C5-C6-O6	7.58	133.15	128.60
1	AA	1363(A)	A	N9-C4-C5	7.58	108.83	105.80
25	BA	2086	U	C5-C4-O4	7.58	130.44	125.90
25	BA	815	C	C6-N1-C2	7.57	123.33	120.30
26	BB	112	U	C5-C6-N1	-7.57	118.91	122.70
25	BA	749	C	C5-C6-N1	-7.57	117.22	121.00
25	BA	1939	U	C4-C5-C6	-7.57	115.16	119.70
25	BA	197	A	N1-C2-N3	7.57	133.08	129.30
25	BA	947	G	N9-C4-C5	-7.57	102.37	105.40
25	DA	380	U	N3-C4-O4	7.57	124.69	119.40
25	BA	935	C	C6-N1-C2	7.56	123.33	120.30
25	BA	1236	G	C8-N9-C4	7.56	109.42	106.40
25	BA	1816	G	C2-N3-C4	7.56	115.68	111.90
25	DA	330	A	C5-N7-C8	-7.56	100.12	103.90
1	AA	233	C	C6-N1-C2	-7.56	117.28	120.30
1	AA	529	G	N1-C6-O6	7.56	124.44	119.90
25	BA	2689	U	C6-N1-C1'	7.56	131.78	121.20
25	BA	859	G	C8-N9-C4	7.55	109.42	106.40
25	BA	931	G	C4-C5-N7	-7.55	107.78	110.80
25	BA	1941	C	N3-C4-C5	-7.55	118.88	121.90
25	BA	130	C	N3-C2-O2	-7.55	116.61	121.90
25	BA	2012	G	C8-N9-C4	7.55	109.42	106.40
25	BA	650	C	C6-N1-C2	-7.55	117.28	120.30

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1107	G	C2-N3-C4	7.55	115.67	111.90
25	BA	1800	C	N1-C2-O2	-7.55	114.37	118.90
25	BA	330	A	N3-C4-N9	-7.55	121.36	127.40
1	AA	518	C	N1-C2-O2	7.55	123.43	118.90
25	BA	1582	C	C5-C6-N1	-7.55	117.23	121.00
25	BA	2866	U	N1-C2-N3	7.55	119.43	114.90
25	BA	2029	G	C8-N9-C4	7.54	109.42	106.40
1	CA	28	G	C8-N9-C4	-7.54	103.38	106.40
1	AA	1290	G	C8-N9-C4	-7.54	103.38	106.40
25	BA	198	C	N3-C2-O2	-7.54	116.62	121.90
25	DA	1021	A	N1-C2-N3	7.54	133.07	129.30
25	DA	2501	C	C6-N1-C2	7.54	123.31	120.30
25	BA	308	G	N3-C4-C5	-7.54	124.83	128.60
25	BA	2634	G	C5-C6-O6	-7.54	124.08	128.60
25	BA	2743	C	C2-N3-C4	-7.54	116.13	119.90
25	BA	1839	G	C4-N9-C1'	7.54	136.30	126.50
25	BA	1107	G	C4-N9-C1'	7.53	136.29	126.50
25	DA	1204	A	C6-C5-N7	-7.53	127.03	132.30
25	BA	685	A	C8-N9-C4	-7.53	102.79	105.80
25	BA	991	C	C6-N1-C2	7.53	123.31	120.30
25	DA	2686	G	N9-C4-C5	7.53	108.41	105.40
1	AA	684	A	N1-C6-N6	-7.53	114.08	118.60
25	BA	255	A	C2-N3-C4	-7.53	106.84	110.60
25	BA	2226	C	C6-N1-C2	7.53	123.31	120.30
25	BA	113	G	N3-C4-C5	7.53	132.36	128.60
25	BA	532	A	C6-N1-C2	-7.53	114.08	118.60
25	BA	1897	G	N1-C6-O6	7.53	124.42	119.90
25	BA	2252	G	N9-C4-C5	-7.52	102.39	105.40
1	CA	1218	C	C6-N1-C2	-7.52	117.29	120.30
25	BA	2235	G	N1-C2-N2	-7.52	109.43	116.20
25	BA	2863	C	C6-N1-C2	7.52	123.31	120.30
25	DA	141	A	C2-N3-C4	-7.52	106.84	110.60
25	BA	690	G	C5-C6-O6	-7.52	124.09	128.60
25	BA	1968	G	N7-C8-N9	7.52	116.86	113.10
25	BA	2881	C	C6-N1-C2	-7.52	117.29	120.30
25	BA	970	C	C6-N1-C2	7.52	123.31	120.30
25	BA	2436	G	C5-C6-N1	7.51	115.26	111.50
25	BA	1694	C	C6-N1-C2	-7.51	117.30	120.30
25	BA	1678	G	C8-N9-C4	-7.51	103.40	106.40
25	BA	71	A	N7-C8-N9	7.50	117.55	113.80
25	BA	679	C	N1-C2-O2	-7.50	114.40	118.90
25	BA	1409	C	C6-N1-C2	7.50	123.30	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	928	G	C6-C5-N7	-7.50	125.90	130.40
25	BA	257	A	N1-C6-N6	7.50	123.10	118.60
25	BA	528	A	C8-N9-C4	-7.50	102.80	105.80
25	BA	1390	U	N3-C4-O4	7.50	124.65	119.40
1	CA	1197	G	N3-C4-C5	-7.50	124.85	128.60
25	BA	2872	G	C6-C5-N7	-7.49	125.90	130.40
25	BA	2540	C	N3-C4-C5	7.49	124.90	121.90
1	AA	684	A	N9-C4-C5	7.49	108.80	105.80
25	BA	139(A)	G	C6-C5-N7	-7.49	125.91	130.40
25	BA	245	G	C4-C5-N7	7.49	113.80	110.80
25	BA	283	A	N1-C6-N6	-7.49	114.11	118.60
25	BA	1187	G	C6-N1-C2	-7.49	120.61	125.10
1	AA	1150	U	C6-N1-C2	-7.49	116.51	121.00
1	AA	1255	G	C4-C5-N7	7.49	113.79	110.80
25	DA	2207	G	N7-C8-N9	7.49	116.84	113.10
26	BB	81	G	N1-C6-O6	7.48	124.39	119.90
26	BB	115	G	N9-C4-C5	-7.48	102.41	105.40
25	BA	1592	C	C6-N1-C2	7.48	123.29	120.30
25	DA	2224	G	N1-C6-O6	7.48	124.39	119.90
25	BA	694	U	N1-C2-O2	7.48	128.03	122.80
25	BA	2624	G	C4-C5-N7	7.48	113.79	110.80
1	AA	595	G	N1-C6-O6	-7.48	115.41	119.90
25	BA	1596	A	C6-N1-C2	-7.48	114.11	118.60
25	BA	271(J)	C	N1-C2-O2	7.47	123.39	118.90
25	BA	1204	A	C4-C5-N7	7.47	114.44	110.70
1	AA	73	G	C5-C6-O6	-7.47	124.12	128.60
25	BA	197	A	C5-N7-C8	-7.47	100.17	103.90
25	BA	695	G	N1-C6-O6	7.47	124.38	119.90
25	BA	1489	U	C5-C4-O4	7.47	130.38	125.90
26	BB	81	G	C2-N3-C4	-7.47	108.17	111.90
1	CA	893	C	N1-C2-O2	7.47	123.38	118.90
25	BA	1225	G	N1-C2-N3	7.47	128.38	123.90
1	CA	1366	C	C5-C4-N4	7.47	125.43	120.20
1	AA	266	G	C4-N9-C1'	7.47	136.21	126.50
1	AA	1530	G	N3-C4-N9	-7.46	121.52	126.00
25	BA	64	A	N1-C2-N3	7.46	133.03	129.30
25	BA	330	A	C4-C5-N7	7.46	114.43	110.70
25	BA	1001	A	C2-N3-C4	7.46	114.33	110.60
25	BA	1941	C	C6-N1-C2	-7.46	117.31	120.30
1	CA	299	G	C6-C5-N7	-7.46	125.92	130.40
25	DA	2235	G	N7-C8-N9	7.46	116.83	113.10
25	BA	1570	A	N9-C4-C5	-7.46	102.82	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2030	A	C6-C5-N7	-7.46	127.08	132.30
25	BA	1350	C	C2-N3-C4	-7.46	116.17	119.90
1	CA	314	C	C6-N1-C2	-7.46	117.32	120.30
1	CA	685	G	N3-C4-N9	-7.46	121.53	126.00
25	DA	2207	G	C6-C5-N7	-7.46	125.93	130.40
1	AA	896	C	N3-C4-C5	7.45	124.88	121.90
25	BA	1296	G	N3-C4-C5	-7.45	124.87	128.60
25	DA	36	G	N1-C6-O6	7.45	124.37	119.90
1	CA	1279	A	C4-C5-C6	7.45	120.73	117.00
1	CA	728	A	N7-C8-N9	7.45	117.53	113.80
25	BA	308	G	N1-C2-N2	-7.45	109.50	116.20
25	BA	1427	A	C5-C6-N1	7.45	121.42	117.70
25	BA	2585	U	C2-N1-C1'	7.45	126.63	117.70
25	DA	1123	C	C6-N1-C2	7.45	123.28	120.30
25	BA	2767	C	N1-C2-N3	7.44	124.41	119.20
1	AA	1091	U	C6-N1-C2	-7.44	116.53	121.00
25	BA	2319	G	N3-C2-N2	-7.44	114.69	119.90
25	BA	2720	U	C6-N1-C2	7.44	125.47	121.00
25	BA	997	G	C8-N9-C4	7.44	109.38	106.40
25	BA	1839	G	C6-C5-N7	-7.44	125.94	130.40
25	DA	391	G	C6-C5-N7	-7.44	125.94	130.40
25	BA	931	G	N3-C4-C5	-7.43	124.88	128.60
25	BA	2056	G	C5-C6-O6	-7.43	124.14	128.60
1	CA	893	C	N3-C4-C5	7.43	124.87	121.90
25	DA	980	A	N1-C6-N6	7.43	123.06	118.60
25	DA	1314	C	C6-N1-C1'	-7.43	111.89	120.80
25	DA	932	G	C4-N9-C1'	-7.43	116.84	126.50
25	BA	962	G	C6-C5-N7	-7.43	125.94	130.40
1	AA	1467	G	C4-C5-N7	-7.42	107.83	110.80
25	BA	2783	G	N1-C6-O6	7.42	124.35	119.90
25	BA	1983	C	C6-N1-C2	7.42	123.27	120.30
25	BA	1047	G	C2-N3-C4	7.42	115.61	111.90
25	BA	1959	G	C4-C5-N7	-7.42	107.83	110.80
25	BA	2700	C	C6-N1-C2	7.42	123.27	120.30
25	BA	271(S)	G	C5-C6-N1	-7.42	107.79	111.50
25	BA	1558	A	C5-C6-N1	-7.42	113.99	117.70
25	BA	1830	C	N3-C2-O2	7.42	127.09	121.90
25	BA	269	U	N1-C2-N3	-7.42	110.45	114.90
25	BA	2690	C	C6-N1-C2	-7.41	117.33	120.30
25	DA	594	U	N1-C2-O2	-7.41	117.61	122.80
25	DA	932	G	C8-N9-C1'	7.41	136.64	127.00
25	DA	645	C	C5-C6-N1	7.41	124.71	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1552	G	C4-C5-N7	-7.41	107.84	110.80
25	BA	688	U	C5-C6-N1	-7.41	119.00	122.70
25	BA	793	A	N1-C6-N6	7.41	123.04	118.60
25	DA	972	G	N1-C6-O6	-7.40	115.46	119.90
25	DA	90	U	C5-C6-N1	7.40	126.40	122.70
25	DA	2207	G	N1-C6-O6	7.40	124.34	119.90
25	BA	763	G	C6-C5-N7	-7.40	125.96	130.40
25	BA	1107	G	N3-C4-N9	7.40	130.44	126.00
1	AA	1064	G	N3-C4-N9	-7.39	121.56	126.00
25	BA	1321	A	N1-C2-N3	7.39	133.00	129.30
25	BA	2085	C	C6-N1-C2	7.39	123.26	120.30
25	BA	1815	A	C6-N1-C2	-7.39	114.16	118.60
25	DA	2599	G	N3-C2-N2	-7.39	114.72	119.90
1	AA	1519	A	C8-N9-C4	-7.39	102.84	105.80
25	DA	1828	G	N3-C4-C5	-7.39	124.91	128.60
25	BA	986	C	N3-C4-C5	7.38	124.85	121.90
25	DA	1204	A	N9-C4-C5	-7.38	102.85	105.80
25	BA	1395	A	N1-C6-N6	-7.38	114.17	118.60
1	CA	1358	U	C5-C6-N1	-7.38	119.01	122.70
25	BA	2769	C	C5-C6-N1	-7.38	117.31	121.00
1	AA	721	G	C8-N9-C1'	-7.37	117.42	127.00
25	DA	298	G	C5-C6-O6	-7.37	124.18	128.60
25	BA	2675	A	C5-N7-C8	7.37	107.58	103.90
25	BA	534	U	N1-C2-O2	-7.37	117.64	122.80
25	BA	1622	G	N3-C2-N2	-7.37	114.74	119.90
25	BA	211	A	C2-N3-C4	-7.37	106.92	110.60
25	BA	1145	C	N3-C2-O2	7.37	127.06	121.90
25	BA	1334	G	C6-C5-N7	-7.36	125.98	130.40
25	DA	1937	A	N1-C6-N6	7.36	123.02	118.60
25	BA	918	A	C5-N7-C8	-7.36	100.22	103.90
25	DA	1293	C	C4-C5-C6	-7.36	113.72	117.40
25	BA	2053	G	C5-C6-O6	-7.36	124.19	128.60
25	DA	837	C	C6-N1-C2	-7.36	117.36	120.30
25	BA	204	A	N1-C6-N6	-7.36	114.19	118.60
25	BA	1202	C	N1-C2-O2	-7.36	114.49	118.90
25	BA	777	A	N1-C2-N3	7.35	132.98	129.30
1	AA	117	G	C5-C6-O6	-7.35	124.19	128.60
25	BA	1033	U	N3-C4-C5	7.35	119.01	114.60
25	BA	1710	C	C6-N1-C2	7.35	123.24	120.30
1	AA	435	C	C5-C6-N1	7.35	124.67	121.00
25	BA	736	C	N3-C2-O2	7.35	127.05	121.90
25	BA	1302	A	C8-N9-C4	7.35	108.74	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1409	C	N3-C4-C5	7.35	124.84	121.90
25	BA	1532	C	N3-C2-O2	-7.35	116.76	121.90
1	CA	363	A	N1-C6-N6	-7.35	114.19	118.60
25	BA	2317	C	C6-N1-C2	-7.35	117.36	120.30
25	BA	2501	C	C2-N3-C4	-7.35	116.23	119.90
25	BA	2826	A	N1-C2-N3	7.34	132.97	129.30
25	BA	265	A	C5-C6-N1	-7.34	114.03	117.70
1	AA	129(A)	G	O4'-C1'-N9	7.34	114.07	108.20
25	BA	2634	G	N1-C6-O6	7.34	124.31	119.90
25	BA	2860	A	C8-N9-C4	7.34	108.74	105.80
1	AA	266	G	N7-C8-N9	7.34	116.77	113.10
25	BA	1948	G	C5-C6-O6	7.34	133.00	128.60
25	DA	337	C	C2-N3-C4	-7.34	116.23	119.90
47	D1	61	ARG	NE-CZ-NH1	-7.34	116.63	120.30
25	BA	1929	G	C4-C5-N7	-7.34	107.86	110.80
25	DA	923	C	C6-N1-C2	-7.34	117.36	120.30
25	DA	2877	G	C2-N3-C4	-7.34	108.23	111.90
25	BA	962	G	N3-C2-N2	-7.34	114.77	119.90
25	BA	2318	G	N1-C6-O6	7.33	124.30	119.90
25	DA	932	G	N3-C4-C5	7.33	132.27	128.60
25	DA	786	C	C6-N1-C2	7.33	123.23	120.30
25	DA	2412	A	N9-C4-C5	7.33	108.73	105.80
25	DA	2589	A	C8-N9-C4	7.33	108.73	105.80
25	BA	2018	G	C5-C6-O6	-7.33	124.20	128.60
25	BA	652(H)	C	C2-N3-C4	7.33	123.56	119.90
25	BA	308	G	N9-C4-C5	-7.33	102.47	105.40
25	BA	780	G	C8-N9-C1'	-7.33	117.48	127.00
25	BA	2319	G	C2-N3-C4	-7.33	108.24	111.90
25	BA	973	A	N1-C2-N3	7.32	132.96	129.30
25	BA	2736	G	C5-C6-O6	-7.32	124.20	128.60
25	BA	2820	A	C8-N9-C4	7.32	108.73	105.80
25	BA	134	C	N3-C2-O2	-7.32	116.78	121.90
25	BA	2820	A	C4-C5-N7	7.32	114.36	110.70
25	BA	1237	A	N1-C6-N6	-7.32	114.21	118.60
25	DA	265	A	C2-N3-C4	-7.32	106.94	110.60
25	DA	2644	G	C5-C6-O6	7.32	132.99	128.60
25	BA	575	A	C6-C5-N7	-7.32	127.18	132.30
25	BA	1558	A	C4-C5-N7	7.32	114.36	110.70
25	BA	2686	G	C5-C6-N1	-7.32	107.84	111.50
25	DA	2700	C	C6-N1-C2	7.31	123.23	120.30
1	AA	1145	C	N1-C2-O2	7.31	123.29	118.90
25	BA	1333	C	N3-C4-C5	7.31	124.83	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2700	C	C5-C6-N1	-7.31	117.34	121.00
25	BA	1435	G	C6-C5-N7	-7.31	126.01	130.40
25	DA	1210	A	C4-C5-N7	7.31	114.36	110.70
1	AA	129(A)	G	C8-N9-C1'	-7.31	117.50	127.00
25	BA	139(A)	G	N9-C4-C5	-7.31	102.48	105.40
25	BA	2624	G	N9-C4-C5	-7.31	102.48	105.40
25	BA	2738	A	C8-N9-C4	7.31	108.72	105.80
25	BA	113	G	N1-C6-O6	7.30	124.28	119.90
25	DA	620	G	C8-N9-C4	-7.30	103.48	106.40
1	AA	541	G	C6-C5-N7	7.30	134.78	130.40
1	CA	853	G	C8-N9-C4	-7.30	103.48	106.40
1	AA	1519	A	C5-C6-N6	7.30	129.54	123.70
25	BA	804	A	N1-C2-N3	7.30	132.95	129.30
25	DA	748	G	C5-C6-N1	7.30	115.15	111.50
25	BA	229	A	C8-N9-C4	-7.30	102.88	105.80
25	DA	1983	C	C5-C6-N1	-7.30	117.35	121.00
25	BA	2232	U	N3-C2-O2	-7.29	117.09	122.20
1	CA	816	A	N1-C6-N6	-7.29	114.22	118.60
25	BA	1204	A	C4-C5-C6	7.29	120.65	117.00
25	DA	614	U	C5-C4-O4	7.29	130.27	125.90
26	BB	53	A	N7-C8-N9	7.29	117.44	113.80
25	BA	2240	C	C6-N1-C2	7.29	123.22	120.30
1	AA	76	C	N1-C2-O2	7.29	123.27	118.90
25	BA	2054	A	N1-C2-N3	7.28	132.94	129.30
25	BA	941	A	C6-C5-N7	-7.28	127.20	132.30
25	BA	190	A	N7-C8-N9	7.28	117.44	113.80
25	BA	2052	G	C4-C5-N7	7.28	113.71	110.80
1	AA	336	C	N3-C2-O2	7.28	126.99	121.90
25	BA	2429	G	C6-N1-C2	-7.28	120.73	125.10
1	AA	791	G	N1-C6-O6	7.27	124.26	119.90
1	AA	1431	C	N3-C2-O2	7.27	126.99	121.90
25	BA	1210	A	N1-C6-N6	7.27	122.96	118.60
25	BA	1295	C	N3-C4-N4	-7.27	112.91	118.00
1	CA	1356	G	C8-N9-C4	-7.27	103.49	106.40
25	DA	178	G	N9-C4-C5	7.27	108.31	105.40
25	BA	503	A	C8-N9-C4	-7.27	102.89	105.80
25	BA	686	G	N1-C2-N2	-7.27	109.66	116.20
1	AA	781	A	N1-C6-N6	7.27	122.96	118.60
1	AA	863	U	C2-N1-C1'	-7.27	108.98	117.70
25	BA	2450	A	N7-C8-N9	7.27	117.43	113.80
25	BA	772	C	C5-C6-N1	-7.27	117.37	121.00
25	BA	1721	G	N3-C4-N9	-7.27	121.64	126.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1926	U	N3-C2-O2	-7.27	117.11	122.20
25	BA	2083	G	C2-N3-C4	-7.26	108.27	111.90
25	DA	2733	A	C8-N9-C4	-7.26	102.89	105.80
25	BA	12	U	C2-N1-C1'	7.26	126.41	117.70
25	BA	1415	U	C5-C6-N1	-7.26	119.07	122.70
25	BA	2755	C	C5-C6-N1	7.26	124.63	121.00
1	CA	73	G	N1-C6-O6	-7.26	115.54	119.90
43	DX	57	LEU	CA-CB-CG	7.26	132.00	115.30
25	BA	529	A	C5-C6-N6	-7.26	117.89	123.70
25	DA	1293	C	C5-C4-N4	-7.25	115.12	120.20
25	BA	13	A	N1-C6-N6	-7.25	114.25	118.60
25	BA	1605	C	C6-N1-C2	-7.25	117.40	120.30
25	DA	80	G	N3-C4-C5	-7.25	124.97	128.60
25	BA	1334	G	C2-N3-C4	-7.25	108.28	111.90
26	BB	68	C	C6-N1-C2	7.25	123.20	120.30
25	BA	2273	A	C8-N9-C4	-7.25	102.90	105.80
25	DA	2755	C	C5-C6-N1	7.25	124.62	121.00
25	BA	2014	A	C8-N9-C4	7.25	108.70	105.80
25	BA	2625	G	C4-C5-N7	-7.24	107.90	110.80
25	DA	303	U	C5-C6-N1	-7.24	119.08	122.70
25	DA	2501	C	N3-C4-C5	7.24	124.80	121.90
25	BA	1123	C	N1-C2-O2	-7.24	114.56	118.90
25	DA	188	G	C4-C5-N7	7.24	113.70	110.80
1	AA	1496	C	C5-C6-N1	-7.24	117.38	121.00
25	BA	399	G	C8-N9-C4	7.24	109.30	106.40
25	BA	2377	A	N1-C6-N6	7.24	122.94	118.60
25	DA	778	G	C2-N3-C4	-7.24	108.28	111.90
25	BA	127	A	C4-C5-C6	-7.23	113.38	117.00
25	BA	2512	C	N3-C4-C5	7.23	124.79	121.90
25	DA	933	A	C8-N9-C4	-7.23	102.91	105.80
25	BA	803	U	C5-C6-N1	-7.23	119.08	122.70
25	BA	2489	G	N9-C4-C5	-7.23	102.51	105.40
25	DA	399	G	C5-C6-O6	-7.23	124.26	128.60
1	AA	1260	C	C6-N1-C2	-7.23	117.41	120.30
25	BA	727	A	C5-N7-C8	-7.23	100.29	103.90
25	DA	1618	A	C8-N9-C4	-7.23	102.91	105.80
1	AA	157	G	C8-N9-C4	-7.23	103.51	106.40
25	BA	2605	U	N3-C2-O2	-7.23	117.14	122.20
25	DA	71	A	C8-N9-C4	-7.22	102.91	105.80
25	BA	847	U	C2-N3-C4	-7.22	122.67	127.00
25	BA	1234	U	N3-C4-O4	7.22	124.45	119.40
25	DA	458	G	N1-C6-O6	-7.22	115.57	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	185	U	N3-C2-O2	-7.22	117.15	122.20
25	BA	308	G	C4-C5-C6	7.22	123.13	118.80
25	BA	2322	A	N1-C6-N6	7.22	122.93	118.60
25	DA	1965	C	C6-N1-C2	7.22	123.19	120.30
1	CA	1158	C	N3-C2-O2	-7.21	116.85	121.90
1	CA	1410	G	C8-N9-C4	7.21	109.29	106.40
25	DA	2624	G	N1-C6-O6	7.21	124.23	119.90
25	BA	1781	C	N3-C4-C5	7.21	124.78	121.90
25	BA	1972	A	C5-N7-C8	-7.21	100.29	103.90
25	BA	1977	A	C8-N9-C4	7.21	108.69	105.80
25	BA	186	G	C8-N9-C4	7.21	109.28	106.40
25	BA	506	G	C5-C6-N1	7.21	115.11	111.50
25	BA	659	C	N3-C4-C5	7.21	124.78	121.90
25	BA	2252	G	C8-N9-C4	7.21	109.28	106.40
25	BA	2511	U	N1-C2-N3	7.21	119.23	114.90
25	BA	2387	U	N1-C2-O2	-7.21	117.75	122.80
1	CA	1373	G	N3-C4-C5	-7.21	125.00	128.60
1	AA	883	C	C2-N1-C1'	7.21	126.73	118.80
1	CA	1518	A	C8-N9-C4	-7.21	102.92	105.80
25	BA	127	A	N9-C4-C5	-7.21	102.92	105.80
1	AA	873	A	C8-N9-C4	-7.20	102.92	105.80
25	BA	1928	A	C2-N3-C4	7.20	114.20	110.60
25	DA	2609	U	N1-C2-N3	7.20	119.22	114.90
1	CA	1519	A	N7-C8-N9	7.20	117.40	113.80
25	BA	2716	U	C5-C6-N1	-7.20	119.10	122.70
33	BN	25	ARG	NE-CZ-NH1	-7.20	116.70	120.30
25	DA	1960	A	C8-N9-C4	7.20	108.68	105.80
25	BA	525	U	N1-C2-N3	7.19	119.22	114.90
25	BA	1251	C	C6-N1-C2	-7.19	117.42	120.30
25	BA	1487	G	N7-C8-N9	7.19	116.69	113.10
25	BA	1619	G	N7-C8-N9	7.19	116.69	113.10
25	DA	2058	A	N7-C8-N9	7.19	117.39	113.80
25	BA	2105	C	N1-C2-O2	7.19	123.21	118.90
25	BA	216	A	N1-C2-N3	7.19	132.89	129.30
25	DA	975	C	N3-C2-O2	-7.19	116.87	121.90
25	BA	1128	A	C8-N9-C4	7.19	108.67	105.80
1	AA	1363(A)	A	C5-C6-N1	7.18	121.29	117.70
25	BA	435	C	N1-C2-O2	7.18	123.21	118.90
26	BB	20	C	C5-C6-N1	7.18	124.59	121.00
25	DA	2595	G	C5-N7-C8	-7.18	100.71	104.30
1	AA	365	U	C2-N1-C1'	-7.18	109.08	117.70
25	BA	204	A	N9-C4-C5	7.18	108.67	105.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1241	A	C8-N9-C4	7.18	108.67	105.80
25	BA	1838	C	C6-N1-C2	7.18	123.17	120.30
25	BA	1125	G	C5-C6-N1	-7.18	107.91	111.50
25	BA	1989	G	N1-C6-O6	7.18	124.21	119.90
25	BA	2768	C	C5-C6-N1	-7.18	117.41	121.00
1	CA	1373	G	N3-C4-N9	7.18	130.31	126.00
25	DA	1820	U	C6-N1-C2	7.18	125.31	121.00
25	BA	759	G	C8-N9-C4	7.17	109.27	106.40
25	BA	807	U	N1-C2-N3	7.17	119.20	114.90
25	BA	947	G	C4-C5-N7	7.17	113.67	110.80
25	DA	1607	C	C6-N1-C2	7.17	123.17	120.30
25	BA	575	A	N1-C6-N6	7.17	122.90	118.60
25	BA	1373	A	C5-C6-N1	7.17	121.29	117.70
25	BA	2520	C	N1-C2-O2	-7.17	114.60	118.90
25	DA	728	G	C8-N9-C4	7.17	109.27	106.40
25	DA	1970	A	C8-N9-C4	-7.17	102.93	105.80
1	AA	1482	G	N3-C4-N9	7.17	130.30	126.00
25	BA	1188	U	N3-C4-O4	7.17	124.42	119.40
1	CA	917	G	C8-N9-C4	-7.17	103.53	106.40
25	DA	1670	C	N3-C4-C5	-7.17	119.03	121.90
25	BA	1258	C	C5-C6-N1	-7.17	117.42	121.00
25	BA	2468	G	C6-C5-N7	-7.17	126.10	130.40
25	DA	271(O)	C	N1-C2-O2	7.17	123.20	118.90
1	AA	307	C	C6-N1-C2	-7.17	117.43	120.30
25	BA	272	G	N3-C4-C5	-7.17	125.02	128.60
25	BA	2388	A	N9-C4-C5	7.17	108.67	105.80
25	BA	749	C	C6-N1-C2	7.16	123.17	120.30
25	DA	1353	A	N9-C4-C5	7.16	108.67	105.80
25	BA	734	A	C2-N3-C4	-7.16	107.02	110.60
25	BA	941	A	N1-C6-N6	7.16	122.90	118.60
25	BA	2512	C	N1-C2-O2	-7.16	114.60	118.90
25	DA	1932	A	N7-C8-N9	7.16	117.38	113.80
1	AA	219	C	C6-N1-C2	-7.16	117.44	120.30
25	DA	2781	A	N1-C6-N6	-7.16	114.31	118.60
25	BA	561	G	N1-C6-O6	-7.15	115.61	119.90
25	BA	1007	C	C2-N3-C4	-7.15	116.32	119.90
25	BA	15	G	C2-N3-C4	-7.15	108.33	111.90
25	BA	1306	C	N1-C2-O2	-7.15	114.61	118.90
25	DA	450	G	C4-C5-C6	7.15	123.09	118.80
25	DA	1223	G	N3-C4-N9	-7.15	121.71	126.00
1	AA	1206	G	C5-C6-O6	-7.14	124.31	128.60
25	BA	688	U	N1-C2-O2	-7.14	117.80	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2020	A	N1-C2-N3	7.14	132.87	129.30
25	BA	2588	G	C5-C6-O6	7.14	132.89	128.60
25	BA	236	C	C2-N3-C4	-7.14	116.33	119.90
25	DA	2607	G	N3-C4-N9	7.14	130.29	126.00
25	BA	777	A	N1-C6-N6	-7.14	114.31	118.60
25	BA	1937	A	N1-C6-N6	7.14	122.88	118.60
25	BA	2445	G	N1-C2-N3	7.14	128.19	123.90
25	DA	820	A	N1-C6-N6	-7.14	114.32	118.60
1	AA	1430	C	C6-N1-C2	7.14	123.16	120.30
25	BA	1034	G	N3-C2-N2	-7.14	114.91	119.90
1	CA	1187	G	N3-C2-N2	-7.13	114.91	119.90
25	BA	1781	C	C5-C4-N4	-7.13	115.21	120.20
25	BA	2776	A	C2-N3-C4	-7.13	107.03	110.60
25	BA	2855	C	N3-C4-C5	7.13	124.75	121.90
25	DA	1934	C	N3-C4-C5	7.13	124.75	121.90
1	AA	317	G	C5-C6-O6	-7.13	124.32	128.60
1	AA	1266	G	N1-C6-O6	7.13	124.18	119.90
22	AY	26	GLY	N-CA-C	7.13	130.93	113.10
25	BA	1377	G	N9-C4-C5	7.13	108.25	105.40
25	BA	1602	U	C5-C6-N1	-7.13	119.14	122.70
25	BA	192	C	N3-C4-C5	7.13	124.75	121.90
25	BA	2088	G	N1-C2-N3	7.13	128.18	123.90
25	BA	1333	C	C2-N1-C1'	7.12	126.64	118.80
25	DA	1769	G	C8-N9-C4	-7.12	103.55	106.40
25	DA	2373	G	C8-N9-C4	7.12	109.25	106.40
25	BA	139(A)	G	C4-N9-C1'	7.12	135.76	126.50
25	BA	141	A	C4-C5-C6	7.12	120.56	117.00
25	BA	148	C	C2-N3-C4	-7.12	116.34	119.90
25	BA	461	C	C6-N1-C2	-7.12	117.45	120.30
25	BA	2729	G	C2-N3-C4	-7.12	108.34	111.90
25	BA	113	G	N3-C4-N9	-7.12	121.73	126.00
25	BA	1142(A)	A	C4-C5-N7	7.12	114.26	110.70
25	DA	2755	C	C2-N1-C1'	7.12	126.63	118.80
25	BA	1107	G	N3-C4-C5	-7.12	125.04	128.60
25	DA	1979	C	N3-C4-C5	-7.12	119.05	121.90
25	BA	763	G	N1-C2-N3	7.12	128.17	123.90
25	BA	1607	C	C2-N1-C1'	7.12	126.63	118.80
25	BA	1950	G	N1-C6-O6	7.12	124.17	119.90
25	DA	1776	G	C6-C5-N7	-7.12	126.13	130.40
25	BA	1933	G	N1-C6-O6	7.11	124.17	119.90
25	BA	1204	A	C4-N9-C1'	7.11	139.10	126.30
25	BA	122	G	C5-C6-N1	-7.11	107.94	111.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2730	C	C6-N1-C2	7.11	123.14	120.30
26	BB	95	C	N3-C2-O2	7.11	126.88	121.90
25	BA	2512	C	C2-N3-C4	-7.11	116.35	119.90
25	BA	2228	G	C4-N9-C1'	7.10	135.74	126.50
25	DA	2423	U	C2-N1-C1'	-7.10	109.18	117.70
1	AA	890	G	C5-C6-O6	7.10	132.86	128.60
1	CA	1391	U	C5-C4-O4	7.10	130.16	125.90
1	AA	1255	G	N3-C4-N9	7.10	130.26	126.00
25	BA	801	G	N1-C6-O6	-7.10	115.64	119.90
25	BA	878	A	C8-N9-C4	-7.10	102.96	105.80
25	DA	1273	U	C5-C6-N1	-7.10	119.15	122.70
1	AA	166	G	N3-C4-N9	7.10	130.26	126.00
1	AA	721	G	C4-N9-C1'	7.10	135.73	126.50
1	AA	1518	A	C5-C6-N6	7.10	129.38	123.70
25	BA	457	A	N1-C6-N6	-7.10	114.34	118.60
25	BA	809	G	C8-N9-C4	-7.10	103.56	106.40
25	BA	2067	G	C5-C6-N1	7.10	115.05	111.50
25	BA	1807	G	C6-C5-N7	-7.10	126.14	130.40
25	DA	2286	A	C2-N3-C4	-7.10	107.05	110.60
25	BA	1197	G	C8-N9-C4	7.09	109.24	106.40
1	CA	129(A)	G	O4'-C1'-N9	7.09	113.88	108.20
25	DA	512	G	N9-C4-C5	7.09	108.24	105.40
25	BA	580	C	C6-N1-C2	7.09	123.14	120.30
25	DA	1135	C	N1-C2-O2	7.09	123.16	118.90
25	BA	1285	G	N3-C4-C5	-7.09	125.05	128.60
1	AA	794	A	C2-N3-C4	-7.09	107.06	110.60
25	BA	97	C	N3-C4-C5	-7.09	119.06	121.90
25	BA	1130	U	N3-C2-O2	-7.09	117.24	122.20
25	BA	2072	G	C6-C5-N7	-7.09	126.15	130.40
25	DA	1999	C	C5-C6-N1	-7.09	117.45	121.00
25	BA	179	G	C4-C5-C6	7.09	123.05	118.80
25	BA	1889	A	N1-C6-N6	7.09	122.85	118.60
25	BA	2719	G	C4-C5-N7	7.09	113.64	110.80
25	BA	569	U	N1-C2-O2	-7.08	117.84	122.80
25	BA	2522	U	N3-C4-O4	7.08	124.36	119.40
1	CA	892	A	N1-C6-N6	7.08	122.85	118.60
25	DA	747	U	C2-N1-C1'	7.08	126.20	117.70
1	CA	831	U	C6-N1-C2	-7.08	116.75	121.00
25	BA	205	G	C8-N9-C4	7.08	109.23	106.40
25	BA	2686	G	C4-C5-C6	7.08	123.05	118.80
25	BA	151	C	C5-C6-N1	-7.08	117.46	121.00
25	BA	1012	U	N3-C4-O4	7.08	124.35	119.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1338	G	N9-C4-C5	-7.08	102.57	105.40
25	BA	1972	A	N7-C8-N9	7.08	117.34	113.80
4	CD	31	CYS	N-CA-CB	7.08	123.34	110.60
1	CA	546	G	N1-C6-O6	-7.08	115.65	119.90
25	DA	1830	C	C4-C5-C6	-7.08	113.86	117.40
25	DA	1355	G	N1-C6-O6	7.07	124.14	119.90
25	BA	1238	G	C5-C6-O6	-7.07	124.36	128.60
18	AR	55	ARG	NE-CZ-NH1	7.07	123.83	120.30
25	BA	2260	C	N3-C2-O2	-7.07	116.95	121.90
1	AA	1519	A	C5-C6-N1	-7.07	114.17	117.70
25	BA	1149	G	C2-N3-C4	-7.07	108.37	111.90
25	BA	1966	A	C8-N9-C4	7.07	108.63	105.80
25	BA	2247	A	N1-C2-N3	7.07	132.83	129.30
1	CA	579	G	N3-C4-C5	-7.07	125.07	128.60
25	DA	803	U	N3-C2-O2	-7.07	117.25	122.20
25	BA	1570	A	C4-C5-N7	7.06	114.23	110.70
1	AA	1456	G	C8-N9-C4	7.06	109.22	106.40
25	BA	179	G	N1-C6-O6	7.06	124.14	119.90
25	BA	211	A	N1-C2-N3	7.06	132.83	129.30
25	BA	2869	G	C4-C5-N7	-7.06	107.97	110.80
9	AI	107	ARG	NE-CZ-NH1	7.06	123.83	120.30
25	DA	113	G	N3-C4-C5	7.06	132.13	128.60
25	BA	2040	C	N3-C2-O2	7.06	126.84	121.90
25	BA	2380	C	N3-C4-N4	-7.06	113.06	118.00
25	BA	2848	G	C8-N9-C4	-7.06	103.58	106.40
25	DA	2512	C	N1-C2-O2	-7.06	114.67	118.90
25	BA	1769	G	C5-C6-O6	-7.06	124.37	128.60
1	CA	1277	C	N1-C2-O2	7.05	123.13	118.90
25	DA	1201	C	C6-N1-C2	7.05	123.12	120.30
25	DA	1531	C	C6-N1-C2	-7.05	117.48	120.30
25	BA	961	C	C4-C5-C6	7.05	120.92	117.40
25	BA	1410	G	C8-N9-C4	7.05	109.22	106.40
25	BA	1796	U	N3-C2-O2	7.05	127.13	122.20
25	BA	432	A	C8-N9-C4	7.05	108.62	105.80
25	BA	1213	A	N1-C2-N3	7.05	132.82	129.30
25	BA	2768	C	N3-C4-C5	7.05	124.72	121.90
25	BA	1417	C	C4-C5-C6	7.04	120.92	117.40
35	DP	45	LEU	CA-CB-CG	-7.04	99.10	115.30
1	AA	511	C	N1-C2-O2	-7.04	114.68	118.90
1	AA	817	C	N1-C2-N3	-7.04	114.27	119.20
25	BA	856	C	C5-C6-N1	7.04	124.52	121.00
25	BA	866	A	N7-C8-N9	7.04	117.32	113.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1761	C	C5-C4-N4	-7.04	115.27	120.20
25	BA	2351	G	N1-C6-O6	-7.04	115.67	119.90
25	DA	774	A	C8-N9-C4	-7.04	102.98	105.80
25	BA	1793	C	C6-N1-C2	-7.04	117.48	120.30
25	BA	1904	G	N7-C8-N9	-7.04	109.58	113.10
25	BA	611	C	C6-N1-C2	7.04	123.11	120.30
25	BA	1337	G	C5-C6-O6	-7.04	124.38	128.60
25	BA	128	C	C6-N1-C2	7.03	123.11	120.30
25	BA	1579	A	C6-C5-N7	-7.03	127.38	132.30
25	DA	991	C	C5-C6-N1	7.03	124.52	121.00
1	AA	1363(A)	A	C8-N9-C4	-7.03	102.99	105.80
25	BA	699	A	C5-C6-N6	-7.03	118.08	123.70
1	AA	928	G	C4-C5-N7	7.03	113.61	110.80
25	BA	122	G	N3-C2-N2	-7.03	114.98	119.90
25	BA	2585	U	N3-C4-C5	7.03	118.82	114.60
1	CA	1523	G	N9-C4-C5	7.03	108.21	105.40
25	DA	12	U	N1-C2-O2	7.03	127.72	122.80
25	DA	2023	G	N3-C4-N9	7.03	130.22	126.00
25	BA	72	U	N1-C2-O2	-7.03	117.88	122.80
25	BA	2323	G	C5-C6-O6	-7.03	124.38	128.60
1	AA	812	C	N3-C2-O2	-7.02	116.98	121.90
25	BA	784	A	C8-N9-C4	-7.02	102.99	105.80
25	BA	2820	A	N1-C6-N6	7.02	122.81	118.60
25	BA	333	G	C8-N9-C4	-7.02	103.59	106.40
25	BA	645	C	C6-N1-C1'	-7.02	112.38	120.80
25	DA	303	U	C6-N1-C2	7.02	125.21	121.00
23	AV	1	C	C5-C6-N1	7.02	124.51	121.00
25	DA	2583	G	N1-C6-O6	-7.02	115.69	119.90
25	BA	733	G	C6-N1-C2	-7.01	120.89	125.10
25	BA	1301	A	C4-C5-C6	7.01	120.51	117.00
25	BA	1603	A	C8-N9-C4	-7.01	102.99	105.80
25	BA	1619	G	C5-N7-C8	-7.01	100.79	104.30
25	BA	1664	A	N1-C6-N6	-7.01	114.39	118.60
25	DA	2033	A	N1-C6-N6	-7.01	114.39	118.60
25	DA	2714	G	N1-C6-O6	7.01	124.11	119.90
25	BA	2581	G	N7-C8-N9	7.01	116.61	113.10
25	BA	1340	U	N1-C2-O2	-7.01	117.89	122.80
25	BA	1435	G	N1-C6-O6	7.01	124.11	119.90
1	CA	194	C	C5-C6-N1	7.01	124.50	121.00
25	DA	2206	G	N3-C4-C5	7.01	132.10	128.60
1	AA	299	G	N3-C4-N9	-7.00	121.80	126.00
25	BA	736	C	N1-C2-O2	-7.00	114.70	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	333	G	N1-C6-O6	7.00	124.10	119.90
25	DA	265	A	C4-C5-C6	7.00	120.50	117.00
25	BA	1555	G	C5-C6-O6	-7.00	124.40	128.60
25	BA	1675	C	N3-C4-C5	-7.00	119.10	121.90
25	BA	2616	C	N3-C4-C5	7.00	124.70	121.90
25	DA	503	A	N1-C6-N6	-7.00	114.40	118.60
25	BA	693	C	N1-C2-O2	7.00	123.10	118.90
25	BA	2431	U	N1-C2-N3	7.00	119.10	114.90
1	AA	15	G	C4-N9-C1'	6.99	135.59	126.50
25	BA	458	G	C4-C5-N7	-6.99	108.00	110.80
25	DA	2624	G	C5-C6-O6	-6.99	124.41	128.60
25	BA	404	C	C6-N1-C1'	6.99	129.19	120.80
25	BA	648	G	N1-C2-N2	-6.99	109.91	116.20
25	BA	807	U	C2-N3-C4	-6.99	122.81	127.00
25	BA	1709	U	C5-C4-O4	6.99	130.09	125.90
25	BA	97	C	C4-C5-C6	6.99	120.89	117.40
25	BA	812	C	N1-C2-O2	-6.99	114.71	118.90
25	DA	1273	U	C2-N3-C4	-6.99	122.81	127.00
25	DA	1798	U	C5-C6-N1	-6.98	119.21	122.70
25	BA	531	C	C5-C6-N1	-6.98	117.51	121.00
25	DA	2326	C	N1-C2-O2	-6.98	114.71	118.90
25	BA	702	G	C8-N9-C4	6.98	109.19	106.40
25	BA	727	A	C5-C6-N6	-6.98	118.12	123.70
25	BA	2008	C	N3-C4-N4	6.98	122.89	118.00
25	DA	2238	G	N1-C6-O6	6.98	124.09	119.90
25	DA	1408	C	N3-C4-N4	6.98	122.88	118.00
25	BA	115	C	C6-N1-C2	6.97	123.09	120.30
25	BA	645	C	C4-C5-C6	-6.97	113.91	117.40
25	BA	1210	A	N3-C4-C5	6.97	131.68	126.80
25	DA	1235	G	C5-C6-O6	6.97	132.78	128.60
25	DA	1425	G	C5-C6-N1	-6.97	108.01	111.50
25	DA	2587	A	C6-C5-N7	-6.97	127.42	132.30
1	AA	785	G	N1-C6-O6	6.97	124.08	119.90
25	BA	1372	U	C5-C4-O4	-6.97	121.72	125.90
25	BA	582	G	N1-C6-O6	-6.97	115.72	119.90
25	DA	972	G	C8-N9-C4	-6.97	103.61	106.40
25	BA	1304	C	C6-N1-C2	6.97	123.09	120.30
1	AA	1358	U	N1-C2-N3	6.97	119.08	114.90
25	BA	143	G	C8-N9-C4	6.97	109.19	106.40
25	BA	179	G	C6-C5-N7	-6.97	126.22	130.40
25	BA	1823	G	N9-C4-C5	-6.97	102.61	105.40
25	DA	1553	A	N1-C6-N6	-6.96	114.42	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1005	C	N3-C2-O2	-6.96	117.03	121.90
25	BA	2605	U	N3-C4-O4	-6.96	114.53	119.40
26	BB	85	G	N3-C4-C5	-6.96	125.12	128.60
25	DA	1672	C	C6-N1-C2	6.96	123.08	120.30
1	AA	1150	U	C5-C6-N1	6.96	126.18	122.70
25	BA	2232	U	N1-C2-N3	6.96	119.08	114.90
25	DA	51	G	N3-C4-C5	-6.96	125.12	128.60
25	BA	2628	C	N3-C4-C5	6.96	124.68	121.90
25	BA	941	A	C4-C5-C6	6.95	120.48	117.00
25	BA	1314	C	C6-N1-C2	6.95	123.08	120.30
25	BA	1555	G	N1-C6-O6	6.95	124.07	119.90
25	DA	783	A	C2-N3-C4	6.95	114.08	110.60
25	DA	1558	A	C4-C5-C6	6.95	120.48	117.00
25	BA	2877	G	N3-C4-C5	6.95	132.08	128.60
25	DA	1926	U	N1-C2-N3	6.95	119.07	114.90
25	DA	2253	G	C5-C6-O6	-6.95	124.43	128.60
25	BA	765	G	N1-C6-O6	6.95	124.07	119.90
25	BA	1315	C	N1-C2-N3	6.95	124.06	119.20
1	CA	1502	A	C5-N7-C8	-6.95	100.43	103.90
25	BA	1133	U	C5-C6-N1	-6.95	119.23	122.70
25	BA	2624	G	C6-C5-N7	-6.95	126.23	130.40
25	BA	1983	C	C5-C6-N1	-6.94	117.53	121.00
25	BA	2228	G	N3-C4-N9	6.94	130.16	126.00
25	DA	271(M)	G	C6-C5-N7	-6.94	126.23	130.40
25	BA	652(S)	C	C5-C6-N1	6.94	124.47	121.00
1	AA	1496	C	C2-N3-C4	-6.94	116.43	119.90
25	BA	51	G	C4-C5-N7	-6.94	108.03	110.80
25	BA	463	G	N3-C2-N2	6.94	124.76	119.90
1	AA	1475	G	N7-C8-N9	6.94	116.57	113.10
25	BA	1776	G	C4-C5-N7	6.94	113.57	110.80
25	DA	2689	U	N1-C2-N3	6.94	119.06	114.90
25	BA	1275	A	C4-C5-C6	6.93	120.47	117.00
25	DA	2286	A	C4-C5-N7	6.93	114.17	110.70
25	BA	774	A	C8-N9-C4	-6.93	103.03	105.80
25	DA	2039	C	C2-N1-C1'	6.93	126.43	118.80
25	DA	459	U	C5-C4-O4	6.93	130.06	125.90
25	DA	1905	C	N3-C2-O2	-6.93	117.05	121.90
25	BA	149	A	N1-C2-N3	6.93	132.76	129.30
25	BA	2447	G	C6-N1-C2	-6.93	120.94	125.10
1	CA	1324	A	C8-N9-C4	-6.93	103.03	105.80
25	BA	1286	A	N1-C2-N3	6.92	132.76	129.30
25	BA	1570	A	C5-C6-N6	-6.92	118.16	123.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2607	G	C6-C5-N7	-6.92	126.25	130.40
1	AA	731	G	N3-C2-N2	-6.92	115.05	119.90
25	BA	90	U	N1-C2-O2	6.92	127.64	122.80
25	BA	179	G	C8-N9-C1'	-6.92	118.00	127.00
26	BB	45	A	N1-C2-N3	6.92	132.76	129.30
25	BA	1028	A	C5-C6-N1	6.92	121.16	117.70
25	BA	1187	G	N3-C2-N2	-6.92	115.06	119.90
25	BA	2721	A	N1-C6-N6	6.92	122.75	118.60
25	BA	203	C	N1-C2-O2	-6.92	114.75	118.90
25	BA	1701	A	N1-C6-N6	6.92	122.75	118.60
25	DA	1372	U	C2-N1-C1'	6.92	126.00	117.70
25	BA	231	C	C4-C5-C6	6.92	120.86	117.40
25	BA	320	A	N1-C6-N6	6.92	122.75	118.60
25	BA	132	G	C8-N9-C4	6.91	109.17	106.40
25	BA	1332	G	C8-N9-C4	-6.91	103.63	106.40
25	DA	1531	C	C5-C6-N1	6.91	124.46	121.00
25	BA	185	U	C2-N3-C4	-6.91	122.85	127.00
25	BA	568	U	C5-C6-N1	-6.91	119.25	122.70
25	BA	700	G	N9-C4-C5	6.91	108.17	105.40
25	BA	1142(A)	A	N1-C6-N6	6.91	122.75	118.60
25	BA	2261	C	C4-C5-C6	6.91	120.86	117.40
25	BA	2508	G	N1-C6-O6	6.91	124.05	119.90
25	BA	1949	G	C2-N3-C4	-6.91	108.45	111.90
25	BA	2894	G	C5-C6-N1	-6.91	108.05	111.50
26	BB	80	U	N3-C4-C5	-6.91	110.45	114.60
25	DA	2732	G	C5-C6-N1	6.91	114.95	111.50
25	BA	689	A	C5-C6-N6	6.91	129.22	123.70
25	BA	2056	G	N9-C4-C5	-6.91	102.64	105.40
25	BA	1333	C	C6-N1-C1'	-6.91	112.51	120.80
25	DA	2695	C	N3-C4-C5	6.91	124.66	121.90
1	AA	319	G	C5-C6-O6	-6.90	124.46	128.60
25	BA	430	G	C6-C5-N7	-6.90	126.26	130.40
25	BA	1430	C	N3-C4-C5	-6.90	119.14	121.90
25	DA	399	G	N1-C6-O6	6.90	124.04	119.90
25	BA	412	A	C8-N9-C4	6.90	108.56	105.80
25	BA	1604	C	C5-C4-N4	-6.90	115.37	120.20
1	CA	1267	C	N3-C2-O2	-6.90	117.07	121.90
1	AA	576	G	N3-C4-N9	6.90	130.14	126.00
25	DA	2063	C	N1-C2-O2	-6.90	114.76	118.90
1	AA	576	G	C6-C5-N7	-6.90	126.26	130.40
25	BA	224	G	N3-C4-N9	6.89	130.14	126.00
25	BA	236	C	N3-C4-C5	6.89	124.66	121.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	259	G	C2-N3-C4	-6.89	108.45	111.90
25	BA	530	G	C5-N7-C8	-6.89	100.85	104.30
25	BA	2374	C	C5-C6-N1	-6.89	117.55	121.00
25	DA	2622	C	C6-N1-C2	6.89	123.06	120.30
25	BA	587	C	C5-C4-N4	6.89	125.02	120.20
25	BA	2033	A	N7-C8-N9	-6.89	110.36	113.80
25	BA	205	G	C6-C5-N7	-6.89	126.27	130.40
25	BA	2510	C	C5-C6-N1	-6.89	117.56	121.00
25	BA	973	A	C4-C5-C6	6.88	120.44	117.00
25	BA	1003	G	C5-C6-O6	-6.88	124.47	128.60
25	BA	1937	A	C4-C5-C6	6.88	120.44	117.00
25	DA	2877	G	N3-C4-C5	6.88	132.04	128.60
25	BA	113	G	N3-C2-N2	-6.88	115.08	119.90
25	BA	1828	G	N3-C4-N9	6.88	130.13	126.00
1	AA	513	C	C6-N1-C1'	-6.88	112.54	120.80
25	BA	708	C	N1-C2-O2	6.88	123.03	118.90
25	BA	2201	C	N3-C4-C5	6.88	124.65	121.90
25	BA	503	A	N1-C2-N3	6.88	132.74	129.30
25	BA	2791	C	C5-C6-N1	6.88	124.44	121.00
26	BB	41	U	C2-N3-C4	-6.88	122.87	127.00
1	AA	740	U	C2-N1-C1'	-6.88	109.45	117.70
25	BA	1494	A	C8-N9-C4	-6.88	103.05	105.80
25	DA	2324	C	C6-N1-C2	6.88	123.05	120.30
1	AA	1431	C	C6-N1-C2	6.87	123.05	120.30
25	BA	479	A	N7-C8-N9	-6.87	110.36	113.80
25	BA	692	C	N3-C4-C5	6.87	124.65	121.90
25	BA	1121	C	N1-C2-O2	-6.87	114.78	118.90
25	BA	1199	U	N3-C4-C5	6.87	118.72	114.60
26	BB	102	A	N1-C6-N6	-6.87	114.48	118.60
25	DA	71	A	N1-C6-N6	6.87	122.72	118.60
25	BA	437	G	C5-N7-C8	-6.87	100.86	104.30
25	BA	1321	A	N1-C6-N6	6.87	122.72	118.60
1	CA	1267	C	C6-N1-C2	-6.87	117.55	120.30
25	BA	2551	C	N1-C2-O2	-6.87	114.78	118.90
1	CA	1260	C	C6-N1-C2	-6.87	117.55	120.30
1	AA	1484	C	C6-N1-C2	6.87	123.05	120.30
25	BA	23	G	C5-C6-N1	-6.87	108.06	111.50
1	AA	791	G	C5-C6-N1	-6.87	108.07	111.50
25	BA	2729	G	C8-N9-C4	6.87	109.15	106.40
25	BA	532	A	C5-C6-N1	6.86	121.13	117.70
25	BA	1792	G	C6-C5-N7	6.86	134.52	130.40
25	DA	2039	C	C6-N1-C2	-6.86	117.56	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	34	C	C6-N1-C2	-6.86	117.56	120.30
1	CA	1205	U	C6-N1-C2	-6.86	116.88	121.00
25	DA	932	G	N1-C6-O6	-6.86	115.78	119.90
25	BA	123	G	N1-C6-O6	6.86	124.02	119.90
25	BA	955	C	N1-C2-O2	-6.86	114.78	118.90
1	CA	976	G	N3-C4-C5	-6.86	125.17	128.60
25	DA	1653	G	N3-C4-C5	-6.86	125.17	128.60
26	DB	70	C	C6-N1-C2	-6.86	117.56	120.30
1	AA	1149	C	C5-C6-N1	6.86	124.43	121.00
25	BA	952	G	C6-C5-N7	-6.86	126.29	130.40
25	BA	529	A	N1-C6-N6	6.85	122.71	118.60
25	BA	930	U	C5-C4-O4	-6.85	121.79	125.90
25	BA	1721	G	C5-N7-C8	-6.85	100.87	104.30
25	BA	1970	A	C5-C6-N6	-6.85	118.22	123.70
25	DA	1845	G	N3-C2-N2	-6.85	115.10	119.90
25	BA	474	G	C5-N7-C8	-6.85	100.87	104.30
25	BA	949	C	N1-C2-O2	-6.85	114.79	118.90
25	BA	2459	A	C8-N9-C4	-6.85	103.06	105.80
25	BA	139(A)	G	N1-C6-O6	6.85	124.01	119.90
25	BA	775	G	C5-C6-N1	6.85	114.92	111.50
25	BA	1662	C	C2-N1-C1'	6.85	126.33	118.80
25	BA	1820	U	C5-C6-N1	-6.85	119.28	122.70
25	BA	2226	C	C5-C6-N1	-6.85	117.58	121.00
26	BB	85	G	C5-C6-O6	-6.85	124.49	128.60
25	BA	1406	U	N3-C4-C5	6.85	118.71	114.60
25	BA	2070	G	C6-C5-N7	-6.85	126.29	130.40
25	BA	2486	G	N3-C4-N9	6.85	130.11	126.00
1	CA	851	G	C4-N9-C1'	6.85	135.40	126.50
25	BA	600	G	C2-N3-C4	-6.84	108.48	111.90
25	BA	1966	A	N9-C4-C5	-6.84	103.06	105.80
1	CA	1279	A	C4-N9-C1'	6.84	138.62	126.30
25	BA	2503	A	C4-C5-N7	6.84	114.12	110.70
1	CA	354	G	C6-C5-N7	-6.84	126.30	130.40
25	DA	391	G	C4-N9-C1'	6.84	135.39	126.50
25	BA	800	A	C6-N1-C2	-6.84	114.50	118.60
1	AA	299	G	C5-C6-O6	6.84	132.70	128.60
25	BA	525	U	N1-C2-O2	-6.84	118.01	122.80
25	BA	2091	U	C6-N1-C2	-6.84	116.90	121.00
1	CA	908	A	C8-N9-C4	6.84	108.53	105.80
25	DA	265	A	C5-C6-N1	-6.84	114.28	117.70
25	BA	461	C	C4-C5-C6	6.83	120.82	117.40
25	BA	933	A	N3-C4-C5	6.83	131.58	126.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1482	G	N3-C4-C5	-6.83	125.18	128.60
25	BA	796	C	C5-C6-N1	-6.83	117.58	121.00
25	BA	1497	U	N1-C2-N3	6.83	119.00	114.90
25	BA	1897	G	C6-C5-N7	-6.83	126.30	130.40
25	BA	2828	C	C5-C6-N1	-6.83	117.58	121.00
25	DA	1026	U	C2-N1-C1'	6.83	125.90	117.70
25	DA	2007	C	C6-N1-C2	6.83	123.03	120.30
25	DA	2340	G	N3-C4-C5	6.83	132.02	128.60
25	DA	2689	U	C2-N3-C4	-6.83	122.90	127.00
1	AA	554	C	C5-C6-N1	6.83	124.42	121.00
1	AA	1507	A	N1-C6-N6	-6.83	114.50	118.60
25	BA	2550	G	N1-C6-O6	6.83	124.00	119.90
25	DA	761	A	C4-C5-C6	6.83	120.42	117.00
25	DA	1964	G	N3-C4-N9	6.83	130.10	126.00
25	BA	1231	G	C2-N3-C4	-6.83	108.48	111.90
25	BA	1532	C	N1-C2-O2	6.83	123.00	118.90
1	CA	513	C	C2-N1-C1'	6.83	126.31	118.80
1	CA	1281	U	C5-C6-N1	6.83	126.11	122.70
25	DA	1791	A	C2-N3-C4	6.83	114.01	110.60
25	BA	990	A	C8-N9-C4	-6.83	103.07	105.80
25	BA	2250	G	C8-N9-C4	-6.83	103.67	106.40
25	BA	2775	A	C8-N9-C4	6.83	108.53	105.80
25	DA	1963	U	C2-N1-C1'	6.83	125.89	117.70
25	BA	2070	G	C2-N3-C4	-6.83	108.49	111.90
1	CA	1129	C	C6-N1-C2	-6.83	117.57	120.30
25	DA	1962	C	N1-C2-O2	-6.83	114.81	118.90
25	BA	2517	C	C6-N1-C2	6.82	123.03	120.30
25	BA	2543	G	N1-C6-O6	-6.82	115.81	119.90
1	CA	691	G	C8-N9-C4	6.82	109.13	106.40
25	DA	530	G	N7-C8-N9	6.82	116.51	113.10
1	AA	1531	A	C8-N9-C4	-6.82	103.07	105.80
25	BA	259	G	C5-C6-N1	-6.82	108.09	111.50
25	BA	2291	U	N3-C4-C5	-6.82	110.51	114.60
25	BA	2503	A	C5-C6-N1	6.82	121.11	117.70
25	DA	1698	A	C5-C6-N1	-6.82	114.29	117.70
25	BA	1222	C	N1-C2-O2	-6.82	114.81	118.90
25	BA	2603	G	C5-C6-O6	-6.82	124.51	128.60
26	BB	82	G	C8-N9-C4	6.82	109.13	106.40
1	AA	767	A	N1-C6-N6	-6.82	114.51	118.60
25	BA	646	A	N1-C6-N6	6.82	122.69	118.60
25	BA	975	C	C2-N3-C4	-6.82	116.49	119.90
25	BA	1685	C	C6-N1-C2	-6.82	117.57	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	BU	12	ARG	NE-CZ-NH1	6.81	123.71	120.30
25	DA	1552	G	N1-C6-O6	-6.81	115.81	119.90
25	BA	216	A	C5-C6-N6	6.81	129.15	123.70
25	BA	513	A	N7-C8-N9	6.81	117.21	113.80
25	BA	530	G	N1-C2-N3	6.81	127.99	123.90
25	BA	448	U	N1-C2-N3	6.81	118.99	114.90
25	BA	2024	G	C8-N9-C1'	-6.81	118.14	127.00
25	DA	972	G	N9-C4-C5	6.81	108.12	105.40
25	BA	1709	U	C5-C6-N1	-6.81	119.30	122.70
25	BA	2053	G	N1-C6-O6	6.81	123.98	119.90
25	DA	1703	G	C6-C5-N7	-6.81	126.31	130.40
25	BA	44	G	C5-C6-N1	6.81	114.90	111.50
25	BA	74	A	N9-C4-C5	6.81	108.52	105.80
41	DV	35	LEU	CA-CB-CG	6.81	130.96	115.30
25	BA	245	G	N9-C4-C5	-6.80	102.68	105.40
25	BA	2703	C	N3-C2-O2	-6.80	117.14	121.90
25	DA	1294	U	N1-C2-N3	6.80	118.98	114.90
25	BA	175	G	N7-C8-N9	-6.80	109.70	113.10
1	AA	1429	C	N1-C2-O2	-6.80	114.82	118.90
25	BA	234	C	C6-N1-C2	-6.80	117.58	120.30
25	BA	2024	G	C8-N9-C4	6.80	109.12	106.40
25	BA	1154	G	C6-C5-N7	-6.80	126.32	130.40
25	DA	1814	G	C8-N9-C4	-6.80	103.68	106.40
23	AV	9	G	C8-N9-C1'	6.80	135.84	127.00
25	BA	524	U	N3-C2-O2	-6.80	117.44	122.20
25	BA	1170	G	C5-N7-C8	-6.80	100.90	104.30
25	BA	1669	A	N1-C2-N3	6.80	132.70	129.30
25	BA	2565	A	C8-N9-C4	6.80	108.52	105.80
25	BA	1802	A	C6-N1-C2	-6.79	114.52	118.60
1	AA	1406	U	C5-C6-N1	-6.79	119.30	122.70
25	BA	90	U	C2-N3-C4	6.79	131.08	127.00
25	DA	1377	G	N3-C4-C5	-6.79	125.20	128.60
25	DA	2618	G	C5-C6-O6	6.79	132.67	128.60
1	AA	872	A	N1-C6-N6	6.79	122.67	118.60
25	BA	636	G	N3-C2-N2	-6.79	115.15	119.90
25	BA	207	A	N1-C6-N6	6.79	122.67	118.60
25	BA	1047	G	N3-C4-N9	6.78	130.07	126.00
25	BA	1792	G	C8-N9-C1'	6.78	135.82	127.00
25	BA	681	G	N1-C2-N2	-6.78	110.10	116.20
25	DA	461	C	N3-C4-C5	-6.78	119.19	121.90
25	BA	2352	A	N9-C4-C5	-6.78	103.09	105.80
25	DA	429	A	N1-C6-N6	6.78	122.67	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2848	G	C5-C6-O6	6.78	132.67	128.60
25	BA	2374	C	C5-C4-N4	-6.78	115.45	120.20
1	AA	93	G	N3-C4-N9	6.78	130.07	126.00
25	BA	745	G	C6-C5-N7	-6.78	126.33	130.40
25	BA	2231	C	N1-C2-O2	-6.78	114.83	118.90
25	BA	1333	C	C2-N3-C4	-6.78	116.51	119.90
1	AA	652	U	N3-C2-O2	6.77	126.94	122.20
25	BA	645	C	N1-C2-N3	-6.77	114.46	119.20
25	BA	2764	A	N9-C4-C5	6.77	108.51	105.80
25	DA	51	G	N1-C6-O6	-6.77	115.84	119.90
25	BA	940	G	C5-C6-O6	-6.77	124.54	128.60
25	BA	841	A	N1-C6-N6	6.76	122.66	118.60
25	BA	1332	G	N1-C2-N2	-6.76	110.11	116.20
25	DA	1377	G	C8-N9-C1'	-6.76	118.20	127.00
25	BA	1389	G	N7-C8-N9	-6.76	109.72	113.10
25	BA	1427	A	C6-N1-C2	-6.76	114.54	118.60
25	BA	1929	G	C5-C6-O6	6.76	132.66	128.60
25	DA	2080	G	C8-N9-C4	-6.76	103.69	106.40
25	DA	2103	C	N3-C4-N4	-6.76	113.27	118.00
25	BA	1572	A	C8-N9-C4	6.76	108.50	105.80
25	BA	1989	G	N1-C2-N2	-6.76	110.12	116.20
25	BA	2371	G	C2-N3-C4	6.76	115.28	111.90
1	AA	243	A	C8-N9-C4	-6.76	103.10	105.80
1	AA	521	G	C6-N1-C2	-6.76	121.05	125.10
1	AA	754	C	C6-N1-C2	-6.76	117.60	120.30
25	BA	1200	C	C2-N3-C4	-6.76	116.52	119.90
25	BA	1831	G	N3-C2-N2	-6.76	115.17	119.90
1	CA	904	C	N3-C4-C5	6.75	124.60	121.90
25	DA	530	G	C5-N7-C8	-6.75	100.92	104.30
25	DA	668	G	N1-C2-N3	6.75	127.95	123.90
25	DA	2628	C	C5-C6-N1	-6.75	117.62	121.00
25	BA	949	C	C6-N1-C2	6.75	123.00	120.30
25	BA	1708	C	C5-C4-N4	-6.75	115.47	120.20
1	AA	1530	G	C8-N9-C4	6.75	109.10	106.40
1	AA	792	A	C2-N3-C4	-6.75	107.23	110.60
25	BA	1569	A	N9-C4-C5	6.75	108.50	105.80
25	BA	2260	C	C2-N3-C4	-6.75	116.53	119.90
25	BA	1156	A	C4-C5-N7	6.75	114.07	110.70
54	B8	34	TRP	N-CA-C	-6.75	92.78	111.00
25	BA	727	A	N1-C6-N6	6.75	122.65	118.60
25	BA	2070	G	N9-C4-C5	-6.75	102.70	105.40
25	DA	2599	G	C5-C6-O6	6.75	132.65	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1204	A	C5-C6-N1	-6.74	114.33	117.70
25	BA	1587	A	C5-C6-N1	6.74	121.07	117.70
25	BA	2783	G	C4-C5-C6	6.74	122.85	118.80
1	CA	629	G	N3-C4-N9	-6.74	121.95	126.00
25	DA	1332	G	C5-C6-N1	-6.74	108.13	111.50
25	DA	2089	U	N1-C2-O2	-6.74	118.08	122.80
25	BA	117	G	C8-N9-C1'	-6.74	118.24	127.00
25	BA	2578	G	N1-C6-O6	-6.74	115.86	119.90
25	DA	298	G	C4-C5-N7	6.74	113.50	110.80
25	BA	272	G	N3-C4-N9	6.74	130.04	126.00
25	BA	1199	U	N3-C4-O4	-6.74	114.68	119.40
25	BA	2636	U	C2-N3-C4	-6.74	122.96	127.00
25	BA	780	G	C4-N9-C1'	6.74	135.26	126.50
25	BA	2542	A	C2-N3-C4	-6.74	107.23	110.60
26	BB	86	G	C8-N9-C4	6.74	109.09	106.40
1	CA	622	A	C2-N3-C4	-6.74	107.23	110.60
23	CV	76	A	C4-C5-C6	-6.74	113.63	117.00
25	DA	2519	U	C6-N1-C2	6.74	125.04	121.00
25	BA	2807	G	C8-N9-C4	-6.73	103.71	106.40
1	AA	576	G	C8-N9-C1'	-6.73	118.25	127.00
25	BA	1701	A	C4-C5-C6	6.73	120.36	117.00
25	BA	1948	G	N9-C4-C5	6.73	108.09	105.40
25	BA	2232	U	C5-C4-O4	6.73	129.94	125.90
25	BA	2646	C	C5-C4-N4	-6.73	115.49	120.20
25	BA	2814	C	N1-C2-O2	-6.73	114.86	118.90
25	BA	730	C	C4-C5-C6	-6.73	114.04	117.40
25	BA	1194	A	C5-C6-N1	6.73	121.06	117.70
25	BA	1607	C	C6-N1-C1'	-6.73	112.73	120.80
25	DA	22	C	N3-C4-C5	6.73	124.59	121.90
25	DA	1958	C	C6-N1-C2	6.73	122.99	120.30
25	BA	379	G	N3-C2-N2	-6.72	115.19	119.90
1	CA	976	G	N3-C4-N9	6.72	130.03	126.00
25	BA	486	C	N1-C2-O2	-6.72	114.87	118.90
25	BA	1695	G	N1-C2-N2	-6.72	110.15	116.20
25	BA	2381	C	C2-N3-C4	-6.72	116.54	119.90
25	BA	2426	A	N9-C4-C5	6.72	108.49	105.80
25	DA	445	C	N1-C2-O2	-6.72	114.87	118.90
25	BA	90	U	N1-C2-N3	-6.72	110.87	114.90
25	BA	2589	A	C8-N9-C4	6.72	108.49	105.80
1	CA	421	U	N1-C2-O2	6.72	127.50	122.80
25	BA	1950	G	C5-C6-O6	-6.72	124.57	128.60
25	BA	759	G	N1-C6-O6	6.71	123.93	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1695	G	N1-C6-O6	6.71	123.93	119.90
25	BA	784	A	C5-C6-N6	6.71	129.07	123.70
26	BB	77	U	N3-C4-C5	6.71	118.63	114.60
25	DA	1625	C	N3-C2-O2	-6.71	117.20	121.90
25	BA	2607	G	N3-C4-N9	6.71	130.03	126.00
26	BB	113	G	C6-C5-N7	-6.71	126.37	130.40
25	BA	1678	G	N9-C4-C5	6.71	108.08	105.40
1	CA	100	C	C6-N1-C2	-6.71	117.62	120.30
25	DA	2023	G	C8-N9-C4	-6.71	103.72	106.40
25	DA	733	G	N9-C4-C5	-6.71	102.72	105.40
25	DA	2083	G	C2-N3-C4	-6.71	108.55	111.90
1	AA	1227	A	N3-C4-C5	6.71	131.50	126.80
25	BA	1030	G	C2-N3-C4	-6.71	108.55	111.90
1	CA	832	C	C2-N1-C1'	6.71	126.17	118.80
25	DA	2430	A	C4-C5-C6	6.71	120.35	117.00
25	DA	2724	C	N3-C4-N4	-6.71	113.31	118.00
25	BA	763	G	C4-C5-C6	6.70	122.82	118.80
25	BA	2441	C	N1-C2-O2	6.70	122.92	118.90
25	DA	13	A	C8-N9-C4	-6.70	103.12	105.80
25	BA	1831	G	C8-N9-C4	-6.70	103.72	106.40
25	DA	1624	G	C5-C6-O6	-6.70	124.58	128.60
1	AA	754	C	N3-C2-O2	-6.70	117.21	121.90
25	BA	139(A)	G	C8-N9-C1'	-6.70	118.29	127.00
25	BA	975(A)	G	C4-C5-N7	6.70	113.48	110.80
25	BA	2377	A	N3-C4-C5	6.70	131.49	126.80
1	AA	576	G	C4-C5-C6	6.70	122.82	118.80
25	BA	1830	C	C4-C5-C6	-6.70	114.05	117.40
25	DA	204	A	C8-N9-C4	-6.70	103.12	105.80
25	BA	2447	G	C8-N9-C4	6.69	109.08	106.40
25	BA	1292	U	C5-C6-N1	6.69	126.05	122.70
25	DA	962	G	N1-C6-O6	6.69	123.92	119.90
25	DA	1992	G	N3-C4-C5	-6.69	125.25	128.60
25	BA	1992	G	N1-C6-O6	-6.69	115.89	119.90
25	BA	2011	U	C4-C5-C6	6.69	123.72	119.70
25	BA	2330	G	C2-N3-C4	-6.69	108.56	111.90
25	BA	2581	G	N9-C4-C5	6.69	108.08	105.40
1	AA	1530	G	C8-N9-C1'	6.69	135.69	127.00
25	BA	146	G	N1-C6-O6	6.68	123.91	119.90
25	BA	2762	G	C2-N3-C4	-6.68	108.56	111.90
25	BA	2467	C	N3-C4-C5	6.68	124.57	121.90
1	CA	266	G	C8-N9-C4	-6.68	103.73	106.40
25	DA	2263	C	C6-N1-C2	6.68	122.97	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2791	C	C5-C6-N1	6.68	124.34	121.00
1	AA	1519	A	N1-C2-N3	6.68	132.64	129.30
25	BA	2499	C	C6-N1-C2	-6.68	117.63	120.30
25	BA	1706	U	N1-C2-O2	6.68	127.47	122.80
1	AA	1400	C	N1-C2-O2	6.68	122.91	118.90
25	BA	266	G	C5-C6-O6	-6.68	124.59	128.60
25	DA	833	U	N3-C2-O2	6.68	126.87	122.20
25	DA	2396	G	C6-C5-N7	-6.67	126.39	130.40
25	BA	2638	G	C2-N3-C4	6.67	115.24	111.90
25	BA	522	G	N9-C4-C5	-6.67	102.73	105.40
44	BY	11	ASP	CB-CG-OD1	-6.67	112.30	118.30
25	BA	1288	U	N3-C2-O2	-6.67	117.53	122.20
25	BA	1721	G	N1-C2-N2	6.67	122.20	116.20
25	BA	220	G	N9-C4-C5	-6.67	102.73	105.40
25	BA	246	C	C6-N1-C2	6.67	122.97	120.30
25	BA	451	C	C6-N1-C2	6.67	122.97	120.30
26	BB	53	A	C5-N7-C8	-6.67	100.56	103.90
25	DA	2565	A	C8-N9-C4	6.67	108.47	105.80
25	BA	258	G	C8-N9-C4	-6.67	103.73	106.40
25	BA	1125	G	N3-C4-N9	-6.67	122.00	126.00
1	CA	1323	G	C8-N9-C4	-6.67	103.73	106.40
25	DA	1369	G	C6-N1-C2	-6.67	121.10	125.10
25	DA	2341	G	C5-C6-O6	-6.67	124.60	128.60
26	DB	115	G	N7-C8-N9	-6.67	109.77	113.10
25	DA	2224	G	C6-C5-N7	-6.67	126.40	130.40
25	BA	2069	G	C4-C5-N7	-6.66	108.14	110.80
25	BA	2887	U	C6-N1-C2	6.66	125.00	121.00
25	DA	1607	C	N1-C2-N3	-6.66	114.54	119.20
25	BA	1675	C	N3-C4-N4	6.66	122.66	118.00
25	BA	2499	C	C5-C6-N1	6.66	124.33	121.00
1	CA	916	G	C8-N9-C4	-6.66	103.73	106.40
25	BA	1650	G	C2-N3-C4	-6.66	108.57	111.90
1	AA	492	G	C8-N9-C4	-6.66	103.74	106.40
25	BA	1034	G	C5-C6-O6	-6.66	124.61	128.60
25	BA	1967	C	C2-N3-C4	-6.66	116.57	119.90
25	BA	2386	C	C5-C6-N1	-6.66	117.67	121.00
25	BA	761	A	C5-C6-N6	-6.66	118.38	123.70
25	BA	677	A	C4-C5-C6	6.66	120.33	117.00
25	BA	2584	U	N1-C2-O2	-6.66	118.14	122.80
25	BA	2745	C	C6-N1-C2	-6.66	117.64	120.30
25	BA	139	G	N3-C4-C5	-6.65	125.27	128.60
25	BA	179	G	C4-N9-C1'	6.65	135.15	126.50

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	14	A	C8-N9-C4	-6.65	103.14	105.80
25	DA	2512	C	C2-N1-C1'	-6.65	111.48	118.80
25	BA	460	A	C8-N9-C4	6.65	108.46	105.80
25	BA	543	C	N1-C2-O2	-6.65	114.91	118.90
25	BA	1649	G	C5-C6-O6	-6.65	124.61	128.60
25	BA	2063	C	C6-N1-C2	6.65	122.96	120.30
25	BA	1278	A	C6-N1-C2	-6.65	114.61	118.60
26	BB	104	U	N3-C4-C5	6.65	118.59	114.60
25	DA	2235	G	C6-C5-N7	-6.65	126.41	130.40
1	AA	511	C	C5-C6-N1	-6.65	117.68	121.00
25	BA	1386	C	C5-C6-N1	-6.65	117.68	121.00
23	CV	67	C	C6-N1-C2	-6.65	117.64	120.30
1	AA	882	C	N3-C4-C5	-6.65	119.24	121.90
25	BA	34	C	C5-C6-N1	6.65	124.32	121.00
25	BA	1997	G	N9-C4-C5	6.65	108.06	105.40
25	BA	133	C	C4-C5-C6	6.64	120.72	117.40
25	BA	2237	G	N9-C4-C5	-6.64	102.74	105.40
1	AA	1324	A	N1-C2-N3	6.64	132.62	129.30
25	BA	126	A	C5-C6-N6	6.64	129.01	123.70
25	BA	787	U	N1-C2-N3	6.64	118.89	114.90
25	BA	1026	U	N3-C2-O2	-6.64	117.55	122.20
25	BA	1963	U	C5-C6-N1	6.64	126.02	122.70
1	CA	1378	C	N3-C4-C5	-6.64	119.24	121.90
25	DA	2430	A	C6-C5-N7	-6.64	127.65	132.30
25	BA	815	C	C2-N3-C4	-6.64	116.58	119.90
1	CA	848	C	C6-N1-C2	-6.64	117.64	120.30
1	AA	7	G	N3-C4-C5	6.64	131.92	128.60
25	BA	955	C	C2-N3-C4	-6.64	116.58	119.90
25	DA	589	C	N1-C2-O2	-6.64	114.92	118.90
25	DA	2680	C	N3-C4-N4	-6.64	113.35	118.00
25	DA	2457	U	C6-N1-C2	-6.64	117.02	121.00
25	BA	1137	G	C5-C6-O6	-6.64	124.62	128.60
25	BA	2237	G	C8-N9-C4	6.64	109.05	106.40
25	BA	676	A	C1'-O4'-C4'	-6.63	104.59	109.90
25	DA	1531	C	C2-N1-C1'	6.63	126.10	118.80
25	BA	2884	U	C5-C4-O4	6.63	129.88	125.90
25	DA	2253	G	C4-C5-N7	6.63	113.45	110.80
23	AV	76	A	N1-C2-N3	-6.63	125.98	129.30
1	CA	442	C	C2-N1-C1'	6.63	126.09	118.80
1	AA	317	G	N3-C2-N2	-6.63	115.26	119.90
25	BA	2860	A	N7-C8-N9	-6.63	110.49	113.80
4	CD	12	CYS	CA-CB-SG	6.63	125.93	114.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2200	C	C2-N1-C1'	6.63	126.09	118.80
1	AA	1312	G	N9-C4-C5	6.63	108.05	105.40
25	BA	614	U	N3-C4-C5	-6.63	110.62	114.60
25	BA	2584	U	N3-C2-O2	6.63	126.84	122.20
25	BA	566	U	C6-N1-C2	6.62	124.97	121.00
25	BA	1219	G	N3-C4-N9	-6.62	122.03	126.00
25	BA	1515	G	N9-C4-C5	-6.62	102.75	105.40
25	BA	2852	G	C6-C5-N7	6.62	134.38	130.40
1	CA	129(A)	G	C8-N9-C4	-6.62	103.75	106.40
1	AA	1126	U	N3-C4-O4	6.62	124.04	119.40
25	BA	627	A	N7-C8-N9	-6.62	110.49	113.80
1	CA	470	C	N1-C2-O2	6.62	122.87	118.90
25	DA	450	G	N9-C4-C5	6.62	108.05	105.40
25	DA	1259	G	C8-N9-C4	6.62	109.05	106.40
25	DA	2387	U	C2-N3-C4	-6.62	123.03	127.00
25	BA	1223	G	N1-C6-O6	-6.62	115.93	119.90
25	BA	2486	G	C5-C6-N1	6.62	114.81	111.50
26	BB	99	G	C6-C5-N7	-6.62	126.43	130.40
25	DA	1614	A	C5-C6-N6	6.62	129.00	123.70
1	AA	814	A	C2-N3-C4	-6.62	107.29	110.60
25	BA	461	C	N1-C2-N3	6.62	123.83	119.20
25	BA	1236	G	N9-C4-C5	-6.62	102.75	105.40
25	BA	1992	G	P-O3'-C3'	6.62	127.64	119.70
1	AA	359	U	C6-N1-C2	-6.62	117.03	121.00
25	BA	950	G	C8-N9-C4	6.62	109.05	106.40
1	CA	308	C	C6-N1-C2	6.62	122.95	120.30
25	DA	25	U	N1-C2-O2	-6.62	118.17	122.80
25	BA	1596	A	C5-C6-N1	6.61	121.01	117.70
25	BA	1695	G	C6-C5-N7	-6.61	126.43	130.40
25	BA	1829	A	C8-N9-C4	6.61	108.44	105.80
25	BA	2827	C	N1-C2-O2	-6.61	114.93	118.90
1	CA	266	G	C6-C5-N7	-6.61	126.43	130.40
25	BA	452	G	N1-C6-O6	-6.61	115.93	119.90
25	DA	2607	G	N9-C4-C5	-6.61	102.75	105.40
1	AA	165	C	C6-N1-C2	-6.61	117.66	120.30
1	AA	191	G	C8-N9-C4	-6.61	103.76	106.40
25	BA	775	G	C6-N1-C2	-6.61	121.13	125.10
25	BA	1198	U	C5-C4-O4	6.61	129.87	125.90
25	BA	2051	A	C4-C5-C6	6.61	120.31	117.00
1	CA	685	G	N3-C4-C5	6.61	131.91	128.60
25	BA	2019	A	C2-N3-C4	-6.61	107.30	110.60
1	CA	1278	U	C5-C6-N1	6.61	126.00	122.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	620	G	C2-N3-C4	6.61	115.20	111.90
25	BA	1259	G	C6-C5-N7	-6.61	126.44	130.40
23	CV	22	G	C8-N9-C4	-6.61	103.76	106.40
25	DA	1906	G	N1-C6-O6	6.61	123.86	119.90
1	CA	413	G	N3-C4-N9	6.60	129.96	126.00
1	AA	19	C	C6-N1-C2	-6.60	117.66	120.30
26	BB	19	G	C6-C5-N7	-6.60	126.44	130.40
23	AV	74	C	N1-C2-O2	6.60	122.86	118.90
25	BA	2286	A	C8-N9-C1'	-6.60	115.82	127.70
1	CA	839	U	C2-N1-C1'	6.60	125.62	117.70
1	CA	1126	U	C5-C6-N1	6.60	126.00	122.70
1	CA	1474	G	C8-N9-C4	6.60	109.04	106.40
23	CV	76	A	N7-C8-N9	-6.60	110.50	113.80
25	DA	213	A	C5-N7-C8	-6.60	100.60	103.90
25	DA	1841	U	N3-C2-O2	-6.60	117.58	122.20
25	BA	1496	A	C8-N9-C4	-6.60	103.16	105.80
25	BA	2709	G	C8-N9-C4	-6.60	103.76	106.40
25	DA	778	G	N1-C2-N3	6.60	127.86	123.90
25	DA	2587	A	C4-C5-C6	6.60	120.30	117.00
25	BA	780	G	C6-C5-N7	-6.60	126.44	130.40
25	DA	1663	C	C6-N1-C2	6.60	122.94	120.30
25	DA	2476	A	N1-C6-N6	-6.60	114.64	118.60
25	BA	192	C	C5-C6-N1	-6.60	117.70	121.00
25	BA	2238	G	C2-N3-C4	6.60	115.20	111.90
25	DA	2502	G	C4-C5-N7	6.60	113.44	110.80
25	BA	53	A	C5-C6-N6	-6.59	118.42	123.70
25	DA	1492	G	N1-C6-O6	6.59	123.86	119.90
1	AA	1524	C	C5-C6-N1	-6.59	117.70	121.00
25	BA	1985	G	N1-C2-N3	6.59	127.86	123.90
25	BA	1792	G	N1-C6-O6	-6.59	115.95	119.90
25	BA	2500	U	C5-C6-N1	-6.59	119.41	122.70
25	DA	1529	G	C8-N9-C4	6.59	109.03	106.40
1	AA	1108	G	N3-C4-C5	-6.59	125.31	128.60
25	BA	2243	U	C5-C4-O4	6.59	129.85	125.90
25	BA	2440	C	C6-N1-C2	6.59	122.94	120.30
25	DA	1807	G	N9-C4-C5	-6.59	102.77	105.40
1	AA	343	U	C5-C6-N1	-6.59	119.41	122.70
25	BA	509	C	N1-C2-O2	-6.59	114.95	118.90
25	BA	646	A	C5-C6-N1	-6.59	114.41	117.70
25	BA	1210	A	N3-C4-N9	-6.59	122.13	127.40
25	BA	1942	C	C6-N1-C2	-6.59	117.67	120.30
25	DA	385	C	N1-C2-O2	6.59	122.85	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1371	G	C5-C6-N1	-6.58	108.21	111.50
25	BA	2363	C	C5-C6-N1	-6.58	117.71	121.00
25	DA	489	G	C4-C5-N7	-6.58	108.17	110.80
25	BA	652(B)	A	C2-N3-C4	6.58	113.89	110.60
25	BA	686	G	C4-C5-N7	6.58	113.43	110.80
1	CA	1356	G	C6-N1-C2	6.58	129.05	125.10
1	AA	529	G	C6-C5-N7	-6.58	126.45	130.40
25	BA	1709	U	N1-C2-N3	6.58	118.85	114.90
25	DA	450	G	C5-N7-C8	6.58	107.59	104.30
25	DA	1974	C	C6-N1-C2	6.58	122.93	120.30
25	BA	122	G	C4-C5-C6	6.57	122.74	118.80
25	BA	2709	G	N9-C4-C5	6.57	108.03	105.40
25	DA	1908	C	C6-N1-C2	-6.57	117.67	120.30
25	BA	176	G	C6-C5-N7	-6.57	126.46	130.40
25	BA	2509	G	C8-N9-C4	6.57	109.03	106.40
25	DA	1832	C	C2-N1-C1'	-6.57	111.57	118.80
25	DA	2440	C	C5-C4-N4	6.57	124.80	120.20
26	DB	113	G	N1-C6-O6	6.57	123.84	119.90
1	AA	1495	U	C2-N3-C4	6.57	130.94	127.00
25	BA	1344	G	N3-C2-N2	-6.57	115.30	119.90
25	BA	1199	U	C2-N3-C4	-6.57	123.06	127.00
25	BA	1769	G	N1-C6-O6	6.57	123.84	119.90
1	CA	129(A)	G	N9-C4-C5	6.57	108.03	105.40
25	BA	1574	C	C6-N1-C2	6.56	122.93	120.30
25	DA	540	C	N3-C2-O2	-6.56	117.31	121.90
25	BA	1500	G	C5-C6-O6	-6.56	124.66	128.60
25	BA	2717	G	C6-C5-N7	-6.56	126.46	130.40
26	BB	99	G	N3-C4-N9	6.56	129.94	126.00
1	CA	1484	C	C2-N1-C1'	-6.56	111.58	118.80
25	DA	2512	C	N3-C2-O2	6.56	126.49	121.90
26	DB	30	C	C6-N1-C2	-6.56	117.67	120.30
1	AA	1401	G	C5-N7-C8	-6.56	101.02	104.30
25	DA	689	A	C2-N3-C4	6.56	113.88	110.60
25	BA	176	G	C2-N3-C4	-6.56	108.62	111.90
1	CA	204	U	C2-N1-C1'	6.56	125.57	117.70
1	CA	858	G	C4-N9-C1'	6.56	135.03	126.50
25	BA	1586	A	N1-C6-N6	6.56	122.53	118.60
25	BA	2697	G	C6-C5-N7	-6.55	126.47	130.40
25	DA	504	U	C6-N1-C1'	-6.55	112.02	121.20
25	DA	1703	G	C4-C5-N7	6.55	113.42	110.80
25	DA	2714	G	C5-C6-O6	-6.55	124.67	128.60
25	BA	2473	U	C2-N1-C1'	6.55	125.56	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1323	G	C6-C5-N7	-6.55	126.47	130.40
25	BA	1031	G	C6-N1-C2	-6.55	121.17	125.10
1	CA	887	G	C5-C6-O6	-6.55	124.67	128.60
25	DA	754	C	C5-C4-N4	-6.55	115.61	120.20
25	BA	1338	G	C6-C5-N7	-6.55	126.47	130.40
25	BA	1443	G	C6-C5-N7	-6.55	126.47	130.40
25	BA	1506	C	N1-C2-O2	6.55	122.83	118.90
25	BA	1937	A	C2-N3-C4	-6.55	107.33	110.60
26	BB	89	G	N7-C8-N9	6.55	116.38	113.10
1	CA	1373	G	C6-C5-N7	-6.55	126.47	130.40
25	BA	1527	G	N9-C4-C5	6.55	108.02	105.40
25	DA	2007	C	N1-C2-O2	-6.54	114.97	118.90
25	BA	122	G	N1-C2-N3	6.54	127.83	123.90
25	BA	589	C	N3-C4-N4	-6.54	113.42	118.00
25	BA	814	C	C6-N1-C2	6.54	122.92	120.30
25	BA	1193	G	N1-C2-N2	-6.54	110.31	116.20
25	BA	2050	C	C4-C5-C6	6.54	120.67	117.40
1	AA	893	C	C6-N1-C2	6.54	122.92	120.30
25	BA	2356	C	N3-C2-O2	-6.54	117.32	121.90
25	DA	1927	A	C8-N9-C4	-6.54	103.18	105.80
25	BA	729	G	C8-N9-C4	-6.54	103.78	106.40
25	BA	1660	C	C6-N1-C2	-6.54	117.68	120.30
25	BA	99	U	N3-C2-O2	-6.54	117.62	122.20
25	BA	1343	G	C5-C6-N1	6.54	114.77	111.50
25	BA	1408	C	C2-N3-C4	-6.54	116.63	119.90
25	BA	2056	G	N1-C6-O6	6.54	123.82	119.90
1	CA	421	U	N3-C2-O2	-6.54	117.62	122.20
1	AA	839	U	C2-N1-C1'	6.54	125.54	117.70
25	BA	1792	G	C4-N9-C1'	-6.54	118.00	126.50
25	BA	613	G	C5-C6-O6	-6.54	124.68	128.60
25	BA	795	C	C2-N1-C1'	6.54	125.99	118.80
25	DA	945	A	C5-N7-C8	-6.54	100.63	103.90
25	DA	1142(A)	A	N1-C6-N6	6.54	122.52	118.60
25	BA	765	G	N1-C2-N2	6.53	122.08	116.20
25	DA	1650	G	C4-C5-N7	6.53	113.41	110.80
25	BA	475	U	C2-N1-C1'	6.53	125.54	117.70
25	DA	2723	C	C6-N1-C2	-6.53	117.69	120.30
25	BA	1342	A	C5-C6-N6	-6.53	118.48	123.70
1	CA	365	U	C5-C4-O4	6.53	129.82	125.90
25	DA	1367	A	C5-C6-N6	-6.53	118.47	123.70
25	DA	2595	G	C4-C5-N7	6.53	113.41	110.80
1	AA	1502	A	N7-C8-N9	6.53	117.06	113.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	746	A	N1-C6-N6	6.53	122.52	118.60
25	BA	750	A	C8-N9-C4	-6.53	103.19	105.80
25	BA	2073	C	C2-N1-C1'	-6.53	111.62	118.80
25	BA	457	A	C5-C6-N6	6.53	128.92	123.70
25	BA	975	C	N3-C4-C5	6.53	124.51	121.90
25	BA	1334	G	C8-N9-C1'	-6.53	118.52	127.00
25	BA	1970	A	C6-N1-C2	-6.53	114.69	118.60
25	BA	2187	G	C5-C6-O6	-6.53	124.68	128.60
41	BV	13	ARG	NE-CZ-NH1	-6.53	117.04	120.30
25	DA	271(Z)	C	C2-N1-C1'	6.53	125.98	118.80
25	DA	2054	A	C6-N1-C2	-6.53	114.69	118.60
25	BA	1843	C	N3-C4-C5	6.52	124.51	121.90
1	CA	1321	C	C5-C6-N1	6.52	124.26	121.00
1	CA	1363(A)	A	N9-C4-C5	6.52	108.41	105.80
1	AA	1064	G	N9-C4-C5	6.52	108.01	105.40
25	BA	198	C	C2-N3-C4	-6.52	116.64	119.90
25	BA	621	A	C8-N9-C4	-6.52	103.19	105.80
25	BA	632	A	C2-N3-C4	-6.52	107.34	110.60
25	BA	777	A	C6-N1-C2	-6.52	114.69	118.60
25	BA	2051	A	C6-N1-C2	-6.52	114.69	118.60
25	DA	2430	A	N1-C2-N3	6.52	132.56	129.30
25	DA	2023	G	C6-C5-N7	-6.52	126.49	130.40
1	AA	1524	C	N3-C4-C5	6.52	124.51	121.90
25	BA	1319	G	C8-N9-C4	-6.52	103.79	106.40
25	BA	1488	G	N7-C8-N9	6.52	116.36	113.10
1	AA	572	A	N1-C6-N6	-6.52	114.69	118.60
25	BA	1698	A	C4-C5-C6	6.52	120.26	117.00
25	DA	1638	C	N3-C4-C5	6.52	124.51	121.90
25	BA	1140	C	C6-N1-C2	-6.52	117.69	120.30
26	BB	64	C	C5-C6-N1	-6.52	117.74	121.00
25	DA	461	C	N3-C4-N4	6.51	122.56	118.00
25	DA	696	G	C8-N9-C4	6.51	109.01	106.40
25	BA	1399	C	C6-N1-C2	6.51	122.91	120.30
25	BA	1106	G	N3-C4-N9	6.51	129.91	126.00
25	BA	117	G	N1-C2-N2	-6.51	110.34	116.20
25	BA	686	G	C2-N3-C4	-6.51	108.64	111.90
25	BA	1426	G	N7-C8-N9	-6.51	109.85	113.10
25	BA	1661	G	C8-N9-C4	6.51	109.00	106.40
25	DA	1781	C	N3-C4-N4	-6.51	113.44	118.00
25	DA	932	G	N9-C4-C5	6.51	108.00	105.40
1	AA	1108	G	C4-C5-N7	-6.51	108.20	110.80
25	BA	418	G	C8-N9-C4	6.51	109.00	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	905	U	N3-C2-O2	-6.51	117.65	122.20
26	BB	64	C	N1-C2-O2	6.51	122.80	118.90
1	AA	595	G	C5-C6-O6	6.50	132.50	128.60
25	BA	820	A	N1-C2-N3	6.50	132.55	129.30
25	BA	1033	U	N3-C4-O4	-6.50	114.85	119.40
25	BA	2501	C	N1-C2-N3	6.50	123.75	119.20
25	BA	122	G	N7-C8-N9	-6.50	109.85	113.10
25	BA	1695	G	N3-C4-N9	6.50	129.90	126.00
25	BA	1769	G	C4-N9-C1'	6.50	134.95	126.50
25	BA	2063	C	N3-C4-N4	6.50	122.55	118.00
25	BA	2354	G	C6-N1-C2	-6.50	121.20	125.10
1	AA	347	G	N3-C4-C5	-6.50	125.35	128.60
25	DA	139(A)	G	N3-C4-N9	6.50	129.90	126.00
25	DA	184	C	C5-C4-N4	-6.50	115.65	120.20
25	DA	1805	U	N3-C2-O2	-6.50	117.65	122.20
1	AA	857	C	C4-C5-C6	6.50	120.65	117.40
25	BA	1668	A	N1-C6-N6	6.50	122.50	118.60
26	BB	116	G	C8-N9-C4	6.50	109.00	106.40
25	DA	141	A	C5-C6-N6	-6.50	118.50	123.70
25	DA	391	G	N1-C6-O6	6.50	123.80	119.90
1	AA	1526	G	C6-C5-N7	-6.50	126.50	130.40
1	CA	616	G	C4-N9-C1'	6.50	134.94	126.50
25	DA	271(M)	G	N3-C2-N2	6.50	124.45	119.90
1	CA	546	G	N3-C4-C5	-6.50	125.35	128.60
25	DA	203	C	C5-C6-N1	6.50	124.25	121.00
1	AA	575	G	N1-C6-O6	-6.49	116.00	119.90
1	AA	598	U	N3-C4-O4	6.49	123.94	119.40
1	AA	1442	G	N3-C4-C5	6.49	131.85	128.60
1	AA	1467	G	C5-C6-N1	-6.49	108.25	111.50
25	BA	515	A	C8-N9-C4	-6.49	103.20	105.80
25	BA	733	G	N3-C4-N9	6.49	129.90	126.00
25	BA	1325	G	N1-C6-O6	6.49	123.80	119.90
25	DA	776	G	C4-N9-C1'	6.49	134.94	126.50
25	BA	2038	G	C6-C5-N7	-6.49	126.50	130.40
25	DA	1038	C	C6-N1-C2	-6.49	117.70	120.30
25	BA	838	C	C4-C5-C6	6.49	120.64	117.40
25	BA	2252	G	C2-N3-C4	-6.49	108.65	111.90
25	BA	2548	G	N1-C2-N3	6.49	127.79	123.90
25	BA	2585	U	C4-C5-C6	-6.49	115.81	119.70
1	CA	960	U	C6-N1-C1'	-6.49	112.11	121.20
1	CA	963	G	C8-N9-C4	-6.49	103.80	106.40
25	DA	2724	C	C5-C6-N1	-6.49	117.75	121.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	24	G	C4-C5-N7	-6.49	108.20	110.80
25	BA	534	U	C5-C6-N1	-6.49	119.46	122.70
25	BA	695	G	C5-C6-N1	-6.49	108.26	111.50
25	BA	2729	G	C5-C6-O6	6.49	132.49	128.60
25	DA	797	C	N3-C4-N4	6.49	122.54	118.00
1	AA	1281	U	N1-C2-O2	6.49	127.34	122.80
25	BA	1843	C	C5-C6-N1	-6.49	117.76	121.00
25	BA	2807	G	C5-C6-O6	6.49	132.49	128.60
26	BB	53	A	C4-C5-N7	6.49	113.94	110.70
25	BA	1721	G	N7-C8-N9	6.48	116.34	113.10
25	DA	178	G	C8-N9-C4	-6.48	103.81	106.40
25	BA	437	G	N9-C4-C5	-6.48	102.81	105.40
25	BA	2605	U	N1-C2-O2	6.48	127.34	122.80
25	DA	645	C	C6-N1-C1'	-6.48	113.02	120.80
1	AA	921	U	C2-N3-C4	6.48	130.89	127.00
25	BA	1018	C	N3-C2-O2	6.48	126.44	121.90
25	BA	1247	A	C2-N3-C4	-6.48	107.36	110.60
25	BA	2675	A	C2-N3-C4	6.48	113.84	110.60
25	BA	1218	C	N3-C4-C5	-6.48	119.31	121.90
1	AA	117	G	C6-C5-N7	-6.47	126.52	130.40
25	BA	1939	U	N3-C2-O2	6.47	126.73	122.20
1	CA	832	C	C6-N1-C1'	-6.47	113.03	120.80
11	AK	13	GLN	N-CA-C	6.47	128.48	111.00
25	BA	304	G	C5-C6-O6	-6.47	124.72	128.60
25	BA	1253	A	N1-C2-N3	-6.47	126.06	129.30
25	DA	407	G	C4-N9-C1'	6.47	134.91	126.50
25	DA	1142(A)	A	C6-C5-N7	-6.47	127.77	132.30
25	DA	1638	C	C6-N1-C2	6.47	122.89	120.30
25	BA	71	A	N3-C4-N9	-6.47	122.22	127.40
25	BA	271(B)	C	C6-N1-C2	6.47	122.89	120.30
25	BA	1847	A	C8-N9-C4	-6.47	103.21	105.80
25	BA	2466	C	C6-N1-C2	6.47	122.89	120.30
1	CA	495	A	N1-C6-N6	-6.47	114.72	118.60
25	BA	71	A	N3-C4-C5	6.47	131.33	126.80
25	BA	2249	U	C5-C4-O4	6.47	129.78	125.90
25	BA	2545	G	C8-N9-C4	-6.47	103.81	106.40
1	CA	1269	A	N1-C6-N6	-6.47	114.72	118.60
25	BA	949	C	C5-C6-N1	-6.47	117.77	121.00
25	BA	1940	U	C4-C5-C6	6.47	123.58	119.70
25	DA	429	A	C5-C6-N6	-6.47	118.53	123.70
23	AV	35	A	C8-N9-C4	6.47	108.39	105.80
25	BA	224	G	C8-N9-C1'	-6.47	118.59	127.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	420	C	N3-C4-C5	6.47	124.49	121.90
25	BA	1030	G	N9-C4-C5	-6.47	102.81	105.40
25	BA	2083	G	C6-C5-N7	-6.47	126.52	130.40
25	BA	72	U	C5-C4-O4	-6.46	122.02	125.90
25	BA	231	C	N1-C2-O2	-6.46	115.02	118.90
25	DA	450	G	C5-C6-O6	6.46	132.48	128.60
25	BA	1819	A	C5-C6-N6	6.46	128.87	123.70
25	DA	1266	G	C8-N9-C4	6.46	108.98	106.40
25	BA	473	G	C8-N9-C4	6.46	108.98	106.40
25	BA	1438	U	N3-C4-O4	6.46	123.92	119.40
25	BA	1664	A	N9-C4-C5	6.46	108.39	105.80
1	AA	598	U	N3-C4-C5	-6.46	110.72	114.60
25	BA	1311	G	N3-C2-N2	-6.46	115.38	119.90
25	BA	1938	A	C8-N9-C4	-6.46	103.22	105.80
25	DA	6	A	C6-N1-C2	-6.46	114.72	118.60
1	AA	1502	A	C5-C6-N6	-6.46	118.53	123.70
25	BA	1446	C	C5-C6-N1	6.46	124.23	121.00
25	BA	1648	C	C2-N3-C4	-6.46	116.67	119.90
25	BA	2308	G	N9-C4-C5	-6.46	102.82	105.40
25	BA	2392	A	C2-N3-C4	-6.46	107.37	110.60
25	DA	80	G	N3-C4-N9	6.46	129.87	126.00
25	BA	673	C	C2-N3-C4	-6.46	116.67	119.90
25	BA	29	U	C5-C4-O4	-6.45	122.03	125.90
25	BA	1243	G	C8-N9-C4	6.45	108.98	106.40
25	BA	2486	G	N3-C4-C5	-6.45	125.37	128.60
1	CA	895	G	C5-C6-O6	-6.45	124.73	128.60
1	CA	1290	G	N3-C4-N9	6.45	129.87	126.00
25	DA	2897	U	C5-C4-O4	-6.45	122.03	125.90
25	BA	2751	G	C8-N9-C1'	-6.45	118.61	127.00
1	CA	629	G	N3-C4-C5	6.45	131.82	128.60
25	DA	1959	G	N9-C4-C5	6.45	107.98	105.40
1	AA	789	U	C6-N1-C2	-6.45	117.13	121.00
25	BA	566	U	C5-C4-O4	-6.45	122.03	125.90
25	BA	1816	G	C5-C6-O6	-6.45	124.73	128.60
25	BA	2686	G	C8-N9-C4	-6.45	103.82	106.40
25	DA	1559	G	N1-C6-O6	-6.45	116.03	119.90
1	AA	1324	A	C6-N1-C2	-6.45	114.73	118.60
25	BA	567	A	C5-N7-C8	-6.45	100.68	103.90
25	BA	600	G	N3-C4-C5	6.45	131.82	128.60
25	BA	1007	C	N1-C2-O2	-6.45	115.03	118.90
26	BB	85	G	C8-N9-C1'	-6.45	118.62	127.00
25	DA	710	G	N1-C6-O6	6.45	123.77	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2058	A	C5-N7-C8	-6.45	100.68	103.90
25	BA	1363	C	N3-C2-O2	-6.44	117.39	121.90
1	AA	511	C	C4-C5-C6	6.44	120.62	117.40
25	DA	2504	U	C6-N1-C2	6.44	124.86	121.00
25	BA	1232	G	C6-N1-C2	-6.44	121.24	125.10
26	DB	56	G	C8-N9-C4	-6.44	103.83	106.40
1	AA	1282	C	C2-N1-C1'	6.44	125.88	118.80
25	BA	1500	G	N1-C6-O6	6.44	123.76	119.90
25	BA	1610	A	N1-C2-N3	-6.44	126.08	129.30
25	BA	2820	A	C2-N3-C4	-6.44	107.38	110.60
25	DA	2709	G	N1-C6-O6	6.44	123.76	119.90
25	BA	121	G	N3-C2-N2	-6.43	115.40	119.90
25	DA	706	A	N9-C4-C5	-6.43	103.23	105.80
25	DA	1493	C	N3-C2-O2	-6.43	117.40	121.90
48	D2	45	SER	N-CA-C	-6.43	93.63	111.00
1	AA	231	G	N1-C6-O6	6.43	123.76	119.90
25	BA	675	A	C5-C6-N6	-6.43	118.55	123.70
25	BA	2674	G	N3-C2-N2	-6.43	115.40	119.90
25	DA	2695	C	N3-C4-N4	-6.43	113.50	118.00
1	AA	1352	C	C6-N1-C2	-6.43	117.73	120.30
25	BA	1816	G	N3-C4-N9	6.43	129.86	126.00
25	BA	1825	A	C8-N9-C4	6.43	108.37	105.80
1	AA	1467	G	C8-N9-C4	-6.43	103.83	106.40
1	AA	1502	A	C5-C6-N1	-6.43	114.48	117.70
25	BA	399	G	N3-C4-C5	6.43	131.81	128.60
25	BA	1584	C	C5-C6-N1	6.43	124.22	121.00
25	BA	2560	C	C2-N3-C4	-6.43	116.69	119.90
25	BA	434	U	N1-C2-N3	6.43	118.76	114.90
25	BA	482	A	N1-C2-N3	6.43	132.51	129.30
25	BA	2835	A	C6-N1-C2	-6.43	114.74	118.60
25	BA	656	G	N1-C6-O6	6.43	123.76	119.90
25	BA	1170	G	C6-C5-N7	-6.43	126.54	130.40
25	BA	2225	A	C6-N1-C2	-6.43	114.74	118.60
25	BA	2227	A	N1-C6-N6	-6.43	114.74	118.60
25	BA	2783	G	C8-N9-C1'	-6.43	118.65	127.00
26	BB	75	G	C8-N9-C1'	-6.42	118.65	127.00
1	CA	398	C	C5-C4-N4	6.42	124.70	120.20
25	BA	1208	C	C4-C5-C6	6.42	120.61	117.40
25	BA	1332	G	N3-C2-N2	-6.42	115.40	119.90
1	CA	499	A	C8-N9-C4	6.42	108.37	105.80
1	AA	728	A	N1-C6-N6	6.42	122.45	118.60
25	DA	982	C	N3-C4-C5	-6.42	119.33	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	72	G	N9-C4-C5	-6.42	102.83	105.40
25	BA	567	A	C4-C5-N7	6.42	113.91	110.70
25	DA	1314	C	C5-C4-N4	-6.42	115.71	120.20
1	AA	1401	G	C4-C5-N7	6.42	113.37	110.80
25	BA	130	C	C5-C6-N1	-6.42	117.79	121.00
25	BA	213	A	C4-C5-C6	-6.42	113.79	117.00
1	CA	1414	U	N3-C2-O2	-6.42	117.71	122.20
25	DA	269	U	N1-C2-O2	6.42	127.29	122.80
25	DA	1516	C	C6-N1-C2	6.42	122.87	120.30
25	BA	2200	C	C6-N1-C2	-6.42	117.73	120.30
2	AB	169	LYS	N-CA-C	-6.41	93.69	111.00
25	BA	974	G	C5-C6-O6	-6.41	124.75	128.60
25	BA	1278	A	C4-C5-C6	6.41	120.21	117.00
25	BA	2348	U	C5-C6-N1	-6.41	119.49	122.70
25	DA	1204	A	C3'-C2'-C1'	-6.41	96.37	101.50
25	DA	2105	C	C6-N1-C2	-6.41	117.73	120.30
25	BA	16	G	N1-C2-N3	6.41	127.75	123.90
25	BA	1628	G	C8-N9-C4	-6.41	103.83	106.40
25	BA	2869	G	C4-C5-C6	6.41	122.65	118.80
25	DA	676	A	C6-C5-N7	-6.41	127.81	132.30
25	BA	590	A	N1-C6-N6	-6.41	114.75	118.60
25	BA	2352	A	C8-N9-C4	6.41	108.36	105.80
25	DA	1260	G	C8-N9-C4	6.41	108.96	106.40
25	BA	939	G	N3-C2-N2	6.41	124.39	119.90
25	BA	1421	G	C8-N9-C4	-6.41	103.84	106.40
25	BA	2791	C	C6-N1-C2	-6.41	117.74	120.30
25	DA	201	C	C2-N3-C4	-6.41	116.70	119.90
1	AA	1206	G	N3-C4-N9	6.41	129.84	126.00
26	BB	91	C	N3-C4-C5	6.41	124.46	121.90
25	DA	12	U	N3-C2-O2	-6.41	117.72	122.20
26	BB	104	U	C5-C6-N1	-6.41	119.50	122.70
1	CA	638	G	C4-N9-C1'	-6.41	118.17	126.50
25	DA	1552	G	C5-C6-O6	6.41	132.44	128.60
25	BA	733	G	N3-C4-C5	-6.40	125.40	128.60
25	BA	2377	A	N9-C4-C5	-6.40	103.24	105.80
25	BA	1207	C	N3-C4-C5	6.40	124.46	121.90
25	BA	1293	C	N3-C4-C5	6.40	124.46	121.90
25	BA	2736	G	N3-C2-N2	-6.40	115.42	119.90
1	CA	1259	C	C5-C6-N1	6.40	124.20	121.00
25	DA	1654	A	N1-C6-N6	-6.40	114.76	118.60
25	DA	2503	A	C2-N3-C4	6.40	113.80	110.60
25	BA	298	G	C5-C6-N1	-6.40	108.30	111.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2729	G	N1-C6-O6	-6.40	116.06	119.90
25	BA	1973	G	C2-N3-C4	-6.40	108.70	111.90
25	BA	532	A	C8-N9-C4	-6.39	103.24	105.80
1	CA	1358	U	N3-C4-C5	6.39	118.44	114.60
25	DA	480	A	N7-C8-N9	6.39	117.00	113.80
25	DA	787	U	N3-C2-O2	-6.39	117.72	122.20
25	DA	1488	G	C8-N9-C4	-6.39	103.84	106.40
23	AV	13	C	C2-N1-C1'	6.39	125.83	118.80
25	BA	768	G	C6-C5-N7	-6.39	126.56	130.40
25	BA	1230	C	C6-N1-C2	6.39	122.86	120.30
25	BA	1781	C	N1-C2-N3	-6.39	114.72	119.20
1	AA	36	C	N3-C2-O2	-6.39	117.43	121.90
25	BA	1035	U	C5-C6-N1	-6.39	119.50	122.70
25	BA	2869	G	N3-C4-C5	-6.39	125.40	128.60
25	BA	686	G	N9-C4-C5	-6.39	102.84	105.40
25	BA	1325	G	N3-C4-N9	6.39	129.83	126.00
25	BA	1772	G	C8-N9-C4	6.39	108.96	106.40
1	CA	1274	G	C6-C5-N7	-6.39	126.57	130.40
25	BA	1152	C	N3-C4-C5	6.39	124.45	121.90
25	BA	1966	A	N1-C6-N6	6.39	122.43	118.60
25	BA	1257	C	C2-N1-C1'	6.39	125.83	118.80
25	BA	2614	A	N7-C8-N9	-6.39	110.61	113.80
25	DA	659	C	C6-N1-C2	6.39	122.86	120.30
25	DA	2206	G	C4-N9-C1'	-6.39	118.20	126.50
25	BA	1196	C	N1-C2-O2	-6.38	115.07	118.90
25	BA	1246	A	N1-C2-N3	6.38	132.49	129.30
34	DO	8	LEU	CA-CB-CG	6.38	129.98	115.30
1	AA	224	C	C6-N1-C2	-6.38	117.75	120.30
25	BA	1769	G	C8-N9-C1'	-6.38	118.71	127.00
25	BA	2715	C	C6-N1-C2	6.38	122.85	120.30
25	BA	2726	U	C6-N1-C2	6.38	124.83	121.00
1	CA	1502	A	C4-C5-N7	6.38	113.89	110.70
25	DA	834	C	C6-N1-C2	-6.38	117.75	120.30
1	CA	979	C	C6-N1-C2	-6.38	117.75	120.30
25	DA	725	G	C8-N9-C4	-6.38	103.85	106.40
25	DA	759	G	N3-C2-N2	-6.38	115.44	119.90
25	BA	984	A	C8-N9-C4	6.37	108.35	105.80
25	BA	2091	U	N1-C2-N3	6.37	118.72	114.90
25	BA	2383	G	C8-N9-C1'	-6.37	118.72	127.00
25	BA	2446	G	N1-C6-O6	6.37	123.72	119.90
4	CD	31	CYS	CB-CA-C	6.37	123.15	110.40
25	BA	151	C	C2-N1-C1'	-6.37	111.79	118.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	190	A	N1-C6-N6	6.37	122.42	118.60
25	BA	202	U	N1-C2-N3	-6.37	111.08	114.90
25	BA	2051	A	N1-C2-N3	6.37	132.49	129.30
25	BA	2512	C	C5-C6-N1	-6.37	117.81	121.00
25	BA	2597	G	C5-C6-O6	6.37	132.42	128.60
25	DA	794	G	C8-N9-C4	6.37	108.95	106.40
25	DA	1142	U	N3-C2-O2	-6.37	117.74	122.20
25	DA	2080	G	N7-C8-N9	6.37	116.29	113.10
1	AA	1290	G	N7-C8-N9	6.37	116.28	113.10
25	BA	630	G	C8-N9-C4	6.37	108.95	106.40
25	BA	729	G	C6-C5-N7	-6.37	126.58	130.40
25	DA	2031	A	N1-C6-N6	6.37	122.42	118.60
25	DA	2695	C	C6-N1-C2	6.37	122.85	120.30
1	AA	107	G	C8-N9-C4	6.37	108.95	106.40
25	BA	117	G	N3-C4-N9	6.37	129.82	126.00
25	BA	139	G	C5-C6-N1	6.37	114.68	111.50
25	BA	2789	C	C5-C6-N1	6.37	124.18	121.00
25	DA	184	C	N3-C4-N4	6.36	122.45	118.00
25	DA	812	C	N3-C4-C5	-6.36	119.35	121.90
1	AA	15	G	C8-N9-C1'	-6.36	118.73	127.00
25	BA	1193	G	C2-N3-C4	-6.36	108.72	111.90
25	DA	745	G	C8-N9-C4	-6.36	103.86	106.40
25	BA	210	C	C2-N3-C4	-6.36	116.72	119.90
25	BA	624	C	C6-N1-C2	6.36	122.84	120.30
25	BA	2083	G	N1-C2-N3	6.36	127.72	123.90
25	BA	2185	C	C6-N1-C2	-6.36	117.75	120.30
1	AA	770	C	C6-N1-C2	6.36	122.84	120.30
25	BA	2267	A	N1-C2-N3	6.36	132.48	129.30
25	BA	2409	G	C5-C6-N1	6.36	114.68	111.50
25	DA	748	G	C2-N3-C4	6.36	115.08	111.90
25	BA	106	C	N3-C2-O2	6.36	126.35	121.90
25	BA	2228	G	C8-N9-C1'	-6.36	118.73	127.00
1	CA	904	C	C5-C4-N4	-6.36	115.75	120.20
25	DA	1831	G	N1-C2-N3	6.36	127.72	123.90
1	AA	541	G	N3-C2-N2	-6.36	115.45	119.90
18	AR	85	LEU	CA-CB-CG	6.36	129.92	115.30
25	BA	748	G	C6-N1-C2	-6.35	121.29	125.10
25	BA	1655	A	N1-C6-N6	6.35	122.41	118.60
25	BA	2564	A	C6-N1-C2	-6.35	114.79	118.60
25	BA	336	C	C4-C5-C6	6.35	120.58	117.40
25	BA	481	G	C4-N9-C1'	6.35	134.76	126.50
25	BA	2430	A	C5-N7-C8	-6.35	100.72	103.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2644	G	C8-N9-C4	-6.35	103.86	106.40
25	BA	2436	G	N1-C6-O6	-6.35	116.09	119.90
25	BA	2587	A	N1-C2-N3	6.35	132.47	129.30
25	BA	1753	G	N3-C4-N9	-6.35	122.19	126.00
1	CA	1290	G	N3-C4-C5	-6.35	125.43	128.60
25	DA	148	C	N3-C4-C5	6.35	124.44	121.90
25	BA	657	U	N1-C2-N3	6.35	118.71	114.90
25	BA	770	G	C6-N1-C2	-6.35	121.29	125.10
25	BA	2574	G	C4-C5-N7	6.35	113.34	110.80
25	BA	2582	G	N3-C2-N2	6.35	124.34	119.90
26	BB	89	G	C8-N9-C1'	-6.35	118.75	127.00
25	BA	2008	C	C5-C4-N4	-6.34	115.76	120.20
25	BA	2371	G	N1-C2-N3	-6.34	120.09	123.90
25	BA	2458	G	N3-C2-N2	-6.34	115.46	119.90
25	BA	2510	C	N1-C2-O2	6.34	122.71	118.90
25	BA	1297	C	N1-C2-O2	-6.34	115.09	118.90
1	CA	740	U	C5-C6-N1	-6.34	119.53	122.70
26	DB	115	G	N3-C4-C5	6.34	131.77	128.60
1	AA	231	G	C6-C5-N7	-6.34	126.60	130.40
25	BA	1632	A	C5-C6-N6	-6.34	118.63	123.70
25	BA	1776	G	N3-C2-N2	6.34	124.34	119.90
25	BA	2576	G	N3-C2-N2	-6.34	115.46	119.90
1	CA	416	G	C5-C6-O6	-6.34	124.80	128.60
25	DA	141	A	C4-C5-C6	6.34	120.17	117.00
25	DA	297	C	C6-N1-C2	-6.34	117.76	120.30
25	DA	1677	A	N9-C4-C5	-6.34	103.26	105.80
25	BA	928	G	C8-N9-C1'	-6.34	118.76	127.00
25	BA	1245	G	C6-N1-C2	-6.34	121.30	125.10
25	BA	1976	U	C5-C4-O4	6.34	129.70	125.90
1	CA	546	G	C8-N9-C4	-6.34	103.87	106.40
25	BA	2894	G	C4-N9-C1'	6.33	134.74	126.50
1	CA	525	C	C5-C6-N1	6.33	124.17	121.00
25	DA	1246	A	C2-N3-C4	-6.33	107.43	110.60
1	AA	488	C	C5-C6-N1	6.33	124.17	121.00
25	BA	967	C	N3-C4-C5	6.33	124.43	121.90
25	BA	2050	C	N1-C2-O2	-6.33	115.10	118.90
25	BA	2538	C	C5-C6-N1	-6.33	117.83	121.00
25	BA	2827	C	C5-C4-N4	-6.33	115.77	120.20
26	BB	99	G	N9-C4-C5	-6.33	102.87	105.40
1	AA	898	G	N7-C8-N9	-6.33	109.94	113.10
25	BA	926	A	C5-C6-N1	6.33	120.87	117.70
25	BA	1154	G	N7-C8-N9	6.33	116.27	113.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1403	C	C5-C6-N1	-6.33	117.83	121.00
25	BA	1799	G	N1-C6-O6	-6.33	116.10	119.90
25	BA	1237	A	C5-C6-N6	6.33	128.76	123.70
25	DA	1781	C	C6-N1-C2	6.33	122.83	120.30
25	BA	377	C	C5-C4-N4	-6.33	115.77	120.20
25	BA	208	C	N3-C4-C5	6.33	124.43	121.90
1	CA	297	G	C8-N9-C4	6.33	108.93	106.40
1	CA	917	G	N7-C8-N9	6.33	116.26	113.10
25	DA	154(A)	C	N1-C2-O2	6.33	122.69	118.90
25	BA	204	A	C4-C5-N7	-6.32	107.54	110.70
1	AA	336	C	C6-N1-C2	6.32	122.83	120.30
1	AA	1429	C	N3-C2-O2	6.32	126.33	121.90
25	BA	2592	G	C8-N9-C4	-6.32	103.87	106.40
25	DA	2723	C	N1-C2-O2	-6.32	115.11	118.90
1	AA	1312	G	C8-N9-C4	-6.32	103.87	106.40
26	BB	20	C	N3-C4-N4	6.32	122.42	118.00
25	DA	1369	G	C5-C6-N1	6.32	114.66	111.50
1	CA	219	C	C6-N1-C2	-6.32	117.77	120.30
25	BA	793	A	C6-C5-N7	-6.32	127.88	132.30
25	BA	1801	G	N1-C6-O6	6.32	123.69	119.90
25	BA	336	C	N1-C2-O2	-6.32	115.11	118.90
25	BA	1753	G	C5-N7-C8	-6.32	101.14	104.30
25	DA	391	G	C8-N9-C1'	-6.32	118.79	127.00
25	DA	944	G	C5-C6-N1	-6.32	108.34	111.50
25	BA	2015	A	C8-N9-C4	6.31	108.33	105.80
25	DA	498	G	N1-C2-N3	-6.31	120.11	123.90
25	DA	734	A	N1-C6-N6	6.31	122.39	118.60
1	AA	1227	A	C2-N3-C4	-6.31	107.44	110.60
25	BA	798	G	N1-C2-N2	-6.31	110.52	116.20
25	BA	990	A	N7-C8-N9	6.31	116.96	113.80
25	BA	1843	C	C5-C4-N4	-6.31	115.78	120.20
25	BA	2072	G	C4-C5-N7	6.31	113.33	110.80
25	DA	2506	U	N3-C2-O2	-6.31	117.78	122.20
25	DA	2396	G	N9-C4-C5	-6.31	102.88	105.40
25	BA	24	G	C4-C5-C6	6.31	122.59	118.80
1	CA	20	U	C5-C6-N1	-6.31	119.55	122.70
1	AA	77	G	N3-C2-N2	6.31	124.32	119.90
22	AY	68	GLY	N-CA-C	6.31	128.87	113.10
25	BA	994	C	C6-N1-C2	6.31	122.82	120.30
25	BA	1177	A	C8-N9-C4	-6.31	103.28	105.80
25	BA	1229	G	C2-N3-C4	-6.31	108.75	111.90
1	AA	1358	U	N3-C4-C5	6.30	118.38	114.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	725	G	C4-C5-C6	6.30	122.58	118.80
25	BA	1184	G	N1-C2-N2	6.30	121.87	116.20
1	AA	518	C	N3-C2-O2	-6.30	117.49	121.90
25	BA	36	G	C8-N9-C4	6.30	108.92	106.40
25	BA	1161	C	N1-C2-O2	6.30	122.68	118.90
26	BB	24	G	C4-C5-N7	6.30	113.32	110.80
25	BA	224	G	N1-C2-N2	-6.30	110.53	116.20
25	BA	518	G	N3-C2-N2	6.30	124.31	119.90
25	BA	646	A	C6-C5-N7	-6.30	127.89	132.30
25	BA	2246	G	C5-C6-N1	6.30	114.65	111.50
25	BA	2489	G	C8-N9-C4	6.30	108.92	106.40
25	BA	1701	A	C6-C5-N7	-6.30	127.89	132.30
1	AA	1145	C	C5-C6-N1	6.30	124.15	121.00
25	BA	545	G	N1-C6-O6	6.30	123.68	119.90
25	BA	1506	C	N3-C2-O2	-6.30	117.49	121.90
25	BA	1650	G	C6-C5-N7	-6.30	126.62	130.40
25	DA	730	C	C6-N1-C2	6.30	122.82	120.30
25	DA	297	C	N3-C2-O2	-6.29	117.49	121.90
25	BA	481	G	C8-N9-C1'	-6.29	118.82	127.00
25	BA	1472	A	C2-N3-C4	-6.29	107.45	110.60
25	BA	2616	C	C5-C4-N4	-6.29	115.80	120.20
50	B4	42	PHE	C-N-CA	6.29	137.44	121.70
25	BA	921	G	C4-C5-C6	6.29	122.58	118.80
25	BA	2434	A	C2-N3-C4	-6.29	107.45	110.60
26	BB	56	G	N3-C4-N9	6.29	129.78	126.00
25	DA	1640	C	N1-C2-O2	6.29	122.67	118.90
25	DA	2598	A	C6-C5-N7	-6.29	127.90	132.30
25	DA	2709	G	N3-C2-N2	-6.29	115.50	119.90
25	BA	1037	G	C8-N9-C4	6.29	108.92	106.40
25	BA	2614	A	N1-C2-N3	-6.29	126.16	129.30
25	DA	265	A	C8-N9-C4	-6.29	103.28	105.80
1	AA	1242	C	C6-N1-C2	6.29	122.81	120.30
25	BA	556	G	N1-C6-O6	6.29	123.67	119.90
25	DA	455	C	C6-N1-C2	6.29	122.81	120.30
25	BA	728	G	C8-N9-C4	6.29	108.91	106.40
25	BA	1427	A	C5-C6-N6	-6.29	118.67	123.70
25	BA	1525	G	C5-N7-C8	6.29	107.44	104.30
25	BA	1586	A	C8-N9-C4	-6.29	103.29	105.80
25	BA	1609	A	C8-N9-C4	6.29	108.31	105.80
25	DA	979	G	C8-N9-C4	-6.29	103.89	106.40
25	BA	218	A	C2-N3-C4	-6.28	107.46	110.60
25	BA	506	G	C5-C6-O6	-6.28	124.83	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1787	A	C2-N3-C4	-6.28	107.46	110.60
25	BA	2645	G	C8-N9-C4	-6.28	103.89	106.40
1	CA	395	C	C6-N1-C2	-6.28	117.79	120.30
25	DA	2423	U	C5-C6-N1	-6.28	119.56	122.70
25	BA	1464	C	C6-N1-C2	-6.28	117.79	120.30
25	BA	2567	G	C5-C6-N1	-6.28	108.36	111.50
25	DA	915	C	C6-N1-C2	-6.28	117.79	120.30
25	BA	484	C	N1-C2-O2	-6.28	115.13	118.90
1	AA	1285	A	C8-N9-C4	-6.28	103.29	105.80
25	BA	1774	C	C6-N1-C2	-6.28	117.79	120.30
25	BA	1855	G	C5-C6-N1	6.28	114.64	111.50
25	BA	2538	C	N3-C4-C5	6.28	124.41	121.90
25	DA	2200	C	C5-C6-N1	6.28	124.14	121.00
1	AA	261	U	N3-C4-C5	-6.28	110.83	114.60
25	BA	941	A	N9-C4-C5	-6.28	103.29	105.80
25	BA	2327	A	N1-C6-N6	-6.28	114.83	118.60
25	BA	2680	C	C6-N1-C2	6.28	122.81	120.30
25	DA	533	G	C5-C6-N1	-6.28	108.36	111.50
25	DA	1552	G	C6-C5-N7	6.28	134.16	130.40
25	DA	1644	C	N1-C2-O2	6.28	122.67	118.90
25	DA	90	U	N1-C2-O2	6.27	127.19	122.80
25	DA	1359	A	N1-C6-N6	-6.27	114.83	118.60
1	AA	511	C	N1-C2-N3	6.27	123.59	119.20
1	AA	1442	G	N3-C4-N9	-6.27	122.24	126.00
26	BB	62	C	C6-N1-C2	6.27	122.81	120.30
25	BA	1758	G	C8-N9-C4	-6.27	103.89	106.40
25	BA	2549	G	C5-C6-O6	-6.27	124.84	128.60
25	BA	448	U	C5-C6-N1	-6.27	119.57	122.70
25	BA	2364	C	N3-C4-C5	6.27	124.41	121.90
26	BB	85	G	N1-C6-O6	6.27	123.66	119.90
25	DA	494	G	N3-C4-C5	6.27	131.73	128.60
25	DA	1005	C	N3-C4-N4	-6.27	113.61	118.00
25	DA	2531	A	C8-N9-C4	6.27	108.31	105.80
23	AV	13	C	N3-C4-N4	6.27	122.39	118.00
25	BA	2686	G	C6-C5-N7	-6.27	126.64	130.40
26	BB	95	C	C6-N1-C2	6.27	122.81	120.30
25	DA	1372	U	N3-C4-O4	6.27	123.79	119.40
25	DA	2680	C	N3-C4-C5	6.27	124.41	121.90
25	BA	669	G	N9-C4-C5	-6.26	102.89	105.40
25	BA	685	A	C4-C5-N7	6.26	113.83	110.70
25	BA	810	U	N3-C2-O2	-6.26	117.81	122.20
25	BA	1669	A	C8-N9-C4	-6.26	103.29	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	254	G	C8-N9-C4	-6.26	103.89	106.40
25	DA	1656	C	C5-C6-N1	6.26	124.13	121.00
25	DA	2591	C	N1-C2-O2	-6.26	115.14	118.90
25	BA	2244	U	C5-C4-O4	6.26	129.66	125.90
25	DA	1340	U	C5-C4-O4	-6.26	122.14	125.90
1	AA	1113	C	C5-C6-N1	6.26	124.13	121.00
25	BA	2644	G	N3-C4-N9	-6.26	122.24	126.00
25	BA	935	C	N3-C4-C5	6.26	124.40	121.90
1	CA	129(A)	G	C5-C6-N1	-6.26	108.37	111.50
25	DA	857	C	C6-N1-C2	-6.26	117.80	120.30
25	DA	955	C	N3-C4-N4	-6.26	113.62	118.00
25	DA	1631(A)	A	C5-C6-N1	-6.26	114.57	117.70
25	BA	17	G	N3-C4-C5	-6.26	125.47	128.60
25	BA	1310	G	C5-C6-N1	6.26	114.63	111.50
25	DA	481	G	N7-C8-N9	6.26	116.23	113.10
25	DA	584	C	C6-N1-C2	6.26	122.80	120.30
25	DA	693	C	N3-C4-N4	-6.26	113.62	118.00
25	BA	2455	G	C6-N1-C2	-6.25	121.35	125.10
25	BA	1476	C	N3-C2-O2	-6.25	117.52	121.90
25	BA	1653	G	P-O3'-C3'	6.25	127.20	119.70
25	DA	353	G	C8-N9-C4	-6.25	103.90	106.40
25	BA	1906	G	N1-C6-O6	6.25	123.65	119.90
25	BA	2007	C	C4-C5-C6	6.25	120.53	117.40
25	BA	2726	U	C5-C6-N1	-6.25	119.58	122.70
1	CA	831	U	C5-C6-N1	6.25	125.83	122.70
1	AA	266	G	C4-C5-C6	6.25	122.55	118.80
1	AA	1149	C	C2-N3-C4	6.25	123.02	119.90
25	BA	556	G	C2-N3-C4	-6.25	108.78	111.90
25	BA	2052	G	C5-C6-N1	6.25	114.62	111.50
25	BA	2088	G	N1-C6-O6	6.25	123.65	119.90
25	BA	2692	C	N1-C2-O2	6.25	122.65	118.90
1	AA	166	G	C8-N9-C4	-6.25	103.90	106.40
1	AA	529	G	C4-C5-N7	6.25	113.30	110.80
1	AA	1412	C	C5-C6-N1	-6.25	117.88	121.00
25	BA	139	G	C2-N3-C4	6.25	115.02	111.90
25	BA	2348	U	C6-N1-C2	6.25	124.75	121.00
25	BA	798	G	C6-N1-C2	-6.24	121.35	125.10
25	BA	1325	G	C2-N3-C4	6.24	115.02	111.90
25	DA	330	A	C2-N3-C4	-6.24	107.48	110.60
25	DA	1408	C	N1-C2-O2	-6.24	115.15	118.90
25	DA	1650	G	C5-C6-O6	-6.24	124.85	128.60
25	BA	522	G	N1-C6-O6	6.24	123.64	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	688	U	C4-C5-C6	6.24	123.44	119.70
25	BA	71	A	C6-C5-N7	-6.24	127.93	132.30
25	BA	927	G	C2-N3-C4	-6.24	108.78	111.90
1	AA	22	G	N1-C6-O6	6.24	123.64	119.90
1	AA	163	C	C6-N1-C2	-6.24	117.81	120.30
25	BA	506	G	C6-N1-C2	-6.24	121.36	125.10
25	BA	942	G	N3-C2-N2	-6.24	115.53	119.90
25	BA	1115	G	C8-N9-C4	6.24	108.89	106.40
25	BA	1194	A	C8-N9-C4	6.24	108.30	105.80
26	BB	87	G	N1-C6-O6	-6.24	116.16	119.90
25	DA	2689	U	N3-C4-O4	-6.24	115.03	119.40
1	AA	59	A	C2-N3-C4	6.24	113.72	110.60
25	BA	1668	A	C5-C6-N6	-6.24	118.71	123.70
26	BB	80	U	N1-C2-N3	6.24	118.64	114.90
25	BA	109	G	N1-C6-O6	-6.24	116.16	119.90
25	BA	1816	G	N9-C4-C5	-6.24	102.91	105.40
25	BA	2429	G	N3-C4-C5	-6.24	125.48	128.60
25	BA	679	C	N3-C4-C5	6.23	124.39	121.90
25	BA	1042	G	C5-C6-O6	-6.23	124.86	128.60
25	BA	1374	G	N1-C6-O6	6.23	123.64	119.90
25	BA	2228	G	N3-C4-C5	-6.23	125.48	128.60
25	DA	2283	C	C6-N1-C2	6.23	122.79	120.30
25	DA	2647	U	C5-C4-O4	6.23	129.64	125.90
1	AA	802	A	N1-C6-N6	6.23	122.34	118.60
25	BA	337	C	N3-C2-O2	6.23	126.26	121.90
25	BA	1133	U	C5-C4-O4	-6.23	122.16	125.90
25	BA	1223	G	N3-C2-N2	6.23	124.26	119.90
25	BA	2885	C	N1-C2-O2	-6.23	115.16	118.90
25	BA	905	U	N1-C2-N3	6.23	118.64	114.90
25	DA	2081	C	N3-C2-O2	6.23	126.26	121.90
1	AA	1442	G	C2-N3-C4	-6.23	108.79	111.90
25	BA	841	A	C2-N3-C4	-6.23	107.49	110.60
25	BA	1156	A	N1-C6-N6	6.23	122.34	118.60
25	BA	1457	A	C4-C5-C6	6.23	120.11	117.00
25	BA	1602	U	N1-C2-O2	6.23	127.16	122.80
25	DA	765	G	C5-C6-O6	-6.23	124.86	128.60
25	DA	2587	A	C5-C6-N6	-6.23	118.72	123.70
1	AA	860	A	N1-C6-N6	6.23	122.34	118.60
25	BA	1331	A	N1-C2-N3	6.23	132.41	129.30
25	DA	1678	G	C4-N9-C1'	6.23	134.59	126.50
25	BA	188	G	N1-C2-N3	6.22	127.63	123.90
25	BA	1933	G	C6-C5-N7	-6.22	126.67	130.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2002	G	C5-N7-C8	6.22	107.41	104.30
25	BA	2318	G	C5-N7-C8	-6.22	101.19	104.30
25	BA	1672	C	N3-C4-N4	6.22	122.36	118.00
25	BA	2268	A	N1-C2-N3	6.22	132.41	129.30
25	DA	2005	A	C2-N3-C4	-6.22	107.49	110.60
1	AA	1286	A	C8-N9-C4	-6.22	103.31	105.80
25	BA	59	U	N3-C2-O2	-6.22	117.84	122.20
25	BA	2639	A	C2-N3-C4	-6.22	107.49	110.60
26	BB	47	C	N3-C2-O2	6.22	126.25	121.90
1	CA	1516	G	C8-N9-C4	6.22	108.89	106.40
25	BA	71	A	C8-N9-C4	-6.22	103.31	105.80
25	BA	556	G	C4-C5-N7	6.22	113.29	110.80
1	CA	363	A	N7-C8-N9	-6.22	110.69	113.80
25	BA	1527	G	C4-C5-N7	-6.22	108.31	110.80
1	AA	319	G	N9-C4-C5	-6.21	102.91	105.40
1	AA	900	A	C4-C5-N7	6.21	113.81	110.70
1	AA	1127	G	N3-C4-C5	6.21	131.71	128.60
25	BA	1153	C	C6-N1-C2	-6.21	117.81	120.30
25	BA	198	C	N1-C2-O2	6.21	122.63	118.90
25	BA	818	G	C5-C6-O6	-6.21	124.87	128.60
26	BB	78	A	N1-C2-N3	6.21	132.41	129.30
25	DA	1968	G	C5-C6-O6	-6.21	124.87	128.60
1	AA	672	U	N3-C2-O2	-6.21	117.85	122.20
1	AA	1044	A	C5-C6-N6	6.21	128.67	123.70
25	BA	732	C	N1-C2-N3	6.21	123.55	119.20
25	DA	2686	G	N3-C2-N2	-6.21	115.55	119.90
25	BA	1027	A	N1-C2-N3	6.21	132.41	129.30
25	DA	139	G	C6-C5-N7	-6.21	126.67	130.40
1	AA	1501	C	C2-N3-C4	-6.21	116.80	119.90
25	BA	769	G	C8-N9-C4	6.21	108.88	106.40
25	BA	824	A	C2-N3-C4	-6.21	107.50	110.60
25	BA	1036	G	C8-N9-C4	6.21	108.88	106.40
25	BA	1156	A	N9-C4-C5	-6.21	103.32	105.80
25	BA	1392	A	N7-C8-N9	-6.21	110.70	113.80
25	BA	1626	G	C5-C6-O6	6.21	132.32	128.60
25	BA	437	G	C5-C6-O6	-6.21	124.88	128.60
25	BA	2438	U	C5-C6-N1	-6.21	119.60	122.70
1	AA	187	C	C5-C6-N1	6.21	124.10	121.00
25	BA	768	G	N7-C8-N9	6.20	116.20	113.10
25	BA	920	G	N1-C2-N2	-6.20	110.62	116.20
25	BA	1793	C	C4-C5-C6	6.20	120.50	117.40
25	BA	1824	G	C5-C6-O6	-6.20	124.88	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	12	U	C2-N1-C1'	6.20	125.14	117.70
25	DA	428	A	C2-N3-C4	6.20	113.70	110.60
25	DA	1981	A	C2-N3-C4	-6.20	107.50	110.60
25	DA	1997	G	N3-C4-N9	6.20	129.72	126.00
1	AA	1136	U	C6-N1-C2	-6.20	117.28	121.00
1	AA	1267	C	C6-N1-C2	-6.20	117.82	120.30
25	BA	363(E)	U	N3-C2-O2	6.20	126.54	122.20
1	AA	1188	A	C4-C5-N7	-6.20	107.60	110.70
1	AA	1267	C	C5-C6-N1	6.20	124.10	121.00
25	BA	99	U	C5-C4-O4	6.20	129.62	125.90
25	BA	1271	G	C2-N3-C4	-6.20	108.80	111.90
25	BA	1359	A	C4-C5-C6	-6.20	113.90	117.00
1	CA	473	G	N9-C4-C5	6.20	107.88	105.40
1	CA	1192	C	C6-N1-C2	-6.20	117.82	120.30
25	DA	503	A	N1-C2-N3	6.20	132.40	129.30
25	BA	444	C	N1-C2-O2	-6.20	115.18	118.90
25	BA	2301	C	C6-N1-C2	-6.20	117.82	120.30
26	BB	56	G	C4-N9-C1'	6.20	134.56	126.50
25	DA	975	C	N3-C4-C5	6.20	124.38	121.90
25	DA	1579	A	C6-C5-N7	-6.20	127.96	132.30
25	DA	2592	G	C8-N9-C4	-6.20	103.92	106.40
25	BA	334	C	C4-C5-C6	6.20	120.50	117.40
25	BA	587	C	C4-C5-C6	6.20	120.50	117.40
25	BA	2726	U	N3-C2-O2	6.20	126.54	122.20
25	BA	468	G	N1-C2-N3	6.19	127.62	123.90
25	BA	577	G	C8-N9-C4	6.19	108.88	106.40
25	BA	1570	A	N3-C4-C5	6.19	131.13	126.80
25	DA	1631	C	N1-C2-O2	-6.19	115.19	118.90
1	AA	1061	G	N3-C2-N2	-6.19	115.57	119.90
25	BA	746	A	C6-C5-N7	-6.19	127.97	132.30
25	BA	1342	A	N1-C6-N6	6.19	122.31	118.60
25	BA	1363	C	N1-C2-N3	6.19	123.53	119.20
25	BA	1674	G	C4-N9-C1'	6.19	134.55	126.50
25	BA	2053	G	N1-C2-N2	6.19	121.77	116.20
1	CA	299	G	C8-N9-C1'	-6.19	118.95	127.00
25	DA	127	A	N9-C4-C5	-6.19	103.32	105.80
25	DA	2894	G	C4-N9-C1'	6.19	134.55	126.50
25	BA	147	U	C4-C5-C6	6.19	123.41	119.70
25	BA	2758	A	C8-N9-C4	6.19	108.28	105.80
35	BP	41	ARG	NE-CZ-NH1	6.19	123.39	120.30
1	CA	416	G	N1-C6-O6	6.19	123.61	119.90
1	CA	858	G	N3-C4-N9	6.19	129.71	126.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	512	G	C4-C5-N7	-6.19	108.32	110.80
25	DA	271(M)	G	N1-C2-N2	-6.19	110.63	116.20
25	DA	1906	G	C5-C6-O6	-6.19	124.89	128.60
25	DA	2238	G	C5-C6-O6	-6.19	124.89	128.60
25	DA	2447	G	C4-N9-C1'	-6.19	118.46	126.50
25	DA	2765	A	N1-C2-N3	6.19	132.39	129.30
25	DA	127	A	C5-C6-N6	-6.19	118.75	123.70
25	DA	533	G	N1-C2-N2	-6.19	110.63	116.20
25	DA	807	U	N3-C4-O4	6.19	123.73	119.40
25	BA	474	G	N3-C4-N9	-6.18	122.29	126.00
25	BA	556	G	C6-C5-N7	-6.18	126.69	130.40
26	BB	106	G	C5-C6-O6	-6.18	124.89	128.60
1	CA	662	G	N3-C4-C5	-6.18	125.51	128.60
1	CA	1356	G	N7-C8-N9	6.18	116.19	113.10
25	DA	2577	A	N1-C6-N6	6.18	122.31	118.60
1	AA	1256	A	C8-N9-C4	-6.18	103.33	105.80
25	BA	178	G	N1-C2-N3	6.18	127.61	123.90
25	BA	1531	C	C2-N1-C1'	6.18	125.60	118.80
25	BA	2229	C	N3-C2-O2	-6.18	117.57	121.90
25	BA	2449	U	C6-N1-C2	6.18	124.71	121.00
25	BA	2511	U	C5-C6-N1	-6.18	119.61	122.70
25	DA	184	C	N1-C2-O2	-6.18	115.19	118.90
1	AA	129(A)	G	N3-C4-C5	-6.18	125.51	128.60
25	BA	1573	G	N3-C2-N2	-6.18	115.57	119.90
25	DA	900	A	C8-N9-C4	-6.18	103.33	105.80
25	DA	1437	C	N1-C2-O2	6.18	122.61	118.90
25	DA	1997	G	N3-C4-C5	-6.18	125.51	128.60
25	DA	2510	C	N3-C4-C5	-6.18	119.43	121.90
1	AA	513	C	C2-N1-C1'	6.18	125.60	118.80
25	BA	476	G	C4-C5-N7	-6.18	108.33	110.80
25	BA	481	G	N3-C4-N9	6.18	129.71	126.00
25	BA	1831	G	N7-C8-N9	6.18	116.19	113.10
25	BA	2040	C	C6-N1-C2	6.18	122.77	120.30
25	BA	2585	U	C5-C4-O4	-6.18	122.19	125.90
25	DA	2053	G	C5-C6-O6	-6.18	124.89	128.60
1	AA	190	U	C5-C6-N1	6.17	125.79	122.70
1	AA	1188	A	N1-C6-N6	-6.17	114.89	118.60
25	BA	498	G	C4-C5-N7	-6.17	108.33	110.80
25	BA	1018	C	C5-C4-N4	-6.17	115.88	120.20
25	BA	2027	G	C5-C6-N1	6.17	114.59	111.50
1	CA	300	A	N1-C6-N6	-6.17	114.89	118.60
25	DA	576	U	N3-C2-O2	6.17	126.52	122.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2057	A	N1-C2-N3	6.17	132.39	129.30
25	DA	2690	C	N1-C2-O2	-6.17	115.19	118.90
25	DA	2773	C	C4-C5-C6	6.17	120.49	117.40
1	CA	857	C	C6-N1-C2	6.17	122.77	120.30
25	BA	2620	C	C6-N1-C2	6.17	122.77	120.30
25	DA	2235	G	C5-N7-C8	-6.17	101.21	104.30
1	AA	572	A	C6-C5-N7	6.17	136.62	132.30
25	BA	530	G	C8-N9-C1'	6.17	135.02	127.00
27	BD	229	VAL	CB-CA-C	-6.17	99.68	111.40
25	DA	928	G	N3-C4-C5	-6.17	125.52	128.60
25	DA	1115	G	N3-C4-C5	6.17	131.69	128.60
23	AV	9	G	C6-C5-N7	6.17	134.10	130.40
25	BA	458	G	C5-N7-C8	6.17	107.38	104.30
25	BA	1245	G	C6-C5-N7	6.17	134.10	130.40
25	BA	2352	A	C2-N3-C4	-6.17	107.52	110.60
1	CA	833	U	C5-C4-O4	6.17	129.60	125.90
25	DA	455	C	N3-C4-N4	-6.17	113.68	118.00
25	DA	1663	C	C5-C6-N1	-6.17	117.92	121.00
1	AA	134	A	N1-C6-N6	-6.17	114.90	118.60
25	BA	2368	C	C4-C5-C6	6.17	120.48	117.40
25	BA	2762	G	N1-C2-N2	-6.17	110.65	116.20
26	BB	85	G	C6-C5-N7	-6.17	126.70	130.40
25	DA	90	U	C2-N1-C1'	6.17	125.10	117.70
1	AA	691	G	C8-N9-C4	6.16	108.86	106.40
25	BA	400	G	N1-C6-O6	6.16	123.60	119.90
25	BA	610	G	N1-C6-O6	-6.16	116.20	119.90
25	BA	2241	A	N3-C4-C5	-6.16	122.49	126.80
25	DA	1941	C	C2-N1-C1'	6.16	125.58	118.80
25	DA	2731	G	N9-C4-C5	-6.16	102.94	105.40
25	BA	474	G	C5-C6-O6	6.16	132.30	128.60
25	BA	1827	C	N1-C2-O2	6.16	122.60	118.90
25	BA	1977	A	C2-N3-C4	-6.16	107.52	110.60
25	BA	2570	G	N3-C4-N9	-6.16	122.30	126.00
25	DA	1022	G	C4-C5-N7	-6.16	108.33	110.80
25	BA	974	G	C6-N1-C2	-6.16	121.40	125.10
25	BA	2249	U	C2-N3-C4	6.16	130.70	127.00
25	BA	2319	G	C8-N9-C4	-6.16	103.94	106.40
25	BA	2578	G	N9-C4-C5	-6.16	102.94	105.40
25	BA	2823	A	C6-C5-N7	-6.16	127.99	132.30
26	BB	80	U	C6-N1-C2	-6.16	117.30	121.00
25	DA	975	C	C5-C6-N1	6.16	124.08	121.00
25	DA	1807	G	N7-C8-N9	-6.16	110.02	113.10

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2585	U	N3-C2-O2	-6.16	117.89	122.20
25	BA	271(M)	G	C4-N9-C1'	6.16	134.51	126.50
26	BB	41	U	C4-C5-C6	6.16	123.39	119.70
25	DA	13	A	N9-C4-C5	6.16	108.26	105.80
25	DA	1298	C	C6-N1-C2	-6.16	117.84	120.30
25	DA	2246	G	N1-C2-N3	6.16	127.59	123.90
25	BA	13	A	C8-N9-C4	-6.16	103.34	105.80
25	BA	1204	A	O4'-C1'-N9	6.16	113.13	108.20
25	BA	2471	C	N3-C2-O2	-6.16	117.59	121.90
25	BA	2725	A	C8-N9-C4	6.16	108.26	105.80
25	DA	139(A)	G	C5-C6-O6	-6.16	124.91	128.60
25	DA	533	G	C8-N9-C4	6.16	108.86	106.40
1	AA	756	C	C6-N1-C2	6.16	122.76	120.30
25	BA	430	G	C4-C5-C6	6.16	122.49	118.80
25	BA	706	A	N7-C8-N9	-6.16	110.72	113.80
25	DA	827	U	C6-N1-C2	6.16	124.69	121.00
25	BA	828	U	C4-C5-C6	6.15	123.39	119.70
25	BA	1616	A	C5-N7-C8	-6.15	100.82	103.90
25	DA	2437	U	N1-C2-O2	-6.15	118.49	122.80
25	BA	2447	G	C5-C6-O6	-6.15	124.91	128.60
25	BA	2824	C	C4-C5-C6	-6.15	114.32	117.40
26	BB	16	G	N9-C4-C5	-6.15	102.94	105.40
25	DA	788	A	C6-C5-N7	-6.15	127.99	132.30
25	DA	1348	G	N1-C6-O6	6.15	123.59	119.90
25	DA	2599	G	C6-C5-N7	6.15	134.09	130.40
1	AA	503	C	C6-N1-C2	-6.15	117.84	120.30
25	BA	820	A	N9-C4-C5	6.15	108.26	105.80
1	CA	266	G	C2-N3-C4	-6.15	108.83	111.90
25	DA	385	C	C2-N1-C1'	6.15	125.57	118.80
25	DA	2447	G	C8-N9-C1'	6.15	135.00	127.00
1	CA	1401	G	N1-C6-O6	6.15	123.59	119.90
25	BA	117	G	C6-C5-N7	-6.15	126.71	130.40
25	BA	793	A	N7-C8-N9	6.15	116.87	113.80
25	BA	1335	U	N1-C2-N3	6.15	118.59	114.90
25	BA	2054	A	C6-N1-C2	-6.15	114.91	118.60
25	BA	2462	U	C5-C6-N1	6.15	125.77	122.70
26	BB	91	C	C5-C6-N1	-6.15	117.93	121.00
25	DA	530	G	N3-C4-N9	-6.15	122.31	126.00
25	DA	565	C	N1-C2-O2	6.15	122.59	118.90
1	AA	189(B)	C	C6-N1-C2	-6.14	117.84	120.30
1	AA	792	A	N3-C4-C5	6.14	131.10	126.80
25	BA	19	C	C4-C5-C6	6.14	120.47	117.40

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1141	U	N3-C4-O4	-6.14	115.10	119.40
25	BA	1296	G	C5-C6-O6	-6.14	124.91	128.60
25	BA	1688	U	N1-C2-O2	-6.14	118.50	122.80
1	CA	907	A	C2-N3-C4	-6.14	107.53	110.60
1	CA	1299	A	C8-N9-C4	-6.14	103.34	105.80
25	DA	371	A	C8-N9-C4	6.14	108.26	105.80
23	AV	7	G	N3-C4-C5	6.14	131.67	128.60
25	BA	201	C	C6-N1-C2	6.14	122.76	120.30
25	BA	727	A	C4-C5-N7	6.14	113.77	110.70
25	BA	1801	G	C5-C6-O6	-6.14	124.92	128.60
26	BB	56	G	C8-N9-C1'	-6.14	119.01	127.00
1	CA	509	A	C8-N9-C4	-6.14	103.34	105.80
25	DA	58	G	C4-N9-C1'	6.14	134.49	126.50
25	BA	62	C	C6-N1-C2	6.14	122.76	120.30
25	BA	205	G	C4-C5-N7	6.14	113.26	110.80
25	BA	495	G	N1-C6-O6	6.14	123.58	119.90
25	BA	1973	G	N1-C2-N3	6.14	127.58	123.90
25	BA	2645	G	N7-C8-N9	6.14	116.17	113.10
25	BA	737	C	N3-C2-O2	6.14	126.20	121.90
25	BA	1706	U	N3-C2-O2	-6.14	117.90	122.20
25	BA	2249	U	N3-C4-C5	-6.14	110.92	114.60
25	BA	65	C	N3-C4-C5	-6.14	119.44	121.90
25	BA	1823	G	C6-C5-N7	-6.14	126.72	130.40
25	BA	2372	G	N3-C2-N2	-6.14	115.60	119.90
25	DA	113	G	N3-C4-N9	-6.14	122.32	126.00
25	DA	849	A	N1-C6-N6	-6.14	114.92	118.60
25	BA	992	C	C2-N3-C4	-6.13	116.83	119.90
25	BA	2762	G	N1-C2-N3	6.13	127.58	123.90
1	AA	1519	A	N9-C4-C5	6.13	108.25	105.80
1	AA	22	G	C5-C6-O6	-6.13	124.92	128.60
1	AA	928	G	C5-C6-O6	-6.13	124.92	128.60
25	BA	28	A	C2-N3-C4	6.13	113.67	110.60
25	BA	555	U	C6-N1-C2	6.13	124.68	121.00
25	BA	1666	G	C5-C6-O6	-6.13	124.92	128.60
25	BA	2283	C	N3-C2-O2	6.13	126.19	121.90
25	BA	2603	G	N1-C6-O6	6.13	123.58	119.90
25	DA	502	A	C8-N9-C4	6.13	108.25	105.80
1	AA	1236	A	N9-C4-C5	-6.13	103.35	105.80
25	BA	994	C	C5-C6-N1	-6.13	117.94	121.00
1	AA	572	A	C4-N9-C1'	-6.13	115.27	126.30
25	BA	2505	G	N1-C2-N3	6.13	127.58	123.90
25	DA	139	G	N1-C6-O6	6.13	123.58	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2185	C	C5-C6-N1	6.13	124.06	121.00
25	BA	973	A	C6-N1-C2	-6.13	114.92	118.60
25	BA	1313	U	C6-N1-C2	-6.13	117.32	121.00
25	BA	1423	G	N3-C2-N2	-6.13	115.61	119.90
25	BA	1559	G	C8-N9-C4	6.13	108.85	106.40
25	DA	962	G	N7-C8-N9	6.13	116.16	113.10
25	DA	2440	C	C2-N1-C1'	-6.13	112.06	118.80
25	BA	139	G	C5-C6-O6	-6.12	124.93	128.60
25	BA	1417	C	C5-C6-N1	-6.12	117.94	121.00
1	CA	912	C	C6-N1-C2	6.12	122.75	120.30
25	DA	1390	U	C6-N1-C2	-6.12	117.33	121.00
25	DA	1966	A	C6-C5-N7	6.12	136.59	132.30
1	CA	865	A	C6-C5-N7	-6.12	128.01	132.30
25	DA	2423	U	C6-N1-C2	6.12	124.67	121.00
25	DA	2505	G	C8-N9-C4	-6.12	103.95	106.40
25	BA	531	C	N3-C4-N4	6.12	122.28	118.00
25	BA	570	G	C4-C5-N7	-6.12	108.35	110.80
25	BA	847	U	C6-N1-C2	6.12	124.67	121.00
25	BA	1156	A	C5-N7-C8	-6.12	100.84	103.90
25	BA	1698	A	N3-C4-C5	6.12	131.08	126.80
26	BB	89	G	C4-C5-C6	6.12	122.47	118.80
25	DA	2426	A	N1-C6-N6	6.12	122.27	118.60
25	DA	2644	G	N9-C4-C5	6.12	107.85	105.40
25	BA	1401	G	C8-N9-C4	-6.12	103.95	106.40
25	BA	2441	C	C5-C4-N4	6.12	124.48	120.20
25	DA	1758	G	C4-C5-N7	-6.12	108.35	110.80
25	DA	2103	C	C2-N3-C4	6.12	122.96	119.90
25	BA	228	A	N3-C4-C5	6.11	131.08	126.80
25	BA	1962	C	C6-N1-C2	-6.11	117.85	120.30
25	BA	2466	C	C5-C4-N4	-6.11	115.92	120.20
25	BA	2615	U	C2-N3-C4	-6.11	123.33	127.00
1	CA	721	G	N1-C6-O6	6.11	123.57	119.90
1	CA	1512	U	N1-C2-O2	-6.11	118.52	122.80
25	DA	614	U	N3-C2-O2	-6.11	117.92	122.20
25	BA	833	U	N1-C2-N3	6.11	118.57	114.90
25	BA	185	U	N1-C2-N3	6.11	118.57	114.90
25	BA	463	G	N1-C2-N2	-6.11	110.70	116.20
25	BA	944	G	C4-N9-C1'	6.11	134.44	126.50
25	BA	1428	C	N1-C2-O2	-6.11	115.23	118.90
1	CA	1274	G	N3-C4-N9	6.11	129.67	126.00
25	DA	733	G	N3-C4-N9	6.11	129.66	126.00
1	AA	1087	G	C8-N9-C4	-6.11	103.96	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	38	A	C4-C5-N7	-6.11	107.65	110.70
25	BA	737	C	C6-N1-C2	6.11	122.74	120.30
25	BA	1719	G	C8-N9-C4	-6.11	103.96	106.40
1	CA	360	A	N1-C6-N6	-6.11	114.94	118.60
25	BA	652(T)	C	C2-N3-C4	6.10	122.95	119.90
25	BA	1565	C	N3-C4-C5	6.10	124.34	121.90
25	BA	1767	C	C4-C5-C6	6.10	120.45	117.40
25	DA	893	C	N1-C2-O2	6.10	122.56	118.90
1	AA	513	C	C5-C4-N4	-6.10	115.93	120.20
25	BA	128	C	N3-C4-C5	6.10	124.34	121.90
25	BA	1558	A	C5-N7-C8	-6.10	100.85	103.90
25	BA	1579	A	C5-C6-N6	-6.10	118.82	123.70
25	BA	2546	U	C4-C5-C6	6.10	123.36	119.70
25	DA	754	C	N3-C4-N4	6.10	122.27	118.00
25	DA	574	C	C5-C4-N4	6.10	124.47	120.20
1	AA	1272	G	C8-N9-C4	-6.10	103.96	106.40
25	BA	793	A	C8-N9-C4	-6.10	103.36	105.80
25	BA	1135	C	C5-C6-N1	-6.10	117.95	121.00
25	BA	2350	C	N1-C2-N3	-6.10	114.93	119.20
1	AA	7	G	C4-N9-C1'	-6.10	118.57	126.50
1	AA	548	G	N1-C6-O6	6.10	123.56	119.90
25	BA	185	U	C5-C6-N1	-6.10	119.65	122.70
25	DA	528	A	N1-C6-N6	6.10	122.26	118.60
25	BA	112	U	N3-C4-O4	6.10	123.67	119.40
1	AA	1083	U	N1-C2-N3	6.09	118.56	114.90
25	BA	1281	G	C5-C6-O6	-6.09	124.94	128.60
25	DA	1008	C	N1-C2-O2	6.09	122.56	118.90
25	DA	1574	C	N3-C4-C5	6.09	124.34	121.90
25	DA	1831	G	C4-N9-C1'	6.09	134.42	126.50
1	AA	22	G	N9-C4-C5	-6.09	102.96	105.40
1	CA	1502	A	C2-N3-C4	-6.09	107.55	110.60
25	DA	2430	A	N1-C6-N6	6.09	122.26	118.60
25	BA	644	A	N9-C4-C5	6.09	108.24	105.80
25	BA	812	C	C2-N3-C4	-6.09	116.86	119.90
1	CA	530	G	C4-N9-C1'	6.09	134.42	126.50
1	CA	718	G	C4-N9-C1'	6.09	134.42	126.50
25	DA	1142(A)	A	C5-N7-C8	-6.09	100.85	103.90
25	BA	972	G	N1-C6-O6	-6.09	116.25	119.90
36	BQ	2	LEU	CA-CB-CG	6.09	129.30	115.30
25	DA	305	U	N1-C2-O2	-6.09	118.54	122.80
25	DA	1445(A)	C	C6-N1-C2	-6.09	117.86	120.30
1	AA	681	C	C6-N1-C2	-6.09	117.86	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2575	C	C4-C5-C6	6.09	120.44	117.40
25	DA	828	U	C5-C6-N1	-6.09	119.66	122.70
25	BA	1311	G	N9-C4-C5	6.09	107.83	105.40
1	CA	865	A	C2-N3-C4	-6.09	107.56	110.60
25	DA	1695	G	C6-C5-N7	-6.09	126.75	130.40
25	BA	706	A	N1-C6-N6	6.08	122.25	118.60
1	CA	317	G	N7-C8-N9	6.08	116.14	113.10
25	BA	2820	A	C5-C6-N6	-6.08	118.83	123.70
25	DA	668	G	N3-C4-C5	6.08	131.64	128.60
25	DA	1908	C	N3-C4-C5	-6.08	119.47	121.90
1	AA	400	C	C6-N1-C2	-6.08	117.87	120.30
1	AA	741	G	C2-N3-C4	-6.08	108.86	111.90
1	AA	741	G	C8-N9-C4	6.08	108.83	106.40
25	BA	186	G	C5-C6-O6	-6.08	124.95	128.60
25	BA	458	G	N9-C4-C5	6.08	107.83	105.40
25	BA	1378	A	N3-C4-N9	-6.08	122.53	127.40
25	BA	1815	A	N1-C6-N6	-6.08	114.95	118.60
25	BA	2231	C	C4-C5-C6	6.08	120.44	117.40
25	BA	2737	G	N3-C2-N2	-6.08	115.64	119.90
1	AA	266	G	C8-N9-C1'	-6.08	119.10	127.00
1	CA	1225	A	C8-N9-C4	-6.08	103.37	105.80
25	DA	1923	U	C6-N1-C2	-6.08	117.35	121.00
25	DA	2492	U	N3-C2-O2	-6.08	117.94	122.20
25	BA	184	C	C6-N1-C2	-6.08	117.87	120.30
25	BA	824	A	N1-C2-N3	6.08	132.34	129.30
25	BA	941	A	N1-C2-N3	6.08	132.34	129.30
25	DA	675	A	N1-C6-N6	6.08	122.25	118.60
25	DA	912	C	C5-C6-N1	6.08	124.04	121.00
25	BA	621	A	N1-C6-N6	-6.08	114.95	118.60
25	BA	962	G	N1-C2-N3	6.08	127.55	123.90
25	BA	1308	A	N1-C6-N6	-6.08	114.95	118.60
25	BA	2543	G	C5-C6-O6	6.08	132.25	128.60
25	BA	2588	G	N1-C6-O6	-6.08	116.25	119.90
1	CA	1312	G	C8-N9-C4	-6.08	103.97	106.40
25	DA	2049	G	C5-N7-C8	-6.08	101.26	104.30
25	DA	2104	G	C4-C5-N7	6.08	113.23	110.80
25	BA	1364	G	N1-C2-N2	-6.08	110.73	116.20
25	BA	1430	C	C4-C5-C6	6.08	120.44	117.40
25	BA	1586	A	C6-C5-N7	-6.08	128.05	132.30
25	BA	1760	A	C6-C5-N7	-6.08	128.05	132.30
25	BA	2069	G	N1-C2-N3	6.08	127.55	123.90
25	BA	2235	G	C2-N3-C4	-6.08	108.86	111.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1350	C	C5-C4-N4	-6.07	115.95	120.20
25	BA	823	G	C2-N3-C4	-6.07	108.86	111.90
25	DA	2318	G	C6-C5-N7	-6.07	126.76	130.40
25	DA	2647	U	C2-N1-C1'	-6.07	110.41	117.70
1	AA	721	G	N3-C4-N9	6.07	129.64	126.00
25	BA	1124	C	N3-C4-C5	6.07	124.33	121.90
1	CA	1063	C	C6-N1-C2	-6.07	117.87	120.30
25	DA	2439	A	N7-C8-N9	6.07	116.83	113.80
25	BA	139(A)	G	C6-N1-C2	-6.07	121.46	125.10
25	BA	518	G	N3-C4-C5	-6.07	125.57	128.60
1	CA	865	A	N7-C8-N9	6.07	116.83	113.80
25	BA	400	G	C8-N9-C4	-6.07	103.97	106.40
25	BA	1548	C	C2-N1-C1'	6.07	125.47	118.80
25	BA	2307	G	N3-C4-N9	6.07	129.64	126.00
25	BA	2582	G	C8-N9-C4	-6.07	103.97	106.40
1	AA	505	G	C4-N9-C1'	6.07	134.38	126.50
25	BA	1410	G	C5-C6-O6	-6.07	124.96	128.60
25	DA	179	G	N1-C6-O6	6.07	123.54	119.90
25	DA	1332	G	N1-C6-O6	6.07	123.54	119.90
25	BA	676	A	O4'-C1'-N9	6.06	113.05	108.20
25	BA	1408	C	C5-C4-N4	-6.06	115.95	120.20
25	BA	2595	G	N1-C6-O6	-6.06	116.26	119.90
25	BA	686	G	N3-C2-N2	6.06	124.14	119.90
25	BA	1450(A)	C	C2-N1-C1'	-6.06	112.13	118.80
25	BA	2289	G	C2-N3-C4	6.06	114.93	111.90
25	BA	2742	C	C5-C6-N1	-6.06	117.97	121.00
1	CA	1176	A	C8-N9-C4	-6.06	103.38	105.80
1	CA	1300	G	C6-C5-N7	6.06	134.04	130.40
25	BA	626	U	N3-C4-C5	-6.06	110.96	114.60
25	BA	1857	G	C4-N9-C1'	6.06	134.38	126.50
1	CA	1414	U	N1-C2-O2	6.06	127.04	122.80
23	CV	13	C	C6-N1-C2	-6.06	117.88	120.30
25	DA	1647	G	C8-N9-C4	6.06	108.82	106.40
25	DA	2623	G	N1-C6-O6	6.06	123.54	119.90
25	DA	2686	G	N3-C4-N9	-6.06	122.36	126.00
25	BA	259	G	C5-C6-O6	-6.06	124.97	128.60
25	BA	969	U	C5-C6-N1	-6.06	119.67	122.70
25	BA	2040	C	N1-C2-N3	-6.06	114.96	119.20
25	BA	2767	C	C2-N3-C4	-6.06	116.87	119.90
1	CA	1502	A	C6-C5-N7	-6.06	128.06	132.30
1	AA	96	U	C2-N3-C4	6.05	130.63	127.00
25	BA	264	C	N3-C4-C5	-6.05	119.48	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2562	U	C5-C6-N1	-6.05	119.67	122.70
1	CA	40	C	N3-C2-O2	-6.05	117.66	121.90
1	CA	365	U	C5-C6-N1	-6.05	119.67	122.70
25	DA	747	U	N3-C4-O4	6.05	123.64	119.40
25	BA	1557	C	C5-C6-N1	-6.05	117.97	121.00
1	AA	820	U	C2-N1-C1'	-6.05	110.44	117.70
1	AA	858	G	N3-C4-N9	6.05	129.63	126.00
25	BA	1415	U	N3-C4-O4	-6.05	115.16	119.40
25	BA	2605	U	C6-N1-C2	-6.05	117.37	121.00
25	BA	2686	G	N1-C6-O6	6.05	123.53	119.90
26	DB	103	G	N1-C6-O6	6.05	123.53	119.90
25	BA	860	U	N3-C4-C5	6.05	118.23	114.60
25	BA	1295	C	C4-C5-C6	-6.05	114.38	117.40
25	DA	735	A	N7-C8-N9	-6.05	110.78	113.80
1	CA	881	G	N1-C6-O6	6.05	123.53	119.90
25	BA	622	G	N9-C4-C5	-6.05	102.98	105.40
25	BA	1029	A	N1-C6-N6	6.05	122.23	118.60
25	BA	1137	G	N1-C6-O6	6.05	123.53	119.90
25	BA	2012	G	N9-C4-C5	-6.05	102.98	105.40
25	BA	2227	A	C5-C6-N6	6.05	128.54	123.70
1	CA	504	C	C5-C6-N1	6.05	124.02	121.00
25	BA	178	G	C2-N3-C4	-6.04	108.88	111.90
25	BA	1616	A	N1-C6-N6	6.04	122.23	118.60
25	BA	523	C	C2-N3-C4	-6.04	116.88	119.90
25	BA	1667	G	C8-N9-C4	6.04	108.82	106.40
25	BA	1799	G	N3-C4-C5	-6.04	125.58	128.60
25	BA	1899	G	N1-C2-N3	6.04	127.53	123.90
25	BA	1908	C	C6-N1-C2	-6.04	117.88	120.30
1	CA	522	C	N1-C2-O2	6.04	122.53	118.90
25	DA	752	A	N7-C8-N9	6.04	116.82	113.80
25	DA	1561	G	C5-C6-O6	-6.04	124.97	128.60
25	DA	1834	U	N3-C2-O2	-6.04	117.97	122.20
25	BA	1798	U	N3-C4-O4	-6.04	115.17	119.40
25	BA	2069	G	N3-C2-N2	-6.04	115.67	119.90
25	BA	658	C	C2-N3-C4	-6.04	116.88	119.90
25	BA	1252	G	C8-N9-C4	6.04	108.82	106.40
25	BA	1331	A	C6-N1-C2	-6.04	114.98	118.60
25	BA	2636	U	C5-C6-N1	-6.04	119.68	122.70
1	AA	541	G	C4-C5-N7	-6.04	108.38	110.80
15	AO	67	LEU	CA-CB-CG	-6.04	101.41	115.30
25	BA	657	U	C5-C4-O4	6.04	129.52	125.90
25	BA	1320	C	N3-C4-C5	6.04	124.32	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1609	A	N7-C8-N9	-6.04	110.78	113.80
25	DA	50	U	N1-C2-O2	6.04	127.03	122.80
25	DA	696	G	N7-C8-N9	-6.04	110.08	113.10
1	AA	1406	U	C2-N3-C4	-6.04	123.38	127.00
25	BA	473	G	N7-C8-N9	-6.04	110.08	113.10
25	BA	1636	C	C4-C5-C6	6.04	120.42	117.40
25	BA	2405	G	N3-C4-C5	-6.04	125.58	128.60
1	CA	343	U	N3-C2-O2	-6.04	117.97	122.20
1	AA	271	C	C6-N1-C2	-6.04	117.89	120.30
1	AA	925	G	C5-C6-O6	-6.04	124.98	128.60
23	AV	12	G	N1-C6-O6	-6.04	116.28	119.90
25	BA	1389	G	C8-N9-C4	6.04	108.81	106.40
1	CA	565	U	N3-C4-O4	6.04	123.62	119.40
25	DA	856	C	C5-C6-N1	6.04	124.02	121.00
25	DA	2361	A	C2-N3-C4	-6.04	107.58	110.60
25	BA	566	U	N3-C2-O2	6.03	126.42	122.20
25	BA	2454	G	C5-C6-N1	6.03	114.52	111.50
25	BA	2542	A	N1-C6-N6	6.03	122.22	118.60
25	DA	1313	U	N3-C4-C5	-6.03	110.98	114.60
25	BA	1368	G	N3-C2-N2	-6.03	115.68	119.90
1	CA	1241	G	C8-N9-C4	6.03	108.81	106.40
25	DA	809	G	C8-N9-C4	-6.03	103.99	106.40
25	BA	180	G	C4-C5-N7	6.03	113.21	110.80
27	BD	275	LYS	N-CA-C	-6.03	94.72	111.00
25	BA	2771	C	C2-N3-C4	-6.03	116.89	119.90
35	BP	21	ARG	NE-CZ-NH2	-6.03	117.29	120.30
25	BA	850	C	C5-C4-N4	-6.03	115.98	120.20
25	BA	1266	G	C8-N9-C4	6.03	108.81	106.40
25	BA	1862	G	N1-C6-O6	-6.03	116.28	119.90
25	DA	390	A	N1-C2-N3	6.03	132.31	129.30
25	DA	1947	C	N3-C4-C5	6.03	124.31	121.90
25	BA	1681	G	N3-C4-N9	-6.03	122.39	126.00
25	BA	2361	A	N1-C2-N3	6.03	132.31	129.30
25	BA	2494	G	C2-N3-C4	-6.03	108.89	111.90
1	CA	292	G	C6-C5-N7	-6.03	126.78	130.40
25	DA	1277	G	C8-N9-C4	6.03	108.81	106.40
25	DA	2678	C	C6-N1-C2	6.03	122.71	120.30
25	BA	2287	A	N3-C4-N9	-6.02	122.58	127.40
1	AA	706	A	C8-N9-C4	6.02	108.21	105.80
25	BA	1907	G	N3-C2-N2	-6.02	115.69	119.90
25	BA	1970	A	N3-C4-C5	-6.02	122.58	126.80
25	BA	971	C	N1-C2-O2	-6.02	115.29	118.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1038	C	N1-C2-O2	6.02	122.51	118.90
25	DA	838	C	N3-C4-N4	-6.02	113.78	118.00
25	DA	2412	A	C5-C6-N6	6.02	128.52	123.70
1	AA	738	C	C5-C6-N1	6.02	124.01	121.00
25	BA	205	G	C5-C6-O6	-6.02	124.99	128.60
25	DA	1558	A	P-O3'-C3'	6.02	126.92	119.70
25	DA	2399	G	C8-N9-C4	-6.02	103.99	106.40
25	DA	2498	C	C5-C6-N1	-6.02	117.99	121.00
25	BA	735	A	C8-N9-C4	6.02	108.21	105.80
25	BA	1311	G	C4-C5-N7	-6.02	108.39	110.80
25	DA	2755	C	N1-C2-O2	6.02	122.51	118.90
25	BA	271(Y)	U	N3-C2-O2	-6.02	117.99	122.20
25	BA	600	G	C4-N9-C1'	-6.02	118.68	126.50
25	DA	480	A	C2-N3-C4	6.02	113.61	110.60
1	AA	693	G	C4-C5-N7	6.01	113.20	110.80
1	AA	1149	C	C6-N1-C2	-6.01	117.89	120.30
23	AV	9	G	C8-N9-C4	-6.01	103.99	106.40
25	BA	1545	A	C2-N3-C4	-6.01	107.59	110.60
25	BA	2434	A	N1-C2-N3	6.01	132.31	129.30
26	DB	14	U	N3-C2-O2	-6.01	117.99	122.20
25	BA	2771	C	C5-C6-N1	-6.01	118.00	121.00
26	BB	53	A	C6-C5-N7	-6.01	128.09	132.30
25	DA	1568	G	C5-C6-O6	-6.01	124.99	128.60
25	DA	1845	G	C8-N9-C4	-6.01	104.00	106.40
25	DA	1987	G	N1-C6-O6	6.01	123.51	119.90
25	DA	2238	G	N1-C2-N2	6.01	121.61	116.20
25	BA	2029	G	N9-C4-C5	-6.01	103.00	105.40
25	BA	2286	A	C4-C5-N7	6.01	113.70	110.70
25	BA	2454	G	N9-C4-C5	6.01	107.80	105.40
25	BA	2559	C	N3-C4-C5	6.01	124.30	121.90
25	DA	2647	U	C5-C6-N1	-6.01	119.70	122.70
25	DA	1826	G	N3-C4-C5	-6.01	125.60	128.60
1	AA	858	G	C4-N9-C1'	6.00	134.31	126.50
25	BA	259	G	N9-C4-C5	-6.00	103.00	105.40
25	DA	1338	G	C6-C5-N7	-6.00	126.80	130.40
25	BA	413	C	N1-C2-O2	-6.00	115.30	118.90
25	BA	1857	G	C6-C5-N7	-6.00	126.80	130.40
25	DA	827	U	N3-C2-O2	6.00	126.40	122.20
26	DB	43	C	N3-C2-O2	-6.00	117.70	121.90
25	BA	64	A	N1-C6-N6	-6.00	115.00	118.60
25	BA	1259	G	C2-N3-C4	-6.00	108.90	111.90
25	BA	2864	G	C4-C5-N7	6.00	113.20	110.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2892	A	C8-N9-C4	-6.00	103.40	105.80
25	BA	1802	A	C5-C6-N1	6.00	120.70	117.70
1	AA	59	A	C8-N9-C4	-6.00	103.40	105.80
25	BA	1857	G	N3-C4-N9	6.00	129.60	126.00
25	BA	2848	G	C4-C5-C6	6.00	122.40	118.80
1	CA	865	A	C5-N7-C8	-6.00	100.90	103.90
25	DA	1830	C	N1-C2-N3	-6.00	115.00	119.20
1	AA	916	G	C4-N9-C1'	6.00	134.30	126.50
16	AP	51	VAL	N-CA-C	-6.00	94.81	111.00
25	BA	216	A	C5-C6-N1	-6.00	114.70	117.70
25	BA	1562	A	C5-N7-C8	-6.00	100.90	103.90
1	CA	589	C	C6-N1-C2	-6.00	117.90	120.30
25	BA	2738	A	N7-C8-N9	-6.00	110.80	113.80
25	DA	1769	G	N3-C2-N2	-6.00	115.70	119.90
25	BA	561	G	C5-C6-N1	5.99	114.50	111.50
25	BA	2021	C	N1-C2-O2	5.99	122.50	118.90
25	BA	2629	A	C2-N3-C4	-5.99	107.60	110.60
26	BB	86	G	N9-C4-C5	-5.99	103.00	105.40
1	CA	1081	G	N9-C4-C5	-5.99	103.00	105.40
25	DA	2473	U	N3-C2-O2	-5.99	118.00	122.20
25	BA	646	A	C8-N9-C4	-5.99	103.40	105.80
25	BA	652(B)	A	N1-C6-N6	-5.99	115.01	118.60
25	BA	1369	G	N1-C6-O6	5.99	123.49	119.90
25	BA	2427	C	N3-C2-O2	5.99	126.09	121.90
25	DA	201	C	C5-C6-N1	-5.99	118.00	121.00
25	DA	856	C	N3-C4-C5	-5.99	119.50	121.90
25	DA	1987	G	N3-C4-C5	5.99	131.60	128.60
1	AA	541	G	C4-N9-C1'	-5.99	118.72	126.50
25	BA	652(F)	G	C6-N1-C2	5.99	128.69	125.10
25	BA	699	A	N1-C6-N6	5.99	122.19	118.60
25	BA	905	U	C2-N3-C4	-5.99	123.41	127.00
25	BA	915	C	N3-C2-O2	-5.99	117.71	121.90
25	BA	1577	C	N3-C4-C5	-5.99	119.50	121.90
25	BA	1678	G	C6-N1-C2	-5.99	121.51	125.10
25	BA	2746	U	N3-C4-O4	-5.99	115.21	119.40
25	DA	1204	A	C5-C6-N1	-5.99	114.71	117.70
35	DP	45	LEU	N-CA-C	5.99	127.17	111.00
25	BA	83	G	C8-N9-C4	5.99	108.80	106.40
1	AA	1074	G	C5-C6-N1	-5.99	108.51	111.50
1	AA	1290	G	C4-N9-C1'	5.99	134.28	126.50
25	BA	502	A	N1-C6-N6	-5.99	115.01	118.60
25	BA	932	G	N9-C4-C5	5.99	107.79	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1721	G	N3-C2-N2	-5.99	115.71	119.90
26	BB	18	G	N1-C2-N2	5.99	121.59	116.20
25	BA	774	A	N7-C8-N9	5.98	116.79	113.80
25	DA	2051	A	N1-C2-N3	5.98	132.29	129.30
1	AA	346	G	C8-N9-C4	-5.98	104.01	106.40
25	BA	74	A	C8-N9-C4	-5.98	103.41	105.80
25	BA	206	U	C5-C4-O4	-5.98	122.31	125.90
25	BA	271(O)	C	N3-C4-C5	5.98	124.29	121.90
25	BA	1377	G	N3-C4-C5	-5.98	125.61	128.60
25	BA	1569	A	C8-N9-C4	-5.98	103.41	105.80
25	BA	2559	C	C2-N3-C4	-5.98	116.91	119.90
26	BB	113	G	N3-C4-N9	5.98	129.59	126.00
25	DA	734	A	C2-N3-C4	-5.98	107.61	110.60
25	DA	2104	G	N9-C4-C5	-5.98	103.01	105.40
25	BA	2571	C	N1-C2-O2	-5.98	115.31	118.90
25	DA	1698	A	N7-C8-N9	5.98	116.79	113.80
25	DA	2654	A	N1-C6-N6	5.98	122.19	118.60
1	AA	1272	G	N7-C8-N9	5.98	116.09	113.10
25	BA	206	U	C2-N3-C4	-5.98	123.41	127.00
25	BA	2092	U	N3-C2-O2	-5.98	118.02	122.20
25	BA	2564	A	N1-C6-N6	-5.98	115.01	118.60
25	BA	2607	G	C6-N1-C2	-5.98	121.51	125.10
25	BA	2803	C	C6-N1-C2	-5.98	117.91	120.30
25	DA	1607	C	C6-N1-C1'	-5.98	113.63	120.80
25	DA	1614	A	N1-C6-N6	-5.98	115.01	118.60
25	DA	1653	G	P-O3'-C3'	5.98	126.87	119.70
25	BA	826	U	C4-C5-C6	5.97	123.28	119.70
25	BA	1369	G	C5-C6-N1	-5.97	108.51	111.50
25	BA	1769	G	C4-C5-C6	5.97	122.38	118.80
25	BA	2225	A	C5-C6-N6	-5.97	118.92	123.70
25	BA	2307	G	C8-N9-C1'	-5.97	119.23	127.00
25	BA	2755	C	C4-C5-C6	-5.97	114.41	117.40
25	DA	1758	G	C5-C6-O6	5.97	132.18	128.60
25	BA	530	G	N1-C6-O6	-5.97	116.32	119.90
25	DA	576	U	N1-C2-O2	-5.97	118.62	122.80
25	DA	645	C	N1-C2-O2	5.97	122.48	118.90
25	DA	2447	G	C4-C5-N7	5.97	113.19	110.80
25	BA	1696	G	C5-C6-N1	5.97	114.48	111.50
1	CA	963	G	N3-C4-C5	-5.97	125.61	128.60
1	AA	1506	U	N3-C2-O2	5.97	126.38	122.20
25	BA	248	G	C2-N3-C4	-5.97	108.92	111.90
25	BA	2410	G	C8-N9-C4	-5.97	104.01	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2368	C	N3-C4-C5	-5.97	119.51	121.90
33	BN	23	LEU	C-N-CA	-5.97	109.77	122.30
25	BA	724	U	C4-C5-C6	5.97	123.28	119.70
25	BA	1001	A	C8-N9-C4	5.97	108.19	105.80
25	BA	1364	G	C5-C6-O6	5.97	132.18	128.60
25	BA	1531	C	N1-C2-O2	5.97	122.48	118.90
25	BA	1880	C	C6-N1-C2	-5.97	117.91	120.30
26	BB	61	G	N1-C6-O6	5.97	123.48	119.90
25	BA	2413	G	N7-C8-N9	-5.96	110.12	113.10
1	CA	915	A	N7-C8-N9	-5.96	110.82	113.80
1	CA	940	C	C5-C6-N1	5.96	123.98	121.00
25	BA	591	C	C4-C5-C6	5.96	120.38	117.40
25	BA	699	A	C4-C5-N7	5.96	113.68	110.70
25	BA	1709	U	C2-N1-C1'	-5.96	110.55	117.70
25	BA	2582	G	C5-C6-O6	5.96	132.18	128.60
26	BB	81	G	C6-C5-N7	-5.96	126.82	130.40
1	CA	851	G	N3-C4-C5	-5.96	125.62	128.60
25	DA	733	G	C5-C6-O6	-5.96	125.02	128.60
25	DA	748	G	N3-C4-C5	-5.96	125.62	128.60
25	BA	255	A	C6-C5-N7	-5.96	128.13	132.30
25	BA	1501	C	N3-C2-O2	5.96	126.07	121.90
26	BB	46	A	N1-C6-N6	-5.96	115.02	118.60
1	AA	505	G	C6-C5-N7	-5.96	126.82	130.40
1	AA	790	A	C2-N3-C4	-5.96	107.62	110.60
25	BA	648	G	N1-C2-N3	5.96	127.47	123.90
25	BA	1213	A	C8-N9-C4	-5.96	103.42	105.80
25	BA	1405	U	C2-N3-C4	-5.96	123.42	127.00
25	BA	1989	G	C8-N9-C4	5.96	108.78	106.40
25	BA	2073	C	C5-C6-N1	-5.96	118.02	121.00
25	BA	2489	G	N1-C2-N3	5.96	127.48	123.90
1	CA	545	C	C5-C6-N1	-5.96	118.02	121.00
25	DA	141	A	C5-C6-N1	-5.96	114.72	117.70
25	BA	636	G	N1-C6-O6	5.96	123.47	119.90
25	BA	2184	G	C6-N1-C2	5.96	128.67	125.10
25	BA	2643	G	C5-C6-N1	5.96	114.48	111.50
25	DA	2281	C	N3-C4-C5	-5.96	119.52	121.90
25	DA	2598	A	C5-C6-N6	-5.96	118.94	123.70
25	DA	933	A	C6-C5-N7	-5.96	128.13	132.30
1	AA	243	A	N7-C8-N9	5.95	116.78	113.80
1	AA	1518	A	C2-N3-C4	-5.95	107.62	110.60
25	BA	1827	C	C6-N1-C2	-5.95	117.92	120.30
25	BA	2007	C	N3-C4-C5	-5.95	119.52	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	20	C	C5-C4-N4	-5.95	116.03	120.20
25	DA	271(F)	C	C6-N1-C2	-5.95	117.92	120.30
25	BA	2550	G	C5-C6-O6	-5.95	125.03	128.60
25	DA	849	A	C5-C6-N6	5.95	128.46	123.70
25	DA	2551	C	N3-C2-O2	-5.95	117.73	121.90
25	BA	689	A	N9-C4-C5	5.95	108.18	105.80
25	BA	1338	G	C4-C5-N7	5.95	113.18	110.80
25	BA	2026	C	C5-C6-N1	-5.95	118.03	121.00
25	BA	2513	G	N1-C6-O6	5.95	123.47	119.90
1	CA	189(D)	C	C5-C6-N1	5.95	123.97	121.00
25	BA	947	G	N1-C6-O6	5.95	123.47	119.90
25	BA	1131	G	N3-C2-N2	5.95	124.06	119.90
25	BA	1257	C	N3-C4-C5	-5.95	119.52	121.90
25	BA	1296	G	C6-N1-C2	-5.95	121.53	125.10
25	BA	1479	G	N3-C2-N2	-5.95	115.74	119.90
25	BA	2225	A	C2-N3-C4	5.95	113.57	110.60
26	BB	75	G	C4-N9-C1'	5.95	134.23	126.50
25	DA	2876	G	C6-C5-N7	-5.95	126.83	130.40
25	BA	699	A	C5-N7-C8	-5.95	100.93	103.90
25	BA	2002	G	N3-C4-N9	5.95	129.57	126.00
25	BA	2077	A	C2-N3-C4	5.95	113.57	110.60
25	DA	1616	A	C5-N7-C8	-5.95	100.93	103.90
25	BA	513	A	C4-C5-C6	5.94	119.97	117.00
25	DA	1235	G	N3-C4-C5	-5.94	125.63	128.60
25	BA	16	G	C6-N1-C2	-5.94	121.53	125.10
25	BA	644	A	N1-C6-N6	-5.94	115.03	118.60
25	BA	2352	A	N1-C6-N6	5.94	122.17	118.60
1	CA	1108	G	C4-C5-N7	-5.94	108.42	110.80
25	DA	143(A)	C	C6-N1-C2	5.94	122.68	120.30
25	DA	329	G	N3-C4-N9	5.94	129.56	126.00
25	DA	1377	G	C4-N9-C1'	5.94	134.22	126.50
25	BA	506	G	N3-C4-N9	5.94	129.56	126.00
25	BA	632	A	C5-N7-C8	-5.94	100.93	103.90
25	DA	330	A	C6-C5-N7	-5.94	128.14	132.30
25	DA	1653	G	C6-C5-N7	-5.94	126.83	130.40
25	DA	1932	A	N9-C4-C5	5.94	108.18	105.80
25	DA	2603	G	C8-N9-C4	5.94	108.78	106.40
25	DA	2791	C	C2-N1-C1'	5.94	125.33	118.80
1	AA	812	C	C6-N1-C2	-5.94	117.92	120.30
25	BA	1648	C	C5-C6-N1	-5.94	118.03	121.00
25	BA	2575	C	C2-N1-C1'	5.94	125.33	118.80
25	DA	665	C	N3-C4-C5	5.94	124.28	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2623	G	C5-C6-O6	-5.94	125.04	128.60
1	AA	383	A	C8-N9-C4	5.94	108.17	105.80
25	BA	432	A	N1-C6-N6	5.94	122.16	118.60
25	BA	874	G	N1-C6-O6	5.94	123.46	119.90
25	BA	963	U	C5-C4-O4	-5.94	122.34	125.90
25	BA	1206	G	C8-N9-C4	5.94	108.78	106.40
25	BA	1220	A	N9-C4-C5	5.94	108.17	105.80
25	BA	1370	C	C6-N1-C2	5.94	122.67	120.30
25	BA	1857	G	C8-N9-C1'	-5.94	119.28	127.00
25	DA	1949	G	C2-N3-C4	-5.94	108.93	111.90
25	BA	52	A	N7-C8-N9	5.93	116.77	113.80
25	BA	214	G	N3-C4-C5	-5.93	125.63	128.60
25	BA	228	A	C4-C5-C6	-5.93	114.03	117.00
25	BA	548	A	N1-C6-N6	-5.93	115.04	118.60
25	BA	753	C	C2-N3-C4	-5.93	116.93	119.90
25	BA	761	A	C4-C5-N7	5.93	113.67	110.70
25	BA	1930	G	N1-C6-O6	5.93	123.46	119.90
25	BA	2247	A	C4-C5-C6	5.93	119.97	117.00
25	BA	2458	G	N1-C6-O6	5.93	123.46	119.90
29	BF	162	LEU	CA-CB-CG	5.93	128.95	115.30
25	DA	133	C	C5-C6-N1	-5.93	118.03	121.00
25	DA	1022	G	C6-C5-N7	5.93	133.96	130.40
25	DA	1885	A	C8-N9-C4	5.93	108.17	105.80
25	BA	753	C	N1-C2-O2	-5.93	115.34	118.90
25	BA	2707	G	C2-N3-C4	-5.93	108.93	111.90
1	CA	562	C	N3-C4-C5	5.93	124.27	121.90
25	DA	2435	A	C8-N9-C4	-5.93	103.43	105.80
25	DA	2860	A	N1-C6-N6	5.93	122.16	118.60
25	BA	251	A	C4-C5-C6	5.93	119.97	117.00
25	BA	584	C	N3-C4-N4	5.93	122.15	118.00
1	AA	1077	G	N9-C4-C5	-5.93	103.03	105.40
25	DA	380	U	C5-C4-O4	-5.93	122.34	125.90
25	DA	986	C	N1-C2-O2	5.93	122.46	118.90
1	CA	1197	G	C4-N9-C1'	5.93	134.21	126.50
25	DA	188	G	C5-C6-O6	-5.93	125.04	128.60
25	DA	271(M)	G	N9-C4-C5	-5.93	103.03	105.40
1	AA	863	U	C6-N1-C1'	5.93	129.50	121.20
1	AA	1430	C	C5-C6-N1	-5.93	118.04	121.00
13	AM	70	LEU	CA-CB-CG	5.93	128.93	115.30
25	BA	248	G	N1-C2-N3	5.93	127.46	123.90
25	BA	704	G	N3-C4-N9	-5.93	122.44	126.00
25	BA	2395	C	C5-C4-N4	-5.93	116.05	120.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	72	U	C5-C6-N1	-5.93	119.74	122.70
25	DA	1219	G	N3-C4-N9	-5.93	122.44	126.00
25	BA	1616	A	C4-C5-N7	5.92	113.66	110.70
25	BA	1776	G	N3-C4-N9	5.92	129.56	126.00
26	BB	118	G	C8-N9-C4	5.92	108.77	106.40
1	CA	1418	A	C8-N9-C4	5.92	108.17	105.80
25	BA	224	G	C6-N1-C2	-5.92	121.55	125.10
25	BA	567	A	C2-N3-C4	-5.92	107.64	110.60
25	BA	931	G	C5-C6-O6	5.92	132.15	128.60
52	B6	6	ARG	NE-CZ-NH1	5.92	123.26	120.30
25	DA	203	C	C4-C5-C6	-5.92	114.44	117.40
1	AA	841	U	C6-N1-C2	-5.92	117.45	121.00
25	BA	55	G	C2-N3-C4	5.92	114.86	111.90
25	BA	220	G	C4-C5-N7	5.92	113.17	110.80
25	BA	1560	G	C5-C6-O6	5.92	132.15	128.60
25	BA	2030	A	C5-C6-N6	-5.92	118.96	123.70
25	BA	2719	G	N9-C4-C5	-5.92	103.03	105.40
1	CA	848	C	C5-C6-N1	5.92	123.96	121.00
25	DA	425	G	C6-C5-N7	-5.92	126.85	130.40
25	BA	73	A	N1-C6-N6	-5.92	115.05	118.60
25	BA	1222	C	N3-C2-O2	5.92	126.04	121.90
25	DA	1142	U	N1-C2-O2	5.92	126.94	122.80
25	DA	1914	C	C2-N1-C1'	5.92	125.31	118.80
25	DA	2468	G	N1-C6-O6	5.92	123.45	119.90
25	DA	131	G	C5-C6-O6	-5.92	125.05	128.60
1	CA	1378	C	C4-C5-C6	5.92	120.36	117.40
25	DA	2452	C	C5-C4-N4	-5.92	116.06	120.20
25	BA	559	G	C4-N9-C1'	-5.91	118.81	126.50
25	BA	2037	G	N3-C4-N9	5.91	129.55	126.00
25	BA	2311	A	C8-N9-C4	5.91	108.17	105.80
1	CA	879	C	C5-C6-N1	-5.91	118.04	121.00
25	DA	972	G	C4-C5-N7	-5.91	108.44	110.80
25	DA	1552	G	N9-C4-C5	5.91	107.77	105.40
25	BA	978	G	N1-C2-N3	5.91	127.45	123.90
25	BA	1948	G	C4-C5-N7	-5.91	108.44	110.80
1	CA	600	C	C6-N1-C2	5.91	122.67	120.30
25	DA	1899	G	N1-C6-O6	5.91	123.45	119.90
1	AA	818	G	C4-C5-N7	-5.91	108.44	110.80
1	AA	1469	G	C8-N9-C4	-5.91	104.04	106.40
25	BA	209	C	C2-N3-C4	-5.91	116.94	119.90
25	BA	943	U	C6-N1-C2	-5.91	117.45	121.00
25	DA	614(A)	U	N3-C2-O2	-5.91	118.06	122.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1656	C	C2-N1-C1'	5.91	125.30	118.80
25	DA	2081	C	C6-N1-C2	5.91	122.66	120.30
25	BA	1204	A	C8-N9-C4	-5.91	103.44	105.80
25	BA	1353	A	C5-C6-N1	-5.91	114.75	117.70
1	CA	43	C	C6-N1-C2	5.91	122.66	120.30
1	AA	928	G	C5-N7-C8	-5.91	101.35	104.30
1	AA	1149	C	N1-C2-O2	5.91	122.44	118.90
1	AA	858	G	C8-N9-C1'	-5.91	119.32	127.00
25	BA	1220	A	C5-C6-N6	5.91	128.42	123.70
25	DA	668	G	C5-C6-N1	-5.91	108.55	111.50
25	DA	2035	G	N9-C4-C5	5.91	107.76	105.40
25	BA	1185	C	N3-C4-C5	5.90	124.26	121.90
25	BA	2529	G	N1-C6-O6	-5.90	116.36	119.90
25	BA	2876	G	N1-C6-O6	-5.90	116.36	119.90
1	AA	353	A	C5-N7-C8	-5.90	100.95	103.90
1	AA	781	A	N9-C4-C5	-5.90	103.44	105.80
25	BA	1763	G	C6-C5-N7	5.90	133.94	130.40
25	BA	1962	C	C5-C6-N1	5.90	123.95	121.00
1	CA	606	G	N3-C4-C5	-5.90	125.65	128.60
1	CA	774	G	C8-N9-C4	-5.90	104.04	106.40
25	DA	102	G	N1-C6-O6	-5.90	116.36	119.90
25	BA	218	A	N3-C4-C5	5.90	130.93	126.80
25	BA	1360	A	C2-N3-C4	-5.90	107.65	110.60
1	CA	912	C	C5-C6-N1	-5.90	118.05	121.00
25	DA	1822	G	C2-N3-C4	-5.90	108.95	111.90
25	DA	1963	U	C5-C6-N1	5.90	125.65	122.70
25	BA	2486	G	C2-N3-C4	5.90	114.85	111.90
25	BA	1364	G	C2-N3-C4	-5.90	108.95	111.90
25	DA	1579	A	C4-C5-C6	5.90	119.95	117.00
25	DA	1631(A)	A	C8-N9-C4	5.90	108.16	105.80
25	BA	640	C	N1-C2-O2	-5.90	115.36	118.90
25	BA	916	G	N3-C4-N9	5.89	129.54	126.00
25	BA	1268	A	N7-C8-N9	-5.89	110.85	113.80
25	BA	1571	A	C8-N9-C4	-5.89	103.44	105.80
25	BA	2546	U	C5-C6-N1	-5.89	119.75	122.70
25	DA	1658	C	N1-C2-O2	5.89	122.44	118.90
25	DA	1845	G	N9-C4-C5	5.89	107.76	105.40
1	AA	139	G	C8-N9-C4	-5.89	104.04	106.40
25	BA	148	C	N3-C4-N4	-5.89	113.88	118.00
25	BA	947	G	C5-C6-O6	-5.89	125.06	128.60
25	BA	1344	G	N1-C6-O6	5.89	123.44	119.90
25	BA	2686	G	C4-N9-C1'	5.89	134.16	126.50

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	34	C	N1-C2-O2	-5.89	115.36	118.90
1	AA	166	G	C4-N9-C1'	5.89	134.16	126.50
25	BA	1677	A	C8-N9-C4	5.89	108.16	105.80
25	BA	2655	G	O4'-C1'-N9	5.89	112.91	108.20
25	DA	781	A	N7-C8-N9	5.89	116.75	113.80
25	BA	474	G	P-O3'-C3'	5.89	126.77	119.70
25	BA	837	C	N1-C2-O2	-5.89	115.37	118.90
25	BA	1670	C	C6-N1-C2	-5.89	117.94	120.30
25	BA	1905	C	N1-C2-O2	5.89	122.43	118.90
26	BB	113	G	N9-C4-C5	-5.89	103.04	105.40
25	DA	524	U	N1-C2-N3	5.89	118.43	114.90
25	BA	600	G	C8-N9-C4	5.89	108.75	106.40
25	BA	795	C	C6-N1-C1'	-5.89	113.73	120.80
25	DA	2848	G	N1-C6-O6	-5.89	116.37	119.90
25	BA	1196	C	C2-N3-C4	-5.89	116.96	119.90
25	BA	1304	C	C2-N3-C4	-5.89	116.96	119.90
25	BA	1800	C	C2-N1-C1'	-5.89	112.33	118.80
25	BA	1803	A	C8-N9-C4	-5.89	103.44	105.80
25	BA	2192	G	N3-C4-C5	-5.89	125.66	128.60
1	CA	27	G	C8-N9-C4	-5.89	104.05	106.40
25	DA	1830	C	C5-C4-N4	-5.89	116.08	120.20
1	AA	916	G	C5-C6-O6	-5.88	125.07	128.60
25	BA	414	C	C2-N3-C4	-5.88	116.96	119.90
25	BA	1039	G	C8-N9-C4	5.88	108.75	106.40
25	BA	2751	G	C4-N9-C1'	5.88	134.15	126.50
26	BB	116	G	N9-C4-C5	-5.88	103.05	105.40
1	CA	1197	G	C8-N9-C1'	-5.88	119.35	127.00
25	DA	399	G	N9-C4-C5	-5.88	103.05	105.40
25	DA	697	C	N3-C4-N4	5.88	122.12	118.00
25	DA	1678	G	C8-N9-C1'	-5.88	119.35	127.00
25	DA	1827	C	N1-C2-N3	5.88	123.32	119.20
25	BA	350	U	C6-N1-C2	5.88	124.53	121.00
25	BA	614	U	N1-C2-N3	5.88	118.43	114.90
25	BA	928	G	N9-C4-C5	-5.88	103.05	105.40
25	BA	1403	C	C4-C5-C6	5.88	120.34	117.40
25	DA	219	G	N1-C6-O6	-5.88	116.37	119.90
25	BA	192	C	C6-N1-C2	5.88	122.65	120.30
23	CV	1	C	C6-N1-C2	-5.88	117.95	120.30
25	BA	233	A	C2-N3-C4	-5.88	107.66	110.60
25	BA	2082	A	C5-C6-N6	-5.88	119.00	123.70
25	BA	2330	G	N1-C6-O6	5.88	123.43	119.90
1	CA	1516	G	N3-C4-C5	5.88	131.54	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1561	G	N1-C6-O6	5.88	123.43	119.90
1	AA	439	A	C5-N7-C8	-5.88	100.96	103.90
25	BA	420	C	C6-N1-C2	5.88	122.65	120.30
25	BA	1358	G	C6-C5-N7	-5.88	126.87	130.40
25	BA	1797	C	N3-C4-C5	5.88	124.25	121.90
25	BA	2039	C	C6-N1-C2	-5.88	117.95	120.30
25	BA	2744	G	C8-N9-C4	5.88	108.75	106.40
25	BA	527	C	N1-C2-O2	-5.88	115.38	118.90
25	BA	534	U	N3-C4-C5	-5.88	111.07	114.60
25	BA	1268	A	N1-C2-N3	5.88	132.24	129.30
25	BA	2327	A	C5-C6-N1	5.88	120.64	117.70
25	DA	855	G	N1-C6-O6	5.88	123.43	119.90
25	DA	1408	C	C5-C4-N4	-5.88	116.09	120.20
25	DA	1026	U	N3-C2-O2	-5.88	118.09	122.20
25	BA	1450(A)	C	C5-C6-N1	-5.87	118.06	121.00
1	CA	120	A	N1-C2-N3	5.87	132.24	129.30
1	CA	413	G	N3-C4-C5	-5.87	125.66	128.60
1	CA	1274	G	N7-C8-N9	5.87	116.04	113.10
1	CA	1381	U	C2-N1-C1'	5.87	124.75	117.70
25	DA	559	G	C4-N9-C1'	-5.87	118.86	126.50
25	DA	1949	G	C6-C5-N7	-5.87	126.88	130.40
1	AA	129(A)	G	N1-C2-N3	5.87	127.42	123.90
25	BA	71	A	C4-C5-N7	5.87	113.64	110.70
1	CA	346	G	C4-N9-C1'	5.87	134.13	126.50
25	DA	1429	G	C8-N9-C4	-5.87	104.05	106.40
1	AA	770	C	C2-N3-C4	-5.87	116.97	119.90
25	BA	1942	C	N1-C2-O2	-5.87	115.38	118.90
25	DA	2717	G	N3-C4-C5	-5.87	125.67	128.60
25	BA	1003	G	C5-C6-N1	5.87	114.43	111.50
25	BA	1262	A	C5-C6-N6	-5.87	119.00	123.70
25	BA	2230	G	N3-C2-N2	-5.87	115.79	119.90
25	BA	2241	A	C6-N1-C2	-5.87	115.08	118.60
25	BA	2283	C	C2-N3-C4	-5.87	116.97	119.90
25	DA	1142(A)	A	C2-N3-C4	-5.87	107.67	110.60
30	DG	135	LEU	CA-CB-CG	5.87	128.80	115.30
25	BA	2224	G	C8-N9-C4	-5.87	104.05	106.40
25	BA	2734	A	C8-N9-C4	5.87	108.15	105.80
1	CA	1099	G	N9-C4-C5	5.87	107.75	105.40
25	DA	1771	C	N3-C4-C5	5.87	124.25	121.90
1	AA	628	G	C6-C5-N7	-5.86	126.88	130.40
1	AA	684	A	C8-N9-C4	-5.86	103.45	105.80
25	BA	1446	C	C6-N1-C2	-5.86	117.95	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2407	G	C8-N9-C1'	-5.86	119.38	127.00
25	BA	2454	G	C6-C5-N7	5.86	133.92	130.40
25	DA	1974	C	N3-C4-C5	5.86	124.25	121.90
1	AA	319	G	N1-C6-O6	5.86	123.42	119.90
25	BA	1828	G	C5-N7-C8	5.86	107.23	104.30
25	BA	1928	A	N3-C4-C5	-5.86	122.70	126.80
25	BA	928	G	C5-C6-O6	-5.86	125.08	128.60
25	BA	1430	C	C5-C4-N4	5.86	124.30	120.20
25	BA	2884	U	C6-N1-C1'	5.86	129.40	121.20
25	DA	2297	C	C5-C6-N1	5.86	123.93	121.00
1	AA	1475	G	N3-C4-C5	-5.86	125.67	128.60
25	BA	979	G	C8-N9-C1'	-5.86	119.38	127.00
25	BA	2607	G	N3-C4-C5	-5.86	125.67	128.60
25	BA	2783	G	C2-N3-C4	-5.86	108.97	111.90
25	BA	255	A	C5-N7-C8	-5.86	100.97	103.90
25	BA	748	G	C5-C6-O6	-5.86	125.08	128.60
25	BA	1812	A	N1-C2-N3	5.86	132.23	129.30
25	BA	2507	C	N3-C2-O2	-5.86	117.80	121.90
1	CA	1101	A	C8-N9-C4	5.86	108.14	105.80
25	DA	1021	A	C5-C6-N1	-5.86	114.77	117.70
25	DA	1256	G	C8-N9-C1'	-5.86	119.39	127.00
25	DA	1395	A	N1-C6-N6	-5.86	115.09	118.60
25	BA	1795	C	N1-C2-O2	5.86	122.41	118.90
25	BA	1970	A	N3-C4-N9	5.86	132.09	127.40
25	BA	2184	G	C5-C6-O6	5.86	132.11	128.60
25	DA	1115	G	C8-N9-C4	5.86	108.74	106.40
25	DA	1403	C	C4-C5-C6	5.86	120.33	117.40
1	AA	421	U	C6-N1-C1'	-5.85	113.00	121.20
1	AA	1504	G	C8-N9-C4	-5.85	104.06	106.40
25	BA	1817	G	N3-C4-C5	-5.85	125.67	128.60
1	AA	1417	G	N9-C4-C5	-5.85	103.06	105.40
25	BA	495	G	N1-C2-N3	5.85	127.41	123.90
25	BA	1036	G	N9-C4-C5	-5.85	103.06	105.40
25	BA	1314	C	N3-C2-O2	-5.85	117.80	121.90
25	BA	2015	A	N7-C8-N9	-5.85	110.87	113.80
25	DA	102	G	C4-C5-N7	-5.85	108.46	110.80
25	DA	1475	G	N3-C4-C5	5.85	131.53	128.60
25	DA	2755	C	C6-N1-C1'	-5.85	113.78	120.80
25	DA	2838	G	N1-C6-O6	5.85	123.41	119.90
25	DA	1223	G	N3-C4-C5	5.85	131.53	128.60
25	DA	1629	U	N1-C2-O2	-5.85	118.70	122.80
25	BA	255	A	N7-C8-N9	5.85	116.72	113.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1037	G	N1-C6-O6	5.85	123.41	119.90
25	BA	1888	G	C8-N9-C4	-5.85	104.06	106.40
25	BA	2507	C	N3-C4-C5	-5.85	119.56	121.90
25	BA	2658	C	C6-N1-C2	5.85	122.64	120.30
1	CA	1272	G	C4-N9-C1'	5.85	134.10	126.50
1	CA	1290	G	C4-N9-C1'	5.85	134.10	126.50
25	BA	1107	G	C8-N9-C1'	-5.85	119.40	127.00
25	BA	1238	G	N1-C6-O6	5.85	123.41	119.90
25	BA	1303	G	C4-C5-N7	-5.85	108.46	110.80
25	DA	113	G	N1-C2-N2	5.85	121.46	116.20
25	DA	1038	C	C5-C6-N1	5.85	123.92	121.00
25	DA	1899	G	C4-C5-N7	5.85	113.14	110.80
25	BA	437	G	N1-C2-N2	-5.85	110.94	116.20
25	DA	1142(A)	A	N1-C2-N3	5.85	132.22	129.30
1	AA	91	C	C6-N1-C2	-5.84	117.96	120.30
1	AA	1259	C	C6-N1-C2	-5.84	117.96	120.30
25	BA	723	G	C8-N9-C4	5.84	108.74	106.40
25	BA	931	G	C5-N7-C8	5.84	107.22	104.30
25	BA	1963	U	C6-N1-C1'	-5.84	113.02	121.20
25	BA	2308	G	N3-C4-C5	5.84	131.52	128.60
25	BA	2523	G	C5-C6-O6	-5.84	125.09	128.60
25	DA	1526	G	N3-C4-C5	5.84	131.52	128.60
25	DA	2857	G	C4-C5-N7	5.84	113.14	110.80
25	BA	120	U	N1-C2-O2	-5.84	118.71	122.80
25	BA	271(W)	G	N1-C6-O6	-5.84	116.39	119.90
25	BA	1021	A	C8-N9-C4	-5.84	103.46	105.80
25	BA	2056	G	C8-N9-C4	5.84	108.74	106.40
25	BA	2072	G	N1-C6-O6	5.84	123.41	119.90
1	CA	1124	G	C8-N9-C4	-5.84	104.06	106.40
25	DA	784	A	P-O3'-C3'	5.84	126.71	119.70
1	AA	974	A	N1-C6-N6	5.84	122.11	118.60
25	BA	513	A	N3-C4-C5	-5.84	122.71	126.80
25	DA	509	C	N3-C2-O2	-5.84	117.81	121.90
1	AA	344	A	N9-C4-C5	5.84	108.14	105.80
25	BA	2275	C	C4-C5-C6	5.84	120.32	117.40
25	DA	464	U	N3-C4-C5	-5.84	111.10	114.60
25	DA	760	G	N3-C2-N2	-5.84	115.81	119.90
25	DA	1497	U	C2-N1-C1'	5.84	124.71	117.70
25	DA	1769	G	C6-C5-N7	-5.84	126.90	130.40
25	BA	372	G	C5-C6-N1	5.84	114.42	111.50
25	BA	479	A	C8-N9-C4	5.84	108.14	105.80
25	BA	734	A	C6-C5-N7	-5.84	128.21	132.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	746	A	C5-C6-N6	-5.84	119.03	123.70
25	BA	761	A	N9-C4-C5	-5.84	103.47	105.80
25	BA	2365	G	C5-C6-N1	5.84	114.42	111.50
1	CA	1158	C	C6-N1-C2	-5.84	117.97	120.30
25	DA	1619	G	C5-C6-N1	5.84	114.42	111.50
25	BA	939	G	C5-C6-O6	5.83	132.10	128.60
25	BA	1005	C	N3-C4-N4	-5.83	113.92	118.00
25	DA	1355	G	C6-C5-N7	-5.83	126.90	130.40
1	AA	713	G	N3-C4-N9	5.83	129.50	126.00
1	AA	1282	C	C5-C6-N1	5.83	123.92	121.00
1	AA	1530	G	C4-C5-C6	-5.83	115.30	118.80
25	BA	945	A	C8-N9-C4	-5.83	103.47	105.80
25	BA	1709	U	N3-C4-O4	-5.83	115.32	119.40
25	BA	1928	A	C6-N1-C2	-5.83	115.10	118.60
25	BA	1989	G	N3-C4-N9	5.83	129.50	126.00
25	BA	2281	C	C6-N1-C2	5.83	122.63	120.30
27	BD	230	ASP	CB-CG-OD1	-5.83	113.05	118.30
25	DA	1393	A	C5-C6-N6	-5.83	119.03	123.70
1	AA	1052	U	C2-N3-C4	5.83	130.50	127.00
25	BA	139(A)	G	C2-N3-C4	5.83	114.82	111.90
25	BA	2041	U	C4-C5-C6	5.83	123.20	119.70
1	AA	1401	G	C5-C6-O6	-5.83	125.10	128.60
25	BA	244	A	C5-C6-N6	-5.83	119.04	123.70
25	BA	2021	C	C6-N1-C1'	-5.83	113.80	120.80
1	AA	827	U	N1-C2-O2	5.83	126.88	122.80
25	BA	206	U	N3-C4-C5	5.83	118.10	114.60
25	BA	485	C	N3-C4-C5	5.83	124.23	121.90
25	BA	990	A	N1-C2-N3	5.83	132.21	129.30
25	BA	1751	C	C6-N1-C2	5.83	122.63	120.30
25	BA	2883	A	C2-N3-C4	-5.83	107.69	110.60
25	DA	458	G	C5-C6-O6	5.83	132.10	128.60
25	BA	399	G	C4-N9-C1'	-5.83	118.92	126.50
25	BA	942	G	C8-N9-C4	-5.83	104.07	106.40
25	BA	1303	G	N9-C4-C5	5.83	107.73	105.40
25	BA	2537	U	N3-C4-O4	-5.83	115.32	119.40
25	BA	2730	C	C2-N1-C1'	-5.83	112.39	118.80
1	AA	578	C	N3-C2-O2	-5.83	117.82	121.90
1	AA	941	G	C5-C6-O6	-5.83	125.11	128.60
25	BA	189	G	C6-C5-N7	-5.83	126.90	130.40
25	BA	221	A	N9-C4-C5	5.83	108.13	105.80
25	BA	1928	A	C5-C6-N1	5.83	120.61	117.70
25	DA	2506	U	N3-C4-O4	-5.83	115.32	119.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2877	G	C5-C6-N1	-5.83	108.59	111.50
1	AA	1309	G	C8-N9-C4	5.82	108.73	106.40
25	BA	1480	G	N3-C4-N9	-5.82	122.51	126.00
25	BA	1612	C	C6-N1-C2	5.82	122.63	120.30
1	CA	1149	C	N1-C2-O2	5.82	122.39	118.90
25	DA	1663	C	C2-N3-C4	-5.82	116.99	119.90
25	BA	556	G	C5-C6-O6	-5.82	125.11	128.60
1	CA	662	G	C8-N9-C4	-5.82	104.07	106.40
1	CA	1048	G	C8-N9-C4	-5.82	104.07	106.40
1	AA	830	G	N1-C6-O6	5.82	123.39	119.90
1	AA	1406	U	N3-C2-O2	-5.82	118.12	122.20
25	BA	1997	G	C4-C5-N7	-5.82	108.47	110.80
25	BA	2275	C	N3-C4-C5	-5.82	119.57	121.90
1	CA	310	G	N1-C6-O6	5.82	123.39	119.90
25	DA	2259	G	N3-C2-N2	-5.82	115.83	119.90
1	AA	9	G	N1-C6-O6	5.82	123.39	119.90
25	DA	337	C	C5-C4-N4	5.82	124.27	120.20
25	BA	2405	G	C2-N3-C4	5.82	114.81	111.90
25	BA	2894	G	N7-C8-N9	5.82	116.01	113.10
1	CA	720	C	C2-N1-C1'	5.82	125.20	118.80
1	CA	1504	G	C8-N9-C4	-5.82	104.07	106.40
25	DA	330	A	N9-C4-C5	-5.82	103.47	105.80
25	DA	1653	G	N3-C2-N2	5.82	123.97	119.90
25	DA	2007	C	N3-C2-O2	5.82	125.97	121.90
25	DA	2415	G	C8-N9-C4	-5.82	104.07	106.40
1	AA	505	G	C4-C5-N7	5.82	113.13	110.80
25	BA	271(O)	C	C6-N1-C2	5.82	122.63	120.30
25	BA	391	G	C2-N3-C4	-5.82	108.99	111.90
25	BA	1797	C	C2-N3-C4	-5.82	116.99	119.90
25	BA	1939	U	C6-N1-C1'	-5.82	113.06	121.20
25	BA	2038	G	N9-C4-C5	-5.82	103.07	105.40
25	BA	2258	C	N3-C4-N4	5.82	122.07	118.00
25	BA	2465	C	C5-C6-N1	-5.82	118.09	121.00
26	BB	85	G	C4-N9-C1'	5.82	134.06	126.50
38	BS	95	HIS	N-CA-C	5.82	126.70	111.00
1	CA	1274	G	C8-N9-C4	-5.82	104.07	106.40
25	DA	1419	A	N1-C6-N6	-5.82	115.11	118.60
25	DA	2590	A	C6-N1-C2	-5.82	115.11	118.60
25	DA	1004	C	N1-C2-O2	-5.81	115.41	118.90
25	DA	1280	G	C8-N9-C4	5.81	108.73	106.40
1	AA	820	U	C6-N1-C1'	5.81	129.34	121.20
25	BA	697	C	C5-C6-N1	-5.81	118.09	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1495	A	C8-N9-C4	-5.81	103.47	105.80
25	BA	1611	C	N1-C2-O2	-5.81	115.41	118.90
25	BA	2103	C	N1-C2-O2	5.81	122.39	118.90
25	BA	2235	G	N1-C2-N3	5.81	127.39	123.90
1	CA	20	U	C6-N1-C2	5.81	124.49	121.00
1	CA	1108	G	C5-C6-O6	5.81	132.09	128.60
1	CA	1512	U	N1-C2-N3	5.81	118.39	114.90
25	DA	229	A	C3'-C2'-C1'	-5.81	96.85	101.50
1	AA	721	G	C6-C5-N7	-5.81	126.91	130.40
1	CA	506	G	N3-C4-C5	-5.81	125.69	128.60
25	BA	2067	G	C6-N1-C2	-5.81	121.61	125.10
25	BA	2346	A	N1-C2-N3	5.81	132.21	129.30
25	DA	733	G	C4-C5-N7	5.81	113.12	110.80
25	DA	2843	G	C5-C6-O6	-5.81	125.11	128.60
25	BA	119	A	N1-C2-N3	5.81	132.20	129.30
25	BA	1030	G	N3-C4-C5	5.81	131.50	128.60
25	DA	986	C	N3-C2-O2	-5.81	117.83	121.90
26	DB	54	G	C6-C5-N7	-5.81	126.92	130.40
25	DA	135	G	N1-C6-O6	5.81	123.38	119.90
25	BA	1922	G	N1-C6-O6	5.80	123.38	119.90
1	CA	1312	G	N9-C4-C5	5.80	107.72	105.40
1	AA	365	U	C4-C5-C6	5.80	123.18	119.70
1	AA	886	G	N3-C2-N2	-5.80	115.84	119.90
25	BA	341	G	N1-C2-N3	5.80	127.38	123.90
25	BA	942	G	C5-C6-O6	5.80	132.08	128.60
25	BA	2501	C	C6-N1-C1'	5.80	127.76	120.80
25	BA	2851	A	N1-C6-N6	5.80	122.08	118.60
25	DA	726	G	C4-C5-N7	-5.80	108.48	110.80
25	BA	335	C	N3-C4-C5	-5.80	119.58	121.90
25	BA	559	G	N3-C4-N9	-5.80	122.52	126.00
25	BA	1560	G	C6-C5-N7	5.80	133.88	130.40
25	BA	1828	G	N1-C2-N2	-5.80	110.98	116.20
25	BA	2070	G	C5-C6-O6	-5.80	125.12	128.60
25	BA	2225	A	C5-C6-N1	5.80	120.60	117.70
25	BA	147	U	N3-C4-C5	-5.80	111.12	114.60
25	BA	1156	A	C5-C6-N6	-5.80	119.06	123.70
25	BA	1243	G	N1-C6-O6	5.80	123.38	119.90
25	BA	2413	G	C2-N3-C4	-5.80	109.00	111.90
25	DA	2191	G	C6-N1-C2	5.80	128.58	125.10
25	BA	38	A	C6-N1-C2	-5.80	115.12	118.60
25	BA	1348	G	C5-C6-N1	5.80	114.40	111.50
25	DA	511	U	C6-N1-C2	-5.80	117.52	121.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2736	G	N1-C6-O6	5.80	123.38	119.90
25	DA	1569	A	C5-C6-N6	5.80	128.34	123.70
25	BA	2894	G	C4-C5-N7	5.79	113.12	110.80
25	DA	791	C	N1-C2-O2	5.79	122.38	118.90
25	DA	1142(A)	A	N7-C8-N9	5.79	116.70	113.80
1	AA	57	G	C8-N9-C4	-5.79	104.08	106.40
25	BA	425	G	C5-C6-O6	-5.79	125.12	128.60
25	BA	1343	G	N3-C4-C5	-5.79	125.70	128.60
25	BA	2035	G	C5-N7-C8	-5.79	101.40	104.30
25	BA	2373	G	C6-N1-C2	-5.79	121.62	125.10
25	DA	1026	U	N1-C2-O2	5.79	126.86	122.80
25	DA	1959	G	N3-C2-N2	-5.79	115.84	119.90
25	DA	2502	G	C5-C6-O6	-5.79	125.12	128.60
25	DA	2725	A	C5-C6-N1	5.79	120.60	117.70
25	BA	559	G	C8-N9-C1'	5.79	134.53	127.00
25	BA	1780	A	N9-C4-C5	5.79	108.12	105.80
25	DA	58	G	C8-N9-C4	-5.79	104.08	106.40
25	DA	1297	C	C5-C6-N1	-5.79	118.10	121.00
1	AA	203	U	C5-C6-N1	5.79	125.59	122.70
1	AA	1236	A	N1-C6-N6	5.79	122.07	118.60
25	BA	607	U	N3-C4-C5	5.79	118.07	114.60
25	BA	1372	U	N3-C4-C5	-5.79	111.13	114.60
25	BA	1447	G	N9-C4-C5	5.79	107.72	105.40
25	BA	2042	A	C8-N9-C4	5.79	108.11	105.80
25	DA	1631(A)	A	N1-C6-N6	5.79	122.07	118.60
25	DA	2028	U	C5-C4-O4	5.79	129.37	125.90
25	DA	2054	A	N1-C2-N3	5.79	132.19	129.30
25	BA	915	C	N1-C2-O2	5.79	122.37	118.90
25	BA	920	G	C8-N9-C4	5.79	108.72	106.40
25	BA	1020	A	C8-N9-C4	-5.79	103.48	105.80
25	DA	102	G	C5-C6-O6	5.79	132.07	128.60
25	BA	190	A	C4-C5-N7	5.79	113.59	110.70
25	BA	536	A	C6-N1-C2	-5.79	115.13	118.60
25	BA	2299	G	N1-C6-O6	5.79	123.37	119.90
25	BA	2553	G	N3-C4-C5	-5.79	125.71	128.60
25	DA	528	A	N7-C8-N9	5.79	116.69	113.80
26	DB	6	C	C5-C6-N1	-5.79	118.11	121.00
25	BA	832	G	C8-N9-C4	-5.78	104.09	106.40
25	BA	2358	G	C5-C6-O6	5.78	132.07	128.60
25	BA	2719	G	N3-C2-N2	5.78	123.95	119.90
26	BB	16	G	C8-N9-C4	5.78	108.71	106.40
25	DA	844	C	C6-N1-C2	5.78	122.61	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1264	G	C5-C6-N1	-5.78	108.61	111.50
1	AA	1499	A	C5-C6-N6	-5.78	119.08	123.70
25	BA	1121	C	C5-C6-N1	-5.78	118.11	121.00
25	BA	1372	U	N1-C2-O2	-5.78	118.75	122.80
25	DA	2473	U	C6-N1-C2	-5.78	117.53	121.00
25	DA	2565	A	C2-N3-C4	-5.78	107.71	110.60
1	AA	700	G	C5-C6-O6	-5.78	125.13	128.60
1	AA	965	A	C8-N9-C4	5.78	108.11	105.80
25	BA	303	U	C5-C6-N1	-5.78	119.81	122.70
25	BA	652(E)	G	N9-C4-C5	-5.78	103.09	105.40
25	DA	188	G	C5-N7-C8	-5.78	101.41	104.30
25	DA	787	U	C5-C4-O4	5.78	129.37	125.90
25	DA	1899	G	N3-C4-N9	5.78	129.47	126.00
25	DA	1964	G	C8-N9-C1'	-5.78	119.48	127.00
1	AA	1138	G	N3-C4-N9	5.78	129.47	126.00
1	CA	1300	G	C4-N9-C1'	-5.78	118.99	126.50
26	DB	4	C	C6-N1-C2	5.78	122.61	120.30
25	BA	500	G	C5-N7-C8	5.78	107.19	104.30
25	BA	2844	G	C8-N9-C4	5.78	108.71	106.40
25	DA	2258	C	N1-C2-O2	-5.78	115.43	118.90
1	AA	1272	G	C4-N9-C1'	5.78	134.01	126.50
1	CA	305	G	C4-C5-N7	-5.78	108.49	110.80
1	CA	851	G	C4-C5-C6	5.78	122.27	118.80
25	DA	461	C	N3-C2-O2	5.78	125.94	121.90
25	DA	583	G	C5-C6-N1	-5.78	108.61	111.50
25	DA	778	G	N9-C4-C5	-5.78	103.09	105.40
25	BA	2327	A	C4-C5-C6	-5.77	114.11	117.00
25	DA	1618	A	N9-C4-C5	5.77	108.11	105.80
31	DH	171	LEU	CA-CB-CG	5.77	128.58	115.30
25	BA	688	U	N1-C2-N3	5.77	118.36	114.90
25	BA	2783	G	C4-N9-C1'	5.77	134.00	126.50
25	DA	234	C	N1-C2-O2	-5.77	115.44	118.90
25	DA	566	U	C2-N1-C1'	-5.77	110.77	117.70
25	DA	791	C	N3-C2-O2	-5.77	117.86	121.90
25	BA	390	A	C5-C6-N6	-5.77	119.08	123.70
1	AA	1064	G	C8-N9-C1'	5.77	134.50	127.00
25	BA	687	C	C5-C6-N1	5.77	123.89	121.00
25	BA	2512	C	C5-C4-N4	-5.77	116.16	120.20
1	AA	644	G	C4-N9-C1'	-5.77	119.00	126.50
23	AV	53	G	N1-C6-O6	-5.77	116.44	119.90
25	BA	1418	G	C5-C6-O6	5.77	132.06	128.60
25	BA	1627	G	C6-C5-N7	-5.77	126.94	130.40

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2011	U	N1-C2-N3	5.77	118.36	114.90
25	BA	2029	G	N1-C6-O6	5.77	123.36	119.90
25	BA	2593	U	N3-C4-O4	-5.77	115.36	119.40
25	DA	113	G	N1-C6-O6	5.77	123.36	119.90
1	CA	942	G	N3-C4-N9	5.77	129.46	126.00
25	BA	458	G	N1-C6-O6	-5.76	116.44	119.90
25	BA	731	C	N3-C4-C5	-5.76	119.59	121.90
25	BA	1194	A	C5-C6-N6	-5.76	119.09	123.70
25	BA	1338	G	N3-C4-N9	5.76	129.46	126.00
1	CA	299	G	C5-C6-O6	-5.76	125.14	128.60
25	DA	2104	G	N3-C4-N9	5.76	129.46	126.00
25	BA	1557	C	C2-N3-C4	-5.76	117.02	119.90
25	BA	1707	G	N3-C2-N2	-5.76	115.87	119.90
26	BB	113	G	C8-N9-C1'	-5.76	119.51	127.00
25	DA	687	C	N1-C2-O2	-5.76	115.44	118.90
25	DA	1261	C	C6-N1-C2	5.76	122.61	120.30
1	AA	317	G	C6-C5-N7	-5.76	126.94	130.40
25	BA	752	A	P-O3'-C3'	5.76	126.61	119.70
25	BA	1750	G	N9-C4-C5	-5.76	103.09	105.40
25	BA	2382	G	N3-C2-N2	5.76	123.93	119.90
25	BA	2794	C	C6-N1-C2	-5.76	118.00	120.30
1	CA	674	G	N1-C6-O6	5.76	123.36	119.90
25	DA	2326	C	C6-N1-C1'	5.76	127.71	120.80
1	AA	774	G	C6-C5-N7	-5.76	126.94	130.40
25	BA	989	G	C6-C5-N7	-5.76	126.94	130.40
25	BA	2413	G	C8-N9-C4	5.76	108.70	106.40
25	DA	2535	G	C5-C6-O6	-5.76	125.14	128.60
25	DA	2755	C	C5-C4-N4	-5.76	116.17	120.20
1	AA	114	U	N3-C2-O2	-5.76	118.17	122.20
25	DA	1004	C	N3-C2-O2	5.76	125.93	121.90
1	AA	765	G	N1-C6-O6	5.76	123.35	119.90
25	BA	1519	G	N7-C8-N9	5.76	115.98	113.10
25	BA	1785	A	C6-C5-N7	-5.76	128.27	132.30
25	BA	2357	U	C5-C6-N1	-5.76	119.82	122.70
25	DA	6	A	C5-C6-N6	-5.76	119.10	123.70
25	BA	121	G	C5-C6-O6	-5.75	125.15	128.60
25	BA	125	G	N3-C4-N9	5.75	129.45	126.00
25	BA	129	C	C2-N3-C4	-5.75	117.02	119.90
1	CA	401	C	N1-C2-O2	-5.75	115.45	118.90
25	DA	778	G	C8-N9-C4	5.75	108.70	106.40
25	DA	1699	G	N9-C4-C5	5.75	107.70	105.40
25	DA	2286	A	C4-N9-C1'	5.75	136.66	126.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	628	G	N1-C6-O6	5.75	123.35	119.90
25	BA	212	G	C4-N9-C1'	-5.75	119.02	126.50
25	BA	632	A	C4-C5-N7	5.75	113.58	110.70
25	BA	652(H)	C	C2-N1-C1'	5.75	125.13	118.80
25	BA	1830	C	N3-C4-C5	5.75	124.20	121.90
25	BA	2753	A	N1-C6-N6	5.75	122.05	118.60
1	CA	851	G	C8-N9-C1'	-5.75	119.52	127.00
25	DA	2027	G	N1-C6-O6	-5.75	116.45	119.90
1	AA	47	C	C5-C6-N1	-5.75	118.12	121.00
1	AA	505	G	N7-C8-N9	5.75	115.97	113.10
25	BA	52	A	C8-N9-C4	-5.75	103.50	105.80
25	BA	1030	G	N7-C8-N9	-5.75	110.23	113.10
25	DA	2689	U	C5-C4-O4	5.75	129.35	125.90
25	DA	778	G	N1-C2-N2	-5.75	111.03	116.20
25	DA	2251	G	N3-C4-N9	5.75	129.45	126.00
25	BA	410	G	N1-C6-O6	5.74	123.35	119.90
25	BA	518	G	N1-C6-O6	-5.74	116.45	119.90
25	BA	1648	C	N1-C2-N3	5.74	123.22	119.20
26	BB	77	U	C6-N1-C2	5.74	124.45	121.00
25	DA	760	G	N9-C4-C5	5.74	107.70	105.40
25	BA	2623	G	N3-C4-C5	-5.74	125.73	128.60
1	CA	1502	A	N1-C6-N6	5.74	122.05	118.60
25	DA	22	C	N3-C4-N4	-5.74	113.98	118.00
25	DA	481	G	P-O3'-C3'	5.74	126.59	119.70
25	DA	1355	G	C5-C6-N1	-5.74	108.63	111.50
25	DA	1774	C	C2-N1-C1'	5.74	125.11	118.80
25	DA	2502	G	C5-N7-C8	-5.74	101.43	104.30
25	BA	992	C	N3-C4-C5	5.74	124.19	121.90
25	BA	2288	A	C5-C6-N6	-5.74	119.11	123.70
25	BA	2697	G	N1-C6-O6	5.74	123.34	119.90
25	BA	2417	C	C5-C6-N1	-5.74	118.13	121.00
25	BA	2575	C	N3-C2-O2	-5.74	117.88	121.90
1	AA	705	U	N1-C2-O2	-5.74	118.78	122.80
25	BA	589	C	C6-N1-C2	5.74	122.59	120.30
25	BA	797	C	N3-C4-N4	5.74	122.02	118.00
25	BA	1929	G	C5-N7-C8	5.74	107.17	104.30
25	BA	1195	G	C5-C6-O6	-5.73	125.16	128.60
25	BA	2443	C	C2-N3-C4	-5.73	117.03	119.90
1	AA	32	A	C4-C5-C6	5.73	119.87	117.00
1	AA	1077	G	C4-C5-N7	5.73	113.09	110.80
25	BA	2383	G	N9-C4-C5	-5.73	103.11	105.40
25	DA	2765	A	C4-C5-C6	5.73	119.87	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	45	C	N3-C2-O2	5.73	125.91	121.90
25	BA	925	C	C2-N1-C1'	-5.73	112.50	118.80
25	BA	988	A	C6-N1-C2	-5.73	115.16	118.60
1	CA	1497	G	N3-C4-N9	-5.73	122.56	126.00
25	DA	894	C	N1-C2-O2	5.73	122.34	118.90
25	DA	1831	G	C6-C5-N7	-5.73	126.96	130.40
1	AA	1053	G	N3-C4-C5	5.73	131.46	128.60
25	BA	1235	G	C5-C6-N1	-5.73	108.64	111.50
25	BA	1938	A	C6-N1-C2	-5.73	115.16	118.60
25	DA	482	A	C5-C6-N6	-5.73	119.12	123.70
25	BA	1308	A	C8-N9-C4	-5.73	103.51	105.80
25	BA	2407	G	C4-N9-C1'	5.73	133.95	126.50
26	BB	47	C	N3-C4-N4	5.73	122.01	118.00
25	DA	1297	C	C4-C5-C6	5.73	120.26	117.40
25	BA	186	G	N9-C4-C5	-5.73	103.11	105.40
25	BA	340	A	N1-C6-N6	5.73	122.04	118.60
25	BA	2069	G	C6-N1-C2	-5.73	121.66	125.10
25	BA	2828	C	C5-C4-N4	-5.73	116.19	120.20
25	BA	2875	C	N3-C2-O2	-5.73	117.89	121.90
25	DA	1616	A	N7-C8-N9	5.73	116.66	113.80
1	AA	1515	C	N1-C2-O2	-5.72	115.47	118.90
25	BA	591	C	N1-C2-O2	-5.72	115.47	118.90
25	BA	942	G	C5-N7-C8	5.72	107.16	104.30
25	BA	975(A)	G	N3-C4-C5	5.72	131.46	128.60
25	BA	1239	G	N1-C6-O6	5.72	123.33	119.90
25	BA	1938	A	N1-C2-N3	5.72	132.16	129.30
25	BA	2709	G	C5-C6-O6	5.72	132.03	128.60
1	AA	187	C	C6-N1-C2	-5.72	118.01	120.30
1	AA	785	G	C5-C6-O6	-5.72	125.17	128.60
25	BA	2063	C	C5-C4-N4	-5.72	116.19	120.20
25	DA	2049	G	C4-C5-N7	5.72	113.09	110.80
25	BA	659	C	C5-C6-N1	-5.72	118.14	121.00
25	BA	689	A	N1-C6-N6	-5.72	115.17	118.60
25	BA	1297	C	C2-N3-C4	-5.72	117.04	119.90
25	BA	1302	A	N7-C8-N9	-5.72	110.94	113.80
26	BB	46	A	C5-C6-N1	5.72	120.56	117.70
36	DQ	64	ILE	CB-CA-C	-5.72	100.16	111.60
25	BA	624	C	N3-C4-N4	-5.72	114.00	118.00
25	BA	1296	G	N3-C4-N9	5.72	129.43	126.00
1	CA	555	C	N3-C4-C5	-5.72	119.61	121.90
1	CA	638	G	N7-C8-N9	-5.72	110.24	113.10
25	DA	1223	G	C4-N9-C1'	-5.72	119.07	126.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	717	C	C2-N1-C1'	5.72	125.09	118.80
1	AA	1495	U	C6-N1-C2	-5.72	117.57	121.00
23	AV	74	C	N3-C2-O2	-5.72	117.90	121.90
25	BA	146	G	C6-C5-N7	-5.72	126.97	130.40
25	BA	214	G	N3-C4-N9	5.72	129.43	126.00
25	BA	1617	C	N3-C2-O2	5.72	125.90	121.90
25	BA	2423	U	C5-C6-N1	-5.72	119.84	122.70
26	BB	80	U	C6-N1-C1'	5.72	129.20	121.20
1	CA	481	G	C4-N9-C1'	5.72	133.93	126.50
25	DA	330	A	C5-C6-N6	-5.72	119.13	123.70
25	BA	271(X)	G	C2-N3-C4	-5.71	109.04	111.90
25	BA	391	G	C4-C5-N7	5.71	113.09	110.80
25	BA	775	G	C4-C5-N7	-5.71	108.51	110.80
25	BA	2409	G	C8-N9-C4	-5.71	104.11	106.40
1	CA	162	A	N1-C6-N6	-5.71	115.17	118.60
23	AV	76	A	N3-C4-N9	-5.71	122.83	127.40
25	BA	1975	G	C4-N9-C1'	5.71	133.93	126.50
1	AA	34	C	N3-C2-O2	5.71	125.90	121.90
1	AA	693	G	N9-C4-C5	-5.71	103.11	105.40
1	AA	755	G	C8-N9-C1'	-5.71	119.58	127.00
25	BA	88	G	N1-C6-O6	5.71	123.33	119.90
25	BA	715	G	C8-N9-C1'	-5.71	119.58	127.00
25	BA	1216	G	C4-C5-C6	5.71	122.23	118.80
34	BO	25	LEU	CB-CA-C	-5.71	99.35	110.20
25	DA	1008	C	N3-C4-C5	5.71	124.18	121.90
25	BA	27	G	C4-C5-C6	5.71	122.23	118.80
25	BA	377	C	N1-C2-O2	-5.71	115.47	118.90
25	DA	2425	A	C2-N3-C4	5.71	113.45	110.60
1	AA	1288	A	N9-C4-C5	5.71	108.08	105.80
25	BA	522	G	C2-N3-C4	-5.71	109.05	111.90
25	BA	764	A	C8-N9-C4	-5.71	103.52	105.80
26	BB	116	G	N3-C4-N9	5.71	129.43	126.00
25	DA	71	A	C4-C5-N7	5.71	113.55	110.70
25	DA	928	G	C8-N9-C4	-5.71	104.12	106.40
25	BA	272	G	C5-C6-N1	5.71	114.35	111.50
25	BA	701	G	C4-C5-N7	-5.71	108.52	110.80
25	BA	806	C	N3-C4-C5	5.71	124.18	121.90
25	BA	1108	U	C6-N1-C2	-5.71	117.58	121.00
25	BA	1364	G	N1-C6-O6	-5.71	116.48	119.90
25	BA	1604	C	N3-C4-N4	5.71	122.00	118.00
1	CA	817	C	N1-C2-O2	5.71	122.32	118.90
25	DA	1297	C	C5-C4-N4	5.71	124.19	120.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1598	C	C2-N1-C1'	5.71	125.08	118.80
1	AA	672	U	C5-C4-O4	5.71	129.32	125.90
25	BA	685	A	C2-N3-C4	-5.71	107.75	110.60
25	BA	842	G	N1-C6-O6	-5.71	116.48	119.90
25	BA	1012	U	N1-C2-O2	-5.71	118.81	122.80
25	BA	2520	C	N1-C2-N3	5.71	123.19	119.20
26	BB	73	A	C5-N7-C8	-5.71	101.05	103.90
25	DA	773	U	C2-N3-C4	-5.71	123.58	127.00
25	DA	2200	C	C6-N1-C2	-5.71	118.02	120.30
25	BA	189	G	N1-C2-N3	5.70	127.32	123.90
25	BA	204	A	C6-N1-C2	-5.70	115.18	118.60
25	BA	778	G	C5-N7-C8	-5.70	101.45	104.30
25	BA	2218	U	N1-C2-N3	-5.70	111.48	114.90
1	CA	803	G	N1-C6-O6	5.70	123.32	119.90
1	CA	914	A	N1-C6-N6	-5.70	115.18	118.60
25	DA	20	C	C6-N1-C2	-5.70	118.02	120.30
50	D4	42	PHE	C-N-CA	5.70	135.96	121.70
25	BA	489	G	N3-C2-N2	-5.70	115.91	119.90
1	CA	858	G	C8-N9-C1'	-5.70	119.59	127.00
25	DA	1830	C	C6-N1-C2	5.70	122.58	120.30
25	BA	864	G	C2-N3-C4	5.70	114.75	111.90
25	BA	1190	G	N1-C2-N2	-5.70	111.07	116.20
25	BA	2572	A	N1-C2-N3	5.70	132.15	129.30
25	DA	1027	A	N1-C6-N6	-5.70	115.18	118.60
25	BA	271(H)	G	C4-C5-N7	5.70	113.08	110.80
25	BA	335	C	C6-N1-C2	-5.70	118.02	120.30
26	BB	99	G	C8-N9-C1'	-5.70	119.59	127.00
1	AA	540	G	N3-C4-N9	5.70	129.42	126.00
25	BA	84	A	N9-C4-C5	5.70	108.08	105.80
25	BA	2105	C	C6-N1-C2	-5.70	118.02	120.30
25	BA	2298	A	N9-C4-C5	5.70	108.08	105.80
1	AA	811	C	C5-C6-N1	-5.70	118.15	121.00
25	BA	197	A	N7-C8-N9	5.70	116.65	113.80
25	BA	244	A	N1-C6-N6	5.70	122.02	118.60
25	BA	639	U	C5-C4-O4	5.70	129.32	125.90
1	CA	575	G	N1-C6-O6	5.70	123.32	119.90
1	CA	1108	G	C5-C6-N1	-5.70	108.65	111.50
1	CA	1274	G	C4-N9-C1'	5.70	133.91	126.50
25	DA	2388	A	N9-C4-C5	5.70	108.08	105.80
25	DA	2731	G	C4-C5-N7	5.70	113.08	110.80
25	BA	1676	A	N3-C4-N9	-5.69	122.84	127.40
1	AA	537	G	C8-N9-C4	-5.69	104.12	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1091	U	C2-N1-C1'	5.69	124.53	117.70
1	AA	1514	C	C6-N1-C2	-5.69	118.02	120.30
25	BA	129	C	C5-C4-N4	-5.69	116.22	120.20
25	BA	2502	G	C2-N3-C4	5.69	114.75	111.90
26	BB	9	G	C8-N9-C4	-5.69	104.12	106.40
1	CA	1272	G	C8-N9-C1'	-5.69	119.60	127.00
25	DA	1437	C	C2-N1-C1'	5.69	125.06	118.80
25	DA	2003	G	C2-N3-C4	-5.69	109.05	111.90
25	BA	1203	G	N1-C2-N2	-5.69	111.08	116.20
25	BA	2394	C	N3-C4-C5	5.69	124.18	121.90
25	BA	2512	C	N3-C2-O2	5.69	125.88	121.90
40	BU	39	LEU	CB-CG-CD2	-5.69	101.33	111.00
25	DA	314	A	N1-C6-N6	-5.69	115.19	118.60
25	DA	1125	G	C8-N9-C4	5.69	108.68	106.40
25	BA	2232	U	C5-C6-N1	-5.69	119.86	122.70
25	BA	2883	A	N1-C2-N3	5.69	132.15	129.30
1	CA	616	G	N3-C4-C5	-5.69	125.76	128.60
1	AA	886	G	N1-C2-N2	5.69	121.32	116.20
23	AV	58	A	C8-N9-C4	-5.69	103.53	105.80
25	BA	238	C	C5-C4-N4	-5.69	116.22	120.20
25	BA	623	G	C8-N9-C4	5.69	108.67	106.40
25	BA	1204	A	C8-N9-C1'	-5.69	117.46	127.70
25	BA	2719	G	C5-N7-C8	-5.69	101.46	104.30
25	DA	533	G	N9-C4-C5	-5.69	103.12	105.40
25	DA	1907	G	N3-C4-N9	-5.69	122.59	126.00
25	DA	2003	G	N3-C4-N9	-5.69	122.59	126.00
25	DA	2018	G	C4-N9-C1'	5.69	133.89	126.50
25	DA	2771	C	N3-C2-O2	-5.69	117.92	121.90
25	BA	1456	G	N1-C2-N3	5.69	127.31	123.90
25	BA	1817	G	N1-C6-O6	-5.69	116.49	119.90
25	BA	1973	G	C5-C6-O6	5.69	132.01	128.60
25	DA	1972	A	C8-N9-C4	-5.69	103.53	105.80
1	AA	388	G	C5-C6-O6	5.68	132.01	128.60
25	BA	577	G	N3-C2-N2	5.68	123.88	119.90
25	BA	1447	G	N3-C4-C5	-5.68	125.76	128.60
25	BA	2717	G	C4-C5-N7	5.68	113.07	110.80
25	DA	74	A	C8-N9-C4	-5.68	103.53	105.80
25	DA	1157	G	C8-N9-C4	-5.68	104.13	106.40
25	DA	1698	A	C6-C5-N7	-5.68	128.32	132.30
25	DA	2585	U	N1-C2-O2	5.68	126.78	122.80
25	DA	2686	G	N7-C8-N9	5.68	115.94	113.10
25	BA	271(S)	G	C4-C5-C6	5.68	122.21	118.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	435	C	N3-C4-C5	5.68	124.17	121.90
25	BA	1450	G	N7-C8-N9	5.68	115.94	113.10
25	BA	2246	G	C8-N9-C4	5.68	108.67	106.40
25	BA	2436	G	N1-C2-N3	5.68	127.31	123.90
1	CA	1154	G	N3-C4-N9	5.68	129.41	126.00
25	DA	371	A	N9-C4-C5	-5.68	103.53	105.80
25	DA	1362	C	C6-N1-C2	-5.68	118.03	120.30
25	BA	2552	U	N3-C4-C5	-5.68	111.19	114.60
1	AA	163	C	C2-N1-C1'	5.68	125.05	118.80
25	BA	447	A	C5-C6-N1	5.68	120.54	117.70
25	BA	854	G	C5-C6-N1	-5.68	108.66	111.50
25	BA	2465	C	C6-N1-C2	5.68	122.57	120.30
45	BZ	94	GLU	C-N-CD	5.68	140.33	128.40
25	DA	686	G	N1-C2-N3	5.68	127.31	123.90
25	DA	1915	U	C2-N1-C1'	5.68	124.52	117.70
25	DA	2437	U	C2-N1-C1'	-5.68	110.89	117.70
25	DA	2711	A	C2-N3-C4	-5.68	107.76	110.60
25	BA	1042	G	N3-C4-N9	5.68	129.41	126.00
25	BA	2020	A	C6-N1-C2	-5.68	115.19	118.60
25	DA	803	U	N1-C2-O2	5.68	126.78	122.80
25	BA	2339	G	C5-C6-O6	-5.68	125.19	128.60
25	DA	1968	G	N1-C6-O6	5.68	123.31	119.90
1	AA	577	G	N1-C6-O6	5.67	123.31	119.90
23	AV	9	G	N1-C6-O6	-5.67	116.50	119.90
25	BA	613	G	C8-N9-C1'	5.67	134.38	127.00
25	BA	978	G	C2-N3-C4	-5.67	109.06	111.90
25	BA	1265	A	C5-N7-C8	-5.67	101.06	103.90
25	BA	1383	C	C6-N1-C2	-5.67	118.03	120.30
25	BA	2014	A	C5-C6-N6	-5.67	119.16	123.70
25	BA	2319	G	N7-C8-N9	5.67	115.94	113.10
25	BA	2489	G	C2-N3-C4	-5.67	109.06	111.90
25	BA	652(Q)	G	C6-C5-N7	-5.67	127.00	130.40
25	BA	1976	U	N1-C2-N3	5.67	118.30	114.90
25	BA	524	U	C5-C4-O4	5.67	129.30	125.90
25	BA	967	C	C5-C6-N1	-5.67	118.16	121.00
25	BA	2509	G	N3-C2-N2	5.67	123.87	119.90
25	DA	494	G	N1-C6-O6	5.67	123.30	119.90
25	DA	2522	U	C6-N1-C2	5.67	124.40	121.00
25	BA	1348	G	C6-N1-C2	-5.67	121.70	125.10
25	DA	271(O)	C	N3-C2-O2	-5.67	117.93	121.90
25	DA	1470	G	N3-C4-N9	-5.67	122.60	126.00
1	AA	548	G	C5-C6-O6	-5.67	125.20	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	31	CYS	N-CA-CB	5.67	120.80	110.60
14	AN	53	LEU	CA-CB-CG	-5.67	102.27	115.30
1	CA	1158	C	C2-N1-C1'	5.67	125.03	118.80
25	DA	452	G	C6-N1-C2	-5.67	121.70	125.10
25	DA	679	C	N1-C2-O2	-5.67	115.50	118.90
1	AA	130	A	N1-C6-N6	5.67	122.00	118.60
25	BA	1196	C	N1-C2-N3	5.67	123.17	119.20
25	BA	2379	G	N1-C6-O6	5.67	123.30	119.90
25	DA	60	G	N9-C4-C5	5.67	107.67	105.40
25	DA	1210	A	C5-C6-N6	-5.67	119.17	123.70
25	DA	1489	U	C5-C4-O4	5.67	129.30	125.90
25	BA	1022	G	N3-C4-N9	-5.66	122.60	126.00
25	BA	1769	G	N3-C4-C5	-5.66	125.77	128.60
25	BA	2598	A	C8-N9-C4	5.66	108.06	105.80
55	B9	9	ARG	NE-CZ-NH2	-5.66	117.47	120.30
25	DA	1187	G	C8-N9-C4	-5.66	104.14	106.40
25	DA	2598	A	C5-N7-C8	-5.66	101.07	103.90
26	DB	14	U	N1-C2-O2	5.66	126.76	122.80
1	AA	572	A	C8-N9-C1'	5.66	137.89	127.70
25	BA	1271	G	C5-C6-N1	-5.66	108.67	111.50
25	BA	1337	G	N3-C2-N2	-5.66	115.94	119.90
26	BB	56	G	N3-C4-C5	-5.66	125.77	128.60
25	DA	737	C	C2-N3-C4	-5.66	117.07	119.90
25	DA	1551	C	C6-N1-C2	-5.66	118.03	120.30
1	AA	928	G	N3-C4-C5	5.66	131.43	128.60
4	AD	26	CYS	CA-CB-SG	5.66	124.19	114.00
25	BA	298	G	C8-N9-C1'	-5.66	119.64	127.00
25	BA	503	A	N9-C4-C5	5.66	108.06	105.80
25	DA	805	G	C5-C6-N1	5.66	114.33	111.50
25	DA	972	G	N1-C2-N3	5.66	127.30	123.90
25	DA	1614	A	C2-N3-C4	-5.66	107.77	110.60
25	DA	2495	G	C5-C6-O6	-5.66	125.20	128.60
1	AA	1400	C	N3-C2-O2	-5.66	117.94	121.90
25	BA	24	G	C4-N9-C1'	5.66	133.85	126.50
25	BA	970	C	C5-C6-N1	-5.66	118.17	121.00
25	BA	1187	G	N3-C4-C5	-5.66	125.77	128.60
25	BA	1862	G	C6-C5-N7	5.66	133.79	130.40
1	CA	506	G	N1-C6-O6	-5.66	116.50	119.90
25	DA	1553	A	N9-C4-C5	5.66	108.06	105.80
25	DA	1857	G	C6-C5-N7	-5.66	127.00	130.40
25	BA	2361	A	C2-N3-C4	-5.66	107.77	110.60
1	AA	1482	G	N1-C2-N2	-5.66	111.11	116.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2296	U	N1-C2-N3	5.66	118.29	114.90
25	BA	613	G	C5-N7-C8	-5.65	101.47	104.30
25	BA	1279	G	C6-N1-C2	-5.65	121.71	125.10
25	DA	616	G	N3-C4-C5	-5.65	125.77	128.60
25	DA	2392	A	N1-C6-N6	-5.65	115.21	118.60
25	DA	574	C	N3-C4-N4	-5.65	114.04	118.00
1	AA	341	C	C6-N1-C2	5.65	122.56	120.30
25	BA	700	G	C6-N1-C2	-5.65	121.71	125.10
25	BA	990	A	C2-N3-C4	-5.65	107.78	110.60
25	BA	1275	A	C6-C5-N7	-5.65	128.34	132.30
46	B0	53	MET	CG-SD-CE	5.65	109.24	100.20
1	AA	98	G	C6-C5-N7	-5.65	127.01	130.40
25	BA	316	C	N3-C4-C5	5.65	124.16	121.90
25	BA	1171	G	N3-C4-N9	5.65	129.39	126.00
25	BA	1208	C	C6-N1-C2	5.65	122.56	120.30
36	BQ	51	ARG	NE-CZ-NH1	-5.65	117.48	120.30
1	CA	774	G	N7-C8-N9	5.65	115.92	113.10
25	DA	216	A	N1-C2-N3	5.65	132.12	129.30
25	DA	1276	A	C2-N3-C4	-5.65	107.78	110.60
25	DA	1625	C	N1-C2-O2	5.65	122.29	118.90
25	DA	2791	C	N3-C4-N4	5.65	121.95	118.00
25	BA	682	G	C4-N9-C1'	5.65	133.84	126.50
25	BA	114	U	C2-N1-C1'	5.64	124.47	117.70
25	BA	2032	G	C2-N3-C4	-5.64	109.08	111.90
25	BA	2079	U	C4-C5-C6	5.64	123.09	119.70
26	BB	24	G	C5-C6-O6	-5.64	125.21	128.60
25	DA	1208	C	N3-C4-N4	5.64	121.95	118.00
25	DA	1314	C	N1-C2-O2	5.64	122.29	118.90
25	DA	1640	C	C2-N1-C1'	5.64	125.01	118.80
25	BA	431	U	C2-N1-C1'	5.64	124.47	117.70
25	BA	2037	G	C5-C6-O6	5.64	131.99	128.60
25	BA	2311	A	N7-C8-N9	-5.64	110.98	113.80
1	CA	993	G	N3-C4-N9	5.64	129.39	126.00
25	DA	1616	A	N1-C6-N6	5.64	121.99	118.60
25	DA	2689	U	C4-C5-C6	5.64	123.08	119.70
25	DA	2723	C	N1-C2-N3	5.64	123.15	119.20
25	DA	577	G	C8-N9-C4	5.64	108.66	106.40
25	DA	669	G	C4-C5-N7	-5.64	108.54	110.80
25	BA	308	G	C4-C5-N7	5.64	113.06	110.80
25	BA	333	G	C4-N9-C1'	5.64	133.83	126.50
25	BA	1708	C	C4-C5-C6	-5.64	114.58	117.40
25	BA	1970	A	C2-N3-C4	5.64	113.42	110.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2271	G	C5-C6-O6	-5.64	125.22	128.60
25	BA	2780	G	C5-C6-O6	5.64	131.98	128.60
25	DA	1787	A	N1-C6-N6	5.64	121.98	118.60
25	DA	2607	G	N1-C2-N2	-5.64	111.12	116.20
25	BA	72	U	C4-C5-C6	5.64	123.08	119.70
26	BB	80	U	N3-C2-O2	-5.64	118.25	122.20
25	DA	1639	U	N3-C2-O2	-5.64	118.25	122.20
25	DA	2259	G	N1-C2-N2	5.64	121.27	116.20
25	DA	2778	A	C2-N3-C4	-5.64	107.78	110.60
25	DA	2829	C	N3-C4-C5	5.64	124.16	121.90
1	AA	1391	U	C2-N3-C4	5.64	130.38	127.00
25	BA	518	G	N3-C4-N9	5.64	129.38	126.00
25	BA	708	C	N3-C2-O2	-5.64	117.95	121.90
25	BA	764	A	C4-C5-C6	5.64	119.82	117.00
25	BA	2038	G	N3-C2-N2	5.64	123.84	119.90
25	BA	2045	C	C5-C6-N1	-5.64	118.18	121.00
1	CA	892	A	C5-C6-N6	-5.64	119.19	123.70
1	CA	1528	U	C5-C6-N1	-5.64	119.88	122.70
25	DA	2473	U	C5-C6-N1	5.64	125.52	122.70
1	AA	1480	G	C8-N9-C4	-5.63	104.15	106.40
25	BA	319	C	N1-C2-O2	5.63	122.28	118.90
25	BA	791	C	N3-C4-C5	5.63	124.15	121.90
25	BA	1262	A	C8-N9-C4	-5.63	103.55	105.80
25	BA	1342	A	N1-C2-N3	5.63	132.12	129.30
25	BA	2061	G	C8-N9-C4	-5.63	104.15	106.40
25	DA	1648	C	N1-C2-O2	-5.63	115.52	118.90
26	DB	94	C	C6-N1-C2	5.63	122.55	120.30
25	DA	2039	C	N3-C2-O2	-5.63	117.96	121.90
25	DA	2042	A	C2-N3-C4	-5.63	107.78	110.60
25	BA	83	G	C2-N3-C4	-5.63	109.08	111.90
25	BA	86	C	C2-N3-C4	-5.63	117.08	119.90
25	BA	488	G	C4-C5-C6	5.63	122.18	118.80
25	BA	771	G	C5-C6-O6	5.63	131.98	128.60
25	BA	2258	C	C2-N1-C1'	5.63	125.00	118.80
25	DA	85	G	C8-N9-C4	5.63	108.65	106.40
25	DA	946	G	N9-C4-C5	5.63	107.65	105.40
25	BA	545	G	C5-N7-C8	-5.63	101.48	104.30
25	DA	2460	U	N3-C4-C5	-5.63	111.22	114.60
25	BA	1149	G	C5-C6-N1	-5.63	108.69	111.50
25	BA	2680	C	C5-C4-N4	-5.63	116.26	120.20
25	DA	192	C	C6-N1-C2	5.63	122.55	120.30
25	BA	316	C	N3-C4-N4	-5.63	114.06	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1403	C	N1-C2-O2	-5.63	115.52	118.90
25	BA	1514	U	C2-N1-C1'	5.63	124.45	117.70
25	BA	1620	G	N9-C4-C5	-5.63	103.15	105.40
25	BA	392	C	C6-N1-C2	5.62	122.55	120.30
25	BA	694	U	N3-C4-O4	-5.62	115.46	119.40
25	BA	2647	U	N3-C2-O2	-5.62	118.26	122.20
25	DA	105	C	N3-C2-O2	5.62	125.84	121.90
25	DA	2222	G	C8-N9-C4	-5.62	104.15	106.40
25	BA	182	A	C5-N7-C8	-5.62	101.09	103.90
25	BA	488	G	N1-C2-N3	5.62	127.27	123.90
25	BA	776	G	C5-C6-N1	-5.62	108.69	111.50
25	BA	1292	U	C4-C5-C6	-5.62	116.33	119.70
25	BA	2299	G	N3-C4-C5	5.62	131.41	128.60
1	CA	1366	C	N3-C4-C5	-5.62	119.65	121.90
25	DA	1701	A	C8-N9-C4	-5.62	103.55	105.80
1	AA	163	C	N1-C2-O2	5.62	122.27	118.90
25	BA	515	A	N9-C4-C5	5.62	108.05	105.80
25	BA	2014	A	N7-C8-N9	-5.62	110.99	113.80
23	CV	60	U	N3-C2-O2	-5.62	118.27	122.20
25	DA	1432	C	N3-C4-N4	5.62	121.94	118.00
27	DD	271	ILE	CB-CA-C	-5.62	100.36	111.60
25	BA	1395	A	C4-C5-N7	-5.62	107.89	110.70
25	BA	2446	G	C2-N3-C4	-5.62	109.09	111.90
1	AA	1274	G	C8-N9-C4	-5.62	104.15	106.40
25	BA	675	A	C5-C6-N1	5.62	120.51	117.70
25	BA	1241	A	N7-C8-N9	-5.62	110.99	113.80
25	BA	1774	C	C5-C6-N1	5.62	123.81	121.00
1	CA	953	G	N3-C4-N9	5.62	129.37	126.00
25	BA	1834	U	N1-C2-O2	5.62	126.73	122.80
25	DA	1487	G	C8-N9-C4	-5.62	104.15	106.40
25	BA	452	G	C5-C6-N1	5.62	114.31	111.50
25	BA	1997	G	N3-C2-N2	-5.62	115.97	119.90
25	BA	2031	A	C5-N7-C8	5.62	106.71	103.90
25	BA	2413	G	N1-C2-N3	5.62	127.27	123.90
25	BA	2536	G	C2-N3-C4	-5.62	109.09	111.90
25	DA	1926	U	C5-C4-O4	5.62	129.27	125.90
1	AA	1205	U	C6-N1-C2	-5.61	117.63	121.00
25	BA	78	A	N1-C6-N6	5.61	121.97	118.60
25	BA	298	G	C4-N9-C1'	5.61	133.80	126.50
25	BA	641	C	N3-C4-C5	-5.61	119.65	121.90
25	BA	1920	C	C4-C5-C6	-5.61	114.59	117.40
25	BA	2082	A	C8-N9-C4	5.61	108.05	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1205	U	N3-C4-C5	-5.61	111.23	114.60
25	DA	133	C	C6-N1-C2	5.61	122.55	120.30
25	DA	889	C	C6-N1-C2	-5.61	118.05	120.30
25	DA	2473	U	N1-C2-O2	5.61	126.73	122.80
25	BA	133	C	C2-N3-C4	-5.61	117.09	119.90
25	BA	251	A	C4-C5-N7	-5.61	107.89	110.70
25	BA	945	A	C6-N1-C2	-5.61	115.23	118.60
25	BA	2552	U	N1-C2-O2	-5.61	118.87	122.80
25	BA	2770	G	C8-N9-C4	5.61	108.64	106.40
1	AA	700	G	N1-C6-O6	5.61	123.27	119.90
25	BA	238	C	C6-N1-C2	5.61	122.55	120.30
25	BA	446	G	C6-C5-N7	-5.61	127.03	130.40
25	BA	784	A	C4-C5-N7	-5.61	107.89	110.70
25	BA	1010	A	C2-N3-C4	-5.61	107.80	110.60
25	BA	1573	G	N1-C6-O6	5.61	123.27	119.90
25	BA	1626	G	C8-N9-C4	-5.61	104.16	106.40
25	BA	2426	A	N1-C6-N6	-5.61	115.23	118.60
25	DA	1909	C	N3-C2-O2	-5.61	117.97	121.90
25	DA	1992	G	C5-C6-N1	5.61	114.31	111.50
25	DA	2239	G	N1-C6-O6	-5.61	116.53	119.90
25	DA	2356	C	N3-C2-O2	5.61	125.83	121.90
1	AA	798	G	N3-C4-C5	-5.61	125.80	128.60
25	BA	582	G	N1-C2-N2	-5.61	111.15	116.20
25	BA	2581	G	C4-N9-C1'	5.61	133.79	126.50
25	BA	2783	G	N1-C2-N3	5.61	127.26	123.90
25	DA	733	G	C4-N9-C1'	5.61	133.79	126.50
25	DA	1374	G	N1-C6-O6	5.61	123.27	119.90
25	DA	2039	C	N1-C2-O2	5.61	122.26	118.90
25	DA	2596	U	C5-C6-N1	-5.61	119.90	122.70
1	AA	572	A	C4-C5-C6	-5.61	114.20	117.00
25	BA	473	G	C5-N7-C8	5.61	107.10	104.30
25	BA	646	A	N7-C8-N9	5.61	116.60	113.80
25	BA	701	G	C5-C6-N1	-5.61	108.70	111.50
25	BA	944	G	C5-N7-C8	-5.61	101.50	104.30
25	BA	1656	C	C6-N1-C2	-5.61	118.06	120.30
42	BW	98	LYS	N-CA-C	-5.61	95.87	111.00
1	AA	1358	U	C5-C6-N1	-5.60	119.90	122.70
25	BA	621	A	N9-C4-C5	5.60	108.04	105.80
1	AA	541	G	N3-C4-N9	-5.60	122.64	126.00
25	BA	644	A	C8-N9-C4	-5.60	103.56	105.80
25	BA	1665	A	C5-C6-N1	5.60	120.50	117.70
25	BA	1671	U	N3-C4-C5	5.60	117.96	114.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2503	A	C6-C5-N7	-5.60	128.38	132.30
1	CA	1323	G	C4-C5-C6	5.60	122.16	118.80
25	DA	380	U	N3-C2-O2	5.60	126.12	122.20
25	DA	407	G	C8-N9-C1'	-5.60	119.72	127.00
25	DA	1160	G	N3-C4-C5	-5.60	125.80	128.60
25	DA	1427	A	C8-N9-C4	-5.60	103.56	105.80
1	AA	226	G	C8-N9-C4	5.60	108.64	106.40
1	AA	1401	G	N7-C8-N9	5.60	115.90	113.10
25	BA	529	A	C4-C5-N7	5.60	113.50	110.70
25	BA	689	A	N1-C2-N3	5.60	132.10	129.30
25	BA	1897	G	C5-C6-O6	-5.60	125.24	128.60
1	AA	811	C	N3-C4-C5	5.60	124.14	121.90
25	BA	516	C	N3-C2-O2	5.60	125.82	121.90
25	BA	733	G	C5-C6-N1	5.60	114.30	111.50
25	BA	2033	A	C5-N7-C8	5.60	106.70	103.90
25	BA	2779	U	N3-C2-O2	-5.60	118.28	122.20
25	DA	1769	G	N7-C8-N9	5.60	115.90	113.10
25	BA	272(D)	G	N7-C8-N9	-5.60	110.30	113.10
25	BA	680	G	C2-N3-C4	-5.60	109.10	111.90
25	BA	981	A	N1-C2-N3	-5.60	126.50	129.30
25	BA	1235	G	N9-C4-C5	5.60	107.64	105.40
25	BA	2551	C	C6-N1-C2	-5.60	118.06	120.30
25	DA	962	G	C5-C6-O6	-5.60	125.24	128.60
25	BA	500	G	N9-C4-C5	5.60	107.64	105.40
25	BA	1313	U	C2-N1-C1'	5.60	124.42	117.70
25	BA	2323	G	N1-C6-O6	5.60	123.26	119.90
1	CA	1473	A	C8-N9-C4	5.60	108.04	105.80
25	DA	768	G	C6-C5-N7	-5.60	127.04	130.40
25	BA	227	A	N1-C2-N3	5.59	132.10	129.30
25	BA	339	U	C6-N1-C2	5.59	124.36	121.00
25	BA	400	G	C4-C5-C6	5.59	122.16	118.80
25	BA	652(A)	A	C2-N3-C4	5.59	113.40	110.60
25	BA	1232	G	C5-C6-O6	-5.59	125.24	128.60
25	BA	1776	G	N9-C4-C5	-5.59	103.16	105.40
25	BA	2070	G	N1-C6-O6	5.59	123.26	119.90
25	BA	2318	G	O4'-C1'-N9	5.59	112.68	108.20
25	BA	2894	G	C8-N9-C1'	-5.59	119.73	127.00
25	DA	1611	C	N1-C2-O2	-5.59	115.54	118.90
1	AA	518	C	C2-N1-C1'	5.59	124.95	118.80
25	BA	229	A	N7-C8-N9	5.59	116.60	113.80
25	BA	271(M)	G	C8-N9-C1'	-5.59	119.73	127.00
25	BA	890	A	C6-C5-N7	-5.59	128.38	132.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	560	C	C2-N1-C1'	-5.59	112.65	118.80
25	BA	1760	A	C5-C6-N6	-5.59	119.23	123.70
25	BA	2079	U	N1-C2-N3	5.59	118.25	114.90
25	BA	2476	A	C8-N9-C4	-5.59	103.56	105.80
25	BA	2594	C	C4-C5-C6	5.59	120.20	117.40
25	DA	493	G	N3-C4-C5	5.59	131.40	128.60
25	BA	36	G	N7-C8-N9	-5.59	110.31	113.10
25	BA	493	G	C6-N1-C2	-5.59	121.75	125.10
25	BA	530	G	N1-C2-N2	5.59	121.23	116.20
25	BA	1607	C	C5-C6-N1	5.59	123.80	121.00
25	BA	1676	A	N3-C4-C5	5.59	130.71	126.80
25	BA	1990	C	N3-C4-C5	-5.59	119.66	121.90
25	BA	2072	G	C5-C6-O6	-5.59	125.25	128.60
25	BA	2873	A	N1-C6-N6	5.59	121.95	118.60
1	CA	150	C	C5-C6-N1	5.59	123.80	121.00
25	DA	2788	C	C2-N1-C1'	-5.59	112.65	118.80
25	BA	735	A	N7-C8-N9	-5.59	111.01	113.80
1	AA	932	C	C2-N1-C1'	5.59	124.94	118.80
25	BA	1263	U	N1-C2-O2	5.59	126.71	122.80
25	BA	1662	C	C6-N1-C2	-5.59	118.06	120.30
25	DA	92	A	C5-N7-C8	-5.59	101.11	103.90
25	DA	560	C	N1-C2-O2	-5.59	115.55	118.90
25	DA	1160	G	N3-C4-N9	5.59	129.35	126.00
25	BA	614(C)	A	N1-C6-N6	5.58	121.95	118.60
25	BA	690	G	C5-C6-N1	5.58	114.29	111.50
25	BA	1031	G	C5-C6-O6	-5.58	125.25	128.60
25	BA	1237	A	C4-C5-N7	-5.58	107.91	110.70
25	BA	2752	C	C6-N1-C2	5.58	122.53	120.30
25	DA	1520	G	N3-C4-N9	5.58	129.35	126.00
25	DA	2482	G	C4-N9-C1'	5.58	133.76	126.50
1	AA	687	A	P-O3'-C3'	5.58	126.40	119.70
25	BA	1262	A	N7-C8-N9	5.58	116.59	113.80
25	BA	1674	G	C8-N9-C1'	-5.58	119.74	127.00
25	BA	2050	C	C5-C6-N1	-5.58	118.21	121.00
25	BA	2458	G	C5-C6-N1	-5.58	108.71	111.50
1	CA	1499	A	N7-C8-N9	-5.58	111.01	113.80
25	DA	1934	C	C5-C6-N1	-5.58	118.21	121.00
25	DA	2207	G	C4-N9-C1'	5.58	133.76	126.50
25	DA	2430	A	C2-N3-C4	-5.58	107.81	110.60
1	AA	668	G	C8-N9-C4	-5.58	104.17	106.40
1	AA	1150	U	C5-C4-O4	5.58	129.25	125.90
23	AV	9	G	C4-C5-N7	-5.58	108.57	110.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	533	G	N1-C6-O6	5.58	123.25	119.90
25	BA	686	G	C8-N9-C1'	-5.58	119.75	127.00
25	BA	706	A	C2-N3-C4	-5.58	107.81	110.60
25	BA	1116	C	C5-C4-N4	-5.58	116.29	120.20
25	BA	1681	G	N3-C4-C5	5.58	131.39	128.60
25	BA	2837	G	C8-N9-C4	-5.58	104.17	106.40
1	CA	572	A	N7-C8-N9	-5.58	111.01	113.80
1	AA	1526	G	C8-N9-C4	-5.58	104.17	106.40
25	BA	1319	G	N7-C8-N9	5.58	115.89	113.10
25	BA	1426	G	C8-N9-C4	5.58	108.63	106.40
25	BA	1525	G	C4-C5-N7	-5.58	108.57	110.80
27	BD	237	GLU	N-CA-C	-5.58	95.94	111.00
25	DA	1983	C	N1-C2-O2	-5.58	115.55	118.90
25	DA	2570	G	C8-N9-C4	5.58	108.63	106.40
1	AA	365	U	C6-N1-C1'	5.58	129.01	121.20
25	BA	9	U	C2-N3-C4	5.58	130.35	127.00
25	BA	1660	C	N1-C2-O2	5.58	122.25	118.90
26	BB	29	A	C5-N7-C8	-5.58	101.11	103.90
1	CA	96	U	C5-C6-N1	5.58	125.49	122.70
1	CA	333	G	C5-C6-O6	-5.58	125.25	128.60
25	DA	1811	G	N3-C2-N2	-5.58	115.99	119.90
25	DA	2455	G	C8-N9-C4	-5.58	104.17	106.40
25	DA	2503	A	C5-C6-N6	-5.58	119.24	123.70
25	DA	2894	G	N3-C4-N9	5.58	129.35	126.00
26	BB	38	C	N3-C4-C5	5.58	124.13	121.90
1	CA	892	A	N9-C4-C5	-5.58	103.57	105.80
25	DA	1281	G	C5-C6-N1	-5.58	108.71	111.50
25	DA	2689	U	P-O3'-C3'	5.58	126.39	119.70
25	BA	803	U	N3-C4-O4	-5.58	115.50	119.40
25	BA	2228	G	N1-C2-N2	-5.58	111.18	116.20
25	BA	2624	G	C8-N9-C4	5.58	108.63	106.40
2	CB	238	LEU	CA-CB-CG	5.58	128.12	115.30
25	DA	1021	A	C5-N7-C8	-5.58	101.11	103.90
25	DA	2053	G	N1-C6-O6	5.58	123.25	119.90
25	DA	2440	C	C5-C6-N1	-5.58	118.21	121.00
1	AA	1044	A	N1-C6-N6	-5.57	115.26	118.60
25	BA	675	A	N9-C4-C5	-5.57	103.57	105.80
25	BA	930	U	C2-N1-C1'	5.57	124.39	117.70
25	BA	1618	A	C6-N1-C2	-5.57	115.25	118.60
25	BA	2782	G	N3-C4-C5	5.57	131.39	128.60
26	BB	77	U	C5-C4-O4	-5.57	122.56	125.90
25	DA	213	A	C4-C5-N7	5.57	113.49	110.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1758	G	N9-C4-C5	5.57	107.63	105.40
26	DB	56	G	N3-C4-C5	-5.57	125.81	128.60
25	BA	1016	G	N3-C4-N9	-5.57	122.66	126.00
1	AA	1495	U	N3-C4-O4	5.57	123.30	119.40
25	BA	85	G	N7-C8-N9	-5.57	110.31	113.10
25	BA	572	A	C4-C5-C6	5.57	119.78	117.00
25	BA	2482	G	C4-C5-C6	5.57	122.14	118.80
25	BA	2520	C	C4-C5-C6	5.57	120.19	117.40
25	DA	188	G	N9-C4-C5	-5.57	103.17	105.40
1	CA	942	G	N3-C4-C5	-5.57	125.82	128.60
25	DA	1367	A	N1-C6-N6	5.57	121.94	118.60
25	DA	2238	G	N3-C2-N2	-5.57	116.00	119.90
1	AA	880	C	N3-C2-O2	5.57	125.80	121.90
25	BA	1553	A	N1-C2-N3	5.57	132.08	129.30
25	BA	1761	C	N3-C4-N4	5.57	121.90	118.00
25	BA	2489	G	N3-C2-N2	5.57	123.80	119.90
25	BA	2503	A	C5-N7-C8	-5.57	101.12	103.90
25	DA	783	A	N3-C4-C5	-5.57	122.90	126.80
1	AA	511	C	C2-N3-C4	-5.57	117.12	119.90
1	AA	697	U	C5-C6-N1	-5.57	119.92	122.70
25	BA	480	A	C6-C5-N7	-5.57	128.40	132.30
25	BA	513	A	N9-C4-C5	5.57	108.03	105.80
25	BA	775	G	C2-N3-C4	5.57	114.68	111.90
1	CA	522	C	N3-C2-O2	-5.57	118.00	121.90
1	CA	921	U	C2-N3-C4	5.57	130.34	127.00
25	DA	265	A	C4-C5-N7	5.57	113.48	110.70
25	DA	583	G	C6-C5-N7	-5.57	127.06	130.40
25	DA	2621	A	C2-N3-C4	-5.57	107.82	110.60
25	DA	2697	G	C8-N9-C4	5.57	108.63	106.40
25	BA	870	A	C5-C6-N1	5.56	120.48	117.70
26	BB	60	C	N3-C4-C5	-5.56	119.67	121.90
1	CA	234	C	C6-N1-C2	5.56	122.53	120.30
25	DA	2056	G	C4-C5-N7	5.56	113.03	110.80
1	AA	672	U	N1-C2-N3	5.56	118.24	114.90
25	BA	257	A	C6-C5-N7	-5.56	128.41	132.30
25	BA	679	C	C6-N1-C2	5.56	122.53	120.30
25	BA	1397	U	C2-N3-C4	-5.56	123.66	127.00
25	BA	2014	A	N9-C4-C5	-5.56	103.58	105.80
25	BA	2290	G	N1-C2-N3	5.56	127.24	123.90
25	DA	773	U	C5-C6-N1	-5.56	119.92	122.70
25	DA	856	C	C3'-C2'-C1'	-5.56	97.05	101.50
1	AA	644	G	N3-C4-C5	5.56	131.38	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	205	G	N1-C2-N2	-5.56	111.20	116.20
25	BA	512	G	O4'-C1'-N9	5.56	112.65	108.20
25	BA	928	G	C5-C6-N1	-5.56	108.72	111.50
25	BA	1922	G	N3-C4-C5	5.56	131.38	128.60
25	BA	2226	C	C2-N3-C4	-5.56	117.12	119.90
25	BA	2335	A	N1-C6-N6	-5.56	115.27	118.60
1	CA	1530	G	N1-C6-O6	5.56	123.24	119.90
25	DA	2866	U	C5-C4-O4	5.56	129.24	125.90
1	AA	340	U	C6-N1-C2	5.56	124.33	121.00
25	BA	621	A	C2-N3-C4	5.56	113.38	110.60
25	BA	679	C	C5-C6-N1	-5.56	118.22	121.00
25	BA	1346	G	N3-C4-C5	-5.56	125.82	128.60
25	BA	2228	G	N3-C2-N2	5.56	123.79	119.90
1	CA	730	G	N1-C6-O6	-5.56	116.56	119.90
25	DA	2283	C	N3-C2-O2	5.56	125.79	121.90
1	AA	511	C	C2-N1-C1'	-5.56	112.69	118.80
1	AA	858	G	N3-C4-C5	-5.55	125.82	128.60
1	AA	1279	A	N7-C8-N9	5.55	116.58	113.80
1	AA	1482	G	C4-N9-C1'	5.55	133.72	126.50
1	AA	1512	U	C2-N3-C4	-5.55	123.67	127.00
25	BA	90	U	C5-C6-N1	5.55	125.48	122.70
25	BA	732	C	C2-N3-C4	-5.55	117.12	119.90
1	CA	1227	A	C8-N9-C4	-5.55	103.58	105.80
1	AA	774	G	C4-N9-C1'	5.55	133.72	126.50
25	BA	210	C	N3-C4-N4	-5.55	114.11	118.00
25	BA	1549	C	C6-N1-C2	5.55	122.52	120.30
25	BA	1785	A	C4-C5-C6	5.55	119.78	117.00
25	BA	1967	C	C6-N1-C2	5.55	122.52	120.30
25	DA	480	A	N3-C4-C5	-5.55	122.91	126.80
25	BA	1151	G	N1-C6-O6	-5.55	116.57	119.90
25	BA	1272	A	N1-C6-N6	-5.55	115.27	118.60
25	BA	1295	C	C2-N1-C1'	-5.55	112.69	118.80
25	BA	2281	C	N1-C2-O2	-5.55	115.57	118.90
25	BA	2475	C	N3-C4-C5	-5.55	119.68	121.90
25	BA	2766	G	N3-C4-C5	-5.55	125.82	128.60
25	DA	506	G	C4-C5-N7	5.55	113.02	110.80
25	DA	1698	A	N3-C4-N9	-5.55	122.96	127.40
6	AF	43	LEU	CA-CB-CG	-5.55	102.54	115.30
25	BA	1681	G	C2-N3-C4	-5.55	109.12	111.90
25	DA	2708	G	C8-N9-C4	5.55	108.62	106.40
1	AA	784	C	C6-N1-C2	5.55	122.52	120.30
25	BA	730	C	N3-C2-O2	5.55	125.78	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	473	G	N3-C2-N2	-5.55	116.02	119.90
25	BA	474	G	C8-N9-C1'	5.55	134.21	127.00
25	BA	533	G	C4-C5-N7	5.55	113.02	110.80
25	BA	2017	U	C5-C6-N1	-5.55	119.93	122.70
25	BA	2729	G	N1-C2-N2	-5.55	111.21	116.20
1	CA	720	C	C6-N1-C2	-5.55	118.08	120.30
25	DA	676	A	N1-C2-N3	5.55	132.07	129.30
1	AA	199	G	N3-C4-N9	5.54	129.33	126.00
1	AA	521	G	N1-C2-N3	5.54	127.23	123.90
25	BA	437	G	N3-C2-N2	5.54	123.78	119.90
25	BA	1246	A	C6-N1-C2	-5.54	115.27	118.60
25	DA	197	A	C5-C6-N6	-5.54	119.26	123.70
25	BA	377	C	N3-C4-N4	5.54	121.88	118.00
25	BA	545	G	N9-C4-C5	-5.54	103.18	105.40
25	BA	2289	G	N1-C2-N2	5.54	121.19	116.20
25	BA	2356	C	C2-N3-C4	-5.54	117.13	119.90
25	BA	2896	C	C2-N3-C4	5.54	122.67	119.90
1	CA	878	G	C4-N9-C1'	5.54	133.71	126.50
25	DA	1256	G	N1-C6-O6	5.54	123.23	119.90
25	BA	30	G	C5-C6-O6	5.54	131.93	128.60
25	BA	449	A	C2-N3-C4	-5.54	107.83	110.60
25	BA	1317	A	C5-C6-N6	-5.54	119.27	123.70
25	BA	1793	C	N1-C2-N3	5.54	123.08	119.20
25	BA	2433	A	C8-N9-C4	-5.54	103.58	105.80
25	BA	2589	A	N3-C4-C5	5.54	130.68	126.80
25	DA	1927	A	N7-C8-N9	5.54	116.57	113.80
25	DA	2897	U	C6-N1-C1'	-5.54	113.44	121.20
1	AA	28	G	C8-N9-C4	-5.54	104.18	106.40
1	AA	857	C	N3-C4-C5	-5.54	119.68	121.90
25	BA	234	C	N3-C2-O2	-5.54	118.02	121.90
25	BA	414	C	C6-N1-C2	5.54	122.52	120.30
25	BA	1443	G	C5-C6-N1	-5.54	108.73	111.50
25	BA	2349	G	N7-C8-N9	5.54	115.87	113.10
37	BR	97	VAL	CB-CA-C	-5.54	100.87	111.40
25	DA	467	G	N7-C8-N9	-5.54	110.33	113.10
25	DA	1558	A	N7-C8-N9	5.54	116.57	113.80
1	CA	629	G	C2-N3-C4	-5.54	109.13	111.90
1	CA	1502	A	N7-C8-N9	5.54	116.57	113.80
25	BA	1506	C	C6-N1-C2	-5.54	118.08	120.30
25	BA	2476	A	C4-C5-C6	5.54	119.77	117.00
25	BA	2501	C	N3-C4-C5	5.54	124.11	121.90
25	DA	33	U	C5-C4-O4	-5.54	122.58	125.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	975	C	C4-C5-C6	-5.54	114.63	117.40
25	DA	1113	U	N3-C2-O2	-5.54	118.32	122.20
1	AA	395	C	N3-C4-C5	-5.54	119.69	121.90
1	AA	774	G	C8-N9-C1'	-5.54	119.80	127.00
25	BA	738	G	C8-N9-C4	-5.54	104.19	106.40
25	BA	1023	U	N3-C2-O2	-5.54	118.33	122.20
25	BA	1312	U	N3-C2-O2	-5.54	118.33	122.20
25	BA	1770	G	N1-C6-O6	5.54	123.22	119.90
25	BA	2027	G	N1-C2-N2	-5.54	111.22	116.20
25	DA	1556	C	C5-C6-N1	-5.54	118.23	121.00
25	BA	418	G	N9-C4-C5	-5.53	103.19	105.40
25	BA	741	G	C5-C6-N1	5.53	114.27	111.50
25	BA	950	G	C2-N3-C4	-5.53	109.13	111.90
25	BA	950	G	N7-C8-N9	-5.53	110.33	113.10
25	DA	30	G	N9-C4-C5	5.53	107.61	105.40
43	BX	60	ARG	NE-CZ-NH1	5.53	123.07	120.30
1	AA	166	G	N7-C8-N9	5.53	115.86	113.10
1	AA	822	C	C6-N1-C2	5.53	122.51	120.30
16	AP	50	LYS	N-CA-C	-5.53	96.07	111.00
25	BA	472	A	C5-C6-N6	-5.53	119.28	123.70
25	BA	535	C	N3-C4-C5	-5.53	119.69	121.90
25	BA	768	G	C4-C5-C6	5.53	122.12	118.80
25	BA	867	C	C6-N1-C2	-5.53	118.09	120.30
25	BA	2260	C	N1-C2-N3	5.53	123.07	119.20
1	CA	427	U	N1-C2-O2	5.53	126.67	122.80
1	CA	856	C	N3-C4-C5	-5.53	119.69	121.90
25	DA	2781	A	C5-C6-N6	5.53	128.12	123.70
25	BA	565	C	N3-C2-O2	-5.53	118.03	121.90
25	DA	1983	C	C2-N3-C4	-5.53	117.14	119.90
1	AA	524	G	C8-N9-C4	-5.53	104.19	106.40
25	BA	1123	C	C4-C5-C6	5.53	120.16	117.40
25	BA	1281	G	N1-C6-O6	5.53	123.22	119.90
25	BA	2388	A	C8-N9-C4	-5.53	103.59	105.80
26	BB	95	C	N1-C2-N3	-5.53	115.33	119.20
1	CA	1325	C	C2-N1-C1'	-5.53	112.72	118.80
25	DA	1640	C	N3-C2-O2	-5.53	118.03	121.90
1	AA	93	G	N3-C2-N2	5.53	123.77	119.90
25	BA	1236	G	C5-C6-O6	-5.53	125.28	128.60
25	BA	1479	G	C5-C6-N1	-5.53	108.74	111.50
1	CA	299	G	N9-C4-C5	-5.53	103.19	105.40
23	CV	32	C	N1-C2-O2	5.53	122.22	118.90
25	DA	2291	U	C5-C4-O4	5.53	129.22	125.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2318	G	C4-N9-C1'	5.53	133.68	126.50
25	DA	2463	C	N1-C2-O2	-5.53	115.58	118.90
25	BA	366	C	N1-C2-O2	-5.52	115.59	118.90
25	BA	2598	A	N9-C4-C5	-5.52	103.59	105.80
25	DA	307	G	N3-C4-N9	5.52	129.31	126.00
25	DA	452	G	C5-C6-N1	5.52	114.26	111.50
25	BA	265	A	C4-N9-C1'	5.52	136.24	126.30
25	BA	572	A	C8-N9-C4	-5.52	103.59	105.80
25	BA	1321	A	C2-N3-C4	-5.52	107.84	110.60
25	BA	2819	G	C5-C6-O6	-5.52	125.29	128.60
1	CA	1077	G	N3-C4-C5	5.52	131.36	128.60
25	DA	187	G	C6-C5-N7	-5.52	127.09	130.40
1	AA	96	U	N1-C2-N3	-5.52	111.59	114.90
25	BA	132	G	C2-N3-C4	-5.52	109.14	111.90
25	BA	2375	G	C5-N7-C8	5.52	107.06	104.30
25	BA	2463	C	C5-C4-N4	-5.52	116.33	120.20
25	BA	2542	A	C5-C6-N1	-5.52	114.94	117.70
1	CA	76	C	C6-N1-C2	-5.52	118.09	120.30
1	CA	113	G	N1-C6-O6	5.52	123.21	119.90
1	AA	818	G	N3-C4-C5	-5.52	125.84	128.60
25	BA	579	G	N1-C6-O6	5.52	123.21	119.90
25	BA	1314	C	C6-N1-C1'	-5.52	114.18	120.80
25	BA	1315	C	N3-C4-N4	-5.52	114.14	118.00
25	BA	1392	A	C5-N7-C8	5.52	106.66	103.90
25	BA	2252	G	C4-C5-N7	5.52	113.01	110.80
1	CA	740	U	C2-N1-C1'	-5.52	111.08	117.70
1	CA	866	C	C6-N1-C2	-5.52	118.09	120.30
1	AA	439	A	N7-C8-N9	5.52	116.56	113.80
25	BA	608	A	N1-C6-N6	5.52	121.91	118.60
25	BA	1245	G	N3-C4-C5	-5.52	125.84	128.60
25	BA	725	G	N1-C2-N3	5.52	127.21	123.90
25	BA	878	A	C4-N9-C1'	5.52	136.23	126.30
26	BB	19	G	C4-C5-N7	5.52	113.01	110.80
1	AA	1507	A	C2-N3-C4	-5.51	107.84	110.60
25	BA	524	U	N1-C2-O2	5.51	126.66	122.80
25	BA	737	C	C5-C4-N4	-5.51	116.34	120.20
25	BA	1016	G	N3-C4-C5	5.51	131.36	128.60
1	CA	1274	G	N3-C4-C5	-5.51	125.84	128.60
25	DA	2002	G	C2-N3-C4	-5.51	109.14	111.90
1	AA	347	G	C8-N9-C1'	-5.51	119.83	127.00
25	BA	70	G	C8-N9-C4	-5.51	104.19	106.40
25	BA	352	G	C8-N9-C4	5.51	108.61	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1667	G	N7-C8-N9	-5.51	110.34	113.10
25	BA	1785	A	C5-C6-N6	-5.51	119.29	123.70
25	BA	2005	A	C6-N1-C2	-5.51	115.29	118.60
25	BA	2503	A	C6-N1-C2	-5.51	115.29	118.60
25	BA	2689	U	C4-C5-C6	5.51	123.01	119.70
25	DA	25	U	N3-C2-O2	5.51	126.06	122.20
25	DA	1509	C	C6-N1-C2	-5.51	118.09	120.30
25	DA	2821	A	C2-N3-C4	-5.51	107.84	110.60
25	BA	678	C	C2-N3-C4	-5.51	117.14	119.90
25	BA	1326	U	C5-C6-N1	-5.51	119.94	122.70
25	BA	2239	G	C8-N9-C4	5.51	108.60	106.40
1	CA	1227	A	N7-C8-N9	5.51	116.56	113.80
25	DA	1293	C	N3-C4-C5	5.51	124.10	121.90
1	AA	791	G	C2-N3-C4	-5.51	109.15	111.90
1	AA	872	A	C6-C5-N7	-5.51	128.44	132.30
25	BA	1266	G	C4-N9-C1'	-5.51	119.34	126.50
25	BA	1819	A	P-O3'-C3'	5.51	126.31	119.70
25	BA	2061	G	C2-N3-C4	5.51	114.65	111.90
1	CA	1497	G	N3-C2-N2	-5.51	116.05	119.90
25	BA	255	A	N1-C2-N3	5.51	132.05	129.30
25	BA	400	G	N9-C4-C5	5.51	107.60	105.40
25	BA	1188	U	C5-C4-O4	-5.51	122.60	125.90
25	DA	33	U	C6-N1-C2	5.51	124.30	121.00
25	DA	645	C	C2-N3-C4	5.51	122.65	119.90
25	DA	1235	G	C4-C5-N7	-5.51	108.60	110.80
25	DA	2100	G	C5-C6-O6	5.51	131.90	128.60
25	DA	2735	G	C5-C6-O6	-5.50	125.30	128.60
1	AA	1504	G	P-O3'-C3'	5.50	126.31	119.70
25	BA	1678	G	N3-C4-C5	-5.50	125.85	128.60
44	BY	92	ASN	N-CA-C	5.50	125.86	111.00
25	DA	1233	C	C5-C6-N1	5.50	123.75	121.00
25	DA	1663	C	C5-C4-N4	-5.50	116.35	120.20
1	AA	547	A	N9-C4-C5	5.50	108.00	105.80
1	AA	1138	G	C2-N3-C4	5.50	114.65	111.90
25	BA	1236	G	N1-C6-O6	5.50	123.20	119.90
25	BA	1920	C	C5-C6-N1	5.50	123.75	121.00
25	BA	2229	C	N1-C2-O2	5.50	122.20	118.90
25	BA	2268	A	C8-N9-C4	-5.50	103.60	105.80
25	BA	2299	G	N3-C2-N2	-5.50	116.05	119.90
25	BA	2482	G	C8-N9-C1'	-5.50	119.85	127.00
26	BB	112	U	C6-N1-C2	5.50	124.30	121.00
1	CA	644	G	C8-N9-C4	5.50	108.60	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1279	A	N3-C4-C5	-5.50	122.95	126.80
25	DA	62	C	C5-C6-N1	-5.50	118.25	121.00
25	DA	738	G	N1-C2-N2	-5.50	111.25	116.20
25	DA	811	U	C2-N1-C1'	-5.50	111.10	117.70
25	DA	1482	G	C5-C6-N1	5.50	114.25	111.50
25	DA	1647	G	N3-C4-C5	5.50	131.35	128.60
25	DA	1985	G	N1-C2-N3	5.50	127.20	123.90
25	DA	2023	G	N7-C8-N9	5.50	115.85	113.10
4	AD	110	PHE	CB-CG-CD1	5.50	124.65	120.80
25	BA	1296	G	C5-C6-N1	5.50	114.25	111.50
25	BA	2392	A	C8-N9-C1'	-5.50	117.80	127.70
48	B2	51	ARG	N-CA-C	-5.50	96.15	111.00
25	DA	1949	G	N1-C2-N3	5.50	127.20	123.90
25	BA	452	G	C2-N3-C4	5.50	114.65	111.90
25	BA	1336	A	N9-C4-C5	5.50	108.00	105.80
25	DA	592	G	N3-C4-N9	5.50	129.30	126.00
25	DA	678	C	N3-C4-C5	5.50	124.10	121.90
25	DA	1445(A)	C	C2-N1-C1'	5.50	124.85	118.80
25	DA	1754	C	C6-N1-C2	5.50	122.50	120.30
25	BA	927	G	N3-C2-N2	-5.50	116.05	119.90
25	BA	1769	G	N9-C4-C5	-5.50	103.20	105.40
25	BA	2330	G	C6-C5-N7	-5.50	127.10	130.40
19	CS	26	GLY	N-CA-C	5.50	126.84	113.10
25	DA	1579	A	C4-N9-C1'	5.50	136.19	126.30
25	DA	1826	G	N3-C4-N9	5.50	129.30	126.00
25	DA	2084	C	C6-N1-C2	5.50	122.50	120.30
25	BA	428	A	N1-C2-N3	5.50	132.05	129.30
25	BA	1027	A	C6-N1-C2	-5.50	115.30	118.60
25	DA	1202	C	N1-C2-O2	-5.50	115.60	118.90
25	BA	199	A	C5-C6-N1	5.49	120.45	117.70
25	BA	528	A	C8-N9-C1'	5.49	137.59	127.70
25	BA	563	G	C8-N9-C4	5.49	108.60	106.40
25	BA	695	G	N3-C2-N2	-5.49	116.06	119.90
25	BA	1586	A	C5-N7-C8	-5.49	101.15	103.90
25	BA	2256	G	C2-N3-C4	-5.49	109.15	111.90
25	BA	2468	G	C5-C6-O6	-5.49	125.30	128.60
25	DA	2205	C	C2-N3-C4	5.49	122.65	119.90
25	BA	966	G	C2-N3-C4	-5.49	109.15	111.90
25	BA	2446	G	C6-C5-N7	-5.49	127.11	130.40
25	DA	1350	C	N1-C2-O2	-5.49	115.61	118.90
25	BA	391	G	N9-C4-C5	-5.49	103.20	105.40
25	BA	2044	C	C5-C6-N1	-5.49	118.25	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2482	G	N1-C2-N3	5.49	127.19	123.90
1	CA	363	A	C8-N9-C4	5.49	108.00	105.80
1	AA	1341	U	N1-C2-N3	5.49	118.19	114.90
1	AA	1358	U	C2-N1-C1'	-5.49	111.11	117.70
25	BA	1630	G	N1-C2-N3	5.49	127.19	123.90
25	DA	1769	G	C4-C5-C6	5.49	122.09	118.80
25	DA	1966	A	C5-C6-N6	5.49	128.09	123.70
25	DA	2396	G	C5-C6-O6	-5.49	125.31	128.60
1	AA	165	C	N3-C2-O2	-5.49	118.06	121.90
1	AA	1126	U	C6-N1-C2	-5.49	117.71	121.00
25	BA	379	G	C2-N3-C4	-5.49	109.16	111.90
25	BA	810	U	N1-C2-O2	5.49	126.64	122.80
25	BA	1162	G	C6-N1-C2	-5.49	121.81	125.10
25	BA	1992	G	C6-N1-C2	-5.49	121.81	125.10
1	CA	363	A	C6-C5-N7	5.49	136.14	132.30
25	BA	1280	G	C2-N3-C4	-5.48	109.16	111.90
25	BA	1371	G	C8-N9-C1'	-5.48	119.87	127.00
25	BA	1229	G	N1-C2-N3	5.48	127.19	123.90
25	BA	1259	G	N1-C2-N2	-5.48	111.27	116.20
25	BA	1378	A	N3-C4-C5	5.48	130.64	126.80
25	BA	1959	G	C5-N7-C8	5.48	107.04	104.30
1	CA	597	G	N1-C6-O6	-5.48	116.61	119.90
25	DA	737	C	C5-C6-N1	-5.48	118.26	121.00
25	DA	1487	G	N3-C2-N2	-5.48	116.06	119.90
1	AA	693	G	C5-C6-O6	-5.48	125.31	128.60
1	AA	913	A	P-O3'-C3'	5.48	126.28	119.70
1	AA	1499	A	N9-C4-C5	-5.48	103.61	105.80
25	BA	1711	C	N3-C4-C5	5.48	124.09	121.90
1	CA	473	G	N3-C2-N2	-5.48	116.06	119.90
25	DA	509	C	C5-C6-N1	-5.48	118.26	121.00
25	DA	2206	G	N7-C8-N9	-5.48	110.36	113.10
25	DA	2296	U	N3-C2-O2	-5.48	118.36	122.20
25	BA	63	U	C5-C6-N1	-5.48	119.96	122.70
1	CA	764	C	C6-N1-C2	-5.48	118.11	120.30
25	DA	2713	A	N1-C6-N6	-5.48	115.31	118.60
1	AA	1205	U	N3-C4-C5	-5.48	111.31	114.60
25	BA	2015	A	N1-C2-N3	5.48	132.04	129.30
25	BA	2288	A	N1-C6-N6	5.48	121.89	118.60
1	CA	149	A	C3'-C2'-C1'	5.48	105.88	101.50
25	DA	666	G	C2-N3-C4	-5.48	109.16	111.90
25	DA	1602	U	C5-C6-N1	-5.48	119.96	122.70
25	DA	2607	G	C8-N9-C1'	-5.48	119.88	127.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	245	G	C8-N9-C4	5.48	108.59	106.40
25	BA	795	C	N1-C2-O2	5.48	122.19	118.90
25	BA	1626	G	C4-C5-N7	-5.48	108.61	110.80
26	DB	113	G	C5-C6-O6	-5.48	125.31	128.60
1	AA	483	C	C5-C6-N1	-5.47	118.26	121.00
25	BA	855	G	C4-C5-N7	5.47	112.99	110.80
25	BA	2377	A	C4-C5-N7	5.47	113.44	110.70
1	CA	73	G	C6-C5-N7	5.47	133.69	130.40
25	DA	1129	A	N1-C2-N3	-5.47	126.56	129.30
25	DA	1216	G	C4-N9-C1'	5.47	133.62	126.50
25	DA	1353	A	C6-N1-C2	-5.47	115.31	118.60
25	DA	1661	G	N1-C6-O6	5.47	123.18	119.90
25	DA	2033	A	C5-C6-N1	5.47	120.44	117.70
25	DA	2828	C	C5-C6-N1	-5.47	118.26	121.00
25	BA	749	C	C2-N3-C4	-5.47	117.16	119.90
25	BA	1317	A	N9-C4-C5	-5.47	103.61	105.80
25	BA	2429	G	C4-C5-C6	5.47	122.08	118.80
25	DA	428	A	C8-N9-C4	-5.47	103.61	105.80
25	BA	19	C	N3-C4-N4	5.47	121.83	118.00
25	BA	1204	A	C1'-O4'-C4'	-5.47	105.52	109.90
25	BA	2033	A	C8-N9-C4	5.47	107.99	105.80
25	BA	2342	C	C6-N1-C2	-5.47	118.11	120.30
25	BA	2429	G	N1-C2-N3	5.47	127.18	123.90
25	BA	1798	U	C2-N1-C1'	-5.47	111.14	117.70
25	BA	1936	A	C5-C6-N6	-5.47	119.33	123.70
25	BA	2271	G	N3-C4-N9	5.47	129.28	126.00
25	BA	330	A	N1-C6-N6	5.47	121.88	118.60
25	DA	443	A	C5-C6-N6	5.47	128.07	123.70
25	DA	2894	G	N3-C4-C5	-5.47	125.87	128.60
1	AA	92	C	C2-N3-C4	5.47	122.63	119.90
1	AA	1531	A	N7-C8-N9	5.47	116.53	113.80
25	BA	765	G	N1-C2-N3	-5.47	120.62	123.90
25	BA	2070	G	N1-C2-N3	5.47	127.18	123.90
25	DA	676	A	O4'-C1'-N9	5.47	112.57	108.20
25	DA	2876	G	N3-C4-N9	5.47	129.28	126.00
1	AA	932	C	C6-N1-C2	-5.46	118.11	120.30
25	BA	790	C	C5-C4-N4	-5.46	116.37	120.20
25	BA	848	G	C5-C6-N1	5.46	114.23	111.50
25	BA	1442	G	N3-C2-N2	-5.46	116.08	119.90
25	BA	2444	G	N3-C2-N2	-5.46	116.08	119.90
40	BU	36	ARG	NE-CZ-NH2	-5.46	117.57	120.30
25	DA	51	G	N3-C4-N9	5.46	129.28	126.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	765	G	C6-C5-N7	-5.46	127.12	130.40
25	BA	1256	G	C4-N9-C1'	5.46	133.60	126.50
25	BA	1671	U	C6-N1-C2	5.46	124.28	121.00
25	BA	1838	C	C5-C4-N4	-5.46	116.38	120.20
25	BA	2055	C	C6-N1-C1'	5.46	127.36	120.80
25	BA	2571	C	C2-N3-C4	-5.46	117.17	119.90
25	BA	2680	C	N1-C2-O2	-5.46	115.62	118.90
1	CA	1424	C	C6-N1-C2	-5.46	118.11	120.30
25	DA	1758	G	N1-C6-O6	-5.46	116.62	119.90
25	DA	1909	C	C4-C5-C6	5.46	120.13	117.40
1	AA	1499	A	C4-C5-N7	5.46	113.43	110.70
25	BA	259	G	N3-C4-C5	5.46	131.33	128.60
25	BA	487	C	C5-C4-N4	-5.46	116.38	120.20
25	BA	652(E)	G	C4-C5-N7	5.46	112.98	110.80
25	BA	793	A	C4-C5-C6	5.46	119.73	117.00
25	BA	823	G	N3-C4-C5	5.46	131.33	128.60
1	CA	1290	G	C5-C6-O6	-5.46	125.32	128.60
25	DA	1983	C	C4-C5-C6	5.46	120.13	117.40
1	AA	581	G	C5-C6-N1	-5.46	108.77	111.50
25	BA	2853	C	C6-N1-C2	5.46	122.48	120.30
25	DA	1355	G	C4-C5-C6	5.46	122.08	118.80
32	DI	101	LEU	CA-CB-CG	5.46	127.86	115.30
1	AA	754	C	C2-N1-C1'	5.46	124.80	118.80
1	AA	1138	G	C5-C6-N1	5.46	114.23	111.50
25	BA	798	G	C2-N3-C4	-5.46	109.17	111.90
25	BA	1551	C	C6-N1-C2	-5.46	118.12	120.30
25	DA	307	G	N3-C4-C5	-5.46	125.87	128.60
1	AA	1285	A	N7-C8-N9	5.46	116.53	113.80
1	AA	1366	C	C6-N1-C2	-5.46	118.12	120.30
25	BA	536	A	C5-C6-N1	5.46	120.43	117.70
25	BA	1698	A	N9-C4-C5	-5.46	103.62	105.80
26	BB	104	U	N1-C2-N3	5.46	118.17	114.90
25	DA	1254	A	N7-C8-N9	5.46	116.53	113.80
25	DA	2014	A	C6-N1-C2	-5.46	115.33	118.60
25	DA	2452	C	C5-C6-N1	5.46	123.73	121.00
1	AA	598	U	C6-N1-C2	-5.46	117.73	121.00
25	BA	1527	G	N3-C4-N9	-5.46	122.73	126.00
25	BA	2038	G	C5-C6-N1	-5.46	108.77	111.50
25	BA	2274	A	C4-C5-N7	5.46	113.43	110.70
1	CA	354	G	C4-C5-N7	5.46	112.98	110.80
1	CA	460	G	C5-C6-N1	-5.46	108.77	111.50
1	AA	666	G	N3-C4-N9	-5.45	122.73	126.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	12	U	N1-C2-O2	5.45	126.62	122.80
25	BA	1856	G	C2-N3-C4	-5.45	109.17	111.90
25	BA	2358	G	N1-C6-O6	-5.45	116.63	119.90
25	BA	2833	G	N3-C4-C5	-5.45	125.87	128.60
1	CA	827	U	N1-C2-O2	5.45	126.62	122.80
25	DA	1655	A	C2-N3-C4	-5.45	107.87	110.60
25	DA	2454	G	N1-C6-O6	-5.45	116.63	119.90
25	BA	1641	A	C8-N9-C4	-5.45	103.62	105.80
25	DA	1856	G	C8-N9-C4	-5.45	104.22	106.40
29	DF	170	LEU	CA-CB-CG	5.45	127.84	115.30
1	AA	740	U	C6-N1-C1'	5.45	128.83	121.20
22	AY	119	LEU	CA-CB-CG	5.45	127.83	115.30
25	BA	24	G	C5-C6-O6	5.45	131.87	128.60
25	BA	772	C	C2-N3-C4	-5.45	117.17	119.90
25	BA	1190	G	N3-C2-N2	5.45	123.72	119.90
25	BA	1408	C	N3-C2-O2	5.45	125.72	121.90
25	BA	1568	G	C5-N7-C8	-5.45	101.58	104.30
1	CA	1277	C	N3-C2-O2	-5.45	118.08	121.90
25	DA	1024	G	N1-C6-O6	5.45	123.17	119.90
26	DB	103	G	C6-C5-N7	-5.45	127.13	130.40
25	BA	154	G	N7-C8-N9	5.45	115.83	113.10
25	BA	2725	A	N3-C4-C5	5.45	130.62	126.80
25	BA	2791	C	C6-N1-C1'	-5.45	114.26	120.80
1	CA	1267	C	C6-N1-C1'	-5.45	114.26	120.80
25	DA	590	A	N3-C4-C5	5.45	130.61	126.80
25	DA	1142(A)	A	C4-C5-C6	5.45	119.72	117.00
1	AA	1495	U	C5-C6-N1	5.45	125.42	122.70
25	BA	652(T)	C	C5-C6-N1	5.45	123.72	121.00
1	CA	76	C	N1-C2-O2	5.45	122.17	118.90
25	DA	2067	G	N3-C2-N2	-5.45	116.09	119.90
25	BA	1977	A	N7-C8-N9	-5.44	111.08	113.80
25	BA	2422	A	C5-C6-N1	-5.44	114.98	117.70
1	CA	481	G	N3-C4-N9	5.44	129.27	126.00
1	AA	189(B)	C	C5-C6-N1	5.44	123.72	121.00
25	BA	74	A	C5-C6-N6	5.44	128.05	123.70
25	BA	465	G	C4-C5-N7	5.44	112.98	110.80
25	BA	656	G	C6-C5-N7	-5.44	127.14	130.40
25	BA	752	A	N1-C2-N3	5.44	132.02	129.30
25	BA	1558	A	P-O3'-C3'	5.44	126.23	119.70
25	BA	2335	A	C5-C6-N6	5.44	128.05	123.70
25	BA	2373	G	N1-C2-N3	5.44	127.17	123.90
45	BZ	67	LEU	CA-CB-CG	5.44	127.82	115.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
46	B0	25	ARG	NE-CZ-NH2	-5.44	117.58	120.30
1	CA	1141	C	C6-N1-C1'	5.44	127.33	120.80
1	CA	1195	C	C6-N1-C2	-5.44	118.12	120.30
25	DA	442	G	N1-C6-O6	-5.44	116.63	119.90
25	DA	932	G	C4-C5-N7	-5.44	108.62	110.80
25	DA	1440	G	C5-C6-O6	5.44	131.87	128.60
25	DA	1656	C	C6-N1-C2	-5.44	118.12	120.30
1	AA	741	G	N9-C4-C5	-5.44	103.22	105.40
25	BA	34	C	C2-N3-C4	5.44	122.62	119.90
25	BA	1193	G	C6-C5-N7	-5.44	127.14	130.40
25	BA	1424	G	C8-N9-C4	5.44	108.58	106.40
25	BA	1791	A	N1-C2-N3	5.44	132.02	129.30
25	BA	2026	C	C2-N3-C4	-5.44	117.18	119.90
25	BA	2252	G	N1-C2-N2	-5.44	111.30	116.20
25	DA	888	C	C5-C6-N1	5.44	123.72	121.00
1	AA	1116	C	C6-N1-C2	5.44	122.48	120.30
1	AA	1519	A	C4-C5-N7	-5.44	107.98	110.70
25	BA	266	G	C4-C5-N7	5.44	112.98	110.80
25	BA	1376	C	N3-C4-C5	5.44	124.08	121.90
25	DA	1192	G	C4-C5-N7	5.44	112.98	110.80
25	DA	2272	U	C6-N1-C2	-5.44	117.74	121.00
25	DA	2429	G	C6-C5-N7	-5.44	127.14	130.40
25	BA	183	C	C5-C6-N1	-5.44	118.28	121.00
25	BA	309	G	N3-C2-N2	5.44	123.71	119.90
25	BA	1198	U	C6-N1-C2	-5.44	117.74	121.00
25	BA	1334	G	C4-N9-C1'	5.44	133.57	126.50
25	BA	1378	A	C2-N3-C4	-5.44	107.88	110.60
25	BA	1584	C	C6-N1-C2	-5.44	118.12	120.30
25	DA	269	U	C2-N1-C1'	5.44	124.22	117.70
25	DA	620	G	N3-C4-C5	-5.44	125.88	128.60
1	AA	1282	C	C5-C4-N4	-5.44	116.39	120.20
1	AA	1384	C	C6-N1-C2	-5.44	118.13	120.30
14	AN	44	LEU	CB-CG-CD1	5.44	120.24	111.00
25	BA	2271	G	C6-C5-N7	-5.44	127.14	130.40
25	DA	1240	U	C6-N1-C2	-5.44	117.74	121.00
1	AA	832	C	C6-N1-C1'	-5.43	114.28	120.80
25	BA	121	G	C6-N1-C2	-5.43	121.84	125.10
25	BA	1850	G	C8-N9-C4	-5.43	104.23	106.40
25	BA	2647	U	N1-C2-O2	5.43	126.60	122.80
1	CA	446	G	C8-N9-C4	-5.43	104.23	106.40
25	DA	92	A	N1-C6-N6	5.43	121.86	118.60
25	DA	1678	G	N3-C4-C5	-5.43	125.88	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1781	C	N1-C2-O2	5.43	122.16	118.90
25	BA	930	U	N3-C4-O4	5.43	123.20	119.40
25	BA	1107	G	C5-C6-N1	5.43	114.22	111.50
25	BA	2001	A	C8-N9-C4	-5.43	103.63	105.80
25	BA	2675	A	C4-C5-N7	-5.43	107.98	110.70
50	B4	24	THR	N-CA-C	-5.43	96.33	111.00
1	CA	496	A	N1-C6-N6	5.43	121.86	118.60
1	CA	806	C	N1-C2-O2	5.43	122.16	118.90
1	CA	1523	G	N1-C6-O6	-5.43	116.64	119.90
25	DA	659	C	N3-C4-C5	5.43	124.07	121.90
25	DA	925	C	N3-C4-N4	-5.43	114.20	118.00
25	DA	1681	G	N3-C4-C5	5.43	131.32	128.60
1	AA	1502	A	C4-C5-C6	5.43	119.72	117.00
25	BA	288	C	N3-C4-N4	5.43	121.80	118.00
25	BA	521	G	C6-N1-C2	-5.43	121.84	125.10
25	BA	692	C	C5-C4-N4	-5.43	116.40	120.20
1	AA	63	C	C5-C6-N1	5.43	123.71	121.00
1	AA	521	G	N1-C6-O6	-5.43	116.64	119.90
25	BA	1437	C	C4-C5-C6	5.43	120.11	117.40
25	BA	2334	G	N3-C2-N2	5.43	123.70	119.90
25	BA	2482	G	C4-N9-C1'	5.43	133.56	126.50
26	BB	38	C	C2-N3-C4	-5.43	117.19	119.90
25	DA	2522	U	C5-C6-N1	-5.43	119.98	122.70
25	DA	2583	G	N9-C4-C5	5.43	107.57	105.40
25	DA	2599	G	N3-C4-N9	-5.43	122.74	126.00
25	BA	119	A	C4-C5-N7	-5.43	107.99	110.70
25	BA	2228	G	C6-C5-N7	-5.43	127.14	130.40
32	BI	31	LEU	CA-CB-CG	-5.43	102.81	115.30
1	CA	946	A	C4-C5-C6	5.43	119.71	117.00
25	DA	1347	G	N3-C4-N9	-5.43	122.74	126.00
25	BA	505	A	N1-C2-N3	5.43	132.01	129.30
25	BA	1109	C	C4-C5-C6	5.43	120.11	117.40
25	BA	1220	A	N1-C6-N6	-5.43	115.34	118.60
25	BA	1363	C	C2-N3-C4	-5.43	117.19	119.90
25	BA	1579	A	C4-C5-C6	5.43	119.71	117.00
25	BA	1616	A	C6-C5-N7	-5.43	128.50	132.30
25	BA	2867	G	C5-C6-N1	-5.43	108.79	111.50
1	CA	435	C	N1-C2-O2	5.43	122.16	118.90
25	DA	479	A	C2-N3-C4	5.43	113.31	110.60
25	DA	518	G	C8-N9-C4	-5.43	104.23	106.40
25	DA	1666	G	N1-C6-O6	5.43	123.16	119.90
1	AA	541	G	C8-N9-C1'	5.42	134.05	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1288	A	N1-C6-N6	-5.42	115.34	118.60
1	AA	1499	A	N1-C6-N6	5.42	121.86	118.60
25	BA	179	G	C2-N3-C4	-5.42	109.19	111.90
25	BA	842	G	C5-C6-N1	5.42	114.21	111.50
25	BA	2783	G	N9-C4-C5	-5.42	103.23	105.40
1	CA	976	G	C4-N9-C1'	5.42	133.55	126.50
25	DA	592	G	C6-C5-N7	-5.42	127.14	130.40
25	DA	760	G	N3-C4-C5	-5.42	125.89	128.60
1	AA	794	A	N1-C2-N3	5.42	132.01	129.30
1	AA	1077	G	N1-C6-O6	5.42	123.15	119.90
25	BA	2767	C	C5-C6-N1	-5.42	118.29	121.00
25	DA	1319	G	N7-C8-N9	5.42	115.81	113.10
25	DA	1767	C	N1-C2-N3	5.42	123.00	119.20
25	BA	122	G	C8-N9-C1'	-5.42	119.95	127.00
25	BA	827	U	N3-C4-C5	5.42	117.85	114.60
25	BA	1193	G	C6-N1-C2	-5.42	121.85	125.10
25	BA	1478	G	N3-C4-C5	-5.42	125.89	128.60
1	CA	863	U	C5-C4-O4	5.42	129.15	125.90
1	CA	1225	A	N7-C8-N9	5.42	116.51	113.80
1	CA	1286	A	C8-N9-C4	-5.42	103.63	105.80
1	CA	1526	G	C8-N9-C4	5.42	108.57	106.40
25	BA	2823	A	N1-C2-N3	5.42	132.01	129.30
25	BA	2872	G	N1-C6-O6	5.42	123.15	119.90
25	BA	2879	C	N1-C2-O2	5.42	122.15	118.90
1	CA	481	G	C6-C5-N7	-5.42	127.15	130.40
25	BA	312	G	N1-C6-O6	5.42	123.15	119.90
25	BA	394	A	N7-C8-N9	-5.42	111.09	113.80
25	BA	2754	U	C5-C4-O4	-5.42	122.65	125.90
26	BB	71	C	C2-N3-C4	-5.42	117.19	119.90
1	CA	129(A)	G	C2-N3-C4	-5.42	109.19	111.90
25	DA	1143	A	C4-C5-C6	5.42	119.71	117.00
25	DA	2700	C	C2-N3-C4	-5.42	117.19	119.90
1	AA	479	C	N3-C4-C5	-5.42	119.73	121.90
1	AA	1019	C	C6-N1-C1'	5.42	127.30	120.80
23	AV	7	G	N3-C4-N9	-5.42	122.75	126.00
25	BA	798	G	N1-C6-O6	-5.42	116.65	119.90
25	DA	489	G	C5-C6-O6	5.42	131.85	128.60
25	DA	507	A	C8-N9-C4	5.42	107.97	105.80
25	DA	662	G	C8-N9-C4	5.42	108.57	106.40
25	DA	1681	G	N3-C4-N9	-5.42	122.75	126.00
1	AA	547	A	N1-C6-N6	-5.41	115.35	118.60
25	BA	583	G	C8-N9-C4	-5.41	104.23	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	916	G	C6-C5-N7	-5.41	127.15	130.40
25	BA	943	U	N3-C4-C5	-5.41	111.35	114.60
25	BA	1310	G	C8-N9-C4	5.41	108.56	106.40
25	DA	743	G	C5-C6-O6	-5.41	125.35	128.60
25	DA	797	C	N3-C4-C5	-5.41	119.73	121.90
25	BA	71	A	N1-C6-N6	5.41	121.85	118.60
25	BA	1308	A	C5-C6-N6	5.41	128.03	123.70
25	BA	2603	G	C4-C5-N7	5.41	112.97	110.80
1	CA	953	G	N3-C4-C5	-5.41	125.89	128.60
25	DA	2281	C	C6-N1-C2	-5.41	118.14	120.30
1	AA	342	C	N3-C2-O2	-5.41	118.11	121.90
1	AA	1277	C	C6-N1-C2	-5.41	118.14	120.30
25	BA	614	U	N3-C4-O4	-5.41	115.61	119.40
25	BA	682	G	C8-N9-C1'	-5.41	119.97	127.00
25	BA	1141	U	C5-C4-O4	5.41	129.15	125.90
25	BA	1187	G	N7-C8-N9	5.41	115.81	113.10
25	BA	1632	A	C4-C5-N7	5.41	113.41	110.70
25	BA	1968	G	C5-N7-C8	-5.41	101.59	104.30
25	BA	2318	G	C4-N9-C1'	5.41	133.53	126.50
25	BA	2602	A	C5-C6-N6	-5.41	119.37	123.70
25	BA	124	G	C8-N9-C4	5.41	108.56	106.40
25	BA	197	A	C8-N9-C4	-5.41	103.64	105.80
25	BA	516	C	C5-C4-N4	-5.41	116.41	120.20
25	BA	542	C	C6-N1-C2	5.41	122.46	120.30
25	BA	797	C	C4-C5-C6	5.41	120.10	117.40
26	BB	79	C	N3-C2-O2	-5.41	118.11	121.90
1	CA	1518	A	C4-C5-C6	5.41	119.70	117.00
25	DA	945	A	C4-C5-C6	5.41	119.70	117.00
26	DB	74	U	C5-C4-O4	5.41	129.15	125.90
1	AA	677	U	N1-C2-O2	-5.41	119.02	122.80
25	BA	752	A	N1-C6-N6	-5.41	115.36	118.60
25	DA	271	A	C8-N9-C4	5.41	107.96	105.80
25	BA	564	C	C4-C5-C6	-5.41	114.70	117.40
25	BA	724	U	N3-C4-O4	5.41	123.18	119.40
25	BA	2767	C	C6-N1-C2	-5.41	118.14	120.30
1	CA	1378	C	C6-N1-C2	-5.41	118.14	120.30
1	CA	1401	G	C5-N7-C8	-5.41	101.60	104.30
25	DA	1765	C	C5-C6-N1	5.41	123.70	121.00
25	DA	2040	C	C6-N1-C2	5.41	122.46	120.30
25	BA	622	G	C8-N9-C1'	-5.40	119.97	127.00
25	BA	1387	C	C6-N1-C2	-5.40	118.14	120.30
25	BA	1406	U	C2-N3-C4	-5.40	123.76	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	299	G	C4-C5-C6	5.40	122.04	118.80
25	DA	533	G	N1-C2-N3	5.40	127.14	123.90
25	DA	1617	C	N1-C2-O2	-5.40	115.66	118.90
1	AA	238	G	C8-N9-C4	5.40	108.56	106.40
25	BA	133	C	C2-N1-C1'	-5.40	112.86	118.80
25	BA	260	G	N9-C4-C5	5.40	107.56	105.40
25	BA	726	G	N1-C2-N2	-5.40	111.34	116.20
25	BA	988	A	N1-C2-N3	5.40	132.00	129.30
25	BA	1252	G	N7-C8-N9	-5.40	110.40	113.10
25	BA	1560	G	C4-C5-N7	-5.40	108.64	110.80
26	BB	116	G	C8-N9-C1'	-5.40	119.98	127.00
25	DA	142	A	N1-C6-N6	-5.40	115.36	118.60
25	DA	806	C	C2-N1-C1'	5.40	124.74	118.80
25	DA	1395	A	N9-C4-C5	5.40	107.96	105.80
25	DA	1997	G	C6-N1-C2	-5.40	121.86	125.10
25	DA	2066	C	N3-C4-N4	5.40	121.78	118.00
25	DA	2831	G	C8-N9-C4	5.40	108.56	106.40
25	BA	678	C	N3-C4-N4	5.40	121.78	118.00
25	BA	939	G	N1-C2-N2	-5.40	111.34	116.20
25	BA	1767	C	C2-N3-C4	-5.40	117.20	119.90
25	DA	127	A	C8-N9-C4	5.40	107.96	105.80
25	DA	139(A)	G	N3-C4-C5	-5.40	125.90	128.60
25	DA	265	A	C4-N9-C1'	5.40	136.02	126.30
25	BA	2356	C	C6-N1-C2	-5.40	118.14	120.30
25	DA	2244	U	C4-C5-C6	5.40	122.94	119.70
1	AA	260	G	N3-C4-C5	5.40	131.30	128.60
1	AA	1129	C	N3-C2-O2	-5.40	118.12	121.90
25	BA	1382	G	N1-C6-O6	5.40	123.14	119.90
25	BA	2446	G	C5-C6-O6	-5.40	125.36	128.60
46	B0	44	ARG	NE-CZ-NH1	-5.40	117.60	120.30
55	B9	19	ARG	NE-CZ-NH1	-5.40	117.60	120.30
25	DA	733	G	C8-N9-C1'	-5.40	119.98	127.00
25	DA	1650	G	N1-C6-O6	5.40	123.14	119.90
1	AA	1364	U	N3-C4-O4	-5.40	115.62	119.40
25	BA	1847	A	C2-N3-C4	5.40	113.30	110.60
25	BA	2345	G	C6-C5-N7	-5.40	127.16	130.40
1	CA	129(A)	G	C8-N9-C1'	-5.40	119.99	127.00
25	DA	1791	A	C5-C6-N6	-5.40	119.38	123.70
25	DA	2191	G	N3-C4-N9	-5.40	122.76	126.00
1	AA	108	G	N1-C6-O6	5.39	123.14	119.90
1	AA	501	C	C6-N1-C2	-5.39	118.14	120.30
25	BA	692	C	N1-C2-O2	-5.39	115.66	118.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1807	G	C4-C5-N7	5.39	112.96	110.80
25	BA	2644	G	N9-C4-C5	5.39	107.56	105.40
1	CA	728	A	N1-C2-N3	5.39	132.00	129.30
25	DA	425	G	C4-N9-C1'	5.39	133.51	126.50
1	AA	260	G	N3-C4-N9	-5.39	122.76	126.00
25	BA	22	C	N3-C4-C5	5.39	124.06	121.90
25	BA	90	U	N3-C4-C5	-5.39	111.36	114.60
25	BA	2260	C	C5-C6-N1	-5.39	118.30	121.00
25	BA	2853	C	C5-C6-N1	-5.39	118.30	121.00
1	CA	1391	U	N3-C2-O2	-5.39	118.42	122.20
25	DA	702	G	C8-N9-C4	5.39	108.56	106.40
25	DA	979	G	N7-C8-N9	5.39	115.80	113.10
25	DA	2022	U	N1-C2-O2	-5.39	119.03	122.80
1	AA	505	G	C5-N7-C8	-5.39	101.61	104.30
1	AA	1252	A	N1-C6-N6	-5.39	115.36	118.60
25	BA	1619	G	N3-C2-N2	-5.39	116.13	119.90
25	BA	1755	A	N1-C6-N6	-5.39	115.36	118.60
25	BA	2572	A	N1-C6-N6	5.39	121.83	118.60
25	DA	761	A	C5-N7-C8	5.39	106.59	103.90
25	BA	124	G	N3-C4-C5	5.39	131.29	128.60
25	BA	449	A	N1-C6-N6	5.39	121.83	118.60
25	BA	494	G	C6-N1-C2	-5.39	121.87	125.10
25	BA	579	G	C8-N9-C4	-5.39	104.24	106.40
25	BA	872	A	N1-C2-N3	5.39	132.00	129.30
25	BA	933	A	C5-C6-N6	-5.39	119.39	123.70
25	BA	990	A	C5-N7-C8	-5.39	101.21	103.90
25	DA	2304	G	C8-N9-C4	-5.39	104.24	106.40
25	DA	2621	A	N1-C2-N3	5.39	131.99	129.30
1	AA	421	U	N1-C2-O2	5.39	126.57	122.80
1	AA	1087	G	N7-C8-N9	5.39	115.79	113.10
25	BA	521	G	N3-C4-C5	-5.39	125.91	128.60
25	BA	2339	G	N1-C6-O6	5.39	123.13	119.90
25	DA	928	G	C4-N9-C1'	5.39	133.50	126.50
25	DA	1779	U	C2-N1-C1'	5.39	124.17	117.70
1	AA	1232	U	C5-C4-O4	-5.39	122.67	125.90
25	BA	1142(A)	A	C8-N9-C1'	5.39	137.40	127.70
25	BA	1626	G	N9-C4-C5	5.39	107.56	105.40
1	CA	325	A	N1-C6-N6	-5.39	115.37	118.60
1	AA	1354	C	N3-C2-O2	-5.38	118.13	121.90
25	BA	266	G	C6-C5-N7	-5.38	127.17	130.40
25	BA	1818	U	N1-C2-N3	5.38	118.13	114.90
25	BA	2542	A	C6-N1-C2	5.38	121.83	118.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	B7	47	ARG	NE-CZ-NH2	-5.38	117.61	120.30
25	DA	833	U	N1-C2-O2	-5.38	119.03	122.80
25	DA	1569	A	C8-N9-C4	-5.38	103.65	105.80
25	DA	2583	G	C8-N9-C4	-5.38	104.25	106.40
25	BA	529	A	C6-C5-N7	-5.38	128.53	132.30
25	BA	1030	G	C4-C5-N7	5.38	112.95	110.80
25	BA	2828	C	N3-C4-C5	5.38	124.05	121.90
1	CA	915	A	N1-C6-N6	-5.38	115.37	118.60
1	CA	1223	C	N1-C2-O2	5.38	122.13	118.90
1	AA	1067	A	C8-N9-C4	-5.38	103.65	105.80
1	AA	1298	C	N1-C2-O2	5.38	122.13	118.90
25	BA	1018	C	C6-N1-C2	5.38	122.45	120.30
25	BA	1889	A	C6-C5-N7	-5.38	128.53	132.30
25	BA	2586	C	C5-C4-N4	-5.38	116.43	120.20
26	BB	16	G	N3-C2-N2	5.38	123.67	119.90
25	DA	614(C)	A	N1-C6-N6	-5.38	115.37	118.60
26	DB	90	A	C8-N9-C4	5.38	107.95	105.80
25	BA	2540	C	C5-C6-N1	-5.38	118.31	121.00
25	DA	855	G	C6-C5-N7	-5.38	127.17	130.40
25	BA	113	G	N1-C2-N2	5.38	121.04	116.20
25	BA	1990	C	C6-N1-C2	-5.38	118.15	120.30
25	BA	2362	G	N1-C2-N2	-5.38	111.36	116.20
25	BA	2513	G	C5-C6-O6	-5.38	125.37	128.60
1	CA	1133	G	C5-C6-O6	5.38	131.83	128.60
25	DA	1264	G	C2-N3-C4	-5.38	109.21	111.90
25	DA	1638	C	C5-C6-N1	-5.38	118.31	121.00
25	BA	704	G	N3-C2-N2	-5.38	116.14	119.90
25	BA	720	C	C6-N1-C2	5.38	122.45	120.30
25	BA	1278	A	C2-N3-C4	-5.38	107.91	110.60
25	BA	2557	G	C6-C5-N7	-5.38	127.17	130.40
1	CA	728	A	C4-C5-C6	5.38	119.69	117.00
25	DA	1558	A	C5-N7-C8	-5.38	101.21	103.90
25	DA	2581	G	N3-C4-C5	-5.38	125.91	128.60
25	BA	27	G	C6-C5-N7	-5.38	127.17	130.40
25	BA	2492	U	N1-C2-O2	5.38	126.56	122.80
25	DA	76	C	C6-N1-C2	-5.38	118.15	120.30
25	DA	1587	A	C2-N3-C4	5.38	113.29	110.60
1	AA	713	G	N3-C4-C5	-5.37	125.91	128.60
25	BA	202	U	C6-N1-C2	5.37	124.22	121.00
25	BA	1334	G	C5-C6-N1	-5.37	108.81	111.50
25	BA	1389	G	C5-C6-N1	-5.37	108.81	111.50
25	BA	1561	G	C4-C5-N7	5.37	112.95	110.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1815	A	N9-C4-C5	5.37	107.95	105.80
25	BA	2327	A	C2-N3-C4	5.37	113.29	110.60
25	BA	2353	G	C8-N9-C4	5.37	108.55	106.40
25	DA	517	C	C5-C4-N4	-5.37	116.44	120.20
25	DA	745	G	C5-C6-N1	-5.37	108.81	111.50
25	DA	1960	A	C2-N3-C4	-5.37	107.91	110.60
26	DB	25	A	N1-C6-N6	5.37	121.82	118.60
25	BA	147	U	C5-C6-N1	-5.37	120.02	122.70
25	BA	499	U	C6-N1-C2	-5.37	117.78	121.00
25	BA	702	G	N7-C8-N9	-5.37	110.42	113.10
25	BA	1828	G	C8-N9-C4	5.37	108.55	106.40
25	DA	488	G	C5-N7-C8	5.37	106.99	104.30
25	DA	2384	G	N1-C6-O6	5.37	123.12	119.90
1	AA	1264	C	C2-N1-C1'	5.37	124.71	118.80
1	CA	320	C	C2-N1-C1'	-5.37	112.89	118.80
1	CA	865	A	C8-N9-C4	-5.37	103.65	105.80
25	DA	893	C	C2-N1-C1'	5.37	124.71	118.80
25	DA	1644	C	N3-C2-O2	-5.37	118.14	121.90
25	BA	53	A	C6-N1-C2	-5.37	115.38	118.60
25	BA	747	U	N3-C4-O4	5.37	123.16	119.40
26	BB	89	G	C8-N9-C4	-5.37	104.25	106.40
25	DA	428	A	N3-C4-C5	-5.37	123.04	126.80
25	DA	1265	A	C2-N3-C4	-5.37	107.92	110.60
25	DA	2018	G	C8-N9-C4	-5.37	104.25	106.40
25	BA	80	G	N3-C2-N2	-5.37	116.14	119.90
25	BA	886	C	N1-C2-O2	5.37	122.12	118.90
25	BA	2851	A	N9-C4-C5	-5.37	103.65	105.80
1	AA	734	G	C6-N1-C2	5.37	128.32	125.10
25	BA	115	C	N3-C2-O2	5.37	125.66	121.90
25	BA	678	C	C5-C4-N4	-5.37	116.44	120.20
25	BA	952	G	C5-C6-O6	-5.37	125.38	128.60
25	BA	953	A	N1-C6-N6	-5.37	115.38	118.60
25	BA	2676	C	C5-C4-N4	-5.37	116.44	120.20
25	BA	2703	C	C2-N3-C4	-5.37	117.22	119.90
25	BA	2835	A	N1-C2-N3	5.37	131.98	129.30
25	DA	668	G	N1-C6-O6	5.37	123.12	119.90
25	DA	1899	G	N9-C4-C5	-5.37	103.25	105.40
23	AV	75	C	C2-N3-C4	-5.36	117.22	119.90
25	BA	827	U	N1-C2-O2	-5.36	119.05	122.80
25	BA	1577	C	C4-C5-C6	5.36	120.08	117.40
25	BA	1695	G	C4-N9-C1'	5.36	133.47	126.50
28	BE	72	VAL	N-CA-C	5.36	125.48	111.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	865	A	C4-C5-N7	5.36	113.38	110.70
1	CA	1467	G	N3-C4-N9	-5.36	122.78	126.00
25	DA	494	G	C8-N9-C4	5.36	108.55	106.40
25	DA	962	G	C6-C5-N7	-5.36	127.18	130.40
25	DA	1216	G	C8-N9-C1'	-5.36	120.03	127.00
25	DA	1372	U	C5-C4-O4	-5.36	122.68	125.90
25	BA	642	G	C8-N9-C4	-5.36	104.25	106.40
25	BA	1751	C	N1-C2-O2	-5.36	115.68	118.90
25	BA	1982	C	C2-N1-C1'	5.36	124.70	118.80
25	BA	2349	G	C8-N9-C4	-5.36	104.25	106.40
1	CA	119	A	P-O3'-C3'	5.36	126.14	119.70
1	CA	372	C	N3-C4-C5	5.36	124.05	121.90
1	AA	804	U	C2-N3-C4	-5.36	123.78	127.00
25	BA	776	G	C4-C5-N7	-5.36	108.66	110.80
25	BA	974	G	C5-C6-N1	5.36	114.18	111.50
25	BA	2501	C	N3-C4-N4	-5.36	114.25	118.00
25	DA	2099	U	C6-N1-C2	-5.36	117.78	121.00
25	BA	146	G	N9-C4-C5	-5.36	103.26	105.40
25	BA	1107	G	N7-C8-N9	5.36	115.78	113.10
25	BA	1163	G	C5-C6-O6	-5.36	125.39	128.60
25	BA	2422	A	C2-N3-C4	-5.36	107.92	110.60
25	DA	930	U	C6-N1-C2	5.36	124.22	121.00
25	DA	2771	C	N1-C2-O2	5.36	122.11	118.90
1	AA	494	U	N3-C4-C5	5.36	117.81	114.60
1	AA	836	G	C4-C5-N7	5.36	112.94	110.80
25	BA	590	A	N1-C2-N3	5.36	131.98	129.30
25	BA	1653	G	C4-N9-C1'	5.36	133.46	126.50
25	BA	1773	A	C4-C5-C6	5.36	119.68	117.00
25	BA	2286	A	C5-C6-N1	-5.36	115.02	117.70
1	CA	682	G	C8-N9-C4	-5.36	104.26	106.40
25	DA	1832	C	N3-C2-O2	5.36	125.65	121.90
25	DA	1839	G	C8-N9-C4	5.36	108.54	106.40
23	AV	69	C	N1-C2-O2	5.36	122.11	118.90
25	BA	555	U	N3-C2-O2	5.36	125.95	122.20
25	BA	2447	G	N9-C4-C5	-5.36	103.26	105.40
25	BA	2769	C	N1-C2-N3	5.36	122.95	119.20
25	BA	2823	A	C5-C6-N6	-5.36	119.42	123.70
1	CA	1441	G	N3-C4-C5	-5.36	125.92	128.60
25	BA	656	G	C4-C5-C6	5.35	122.01	118.80
25	BA	1561	G	C5-C6-O6	-5.35	125.39	128.60
25	BA	2606	C	C5-C6-N1	-5.35	118.32	121.00
1	CA	240	C	N3-C4-N4	-5.35	114.25	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	747	U	C5-C4-O4	-5.35	122.69	125.90
25	DA	1273	U	C4-C5-C6	5.35	122.91	119.70
25	DA	2360	A	C8-N9-C4	5.35	107.94	105.80
25	DA	2503	A	C5-C6-N1	5.35	120.38	117.70
1	AA	102	G	C8-N9-C4	-5.35	104.26	106.40
1	AA	280	C	C6-N1-C2	5.35	122.44	120.30
1	AA	1335	C	C6-N1-C2	5.35	122.44	120.30
25	BA	921	G	N3-C4-C5	-5.35	125.92	128.60
25	BA	1321	A	C4-C5-C6	5.35	119.68	117.00
25	BA	1800	C	N3-C2-O2	5.35	125.65	121.90
1	CA	305	G	C5-C6-O6	5.35	131.81	128.60
25	DA	506	G	C5-C6-O6	-5.35	125.39	128.60
25	DA	1519	G	C8-N9-C4	-5.35	104.26	106.40
25	DA	1936	A	N1-C6-N6	5.35	121.81	118.60
1	AA	660	G	C6-C5-N7	-5.35	127.19	130.40
25	BA	1144	G	C5-C6-N1	5.35	114.18	111.50
25	DA	2235	G	C8-N9-C4	-5.35	104.26	106.40
25	DA	2394	C	N3-C2-O2	-5.35	118.15	121.90
25	BA	1259	G	N1-C2-N3	5.35	127.11	123.90
25	BA	2206	G	C4-N9-C1'	-5.35	119.55	126.50
25	BA	2640	G	C4-C5-N7	-5.35	108.66	110.80
25	DA	2373	G	N7-C8-N9	-5.35	110.42	113.10
1	AA	529	G	N3-C4-N9	5.35	129.21	126.00
1	AA	1293	G	N3-C4-N9	5.35	129.21	126.00
25	BA	197	A	C5-C6-N1	-5.35	115.03	117.70
25	BA	259	G	C6-C5-N7	-5.35	127.19	130.40
25	BA	2727	G	N1-C6-O6	5.35	123.11	119.90
25	DA	188	G	N1-C6-O6	5.35	123.11	119.90
25	DA	1277	G	C4-N9-C1'	-5.35	119.55	126.50
25	DA	2405	G	C4-N9-C1'	5.35	133.45	126.50
1	AA	1370	G	N1-C6-O6	5.35	123.11	119.90
25	BA	967	C	C6-N1-C2	5.35	122.44	120.30
25	DA	895	U	C5-C6-N1	5.35	125.37	122.70
1	AA	1282	C	N1-C2-O2	5.34	122.11	118.90
23	AV	21	A	N1-C6-N6	-5.34	115.39	118.60
25	BA	12	U	C6-N1-C2	-5.34	117.79	121.00
25	BA	17	G	C2-N3-C4	5.34	114.57	111.90
25	BA	216	A	C2-N3-C4	-5.34	107.93	110.60
25	BA	758	C	C2-N3-C4	-5.34	117.23	119.90
25	BA	1116	C	C6-N1-C1'	-5.34	114.39	120.80
26	BB	112	U	C4-C5-C6	5.34	122.91	119.70
1	CA	1133	G	N3-C4-C5	5.34	131.27	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1322	A	C2-N3-C4	-5.34	107.93	110.60
25	DA	1687	G	N1-C6-O6	-5.34	116.69	119.90
47	D1	21	ARG	NE-CZ-NH1	5.34	122.97	120.30
25	BA	2440	C	C5-C6-N1	-5.34	118.33	121.00
1	CA	728	A	N9-C4-C5	5.34	107.94	105.80
23	AV	8	U	C5-C4-O4	5.34	129.10	125.90
25	BA	434	U	C5-C6-N1	-5.34	120.03	122.70
25	BA	638	G	C8-N9-C4	-5.34	104.26	106.40
25	BA	2091	U	N3-C4-C5	-5.34	111.39	114.60
25	BA	2253	G	C4-C5-N7	5.34	112.94	110.80
1	AA	1236	A	C8-N9-C4	5.34	107.94	105.80
25	BA	272	G	C2-N3-C4	5.34	114.57	111.90
25	BA	318	C	N3-C2-O2	-5.34	118.16	121.90
25	BA	1597	A	C5-C6-N6	-5.34	119.43	123.70
26	BB	116	G	N1-C2-N2	-5.34	111.39	116.20
25	DA	1831	G	C8-N9-C4	-5.34	104.26	106.40
25	DA	2541	A	N1-C6-N6	5.34	121.80	118.60
25	DA	2622	C	C2-N1-C1'	-5.34	112.93	118.80
25	BA	201	C	C5-C6-N1	-5.34	118.33	121.00
25	BA	790	C	N1-C2-N3	-5.34	115.46	119.20
25	BA	1129	A	C6-N1-C2	-5.34	115.40	118.60
25	DA	1964	G	C4-N9-C1'	5.34	133.44	126.50
1	AA	496	A	C4-C5-C6	5.34	119.67	117.00
25	BA	1145	C	N3-C4-N4	5.34	121.74	118.00
25	BA	1970	A	C4-N9-C1'	5.34	135.91	126.30
1	CA	483	C	C6-N1-C2	5.34	122.44	120.30
25	DA	1330	C	N3-C2-O2	5.34	125.64	121.90
23	AV	12	G	C6-C5-N7	5.33	133.60	130.40
25	BA	1395	A	N9-C4-C5	5.33	107.93	105.80
25	BA	1627	G	C5-C6-N1	-5.33	108.83	111.50
25	BA	2076	U	C4-C5-C6	5.33	122.90	119.70
25	DA	2714	G	N3-C2-N2	-5.33	116.17	119.90
1	AA	365	U	C5-C4-O4	5.33	129.10	125.90
25	BA	173	G	C5-C6-O6	-5.33	125.40	128.60
25	BA	430	G	C5-C6-O6	-5.33	125.40	128.60
25	BA	591	C	C5-C6-N1	-5.33	118.33	121.00
25	BA	646	A	C2-N3-C4	-5.33	107.93	110.60
25	BA	1265	A	N1-C2-N3	5.33	131.97	129.30
25	BA	1383	C	N3-C4-N4	5.33	121.73	118.00
25	BA	1587	A	C6-N1-C2	-5.33	115.40	118.60
25	BA	2037	G	N3-C4-C5	-5.33	125.93	128.60
1	CA	776	G	N9-C4-C5	5.33	107.53	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	482	A	C8-N9-C4	5.33	107.93	105.80
25	DA	1305	C	C5-C6-N1	5.33	123.67	121.00
25	DA	1999	C	C2-N3-C4	-5.33	117.23	119.90
25	BA	745	G	N1-C6-O6	5.33	123.10	119.90
25	BA	1125	G	C5-C6-O6	5.33	131.80	128.60
25	BA	1833	U	C6-N1-C2	-5.33	117.80	121.00
25	BA	1901	A	N1-C6-N6	-5.33	115.40	118.60
25	BA	2605	U	C2-N3-C4	5.33	130.20	127.00
1	CA	894	G	C8-N9-C4	5.33	108.53	106.40
1	AA	1225	A	N7-C8-N9	5.33	116.47	113.80
25	BA	1588	C	C2-N1-C1'	5.33	124.66	118.80
25	BA	1649	G	N1-C6-O6	5.33	123.10	119.90
25	BA	2339	G	C8-N9-C4	5.33	108.53	106.40
1	CA	299	G	C2-N3-C4	-5.33	109.23	111.90
1	AA	117	G	N3-C2-N2	-5.33	116.17	119.90
1	AA	1070	U	N3-C2-O2	5.33	125.93	122.20
25	BA	78	A	C5-C6-N6	-5.33	119.44	123.70
25	BA	885	C	N1-C2-O2	5.33	122.10	118.90
25	BA	2250	G	N7-C8-N9	5.33	115.76	113.10
26	BB	26	A	C2-N3-C4	-5.33	107.94	110.60
1	CA	965	A	C8-N9-C4	5.33	107.93	105.80
25	DA	1320	C	N1-C2-O2	-5.33	115.70	118.90
25	DA	1353	A	N1-C6-N6	-5.33	115.40	118.60
25	DA	2515	C	C6-N1-C2	-5.33	118.17	120.30
1	CA	305	G	N1-C2-N3	5.33	127.10	123.90
25	DA	2766	G	C4-C5-N7	5.33	112.93	110.80
28	DE	78	LEU	CA-CB-CG	5.33	127.55	115.30
25	BA	143	G	N1-C6-O6	-5.33	116.70	119.90
25	BA	2055	C	C2-N1-C1'	-5.33	112.94	118.80
25	BA	2755	C	C2-N3-C4	5.33	122.56	119.90
23	CV	28	C	C5-C6-N1	5.33	123.66	121.00
1	AA	44	G	C6-C5-N7	-5.32	127.21	130.40
25	BA	432	A	N9-C4-C5	-5.32	103.67	105.80
25	BA	1623	G	C4-C5-N7	5.32	112.93	110.80
25	BA	2501	C	N3-C2-O2	-5.32	118.17	121.90
25	BA	2523	G	N3-C2-N2	-5.32	116.17	119.90
25	BA	2747	G	C6-C5-N7	-5.32	127.21	130.40
1	CA	1120	G	C8-N9-C4	-5.32	104.27	106.40
25	DA	1675	C	C5-C4-N4	5.32	123.93	120.20
1	AA	928	G	N9-C4-C5	-5.32	103.27	105.40
26	BB	75	G	C4-C5-C6	5.32	121.99	118.80
1	CA	802	A	N7-C8-N9	5.32	116.46	113.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	884	U	N3-C4-O4	5.32	123.13	119.40
1	AA	47	C	C4-C5-C6	5.32	120.06	117.40
1	AA	916	G	N1-C6-O6	5.32	123.09	119.90
25	BA	1573	G	C4-N9-C1'	-5.32	119.58	126.50
25	BA	2579	C	N3-C2-O2	-5.32	118.17	121.90
1	CA	863	U	C2-N1-C1'	-5.32	111.32	117.70
25	DA	776	G	C8-N9-C1'	-5.32	120.08	127.00
25	DA	945	A	C5-C6-N1	-5.32	115.04	117.70
25	BA	1044	G	N1-C6-O6	-5.32	116.71	119.90
25	BA	2751	G	N3-C4-N9	5.32	129.19	126.00
25	DA	789	A	C8-N9-C4	-5.32	103.67	105.80
25	DA	2644	G	C4-C5-N7	-5.32	108.67	110.80
25	BA	1920	C	C5-C4-N4	-5.32	116.48	120.20
25	BA	2070	G	N3-C4-N9	5.32	129.19	126.00
25	DA	13	A	N1-C6-N6	-5.32	115.41	118.60
25	DA	2191	G	N3-C4-C5	5.32	131.26	128.60
1	AA	1421	G	C8-N9-C4	-5.32	104.27	106.40
25	BA	338	G	N7-C8-N9	-5.32	110.44	113.10
25	BA	928	G	C4-N9-C1'	5.32	133.41	126.50
25	BA	1219	G	C4-N9-C1'	-5.32	119.59	126.50
25	BA	1857	G	C4-C5-C6	5.32	121.99	118.80
25	BA	1863	G	C8-N9-C4	5.32	108.53	106.40
25	BA	2035	G	C4-C5-N7	5.32	112.93	110.80
25	BA	2433	A	N7-C8-N9	5.32	116.46	113.80
25	DA	1223	G	C8-N9-C1'	5.32	133.91	127.00
25	BA	2450	A	C6-C5-N7	-5.31	128.58	132.30
27	BD	213	ARG	NE-CZ-NH2	-5.31	117.64	120.30
25	DA	1163	G	N3-C2-N2	-5.31	116.18	119.90
1	AA	1457	G	C8-N9-C4	5.31	108.53	106.40
25	BA	27	G	N3-C4-C5	-5.31	125.94	128.60
25	BA	304	G	N1-C6-O6	5.31	123.09	119.90
25	BA	376	C	N1-C2-N3	5.31	122.92	119.20
25	BA	926	A	N1-C6-N6	5.31	121.79	118.60
25	BA	1361	G	C2-N3-C4	-5.31	109.24	111.90
25	BA	1755	A	C6-N1-C2	-5.31	115.41	118.60
1	CA	915	A	C5-N7-C8	5.31	106.56	103.90
25	DA	1894	C	N1-C2-O2	-5.31	115.71	118.90
25	DA	1964	G	C6-C5-N7	-5.31	127.21	130.40
25	DA	2365	G	C4-C5-N7	5.31	112.92	110.80
1	AA	886	G	N3-C4-N9	-5.31	122.81	126.00
25	BA	449	A	C4-C5-N7	5.31	113.36	110.70
25	BA	2231	C	N3-C4-C5	-5.31	119.78	121.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	60	C	C6-N1-C2	-5.31	118.18	120.30
26	BB	76	G	N1-C6-O6	5.31	123.09	119.90
1	AA	1278	U	C5-C6-N1	5.31	125.36	122.70
25	BA	36	G	C4-C5-N7	-5.31	108.68	110.80
25	BA	680	G	C8-N9-C4	5.31	108.52	106.40
25	BA	1026	U	C2-N1-C1'	5.31	124.07	117.70
25	BA	1192	G	N1-C6-O6	5.31	123.08	119.90
25	BA	2018	G	N1-C6-O6	5.31	123.08	119.90
25	DA	2829	C	C2-N1-C1'	-5.31	112.96	118.80
1	AA	1488	G	C8-N9-C4	-5.31	104.28	106.40
25	BA	514	A	N7-C8-N9	-5.31	111.15	113.80
25	BA	2373	G	N1-C2-N2	-5.31	111.42	116.20
26	BB	94	C	C5-C4-N4	-5.31	116.48	120.20
25	DA	1626	G	C8-N9-C4	-5.31	104.28	106.40
25	DA	1675	C	C6-N1-C2	-5.31	118.18	120.30
25	DA	2341	G	N1-C6-O6	5.31	123.08	119.90
25	DA	2459	A	C8-N9-C4	-5.31	103.68	105.80
25	BA	689	A	C4-C5-N7	-5.31	108.05	110.70
25	BA	1351	C	C5-C6-N1	-5.31	118.35	121.00
25	DA	774	A	N7-C8-N9	5.31	116.45	113.80
25	DA	1579	A	C8-N9-C1'	-5.31	118.15	127.70
1	AA	900	A	N7-C8-N9	5.30	116.45	113.80
1	AA	1158	C	C5-C6-N1	-5.30	118.35	121.00
25	BA	123	G	C5-C6-O6	-5.30	125.42	128.60
25	BA	1351	C	C2-N3-C4	-5.30	117.25	119.90
25	BA	2718	G	C4-N9-C1'	5.30	133.40	126.50
26	BB	65	C	N1-C2-O2	5.30	122.08	118.90
25	DA	946	G	C8-N9-C4	-5.30	104.28	106.40
25	DA	1822	G	C5-C6-N1	-5.30	108.85	111.50
25	BA	646	A	C5-N7-C8	-5.30	101.25	103.90
25	BA	2739	U	C5-C6-N1	-5.30	120.05	122.70
25	DA	142	A	N9-C4-C5	5.30	107.92	105.80
25	DA	514	A	C5-C6-N6	-5.30	119.46	123.70
25	DA	2827	C	N1-C2-O2	-5.30	115.72	118.90
25	DA	2877	G	C8-N9-C4	5.30	108.52	106.40
25	BA	1965	C	C4-C5-C6	-5.30	114.75	117.40
25	BA	2265	U	N1-C2-N3	5.30	118.08	114.90
1	CA	893	C	N1-C2-N3	-5.30	115.49	119.20
1	AA	7	G	N3-C4-N9	-5.30	122.82	126.00
1	AA	117	G	C2-N3-C4	-5.30	109.25	111.90
25	BA	959	A	N1-C6-N6	-5.30	115.42	118.60
25	BA	2054	A	C5-C6-N6	-5.30	119.46	123.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2514	U	N3-C2-O2	5.30	125.91	122.20
1	CA	887	G	N1-C6-O6	5.30	123.08	119.90
1	CA	1300	G	C8-N9-C1'	5.30	133.89	127.00
1	AA	343	U	C4-C5-C6	5.30	122.88	119.70
42	BW	18	ARG	NE-CZ-NH2	-5.30	117.65	120.30
25	DA	1631	C	C6-N1-C2	5.30	122.42	120.30
25	DA	2519	U	C5-C6-N1	-5.30	120.05	122.70
1	AA	1324	A	C4-C5-C6	5.30	119.65	117.00
25	BA	1692	U	C6-N1-C2	5.30	124.18	121.00
25	BA	2626	C	C6-N1-C2	5.30	122.42	120.30
25	DA	1218	C	C6-N1-C2	-5.30	118.18	120.30
25	DA	2022	U	C4-C5-C6	5.30	122.88	119.70
25	DA	2791	C	N3-C4-C5	-5.30	119.78	121.90
25	BA	715	G	N9-C4-C5	-5.29	103.28	105.40
25	BA	1653	G	N3-C4-C5	-5.29	125.95	128.60
25	BA	2331	G	C8-N9-C4	5.29	108.52	106.40
26	BB	30	C	C6-N1-C2	-5.29	118.18	120.30
25	DA	1187	G	C4-N9-C1'	5.29	133.38	126.50
1	AA	770	C	C5-C6-N1	-5.29	118.35	121.00
1	AA	780	A	C8-N9-C4	5.29	107.92	105.80
1	AA	1108	G	N1-C6-O6	-5.29	116.72	119.90
1	AA	1507	A	C5-C6-N6	5.29	127.93	123.70
1	AA	1524	C	C2-N3-C4	-5.29	117.25	119.90
25	BA	20	C	C5-C6-N1	-5.29	118.35	121.00
25	BA	829	A	C8-N9-C4	5.29	107.92	105.80
25	BA	859	G	N7-C8-N9	-5.29	110.45	113.10
25	BA	1607	C	N3-C4-C5	-5.29	119.78	121.90
25	BA	1819	A	C8-N9-C4	-5.29	103.68	105.80
25	BA	2033	A	N1-C6-N6	-5.29	115.42	118.60
25	BA	2412	A	N1-C6-N6	-5.29	115.42	118.60
25	BA	2557	G	C5-C6-O6	-5.29	125.42	128.60
25	DA	2502	G	N1-C6-O6	5.29	123.08	119.90
25	BA	224	G	N3-C4-C5	-5.29	125.95	128.60
25	BA	516	C	N3-C4-N4	5.29	121.70	118.00
25	BA	2327	A	N1-C2-N3	-5.29	126.65	129.30
25	DA	1984	G	N3-C2-N2	-5.29	116.20	119.90
25	DA	2597	G	C8-N9-C1'	-5.29	120.12	127.00
1	AA	165	C	N1-C2-O2	5.29	122.07	118.90
1	AA	883	C	C6-N1-C2	-5.29	118.18	120.30
1	AA	1074	G	C8-N9-C4	-5.29	104.28	106.40
1	AA	1526	G	N7-C8-N9	5.29	115.75	113.10
25	BA	1047	G	C8-N9-C4	-5.29	104.28	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1132	C	C6-N1-C2	-5.29	118.18	120.30
25	DA	1429	G	N9-C4-C5	5.29	107.52	105.40
1	AA	890	G	C4-C5-N7	-5.29	108.69	110.80
4	AD	188	LEU	CA-CB-CG	5.29	127.47	115.30
25	BA	449	A	C5-N7-C8	-5.29	101.26	103.90
25	BA	783	A	C8-N9-C4	-5.29	103.69	105.80
25	BA	1025	G	N7-C8-N9	-5.29	110.46	113.10
25	BA	2293	C	C5-C6-N1	-5.29	118.36	121.00
1	CA	479	C	C6-N1-C2	-5.29	118.19	120.30
1	CA	513	C	C6-N1-C1'	-5.29	114.45	120.80
25	DA	512	G	N1-C6-O6	-5.29	116.73	119.90
25	DA	1237	A	N1-C6-N6	-5.29	115.43	118.60
25	DA	1679	U	N3-C4-C5	-5.29	111.43	114.60
25	DA	1838	C	N1-C2-O2	5.29	122.07	118.90
25	DA	2729	G	C4-C5-N7	5.29	112.92	110.80
1	AA	355	C	C6-N1-C2	-5.29	118.19	120.30
25	BA	575	A	N3-C4-C5	-5.29	123.10	126.80
1	CA	1267	C	C5-C6-N1	5.29	123.64	121.00
25	BA	53	A	N1-C2-N3	5.29	131.94	129.30
25	BA	1287	A	C8-N9-C4	-5.29	103.69	105.80
25	BA	2027	G	N3-C4-C5	-5.29	125.96	128.60
25	DA	1702	G	C4-N9-C1'	-5.29	119.63	126.50
1	AA	336	C	N1-C2-O2	-5.28	115.73	118.90
1	AA	1150	U	N3-C4-C5	-5.28	111.43	114.60
25	BA	1145	C	N3-C4-C5	-5.28	119.79	121.90
25	BA	1579	A	N7-C8-N9	5.28	116.44	113.80
25	BA	2583	G	N1-C6-O6	5.28	123.07	119.90
1	CA	785	G	C8-N9-C4	5.28	108.51	106.40
25	DA	838	C	C5-C6-N1	-5.28	118.36	121.00
25	BA	29	U	C4-C5-C6	-5.28	116.53	119.70
25	BA	1428	C	C2-N1-C1'	-5.28	112.99	118.80
25	BA	2812	G	C5-C6-O6	5.28	131.77	128.60
26	BB	24	G	N9-C4-C5	-5.28	103.29	105.40
25	DA	13	A	C5-C6-N6	5.28	127.92	123.70
25	DA	2447	G	N1-C2-N2	5.28	120.95	116.20
25	DA	2607	G	C6-C5-N7	-5.28	127.23	130.40
25	DA	2838	G	N3-C2-N2	-5.28	116.20	119.90
1	AA	684	A	C5-C6-N6	5.28	127.92	123.70
1	AA	975	A	C5-N7-C8	-5.28	101.26	103.90
1	AA	1188	A	C5-C6-N6	5.28	127.92	123.70
25	DA	1788	C	C6-N1-C2	-5.28	118.19	120.30
25	BA	944	G	N1-C2-N3	5.28	127.07	123.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	961	C	N1-C2-N3	5.28	122.89	119.20
25	BA	975(A)	G	N1-C6-O6	5.28	123.07	119.90
1	CA	1402	C	C6-N1-C2	-5.28	118.19	120.30
1	AA	792	A	C4-N9-C1'	-5.28	116.80	126.30
25	BA	745	G	N3-C4-N9	5.28	129.16	126.00
25	BA	1160	G	N1-C2-N3	-5.28	120.73	123.90
25	BA	2712(A)	A	C8-N9-C4	5.28	107.91	105.80
25	BA	2717	G	N9-C4-C5	-5.28	103.29	105.40
26	BB	88	C	C2-N1-C1'	-5.28	113.00	118.80
1	CA	638	G	N3-C4-C5	5.28	131.24	128.60
25	DA	329	G	C4-N9-C1'	5.28	133.36	126.50
25	DA	1008	C	C6-N1-C2	5.28	122.41	120.30
25	DA	1232	G	N3-C4-N9	-5.28	122.83	126.00
25	DA	2575	C	N3-C2-O2	-5.28	118.21	121.90
25	BA	890	A	N9-C4-C5	-5.27	103.69	105.80
25	BA	2559	C	C5-C6-N1	-5.27	118.36	121.00
25	DA	1844	C	C5-C4-N4	-5.27	116.51	120.20
25	BA	218	A	N3-C4-N9	-5.27	123.18	127.40
25	BA	532	A	N7-C8-N9	5.27	116.44	113.80
25	BA	1479	G	N1-C6-O6	5.27	123.06	119.90
25	BA	1929	G	N1-C6-O6	-5.27	116.74	119.90
1	CA	1081	G	C8-N9-C4	5.27	108.51	106.40
1	CA	1518	A	N7-C8-N9	5.27	116.44	113.80
1	AA	697	U	C2-N3-C4	-5.27	123.84	127.00
1	AA	1375	A	N7-C8-N9	5.27	116.44	113.80
25	BA	2684	U	C5-C6-N1	-5.27	120.06	122.70
40	BU	12	ARG	NE-CZ-NH2	-5.27	117.67	120.30
25	DA	59	U	N1-C2-N3	5.27	118.06	114.90
1	AA	810	C	C2-N1-C1'	5.27	124.60	118.80
1	AA	811	C	N3-C2-O2	5.27	125.59	121.90
25	BA	729	G	C4-N9-C1'	5.27	133.35	126.50
25	BA	1685	C	N3-C4-N4	5.27	121.69	118.00
25	BA	1924	C	C2-N1-C1'	-5.27	113.00	118.80
25	BA	1980	G	C5-C6-N1	5.27	114.14	111.50
25	DA	534	U	N3-C4-C5	-5.27	111.44	114.60
25	DA	2515	C	N1-C2-O2	-5.27	115.74	118.90
34	DO	26	LYS	N-CA-C	-5.27	96.77	111.00
1	AA	181	G	C8-N9-C4	-5.27	104.29	106.40
1	AA	809	G	N3-C2-N2	-5.27	116.21	119.90
1	AA	925	G	C6-N1-C2	-5.27	121.94	125.10
25	BA	61	G	C8-N9-C4	5.27	108.51	106.40
25	BA	1149	G	N3-C4-C5	5.27	131.23	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1181	C	C6-N1-C2	5.27	122.41	120.30
25	BA	1259	G	C4-C5-C6	5.27	121.96	118.80
25	BA	1992	G	N3-C4-N9	5.27	129.16	126.00
25	BA	2581	G	N1-C2-N2	-5.27	111.46	116.20
25	BA	2613	U	N3-C4-C5	5.27	117.76	114.60
1	CA	442	C	C5-C6-N1	5.27	123.63	121.00
25	DA	114	U	C2-N1-C1'	5.27	124.02	117.70
25	DA	135	G	N3-C4-C5	5.27	131.23	128.60
25	DA	531	C	C6-N1-C1'	5.27	127.12	120.80
25	BA	686	G	C4-C5-C6	5.27	121.96	118.80
27	BD	274	ARG	C-N-CA	5.27	134.86	121.70
47	B1	25	LYS	CD-CE-NZ	5.27	123.81	111.70
1	CA	565	U	C6-N1-C2	-5.27	117.84	121.00
1	CA	1356	G	C5-C6-N1	-5.27	108.87	111.50
1	CA	1363(A)	A	C4-C5-N7	-5.27	108.07	110.70
25	DA	294	A	N1-C6-N6	-5.27	115.44	118.60
25	BA	715	G	C4-N9-C1'	5.26	133.34	126.50
25	BA	763	G	N3-C4-C5	-5.26	125.97	128.60
25	BA	1405	U	N3-C2-O2	-5.26	118.51	122.20
25	BA	1515	G	N3-C4-N9	5.26	129.16	126.00
25	BA	1978	A	C8-N9-C4	5.26	107.91	105.80
1	CA	1385	G	N3-C2-N2	-5.26	116.22	119.90
1	CA	1414	U	C2-N1-C1'	5.26	124.02	117.70
25	DA	968	G	C8-N9-C4	-5.26	104.29	106.40
25	DA	1423	G	C8-N9-C4	5.26	108.51	106.40
25	DA	2060	A	C5-C6-N1	5.26	120.33	117.70
25	DA	2504	U	N1-C2-N3	-5.26	111.74	114.90
25	BA	530	G	C6-C5-N7	5.26	133.56	130.40
25	BA	2102	U	C2-N3-C4	5.26	130.16	127.00
25	BA	2363	C	C5-C4-N4	-5.26	116.52	120.20
26	BB	85	G	C4-C5-C6	5.26	121.96	118.80
25	DA	752	A	C8-N9-C4	-5.26	103.69	105.80
1	AA	511	C	C6-N1-C1'	5.26	127.11	120.80
1	AA	744	C	N3-C2-O2	-5.26	118.22	121.90
1	AA	1044	A	N9-C4-C5	5.26	107.90	105.80
25	BA	665	C	N3-C2-O2	5.26	125.58	121.90
25	BA	2253	G	C6-C5-N7	-5.26	127.24	130.40
1	CA	481	G	C8-N9-C1'	-5.26	120.16	127.00
25	DA	1193	G	N1-C6-O6	5.26	123.06	119.90
25	DA	2049	G	C2-N3-C4	-5.26	109.27	111.90
1	AA	1137	C	C5-C6-N1	5.26	123.63	121.00
25	BA	136	G	C2-N3-C4	-5.26	109.27	111.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	652(Q)	G	N1-C6-O6	5.26	123.06	119.90
25	BA	2083	G	C5-C6-N1	-5.26	108.87	111.50
34	BO	25	LEU	CA-CB-CG	5.26	127.40	115.30
1	CA	1500	A	N1-C6-N6	5.26	121.75	118.60
25	DA	530	G	N9-C4-C5	5.26	107.50	105.40
25	DA	2049	G	N3-C4-C5	5.26	131.23	128.60
25	DA	2382	G	N3-C4-C5	-5.26	125.97	128.60
25	DA	2829	C	N3-C2-O2	5.26	125.58	121.90
25	BA	298	G	C4-C5-C6	5.26	121.95	118.80
25	BA	1025	G	N1-C6-O6	-5.26	116.75	119.90
25	BA	1630	G	C2-N3-C4	-5.26	109.27	111.90
1	AA	42	G	N1-C6-O6	5.26	123.05	119.90
1	AA	652	U	N1-C2-O2	-5.26	119.12	122.80
1	AA	1076	C	N1-C2-O2	-5.26	115.75	118.90
25	BA	1299	G	C5-N7-C8	-5.26	101.67	104.30
25	BA	1336	A	C8-N9-C4	-5.26	103.70	105.80
25	BA	1595	G	N3-C4-C5	-5.26	125.97	128.60
25	BA	2049	G	C8-N9-C4	5.26	108.50	106.40
25	BA	2508	G	C2-N3-C4	5.26	114.53	111.90
1	CA	64	G	N1-C6-O6	5.26	123.05	119.90
25	DA	1471	A	C8-N9-C4	-5.26	103.70	105.80
25	DA	1829	A	C2-N3-C4	-5.26	107.97	110.60
26	DB	19	G	N3-C4-N9	-5.26	122.85	126.00
26	DB	103	G	C4-C5-N7	5.26	112.90	110.80
25	BA	130	C	C6-N1-C1'	-5.25	114.49	120.80
25	BA	625	G	C8-N9-C4	-5.25	104.30	106.40
25	BA	2874	C	C6-N1-C2	5.25	122.40	120.30
23	CV	22	G	N7-C8-N9	5.25	115.73	113.10
1	AA	636	U	C5-C6-N1	5.25	125.33	122.70
25	BA	2261	C	N3-C4-C5	-5.25	119.80	121.90
25	BA	2677	G	N1-C6-O6	-5.25	116.75	119.90
25	BA	2730	C	C2-N3-C4	-5.25	117.27	119.90
25	BA	2783	G	N3-C4-N9	5.25	129.15	126.00
25	DA	1619	G	C2-N3-C4	5.25	114.53	111.90
1	AA	156	G	N3-C4-C5	-5.25	125.97	128.60
1	AA	731	G	N3-C4-N9	-5.25	122.85	126.00
25	BA	1033	U	C2-N3-C4	-5.25	123.85	127.00
25	BA	1221(A)	C	C5-C4-N4	-5.25	116.52	120.20
25	BA	2001	A	N7-C8-N9	5.25	116.43	113.80
25	BA	2680	C	N3-C4-N4	5.25	121.68	118.00
25	BA	2689	U	N3-C2-O2	-5.25	118.52	122.20
25	BA	2870	C	N3-C4-C5	-5.25	119.80	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	318	G	N3-C2-N2	-5.25	116.22	119.90
1	CA	416	G	C6-C5-N7	-5.25	127.25	130.40
13	CM	70	LEU	CA-CB-CG	5.25	127.38	115.30
25	DA	1142	U	C6-N1-C1'	-5.25	113.85	121.20
25	DA	1600	C	C5-C6-N1	-5.25	118.37	121.00
1	AA	1008	C	C2-N1-C1'	-5.25	113.03	118.80
1	CA	1149	C	N3-C2-O2	-5.25	118.22	121.90
1	AA	541	G	N1-C2-N2	5.25	120.92	116.20
25	BA	556	G	C5-N7-C8	-5.25	101.67	104.30
25	BA	864	G	N3-C4-N9	5.25	129.15	126.00
25	BA	1815	A	C5-C6-N1	5.25	120.32	117.70
25	BA	2378	A	N1-C2-N3	5.25	131.92	129.30
25	BA	2729	G	N3-C4-C5	5.25	131.22	128.60
25	DA	2619	C	C6-N1-C2	5.25	122.40	120.30
25	BA	146	G	C5-C6-O6	-5.25	125.45	128.60
25	BA	880	G	C8-N9-C4	-5.25	104.30	106.40
25	BA	2102	U	C5-C6-N1	5.25	125.32	122.70
1	CA	506	G	C8-N9-C4	-5.25	104.30	106.40
25	DA	222	A	C8-N9-C4	5.25	107.90	105.80
25	DA	1970	A	N7-C8-N9	5.25	116.42	113.80
25	DA	2033	A	N9-C4-C5	5.25	107.90	105.80
25	DA	2566	A	N3-C4-N9	-5.25	123.20	127.40
1	AA	586	C	N3-C4-C5	5.25	124.00	121.90
25	BA	211	A	N1-C6-N6	5.25	121.75	118.60
25	DA	2426	A	C4-C5-N7	5.25	113.32	110.70
25	DA	2821	A	N1-C2-N3	5.25	131.92	129.30
25	BA	1676	A	C5-C6-N6	5.24	127.89	123.70
25	BA	2483	C	C5-C4-N4	-5.24	116.53	120.20
25	BA	2811	G	C4-C5-N7	5.24	112.90	110.80
25	DA	616	G	N3-C4-N9	5.24	129.15	126.00
25	DA	977	G	C4-C5-N7	5.24	112.90	110.80
25	DA	1787	A	N9-C4-C5	-5.24	103.70	105.80
25	DA	2583	G	C5-C6-O6	5.24	131.75	128.60
25	BA	1363	C	N3-C4-N4	-5.24	114.33	118.00
25	BA	2718	G	C6-C5-N7	-5.24	127.25	130.40
25	BA	2873	A	C6-C5-N7	-5.24	128.63	132.30
1	CA	314	C	C2-N1-C1'	5.24	124.57	118.80
1	AA	300	A	N1-C6-N6	-5.24	115.46	118.60
25	BA	183	C	C6-N1-C2	5.24	122.40	120.30
25	BA	491	G	N1-C6-O6	-5.24	116.75	119.90
25	BA	2275	C	C5-C4-N4	5.24	123.87	120.20
25	BA	2413	G	C4-N9-C1'	-5.24	119.69	126.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2824	C	C2-N1-C1'	-5.24	113.04	118.80
26	BB	35	U	C5-C6-N1	-5.24	120.08	122.70
26	BB	77	U	C2-N3-C4	-5.24	123.86	127.00
36	BQ	14	ARG	NE-CZ-NH2	-5.24	117.68	120.30
1	CA	319	G	C2-N3-C4	-5.24	109.28	111.90
25	DA	137	C	C6-N1-C2	-5.24	118.20	120.30
25	DA	188	G	N3-C4-C5	5.24	131.22	128.60
25	DA	893	C	C5-C6-N1	5.24	123.62	121.00
25	DA	2876	G	N1-C6-O6	5.24	123.05	119.90
1	AA	1272	G	C6-C5-N7	-5.24	127.26	130.40
1	AA	1482	G	C6-C5-N7	-5.24	127.26	130.40
25	BA	146	G	C4-C5-N7	5.24	112.89	110.80
25	BA	870	A	N1-C6-N6	-5.24	115.46	118.60
25	BA	1319	G	C6-N1-C2	-5.24	121.96	125.10
25	BA	1753	G	C8-N9-C4	-5.24	104.31	106.40
25	BA	2018	G	N3-C4-C5	-5.24	125.98	128.60
25	BA	2196	C	N1-C2-O2	-5.24	115.76	118.90
25	BA	2820	A	C5-N7-C8	-5.24	101.28	103.90
1	CA	1119	C	C5-C6-N1	5.24	123.62	121.00
25	DA	464	U	N3-C4-O4	5.24	123.07	119.40
25	DA	473	G	C2-N3-C4	-5.24	109.28	111.90
25	DA	530	G	C8-N9-C1'	5.24	133.81	127.00
25	DA	1945	G	N3-C4-N9	5.24	129.14	126.00
25	DA	2589	A	N7-C8-N9	-5.24	111.18	113.80
25	BA	995	C	N1-C2-O2	-5.24	115.76	118.90
25	BA	1022	G	N9-C4-C5	5.24	107.50	105.40
1	CA	1399	C	N3-C4-C5	-5.24	119.81	121.90
25	DA	2446	G	C4-C5-N7	-5.24	108.70	110.80
1	AA	509	A	N7-C8-N9	5.24	116.42	113.80
1	AA	575	G	C6-C5-N7	5.24	133.54	130.40
25	BA	796	C	C6-N1-C2	5.24	122.39	120.30
25	BA	963	U	C2-N1-C1'	5.24	123.98	117.70
25	BA	1107	G	C8-N9-C4	-5.24	104.31	106.40
25	BA	2703	C	N1-C2-O2	5.24	122.04	118.90
25	DA	1839	G	N9-C4-C5	-5.24	103.31	105.40
25	DA	2775	A	C8-N9-C4	5.24	107.89	105.80
1	AA	1229	A	C6-N1-C2	5.23	121.74	118.60
25	BA	1111	A	N1-C6-N6	5.23	121.74	118.60
25	BA	1333	C	N3-C4-N4	5.23	121.66	118.00
25	DA	730	C	N3-C4-C5	5.23	123.99	121.90
25	DA	930	U	N1-C2-N3	-5.23	111.76	114.90
25	DA	1637	A	N1-C2-N3	5.23	131.92	129.30

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1789	A	N1-C6-N6	-5.23	115.46	118.60
25	DA	2555	U	C2-N1-C1'	-5.23	111.42	117.70
1	AA	36	C	N1-C2-N3	5.23	122.86	119.20
1	AA	117	G	C4-C5-N7	5.23	112.89	110.80
1	AA	1253	G	N3-C4-C5	-5.23	125.98	128.60
25	BA	832	G	N9-C4-C5	5.23	107.49	105.40
25	BA	1796	U	C6-N1-C2	5.23	124.14	121.00
25	DA	2321	G	C4-N9-C1'	5.23	133.30	126.50
25	BA	197	A	C6-C5-N7	-5.23	128.64	132.30
25	BA	1401	G	N7-C8-N9	5.23	115.72	113.10
25	BA	1514	U	N1-C2-O2	5.23	126.46	122.80
25	BA	2024	G	N7-C8-N9	-5.23	110.48	113.10
25	BA	2616	C	C2-N3-C4	-5.23	117.28	119.90
25	BA	2632	A	C5-C6-N1	5.23	120.31	117.70
25	BA	2822	G	N1-C6-O6	5.23	123.04	119.90
1	CA	816	A	N9-C4-C5	5.23	107.89	105.80
1	AA	768	A	C4-C5-C6	5.23	119.61	117.00
27	BD	113	VAL	CB-CA-C	-5.23	101.46	111.40
25	DA	1551	C	N3-C4-C5	-5.23	119.81	121.90
1	AA	575	G	C4-N9-C1'	-5.23	119.70	126.50
1	AA	800	G	C8-N9-C4	-5.23	104.31	106.40
25	BA	67	U	N1-C2-N3	5.23	118.04	114.90
25	BA	132	G	N1-C2-N3	5.23	127.04	123.90
25	BA	343	C	C2-N3-C4	-5.23	117.29	119.90
25	BA	652(F)	G	N3-C4-C5	5.23	131.21	128.60
25	BA	1286	A	C2-N3-C4	-5.23	107.99	110.60
38	BS	58	LEU	CA-CB-CG	5.23	127.32	115.30
25	DA	71	A	C4-C5-C6	5.23	119.61	117.00
25	DA	132	G	C5-C6-O6	5.23	131.74	128.60
25	DA	1204	A	O4'-C1'-N9	5.23	112.38	108.20
25	DA	1945	G	C8-N9-C1'	-5.23	120.21	127.00
16	AP	78	GLY	N-CA-C	-5.23	100.04	113.10
25	BA	2409	G	C6-N1-C2	-5.23	121.97	125.10
1	AA	1108	G	C5-C6-O6	5.22	131.74	128.60
25	BA	997	G	N3-C2-N2	5.22	123.56	119.90
25	BA	2828	C	C2-N3-C4	-5.22	117.29	119.90
26	BB	99	G	N1-C6-O6	5.22	123.03	119.90
25	DA	2485	G	N3-C4-N9	5.22	129.13	126.00
25	BA	320	A	C5-N7-C8	-5.22	101.29	103.90
25	BA	938	G	N3-C4-N9	-5.22	122.87	126.00
25	BA	1831	G	C5-N7-C8	-5.22	101.69	104.30
25	BA	1840	G	N1-C6-O6	-5.22	116.77	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2574	G	N9-C4-C5	-5.22	103.31	105.40
25	DA	696	G	C5-N7-C8	5.22	106.91	104.30
25	DA	1631	C	C2-N3-C4	-5.22	117.29	119.90
25	DA	2571	C	C6-N1-C2	-5.22	118.21	120.30
25	BA	2575	C	N1-C2-N3	5.22	122.86	119.20
25	DA	2607	G	C8-N9-C4	5.22	108.49	106.40
1	AA	345	C	N1-C2-O2	5.22	122.03	118.90
25	BA	441	U	C2-N3-C4	-5.22	123.87	127.00
25	BA	1004	C	N3-C4-C5	-5.22	119.81	121.90
25	BA	1168	G	N1-C2-N2	-5.22	111.50	116.20
25	BA	1640	C	C6-N1-C2	-5.22	118.21	120.30
25	BA	2569	G	N3-C2-N2	5.22	123.55	119.90
26	BB	47	C	N1-C2-O2	-5.22	115.77	118.90
1	CA	1406	U	N3-C2-O2	-5.22	118.55	122.20
25	DA	1371	G	C5-C6-N1	5.22	114.11	111.50
25	BA	1721	G	N9-C4-C5	5.22	107.49	105.40
25	BA	2558	C	C2-N3-C4	-5.22	117.29	119.90
25	BA	2629	A	N1-C2-N3	5.22	131.91	129.30
33	BN	46	VAL	N-CA-C	5.22	125.09	111.00
1	CA	1523	G	C5-C6-O6	5.22	131.73	128.60
1	AA	369	C	C6-N1-C2	-5.22	118.21	120.30
1	AA	765	G	C8-N9-C4	5.22	108.49	106.40
23	AV	2	G	N3-C2-N2	-5.22	116.25	119.90
25	BA	756	C	C2-N1-C1'	-5.22	113.06	118.80
25	BA	940	G	N3-C4-N9	5.22	129.13	126.00
25	BA	1928	A	C8-N9-C4	-5.22	103.71	105.80
25	BA	2073	C	N1-C2-O2	-5.22	115.77	118.90
25	BA	2873	A	C4-C5-C6	5.22	119.61	117.00
1	CA	1197	G	C5-C6-N1	5.22	114.11	111.50
25	BA	649	G	C5-C6-O6	-5.21	125.47	128.60
25	BA	715	G	N1-C2-N2	-5.21	111.51	116.20
25	BA	1627	G	C4-C5-N7	5.21	112.89	110.80
25	DA	1260	G	N7-C8-N9	-5.21	110.49	113.10
25	DA	1813	G	N3-C2-N2	-5.21	116.25	119.90
25	DA	1984	G	C8-N9-C4	-5.21	104.31	106.40
25	BA	1966	A	C5-C6-N6	-5.21	119.53	123.70
25	DA	1441	G	C8-N9-C4	5.21	108.48	106.40
25	DA	2035	G	C5-N7-C8	5.21	106.91	104.30
1	AA	728	A	C5-N7-C8	-5.21	101.29	103.90
1	AA	1474	G	N7-C8-N9	-5.21	110.49	113.10
25	BA	1399	C	C4-C5-C6	5.21	120.01	117.40
25	BA	1399	C	C5-C6-N1	-5.21	118.39	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1592	C	N1-C2-O2	5.21	122.03	118.90
25	BA	2646	C	N3-C4-N4	5.21	121.65	118.00
25	BA	2826	A	C8-N9-C4	5.21	107.89	105.80
25	BA	2869	G	C5-C6-O6	5.21	131.73	128.60
25	DA	219	G	N3-C4-C5	-5.21	125.99	128.60
25	DA	329	G	N1-C2-N2	-5.21	111.51	116.20
25	DA	1683	C	C6-N1-C2	5.21	122.38	120.30
29	DF	12	LEU	CA-CB-CG	5.21	127.28	115.30
1	AA	119	A	C2-N3-C4	5.21	113.20	110.60
25	BA	265	A	C4-C5-C6	5.21	119.61	117.00
25	BA	2352	A	C5-C6-N6	-5.21	119.53	123.70
25	BA	2764	A	C5-C6-N6	5.21	127.87	123.70
40	BU	83	LEU	CA-CB-CG	5.21	127.28	115.30
1	CA	1149	C	C2-N1-C1'	5.21	124.53	118.80
25	DA	2726	U	C6-N1-C2	5.21	124.13	121.00
1	AA	1227	A	C5-C6-N1	-5.21	115.09	117.70
25	BA	146	G	C2-N3-C4	-5.21	109.30	111.90
25	BA	2327	A	C6-C5-N7	5.21	135.95	132.30
53	B7	34	ARG	NE-CZ-NH1	-5.21	117.69	120.30
1	CA	504	C	C2-N1-C1'	5.21	124.53	118.80
25	DA	837	C	N3-C4-N4	5.21	121.65	118.00
1	AA	862	C	N3-C4-C5	-5.21	119.82	121.90
25	BA	799	G	C6-N1-C2	-5.21	121.98	125.10
25	BA	926	A	C4-C5-N7	5.21	113.30	110.70
25	BA	1970	A	C8-N9-C1'	-5.21	118.33	127.70
25	BA	2031	A	C4-C5-N7	-5.21	108.10	110.70
25	BA	2074	U	C5-C6-N1	5.21	125.30	122.70
1	CA	1411	C	N3-C4-C5	5.21	123.98	121.90
25	BA	15	G	C6-N1-C2	5.21	128.22	125.10
1	CA	1323	G	N7-C8-N9	5.21	115.70	113.10
25	DA	298	G	C5-N7-C8	-5.21	101.70	104.30
25	DA	2608	G	C5-C6-O6	5.21	131.72	128.60
25	BA	732	C	C6-N1-C1'	5.20	127.05	120.80
25	BA	859	G	C4-N9-C1'	-5.20	119.73	126.50
25	BA	1262	A	C6-C5-N7	-5.20	128.66	132.30
25	BA	1368	G	N9-C4-C5	5.20	107.48	105.40
25	BA	1616	A	N7-C8-N9	5.20	116.40	113.80
25	BA	1835	G	N7-C8-N9	5.20	115.70	113.10
25	BA	2315	G	N9-C4-C5	-5.20	103.32	105.40
25	BA	2819	G	N3-C2-N2	-5.20	116.26	119.90
1	CA	616	G	C6-C5-N7	-5.20	127.28	130.40
1	CA	1281	U	N1-C2-O2	5.20	126.44	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1455	G	C8-N9-C4	-5.20	104.32	106.40
25	DA	2089	U	N3-C2-O2	5.20	125.84	122.20
1	AA	736	C	C6-N1-C2	-5.20	118.22	120.30
25	BA	1663	C	C6-N1-C2	5.20	122.38	120.30
25	DA	820	A	C5-C6-N6	5.20	127.86	123.70
25	DA	1675	C	N3-C2-O2	-5.20	118.26	121.90
25	BA	189	G	N1-C2-N2	-5.20	111.52	116.20
25	BA	1360	A	N3-C4-C5	5.20	130.44	126.80
25	BA	1424	G	C2-N3-C4	-5.20	109.30	111.90
25	BA	1970	A	C5-C6-N1	5.20	120.30	117.70
25	BA	2564	A	N9-C4-C5	5.20	107.88	105.80
25	DA	1229	G	N1-C6-O6	5.20	123.02	119.90
25	DA	1394	U	N3-C2-O2	-5.20	118.56	122.20
25	DA	2695	C	C5-C6-N1	-5.20	118.40	121.00
1	AA	175	C	N3-C2-O2	-5.20	118.26	121.90
25	BA	2051	A	C8-N9-C4	-5.20	103.72	105.80
25	DA	734	A	C5-N7-C8	-5.20	101.30	103.90
25	DA	2443	C	N3-C2-O2	-5.20	118.26	121.90
25	BA	1200	C	C5-C6-N1	-5.20	118.40	121.00
25	BA	1349	A	C2-N3-C4	-5.20	108.00	110.60
25	BA	1415	U	N3-C2-O2	-5.20	118.56	122.20
25	BA	2352	A	C4-C5-N7	5.20	113.30	110.70
25	BA	2417	C	C4-C5-C6	5.20	120.00	117.40
26	BB	96	U	N1-C2-O2	5.20	126.44	122.80
1	CA	1112	C	N1-C2-N3	5.20	122.84	119.20
25	BA	198	C	C2-N1-C1'	5.20	124.52	118.80
25	BA	498	G	C5-C6-O6	5.20	131.72	128.60
25	BA	972	G	N9-C4-C5	5.20	107.48	105.40
25	BA	1325	G	N3-C4-C5	-5.20	126.00	128.60
25	BA	2497	A	C5-C6-N1	5.20	120.30	117.70
25	BA	2730	C	N3-C4-N4	-5.20	114.36	118.00
26	BB	81	G	C5-C6-O6	-5.20	125.48	128.60
1	CA	1363(A)	A	C6-N1-C2	-5.20	115.48	118.60
1	AA	952	U	C2-N1-C1'	-5.19	111.47	117.70
25	BA	700	G	C8-N9-C4	-5.19	104.32	106.40
25	BA	713	G	C6-C5-N7	-5.19	127.28	130.40
25	BA	932	G	C5-C6-O6	5.19	131.72	128.60
25	BA	1985	G	C2-N3-C4	-5.19	109.30	111.90
25	BA	2035	G	C8-N9-C1'	5.19	133.75	127.00
26	BB	6	C	C5-C6-N1	-5.19	118.40	121.00
28	BE	119	ARG	NE-CZ-NH2	-5.19	117.70	120.30
25	BA	1806	C	C2-N1-C1'	-5.19	113.09	118.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2072	G	N3-C4-N9	5.19	129.12	126.00
25	BA	2197	U	N1-C2-O2	-5.19	119.17	122.80
25	DA	672	C	C5-C6-N1	-5.19	118.40	121.00
1	AA	912	C	N1-C2-O2	-5.19	115.79	118.90
23	AV	51	C	C5-C6-N1	5.19	123.59	121.00
25	BA	34	C	P-O3'-C3'	5.19	125.93	119.70
25	BA	949	C	N3-C2-O2	5.19	125.53	121.90
25	BA	2279	G	C5-C6-O6	5.19	131.72	128.60
25	BA	2291	U	C5-C4-O4	5.19	129.01	125.90
1	CA	115	G	C6-C5-N7	-5.19	127.28	130.40
25	DA	574	C	C6-N1-C1'	5.19	127.03	120.80
25	DA	2014	A	C4-C5-C6	5.19	119.59	117.00
25	DA	2894	G	C8-N9-C1'	-5.19	120.25	127.00
25	BA	1819	A	N1-C2-N3	5.19	131.89	129.30
1	AA	550	G	N3-C2-N2	-5.19	116.27	119.90
1	AA	554	C	C6-N1-C2	-5.19	118.22	120.30
25	BA	570	G	N3-C4-C5	-5.19	126.01	128.60
25	BA	636	G	C5-C6-O6	-5.19	125.49	128.60
25	BA	1760	A	C4-C5-N7	5.19	113.29	110.70
25	BA	1763	G	C4-N9-C1'	-5.19	119.76	126.50
25	BA	2203	U	C2-N1-C1'	-5.19	111.47	117.70
25	BA	2491	U	C6-N1-C2	5.19	124.11	121.00
1	CA	913	A	P-O3'-C3'	5.19	125.92	119.70
25	DA	1299	G	N1-C2-N3	5.19	127.01	123.90
25	BA	2721	A	C6-C5-N7	-5.19	128.67	132.30
1	CA	1133	G	N9-C4-C5	5.19	107.47	105.40
25	DA	767	U	N3-C2-O2	-5.19	118.57	122.20
25	BA	332	A	N1-C6-N6	-5.18	115.49	118.60
25	BA	400	G	C5-C6-N1	-5.18	108.91	111.50
25	BA	1352	U	N3-C4-O4	5.18	123.03	119.40
25	BA	2410	G	N3-C4-C5	-5.18	126.01	128.60
25	BA	2564	A	C5-C6-N1	5.18	120.29	117.70
25	BA	2572	A	C4-C5-C6	5.18	119.59	117.00
25	DA	559	G	N3-C4-C5	5.18	131.19	128.60
1	AA	1418	A	N1-C6-N6	5.18	121.71	118.60
25	BA	2364	C	C5-C6-N1	-5.18	118.41	121.00
1	CA	530	G	C8-N9-C1'	-5.18	120.26	127.00
25	DA	377	C	N1-C2-O2	-5.18	115.79	118.90
25	DA	552	G	N3-C4-N9	-5.18	122.89	126.00
25	DA	1496	A	C8-N9-C4	-5.18	103.73	105.80
25	DA	2823	A	C5-N7-C8	-5.18	101.31	103.90
1	AA	319	G	C8-N9-C4	5.18	108.47	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2565	A	N7-C8-N9	-5.18	111.21	113.80
1	CA	1333	A	N1-C6-N6	-5.18	115.49	118.60
25	DA	1691	C	N1-C2-O2	-5.18	115.79	118.90
25	DA	2288	A	C8-N9-C4	-5.18	103.73	105.80
1	AA	794	A	C5-C6-N1	-5.18	115.11	117.70
1	AA	811	C	N1-C2-O2	-5.18	115.79	118.90
25	BA	583	G	N1-C6-O6	-5.18	116.79	119.90
25	BA	973	A	N1-C6-N6	5.18	121.71	118.60
25	BA	1204	A	C3'-C2'-C1'	-5.18	97.36	101.50
25	BA	1631(A)	A	C8-N9-C4	-5.18	103.73	105.80
25	BA	2219	G	N3-C2-N2	5.18	123.53	119.90
25	DA	849	A	N9-C4-C5	5.18	107.87	105.80
25	DA	1992	G	C2-N3-C4	5.18	114.49	111.90
25	DA	2185	C	N1-C2-O2	5.18	122.01	118.90
1	AA	221	C	C6-N1-C2	-5.18	118.23	120.30
25	DA	673	C	C2-N3-C4	-5.18	117.31	119.90
1	AA	243	A	C5-N7-C8	-5.18	101.31	103.90
1	AA	719	C	N3-C4-C5	-5.18	119.83	121.90
1	AA	1363(A)	A	C6-C5-N7	5.18	135.92	132.30
1	AA	1417	G	C8-N9-C1'	-5.18	120.27	127.00
22	AY	9	ALA	CB-CA-C	5.18	117.86	110.10
25	BA	563	G	N9-C4-C5	-5.18	103.33	105.40
25	BA	1622	G	C6-N1-C2	-5.18	121.99	125.10
25	BA	2715	C	C5-C6-N1	-5.18	118.41	121.00
25	DA	546	C	C2-N1-C1'	5.18	124.50	118.80
25	DA	1645	G	N3-C4-C5	-5.18	126.01	128.60
25	DA	2321	G	N3-C4-C5	-5.18	126.01	128.60
1	AA	944	G	C4-C5-C6	5.17	121.90	118.80
1	AA	972	C	N3-C4-N4	5.17	121.62	118.00
1	AA	1271	G	N1-C6-O6	5.17	123.00	119.90
25	BA	221	A	N1-C6-N6	-5.17	115.50	118.60
25	BA	333	G	N7-C8-N9	5.17	115.69	113.10
25	BA	1653	G	C8-N9-C1'	-5.17	120.27	127.00
55	B9	19	ARG	NE-CZ-NH2	5.17	122.89	120.30
1	CA	685	G	C8-N9-C1'	5.17	133.73	127.00
1	CA	932	C	N3-C2-O2	-5.17	118.28	121.90
25	DA	1135	C	C6-N1-C1'	-5.17	114.59	120.80
25	DA	1897	G	C8-N9-C4	5.17	108.47	106.40
25	DA	2054	A	C8-N9-C4	-5.17	103.73	105.80
25	DA	2444	G	C4-C5-N7	-5.17	108.73	110.80
25	DA	2618	G	C4-C5-N7	-5.17	108.73	110.80
25	BA	1116	C	N1-C2-O2	5.17	122.00	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	530	G	N7-C8-N9	5.17	115.69	113.10
25	BA	1293	C	C5-C4-N4	-5.17	116.58	120.20
25	BA	1438	U	C4-C5-C6	5.17	122.80	119.70
25	BA	1788	C	N1-C2-O2	5.17	122.00	118.90
25	DA	1347	G	N3-C4-C5	5.17	131.19	128.60
25	DA	2429	G	N1-C6-O6	5.17	123.00	119.90
25	BA	2229	C	C6-N1-C2	-5.17	118.23	120.30
25	BA	2293	C	N3-C4-C5	5.17	123.97	121.90
25	DA	196	A	C8-N9-C4	5.17	107.87	105.80
25	DA	589	C	N3-C2-O2	5.17	125.52	121.90
25	DA	729	G	C5-C6-O6	-5.17	125.50	128.60
25	DA	1655	A	C8-N9-C4	5.17	107.87	105.80
25	DA	2401	U	C2-N1-C1'	5.17	123.90	117.70
1	AA	911	U	C5-C6-N1	-5.17	120.12	122.70
25	BA	1669	A	C4-N9-C1'	5.17	135.60	126.30
25	BA	1929	G	N7-C8-N9	-5.17	110.52	113.10
1	CA	115	G	P-O3'-C3'	5.17	125.90	119.70
25	DA	512	G	C5-C6-O6	5.17	131.70	128.60
25	DA	1129	A	C4-C5-C6	-5.17	114.42	117.00
26	DB	53	A	C8-N9-C4	-5.17	103.73	105.80
1	AA	786	G	C4-C5-N7	-5.17	108.73	110.80
25	BA	148	C	N3-C4-C5	5.17	123.97	121.90
25	BA	150	C	C5-C6-N1	-5.17	118.42	121.00
25	BA	151	C	N3-C4-N4	-5.17	114.38	118.00
25	BA	404	C	N3-C4-N4	-5.17	114.38	118.00
25	BA	1519	G	N9-C4-C5	5.17	107.47	105.40
25	BA	1664	A	N7-C8-N9	5.17	116.38	113.80
25	BA	1806	C	N3-C4-N4	-5.17	114.38	118.00
25	BA	2373	G	C8-N9-C4	5.17	108.47	106.40
1	CA	299	G	C5-C6-N1	-5.17	108.92	111.50
1	CA	576	G	C5-C6-O6	-5.17	125.50	128.60
1	CA	1272	G	C6-C5-N7	-5.17	127.30	130.40
25	DA	2775	A	C4-C5-C6	-5.17	114.42	117.00
1	AA	693	G	N1-C6-O6	5.17	123.00	119.90
25	BA	748	G	C5-C6-N1	5.17	114.08	111.50
25	BA	1925	C	C2-N1-C1'	-5.17	113.12	118.80
25	BA	1957	C	C5-C6-N1	-5.17	118.42	121.00
25	BA	2680	C	C5-C6-N1	-5.17	118.42	121.00
1	AA	689	C	C6-N1-C2	-5.16	118.23	120.30
25	BA	2327	A	N7-C8-N9	-5.16	111.22	113.80
1	CA	853	G	N9-C4-C5	5.16	107.47	105.40
25	DA	1262	A	C5-C6-N6	-5.16	119.57	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	744	G	N3-C2-N2	-5.16	116.29	119.90
25	BA	2268	A	C6-N1-C2	-5.16	115.50	118.60
25	DA	209	C	C6-N1-C2	5.16	122.36	120.30
25	DA	747	U	C6-N1-C1'	-5.16	113.97	121.20
25	DA	2028	U	C4-C5-C6	5.16	122.80	119.70
1	AA	1276	G	C8-N9-C4	-5.16	104.34	106.40
1	AA	1499	A	C8-N9-C4	5.16	107.86	105.80
25	BA	228	A	N3-C4-N9	-5.16	123.27	127.40
25	BA	826	U	C6-N1-C2	5.16	124.10	121.00
25	BA	2550	G	N3-C2-N2	-5.16	116.29	119.90
25	BA	2869	G	N7-C8-N9	5.16	115.68	113.10
25	DA	784	A	N9-C4-C5	5.16	107.86	105.80
25	DA	1769	G	C5-C6-O6	-5.16	125.50	128.60
25	DA	1792	G	C8-N9-C4	5.16	108.47	106.40
25	BA	458	G	N3-C4-C5	-5.16	126.02	128.60
25	BA	826	U	C2-N3-C4	-5.16	123.91	127.00
25	BA	1196	C	C6-N1-C2	-5.16	118.24	120.30
25	BA	1376	C	C5-C4-N4	-5.16	116.59	120.20
25	BA	2485	G	C2-N3-C4	-5.16	109.32	111.90
25	BA	2872	G	C4-C5-C6	5.16	121.89	118.80
25	DA	541	C	C6-N1-C2	5.16	122.36	120.30
1	AA	516	U	C6-N1-C2	-5.16	117.91	121.00
1	AA	581	G	C5-C6-O6	5.16	131.69	128.60
1	AA	713	G	C2-N3-C4	5.16	114.48	111.90
25	BA	38	A	C5-C6-N1	5.16	120.28	117.70
25	BA	224	G	C5-C6-N1	5.16	114.08	111.50
25	BA	978	G	N1-C6-O6	5.16	122.99	119.90
25	BA	1122	G	C4-C5-N7	5.16	112.86	110.80
25	BA	1279	G	C8-N9-C4	-5.16	104.34	106.40
25	BA	2726	U	N1-C2-O2	-5.16	119.19	122.80
1	CA	783	C	N3-C4-C5	5.16	123.96	121.90
25	BA	305	U	C4-C5-C6	5.16	122.79	119.70
25	BA	568	U	C5-C4-O4	-5.16	122.81	125.90
25	BA	2706	G	C4-C5-N7	5.16	112.86	110.80
25	DA	781	A	C8-N9-C4	-5.16	103.74	105.80
1	AA	550	G	N1-C6-O6	5.15	122.99	119.90
25	DA	135	G	N3-C4-N9	-5.15	122.91	126.00
25	DA	2365	G	C6-C5-N7	-5.15	127.31	130.40
1	AA	502	G	C5-C6-O6	-5.15	125.51	128.60
1	AA	513	C	N1-C2-N3	-5.15	115.59	119.20
1	AA	755	G	C4-N9-C1'	5.15	133.20	126.50
25	BA	613	G	C4-N9-C1'	-5.15	119.80	126.50

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1621	U	N1-C2-N3	5.15	117.99	114.90
25	BA	2076	U	N1-C2-O2	-5.15	119.19	122.80
25	BA	2325	G	N1-C6-O6	5.15	122.99	119.90
25	BA	2833	G	N3-C4-N9	5.15	129.09	126.00
42	BW	84	ARG	NE-CZ-NH1	5.15	122.88	120.30
25	DA	2553	G	C8-N9-C1'	-5.15	120.30	127.00
1	AA	7	G	C8-N9-C1'	5.15	133.69	127.00
25	BA	249	C	C5-C6-N1	-5.15	118.42	121.00
25	BA	968	G	C5-C6-N1	-5.15	108.92	111.50
25	BA	2070	G	N1-C2-N2	-5.15	111.56	116.20
25	BA	2345	G	N1-C2-N3	5.15	126.99	123.90
25	BA	2395	C	N3-C4-N4	5.15	121.61	118.00
26	BB	31	C	N1-C2-O2	5.15	121.99	118.90
1	CA	55	A	C8-N9-C4	-5.15	103.74	105.80
25	DA	1788	C	C2-N1-C1'	5.15	124.47	118.80
25	BA	1331	A	N9-C4-C5	5.15	107.86	105.80
25	BA	1849	G	N1-C6-O6	5.15	122.99	119.90
25	BA	2501	C	C2-N1-C1'	-5.15	113.14	118.80
25	DA	518	G	C4-N9-C1'	5.15	133.19	126.50
1	AA	975	A	N7-C8-N9	5.15	116.37	113.80
1	AA	1271	G	C5-C6-O6	-5.15	125.51	128.60
25	BA	204	A	C5-C6-N6	5.15	127.82	123.70
25	BA	766	C	C4-C5-C6	5.15	119.97	117.40
25	BA	1752	C	C5-C6-N1	-5.15	118.43	121.00
25	BA	1966	A	C4-C5-N7	5.15	113.27	110.70
1	CA	738	C	C5-C6-N1	5.15	123.57	121.00
25	DA	1470	G	N3-C2-N2	-5.15	116.30	119.90
25	DA	2032	G	C5-N7-C8	5.15	106.87	104.30
25	DA	2609	U	C6-N1-C2	-5.15	117.91	121.00
25	BA	335	C	C5-C6-N1	5.15	123.57	121.00
25	BA	831	G	N3-C4-C5	-5.15	126.03	128.60
26	BB	6	C	N3-C2-O2	5.15	125.50	121.90
25	DA	1214	A	C6-N1-C2	-5.15	115.51	118.60
1	AA	1357	A	N1-C6-N6	5.14	121.69	118.60
25	BA	845	G	N1-C6-O6	-5.14	116.81	119.90
25	BA	1217	C	N3-C4-N4	5.14	121.60	118.00
25	BA	2067	G	C2-N3-C4	5.14	114.47	111.90
25	BA	2097	C	N3-C2-O2	-5.14	118.30	121.90
25	BA	2482	G	N1-C2-N2	-5.14	111.57	116.20
25	BA	2803	C	N3-C4-C5	-5.14	119.84	121.90
25	DA	493	G	C5-N7-C8	-5.14	101.73	104.30
25	BA	365	C	C2-N1-C1'	-5.14	113.14	118.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2823	A	C4-C5-C6	5.14	119.57	117.00
35	BP	27	HIS	N-CA-C	5.14	124.89	111.00
1	CA	539	A	C2-N3-C4	5.14	113.17	110.60
25	DA	467	G	N9-C4-C5	-5.14	103.34	105.40
25	DA	2728	U	C5-C6-N1	-5.14	120.13	122.70
25	DA	2842	G	N3-C4-C5	5.14	131.17	128.60
25	BA	1159	U	N1-C2-N3	5.14	117.98	114.90
25	BA	1605	C	N1-C2-N3	5.14	122.80	119.20
25	BA	2705	A	C8-N9-C4	5.14	107.86	105.80
1	CA	39	G	N1-C6-O6	-5.14	116.82	119.90
1	CA	593	G	N1-C6-O6	5.14	122.98	119.90
25	DA	672	C	N1-C2-O2	-5.14	115.81	118.90
1	AA	240	C	C6-N1-C2	5.14	122.36	120.30
25	BA	776	G	N1-C2-N3	5.14	126.98	123.90
25	BA	862	G	C4-C5-C6	5.14	121.88	118.80
25	BA	2606	C	C2-N3-C4	-5.14	117.33	119.90
25	BA	2675	A	N1-C6-N6	-5.14	115.52	118.60
25	DA	306	U	C6-N1-C2	-5.14	117.92	121.00
25	DA	546	C	C6-N1-C2	-5.14	118.24	120.30
25	DA	1238	G	N1-C6-O6	-5.14	116.82	119.90
25	DA	2425	A	C5-C6-N1	5.14	120.27	117.70
25	BA	698	C	N3-C4-N4	5.14	121.60	118.00
25	BA	1372	U	C4-C5-C6	5.14	122.78	119.70
25	BA	2346	A	C2-N3-C4	-5.14	108.03	110.60
1	CA	44	G	C8-N9-C1'	-5.14	120.32	127.00
1	CA	1235	U	C5-C6-N1	5.14	125.27	122.70
25	DA	684	G	C8-N9-C4	-5.14	104.34	106.40
25	DA	2755	C	N3-C4-N4	5.14	121.60	118.00
26	DB	102	A	N9-C4-C5	-5.14	103.75	105.80
1	AA	872	A	C5-C6-N1	-5.14	115.13	117.70
25	BA	53	A	C4-C5-C6	5.14	119.57	117.00
25	BA	941	A	C8-N9-C1'	-5.14	118.45	127.70
1	CA	129(A)	G	C4-N9-C1'	5.14	133.18	126.50
25	DA	1421	G	C5-C6-N1	-5.14	108.93	111.50
1	AA	570	G	C4-C5-N7	5.13	112.85	110.80
1	AA	616	G	N7-C8-N9	5.13	115.67	113.10
1	AA	728	A	C6-C5-N7	-5.13	128.71	132.30
1	AA	882	C	N3-C4-N4	5.13	121.59	118.00
1	AA	1355	G	C8-N9-C4	-5.13	104.35	106.40
25	BA	220	G	C6-C5-N7	-5.13	127.32	130.40
25	BA	1149	G	N1-C6-O6	5.13	122.98	119.90
25	BA	2238	G	N3-C4-C5	-5.13	126.03	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2739	U	C2-N3-C4	-5.13	123.92	127.00
1	CA	1325	C	C6-N1-C1'	5.13	126.96	120.80
25	DA	1678	G	C4-C5-C6	5.13	121.88	118.80
25	DA	2716	U	N1-C2-N3	5.13	117.98	114.90
25	BA	2038	G	N1-C2-N2	-5.13	111.58	116.20
1	CA	572	A	C8-N9-C4	5.13	107.85	105.80
25	DA	825	C	C4-C5-C6	5.13	119.97	117.40
25	DA	1276	A	N9-C4-C5	-5.13	103.75	105.80
1	AA	811	C	C2-N3-C4	-5.13	117.33	119.90
25	BA	189	G	C2-N3-C4	-5.13	109.33	111.90
25	BA	224	G	C4-N9-C1'	5.13	133.17	126.50
25	BA	739	G	N1-C6-O6	-5.13	116.82	119.90
25	BA	828	U	C2-N3-C4	-5.13	123.92	127.00
25	BA	931	G	N3-C4-N9	5.13	129.08	126.00
52	B6	10	LEU	CA-CB-CG	5.13	127.10	115.30
25	DA	965	C	C6-N1-C2	-5.13	118.25	120.30
25	DA	2412	A	C8-N9-C4	-5.13	103.75	105.80
1	AA	1227	A	N3-C4-N9	-5.13	123.30	127.40
25	BA	857	C	C5-C4-N4	-5.13	116.61	120.20
25	BA	2308	G	C6-C5-N7	-5.13	127.32	130.40
25	BA	2320	A	C5-C6-N6	-5.13	119.60	123.70
1	AA	502	G	N1-C6-O6	5.13	122.98	119.90
25	BA	199	A	C6-C5-N7	5.13	135.89	132.30
25	BA	1586	A	C4-C5-C6	5.13	119.56	117.00
25	BA	1602	U	C5-C4-O4	5.13	128.98	125.90
25	BA	2455	G	N1-C6-O6	-5.13	116.82	119.90
25	BA	2492	U	N3-C2-O2	-5.13	118.61	122.20
25	BA	2714	G	C5-C6-O6	-5.13	125.52	128.60
26	BB	76	G	C5-C6-O6	-5.13	125.52	128.60
1	CA	337	C	C6-N1-C2	-5.13	118.25	120.30
1	CA	1259	C	C6-N1-C2	-5.13	118.25	120.30
25	DA	451	C	N3-C4-C5	5.13	123.95	121.90
25	DA	2195	C	C2-N1-C1'	-5.13	113.16	118.80
25	DA	2405	G	C8-N9-C1'	-5.13	120.33	127.00
25	DA	2695	C	C2-N1-C1'	-5.13	113.16	118.80
26	DB	22	U	C5-C6-N1	5.13	125.26	122.70
25	BA	22	C	N3-C4-N4	-5.13	114.41	118.00
25	BA	412	A	N7-C8-N9	-5.13	111.24	113.80
25	BA	866	A	C8-N9-C4	-5.13	103.75	105.80
25	BA	1220	A	C4-C5-N7	-5.13	108.14	110.70
25	BA	1904	G	C5-N7-C8	5.13	106.86	104.30
25	BA	2638	G	N3-C4-C5	-5.13	126.04	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	495	A	N9-C4-C5	5.13	107.85	105.80
25	DA	799	G	N1-C2-N3	5.13	126.97	123.90
25	BA	38	A	C5-N7-C8	5.12	106.46	103.90
1	CA	691	G	N9-C4-C5	-5.12	103.35	105.40
25	DA	1256	G	C4-N9-C1'	5.12	133.16	126.50
25	DA	1566	A	C2-N3-C4	-5.12	108.04	110.60
25	DA	2394	C	N1-C2-O2	5.12	121.97	118.90
25	BA	415	A	N1-C6-N6	-5.12	115.53	118.60
25	BA	1441	G	C2-N3-C4	5.12	114.46	111.90
25	BA	1531	C	C5-C6-N1	5.12	123.56	121.00
25	BA	1557	C	N3-C4-N4	-5.12	114.41	118.00
25	BA	1817	G	N3-C2-N2	5.12	123.49	119.90
25	BA	2569	G	N3-C4-N9	5.12	129.07	126.00
43	BX	94	GLY	N-CA-C	5.12	125.91	113.10
1	CA	733	A	C8-N9-C4	5.12	107.85	105.80
25	DA	15	G	C8-N9-C4	5.12	108.45	106.40
25	DA	34	C	N1-C2-O2	5.12	121.97	118.90
25	DA	242	G	C4-N9-C1'	-5.12	119.84	126.50
25	DA	2027	G	N3-C4-C5	-5.12	126.04	128.60
27	DD	211	ARG	NE-CZ-NH1	5.12	122.86	120.30
1	AA	1482	G	C8-N9-C1'	-5.12	120.34	127.00
1	AA	1496	C	N3-C4-N4	-5.12	114.42	118.00
25	BA	973	A	C6-C5-N7	-5.12	128.72	132.30
25	BA	979	G	C6-C5-N7	-5.12	127.33	130.40
25	BA	1345	C	N3-C4-C5	5.12	123.95	121.90
25	BA	1619	G	N9-C4-C5	5.12	107.45	105.40
25	BA	2192	G	C4-N9-C1'	5.12	133.16	126.50
25	BA	2375	G	C5-C6-N1	5.12	114.06	111.50
26	BB	5	C	C5-C6-N1	-5.12	118.44	121.00
26	BB	53	A	N1-C6-N6	5.12	121.67	118.60
1	CA	1516	G	C2-N3-C4	-5.12	109.34	111.90
25	DA	102	G	P-O3'-C3'	5.12	125.84	119.70
25	DA	145	G	N7-C8-N9	-5.12	110.54	113.10
25	DA	1128	A	C2-N3-C4	5.12	113.16	110.60
25	DA	1231	G	C5-C6-N1	-5.12	108.94	111.50
25	DA	1801	G	C6-N1-C2	-5.12	122.03	125.10
25	DA	1961	C	C2-N1-C1'	-5.12	113.17	118.80
25	DA	2007	C	C2-N1-C1'	-5.12	113.17	118.80
25	DA	2751	G	C2-N3-C4	5.12	114.46	111.90
1	AA	1331	G	C4-N9-C1'	-5.12	119.84	126.50
25	BA	575	A	C5-C6-N6	-5.12	119.60	123.70
1	CA	168	G	C8-N9-C4	5.12	108.45	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	525	C	N3-C4-N4	5.12	121.58	118.00
25	DA	125	G	N9-C4-C5	-5.12	103.35	105.40
25	DA	546	C	N1-C2-O2	5.12	121.97	118.90
25	DA	2283	C	N1-C2-O2	-5.12	115.83	118.90
25	BA	647	G	C5-C6-O6	5.12	131.67	128.60
25	BA	1228	G	C2-N3-C4	-5.12	109.34	111.90
25	BA	1617	C	N3-C4-C5	5.12	123.95	121.90
25	BA	2447	G	C4-N9-C1'	-5.12	119.85	126.50
25	DA	2831	G	N1-C6-O6	-5.12	116.83	119.90
25	BA	1028	A	C2-N3-C4	5.12	113.16	110.60
25	DA	1157	G	C4-N9-C1'	5.12	133.15	126.50
25	DA	1984	G	N7-C8-N9	5.12	115.66	113.10
1	AA	1094	G	N3-C4-C5	-5.12	126.04	128.60
1	AA	1406	U	N3-C4-C5	5.12	117.67	114.60
25	BA	263	C	C6-N1-C2	5.12	122.35	120.30
25	BA	312	G	N3-C2-N2	-5.12	116.32	119.90
25	BA	1613	G	C8-N9-C4	-5.12	104.35	106.40
25	BA	2575	C	C6-N1-C2	-5.12	118.25	120.30
26	BB	65	C	C5-C4-N4	-5.12	116.62	120.20
39	BT	127	ALA	N-CA-C	-5.12	97.19	111.00
1	AA	119	A	C5-C6-N1	5.11	120.26	117.70
25	BA	701	G	C8-N9-C4	5.11	108.45	106.40
25	BA	2296	U	N3-C4-C5	-5.11	111.53	114.60
25	BA	2335	A	N9-C4-C5	5.11	107.85	105.80
26	BB	37	C	N1-C2-O2	-5.11	115.83	118.90
25	DA	2006	C	C6-N1-C2	-5.11	118.25	120.30
26	DB	2	C	C2-N1-C1'	5.11	124.43	118.80
25	DA	624	C	N1-C2-O2	-5.11	115.83	118.90
1	AA	789	U	N1-C2-N3	5.11	117.97	114.90
1	CA	426	G	C8-N9-C4	-5.11	104.36	106.40
25	DA	1829	A	N1-C2-N3	5.11	131.86	129.30
1	AA	1064	G	C4-N9-C1'	-5.11	119.86	126.50
1	AA	1409	C	N1-C2-O2	-5.11	115.83	118.90
25	BA	1130	U	N1-C2-O2	5.11	126.38	122.80
25	BA	2310	A	C8-N9-C4	-5.11	103.76	105.80
25	DA	1531	C	N3-C4-N4	5.11	121.58	118.00
1	AA	890	G	N9-C4-C5	5.11	107.44	105.40
25	BA	336	C	C5-C6-N1	-5.11	118.45	121.00
25	BA	589	C	C5-C6-N1	-5.11	118.45	121.00
25	BA	993	G	C5-C6-O6	5.11	131.66	128.60
25	BA	1368	G	C6-N1-C2	-5.11	122.04	125.10
25	BA	1623	G	C5-N7-C8	-5.11	101.75	104.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2517	C	C5-C6-N1	-5.11	118.45	121.00
25	BA	2582	G	C2-N3-C4	5.11	114.45	111.90
1	CA	1272	G	N3-C4-N9	5.11	129.06	126.00
25	BA	1823	G	C5-N7-C8	-5.11	101.75	104.30
35	BP	44	GLY	N-CA-C	-5.11	100.33	113.10
25	DA	1789	A	C8-N9-C4	5.11	107.84	105.80
25	DA	1992	G	N7-C8-N9	5.11	115.65	113.10
25	DA	2590	A	C5-C6-N1	5.11	120.25	117.70
25	BA	1773	A	C6-C5-N7	-5.10	128.73	132.30
25	BA	1974	C	C2-N3-C4	-5.10	117.35	119.90
25	BA	2860	A	C6-N1-C2	-5.10	115.54	118.60
1	AA	399	G	C8-N9-C4	5.10	108.44	106.40
1	AA	774	G	N3-C4-N9	5.10	129.06	126.00
1	AA	783	C	C5-C6-N1	-5.10	118.45	121.00
25	BA	20	C	N3-C4-C5	5.10	123.94	121.90
25	BA	182	A	C5-C6-N6	-5.10	119.62	123.70
25	BA	577	G	N7-C8-N9	-5.10	110.55	113.10
25	BA	1308	A	N9-C4-C5	5.10	107.84	105.80
25	BA	1506	C	C6-N1-C1'	-5.10	114.68	120.80
25	BA	2273	A	N1-C2-N3	-5.10	126.75	129.30
25	BA	2677	G	C5-C6-O6	5.10	131.66	128.60
1	CA	730	G	C2-N3-C4	5.10	114.45	111.90
25	DA	1969	A	C5-N7-C8	-5.10	101.35	103.90
1	AA	798	G	C8-N9-C4	-5.10	104.36	106.40
1	AA	1019	C	P-O3'-C3'	5.10	125.82	119.70
25	BA	154	G	C4-N9-C1'	5.10	133.13	126.50
25	BA	210	C	N3-C4-C5	5.10	123.94	121.90
25	BA	862	G	N3-C2-N2	-5.10	116.33	119.90
25	BA	1663	C	N3-C4-C5	5.10	123.94	121.90
25	BA	1707	G	N1-C6-O6	5.10	122.96	119.90
25	BA	1989	G	C8-N9-C1'	-5.10	120.37	127.00
25	BA	2776	A	C5-N7-C8	-5.10	101.35	103.90
26	BB	38	C	C5-C6-N1	-5.10	118.45	121.00
1	CA	993	G	C4-N9-C1'	5.10	133.13	126.50
25	DA	1115	G	C4-N9-C1'	-5.10	119.87	126.50
25	DA	1670	C	N3-C2-O2	-5.10	118.33	121.90
25	DA	2528	U	N3-C4-C5	-5.10	111.54	114.60
1	AA	882	C	C2-N1-C1'	5.10	124.41	118.80
25	BA	1496	A	C2-N3-C4	5.10	113.15	110.60
25	BA	1816	G	C8-N9-C4	5.10	108.44	106.40
25	BA	1948	G	N3-C4-C5	-5.10	126.05	128.60
25	BA	2544	G	N1-C2-N3	5.10	126.96	123.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BB	113	G	N1-C6-O6	5.10	122.96	119.90
51	B5	55	ARG	N-CA-C	-5.10	97.23	111.00
1	CA	1142	G	C8-N9-C4	5.10	108.44	106.40
25	DA	2426	A	C5-C6-N6	-5.10	119.62	123.70
1	AA	405	U	N3-C2-O2	-5.10	118.63	122.20
25	BA	2383	G	N3-C4-N9	5.10	129.06	126.00
1	CA	357	G	C8-N9-C4	-5.10	104.36	106.40
1	CA	546	G	C2-N3-C4	5.10	114.45	111.90
25	DA	1556	C	C4-C5-C6	5.10	119.95	117.40
25	DA	2256	G	C2-N3-C4	5.10	114.45	111.90
1	AA	119	A	C6-N1-C2	-5.09	115.54	118.60
25	BA	154	G	C6-C5-N7	-5.09	127.34	130.40
25	BA	498	G	C5-N7-C8	5.09	106.85	104.30
25	BA	841	A	C5-N7-C8	-5.09	101.35	103.90
25	BA	2298	A	C6-C5-N7	5.09	135.87	132.30
25	DA	265	A	N1-C2-N3	5.09	131.85	129.30
25	DA	620	G	N9-C4-C5	5.09	107.44	105.40
42	DW	12	ILE	N-CA-C	-5.09	97.24	111.00
25	BA	348	G	N3-C4-C5	-5.09	126.05	128.60
25	BA	768	G	N1-C2-N3	5.09	126.96	123.90
25	BA	2431	U	C4-C5-C6	5.09	122.76	119.70
25	DA	2565	A	N3-C4-C5	5.09	130.37	126.80
26	DB	103	G	C5-C6-O6	-5.09	125.54	128.60
25	BA	295	G	C5-C6-O6	-5.09	125.55	128.60
25	BA	1384	A	N1-C6-N6	5.09	121.66	118.60
25	BA	2315	G	C6-C5-N7	-5.09	127.35	130.40
25	BA	2319	G	N1-C2-N3	5.09	126.95	123.90
25	BA	2836	U	N1-C2-O2	5.09	126.36	122.80
25	DA	187	G	N1-C2-N3	5.09	126.95	123.90
25	DA	2031	A	N9-C4-C5	-5.09	103.76	105.80
25	DA	2186	G	C5-C6-N1	-5.09	108.95	111.50
25	DA	2302	G	N1-C6-O6	5.09	122.95	119.90
25	DA	2502	G	N7-C8-N9	5.09	115.64	113.10
22	AY	63	LEU	CA-CB-CG	5.09	127.01	115.30
25	BA	1275	A	C5-C6-N1	-5.09	115.16	117.70
25	BA	1957	C	C5-C4-N4	5.09	123.76	120.20
25	BA	2673	G	N3-C2-N2	-5.09	116.34	119.90
26	BB	99	G	C8-N9-C4	5.09	108.44	106.40
25	BA	472	A	C6-C5-N7	-5.09	128.74	132.30
25	BA	662	G	N1-C2-N3	5.09	126.95	123.90
25	BA	1269	A	C2-N3-C4	-5.09	108.06	110.60
1	CA	715	A	C5-C6-N1	-5.09	115.16	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	693	C	C5-C6-N1	-5.09	118.46	121.00
1	AA	98	G	N1-C6-O6	5.09	122.95	119.90
25	BA	502	A	N9-C4-C5	5.09	107.83	105.80
25	BA	540	C	N1-C2-O2	-5.09	115.85	118.90
25	BA	814	C	C2-N1-C1'	-5.09	113.20	118.80
25	BA	1187	G	C4-C5-N7	-5.09	108.77	110.80
25	BA	1548	C	C6-N1-C2	-5.09	118.27	120.30
25	BA	2247	A	C8-N9-C4	-5.09	103.77	105.80
25	BA	2884	U	N3-C4-O4	-5.09	115.84	119.40
26	DB	54	G	C4-N9-C1'	5.09	133.11	126.50
25	BA	827	U	C2-N1-C1'	-5.08	111.60	117.70
25	BA	2409	G	N1-C2-N2	-5.08	111.62	116.20
25	BA	2869	G	C4-N9-C1'	5.08	133.11	126.50
25	DA	552	G	N3-C4-C5	5.08	131.14	128.60
25	DA	1669	A	N1-C2-N3	5.08	131.84	129.30
1	AA	1363(A)	A	C6-N1-C2	-5.08	115.55	118.60
25	BA	205	G	C8-N9-C1'	-5.08	120.39	127.00
25	BA	1118	C	C6-N1-C2	-5.08	118.27	120.30
25	BA	2867	G	N1-C6-O6	5.08	122.95	119.90
26	BB	115	G	C4-C5-N7	5.08	112.83	110.80
1	AA	732	C	N3-C2-O2	-5.08	118.34	121.90
25	BA	379	G	N3-C4-N9	-5.08	122.95	126.00
25	BA	380	U	C5-C6-N1	-5.08	120.16	122.70
25	BA	1624	G	N3-C2-N2	-5.08	116.34	119.90
25	BA	2251	G	N3-C4-C5	-5.08	126.06	128.60
25	BA	2499	C	C2-N3-C4	5.08	122.44	119.90
25	BA	2589	A	N7-C8-N9	-5.08	111.26	113.80
25	DA	1814	G	N7-C8-N9	5.08	115.64	113.10
25	DA	1936	A	C4-C5-N7	5.08	113.24	110.70
25	DA	2012	G	C6-C5-N7	-5.08	127.35	130.40
1	AA	70	G	N9-C4-C5	5.08	107.43	105.40
1	AA	503	C	C5-C6-N1	5.08	123.54	121.00
25	BA	148	C	C2-N1-C1'	-5.08	113.21	118.80
25	BA	2764	A	N1-C6-N6	-5.08	115.55	118.60
25	BA	2875	C	N1-C2-O2	5.08	121.95	118.90
53	B7	42	LEU	CB-CG-CD1	-5.08	102.36	111.00
25	DA	500	G	C5-C6-N1	-5.08	108.96	111.50
25	DA	2286	A	C8-N9-C1'	-5.08	118.56	127.70
1	AA	781	A	C4-C5-N7	5.08	113.24	110.70
25	BA	271(J)	C	C5-C4-N4	-5.08	116.65	120.20
25	BA	993	G	C5-C6-N1	-5.08	108.96	111.50
25	BA	2380	C	C2-N1-C1'	-5.08	113.21	118.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2430	A	N1-C2-N3	5.08	131.84	129.30
25	BA	2744	G	N1-C6-O6	5.08	122.95	119.90
1	CA	1430	C	C6-N1-C2	-5.08	118.27	120.30
25	DA	1797	C	C6-N1-C2	5.08	122.33	120.30
25	BA	1386	C	C4-C5-C6	5.08	119.94	117.40
25	BA	1812	A	N9-C4-C5	5.08	107.83	105.80
25	BA	1799	G	P-O3'-C3'	5.08	125.79	119.70
25	BA	1804	C	N3-C4-C5	5.08	123.93	121.90
25	BA	2372	G	N1-C2-N2	5.08	120.77	116.20
25	BA	2553	G	C2-N3-C4	5.08	114.44	111.90
25	BA	2767	C	N1-C2-O2	5.08	121.94	118.90
1	CA	878	G	C8-N9-C1'	-5.08	120.40	127.00
25	DA	27	G	C8-N9-C4	-5.08	104.37	106.40
25	DA	930	U	C5-C4-O4	-5.08	122.85	125.90
1	AA	527	G	N3-C4-N9	-5.07	122.96	126.00
1	AA	1206	G	N9-C4-C5	-5.07	103.37	105.40
1	AA	1264	C	C5-C4-N4	-5.07	116.65	120.20
25	BA	582	G	C5-C6-O6	5.07	131.64	128.60
25	BA	1154	G	C5-N7-C8	-5.07	101.76	104.30
25	BA	1390	U	N3-C2-O2	5.07	125.75	122.20
25	BA	1753	G	N3-C4-C5	5.07	131.14	128.60
25	BA	1848	A	C8-N9-C4	5.07	107.83	105.80
25	BA	2230	G	N3-C4-C5	5.07	131.14	128.60
25	BA	2574	G	N3-C2-N2	-5.07	116.35	119.90
26	BB	20	C	C2-N1-C1'	5.07	124.38	118.80
25	DA	329	G	C8-N9-C4	-5.07	104.37	106.40
25	DA	1770	G	C6-C5-N7	-5.07	127.36	130.40
1	AA	1150	U	C2-N3-C4	5.07	130.04	127.00
25	BA	1208	C	C2-N3-C4	-5.07	117.36	119.90
26	BB	114	C	N1-C2-O2	-5.07	115.86	118.90
36	BQ	125	LEU	CB-CG-CD1	-5.07	102.38	111.00
25	BA	1835	G	C5-N7-C8	-5.07	101.77	104.30
25	BA	2540	C	C2-N3-C4	-5.07	117.36	119.90
25	DA	781	A	C5-N7-C8	-5.07	101.36	103.90
25	DA	982	C	C2-N3-C4	5.07	122.44	119.90
25	DA	1452	A	N1-C6-N6	5.07	121.64	118.60
25	DA	2405	G	C5-C6-O6	5.07	131.64	128.60
25	DA	2502	G	C4-C5-C6	5.07	121.84	118.80
25	BA	545	G	N3-C4-C5	5.07	131.13	128.60
25	BA	1160	G	C6-N1-C2	5.07	128.14	125.10
25	BA	1948	G	C5-C6-N1	5.07	114.03	111.50
25	BA	2552	U	C4-C5-C6	5.07	122.74	119.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1340	U	C2-N3-C4	-5.07	123.96	127.00
1	AA	155	C	N1-C2-O2	5.07	121.94	118.90
25	BA	1046	A	C8-N9-C4	-5.07	103.77	105.80
25	BA	1338	G	N1-C2-N2	-5.07	111.64	116.20
25	BA	136	G	C8-N9-C4	5.07	108.43	106.40
25	BA	1647	G	C4-C5-N7	-5.07	108.77	110.80
1	CA	377	G	N1-C6-O6	5.07	122.94	119.90
25	DA	74	A	C5-C6-N6	5.07	127.75	123.70
25	DA	341	G	N1-C2-N2	-5.07	111.64	116.20
25	DA	748	G	N3-C2-N2	5.07	123.45	119.90
1	AA	625	G	N7-C8-N9	5.06	115.63	113.10
25	BA	570	G	C6-N1-C2	-5.06	122.06	125.10
25	BA	2542	A	N3-C4-C5	5.06	130.34	126.80
1	AA	880	C	N3-C4-C5	5.06	123.92	121.90
25	BA	251	A	C5-N7-C8	5.06	106.43	103.90
25	BA	745	G	C5-C6-N1	5.06	114.03	111.50
25	BA	1676	A	C2-N3-C4	-5.06	108.07	110.60
26	BB	70	C	N3-C4-C5	5.06	123.92	121.90
25	DA	781	A	C5-C6-N6	-5.06	119.65	123.70
25	DA	933	A	N1-C6-N6	5.06	121.64	118.60
25	DA	945	A	C8-N9-C1'	-5.06	118.59	127.70
25	DA	1235	G	C8-N9-C4	-5.06	104.38	106.40
25	DA	1997	G	C5-C6-O6	-5.06	125.56	128.60
1	AA	348	G	N3-C4-N9	5.06	129.04	126.00
25	BA	513	A	C4-N9-C1'	5.06	135.41	126.30
25	BA	1527	G	C5-C6-O6	5.06	131.64	128.60
25	BA	1838	C	N3-C4-N4	5.06	121.54	118.00
25	BA	2727	G	N3-C2-N2	-5.06	116.36	119.90
1	CA	833	U	N1-C2-N3	5.06	117.94	114.90
1	AA	102	G	N3-C4-C5	-5.06	126.07	128.60
25	BA	257	A	C4-C5-C6	5.06	119.53	117.00
25	BA	1006	C	C6-N1-C2	5.06	122.32	120.30
25	BA	1667	G	C6-C5-N7	5.06	133.44	130.40
25	BA	2520	C	C2-N3-C4	-5.06	117.37	119.90
25	BA	2574	G	C6-C5-N7	-5.06	127.36	130.40
1	CA	895	G	N1-C6-O6	5.06	122.94	119.90
1	CA	1189	C	C6-N1-C2	5.06	122.32	120.30
25	DA	1694	C	C6-N1-C2	5.06	122.32	120.30
25	DA	2892	A	C8-N9-C4	-5.06	103.78	105.80
1	AA	884	U	C4-C5-C6	5.06	122.73	119.70
1	AA	1341	U	N1-C2-O2	-5.06	119.26	122.80
23	AV	76	A	C4-C5-N7	5.06	113.23	110.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	723	G	N9-C4-C5	-5.06	103.38	105.40
1	CA	304	U	C4-C5-C6	5.06	122.73	119.70
1	CA	1335	C	C6-N1-C2	5.06	122.32	120.30
25	DA	1121	C	N3-C4-N4	-5.06	114.46	118.00
25	BA	555	U	C2-N1-C1'	-5.06	111.63	117.70
25	BA	725	G	C2-N3-C4	-5.06	109.37	111.90
25	BA	1262	A	C5-N7-C8	-5.06	101.37	103.90
25	BA	2499	C	N3-C4-N4	5.06	121.54	118.00
29	BF	32	LEU	CA-CB-CG	-5.06	103.67	115.30
1	CA	879	C	C6-N1-C2	5.06	122.32	120.30
25	DA	2857	G	C5-N7-C8	-5.06	101.77	104.30
1	AA	804	U	N1-C2-N3	5.05	117.93	114.90
1	AA	832	C	C2-N1-C1'	5.05	124.36	118.80
1	AA	1352	C	N1-C2-N3	5.05	122.74	119.20
25	BA	652(F)	G	C8-N9-C4	5.05	108.42	106.40
25	BA	2248	C	N3-C2-O2	-5.05	118.36	121.90
25	BA	2431	U	C5-C4-O4	5.05	128.93	125.90
25	BA	2848	G	C6-C5-N7	-5.05	127.37	130.40
1	CA	1067	A	C8-N9-C4	-5.05	103.78	105.80
25	DA	861	A	C8-N9-C4	-5.05	103.78	105.80
25	BA	494	G	C6-C5-N7	-5.05	127.37	130.40
37	BR	107	ASP	CB-CG-OD2	-5.05	113.75	118.30
1	CA	773	G	N1-C2-N3	-5.05	120.87	123.90
1	CA	894	G	C2-N3-C4	-5.05	109.37	111.90
1	AA	15	G	C6-C5-N7	-5.05	127.37	130.40
1	AA	1137	C	C6-N1-C1'	5.05	126.86	120.80
25	BA	469	G	N1-C6-O6	-5.05	116.87	119.90
25	BA	802	A	C8-N9-C1'	-5.05	118.61	127.70
25	BA	2498	C	C2-N3-C4	-5.05	117.37	119.90
25	BA	2608	G	C5-C6-N1	-5.05	108.97	111.50
37	BR	2	ARG	CA-CB-CG	5.05	124.51	113.40
25	DA	1616	A	C4-C5-N7	5.05	113.22	110.70
1	AA	266	G	N3-C4-N9	5.05	129.03	126.00
25	BA	334	C	C2-N1-C1'	5.05	124.35	118.80
25	BA	373	U	N3-C4-C5	5.05	117.63	114.60
25	BA	465	G	N3-C4-N9	5.05	129.03	126.00
25	BA	1567	A	C8-N9-C4	-5.05	103.78	105.80
25	BA	1975	G	C8-N9-C4	-5.05	104.38	106.40
25	BA	2724	C	C5-C4-N4	-5.05	116.67	120.20
25	BA	2812	G	N1-C6-O6	-5.05	116.87	119.90
25	DA	197	A	C6-N1-C2	-5.05	115.57	118.60
25	DA	510	C	C2-N1-C1'	5.05	124.36	118.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2440	C	C4-C5-C6	5.05	119.92	117.40
25	BA	2334	G	N1-C2-N2	-5.05	111.66	116.20
25	DA	253	C	C5-C4-N4	-5.05	116.67	120.20
25	DA	1354	A	C5-C6-N1	5.05	120.22	117.70
25	DA	1698	A	C6-N1-C2	5.05	121.63	118.60
1	AA	541	G	N9-C4-C5	5.05	107.42	105.40
1	AA	1135	U	N1-C2-O2	5.05	126.33	122.80
25	BA	245	G	N1-C6-O6	5.05	122.93	119.90
25	BA	693	C	C4-C5-C6	5.05	119.92	117.40
25	BA	752	A	C4-C5-N7	-5.05	108.18	110.70
25	BA	1614	A	C2-N3-C4	-5.05	108.08	110.60
25	BA	1776	G	C6-C5-N7	-5.05	127.37	130.40
25	BA	2703	C	C2-N1-C1'	5.05	124.35	118.80
26	BB	89	G	N3-C4-N9	5.05	129.03	126.00
25	DA	718	A	N1-C6-N6	5.05	121.63	118.60
25	DA	788	A	N9-C4-C5	-5.05	103.78	105.80
25	DA	1814	G	N1-C2-N3	5.05	126.93	123.90
25	DA	2608	G	C2-N3-C4	-5.05	109.38	111.90
42	DW	92	ARG	NE-CZ-NH2	-5.05	117.78	120.30
1	AA	806	C	C5-C4-N4	-5.04	116.67	120.20
1	AA	1169	A	C8-N9-C4	-5.04	103.78	105.80
1	CA	1523	G	C8-N9-C4	-5.04	104.38	106.40
1	AA	1153	C	N1-C2-O2	5.04	121.93	118.90
25	BA	176	G	N1-C6-O6	5.04	122.93	119.90
25	BA	231	C	N1-C2-N3	5.04	122.73	119.20
25	BA	333	G	N9-C4-C5	5.04	107.42	105.40
25	BA	944	G	C8-N9-C4	-5.04	104.38	106.40
25	BA	1116	C	C6-N1-C2	5.04	122.32	120.30
25	BA	1131	G	C5-C6-O6	5.04	131.63	128.60
25	BA	1361	G	N3-C4-C5	5.04	131.12	128.60
25	BA	1812	A	C6-N1-C2	-5.04	115.57	118.60
25	BA	2055	C	N1-C2-O2	-5.04	115.87	118.90
25	BA	2450	A	C5-N7-C8	-5.04	101.38	103.90
25	BA	2491	U	N3-C4-C5	5.04	117.63	114.60
1	CA	413	G	C8-N9-C1'	-5.04	120.44	127.00
1	CA	662	G	N3-C4-N9	5.04	129.03	126.00
1	CA	1081	G	N3-C4-N9	5.04	129.03	126.00
1	CA	1528	U	C6-N1-C2	5.04	124.03	121.00
25	DA	115	C	C5-C6-N1	-5.04	118.48	121.00
25	DA	1492	G	N3-C2-N2	-5.04	116.37	119.90
1	AA	63	C	C6-N1-C2	-5.04	118.28	120.30
25	BA	115	C	N1-C2-O2	-5.04	115.88	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	587	C	N3-C4-N4	-5.04	114.47	118.00
25	BA	1343	G	C5-C6-O6	5.04	131.62	128.60
1	CA	7	G	N1-C6-O6	5.04	122.92	119.90
25	DA	116	C	C6-N1-C1'	5.04	126.85	120.80
25	DA	472	A	N1-C6-N6	5.04	121.62	118.60
25	DA	1774	C	C6-N1-C2	-5.04	118.28	120.30
23	AV	46	G	C4-C5-N7	5.04	112.82	110.80
25	BA	118	A	N7-C8-N9	-5.04	111.28	113.80
25	BA	450	G	C2-N3-C4	5.04	114.42	111.90
25	BA	506	G	N3-C4-C5	-5.04	126.08	128.60
25	BA	1108	U	C5-C4-O4	5.04	128.92	125.90
25	BA	2105	C	C5-C4-N4	5.04	123.73	120.20
25	DA	509	C	C2-N3-C4	-5.04	117.38	119.90
1	AA	199	G	C8-N9-C1'	-5.04	120.45	127.00
25	BA	339	U	C5-C6-N1	-5.04	120.18	122.70
25	BA	746	A	C4-C5-N7	5.04	113.22	110.70
25	BA	1177	A	N3-C4-C5	-5.04	123.27	126.80
25	BA	1897	G	N9-C4-C5	-5.04	103.39	105.40
25	BA	2318	G	C4-C5-C6	5.04	121.82	118.80
25	BA	2569	G	N1-C2-N2	-5.04	111.67	116.20
26	BB	82	G	N7-C8-N9	-5.04	110.58	113.10
1	CA	597	G	C5-C6-N1	5.04	114.02	111.50
1	CA	1429	C	N3-C2-O2	-5.04	118.37	121.90
25	BA	715	G	N3-C4-C5	-5.04	126.08	128.60
25	BA	962	G	C6-N1-C2	-5.04	122.08	125.10
25	BA	2363	C	N1-C2-O2	-5.04	115.88	118.90
25	BA	2819	G	N1-C6-O6	5.04	122.92	119.90
25	DA	1834	U	N1-C2-O2	5.04	126.33	122.80
26	DB	56	G	C2-N3-C4	5.04	114.42	111.90
1	AA	1358	U	C6-N1-C1'	5.04	128.25	121.20
25	BA	480	A	C8-N9-C4	-5.04	103.78	105.80
25	BA	962	G	C4-C5-C6	5.04	121.82	118.80
25	BA	1781	C	C6-N1-C1'	-5.04	114.76	120.80
25	BA	1888	G	N7-C8-N9	5.04	115.62	113.10
25	BA	2754	U	N3-C4-O4	5.04	122.92	119.40
1	CA	1520	G	C6-C5-N7	5.04	133.42	130.40
25	DA	1187	G	N7-C8-N9	5.04	115.62	113.10
26	DB	102	A	C4-C5-N7	5.04	113.22	110.70
1	AA	297	G	N9-C4-C5	-5.03	103.39	105.40
1	AA	616	G	C8-N9-C4	-5.03	104.39	106.40
25	BA	366	C	C4-C5-C6	5.03	119.92	117.40
25	BA	437	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(°)
25	BA	554	U	N1-C2-N3	5.03	117.92	114.90
25	BA	932	G	N1-C6-O6	-5.03	116.88	119.90
25	BA	1015	G	N1-C6-O6	5.03	122.92	119.90
25	BA	1579	A	C8-N9-C4	-5.03	103.79	105.80
1	CA	12	U	N3-C4-C5	-5.03	111.58	114.60
1	CA	329	A	C8-N9-C4	-5.03	103.79	105.80
1	CA	1531	A	N1-C6-N6	5.03	121.62	118.60
25	DA	612	C	C2-N1-C1'	-5.03	113.26	118.80
25	DA	923	C	C5-C6-N1	5.03	123.52	121.00
25	DA	1964	G	N3-C4-C5	-5.03	126.08	128.60
1	AA	598	U	C5-C6-N1	5.03	125.22	122.70
18	AR	31	LEU	CA-CB-CG	5.03	126.87	115.30
25	BA	1021	A	C4-C5-C6	5.03	119.52	117.00
1	CA	616	G	N3-C4-N9	5.03	129.02	126.00
25	DA	6	A	N3-C4-C5	-5.03	123.28	126.80
25	DA	2104	G	N3-C2-N2	5.03	123.42	119.90
1	AA	98	G	N7-C8-N9	5.03	115.62	113.10
1	AA	1309	G	N9-C4-C5	-5.03	103.39	105.40
25	BA	271(W)	G	C5-C6-O6	5.03	131.62	128.60
25	BA	1221	C	N1-C2-O2	-5.03	115.88	118.90
25	BA	1965	C	N1-C2-O2	5.03	121.92	118.90
25	BA	2090	G	C4-C5-N7	-5.03	108.79	110.80
25	BA	2230	G	N3-C4-N9	-5.03	122.98	126.00
25	BA	2321	G	N3-C2-N2	-5.03	116.38	119.90
25	BA	2630	G	C8-N9-C4	5.03	108.41	106.40
1	CA	851	G	C6-C5-N7	-5.03	127.38	130.40
1	CA	869	G	C5-C6-N1	-5.03	108.98	111.50
25	DA	378	C	N3-C4-C5	5.03	123.91	121.90
25	DA	798	G	C5-C6-N1	-5.03	108.98	111.50
25	DA	2697	G	N9-C4-C5	-5.03	103.39	105.40
1	AA	748	C	C6-N1-C2	-5.03	118.29	120.30
25	BA	2345	G	C4-C5-C6	5.03	121.82	118.80
32	BI	31	LEU	C-N-CD	5.03	138.96	128.40
1	AA	307	C	N3-C4-C5	-5.03	119.89	121.90
1	AA	504	C	N3-C2-O2	-5.03	118.38	121.90
1	AA	550	G	C5-C6-O6	-5.03	125.58	128.60
25	BA	134	C	N3-C4-C5	-5.03	119.89	121.90
25	BA	180	G	N1-C6-O6	5.03	122.92	119.90
25	BA	567	A	N1-C2-N3	5.03	131.81	129.30
25	BA	1110	G	C4-N9-C1'	5.03	133.03	126.50
25	BA	1976	U	N3-C2-O2	-5.03	118.68	122.20
25	BA	2662	A	C8-N9-C4	-5.03	103.79	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	644	G	N7-C8-N9	-5.03	110.59	113.10
25	DA	1354	A	N1-C6-N6	-5.03	115.58	118.60
25	BA	271(M)	G	C5-C6-N1	5.03	114.01	111.50
25	BA	1155	A	C2-N3-C4	5.03	113.11	110.60
25	BA	1514	U	C6-N1-C2	-5.03	117.98	121.00
25	BA	1820	U	N3-C2-O2	-5.03	118.68	122.20
25	BA	1825	A	N7-C8-N9	-5.03	111.29	113.80
25	BA	1994	C	N1-C2-O2	-5.03	115.89	118.90
25	BA	2610	C	P-O3'-C3'	5.03	125.73	119.70
26	BB	30	C	C2-N3-C4	5.03	122.41	119.90
1	CA	377	G	C6-C5-N7	-5.03	127.39	130.40
25	DA	1923	U	C5-C6-N1	5.03	125.21	122.70
25	DA	1964	G	C5-C6-O6	-5.03	125.58	128.60
25	BA	1251	C	N1-C2-O2	-5.02	115.89	118.90
25	BA	1983	C	C2-N1-C1'	-5.02	113.27	118.80
25	BA	2094	G	C5-C6-N1	5.02	114.01	111.50
1	AA	371	G	C5-C6-O6	-5.02	125.59	128.60
25	BA	768	G	N1-C6-O6	5.02	122.91	119.90
25	BA	1031	G	N3-C4-C5	-5.02	126.09	128.60
25	BA	1154	G	C4-C5-N7	5.02	112.81	110.80
25	BA	2033	A	C2-N3-C4	5.02	113.11	110.60
25	BA	2224	G	N7-C8-N9	5.02	115.61	113.10
25	BA	2241	A	C8-N9-C4	-5.02	103.79	105.80
25	BA	2502	G	N3-C4-C5	-5.02	126.09	128.60
25	BA	2722	G	C8-N9-C4	5.02	108.41	106.40
26	BB	30	C	C5-C6-N1	5.02	123.51	121.00
1	CA	1484	C	N3-C4-C5	5.02	123.91	121.90
25	DA	142	A	C8-N9-C4	-5.02	103.79	105.80
25	BA	1940	U	N1-C2-N3	5.02	117.91	114.90
25	BA	2866	U	N3-C4-C5	-5.02	111.59	114.60
26	BB	79	C	C5-C4-N4	5.02	123.72	120.20
1	AA	728	A	C4-C5-N7	5.02	113.21	110.70
1	AA	1412	C	C6-N1-C2	5.02	122.31	120.30
25	BA	307	G	N1-C6-O6	5.02	122.91	119.90
25	BA	1256	G	C8-N9-C1'	-5.02	120.47	127.00
25	BA	1600	C	C5-C6-N1	-5.02	118.49	121.00
25	BA	1621	U	C4-C5-C6	5.02	122.71	119.70
25	BA	1664	A	C2-N3-C4	5.02	113.11	110.60
25	BA	2374	C	C2-N3-C4	-5.02	117.39	119.90
25	BA	2588	G	N3-C4-N9	-5.02	122.99	126.00
25	DA	798	G	N3-C4-N9	-5.02	122.99	126.00
25	BA	271(W)	G	N3-C2-N2	5.02	123.41	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1190	G	C2-N3-C4	-5.02	109.39	111.90
26	BB	43	C	N3-C2-O2	-5.02	118.39	121.90
1	CA	1338	G	N1-C6-O6	-5.02	116.89	119.90
25	DA	391	G	C5-C6-N1	-5.02	108.99	111.50
25	DA	528	A	C8-N9-C4	-5.02	103.79	105.80
25	DA	1219	G	N3-C4-C5	5.02	131.11	128.60
25	DA	1299	G	C8-N9-C4	-5.02	104.39	106.40
25	DA	2356	C	C6-N1-C2	5.02	122.31	120.30
25	DA	2827	C	N3-C2-O2	5.02	125.41	121.90
1	AA	1145	C	N3-C4-C5	-5.02	119.89	121.90
25	BA	779	U	C5-C4-O4	-5.02	122.89	125.90
25	BA	2453	A	N9-C4-C5	5.02	107.81	105.80
1	CA	93	G	N3-C4-C5	-5.02	126.09	128.60
25	DA	760	G	N7-C8-N9	5.02	115.61	113.10
25	DA	1482	G	C2-N3-C4	5.02	114.41	111.90
1	AA	1253	G	N3-C4-N9	5.01	129.01	126.00
1	AA	1331	G	N3-C4-C5	5.01	131.11	128.60
25	BA	922	U	N3-C4-O4	-5.01	115.89	119.40
25	BA	1278	A	N1-C6-N6	5.01	121.61	118.60
25	DA	1377	G	C4-C5-C6	5.01	121.81	118.80
25	BA	468	G	C4-C5-N7	-5.01	108.80	110.80
25	BA	1751	C	N3-C2-O2	5.01	125.41	121.90
25	BA	2562	U	C4-C5-C6	5.01	122.71	119.70
25	DA	1266	G	N3-C4-N9	5.01	129.01	126.00
25	DA	2246	G	C2-N3-C4	-5.01	109.39	111.90
25	DA	2455	G	C4-N9-C1'	5.01	133.02	126.50
1	AA	421	U	C5-C6-N1	5.01	125.21	122.70
1	AA	1274	G	N7-C8-N9	5.01	115.61	113.10
23	AV	2	G	C8-N9-C4	-5.01	104.39	106.40
25	BA	1042	G	C4-C5-N7	5.01	112.80	110.80
25	BA	1334	G	N9-C4-C5	-5.01	103.39	105.40
25	BA	1631(A)	A	N7-C8-N9	5.01	116.31	113.80
25	BA	1831	G	C5-C6-O6	-5.01	125.59	128.60
25	BA	1978	A	N1-C2-N3	-5.01	126.80	129.30
25	BA	2008	C	N1-C2-O2	-5.01	115.89	118.90
25	BA	2197	U	C6-N1-C2	5.01	124.01	121.00
25	BA	2265	U	C4-C5-C6	5.01	122.71	119.70
25	BA	2607	G	C5-C6-N1	5.01	114.01	111.50
1	CA	436	C	C5-C6-N1	5.01	123.50	121.00
9	CI	107	ARG	CG-CD-NE	5.01	122.32	111.80
25	DA	92	A	C6-C5-N7	-5.01	128.79	132.30
25	DA	503	A	N9-C4-C5	5.01	107.80	105.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	755	C	N1-C2-O2	-5.01	115.89	118.90
25	DA	945	A	N1-C2-N3	5.01	131.81	129.30
25	DA	1667	G	C8-N9-C4	5.01	108.40	106.40
1	AA	226	G	N7-C8-N9	-5.01	110.59	113.10
1	AA	509	A	C3'-C2'-C1'	-5.01	97.49	101.50
1	AA	527	G	N3-C4-C5	5.01	131.10	128.60
25	BA	141	A	C5-C6-N1	-5.01	115.19	117.70
25	BA	802	A	N1-C6-N6	5.01	121.61	118.60
26	BB	45	A	C5-C6-N6	5.01	127.71	123.70
54	B8	60	LEU	CB-CG-CD1	-5.01	102.48	111.00
25	DA	60	G	C8-N9-C1'	5.01	133.51	127.00
25	DA	90	U	N3-C4-O4	5.01	122.91	119.40
25	DA	574	C	C2-N3-C4	5.01	122.40	119.90
25	DA	1670	C	C6-N1-C2	-5.01	118.30	120.30
25	DA	1992	G	P-O3'-C3'	5.01	125.71	119.70
25	DA	2476	A	N9-C4-C5	5.01	107.80	105.80
25	DA	1670	C	N1-C2-N3	5.01	122.70	119.20
25	DA	1789	A	N7-C8-N9	-5.01	111.30	113.80
25	DA	2824	C	C6-N1-C2	5.01	122.30	120.30
1	AA	166	G	C2-N3-C4	5.01	114.40	111.90
1	AA	990	C	C2-N1-C1'	5.01	124.31	118.80
25	BA	414	C	C5-C4-N4	-5.01	116.70	120.20
25	BA	851	U	C6-N1-C2	5.01	124.00	121.00
25	BA	2508	G	N1-C2-N2	5.01	120.71	116.20
1	CA	1373	G	C8-N9-C4	-5.01	104.40	106.40
25	DA	314	A	C4-C5-C6	-5.01	114.50	117.00
25	DA	1671	U	N3-C2-O2	5.01	125.70	122.20
25	DA	2361	A	N1-C2-N3	5.01	131.80	129.30
1	AA	98	G	C4-N9-C1'	5.00	133.01	126.50
1	AA	1442	G	C5-C6-N1	-5.00	109.00	111.50
25	BA	1777	U	C4-C5-C6	5.00	122.70	119.70
25	BA	186	G	C6-C5-N7	-5.00	127.40	130.40
25	BA	228	A	C8-N9-C1'	5.00	136.71	127.70
25	BA	365	C	C6-N1-C1'	5.00	126.81	120.80
25	BA	652(H)	C	N3-C2-O2	-5.00	118.40	121.90
25	BA	1389	G	C5-N7-C8	5.00	106.80	104.30
25	BA	1415	U	C5-C4-O4	5.00	128.90	125.90
25	BA	2324	C	N1-C2-O2	5.00	121.90	118.90
28	BE	78	LEU	CA-CB-CG	5.00	126.81	115.30
1	CA	509	A	N7-C8-N9	5.00	116.30	113.80
1	CA	923	A	N1-C2-N3	5.00	131.80	129.30
17	CQ	6	LEU	CA-CB-CG	5.00	126.81	115.30

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	117	G	N1-C2-N3	5.00	126.90	123.90
1	AA	372	C	N1-C2-O2	5.00	121.90	118.90
25	BA	39	C	C6-N1-C2	5.00	122.30	120.30
25	BA	216	A	N9-C4-C5	5.00	107.80	105.80
25	BA	1561	G	N9-C4-C5	-5.00	103.40	105.40
25	BA	1617	C	C2-N3-C4	-5.00	117.40	119.90
25	BA	2897	U	C5-C4-O4	-5.00	122.90	125.90
51	B5	60	VAL	CB-CA-C	-5.00	101.90	111.40
1	CA	865	A	N1-C6-N6	5.00	121.60	118.60
25	DA	603	A	C8-N9-C4	5.00	107.80	105.80
25	DA	1937	A	C4-C5-C6	5.00	119.50	117.00
25	DA	1990	C	C5-C4-N4	5.00	123.70	120.20
25	DA	2288	A	N7-C8-N9	5.00	116.30	113.80

There are no chirality outliers.

All (82) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	189(D)	C	Sidechain
2	AB	14	GLY	Peptide
2	AB	23	ARG	Peptide
2	AB	71	VAL	Peptide
2	AB	76	GLN	Peptide
3	AC	110	ASN	Peptide
3	AC	166	GLU	Peptide
4	AD	109	GLY	Peptide
4	AD	177	ASP	Peptide
4	AD	29	PRO	Peptide
4	AD	30	LYS	Peptide
5	AE	85	GLY	Peptide
5	AE	97	GLY	Peptide
7	AG	57	GLU	Peptide
9	AI	45	ALA	Peptide
9	AI	53	VAL	Peptide
9	AI	56	LEU	Peptide
10	AJ	55	LYS	Peptide
10	AJ	80	LYS	Peptide
11	AK	48	ILE	Peptide
12	AL	89	ARG	Peptide
13	AM	10	PRO	Peptide
13	AM	65	LYS	Peptide
13	AM	68	GLY	Peptide

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
18	AR	31	LEU	Peptide
20	AT	101	GLY	Peptide
20	AT	98	PRO	Peptide
22	AY	11	PRO	Peptide
47	B1	83	GLU	Peptide
50	B4	42	PHE	Peptide
51	B5	53	ALA	Peptide
27	BD	141	VAL	Peptide
27	BD	239	ARG	Peptide
28	BE	203	LYS	Peptide
28	BE	72	VAL	Peptide
29	BF	129	PHE	Peptide
29	BF	85	GLY	Peptide
32	BI	10	GLU	Peptide
32	BI	106	GLY	Peptide
32	BI	107	VAL	Peptide
34	BO	48	PRO	Peptide
35	BP	25	SER	Peptide
36	BQ	1	MET	Peptide
36	BQ	60	ARG	Peptide
38	BS	82	ILE	Peptide
39	BT	126	ALA	Peptide
43	BX	24	GLY	Peptide
45	BZ	159	PRO	Peptide
1	CA	129(A)	G	Sidechain
2	CB	22	LYS	Peptide
2	CB	71	VAL	Peptide
4	CD	147	ALA	Peptide
4	CD	28	SER	Peptide
4	CD	29	PRO	Peptide
4	CD	3	ARG	Peptide
4	CD	30	LYS	Peptide
5	CE	36	ASP	Peptide
7	CG	113	GLU	Peptide
10	CJ	55	LYS	Peptide
10	CJ	90	LEU	Peptide
13	CM	44	ARG	Peptide
13	CM	65	LYS	Peptide
14	CN	14	PRO	Peptide
16	CP	15	PRO	Peptide
20	CT	11	SER	Peptide
20	CT	45	GLN	Peptide

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
21	CU	6	ARG	Peptide
47	D1	83	GLU	Peptide
48	D2	43	GLN	Peptide
50	D4	42	PHE	Peptide
52	D6	43	CYS	Peptide
28	DE	72	VAL	Peptide
29	DF	85	GLY	Peptide
30	DG	13	GLU	Peptide
30	DG	49	ASP	Peptide
30	DG	50	ALA	Peptide
31	DH	92	ILE	Peptide
34	DO	48	PRO	Peptide
35	DP	26	GLY	Peptide
36	DQ	1	MET	Peptide
38	DS	82	ILE	Peptide
39	DT	126	ALA	Peptide

## 5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	31513	0	15906	882	0
1	CA	31406	0	15852	823	0
2	AB	1809	0	1781	104	0
2	CB	1817	0	1785	126	0
3	AC	1434	0	1299	59	0
3	CC	1453	0	1320	64	0
4	AD	1520	0	1407	80	0
4	CD	1537	0	1430	81	1
5	AE	1105	0	1130	50	0
5	CE	1115	0	1145	55	0
6	AF	781	0	741	36	1
6	CF	784	0	739	30	0
7	AG	1152	0	1098	58	0
7	CG	1149	0	1096	52	0
8	AH	1045	0	1033	52	0
8	CH	1049	0	1037	52	0
9	AI	863	0	760	54	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
9	CI	849	0	735	54	0
10	AJ	659	0	552	38	0
10	CJ	657	0	547	40	0
11	AK	843	0	841	34	0
11	CK	828	0	822	31	0
12	AL	909	0	927	50	0
12	CL	905	0	916	30	0
13	AM	814	0	765	47	0
13	CM	784	0	730	51	0
14	AN	473	0	491	39	0
14	CN	469	0	482	37	0
15	AO	724	0	749	34	0
15	CO	724	0	749	30	0
16	AP	646	0	636	42	0
16	CP	661	0	653	45	0
17	AQ	823	0	891	52	0
17	CQ	819	0	880	38	0
18	AR	514	0	530	27	0
18	CR	514	0	530	21	0
19	AS	560	0	466	24	0
19	CS	529	0	443	22	0
20	AT	714	0	775	41	0
20	CT	773	0	836	32	0
21	AU	217	0	234	7	0
21	CU	180	0	173	4	0
22	AY	1031	0	1087	85	0
23	AV	1644	0	836	23	0
23	CV	1644	0	836	38	0
24	AX	131	0	66	4	0
24	CX	131	0	66	2	0
25	BA	59281	0	29884	1053	0
25	DA	58627	0	29570	1197	0
26	BB	2573	0	1306	47	0
26	DB	2573	0	1306	83	0
27	BD	2131	0	2207	97	0
27	DD	2136	0	2218	104	0
28	BE	1555	0	1607	65	0
28	DE	1555	0	1607	72	0
29	BF	1576	0	1616	71	0
29	DF	1578	0	1623	96	0
30	BG	1368	0	1324	52	0
30	DG	1361	0	1316	76	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
31	BH	1317	0	1376	52	0
31	DH	1317	0	1376	59	0
32	BI	1066	0	1095	47	0
32	DI	1057	0	1087	56	0
33	BN	1112	0	1180	49	0
33	DN	1112	0	1180	64	0
34	BO	923	0	981	37	0
34	DO	923	0	981	38	0
35	BP	1131	0	1201	61	0
35	DP	1131	0	1201	66	0
36	BQ	1122	0	1179	46	0
36	DQ	1122	0	1179	66	0
37	BR	968	0	1033	42	0
37	DR	968	0	1033	56	0
38	BS	865	0	905	53	0
38	DS	873	0	927	64	0
39	BT	1072	0	1116	31	0
39	DT	1058	0	1098	35	0
40	BU	959	0	1019	35	0
40	DU	959	0	1019	49	0
41	BV	766	0	827	24	0
41	DV	770	0	838	40	0
42	BW	890	0	951	33	0
42	DW	877	0	932	32	0
43	BX	742	0	799	36	0
43	DX	732	0	777	17	0
44	BY	785	0	828	25	0
44	DY	781	0	829	42	0
45	BZ	1454	0	1452	66	0
45	DZ	1451	0	1421	72	0
46	B0	594	0	604	30	0
46	D0	607	0	622	39	0
47	B1	745	0	804	33	0
47	D1	745	0	804	37	0
48	B2	588	0	643	28	0
48	D2	584	0	623	26	0
49	B3	458	0	503	16	0
49	D3	453	0	501	28	0
50	B4	349	0	336	22	0
50	D4	349	0	336	19	0
51	B5	455	0	472	20	0
51	D5	451	0	461	25	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
52	B6	449	0	462	25	0
52	D6	437	0	440	16	0
53	B7	418	0	467	22	0
53	D7	402	0	434	11	0
54	B8	509	0	565	24	0
54	D8	509	0	565	26	0
55	B9	297	0	316	16	0
55	D9	292	0	313	14	0
56	AA	348	0	0	0	0
56	AD	2	0	0	0	0
56	AE	1	0	0	0	0
56	AF	1	0	0	0	0
56	AI	2	0	0	0	0
56	AK	1	0	0	0	0
56	AT	1	0	0	0	0
56	AV	18	0	0	0	0
56	AY	1	0	0	0	0
56	B0	5	0	0	0	0
56	B1	3	0	0	0	0
56	B2	2	0	0	0	0
56	B3	2	0	0	0	0
56	B5	3	0	0	0	0
56	B6	1	0	0	0	0
56	B7	1	0	0	0	0
56	B8	2	0	0	0	0
56	B9	1	0	0	0	0
56	BA	896	0	0	0	0
56	BB	30	0	0	0	0
56	BD	5	0	0	0	0
56	BE	5	0	0	0	0
56	BF	7	0	0	0	0
56	BG	2	0	0	0	0
56	BO	2	0	0	0	0
56	BP	2	0	0	0	0
56	BQ	4	0	0	0	0
56	BR	2	0	0	0	0
56	BT	1	0	0	0	0
56	BU	1	0	0	0	0
56	BV	2	0	0	0	0
56	BX	1	0	0	0	0
56	BY	2	0	0	0	0
56	BZ	2	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	CA	219	0	0	0	0
56	CD	1	0	0	0	0
56	CT	1	0	0	0	0
56	CV	10	0	0	0	0
56	CX	1	0	0	0	0
56	D0	4	0	0	0	0
56	D1	1	0	0	0	0
56	D5	1	0	0	0	0
56	D6	2	0	0	0	0
56	D7	1	0	0	0	0
56	D8	1	0	0	0	0
56	DA	696	0	0	0	0
56	DB	16	0	0	0	0
56	DD	4	0	0	0	0
56	DE	4	0	0	0	0
56	DF	3	0	0	0	0
56	DO	3	0	0	0	0
56	DQ	2	0	0	0	0
56	DR	1	0	0	0	0
56	DT	3	0	0	0	0
56	DU	1	0	0	0	0
56	DV	1	0	0	0	0
56	DX	1	0	0	0	0
57	AD	1	0	0	0	0
57	AN	1	0	0	0	0
57	B4	1	0	0	0	0
57	B5	1	0	0	0	0
57	B6	1	0	0	0	0
57	B9	1	0	0	0	0
57	BY	1	0	0	0	0
57	CD	1	0	0	0	0
57	CN	1	0	0	0	0
57	D4	1	0	0	0	0
57	D5	1	0	0	0	0
57	D6	1	0	0	0	0
57	D9	1	0	0	0	0
57	DY	1	0	0	0	0
58	AA	372	0	0	22	0
58	AD	2	0	0	0	0
58	AE	3	0	0	0	0
58	AI	1	0	0	1	0
58	AK	2	0	0	0	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	AL	2	0	0	0	0
58	AN	1	0	0	0	0
58	AT	5	0	0	1	0
58	AV	16	0	0	1	0
58	AX	1	0	0	0	0
58	AY	2	0	0	1	0
58	B0	4	0	0	0	0
58	B1	1	0	0	0	0
58	B3	1	0	0	0	0
58	B6	4	0	0	0	0
58	B7	2	0	0	0	0
58	B8	4	0	0	1	0
58	B9	1	0	0	0	0
58	BA	1491	0	0	71	0
58	BB	46	0	0	1	0
58	BD	10	0	0	0	0
58	BE	5	0	0	0	0
58	BF	5	0	0	0	0
58	BG	5	0	0	1	0
58	BH	1	0	0	0	0
58	BN	3	0	0	0	0
58	BO	3	0	0	0	0
58	BP	9	0	0	2	0
58	BQ	4	0	0	0	0
58	BR	7	0	0	0	0
58	BT	1	0	0	0	0
58	BU	7	0	0	1	0
58	BV	1	0	0	0	0
58	BW	2	0	0	0	0
58	BX	2	0	0	0	0
58	BY	1	0	0	0	0
58	CA	330	0	0	17	0
58	CB	1	0	0	1	0
58	CC	1	0	0	0	0
58	CD	3	0	0	0	0
58	CE	1	0	0	0	0
58	CK	2	0	0	0	0
58	CL	3	0	0	1	0
58	CN	2	0	0	0	0
58	CO	2	0	0	1	0
58	CQ	2	0	0	1	0
58	CT	2	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	CV	13	0	0	0	0
58	CX	1	0	0	0	0
58	D1	3	0	0	1	0
58	D3	1	0	0	0	0
58	D6	2	0	0	0	0
58	D7	2	0	0	0	0
58	D8	4	0	0	1	0
58	DA	1028	0	0	63	0
58	DB	40	0	0	2	0
58	DD	8	0	0	0	0
58	DE	11	0	0	1	0
58	DF	4	0	0	0	0
58	DG	1	0	0	0	0
58	DN	3	0	0	0	0
58	DO	5	0	0	1	0
58	DP	4	0	0	0	0
58	DR	5	0	0	1	0
58	DT	3	0	0	0	0
58	DV	1	0	0	0	0
58	DW	1	0	0	0	0
58	DY	2	0	0	0	0
All	All	284877	0	186478	7600	1

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 17.

All (7600) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:D9:11:CYS:SG	55:D9:32:HIS:HE1	1.40	1.43
25:DA:885:C:N4	25:DA:890:A:N6	1.81	1.27
25:BA:885:C:N4	25:BA:890:A:N6	1.88	1.22
1:CA:1358:U:H3	1:CA:1363(A):A:N6	1.35	1.22
1:AA:1358:U:H3	1:AA:1363(A):A:N6	1.41	1.16
26:BB:119:G:H2'	26:BB:120:A:H5'	1.20	1.11
26:BB:119:G:C2'	26:BB:120:A:H5'	1.81	1.10
25:DA:1798:U:H5'	27:DD:259:THR:HG22	1.36	1.03
25:DA:31:C:OP1	58:DA:3861:HOH:O	1.75	1.03
18:AR:55:ARG:HH11	18:AR:55:ARG:HG3	1.24	1.02
1:CA:1162:C:N4	1:CA:1174:G:H1	1.58	1.01
25:BA:1654:A:OP1	37:BR:1:MET:N	1.93	1.00

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1358:U:O4	1:CA:1363(A):A:N1	1.94	0.99
25:DA:571:A:H5'	25:DA:2030:A:H62	1.27	0.99
25:BA:1376:C:OP2	58:BA:5003:HOH:O	1.79	0.99
25:BA:139(A):G:N2	43:BX:44:GLU:OE1	1.97	0.98
1:AA:1358:U:O4	1:AA:1363(A):A:N1	1.97	0.97
25:BA:571:A:H5'	25:BA:2030:A:H62	1.26	0.97
25:BA:676:A:H8	25:BA:2069:G:H21	1.13	0.97
4:AD:22:LYS:HB2	4:AD:26:CYS:HB2	1.48	0.96
33:BN:56:ASN:H	33:BN:125:GLY:HA3	1.29	0.96
25:DA:631:A:OP1	35:DP:65:ARG:NH1	1.98	0.95
25:BA:885:C:H42	25:BA:890:A:N6	1.52	0.95
26:DB:52:A:HO2'	26:DB:53:A:H2	1.09	0.95
25:DA:885:C:H42	25:DA:890:A:N6	1.56	0.95
1:CA:1502:A:H2	1:CA:1505:G:H1	1.16	0.94
22:AY:68:GLY:HA2	22:AY:69:VAL:HB	1.50	0.94
4:AD:110:PHE:HD1	4:AD:110:PHE:H	1.05	0.94
25:DA:1689:A:H62	25:DA:1698:A:H2	1.14	0.94
1:CA:377:G:H1	1:CA:386:C:H42	1.12	0.94
32:BI:77:LEU:HB3	32:BI:142:VAL:HG12	1.50	0.93
47:D1:50:ARG:HG2	47:D1:59:THR:HB	1.51	0.93
25:BA:1403:C:H5''	25:BA:1471:A:H1'	1.51	0.92
25:BA:586:A:OP2	58:BA:5378:HOH:O	1.88	0.92
27:BD:69:ARG:NH2	27:BD:128:GLY:O	2.02	0.92
1:CA:1352:C:OP1	21:CU:3:LYS:NZ	2.03	0.91
1:AA:56:U:H2'	1:AA:57:G:H8	1.36	0.91
40:BU:28:ARG:NH1	40:BU:38:THR:OG1	2.04	0.90
25:DA:271(I):G:H1	25:DA:271(O):C:H42	1.13	0.90
11:AK:79:SER:HA	11:AK:104:GLN:HB2	1.50	0.90
1:CA:1277:C:HO2'	1:CA:1279:A:H8	0.96	0.90
25:BA:141:A:H8	25:BA:1408:C:HO2'	0.91	0.90
1:AA:929:G:H1	1:AA:1388:C:H42	1.16	0.90
25:DA:885:C:N4	25:DA:890:A:H61	1.68	0.90
36:BQ:21:THR:HG21	36:BQ:101:ARG:HB2	1.53	0.90
52:D6:16:CYS:HB3	52:D6:43:CYS:SG	2.12	0.89
25:BA:2507:C:OP1	58:BA:3915:HOH:O	1.88	0.89
1:AA:934:C:OP1	58:AA:2023:HOH:O	1.90	0.89
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.51	0.89
25:DA:1038:C:H42	25:DA:1117:G:H1	1.14	0.89
47:B1:3:LYS:HB2	47:B1:61:ARG:HH12	1.37	0.89
25:DA:2407:G:OP1	58:DA:4097:HOH:O	1.90	0.89
46:B0:11:ARG:O	46:B0:14:ARG:NH2	2.06	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:112:LYS:HA	9:AI:119:ALA:HB2	1.55	0.88
54:B8:6:THR:HG22	54:B8:63:PRO:HD2	1.52	0.88
36:DQ:16:ARG:HG2	36:DQ:16:ARG:HH11	1.38	0.88
1:AA:1255:G:O2'	1:AA:1258:G:O2'	1.92	0.88
2:AB:69:LEU:HB3	2:AB:162:ILE:HG22	1.56	0.88
42:DW:19:LEU:HB3	51:D5:25:LEU:HD12	1.53	0.87
55:B9:11:CYS:HB3	55:B9:32:HIS:HE1	1.38	0.87
1:AA:1019:C:O2'	1:AA:1020:U:OP1	1.92	0.86
43:BX:27:THR:HG22	43:BX:80:ILE:HG12	1.55	0.86
46:B0:38:VAL:HG23	46:B0:59:LEU:HB2	1.55	0.86
1:CA:1158:C:N3	1:CA:1181:G:N2	2.24	0.86
50:D4:16:CYS:SG	50:D4:36:CYS:HB3	2.16	0.86
1:AA:1158:C:H5	1:AA:1181:G:H1	1.21	0.86
27:DD:206:LEU:HD22	27:DD:211:ARG:HG2	1.56	0.86
32:DI:71:ILE:HG23	32:DI:72:LEU:HD23	1.58	0.86
1:CA:1321:C:H5'	1:CA:1322:C:H5''	1.58	0.85
1:AA:1346:A:H5''	9:AI:120:ARG:HH12	1.39	0.85
1:AA:664:G:H22	1:AA:741:G:H1	1.22	0.85
1:CA:953:G:H5'	1:CA:965:A:H61	1.39	0.85
5:AE:100:VAL:HG22	5:AE:118:ILE:HG22	1.57	0.85
25:BA:910:A:H62	36:BQ:12:GLN:HA	1.39	0.85
1:AA:542:G:OP1	4:AD:10:ARG:NH2	2.09	0.85
18:CR:53:ARG:HG3	18:CR:63:GLN:HE21	1.42	0.85
25:DA:1365:A:O2'	47:D1:11:ARG:NH2	2.08	0.85
1:AA:166:G:H2'	1:AA:167:G:H8	1.41	0.85
25:BA:2106:G:H1	25:BA:2183:C:H42	1.20	0.85
25:DA:249:C:OP1	58:DA:4012:HOH:O	1.94	0.85
25:DA:2206:G:H5'	25:DA:2207:G:N7	1.92	0.85
1:CA:922:G:H4'	5:CE:20:GLN:HA	1.59	0.85
25:DA:635:C:O2'	25:DA:639:U:OP1	1.95	0.84
38:DS:102:ALA:HA	38:DS:105:ALA:H	1.42	0.84
25:DA:2777:G:H5''	25:DA:2778:A:H5'	1.59	0.84
25:BA:1832:C:OP2	58:BA:3908:HOH:O	1.95	0.84
25:BA:2319:G:H1'	25:BA:2320:A:H5''	1.58	0.84
38:DS:34:HIS:HD1	38:DS:53:SER:HG	1.25	0.84
49:B3:8:LEU:HD13	49:B3:31:LEU:HD23	1.59	0.84
5:CE:31:LEU:HD22	5:CE:43:LEU:HD11	1.59	0.84
7:AG:146:GLU:O	7:AG:149:ARG:N	2.11	0.84
1:AA:1321:C:H3'	1:AA:1322:C:H5''	1.59	0.83
22:AY:36:ALA:HA	22:AY:80:GLN:HB2	1.61	0.83
45:BZ:160:GLY:HA2	45:BZ:161:VAL:HG12	1.57	0.83

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1162:C:H42	1:CA:1174:G:H1	0.84	0.83
9:CI:28:VAL:HG22	9:CI:63:ILE:HB	1.61	0.83
25:DA:2206:G:H3'	25:DA:2207:G:C8	2.13	0.83
2:AB:116:GLU:HA	2:AB:119:GLU:HB2	1.59	0.83
3:CC:24:ALA:HB3	3:CC:29:TYR:HB2	1.59	0.83
25:DA:2287:A:H62	25:DA:2344:U:H3	1.27	0.83
35:DP:39:LYS:HB2	35:DP:45:LEU:HD12	1.60	0.83
33:DN:24:GLY:HA2	33:DN:27:ALA:HB3	1.61	0.83
8:AH:91:ARG:HD3	17:AQ:33:GLY:HA3	1.60	0.83
1:CA:673:G:H2'	1:CA:674:G:C8	2.13	0.83
25:DA:864:G:N7	36:DQ:22:LYS:NZ	2.26	0.83
10:AJ:35:SER:HB3	10:AJ:73:ASP:HB2	1.58	0.83
25:BA:958:U:H5''	36:BQ:14:ARG:HD3	1.61	0.83
25:DA:1210:A:H5'	25:DA:1210:A:H8	1.43	0.83
25:DA:1740:G:H2'	25:DA:1741:A:H8	1.43	0.83
22:AY:32:LYS:HA	25:BA:2573:C:N4	1.94	0.83
2:AB:88:ALA:HB2	2:AB:219:VAL:HG13	1.58	0.82
25:BA:2287:A:H2	25:BA:2346:A:H62	1.28	0.82
1:CA:976:G:N2	1:CA:1363:C:OP2	2.12	0.82
30:DG:161:THR:HG22	30:DG:163:ALA:H	1.43	0.82
7:AG:51:GLN:HG3	7:AG:58:PRO:HD3	1.60	0.82
12:AL:53:ARG:HG2	12:AL:69:TYR:HE1	1.42	0.82
25:BA:2562:U:H1'	34:BO:23:ARG:HH11	1.42	0.82
7:CG:23:VAL:HG13	7:CG:43:PHE:HE2	1.42	0.82
25:DA:1530:C:O2'	25:DA:1531:C:O5'	1.97	0.82
2:AB:69:LEU:HD13	2:AB:91:PRO:HB2	1.62	0.82
5:CE:36:ASP:HB3	5:CE:38:GLN:H	1.45	0.82
25:BA:885:C:N4	25:BA:890:A:H61	1.78	0.81
1:AA:1128:C:H5''	9:AI:16:ARG:HH12	1.45	0.81
5:CE:36:ASP:CB	5:CE:38:GLN:H	1.92	0.81
16:CP:43:LYS:HA	16:CP:48:TRP:HB3	1.60	0.81
39:DT:54:ARG:HA	39:DT:59:THR:HB	1.62	0.81
16:AP:39:TYR:CZ	16:AP:41:PRO:HB3	2.14	0.81
1:AA:96:U:H1'	1:AA:97:G:H5'	1.63	0.81
38:BS:96:GLY:HA2	38:BS:100:ALA:H	1.44	0.81
25:DA:154(A):C:H42	25:DA:171:G:H1	1.28	0.81
25:DA:1889:A:H2'	25:DA:1890:A:C8	2.15	0.81
8:CH:10:LEU:HD22	8:CH:83:ILE:HD11	1.63	0.81
25:DA:1265:A:OP2	58:DA:3919:HOH:O	1.97	0.81
25:DA:1412:A:H2'	25:DA:1413:G:H8	1.46	0.81
25:BA:83:G:N2	25:BA:103:A:OP2	2.10	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DI:38:LEU:HB3	32:DI:40:THR:HG23	1.62	0.81
47:B1:21:ARG:HD3	47:B1:35:THR:HG21	1.62	0.80
25:DA:826:U:H4'	35:DP:55:ARG:HB2	1.63	0.80
25:BA:1039:G:O6	25:BA:1116:C:N4	2.14	0.80
31:BH:164:TYR:N	31:BH:167:GLU:OE1	2.14	0.80
30:DG:36:LYS:HD3	30:DG:95:ARG:HH12	1.45	0.80
11:AK:34:ASP:HB3	11:AK:40:ILE:HD11	1.63	0.80
11:AK:86:GLY:N	11:AK:112:THR:OG1	2.14	0.80
14:AN:21:TYR:HE2	14:AN:23:ARG:HE	1.27	0.80
42:BW:86:LEU:HD12	42:BW:87:PRO:HD2	1.64	0.80
10:CJ:44:VAL:HG22	10:CJ:66:ARG:HG2	1.63	0.80
16:AP:52:ASP:HB3	16:AP:55:ARG:HB2	1.63	0.80
2:CB:68:ILE:HG22	2:CB:90:MET:HG2	1.63	0.80
17:AQ:43:LEU:HB3	17:AQ:69:LYS:HE2	1.61	0.80
25:DA:11:G:H2'	25:DA:12:U:H5'	1.64	0.80
25:BA:517:C:OP1	51:B5:16:ARG:NH2	2.15	0.80
25:DA:2206:G:H3'	25:DA:2207:G:H8	1.45	0.80
25:DA:2276:G:H5'	36:DQ:86:GLY:HA2	1.62	0.80
35:DP:138:LEU:HD23	35:DP:145:PRO:HG3	1.62	0.80
25:BA:2285:C:OP2	52:B6:6:ARG:NH1	2.15	0.80
34:DO:20:MET:HB2	34:DO:44:LYS:HG2	1.64	0.80
25:BA:2317:C:H2'	25:BA:2318:G:H5'	1.64	0.80
42:BW:12:ILE:HD13	42:BW:17:VAL:HG22	1.64	0.80
50:B4:18:CYS:HB2	50:B4:20:ASN:HB2	1.64	0.80
25:DA:851:U:H5'	49:D3:49:LYS:HD2	1.64	0.80
1:AA:862:C:O2	1:AA:867:G:N2	2.14	0.79
1:AA:1392:G:H21	1:AA:1502:A:H8	1.29	0.79
20:AT:10:LEU:HD23	20:AT:12:ALA:H	1.45	0.79
8:CH:12:ARG:NH2	8:CH:27:PRO:HD3	1.97	0.79
25:DA:2308:G:O6	25:DA:2311:A:N6	2.14	0.79
1:AA:737:A:H2'	1:AA:738:C:H6	1.46	0.79
1:AA:974:A:OP2	14:AN:29:ARG:NH2	2.13	0.79
22:AY:47:SER:OG	22:AY:48:LEU:N	2.15	0.79
25:DA:1762:A:N1	58:DA:3968:HOH:O	2.14	0.79
41:DV:76:LYS:HB2	41:DV:81:TYR:HB3	1.63	0.79
1:AA:64:G:H4'	1:AA:65:U:H3'	1.63	0.79
25:DA:299:A:H5''	44:DY:86:ARG:HH21	1.45	0.79
38:DS:34:HIS:ND1	38:DS:53:SER:OG	2.10	0.79
1:AA:453:A:H62	1:AA:479:C:H42	1.27	0.79
20:CT:47:GLY:HA2	20:CT:48:LYS:HB2	1.63	0.79
1:AA:1502:A:H2	1:AA:1505:G:H1	1.27	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:21:PRO:HA	9:AI:59:PHE:HA	1.64	0.79
16:CP:22:THR:HA	16:CP:33:ILE:HG12	1.64	0.79
27:DD:274:ARG:HG2	27:DD:275:LYS:HB3	1.62	0.79
33:BN:20:GLY:HA2	33:BN:61:ARG:HD3	1.64	0.79
25:DA:819:A:OP2	25:DA:1187:G:N2	2.15	0.79
25:BA:1041:C:H42	25:BA:1114:G:H1	1.29	0.78
1:CA:562:C:H1'	12:CL:15:ARG:HB3	1.65	0.78
13:AM:85:GLY:HA3	13:AM:86:CYS:HB3	1.65	0.78
19:AS:41:VAL:N	19:AS:44:MET:SD	2.53	0.78
25:BA:847:U:O4	25:BA:933:A:N6	2.17	0.78
25:BA:1689:A:H62	25:BA:1698:A:H2	1.30	0.78
1:AA:1281:U:H5'	1:AA:1282:C:OP2	1.82	0.78
25:BA:615:G:OP1	29:BF:40:GLN:NE2	2.17	0.78
4:CD:189:PRO:HB3	4:CD:194:LEU:HD21	1.64	0.78
25:DA:1365:A:OP1	47:D1:41:ARG:NH1	2.17	0.78
30:DG:63:ILE:HG22	30:DG:64:THR:HG23	1.64	0.78
1:AA:35:G:O2'	12:AL:118:SER:O	2.01	0.78
28:BE:126:PRO:HG2	28:BE:131:ALA:HB2	1.64	0.78
5:CE:51:VAL:HG23	5:CE:52:PRO:HD3	1.64	0.78
10:CJ:35:SER:HB3	10:CJ:73:ASP:HB2	1.65	0.78
9:AI:13:ALA:HB2	9:AI:68:GLY:HA3	1.66	0.78
6:CF:8:ILE:HD13	6:CF:26:ILE:HD13	1.64	0.78
25:DA:910:A:H62	36:DQ:12:GLN:HA	1.49	0.78
42:BW:73:ALA:HB3	42:BW:106:ILE:HB	1.63	0.78
25:DA:781:A:OP1	27:DD:218:ARG:NH2	2.17	0.78
1:CA:1147:C:O2	9:CI:16:ARG:NH1	2.17	0.78
16:CP:72:ARG:HH11	16:CP:72:ARG:HG3	1.45	0.78
1:AA:954:G:H21	1:AA:1227:A:H62	1.32	0.78
2:AB:163:PHE:HD2	2:AB:185:ILE:HG13	1.48	0.78
47:B1:3:LYS:HB2	47:B1:61:ARG:NH1	1.98	0.78
25:BA:1435:G:H1	25:BA:1557:C:H42	1.29	0.77
13:CM:64:TRP:HE3	13:CM:64:TRP:H	1.29	0.77
25:DA:784:A:OP2	58:DA:3805:HOH:O	2.03	0.77
25:BA:652(H):C:H42	25:BA:652(Q):G:H1	1.32	0.77
10:CJ:50:ILE:HB	14:CN:41:ARG:HD2	1.66	0.77
25:DA:1250:G:N7	35:DP:18:ARG:NH2	2.32	0.77
25:BA:151:C:H42	25:BA:175:G:H1	1.30	0.77
25:BA:2287:A:N6	25:BA:2344:U:H3	1.82	0.77
38:DS:14:VAL:O	38:DS:18:ILE:HG12	1.85	0.77
15:AO:62:GLN:HA	15:AO:65:ARG:HH11	1.50	0.77
28:BE:105:THR:OG1	28:BE:199:ARG:NH2	2.18	0.77

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BW:14:PRO:HG2	42:BW:78:GLU:HG2	1.65	0.77
25:DA:317:G:N7	58:DA:4605:HOH:O	2.16	0.77
25:DA:639:U:H2'	25:DA:640:C:C6	2.19	0.77
1:AA:1239:A:H62	1:AA:1299:A:H62	1.30	0.77
16:AP:28:ARG:NH1	16:AP:29:ASP:OD2	2.18	0.77
25:BA:2615:U:OP1	58:BA:4761:HOH:O	2.01	0.77
18:CR:56:THR:HB	18:CR:58:LEU:HD13	1.67	0.77
13:AM:23:TYR:HB3	13:AM:67:GLU:HG2	1.64	0.77
25:BA:1971:A:C4	27:BD:241:PRO:HD3	2.19	0.77
25:DA:271(I):G:H1	25:DA:271(O):C:N4	1.81	0.77
26:DB:13:A:N1	26:DB:69:G:O2'	2.16	0.77
31:DH:3:ARG:HD3	31:DH:54:ARG:HH12	1.49	0.77
1:CA:1358:U:N3	1:CA:1363(A):A:N6	2.10	0.77
25:DA:1558:A:H4'	25:DA:1559:G:O5'	1.85	0.77
25:DA:2839:G:H5'	37:DR:46:GLY:HA2	1.65	0.77
25:BA:751:A:H5'	42:BW:90:ARG:HA	1.66	0.76
25:DA:48:G:O6	58:DA:4628:HOH:O	2.03	0.76
25:DA:2100:G:H1	25:DA:2189:U:H3	1.33	0.76
25:DA:2683:C:OP1	39:DT:53:ARG:NH2	2.17	0.76
25:BA:1332:G:C8	25:BA:1332:G:H5'	2.20	0.76
44:BY:79:CYS:SG	44:BY:102:CYS:HB3	2.24	0.76
2:CB:161:ALA:HB1	2:CB:185:ILE:HD11	1.67	0.76
8:CH:21:LYS:O	8:CH:65:TYR:OH	2.00	0.76
25:DA:1453:U:OP1	37:DR:77:ARG:NH1	2.19	0.76
25:BA:1047:G:H2'	25:BA:1110:G:H22	1.49	0.76
50:B4:18:CYS:SG	50:B4:39:CYS:HB3	2.24	0.76
25:DA:2577:A:OP2	51:D5:3:LYS:NZ	2.16	0.76
25:DA:309:G:N3	25:DA:329:G:O2'	2.18	0.76
4:AD:157:LEU:O	4:AD:161:ASN:ND2	2.17	0.76
38:BS:42:ASP:N	38:BS:42:ASP:OD1	2.19	0.76
1:CA:404:U:H2'	1:CA:405:U:H6	1.50	0.76
1:CA:1347:G:C8	9:CI:107:ARG:HB3	2.20	0.76
25:DA:2293:C:O2	25:DA:2339:G:N2	2.17	0.76
55:D9:25:VAL:HB	55:D9:34:GLN:HB2	1.67	0.76
1:AA:1422:G:H5'	34:BO:48:PRO:HB3	1.68	0.76
35:BP:56:SER:HB2	35:BP:61:ARG:HD2	1.68	0.76
1:CA:586:C:H2'	1:CA:587:G:H5'	1.68	0.76
42:DW:50:VAL:HG12	42:DW:105:VAL:HG22	1.68	0.76
1:AA:1315:U:O2'	1:AA:1360:A:N3	2.17	0.76
40:BU:92:ARG:HA	40:BU:95:LEU:HB2	1.68	0.76
25:DA:2296:U:OP2	38:DS:9:ARG:NH2	2.18	0.76

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1131:G:H1	1:AA:1143:G:H21	1.34	0.76
25:BA:2317:C:C2'	25:BA:2318:G:H5'	2.15	0.76
1:CA:826:C:O2	1:CA:874:G:N2	2.18	0.76
25:DA:2006:C:OP2	58:DA:3840:HOH:O	2.02	0.76
34:DO:35:VAL:HG11	34:DO:103:ALA:HB3	1.67	0.76
23:CV:3:C:H42	23:CV:70:G:H1	1.34	0.75
1:AA:1144:G:N2	1:AA:1146:A:H62	1.85	0.75
27:BD:183:ARG:HG3	27:BD:270:ILE:HD13	1.68	0.75
25:DA:2287:A:N6	25:DA:2344:U:H3	1.82	0.75
55:D9:29:ASN:HD22	55:D9:32:HIS:CD2	2.03	0.75
10:CJ:48:THR:HA	10:CJ:62:HIS:HB3	1.67	0.75
25:DA:676:A:H8	25:DA:2069:G:H21	1.33	0.75
25:DA:1645:G:H5''	25:DA:1646:C:H5'	1.69	0.75
1:AA:382:A:H2'	1:AA:383:A:H8	1.51	0.75
25:BA:1434:A:H61	25:BA:1558:A:N6	1.84	0.75
25:DA:958:U:OP2	36:DQ:14:ARG:NH1	2.17	0.75
41:DV:40:LEU:HB2	41:DV:46:VAL:HG13	1.66	0.75
45:DZ:52:SER:OG	45:DZ:53:ILE:N	2.15	0.75
25:BA:9:U:H3	25:BA:2629:A:H2	1.33	0.75
25:BA:252:G:OP2	35:BP:50:ARG:NH1	2.20	0.75
25:BA:2685:G:O6	58:BA:4699:HOH:O	2.03	0.75
20:CT:49:ALA:HA	20:CT:52:ALA:HB3	1.69	0.75
45:DZ:110:GLY:HA3	45:DZ:174:VAL:HG11	1.68	0.75
25:BA:529:A:N6	25:BA:2041:U:O2	2.19	0.75
1:CA:559:A:H4'	1:CA:560:U:H5''	1.67	0.75
3:CC:179:ARG:HD2	3:CC:206:GLU:HB3	1.69	0.75
25:DA:1557:C:OP2	25:DA:1558:A:O2'	2.03	0.75
1:AA:737:A:H2'	1:AA:738:C:C6	2.22	0.75
3:AC:19:GLU:O	3:AC:40:ARG:NH2	2.19	0.75
25:BA:330:A:H2	25:BA:1210:A:H2'	1.52	0.75
25:BA:2445:G:OP1	29:BF:74:ARG:NH2	2.20	0.75
35:BP:32:THR:O	58:BP:307:HOH:O	2.04	0.75
32:DI:83:ALA:HB1	32:DI:87:LYS:O	1.87	0.75
25:DA:1567:A:H5'	27:DD:58:HIS:CD2	2.21	0.75
1:AA:269:C:H2'	1:AA:270:A:C8	2.22	0.75
1:AA:1279:A:O2'	1:AA:1281:U:OP2	2.03	0.75
2:AB:201:ILE:HG21	2:AB:214:ILE:HG21	1.69	0.75
2:AB:44:LEU:HD22	2:AB:44:LEU:H	1.51	0.74
5:CE:102:ALA:HB1	5:CE:106:PRO:HG2	1.69	0.74
1:AA:1305:G:N2	1:AA:1331:G:H1'	2.02	0.74
25:BA:1300:U:H4'	25:BA:1301:A:H5''	1.69	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:2106:G:H1	25:BA:2183:C:N4	1.85	0.74
25:BA:2327:A:H2'	25:BA:2328:A:C8	2.21	0.74
1:AA:269:C:H2'	1:AA:270:A:H8	1.52	0.74
25:BA:2573:C:O2	58:BA:3912:HOH:O	2.06	0.74
1:CA:1162:C:N3	1:CA:1174:G:N2	2.32	0.74
28:BE:61:ARG:HH11	28:BE:61:ARG:HB2	1.52	0.74
8:AH:28:ALA:HB2	8:AH:59:LEU:HG	1.68	0.74
10:AJ:9:ARG:HB2	10:AJ:95:GLU:HB3	1.67	0.74
25:BA:1210:A:H5'	25:BA:1210:A:H8	1.53	0.74
25:DA:1740:G:H2'	25:DA:1741:A:C8	2.22	0.74
1:AA:56:U:H2'	1:AA:57:G:C8	2.23	0.74
36:BQ:62:GLY:HA2	45:BZ:116:VAL:HG21	1.70	0.74
25:DA:300:A:P	44:DY:86:ARG:HH22	2.09	0.74
26:DB:48:A:H4'	38:DS:95:HIS:HD2	1.51	0.74
1:CA:564:C:O2'	8:CH:91:ARG:NH2	2.19	0.74
25:DA:120:U:OP2	58:DA:4239:HOH:O	2.04	0.74
47:D1:21:ARG:HD3	47:D1:35:THR:HG21	1.69	0.74
1:AA:434:U:H2'	1:AA:435:C:C6	2.22	0.74
1:AA:567:G:N3	58:AA:2260:HOH:O	2.20	0.74
2:CB:21:ARG:HB3	2:CB:39:ILE:HA	1.70	0.74
16:CP:28:ARG:HH11	16:CP:28:ARG:HG2	1.50	0.74
25:DA:1316:U:H2'	25:DA:1317:A:H8	1.53	0.74
1:CA:130:A:H5'	17:CQ:63:ARG:HE	1.52	0.74
25:DA:500:G:N1	25:DA:503:A:OP2	2.20	0.74
1:AA:342:C:H2'	1:AA:343:U:H5'	1.70	0.74
1:AA:836:G:OP1	18:AR:61:LYS:NZ	2.19	0.74
9:CI:107:ARG:HH11	9:CI:107:ARG:HG2	1.53	0.74
16:AP:43:LYS:HG2	16:AP:48:TRP:CE2	2.23	0.73
32:BI:92:VAL:HG13	32:BI:120:ILE:HB	1.68	0.73
25:DA:134:C:H42	25:DA:145:G:H1	1.36	0.73
31:DH:106:THR:HG22	31:DH:112:PRO:HB3	1.69	0.73
1:AA:316:G:OP2	1:AA:351:G:O2'	2.05	0.73
2:AB:163:PHE:CD2	2:AB:185:ILE:HG13	2.23	0.73
10:CJ:39:PRO:HA	10:CJ:70:ARG:HD3	1.70	0.73
27:DD:182:LEU:HB3	27:DD:271:ILE:HD12	1.70	0.73
1:AA:832:C:HO2'	1:AA:833:U:H6	1.34	0.73
1:AA:1346:A:H5''	9:AI:120:ARG:NH1	2.02	0.73
25:BA:2817:G:OP1	37:BR:42:LYS:NZ	2.21	0.73
27:DD:177:LEU:HD12	27:DD:181:GLU:HB3	1.69	0.73
29:DF:185:ASP:HA	29:DF:188:ARG:HD3	1.69	0.73
6:AF:27:GLN:HA	6:AF:30:LEU:HD12	1.69	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:31:ILE:HG12	19:AS:49:ILE:HG12	1.70	0.73
29:BF:32:LEU:HB3	29:BF:112:MET:HE1	1.70	0.73
46:B0:55:ARG:HH11	46:B0:55:ARG:HB2	1.52	0.73
25:BA:2712:U:O2'	25:BA:2712(A):A:OP2	2.04	0.73
25:DA:468:G:N7	53:D7:39:ARG:NH2	2.34	0.73
25:DA:2712:U:O2'	25:DA:2712(A):A:OP2	2.06	0.73
35:DP:111:ARG:HG2	35:DP:128:HIS:CG	2.23	0.73
25:BA:1204:A:H2	25:BA:1241:A:H62	1.36	0.73
25:DA:7:G:H2'	25:DA:8:A:C8	2.23	0.73
25:DA:1639:U:H2'	25:DA:1640:C:H5''	1.71	0.73
1:AA:149:A:OP2	58:AA:2198:HOH:O	2.06	0.73
25:BA:271(M):G:O2'	25:BA:271(N):U:O5'	2.07	0.73
29:BF:53:THR:HG22	29:BF:55:GLY:H	1.53	0.73
34:BO:2:ILE:HB	34:BO:33:ALA:HB3	1.70	0.73
1:CA:1152:A:H5'	10:CJ:13:HIS:CD2	2.24	0.73
2:CB:84:GLU:HB3	2:CB:219:VAL:HG21	1.71	0.73
25:DA:1412:A:H2'	25:DA:1413:G:C8	2.24	0.73
25:DA:2567:G:H2'	25:DA:2568:C:C6	2.23	0.73
25:DA:2884:U:H1'	51:D5:53:ALA:HB2	1.70	0.73
31:DH:8:PRO:HB3	31:DH:51:ARG:HG3	1.71	0.73
32:DI:72:LEU:C	32:DI:74:ASN:H	1.90	0.73
25:BA:271(E):U:H3	25:BA:271(S):G:H1	1.35	0.73
25:BA:686:G:OP1	53:B7:11:LYS:NZ	2.18	0.73
1:CA:316:G:OP2	1:CA:351:G:O2'	2.05	0.73
25:DA:587:C:OP2	35:DP:21:ARG:NH2	2.21	0.73
30:DG:47:LYS:HB3	30:DG:82:LEU:HD13	1.71	0.73
31:DH:80:SER:OG	31:DH:81:GLU:N	2.21	0.73
32:DI:72:LEU:HA	32:DI:75:LEU:HD12	1.69	0.73
8:AH:21:LYS:O	8:AH:65:TYR:OH	2.04	0.73
25:BA:1177:A:O2'	25:BA:1178:C:O4'	2.06	0.73
41:BV:29:PRO:HA	41:BV:61:VAL:HG22	1.70	0.73
1:AA:1197:G:OP1	58:AA:2360:HOH:O	2.06	0.72
25:BA:784:A:H5'	25:BA:785:G:OP1	1.88	0.72
33:BN:67:LEU:HA	33:BN:87:LEU:HD12	1.71	0.72
17:CQ:57:VAL:HG12	17:CQ:76:LEU:HA	1.70	0.72
37:DR:51:LEU:HD22	37:DR:66:VAL:HG13	1.69	0.72
9:CI:9:ARG:HG2	9:CI:14:VAL:HG12	1.69	0.72
25:DA:1403:C:H5''	25:DA:1471:A:H1'	1.71	0.72
4:AD:134:ASP:OD2	4:AD:134:ASP:N	2.21	0.72
11:AK:120:ARG:HG2	11:AK:120:ARG:HH11	1.54	0.72
25:BA:587:C:OP2	35:BP:21:ARG:NH2	2.21	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:2781:A:H5''	25:DA:2782:G:H5'	1.70	0.72
28:DE:128:SER:OG	28:DE:129:HIS:N	2.20	0.72
36:DQ:36:ALA:HB1	36:DQ:127:ILE:HD11	1.71	0.72
33:BN:24:GLY:HA2	33:BN:27:ALA:CB	2.20	0.72
47:D1:23:LYS:HB3	47:D1:29:GLY:HA3	1.70	0.72
1:AA:450:G:OP1	16:AP:43:LYS:NZ	2.23	0.72
10:AJ:37:PRO:HA	10:AJ:72:VAL:HG12	1.72	0.72
22:AY:68:GLY:HA2	22:AY:69:VAL:CB	2.18	0.72
33:DN:58:ASP:OD1	33:DN:58:ASP:N	2.14	0.72
25:BA:1037:G:N7	58:BA:4044:HOH:O	2.21	0.72
2:CB:95:GLN:HG3	2:CB:148:TYR:HA	1.72	0.72
25:DA:885:C:C4	25:DA:890:A:N6	2.54	0.72
44:DY:49:VAL:HG22	44:DY:61:ILE:HG22	1.70	0.72
17:AQ:44:ALA:N	17:AQ:69:LYS:HZ3	1.88	0.72
25:BA:2357:U:OP1	46:B0:20:ARG:NH1	2.22	0.72
25:BA:2789:C:HO2'	25:BA:2790:A:HO2'	1.28	0.72
32:BI:79:ILE:HD12	32:BI:144:VAL:HB	1.72	0.72
45:BZ:110:GLY:HA3	45:BZ:174:VAL:HG11	1.72	0.72
1:CA:1059:C:N4	58:CA:2121:HOH:O	2.09	0.72
25:DA:139(A):G:N2	43:DX:44:GLU:OE1	2.22	0.72
25:DA:863:A:H3'	36:DQ:22:LYS:HE2	1.71	0.72
2:CB:71:VAL:HB	2:CB:164:VAL:HG13	1.72	0.72
25:DA:33:U:O4	25:DA:446:G:O2'	2.08	0.72
25:DA:2692:C:HO2'	25:DA:2847:U:HO2'	1.37	0.72
25:BA:2306:C:O2	58:BA:5334:HOH:O	2.08	0.72
25:DA:620:G:H5''	25:DA:620:G:N3	2.05	0.72
1:AA:933:G:O6	7:AG:3:ARG:NH2	2.22	0.71
1:AA:1414:U:H3	1:AA:1486:G:H1	1.33	0.71
1:AA:1457:G:OP1	20:AT:39:LYS:NZ	2.23	0.71
6:AF:14:LEU:HD22	6:AF:15:ASP:H	1.53	0.71
29:BF:20:LEU:HD22	29:BF:21:ALA:HB3	1.72	0.71
29:BF:185:ASP:HA	29:BF:188:ARG:HD3	1.72	0.71
25:DA:1009:A:OP1	33:DN:37:LYS:NZ	2.20	0.71
49:D3:23:LEU:HD12	49:D3:28:LEU:HB2	1.72	0.71
2:AB:24:TRP:CZ3	2:AB:26:PRO:HA	2.25	0.71
2:AB:71:VAL:HB	2:AB:164:VAL:HG13	1.73	0.71
1:CA:572:A:OP2	58:CA:1963:HOH:O	2.07	0.71
25:DA:479:A:N3	25:DA:481:G:H5''	2.05	0.71
25:DA:2378:A:H4'	38:DS:23:ARG:NH1	2.05	0.71
27:DD:127:VAL:HA	27:DD:193:VAL:HG23	1.71	0.71
1:AA:1060:C:C5	3:AC:2:GLY:HA2	2.25	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:162:ILE:O	2:AB:185:ILE:HG12	1.89	0.71
10:AJ:11:PHE:HE2	10:AJ:67:THR:HG22	1.54	0.71
25:BA:2785:C:O3'	28:BE:69:LYS:NZ	2.23	0.71
26:BB:86:G:H1	26:BB:91:C:H42	1.37	0.71
1:CA:677:U:H3	1:CA:713:G:H22	1.36	0.71
25:BA:2464:C:H1'	58:BA:5236:HOH:O	1.89	0.71
1:CA:1308:U:H5''	13:CM:98:VAL:HG22	1.71	0.71
3:CC:110:ASN:HB2	3:CC:111:LEU:HD12	1.73	0.71
16:CP:28:ARG:NH1	16:CP:29:ASP:OD1	2.23	0.71
39:BT:51:ARG:HB2	39:BT:98:LYS:HD2	1.72	0.71
25:DA:994:C:OP2	40:DU:54:LYS:NZ	2.21	0.71
7:AG:111:ARG:NH1	7:AG:113:GLU:OE1	2.24	0.71
16:AP:28:ARG:HG2	16:AP:28:ARG:HH11	1.54	0.71
6:CF:6:VAL:HG22	6:CF:90:VAL:HG22	1.72	0.71
25:DA:2307:G:H4'	25:DA:2308:G:H5'	1.71	0.71
3:AC:36:ASP:HA	3:AC:39:ILE:HB	1.73	0.71
20:AT:30:LYS:HA	20:AT:33:ILE:HD12	1.73	0.71
25:DA:548:A:N6	41:DV:19:LYS:H	1.89	0.71
35:DP:39:LYS:HD2	35:DP:45:LEU:HD12	1.72	0.71
36:DQ:34:LEU:HB2	36:DQ:118:LEU:HD22	1.72	0.71
3:AC:12:LEU:HD11	14:AN:51:GLY:HA2	1.71	0.71
1:CA:568:G:N7	12:CL:5:PRO:HD3	2.06	0.71
25:DA:991:C:H5'	25:DA:991:C:H6	1.56	0.71
1:CA:129(A):G:O6	1:CA:189(D):C:C2	2.44	0.71
2:CB:97:TRP:CH2	2:CB:173:ALA:HA	2.26	0.71
9:CI:103:THR:OG1	9:CI:104:ARG:N	2.22	0.71
1:CA:1239:A:H2'	1:CA:1298:C:H42	1.55	0.71
23:CV:40:C:H2'	23:CV:41:C:H6	1.56	0.71
25:DA:1266:G:O5'	42:DW:15:ARG:NH2	2.23	0.71
25:BA:1019:U:HO2'	25:BA:1021:A:H2	1.39	0.70
25:BA:1174:A:H4'	25:BA:1175:U:OP1	1.89	0.70
25:BA:1332:G:N2	25:BA:1609:A:H2'	2.06	0.70
27:BD:131:LEU:HB2	27:BD:136:ILE:HD11	1.73	0.70
47:D1:54:ALA:HB1	47:D1:83:GLU:HG3	1.73	0.70
1:AA:929:G:H1	1:AA:1388:C:N4	1.87	0.70
25:BA:1149:G:N7	58:BA:5231:HOH:O	2.24	0.70
2:CB:155:LEU:HD11	2:CB:159:PRO:HD3	1.71	0.70
1:AA:186:C:H2'	1:AA:187:C:C6	2.26	0.70
1:AA:382:A:H2'	1:AA:383:A:C8	2.26	0.70
1:AA:1108:G:O6	58:AA:2345:HOH:O	2.09	0.70
1:AA:1255:G:OP1	10:AJ:45:ARG:NH2	2.24	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:129:THR:HG22	32:BI:139:GLN:HE22	1.55	0.70
38:BS:96:GLY:H	38:BS:99:LYS:H	1.39	0.70
1:CA:503:C:OP2	12:CL:116:SER:HB3	1.91	0.70
1:CA:826:C:H4'	8:CH:12:ARG:HD2	1.72	0.70
25:DA:384:U:H2'	25:DA:385:C:H6	1.54	0.70
33:DN:34:LEU:O	33:DN:49:GLY:HA3	1.91	0.70
1:AA:652:U:O4	1:AA:752:G:O2'	2.09	0.70
18:AR:55:ARG:HG3	18:AR:55:ARG:NH1	2.01	0.70
25:BA:1398:C:O3'	43:BX:25:LYS:NZ	2.24	0.70
16:CP:29:ASP:OD2	16:CP:29:ASP:N	2.22	0.70
25:DA:849:A:N1	49:D3:25:ALA:HB2	2.05	0.70
25:DA:1721:G:H8	25:DA:1741:A:H62	1.38	0.70
34:DO:23:ARG:HG3	34:DO:24:VAL:N	2.07	0.70
1:CA:400:C:H5''	4:CD:73:ARG:HH12	1.57	0.70
1:CA:404:U:H2'	1:CA:405:U:C6	2.26	0.70
25:DA:1149:G:H2'	25:DA:1150:C:C6	2.27	0.70
25:DA:1803:A:O2'	27:DD:259:THR:HG21	1.91	0.70
35:DP:120:ALA:HB1	35:DP:138:LEU:HD12	1.71	0.70
1:AA:674:G:H2'	1:AA:675:A:H8	1.56	0.70
25:BA:1045:A:OP1	25:BA:1045:A:H4'	1.89	0.70
36:BQ:110:THR:HG23	36:BQ:113:GLN:HG3	1.74	0.70
40:BU:76:TYR:OH	40:BU:92:ARG:NH1	2.24	0.70
52:B6:13:CYS:SG	52:B6:47:THR:HG21	2.31	0.70
1:CA:97:G:HO2'	1:CA:98:G:H8	1.40	0.70
3:CC:127:ARG:NH2	3:CC:192:THR:OG1	2.24	0.70
25:DA:572:A:OP2	41:DV:78:LYS:NZ	2.24	0.70
25:DA:1332:G:N2	25:DA:1609:A:O2'	2.23	0.70
1:AA:54:C:O2	1:AA:357:G:N2	2.22	0.70
1:AA:865:A:H2'	1:AA:866:C:C6	2.27	0.70
1:AA:1504:G:OP1	1:AA:1507:A:H4'	1.91	0.70
9:AI:117:HIS:O	9:AI:119:ALA:N	2.24	0.70
45:BZ:82:ARG:NH2	45:BZ:82:ARG:HB3	2.06	0.70
1:CA:1244:C:H42	1:CA:1293:G:H1	1.39	0.70
25:DA:2528:U:H5'	55:D9:31:LYS:HD3	1.74	0.70
25:BA:729:G:OP2	27:BD:13:ARG:NH1	2.24	0.70
36:BQ:21:THR:HG21	36:BQ:101:ARG:HD2	1.73	0.70
1:CA:736:C:H2'	1:CA:737:A:C8	2.26	0.70
25:DA:71:A:H5''	25:DA:73:A:C8	2.27	0.70
25:DA:298:G:N7	58:DA:3734:HOH:O	2.24	0.70
1:AA:1305:G:H22	1:AA:1331:G:H1'	1.55	0.70
1:AA:342:C:C4	1:AA:343:U:H5	2.10	0.69

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:1170:G:H5''	25:BA:1170:G:H8	1.55	0.69
38:BS:101:LEU:HD23	38:BS:102:ALA:H	1.57	0.69
1:CA:518:C:H2'	1:CA:530:G:C8	2.26	0.69
1:AA:625:G:H2'	1:AA:626:U:H6	1.57	0.69
18:AR:56:THR:HB	18:AR:58:LEU:HD22	1.74	0.69
30:BG:41:GLN:HB3	30:BG:43:LEU:HD22	1.73	0.69
1:CA:1012:U:H3	1:CA:1017:G:H1	1.37	0.69
25:DA:19:C:H2'	25:DA:20:C:H6	1.57	0.69
25:DA:1920:C:OP2	58:DA:3707:HOH:O	2.09	0.69
36:DQ:43:THR:HG22	36:DQ:94:VAL:HG12	1.74	0.69
45:DZ:156:LYS:HD2	45:DZ:158:PRO:HG3	1.73	0.69
52:B6:40:CYS:SG	52:B6:42:TRP:HB2	2.32	0.69
19:CS:22:LEU:HD22	19:CS:27:GLU:HA	1.75	0.69
25:DA:2055:C:N3	58:DA:3908:HOH:O	2.24	0.69
25:BA:2467:C:H4'	36:BQ:123:HIS:ND1	2.07	0.69
1:CA:954:G:H21	1:CA:1227:A:N6	1.89	0.69
25:DA:272(G):C:H42	25:DA:363(C):G:H1	1.40	0.69
25:DA:1021:A:H62	25:DA:1141:U:H3	1.39	0.69
1:AA:345:C:OP2	39:BT:39:ARG:NH2	2.25	0.69
13:AM:60:VAL:HG12	13:AM:64:TRP:HZ3	1.55	0.69
25:BA:220:G:O2'	25:BA:233:A:N3	2.25	0.69
25:BA:885:C:C4	25:BA:890:A:N6	2.61	0.69
25:BA:2595:G:N7	58:BA:4706:HOH:O	2.25	0.69
1:CA:736:C:H2'	1:CA:737:A:H8	1.58	0.69
6:CF:70:ASP:N	6:CF:70:ASP:OD1	2.26	0.69
25:DA:287:C:H42	25:DA:354:G:H1	1.39	0.69
1:AA:928:G:H1	1:AA:1389:C:H42	1.39	0.69
9:AI:114:TYR:HE1	10:AJ:60:ARG:H	1.41	0.69
34:BO:19:ILE:HG22	34:BO:43:VAL:HA	1.74	0.69
1:CA:243:A:H4'	1:CA:244:U:H5''	1.74	0.69
1:CA:920:U:H2'	1:CA:921:U:C6	2.27	0.69
1:AA:97:G:HO2'	1:AA:98:G:H8	1.40	0.69
1:AA:1189:C:OP1	10:AJ:51:ARG:NH2	2.14	0.69
1:AA:593:G:O6	58:AA:2267:HOH:O	2.09	0.69
25:BA:528:A:N1	25:BA:2042:A:H2'	2.08	0.69
25:BA:674:G:O2'	29:BF:74:ARG:HD3	1.92	0.69
47:B1:60:PHE:HE1	47:B1:95:LEU:HD11	1.58	0.69
4:CD:204:ILE:HG21	5:CE:98:THR:O	1.91	0.69
7:CG:18:TYR:CE2	7:CG:59:LEU:HB2	2.27	0.69
25:DA:1776:G:OP2	58:DA:3845:HOH:O	2.10	0.69
29:DF:185:ASP:OD1	29:DF:188:ARG:NH1	2.25	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:D0:27:GLU:HB2	46:D0:69:PHE:HD1	1.57	0.69
1:AA:114:U:OP1	58:AA:2185:HOH:O	2.10	0.69
1:AA:911:U:OP2	12:AL:97:ARG:NH1	2.25	0.69
25:BA:832:G:H21	35:BP:53:GLY:HA3	1.58	0.69
1:CA:1292:U:H5'	9:CI:38:GLN:HG2	1.75	0.69
2:CB:27:LYS:HB2	2:CB:194:PRO:HD2	1.75	0.69
28:DE:135:HIS:CD2	28:DE:135:HIS:H	2.09	0.69
18:AR:44:LEU:HD21	18:AR:70:ILE:HG21	1.74	0.69
29:BF:63:LYS:NZ	29:BF:75:HIS:O	2.26	0.69
50:B4:16:CYS:SG	50:B4:18:CYS:N	2.66	0.69
25:DA:71:A:H3'	25:DA:71:A:OP2	1.92	0.69
25:DA:574:C:OP2	58:DA:3934:HOH:O	2.10	0.69
30:DG:96:ARG:O	30:DG:99:MET:HB3	1.93	0.69
30:DG:108:ASN:HA	50:D4:37:SER:HB3	1.74	0.69
34:DO:73:ASP:OD1	39:DT:32:TYR:OH	2.10	0.69
7:AG:26:PHE:HE2	7:AG:30:ILE:HD11	1.58	0.68
25:BA:1434:A:H61	25:BA:1558:A:H62	1.40	0.68
30:BG:120:LEU:HD23	30:BG:179:PRO:HG2	1.73	0.68
30:BG:145:THR:OG1	30:BG:146:TYR:N	2.26	0.68
1:CA:582:U:OP1	15:CO:68:ARG:NH2	2.27	0.68
1:CA:1457:G:OP1	20:CT:39:LYS:NZ	2.26	0.68
2:CB:88:ALA:HB2	2:CB:219:VAL:HG13	1.73	0.68
7:CG:151:TYR:OH	11:CK:54:ARG:NH1	2.27	0.68
27:DD:51:VAL:HG12	27:DD:54:ARG:HD3	1.75	0.68
28:DE:143:ASN:HB2	28:DE:147:PRO:HD2	1.75	0.68
22:AY:28:GLN:O	22:AY:32:LYS:N	2.24	0.68
36:BQ:135:ASP:HB3	36:BQ:137:TYR:H	1.57	0.68
1:CA:9:G:H2'	1:CA:10:A:C8	2.28	0.68
3:CC:18:TRP:HE3	3:CC:18:TRP:H	1.39	0.68
25:DA:152:G:H1	25:DA:174:C:H42	1.40	0.68
13:AM:3:ARG:HB2	13:AM:9:ILE:HA	1.74	0.68
25:BA:2010:G:N7	58:BA:4544:HOH:O	2.27	0.68
25:BA:2610:C:H4'	25:BA:2611:U:OP2	1.93	0.68
35:BP:91:PHE:O	35:BP:121:LYS:NZ	2.26	0.68
44:BY:68:HIS:HB3	44:BY:71:LYS:HG3	1.73	0.68
1:CA:924:C:O2'	1:CA:1502:A:N6	2.27	0.68
2:AB:24:TRP:HD1	2:AB:24:TRP:H	1.37	0.68
34:BO:35:VAL:HG11	34:BO:103:ALA:HB3	1.74	0.68
1:CA:728:A:H2'	1:CA:729:A:C8	2.28	0.68
25:DA:637:A:H8	35:DP:117:GLU:HG3	1.58	0.68
25:DA:2556:C:H2'	25:DA:2557:G:O4'	1.92	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:1178:C:H2'	25:BA:1179:C:H6	1.59	0.68
1:CA:748:C:H4'	1:CA:749:C:O5'	1.92	0.68
25:DA:495:G:H21	42:DW:61:ASN:HD21	1.41	0.68
25:DA:989:G:OP2	49:D3:11:SER:OG	2.12	0.68
25:DA:1980:G:O2'	25:DA:1982:C:OP2	2.08	0.68
34:DO:87:ILE:HG22	34:DO:93:PRO:HA	1.75	0.68
2:AB:75:LYS:HA	2:AB:78:GLN:HB2	1.75	0.68
25:BA:1298:C:H5''	25:BA:1299:G:OP2	1.94	0.68
1:AA:235:C:H5'	17:AQ:70:ARG:HG2	1.76	0.68
25:BA:1800:C:OP1	27:BD:266:SER:OG	2.08	0.68
52:D6:3:SER:H	52:D6:6:ARG:HB3	1.57	0.68
25:BA:271(K):U:H4'	25:BA:271(L):U:OP2	1.92	0.68
26:BB:86:G:H1	26:BB:91:C:N4	1.92	0.68
29:BF:63:LYS:HA	29:BF:76:GLY:O	1.93	0.68
25:DA:9:U:H3	25:DA:2629:A:H2	1.41	0.68
25:DA:1721:G:H2'	25:DA:1740:G:O6	1.94	0.68
25:DA:2570:G:N7	58:DA:4187:HOH:O	2.26	0.68
25:DA:2641:G:H5''	33:DN:76:SER:HB3	1.75	0.68
26:DB:90:A:C5	26:DB:91:C:H1'	2.28	0.68
1:AA:531:U:O2	58:AA:2241:HOH:O	2.10	0.68
25:BA:422:A:OP2	58:BA:5044:HOH:O	2.11	0.68
25:BA:2389:G:H5''	25:BA:2390:U:H5'	1.76	0.68
47:B1:18:ILE:HG12	47:B1:37:ILE:HG12	1.76	0.68
53:B7:47:ARG:HH11	53:B7:47:ARG:HB2	1.59	0.68
1:CA:460:G:C6	1:CA:470:C:H5''	2.27	0.68
25:DA:1140:C:O3'	33:DN:25:ARG:NH1	2.27	0.68
31:DH:20:ALA:HB3	31:DH:23:ARG:HB2	1.76	0.68
28:BE:24:THR:HG22	28:BE:186:GLY:O	1.94	0.68
38:BS:95:HIS:C	38:BS:99:LYS:HB3	2.14	0.68
25:DA:928:G:O6	58:DA:4234:HOH:O	2.09	0.68
25:DA:995:C:O2	33:DN:3:THR:OG1	2.11	0.68
25:DA:1693:U:O2'	27:DD:14:ARG:NH2	2.26	0.68
25:DA:1970:A:OP1	58:DA:4218:HOH:O	2.12	0.68
25:DA:2816:C:O3'	37:DR:99:LYS:NZ	2.25	0.68
34:DO:24:VAL:HA	34:DO:39:ILE:HG22	1.74	0.68
44:DY:61:ILE:HG13	44:DY:62:GLU:N	2.09	0.68
43:BX:57:LEU:HD11	43:BX:78:LYS:HG2	1.76	0.67
3:CC:36:ASP:HA	3:CC:39:ILE:HD12	1.76	0.67
12:CL:70:ILE:HG23	12:CL:100:ILE:HD12	1.75	0.67
1:CA:148:G:H2'	1:CA:149:A:H8	1.58	0.67
25:DA:248:G:OP1	58:DA:4630:HOH:O	2.11	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:848:G:H2'	25:DA:849:A:C8	2.29	0.67
25:DA:2789:C:O3'	25:DA:2790:A:H4'	1.93	0.67
29:DF:157:VAL:HB	29:DF:194:MET:HG2	1.76	0.67
37:DR:21:TYR:CZ	37:DR:43:GLU:HG2	2.29	0.67
25:BA:1466:G:O2'	25:BA:1546:C:O2'	1.98	0.67
26:BB:119:G:C2'	26:BB:120:A:C5'	2.68	0.67
1:CA:1158:C:H42	1:CA:1181:G:H1	1.43	0.67
25:DA:1983:C:H2'	25:DA:1984:G:H5''	1.76	0.67
31:DH:9:ILE:HB	31:DH:50:VAL:HB	1.76	0.67
2:AB:163:PHE:HA	2:AB:185:ILE:O	1.94	0.67
5:AE:36:ASP:OD2	5:AE:38:GLN:N	2.28	0.67
9:AI:103:THR:OG1	9:AI:104:ARG:N	2.28	0.67
25:BA:759:G:N7	58:BA:4939:HOH:O	2.28	0.67
25:BA:1278:A:OP1	37:BR:36:THR:HG23	1.94	0.67
48:B2:1:MET:N	48:B2:52:ASP:OD1	2.19	0.67
25:DA:2820:A:OP2	37:DR:2:ARG:NH2	2.27	0.67
1:AA:754:C:OP1	15:AO:72:ARG:NH1	2.27	0.67
3:AC:73:PRO:HB3	3:AC:103:VAL:HG11	1.77	0.67
25:BA:2036:C:OP1	58:BA:4649:HOH:O	2.12	0.67
45:BZ:39:VAL:HG21	45:BZ:44:PHE:HB2	1.75	0.67
7:CG:120:ILE:O	7:CG:124:LEU:HB2	1.95	0.67
9:CI:13:ALA:HB2	9:CI:68:GLY:HA3	1.76	0.67
25:DA:531:C:OP1	25:DA:561:G:N1	2.28	0.67
25:DA:827:U:OP1	58:DA:4430:HOH:O	2.10	0.67
2:AB:77:ALA:HB2	2:AB:211:ILE:HD13	1.77	0.67
13:AM:37:THR:HG23	13:AM:59:TYR:HD2	1.59	0.67
22:AY:61:HIS:HB3	22:AY:64:ILE:HG22	1.77	0.67
25:BA:1140:C:O3'	33:BN:25:ARG:NH1	2.27	0.67
1:CA:1261:A:H61	1:CA:1274:G:H1'	1.58	0.67
27:DD:69:ARG:NH2	27:DD:128:GLY:O	2.28	0.67
36:DQ:57:HIS:CD2	36:DQ:117:ALA:HB2	2.29	0.67
1:AA:1358:U:N3	1:AA:1363(A):A:N6	2.16	0.67
1:CA:509:A:C8	1:CA:509:A:H3'	2.29	0.67
1:CA:1270:C:HO2'	1:CA:1313:U:HO2'	1.34	0.67
25:DA:2577:A:H5''	25:DA:2578:G:H5'	1.77	0.67
7:AG:62:PHE:HA	7:AG:124:LEU:HD22	1.76	0.67
25:BA:308:G:N7	58:BA:4856:HOH:O	2.27	0.67
25:BA:2059:A:OP2	58:BA:4715:HOH:O	2.12	0.67
25:BA:2343:C:HO2'	25:BA:2373:G:HO2'	1.42	0.67
1:AA:438:G:H4'	4:AD:123:HIS:HD2	1.60	0.67
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.30	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:187:LEU:HA	2:AB:201:ILE:HB	1.77	0.67
20:AT:75:ASN:OD1	20:AT:75:ASN:N	2.28	0.67
1:CA:353:A:H5'	1:CA:353:A:H8	1.60	0.67
25:DA:323:G:HO2'	25:DA:1205:U:H3	1.43	0.67
49:D3:10:LYS:HB3	49:D3:53:LEU:HA	1.75	0.67
25:BA:1310:G:OP2	53:B7:9:ARG:NH1	2.27	0.67
25:BA:1778:U:H2'	25:BA:1784:A:N6	2.09	0.67
25:BA:2292:C:OP1	38:BS:17:ARG:NH2	2.26	0.67
25:BA:2405:G:H4'	25:BA:2406:U:OP2	1.93	0.67
37:BR:44:LEU:HD22	37:BR:48:VAL:HG23	1.76	0.67
4:CD:162:LEU:HD22	4:CD:178:VAL:HG13	1.75	0.67
25:DA:1337:G:OP2	43:DX:73:ARG:NH2	2.27	0.67
25:DA:1405:U:H2'	25:DA:1406:U:C6	2.29	0.67
33:DN:104:LYS:HA	33:DN:107:LEU:HD12	1.77	0.67
38:DS:18:ILE:O	38:DS:21:THR:HG22	1.94	0.67
1:AA:975:A:H4'	1:AA:976:G:H5''	1.75	0.66
25:BA:769:G:N7	58:BA:4423:HOH:O	2.29	0.66
25:BA:1368:G:OP1	53:B7:28:ARG:NH2	2.28	0.66
1:CA:9:G:H2'	1:CA:10:A:H8	1.59	0.66
1:CA:1143:G:H2'	1:CA:1144:G:H8	1.60	0.66
5:CE:91:LEU:HD12	5:CE:120:THR:HB	1.77	0.66
6:CF:69:GLU:O	6:CF:72:VAL:HG12	1.96	0.66
25:DA:660:G:H5'	29:DF:99:TYR:CD2	2.30	0.66
25:DA:1721:G:N1	25:DA:1739:U:OP2	2.28	0.66
1:AA:201:C:H42	1:AA:216:G:H1	1.42	0.66
2:AB:84:GLU:HB3	2:AB:219:VAL:HG21	1.77	0.66
1:CA:509:A:H3'	1:CA:509:A:H8	1.61	0.66
1:CA:980:C:H5'	1:CA:981:U:OP2	1.96	0.66
2:CB:178:ARG:HH12	8:CH:68:ARG:NH2	1.93	0.66
25:DA:15:G:OP2	58:DA:4287:HOH:O	2.12	0.66
25:DA:2019:A:O3'	40:DU:27:LEU:HD12	1.95	0.66
27:DD:5:LYS:HA	27:DD:17:THR:HG22	1.76	0.66
36:DQ:35:VAL:HG22	36:DQ:36:ALA:H	1.60	0.66
38:DS:96:GLY:HA2	38:DS:100:ALA:H	1.60	0.66
1:AA:1226:C:O2'	13:AM:111:LYS:NZ	2.27	0.66
1:CA:1513:A:H2'	1:CA:1514:C:C6	2.30	0.66
3:CC:18:TRP:CD1	14:CN:54:PRO:HA	2.31	0.66
25:DA:548:A:H61	41:DV:19:LYS:H	1.43	0.66
31:DH:113:VAL:HG21	31:DH:151:ILE:HG21	1.77	0.66
36:DQ:37:LEU:HD21	36:DQ:130:LYS:HB2	1.77	0.66
1:AA:473:G:H2'	1:AA:474:G:H8	1.61	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:15:THR:HG21	3:AC:181:ASN:HA	1.78	0.66
35:BP:39:LYS:HB2	35:BP:45:LEU:HG	1.77	0.66
45:BZ:69:THR:HG22	45:BZ:90:VAL:HA	1.76	0.66
5:CE:71:LEU:HD13	5:CE:74:GLY:HA2	1.75	0.66
22:AY:32:LYS:HG3	25:BA:2507:C:H5'	1.77	0.66
25:BA:1021:A:H62	25:BA:1141:U:H3	1.43	0.66
25:BA:2464:C:O2	58:BA:5236:HOH:O	2.07	0.66
25:DA:301:G:OP2	44:DY:84:ARG:NH2	2.22	0.66
38:DS:96:GLY:HA2	38:DS:97:ARG:C	2.16	0.66
20:AT:63:ILE:HD13	20:AT:80:ARG:HB3	1.76	0.66
25:BA:2850:A:OP2	25:BA:2866:U:H5	1.77	0.66
4:CD:14:ARG:HA	4:CD:39:PRO:HG3	1.77	0.66
46:D0:65:GLY:HA3	46:D0:81:VAL:HG12	1.77	0.66
1:AA:1352:C:OP1	21:AU:3:LYS:NZ	2.24	0.66
6:AF:10:LEU:HD23	6:AF:61:LEU:HD13	1.78	0.66
25:BA:2638:G:P	28:BE:82:ARG:HH22	2.18	0.66
1:CA:1074:G:O2'	1:CA:1101:A:N1	2.25	0.66
1:CA:1347:G:H8	9:CI:107:ARG:HB3	1.60	0.66
44:DY:23:ARG:HG2	44:DY:42:VAL:HG22	1.77	0.66
1:AA:431:A:H2'	1:AA:432:A:O4'	1.95	0.66
1:AA:1136:U:H5''	1:AA:1137:C:N3	2.11	0.66
13:AM:20:THR:HA	13:AM:25:ILE:HG22	1.78	0.66
33:BN:73:THR:HG23	33:BN:82:LEU:HD11	1.78	0.66
25:DA:363:G:H2'	25:DA:363(A):A:H8	1.59	0.66
25:DA:602:G:O2'	25:DA:655:A:N6	2.29	0.66
25:DA:1316:U:H2'	25:DA:1317:A:C8	2.30	0.66
32:DI:54:GLN:HG2	32:DI:57:ARG:HH21	1.61	0.66
9:AI:105:ASP:HB2	9:AI:107:ARG:NE	2.11	0.66
22:AY:106:ARG:NH1	25:BA:1914:C:OP2	2.29	0.66
25:BA:2364:C:H4'	46:B0:56:ASP:OD2	1.96	0.66
1:CA:975:A:H4'	1:CA:976:G:H5''	1.77	0.66
16:CP:56:ALA:O	16:CP:60:LEU:HB2	1.95	0.66
29:DF:162:LEU:H	29:DF:162:LEU:HD22	1.60	0.66
1:AA:910:C:OP1	12:AL:97:ARG:NH2	2.29	0.66
1:AA:1316:G:H4'	14:AN:18:VAL:HG13	1.78	0.66
8:AH:87:SER:HA	8:AH:93:VAL:HG23	1.78	0.66
25:BA:187:G:N7	58:BA:4449:HOH:O	2.28	0.66
25:BA:2833:G:H3'	25:BA:2834:G:C5'	2.25	0.66
26:BB:77:U:OP1	45:BZ:19:ARG:NH2	2.29	0.66
3:CC:47:LEU:HB3	3:CC:52:LEU:HD12	1.77	0.66
5:CE:102:ALA:O	5:CE:107:ARG:NH1	2.29	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:90:GLN:HA	20:CT:93:GLU:HB2	1.78	0.66
25:DA:1204:A:H2	25:DA:1241:A:H62	1.44	0.66
25:DA:1599:C:H2'	25:DA:1600:C:H6	1.60	0.66
31:DH:8:PRO:O	31:DH:69:ARG:NH1	2.29	0.66
1:AA:461:A:O2'	1:AA:471:G:N7	2.26	0.65
1:AA:625:G:H2'	1:AA:626:U:C6	2.31	0.65
15:AO:15:PHE:CE2	15:AO:84:LYS:HD2	2.30	0.65
22:AY:35:THR:O	22:AY:37:ILE:HG12	1.95	0.65
25:BA:1430:C:H2'	25:BA:1431:U:C6	2.32	0.65
1:CA:1128:C:O2'	1:CA:1130:A:N7	2.28	0.65
6:CF:61:LEU:HB3	6:CF:63:TYR:HE2	1.61	0.65
25:DA:2313:C:H2'	25:DA:2314:C:H6	1.61	0.65
3:AC:182:ILE:HG12	3:AC:203:PHE:HD1	1.61	0.65
7:AG:46:ALA:O	7:AG:50:ILE:N	2.28	0.65
8:AH:45:ILE:HD12	8:AH:47:GLY:HA2	1.78	0.65
12:AL:53:ARG:HG2	12:AL:69:TYR:CE1	2.29	0.65
2:CB:47:THR:O	2:CB:51:LEU:N	2.28	0.65
17:CQ:24:GLU:HA	17:CQ:39:SER:HB3	1.77	0.65
25:BA:32:C:O2'	25:BA:33:U:H5'	1.96	0.65
25:BA:960:A:H5''	25:BA:961:C:OP2	1.97	0.65
1:CA:619:U:N3	4:CD:134:ASP:OD2	2.30	0.65
11:CK:87:THR:HA	11:CK:91:ARG:HH21	1.59	0.65
25:DA:783:A:OP2	58:DA:3805:HOH:O	2.12	0.65
40:DU:92:ARG:HA	40:DU:95:LEU:HB2	1.77	0.65
1:AA:600:C:H2'	1:AA:601:C:C6	2.31	0.65
9:AI:29:ASN:ND2	9:AI:65:VAL:O	2.27	0.65
25:BA:177:G:OP1	58:BA:4985:HOH:O	2.14	0.65
25:BA:2206:G:H3'	25:BA:2207:G:C8	2.32	0.65
1:CA:971:G:OP2	1:CA:1231:G:N2	2.20	0.65
25:DA:1614:A:OP1	58:DA:4124:HOH:O	2.13	0.65
25:DA:2316:C:H4'	30:DG:128:ARG:HD2	1.79	0.65
31:DH:90:LYS:NZ	31:DH:159:GLU:OE1	2.29	0.65
22:AY:61:HIS:ND1	22:AY:62:HIS:O	2.30	0.65
32:BI:107:VAL:HG12	32:BI:108:THR:H	1.62	0.65
35:BP:52:GLU:OE1	35:BP:55:ARG:NH1	2.28	0.65
38:BS:101:LEU:O	38:BS:103:GLU:N	2.29	0.65
1:CA:60:A:H4'	1:CA:61:G:O5'	1.96	0.65
1:CA:222:U:H2'	1:CA:223:U:C6	2.32	0.65
1:CA:376:G:H4'	16:CP:5:ARG:NH1	2.12	0.65
25:DA:1762:A:H2'	58:DA:4689:HOH:O	1.97	0.65
26:DB:40:U:O4	50:D4:1:MET:N	2.22	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:D4:33:VAL:HG12	50:D4:34:GLU:H	1.61	0.65
10:AJ:11:PHE:CE2	10:AJ:67:THR:HG22	2.31	0.65
25:BA:2319:G:N2	38:BS:3:ARG:HA	2.12	0.65
31:BH:41:MET:HE2	31:BH:65:HIS:HA	1.79	0.65
38:BS:58:LEU:HB2	38:BS:59:LYS:HB2	1.78	0.65
1:CA:766:A:OP2	58:CA:2037:HOH:O	2.13	0.65
1:CA:1490:C:H2'	1:CA:1491:G:O4'	1.97	0.65
25:DA:607:U:OP1	29:DF:102:PRO:HA	1.95	0.65
25:DA:987:G:OP2	58:DA:4261:HOH:O	2.14	0.65
25:DA:997:G:OP2	40:DU:58:ARG:NH1	2.30	0.65
25:DA:2574:G:OP1	58:DA:3865:HOH:O	2.13	0.65
28:DE:116:VAL:HG13	28:DE:122:PHE:HB2	1.77	0.65
30:DG:39:ILE:HG23	30:DG:157:ILE:HG12	1.78	0.65
32:DI:29:TYR:O	32:DI:33:ARG:HG3	1.97	0.65
47:D1:26:ARG:N	58:D1:202:HOH:O	2.29	0.65
48:D2:65:ASN:OD1	48:D2:69:ARG:NH1	2.30	0.65
1:AA:757:U:H2'	1:AA:758:G:O4'	1.97	0.65
25:BA:1859:A:N6	25:BA:1883:G:O2'	2.30	0.65
26:BB:11:C:H3'	26:BB:12:C:H6	1.60	0.65
3:CC:134:ILE:HD11	3:CC:153:VAL:HG21	1.79	0.65
25:DA:1315:C:OP2	58:DA:3824:HOH:O	2.13	0.65
25:DA:2282:G:O2'	25:DA:2283:C:OP2	2.11	0.65
25:DA:2659:G:N7	58:DA:4723:HOH:O	2.28	0.65
25:DA:2689:U:OP2	25:DA:2719:G:N2	2.30	0.65
38:DS:59:LYS:H	38:DS:60:GLY:HA3	1.62	0.65
41:DV:6:LYS:HE3	41:DV:9:GLY:HA2	1.78	0.65
1:AA:598:U:H4'	8:AH:94:TYR:CD2	2.32	0.65
27:BD:83:GLU:OE2	27:BD:104:TYR:OH	2.10	0.65
30:BG:64:THR:HB	30:BG:94:LEU:HD11	1.78	0.65
49:B3:6:VAL:HG12	49:B3:54:VAL:HG11	1.79	0.65
2:CB:86:GLU:O	2:CB:89:GLY:N	2.30	0.65
2:CB:178:ARG:HH12	8:CH:68:ARG:HH22	1.45	0.65
29:DF:34:TRP:CZ2	35:DP:8:PRO:HG3	2.32	0.65
31:DH:9:ILE:N	31:DH:50:VAL:O	2.30	0.65
22:AY:16:GLU:HB2	22:AY:41:PHE:HB2	1.78	0.65
25:BA:1022:G:H22	25:BA:1142(A):A:H2	1.45	0.65
34:BO:8:LEU:HB2	34:BO:19:ILE:HG13	1.79	0.65
1:CA:1320:C:H5'	19:CS:70:LYS:HD3	1.78	0.65
1:CA:1492:A:H4'	1:CA:1493:A:OP1	1.95	0.65
25:DA:1430:C:H2'	25:DA:1431:U:C6	2.32	0.65
31:DH:159:GLU:HG3	31:DH:169:VAL:HG21	1.79	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:155:LEU:HD11	2:AB:159:PRO:HD3	1.79	0.65
15:AO:25:THR:HG21	15:AO:70:LEU:HB2	1.79	0.65
25:BA:545:G:OP1	25:BA:545:G:H4'	1.94	0.65
25:BA:1342:A:OP2	58:BA:4554:HOH:O	2.15	0.65
25:BA:1518:U:H2'	25:BA:1519:G:O4'	1.97	0.65
29:BF:185:ASP:OD1	29:BF:188:ARG:NH1	2.28	0.65
31:BH:149:ARG:HH11	31:BH:149:ARG:HG3	1.60	0.65
2:CB:134:GLU:HA	2:CB:137:ARG:HE	1.61	0.65
14:CN:24:CYS:SG	14:CN:25:VAL:N	2.70	0.65
1:AA:171:A:H2'	1:AA:172:A:C8	2.32	0.64
1:AA:857:C:H2'	1:AA:858:G:O4'	1.97	0.64
5:AE:83:GLU:HB3	5:AE:88:LYS:HB2	1.79	0.64
25:BA:1980:G:O2'	25:BA:1982:C:OP2	2.12	0.64
15:CO:56:LEU:O	15:CO:60:VAL:HG23	1.96	0.64
25:DA:994:C:OP1	40:DU:53:ARG:NH2	2.30	0.64
25:BA:639:U:H2'	25:BA:640:C:C6	2.32	0.64
2:CB:163:PHE:HA	2:CB:185:ILE:O	1.96	0.64
25:DA:1252:G:N3	40:DU:33:ARG:HD2	2.12	0.64
25:DA:1503:U:H2'	25:DA:1504:C:H6	1.62	0.64
27:DD:176:ARG:HG3	27:DD:176:ARG:O	1.96	0.64
32:DI:110:ASP:N	32:DI:130:TYR:OH	2.22	0.64
25:BA:139(A):G:N7	58:BA:4063:HOH:O	2.30	0.64
25:BA:728:G:H4'	27:BD:13:ARG:HD3	1.79	0.64
48:B2:51:ARG:O	48:B2:54:LYS:N	2.30	0.64
8:CH:85:ARG:HH21	8:CH:134:ILE:HG23	1.62	0.64
25:DA:1031:G:H21	55:D9:36:GLN:HE22	1.44	0.64
27:DD:242:ARG:N	27:DD:242:ARG:HD3	2.12	0.64
1:AA:542:G:P	4:AD:10:ARG:HH22	2.20	0.64
14:AN:23:ARG:HD2	14:AN:28:GLY:O	1.98	0.64
25:BA:1188:U:H4'	41:BV:79:VAL:HG22	1.79	0.64
25:BA:2657:A:H5''	25:BA:2658:C:OP2	1.98	0.64
1:CA:552:U:O3'	12:CL:87:GLY:HA3	1.98	0.64
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.32	0.64
1:CA:1376:U:H2'	1:CA:1377:A:C8	2.33	0.64
25:DA:1529:G:O6	25:DA:1530:C:N4	2.31	0.64
41:DV:29:PRO:HA	41:DV:61:VAL:HG22	1.79	0.64
4:AD:109:GLY:O	4:AD:111:ALA:N	2.31	0.64
1:CA:45:U:H2'	1:CA:46:G:C8	2.33	0.64
1:CA:1197:G:OP2	58:CA:2063:HOH:O	2.15	0.64
2:CB:97:TRP:HZ2	2:CB:102:LEU:HD13	1.62	0.64
15:CO:25:THR:HG21	15:CO:70:LEU:HB2	1.79	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:82:ILE:HD12	15:CO:88:ARG:HH22	1.62	0.64
25:DA:102:G:OP1	48:D2:7:ARG:NH2	2.31	0.64
25:DA:1614:A:OP1	58:DA:4125:HOH:O	2.15	0.64
1:AA:1286:A:H2'	1:AA:1287:A:H4'	1.79	0.64
25:BA:1187:G:H5''	41:BV:81:TYR:CE2	2.33	0.64
50:B4:18:CYS:CB	50:B4:20:ASN:HB2	2.26	0.64
1:CA:758:G:N7	58:CA:1981:HOH:O	2.30	0.64
1:CA:1423:G:H2'	1:CA:1424:C:C6	2.33	0.64
7:CG:111:ARG:NH1	7:CG:113:GLU:OE2	2.30	0.64
23:CV:19:G:N2	23:CV:56:C:O2	2.29	0.64
25:DA:288:C:H2'	25:DA:289:A:H8	1.63	0.64
25:DA:2712(A):A:H5''	25:DA:2713:A:OP2	1.98	0.64
26:DB:55:U:O3'	30:DG:27:ASN:ND2	2.31	0.64
1:AA:1227:A:OP2	13:AM:111:LYS:HE3	1.97	0.64
7:AG:73:MET:HA	7:AG:90:GLU:HA	1.80	0.64
9:AI:44:VAL:N	9:AI:45:ALA:HA	2.12	0.64
12:AL:90:VAL:HB	12:AL:93:LEU:HB2	1.78	0.64
22:AY:34:SER:OG	22:AY:36:ALA:HB3	1.98	0.64
25:BA:271(I):G:O6	58:BA:5049:HOH:O	2.12	0.64
28:BE:28:ALA:HB3	28:BE:93:VAL:HG12	1.78	0.64
1:CA:501:C:H2'	1:CA:502:G:H8	1.63	0.64
1:CA:1117:G:H5'	1:CA:1118:C:OP2	1.96	0.64
3:CC:164:ARG:NH1	3:CC:166:GLU:OE1	2.31	0.64
25:DA:601:C:O2'	29:DF:104:LYS:NZ	2.30	0.64
25:DA:1503:U:H2'	25:DA:1504:C:C6	2.32	0.64
26:DB:103:G:N7	58:DB:320:HOH:O	2.30	0.64
34:DO:19:ILE:HG22	34:DO:43:VAL:HA	1.80	0.64
1:AA:538:G:H5''	12:AL:114:LYS:HB2	1.77	0.64
1:AA:721:G:H4'	1:AA:722:A:O4'	1.97	0.64
1:AA:920:U:H2'	1:AA:921:U:C6	2.33	0.64
25:BA:185:U:H4'	25:BA:218:A:H4'	1.79	0.64
1:CA:129(A):G:N2	1:CA:189(H):G:N7	2.45	0.64
1:CA:473:G:H2'	1:CA:474:G:H8	1.63	0.64
2:CB:163:PHE:CD2	2:CB:185:ILE:HB	2.32	0.64
4:CD:22:LYS:HG3	4:CD:31:CYS:SG	2.38	0.64
10:CJ:37:PRO:HA	10:CJ:72:VAL:HG12	1.80	0.64
17:CQ:57:VAL:HA	17:CQ:77:VAL:HG23	1.80	0.64
25:DA:1876:A:H2'	25:DA:1877:A:C8	2.33	0.64
44:DY:13:VAL:HG12	44:DY:74:PRO:HA	1.78	0.64
48:D2:50:ILE:O	48:D2:51:ARG:HB3	1.97	0.64
1:AA:376:G:H2'	1:AA:377:G:H8	1.62	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:992:U:H4'	1:AA:993:G:O5'	1.97	0.64
1:AA:1530:G:O2'	1:AA:1531:A:OP1	2.16	0.64
38:BS:31:SER:O	38:BS:97:ARG:NH2	2.27	0.64
46:B0:27:GLU:HG3	46:B0:68:GLU:HA	1.79	0.64
1:CA:646:U:H2'	1:CA:647:C:C6	2.33	0.64
2:CB:78:GLN:O	2:CB:94:ASN:ND2	2.31	0.64
25:DA:1378:A:OP1	53:D7:10:ARG:NH2	2.31	0.64
25:DA:1654:A:H1'	25:DA:2823:A:H5'	1.80	0.64
35:DP:121:LYS:HG2	35:DP:122:PRO:HD2	1.79	0.64
39:DT:81:PRO:HG2	39:DT:82:LEU:HD12	1.80	0.64
1:AA:1118:C:H1'	1:AA:1179:A:C4	2.32	0.64
3:AC:22:TRP:CD1	3:AC:59:ARG:HD2	2.33	0.64
25:BA:566:U:H5''	35:BP:29:LYS:HE3	1.79	0.64
47:B1:54:ALA:HB1	47:B1:83:GLU:HG3	1.80	0.64
1:CA:1126:U:O2'	1:CA:1127:G:O5'	2.10	0.64
1:CA:1143:G:H2'	1:CA:1144:G:C8	2.33	0.64
32:DI:72:LEU:HD21	32:DI:107:VAL:HG11	1.80	0.64
28:BE:111:ARG:HG3	28:BE:160:TYR:CD1	2.33	0.63
35:BP:96:THR:HA	35:BP:126:VAL:HG23	1.78	0.63
43:BX:31:HIS:CD2	43:BX:33:LYS:H	2.16	0.63
12:CL:113:ARG:NH2	58:CL:203:HOH:O	2.31	0.63
25:DA:804:A:H5''	25:DA:805:G:OP1	1.98	0.63
25:DA:993:G:C4	25:DA:994:C:H5	2.16	0.63
25:DA:2101:G:C2	25:DA:2102:U:H1'	2.32	0.63
30:DG:33:ARG:NE	30:DG:162:THR:HG21	2.13	0.63
1:AA:187:C:O2	58:AA:2208:HOH:O	2.13	0.63
1:AA:266:G:O2'	1:AA:267:C:OP2	2.12	0.63
22:AY:33:THR:OG1	25:BA:2452:C:OP1	2.04	0.63
25:BA:71:A:C2	43:BX:31:HIS:HE1	2.16	0.63
25:BA:1047:G:H2'	25:BA:1110:G:N2	2.12	0.63
25:BA:1226:A:OP1	41:BV:84:LYS:NZ	2.22	0.63
32:BI:79:ILE:HB	32:BI:144:VAL:HG23	1.80	0.63
25:DA:1210:A:H5''	25:DA:1212:G:H5'	1.79	0.63
30:DG:76:SER:HA	30:DG:83:ARG:HA	1.78	0.63
35:DP:100:LEU:HD22	35:DP:105:LEU:HB2	1.80	0.63
25:BA:697:C:H2'	25:BA:698:C:C6	2.33	0.63
25:BA:1364:G:P	47:B1:3:LYS:HG3	2.39	0.63
25:BA:2298:A:H62	25:BA:2318:G:H8	1.44	0.63
55:B9:11:CYS:HB3	55:B9:32:HIS:CE1	2.27	0.63
1:CA:6:G:O2'	1:CA:7:G:H5''	1.97	0.63
1:CA:1358:U:H5''	14:CN:34:TYR:HA	1.79	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:94:ARG:HB3	13:CM:96:LEU:HG	1.79	0.63
26:DB:43:C:O2	30:DG:95:ARG:NH2	2.31	0.63
47:D1:77:ALA:HB2	47:D1:94:LEU:HD21	1.80	0.63
1:AA:1149:C:H2'	1:AA:1150:U:H6	1.63	0.63
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.33	0.63
1:AA:1363(A):A:H1'	1:AA:1365:G:N7	2.13	0.63
5:AE:15:ARG:HH22	22:AY:129:LYS:HG3	1.63	0.63
25:BA:1359:A:H2'	25:BA:1360:A:H5'	1.80	0.63
25:BA:1364:G:C8	47:B1:3:LYS:HD2	2.32	0.63
33:BN:24:GLY:HA2	33:BN:27:ALA:HB2	1.80	0.63
45:BZ:111:VAL:C	45:BZ:113:ALA:H	2.02	0.63
1:CA:1323:G:H2'	1:CA:1324:A:C8	2.34	0.63
8:CH:97:VAL:O	8:CH:100:ILE:HG13	1.99	0.63
29:DF:110:LEU:HD22	29:DF:202:PHE:HE1	1.64	0.63
1:AA:1221:G:OP1	1:AA:1320:C:N4	2.31	0.63
3:AC:52:LEU:H	3:AC:70:VAL:HG23	1.62	0.63
4:AD:36:ARG:HG2	4:AD:36:ARG:HH11	1.62	0.63
32:BI:72:LEU:HD12	32:BI:138:ILE:HG21	1.80	0.63
1:CA:586:C:C2'	1:CA:587:G:H5'	2.29	0.63
1:CA:993:G:N7	1:CA:1213:A:N6	2.47	0.63
1:CA:1497:G:H8	58:CA:2223:HOH:O	1.81	0.63
6:CF:62:TRP:C	6:CF:63:TYR:HD2	2.02	0.63
13:CM:16:ASP:HB3	13:CM:34:LEU:HD11	1.79	0.63
25:DA:1495:A:H2'	25:DA:1496:A:C8	2.32	0.63
25:DA:1529:G:C6	25:DA:1530:C:N4	2.67	0.63
34:DO:68:GLU:OE2	34:DO:78:ARG:NH1	2.32	0.63
52:D6:16:CYS:CB	52:D6:43:CYS:SG	2.78	0.63
1:AA:147:G:H2'	1:AA:148:G:H8	1.64	0.63
1:AA:448:A:OP2	1:AA:485:G:N1	2.23	0.63
25:BA:271(F):C:H2'	25:BA:271(G):C:H6	1.64	0.63
43:BX:57:LEU:HD11	43:BX:78:LYS:HE2	1.80	0.63
1:CA:728:A:N7	15:CO:54:ARG:HD2	2.13	0.63
13:CM:44:ARG:O	13:CM:46:LYS:N	2.26	0.63
25:DA:2080:G:H5'	47:D1:19:GLN:HG3	1.78	0.63
27:DD:132:PRO:HD3	27:DD:190:TYR:CZ	2.34	0.63
28:DE:120:TRP:CE3	28:DE:155:LYS:HD3	2.34	0.63
29:DF:164:ARG:HD2	29:DF:175:THR:HG23	1.81	0.63
1:AA:677:U:H3	1:AA:713:G:H22	1.46	0.63
10:AJ:38:ILE:HG12	10:AJ:71:LEU:O	1.98	0.63
26:BB:11:C:H3'	26:BB:12:C:C6	2.34	0.63
29:BF:52:LYS:HG2	29:BF:56:GLU:HB2	1.81	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:34:THR:OG1	34:BO:35:VAL:N	2.31	0.63
37:BR:28:LEU:HD12	37:BR:48:VAL:HG21	1.79	0.63
43:BX:60:ARG:HB3	43:BX:60:ARG:HH11	1.62	0.63
2:AB:21:ARG:HB3	2:AB:39:ILE:HG12	1.79	0.63
12:AL:43:VAL:HG13	12:AL:55:VAL:HG21	1.81	0.63
25:BA:2833:G:H3'	25:BA:2834:G:H5'	1.80	0.63
1:CA:870:U:H5'	1:CA:870:U:H6	1.63	0.63
1:CA:953:G:H5'	1:CA:965:A:N6	2.13	0.63
1:CA:1262:C:H2'	1:CA:1263:C:C6	2.33	0.63
1:CA:1292:U:OP2	7:CG:41:ARG:NH2	2.32	0.63
3:CC:67:THR:HB	3:CC:102:ASN:HB3	1.81	0.63
25:DA:674:G:O2'	29:DF:74:ARG:HD3	1.99	0.63
25:DA:1313:U:H2'	25:DA:1610:A:C2	2.34	0.63
25:DA:2356:C:O3'	46:D0:20:ARG:HD3	1.99	0.63
27:DD:71:ASP:OD1	27:DD:103:ARG:NH2	2.31	0.63
33:DN:62:VAL:HG21	33:DN:87:LEU:HD11	1.81	0.63
3:AC:70:VAL:HG22	3:AC:71:ALA:H	1.64	0.63
25:BA:1824:G:OP1	27:BD:52:ARG:NH1	2.31	0.63
27:BD:132:PRO:HD2	27:BD:135:PHE:HD1	1.64	0.63
40:BU:47:TYR:HA	40:BU:50:ARG:NH2	2.14	0.63
48:B2:44:LEU:HG	48:B2:45:SER:O	1.99	0.63
25:DA:1448:G:H4'	25:DA:1542:A:OP1	1.99	0.63
29:DF:197:ASP:OD2	29:DF:197:ASP:N	2.32	0.63
45:DZ:54:HIS:ND1	45:DZ:101:PRO:HG3	2.14	0.63
1:AA:165:C:H2'	1:AA:166:G:C8	2.34	0.62
1:AA:401:C:OP2	4:AD:73:ARG:HD2	1.98	0.62
1:AA:881:G:P	12:AL:12:ARG:HH22	2.22	0.62
25:BA:1044:G:H5'	25:BA:1045:A:OP2	1.99	0.62
47:B1:40:ARG:HD3	47:B1:40:ARG:C	2.19	0.62
11:CK:29:ILE:HG23	11:CK:44:SER:HB3	1.81	0.62
13:CM:90:LEU:O	13:CM:91:ARG:HG2	1.99	0.62
25:DA:2183:C:H2'	25:DA:2184:G:C8	2.33	0.62
31:DH:95:ARG:HB2	31:DH:128:PRO:HB3	1.81	0.62
1:AA:457:C:H2'	1:AA:458:C:C6	2.34	0.62
1:AA:688:G:H2'	1:AA:689:C:H6	1.64	0.62
25:BA:1364:G:OP1	47:B1:2:SER:HA	1.99	0.62
25:BA:2304:G:H22	25:BA:2312:U:H3	1.47	0.62
25:BA:2316:C:H2'	25:BA:2317:C:H6	1.65	0.62
39:BT:84:GLN:HG2	39:BT:85:LYS:HG3	1.79	0.62
1:CA:559:A:H4'	1:CA:560:U:C5'	2.29	0.62
5:CE:126:ARG:HH11	5:CE:126:ARG:CG	2.12	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:43:LYS:O	16:CP:45:THR:N	2.31	0.62
20:CT:18:GLN:O	20:CT:22:ARG:HG3	1.99	0.62
25:DA:89:G:H3'	25:DA:90:U:H5''	1.81	0.62
45:DZ:145:GLU:HG3	45:DZ:146:ILE:H	1.64	0.62
54:D8:58:ILE:HA	54:D8:61:LEU:HD12	1.82	0.62
1:AA:539:A:H2'	1:AA:540:G:C8	2.34	0.62
1:AA:540:G:H2'	1:AA:541:G:O4'	1.98	0.62
7:AG:36:LYS:HA	7:AG:39:ALA:HB3	1.80	0.62
25:BA:1156:A:C8	40:BU:51:LYS:HG2	2.33	0.62
25:BA:1178:C:H2'	25:BA:1179:C:C6	2.34	0.62
30:BG:111:LEU:HD13	30:BG:120:LEU:HD21	1.80	0.62
25:DA:1019:U:H3	25:DA:1142(A):A:H62	1.47	0.62
25:DA:1472:A:H2'	25:DA:1473:G:O4'	1.99	0.62
1:AA:160:A:H2'	1:AA:161:A:O4'	2.00	0.62
1:AA:507:C:OP2	1:AA:508:C:O2'	2.13	0.62
15:AO:39:LEU:HD22	15:AO:43:LEU:HG	1.82	0.62
31:BH:3:ARG:NE	31:BH:3:ARG:HA	2.13	0.62
1:CA:129(A):G:O6	1:CA:189(D):C:N3	2.31	0.62
25:DA:1899:G:N3	25:DA:1899:G:H2'	2.14	0.62
25:DA:2324:C:H5''	25:DA:2325:G:H5'	1.80	0.62
32:DI:92:VAL:HG22	32:DI:120:ILE:HB	1.81	0.62
1:AA:1326:C:OP1	21:AU:12:LYS:NZ	2.28	0.62
15:AO:3:ILE:HG23	15:AO:38:ARG:HD3	1.79	0.62
25:BA:1249:U:OP1	58:BA:5376:HOH:O	2.16	0.62
25:DA:1557:C:P	25:DA:1558:A:HO2'	2.22	0.62
26:DB:31:C:O2'	26:DB:53:A:N6	2.31	0.62
32:DI:75:LEU:HD23	32:DI:105:HIS:NE2	2.14	0.62
38:DS:88:ASP:OD1	38:DS:90:GLY:N	2.32	0.62
45:DZ:94:GLU:O	45:DZ:130:PRO:HD3	1.99	0.62
1:AA:166:G:O2'	1:AA:167:G:H5'	1.99	0.62
1:AA:182:U:C2	1:AA:183:G:H1'	2.35	0.62
1:AA:438:G:O2'	1:AA:494:U:O4	2.17	0.62
1:AA:1019:C:H2'	1:AA:1020:U:O4'	1.99	0.62
1:AA:1090:U:H2'	1:AA:1091:U:H6	1.64	0.62
13:AM:48:LEU:O	13:AM:52:GLU:HB2	2.00	0.62
25:BA:1799:G:O6	27:BD:179:SER:HB3	2.00	0.62
25:BA:1878:G:H2'	25:BA:1879:C:C6	2.35	0.62
39:BT:56:GLY:O	39:BT:59:THR:HG23	1.99	0.62
42:BW:79:GLY:HA3	42:BW:100:THR:HG22	1.80	0.62
1:CA:811:C:O2'	1:CA:901:A:N1	2.32	0.62
2:CB:163:PHE:HD2	2:CB:185:ILE:HB	1.64	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1857:G:H8	25:DA:1857:G:O5'	1.83	0.62
25:DA:2533:A:OP1	25:DA:2665:A:O2'	2.16	0.62
25:DA:2847:U:OP1	39:DT:98:LYS:NZ	2.33	0.62
32:DI:77:LEU:HG	32:DI:101:LEU:HD23	1.80	0.62
39:DT:26:ASP:O	39:DT:49:VAL:HG12	2.00	0.62
39:DT:27:THR:HB	39:DT:89:VAL:HG22	1.82	0.62
1:AA:1171:G:H2'	1:AA:1172:C:C6	2.35	0.62
25:BA:907:U:H4'	36:BQ:101:ARG:HH22	1.63	0.62
25:BA:1227:G:OP2	40:BU:16:LYS:NZ	2.32	0.62
48:B2:16:LEU:HD12	48:B2:16:LEU:H	1.62	0.62
1:CA:520:A:N1	1:CA:536:C:H1'	2.15	0.62
1:CA:1369:C:OP1	14:CN:61:TRP:NE1	2.29	0.62
7:CG:89:MET:HG3	7:CG:155:ARG:HG3	1.80	0.62
25:DA:2218:U:H4'	25:DA:2219:G:OP2	1.98	0.62
25:BA:271(I):G:H1	25:BA:271(O):C:H42	1.48	0.62
25:BA:2336:A:H61	46:B0:43:THR:HG22	1.64	0.62
45:BZ:15:PRO:O	45:BZ:19:ARG:HB2	1.99	0.62
2:CB:185:ILE:HG23	2:CB:199:TYR:HB2	1.82	0.62
4:CD:59:ARG:O	4:CD:62:GLN:N	2.33	0.62
11:CK:82:VAL:HB	11:CK:108:ILE:HG12	1.82	0.62
29:DF:9:ILE:HG21	29:DF:125:LEU:HD13	1.80	0.62
1:AA:611:A:H61	1:AA:629:G:H1	1.46	0.62
25:BA:1292:U:H2'	25:BA:1293:C:C6	2.34	0.62
30:BG:125:PHE:N	58:BG:303:HOH:O	2.31	0.62
10:CJ:40:LEU:HB3	10:CJ:41:PRO:HD2	1.81	0.62
25:DA:342:G:N7	58:DA:4246:HOH:O	2.31	0.62
25:DA:833:U:O2	35:DP:55:ARG:NH2	2.32	0.62
25:DA:954:G:H5''	36:DQ:13:GLN:HB3	1.82	0.62
29:DF:135:LYS:HB2	29:DF:138:GLU:HG3	1.82	0.62
37:DR:52:ILE:HD12	37:DR:94:TYR:HB2	1.81	0.62
1:AA:129(A):G:N2	1:AA:189(H):G:N7	2.48	0.62
1:AA:586:C:C2'	1:AA:587:G:H5'	2.30	0.62
25:BA:413:C:H2'	25:BA:414:C:C6	2.35	0.62
25:BA:471:A:O3'	58:BA:4963:HOH:O	2.16	0.62
25:BA:1690:A:H5''	25:BA:1691:C:OP2	2.00	0.62
25:BA:2331:G:O2'	46:B0:43:THR:HG22	2.00	0.62
35:BP:90:ARG:HG2	35:BP:91:PHE:CD2	2.35	0.62
13:CM:73:GLU:O	13:CM:77:ASN:HB2	1.99	0.62
25:DA:271(U):G:H2'	25:DA:271(V):G:H8	1.65	0.62
25:DA:1530:C:N4	25:DA:1539:G:H1	1.97	0.62
25:DA:2277:G:H3'	46:D0:12:ASN:HD21	1.65	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:DE:14:ILE:HD11	28:DE:173:VAL:HG11	1.82	0.62
1:AA:77:G:O6	1:AA:92:C:N3	2.34	0.61
1:AA:100:C:H2'	1:AA:101:A:C8	2.35	0.61
1:AA:1128:C:O2'	1:AA:1130:A:N7	2.32	0.61
1:AA:1225:A:H2'	1:AA:1225:A:N3	2.15	0.61
1:AA:1272:G:H8	1:AA:1272:G:H5''	1.65	0.61
2:CB:100:GLY:HA2	2:CB:104:ASN:H	1.64	0.61
25:DA:2448:A:OP2	58:DA:4708:HOH:O	2.16	0.61
45:DZ:126:VAL:HG13	45:DZ:163:LEU:HA	1.81	0.61
5:AE:76:ILE:HD13	5:AE:118:ILE:HD12	1.82	0.61
33:BN:55:VAL:HG22	33:BN:126:PRO:HA	1.82	0.61
39:BT:11:GLU:OE1	39:BT:57:PHE:HB3	2.00	0.61
1:CA:17:U:H2'	1:CA:18:C:C6	2.36	0.61
1:CA:573:A:N3	1:CA:883:C:O2'	2.33	0.61
25:DA:1789:A:H5'	27:DD:221:VAL:HG12	1.82	0.61
25:DA:2439:A:C8	25:DA:2439:A:H5''	2.35	0.61
27:DD:58:HIS:ND1	27:DD:59:LYS:N	2.48	0.61
41:DV:5:VAL:HG11	41:DV:57:VAL:HG21	1.82	0.61
2:AB:18:GLY:HA2	2:AB:42:ILE:HG13	1.82	0.61
22:AY:25:ALA:O	22:AY:30:VAL:HG21	1.99	0.61
25:BA:593:G:H4'	54:B8:4:MET:HE2	1.82	0.61
25:BA:652(F):G:O6	25:BA:652(S):C:N3	2.33	0.61
44:BY:51:VAL:HG22	44:BY:58:GLY:HA3	1.81	0.61
1:CA:1348:U:H2'	1:CA:1349:A:H8	1.66	0.61
4:CD:19:LEU:HD22	4:CD:19:LEU:H	1.66	0.61
25:DA:994:C:O2'	25:DA:996:A:OP1	2.09	0.61
25:DA:2364:C:H4'	46:D0:56:ASP:OD2	2.00	0.61
1:AA:262:A:H2'	1:AA:263:A:C8	2.36	0.61
1:AA:384:G:H2'	1:AA:385:C:H6	1.64	0.61
1:AA:414:A:H2'	1:AA:415:A:C8	2.34	0.61
25:BA:1019:U:H3	25:BA:1142(A):A:H62	1.48	0.61
25:BA:1858:G:O2'	25:BA:1884:A:N6	2.33	0.61
45:BZ:82:ARG:HB3	45:BZ:82:ARG:HH21	1.65	0.61
11:CK:20:TYR:HB2	11:CK:31:THR:HG22	1.83	0.61
17:CQ:13:ASP:HB2	58:CQ:202:HOH:O	2.00	0.61
17:CQ:96:GLU:O	17:CQ:97:SER:HB3	2.00	0.61
25:DA:708:C:H42	25:DA:723:G:H1	1.47	0.61
35:DP:38:GLN:O	35:DP:39:LYS:HB3	2.00	0.61
1:AA:736:C:H2'	1:AA:737:A:C8	2.35	0.61
1:AA:750:G:N3	15:AO:23:GLY:HA3	2.15	0.61
5:AE:33:VAL:HG21	5:AE:109:ILE:HA	1.81	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:54:G:O2'	53:B7:35:ARG:HD3	2.00	0.61
25:BA:184:C:H2'	25:BA:185:U:H6	1.64	0.61
25:BA:603:A:H4'	25:BA:604:G:H5'	1.83	0.61
25:BA:2286:A:OP1	52:B6:29:ASN:ND2	2.29	0.61
44:BY:11:ASP:N	44:BY:11:ASP:OD1	2.31	0.61
1:CA:192:U:H2'	1:CA:193:C:H6	1.65	0.61
1:CA:1049:U:H4'	1:CA:1050:G:C5'	2.31	0.61
3:CC:131:ARG:H	3:CC:134:ILE:HD12	1.64	0.61
14:CN:37:PHE:HB3	14:CN:39:LEU:HD12	1.81	0.61
16:CP:15:PRO:O	16:CP:16:HIS:ND1	2.33	0.61
25:DA:826:U:C4'	35:DP:55:ARG:HB2	2.30	0.61
25:DA:1449:A:O2'	25:DA:1529:G:N2	2.28	0.61
26:DB:20:C:H42	26:DB:63:G:H1	1.48	0.61
31:DH:54:ARG:NE	31:DH:57:ASP:OD1	2.34	0.61
1:AA:14:U:H5	58:AA:2112:HOH:O	1.83	0.61
2:AB:21:ARG:HD3	2:AB:21:ARG:N	2.14	0.61
16:AP:19:ILE:HG22	16:AP:36:ILE:HG13	1.82	0.61
17:AQ:86:GLU:HG3	17:AQ:90:ILE:HD11	1.81	0.61
25:BA:652(H):C:N4	25:BA:652(Q):G:H1	1.98	0.61
38:BS:10:ARG:O	38:BS:14:VAL:HG13	2.00	0.61
51:B5:36:CYS:O	51:B5:37:LYS:HD3	2.00	0.61
54:B8:34:TRP:CE2	54:B8:35:GLN:HB3	2.36	0.61
2:CB:102:LEU:HD23	2:CB:182:ILE:HD12	1.82	0.61
1:AA:438:G:H4'	4:AD:123:HIS:CD2	2.35	0.61
22:AY:34:SER:CB	25:BA:2602:A:H61	2.14	0.61
31:BH:3:ARG:HB3	31:BH:6:ARG:HG2	1.82	0.61
31:BH:83:TYR:CE1	31:BH:138:LYS:HD2	2.36	0.61
1:CA:1445:C:O2'	1:CA:1447:A:N6	2.34	0.61
28:DE:47:VAL:HG21	28:DE:86:PRO:HD2	1.83	0.61
1:AA:153:C:N4	1:AA:169:C:H42	1.99	0.61
1:AA:278:G:OP2	17:AQ:41:LYS:HE2	2.01	0.61
1:AA:285:G:N7	58:AA:2056:HOH:O	2.31	0.61
1:AA:1144:G:H21	1:AA:1146:A:H62	1.49	0.61
3:AC:111:LEU:HD11	3:AC:144:SER:O	1.99	0.61
13:AM:69:GLU:OE1	13:AM:70:LEU:N	2.32	0.61
20:AT:73:HIS:HB3	20:AT:74:LYS:HE3	1.83	0.61
1:CA:390:C:O3'	16:CP:28:ARG:NH2	2.33	0.61
1:CA:590:C:O2	1:CA:649:G:N2	2.21	0.61
1:CA:1107:C:C4	1:CA:1108:G:C8	2.88	0.61
2:CB:187:LEU:HA	2:CB:201:ILE:HB	1.82	0.61
1:AA:384:G:H2'	1:AA:385:C:C6	2.36	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:865:A:H2'	1:AA:866:C:H6	1.65	0.61
1:AA:1016:A:H2'	1:AA:1017:G:O4'	2.01	0.61
1:AA:1242:C:H4'	1:AA:1304:G:OP1	2.01	0.61
7:AG:111:ARG:NH2	7:AG:126:ASP:OD1	2.33	0.61
25:BA:607:U:OP1	29:BF:102:PRO:HA	2.01	0.61
25:BA:646:A:H2'	25:BA:647:G:O4'	2.00	0.61
38:BS:25:ARG:NH1	38:BS:42:ASP:OD2	2.33	0.61
1:CA:765:G:H5''	1:CA:766:A:OP1	2.01	0.61
1:CA:954:G:H21	1:CA:1227:A:H62	1.49	0.61
25:DA:1190:G:H5''	35:DP:32:THR:HA	1.83	0.61
39:DT:36:GLU:OE1	39:DT:41:ARG:NE	2.33	0.61
45:DZ:157:LEU:HD21	45:DZ:163:LEU:HB2	1.83	0.61
50:D4:18:CYS:HB3	50:D4:39:CYS:HB3	1.83	0.61
25:BA:1047:G:H21	25:BA:1111:A:N6	1.98	0.61
25:BA:1188:U:C2'	25:BA:1189:A:H5'	2.31	0.61
25:BA:1678:G:N3	25:BA:1678:G:H5''	2.15	0.61
26:BB:48:A:H4'	38:BS:95:HIS:HD2	1.64	0.61
37:BR:33:ARG:NH1	37:BR:115:GLU:OE2	2.26	0.61
38:BS:15:ARG:O	38:BS:19:LYS:HG3	2.01	0.61
1:CA:64:G:H4'	1:CA:65:U:H3'	1.83	0.61
1:CA:922:G:H2'	1:CA:923:A:C8	2.36	0.61
11:CK:18:ARG:HB2	11:CK:33:THR:HG23	1.81	0.61
25:DA:83:G:N2	25:DA:103:A:OP2	2.32	0.61
25:DA:89:G:H3'	25:DA:90:U:C5'	2.31	0.61
25:DA:1028:A:N6	25:DA:1125:G:H2'	2.15	0.61
25:DA:1292:U:H2'	25:DA:1293:C:C6	2.36	0.61
28:DE:12:THR:HG22	28:DE:13:ARG:H	1.66	0.61
45:DZ:30:ASN:HB3	45:DZ:90:VAL:HB	1.83	0.61
1:AA:1255:G:HO2'	1:AA:1258:G:HO2'	1.35	0.60
9:AI:126:SER:HA	9:AI:127:LYS:HB2	1.82	0.60
11:AK:43:SER:OG	11:AK:67:ASP:OD1	2.19	0.60
25:BA:535:C:O3'	40:BU:53:ARG:NH1	2.34	0.60
27:BD:108:PRO:HB3	27:BD:143:HIS:CE1	2.36	0.60
30:BG:45:GLU:C	30:BG:47:LYS:H	2.04	0.60
31:BH:164:TYR:HB2	31:BH:167:GLU:HB2	1.82	0.60
33:BN:56:ASN:H	33:BN:125:GLY:CA	2.07	0.60
38:BS:88:ASP:OD1	38:BS:90:GLY:N	2.34	0.60
27:DD:159:ALA:HB1	27:DD:198:ASN:O	2.01	0.60
54:D8:6:THR:HG22	54:D8:63:PRO:HD2	1.83	0.60
1:AA:166:G:H2'	1:AA:167:G:C8	2.32	0.60
1:AA:221:C:H2'	1:AA:222:U:H6	1.66	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:612:C:O2	1:AA:629:G:N2	2.34	0.60
5:AE:75:THR:OG1	5:AE:76:ILE:N	2.31	0.60
12:AL:70:ILE:HD13	12:AL:77:LEU:HD12	1.83	0.60
28:BE:116:VAL:HG13	28:BE:122:PHE:CD2	2.36	0.60
44:BY:23:ARG:HB2	44:BY:23:ARG:HH11	1.65	0.60
1:CA:501:C:H2'	1:CA:502:G:C8	2.36	0.60
1:CA:939:G:H1	1:CA:1344:C:H42	1.49	0.60
1:CA:1170:A:C2	1:CA:1171:G:H1'	2.36	0.60
1:CA:1281:U:H3'	1:CA:1281:U:H6	1.65	0.60
4:CD:43:HIS:HA	4:CD:46:LYS:HD2	1.83	0.60
25:DA:212:G:H2'	25:DA:213:A:O4'	2.00	0.60
25:DA:2313:C:H2'	25:DA:2314:C:C6	2.35	0.60
42:DW:36:LEU:HD13	42:DW:48:ALA:HA	1.83	0.60
1:AA:129(A):G:N1	1:AA:189(D):C:O2	2.34	0.60
1:AA:958:A:N3	1:AA:985:C:O2'	2.34	0.60
1:AA:1252:A:H2'	1:AA:1253:G:O4'	2.00	0.60
25:BA:1040:C:H2'	25:BA:1041:C:O4'	2.01	0.60
1:CA:437:U:H5''	4:CD:155:LEU:HD11	1.81	0.60
25:DA:1331:A:O2'	25:DA:1332:G:H8	1.85	0.60
25:DA:1790:C:H5''	25:DA:1791:A:OP1	2.01	0.60
25:DA:2478:A:H5'	55:D9:31:LYS:HD2	1.83	0.60
31:DH:20:ALA:HB1	31:DH:21:PRO:HD2	1.83	0.60
50:D4:14:ILE:HG22	50:D4:33:VAL:HG22	1.82	0.60
2:AB:111:ARG:HG2	2:AB:111:ARG:HH11	1.65	0.60
4:AD:17:VAL:HG11	4:AD:197:PRO:HG3	1.82	0.60
25:BA:729:G:C6	27:BD:208:LYS:HB2	2.37	0.60
25:BA:1797:C:H4'	27:BD:257:LEU:O	2.01	0.60
32:BI:107:VAL:HG12	32:BI:108:THR:N	2.17	0.60
43:BX:57:LEU:CD1	43:BX:78:LYS:HG2	2.32	0.60
1:CA:1170:A:N6	1:CA:1171:G:N3	2.50	0.60
2:CB:80:ILE:HD13	2:CB:212:GLN:HG2	1.83	0.60
41:DV:50:PRO:HG2	41:DV:51:VAL:HG12	1.83	0.60
50:D4:36:CYS:SG	50:D4:37:SER:N	2.74	0.60
1:AA:323:U:H5'	20:AT:23:ARG:HB2	1.82	0.60
1:AA:517:G:H5'	1:AA:519:C:C2	2.37	0.60
16:AP:68:ASP:OD1	16:AP:71:ARG:NH1	2.33	0.60
20:AT:39:LYS:O	20:AT:42:GLN:HB3	2.01	0.60
1:CA:450:G:H4'	16:CP:41:PRO:HB2	1.82	0.60
2:CB:19:HIS:NE2	2:CB:206:ASP:HB2	2.15	0.60
6:CF:62:TRP:CH2	6:CF:64:GLN:HB2	2.37	0.60
25:DA:581:C:H2'	25:DA:582:G:H8	1.66	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1358:G:O2'	25:DA:1359:A:H5''	2.00	0.60
28:DE:27:LEU:HD22	39:DT:1:MET:HE3	1.82	0.60
1:AA:147:G:H2'	1:AA:148:G:C8	2.37	0.60
25:BA:31:C:OP1	58:BA:5383:HOH:O	2.17	0.60
25:BA:51:G:O2'	25:BA:119:A:N1	2.33	0.60
29:BF:116:ASP:OD2	35:BP:1:MET:HB2	2.02	0.60
31:BH:107:VAL:HG21	31:BH:152:ARG:HB2	1.84	0.60
1:CA:869:G:N7	58:CA:1967:HOH:O	2.32	0.60
1:CA:1227:A:H3'	1:CA:1227:A:C8	2.37	0.60
25:DA:370:G:OP1	25:DA:403:U:N3	2.31	0.60
25:DA:1169:G:H1	25:DA:1180:C:H42	1.49	0.60
25:DA:1221(A):C:H42	25:DA:1228:G:H1	1.49	0.60
25:DA:1427:A:H4'	25:DA:1428:C:O5'	2.01	0.60
25:DA:1818:U:H2'	27:DD:157:ARG:HG3	1.83	0.60
34:DO:88:ASN:H	34:DO:88:ASN:HD22	1.48	0.60
1:AA:429:U:H1'	1:AA:430:A:H5''	1.84	0.60
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.36	0.60
22:AY:50:GLU:HA	22:AY:53:LYS:HB2	1.81	0.60
25:BA:1021:A:H3'	25:BA:1021:A:C8	2.36	0.60
25:BA:1262:A:N3	51:B5:10:LYS:HE3	2.16	0.60
25:BA:2313:C:H4'	30:BG:91:ARG:HG3	1.84	0.60
25:BA:2467:C:OP1	55:B9:6:SER:OG	2.10	0.60
1:CA:1201:A:H4'	1:CA:1202:G:O5'	2.02	0.60
20:CT:38:LYS:HG3	20:CT:41:ILE:HD11	1.83	0.60
1:AA:1077:G:N2	1:AA:1080:A:OP2	2.35	0.60
4:AD:129:ASN:OD1	4:AD:145:GLU:N	2.25	0.60
10:AJ:50:ILE:H	14:AN:41:ARG:HE	1.48	0.60
25:BA:747:U:O2	25:BA:2014:A:H1'	2.02	0.60
25:BA:2638:G:OP2	28:BE:82:ARG:NH2	2.34	0.60
43:BX:12:VAL:HG12	43:BX:17:ALA:HB2	1.83	0.60
1:CA:1344:C:H4'	9:CI:120:ARG:HB3	1.84	0.60
4:CD:79:PHE:O	4:CD:82:ALA:HB3	2.02	0.60
5:CE:36:ASP:HB2	5:CE:38:GLN:H	1.67	0.60
23:CV:40:C:H2'	23:CV:41:C:C6	2.36	0.60
25:DA:976:C:H5'	25:DA:1156:A:N6	2.16	0.60
25:DA:2563:U:H4'	34:DO:28:SER:HA	1.83	0.60
25:DA:2705:A:OP2	58:DA:4356:HOH:O	2.15	0.60
45:DZ:53:ILE:HG22	45:DZ:71:VAL:HB	1.82	0.60
10:AJ:49:VAL:HG23	14:AN:41:ARG:HG2	1.83	0.60
22:AY:32:LYS:HA	25:BA:2573:C:H41	1.66	0.60
25:BA:795:C:H2'	25:BA:796:C:C6	2.37	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:2527:C:H5''	55:B9:30:PRO:HB2	1.84	0.60
33:BN:52:VAL:HG12	33:BN:120:LEU:HD23	1.83	0.60
1:CA:1205:U:H4'	3:CC:195:VAL:HG21	1.83	0.60
10:CJ:11:PHE:CE2	10:CJ:67:THR:HG22	2.36	0.60
25:DA:154(A):C:N4	25:DA:171:G:H1	1.98	0.60
25:DA:1247:A:OP1	29:DF:95:ARG:NH2	2.35	0.60
25:DA:1496:A:N3	25:DA:1577:C:O2'	2.30	0.60
29:DF:11:VAL:HG22	29:DF:125:LEU:HB2	1.83	0.60
1:AA:254:G:H4'	17:AQ:18:THR:HG21	1.83	0.60
17:AQ:48:GLU:O	17:AQ:50:LYS:N	2.35	0.60
22:AY:21:ARG:HG3	22:AY:35:THR:H	1.66	0.60
25:BA:579:G:H2'	25:BA:580:C:C6	2.37	0.60
25:BA:1109:C:H5	25:BA:1110:G:C6	2.20	0.60
25:BA:1531:C:H42	25:BA:1538:G:H1	1.50	0.60
37:BR:103:ARG:HG2	37:BR:103:ARG:HH11	1.66	0.60
40:BU:79:PHE:CZ	40:BU:83:LEU:HD21	2.37	0.60
16:CP:76:GLN:O	16:CP:76:GLN:NE2	2.31	0.60
31:DH:149:ARG:HD2	31:DH:164:TYR:CE1	2.37	0.60
41:DV:60:GLU:HB2	41:DV:97:LYS:HE2	1.82	0.60
41:DV:98:GLU:OE1	41:DV:100:ARG:NH1	2.35	0.60
6:AF:27:GLN:O	6:AF:31:GLU:HG3	2.02	0.59
25:BA:697:C:H2'	25:BA:698:C:H6	1.67	0.59
25:BA:1106:G:H8	25:BA:1106:G:O5'	1.84	0.59
1:CA:715:A:H2'	1:CA:716:A:C8	2.37	0.59
7:CG:18:TYR:HD2	7:CG:59:LEU:HD22	1.65	0.59
7:CG:111:ARG:HB2	7:CG:113:GLU:OE1	2.02	0.59
25:DA:875:G:O6	25:DA:902:C:N4	2.25	0.59
1:AA:1182:G:H4'	1:AA:1183:A:C5'	2.32	0.59
13:AM:65:LYS:HD2	13:AM:69:GLU:HG3	1.84	0.59
15:AO:71:GLN:HG2	15:AO:78:TYR:CG	2.37	0.59
25:BA:1952:A:OP1	34:BO:44:LYS:NZ	2.30	0.59
38:BS:53:SER:OG	38:BS:54:LEU:N	2.35	0.59
9:CI:17:VAL:HG12	9:CI:63:ILE:HG12	1.84	0.59
25:DA:608:A:H2'	25:DA:609:A:C8	2.37	0.59
29:DF:53:THR:HG22	29:DF:56:GLU:OE2	2.02	0.59
1:AA:343:U:H1'	1:AA:344:A:OP1	2.02	0.59
1:AA:414:A:H2'	1:AA:415:A:H8	1.67	0.59
25:BA:652(Q):G:H2'	25:BA:652(R):C:H5'	1.82	0.59
38:BS:99:LYS:O	38:BS:103:GLU:HG3	2.02	0.59
1:CA:1279:A:O2'	1:CA:1281:U:OP2	2.12	0.59
18:CR:44:LEU:HD21	18:CR:70:ILE:HG21	1.85	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:90:U:O2'	25:DA:92:A:C8	2.56	0.59
25:DA:918:A:H5''	26:DB:98:G:O2'	2.03	0.59
25:DA:1607:C:H4'	25:DA:1608:A:O5'	2.02	0.59
27:DD:108:PRO:HB3	27:DD:143:HIS:CE1	2.38	0.59
30:DG:106:LEU:HA	30:DG:110:ALA:HB3	1.83	0.59
30:DG:109:VAL:HG11	30:DG:142:PRO:HB3	1.85	0.59
53:D7:12:ARG:NH2	53:D7:44:PRO:HB3	2.17	0.59
1:AA:447:G:H2'	1:AA:485:G:N2	2.18	0.59
1:AA:1223:C:H5''	1:AA:1224:G:H5''	1.85	0.59
2:AB:15:VAL:HG23	2:AB:209:ARG:HD3	1.83	0.59
13:AM:49:THR:O	13:AM:51:ALA:N	2.35	0.59
15:AO:39:LEU:O	15:AO:42:HIS:N	2.35	0.59
25:BA:919:G:N2	25:BA:2269:A:OP2	2.36	0.59
25:BA:2206:G:H5'	25:BA:2207:G:N7	2.17	0.59
48:B2:63:VAL:O	48:B2:66:GLU:HB2	2.02	0.59
25:DA:1283:G:H22	25:DA:1286:A:H5'	1.66	0.59
25:DA:1803:A:H4'	27:DD:259:THR:HG23	1.83	0.59
25:DA:2647:U:H2'	25:DA:2648:C:H6	1.68	0.59
28:DE:38:THR:O	28:DE:42:ASP:N	2.30	0.59
30:DG:38:VAL:HG22	30:DG:93:THR:HG23	1.85	0.59
37:DR:79:LEU:HA	37:DR:83:ILE:HD12	1.85	0.59
38:DS:36:TYR:HA	38:DS:52:SER:HB3	1.85	0.59
50:D4:16:CYS:HB2	50:D4:20:ASN:O	2.02	0.59
4:AD:9:CYS:SG	4:AD:12:CYS:SG	3.01	0.59
15:AO:3:ILE:H	15:AO:3:ILE:HD13	1.67	0.59
25:BA:1803:A:H4'	27:BD:259:THR:CG2	2.33	0.59
1:CA:986:A:H1'	19:CS:54:GLY:O	2.02	0.59
1:CA:1492:A:H3'	25:DA:1913:A:H61	1.68	0.59
5:CE:8:GLU:HB3	5:CE:34:VAL:HG23	1.84	0.59
11:CK:85:ARG:HE	11:CK:111:ASP:HB3	1.68	0.59
25:DA:141:A:C8	25:DA:1408:C:O2'	2.52	0.59
25:DA:1329:U:H5''	25:DA:1330:C:H5	1.66	0.59
25:DA:1379:A:H4'	25:DA:1380:G:OP2	2.02	0.59
25:DA:1593:G:H2'	25:DA:1594:G:C8	2.37	0.59
25:DA:2014:A:H4'	42:DW:92:ARG:NH2	2.17	0.59
37:DR:24:GLN:OE1	37:DR:36:THR:HG21	2.03	0.59
37:DR:72:ASP:OD1	37:DR:75:LEU:HB2	2.02	0.59
41:BV:65:GLY:HA3	41:BV:91:TYR:CZ	2.37	0.59
25:DA:528:A:C2	25:DA:2043:C:H4'	2.38	0.59
25:DA:1227:G:OP2	40:DU:16:LYS:NZ	2.36	0.59
25:DA:1237:A:OP1	58:DA:4032:HOH:O	2.16	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DB:12:C:H2'	46:D0:73:GLY:HA3	1.83	0.59
26:DB:44:G:OP1	30:DG:98:ARG:NH2	2.35	0.59
33:DN:37:LYS:HG3	33:DN:42:TRP:CE2	2.37	0.59
41:DV:58:VAL:HB	41:DV:97:LYS:HB2	1.85	0.59
44:DY:2:ARG:O	44:DY:2:ARG:HG3	2.00	0.59
1:AA:828:A:H2'	1:AA:829:G:O4'	2.03	0.59
3:AC:5:ILE:HG23	3:AC:6:HIS:H	1.66	0.59
8:AH:20:TYR:CE2	8:AH:75:ARG:HG2	2.38	0.59
12:AL:83:VAL:HG11	12:AL:100:ILE:HG12	1.83	0.59
13:AM:15:VAL:O	13:AM:19:LEU:HD23	2.02	0.59
25:BA:2287:A:H62	25:BA:2344:U:H3	1.50	0.59
25:BA:2766:G:H5''	25:BA:2767:C:OP2	2.01	0.59
45:BZ:44:PHE:CE2	45:BZ:86:VAL:HG11	2.37	0.59
20:CT:69:GLY:O	20:CT:73:HIS:CD2	2.55	0.59
25:DA:311:A:C6	25:DA:328:U:C4	2.90	0.59
26:DB:52:A:O2'	26:DB:53:A:H2	1.81	0.59
35:DP:91:PHE:O	35:DP:121:LYS:NZ	2.35	0.59
36:DQ:31:ASP:O	36:DQ:134:ARG:HG2	2.03	0.59
42:DW:79:GLY:HA3	42:DW:100:THR:HG22	1.84	0.59
1:AA:92:C:O2'	1:AA:93:G:H5'	2.02	0.59
17:AQ:43:LEU:C	17:AQ:69:LYS:HZ3	2.06	0.59
18:AR:36:ASN:O	18:AR:40:LEU:HG	2.03	0.59
25:BA:1017:G:N7	58:BA:4184:HOH:O	2.31	0.59
25:BA:1453:U:O2'	25:BA:1455:G:N7	2.33	0.59
25:BA:1693:U:O2'	25:BA:1695:G:O6	2.21	0.59
25:BA:1799:G:O2'	25:BA:1800:C:OP2	2.18	0.59
45:BZ:150:LEU:O	45:BZ:171:ILE:HG13	2.03	0.59
1:CA:40:C:H42	1:CA:402:G:H1	1.50	0.59
1:CA:1320:C:H2'	1:CA:1321:C:O4'	2.03	0.59
4:CD:26:CYS:HA	4:CD:31:CYS:HB3	1.85	0.59
25:DA:644:A:H4'	25:DA:645:C:C5	2.37	0.59
25:DA:800:A:H8	25:DA:800:A:OP1	1.86	0.59
25:DA:1210:A:H5'	25:DA:1210:A:C8	2.32	0.59
25:DA:1920:C:OP1	58:DA:3708:HOH:O	2.17	0.59
33:DN:123:TYR:HH	33:DN:130:HIS:CE1	2.19	0.59
45:DZ:157:LEU:HD23	45:DZ:161:VAL:HG13	1.83	0.59
55:D9:10:ILE:HD12	55:D9:32:HIS:HA	1.85	0.59
16:AP:20:VAL:HG21	16:AP:32:TYR:CD1	2.38	0.59
25:BA:534:U:H5'	40:BU:42:ALA:HB1	1.85	0.59
25:BA:2344:U:O2'	52:B6:36:LEU:HD22	2.03	0.59
27:BD:147:LEU:CD1	27:BD:155:LEU:HD11	2.32	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:384:G:H2'	1:CA:385:C:C6	2.38	0.59
25:DA:1856:G:H2'	25:DA:1857:G:H5'	1.85	0.59
25:DA:2390:U:O2'	25:DA:2391:G:H5'	2.02	0.59
28:DE:52:LEU:HB2	28:DE:76:ARG:HG2	1.84	0.59
35:DP:39:LYS:HB2	35:DP:45:LEU:CD1	2.31	0.59
40:DU:58:ARG:HA	40:DU:61:TRP:CE3	2.37	0.59
1:AA:299:G:H2'	1:AA:300:A:C8	2.37	0.59
1:AA:586:C:H2'	1:AA:587:G:H5'	1.85	0.59
11:AK:41:THR:HG21	11:AK:71:LYS:HB3	1.85	0.59
22:AY:30:VAL:HG22	25:BA:2602:A:C6	2.38	0.59
27:BD:132:PRO:HG3	27:BD:190:TYR:CE1	2.38	0.59
28:BE:78:LEU:O	28:BE:79:ARG:HG2	2.03	0.59
29:BF:184:TYR:CE2	29:BF:188:ARG:HD2	2.38	0.59
40:BU:76:TYR:HH	40:BU:92:ARG:HH11	1.51	0.59
1:CA:129(A):G:N2	1:CA:189(H):G:C5	2.71	0.59
4:CD:105:VAL:HG21	4:CD:126:ILE:HD12	1.85	0.59
7:CG:82:GLY:HA2	24:CX:1:A:C8	2.37	0.59
12:CL:6:THR:HG23	12:CL:9:GLN:HB2	1.84	0.59
25:DA:288:C:H2'	25:DA:289:A:C8	2.37	0.59
25:DA:1354:A:H2'	25:DA:1355:G:O4'	2.02	0.59
25:DA:1545:A:H2'	25:DA:1546:C:O4'	2.02	0.59
25:DA:1593:G:H2'	25:DA:1594:G:H8	1.67	0.59
25:DA:2009:G:H1'	37:DR:107:ASP:O	2.03	0.59
26:DB:17:C:N4	26:DB:109:C:N3	2.51	0.59
26:DB:113:G:H2'	26:DB:114:C:C6	2.38	0.59
37:DR:19:ALA:O	37:DR:23:ASN:ND2	2.29	0.59
37:DR:81:ASP:O	37:DR:85:PRO:HG3	2.02	0.59
20:AT:64:ASP:OD2	20:AT:81:LYS:NZ	2.34	0.58
22:AY:38:HIS:NE2	22:AY:80:GLN:HG3	2.18	0.58
27:BD:131:LEU:HB2	27:BD:136:ILE:CD1	2.33	0.58
31:BH:94:TYR:CE2	31:BH:160:LYS:HG2	2.38	0.58
35:BP:38:GLN:HA	35:BP:41:ARG:HG2	1.85	0.58
35:BP:88:LEU:HD11	35:BP:114:ILE:HD12	1.85	0.58
1:CA:857:C:H2'	1:CA:858:G:O4'	2.03	0.58
1:CA:1060:C:O2'	1:CA:1061:G:H5'	2.03	0.58
1:CA:1492:A:H2'	25:DA:1913:A:N1	2.17	0.58
2:CB:165:VAL:HG23	2:CB:166:ASP:H	1.67	0.58
4:CD:22:LYS:HB2	4:CD:26:CYS:SG	2.43	0.58
8:CH:38:ILE:HD12	8:CH:118:VAL:HG12	1.85	0.58
11:CK:22:HIS:O	11:CK:28:THR:HA	2.03	0.58
25:DA:784:A:H5'	25:DA:785:G:OP1	2.02	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:2689:U:P	25:DA:2719:G:H22	2.24	0.58
30:DG:106:LEU:O	30:DG:111:LEU:N	2.26	0.58
32:DI:75:LEU:HD23	32:DI:105:HIS:CD2	2.38	0.58
1:AA:176:C:OP1	20:AT:29:LYS:NZ	2.35	0.58
14:AN:24:CYS:HB3	14:AN:27:CYS:O	2.03	0.58
20:AT:87:LYS:O	20:AT:91:LEU:HG	2.03	0.58
46:B0:40:GLN:OE1	46:B0:44:ARG:N	2.33	0.58
47:B1:21:ARG:HG2	47:B1:21:ARG:HH11	1.67	0.58
2:CB:178:ARG:HH22	8:CH:68:ARG:HH12	1.51	0.58
25:DA:1857:G:H2'	25:DA:1858:G:O4'	2.04	0.58
32:DI:5:LEU:HD11	32:DI:19:VAL:HG22	1.84	0.58
37:DR:29:LEU:HB3	37:DR:75:LEU:HD11	1.84	0.58
45:DZ:48:PHE:HE2	45:DZ:71:VAL:HG11	1.68	0.58
1:AA:148:G:C2	1:AA:149:A:N7	2.71	0.58
1:AA:691:G:H2'	1:AA:692:U:C6	2.38	0.58
17:AQ:76:LEU:HD11	17:AQ:78:GLU:O	2.03	0.58
25:BA:286:C:H2'	25:BA:287:C:C6	2.39	0.58
25:BA:568:U:OP1	35:BP:36:LYS:HE3	2.03	0.58
25:BA:763:G:O2'	25:BA:764:A:H3'	2.03	0.58
28:BE:60:ASN:OD1	28:BE:63:LEU:HB2	2.04	0.58
32:BI:130:TYR:HB3	32:BI:138:ILE:HB	1.85	0.58
1:CA:1095:U:OP1	1:CA:1108:G:N2	2.29	0.58
25:DA:185:U:H4'	25:DA:218:A:H4'	1.84	0.58
25:DA:1266:G:O2'	25:DA:2012:G:O6	2.18	0.58
25:DA:2572:A:OP1	25:DA:2574:G:O2'	2.17	0.58
27:DD:144:ALA:HB3	27:DD:192:THR:HG23	1.84	0.58
28:DE:33:VAL:HG11	28:DE:36:ARG:HH21	1.68	0.58
28:DE:143:ASN:HD22	28:DE:147:PRO:CD	2.15	0.58
47:D1:5:CYS:SG	47:D1:62:VAL:HG23	2.43	0.58
1:AA:664:G:N2	1:AA:741:G:H1	1.98	0.58
1:AA:832:C:O2'	1:AA:833:U:H6	1.86	0.58
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.38	0.58
1:AA:1397:C:OP2	5:AE:24:ARG:NH2	2.36	0.58
3:AC:6:HIS:CD2	3:AC:7:PRO:HD2	2.39	0.58
3:AC:114:PRO:O	3:AC:118:GLN:NE2	2.24	0.58
25:BA:676:A:H2	25:BA:802:A:H61	1.51	0.58
25:BA:2573:C:H5''	25:BA:2574:G:H5''	1.85	0.58
1:CA:980:C:OP1	58:CA:2053:HOH:O	2.17	0.58
1:CA:989:C:H1'	1:CA:1016:A:H2	1.68	0.58
2:CB:127:ILE:HG12	2:CB:128:GLU:H	1.67	0.58
4:CD:71:SER:O	4:CD:75:PHE:N	2.27	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:155:LEU:HD23	4:CD:156:GLU:N	2.18	0.58
6:CF:81:ILE:HD11	27:DD:125:ILE:HB	1.85	0.58
25:DA:34:C:O2'	25:DA:35:G:OP1	2.18	0.58
25:DA:2275:C:H6	25:DA:2275:C:H5'	1.68	0.58
27:DD:24:ILE:HD13	27:DD:84:TYR:HB2	1.85	0.58
36:DQ:21:THR:HG21	36:DQ:101:ARG:HB2	1.85	0.58
1:AA:129(A):G:O6	1:AA:189(D):C:C2	2.57	0.58
1:AA:342:C:C4	1:AA:343:U:C5	2.90	0.58
2:AB:21:ARG:HH12	2:AB:23:ARG:HB2	1.69	0.58
25:BA:848:G:C4	25:BA:933:A:H8	2.22	0.58
25:BA:885:C:N4	25:BA:890:A:C6	2.43	0.58
25:BA:1329:U:H5''	25:BA:1330:C:H5	1.68	0.58
25:BA:1435:G:H1	25:BA:1557:C:N4	1.98	0.58
25:BA:2591:C:P	27:BD:239:ARG:HG2	2.44	0.58
27:BD:101:GLU:HG2	27:BD:103:ARG:HD3	1.85	0.58
33:BN:14:VAL:HG11	33:BN:138:LEU:HD12	1.84	0.58
44:BY:23:ARG:HG2	44:BY:42:VAL:HG22	1.84	0.58
45:BZ:144:LEU:HD23	45:BZ:174:VAL:HG23	1.85	0.58
1:CA:1272:G:H5''	1:CA:1272:G:H8	1.69	0.58
4:CD:38:TYR:OH	4:CD:45:GLN:NE2	2.34	0.58
18:CR:74:ARG:HE	18:CR:81:PHE:HA	1.69	0.58
30:DG:23:PHE:HB2	30:DG:25:TYR:CZ	2.38	0.58
31:DH:11:VAL:HG13	31:DH:15:VAL:HG13	1.86	0.58
35:DP:38:GLN:HA	35:DP:41:ARG:HG2	1.86	0.58
42:DW:26:GLY:H	42:DW:71:VAL:HG12	1.67	0.58
45:DZ:9:TYR:HE2	45:DZ:35:ARG:HG3	1.68	0.58
5:AE:87:SER:HB3	5:AE:125:SER:O	2.04	0.58
7:AG:150:ALA:HB2	11:AK:50:TYR:HE1	1.67	0.58
20:AT:90:GLN:HA	20:AT:93:GLU:HB2	1.84	0.58
25:BA:443:A:H1'	25:BA:1201:C:O4'	2.03	0.58
25:BA:1420:U:O2'	25:BA:1421:G:OP1	2.22	0.58
25:BA:1434:A:H2'	25:BA:1435:G:C8	2.38	0.58
36:BQ:84:GLY:O	36:BQ:85:LYS:HB2	2.04	0.58
1:CA:401:C:O2'	1:CA:621:A:N3	2.33	0.58
1:CA:828:A:H2'	1:CA:829:G:O4'	2.02	0.58
4:CD:28:SER:OG	4:CD:30:LYS:N	2.31	0.58
4:CD:127:THR:HG23	4:CD:147:ALA:HB3	1.84	0.58
13:CM:16:ASP:OD2	13:CM:16:ASP:N	2.33	0.58
25:DA:2286:A:OP1	52:D6:29:ASN:ND2	2.37	0.58
25:DA:2611:U:H2'	51:D5:2:ALA:O	2.02	0.58
1:AA:899:C:H2'	1:AA:900:A:C8	2.39	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:37:ASN:O	7:AG:41:ARG:HG2	2.04	0.58
8:AH:83:ILE:HB	8:AH:137:VAL:HG12	1.86	0.58
17:AQ:67:LYS:HA	17:AQ:70:ARG:HH12	1.68	0.58
25:BA:1692:U:H2'	25:BA:1694:C:C5	2.38	0.58
25:BA:1825:A:OP1	27:BD:249:PRO:HD3	2.02	0.58
25:BA:2454:G:H1'	58:BA:4680:HOH:O	2.03	0.58
25:BA:2492:U:H2'	25:BA:2493:U:H6	1.69	0.58
27:BD:96:HIS:CD2	27:BD:102:LYS:HD3	2.39	0.58
2:CB:28:PHE:CZ	2:CB:189:ASP:HA	2.38	0.58
25:DA:2033:A:P	58:DA:4591:HOH:O	2.61	0.58
25:DA:2722:G:H5'	37:DR:4:LEU:HD12	1.86	0.58
38:DS:66:ALA:HA	38:DS:69:VAL:HG12	1.85	0.58
40:DU:27:LEU:HA	40:DU:30:LYS:HB2	1.86	0.58
1:AA:444:C:H2'	1:AA:445:G:H8	1.68	0.58
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.38	0.58
11:AK:85:ARG:HD3	11:AK:113:PRO:HD3	1.85	0.58
14:AN:4:LYS:HA	14:AN:7:ILE:HG22	1.86	0.58
25:BA:95:G:O2'	48:B2:46:GLN:HA	2.03	0.58
27:BD:10:THR:OG1	27:BD:13:ARG:HB2	2.04	0.58
32:BI:29:TYR:O	32:BI:32:PRO:HD2	2.04	0.58
33:BN:54:VAL:HG12	33:BN:55:VAL:H	1.68	0.58
43:BX:41:ASN:O	43:BX:45:THR:HG23	2.04	0.58
46:B0:38:VAL:HG21	46:B0:59:LEU:HD12	1.86	0.58
1:CA:671:G:N2	1:CA:735:C:O2	2.36	0.58
1:CA:828:A:H5''	1:CA:859:A:C2	2.39	0.58
3:CC:70:VAL:HG12	3:CC:71:ALA:H	1.69	0.58
13:CM:105:THR:OG1	13:CM:106:ASN:OD1	2.19	0.58
25:DA:66:C:H2'	25:DA:67:U:H6	1.69	0.58
25:DA:72:U:OP1	58:DA:4084:HOH:O	2.16	0.58
25:DA:492:A:H2'	25:DA:493:G:O4'	2.02	0.58
1:AA:114:U:H2'	1:AA:115:G:C8	2.39	0.58
1:AA:345:C:H4'	1:AA:346:G:C4	2.39	0.58
1:AA:741:G:H2'	1:AA:742:G:O4'	2.04	0.58
2:AB:47:THR:O	2:AB:51:LEU:N	2.30	0.58
2:AB:53:ARG:HA	2:AB:56:ARG:HG2	1.85	0.58
25:BA:400:G:N7	58:BA:4208:HOH:O	2.32	0.58
25:BA:1784:A:H4'	25:BA:1785:A:O5'	2.03	0.58
34:BO:88:ASN:O	34:BO:91:LEU:N	2.31	0.58
37:BR:33:ARG:HB2	37:BR:115:GLU:HB3	1.85	0.58
1:CA:460:G:N1	1:CA:470:C:H5''	2.19	0.58
5:CE:11:ILE:HG21	5:CE:105:VAL:HA	1.84	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:31:ILE:HD11	19:CS:49:ILE:HG12	1.85	0.58
25:DA:848:G:N9	25:DA:933:A:H8	2.02	0.58
25:DA:2872:G:O2'	25:DA:2873:A:H5'	2.03	0.58
29:DF:32:LEU:HD11	29:DF:105:VAL:HG13	1.85	0.58
6:AF:69:GLU:O	6:AF:72:VAL:HG12	2.03	0.58
22:AY:37:ILE:HG23	22:AY:75:GLN:HA	1.85	0.58
25:BA:1418:G:OP1	25:BA:1588:C:O2'	2.21	0.58
25:BA:1466:G:HO2'	25:BA:1546:C:HO2'	1.24	0.58
25:BA:2207:G:O2'	25:BA:2208:A:OP1	2.20	0.58
25:BA:2637:U:H5''	28:BE:82:ARG:HH21	1.69	0.58
25:BA:2755:C:C4	55:B9:19:ARG:NH1	2.72	0.58
30:BG:76:SER:HA	30:BG:83:ARG:HA	1.86	0.58
45:BZ:30:ASN:ND2	45:BZ:90:VAL:HB	2.19	0.58
1:CA:598:U:H4'	8:CH:94:TYR:CG	2.39	0.58
1:CA:728:A:H2'	1:CA:729:A:H8	1.69	0.58
17:CQ:95:TYR:O	17:CQ:98:LEU:N	2.36	0.58
25:DA:637:A:H5''	35:DP:117:GLU:HG2	1.86	0.58
27:DD:274:ARG:CG	27:DD:275:LYS:HB3	2.31	0.58
32:DI:104:GLN:O	32:DI:105:HIS:ND1	2.35	0.58
33:DN:30:ILE:HG22	33:DN:34:LEU:HD22	1.84	0.58
34:DO:63:VAL:HG22	34:DO:84:ALA:HA	1.86	0.58
1:AA:864:A:H2'	1:AA:865:A:C8	2.39	0.57
1:AA:881:G:OP2	12:AL:12:ARG:NH2	2.36	0.57
17:AQ:22:LEU:HD11	17:AQ:39:SER:HB3	1.86	0.57
25:BA:1048:A:OP2	25:BA:1109:C:N4	2.37	0.57
28:BE:174:ASP:OD2	28:BE:175:VAL:N	2.36	0.57
30:BG:146:TYR:O	30:BG:149:VAL:HG13	2.04	0.57
43:BX:65:ARG:HD3	43:BX:67:GLY:O	2.04	0.57
1:CA:32:A:C2	1:CA:33:A:C4	2.92	0.57
1:CA:116:A:OP2	58:CA:1977:HOH:O	2.17	0.57
17:CQ:58:GLU:OE1	17:CQ:75:ARG:NH2	2.37	0.57
25:DA:581:C:H2'	25:DA:582:G:C8	2.39	0.57
25:DA:1224:C:O2'	41:DV:86:GLY:N	2.34	0.57
25:DA:1336:A:H2'	25:DA:1337:G:H8	1.69	0.57
25:DA:2425:A:H4'	25:DA:2426:A:H5''	1.86	0.57
30:DG:14:GLU:O	30:DG:18:GLU:HB3	2.03	0.57
1:AA:711:G:H2'	1:AA:712:A:H8	1.69	0.57
1:AA:1398:A:N1	5:AE:19:MET:HE1	2.19	0.57
2:AB:167:PRO:HG3	2:AB:188:ALA:HB2	1.85	0.57
7:AG:26:PHE:CE2	7:AG:30:ILE:HD11	2.38	0.57
10:AJ:8:LEU:HA	10:AJ:95:GLU:O	2.04	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AP:43:LYS:HA	16:AP:48:TRP:CD1	2.39	0.57
25:BA:580:C:H2'	25:BA:581:C:C6	2.39	0.57
25:BA:1153:C:OP1	40:BU:92:ARG:NH1	2.36	0.57
39:BT:55:ASN:H	39:BT:59:THR:HG22	1.69	0.57
40:BU:34:LYS:O	40:BU:38:THR:HB	2.04	0.57
25:DA:1914:C:O2'	25:DA:1915:U:OP1	2.21	0.57
26:DB:53:A:H2'	26:DB:54:G:O4'	2.04	0.57
28:DE:23:VAL:HG21	28:DE:183:LEU:HG	1.86	0.57
31:DH:88:LEU:HB2	31:DH:163:TYR:HB2	1.85	0.57
36:DQ:62:GLY:O	45:DZ:178:GLU:HG2	2.03	0.57
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.20	0.57
22:AY:21:ARG:HA	22:AY:35:THR:H	1.69	0.57
22:AY:32:LYS:NZ	25:BA:2573:C:OP2	2.32	0.57
25:BA:1250:G:N7	35:BP:18:ARG:NH2	2.51	0.57
25:BA:1495:A:H2'	25:BA:1496:A:C8	2.39	0.57
25:BA:1586:A:H8	25:BA:1586:A:O5'	1.87	0.57
29:BF:7:TYR:HB2	29:BF:22:ALA:HB3	1.86	0.57
1:CA:67:C:H2'	1:CA:68:G:C8	2.39	0.57
1:CA:1119:C:H2'	1:CA:1120:G:C8	2.38	0.57
1:CA:1360:A:H8	1:CA:1360:A:OP1	1.87	0.57
25:DA:857:C:H2'	25:DA:858:U:C6	2.39	0.57
25:DA:1040:C:H2'	25:DA:1041:C:O4'	2.04	0.57
25:DA:1149:G:H2'	25:DA:1150:C:H6	1.66	0.57
25:DA:1359:A:N6	25:DA:1372:U:H3	2.02	0.57
25:DA:2331:G:O3'	46:D0:43:THR:HG22	2.03	0.57
26:DB:113:G:H2'	26:DB:114:C:H6	1.69	0.57
33:DN:104:LYS:HB2	33:DN:117:PHE:CE1	2.38	0.57
39:DT:53:ARG:NH1	39:DT:60:THR:HG23	2.19	0.57
1:AA:41:G:H2'	1:AA:42:G:C8	2.40	0.57
1:AA:667:G:H4'	15:AO:51:HIS:CE1	2.39	0.57
4:AD:90:GLY:O	4:AD:94:LEU:HD12	2.04	0.57
12:AL:71:PRO:O	12:AL:102:ARG:HD2	2.04	0.57
25:BA:151:C:N4	25:BA:175:G:H1	2.00	0.57
25:BA:1143:A:OP1	33:BN:25:ARG:NH2	2.38	0.57
25:BA:1427:A:H4'	25:BA:1428:C:O5'	2.04	0.57
31:BH:11:VAL:HG13	31:BH:15:VAL:HG22	1.84	0.57
1:CA:365:U:H5''	1:CA:366:C:OP1	2.04	0.57
1:CA:833:U:H2'	1:CA:834:C:C6	2.39	0.57
1:CA:983:A:H3'	1:CA:983:A:N3	2.19	0.57
42:DW:76:VAL:HG22	42:DW:103:ILE:HG23	1.86	0.57
44:DY:90:LEU:HB3	44:DY:92:ASN:H	1.69	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:67:C:H2'	1:AA:68:G:C8	2.40	0.57
1:AA:1347:G:O2'	1:AA:1348:U:OP2	2.22	0.57
3:AC:113:ALA:HA	3:AC:202:ILE:HD11	1.86	0.57
7:AG:95:ARG:HE	7:AG:99:LEU:HD11	1.69	0.57
48:B2:16:LEU:O	48:B2:67:LYS:NZ	2.36	0.57
1:CA:560:U:H4'	1:CA:561:U:O5'	2.04	0.57
1:CA:656:C:O2'	15:CO:28:GLN:NE2	2.30	0.57
1:CA:1060:C:C5	3:CC:2:GLY:HA3	2.40	0.57
7:CG:26:PHE:O	7:CG:30:ILE:HG13	2.04	0.57
12:CL:33:ARG:HD3	12:CL:62:SER:HB3	1.86	0.57
25:DA:993:G:C5	25:DA:994:C:H5	2.22	0.57
25:DA:1396:U:OP2	58:DA:4673:HOH:O	2.17	0.57
30:DG:105:LYS:NZ	50:D4:25:TYR:O	2.37	0.57
45:DZ:128:VAL:HG22	45:DZ:129:SER:H	1.69	0.57
1:AA:563:A:N6	58:AA:2260:HOH:O	2.37	0.57
1:AA:1226:C:N4	13:AM:104:ARG:HD3	2.19	0.57
2:AB:115:LEU:HD13	2:AB:145:LEU:HB3	1.86	0.57
7:AG:6:ARG:HG3	7:AG:6:ARG:O	2.04	0.57
15:AO:56:LEU:O	15:AO:60:VAL:HG23	2.05	0.57
25:BA:370:G:H4'	25:BA:371:A:OP2	2.04	0.57
25:BA:1109:C:H5'	25:BA:1110:G:OP2	2.04	0.57
31:BH:125:VAL:HG22	31:BH:131:VAL:HG22	1.85	0.57
50:B4:10:VAL:HG21	50:B4:29:PRO:HG3	1.87	0.57
8:CH:26:VAL:O	8:CH:59:LEU:N	2.37	0.57
25:DA:10:G:O2'	25:DA:2801(A):A:N7	2.38	0.57
25:DA:926:A:N7	58:DA:4231:HOH:O	2.32	0.57
25:DA:1359:A:C2	25:DA:1372:U:O4	2.58	0.57
25:DA:1589:C:H2'	25:DA:1590:U:H6	1.69	0.57
25:DA:1973:G:H2'	25:DA:1974:C:C6	2.39	0.57
25:DA:2014:A:H5'	42:DW:94:ASP:OD2	2.04	0.57
25:DA:2592:G:H2'	25:DA:2593:U:O4'	2.03	0.57
26:DB:15:A:OP2	26:DB:69:G:N2	2.38	0.57
27:DD:72:LYS:HE3	27:DD:75:ILE:HD12	1.87	0.57
29:DF:130:ALA:CB	29:DF:142:TRP:HD1	2.18	0.57
39:DT:118:ARG:NH2	39:DT:121:ILE:HG21	2.19	0.57
54:D8:15:LYS:HB2	58:D8:301:HOH:O	2.04	0.57
1:AA:711:G:H2'	1:AA:712:A:C8	2.39	0.57
1:AA:1456:G:O2'	20:AT:39:LYS:NZ	2.19	0.57
7:AG:69:VAL:HG12	7:AG:100:ALA:HA	1.85	0.57
13:AM:60:VAL:HG12	13:AM:64:TRP:CZ3	2.39	0.57
18:AR:53:ARG:HH21	18:AR:60:ALA:N	2.03	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:43:GLU:N	19:AS:43:GLU:OE1	2.37	0.57
25:BA:779:U:OP1	27:BD:49:ILE:HG13	2.05	0.57
25:BA:993:G:OP1	40:BU:50:ARG:NH2	2.38	0.57
25:BA:1045:A:H1'	25:BA:1047:G:C2	2.40	0.57
25:BA:1570:A:H2'	25:BA:1571:A:C8	2.38	0.57
42:BW:33:ARG:NE	42:BW:52:GLU:OE1	2.37	0.57
1:CA:947:G:O3'	13:CM:109:THR:OG1	2.23	0.57
2:CB:162:ILE:O	2:CB:185:ILE:HG12	2.05	0.57
8:CH:86:ILE:HG21	8:CH:133:LEU:HD13	1.85	0.57
25:DA:247:G:H4'	25:DA:386:G:C5	2.40	0.57
25:DA:520:G:H2'	25:DA:521:G:C8	2.40	0.57
25:DA:657:U:H2'	25:DA:658:C:C6	2.40	0.57
25:DA:2074:U:H2'	25:DA:2075:U:C6	2.38	0.57
1:AA:17:U:H2'	1:AA:18:C:C6	2.39	0.57
1:AA:224:C:H2'	1:AA:225:C:H6	1.69	0.57
1:AA:1182:G:H4'	1:AA:1183:A:H5''	1.85	0.57
25:BA:2079:U:OP1	47:B1:21:ARG:NH2	2.37	0.57
32:BI:68:LEU:HA	32:BI:71:ILE:HG22	1.86	0.57
43:BX:57:LEU:HD12	43:BX:57:LEU:O	2.05	0.57
1:CA:800:G:O6	58:CA:2116:HOH:O	2.15	0.57
8:CH:41:ARG:O	8:CH:41:ARG:HG2	2.05	0.57
13:CM:91:ARG:HB3	13:CM:96:LEU:HB2	1.87	0.57
25:DA:1019:U:H3	25:DA:1142(A):A:N6	2.02	0.57
25:DA:1187:G:H5''	41:DV:81:TYR:CE2	2.38	0.57
25:DA:1225:G:H4'	41:DV:84:LYS:HG2	1.87	0.57
36:DQ:16:ARG:HG2	36:DQ:16:ARG:NH1	2.13	0.57
1:AA:109:A:H2'	1:AA:326:G:N2	2.19	0.57
1:AA:939:G:H5''	7:AG:102:ARG:CZ	2.34	0.57
3:AC:11:ARG:NH2	3:AC:177:THR:O	2.38	0.57
25:BA:2846:G:OP2	39:BT:54:ARG:HB2	2.05	0.57
25:DA:619:G:H5''	25:DA:620:G:OP2	2.04	0.57
25:DA:2849:U:OP2	39:DT:95:ARG:NH1	2.37	0.57
44:DY:19:LYS:HE3	44:DY:20:TYR:HE1	1.70	0.57
1:AA:828:A:H4'	1:AA:828:A:OP1	2.05	0.57
1:AA:943:U:H2'	1:AA:944:G:H5'	1.86	0.57
1:AA:996:A:O5'	1:AA:996:A:H8	1.87	0.57
9:AI:16:ARG:HB2	9:AI:64:THR:HG22	1.87	0.57
25:BA:721:C:H2'	25:BA:722:A:H8	1.69	0.57
44:BY:83:THR:OG1	44:BY:84:ARG:N	2.38	0.57
1:CA:1367:C:H5'	10:CJ:60:ARG:NH1	2.20	0.57
10:CJ:49:VAL:HG22	14:CN:41:ARG:HG3	1.87	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:32:SER:HB3	14:CN:41:ARG:HB3	1.87	0.57
25:DA:1336:A:H2'	25:DA:1337:G:C8	2.39	0.57
25:DA:2394:C:OP2	54:D8:30:ARG:NH1	2.38	0.57
36:DQ:126:PRO:HG2	36:DQ:127:ILE:HG23	1.87	0.57
44:DY:14:LEU:HG	44:DY:15:VAL:N	2.20	0.57
1:AA:630:G:H2'	1:AA:631:G:O4'	2.06	0.56
20:AT:45:GLN:HA	20:AT:91:LEU:HB3	1.86	0.56
22:AY:21:ARG:CG	22:AY:35:THR:H	2.17	0.56
25:BA:323:G:C8	29:BF:171:PRO:HG3	2.39	0.56
25:BA:2791:C:H3'	25:BA:2791:C:OP2	2.04	0.56
1:CA:97:G:O2'	1:CA:98:G:H8	1.87	0.56
1:CA:174:C:H2'	1:CA:175:C:C6	2.40	0.56
1:CA:820:U:H4'	1:CA:821:G:OP2	2.05	0.56
4:CD:100:ARG:HH12	4:CD:137:SER:HB3	1.69	0.56
15:CO:55:GLY:HA2	15:CO:58:MET:HE3	1.85	0.56
25:DA:62:C:H42	25:DA:93:G:H1	1.53	0.56
32:DI:93:THR:HG23	32:DI:119:PRO:HG3	1.87	0.56
38:DS:59:LYS:HB3	38:DS:60:GLY:HA2	1.87	0.56
44:DY:99:CYS:CB	44:DY:102:CYS:SG	2.92	0.56
1:AA:192:U:H2'	1:AA:193:C:H6	1.69	0.56
1:AA:872:A:C4	1:AA:874:G:N7	2.72	0.56
1:AA:971:G:N2	1:AA:1363(A):A:OP2	2.26	0.56
1:AA:1346:A:N1	1:AA:1374:A:H5''	2.19	0.56
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.39	0.56
4:AD:110:PHE:CD1	4:AD:110:PHE:N	2.62	0.56
4:AD:173:TRP:CD1	4:AD:174:LEU:HG	2.40	0.56
9:AI:107:ARG:HD3	9:AI:107:ARG:H	1.70	0.56
25:BA:141:A:H8	25:BA:1408:C:O2'	1.73	0.56
48:B2:65:ASN:OD1	48:B2:69:ARG:HD3	2.05	0.56
1:CA:953:G:C2	1:CA:954:G:H1'	2.39	0.56
25:DA:652(A):A:H4'	25:DA:652(B):A:OP2	2.05	0.56
25:DA:857:C:H2'	25:DA:858:U:H6	1.69	0.56
25:DA:2364:C:H2'	25:DA:2365:G:O4'	2.04	0.56
1:AA:618:C:H5''	1:AA:619:U:H5''	1.87	0.56
1:AA:624:C:O3'	16:AP:10:GLY:HA2	2.05	0.56
1:AA:673:G:H2'	1:AA:674:G:C8	2.40	0.56
1:AA:674:G:H2'	1:AA:675:A:C8	2.37	0.56
1:AA:730:G:H5''	1:AA:731:G:OP2	2.05	0.56
1:AA:1285:A:O5'	1:AA:1285:A:H8	1.88	0.56
1:AA:1350:A:C5	1:AA:1351:U:C4	2.93	0.56
1:AA:1432:G:N7	58:AA:2083:HOH:O	2.33	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:41:VAL:HG23	5:AE:67:VAL:HG12	1.87	0.56
8:AH:58:TYR:O	8:AH:59:LEU:HD23	2.05	0.56
8:AH:81:HIS:N	8:AH:138:TRP:O	2.35	0.56
22:AY:66:SER:HB3	25:BA:2559:C:OP1	2.06	0.56
23:AV:47:U:H3'	23:AV:48:C:H5'	1.87	0.56
25:BA:197:A:OP1	58:BA:4873:HOH:O	2.18	0.56
25:BA:721:C:H2'	25:BA:722:A:C8	2.40	0.56
25:BA:796:C:H2'	25:BA:797:C:C6	2.41	0.56
27:BD:8:PRO:HB3	27:BD:14:ARG:HB2	1.86	0.56
29:BF:184:TYR:O	29:BF:188:ARG:HG3	2.05	0.56
31:BH:98:LEU:HD12	31:BH:100:GLY:O	2.05	0.56
39:BT:16:ARG:NH2	39:BT:83:ILE:O	2.38	0.56
47:B1:58:ILE:HD11	47:B1:60:PHE:CZ	2.41	0.56
1:CA:70:G:H1	1:CA:99:U:H3	1.50	0.56
1:CA:1186:G:N2	14:CN:61:TRP:OXT	2.37	0.56
1:CA:1220:G:H5'	19:CS:34:TRP:O	2.05	0.56
1:CA:1226:C:H42	13:CM:104:ARG:HD2	1.70	0.56
1:CA:1251:A:H2'	1:CA:1252:A:C8	2.39	0.56
1:CA:1252:A:H2'	1:CA:1253:G:O4'	2.05	0.56
1:CA:1270:C:O2'	1:CA:1313:U:O2'	2.11	0.56
1:CA:1292:U:H2'	1:CA:1293:G:H8	1.68	0.56
1:CA:1376:U:P	7:CG:94:ARG:HH22	2.27	0.56
8:CH:20:TYR:HA	8:CH:65:TYR:CE2	2.40	0.56
10:CJ:68:HIS:N	10:CJ:68:HIS:ND1	2.53	0.56
25:DA:978:G:O6	58:DA:4264:HOH:O	2.18	0.56
25:DA:1359:A:N1	25:DA:1372:U:C4	2.72	0.56
25:DA:1429:G:H2'	25:DA:1430:C:C6	2.41	0.56
25:DA:2300:G:H2'	25:DA:2301:C:H6	1.70	0.56
37:DR:2:ARG:NH1	37:DR:5:LYS:O	2.37	0.56
43:DX:57:LEU:HD13	43:DX:78:LYS:HG2	1.87	0.56
1:AA:10:A:H2'	1:AA:11:G:H8	1.69	0.56
1:AA:105:G:H2'	1:AA:106:C:C6	2.40	0.56
1:AA:1510:U:H2'	1:AA:1511:G:C8	2.41	0.56
4:AD:105:VAL:HG12	4:AD:117:ALA:HB1	1.86	0.56
5:AE:122:GLU:HG2	5:AE:131:ILE:HD12	1.88	0.56
25:BA:2469:A:C2	25:BA:2482:G:C8	2.94	0.56
50:B4:42:PHE:H	50:B4:43:TYR:HB2	1.70	0.56
1:CA:10:A:H2'	1:CA:11:G:H8	1.70	0.56
1:CA:126:G:OP1	1:CA:605:U:O2'	2.23	0.56
2:CB:69:LEU:HB3	2:CB:162:ILE:HG22	1.87	0.56
25:DA:71:A:H5''	25:DA:73:A:N7	2.21	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:796:C:H2'	25:DA:797:C:C6	2.40	0.56
25:DA:971:C:H2'	25:DA:972:G:H5'	1.88	0.56
25:DA:1403:C:H5''	25:DA:1471:A:C1'	2.34	0.56
25:DA:2659:G:P	31:DH:158:HIS:HE2	2.28	0.56
25:DA:2833:G:O2'	25:DA:2834:G:OP1	2.23	0.56
28:DE:4:ILE:HG12	28:DE:5:LEU:H	1.70	0.56
28:DE:135:HIS:H	28:DE:135:HIS:HD2	1.53	0.56
31:DH:70:THR:HA	31:DH:73:ALA:HB3	1.86	0.56
33:DN:63:THR:HG22	33:DN:66:LYS:HZ2	1.71	0.56
1:AA:1313:U:O4	19:AS:4:SER:HA	2.05	0.56
7:AG:51:GLN:HG2	7:AG:55:GLY:HA3	1.88	0.56
22:AY:66:SER:C	22:AY:68:GLY:H	2.08	0.56
25:BA:1359:A:N6	25:BA:1372:U:H3	2.02	0.56
25:BA:1359:A:N1	25:BA:1372:U:C4	2.73	0.56
25:BA:1688:U:O2	25:BA:1700:A:H5'	2.05	0.56
25:BA:2099:U:H3	25:BA:2190:G:H1	1.52	0.56
25:BA:2787:C:H4'	28:BE:61:ARG:HG2	1.87	0.56
37:BR:38:VAL:HG22	37:BR:112:ALA:HB2	1.87	0.56
2:CB:134:GLU:O	2:CB:138:LEU:HD11	2.05	0.56
7:CG:58:PRO:HA	7:CG:61:VAL:HG12	1.87	0.56
16:CP:58:TYR:O	16:CP:61:SER:OG	2.12	0.56
25:DA:1019:U:HO2'	25:DA:1021:A:H2	1.52	0.56
25:DA:1486:A:O2'	25:DA:1487:G:H5'	2.05	0.56
1:AA:656:C:O2'	15:AO:28:GLN:NE2	2.39	0.56
1:AA:1203:C:H2'	1:AA:1204:A:O4'	2.05	0.56
1:AA:1285:A:H4'	1:AA:1286:A:O5'	2.06	0.56
20:AT:51:GLU:HG2	20:AT:54:LYS:HD3	1.88	0.56
22:AY:124:GLN:O	22:AY:128:VAL:HB	2.05	0.56
25:BA:330:A:C2	25:BA:1210:A:H2'	2.39	0.56
25:BA:2203:U:O2'	25:BA:2205:C:H5'	2.06	0.56
32:BI:111:PRO:C	32:BI:113:ARG:H	2.08	0.56
35:BP:50:ARG:HG3	35:BP:50:ARG:HH21	1.70	0.56
7:CG:102:ARG:O	7:CG:106:GLN:HB2	2.05	0.56
9:CI:20:ARG:O	9:CI:60:ASP:HB2	2.05	0.56
9:CI:114:TYR:H	9:CI:114:TYR:HD2	1.52	0.56
25:DA:1762:A:H8	58:DA:4689:HOH:O	1.87	0.56
40:DU:102:GLU:HG3	41:DV:2:PHE:CE1	2.41	0.56
1:AA:236:G:H5''	17:AQ:42:TYR:OH	2.05	0.56
1:AA:373:A:HO2'	1:AA:481:G:N2	2.03	0.56
1:AA:921:U:O2	5:AE:19:MET:HB2	2.06	0.56
2:AB:114:ARG:HH11	2:AB:118:LEU:HD21	1.69	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:141:GLU:O	2:AB:145:LEU:HB2	2.06	0.56
3:AC:32:LEU:HD13	3:AC:59:ARG:NH1	2.21	0.56
17:AQ:13:ASP:OD1	17:AQ:13:ASP:N	2.37	0.56
25:BA:511:U:C5	25:BA:512:G:C5	2.94	0.56
25:BA:1796:U:H2'	25:BA:1797:C:C6	2.41	0.56
25:BA:2389:G:H5''	25:BA:2390:U:C5'	2.36	0.56
27:BD:108:PRO:HG2	27:BD:111:LEU:HB2	1.87	0.56
28:BE:11:MET:HG2	28:BE:24:THR:HB	1.87	0.56
1:CA:202:U:H3'	1:CA:203:U:H6	1.70	0.56
1:CA:826:C:H2'	1:CA:827:U:H6	1.70	0.56
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.21	0.56
4:CD:88:VAL:O	4:CD:92:VAL:HG23	2.05	0.56
11:CK:80:VAL:H	11:CK:104:GLN:HB2	1.71	0.56
25:DA:229:A:H5''	25:DA:230:U:H5'	1.88	0.56
25:DA:1971:A:C4	27:DD:241:PRO:HD3	2.41	0.56
25:DA:2296:U:OP2	38:DS:6:ALA:HB2	2.05	0.56
25:DA:2387:U:OP1	46:D0:55:ARG:NH2	2.38	0.56
45:DZ:104:PHE:HB3	45:DZ:141:VAL:HG21	1.87	0.56
45:DZ:180:VAL:O	45:DZ:183:LEU:HB2	2.05	0.56
1:AA:452:A:O2'	1:AA:453:A:OP2	2.18	0.56
1:AA:1239:A:H62	1:AA:1299:A:N6	2.02	0.56
2:AB:55:PHE:HA	2:AB:58:ILE:HB	1.88	0.56
5:AE:98:THR:HG22	5:AE:99:GLY:O	2.06	0.56
9:AI:94:ALA:C	9:AI:96:LEU:H	2.09	0.56
22:AY:30:VAL:HG22	25:BA:2602:A:C5	2.40	0.56
25:BA:700:G:H2'	25:BA:701:G:O4'	2.06	0.56
25:BA:1358:G:N1	25:BA:1372:U:OP2	2.32	0.56
27:BD:148:GLU:HB3	27:BD:151:LYS:HD2	1.88	0.56
29:BF:62:ARG:HG3	29:BF:63:LYS:N	2.20	0.56
1:CA:189(C):C:H2'	1:CA:189(D):C:O4'	2.05	0.56
1:CA:1095:U:H5''	1:CA:1109:C:O2	2.05	0.56
1:CA:1317:C:N4	14:CN:19:ARG:HH21	2.04	0.56
1:CA:1323:G:H2'	1:CA:1324:A:H8	1.69	0.56
2:CB:100:GLY:CA	2:CB:104:ASN:H	2.18	0.56
13:CM:15:VAL:O	13:CM:19:LEU:HD23	2.05	0.56
25:DA:229:A:H3'	25:DA:229:A:C8	2.41	0.56
25:DA:528:A:C2	25:DA:2042:A:H2'	2.41	0.56
25:DA:2061:G:H5''	25:DA:2503:A:C2	2.41	0.56
25:DA:2395:C:O2'	47:D1:30:VAL:O	2.24	0.56
25:DA:2641:G:P	33:DN:74:ARG:HH21	2.29	0.56
46:D0:27:GLU:HG3	46:D0:68:GLU:HA	1.88	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:600:C:H2'	1:AA:601:C:H6	1.71	0.56
1:AA:1181:G:O2'	1:AA:1182:G:C5	2.59	0.56
7:AG:12:LEU:H	7:AG:12:LEU:HD12	1.71	0.56
17:AQ:29:HIS:HB2	17:AQ:36:ILE:HD13	1.87	0.56
25:BA:1025:G:C4	25:BA:1135:C:H1'	2.41	0.56
25:BA:2492:U:H2'	25:BA:2493:U:C6	2.41	0.56
42:BW:88:ARG:NH1	42:BW:94:ASP:OD1	2.39	0.56
49:B3:39:ASP:OD2	49:B3:44:ARG:NH1	2.39	0.56
1:CA:1014:A:H1'	19:CS:34:TRP:HB2	1.88	0.56
1:CA:1067:A:H8	1:CA:1067:A:O5'	1.88	0.56
1:CA:1310:G:H1	1:CA:1327:C:H42	1.54	0.56
11:CK:99:GLN:HE21	11:CK:105:VAL:HG21	1.70	0.56
13:CM:33:ALA:HA	13:CM:59:TYR:CE1	2.41	0.56
29:DF:129:PHE:O	29:DF:132:VAL:HG22	2.06	0.56
34:DO:77:ILE:HG13	39:DT:74:ARG:HG2	1.87	0.56
1:AA:70:G:H1	1:AA:99:U:H3	1.54	0.56
1:AA:412:A:C6	4:AD:35:ARG:HG2	2.41	0.56
1:AA:419:C:H5''	1:AA:513:C:H1'	1.88	0.56
1:AA:474:G:H2'	1:AA:475:G:C8	2.41	0.56
1:AA:518:C:O2	22:AY:117:ARG:NH1	2.38	0.56
1:AA:528:C:OP1	22:AY:124:GLN:NE2	2.38	0.56
7:AG:90:GLU:N	7:AG:90:GLU:OE2	2.39	0.56
8:AH:27:PRO:HA	8:AH:58:TYR:HA	1.88	0.56
14:AN:24:CYS:SG	14:AN:40:CYS:N	2.77	0.56
18:AR:31:LEU:O	18:AR:32:ARG:HB2	2.06	0.56
25:BA:1239:G:H2'	25:BA:1240:U:O4'	2.06	0.56
37:BR:55:ALA:HB2	37:BR:79:LEU:HD13	1.87	0.56
1:CA:1530:G:O2'	1:CA:1531:A:OP1	2.17	0.56
9:CI:118:LYS:O	9:CI:120:ARG:N	2.35	0.56
25:DA:2277:G:H3'	46:D0:12:ASN:ND2	2.21	0.56
25:DA:2320:A:H2'	25:DA:2320:A:N3	2.19	0.56
25:DA:2404:C:H2'	25:DA:2405:G:H5'	1.88	0.56
25:DA:2463:C:C2'	25:DA:2464:C:H5'	2.35	0.56
26:DB:22:U:H3	26:DB:61:G:H1	1.53	0.56
38:DS:58:LEU:HD12	38:DS:59:LYS:HB2	1.87	0.56
42:DW:50:VAL:HG12	42:DW:105:VAL:CG2	2.36	0.56
1:AA:476:G:OP2	1:AA:476:G:H8	1.89	0.55
39:BT:55:ASN:N	39:BT:59:THR:HG22	2.21	0.55
1:CA:1353:G:H2'	1:CA:1354:C:C6	2.41	0.55
4:CD:19:LEU:HB3	4:CD:67:ILE:HG12	1.87	0.55
1:AA:839:U:O2	1:AA:839:U:H2'	2.05	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:4:TYR:CZ	9:AI:88:TYR:HD1	2.25	0.55
11:AK:48:ILE:HD12	11:AK:63:LEU:HB3	1.88	0.55
25:BA:10:G:O2'	25:BA:2801(A):A:N7	2.37	0.55
50:B4:26:SER:OG	50:B4:27:THR:N	2.37	0.55
54:B8:61:LEU:O	54:B8:63:PRO:HD3	2.06	0.55
2:CB:97:TRP:HH2	2:CB:176:GLU:HB2	1.72	0.55
5:CE:8:GLU:HA	5:CE:34:VAL:HA	1.88	0.55
7:CG:69:VAL:HG22	7:CG:135:VAL:HG22	1.89	0.55
25:DA:1167:U:O2	25:DA:1183:G:N2	2.39	0.55
25:DA:1209:G:H21	25:DA:1210:A:H62	1.54	0.55
25:DA:1859:A:N6	25:DA:1883:G:O2'	2.37	0.55
25:DA:1939:U:OP1	25:DA:2604:U:O2'	2.24	0.55
1:AA:49:U:O4	1:AA:365:U:H5	1.89	0.55
1:AA:460:G:N1	1:AA:470:C:H5''	2.21	0.55
1:AA:679:C:H2'	1:AA:680:C:C6	2.40	0.55
17:AQ:86:GLU:O	17:AQ:90:ILE:HG12	2.06	0.55
22:AY:32:LYS:HG2	25:BA:2573:C:C5	2.41	0.55
25:BA:184:C:H2'	25:BA:185:U:C6	2.42	0.55
25:BA:754:C:H2'	25:BA:755:C:H6	1.71	0.55
25:BA:847:U:C4	25:BA:933:A:N6	2.73	0.55
25:BA:2371:G:H1'	52:B6:39:TYR:HE1	1.71	0.55
31:BH:9:ILE:HD11	31:BH:69:ARG:HD2	1.88	0.55
31:BH:94:TYR:CD1	31:BH:107:VAL:HA	2.42	0.55
4:CD:30:LYS:CB	4:CD:35:ARG:HD2	2.37	0.55
5:CE:36:ASP:HB3	5:CE:38:GLN:N	2.20	0.55
7:CG:111:ARG:HE	7:CG:123:GLU:HB2	1.71	0.55
14:CN:24:CYS:CB	14:CN:28:GLY:HA2	2.36	0.55
25:DA:2870:C:H5''	37:DR:65:LEU:HD21	1.88	0.55
32:DI:68:LEU:HA	32:DI:71:ILE:HG22	1.87	0.55
49:D3:27:GLY:HA3	49:D3:35:ARG:NH1	2.21	0.55
1:AA:45:U:H2'	1:AA:46:G:C8	2.42	0.55
1:AA:426:G:OP1	4:AD:36:ARG:NH1	2.40	0.55
2:AB:24:TRP:CD1	2:AB:24:TRP:N	2.69	0.55
8:AH:39:LEU:HB3	8:AH:45:ILE:HG12	1.87	0.55
10:AJ:8:LEU:HD12	10:AJ:20:ALA:HB2	1.86	0.55
13:AM:15:VAL:HG23	13:AM:43:THR:O	2.06	0.55
25:BA:2615:U:H2'	25:BA:2616:C:H6	1.71	0.55
1:CA:804:U:H5''	1:CA:805:C:OP2	2.06	0.55
1:CA:1188:A:H2'	1:CA:1189:C:O4'	2.06	0.55
5:CE:83:GLU:HG2	5:CE:88:LYS:HD2	1.87	0.55
13:CM:10:PRO:HG2	13:CM:18:ALA:HB1	1.88	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:29:ARG:HG2	14:CN:40:CYS:HB3	1.87	0.55
23:CV:10:G:N2	23:CV:26:G:H1'	2.21	0.55
25:DA:1366:A:OP1	47:D1:3:LYS:NZ	2.38	0.55
25:DA:2329:G:N2	46:D0:41:ARG:HG3	2.21	0.55
1:AA:503:C:OP2	12:AL:116:SER:HB3	2.07	0.55
1:AA:877:C:H5''	8:AH:88:LYS:HD3	1.87	0.55
3:AC:30:ARG:HG2	14:AN:36:PHE:O	2.07	0.55
17:AQ:57:VAL:HG21	17:AQ:73:VAL:HG13	1.88	0.55
22:AY:8:VAL:HG11	22:AY:49:PRO:HD3	1.88	0.55
25:BA:511:U:H5''	25:BA:512:G:OP2	2.06	0.55
25:BA:1034:G:H5'	55:B9:18:ARG:HD2	1.88	0.55
25:BA:1359:A:H61	25:BA:1372:U:H3	1.53	0.55
25:BA:1444:G:H2'	25:BA:1445(A):C:C5	2.41	0.55
25:BA:2847:U:OP1	39:BT:98:LYS:NZ	2.37	0.55
27:BD:72:LYS:HB3	27:BD:75:ILE:HD12	1.87	0.55
1:CA:1014:A:C2	1:CA:1219:U:H1'	2.42	0.55
1:CA:1205:U:H4'	3:CC:195:VAL:CG2	2.36	0.55
1:CA:1321:C:H6	1:CA:1321:C:H5''	1.71	0.55
9:CI:99:LEU:HB3	9:CI:101:PHE:CE1	2.42	0.55
11:CK:38:ASN:OD1	11:CK:38:ASN:N	2.40	0.55
25:DA:242:G:H5''	54:D8:64:TYR:CE2	2.42	0.55
25:DA:448:U:C4	25:DA:583:G:H1'	2.41	0.55
25:DA:2463:C:H2'	25:DA:2464:C:H5'	1.88	0.55
1:AA:308:C:H2'	1:AA:309:G:H8	1.71	0.55
1:AA:991:U:H4'	1:AA:992:U:O5'	2.06	0.55
1:AA:1123:A:O2'	10:AJ:37:PRO:O	2.23	0.55
11:AK:107:SER:OG	11:AK:108:ILE:N	2.38	0.55
25:BA:652(H):C:H2'	25:BA:652(I):C:H5'	1.89	0.55
41:BV:29:PRO:HA	41:BV:61:VAL:CG2	2.36	0.55
47:B1:58:ILE:O	47:B1:58:ILE:HG13	2.06	0.55
1:CA:1236:A:H4'	1:CA:1304:G:H4'	1.89	0.55
4:CD:149:ALA:HB3	4:CD:152:SER:HB2	1.89	0.55
5:CE:24:ARG:O	5:CE:25:ARG:HG3	2.07	0.55
10:CJ:55:LYS:H	10:CJ:56:HIS:HD2	1.54	0.55
25:DA:639:U:H2'	25:DA:640:C:H6	1.70	0.55
29:DF:36:VAL:O	29:DF:40:GLN:HG3	2.07	0.55
32:DI:56:LYS:O	32:DI:60:GLU:N	2.36	0.55
1:AA:1059:C:O2	10:AJ:53:PRO:HG3	2.06	0.55
4:AD:121:VAL:HA	4:AD:126:ILE:HG13	1.89	0.55
10:AJ:8:LEU:N	10:AJ:70:ARG:O	2.23	0.55
10:AJ:45:ARG:HG2	10:AJ:47:PHE:CZ	2.41	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:74:VAL:HG13	13:AM:78:ILE:HD11	1.88	0.55
13:AM:87:TYR:O	13:AM:91:ARG:HG2	2.07	0.55
25:BA:792:G:H5''	25:BA:793:A:H5'	1.87	0.55
25:BA:1918:A:O2'	25:BA:1920:C:N4	2.40	0.55
35:BP:50:ARG:HD3	54:B8:7:HIS:CD2	2.42	0.55
1:CA:1118:C:H1'	1:CA:1179:A:C4	2.41	0.55
2:CB:47:THR:HA	2:CB:202:PRO:HG2	1.88	0.55
4:CD:10:ARG:HB3	4:CD:40:PRO:HG3	1.88	0.55
25:DA:2371:G:O2'	52:D6:46:HIS:ND1	2.33	0.55
26:DB:30:C:H2'	26:DB:31:C:H5'	1.89	0.55
29:DF:32:LEU:O	29:DF:36:VAL:HG23	2.07	0.55
1:AA:236:G:H2'	1:AA:237:C:C6	2.41	0.55
1:AA:363:A:OP1	12:AL:33:ARG:HG3	2.06	0.55
1:AA:452:A:OP1	16:AP:43:LYS:NZ	2.25	0.55
1:AA:818:G:HO2'	1:AA:820:U:H6	1.51	0.55
1:AA:972:C:H2'	10:AJ:55:LYS:HB2	1.88	0.55
1:AA:974:A:H8	1:AA:974:A:OP1	1.88	0.55
3:AC:44:GLU:O	3:AC:48:TYR:HB2	2.06	0.55
17:AQ:29:HIS:CD2	17:AQ:32:TYR:HB2	2.41	0.55
23:AV:49:G:H1	23:AV:65:C:H42	1.53	0.55
25:BA:733:G:N7	58:BA:5175:HOH:O	2.33	0.55
30:BG:60:LEU:O	30:BG:64:THR:HG23	2.07	0.55
34:BO:7:TYR:CE1	34:BO:20:MET:HB2	2.41	0.55
1:CA:1227:A:H3'	1:CA:1227:A:H8	1.71	0.55
5:CE:80:ILE:HD13	5:CE:138:ALA:HB1	1.89	0.55
25:DA:579:G:H2'	25:DA:580:C:C6	2.41	0.55
25:DA:1259:G:H2'	25:DA:1260:G:C8	2.40	0.55
25:DA:2239:G:H5'	27:DD:251:GLY:HA3	1.87	0.55
25:DA:2755:C:O3'	25:DA:2756:U:H6	1.90	0.55
31:DH:44:VAL:HB	31:DH:51:ARG:H	1.71	0.55
40:DU:19:LYS:O	40:DU:22:LYS:HG3	2.07	0.55
54:D8:32:LEU:O	54:D8:36:LYS:HE3	2.06	0.55
1:AA:41:G:H2'	1:AA:42:G:H8	1.72	0.55
1:AA:70:G:H2'	1:AA:71:C:C6	2.41	0.55
1:AA:519:C:H2'	1:AA:520:A:C8	2.42	0.55
4:AD:30:LYS:C	4:AD:32:ALA:H	2.03	0.55
15:AO:76:GLU:HA	15:AO:76:GLU:OE2	2.06	0.55
22:AY:22:ALA:HA	22:AY:37:ILE:HG13	1.89	0.55
25:BA:1174:A:H1'	25:BA:1175:U:H5''	1.89	0.55
37:BR:33:ARG:NH2	51:B5:57:VAL:O	2.36	0.55
42:BW:19:LEU:HB3	51:B5:25:LEU:HD11	1.89	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B2:13:ALA:HA	48:B2:16:LEU:CD1	2.37	0.55
1:CA:974:A:H8	1:CA:974:A:OP1	1.90	0.55
4:CD:53:ASP:O	4:CD:57:ARG:NH1	2.40	0.55
25:DA:2028:U:H5	58:DA:4592:HOH:O	1.89	0.55
26:DB:4:C:H42	26:DB:117:G:H1	1.55	0.55
28:DE:178:GLU:OE2	28:DE:178:GLU:N	2.23	0.55
31:DH:144:VAL:O	31:DH:148:ILE:HG12	2.07	0.55
32:DI:102:SER:OG	32:DI:103:ARG:N	2.39	0.55
33:DN:67:LEU:HD13	33:DN:87:LEU:HD13	1.88	0.55
37:DR:78:LYS:HE2	37:DR:83:ILE:HD11	1.89	0.55
54:D8:37:SER:OG	54:D8:40:GLU:HG3	2.07	0.55
1:AA:130:A:O2'	1:AA:131:C:O5'	2.22	0.55
1:AA:303:A:HO2'	1:AA:555:C:HO2'	1.50	0.55
1:AA:865:A:C2	1:AA:918:A:H4'	2.42	0.55
7:AG:27:ILE:HD11	7:AG:40:ALA:HA	1.88	0.55
9:AI:49:PRO:HG3	9:AI:101:PHE:HD2	1.72	0.55
12:AL:32:PHE:CE1	12:AL:86:ARG:HG3	2.42	0.55
25:BA:1639:U:O2'	25:BA:1640:C:H5'	2.06	0.55
25:BA:2296:U:OP2	38:BS:9:ARG:NH2	2.40	0.55
29:BF:32:LEU:HD11	29:BF:105:VAL:HG13	1.88	0.55
29:BF:175:THR:O	29:BF:176:LEU:HB2	2.07	0.55
32:BI:120:ILE:HG21	32:BI:126:TYR:CE1	2.42	0.55
41:BV:19:LYS:HG2	41:BV:95:LEU:HD23	1.89	0.55
1:CA:11:G:C5	1:CA:12:U:C5	2.95	0.55
1:CA:216:G:H2'	1:CA:217:C:C6	2.41	0.55
1:CA:826:C:H5'	8:CH:12:ARG:HH11	1.72	0.55
18:CR:45:SER:OG	18:CR:47:THR:HG22	2.07	0.55
25:DA:442:G:H4'	29:DF:46:ARG:HG3	1.89	0.55
25:DA:2037:G:H2'	25:DA:2038:G:C8	2.42	0.55
25:DA:2658:C:H5''	31:DH:158:HIS:CD2	2.42	0.55
27:DD:95:LEU:HD11	27:DD:105:ILE:HG12	1.88	0.55
34:DO:120:GLU:HG2	34:DO:122:LEU:HG	1.89	0.55
45:DZ:126:VAL:HG11	45:DZ:161:VAL:HG22	1.88	0.55
49:D3:8:LEU:HD13	49:D3:31:LEU:HD23	1.87	0.55
1:AA:665:A:H1'	1:AA:733:A:O4'	2.07	0.54
1:AA:1511:G:H2'	1:AA:1512:U:O4'	2.07	0.54
4:AD:36:ARG:HG2	4:AD:36:ARG:NH1	2.23	0.54
25:BA:207:A:H2'	25:BA:208:C:O4'	2.07	0.54
25:BA:1324:G:C4	25:BA:1328:G:O6	2.59	0.54
33:BN:24:GLY:HA2	33:BN:27:ALA:HB3	1.90	0.54
25:DA:1034:G:H5'	55:D9:18:ARG:HD2	1.88	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DX:3:THR:OG1	43:DX:5:TYR:N	2.37	0.54
45:DZ:3:TYR:HB2	45:DZ:56:VAL:O	2.06	0.54
45:DZ:100:VAL:HG13	45:DZ:136:PHE:HA	1.89	0.54
1:AA:97:G:O2'	1:AA:98:G:H8	1.90	0.54
1:AA:1376:U:H2'	1:AA:1377:A:H8	1.73	0.54
2:AB:52:GLU:OE1	2:AB:56:ARG:NH1	2.40	0.54
8:AH:20:TYR:HA	8:AH:65:TYR:CZ	2.42	0.54
16:AP:21:VAL:HG11	16:AP:59:TRP:NE1	2.22	0.54
25:BA:229:A:H8	25:BA:229:A:OP1	1.90	0.54
25:BA:910:A:C5	36:BQ:13:GLN:HG3	2.43	0.54
25:BA:1021:A:H2'	25:BA:1023:U:H5'	1.88	0.54
25:BA:2591:C:OP1	27:BD:239:ARG:HG2	2.07	0.54
25:BA:2751:G:H4'	31:BH:4:ILE:HD11	1.89	0.54
29:BF:179:GLU:OE2	29:BF:179:GLU:N	2.32	0.54
1:CA:736:C:OP1	18:CR:72:ARG:NH1	2.41	0.54
2:CB:149:LEU:HD23	2:CB:152:PHE:HB3	1.87	0.54
2:CB:166:ASP:HB3	2:CB:169:LYS:HB3	1.90	0.54
5:CE:148:VAL:HG21	8:CH:107:LEU:HD12	1.89	0.54
25:DA:829:A:H5''	25:DA:831:G:N7	2.22	0.54
25:DA:1688:U:O2	25:DA:1700:A:H5'	2.07	0.54
25:DA:2661:G:H2'	25:DA:2662:A:C8	2.43	0.54
28:DE:4:ILE:HD13	28:DE:28:ALA:HB1	1.89	0.54
36:DQ:1:MET:O	36:DQ:1:MET:HG2	2.07	0.54
38:DS:53:SER:OG	38:DS:54:LEU:N	2.39	0.54
41:DV:56:SER:H	41:DV:100:ARG:HB2	1.71	0.54
41:DV:72:VAL:HG13	41:DV:85:LYS:HB3	1.89	0.54
45:DZ:111:VAL:C	45:DZ:113:ALA:H	2.10	0.54
49:D3:22:ALA:HB2	49:D3:49:LYS:HD3	1.90	0.54
51:D5:35:GLU:HG3	51:D5:51:TYR:CD2	2.41	0.54
4:AD:189:PRO:HB2	4:AD:194:LEU:HD11	1.90	0.54
25:BA:242:G:O4'	54:B8:3:LYS:HE3	2.07	0.54
25:BA:2096:U:H3	25:BA:2193:G:H1	1.55	0.54
34:BO:115:VAL:HG13	34:BO:121:VAL:HG21	1.89	0.54
44:BY:36:ALA:HB1	44:BY:67:LEU:O	2.07	0.54
1:CA:1189:C:OP1	10:CJ:51:ARG:NH2	2.40	0.54
1:CA:1220:G:H2'	1:CA:1221:G:O4'	2.08	0.54
9:CI:40:LEU:HD11	9:CI:70:LYS:HB3	1.88	0.54
17:CQ:13:ASP:O	17:CQ:15:MET:N	2.40	0.54
20:CT:36:LEU:HD12	20:CT:55:ILE:HG23	1.90	0.54
25:DA:2405:G:H4'	25:DA:2406:U:OP2	2.08	0.54
1:AA:509:A:C8	1:AA:509:A:H3'	2.43	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:155:LEU:HD21	2:AB:159:PRO:HG3	1.88	0.54
5:AE:69:VAL:N	5:AE:70:PRO:HD3	2.21	0.54
7:AG:73:MET:HG3	7:AG:89:MET:O	2.08	0.54
11:AK:108:ILE:HG22	18:AR:87:ARG:HD2	1.89	0.54
13:AM:74:VAL:O	13:AM:78:ILE:HG12	2.07	0.54
25:BA:534:U:H2'	25:BA:535:C:C6	2.43	0.54
25:BA:577:G:O2'	25:BA:1254:A:OP1	2.22	0.54
25:BA:1420:U:HO2'	25:BA:1421:G:P	2.29	0.54
38:BS:96:GLY:N	38:BS:99:LYS:HB3	2.21	0.54
44:BY:8:LYS:O	44:BY:11:ASP:OD1	2.25	0.54
46:B0:24:LYS:O	46:B0:25:ARG:HD3	2.07	0.54
54:B8:54:GLU:O	54:B8:58:ILE:HD13	2.07	0.54
8:CH:49:GLU:OE2	8:CH:62:TYR:OH	2.24	0.54
8:CH:97:VAL:HA	8:CH:100:ILE:HD11	1.89	0.54
25:DA:7:G:H2'	25:DA:8:A:H8	1.70	0.54
25:DA:22:C:H42	25:DA:518:G:H1	1.55	0.54
27:DD:172:TYR:CD1	27:DD:186:HIS:HA	2.42	0.54
34:DO:15:GLY:HA2	34:DO:47:ILE:HD11	1.90	0.54
1:AA:222:U:H2'	1:AA:223:U:C6	2.43	0.54
1:AA:255:G:H1'	17:AQ:16:GLN:OE1	2.08	0.54
1:AA:757:U:O2'	1:AA:879:C:O2	2.25	0.54
1:AA:1307:U:OP1	13:AM:101:GLN:NE2	2.40	0.54
14:AN:50:LYS:HE3	14:AN:52:GLN:NE2	2.22	0.54
25:BA:779:U:H5''	27:BD:49:ILE:HD11	1.90	0.54
27:BD:136:ILE:HG22	27:BD:137:PRO:HD2	1.90	0.54
35:BP:140:ALA:O	35:BP:142:GLY:N	2.40	0.54
41:BV:49:THR:O	41:BV:49:THR:HG22	2.07	0.54
43:BX:60:ARG:HH21	53:B7:47:ARG:HH21	1.53	0.54
1:CA:443:C:H2'	1:CA:444:C:H6	1.73	0.54
1:CA:1170:A:N1	1:CA:1171:G:H1'	2.23	0.54
13:CM:15:VAL:HG13	13:CM:44:ARG:HA	1.90	0.54
14:CN:48:ALA:HB2	14:CN:53:LEU:HD12	1.90	0.54
25:DA:455:C:N3	25:DA:472:A:H2'	2.21	0.54
25:DA:795:C:H2'	25:DA:796:C:H6	1.73	0.54
26:DB:55:U:C1'	30:DG:29:TRP:HE1	2.21	0.54
35:DP:52:GLU:O	35:DP:54:GLY:N	2.41	0.54
44:DY:13:VAL:HB	44:DY:72:VAL:HG22	1.88	0.54
1:AA:191:G:H1'	58:AT:304:HOH:O	2.07	0.54
1:AA:1316:G:H22	1:AA:1319:A:H5''	1.71	0.54
1:AA:1504:G:H3'	1:AA:1504:G:P	2.48	0.54
13:AM:49:THR:O	13:AM:49:THR:OG1	2.24	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:6:LEU:HD21	14:AN:23:ARG:HH22	1.71	0.54
25:BA:645:C:O2	25:BA:645:C:H2'	2.07	0.54
25:BA:1996:C:OP1	34:BO:31:LYS:HE3	2.08	0.54
25:BA:2371:G:H1'	52:B6:39:TYR:CE1	2.42	0.54
41:BV:42:GLY:O	41:BV:43:GLU:HG2	2.07	0.54
1:CA:59:A:H3'	1:CA:331:G:H22	1.72	0.54
1:CA:376:G:H4'	16:CP:5:ARG:HH11	1.73	0.54
3:CC:29:TYR:H	3:CC:32:LEU:HG	1.72	0.54
25:DA:126:A:OP2	53:D7:19:ARG:HB2	2.07	0.54
25:DA:1359:A:H61	25:DA:1372:U:H3	1.56	0.54
25:DA:2632:A:O2'	25:DA:2811:G:O2'	2.16	0.54
45:DZ:24:LEU:HB2	45:DZ:41:LEU:HD22	1.89	0.54
6:AF:8:ILE:HG22	6:AF:10:LEU:HD22	1.88	0.54
22:AY:62:HIS:N	25:BA:1946:U:OP1	2.40	0.54
25:BA:1327:C:P	58:BA:4574:HOH:O	2.65	0.54
25:BA:1968:G:OP1	58:BA:4142:HOH:O	2.18	0.54
25:BA:2186:G:H3'	25:BA:2187:G:H5''	1.88	0.54
43:BX:44:GLU:HG3	43:BX:51:VAL:HG23	1.90	0.54
1:CA:443:C:H2'	1:CA:444:C:C6	2.42	0.54
1:CA:1148:U:H2'	1:CA:1149:C:O4'	2.07	0.54
2:CB:50:GLU:O	2:CB:54:THR:OG1	2.24	0.54
6:CF:33:TYR:CG	6:CF:75:LEU:HD23	2.43	0.54
23:CV:15:G:H2'	23:CV:59:A:N1	2.22	0.54
25:DA:857:C:H4'	46:D0:23:VAL:HG21	1.90	0.54
25:DA:889:C:HO2'	25:DA:890:A:H8	1.54	0.54
25:DA:2689:U:H5	58:DA:3720:HOH:O	1.90	0.54
27:DD:127:VAL:HA	27:DD:193:VAL:CG2	2.38	0.54
30:DG:24:GLY:O	30:DG:26:GLN:NE2	2.36	0.54
33:DN:61:ARG:HH11	33:DN:61:ARG:HB2	1.73	0.54
1:AA:929:G:N2	1:AA:1388:C:N3	2.46	0.54
1:AA:1053:G:H4'	1:AA:1054:C:H5'	1.89	0.54
1:AA:1457:G:H2'	1:AA:1458:G:C8	2.42	0.54
1:AA:1502:A:H2	1:AA:1505:G:N1	2.04	0.54
2:AB:23:ARG:HG3	2:AB:23:ARG:O	2.08	0.54
11:AK:23:ALA:HB2	11:AK:28:THR:HG23	1.90	0.54
14:AN:23:ARG:HG3	14:AN:24:CYS:H	1.72	0.54
22:AY:63:LEU:HD22	22:AY:72:ILE:HG23	1.90	0.54
25:BA:2208:A:H1'	25:BA:2219:G:C4	2.43	0.54
25:BA:2611:U:H2'	51:B5:2:ALA:O	2.08	0.54
25:BA:2698:U:H2'	25:BA:2699:C:C6	2.42	0.54
30:BG:3:LEU:HD13	50:B4:25:TYR:CZ	2.43	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BS:39:ILE:HD12	38:BS:85:VAL:HG21	1.90	0.54
51:B5:49:CYS:SG	51:B5:51:TYR:HB2	2.48	0.54
1:CA:438:G:H4'	4:CD:123:HIS:CD2	2.43	0.54
1:CA:878:G:H1'	8:CH:3:THR:HG21	1.90	0.54
15:CO:59:MET:HE1	58:CO:201:HOH:O	2.07	0.54
25:DA:576:U:H5	58:DA:3932:HOH:O	1.91	0.54
25:DA:1638:C:O2	25:DA:2698:U:O2'	2.26	0.54
25:DA:2329:G:H21	46:D0:41:ARG:HG3	1.73	0.54
28:DE:112:GLY:O	28:DE:159:HIS:HA	2.08	0.54
29:DF:130:ALA:HB2	29:DF:142:TRP:HD1	1.72	0.54
30:DG:124:SER:HB2	30:DG:131:TYR:CE1	2.43	0.54
32:DI:114:LEU:HD21	32:DI:128:LEU:HD13	1.89	0.54
50:D4:14:ILE:HG23	50:D4:31:ILE:HD12	1.90	0.54
2:AB:12:GLU:O	2:AB:16:HIS:HB2	2.08	0.54
16:AP:55:ARG:O	16:AP:58:TYR:N	2.41	0.54
17:AQ:26:GLN:HG2	17:AQ:35:VAL:HG13	1.90	0.54
18:AR:66:LEU:O	18:AR:70:ILE:HG13	2.07	0.54
20:AT:15:ARG:O	20:AT:19:SER:OG	2.26	0.54
25:BA:2351:G:HO2'	25:BA:2352:A:H8	1.55	0.54
26:BB:37:C:C5	26:BB:38:C:C5	2.96	0.54
26:BB:48:A:H2'	26:BB:49:C:C6	2.43	0.54
28:BE:2:LYS:HA	28:BE:84:PHE:CE2	2.43	0.54
46:B0:63:VAL:HG23	46:B0:64:ASP:N	2.23	0.54
48:B2:53:LEU:O	48:B2:56:GLN:HB2	2.08	0.54
54:B8:22:VAL:HG12	54:B8:50:LEU:HD12	1.89	0.54
1:CA:988:G:H2'	1:CA:989:C:O4'	2.07	0.54
1:CA:1062:U:H2'	1:CA:1063:C:C6	2.43	0.54
1:CA:1062:U:H2'	1:CA:1063:C:C5	2.43	0.54
1:CA:1261:A:N6	1:CA:1274:G:H1'	2.22	0.54
1:CA:1268:A:H2'	1:CA:1269:A:C8	2.43	0.54
3:CC:113:ALA:HB3	3:CC:114:PRO:HD3	1.88	0.54
4:CD:173:TRP:HZ3	4:CD:193:ASP:HB3	1.73	0.54
25:DA:531:C:OP2	58:DA:4423:HOH:O	2.18	0.54
25:DA:631:A:H1'	35:DP:66:GLY:HA2	1.89	0.54
25:DA:1786:A:H1'	25:DA:1938:A:N6	2.21	0.54
25:DA:1970:A:OP1	58:DA:4216:HOH:O	2.17	0.54
25:DA:2406:U:OP1	25:DA:2411:A:N6	2.41	0.54
25:DA:2444:G:OP2	29:DF:68:LYS:HE2	2.07	0.54
26:DB:24:G:H5'	26:DB:25:A:N7	2.23	0.54
29:DF:117:ARG:HD2	29:DF:190:GLU:O	2.08	0.54
32:DI:29:TYR:HD2	32:DI:30:LEU:HD23	1.72	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:251:G:N7	58:AA:2225:HOH:O	2.34	0.54
1:AA:986:A:H1'	19:AS:54:GLY:O	2.07	0.54
1:AA:1293:G:HO2'	1:AA:1294:G:H8	1.54	0.54
5:AE:78:HIS:CD2	5:AE:142:LEU:HD23	2.42	0.54
15:AO:82:ILE:HB	15:AO:87:ILE:HG22	1.90	0.54
25:BA:836:G:H2'	25:BA:837:C:C6	2.43	0.54
25:BA:1593:G:H2'	25:BA:1594:G:C8	2.43	0.54
26:BB:30:C:OP2	38:BS:32:LEU:HD11	2.08	0.54
31:BH:8:PRO:O	31:BH:69:ARG:NH1	2.40	0.54
38:BS:7:TYR:CE1	38:BS:91:PRO:HG3	2.43	0.54
45:BZ:40:ASP:HB3	45:BZ:43:GLU:HB2	1.90	0.54
1:CA:604:G:H2'	1:CA:605:U:O4'	2.08	0.54
1:CA:769:G:H4'	1:CA:1513:A:H4'	1.90	0.54
1:CA:1103:C:H2'	1:CA:1104:G:O4'	2.08	0.54
1:CA:1300:G:HO2'	1:CA:1301:U:P	2.29	0.54
3:CC:117:ALA:HB2	3:CC:200:ALA:HB2	1.89	0.54
13:CM:22:ILE:HB	13:CM:25:ILE:HD13	1.90	0.54
17:CQ:86:GLU:HG3	17:CQ:90:ILE:HG13	1.89	0.54
25:DA:852:G:N2	25:DA:926:A:H1'	2.23	0.54
25:DA:1022:G:H22	25:DA:1142(A):A:H2	1.56	0.54
31:DH:118:PRO:HD2	31:DH:121:ILE:HG13	1.90	0.54
42:DW:40:ASN:O	42:DW:41:LYS:HG2	2.08	0.54
48:D2:32:LEU:HB2	48:D2:53:LEU:HD13	1.90	0.54
1:AA:872:A:H4'	1:AA:873:A:OP1	2.07	0.53
1:AA:1468:A:H2'	1:AA:1469:G:O4'	2.08	0.53
3:AC:131:ARG:HH21	3:AC:166:GLU:HB3	1.72	0.53
11:AK:99:GLN:HG2	11:AK:105:VAL:HG21	1.91	0.53
15:AO:8:LYS:O	15:AO:12:ILE:HG13	2.08	0.53
25:BA:642:G:H21	25:BA:646:A:H2	1.55	0.53
25:BA:826:U:H4'	35:BP:55:ARG:HB2	1.90	0.53
25:BA:1165:U:H2'	25:BA:1166:C:C6	2.43	0.53
25:BA:2439:A:H5'	25:BA:2439:A:C8	2.42	0.53
26:BB:95:C:H2'	26:BB:96:U:C6	2.43	0.53
29:BF:102:PRO:O	29:BF:105:VAL:N	2.34	0.53
40:BU:59:ARG:O	40:BU:63:VAL:HG23	2.08	0.53
50:B4:40:HIS:O	50:B4:42:PHE:N	2.40	0.53
1:CA:1065:U:H4'	1:CA:1066:C:O5'	2.08	0.53
2:CB:22:LYS:NZ	58:CB:301:HOH:O	2.29	0.53
6:CF:67:MET:HG3	6:CF:68:PRO:HD2	1.90	0.53
25:DA:886:C:OP1	25:DA:886:C:H4'	2.08	0.53
26:DB:50:G:OP1	38:DS:63:THR:OG1	2.20	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:DG:44:GLY:HA2	30:DG:88:ILE:HG22	1.89	0.53
1:AA:826:C:H4'	8:AH:12:ARG:HD3	1.89	0.53
1:AA:1171:G:H2'	1:AA:1172:C:H6	1.73	0.53
1:AA:1456:G:O2'	1:AA:1457:G:OP1	2.24	0.53
2:AB:118:LEU:HD12	2:AB:142:LEU:HB2	1.89	0.53
2:AB:238:LEU:HA	2:AB:239:VAL:C	2.29	0.53
3:AC:11:ARG:HB3	3:AC:15:THR:HB	1.90	0.53
5:AE:95:ALA:HB1	5:AE:96:PRO:HD2	1.90	0.53
6:AF:2:ARG:CZ	6:AF:69:GLU:HG2	2.38	0.53
22:AY:38:HIS:CE1	22:AY:84:ARG:HB2	2.42	0.53
25:BA:2016:U:H1'	51:B5:6:VAL:HG13	1.89	0.53
39:BT:54:ARG:HA	39:BT:59:THR:HG22	1.90	0.53
11:CK:59:TYR:CE2	11:CK:63:LEU:HD12	2.43	0.53
15:CO:34:LEU:HD11	15:CO:38:ARG:HH11	1.72	0.53
15:CO:70:LEU:HD12	15:CO:70:LEU:O	2.08	0.53
20:CT:61:SER:OG	20:CT:65:LYS:HE3	2.08	0.53
25:DA:1470:G:H5''	25:DA:1471:A:OP1	2.09	0.53
1:AA:352:C:O2'	1:AA:354:G:OP1	2.17	0.53
1:AA:922:G:C6	1:AA:923:A:C6	2.96	0.53
2:AB:101:MET:HB2	2:AB:102:LEU:HD12	1.90	0.53
5:AE:57:LYS:HD3	5:AE:61:TYR:HE2	1.72	0.53
11:AK:79:SER:HA	11:AK:104:GLN:CB	2.32	0.53
20:AT:14:LYS:HG2	20:AT:18:GLN:HE21	1.74	0.53
25:BA:1385:G:O2'	25:BA:1396:U:O2	2.25	0.53
25:BA:2223:G:H2'	25:BA:2224:G:H5'	1.91	0.53
25:BA:2530:A:N7	31:BH:172:LYS:NZ	2.54	0.53
25:BA:2565:A:H5''	25:BA:2566:A:OP2	2.09	0.53
25:BA:2850:A:OP2	25:BA:2866:U:C5	2.59	0.53
1:CA:171:A:H2'	1:CA:172:A:C8	2.42	0.53
1:CA:1157:A:O4'	1:CA:1181:G:N2	2.42	0.53
1:CA:1292:U:H2'	1:CA:1293:G:C8	2.43	0.53
1:CA:1358:U:H3	1:CA:1363(A):A:H61	0.61	0.53
2:CB:92:TYR:CD2	2:CB:151:GLY:HA3	2.43	0.53
13:CM:50:GLU:HA	13:CM:53:VAL:HB	1.89	0.53
23:CV:18:G:O2'	23:CV:19:G:O5'	2.26	0.53
25:DA:300:A:N6	58:DA:3884:HOH:O	2.41	0.53
25:DA:363:G:H2'	25:DA:363(A):A:C8	2.41	0.53
25:DA:1651:G:OP1	37:DR:40:LYS:HE3	2.08	0.53
28:DE:72:VAL:HA	28:DE:73:GLU:HB3	1.90	0.53
36:DQ:20:ALA:HA	36:DQ:99:PRO:HD2	1.90	0.53
1:AA:646:U:O4	58:AA:2267:HOH:O	2.18	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:170:VAL:HG22	4:AD:171:GLY:H	1.73	0.53
12:AL:31:PRO:HB2	12:AL:32:PHE:CD2	2.43	0.53
20:AT:12:ALA:O	20:AT:15:ARG:HB2	2.07	0.53
22:AY:116:GLU:O	22:AY:119:LEU:HB3	2.08	0.53
25:BA:1168:G:H1	25:BA:1181:C:H42	1.56	0.53
34:BO:7:TYR:CZ	34:BO:44:LYS:HG3	2.43	0.53
1:CA:1298:C:H4'	1:CA:1299:A:C4	2.43	0.53
1:CA:1517:G:H1'	25:DA:1919:A:O3'	2.09	0.53
9:CI:53:VAL:O	9:CI:55:ALA:N	2.42	0.53
13:CM:63:THR:HB	13:CM:64:TRP:CE3	2.43	0.53
23:CV:47:U:H3'	23:CV:48:C:H5'	1.90	0.53
25:DA:2300:G:H2'	25:DA:2301:C:C6	2.43	0.53
37:DR:33:ARG:NH2	51:D5:57:VAL:O	2.34	0.53
37:DR:104:ARG:HG3	37:DR:107:ASP:OD2	2.09	0.53
38:DS:27:SER:HA	38:DS:88:ASP:HB3	1.90	0.53
45:DZ:74:VAL:HG22	45:DZ:86:VAL:HG13	1.88	0.53
1:AA:418:C:H1'	1:AA:540:G:O2'	2.08	0.53
1:AA:432:A:H3'	1:AA:433:C:C6	2.43	0.53
1:AA:544:G:H2'	1:AA:545:C:C6	2.44	0.53
1:AA:954:G:H21	1:AA:1227:A:N6	2.05	0.53
1:AA:977:A:H2'	1:AA:978:A:H5''	1.91	0.53
1:AA:1053:G:HO2'	1:AA:1199:U:H5	1.55	0.53
3:AC:23:TYR:CG	3:AC:24:ALA:N	2.77	0.53
4:AD:173:TRP:HB2	4:AD:187:ARG:O	2.09	0.53
17:AQ:18:THR:HG23	17:AQ:69:LYS:HZ1	1.74	0.53
42:BW:68:ARG:HB3	42:BW:109:GLU:HG2	1.90	0.53
1:CA:187:C:H2'	1:CA:188:C:C6	2.43	0.53
1:CA:675:A:O2'	11:CK:114:VAL:O	2.26	0.53
1:CA:859:A:H2'	1:CA:860:A:O4'	2.09	0.53
1:CA:1169:A:H2'	1:CA:1170:A:H8	1.74	0.53
1:CA:1207:G:H2'	1:CA:1208:C:C6	2.43	0.53
1:CA:1239:A:C2'	1:CA:1298:C:H42	2.21	0.53
25:DA:907:U:O2'	36:DQ:101:ARG:NH2	2.42	0.53
25:DA:2680:C:H5'	28:DE:189:PRO:HA	1.90	0.53
25:DA:2881:C:H2'	25:DA:2882:A:O4'	2.08	0.53
33:DN:48:MET:H	33:DN:48:MET:HE2	1.73	0.53
40:DU:72:HIS:HE2	40:DU:107:ALA:HB2	1.73	0.53
1:AA:730:G:C5	1:AA:731:G:H1'	2.44	0.53
1:AA:939:G:H5''	7:AG:102:ARG:NH2	2.24	0.53
4:AD:79:PHE:CE1	4:AD:204:ILE:HD13	2.43	0.53
8:AH:121:ASP:HB2	8:AH:125:ARG:NH2	2.24	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:44:SER:OG	11:AK:47:VAL:HG23	2.09	0.53
36:BQ:109:VAL:HG13	36:BQ:113:GLN:HB2	1.90	0.53
1:CA:436:C:O2'	1:CA:437:U:H6	1.91	0.53
1:CA:623:C:O5'	1:CA:623:C:H6	1.92	0.53
1:CA:881:G:P	12:CL:12:ARG:HH22	2.31	0.53
1:CA:1235:U:O2'	1:CA:1305:G:O5'	2.27	0.53
3:CC:43:LEU:HB3	3:CC:47:LEU:HD12	1.90	0.53
20:CT:73:HIS:HB3	20:CT:74:LYS:HG2	1.90	0.53
25:DA:2359:C:H2'	25:DA:2360:A:O4'	2.09	0.53
30:DG:44:GLY:CA	30:DG:88:ILE:HG22	2.38	0.53
32:DI:77:LEU:HD11	32:DI:101:LEU:HB2	1.91	0.53
45:DZ:128:VAL:HG23	45:DZ:161:VAL:H	1.73	0.53
1:AA:160:A:C2	1:AA:343:U:H4'	2.43	0.53
2:AB:109:SER:HA	2:AB:112:VAL:HG23	1.91	0.53
4:AD:120:LEU:HB3	4:AD:126:ILE:HD11	1.91	0.53
6:AF:30:LEU:HB3	6:AF:35:ALA:HB3	1.91	0.53
8:AH:38:ILE:O	8:AH:42:GLU:HG2	2.09	0.53
13:AM:50:GLU:HA	13:AM:53:VAL:HG23	1.90	0.53
25:BA:29:U:H2'	25:BA:30:G:C8	2.44	0.53
25:BA:652(D):C:H2'	25:BA:652(E):G:O4'	2.09	0.53
25:BA:1257:C:H4'	29:BF:83:PHE:CD2	2.44	0.53
25:BA:2011:U:OP1	42:BW:42:ARG:NH1	2.42	0.53
25:BA:2065:C:H2'	25:BA:2066:C:C6	2.44	0.53
27:BD:5:LYS:HA	27:BD:17:THR:HG22	1.90	0.53
40:BU:44:ASN:HD21	41:BV:75:PHE:HB3	1.73	0.53
43:BX:25:LYS:HE2	43:BX:82:GLN:NE2	2.23	0.53
43:BX:27:THR:CG2	43:BX:80:ILE:HG12	2.33	0.53
45:BZ:160:GLY:HA2	45:BZ:161:VAL:CG1	2.33	0.53
1:CA:922:G:N3	1:CA:1398:A:H2	2.07	0.53
1:CA:1070:U:H2'	1:CA:1071:C:H6	1.73	0.53
1:CA:1250:A:H4'	9:CI:67:GLY:HA2	1.90	0.53
1:CA:1409:C:H42	1:CA:1491:G:H1	1.57	0.53
5:CE:29:GLY:HA2	5:CE:46:GLY:O	2.09	0.53
6:CF:61:LEU:HB3	6:CF:63:TYR:CE2	2.41	0.53
25:DA:1267:U:H2'	25:DA:1268:A:H8	1.74	0.53
28:DE:101:ARG:CZ	28:DE:171:GLU:HB2	2.39	0.53
29:DF:182:ASN:HD21	29:DF:185:ASP:CG	2.12	0.53
31:DH:43:VAL:HG12	31:DH:44:VAL:H	1.74	0.53
32:DI:94:ALA:HA	32:DI:97:ILE:HB	1.90	0.53
38:DS:95:HIS:N	38:DS:99:LYS:HB3	2.23	0.53
44:DY:76:CYS:SG	44:DY:99:CYS:HB2	2.48	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:177:C:OP1	20:AT:65:LYS:NZ	2.32	0.53
1:AA:1073:U:H2'	1:AA:1074:G:H8	1.72	0.53
1:AA:1151:A:H5''	10:AJ:41:PRO:HA	1.90	0.53
1:AA:1258:G:H2'	1:AA:1259:C:C6	2.44	0.53
3:AC:58:GLU:H	3:AC:65:ALA:HB3	1.73	0.53
8:AH:82:HIS:O	8:AH:137:VAL:HA	2.09	0.53
20:AT:72:LEU:HD23	20:AT:73:HIS:N	2.24	0.53
25:BA:1470:G:H5''	25:BA:1471:A:OP1	2.09	0.53
25:BA:2543:G:H1'	25:BA:2766:G:H5'	1.91	0.53
25:BA:2567:G:H2'	25:BA:2568:C:C6	2.44	0.53
36:BQ:137:TYR:HB3	45:BZ:76:LEU:HD21	1.91	0.53
43:BX:11:PRO:HB3	43:BX:92:LEU:HD11	1.89	0.53
1:CA:188:C:H1'	20:CT:104:LEU:CB	2.38	0.53
1:CA:946:A:H2'	1:CA:947:G:C8	2.44	0.53
4:CD:25:ARG:HG2	4:CD:30:LYS:O	2.08	0.53
25:DA:184:C:H2'	25:DA:185:U:C6	2.43	0.53
25:DA:263:C:H2'	25:DA:264:C:O4'	2.09	0.53
30:DG:107:LEU:HD23	30:DG:111:LEU:HD12	1.90	0.53
45:DZ:18:LEU:HD23	45:DZ:25:PRO:HG3	1.91	0.53
1:AA:49:U:O2'	1:AA:50:A:H2'	2.08	0.53
1:AA:189(C):C:H2'	1:AA:189(D):C:O4'	2.09	0.53
1:AA:1164:G:C2'	1:AA:1165:C:H5'	2.38	0.53
5:AE:50:GLU:HB2	5:AE:53:LEU:HD22	1.91	0.53
25:BA:1582:C:O2'	25:BA:1583:A:O5'	2.26	0.53
25:BA:2321:G:H5''	25:BA:2322:A:OP2	2.08	0.53
26:BB:105:A:OP1	45:BZ:72:ARG:NH1	2.41	0.53
37:BR:67:LEU:HD13	37:BR:76:VAL:HG21	1.89	0.53
45:BZ:152:ALA:HA	45:BZ:155:LEU:HB2	1.91	0.53
1:CA:1053:G:N7	1:CA:1200:C:H5''	2.24	0.53
14:CN:25:VAL:HG22	14:CN:38:GLY:O	2.09	0.53
28:DE:107:THR:O	28:DE:190:GLY:HA2	2.08	0.53
32:DI:72:LEU:O	32:DI:74:ASN:N	2.38	0.53
39:DT:53:ARG:HG3	39:DT:53:ARG:O	2.09	0.53
1:AA:237:C:H5''	17:AQ:25:ARG:CZ	2.38	0.53
3:AC:156:ARG:O	3:AC:158:GLY:N	2.42	0.53
7:AG:111:ARG:HB2	7:AG:119:ARG:HD2	1.91	0.53
25:BA:1430:C:H2'	25:BA:1431:U:H6	1.74	0.53
25:BA:1453:U:OP1	37:BR:77:ARG:HD3	2.09	0.53
25:BA:1720:U:OP2	58:BA:5303:HOH:O	2.19	0.53
25:BA:2272:U:H5''	25:BA:2273:A:OP1	2.08	0.53
25:BA:2273:A:O2'	25:BA:2274:A:H5'	2.09	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:12:TYR:HA	30:BG:16:ARG:HG3	1.91	0.53
35:BP:75:ILE:HD13	35:BP:77:ARG:NH1	2.24	0.53
1:CA:115:G:H1'	1:CA:116:A:N7	2.23	0.53
1:CA:192:U:H2'	1:CA:193:C:C6	2.44	0.53
1:CA:202:U:H3'	1:CA:203:U:C6	2.44	0.53
2:CB:42:ILE:HG22	2:CB:43:ASP:H	1.73	0.53
25:DA:323:G:O2'	25:DA:1205:U:N3	2.35	0.53
25:DA:330:A:HO2'	25:DA:331:A:H8	1.57	0.53
25:DA:2345:G:OP2	52:D6:38:LYS:HG3	2.09	0.53
25:DA:2527:C:C4	25:DA:2528:U:C5	2.97	0.53
27:DD:182:LEU:HD12	27:DD:272:ALA:HB3	1.90	0.53
31:DH:3:ARG:HG2	31:DH:6:ARG:CZ	2.38	0.53
36:DQ:111:GLU:O	36:DQ:115:MET:HG2	2.09	0.53
1:AA:129(A):G:H22	1:AA:189(D):C:N4	2.07	0.52
1:AA:457:C:H2'	1:AA:458:C:H6	1.73	0.52
1:AA:1089:G:H2'	1:AA:1090:U:H5'	1.91	0.52
5:AE:139:LEU:HA	5:AE:142:LEU:HD12	1.90	0.52
25:BA:1865:G:N2	25:BA:1877:A:OP2	2.42	0.52
25:BA:1899:G:H2'	25:BA:1899:G:N3	2.24	0.52
25:BA:2690:C:H5''	25:BA:2872:G:H21	1.74	0.52
33:BN:112:LEU:HD12	33:BN:112:LEU:O	2.09	0.52
37:BR:72:ASP:O	37:BR:76:VAL:HG23	2.09	0.52
1:CA:928:G:H1	1:CA:1389:C:H42	1.57	0.52
1:CA:1151:A:O2'	1:CA:1152:A:O5'	2.21	0.52
2:CB:186:ALA:HB3	2:CB:197:VAL:HG11	1.89	0.52
25:DA:795:C:H2'	25:DA:796:C:C6	2.44	0.52
25:DA:994:C:O2	25:DA:994:C:H2'	2.09	0.52
25:DA:1430:C:H2'	25:DA:1431:U:H6	1.72	0.52
25:DA:2351:G:HO2'	25:DA:2352:A:H8	1.54	0.52
29:DF:129:PHE:CD2	29:DF:163:VAL:HG21	2.44	0.52
32:DI:72:LEU:C	32:DI:74:ASN:N	2.61	0.52
36:DQ:63:LYS:HE3	36:DQ:65:PHE:CE1	2.44	0.52
1:AA:221:C:H2'	1:AA:222:U:C6	2.44	0.52
1:AA:1179:A:H4'	9:AI:103:THR:HA	1.91	0.52
4:AD:79:PHE:HE1	4:AD:204:ILE:HD13	1.73	0.52
25:BA:330:A:HO2'	25:BA:331:A:H8	1.53	0.52
25:BA:1629:U:H2'	25:BA:1630:G:C8	2.44	0.52
25:BA:1935:G:N2	25:BA:1964:G:H5'	2.24	0.52
27:BD:147:LEU:HD13	27:BD:155:LEU:HD11	1.90	0.52
28:BE:116:VAL:HG22	28:BE:120:TRP:HD1	1.74	0.52
29:BF:123:LEU:HD21	29:BF:199:TRP:CZ3	2.44	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BW:13:SER:HB3	42:BW:16:LYS:HD2	1.90	0.52
1:CA:296:U:O2'	1:CA:556:C:O2	2.25	0.52
1:CA:663:A:O3'	18:CR:64:ARG:NH2	2.42	0.52
1:CA:1241:G:H1	1:CA:1296:C:H42	1.55	0.52
2:CB:57:PHE:O	2:CB:61:LEU:N	2.42	0.52
25:DA:1739:U:HO2'	25:DA:1740:G:H8	1.57	0.52
46:D0:47:PRO:HA	46:D0:51:VAL:HG12	1.91	0.52
1:AA:313:A:H2'	1:AA:314:C:C6	2.44	0.52
1:AA:373:A:O2'	1:AA:481:G:N2	2.42	0.52
4:AD:149:ALA:O	4:AD:152:SER:N	2.38	0.52
13:AM:59:TYR:HD1	13:AM:63:THR:HG1	1.47	0.52
25:BA:64:A:O3'	43:BX:71:GLY:HA3	2.10	0.52
25:BA:1818:U:H2'	27:BD:157:ARG:HG3	1.90	0.52
25:BA:2483:C:O2	36:BQ:124:LYS:HE3	2.09	0.52
33:BN:47:ALA:HB2	33:BN:112:LEU:HD11	1.90	0.52
45:BZ:121:HIS:HB3	45:BZ:123:ASP:O	2.09	0.52
45:BZ:128:VAL:HG23	45:BZ:161:VAL:N	2.25	0.52
1:CA:397:A:H3'	1:CA:397:A:N3	2.24	0.52
1:CA:512:U:H2'	1:CA:513:C:H6	1.74	0.52
1:CA:939:G:H5''	7:CG:102:ARG:HH12	1.73	0.52
1:CA:1052:U:H2'	1:CA:1055:A:OP1	2.09	0.52
1:CA:1057:G:H2'	1:CA:1058:G:O4'	2.09	0.52
1:CA:1135:U:H2'	1:CA:1137:C:O2	2.10	0.52
1:CA:1144:G:N2	1:CA:1146:A:H62	2.08	0.52
9:CI:17:VAL:HG21	9:CI:80:GLY:C	2.29	0.52
12:CL:53:ARG:NH1	12:CL:92:ASP:OD2	2.42	0.52
19:CS:49:ILE:HG13	19:CS:62:ILE:HD11	1.90	0.52
25:DA:41:C:H2'	25:DA:42:G:H8	1.75	0.52
25:DA:636:G:C2	35:DP:115:LEU:HD11	2.44	0.52
25:DA:1477:A:H2'	25:DA:1478:G:O4'	2.09	0.52
25:DA:1506:C:H2'	25:DA:1507:A:H5'	1.90	0.52
25:DA:2273:A:H2'	25:DA:2274:A:C8	2.43	0.52
25:DA:2275:C:O2'	36:DQ:85:LYS:N	2.35	0.52
25:DA:2647:U:H2'	25:DA:2648:C:C6	2.44	0.52
25:DA:2869:G:H2'	25:DA:2870:C:O4'	2.09	0.52
49:D3:26:LEU:HD21	49:D3:46:ASN:HB2	1.91	0.52
1:AA:1362:C:H2'	1:AA:1363:C:H5''	1.90	0.52
25:BA:34:C:H4'	25:BA:35:G:OP2	2.10	0.52
25:BA:1692:U:O2'	25:BA:1693:U:H2'	2.10	0.52
30:BG:82:LEU:HD23	30:BG:86:MET:CB	2.39	0.52
34:BO:24:VAL:HA	34:BO:39:ILE:HG22	1.91	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:55:ARG:HG2	35:BP:56:SER:N	2.24	0.52
1:CA:438:G:O2'	1:CA:494:U:O4	2.23	0.52
1:CA:833:U:H2'	1:CA:834:C:H6	1.74	0.52
2:CB:48:MET:HA	2:CB:51:LEU:HB2	1.91	0.52
5:CE:126:ARG:HH11	5:CE:126:ARG:HG2	1.75	0.52
6:CF:80:ARG:HG3	6:CF:80:ARG:HH21	1.73	0.52
10:CJ:8:LEU:HD11	10:CJ:20:ALA:HB2	1.91	0.52
13:CM:34:LEU:O	13:CM:38:GLY:N	2.42	0.52
20:CT:49:ALA:HB2	20:CT:92:LEU:HD22	1.91	0.52
25:DA:1849:G:H2'	25:DA:1850:G:H8	1.74	0.52
25:DA:2019:A:H2'	25:DA:2020:A:O5'	2.09	0.52
26:DB:6:C:O2'	38:DS:29:PHE:HE1	1.93	0.52
29:DF:28:ILE:HA	29:DF:112:MET:HG2	1.91	0.52
1:AA:1300:G:O2'	1:AA:1301:U:P	2.67	0.52
17:AQ:11:VAL:HG23	17:AQ:20:THR:HB	1.90	0.52
20:AT:12:ALA:O	20:AT:15:ARG:N	2.42	0.52
22:AY:106:ARG:HG2	22:AY:107:PRO:HA	1.91	0.52
25:BA:89:G:H3'	25:BA:90:U:H5''	1.90	0.52
25:BA:234:C:H2'	25:BA:235:U:O4'	2.10	0.52
25:BA:1359:A:C2	25:BA:1372:U:O4	2.62	0.52
25:BA:1607:C:N4	25:BA:1622:G:OP2	2.32	0.52
25:BA:1789:A:H5''	27:BD:220:HIS:O	2.10	0.52
25:BA:2233:U:H2'	25:BA:2234:G:C8	2.44	0.52
25:BA:2292:C:P	38:BS:17:ARG:HH22	2.32	0.52
25:BA:2405:G:H2'	25:BA:2411:A:H62	1.74	0.52
28:BE:101:ARG:CZ	28:BE:171:GLU:HB2	2.40	0.52
28:BE:170:LEU:HB3	28:BE:184:VAL:CG2	2.39	0.52
33:BN:38:HIS:CD2	33:BN:39:ARG:HG2	2.44	0.52
49:B3:54:VAL:HG12	49:B3:55:ARG:N	2.23	0.52
1:CA:131:C:H2'	1:CA:132:C:C6	2.45	0.52
1:CA:148:G:H2'	1:CA:149:A:C8	2.43	0.52
1:CA:433:C:H2'	1:CA:434:U:H6	1.75	0.52
1:CA:1098:C:H2'	1:CA:1099:G:O4'	2.09	0.52
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.45	0.52
1:CA:1502:A:H4'	1:CA:1503:A:OP2	2.09	0.52
25:DA:9:U:O2'	25:DA:10:G:OP1	2.24	0.52
25:DA:747:U:O2	25:DA:2014:A:H1'	2.09	0.52
25:DA:1652:A:C2'	25:DA:1653:G:H5'	2.39	0.52
25:DA:1819:A:H4'	25:DA:1820:U:O5'	2.08	0.52
26:DB:114:C:H4'	38:DS:46:VAL:HG13	1.91	0.52
38:DS:48:LEU:H	38:DS:48:LEU:HD12	1.74	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:545:C:OP2	4:AD:62:GLN:NE2	2.42	0.52
1:AA:928:G:H1	1:AA:1389:C:N4	2.05	0.52
1:AA:949:A:H1'	1:AA:1364:U:N3	2.25	0.52
1:AA:979:C:H42	14:AN:18:VAL:HB	1.75	0.52
1:AA:1245:A:C6	1:AA:1293:G:C6	2.97	0.52
1:AA:1508:G:H2'	1:AA:1509:C:O4'	2.10	0.52
4:AD:33:MET:SD	4:AD:37:PRO:HA	2.50	0.52
13:AM:91:ARG:HB2	13:AM:98:VAL:HG23	1.91	0.52
16:AP:23:ASP:OD1	16:AP:25:ARG:HG2	2.09	0.52
25:BA:197:A:N6	25:BA:2430:A:H2'	2.25	0.52
25:BA:868:U:C4	25:BA:869:G:N7	2.78	0.52
25:BA:1878:G:H2'	25:BA:1879:C:H6	1.74	0.52
25:BA:2845:G:H5''	39:BT:54:ARG:O	2.10	0.52
29:BF:28:ILE:HD13	29:BF:119:ARG:HH21	1.75	0.52
42:BW:79:GLY:CA	42:BW:100:THR:HG22	2.39	0.52
52:B6:47:THR:HB	52:B6:49:HIS:CE1	2.45	0.52
1:CA:243:A:H4'	1:CA:244:U:C5'	2.39	0.52
1:CA:664:G:P	18:CR:64:ARG:HH21	2.32	0.52
1:CA:737:A:H2'	1:CA:738:C:H6	1.74	0.52
5:CE:100:VAL:HA	5:CE:118:ILE:HG22	1.92	0.52
23:CV:36:U:H2'	23:CV:37:A:O4'	2.10	0.52
25:DA:244:A:C2	25:DA:255:A:C4	2.97	0.52
25:DA:632:A:H2'	25:DA:633:A:C8	2.45	0.52
25:DA:2262:U:O2'	25:DA:2263:C:H5'	2.09	0.52
25:DA:2302:G:H2'	25:DA:2303:G:H8	1.75	0.52
28:DE:175:VAL:HG23	28:DE:177:PRO:HD3	1.92	0.52
31:DH:149:ARG:HA	31:DH:162:ILE:HG21	1.92	0.52
36:DQ:42:ILE:HD13	36:DQ:97:VAL:CG2	2.39	0.52
46:D0:29:GLN:O	46:D0:67:VAL:HG23	2.10	0.52
1:AA:587:G:O2'	1:AA:588:G:OP2	2.24	0.52
1:AA:617:G:C2	1:AA:618:C:C5	2.98	0.52
1:AA:991:U:O4	1:AA:1212:U:O2'	2.28	0.52
1:AA:1220:G:O3'	19:AS:36:ARG:HD3	2.10	0.52
1:AA:1226:C:H4'	19:AS:80:TYR:OH	2.09	0.52
2:AB:86:GLU:C	2:AB:89:GLY:H	2.13	0.52
3:AC:134:ILE:HD11	3:AC:153:VAL:HG23	1.91	0.52
25:BA:615:G:OP2	29:BF:43:LYS:NZ	2.36	0.52
25:BA:1170:G:N2	25:BA:1180:C:C2	2.77	0.52
25:BA:1249:U:P	58:BA:5376:HOH:O	2.68	0.52
25:BA:1497:U:H5''	25:BA:1498:C:H5	1.74	0.52
25:BA:2320:A:N3	25:BA:2320:A:H2'	2.24	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:47:ILE:HB	34:BO:48:PRO:HD2	1.91	0.52
38:BS:96:GLY:HA2	38:BS:97:ARG:C	2.29	0.52
1:CA:401:C:H2'	1:CA:402:G:C8	2.44	0.52
1:CA:538:G:OP2	12:CL:115:LYS:HB2	2.09	0.52
1:CA:737:A:H2'	1:CA:738:C:C6	2.44	0.52
1:CA:874:G:H2'	1:CA:875:C:C6	2.44	0.52
1:CA:973:G:H3'	1:CA:974:A:H5''	1.90	0.52
1:CA:1131:G:H2'	1:CA:1132:C:C6	2.45	0.52
1:CA:1170:A:C6	1:CA:1171:G:H1'	2.45	0.52
4:CD:17:VAL:HG22	4:CD:18:LYS:H	1.75	0.52
4:CD:64:LEU:HD22	4:CD:198:VAL:HG11	1.92	0.52
14:CN:27:CYS:SG	14:CN:43:CYS:SG	3.05	0.52
25:DA:142:A:HO2'	25:DA:1407:C:HO2'	1.58	0.52
25:DA:195:A:H61	25:DA:198:C:H3'	1.75	0.52
25:DA:300:A:P	44:DY:86:ARG:NH2	2.80	0.52
25:DA:608:A:H2'	25:DA:609:A:H8	1.73	0.52
25:DA:1537:G:H2'	25:DA:1538:G:H8	1.74	0.52
25:DA:1607:C:N4	25:DA:1622:G:OP2	2.43	0.52
25:DA:2206:G:C3'	25:DA:2207:G:C8	2.91	0.52
25:DA:2576:G:H1'	58:DA:3853:HOH:O	2.10	0.52
30:DG:7:LEU:HD22	30:DG:100:TRP:CE3	2.44	0.52
30:DG:16:ARG:NE	30:DG:31:VAL:HG21	2.25	0.52
33:DN:24:GLY:HA2	33:DN:27:ALA:CB	2.37	0.52
50:D4:3:GLU:CD	50:D4:3:GLU:H	2.12	0.52
1:AA:320:C:H42	1:AA:333:G:H1	1.56	0.52
1:AA:406:G:H21	4:AD:119:GLN:HE22	1.57	0.52
1:AA:460:G:C6	1:AA:470:C:H5''	2.44	0.52
1:AA:598:U:H2'	1:AA:599:C:C6	2.44	0.52
1:AA:878:G:H5'	8:AH:89:PRO:HG2	1.92	0.52
1:AA:1151:A:C5'	10:AJ:41:PRO:HA	2.40	0.52
7:AG:57:GLU:O	7:AG:59:LEU:N	2.43	0.52
18:AR:74:ARG:HG3	18:AR:79:LEU:HB2	1.91	0.52
25:BA:1041:C:N4	25:BA:1114:G:H1	2.05	0.52
25:BA:1903:G:OP1	27:BD:241:PRO:HB2	2.10	0.52
26:BB:78:A:C2	26:BB:100:A:C4	2.98	0.52
31:BH:149:ARG:HG3	31:BH:149:ARG:NH1	2.24	0.52
33:BN:42:TRP:HA	33:BN:48:MET:SD	2.50	0.52
34:BO:73:ASP:OD2	34:BO:75:SER:HB3	2.10	0.52
1:CA:500:G:N2	1:CA:546:G:H1'	2.25	0.52
1:CA:872:A:C4	1:CA:874:G:N7	2.78	0.52
4:CD:189:PRO:CB	4:CD:194:LEU:HD21	2.38	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:67:LEU:O	15:CO:71:GLN:HB2	2.10	0.52
25:DA:698:C:O2'	25:DA:734:A:N6	2.43	0.52
25:DA:1198:U:H2'	25:DA:1199:U:H6	1.75	0.52
25:DA:1472:A:H61	25:DA:1519:G:H1'	1.74	0.52
25:DA:1653:G:C6	37:DR:9:LYS:HB2	2.45	0.52
30:DG:3:LEU:HD13	50:D4:25:TYR:CZ	2.45	0.52
36:DQ:21:THR:HG21	36:DQ:101:ARG:HH11	1.74	0.52
37:DR:52:ILE:HB	37:DR:94:TYR:HD1	1.73	0.52
39:DT:127:ALA:HA	39:DT:129:ARG:N	2.25	0.52
1:AA:402:G:OP1	4:AD:74:GLN:HG3	2.09	0.52
1:AA:1278:U:H6	1:AA:1278:U:H5''	1.75	0.52
7:AG:153:HIS:CE1	11:AK:58:PRO:HD2	2.45	0.52
25:BA:848:G:N9	25:BA:933:A:H8	2.08	0.52
25:BA:1300:U:H4'	25:BA:1301:A:C5'	2.36	0.52
25:BA:2712:U:OP1	25:BA:2714:G:H4'	2.10	0.52
25:BA:2712(A):A:H5''	25:BA:2713:A:OP2	2.09	0.52
1:CA:751:U:H1'	15:CO:24:SER:H	1.75	0.52
1:CA:1218:C:H2'	1:CA:1219:U:C6	2.45	0.52
1:CA:1281:U:H3'	1:CA:1281:U:C6	2.45	0.52
1:CA:1416:G:H1	1:CA:1484:C:H42	1.58	0.52
2:CB:171:ALA:HA	2:CB:174:VAL:HG23	1.92	0.52
5:CE:33:VAL:HG21	5:CE:109:ILE:HA	1.92	0.52
8:CH:20:TYR:HD1	8:CH:65:TYR:CD2	2.27	0.52
8:CH:77:GLU:HG3	8:CH:78:GLN:N	2.25	0.52
25:DA:479:A:H1'	25:DA:480:A:H5''	1.92	0.52
25:DA:1579:A:H2'	25:DA:1580:A:C8	2.44	0.52
29:DF:7:TYR:OH	29:DF:119:ARG:HD3	2.09	0.52
36:DQ:63:LYS:O	36:DQ:107:ALA:N	2.43	0.52
45:DZ:155:LEU:HB3	45:DZ:157:LEU:HD12	1.91	0.52
46:D0:26:TYR:O	46:D0:29:GLN:HB2	2.09	0.52
51:D5:41:PRO:O	51:D5:44:THR:OG1	2.27	0.52
1:AA:501:C:H2'	1:AA:502:G:H8	1.75	0.52
1:AA:509:A:N3	1:AA:543:C:O2'	2.36	0.52
17:AQ:82:MET:O	17:AQ:86:GLU:N	2.32	0.52
25:BA:141:A:C8	25:BA:1408:C:O2'	2.54	0.52
25:BA:286:C:H2'	25:BA:287:C:H6	1.75	0.52
25:BA:673:C:H5''	29:BF:81:PRO:HD2	1.91	0.52
25:BA:1761:C:H3'	25:BA:1762:A:H5''	1.92	0.52
25:BA:2052:G:OP2	58:BA:5357:HOH:O	2.18	0.52
26:BB:86:G:N2	26:BB:91:C:N3	2.53	0.52
27:BD:134:ARG:HD3	27:BD:135:PHE:CZ	2.45	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:29:GLY:H	28:BE:93:VAL:HG12	1.75	0.52
29:BF:22:ALA:HB1	29:BF:24:LEU:HB2	1.91	0.52
33:BN:39:ARG:NH2	33:BN:41:ASP:OD2	2.42	0.52
49:B3:23:LEU:HD13	49:B3:50:VAL:HG11	1.91	0.52
1:CA:545:C:O2'	1:CA:549:C:OP1	2.28	0.52
1:CA:1381:U:O2	1:CA:1381:U:H2'	2.09	0.52
3:CC:132:ARG:O	3:CC:136:GLN:HB2	2.10	0.52
10:CJ:11:PHE:HE2	10:CJ:67:THR:HG22	1.75	0.52
25:DA:71:A:C2	43:DX:31:HIS:HE1	2.28	0.52
27:DD:71:ASP:CG	27:DD:103:ARG:HH22	2.14	0.52
29:DF:51:THR:HG23	29:DF:92:PRO:HG2	1.92	0.52
35:DP:29:LYS:HG2	35:DP:30:THR:N	2.24	0.52
43:DX:35:THR:HG23	43:DX:38:GLU:H	1.74	0.52
44:DY:20:TYR:CD2	44:DY:42:VAL:HG13	2.45	0.52
1:AA:393:A:OP2	16:AP:12:LYS:HD2	2.10	0.51
1:AA:763:G:H2'	1:AA:764:C:H6	1.75	0.51
2:AB:97:TRP:HH2	2:AB:176:GLU:CG	2.23	0.51
22:AY:21:ARG:HD3	22:AY:31:ASN:O	2.11	0.51
25:BA:53:A:H61	25:BA:117:G:H1'	1.75	0.51
25:BA:414:C:H2'	25:BA:415:A:C8	2.44	0.51
25:BA:888:C:H4'	25:BA:889:C:OP1	2.08	0.51
25:BA:1289:C:H2'	25:BA:1290:C:H6	1.75	0.51
25:BA:1341:U:O2	43:BX:80:ILE:HD12	2.10	0.51
25:BA:1379:A:H4'	25:BA:1380:G:OP2	2.10	0.51
25:BA:1491:G:C2'	25:BA:1492:G:H5'	2.40	0.51
25:BA:2335:A:C8	25:BA:2337:G:C5	2.99	0.51
25:BA:2869:G:H2'	25:BA:2870:C:O4'	2.09	0.51
30:BG:28:VAL:O	30:BG:31:VAL:HG13	2.10	0.51
31:BH:4:ILE:O	31:BH:69:ARG:HG2	2.09	0.51
42:BW:40:ASN:O	42:BW:41:LYS:HG3	2.09	0.51
50:B4:42:PHE:HB3	50:B4:43:TYR:CD1	2.44	0.51
1:CA:793:U:O2	1:CA:1516:G:H4'	2.10	0.51
9:CI:28:VAL:HA	9:CI:63:ILE:O	2.10	0.51
19:CS:67:VAL:HG23	19:CS:68:GLY:H	1.75	0.51
25:DA:363(E):U:O2'	25:DA:363(F):A:OP1	2.24	0.51
25:DA:827:U:H4'	25:DA:828:U:C5	2.45	0.51
25:DA:864:G:C6	25:DA:865:C:N4	2.78	0.51
25:DA:944:G:H5''	25:DA:945:A:O5'	2.10	0.51
25:DA:972:G:OP2	25:DA:973:A:O2'	2.20	0.51
25:DA:2316:C:O2'	30:DG:128:ARG:NH1	2.42	0.51
25:DA:2464:C:O2'	25:DA:2465:C:H5''	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DQ:57:HIS:HD2	36:DQ:117:ALA:HB2	1.72	0.51
37:DR:103:ARG:HD3	37:DR:108:GLY:O	2.10	0.51
1:AA:197:A:N6	1:AA:221:C:H5'	2.25	0.51
1:AA:410:G:H5''	1:AA:411:A:OP1	2.10	0.51
1:AA:666:G:H5'	1:AA:726:C:H1'	1.92	0.51
6:AF:1:MET:HA	6:AF:67:MET:O	2.10	0.51
20:AT:73:HIS:C	20:AT:74:LYS:HG2	2.31	0.51
25:BA:250:G:OP2	54:B8:13:ARG:NH2	2.42	0.51
25:BA:576:U:H2'	25:BA:577:G:C8	2.45	0.51
25:BA:593:G:C4'	54:B8:4:MET:HE2	2.40	0.51
25:BA:1405:U:H2'	25:BA:1406:U:C6	2.45	0.51
25:BA:2065:C:H2'	25:BA:2066:C:H6	1.75	0.51
25:BA:2479:G:OP1	25:BA:2537:U:H1'	2.10	0.51
1:CA:189(D):C:N4	1:CA:189(E):U:C2	2.78	0.51
1:CA:1119:C:OP1	9:CI:83:ARG:NH1	2.38	0.51
1:CA:1142:G:H3'	1:CA:1143:G:C8	2.45	0.51
4:CD:4:TYR:C	4:CD:4:TYR:CD2	2.83	0.51
4:CD:15:GLU:OE2	4:CD:66:ARG:NH1	2.43	0.51
12:CL:79:GLU:O	12:CL:80:HIS:HB2	2.10	0.51
14:CN:24:CYS:HB3	14:CN:28:GLY:HA2	1.91	0.51
15:CO:78:TYR:O	15:CO:82:ILE:HG12	2.10	0.51
16:CP:43:LYS:C	16:CP:45:THR:H	2.13	0.51
25:DA:610:G:H2'	25:DA:611:C:C6	2.45	0.51
25:DA:1371:G:H2'	25:DA:1372:U:H5	1.74	0.51
25:DA:1434:A:H61	25:DA:1558:A:H62	1.58	0.51
25:DA:2238:G:H2'	25:DA:2238:G:N3	2.26	0.51
27:DD:221:VAL:HG23	27:DD:226:MET:CE	2.40	0.51
30:DG:16:ARG:O	30:DG:20:ILE:HG13	2.10	0.51
1:AA:198:G:H2'	1:AA:199:G:C8	2.45	0.51
1:AA:250:A:H4'	1:AA:251:G:O5'	2.10	0.51
1:AA:559:A:OP2	5:AE:126:ARG:NH2	2.44	0.51
1:AA:642:A:N3	8:AH:113:SER:OG	2.44	0.51
1:AA:820:U:H4'	1:AA:821:G:OP2	2.10	0.51
25:BA:71:A:H5'	25:BA:71:A:C8	2.46	0.51
25:BA:733:G:OP2	58:BA:5174:HOH:O	2.18	0.51
26:BB:19:G:H5'	26:BB:20:C:OP2	2.10	0.51
35:BP:38:GLN:O	35:BP:39:LYS:HB3	2.09	0.51
1:CA:164:U:H2'	1:CA:165:C:C6	2.45	0.51
1:CA:724:G:C2	1:CA:725:G:C8	2.99	0.51
2:CB:100:GLY:O	2:CB:108:ILE:HG13	2.09	0.51
25:DA:84:A:H5''	44:DY:8:LYS:HG2	1.92	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1267:U:H2'	25:DA:1268:A:C8	2.46	0.51
25:DA:1480:G:C6	25:DA:1481:U:N3	2.78	0.51
25:DA:2022:U:O2'	25:DA:2617:C:H5'	2.10	0.51
33:DN:19:GLU:HG3	33:DN:20:GLY:H	1.75	0.51
38:DS:4:LEU:HD11	38:DS:12:PHE:HE1	1.75	0.51
42:DW:54:ALA:HB1	42:DW:107:LEU:HD22	1.92	0.51
1:AA:227:G:O2'	16:AP:62:VAL:HG21	2.11	0.51
1:AA:1132:C:H2'	1:AA:1133:G:C8	2.46	0.51
12:AL:71:PRO:HG2	12:AL:102:ARG:HG3	1.91	0.51
15:AO:39:LEU:HD13	15:AO:56:LEU:HB2	1.92	0.51
25:BA:104:U:H5''	25:BA:105:C:OP2	2.11	0.51
25:BA:652(R):C:H1'	25:BA:652(S):C:C6	2.45	0.51
25:BA:2291:U:O2'	25:BA:2374:C:O2	2.28	0.51
25:BA:2722:G:H2'	25:BA:2723:C:C6	2.45	0.51
32:BI:129:THR:HA	32:BI:138:ILE:O	2.10	0.51
42:BW:29:LEU:HD12	42:BW:29:LEU:O	2.11	0.51
1:CA:97:G:O2'	1:CA:98:G:H5''	2.11	0.51
1:CA:589:C:H2'	1:CA:590:C:H6	1.76	0.51
1:CA:1151:A:H5'	10:CJ:40:LEU:O	2.11	0.51
3:CC:20:SER:OG	3:CC:40:ARG:NH2	2.37	0.51
9:CI:114:TYR:HE1	10:CJ:60:ARG:H	1.55	0.51
23:CV:16:C:H5'	23:CV:59:A:N1	2.25	0.51
25:DA:2505:G:O6	25:DA:2576:G:H2'	2.10	0.51
26:DB:55:U:H1'	30:DG:29:TRP:HE1	1.75	0.51
28:DE:108:SER:HB3	28:DE:165:VAL:HG21	1.91	0.51
33:DN:38:HIS:ND1	33:DN:39:ARG:HG3	2.25	0.51
36:DQ:48:GLU:O	36:DQ:52:VAL:HG23	2.11	0.51
1:AA:129(A):G:H5'	1:AA:189(H):G:H5'	1.91	0.51
1:AA:985:C:C2	1:AA:1221:G:N2	2.78	0.51
1:AA:1138:G:C6	1:AA:1140:C:H1'	2.46	0.51
2:AB:106:LYS:O	2:AB:110:GLN:NE2	2.44	0.51
20:AT:77:ALA:O	20:AT:81:LYS:HG3	2.11	0.51
25:BA:1210:A:H5'	25:BA:1210:A:C8	2.39	0.51
25:BA:1945:G:H2'	25:BA:1946:U:C6	2.46	0.51
30:BG:41:GLN:NE2	30:BG:154:GLY:O	2.43	0.51
31:BH:94:TYR:HE1	31:BH:108:GLY:N	2.07	0.51
36:BQ:12:GLN:HG2	36:BQ:73:PRO:HD2	1.91	0.51
40:BU:65:ILE:HD11	40:BU:95:LEU:HB3	1.91	0.51
1:CA:978:A:O2'	1:CA:1322:C:N3	2.35	0.51
2:CB:102:LEU:HB3	2:CB:180:LEU:CD1	2.40	0.51
4:CD:100:ARG:NH1	4:CD:137:SER:HA	2.25	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:8:LYS:O	15:CO:12:ILE:HG13	2.10	0.51
23:CV:47:U:H3'	23:CV:48:C:C5'	2.40	0.51
25:DA:57:C:H2'	25:DA:58:G:O4'	2.10	0.51
25:DA:272(G):C:N4	25:DA:363(C):G:H1	2.08	0.51
25:DA:1257:C:H4'	29:DF:83:PHE:CE2	2.46	0.51
25:DA:1514:U:H2'	25:DA:1515:G:C8	2.45	0.51
25:DA:1529:G:O6	25:DA:1541:G:N2	2.42	0.51
25:DA:1754:C:OP1	39:DT:96:ARG:NH1	2.41	0.51
25:DA:1945:G:H2'	25:DA:1946:U:H6	1.75	0.51
26:DB:94:C:H2'	26:DB:95:C:H6	1.75	0.51
42:DW:72:LYS:N	42:DW:106:ILE:O	2.35	0.51
47:D1:67:ILE:N	47:D1:68:PRO:HD2	2.25	0.51
1:AA:926:G:C6	1:AA:1505:G:C6	2.98	0.51
6:AF:91:VAL:HG22	18:AR:72:ARG:HH21	1.74	0.51
11:AK:18:ARG:HB2	11:AK:33:THR:OG1	2.10	0.51
26:BB:8:U:H5'	26:BB:9:G:OP2	2.11	0.51
32:BI:11:ASN:O	32:BI:12:LEU:HD23	2.10	0.51
1:CA:693:G:H2'	1:CA:694:A:C8	2.46	0.51
1:CA:889:A:H4'	1:CA:890:G:OP1	2.10	0.51
1:CA:1126:U:H6	1:CA:1126:U:P	2.34	0.51
1:CA:1206:G:C6	1:CA:1207:G:C5	2.98	0.51
9:CI:105:ASP:HB2	9:CI:107:ARG:HD3	1.93	0.51
18:CR:53:ARG:HA	18:CR:56:THR:OG1	2.10	0.51
25:DA:2820:A:C5	37:DR:4:LEU:HD11	2.46	0.51
30:DG:101:ILE:HG21	50:D4:25:TYR:HB2	1.91	0.51
38:DS:26:LEU:HD22	38:DS:87:PHE:CD1	2.45	0.51
41:DV:57:VAL:HG12	41:DV:99:ILE:HG23	1.93	0.51
49:D3:44:ARG:O	49:D3:48:GLU:HG2	2.10	0.51
1:AA:827:U:H5'	1:AA:828:A:OP2	2.10	0.51
5:AE:15:ARG:NH2	22:AY:129:LYS:HG3	2.25	0.51
7:AG:146:GLU:O	7:AG:148:ASN:N	2.44	0.51
11:AK:70:LYS:NZ	11:AK:70:LYS:HB3	2.26	0.51
32:BI:59:ALA:O	32:BI:62:LYS:N	2.44	0.51
34:BO:116:SER:OG	34:BO:117:LEU:N	2.44	0.51
40:BU:58:ARG:HA	40:BU:61:TRP:CE3	2.46	0.51
45:BZ:80:ARG:HB3	45:BZ:82:ARG:HG3	1.92	0.51
47:B1:21:ARG:HG2	47:B1:21:ARG:NH1	2.26	0.51
52:B6:35:GLU:O	52:B6:36:LEU:HG	2.10	0.51
8:CH:4:ASP:OD1	8:CH:85:ARG:HD2	2.10	0.51
25:DA:192:C:O2'	25:DA:802:A:N3	2.42	0.51
25:DA:267:C:H42	25:DA:425:G:H1	1.58	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:307:G:N2	25:DA:310:A:O5'	2.43	0.51
25:DA:1384:A:O2'	25:DA:1404:C:O2	2.25	0.51
25:DA:2777:G:C5'	25:DA:2778:A:H5'	2.37	0.51
30:DG:167:GLU:HA	30:DG:170:ARG:HB2	1.92	0.51
33:DN:97:ARG:O	33:DN:100:GLU:N	2.43	0.51
36:DQ:43:THR:N	36:DQ:46:GLN:OE1	2.31	0.51
39:DT:127:ALA:HA	39:DT:129:ARG:H	1.75	0.51
1:AA:153:C:H42	1:AA:169:C:H42	1.57	0.51
22:AY:38:HIS:O	22:AY:73:LYS:HA	2.10	0.51
25:BA:1510:G:H2'	25:BA:1511:C:C6	2.45	0.51
25:BA:2040:C:H2'	25:BA:2041:U:O4'	2.11	0.51
28:BE:16:ARG:O	28:BE:16:ARG:HG3	2.11	0.51
29:BF:117:ARG:HH21	29:BF:187:VAL:HA	1.75	0.51
48:B2:16:LEU:HB3	48:B2:20:GLU:HB2	1.92	0.51
1:CA:939:G:H5''	7:CG:102:ARG:HH22	1.75	0.51
1:CA:963:G:H4'	58:CA:2207:HOH:O	2.11	0.51
1:CA:1222:G:C6	1:CA:1223:C:C4	2.99	0.51
1:CA:1365:G:H2'	1:CA:1366:C:O4'	2.11	0.51
1:CA:1370:G:C8	9:CI:109:VAL:HG11	2.46	0.51
17:CQ:67:LYS:HA	17:CQ:70:ARG:HH12	1.75	0.51
25:DA:954:G:O2'	25:DA:2274:A:N1	2.41	0.51
25:DA:1558:A:C4'	25:DA:1559:G:O5'	2.56	0.51
28:DE:9:VAL:HG13	28:DE:25:VAL:O	2.10	0.51
30:DG:64:THR:HG22	30:DG:94:LEU:HD11	1.91	0.51
30:DG:125:PHE:HB3	30:DG:166:ASP:OD2	2.11	0.51
33:DN:47:ALA:HB2	33:DN:112:LEU:HD11	1.92	0.51
38:DS:41:ASP:OD2	38:DS:44:LYS:HD3	2.11	0.51
49:D3:6:VAL:HG12	49:D3:56:VAL:HG22	1.93	0.51
1:AA:720:C:O5'	1:AA:720:C:H6	1.93	0.51
1:AA:972:C:C2'	10:AJ:55:LYS:HB2	2.41	0.51
1:AA:1258:G:H1	1:AA:1277:C:H42	1.59	0.51
2:AB:54:THR:HG21	2:AB:201:ILE:HD11	1.92	0.51
3:AC:43:LEU:HD13	3:AC:47:LEU:HD12	1.91	0.51
8:AH:87:SER:HA	8:AH:93:VAL:CG2	2.40	0.51
10:AJ:64:GLU:HB3	14:AN:59:ALA:HB2	1.93	0.51
22:AY:20:ILE:O	22:AY:35:THR:HA	2.11	0.51
22:AY:21:ARG:HA	22:AY:35:THR:N	2.25	0.51
22:AY:61:HIS:HB3	22:AY:64:ILE:CG2	2.41	0.51
25:BA:528:A:C2	25:BA:2042:A:H2'	2.45	0.51
29:BF:7:TYR:CD2	29:BF:24:LEU:HB3	2.46	0.51
30:BG:131:TYR:O	30:BG:159:VAL:HG12	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:86:GLU:HB2	31:BH:165:ALA:HB2	1.92	0.51
44:BY:91:GLU:C	44:BY:93:GLY:HA2	2.31	0.51
1:CA:232:G:H1'	1:CA:262:A:N1	2.25	0.51
1:CA:1225:A:N3	1:CA:1225:A:H2'	2.26	0.51
5:CE:41:VAL:HG23	5:CE:67:VAL:HG13	1.93	0.51
25:DA:271(J):C:O2'	25:DA:271(K):U:OP2	2.21	0.51
25:DA:328:U:H4'	44:DY:68:HIS:CD2	2.46	0.51
25:DA:1169:G:H2'	25:DA:1170:G:O4'	2.11	0.51
25:DA:1589:C:H2'	25:DA:1590:U:C6	2.46	0.51
25:DA:1668:A:H4'	25:DA:1669:A:O5'	2.10	0.51
25:DA:1788:C:OP1	27:DD:222:ARG:NH2	2.44	0.51
25:DA:2055:C:H5'	25:DA:2056:G:H5''	1.92	0.51
25:DA:2833:G:O2'	25:DA:2833:G:N3	2.43	0.51
26:DB:116:G:H8	26:DB:116:G:OP2	1.93	0.51
1:AA:165:C:H2'	1:AA:166:G:H8	1.76	0.51
1:AA:915:A:H3'	1:AA:916:G:H5''	1.92	0.51
1:AA:1055:A:C6	1:AA:1206:G:C5	2.98	0.51
1:AA:1293:G:O2'	1:AA:1294:G:H8	1.93	0.51
6:AF:3:ARG:HA	6:AF:65:VAL:O	2.11	0.51
6:AF:22:GLU:O	6:AF:26:ILE:HG13	2.11	0.51
23:AV:47:U:H5'	23:AV:48:C:O5'	2.11	0.51
25:BA:530:G:O4'	25:BA:530:G:N3	2.37	0.51
25:BA:1026:U:O2	25:BA:1026:U:H2'	2.10	0.51
25:BA:1948:G:N7	58:BA:4912:HOH:O	2.33	0.51
32:BI:124:GLY:H	32:BI:144:VAL:HG13	1.76	0.51
50:B4:25:TYR:CD1	50:B4:25:TYR:N	2.78	0.51
1:CA:191:G:N3	20:CT:103:GLY:HA2	2.26	0.51
1:CA:202:U:H5''	1:CA:203:U:H5	1.75	0.51
1:CA:418:C:H1'	1:CA:540:G:O2'	2.11	0.51
1:CA:475:G:H2'	1:CA:476:G:H8	1.75	0.51
1:CA:678:U:H2'	1:CA:679:C:C6	2.46	0.51
1:CA:734:G:H21	18:CR:75:ILE:HD11	1.75	0.51
2:CB:134:GLU:HA	2:CB:137:ARG:NE	2.26	0.51
14:CN:40:CYS:O	14:CN:43:CYS:HB3	2.11	0.51
25:DA:271(L):U:H4'	25:DA:271(M):G:H5'	1.92	0.51
25:DA:662:G:H5''	35:DP:16:ARG:HG2	1.93	0.51
25:DA:1694:C:H4'	25:DA:1695:G:O5'	2.11	0.51
26:DB:79:C:O5'	26:DB:79:C:H6	1.94	0.51
27:DD:68:LYS:O	27:DD:69:ARG:HB2	2.10	0.51
34:DO:15:GLY:O	34:DO:47:ILE:HG12	2.11	0.51
36:DQ:10:ARG:HG3	36:DQ:10:ARG:HH11	1.75	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DQ:114:ALA:O	36:DQ:118:LEU:HB2	2.11	0.51
1:AA:180:U:C2'	1:AA:181:G:H5'	2.41	0.50
1:AA:183:G:N2	1:AA:223:U:O2'	2.36	0.50
1:AA:195:A:H1'	1:AA:222:U:O2'	2.12	0.50
1:AA:232:G:H2'	1:AA:233:C:O4'	2.11	0.50
3:AC:134:ILE:HG22	3:AC:168:ALA:HB3	1.93	0.50
6:AF:35:ALA:HA	6:AF:67:MET:HB3	1.93	0.50
9:AI:43:ALA:HA	9:AI:45:ALA:HA	1.92	0.50
12:AL:92:ASP:O	12:AL:94:PRO:HD3	2.11	0.50
14:AN:21:TYR:OH	14:AN:23:ARG:NH2	2.39	0.50
25:BA:374:A:C2	25:BA:401:A:C4	2.99	0.50
25:BA:458:G:O2'	53:B7:39:ARG:HD3	2.11	0.50
25:BA:1945:G:H2'	25:BA:1946:U:H6	1.76	0.50
35:BP:101:VAL:HA	35:BP:106:LEU:O	2.10	0.50
55:B9:9:ARG:HB3	55:B9:14:CYS:HB2	1.91	0.50
1:CA:130:A:O2'	1:CA:131:C:O5'	2.26	0.50
1:CA:382:A:H2'	1:CA:383:A:C8	2.46	0.50
1:CA:811:C:H4'	1:CA:900:A:N6	2.25	0.50
1:CA:991:U:O4	1:CA:1212:U:O2'	2.29	0.50
2:CB:236:TYR:HA	2:CB:239:VAL:CG2	2.42	0.50
13:CM:68:GLY:H	13:CM:71:ARG:NH2	2.09	0.50
14:CN:23:ARG:HD3	14:CN:29:ARG:O	2.11	0.50
25:DA:1257:C:H4'	29:DF:83:PHE:CD2	2.45	0.50
25:DA:2357:U:OP1	46:D0:20:ARG:NH1	2.43	0.50
25:DA:2432:A:N1	47:D1:35:THR:HG22	2.25	0.50
25:DA:2821:A:OP2	25:DA:2822:G:OP2	2.29	0.50
26:DB:64:C:H2'	26:DB:65:C:C6	2.46	0.50
35:DP:48:PRO:O	54:D8:57:ARG:NH2	2.45	0.50
45:DZ:29:TYR:HA	45:DZ:33:LEU:O	2.12	0.50
1:AA:501:C:H2'	1:AA:502:G:C8	2.46	0.50
1:AA:834:C:H2'	1:AA:835:U:C6	2.45	0.50
1:AA:1084:G:C5	1:AA:1085:U:C4	3.00	0.50
1:AA:1401:G:C2	1:AA:1402:C:H1'	2.46	0.50
5:AE:92:LYS:O	5:AE:118:ILE:HG13	2.11	0.50
15:AO:32:LEU:O	15:AO:35:ARG:N	2.44	0.50
18:AR:32:ARG:HA	18:AR:69:THR:HG21	1.93	0.50
22:AY:34:SER:HB3	25:BA:2602:A:H61	1.75	0.50
25:BA:7:G:H2'	25:BA:8:A:C8	2.45	0.50
25:BA:61:G:H1	25:BA:94:C:H42	1.59	0.50
25:BA:531:C:H5'	58:BA:4026:HOH:O	2.11	0.50
25:BA:734:A:C4	25:BA:735:A:C8	2.99	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:88:ILE:HG22	32:BI:90:GLY:N	2.25	0.50
34:BO:17:ARG:HD3	34:BO:47:ILE:HG23	1.94	0.50
48:B2:51:ARG:O	48:B2:53:LEU:N	2.44	0.50
1:CA:767:A:H2'	1:CA:768:A:O4'	2.11	0.50
1:CA:1256:A:H4'	1:CA:1257:U:OP1	2.10	0.50
1:CA:1321:C:C5'	1:CA:1322:C:H5''	2.38	0.50
1:CA:1375:A:H4'	7:CG:29:LYS:NZ	2.26	0.50
1:CA:1496:C:H2'	1:CA:1497:G:O4'	2.10	0.50
1:CA:1513:A:H2'	1:CA:1514:C:H6	1.74	0.50
2:CB:24:TRP:CZ3	2:CB:29:ALA:HB2	2.46	0.50
23:CV:55:U:N3	23:CV:58:A:OP2	2.27	0.50
25:DA:718:A:H3'	25:DA:719:C:H6	1.76	0.50
25:DA:1446:C:H2'	25:DA:1447:G:H8	1.76	0.50
25:DA:1514:U:H2'	25:DA:1515:G:H8	1.76	0.50
25:DA:2562:U:H1'	34:DO:23:ARG:HH11	1.76	0.50
25:DA:2692:C:O2'	25:DA:2847:U:O2'	2.19	0.50
26:DB:32:C:O2	26:DB:50:G:N2	2.33	0.50
29:DF:8:GLN:OE1	29:DF:21:ALA:N	2.44	0.50
30:DG:15:VAL:HG12	30:DG:19:LEU:HG	1.92	0.50
45:DZ:124:ILE:HD11	45:DZ:165:VAL:HG21	1.93	0.50
1:AA:804:U:H5''	1:AA:805:C:OP2	2.12	0.50
6:AF:74:ASP:N	6:AF:74:ASP:OD2	2.43	0.50
25:BA:1188:U:H2'	25:BA:1189:A:H5'	1.93	0.50
25:BA:1889:A:N1	25:BA:2234:G:H1'	2.25	0.50
27:BD:139:GLY:H	27:BD:165:ILE:HB	1.74	0.50
32:BI:93:THR:O	32:BI:97:ILE:HG13	2.12	0.50
1:CA:437:U:H5''	4:CD:155:LEU:HD21	1.93	0.50
1:CA:1061:G:O2'	1:CA:1062:U:OP1	2.25	0.50
2:CB:166:ASP:O	2:CB:170:GLU:N	2.44	0.50
9:CI:21:PRO:HA	9:CI:59:PHE:HA	1.93	0.50
9:CI:45:ALA:HB3	9:CI:48:GLU:HB2	1.93	0.50
18:CR:61:LYS:O	18:CR:65:ILE:HG12	2.12	0.50
25:DA:27:G:N2	25:DA:512:G:H1'	2.26	0.50
25:DA:189:G:OP2	47:D1:39:LYS:NZ	2.45	0.50
25:DA:197:A:N6	25:DA:2430:A:H2'	2.25	0.50
25:DA:575:A:OP2	25:DA:2055:C:N4	2.31	0.50
25:DA:2302:G:N1	25:DA:2315:G:C6	2.80	0.50
25:DA:2399:G:H2'	25:DA:2400:G:O4'	2.11	0.50
25:DA:2789:C:H4'	25:DA:2790:A:OP1	2.12	0.50
29:DF:13:SER:HB2	29:DF:18:ARG:HE	1.76	0.50
30:DG:33:ARG:H	30:DG:162:THR:HG23	1.74	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DN:38:HIS:CE1	33:DN:39:ARG:HG3	2.46	0.50
45:DZ:153:SER:HB3	45:DZ:167:PRO:O	2.11	0.50
1:AA:666:G:C2	1:AA:741:G:C4	2.99	0.50
2:AB:178:ARG:NH1	2:AB:196:LEU:O	2.45	0.50
3:AC:141:VAL:HG11	3:AC:149:ALA:HB2	1.93	0.50
16:AP:21:VAL:O	16:AP:33:ILE:HG12	2.11	0.50
16:AP:60:LEU:HD11	16:AP:66:PRO:HD3	1.93	0.50
25:BA:819:A:C4	25:BA:1189:A:C2	2.98	0.50
25:BA:1156:A:N7	40:BU:51:LYS:HG2	2.26	0.50
25:BA:2420:C:H5'	52:B6:54:ILE:HD11	1.93	0.50
28:BE:10:GLY:C	39:BT:7:ILE:HD11	2.32	0.50
36:BQ:14:ARG:HG2	36:BQ:41:TRP:HH2	1.77	0.50
37:BR:2:ARG:HA	37:BR:5:LYS:HD2	1.94	0.50
42:BW:41:LYS:HD2	51:B5:25:LEU:HD21	1.94	0.50
54:B8:33:ASN:HA	54:B8:36:LYS:HD2	1.92	0.50
1:CA:622:A:C8	1:CA:623:C:C6	2.99	0.50
3:CC:11:ARG:HB3	3:CC:15:THR:H	1.76	0.50
15:CO:29:VAL:HG12	15:CO:85:LEU:HD13	1.94	0.50
23:CV:23:C:H2'	23:CV:24:U:C6	2.46	0.50
23:CV:75:C:H5''	23:CV:76:A:OP2	2.10	0.50
25:DA:1025:G:C5	25:DA:1135:C:H1'	2.47	0.50
25:DA:1747:G:H2'	25:DA:1747(A):G:H8	1.76	0.50
25:DA:2285:C:OP2	52:D6:6:ARG:NH1	2.42	0.50
25:DA:2673:G:O3'	34:DO:26:LYS:NZ	2.44	0.50
26:DB:89:G:H2'	26:DB:90:A:C8	2.46	0.50
27:DD:177:LEU:HD11	27:DD:183:ARG:HB2	1.93	0.50
28:DE:135:HIS:CD2	28:DE:135:HIS:N	2.79	0.50
36:DQ:32:TYR:HE2	36:DQ:133:ARG:HG3	1.76	0.50
41:DV:5:VAL:HG11	41:DV:57:VAL:CG2	2.41	0.50
45:DZ:43:GLU:O	45:DZ:47:VAL:HG23	2.11	0.50
1:AA:895:G:H2'	1:AA:896:C:C6	2.47	0.50
1:AA:1090:U:H2'	1:AA:1091:U:C6	2.45	0.50
3:AC:23:TYR:CD1	10:AJ:10:GLY:HA2	2.47	0.50
5:AE:12:LEU:HD11	5:AE:14:ARG:HB3	1.93	0.50
5:AE:137:GLU:O	5:AE:141:GLN:HG3	2.12	0.50
8:AH:51:VAL:HG11	8:AH:60:ARG:HD2	1.94	0.50
12:AL:82:VAL:HG23	12:AL:106:ASP:OD2	2.11	0.50
13:AM:69:GLU:C	13:AM:71:ARG:H	2.15	0.50
22:AY:9:ALA:CB	22:AY:10:ILE:HA	2.41	0.50
25:BA:13:A:N1	25:BA:525:U:H2'	2.26	0.50
25:BA:2700:C:C2'	25:BA:2701:C:H5'	2.41	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:106:GLY:HA3	32:BI:107:VAL:HG23	1.92	0.50
38:BS:96:GLY:N	38:BS:99:LYS:H	2.05	0.50
1:CA:49:U:O2	1:CA:362:G:H1'	2.11	0.50
1:CA:308:C:OP1	58:CA:2117:HOH:O	2.20	0.50
5:CE:12:LEU:HB3	5:CE:31:LEU:HB2	1.92	0.50
7:CG:10:ARG:HG2	7:CG:10:ARG:HH11	1.76	0.50
18:CR:31:LEU:HD11	18:CR:62:GLU:HB3	1.93	0.50
25:DA:1003:G:N2	25:DA:1153:C:C2	2.80	0.50
25:DA:1406:U:H2'	25:DA:1407:C:C6	2.46	0.50
25:DA:1803:A:H4'	27:DD:259:THR:CG2	2.41	0.50
28:DE:115:GLY:O	28:DE:119:ARG:HB2	2.12	0.50
42:DW:14:PRO:HG2	42:DW:78:GLU:HG2	1.93	0.50
42:DW:40:ASN:C	42:DW:41:LYS:HG2	2.31	0.50
1:AA:97:G:O2'	1:AA:98:G:H5''	2.11	0.50
1:AA:110:C:H2'	1:AA:111:G:O4'	2.12	0.50
1:AA:130:A:C8	17:AQ:63:ARG:HG3	2.46	0.50
1:AA:1216:G:H5''	14:AN:5:ALA:CB	2.41	0.50
2:AB:219:VAL:HA	2:AB:222:ILE:HD12	1.92	0.50
13:AM:82:MET:HA	13:AM:89:GLY:HA3	1.93	0.50
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.93	0.50
25:BA:895:U:H5'	25:BA:896:A:OP2	2.12	0.50
25:BA:1042:G:H5''	25:BA:1043:C:OP2	2.12	0.50
25:BA:1635:G:H5''	58:BA:5161:HOH:O	2.11	0.50
31:BH:3:ARG:HA	31:BH:3:ARG:HE	1.77	0.50
33:BN:96:GLU:CD	33:BN:96:GLU:H	2.15	0.50
46:B0:49:LYS:O	46:B0:50:ASN:HB2	2.11	0.50
1:CA:57:G:C6	1:CA:58:C:C4	3.00	0.50
1:CA:176:C:H2'	1:CA:177:C:H6	1.77	0.50
1:CA:186:C:H2'	1:CA:187:C:C6	2.47	0.50
1:CA:690:G:H2'	1:CA:691:G:O4'	2.10	0.50
1:CA:1279:A:H4'	1:CA:1280:A:OP1	2.12	0.50
1:CA:1286:A:H2'	1:CA:1287:A:H4'	1.94	0.50
16:CP:49:LEU:HD12	16:CP:50:LYS:H	1.75	0.50
25:DA:271(I):G:N2	25:DA:271(O):C:N3	2.46	0.50
25:DA:271(M):G:H4'	25:DA:271(N):U:OP1	2.10	0.50
25:DA:718:A:O5'	25:DA:718:A:H8	1.94	0.50
29:DF:184:TYR:HE1	35:DP:3:LEU:HD21	1.77	0.50
38:DS:105:ALA:O	38:DS:110:LEU:HB2	2.12	0.50
47:D1:86:SER:HB3	47:D1:89:GLU:HG2	1.94	0.50
1:AA:1184:G:H8	1:AA:1184:G:OP1	1.94	0.50
2:AB:111:ARG:HG2	2:AB:111:ARG:NH1	2.27	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:44:GLY:HA2	6:AF:59:TYR:CZ	2.47	0.50
7:AG:85:TYR:HD1	7:AG:154:TYR:CE1	2.30	0.50
16:AP:3:LYS:O	16:AP:21:VAL:HA	2.12	0.50
23:AV:45:G:H8	23:AV:45:G:O5'	1.95	0.50
27:BD:132:PRO:HA	27:BD:190:TYR:HA	1.94	0.50
28:BE:5:LEU:N	28:BE:5:LEU:HD23	2.26	0.50
28:BE:50:GLY:CA	28:BE:75:VAL:HG11	2.41	0.50
29:BF:25:PRO:HG2	29:BF:111:ALA:HB1	1.93	0.50
35:BP:75:ILE:CD1	35:BP:75:ILE:H	2.24	0.50
36:BQ:116:GLU:O	36:BQ:119:ARG:N	2.45	0.50
1:CA:685:G:C2	1:CA:686:U:C4	3.00	0.50
1:CA:1184:G:H2'	1:CA:1185:G:H5'	1.93	0.50
1:CA:1244:C:N4	1:CA:1293:G:H1	2.07	0.50
7:CG:12:LEU:H	7:CG:12:LEU:HD12	1.76	0.50
25:DA:973:A:H5'	25:DA:1188:U:H1'	1.93	0.50
25:DA:1313:U:H2'	25:DA:1610:A:N1	2.27	0.50
25:DA:1878:G:C6	25:DA:1879:C:C4	3.00	0.50
25:DA:2262:U:H4'	25:DA:2328:A:H2	1.76	0.50
25:DA:2879:C:OP2	58:DA:4348:HOH:O	2.18	0.50
27:DD:147:LEU:HD12	27:DD:155:LEU:HD21	1.93	0.50
28:DE:75:VAL:HG13	28:DE:77:ILE:H	1.76	0.50
29:DF:6:VAL:O	29:DF:22:ALA:HB3	2.12	0.50
37:DR:84:ALA:N	37:DR:85:PRO:HD2	2.27	0.50
38:DS:41:ASP:OD1	38:DS:43:GLU:HB2	2.11	0.50
45:DZ:21:ALA:O	45:DZ:23:LYS:N	2.45	0.50
1:AA:119:A:H4'	1:AA:120:A:O5'	2.11	0.50
1:AA:353:A:H8	1:AA:353:A:H5'	1.77	0.50
1:AA:474:G:H2'	1:AA:475:G:H8	1.77	0.50
1:AA:1124:G:N7	1:AA:1145:C:O2'	2.39	0.50
1:AA:1307:U:H2'	1:AA:1308:U:O4'	2.12	0.50
4:AD:146:ILE:H	4:AD:146:ILE:HD12	1.76	0.50
14:AN:43:CYS:O	14:AN:46:GLU:HB2	2.12	0.50
25:BA:311:A:OP2	58:BA:4641:HOH:O	2.20	0.50
25:BA:858:U:O2	25:BA:2268:A:H2'	2.12	0.50
25:BA:1045:A:H3'	25:BA:1045:A:N3	2.27	0.50
49:B3:6:VAL:CG1	49:B3:54:VAL:HG11	2.42	0.50
1:CA:411:A:O2'	1:CA:413:G:H5'	2.10	0.50
1:CA:757:U:H2'	1:CA:758:G:O4'	2.12	0.50
1:CA:790:A:H61	1:CA:1498:U:P	2.35	0.50
1:CA:840:C:H4'	1:CA:841:U:OP1	2.10	0.50
1:CA:900:A:H2'	1:CA:901:A:O4'	2.12	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1452:C:O2'	1:CA:1456:G:P	2.70	0.50
3:CC:43:LEU:O	3:CC:47:LEU:HB2	2.12	0.50
12:CL:40:VAL:HG21	12:CL:78:GLN:HA	1.93	0.50
25:DA:571:A:OP2	25:DA:2030:A:N6	2.44	0.50
25:DA:910:A:N7	36:DQ:12:GLN:HB2	2.27	0.50
27:DD:148:GLU:HB2	27:DD:151:LYS:HD3	1.93	0.50
49:D3:12:PRO:O	49:D3:15:TYR:HB2	2.11	0.50
52:D6:6:ARG:HG3	52:D6:6:ARG:O	2.12	0.50
1:AA:452:A:H4'	16:AP:72:ARG:NH1	2.27	0.50
1:AA:818:G:O2'	1:AA:819:A:H5'	2.12	0.50
1:AA:1071:C:H5''	5:AE:49:PRO:HG2	1.94	0.50
1:AA:1233:G:H2'	1:AA:1234:C:C6	2.46	0.50
1:AA:1483:A:HO2'	25:BA:1947:C:HO2'	1.58	0.50
2:AB:36:ARG:O	2:AB:39:ILE:N	2.33	0.50
2:AB:167:PRO:HG3	2:AB:188:ALA:CB	2.42	0.50
11:AK:29:ILE:HG23	11:AK:44:SER:HB3	1.94	0.50
25:BA:466:A:N3	25:BA:683:C:H1'	2.27	0.50
25:BA:631:A:H5''	25:BA:632:A:OP2	2.11	0.50
25:BA:848:G:H2'	25:BA:849:A:C8	2.47	0.50
25:BA:1243:G:O3'	35:BP:7:ARG:NH2	2.44	0.50
25:BA:1662:C:O2'	25:BA:1663:C:H5'	2.12	0.50
25:BA:2189:U:H2'	25:BA:2190:G:H8	1.77	0.50
30:BG:47:LYS:O	30:BG:82:LEU:HD22	2.12	0.50
40:BU:28:ARG:HH11	40:BU:38:THR:HG1	1.59	0.50
50:B4:16:CYS:SG	50:B4:17:GLY:N	2.85	0.50
1:CA:187:C:H2'	1:CA:188:C:H6	1.76	0.50
1:CA:903:G:OP1	58:CA:2057:HOH:O	2.20	0.50
1:CA:1137:C:H4'	1:CA:1138:G:C2	2.47	0.50
1:CA:1279:A:O2'	1:CA:1280:A:O5'	2.30	0.50
3:CC:150:LYS:HG3	3:CC:169:ALA:HB2	1.94	0.50
11:CK:33:THR:OG1	11:CK:34:ASP:O	2.30	0.50
12:CL:32:PHE:HE1	12:CL:86:ARG:HG3	1.76	0.50
25:DA:1006:C:C2	25:DA:1138:G:N2	2.80	0.50
25:DA:2103:C:O2	25:DA:2187:G:N1	2.45	0.50
25:DA:2473:U:O2	25:DA:2473:U:H2'	2.11	0.50
26:DB:9:G:OP1	38:DS:15:ARG:NH1	2.42	0.50
26:DB:49:C:OP1	38:DS:97:ARG:N	2.45	0.50
41:DV:74:LYS:HB2	41:DV:83:ARG:HB2	1.94	0.50
44:DY:98:VAL:HG23	44:DY:99:CYS:O	2.12	0.50
1:AA:142:G:C2	1:AA:143:A:C8	2.99	0.49
1:AA:186:C:H2'	1:AA:187:C:H6	1.73	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:504:C:OP1	58:AA:2048:HOH:O	2.19	0.49
1:AA:518:C:C5	1:AA:530:G:C8	3.00	0.49
1:AA:765:G:H5''	1:AA:766:A:OP1	2.11	0.49
1:AA:994:A:N3	1:AA:994:A:H2'	2.26	0.49
6:AF:36:ARG:HH11	6:AF:36:ARG:CG	2.25	0.49
7:AG:26:PHE:CD1	7:AG:62:PHE:HE1	2.30	0.49
7:AG:28:ASN:OD1	7:AG:36:LYS:NZ	2.45	0.49
12:AL:78:GLN:O	12:AL:81:SER:HB2	2.12	0.49
19:AS:31:ILE:HG23	19:AS:48:THR:O	2.12	0.49
25:BA:330:A:O2'	25:BA:331:A:H8	1.95	0.49
25:BA:866:A:O2'	25:BA:867:C:H5'	2.12	0.49
25:BA:1485:G:H1	25:BA:1504:C:H42	1.60	0.49
25:BA:2186:G:C3'	25:BA:2187:G:H5''	2.42	0.49
25:BA:2336:A:H61	46:B0:43:THR:CG2	2.22	0.49
25:BA:2787:C:H1'	28:BE:62:PRO:HG3	1.94	0.49
31:BH:7:LEU:HG	31:BH:69:ARG:NH1	2.26	0.49
32:BI:104:GLN:HG2	32:BI:105:HIS:HD2	1.76	0.49
45:BZ:140:ASP:OD2	45:BZ:142:SER:HB2	2.11	0.49
1:CA:21:G:H2'	1:CA:22:G:C8	2.46	0.49
1:CA:52:G:O2'	1:CA:53:A:H5'	2.12	0.49
1:CA:437:U:C5'	4:CD:155:LEU:HD21	2.42	0.49
1:CA:944:G:C2	1:CA:1340:A:C6	2.99	0.49
1:CA:1308:U:OP2	13:CM:99:ARG:HG3	2.12	0.49
2:CB:97:TRP:CZ2	2:CB:102:LEU:HD13	2.45	0.49
2:CB:198:ASP:OD2	2:CB:198:ASP:N	2.45	0.49
7:CG:140:ASP:O	7:CG:144:MET:N	2.45	0.49
10:CJ:45:ARG:HD3	10:CJ:65:LEU:HD23	1.94	0.49
25:DA:173:G:H2'	25:DA:174:C:C6	2.48	0.49
25:DA:848:G:C4	25:DA:933:A:H8	2.30	0.49
25:DA:1006:C:H1'	33:DN:106:MET:HB3	1.93	0.49
25:DA:1341:U:H1'	43:DX:55:ASN:HD22	1.76	0.49
25:DA:1709:U:H2'	25:DA:1710:C:C6	2.46	0.49
25:DA:2712:U:H1'	25:DA:2712(A):A:C8	2.47	0.49
27:DD:145:VAL:HG11	27:DD:175:LEU:HD11	1.94	0.49
28:DE:35:GLN:HB3	28:DE:48:GLN:HB3	1.93	0.49
32:DI:58:LEU:HD13	32:DI:59:ALA:HB2	1.94	0.49
33:DN:26:LEU:HD23	33:DN:60:ILE:HD11	1.92	0.49
37:DR:21:TYR:OH	37:DR:43:GLU:HG2	2.11	0.49
38:DS:96:GLY:H	38:DS:99:LYS:H	1.60	0.49
40:DU:72:HIS:ND1	40:DU:72:HIS:N	2.60	0.49
1:AA:60:A:H4'	1:AA:61:G:O5'	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:129(A):G:N2	1:AA:189(H):G:C5	2.80	0.49
1:AA:444:C:H2'	1:AA:445:G:C8	2.47	0.49
4:AD:88:VAL:O	4:AD:92:VAL:HG23	2.12	0.49
10:AJ:9:ARG:HB2	10:AJ:95:GLU:CB	2.37	0.49
10:AJ:13:HIS:HB3	10:AJ:68:HIS:NE2	2.27	0.49
15:AO:74:ASP:CG	15:AO:77:ARG:HD3	2.33	0.49
25:BA:795:C:H2'	25:BA:796:C:H6	1.76	0.49
25:BA:1183:G:H4'	49:B3:29:ARG:HH22	1.77	0.49
25:BA:1488:G:H5''	25:BA:1488:G:C8	2.47	0.49
25:BA:1503:U:H2'	25:BA:1504:C:C6	2.46	0.49
25:BA:2203:U:O4'	27:BD:151:LYS:HE2	2.12	0.49
28:BE:137:HIS:HD1	28:BE:138:PRO:HD2	1.76	0.49
40:BU:108:GLU:O	40:BU:111:GLU:N	2.45	0.49
49:B3:6:VAL:HG12	49:B3:54:VAL:CG1	2.42	0.49
55:B9:27:CYS:SG	55:B9:28:GLU:N	2.85	0.49
1:CA:872:A:O2'	1:CA:873:A:H5''	2.11	0.49
1:CA:959:A:O2'	1:CA:984:C:O2'	2.30	0.49
1:CA:1095:U:H2'	1:CA:1096:C:O4'	2.11	0.49
2:CB:69:LEU:HD13	2:CB:91:PRO:HB2	1.94	0.49
7:CG:27:ILE:HD11	7:CG:43:PHE:HD2	1.77	0.49
9:CI:26:VAL:O	9:CI:32:ASP:HA	2.12	0.49
13:CM:69:GLU:C	13:CM:71:ARG:H	2.16	0.49
25:DA:294:A:H2'	25:DA:295:G:O4'	2.12	0.49
25:DA:579:G:H2'	25:DA:580:C:H6	1.77	0.49
25:DA:631:A:OP2	54:D8:47:LYS:NZ	2.34	0.49
25:DA:1300:U:H4'	25:DA:1301:A:H5''	1.94	0.49
25:DA:1540:U:H2'	25:DA:1541:G:O4'	2.12	0.49
25:DA:2331:G:N3	25:DA:2336:A:H2	2.10	0.49
29:DF:158:THR:HG21	29:DF:163:VAL:HG11	1.94	0.49
40:DU:49:HIS:HA	40:DU:52:ARG:HB3	1.94	0.49
40:DU:76:TYR:O	40:DU:80:ILE:HG12	2.12	0.49
1:AA:104:G:O6	20:AT:14:LYS:NZ	2.44	0.49
1:AA:324:G:N2	1:AA:327:A:C8	2.80	0.49
1:AA:428:G:O4'	1:AA:430:A:C8	2.65	0.49
4:AD:65:ARG:HG2	4:AD:75:PHE:CD1	2.47	0.49
25:BA:1322:A:H2'	25:BA:1323:U:H6	1.77	0.49
25:BA:2052:G:O4'	28:BE:142:GLY:HA3	2.12	0.49
25:BA:2507:C:C2	25:BA:2508:G:C8	3.00	0.49
33:BN:54:VAL:HG12	33:BN:55:VAL:N	2.27	0.49
33:BN:85:ILE:HG22	33:BN:86:PRO:HD2	1.95	0.49
33:BN:104:LYS:HB2	33:BN:117:PHE:CE1	2.47	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:75:ILE:H	35:BP:75:ILE:HD12	1.77	0.49
42:BW:80:PRO:O	42:BW:100:THR:HB	2.13	0.49
1:CA:991:U:H4'	1:CA:992:U:O5'	2.12	0.49
1:CA:1190:G:OP1	3:CC:5:ILE:N	2.30	0.49
1:CA:1268:A:O2'	1:CA:1269:A:O5'	2.30	0.49
1:CA:1352:C:H42	1:CA:1370:G:H1	1.61	0.49
3:CC:18:TRP:HD1	14:CN:54:PRO:HA	1.74	0.49
3:CC:52:LEU:HD21	3:CC:55:VAL:HG22	1.94	0.49
8:CH:12:ARG:HH21	8:CH:26:VAL:HA	1.78	0.49
25:DA:539:G:H2'	25:DA:540:C:C6	2.47	0.49
25:DA:1239:G:H2'	25:DA:1240:U:O4'	2.12	0.49
27:DD:52:ARG:HB2	27:DD:53:PHE:CD2	2.47	0.49
28:DE:54:GLN:HB2	28:DE:76:ARG:HB3	1.94	0.49
32:DI:4:ILE:HG12	32:DI:18:VAL:HG22	1.95	0.49
36:DQ:55:VAL:HG12	36:DQ:64:ILE:HD12	1.95	0.49
41:DV:20:LEU:O	41:DV:93:GLU:HG2	2.12	0.49
41:DV:52:VAL:CG2	41:DV:55:ALA:HB3	2.42	0.49
1:AA:407:G:O2'	4:AD:116:GLN:HG3	2.11	0.49
1:AA:731:G:OP1	1:AA:766:A:H1'	2.13	0.49
1:AA:812:C:OP1	1:AA:903:G:H1'	2.12	0.49
1:AA:1218:C:OP2	14:AN:9:LYS:NZ	2.32	0.49
1:AA:1282:C:OP2	1:AA:1282:C:H6	1.96	0.49
2:AB:21:ARG:HH11	2:AB:21:ARG:H	1.60	0.49
4:AD:127:THR:OG1	4:AD:128:VAL:N	2.44	0.49
19:AS:33:THR:OG1	19:AS:34:TRP:N	2.45	0.49
23:AV:3:C:H5'	25:BA:2255:G:O2'	2.13	0.49
25:BA:652(P):G:H1'	25:BA:652(Q):G:C8	2.47	0.49
25:BA:2485:G:OP1	36:BQ:46:GLN:NE2	2.45	0.49
34:BO:64:ARG:HG2	34:BO:79:PHE:CD2	2.48	0.49
36:BQ:116:GLU:OE1	36:BQ:116:GLU:HA	2.12	0.49
51:B5:8:LYS:O	51:B5:9:LYS:HG2	2.13	0.49
1:CA:180:U:H2'	1:CA:181:G:H5'	1.94	0.49
1:CA:376:G:O3'	16:CP:5:ARG:HD2	2.13	0.49
1:CA:920:U:H2'	1:CA:921:U:H6	1.72	0.49
11:CK:105:VAL:HG23	11:CK:105:VAL:O	2.13	0.49
17:CQ:66:SER:OG	17:CQ:67:LYS:O	2.28	0.49
20:CT:10:LEU:HG	20:CT:12:ALA:H	1.76	0.49
25:DA:588:U:H2'	25:DA:589:C:C6	2.48	0.49
25:DA:667:U:H2'	25:DA:668:G:O4'	2.13	0.49
25:DA:900:A:H2'	25:DA:901:A:O4'	2.13	0.49
25:DA:2439:A:H1'	25:DA:2587:A:OP1	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DB:20:C:H2'	26:DB:21:G:H5'	1.94	0.49
28:DE:47:VAL:HG12	28:DE:49:LEU:HD13	1.94	0.49
31:DH:9:ILE:HD12	31:DH:72:ILE:HG22	1.94	0.49
34:DO:115:VAL:HG12	34:DO:121:VAL:HG21	1.94	0.49
41:DV:5:VAL:HG12	41:DV:37:VAL:HG22	1.94	0.49
46:D0:52:GLY:O	46:D0:59:LEU:HA	2.11	0.49
48:D2:44:LEU:HD23	48:D2:45:SER:O	2.13	0.49
49:D3:5:LYS:HE2	49:D3:57:GLU:HG3	1.95	0.49
52:D6:16:CYS:HB2	52:D6:18:ARG:HH11	1.78	0.49
1:AA:60:A:P	1:AA:60:A:H8	2.36	0.49
1:AA:453:A:C6	1:AA:454:C:N4	2.80	0.49
1:AA:946:A:H2'	1:AA:947:G:C8	2.47	0.49
1:AA:1495:U:O2'	25:BA:1919:A:N1	2.43	0.49
1:AA:1531:A:H2'	1:AA:1532:U:O4'	2.13	0.49
4:AD:152:SER:O	4:AD:154:ASN:N	2.46	0.49
25:BA:376:C:H2'	25:BA:377:C:C6	2.47	0.49
25:BA:1472:A:H2'	25:BA:1473:G:H8	1.77	0.49
25:BA:1503:U:H2'	25:BA:1504:C:H6	1.77	0.49
25:BA:2220:G:N7	58:BA:4113:HOH:O	2.35	0.49
27:BD:136:ILE:O	27:BD:168:ARG:NH2	2.46	0.49
29:BF:150:GLY:HA2	29:BF:172:TRP:CE3	2.47	0.49
1:CA:551:U:H5'	12:CL:119:LYS:HE2	1.95	0.49
1:CA:1423:G:H2'	1:CA:1424:C:H6	1.76	0.49
2:CB:82:ARG:HG3	2:CB:92:TYR:CZ	2.48	0.49
3:CC:30:ARG:HH21	14:CN:38:GLY:HA2	1.76	0.49
8:CH:12:ARG:HH21	8:CH:27:PRO:HD3	1.73	0.49
9:CI:83:ARG:O	9:CI:86:VAL:HG22	2.12	0.49
10:CJ:55:LYS:H	10:CJ:56:HIS:CD2	2.30	0.49
25:DA:1252:G:O4'	40:DU:33:ARG:HD3	2.12	0.49
25:DA:2307:G:H4'	25:DA:2308:G:C5'	2.40	0.49
25:DA:2716:U:O2'	25:DA:2717:G:H5'	2.13	0.49
27:DD:239:ARG:HG3	27:DD:239:ARG:O	2.11	0.49
28:DE:4:ILE:HG12	28:DE:5:LEU:N	2.27	0.49
29:DF:188:ARG:HA	35:DP:3:LEU:HD11	1.95	0.49
31:DH:7:LEU:HB3	31:DH:69:ARG:NH1	2.26	0.49
36:DQ:55:VAL:HG12	36:DQ:64:ILE:CD1	2.42	0.49
38:DS:7:TYR:HA	38:DS:10:ARG:HH12	1.76	0.49
55:D9:30:PRO:O	55:D9:33:LYS:HB2	2.13	0.49
1:AA:115:G:H1	1:AA:312:C:H42	1.59	0.49
1:AA:618:C:N3	1:AA:622:A:N6	2.60	0.49
1:AA:1179:A:H2'	1:AA:1180:A:O4'	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:158:ILE:O	4:AD:162:LEU:HB2	2.13	0.49
7:AG:145:ALA:O	7:AG:147:ALA:N	2.46	0.49
11:AK:73:MET:HG3	11:AK:103:LEU:HD21	1.95	0.49
19:AS:70:LYS:N	19:AS:70:LYS:HD2	2.27	0.49
25:BA:729:G:C5	27:BD:208:LYS:HB2	2.47	0.49
25:BA:861:A:H2'	25:BA:862:G:O4'	2.12	0.49
25:BA:1049:C:O2	25:BA:1050:A:N7	2.46	0.49
25:BA:1289:C:H2'	25:BA:1290:C:C6	2.47	0.49
25:BA:1429:G:H2'	25:BA:1430:C:C6	2.47	0.49
25:BA:1587:A:H2'	25:BA:1588:C:C6	2.47	0.49
25:BA:1641:A:H2'	25:BA:1642:G:O4'	2.13	0.49
27:BD:112:GLN:O	27:BD:115:GLN:HG2	2.12	0.49
33:BN:56:ASN:N	33:BN:125:GLY:HA3	2.13	0.49
33:BN:58:ASP:N	33:BN:58:ASP:OD1	2.44	0.49
34:BO:35:VAL:HG11	34:BO:103:ALA:CB	2.42	0.49
45:BZ:104:PHE:HB3	45:BZ:141:VAL:HG21	1.95	0.49
8:CH:13:ILE:O	8:CH:17:THR:HG23	2.12	0.49
14:CN:27:CYS:HG	14:CN:43:CYS:HG	1.55	0.49
16:CP:28:ARG:HG2	16:CP:28:ARG:NH1	2.25	0.49
19:CS:62:ILE:HG23	19:CS:66:MET:HG3	1.94	0.49
23:CV:53:G:H2'	23:CV:54:U:C6	2.47	0.49
25:DA:19:C:H2'	25:DA:20:C:C6	2.43	0.49
25:DA:1019:U:O2'	25:DA:1021:A:H2	1.94	0.49
25:DA:1022:G:C6	25:DA:1140:C:C4	3.00	0.49
25:DA:1319:G:H8	25:DA:1319:G:H5''	1.78	0.49
25:DA:2465:C:O2	25:DA:2486:G:C2	2.65	0.49
26:DB:105:A:OP1	45:DZ:72:ARG:NH1	2.46	0.49
27:DD:120:GLY:O	27:DD:131:LEU:HG	2.13	0.49
29:DF:39:TRP:CH2	29:DF:106:ARG:HD3	2.47	0.49
43:DX:5:TYR:CE2	48:D2:30:ARG:HB2	2.48	0.49
44:DY:43:ASN:OD1	44:DY:65:ALA:HB3	2.12	0.49
48:D2:46:GLN:O	48:D2:49:LYS:HG3	2.13	0.49
1:AA:880:C:OP1	12:AL:8:ASN:ND2	2.45	0.49
8:AH:4:ASP:OD1	8:AH:85:ARG:NH1	2.46	0.49
17:AQ:18:THR:HG23	17:AQ:69:LYS:NZ	2.27	0.49
20:AT:38:LYS:HA	20:AT:41:ILE:HG13	1.94	0.49
25:BA:1188:U:O2'	25:BA:1189:A:H5'	2.12	0.49
25:BA:1839:G:N7	25:BA:1927:A:H1'	2.27	0.49
25:BA:1994:C:O2'	25:BA:1995:U:H5'	2.13	0.49
25:BA:2319:G:H22	38:BS:3:ARG:HA	1.76	0.49
48:B2:50:ILE:O	48:B2:51:ARG:HB2	2.12	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:B4:42:PHE:CA	50:B4:43:TYR:HB2	2.43	0.49
1:CA:722:A:H5'	1:CA:723:U:OP2	2.13	0.49
1:CA:977:A:O2'	1:CA:981:U:N3	2.45	0.49
1:CA:1157:A:H62	1:CA:1177:G:N2	2.10	0.49
2:CB:20:GLU:O	2:CB:40:HIS:HB2	2.11	0.49
2:CB:80:ILE:HG12	2:CB:211:ILE:HG22	1.93	0.49
2:CB:83:MET:SD	2:CB:234:PRO:HB2	2.52	0.49
2:CB:174:VAL:O	2:CB:178:ARG:HG3	2.13	0.49
2:CB:189:ASP:N	2:CB:189:ASP:OD1	2.45	0.49
25:DA:2550:G:C5	25:DA:2551:C:C5	3.01	0.49
29:DF:178:PRO:HB2	29:DF:201:VAL:HG22	1.94	0.49
31:DH:69:ARG:HG3	31:DH:70:THR:N	2.27	0.49
34:DO:114:ILE:O	34:DO:117:LEU:N	2.45	0.49
38:DS:35:ILE:HD11	38:DS:101:LEU:HD12	1.93	0.49
48:D2:45:SER:O	48:D2:46:GLN:HB2	2.13	0.49
1:AA:445:G:C2	1:AA:446:G:C4	3.00	0.49
1:AA:1127:G:C2'	1:AA:1128:C:H5'	2.43	0.49
3:AC:121:ALA:O	3:AC:125:GLU:HG3	2.11	0.49
16:AP:61:SER:OG	16:AP:62:VAL:N	2.45	0.49
19:AS:36:ARG:HB3	19:AS:72:GLY:HA3	1.94	0.49
25:BA:1163:G:C2	25:BA:1164:G:C8	3.01	0.49
43:BX:63:LYS:O	43:BX:64:LYS:HG2	2.13	0.49
48:B2:29:LYS:HD3	48:B2:57:ILE:HG21	1.95	0.49
1:CA:1112:C:H2'	1:CA:1113:C:H5'	1.94	0.49
1:CA:1245:A:H61	1:CA:1292:U:H3	1.61	0.49
1:CA:1378:C:H5	1:CA:1379:G:N9	2.10	0.49
2:CB:153:ARG:HG3	2:CB:154:LEU:N	2.28	0.49
3:CC:78:GLY:HA3	3:CC:83:ARG:H	1.76	0.49
5:CE:100:VAL:O	5:CE:107:ARG:NH2	2.45	0.49
12:CL:33:ARG:HG2	12:CL:60:LEU:HG	1.93	0.49
25:DA:637:A:C8	35:DP:117:GLU:HG3	2.45	0.49
25:DA:998:C:P	40:DU:92:ARG:HH22	2.36	0.49
25:DA:1357:U:H2'	25:DA:1358:G:C8	2.48	0.49
25:DA:1789:A:H5''	27:DD:220:HIS:O	2.13	0.49
27:DD:78:LYS:HE2	27:DD:114:GLY:HA2	1.93	0.49
27:DD:218:ARG:HB3	27:DD:219:PRO:HD2	1.95	0.49
28:DE:132:HIS:CD2	58:DE:410:HOH:O	2.65	0.49
29:DF:167:ALA:HB1	29:DF:173:VAL:HG11	1.95	0.49
30:DG:28:VAL:O	30:DG:31:VAL:HG13	2.11	0.49
36:DQ:108:GLY:HA3	45:DZ:116:VAL:HG11	1.95	0.49
1:AA:124:G:H4'	1:AA:291:C:O2'	2.13	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:237:C:H5''	17:AQ:25:ARG:NE	2.28	0.49
1:AA:254:G:OP1	17:AQ:67:LYS:O	2.31	0.49
1:AA:347:G:C6	1:AA:348:G:C8	3.00	0.49
1:AA:539:A:H2'	1:AA:540:G:H8	1.76	0.49
1:AA:939:G:H5''	7:AG:102:ARG:NH1	2.28	0.49
1:AA:1048:G:OP1	14:AN:3:ARG:HB3	2.13	0.49
1:AA:1233:G:H2'	1:AA:1234:C:H6	1.78	0.49
8:AH:34:GLU:OE1	8:AH:37:ARG:NH1	2.45	0.49
8:AH:53:VAL:HG12	8:AH:54:ASP:OD2	2.13	0.49
25:BA:700:G:OP2	58:BA:5149:HOH:O	2.20	0.49
25:BA:1168:G:H2'	25:BA:1169:G:O4'	2.13	0.49
25:BA:2100:G:C6	25:BA:2190:G:C6	3.00	0.49
25:BA:2286:A:H4'	25:BA:2287:A:O5'	2.12	0.49
29:BF:123:LEU:HD21	29:BF:199:TRP:HZ3	1.78	0.49
32:BI:27:ARG:HD3	47:B1:71:TYR:CE1	2.48	0.49
54:B8:29:LYS:NZ	54:B8:45:GLY:HA2	2.27	0.49
1:CA:434:U:H2'	1:CA:435:C:H6	1.77	0.49
1:CA:1182:G:H4'	1:CA:1183:A:H3'	1.95	0.49
1:CA:1281:U:H5''	1:CA:1282:C:OP2	2.13	0.49
1:CA:1360:A:H2'	1:CA:1361:G:O4'	2.13	0.49
8:CH:51:VAL:HG11	8:CH:60:ARG:NH1	2.28	0.49
11:CK:23:ALA:O	11:CK:86:GLY:HA3	2.12	0.49
14:CN:23:ARG:HG3	14:CN:24:CYS:N	2.26	0.49
18:CR:65:ILE:O	18:CR:69:THR:HG23	2.13	0.49
25:DA:12:U:O2	25:DA:12:U:H2'	2.12	0.49
25:DA:38:A:H2'	25:DA:39:C:C6	2.48	0.49
25:DA:321:G:C5	25:DA:341:G:H4'	2.47	0.49
25:DA:2801(A):A:H5''	25:DA:2802:G:H5'	1.93	0.49
26:DB:2:C:O2'	26:DB:3:C:H5'	2.12	0.49
28:DE:200:GLU:HG3	28:DE:201:THR:H	1.78	0.49
29:DF:17:ARG:HG3	29:DF:18:ARG:H	1.78	0.49
32:DI:14:ASP:N	32:DI:17:GLN:OE1	2.44	0.49
51:D5:29:THR:O	51:D5:30:LEU:HD23	2.13	0.49
1:AA:373:A:C2	1:AA:374:A:C8	3.00	0.49
1:AA:391:G:O3'	16:AP:8:ARG:NH2	2.44	0.49
5:AE:77:PRO:HD2	5:AE:142:LEU:HD22	1.93	0.49
14:AN:27:CYS:O	14:AN:29:ARG:N	2.46	0.49
25:BA:330:A:O2'	25:BA:331:A:C8	2.66	0.49
25:BA:384:U:H2'	25:BA:385:C:H6	1.77	0.49
25:BA:468:G:N7	53:B7:39:ARG:NH2	2.57	0.49
25:BA:580:C:H2'	25:BA:581:C:H6	1.77	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:787:U:H5''	25:BA:788:A:H5'	1.95	0.49
25:BA:2287:A:C4	25:BA:2289:G:C8	3.00	0.49
25:BA:2463:C:C2'	25:BA:2464:C:H5'	2.43	0.49
31:BH:94:TYR:CE1	31:BH:108:GLY:N	2.80	0.49
41:BV:98:GLU:OE1	41:BV:100:ARG:HD3	2.13	0.49
1:CA:376:G:H5''	16:CP:5:ARG:HB2	1.94	0.49
1:CA:588:G:H2'	1:CA:588:G:N3	2.27	0.49
1:CA:1169:A:H2'	1:CA:1170:A:C8	2.48	0.49
2:CB:84:GLU:OE1	2:CB:87:ARG:NH1	2.46	0.49
3:CC:70:VAL:O	3:CC:106:VAL:N	2.40	0.49
23:CV:9:G:O2'	23:CV:10:G:N7	2.35	0.49
25:DA:1154:G:H8	25:DA:1154:G:O5'	1.95	0.49
25:DA:1339:G:N2	25:DA:1603:A:H1'	2.27	0.49
25:DA:1450(A):C:N4	25:DA:1451:C:H41	2.11	0.49
25:DA:2319:G:O4'	25:DA:2319:G:N3	2.45	0.49
32:DI:38:LEU:O	32:DI:43:ASN:ND2	2.46	0.49
37:DR:94:TYR:CD2	37:DR:94:TYR:N	2.79	0.49
1:AA:254:G:H1'	17:AQ:15:MET:HB3	1.95	0.48
1:AA:447:G:O6	1:AA:485:G:O2'	2.27	0.48
1:AA:473:G:H2'	1:AA:474:G:C8	2.44	0.48
1:AA:616:G:C2	1:AA:617:G:N7	2.81	0.48
1:AA:943:U:C2'	1:AA:944:G:H5'	2.43	0.48
1:AA:952:U:O2'	1:AA:953:G:H5'	2.13	0.48
13:AM:50:GLU:HA	13:AM:53:VAL:CG2	2.43	0.48
16:AP:20:VAL:HG23	16:AP:35:LYS:HA	1.94	0.48
25:BA:911:A:H2'	36:BQ:9:TYR:OH	2.13	0.48
25:BA:1021:A:H3'	25:BA:1021:A:H8	1.75	0.48
25:BA:1168:G:H1	25:BA:1181:C:N4	2.11	0.48
25:BA:1815:A:C5	25:BA:1817:G:C6	3.01	0.48
25:BA:2729:G:O2'	28:BE:170:LEU:HD11	2.13	0.48
25:BA:2741:A:OP1	55:B9:22:ARG:NH2	2.31	0.48
27:BD:108:PRO:HB3	27:BD:143:HIS:HE1	1.76	0.48
36:BQ:67:ARG:HD2	36:BQ:105:GLU:OE1	2.13	0.48
37:BR:103:ARG:HG2	37:BR:103:ARG:NH1	2.28	0.48
43:BX:60:ARG:HH21	53:B7:47:ARG:NH2	2.11	0.48
1:CA:377:G:H1	1:CA:386:C:N4	1.96	0.48
1:CA:927:G:N2	1:CA:1391:U:H1'	2.27	0.48
1:CA:1161:C:H2'	1:CA:1162:C:C6	2.48	0.48
4:CD:38:TYR:CE1	4:CD:45:GLN:HG3	2.48	0.48
12:CL:6:THR:O	12:CL:9:GLN:HB2	2.13	0.48
25:DA:776:G:H4'	25:DA:777:A:O5'	2.12	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1001:A:H2'	25:DA:1002:G:O4'	2.13	0.48
25:DA:1005:C:C2	25:DA:1143:A:C5	3.01	0.48
25:DA:1019:U:H2'	25:DA:1020:A:H8	1.78	0.48
25:DA:2261:C:C5	46:D0:16:SER:HB3	2.48	0.48
27:DD:68:LYS:C	27:DD:70:TRP:H	2.15	0.48
28:DE:67:PHE:HB3	28:DE:72:VAL:O	2.12	0.48
31:DH:153:LYS:HG3	31:DH:154:PRO:HD2	1.94	0.48
32:DI:123:LEU:HA	32:DI:144:VAL:HG13	1.95	0.48
35:DP:143:GLY:O	35:DP:145:PRO:HD3	2.13	0.48
39:DT:53:ARG:HH11	39:DT:60:THR:HG23	1.77	0.48
40:DU:76:TYR:OH	40:DU:92:ARG:NH1	2.40	0.48
1:AA:40:C:H2'	1:AA:41:G:H8	1.78	0.48
1:AA:1138:G:C5	1:AA:1140:C:H1'	2.48	0.48
1:AA:1531:A:H2'	1:AA:1532:U:C1'	2.43	0.48
2:AB:97:TRP:CH2	2:AB:173:ALA:HA	2.49	0.48
4:AD:142:PRO:HG3	4:AD:185:PHE:CE2	2.48	0.48
6:AF:70:ASP:OD2	6:AF:71:ARG:HG3	2.13	0.48
10:AJ:39:PRO:HA	10:AJ:70:ARG:HD3	1.95	0.48
11:AK:99:GLN:HG3	11:AK:105:VAL:HG11	1.95	0.48
17:AQ:21:VAL:HG21	17:AQ:59:ILE:HG21	1.95	0.48
22:AY:103:LYS:HB3	25:BA:1915:U:H4'	1.95	0.48
25:BA:588:U:H2'	25:BA:589:C:C6	2.47	0.48
25:BA:764:A:OP1	27:BD:208:LYS:HE2	2.13	0.48
25:BA:2609:U:OP1	25:BA:2609:U:H4'	2.11	0.48
27:BD:274:ARG:CB	27:BD:275:LYS:HB2	2.43	0.48
28:BE:82:ARG:HG2	28:BE:83:ASP:H	1.77	0.48
34:BO:64:ARG:HG2	34:BO:79:PHE:CG	2.48	0.48
39:BT:15:VAL:HG12	39:BT:16:ARG:N	2.28	0.48
50:B4:42:PHE:N	50:B4:43:TYR:HB2	2.28	0.48
1:CA:1227:A:C8	1:CA:1227:A:C3'	2.95	0.48
1:CA:1362:C:H2'	1:CA:1363:C:H5''	1.95	0.48
1:CA:1378:C:C5	1:CA:1379:G:C8	3.01	0.48
5:CE:50:GLU:HB2	5:CE:53:LEU:HD13	1.95	0.48
7:CG:109:ASN:O	7:CG:110:GLN:NE2	2.46	0.48
17:CQ:6:LEU:HB3	17:CQ:23:VAL:HG11	1.95	0.48
17:CQ:7:THR:HG23	17:CQ:58:GLU:HG3	1.96	0.48
25:DA:1141:U:P	33:DN:25:ARG:HH11	2.36	0.48
25:DA:1494:A:H2'	25:DA:1495:A:C8	2.48	0.48
25:DA:1859:A:C2	25:DA:1884:A:H1'	2.48	0.48
25:DA:1936:A:H2'	25:DA:1945:G:O6	2.14	0.48
25:DA:1963:U:H4'	25:DA:1964:G:OP1	2.13	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:DG:33:ARG:HE	30:DG:33:ARG:HB2	1.46	0.48
31:DH:26:VAL:HG12	31:DH:79:VAL:HG21	1.95	0.48
44:DY:79:CYS:HB2	44:DY:81:LYS:H	1.77	0.48
45:DZ:30:ASN:N	45:DZ:33:LEU:O	2.38	0.48
1:AA:1148:U:H2'	1:AA:1149:C:O4'	2.13	0.48
2:AB:74:LYS:C	2:AB:76:GLN:H	2.16	0.48
13:AM:22:ILE:HG23	13:AM:67:GLU:HG3	1.95	0.48
25:BA:30:G:O2'	25:BA:1214:A:N3	2.41	0.48
25:BA:1045:A:H1'	25:BA:1047:G:N3	2.28	0.48
25:BA:1048:A:H1'	25:BA:1049:C:H2'	1.95	0.48
25:BA:1049:C:O2'	25:BA:1050:A:C8	2.67	0.48
52:B6:47:THR:HG22	52:B6:48:VAL:N	2.28	0.48
1:CA:978:A:H5''	1:CA:979:C:OP2	2.12	0.48
1:CA:1142:G:H3'	1:CA:1143:G:H8	1.77	0.48
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.48	0.48
4:CD:107:ARG:HB3	4:CD:174:LEU:HD11	1.95	0.48
4:CD:117:ALA:O	4:CD:121:VAL:HG23	2.12	0.48
5:CE:36:ASP:O	5:CE:37:ARG:HB2	2.12	0.48
17:CQ:68:ARG:H	17:CQ:70:ARG:NH1	2.11	0.48
23:CV:49:G:C2'	23:CV:50:U:H5'	2.44	0.48
25:DA:673:C:H5''	29:DF:81:PRO:HD2	1.94	0.48
26:DB:66:A:H61	26:DB:109:C:H5''	1.77	0.48
48:D2:9:GLN:HE22	48:D2:56:GLN:HB3	1.78	0.48
1:AA:321:A:N7	1:AA:328:C:O2'	2.41	0.48
1:AA:837:G:N7	58:AA:2311:HOH:O	2.35	0.48
1:AA:1164:G:O2'	1:AA:1165:C:H5'	2.13	0.48
2:AB:118:LEU:HD11	2:AB:141:GLU:HB3	1.94	0.48
5:AE:126:ARG:HH11	5:AE:126:ARG:CG	2.26	0.48
8:AH:7:ALA:HB2	8:AH:85:ARG:HD2	1.95	0.48
17:AQ:62:SER:HB3	17:AQ:72:ARG:HE	1.79	0.48
22:AY:69:VAL:HG12	22:AY:71:VAL:HG22	1.94	0.48
22:AY:113:ALA:O	22:AY:117:ARG:HG3	2.13	0.48
25:BA:831:G:O2'	35:BP:38:GLN:HG2	2.13	0.48
25:BA:1031:G:H21	55:B9:36:GLN:HE22	1.61	0.48
25:BA:1651:G:OP1	37:BR:40:LYS:HE3	2.13	0.48
25:BA:2784:C:H1'	28:BE:37:ARG:HH12	1.78	0.48
45:BZ:61:LEU:HD23	45:BZ:67:LEU:HD23	1.95	0.48
1:CA:1226:C:OP2	13:CM:103:THR:OG1	2.21	0.48
2:CB:212:GLN:O	2:CB:216:SER:OG	2.26	0.48
5:CE:80:ILE:CD1	5:CE:91:LEU:HB2	2.43	0.48
13:CM:65:LYS:HA	13:CM:66:LEU:CB	2.44	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:65:LYS:HA	13:CM:66:LEU:CG	2.44	0.48
25:DA:659:C:H4'	29:DF:100:THR:O	2.12	0.48
25:DA:660:G:H5'	29:DF:99:TYR:CE2	2.48	0.48
25:DA:898:C:H2'	25:DA:899:A:O4'	2.13	0.48
25:DA:2102:U:O2	25:DA:2187:G:O6	2.31	0.48
25:DA:2575:C:H2'	25:DA:2578:G:O6	2.12	0.48
25:DA:2805:G:H2'	25:DA:2807:G:O4'	2.13	0.48
25:DA:2884:U:O2	51:D5:53:ALA:HB2	2.13	0.48
25:DA:2887:U:H2'	25:DA:2888:C:H6	1.79	0.48
28:DE:24:THR:HG22	28:DE:186:GLY:O	2.13	0.48
33:DN:18:ALA:HB1	33:DN:60:ILE:HD13	1.94	0.48
38:DS:26:LEU:HA	38:DS:39:ILE:HD13	1.95	0.48
38:DS:101:LEU:HD22	38:DS:102:ALA:HB2	1.94	0.48
39:DT:91:ARG:HD2	39:DT:120:ARG:NH1	2.29	0.48
40:DU:104:GLN:OE1	40:DU:105:VAL:HG23	2.13	0.48
45:DZ:34:ASN:O	45:DZ:35:ARG:HD2	2.13	0.48
45:DZ:151:HIS:C	45:DZ:153:SER:H	2.17	0.48
1:AA:159:G:H2'	1:AA:161:A:OP2	2.13	0.48
1:AA:751:U:H5''	1:AA:752:G:OP2	2.14	0.48
1:AA:939:G:OP1	7:AG:102:ARG:NH1	2.36	0.48
1:AA:953:G:C2	1:AA:954:G:H1'	2.48	0.48
1:AA:1368:G:H5''	9:AI:112:LYS:HB3	1.94	0.48
4:AD:176:LEU:HG	4:AD:178:VAL:HG22	1.95	0.48
5:AE:30:ALA:O	5:AE:45:PHE:HA	2.13	0.48
17:AQ:40:LYS:HE2	17:AQ:42:TYR:CZ	2.49	0.48
20:AT:38:LYS:HA	20:AT:41:ILE:CG1	2.43	0.48
25:BA:154:G:H5''	25:BA:154:G:H8	1.77	0.48
25:BA:833:U:O2	35:BP:55:ARG:NH2	2.45	0.48
25:BA:975:C:OP2	25:BA:975:C:H4'	2.13	0.48
25:BA:1784:A:OP2	58:BA:5166:HOH:O	2.20	0.48
25:BA:2845:G:O2'	25:BA:2846:G:H5'	2.13	0.48
31:BH:154:PRO:HB3	31:BH:163:TYR:CZ	2.47	0.48
33:BN:102:ALA:O	33:BN:106:MET:HG3	2.14	0.48
50:B4:15:ILE:HG13	50:B4:21:VAL:HG13	1.95	0.48
1:CA:271:C:H2'	1:CA:272:C:H6	1.78	0.48
1:CA:363:A:C2	12:CL:31:PRO:HG2	2.48	0.48
1:CA:1192:C:OP2	3:CC:4:LYS:NZ	2.38	0.48
8:CH:51:VAL:HG11	8:CH:60:ARG:HH11	1.77	0.48
23:CV:21:A:H2'	23:CV:46:G:O6	2.14	0.48
25:DA:287:C:N4	25:DA:354:G:H1	2.10	0.48
25:DA:533:G:H21	40:DU:45:TYR:HE2	1.61	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:537:C:O2'	33:DN:5:VAL:HG21	2.13	0.48
25:DA:770:G:N3	25:DA:1354:A:H2	2.12	0.48
25:DA:988:A:P	49:D3:11:SER:HB2	2.54	0.48
25:DA:1448:G:O2'	25:DA:1528:A:N6	2.38	0.48
25:DA:1689:A:N6	25:DA:1698:A:H2	1.97	0.48
25:DA:2295:C:C2	25:DA:2296:U:H5	2.31	0.48
31:DH:30:LYS:HG3	31:DH:80:SER:O	2.13	0.48
36:DQ:97:VAL:HG13	36:DQ:101:ARG:HB3	1.95	0.48
39:DT:109:GLU:O	39:DT:113:LYS:N	2.45	0.48
49:D3:43:ILE:O	49:D3:47:VAL:HG23	2.13	0.48
52:D6:9:LEU:CD2	52:D6:25:LYS:HB3	2.43	0.48
1:AA:66:G:O4'	1:AA:173:U:C4	2.66	0.48
1:AA:113:G:H2'	1:AA:114:U:C6	2.48	0.48
1:AA:865:A:H2	1:AA:918:A:H4'	1.78	0.48
1:AA:1223:C:OP2	19:AS:78:ARG:NH2	2.43	0.48
3:AC:33:LEU:HD22	14:AN:53:LEU:HD21	1.95	0.48
3:AC:153:VAL:HG22	3:AC:198:VAL:HG22	1.95	0.48
6:AF:89:MET:HE2	6:AF:91:VAL:HG23	1.96	0.48
9:AI:45:ALA:HB3	9:AI:47:LEU:H	1.78	0.48
9:AI:46:ALA:HB1	9:AI:77:ILE:HB	1.95	0.48
23:AV:46:G:H8	23:AV:46:G:H3'	1.79	0.48
25:BA:89:G:H3'	25:BA:90:U:C5'	2.44	0.48
25:BA:832:G:N2	35:BP:53:GLY:HA3	2.27	0.48
25:BA:996:A:C2	25:BA:997:G:C8	3.01	0.48
25:BA:1186:G:OP1	58:BA:5190:HOH:O	2.20	0.48
25:BA:2573:C:H5''	25:BA:2574:G:C5'	2.44	0.48
26:BB:31:C:H4'	30:BG:29:TRP:CH2	2.49	0.48
29:BF:64:ILE:HG12	29:BF:65:TRP:N	2.29	0.48
30:BG:5:VAL:HG23	30:BG:104:GLU:OE2	2.13	0.48
35:BP:63:PRO:HG2	54:B8:25:MET:HB2	1.95	0.48
35:BP:138:LEU:HD23	35:BP:145:PRO:HG3	1.95	0.48
36:BQ:43:THR:O	36:BQ:46:GLN:HB2	2.14	0.48
1:CA:266:G:H5''	1:CA:267:C:C5	2.48	0.48
1:CA:411:A:OP2	4:CD:25:ARG:NH2	2.46	0.48
1:CA:502:G:C2	1:CA:503:C:C2	3.01	0.48
1:CA:539:A:H2'	1:CA:540:G:C8	2.49	0.48
1:CA:946:A:O2'	1:CA:1333:A:N3	2.41	0.48
1:CA:1065:U:H1'	1:CA:1066:C:OP2	2.14	0.48
1:CA:1135:U:H2'	1:CA:1137:C:C2	2.48	0.48
25:DA:102:G:O2'	25:DA:103:A:P	2.71	0.48
25:DA:520:G:H2'	25:DA:521:G:H8	1.76	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1008:C:N4	25:DA:1136:G:C6	2.82	0.48
25:DA:2054:A:H5''	25:DA:2055:C:O5'	2.12	0.48
25:DA:2326:C:H5''	25:DA:2327:A:OP2	2.13	0.48
25:DA:2376:A:H8	25:DA:2376:A:OP1	1.97	0.48
25:DA:2751:G:C8	31:DH:2:SER:N	2.81	0.48
27:DD:273:ARG:HG2	27:DD:274:ARG:N	2.28	0.48
33:DN:42:TRP:HA	33:DN:48:MET:SD	2.53	0.48
36:DQ:32:TYR:HB2	36:DQ:106:VAL:HG23	1.95	0.48
40:DU:17:ILE:HA	40:DU:20:LEU:HD12	1.95	0.48
43:DX:84:ALA:O	43:DX:87:GLN:HG3	2.13	0.48
45:DZ:108:PRO:HA	45:DZ:142:SER:HA	1.96	0.48
1:AA:189:G:C6	1:AA:189(L):G:N1	2.81	0.48
3:AC:113:ALA:HB3	3:AC:114:PRO:HD3	1.94	0.48
4:AD:138:TYR:HD2	4:AD:139:ARG:N	2.11	0.48
13:AM:23:TYR:CB	13:AM:67:GLU:HG2	2.38	0.48
13:AM:74:VAL:O	13:AM:77:ASN:HB2	2.14	0.48
20:AT:78:ALA:O	20:AT:82:SER:OG	2.31	0.48
22:AY:39:LEU:HD22	22:AY:71:VAL:HG12	1.95	0.48
22:AY:62:HIS:CD2	22:AY:63:LEU:HG	2.48	0.48
25:BA:848:G:C4	25:BA:933:A:C8	3.01	0.48
25:BA:2093:G:OP1	32:BI:23:PRO:HD2	2.13	0.48
25:BA:2575:C:H6	25:BA:2575:C:O5'	1.96	0.48
33:BN:33:LEU:HD12	33:BN:38:HIS:ND1	2.29	0.48
36:BQ:26:TYR:CE1	36:BQ:28:ALA:HB2	2.49	0.48
37:BR:33:ARG:CB	37:BR:115:GLU:HB3	2.44	0.48
1:CA:73:G:C6	1:CA:97:G:C6	3.01	0.48
1:CA:677:U:H3	1:CA:713:G:N2	2.08	0.48
2:CB:58:ILE:H	2:CB:58:ILE:HG13	1.42	0.48
9:CI:11:LYS:H	9:CI:104:ARG:NH1	2.11	0.48
14:CN:29:ARG:HH21	14:CN:42:ILE:HD11	1.78	0.48
20:CT:54:LYS:HA	20:CT:57:ARG:NH2	2.29	0.48
20:CT:92:LEU:O	20:CT:96:GLY:HA2	2.12	0.48
23:CV:12:G:H4'	25:DA:1908:C:O2	2.14	0.48
25:DA:531:C:H4'	25:DA:532:A:H5''	1.94	0.48
25:DA:1292:U:H2'	25:DA:1293:C:H6	1.79	0.48
25:DA:2469:A:H5''	25:DA:2470:G:OP2	2.14	0.48
25:DA:2529:G:H5''	25:DA:2530:A:H5''	1.95	0.48
26:DB:37:C:C5	26:DB:38:C:C5	3.02	0.48
39:DT:6:LEU:HA	39:DT:6:LEU:HD13	1.47	0.48
43:DX:36:LYS:HE3	43:DX:56:THR:OG1	2.14	0.48
1:AA:28:G:H5''	1:AA:29:G:OP2	2.14	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:115:G:O5'	1:AA:115:G:H8	1.95	0.48
1:AA:923:A:OP1	5:AE:21:ALA:HB2	2.14	0.48
1:AA:941:G:C2	1:AA:942:G:H1'	2.48	0.48
1:AA:949:A:H1'	1:AA:1364:U:H3	1.78	0.48
3:AC:181:ASN:ND2	3:AC:204:LEU:HD12	2.28	0.48
9:AI:127:LYS:HD2	58:AI:301:HOH:O	2.14	0.48
23:AV:59:A:H2'	23:AV:60:U:H5'	1.96	0.48
25:BA:132:G:H1	25:BA:147:U:H3	1.60	0.48
25:BA:154:G:H5'	25:BA:154(A):C:OP2	2.13	0.48
25:BA:271(K):U:H1'	25:BA:271(L):U:OP1	2.14	0.48
25:BA:442:G:H4'	29:BF:46:ARG:HG3	1.95	0.48
25:BA:886:C:O2'	25:BA:889:C:N4	2.46	0.48
25:BA:1568:G:O5'	27:BD:61:LEU:HD22	2.14	0.48
28:BE:82:ARG:HG2	28:BE:83:ASP:N	2.29	0.48
44:BY:13:VAL:HB	44:BY:72:VAL:HG22	1.96	0.48
1:CA:406:G:H21	4:CD:119:GLN:HE22	1.59	0.48
1:CA:509:A:C8	1:CA:509:A:C3'	2.96	0.48
1:CA:541:G:C6	1:CA:542:G:C5	3.02	0.48
1:CA:764:C:C2	1:CA:765:G:C8	3.02	0.48
1:CA:1056:U:O3'	3:CC:155:GLY:HA2	2.14	0.48
1:CA:1123:A:H4'	10:CJ:37:PRO:HD2	1.96	0.48
2:CB:30:ARG:HG3	2:CB:31:TYR:N	2.29	0.48
5:CE:80:ILE:HD12	5:CE:91:LEU:HB2	1.94	0.48
10:CJ:8:LEU:HB2	10:CJ:16:LEU:HD21	1.94	0.48
25:DA:109:G:H2'	25:DA:110:G:O4'	2.13	0.48
25:DA:614(C):A:N3	25:DA:615:G:H1'	2.29	0.48
25:DA:854:G:H2'	25:DA:855:G:H8	1.79	0.48
25:DA:1200:C:H1'	40:DU:2:PRO:HG3	1.95	0.48
25:DA:1638:C:H4'	25:DA:2710:C:O2	2.14	0.48
25:DA:1802:A:N1	25:DA:1822:G:H1'	2.29	0.48
25:DA:1839:G:C8	25:DA:1927:A:H1'	2.49	0.48
25:DA:2228:G:OP1	27:DD:261:LYS:HE2	2.14	0.48
25:DA:2534:A:C2	25:DA:2535:G:H1'	2.49	0.48
25:DA:2780:G:H4'	25:DA:2781:A:OP2	2.14	0.48
25:DA:2783:G:H2'	25:DA:2784:C:C6	2.49	0.48
33:DN:62:VAL:CG1	33:DN:66:LYS:HB2	2.44	0.48
37:DR:25:ALA:O	37:DR:29:LEU:HB2	2.14	0.48
48:D2:32:LEU:HD12	48:D2:53:LEU:HB3	1.96	0.48
1:AA:189(A):C:H2'	1:AA:189(B):C:C6	2.49	0.48
1:AA:626:U:C2	1:AA:627:G:C8	3.02	0.48
1:AA:800:G:HO2'	1:AA:801:U:H6	1.60	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:2273:A:H2'	25:BA:2274:A:C8	2.49	0.48
58:BA:3942:HOH:O	46:B0:23:VAL:HG23	2.13	0.48
26:BB:77:U:P	45:BZ:19:ARG:HH22	2.37	0.48
28:BE:50:GLY:HA3	28:BE:75:VAL:HG11	1.96	0.48
30:BG:34:LEU:HD23	30:BG:34:LEU:HA	1.78	0.48
45:BZ:128:VAL:HG22	45:BZ:132:ASN:HB2	1.96	0.48
52:B6:47:THR:HG22	52:B6:48:VAL:O	2.14	0.48
1:CA:537:G:H5''	12:CL:113:ARG:NH1	2.29	0.48
1:CA:848:C:H2'	1:CA:849:C:O4'	2.14	0.48
1:CA:1253:G:H2'	1:CA:1254:C:C6	2.49	0.48
25:DA:705:A:H1'	27:DD:9:TYR:CE1	2.49	0.48
25:DA:754:C:H2'	25:DA:755:C:C6	2.49	0.48
25:DA:875:G:N2	25:DA:903:C:C2	2.81	0.48
25:DA:1356:G:C6	25:DA:1357:U:N3	2.81	0.48
25:DA:1810:A:H2'	25:DA:1811:G:O4'	2.13	0.48
25:DA:2009:G:OP1	42:DW:41:LYS:HE3	2.14	0.48
25:DA:2052:G:O4'	28:DE:142:GLY:HA3	2.14	0.48
25:DA:2361:A:OP1	54:D8:27:THR:HG23	2.13	0.48
25:DA:2833:G:O2'	25:DA:2834:G:P	2.71	0.48
30:DG:32:PRO:HB2	30:DG:172:LEU:HD22	1.96	0.48
33:DN:53:VAL:HG11	33:DN:128:HIS:HB2	1.96	0.48
36:DQ:63:LYS:HE3	36:DQ:65:PHE:CZ	2.49	0.48
47:D1:76:ARG:HE	47:D1:97:LEU:HD22	1.79	0.48
53:D7:24:THR:O	53:D7:28:ARG:HG3	2.13	0.48
1:AA:167:G:H2'	1:AA:168:G:C8	2.49	0.48
1:AA:324:G:N1	1:AA:327:A:OP2	2.47	0.48
1:AA:343:U:P	1:AA:343:U:H3'	2.53	0.48
1:AA:976:G:C8	1:AA:1362:C:N4	2.82	0.48
1:AA:1246:C:H42	1:AA:1291:G:H1	1.62	0.48
3:AC:19:GLU:HB2	3:AC:55:VAL:O	2.13	0.48
6:AF:86:ARG:O	6:AF:87:ARG:HG2	2.13	0.48
22:AY:34:SER:HB2	25:BA:2602:A:H61	1.77	0.48
25:BA:570:G:H2'	25:BA:2030:A:C5	2.48	0.48
25:BA:2032:G:O2'	28:BE:145:LYS:NZ	2.46	0.48
25:BA:2637:U:H5''	28:BE:82:ARG:NH2	2.27	0.48
28:BE:77:ILE:HG21	28:BE:195:LEU:HD11	1.96	0.48
31:BH:62:LYS:HE2	31:BH:62:LYS:HB2	1.64	0.48
31:BH:143:GLN:O	31:BH:146:ALA:HB3	2.14	0.48
36:BQ:110:THR:HG23	36:BQ:113:GLN:CG	2.42	0.48
38:BS:65:VAL:O	38:BS:69:VAL:HG12	2.14	0.48
50:B4:42:PHE:HB3	50:B4:43:TYR:HB2	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:189(H):G:C6	1:CA:189(I):G:C5	3.01	0.48
1:CA:433:C:H2'	1:CA:434:U:C6	2.49	0.48
1:CA:560:U:H5'	1:CA:566:G:N2	2.29	0.48
1:CA:1203:C:OP1	14:CN:3:ARG:HD3	2.14	0.48
1:CA:1273:G:H5'	1:CA:1274:G:OP2	2.14	0.48
1:CA:1493:A:C8	1:CA:1493:A:OP2	2.67	0.48
2:CB:187:LEU:HD23	2:CB:201:ILE:HG22	1.95	0.48
13:CM:65:LYS:HA	13:CM:66:LEU:HG	1.95	0.48
18:CR:70:ILE:O	18:CR:74:ARG:HG3	2.13	0.48
25:DA:296:C:O3'	44:DY:95:LYS:NZ	2.47	0.48
25:DA:483:A:O2'	44:DY:49:VAL:O	2.21	0.48
25:DA:1339:G:H21	25:DA:1603:A:H1'	1.79	0.48
25:DA:2461:C:H2'	25:DA:2462:U:C6	2.49	0.48
25:DA:2657:A:C2	25:DA:2665:A:C4	3.02	0.48
29:DF:53:THR:O	29:DF:55:GLY:N	2.47	0.48
29:DF:89:VAL:HG12	29:DF:90:PHE:N	2.28	0.48
33:DN:128:HIS:O	33:DN:130:HIS:N	2.47	0.48
42:DW:59:VAL:HG12	42:DW:60:ASN:OD1	2.13	0.48
45:DZ:128:VAL:HG23	45:DZ:161:VAL:N	2.29	0.48
1:AA:189:G:C6	1:AA:189(A):C:C4	3.02	0.47
1:AA:993:G:N3	1:AA:993:G:H2'	2.29	0.47
1:AA:1125:U:H5''	1:AA:1126:U:C4	2.49	0.47
1:AA:1149:C:H2'	1:AA:1150:U:C6	2.47	0.47
1:AA:1202:G:O4'	14:AN:29:ARG:NH1	2.40	0.47
1:AA:1245:A:N6	1:AA:1293:G:O6	2.47	0.47
2:AB:9:GLU:O	2:AB:11:LEU:N	2.39	0.47
25:BA:69:C:H2'	25:BA:70:G:H8	1.79	0.47
25:BA:1139:G:O2'	25:BA:1143:A:N1	2.30	0.47
25:BA:1364:G:OP2	47:B1:3:LYS:HG3	2.14	0.47
25:BA:2469:A:O3'	36:BQ:56:ARG:HD3	2.14	0.47
32:BI:132:PRO:HD3	32:BI:138:ILE:CD1	2.44	0.47
47:B1:37:ILE:HG22	47:B1:38:SER:N	2.29	0.47
47:B1:94:LEU:O	47:B1:97:LEU:HB2	2.14	0.47
1:CA:240:C:H2'	1:CA:241:C:C6	2.49	0.47
1:CA:477:A:H2'	1:CA:479:C:H6	1.79	0.47
1:CA:561:U:O2'	1:CA:562:C:OP1	2.27	0.47
1:CA:562:C:H4'	1:CA:563:A:O5'	2.14	0.47
1:CA:1268:A:H4'	21:CU:19:GLY:HA2	1.95	0.47
2:CB:109:SER:O	2:CB:112:VAL:N	2.47	0.47
25:DA:297:C:OP1	44:DY:87:LYS:HD2	2.14	0.47
25:DA:872:A:C6	25:DA:873:G:C6	3.01	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1183:G:O3'	49:D3:29:ARG:NH1	2.47	0.47
25:DA:1788:C:C2	25:DA:1789:A:C8	3.01	0.47
25:DA:2334:G:H8	25:DA:2334:G:OP1	1.96	0.47
25:DA:2528:U:O2'	25:DA:2529:G:H3'	2.13	0.47
25:DA:2779:U:H4'	25:DA:2780:G:H5''	1.95	0.47
28:DE:51:PHE:HB3	28:DE:77:ILE:HG22	1.95	0.47
29:DF:184:TYR:CE2	29:DF:188:ARG:HD2	2.49	0.47
34:DO:64:ARG:HB3	34:DO:79:PHE:CG	2.49	0.47
41:DV:64:HIS:ND1	41:DV:92:THR:OG1	2.38	0.47
1:AA:21:G:H2'	1:AA:22:G:C8	2.49	0.47
1:AA:153:C:H2'	1:AA:154:C:C6	2.49	0.47
1:AA:263:A:OP2	20:AT:79:ARG:NH1	2.47	0.47
1:AA:625:G:H4'	16:AP:16:HIS:CD2	2.49	0.47
1:AA:1129:C:O5'	1:AA:1130:A:H5'	2.13	0.47
1:AA:1457:G:H2'	1:AA:1458:G:H8	1.77	0.47
2:AB:185:ILE:CG2	2:AB:199:TYR:HB2	2.34	0.47
5:AE:126:ARG:HH11	5:AE:126:ARG:HG2	1.78	0.47
8:AH:7:ALA:HB2	8:AH:85:ARG:CD	2.45	0.47
18:AR:24:ALA:O	18:AR:26:LEU:N	2.47	0.47
25:BA:183:C:N4	25:BA:213:A:H61	2.11	0.47
25:BA:528:A:C2	25:BA:2043:C:H4'	2.49	0.47
25:BA:771:G:OP1	53:B7:14:LYS:NZ	2.48	0.47
25:BA:1916:A:H2'	25:BA:1917:U:O4'	2.14	0.47
25:BA:2562:U:H1'	34:BO:23:ARG:NH1	2.21	0.47
26:BB:32:C:C2	26:BB:51:G:N2	2.82	0.47
38:BS:36:TYR:N	38:BS:36:TYR:CD1	2.81	0.47
1:CA:257:G:C4	1:CA:258:G:C8	3.02	0.47
1:CA:574:A:H5''	1:CA:575:G:OP2	2.14	0.47
1:CA:619:U:C2	4:CD:135:LEU:HD21	2.49	0.47
1:CA:881:G:H2'	1:CA:882:C:O4'	2.14	0.47
1:CA:1411:C:H2'	1:CA:1412:C:H6	1.80	0.47
2:CB:69:LEU:HD12	2:CB:70:PHE:N	2.29	0.47
3:CC:39:ILE:O	3:CC:43:LEU:HG	2.14	0.47
23:CV:72:A:H2'	23:CV:73:A:O4'	2.14	0.47
25:DA:533:G:H5'	40:DU:24:TYR:CD2	2.49	0.47
25:DA:565:C:H2'	25:DA:566:U:O4'	2.14	0.47
25:DA:646:A:H2'	25:DA:647:G:O4'	2.13	0.47
25:DA:886:C:H2'	25:DA:887:A:H5'	1.96	0.47
25:DA:1021:A:C8	25:DA:1021:A:H3'	2.50	0.47
25:DA:1497:U:H5''	25:DA:1498:C:H5	1.79	0.47
25:DA:2653:U:H3	25:DA:2667:C:H42	1.61	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:2712:U:OP1	25:DA:2714:G:H4'	2.15	0.47
26:DB:45:A:OP1	30:DG:95:ARG:HD2	2.14	0.47
26:DB:55:U:HO2'	30:DG:29:TRP:HD1	1.62	0.47
36:DQ:35:VAL:HG22	36:DQ:36:ALA:N	2.28	0.47
40:DU:8:VAL:HG13	40:DU:12:ARG:HE	1.79	0.47
44:DY:92:ASN:N	44:DY:93:GLY:HA2	2.28	0.47
51:D5:45:VAL:HG22	51:D5:52:TYR:HB2	1.94	0.47
1:AA:303:A:H2'	1:AA:304:U:O4'	2.14	0.47
1:AA:965:A:C2	1:AA:969:A:C2	3.03	0.47
1:AA:980:C:H5''	1:AA:981:U:OP2	2.14	0.47
10:AJ:7:LYS:HA	10:AJ:71:LEU:HA	1.96	0.47
20:AT:14:LYS:O	20:AT:18:GLN:HG3	2.13	0.47
22:AY:40:ARG:NH2	22:AY:88:LEU:HD22	2.30	0.47
23:AV:46:G:H3'	23:AV:46:G:C8	2.49	0.47
25:BA:1176:G:H1'	25:BA:1177:A:H5''	1.96	0.47
33:BN:63:THR:O	33:BN:66:LYS:HG3	2.14	0.47
38:BS:100:ALA:C	38:BS:101:LEU:O	2.48	0.47
40:BU:79:PHE:CE1	40:BU:83:LEU:HD21	2.50	0.47
47:B1:64:ALA:HA	47:B1:67:ILE:HG13	1.96	0.47
1:CA:114:U:H2'	1:CA:115:G:C8	2.48	0.47
1:CA:544:G:OP1	4:CD:62:GLN:NE2	2.30	0.47
1:CA:1308:U:H5''	13:CM:98:VAL:CG2	2.42	0.47
1:CA:1353:G:H2'	1:CA:1354:C:H6	1.78	0.47
1:CA:1389:C:H5''	1:CA:1390:U:OP2	2.14	0.47
1:CA:1512:U:H2'	1:CA:1513:A:H8	1.78	0.47
6:CF:2:ARG:CZ	6:CF:69:GLU:HG2	2.44	0.47
6:CF:50:TYR:HB2	6:CF:51:PRO:HD2	1.96	0.47
9:CI:24:GLY:HA2	9:CI:59:PHE:O	2.15	0.47
20:CT:26:ASN:OD1	20:CT:71:THR:HG23	2.14	0.47
25:DA:152:G:H2'	25:DA:153:C:O4'	2.14	0.47
25:DA:321:G:OP2	29:DF:136:THR:OG1	2.32	0.47
25:DA:960:A:H5''	25:DA:961:C:OP2	2.14	0.47
25:DA:1283:G:H2'	25:DA:1285:G:OP2	2.14	0.47
25:DA:1283:G:N2	25:DA:1286:A:H5'	2.29	0.47
25:DA:1302:A:H5'	25:DA:1608:A:OP1	2.15	0.47
25:DA:2572:A:N7	28:DE:145:LYS:HB2	2.29	0.47
32:DI:88:ILE:HD12	32:DI:121:LYS:C	2.34	0.47
47:D1:73:LEU:HD22	47:D1:73:LEU:HA	1.80	0.47
53:D7:8:ASN:C	53:D7:8:ASN:OD1	2.53	0.47
1:AA:52:G:H2'	1:AA:53:A:H8	1.78	0.47
1:AA:1358:U:H3	1:AA:1363(A):A:H61	0.59	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:220:ASP:O	2:AB:224:GLN:N	2.45	0.47
3:AC:118:GLN:HA	3:AC:121:ALA:HB3	1.95	0.47
9:AI:126:SER:HA	9:AI:127:LYS:HD3	1.96	0.47
22:AY:44:ARG:CZ	22:AY:57:LEU:HD11	2.44	0.47
25:BA:603:A:C8	25:BA:655:A:C6	3.02	0.47
25:BA:2249:U:H4'	25:BA:2250:G:OP2	2.15	0.47
25:BA:2348:U:H2'	25:BA:2349:G:H5''	1.96	0.47
27:BD:71:ASP:CB	27:BD:103:ARG:HH22	2.26	0.47
47:B1:58:ILE:HD11	47:B1:60:PHE:CE2	2.48	0.47
49:B3:56:VAL:HG12	49:B3:57:GLU:N	2.30	0.47
1:CA:189(D):C:O2	1:CA:189(H):G:C2	2.67	0.47
1:CA:234:C:H2'	1:CA:235:C:H6	1.79	0.47
1:CA:270:A:C5	1:CA:271:C:C4	3.02	0.47
1:CA:832:C:O2'	1:CA:833:U:P	2.73	0.47
1:CA:836:G:C6	1:CA:851:G:C6	3.03	0.47
2:CB:185:ILE:HA	2:CB:199:TYR:O	2.14	0.47
4:CD:103:ASN:O	4:CD:106:TYR:N	2.48	0.47
4:CD:110:PHE:N	4:CD:110:PHE:CD1	2.82	0.47
4:CD:162:LEU:HD23	4:CD:162:LEU:HA	1.65	0.47
19:CS:35:SER:HB3	19:CS:37:ARG:HD3	1.96	0.47
23:CV:61:C:O2'	23:CV:62:C:H5'	2.14	0.47
25:DA:1438:U:O2'	25:DA:1439:A:H5'	2.14	0.47
25:DA:1515:G:H2'	25:DA:1516:C:H6	1.79	0.47
25:DA:1686:C:O2'	25:DA:1687:G:H5'	2.14	0.47
25:DA:1796:U:H2'	25:DA:1797:C:C6	2.50	0.47
25:DA:1915:U:H3'	25:DA:1916:A:H8	1.78	0.47
25:DA:2050:C:H1'	28:DE:156:MET:CE	2.44	0.47
25:DA:2262:U:OP1	46:D0:19:LYS:HD3	2.13	0.47
25:DA:2634:G:O6	25:DA:2784:C:N4	2.34	0.47
25:DA:2808:U:H5''	25:DA:2891:G:O6	2.14	0.47
27:DD:16:MET:HB2	27:DD:207:GLY:HA3	1.96	0.47
28:DE:18:ASP:HB3	39:DT:82:LEU:HD21	1.95	0.47
30:DG:106:LEU:HG	30:DG:111:LEU:HG	1.97	0.47
41:DV:42:GLY:O	41:DV:43:GLU:HG2	2.14	0.47
42:DW:71:VAL:HA	42:DW:107:LEU:HD12	1.95	0.47
45:DZ:19:ARG:HE	45:DZ:19:ARG:HB2	1.42	0.47
1:AA:300:A:H1'	1:AA:565:U:O2	2.15	0.47
3:AC:3:ASN:OD1	3:AC:3:ASN:N	2.47	0.47
4:AD:133:VAL:HG11	4:AD:138:TYR:HD1	1.79	0.47
8:AH:28:ALA:HA	8:AH:32:LYS:HD3	1.97	0.47
9:AI:101:PHE:CD1	9:AI:101:PHE:N	2.80	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:14:ARG:HG2	13:AM:17:VAL:HG22	1.97	0.47
16:AP:50:LYS:O	16:AP:51:VAL:HG23	2.15	0.47
22:AY:21:ARG:HA	22:AY:35:THR:HA	1.96	0.47
23:AV:20:U:O2'	23:AV:21:A:H5''	2.14	0.47
25:BA:118:A:C8	25:BA:119:A:C8	3.03	0.47
25:BA:143:G:H1'	43:BX:37:THR:HG21	1.96	0.47
25:BA:356:G:H2'	25:BA:357:A:H8	1.79	0.47
25:BA:885:C:N3	25:BA:890:A:N1	2.62	0.47
25:BA:1019:U:O2'	25:BA:1021:A:H2	1.96	0.47
25:BA:1579:A:H2'	25:BA:1580:A:O4'	2.14	0.47
34:BO:79:PHE:HE2	34:BO:101:PRO:HB2	1.79	0.47
1:CA:664:G:H22	1:CA:741:G:H1	1.61	0.47
1:CA:832:C:N4	1:CA:855:G:C6	2.82	0.47
1:CA:1168:A:H8	1:CA:1168:A:OP1	1.97	0.47
1:CA:1181:G:H2'	1:CA:1182:G:C4	2.50	0.47
2:CB:19:HIS:ND1	2:CB:20:GLU:HG2	2.29	0.47
2:CB:136:VAL:O	2:CB:139:LYS:HB3	2.14	0.47
8:CH:4:ASP:OD1	8:CH:85:ARG:NH1	2.41	0.47
8:CH:73:ASP:OD2	8:CH:75:ARG:HD3	2.15	0.47
9:CI:44:VAL:HA	9:CI:45:ALA:HA	1.54	0.47
10:CJ:55:LYS:O	10:CJ:57:LYS:N	2.48	0.47
13:CM:9:ILE:HA	13:CM:10:PRO:HD3	1.53	0.47
25:DA:29:U:O5'	25:DA:29:U:H6	1.98	0.47
25:DA:251:A:C5	25:DA:252:G:H1'	2.50	0.47
25:DA:480:A:OP2	44:DY:47:LYS:HD3	2.14	0.47
25:DA:832:G:H21	35:DP:53:GLY:HA3	1.80	0.47
25:DA:1242:A:N1	35:DP:4:SER:HB2	2.29	0.47
25:DA:1927:A:H2'	25:DA:1928:A:C8	2.50	0.47
25:DA:2256:G:H2'	25:DA:2257:U:H6	1.79	0.47
25:DA:2467:C:H4'	36:DQ:123:HIS:ND1	2.30	0.47
25:DA:2787:C:O2'	28:DE:61:ARG:HD3	2.14	0.47
53:D7:35:ARG:HG3	53:D7:42:LEU:HD11	1.95	0.47
1:AA:262:A:C6	1:AA:263:A:C6	3.03	0.47
1:AA:875:C:O2'	8:AH:14:ARG:NH1	2.46	0.47
1:AA:975:A:N6	1:AA:1366:C:O2'	2.45	0.47
1:AA:1097:C:H2'	1:AA:1098:C:H6	1.79	0.47
25:BA:221:A:N1	25:BA:265:A:O2'	2.44	0.47
25:BA:298:G:N7	58:BA:4997:HOH:O	2.35	0.47
25:BA:2036:C:P	58:BA:4649:HOH:O	2.73	0.47
27:BD:147:LEU:HD12	27:BD:155:LEU:HD11	1.97	0.47
28:BE:77:ILE:HA	28:BE:77:ILE:HD13	1.63	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:29:ASN:HB3	29:BF:112:MET:HE1	1.97	0.47
30:BG:21:ARG:HE	30:BG:21:ARG:HB3	1.41	0.47
45:BZ:54:HIS:ND1	45:BZ:101:PRO:HG3	2.30	0.47
47:B1:6:GLU:HG3	47:B1:61:ARG:O	2.15	0.47
1:CA:55:A:C5	1:CA:56:U:C5	3.02	0.47
1:CA:378:G:C6	1:CA:379:C:C4	3.01	0.47
1:CA:983:A:N1	1:CA:1222:G:N2	2.52	0.47
1:CA:1007:C:H2'	1:CA:1008:C:H6	1.79	0.47
2:CB:32:ILE:HD11	2:CB:190:THR:HG22	1.96	0.47
11:CK:34:ASP:HB3	11:CK:40:ILE:HD11	1.96	0.47
25:DA:71:A:C2	43:DX:31:HIS:CE1	3.02	0.47
25:DA:729:G:O5'	27:DD:208:LYS:NZ	2.48	0.47
25:DA:830:G:H4'	25:DA:831:G:OP2	2.15	0.47
25:DA:953:A:H2'	25:DA:954:G:H8	1.80	0.47
30:DG:16:ARG:CZ	30:DG:31:VAL:HG21	2.44	0.47
32:DI:65:ALA:O	32:DI:68:LEU:HB2	2.14	0.47
35:DP:86:LYS:HB3	35:DP:118:GLY:HA2	1.97	0.47
36:DQ:60:ARG:NH2	45:DZ:177:PRO:HG3	2.30	0.47
46:D0:56:ASP:O	46:D0:57:PHE:HB2	2.14	0.47
1:AA:251:G:H4'	1:AA:252:U:O5'	2.15	0.47
1:AA:432:A:H3'	1:AA:433:C:H6	1.80	0.47
1:AA:832:C:N4	1:AA:855:G:C6	2.82	0.47
1:AA:872:A:C5	1:AA:874:G:C8	3.02	0.47
1:AA:983:A:H3'	1:AA:983:A:N3	2.29	0.47
1:AA:1104:G:H4'	2:AB:111:ARG:NH1	2.30	0.47
1:AA:1351:U:O4'	7:AG:33:ASP:HB3	2.14	0.47
7:AG:18:TYR:CD2	7:AG:59:LEU:HD22	2.50	0.47
9:AI:4:TYR:CE1	9:AI:88:TYR:HA	2.49	0.47
10:AJ:55:LYS:HG2	10:AJ:56:HIS:N	2.29	0.47
16:AP:39:TYR:CE1	16:AP:41:PRO:HB3	2.50	0.47
17:AQ:5:VAL:O	17:AQ:6:LEU:HD12	2.15	0.47
18:AR:59:SER:N	18:AR:62:GLU:OE1	2.34	0.47
25:BA:70:G:H21	25:BA:71:A:H62	1.63	0.47
25:BA:204:A:H8	25:BA:204:A:OP1	1.97	0.47
25:BA:774:A:H2'	25:BA:774:A:N3	2.29	0.47
25:BA:1021:A:C8	25:BA:1021:A:C3'	2.97	0.47
25:BA:1152:C:O2'	25:BA:1153:C:H5'	2.15	0.47
25:BA:1290:C:O2'	25:BA:1291:C:H5'	2.14	0.47
25:BA:1336:A:H2'	25:BA:1337:G:C8	2.50	0.47
25:BA:1372:U:H6	25:BA:1372:U:O5'	1.97	0.47
25:BA:2570:G:O6	58:BA:4312:HOH:O	2.18	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BB:89:G:OP2	26:BB:89:G:H8	1.98	0.47
27:BD:16:MET:HG2	27:BD:211:ARG:HH21	1.79	0.47
27:BD:35:LYS:HG2	27:BD:64:ILE:HD11	1.97	0.47
35:BP:26:GLY:CA	35:BP:28:GLY:H	2.28	0.47
36:BQ:31:ASP:HB2	36:BQ:32:TYR:HD1	1.80	0.47
36:BQ:52:VAL:HA	36:BQ:55:VAL:HG13	1.97	0.47
37:BR:4:LEU:HA	37:BR:4:LEU:HD23	1.41	0.47
38:BS:3:ARG:CZ	38:BS:3:ARG:HB2	2.44	0.47
38:BS:102:ALA:O	38:BS:106:ARG:N	2.34	0.47
39:BT:1:MET:O	39:BT:1:MET:HG3	2.13	0.47
52:B6:14:THR:OG1	52:B6:48:VAL:O	2.32	0.47
1:CA:129(A):G:N7	1:CA:189(E):U:O3'	2.48	0.47
1:CA:452:A:H1'	1:CA:453:A:C8	2.49	0.47
1:CA:920:U:O4'	1:CA:1080:A:C2	2.68	0.47
1:CA:1016:A:C5	1:CA:1017:G:H1'	2.50	0.47
1:CA:1127:G:C2'	1:CA:1147:C:H42	2.28	0.47
1:CA:1226:C:H2'	13:CM:103:THR:HB	1.96	0.47
1:CA:1347:G:HO2'	1:CA:1373:G:H1	1.63	0.47
1:CA:1392:G:N2	1:CA:1502:A:H8	2.12	0.47
3:CC:152:ILE:HD12	3:CC:199:LYS:HD2	1.97	0.47
4:CD:118:ARG:O	4:CD:121:VAL:N	2.48	0.47
6:CF:2:ARG:HB2	6:CF:4:TYR:CE2	2.49	0.47
11:CK:104:GLN:O	11:CK:105:VAL:HG22	2.14	0.47
20:CT:67:ALA:HB2	20:CT:77:ALA:HB2	1.96	0.47
25:DA:9:U:HO2'	25:DA:10:G:P	2.36	0.47
25:DA:144:C:H2'	25:DA:145:G:H8	1.80	0.47
25:DA:176:G:O2'	25:DA:177:G:H5'	2.15	0.47
25:DA:323:G:H2'	29:DF:169:ASN:ND2	2.30	0.47
25:DA:475:U:C4	25:DA:481:G:O6	2.68	0.47
25:DA:614:U:H5'	25:DA:614(C):A:N6	2.30	0.47
25:DA:987:G:O2'	25:DA:1000:A:N3	2.37	0.47
25:DA:1529:G:C6	25:DA:1530:C:C4	3.02	0.47
25:DA:2070:G:C2	25:DA:2442:C:C2	3.02	0.47
25:DA:2261:C:C6	46:D0:16:SER:HB3	2.50	0.47
25:DA:2464:C:C2	25:DA:2487:G:C2	3.02	0.47
26:DB:45:A:C6	26:DB:46:A:C5	3.02	0.47
28:DE:98:PRO:HD3	28:DE:175:VAL:HG13	1.95	0.47
29:DF:28:ILE:HG13	29:DF:112:MET:HG2	1.97	0.47
30:DG:33:ARG:HE	30:DG:162:THR:HG21	1.78	0.47
31:DH:88:LEU:N	31:DH:163:TYR:O	2.47	0.47
36:DQ:2:LEU:HA	36:DQ:2:LEU:HD12	1.61	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DQ:110:THR:HG23	36:DQ:113:GLN:OE1	2.14	0.47
38:DS:95:HIS:C	38:DS:99:LYS:HB3	2.35	0.47
40:DU:41:ALA:O	40:DU:45:TYR:HD1	1.97	0.47
40:DU:88:ILE:HG23	41:DV:48:GLY:O	2.14	0.47
44:DY:19:LYS:HE3	44:DY:20:TYR:CE1	2.50	0.47
49:D3:46:ASN:O	49:D3:50:VAL:HG22	2.14	0.47
1:AA:545:C:O3'	4:AD:72:GLU:HB3	2.15	0.47
1:AA:668:G:O4'	15:AO:49:ASP:HB2	2.15	0.47
1:AA:803:G:H2'	1:AA:804:U:O4'	2.15	0.47
1:AA:939:G:H2'	1:AA:940:C:C6	2.50	0.47
1:AA:1066:C:O2'	1:AA:1067:A:H5'	2.15	0.47
1:AA:1132:C:H2'	1:AA:1133:G:H8	1.79	0.47
3:AC:16:ARG:NH1	3:AC:183:ASP:OD2	2.44	0.47
3:AC:32:LEU:HD13	3:AC:59:ARG:HH11	1.80	0.47
4:AD:41:GLY:C	4:AD:43:HIS:H	2.18	0.47
4:AD:129:ASN:HD21	4:AD:144:ASP:CB	2.27	0.47
8:AH:25:ASP:HB3	8:AH:58:TYR:CD2	2.50	0.47
12:AL:60:LEU:HB2	12:AL:64:TYR:O	2.14	0.47
20:AT:61:SER:O	20:AT:65:LYS:HG3	2.15	0.47
25:BA:652(H):C:C2'	25:BA:652(I):C:H5'	2.44	0.47
25:BA:1309:G:H4'	53:B7:7:PRO:HG2	1.96	0.47
25:BA:1664:A:OP2	58:BA:5297:HOH:O	2.21	0.47
25:BA:2291:U:H2'	25:BA:2292:C:C6	2.50	0.47
25:BA:2431:U:OP1	58:BA:4603:HOH:O	2.20	0.47
27:BD:5:LYS:HB3	27:BD:5:LYS:HE3	1.66	0.47
27:BD:33:LEU:O	27:BD:64:ILE:HD12	2.15	0.47
28:BE:137:HIS:ND1	28:BE:138:PRO:HD2	2.29	0.47
28:BE:201:THR:OG1	28:BE:202:LYS:N	2.48	0.47
30:BG:33:ARG:HB2	30:BG:162:THR:HG21	1.96	0.47
36:BQ:42:ILE:HD12	36:BQ:97:VAL:HG21	1.96	0.47
1:CA:436:C:HO2'	1:CA:437:U:H6	1.57	0.47
1:CA:781:A:H4'	1:CA:1522:U:O2'	2.15	0.47
1:CA:947:G:H2'	1:CA:948:C:C6	2.50	0.47
7:CG:134:ALA:O	7:CG:137:LYS:HB3	2.15	0.47
8:CH:20:TYR:HD1	8:CH:65:TYR:CE2	2.32	0.47
16:CP:51:VAL:CG1	16:CP:53:VAL:H	2.28	0.47
20:CT:56:MET:HE1	20:CT:85:MET:HA	1.96	0.47
25:DA:686:G:N2	25:DA:788:A:H61	2.12	0.47
25:DA:1782:C:H1'	25:DA:2609:U:H5''	1.97	0.47
25:DA:1820:U:C2	27:DD:202:LYS:HG2	2.50	0.47
25:DA:2524:G:N2	25:DA:2539:C:O2	2.42	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DB:66:A:H61	26:DB:109:C:C5'	2.27	0.47
27:DD:109:ASP:HB2	27:DD:197:GLY:HA2	1.96	0.47
30:DG:19:LEU:HA	30:DG:22:ARG:HB2	1.96	0.47
31:DH:137:ASP:HB3	31:DH:140:LYS:HB2	1.97	0.47
35:DP:60:MET:HA	54:D8:13:ARG:NH1	2.29	0.47
40:DU:18:LEU:HA	40:DU:18:LEU:HD23	1.64	0.47
44:DY:9:LYS:HB2	44:DY:27:VAL:O	2.14	0.47
47:D1:85:LEU:HB3	47:D1:89:GLU:HG3	1.97	0.47
52:D6:8:LYS:HD3	54:D8:34:TRP:CD2	2.49	0.47
1:AA:1067:A:H8	1:AA:1067:A:O5'	1.96	0.47
1:AA:1124:G:O2'	1:AA:1126:U:O4	2.18	0.47
1:AA:1317:C:OP1	14:AN:17:LYS:HG2	2.14	0.47
2:AB:215:LEU:O	2:AB:219:VAL:HG23	2.14	0.47
4:AD:78:LEU:O	4:AD:81:GLU:N	2.48	0.47
7:AG:69:VAL:O	7:AG:138:LYS:HG3	2.15	0.47
9:AI:126:SER:CA	9:AI:127:LYS:HB2	2.44	0.47
12:AL:124:LYS:HE3	12:AL:125:PRO:HD2	1.97	0.47
25:BA:265:A:H1'	25:BA:266:G:O4'	2.15	0.47
25:BA:652(G):G:H2'	25:BA:652(H):C:C6	2.49	0.47
25:BA:922:U:H2'	25:BA:923:C:C6	2.50	0.47
38:BS:27:SER:HA	38:BS:88:ASP:HB3	1.97	0.47
38:BS:110:LEU:HD12	38:BS:110:LEU:HA	1.81	0.47
1:CA:124:G:H2'	1:CA:125:U:H6	1.79	0.47
1:CA:377:G:OP1	16:CP:3:LYS:HD2	2.15	0.47
1:CA:426:G:OP1	4:CD:36:ARG:NH1	2.47	0.47
1:CA:450:G:OP1	16:CP:43:LYS:NZ	2.47	0.47
2:CB:28:PHE:CD2	2:CB:194:PRO:HG3	2.50	0.47
2:CB:68:ILE:HG13	2:CB:161:ALA:HB3	1.97	0.47
9:CI:114:TYR:CD1	10:CJ:60:ARG:HB2	2.50	0.47
12:CL:34:ARG:O	12:CL:61:THR:HG23	2.14	0.47
17:CQ:5:VAL:HG23	17:CQ:60:ILE:HD12	1.97	0.47
23:CV:8:U:O2'	23:CV:21:A:N1	2.34	0.47
25:DA:198:C:H5'	25:DA:2244:U:OP1	2.14	0.47
25:DA:257:A:H2'	25:DA:258:G:O4'	2.15	0.47
25:DA:533:G:H5'	40:DU:24:TYR:CE2	2.50	0.47
25:DA:572:A:H2'	25:DA:573:G:O4'	2.15	0.47
25:DA:1441:G:H2'	25:DA:1442:G:H8	1.79	0.47
25:DA:1914:C:HO2'	25:DA:1915:U:P	2.35	0.47
25:DA:2537:U:H2'	25:DA:2538:C:C6	2.50	0.47
54:D8:57:ARG:H	54:D8:57:ARG:HG3	1.44	0.47
1:AA:258:G:H2'	1:AA:259:G:H8	1.80	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:580:U:H2'	1:AA:581:G:O4'	2.15	0.47
1:AA:1009:G:H3'	1:AA:1010:G:H8	1.80	0.47
1:AA:1089:G:C2'	1:AA:1090:U:H5'	2.44	0.47
1:AA:1245:A:N1	1:AA:1293:G:C6	2.83	0.47
1:AA:1499:A:O2'	1:AA:1520:G:H5'	2.14	0.47
4:AD:122:ARG:NH2	4:AD:134:ASP:HB2	2.29	0.47
6:AF:21:LEU:O	6:AF:25:ILE:HG12	2.15	0.47
7:AG:113:GLU:CG	7:AG:119:ARG:HG2	2.45	0.47
8:AH:81:HIS:ND1	8:AH:138:TRP:OXT	2.48	0.47
21:AU:3:LYS:HB3	21:AU:14:TRP:CD1	2.50	0.47
22:AY:45:ALA:HA	22:AY:53:LYS:HE3	1.97	0.47
25:BA:748:G:C8	42:BW:89:ALA:HB1	2.50	0.47
25:BA:960:A:H2'	25:BA:962:G:H5'	1.97	0.47
25:BA:1583:A:H5'	25:BA:1584:C:H5''	1.96	0.47
25:BA:2615:U:H2'	25:BA:2616:C:C6	2.50	0.47
25:BA:2808:U:H3	25:BA:2892:A:H62	1.63	0.47
26:BB:89:G:H2'	26:BB:90:A:C8	2.50	0.47
29:BF:96:ASP:C	29:BF:96:ASP:OD1	2.52	0.47
33:BN:67:LEU:HA	33:BN:87:LEU:CD1	2.42	0.47
34:BO:98:VAL:HG11	34:BO:114:ILE:HG23	1.97	0.47
35:BP:39:LYS:HG2	35:BP:39:LYS:O	2.14	0.47
40:BU:90:VAL:HG11	40:BU:95:LEU:HD13	1.96	0.47
45:BZ:39:VAL:CG2	45:BZ:44:PHE:HB2	2.44	0.47
45:BZ:53:ILE:HG22	45:BZ:71:VAL:HB	1.97	0.47
1:CA:741:G:H2'	1:CA:742:G:O4'	2.14	0.47
1:CA:862:C:H1'	1:CA:874:G:H5''	1.96	0.47
1:CA:885:G:O2'	1:CA:914:A:N1	2.36	0.47
1:CA:1095:U:P	1:CA:1108:G:H1	2.38	0.47
4:CD:32:ALA:HA	4:CD:35:ARG:HG3	1.96	0.47
12:CL:33:ARG:HH11	12:CL:62:SER:HB3	1.78	0.47
13:CM:90:LEU:C	13:CM:91:ARG:HG2	2.36	0.47
15:CO:7:GLU:O	15:CO:11:VAL:HG23	2.15	0.47
25:DA:93:G:H2'	25:DA:94:C:C6	2.50	0.47
25:DA:1420:U:HO2'	25:DA:1421:G:P	2.36	0.47
25:DA:2410:G:N2	25:DA:2411:A:H1'	2.30	0.47
29:DF:178:PRO:HB2	29:DF:201:VAL:CG2	2.45	0.47
35:DP:38:GLN:C	35:DP:40:SER:H	2.18	0.47
35:DP:112:LEU:HD22	35:DP:113:LYS:N	2.30	0.47
1:AA:153:C:H42	1:AA:169:C:N4	2.12	0.46
1:AA:515:G:H2'	1:AA:516:U:O4'	2.15	0.46
1:AA:678:U:H2'	1:AA:679:C:C6	2.50	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:865:A:H5'	1:AA:1078:U:O4	2.15	0.46
1:AA:1149:C:P	9:AI:9:ARG:HH21	2.38	0.46
1:AA:1150:U:O2	10:AJ:39:PRO:HG2	2.15	0.46
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.97	0.46
1:AA:1305:G:H5''	21:AU:4:GLY:HA3	1.97	0.46
1:AA:1506:U:O2'	1:AA:1507:A:H5'	2.14	0.46
3:AC:22:TRP:HE3	3:AC:23:TYR:O	1.97	0.46
3:AC:195:VAL:HG12	3:AC:196:LEU:O	2.15	0.46
4:AD:13:ARG:O	4:AD:15:GLU:N	2.48	0.46
4:AD:121:VAL:HG11	4:AD:136:PRO:HA	1.98	0.46
8:AH:35:ILE:O	8:AH:38:ILE:N	2.45	0.46
15:AO:63:ARG:HG2	15:AO:67:LEU:HD12	1.97	0.46
25:BA:527:C:C4	25:BA:2779:U:H2'	2.50	0.46
25:BA:819:A:OP2	25:BA:1187:G:N2	2.36	0.46
25:BA:2444:G:OP2	29:BF:68:LYS:HD2	2.14	0.46
25:BA:2773:C:H2'	25:BA:2774:C:H6	1.80	0.46
25:BA:2801(A):A:H1'	25:BA:2895:U:H1'	1.96	0.46
31:BH:20:ALA:HB1	31:BH:21:PRO:HD2	1.97	0.46
42:BW:14:PRO:HG2	42:BW:78:GLU:CG	2.40	0.46
44:BY:79:CYS:SG	44:BY:102:CYS:CB	2.97	0.46
50:B4:7:PRO:HB2	50:B4:27:THR:HG21	1.97	0.46
54:B8:42:ARG:HD2	58:B8:201:HOH:O	2.14	0.46
1:CA:216:G:H2'	1:CA:217:C:H6	1.79	0.46
1:CA:572:A:H5'	1:CA:573:A:OP2	2.15	0.46
1:CA:790:A:C6	1:CA:791:G:C6	3.03	0.46
1:CA:818:G:O2'	1:CA:819:A:H5'	2.15	0.46
1:CA:1151:A:O2'	1:CA:1152:A:H8	1.98	0.46
2:CB:112:VAL:O	2:CB:115:LEU:HB3	2.15	0.46
15:CO:48:LYS:HD2	15:CO:48:LYS:HA	1.78	0.46
15:CO:61:GLY:O	15:CO:65:ARG:HD3	2.16	0.46
25:DA:991:C:H5'	25:DA:991:C:C6	2.44	0.46
25:DA:1331:A:O2'	25:DA:1332:G:C8	2.66	0.46
25:DA:1655:A:C8	25:DA:1656:C:C5	3.02	0.46
25:DA:1815:A:C5	25:DA:1817:G:C6	3.03	0.46
25:DA:1849:G:H2'	25:DA:1850:G:C8	2.50	0.46
25:DA:2275:C:H5'	25:DA:2275:C:C6	2.47	0.46
26:DB:48:A:H4'	38:DS:95:HIS:CD2	2.41	0.46
30:DG:11:TYR:CZ	30:DG:16:ARG:HD3	2.51	0.46
1:AA:195:A:H2'	1:AA:196:A:C8	2.50	0.46
1:AA:264:U:O2	17:AQ:64:PRO:HG2	2.15	0.46
1:AA:352:C:H2'	1:AA:352:C:O2	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:998:G:H1	1:AA:1043:C:H42	1.63	0.46
1:AA:1250:A:H2'	1:AA:1251:A:C8	2.50	0.46
2:AB:133:LYS:HE2	2:AB:133:LYS:HB3	1.81	0.46
11:AK:59:TYR:CE2	11:AK:63:LEU:HD12	2.50	0.46
13:AM:14:ARG:HA	13:AM:44:ARG:HA	1.97	0.46
16:AP:75:ARG:O	16:AP:78:GLY:N	2.43	0.46
25:BA:65:C:H2'	25:BA:66:C:H6	1.79	0.46
25:BA:244:A:H2'	25:BA:245:G:O4'	2.16	0.46
25:BA:2223:G:C2'	25:BA:2224:G:H5'	2.45	0.46
25:BA:2394:C:OP1	35:BP:64:LYS:HB2	2.15	0.46
30:BG:6:ALA:HB3	30:BG:104:GLU:OE1	2.15	0.46
32:BI:96:ASP:O	32:BI:99:GLU:N	2.48	0.46
44:BY:79:CYS:HB2	44:BY:81:LYS:H	1.79	0.46
45:BZ:44:PHE:CD1	45:BZ:44:PHE:C	2.89	0.46
52:B6:25:LYS:HE3	52:B6:30:THR:O	2.15	0.46
1:CA:328:C:H4'	1:CA:329:A:O5'	2.15	0.46
2:CB:135:GLN:O	2:CB:138:LEU:HD12	2.15	0.46
2:CB:162:ILE:HG13	2:CB:184:VAL:HG13	1.97	0.46
2:CB:178:ARG:HH22	8:CH:68:ARG:NH1	2.14	0.46
7:CG:31:MET:SD	7:CG:34:GLY:HA2	2.55	0.46
25:DA:236:C:H2'	25:DA:237:C:C6	2.50	0.46
25:DA:320:A:H4'	25:DA:322:A:N7	2.30	0.46
25:DA:681:G:H2'	25:DA:682:G:O4'	2.16	0.46
25:DA:736:C:H42	25:DA:760:G:H1	1.63	0.46
25:DA:947:G:N3	25:DA:984:A:H2	2.13	0.46
25:DA:970:C:H2'	25:DA:971:C:C6	2.50	0.46
25:DA:1364:G:N7	47:D1:3:LYS:HE2	2.31	0.46
25:DA:1676:A:H8	25:DA:1676:A:OP2	1.99	0.46
25:DA:2016:U:O2	51:D5:7:PRO:HG2	2.14	0.46
25:DA:2680:C:OP2	28:DE:111:ARG:NH2	2.44	0.46
27:DD:68:LYS:HD2	27:DD:70:TRP:CZ2	2.50	0.46
28:DE:150:VAL:HG13	28:DE:154:LYS:HG3	1.96	0.46
30:DG:25:TYR:HB3	30:DG:30:GLU:HB2	1.97	0.46
31:DH:52:VAL:HG12	31:DH:65:HIS:CD2	2.50	0.46
35:DP:26:GLY:HA3	35:DP:27:HIS:CB	2.45	0.46
38:DS:94:TYR:CE2	38:DS:99:LYS:HD2	2.50	0.46
42:DW:31:GLU:O	42:DW:34:ASN:HB2	2.16	0.46
1:AA:651:C:H2'	1:AA:652:U:C6	2.50	0.46
1:AA:984:C:H2'	1:AA:985:C:C6	2.50	0.46
1:AA:1137:C:H4'	1:AA:1138:G:C2	2.51	0.46
7:AG:74:GLU:OE1	7:AG:95:ARG:NH2	2.48	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:1584:C:H3'	25:BA:1584:C:H6	1.80	0.46
25:BA:1781:C:H6	25:BA:1781:C:H5'	1.79	0.46
25:BA:1914:C:O2'	25:BA:1915:U:P	2.73	0.46
25:BA:2578:G:N3	25:BA:2578:G:H2'	2.29	0.46
25:BA:2615:U:H1'	51:B5:7:PRO:HB3	1.96	0.46
30:BG:3:LEU:HD12	30:BG:5:VAL:HG12	1.96	0.46
34:BO:9:GLU:O	34:BO:83:ALA:HA	2.15	0.46
53:B7:8:ASN:C	53:B7:8:ASN:OD1	2.53	0.46
1:CA:197:A:N6	1:CA:221:C:H5'	2.30	0.46
1:CA:325:A:H2'	1:CA:326:G:O4'	2.15	0.46
1:CA:377:G:N2	1:CA:386:C:N3	2.41	0.46
1:CA:385:C:O2'	1:CA:386:C:H5'	2.16	0.46
1:CA:406:G:H21	4:CD:119:GLN:NE2	2.14	0.46
1:CA:878:G:H5''	1:CA:879:C:OP2	2.16	0.46
1:CA:1085:U:H3'	1:CA:1086:U:H5	1.80	0.46
2:CB:129:GLU:C	2:CB:130:ARG:HD2	2.36	0.46
3:CC:125:GLU:HA	3:CC:191:THR:HG22	1.98	0.46
4:CD:68:TYR:CD2	4:CD:97:LEU:HD22	2.50	0.46
4:CD:101:LEU:HD23	4:CD:138:TYR:HB3	1.96	0.46
4:CD:121:VAL:O	4:CD:134:ASP:HA	2.15	0.46
4:CD:158:ILE:O	4:CD:162:LEU:HB2	2.16	0.46
9:CI:42:ARG:O	9:CI:74:ILE:HG21	2.15	0.46
25:DA:817:C:H2'	25:DA:818:G:H8	1.80	0.46
25:DA:847:U:H5'	25:DA:848:G:OP2	2.15	0.46
25:DA:2567:G:H2'	25:DA:2568:C:H6	1.78	0.46
26:DB:7:G:H4'	38:DS:29:PHE:CD1	2.51	0.46
30:DG:145:THR:OG1	30:DG:146:TYR:N	2.44	0.46
31:DH:149:ARG:HD2	31:DH:164:TYR:HE1	1.79	0.46
33:DN:33:LEU:HD12	33:DN:38:HIS:CD2	2.51	0.46
48:D2:50:ILE:C	48:D2:52:ASP:H	2.19	0.46
1:AA:848:C:O2'	1:AA:849:C:H5'	2.16	0.46
1:AA:983:A:H2	1:AA:984:C:C6	2.33	0.46
2:AB:184:VAL:O	2:AB:198:ASP:HB2	2.16	0.46
6:AF:33:TYR:HB2	6:AF:75:LEU:HD12	1.97	0.46
8:AH:20:TYR:HA	8:AH:65:TYR:OH	2.14	0.46
8:AH:20:TYR:HE1	8:AH:78:GLN:HE22	1.64	0.46
20:AT:53:LEU:HA	20:AT:56:MET:HG2	1.98	0.46
22:AY:32:LYS:HE3	25:BA:2507:C:OP1	2.16	0.46
22:AY:63:LEU:O	22:AY:70:ILE:HA	2.15	0.46
25:BA:272(J):C:H2'	25:BA:274:G:O4'	2.15	0.46
25:BA:668:G:H5'	25:BA:669:G:OP2	2.14	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:1665:A:N6	58:BA:5296:HOH:O	2.49	0.46
25:BA:2206:G:OP2	25:BA:2206:G:H4'	2.14	0.46
25:BA:2690:C:H5''	25:BA:2872:G:N2	2.30	0.46
25:BA:2808:U:H2'	25:BA:2809:A:H5'	1.96	0.46
29:BF:7:TYR:HB2	29:BF:22:ALA:CB	2.45	0.46
29:BF:158:THR:OG1	29:BF:159:GLY:N	2.48	0.46
34:BO:64:ARG:O	34:BO:82:ASN:HA	2.15	0.46
35:BP:88:LEU:HD23	35:BP:88:LEU:HA	1.65	0.46
43:BX:12:VAL:HG22	43:BX:29:TRP:CE2	2.50	0.46
43:BX:31:HIS:HD2	43:BX:33:LYS:H	1.59	0.46
44:BY:15:VAL:HG21	44:BY:42:VAL:HG11	1.97	0.46
47:B1:60:PHE:CE1	47:B1:95:LEU:HD11	2.44	0.46
49:B3:31:LEU:HD23	49:B3:31:LEU:HA	1.61	0.46
53:B7:9:ARG:NH2	53:B7:47:ARG:HG3	2.30	0.46
1:CA:665:A:N3	1:CA:732:C:H2'	2.30	0.46
1:CA:839:U:H5'	1:CA:840:C:H5	1.80	0.46
1:CA:880:C:H2'	1:CA:881:G:C8	2.50	0.46
1:CA:1352:C:H2'	1:CA:1353:G:C8	2.50	0.46
1:CA:1366:C:H2'	1:CA:1367:C:C6	2.50	0.46
4:CD:150:GLU:HA	4:CD:153:ARG:HE	1.80	0.46
11:CK:122:LYS:HB3	11:CK:122:LYS:HE2	1.70	0.46
20:CT:58:LYS:HE3	20:CT:62:LEU:HD11	1.97	0.46
25:DA:14:A:H5''	25:DA:15:G:OP2	2.16	0.46
25:DA:826:U:OP1	25:DA:2428:G:H3'	2.15	0.46
25:DA:1420:U:O2'	25:DA:1421:G:OP1	2.28	0.46
27:DD:179:SER:O	27:DD:275:LYS:HB2	2.15	0.46
29:DF:53:THR:O	29:DF:56:GLU:N	2.42	0.46
29:DF:70:THR:C	29:DF:72:ARG:H	2.18	0.46
32:DI:29:TYR:CD2	32:DI:30:LEU:HD23	2.49	0.46
36:DQ:38:GLU:HB2	36:DQ:127:ILE:HB	1.97	0.46
44:DY:28:LYS:HG2	44:DY:40:GLU:HG3	1.97	0.46
46:D0:34:GLY:N	46:D0:61:ALA:O	2.28	0.46
1:AA:1042:G:H2'	1:AA:1043:C:O4'	2.14	0.46
1:AA:1347:G:C8	9:AI:107:ARG:HB3	2.50	0.46
2:AB:208:ILE:H	2:AB:208:ILE:HG12	1.41	0.46
6:AF:76:ALA:HB1	6:AF:80:ARG:NH2	2.30	0.46
25:BA:557:U:H2'	25:BA:558:G:H8	1.81	0.46
25:BA:652(G):G:H2'	25:BA:652(H):C:H6	1.81	0.46
25:BA:2298:A:H2'	25:BA:2299:G:O4'	2.16	0.46
25:BA:2691:C:O3'	25:BA:2871:C:H4'	2.16	0.46
39:BT:9:LEU:O	39:BT:12:SER:OG	2.32	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B6:16:CYS:SG	52:B6:18:ARG:HG3	2.55	0.46
1:CA:570:G:H2'	1:CA:571:U:C6	2.50	0.46
1:CA:784:C:H2'	1:CA:785:G:C8	2.50	0.46
1:CA:968:A:C8	1:CA:1062:U:H4'	2.51	0.46
1:CA:1007:C:H2'	1:CA:1008:C:C6	2.50	0.46
3:CC:24:ALA:CB	3:CC:29:TYR:HB2	2.40	0.46
25:DA:841:A:H2'	25:DA:842:G:C8	2.50	0.46
25:DA:1515:G:H2'	25:DA:1516:C:C6	2.49	0.46
25:DA:2278:A:OP1	36:DQ:11:LYS:HE2	2.16	0.46
25:DA:2302:G:H2'	25:DA:2303:G:C8	2.50	0.46
25:DA:2611:U:H3'	25:DA:2611:U:OP2	2.16	0.46
25:DA:2766:G:H5''	25:DA:2767:C:OP2	2.14	0.46
35:DP:95:VAL:CG2	35:DP:125:VAL:HG12	2.45	0.46
37:DR:67:LEU:HD13	37:DR:76:VAL:HG21	1.96	0.46
38:DS:66:ALA:O	38:DS:69:VAL:HG12	2.16	0.46
38:DS:78:LEU:HD22	38:DS:82:ILE:O	2.15	0.46
45:DZ:24:LEU:HD23	45:DZ:44:PHE:CD1	2.51	0.46
46:D0:41:ARG:HD3	46:D0:41:ARG:HA	1.63	0.46
48:D2:21:LEU:HD23	48:D2:21:LEU:HA	1.60	0.46
52:D6:17:LYS:HD3	52:D6:17:LYS:HA	1.73	0.46
1:AA:1392:G:H2'	1:AA:1393:U:C6	2.50	0.46
2:AB:21:ARG:NH1	2:AB:23:ARG:HB2	2.30	0.46
4:AD:121:VAL:O	4:AD:134:ASP:HA	2.16	0.46
10:AJ:67:THR:O	10:AJ:67:THR:OG1	2.34	0.46
12:AL:24:VAL:HG13	12:AL:98:TYR:CE2	2.50	0.46
23:AV:31:G:C2	23:AV:40:C:C2	3.03	0.46
25:BA:271(I):G:H1	25:BA:271(O):C:N4	2.14	0.46
25:BA:330:A:H2	25:BA:1210:A:C2'	2.24	0.46
25:BA:614(C):A:C4	29:BF:180:GLY:HA2	2.50	0.46
25:BA:1109:C:C5	25:BA:1110:G:C6	3.03	0.46
25:BA:1257:C:H4'	29:BF:83:PHE:CE2	2.50	0.46
25:BA:1805:U:H5''	27:BD:250:TRP:CD2	2.50	0.46
25:BA:2405:G:O2'	25:BA:2411:A:N6	2.49	0.46
27:BD:85:ASP:HB2	27:BD:92:ILE:HD13	1.98	0.46
28:BE:59:VAL:HG21	28:BE:74:PRO:HB3	1.98	0.46
29:BF:176:LEU:HD21	29:BF:181:LEU:HA	1.97	0.46
42:BW:36:LEU:HA	42:BW:36:LEU:HD23	1.53	0.46
45:BZ:70:LEU:HG	45:BZ:91:LEU:HD21	1.97	0.46
54:B8:40:GLU:O	54:B8:44:LYS:HG3	2.16	0.46
1:CA:149:A:O2'	1:CA:150:C:H5'	2.15	0.46
1:CA:262:A:C6	1:CA:263:A:C6	3.03	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:509:A:H5''	4:CD:55:ALA:HB2	1.98	0.46
1:CA:1133:G:N2	1:CA:1142:G:C4	2.83	0.46
1:CA:1316:G:H2'	1:CA:1317:C:H5''	1.97	0.46
10:CJ:6:ILE:HA	10:CJ:97:GLU:O	2.15	0.46
11:CK:84:VAL:HG12	11:CK:110:ASP:OD1	2.15	0.46
25:DA:590:A:OP1	29:DF:95:ARG:NH1	2.49	0.46
25:DA:671:C:H2'	25:DA:672:C:C6	2.51	0.46
25:DA:774:A:N3	25:DA:774:A:H2'	2.31	0.46
25:DA:1495:A:H2'	25:DA:1496:A:H8	1.74	0.46
27:DD:36:PRO:HA	27:DD:61:LEU:CD1	2.46	0.46
29:DF:51:THR:HB	29:DF:88:VAL:HG11	1.96	0.46
29:DF:164:ARG:O	29:DF:168:ARG:HB2	2.16	0.46
30:DG:121:ASN:HA	30:DG:122:PRO:HD3	1.68	0.46
32:DI:140:LEU:HD23	32:DI:140:LEU:HA	1.73	0.46
41:DV:87:HIS:NE2	41:DV:89:GLN:HG2	2.31	0.46
45:DZ:9:TYR:CE2	45:DZ:35:ARG:HG3	2.50	0.46
51:D5:51:TYR:CE1	51:D5:56:LYS:HG3	2.50	0.46
54:D8:16:ILE:HD12	54:D8:59:LYS:HD2	1.97	0.46
1:AA:633:G:H2'	1:AA:634:C:C6	2.50	0.46
1:AA:834:C:H2'	1:AA:835:U:H6	1.81	0.46
1:AA:1112:C:H1'	3:AC:179:ARG:HE	1.80	0.46
1:AA:1366:C:H2'	1:AA:1367:C:C6	2.51	0.46
2:AB:103:THR:HA	2:AB:180:LEU:HD11	1.97	0.46
6:AF:68:PRO:HG2	6:AF:71:ARG:HD2	1.98	0.46
7:AG:120:ILE:H	7:AG:120:ILE:HG12	1.47	0.46
8:AH:25:ASP:HB3	8:AH:58:TYR:HD2	1.81	0.46
12:AL:56:ALA:O	12:AL:68:ALA:N	2.42	0.46
25:BA:725:G:C6	25:BA:726:G:N1	2.84	0.46
25:BA:807:U:OP2	35:BP:41:ARG:NH2	2.47	0.46
25:BA:824:A:H1'	25:BA:2358:G:N7	2.30	0.46
25:BA:833:U:H2'	25:BA:834:C:C6	2.51	0.46
25:BA:1260:G:C6	25:BA:1261:C:C4	3.03	0.46
25:BA:1786:A:H1'	25:BA:1938:A:N6	2.30	0.46
28:BE:60:ASN:O	28:BE:64:LYS:HB2	2.15	0.46
33:BN:48:MET:HE3	33:BN:48:MET:HB2	1.86	0.46
37:BR:2:ARG:O	37:BR:2:ARG:HG2	2.16	0.46
1:CA:124:G:H2'	1:CA:125:U:C6	2.51	0.46
1:CA:408:A:C6	1:CA:409:G:C5	3.04	0.46
1:CA:781:A:H5'	1:CA:782:A:OP2	2.16	0.46
1:CA:1399:C:C2	1:CA:1502:A:N6	2.84	0.46
18:CR:52:PRO:O	18:CR:56:THR:HG23	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:82:SER:O	20:CT:86:ARG:HG3	2.16	0.46
25:DA:137:C:N4	25:DA:139:G:O6	2.48	0.46
25:DA:854:G:H2'	25:DA:855:G:C8	2.50	0.46
25:DA:2295:C:H5	38:DS:13:ARG:NH2	2.13	0.46
25:DA:2295:C:H5	38:DS:13:ARG:HH22	1.63	0.46
25:DA:2418:A:C2	25:DA:2419:U:C2	3.03	0.46
25:DA:2461:C:H2'	25:DA:2462:U:H6	1.81	0.46
27:DD:65:ILE:HG21	27:DD:106:ILE:HG22	1.98	0.46
29:DF:149:ASP:OD2	29:DF:149:ASP:N	2.47	0.46
34:DO:89:ASN:OD1	34:DO:89:ASN:N	2.48	0.46
40:DU:79:PHE:CZ	40:DU:83:LEU:HD21	2.51	0.46
47:D1:94:LEU:HD23	47:D1:94:LEU:HA	1.70	0.46
1:AA:52:G:O2'	1:AA:53:A:H5'	2.16	0.46
1:AA:354:G:C2	1:AA:355:C:C5	3.04	0.46
1:AA:925:G:H1'	1:AA:1502:A:C4	2.51	0.46
7:AG:36:LYS:O	7:AG:40:ALA:N	2.46	0.46
8:AH:20:TYR:HD1	8:AH:65:TYR:CE2	2.34	0.46
25:BA:620:G:N3	25:BA:620:G:H5'	2.30	0.46
25:BA:754:C:H2'	25:BA:755:C:C6	2.50	0.46
25:BA:1508:A:H4'	25:BA:1509(A):A:C4	2.51	0.46
27:BD:166:GLN:HB2	27:BD:174:ILE:HG22	1.98	0.46
29:BF:140:LEU:HD13	29:BF:140:LEU:HA	1.69	0.46
30:BG:94:LEU:HA	30:BG:94:LEU:HD23	1.69	0.46
35:BP:36:LYS:O	35:BP:40:SER:HB3	2.16	0.46
36:BQ:30:GLY:HA2	36:BQ:107:ALA:HB2	1.98	0.46
40:BU:104:GLN:H	40:BU:104:GLN:HG3	1.45	0.46
43:BX:5:TYR:CE1	48:B2:30:ARG:HB2	2.50	0.46
1:CA:124:G:H1	1:CA:237:C:H42	1.62	0.46
1:CA:330:C:H2'	1:CA:331:G:H5'	1.98	0.46
1:CA:734:G:H2'	1:CA:735:C:H6	1.81	0.46
1:CA:1427:U:H2'	1:CA:1428:A:C8	2.51	0.46
9:CI:71:SER:HA	9:CI:74:ILE:HB	1.97	0.46
25:DA:41:C:H2'	25:DA:42:G:C8	2.51	0.46
25:DA:330:A:O2'	25:DA:331:A:H2'	2.15	0.46
25:DA:1007:C:H2'	25:DA:1008:C:H5	1.80	0.46
25:DA:1021:A:H3'	25:DA:1021:A:H8	1.80	0.46
26:DB:90:A:C6	26:DB:91:C:H1'	2.50	0.46
27:DD:51:VAL:CG1	27:DD:54:ARG:HD3	2.46	0.46
28:DE:117:MET:H	28:DE:117:MET:HG3	1.62	0.46
29:DF:181:LEU:O	29:DF:205:ARG:NH2	2.44	0.46
39:DT:11:GLU:O	39:DT:15:VAL:HG23	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:D3:52:HIS:CD2	49:D3:53:LEU:HG	2.51	0.46
1:AA:137:C:O5'	1:AA:137:C:H6	1.98	0.46
1:AA:522:C:H5''	12:AL:120:TYR:OH	2.16	0.46
1:AA:574:A:N3	1:AA:883:C:H1'	2.31	0.46
1:AA:784:C:C2	1:AA:799:G:N2	2.84	0.46
1:AA:937:A:H5''	1:AA:938:A:OP2	2.16	0.46
4:AD:70:ILE:HG12	4:AD:71:SER:H	1.81	0.46
18:AR:43:PHE:C	18:AR:51:LEU:HD12	2.35	0.46
20:AT:56:MET:HE3	20:AT:88:VAL:HG11	1.96	0.46
22:AY:4:ILE:O	22:AY:4:ILE:HG22	2.15	0.46
22:AY:40:ARG:O	22:AY:71:VAL:HA	2.15	0.46
25:BA:27:G:O2'	25:BA:28:A:OP2	2.32	0.46
25:BA:236:C:H2'	25:BA:237:C:C6	2.50	0.46
25:BA:612:C:H2'	25:BA:613:G:O4'	2.16	0.46
25:BA:981:A:H2	25:BA:2027:G:N3	2.13	0.46
25:BA:1268:A:C2	25:BA:2013:A:C4	3.04	0.46
25:BA:1399:C:P	43:BX:25:LYS:HZ1	2.39	0.46
25:BA:1705:G:C6	25:BA:1706:U:C4	3.04	0.46
25:BA:1784:A:P	58:BA:5166:HOH:O	2.73	0.46
25:BA:1889:A:O2'	25:BA:2087:G:H5'	2.16	0.46
25:BA:2096:U:H5'	25:BA:2097:C:OP2	2.16	0.46
25:BA:2466:C:C2'	25:BA:2467:C:H5'	2.45	0.46
31:BH:9:ILE:HD13	31:BH:72:ILE:HG22	1.97	0.46
36:BQ:58:PHE:HB3	36:BQ:61:GLY:HA3	1.98	0.46
36:BQ:69:PHE:CD1	36:BQ:70:PRO:HD2	2.51	0.46
41:BV:5:VAL:HG11	41:BV:57:VAL:HG21	1.97	0.46
1:CA:10:A:H2'	1:CA:11:G:C8	2.50	0.46
1:CA:273:A:N6	1:CA:274:A:C6	2.84	0.46
1:CA:518:C:H2'	1:CA:530:G:H8	1.77	0.46
1:CA:604:G:C6	1:CA:605:U:N3	2.84	0.46
1:CA:1157:A:H4'	1:CA:1158:C:O5'	2.15	0.46
1:CA:1343:G:C6	1:CA:1344:C:N4	2.84	0.46
2:CB:47:THR:HG23	2:CB:202:PRO:HG2	1.98	0.46
14:CN:33:VAL:HA	14:CN:39:LEU:O	2.16	0.46
19:CS:51:VAL:O	19:CS:57:HIS:HA	2.16	0.46
25:DA:370:G:H4'	25:DA:371:A:OP2	2.16	0.46
25:DA:517:C:OP1	51:D5:16:ARG:NH2	2.45	0.46
25:DA:528:A:H3'	25:DA:528:A:C8	2.50	0.46
25:DA:704:G:H1'	25:DA:726:G:N2	2.30	0.46
25:DA:850:C:O3'	49:D3:49:LYS:HE2	2.16	0.46
25:DA:1332:G:H4'	25:DA:1333:C:OP2	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1464:C:C2	25:DA:1465:G:C8	3.04	0.46
25:DA:1827:C:C2'	25:DA:1828:G:H5'	2.46	0.46
25:DA:1925:C:O2'	25:DA:1926:U:H5'	2.15	0.46
29:DF:187:VAL:HG12	35:DP:3:LEU:HD12	1.96	0.46
31:DH:13:LYS:HA	31:DH:14:GLY:HA2	1.57	0.46
34:DO:113:LYS:O	34:DO:117:LEU:HD12	2.15	0.46
41:DV:37:VAL:HG12	41:DV:39:LEU:H	1.81	0.46
1:AA:308:C:H2'	1:AA:309:G:C8	2.51	0.46
1:AA:1249:C:O4'	9:AI:70:LYS:HE2	2.16	0.46
1:AA:1300:G:HO2'	1:AA:1301:U:P	2.39	0.46
3:AC:56:ASP:O	3:AC:57:ILE:HG13	2.16	0.46
4:AD:192:GLU:C	4:AD:194:LEU:N	2.70	0.46
7:AG:69:VAL:CG1	7:AG:100:ALA:HA	2.46	0.46
9:AI:114:TYR:N	9:AI:114:TYR:CD2	2.84	0.46
21:AU:25:LYS:HA	21:AU:26:LYS:NZ	2.31	0.46
23:AV:2:G:H2'	23:AV:2:G:N3	2.30	0.46
25:BA:413:C:H2'	25:BA:414:C:H6	1.78	0.46
25:BA:705:A:H2'	25:BA:706:A:O4'	2.16	0.46
25:BA:847:U:C5	25:BA:933:A:N6	2.84	0.46
25:BA:1047:G:OP1	25:BA:1047:G:H4'	2.16	0.46
25:BA:2790:A:N3	25:BA:2790:A:H2'	2.31	0.46
25:BA:2837:G:H5''	58:BA:4879:HOH:O	2.15	0.46
28:BE:116:VAL:CG1	28:BE:122:PHE:CD2	2.99	0.46
31:BH:125:VAL:HG12	31:BH:127:GLU:O	2.15	0.46
36:BQ:43:THR:HA	36:BQ:94:VAL:HG12	1.97	0.46
37:BR:18:LEU:HD23	37:BR:18:LEU:HA	1.59	0.46
47:B1:22:GLY:O	47:B1:32:LYS:NZ	2.49	0.46
1:CA:382:A:H2'	1:CA:383:A:H8	1.80	0.46
1:CA:976:G:H5''	1:CA:1358:U:O2	2.15	0.46
2:CB:165:VAL:HG23	2:CB:166:ASP:N	2.30	0.46
3:CC:189:ALA:HB3	3:CC:196:LEU:HB2	1.98	0.46
10:CJ:55:LYS:HB3	10:CJ:55:LYS:HE2	1.45	0.46
16:CP:68:ASP:C	16:CP:70:ALA:N	2.68	0.46
25:DA:699:A:H2'	25:DA:700:G:O4'	2.16	0.46
32:DI:41:GLU:HA	32:DI:44:LEU:HB3	1.97	0.46
37:DR:118:GLU:H	37:DR:118:GLU:HG3	1.26	0.46
42:DW:51:LEU:O	42:DW:54:ALA:HB3	2.16	0.46
48:D2:32:LEU:O	48:D2:35:LEU:N	2.49	0.46
1:AA:170:U:O2'	1:AA:171:A:H5'	2.15	0.45
1:AA:323:U:H2'	1:AA:324:G:O4'	2.16	0.45
1:AA:657:G:C2	1:AA:658:G:C8	3.04	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:671:G:H2'	1:AA:672:U:O4'	2.16	0.45
1:AA:1054:C:O2'	1:AA:1055:A:H5''	2.16	0.45
2:AB:215:LEU:HD23	2:AB:215:LEU:HA	1.67	0.45
11:AK:125:PHE:N	11:AK:125:PHE:CD2	2.84	0.45
12:AL:24:VAL:CG1	12:AL:26:ALA:HB2	2.46	0.45
17:AQ:43:LEU:HB3	17:AQ:69:LYS:CE	2.39	0.45
25:BA:297:C:H5''	44:BY:87:LYS:HG3	1.98	0.45
25:BA:518:G:H2'	25:BA:519:U:C6	2.51	0.45
25:BA:1632:A:N6	25:BA:1633:G:C6	2.84	0.45
25:BA:1721:G:H3'	25:BA:1722:A:H5''	1.98	0.45
25:BA:2088:G:C6	25:BA:2089:U:C4	3.04	0.45
25:BA:2298:A:N6	25:BA:2318:G:H8	2.13	0.45
25:BA:2355:C:H1'	46:B0:39:ARG:HH21	1.82	0.45
25:BA:2461:C:H2'	25:BA:2462:U:H6	1.81	0.45
25:BA:2623:G:H4'	25:BA:2825:C:O2	2.16	0.45
26:BB:119:G:O2'	26:BB:120:A:H5'	2.13	0.45
32:BI:29:TYR:HD2	32:BI:30:LEU:HD23	1.81	0.45
32:BI:38:LEU:HB3	32:BI:40:THR:HG22	1.98	0.45
33:BN:128:HIS:HA	33:BN:129:PRO:HD2	1.46	0.45
35:BP:45:LEU:HA	35:BP:45:LEU:HD23	1.28	0.45
38:BS:61:ASN:O	38:BS:65:VAL:HG23	2.16	0.45
42:BW:65:LEU:HD12	42:BW:68:ARG:HE	1.81	0.45
1:CA:922:G:C2	1:CA:923:A:C4	3.04	0.45
1:CA:1189:C:O2	58:CA:2101:HOH:O	2.20	0.45
1:CA:1291:G:H2'	1:CA:1292:U:C6	2.51	0.45
1:CA:1501:C:OP2	1:CA:1504:G:H2'	2.15	0.45
2:CB:111:ARG:HD3	2:CB:111:ARG:HA	1.58	0.45
2:CB:130:ARG:HB3	2:CB:131:PRO:HD2	1.98	0.45
3:CC:30:ARG:NH2	14:CN:38:GLY:HA2	2.30	0.45
15:CO:16:ALA:HB1	15:CO:21:ASP:HB3	1.98	0.45
16:CP:53:VAL:HG13	16:CP:79:VAL:HG23	1.98	0.45
25:DA:271(K):U:O2'	25:DA:271(M):G:N2	2.49	0.45
25:DA:848:G:C4	25:DA:933:A:C8	3.04	0.45
25:DA:1164:G:H2'	25:DA:1165:U:C6	2.52	0.45
25:DA:2032:G:H4'	58:DA:4589:HOH:O	2.15	0.45
25:DA:2335:A:O2'	25:DA:2337:G:N7	2.41	0.45
26:DB:6:C:C2	26:DB:116:G:N2	2.84	0.45
29:DF:184:TYR:CE1	35:DP:3:LEU:HD21	2.51	0.45
32:DI:126:TYR:HB2	32:DI:142:VAL:O	2.15	0.45
37:DR:97:VAL:HG23	37:DR:114:VAL:HG23	1.98	0.45
1:AA:55:A:C6	1:AA:56:U:C4	3.04	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:692:U:O2'	1:AA:694:A:N7	2.41	0.45
1:AA:1065:U:H4'	1:AA:1066:C:O5'	2.15	0.45
1:AA:1225:A:H5'	1:AA:1226:C:OP2	2.16	0.45
4:AD:14:ARG:H	4:AD:39:PRO:HA	1.80	0.45
13:AM:37:THR:HG23	13:AM:59:TYR:CD2	2.46	0.45
17:AQ:31:LEU:HG	17:AQ:31:LEU:O	2.15	0.45
22:AY:62:HIS:O	22:AY:63:LEU:HB2	2.16	0.45
25:BA:181:A:H1'	58:BA:4020:HOH:O	2.16	0.45
25:BA:883:G:C6	25:BA:884:C:C4	3.04	0.45
25:BA:1332:G:N2	25:BA:1609:A:C2'	2.78	0.45
25:BA:1359:A:N1	25:BA:1372:U:O4	2.49	0.45
25:BA:1863:G:H2'	25:BA:1864:U:O4'	2.15	0.45
25:BA:2615:U:C2	51:B5:7:PRO:HA	2.51	0.45
29:BF:68:LYS:HB2	29:BF:69:HIS:ND1	2.31	0.45
33:BN:138:LEU:HA	33:BN:138:LEU:HD23	1.36	0.45
42:BW:86:LEU:HD12	42:BW:87:PRO:CD	2.41	0.45
51:B5:40:LYS:HE2	51:B5:40:LYS:HB2	1.43	0.45
1:CA:234:C:H2'	1:CA:235:C:C6	2.51	0.45
1:CA:501:C:OP1	12:CL:117:ARG:NH2	2.49	0.45
1:CA:975:A:H4'	1:CA:1358:U:O2	2.16	0.45
1:CA:986:A:N3	19:CS:52:TYR:OH	2.41	0.45
1:CA:1347:G:H22	1:CA:1374:A:P	2.38	0.45
3:CC:137:ALA:HA	3:CC:140:ARG:HE	1.81	0.45
4:CD:57:ARG:HG2	4:CD:202:LEU:O	2.17	0.45
15:CO:17:ARG:HH11	15:CO:17:ARG:HG3	1.82	0.45
16:CP:55:ARG:O	16:CP:58:TYR:N	2.45	0.45
19:CS:12:ASP:HB3	19:CS:13:ASP:H	1.48	0.45
25:DA:271(Q):G:O2'	25:DA:271(R):G:OP2	2.30	0.45
25:DA:506:G:O3'	25:DA:507:A:H8	1.98	0.45
25:DA:600:G:N2	25:DA:605:C:O3'	2.49	0.45
25:DA:1006:C:N3	25:DA:1138:G:C2	2.84	0.45
25:DA:1115:G:H8	25:DA:1115:G:OP2	1.99	0.45
25:DA:1124:C:H1'	55:D9:36:GLN:NE2	2.31	0.45
25:DA:1341:U:OP1	25:DA:1397:U:N3	2.37	0.45
25:DA:2419:U:H2'	25:DA:2420:C:C6	2.52	0.45
26:DB:83:G:H1	26:DB:94:C:H42	1.64	0.45
27:DD:264:LYS:O	27:DD:267:SER:HB2	2.16	0.45
29:DF:59:TYR:CD1	29:DF:78:ILE:HD12	2.50	0.45
31:DH:87:LEU:HA	31:DH:163:TYR:O	2.16	0.45
32:DI:26:ALA:HA	32:DI:30:LEU:HB2	1.98	0.45
37:DR:107:ASP:OD2	37:DR:108:GLY:N	2.50	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DU:104:GLN:OE1	40:DU:105:VAL:N	2.49	0.45
1:AA:297:G:H5''	58:AA:2148:HOH:O	2.15	0.45
1:AA:363:A:O2'	1:AA:364:A:H5'	2.16	0.45
1:AA:373:A:H2'	1:AA:374:A:H8	1.81	0.45
1:AA:599:C:H4'	8:AH:130:GLY:CA	2.46	0.45
1:AA:1261:A:H5''	1:AA:1262:C:OP2	2.17	0.45
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.51	0.45
4:AD:60:GLU:OE2	4:AD:198:VAL:HA	2.16	0.45
12:AL:27:LEU:CB	12:AL:30:ALA:HB3	2.47	0.45
20:AT:31:SER:HA	20:AT:34:LYS:HE3	1.97	0.45
25:BA:176:G:O2'	25:BA:177:G:H5'	2.16	0.45
25:BA:1932:A:H2'	25:BA:1933:G:O4'	2.17	0.45
26:BB:35:U:H5''	58:BB:335:HOH:O	2.15	0.45
32:BI:9:LEU:HD21	32:BI:35:LEU:HD13	1.99	0.45
33:BN:28:THR:HG22	33:BN:29:LYS:N	2.31	0.45
35:BP:148:LEU:H	35:BP:148:LEU:HD23	1.80	0.45
37:BR:77:ARG:O	37:BR:81:ASP:HB2	2.17	0.45
52:B6:39:TYR:HE2	52:B6:41:PRO:HA	1.81	0.45
1:CA:910:C:H2'	1:CA:911:U:O4'	2.16	0.45
1:CA:923:A:H2'	1:CA:924:C:H6	1.81	0.45
1:CA:1015:A:H2'	1:CA:1016:A:C8	2.51	0.45
1:CA:1091:U:O2	1:CA:1093:A:C8	2.69	0.45
1:CA:1176:A:H2'	1:CA:1177:G:O4'	2.16	0.45
2:CB:107:THR:HA	2:CB:110:GLN:HG3	1.99	0.45
2:CB:178:ARG:HD2	2:CB:196:LEU:O	2.17	0.45
6:CF:29:ALA:O	6:CF:32:ASN:HB2	2.15	0.45
13:CM:72:ALA:O	13:CM:75:ALA:HB3	2.16	0.45
17:CQ:83:ASP:N	17:CQ:83:ASP:OD1	2.48	0.45
20:CT:33:ILE:O	20:CT:37:SER:OG	2.27	0.45
23:CV:19:G:C4	23:CV:57:A:C2	3.05	0.45
25:DA:1017:G:O6	58:DA:4540:HOH:O	2.20	0.45
28:DE:12:THR:HG22	28:DE:13:ARG:N	2.31	0.45
31:DH:95:ARG:CB	31:DH:128:PRO:HB3	2.45	0.45
44:DY:39:VAL:HG12	44:DY:42:VAL:HG21	1.98	0.45
46:D0:27:GLU:HB2	46:D0:69:PHE:CD1	2.45	0.45
1:AA:185:A:H2'	1:AA:186:C:C6	2.52	0.45
1:AA:303:A:O2'	1:AA:555:C:O2'	2.24	0.45
1:AA:913:A:H4'	1:AA:914:A:O5'	2.16	0.45
1:AA:1223:C:P	19:AS:78:ARG:HH21	2.39	0.45
1:AA:1516:G:H2'	1:AA:1518:A:OP2	2.16	0.45
2:AB:9:GLU:C	2:AB:11:LEU:H	2.19	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:114:TYR:H	9:AI:114:TYR:HD2	1.65	0.45
12:AL:5:PRO:HG2	12:AL:10:LEU:HD21	1.99	0.45
12:AL:7:ILE:HA	12:AL:10:LEU:HD23	1.98	0.45
12:AL:24:VAL:O	12:AL:24:VAL:HG12	2.16	0.45
15:AO:62:GLN:O	15:AO:65:ARG:HB2	2.16	0.45
16:AP:74:LEU:HB3	16:AP:79:VAL:HG11	1.97	0.45
17:AQ:44:ALA:N	17:AQ:69:LYS:NZ	2.62	0.45
24:AX:3:A:O5'	24:AX:3:A:H8	1.99	0.45
25:BA:1142(A):A:C4	25:BA:1144:G:C8	3.04	0.45
25:BA:1790:C:H4'	27:BD:209:ALA:HB2	1.98	0.45
25:BA:2092:U:H4'	25:BA:2093:G:O5'	2.17	0.45
25:BA:2494:G:O2'	25:BA:2495:G:H5'	2.16	0.45
25:BA:2496:C:OP1	36:BQ:82:ARG:HB3	2.17	0.45
27:BD:2:ALA:N	27:BD:20:ASP:OD2	2.49	0.45
28:BE:170:LEU:HB3	28:BE:184:VAL:HG21	1.97	0.45
31:BH:7:LEU:HA	31:BH:8:PRO:HD2	1.66	0.45
37:BR:118:GLU:CD	37:BR:118:GLU:H	2.19	0.45
1:CA:129(A):G:O6	1:CA:189(E):U:O4'	2.34	0.45
1:CA:373:A:C2	1:CA:374:A:C8	3.04	0.45
1:CA:376:G:H2'	1:CA:377:G:H8	1.81	0.45
1:CA:460:G:O6	1:CA:470:C:H5''	2.15	0.45
1:CA:624:C:O3'	16:CP:10:GLY:HA2	2.17	0.45
1:CA:770:C:O2'	1:CA:899:C:N3	2.39	0.45
1:CA:1122:U:H2'	1:CA:1123:A:O4'	2.17	0.45
1:CA:1206:G:H4'	3:CC:192:THR:O	2.15	0.45
1:CA:1318:A:H4'	19:CS:10:PHE:CE2	2.51	0.45
3:CC:18:TRP:CD1	14:CN:53:LEU:O	2.70	0.45
4:CD:89:THR:O	4:CD:93:PHE:N	2.39	0.45
7:CG:26:PHE:CG	7:CG:62:PHE:HE1	2.34	0.45
10:CJ:8:LEU:O	10:CJ:16:LEU:HD11	2.17	0.45
17:CQ:45:HIS:HB3	17:CQ:72:ARG:HB3	1.98	0.45
25:DA:141:A:H8	25:DA:1408:C:HO2'	1.53	0.45
25:DA:280:C:N3	25:DA:361:G:N2	2.64	0.45
25:DA:990:A:N6	25:DA:1186:G:H1'	2.31	0.45
25:DA:1375:C:H2'	25:DA:1376:C:H6	1.81	0.45
25:DA:1468:C:H2'	25:DA:1469:A:C8	2.52	0.45
25:DA:1952:A:C6	25:DA:1953:A:N1	2.85	0.45
25:DA:2571:C:H5''	25:DA:2572:A:H5''	1.98	0.45
30:DG:120:LEU:HB2	30:DG:180:PHE:HD2	1.82	0.45
31:DH:92:ILE:O	31:DH:94:TYR:HB2	2.16	0.45
34:DO:43:VAL:HG23	34:DO:56:ASP:O	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DZ:22:GLY:O	45:DZ:23:LYS:HD3	2.16	0.45
1:AA:251:G:N2	1:AA:253:U:C5	2.85	0.45
1:AA:304:U:H2'	1:AA:305:G:C8	2.51	0.45
1:AA:392:G:H2'	1:AA:393:A:C8	2.52	0.45
1:AA:560:U:H4'	1:AA:561:U:O5'	2.16	0.45
1:AA:818:G:O2'	1:AA:820:U:H6	2.00	0.45
1:AA:832:C:H6	1:AA:832:C:H2'	1.59	0.45
1:AA:1053:G:C4'	1:AA:1054:C:H5'	2.46	0.45
1:AA:1316:G:N2	1:AA:1319:A:H5''	2.31	0.45
8:AH:68:ARG:HB3	8:AH:68:ARG:HH11	1.82	0.45
25:BA:55:G:N3	25:BA:127:A:H2	2.14	0.45
25:BA:857:C:H4'	46:B0:23:VAL:HG21	1.99	0.45
25:BA:1048:A:O2'	25:BA:1049:C:OP2	2.29	0.45
25:BA:1511:C:N4	58:BA:5287:HOH:O	2.49	0.45
25:BA:2877:G:O2'	25:BA:2878:U:H5'	2.17	0.45
26:BB:51:G:N7	38:BS:62:LYS:NZ	2.42	0.45
27:BD:94:LEU:HA	27:BD:94:LEU:HD23	1.63	0.45
28:BE:45:THR:O	28:BE:82:ARG:HG2	2.16	0.45
33:BN:30:ILE:O	33:BN:34:LEU:HB2	2.17	0.45
35:BP:19:VAL:CG2	35:BP:31:ALA:HB1	2.46	0.45
36:BQ:16:ARG:HE	36:BQ:16:ARG:HB3	1.62	0.45
48:B2:21:LEU:HD23	48:B2:21:LEU:HA	1.70	0.45
52:B6:47:THR:HB	52:B6:49:HIS:HE1	1.82	0.45
55:B9:2:LYS:HA	55:B9:2:LYS:HD2	1.50	0.45
1:CA:503:C:H2'	1:CA:504:C:H6	1.82	0.45
1:CA:622:A:C8	1:CA:623:C:C5	3.04	0.45
2:CB:37:ASN:O	2:CB:39:ILE:HG13	2.16	0.45
25:DA:507:A:H5''	25:DA:508:G:H3'	1.98	0.45
25:DA:563:G:H5'	25:DA:572:A:H4'	1.98	0.45
25:DA:571:A:H1'	25:DA:573:G:H5''	1.98	0.45
25:DA:573:G:O2'	25:DA:574:C:H3'	2.15	0.45
25:DA:874:G:H2'	25:DA:875:G:O4'	2.17	0.45
25:DA:1942:C:OP2	25:DA:1943:U:O2'	2.28	0.45
25:DA:2023:G:H5'	25:DA:2617:C:H4'	1.98	0.45
34:DO:107:ARG:HB2	34:DO:115:VAL:HG11	1.98	0.45
36:DQ:69:PHE:CD1	36:DQ:70:PRO:HD2	2.52	0.45
45:DZ:14:LYS:HA	45:DZ:15:PRO:HD3	1.75	0.45
47:D1:66:HIS:C	47:D1:68:PRO:HD2	2.37	0.45
1:AA:343:U:H3'	1:AA:343:U:OP2	2.15	0.45
1:AA:1106:G:C5	1:AA:1107:C:C5	3.05	0.45
5:AE:71:LEU:HD23	5:AE:71:LEU:HA	1.58	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:59:TYR:O	13:AM:63:THR:N	2.49	0.45
14:AN:3:ARG:O	14:AN:6:LEU:HB3	2.16	0.45
25:BA:658:C:H2'	25:BA:659:C:C6	2.51	0.45
25:BA:790:C:H6	25:BA:790:C:H2'	1.54	0.45
25:BA:806:C:C2	25:BA:807:U:C5	3.04	0.45
25:BA:1049:C:N4	25:BA:1111:A:C2	2.83	0.45
25:BA:1322:A:H2'	25:BA:1323:U:C6	2.51	0.45
25:BA:2101:G:H2'	25:BA:2102:U:C6	2.52	0.45
25:BA:2376:A:N3	38:BS:106:ARG:NH2	2.62	0.45
37:BR:67:LEU:O	37:BR:71:GLN:N	2.49	0.45
41:BV:76:LYS:HG3	41:BV:81:TYR:CD1	2.52	0.45
43:BX:84:ALA:O	43:BX:87:GLN:HG3	2.17	0.45
45:BZ:24:LEU:HD11	45:BZ:85:HIS:HA	1.99	0.45
45:BZ:150:LEU:HB3	45:BZ:171:ILE:HD11	1.99	0.45
1:CA:563:A:N7	1:CA:567:G:H1'	2.32	0.45
1:CA:677:U:H1'	11:CK:119:CYS:SG	2.56	0.45
1:CA:872:A:C5	1:CA:874:G:C8	3.05	0.45
1:CA:939:G:H5''	7:CG:102:ARG:NH1	2.31	0.45
1:CA:1446:U:H4'	1:CA:1447:A:C6	2.51	0.45
2:CB:167:PRO:O	2:CB:171:ALA:N	2.49	0.45
3:CC:139:GLN:OE1	3:CC:139:GLN:HA	2.17	0.45
5:CE:12:LEU:O	5:CE:30:ALA:HA	2.16	0.45
8:CH:66:GLY:O	8:CH:76:PRO:HB3	2.17	0.45
10:CJ:42:THR:OG1	10:CJ:68:HIS:HB3	2.16	0.45
17:CQ:45:HIS:NE2	17:CQ:47:PRO:HG3	2.32	0.45
25:DA:95:G:O2'	48:D2:46:GLN:HA	2.16	0.45
25:DA:184:C:H2'	25:DA:185:U:H6	1.81	0.45
25:DA:953:A:C4	25:DA:954:G:C8	3.04	0.45
25:DA:970:C:H2'	25:DA:971:C:H6	1.81	0.45
25:DA:997:G:H5''	40:DU:92:ARG:HH21	1.81	0.45
25:DA:2262:U:H2'	25:DA:2263:C:C6	2.52	0.45
25:DA:2331:G:H4'	46:D0:43:THR:H	1.81	0.45
25:DA:2462:U:H1'	25:DA:2491:U:O4	2.17	0.45
25:DA:2557:G:H2'	25:DA:2558:C:C6	2.51	0.45
26:DB:28:C:H2'	26:DB:29:A:O4'	2.17	0.45
29:DF:24:LEU:HD21	29:DF:199:TRP:HH2	1.81	0.45
31:DH:71:LEU:O	31:DH:74:ASN:N	2.49	0.45
36:DQ:132:VAL:HG11	45:DZ:81:ARG:NH2	2.31	0.45
42:DW:12:ILE:HD13	42:DW:17:VAL:HG22	1.97	0.45
47:D1:41:ARG:HD3	47:D1:43:TYR:CE2	2.52	0.45
1:AA:608:A:H2'	1:AA:609:A:O4'	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:754:C:P	15:AO:72:ARG:HH12	2.40	0.45
2:AB:80:ILE:HD11	2:AB:211:ILE:HG22	1.98	0.45
8:AH:111:ILE:O	8:AH:112:LEU:HB3	2.16	0.45
23:AV:47:U:H3'	23:AV:48:C:C5'	2.47	0.45
25:BA:181:A:H2'	25:BA:182:A:C8	2.51	0.45
25:BA:254:G:N7	54:B8:5:LYS:HE2	2.32	0.45
25:BA:398:G:H2'	25:BA:399:G:O4'	2.16	0.45
25:BA:1048:A:O2'	25:BA:1049:C:P	2.75	0.45
25:BA:1425:G:O2'	25:BA:1426:G:H5'	2.17	0.45
25:BA:2224:G:H4'	25:BA:2226:C:C2	2.52	0.45
25:BA:2328:A:H2'	25:BA:2329:G:C8	2.52	0.45
25:BA:2522:U:O2'	25:BA:2647:U:OP1	2.27	0.45
25:BA:2803:C:H2'	25:BA:2804:C:O4'	2.17	0.45
32:BI:7:GLU:HB3	32:BI:8:PRO:HD2	1.98	0.45
41:BV:24:LYS:HA	41:BV:92:THR:OG1	2.17	0.45
45:BZ:111:VAL:HG12	45:BZ:112:ARG:H	1.81	0.45
1:CA:120:A:C6	1:CA:122:G:C2	3.05	0.45
1:CA:250:A:H5'	1:CA:252:U:H1'	1.99	0.45
1:CA:947:G:H2'	1:CA:948:C:H6	1.82	0.45
1:CA:1157:A:H62	1:CA:1177:G:H22	1.65	0.45
1:CA:1227:A:N3	19:CS:83:HIS:HB3	2.32	0.45
1:CA:1281:U:C6	1:CA:1281:U:C3'	3.00	0.45
1:CA:1366:C:H2'	1:CA:1367:C:H6	1.82	0.45
2:CB:16:HIS:CD2	2:CB:209:ARG:HG3	2.52	0.45
3:CC:8:ILE:O	3:CC:12:LEU:HG	2.16	0.45
7:CG:16:LEU:HD12	9:CI:41:VAL:HG12	1.98	0.45
7:CG:111:ARG:NE	7:CG:123:GLU:HB2	2.31	0.45
18:CR:53:ARG:HG3	18:CR:63:GLN:NE2	2.22	0.45
18:CR:53:ARG:NE	18:CR:58:LEU:O	2.50	0.45
18:CR:74:ARG:HA	18:CR:79:LEU:O	2.17	0.45
25:DA:103:A:OP2	25:DA:103:A:H8	2.00	0.45
25:DA:579:G:C8	25:DA:2017:U:C4	3.05	0.45
25:DA:1198:U:H2'	25:DA:1199:U:C6	2.50	0.45
25:DA:1274:A:N3	25:DA:1297:C:H1'	2.32	0.45
25:DA:1309:G:HO2'	25:DA:1611:C:HO2'	1.59	0.45
25:DA:1359:A:H2	25:DA:1372:U:O4	2.00	0.45
25:DA:1936:A:C8	25:DA:1940:U:O2	2.70	0.45
26:DB:108:U:H2'	26:DB:109:C:H5''	1.98	0.45
27:DD:2:ALA:HB3	27:DD:20:ASP:HB3	1.99	0.45
27:DD:145:VAL:HG13	27:DD:191:ALA:HB2	1.99	0.45
28:DE:61:ARG:HB3	28:DE:62:PRO:HD3	1.98	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DF:9:ILE:HA	29:DF:10:PRO:HD2	1.65	0.45
29:DF:13:SER:O	29:DF:16:GLY:N	2.50	0.45
29:DF:19:GLU:O	29:DF:20:LEU:HD23	2.16	0.45
37:DR:56:LYS:NZ	37:DR:90:ARG:O	2.50	0.45
45:DZ:31:ARG:H	45:DZ:31:ARG:HG3	1.24	0.45
47:D1:41:ARG:HD3	47:D1:43:TYR:HE2	1.82	0.45
49:D3:4:LEU:O	49:D3:36:VAL:HA	2.17	0.45
1:AA:147:G:C2	1:AA:176:C:C2	3.05	0.45
1:AA:779:C:H2'	1:AA:780:A:O4'	2.17	0.45
1:AA:1067:A:N3	1:AA:1068:G:H1'	2.32	0.45
1:AA:1277:C:O2'	1:AA:1279:A:H1'	2.17	0.45
2:AB:221:LEU:HD22	2:AB:221:LEU:HA	1.79	0.45
3:AC:114:PRO:HG3	3:AC:185:GLY:HA3	1.97	0.45
6:AF:82:ARG:HA	6:AF:82:ARG:HD2	1.62	0.45
22:AY:127:SER:OG	58:AY:301:HOH:O	2.21	0.45
25:BA:151:C:O2'	25:BA:152:G:H5'	2.17	0.45
25:BA:320:A:OP1	29:BF:135:LYS:NZ	2.50	0.45
25:BA:613:G:N2	25:BA:615:G:C4	2.85	0.45
25:BA:1651:G:H5'	37:BR:39:PRO:HG2	1.98	0.45
25:BA:2243:U:H2'	25:BA:2244:U:C6	2.52	0.45
25:BA:2461:C:H2'	25:BA:2462:U:C6	2.51	0.45
29:BF:194:MET:HB3	29:BF:198:ALA:HB3	1.98	0.45
34:BO:86:ILE:HG22	34:BO:94:ARG:HG3	1.97	0.45
36:BQ:62:GLY:O	45:BZ:178:GLU:HG2	2.16	0.45
1:CA:499:A:H4'	1:CA:500:G:OP1	2.16	0.45
1:CA:939:G:H5''	7:CG:102:ARG:NH2	2.32	0.45
1:CA:1285:A:H4'	1:CA:1286:A:O5'	2.17	0.45
1:CA:1415:G:N3	1:CA:1486:G:C2	2.85	0.45
1:CA:1421:G:H1	1:CA:1479:C:H42	1.64	0.45
2:CB:20:GLU:OE2	2:CB:23:ARG:NH2	2.45	0.45
2:CB:21:ARG:CB	2:CB:39:ILE:HA	2.44	0.45
13:CM:65:LYS:HE3	13:CM:65:LYS:O	2.17	0.45
25:DA:139(A):G:O2'	25:DA:140:G:H5'	2.17	0.45
25:DA:792:G:N3	25:DA:2072:G:O2'	2.41	0.45
25:DA:1221(A):C:C2	25:DA:1229:G:C2	3.05	0.45
25:DA:1298:C:H5''	25:DA:1299:G:OP2	2.17	0.45
25:DA:1669:A:H5''	25:DA:2550:G:OP1	2.17	0.45
25:DA:2019:A:C2'	25:DA:2020:A:O5'	2.65	0.45
25:DA:2393:A:C2'	25:DA:2394:C:H5'	2.47	0.45
26:DB:19:G:H2'	26:DB:20:C:O4'	2.17	0.45
26:DB:77:U:H4'	45:DZ:84:GLU:CD	2.37	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DD:35:LYS:HG3	27:DD:64:ILE:HD11	1.98	0.45
27:DD:76:PRO:HA	27:DD:118:VAL:HB	1.99	0.45
32:DI:92:VAL:CG2	32:DI:120:ILE:HB	2.46	0.45
33:DN:11:PRO:O	33:DN:13:TRP:HD1	2.00	0.45
34:DO:68:GLU:H	34:DO:68:GLU:CD	2.19	0.45
37:DR:65:LEU:HD12	37:DR:65:LEU:HA	1.72	0.45
38:DS:66:ALA:O	38:DS:69:VAL:N	2.50	0.45
41:DV:87:HIS:CE1	41:DV:89:GLN:HG2	2.52	0.45
42:DW:80:PRO:O	42:DW:100:THR:HB	2.17	0.45
48:D2:22:GLU:HG3	48:D2:64:LEU:HD11	1.98	0.45
1:AA:55:A:C5	1:AA:56:U:C5	3.05	0.45
1:AA:275:G:O2'	17:AQ:15:MET:HG2	2.16	0.45
1:AA:342:C:N3	1:AA:343:U:C5	2.85	0.45
1:AA:428:G:H4'	1:AA:429:U:OP1	2.16	0.45
1:AA:542:G:H5'	4:AD:41:GLY:HA3	1.99	0.45
1:AA:599:C:H4'	8:AH:130:GLY:HA3	1.99	0.45
1:AA:1136:U:H5''	1:AA:1137:C:C2	2.52	0.45
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.51	0.45
1:AA:1263:C:H5''	1:AA:1264:C:OP2	2.17	0.45
1:AA:1355:G:H2'	1:AA:1356:G:C8	2.51	0.45
2:AB:222:ILE:HG22	2:AB:226:ARG:HD2	1.99	0.45
3:AC:12:LEU:HD23	3:AC:12:LEU:HA	1.76	0.45
4:AD:113:SER:OG	4:AD:116:GLN:N	2.37	0.45
6:AF:11:ASN:HA	6:AF:12:PRO:HD2	1.73	0.45
15:AO:53:HIS:O	15:AO:56:LEU:HB3	2.16	0.45
17:AQ:90:ILE:O	17:AQ:94:ASN:N	2.45	0.45
25:BA:1508:A:H4'	25:BA:1509(A):A:C5	2.51	0.45
25:BA:1784:A:H4'	25:BA:1785:A:C5'	2.47	0.45
25:BA:2043:C:H1'	25:BA:2779:U:O4	2.17	0.45
36:BQ:18:LYS:HB2	36:BQ:18:LYS:HE3	1.75	0.45
40:BU:24:TYR:CD1	40:BU:38:THR:HG21	2.51	0.45
40:BU:50:ARG:O	40:BU:53:ARG:HB3	2.17	0.45
1:CA:189:G:C2	1:CA:189(L):G:C2	3.05	0.45
1:CA:245:C:O2	1:CA:283:C:N3	2.50	0.45
1:CA:731:G:OP1	1:CA:766:A:H1'	2.17	0.45
1:CA:936:C:H2'	1:CA:937:A:O4'	2.17	0.45
1:CA:1317:C:H42	14:CN:19:ARG:HH21	1.63	0.45
1:CA:1487:G:H8	1:CA:1487:G:O5'	2.00	0.45
2:CB:87:ARG:CZ	2:CB:233:SER:HB2	2.47	0.45
4:CD:146:ILE:HD12	4:CD:146:ILE:N	2.32	0.45
5:CE:79:GLU:HG3	5:CE:93:PRO:HD2	1.98	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:82:GLY:HA2	24:CX:1:A:N7	2.32	0.45
9:CI:5:TYR:OH	9:CI:16:ARG:HG2	2.16	0.45
14:CN:13:THR:N	14:CN:14:PRO:HD2	2.32	0.45
14:CN:29:ARG:NH2	14:CN:42:ILE:HD11	2.32	0.45
25:DA:362:U:O2'	25:DA:363:G:H5''	2.17	0.45
25:DA:1354:A:C8	25:DA:1355:G:C8	3.04	0.45
26:DB:6:C:HO2'	38:DS:29:PHE:HE1	1.64	0.45
28:DE:12:THR:HG21	39:DT:11:GLU:HG2	1.99	0.45
32:DI:124:GLY:H	32:DI:144:VAL:HG13	1.82	0.45
43:DX:25:LYS:HA	43:DX:81:VAL:O	2.16	0.45
51:D5:16:ARG:HG3	51:D5:17:ASP:H	1.82	0.45
1:AA:30:U:H4'	1:AA:31:G:OP2	2.15	0.45
1:AA:93:G:O2'	1:AA:96:U:P	2.75	0.45
1:AA:1346:A:C8	7:AG:10:ARG:NH2	2.85	0.45
2:AB:28:PHE:HD2	2:AB:194:PRO:HG3	1.81	0.45
2:AB:197:VAL:HG12	2:AB:198:ASP:H	1.82	0.45
4:AD:134:ASP:O	4:AD:136:PRO:HD3	2.17	0.45
5:AE:102:ALA:HB1	5:AE:106:PRO:HG2	1.99	0.45
9:AI:117:HIS:C	9:AI:119:ALA:H	2.20	0.45
12:AL:70:ILE:HG12	12:AL:100:ILE:HD12	1.99	0.45
16:AP:49:LEU:HD12	16:AP:50:LYS:O	2.17	0.45
20:AT:90:GLN:O	20:AT:93:GLU:HB3	2.17	0.45
24:AX:5:U:C2'	24:AX:6:G:H5'	2.47	0.45
25:BA:300:A:OP2	44:BY:86:ARG:NH2	2.50	0.45
25:BA:637:A:H4'	25:BA:638:G:O5'	2.17	0.45
25:BA:764:A:O4'	27:BD:213:ARG:HG3	2.17	0.45
25:BA:805:G:OP1	58:BA:5183:HOH:O	2.21	0.45
25:BA:1803:A:H4'	27:BD:259:THR:HG21	1.99	0.45
25:BA:2771:C:H2'	25:BA:2772:C:C6	2.52	0.45
26:BB:41:U:C6	30:BG:69:ALA:HB1	2.52	0.45
31:BH:37:VAL:HG22	31:BH:68:THR:HG23	1.98	0.45
31:BH:121:ILE:HD13	31:BH:121:ILE:HA	1.78	0.45
37:BR:100:LEU:HD11	51:B5:58:LEU:HD11	1.99	0.45
47:B1:35:THR:H	47:B1:35:THR:HG23	1.51	0.45
51:B5:42:PRO:HB2	51:B5:43:HIS:ND1	2.31	0.45
1:CA:429:U:H1'	1:CA:430:A:H5''	1.99	0.45
1:CA:730:G:C5	1:CA:731:G:H1'	2.52	0.45
1:CA:923:A:H2'	1:CA:924:C:C6	2.52	0.45
1:CA:987:G:H1	1:CA:1218:C:H42	1.65	0.45
1:CA:1305:G:N1	1:CA:1331:G:O2'	2.46	0.45
1:CA:1354:C:N3	1:CA:1368:G:O6	2.49	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:18:GLY:HA2	2:CB:42:ILE:HG13	1.99	0.45
5:CE:98:THR:HG22	5:CE:99:GLY:N	2.32	0.45
8:CH:127:LEU:HD13	8:CH:127:LEU:HA	1.69	0.45
15:CO:24:SER:O	15:CO:27:VAL:N	2.50	0.45
19:CS:62:ILE:H	19:CS:62:ILE:HD12	1.82	0.45
25:DA:36:G:N3	25:DA:450:G:O2'	2.49	0.45
25:DA:363(E):U:HO2'	25:DA:363(F):A:P	2.37	0.45
25:DA:389:G:H8	25:DA:389:G:O5'	1.99	0.45
25:DA:527:C:H5	58:DA:4190:HOH:O	1.99	0.45
25:DA:720:C:H2'	25:DA:721:C:H6	1.82	0.45
25:DA:1288:U:C2	25:DA:1327:C:O2	2.70	0.45
27:DD:96:HIS:NE2	27:DD:102:LYS:HE2	2.32	0.45
29:DF:132:VAL:HG23	29:DF:132:VAL:O	2.17	0.45
40:DU:5:LYS:HG2	40:DU:7:GLY:H	1.81	0.45
42:DW:75:TYR:HE2	42:DW:104:THR:HG1	1.63	0.45
42:DW:86:LEU:HD12	42:DW:87:PRO:HD2	1.99	0.45
50:D4:8:LYS:HE3	50:D4:8:LYS:HB3	1.66	0.45
1:AA:202:U:H3'	1:AA:203:U:H5	1.81	0.44
1:AA:370:C:H2'	1:AA:371:G:C8	2.52	0.44
1:AA:377:G:H1	1:AA:386:C:H42	1.64	0.44
1:AA:615:C:H2'	1:AA:616:G:O4'	2.17	0.44
1:AA:621:A:H2'	1:AA:622:A:C8	2.51	0.44
1:AA:831:U:OP1	2:AB:22:LYS:HD3	2.18	0.44
1:AA:922:G:C2	1:AA:923:A:C4	3.05	0.44
1:AA:974:A:OP1	1:AA:974:A:C8	2.69	0.44
2:AB:18:GLY:HA3	2:AB:41:ILE:HA	1.99	0.44
2:AB:208:ILE:O	2:AB:212:GLN:HB2	2.16	0.44
6:AF:89:MET:HE2	6:AF:89:MET:HB3	1.87	0.44
13:AM:69:GLU:O	13:AM:71:ARG:N	2.49	0.44
16:AP:55:ARG:HA	16:AP:55:ARG:HD2	1.75	0.44
25:BA:543:C:H2'	25:BA:545:G:O4'	2.17	0.44
25:BA:738:G:C6	25:BA:739:G:C2	3.05	0.44
25:BA:971:C:H2'	25:BA:972:G:O4'	2.17	0.44
25:BA:1354:A:H2'	25:BA:1355:G:O4'	2.17	0.44
25:BA:2205:C:O2	25:BA:2220:G:C2	2.69	0.44
25:BA:2536:G:C6	25:BA:2537:U:C4	3.05	0.44
28:BE:181:LEU:HD11	39:BT:6:LEU:HD12	1.99	0.44
32:BI:65:ALA:HB1	32:BI:136:VAL:HG11	1.99	0.44
33:BN:47:ALA:HB2	33:BN:112:LEU:CD1	2.47	0.44
35:BP:27:HIS:ND1	35:BP:27:HIS:N	2.65	0.44
39:BT:16:ARG:HE	39:BT:19:LEU:HD21	1.80	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BZ:179:ASP:O	45:BZ:182:LYS:HB2	2.17	0.44
1:CA:675:A:H2'	1:CA:676:A:H8	1.81	0.44
1:CA:678:U:H2'	1:CA:679:C:H6	1.82	0.44
1:CA:819:A:H4'	1:CA:820:U:OP2	2.17	0.44
1:CA:1348:U:H4'	9:CI:120:ARG:HG3	1.99	0.44
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.52	0.44
3:CC:18:TRP:N	3:CC:18:TRP:CE3	2.82	0.44
10:CJ:69:ASN:O	10:CJ:70:ARG:HG2	2.18	0.44
25:DA:247:G:H4'	25:DA:386:G:C6	2.53	0.44
25:DA:308:G:O2'	58:DA:3739:HOH:O	2.21	0.44
25:DA:1020:A:H4'	25:DA:1021:A:O5'	2.17	0.44
25:DA:2555:U:C5	25:DA:2556:C:C2	3.05	0.44
25:DA:2850:A:OP2	25:DA:2866:U:H5	2.00	0.44
26:DB:46:A:H2'	26:DB:47:C:C6	2.52	0.44
29:DF:34:TRP:CE2	35:DP:8:PRO:HG3	2.51	0.44
36:DQ:19:GLY:O	36:DQ:98:LYS:HB3	2.17	0.44
38:DS:7:TYR:CZ	38:DS:91:PRO:HG3	2.52	0.44
38:DS:8:GLU:H	38:DS:8:GLU:HG3	1.47	0.44
44:DY:76:CYS:HA	44:DY:77:PRO:HD3	1.77	0.44
47:D1:46:LEU:HD22	47:D1:46:LEU:HA	1.80	0.44
1:AA:1172:C:H2'	1:AA:1173:G:H8	1.82	0.44
1:AA:1256:A:H5''	1:AA:1257:U:OP1	2.16	0.44
1:AA:1358:U:H5''	14:AN:33:VAL:O	2.16	0.44
2:AB:28:PHE:CD2	2:AB:194:PRO:HG3	2.53	0.44
3:AC:23:TYR:CD2	3:AC:24:ALA:N	2.85	0.44
3:AC:179:ARG:H	3:AC:179:ARG:HG3	1.45	0.44
11:AK:120:ARG:HH11	11:AK:120:ARG:CG	2.27	0.44
13:AM:66:LEU:O	13:AM:69:GLU:O	2.35	0.44
25:BA:272(B):G:H2'	25:BA:272(C):G:H8	1.82	0.44
25:BA:1606:G:H5''	25:BA:1607:C:OP1	2.17	0.44
25:BA:2345:G:N3	25:BA:2381:C:H2'	2.32	0.44
25:BA:2789:C:O2'	25:BA:2790:A:O2'	2.06	0.44
27:BD:184:LYS:HE3	27:BD:271:ILE:HD11	2.00	0.44
30:BG:33:ARG:HB2	30:BG:162:THR:CG2	2.47	0.44
37:BR:75:LEU:HA	37:BR:75:LEU:HD22	1.64	0.44
50:B4:16:CYS:SG	50:B4:18:CYS:CB	3.06	0.44
53:B7:47:ARG:HH11	53:B7:47:ARG:CB	2.29	0.44
1:CA:129(A):G:N1	1:CA:189(D):C:O2	2.50	0.44
1:CA:243:A:C2	1:CA:246:A:C8	3.05	0.44
1:CA:436:C:O2'	1:CA:437:U:P	2.76	0.44
1:CA:590:C:H2'	1:CA:591:U:C6	2.52	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:923:A:OP1	5:CE:21:ALA:HB2	2.17	0.44
1:CA:991:U:C5	1:CA:1212:U:H1'	2.52	0.44
1:CA:1328:C:OP2	21:CU:7:ARG:NH1	2.50	0.44
1:CA:1382:C:H2'	1:CA:1383:C:C6	2.52	0.44
5:CE:84:PHE:HB2	5:CE:134:ALA:HB2	1.98	0.44
5:CE:151:LEU:CD1	8:CH:77:GLU:HG2	2.47	0.44
10:CJ:51:ARG:HG3	10:CJ:60:ARG:HA	1.99	0.44
11:CK:67:ASP:O	11:CK:71:LYS:HG3	2.17	0.44
25:DA:192:C:C2'	25:DA:193:U:H5'	2.47	0.44
25:DA:300:A:OP2	44:DY:86:ARG:NH2	2.50	0.44
25:DA:628:G:H2'	25:DA:629:G:C8	2.53	0.44
25:DA:857:C:O2'	25:DA:858:U:H5'	2.17	0.44
25:DA:921:G:H2'	25:DA:922:U:C6	2.53	0.44
26:DB:35:U:H2'	26:DB:36:C:O4'	2.17	0.44
27:DD:36:PRO:HA	27:DD:61:LEU:HD12	1.99	0.44
29:DF:140:LEU:HD11	29:DF:170:LEU:HD11	1.98	0.44
31:DH:3:ARG:HG3	31:DH:3:ARG:NH1	2.30	0.44
33:DN:63:THR:HG22	33:DN:66:LYS:NZ	2.30	0.44
35:DP:2:LYS:O	35:DP:5:ASP:HB2	2.17	0.44
36:DQ:108:GLY:HA3	45:DZ:116:VAL:CG1	2.48	0.44
37:DR:111:LEU:HD12	37:DR:111:LEU:HA	1.73	0.44
44:DY:24:VAL:HG12	44:DY:25:GLY:N	2.32	0.44
44:DY:84:ARG:O	44:DY:100:ALA:HB2	2.17	0.44
46:D0:37:LEU:HG	46:D0:60:PHE:HA	1.99	0.44
54:D8:4:MET:HE3	54:D8:63:PRO:HG3	1.99	0.44
1:AA:40:C:H2'	1:AA:41:G:C8	2.51	0.44
1:AA:391:G:C6	1:AA:392:G:C5	3.06	0.44
1:AA:615:C:H2'	1:AA:616:G:H8	1.83	0.44
1:AA:620:C:H2'	1:AA:621:A:O4'	2.17	0.44
1:AA:659:U:C2'	1:AA:660:G:H5'	2.47	0.44
1:AA:1070:U:H2'	1:AA:1071:C:H6	1.82	0.44
1:AA:1162:C:H42	1:AA:1174:G:H1	1.65	0.44
2:AB:44:LEU:H	2:AB:44:LEU:CD2	2.23	0.44
5:AE:147:ASP:OD2	5:AE:147:ASP:N	2.50	0.44
7:AG:74:GLU:HB2	7:AG:141:VAL:HG13	1.99	0.44
12:AL:48:PRO:O	22:AY:117:ARG:NE	2.48	0.44
22:AY:20:ILE:HG13	22:AY:37:ILE:HB	1.99	0.44
23:AV:75:C:H5''	23:AV:76:A:OP2	2.16	0.44
25:BA:602:G:O2'	25:BA:655:A:N6	2.49	0.44
25:BA:1109:C:C5	25:BA:1110:G:N1	2.86	0.44
25:BA:1803:A:O3'	27:BD:259:THR:HG21	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:1887:C:H2'	25:BA:1888:G:H5'	1.98	0.44
25:BA:2311:A:C8	30:BG:80:PHE:CE2	3.05	0.44
25:BA:2552:U:C2	25:BA:2554:U:H5'	2.51	0.44
29:BF:18:ARG:C	29:BF:19:GLU:HG2	2.37	0.44
29:BF:106:ARG:H	29:BF:106:ARG:HG2	1.30	0.44
1:CA:174:C:H2'	1:CA:175:C:H6	1.81	0.44
1:CA:1008:C:O2	1:CA:1009:G:H1'	2.17	0.44
1:CA:1370:G:O6	58:CA:1953:HOH:O	2.21	0.44
2:CB:132:LYS:O	2:CB:135:GLN:HG2	2.17	0.44
4:CD:36:ARG:HG2	4:CD:38:TYR:CZ	2.52	0.44
25:DA:236:C:H2'	25:DA:237:C:H6	1.82	0.44
25:DA:652(D):C:H2'	25:DA:652(E):G:O4'	2.18	0.44
25:DA:861:A:C2	25:DA:917:A:C4	3.05	0.44
25:DA:888:C:H2'	25:DA:889:C:C4	2.52	0.44
25:DA:1142:U:OP2	58:DA:3755:HOH:O	2.21	0.44
25:DA:1721:G:N3	25:DA:1721:G:H5''	2.31	0.44
25:DA:1774:C:H6	25:DA:1774:C:O5'	2.00	0.44
25:DA:2648:C:H2'	25:DA:2649:U:C6	2.53	0.44
25:DA:2884:U:H1'	51:D5:53:ALA:CB	2.45	0.44
26:DB:42:C:O2	30:DG:92:VAL:HA	2.17	0.44
28:DE:98:PRO:HG3	28:DE:174:ASP:HA	2.00	0.44
31:DH:151:ILE:H	31:DH:151:ILE:HD12	1.82	0.44
34:DO:99:PHE:HB2	58:DO:303:HOH:O	2.17	0.44
35:DP:50:ARG:HH11	54:D8:7:HIS:CD2	2.35	0.44
45:DZ:137:ILE:HG23	45:DZ:156:LYS:HE3	1.99	0.44
1:AA:220:G:C6	1:AA:221:C:C4	3.05	0.44
1:AA:416:G:C5	1:AA:417:C:C4	3.05	0.44
1:AA:961:U:OP2	1:AA:1223:C:H1'	2.17	0.44
1:AA:1312:G:N2	1:AA:1326:C:C2	2.86	0.44
2:AB:72:GLY:HA3	2:AB:165:VAL:HG23	1.99	0.44
2:AB:211:ILE:O	2:AB:215:LEU:HB2	2.17	0.44
3:AC:5:ILE:HG12	14:AN:58:LYS:NZ	2.31	0.44
12:AL:86:ARG:HH21	12:AL:99:HIS:CD2	2.36	0.44
21:AU:25:LYS:HG2	21:AU:26:LYS:H	1.82	0.44
22:AY:35:THR:HG22	22:AY:36:ALA:H	1.82	0.44
22:AY:40:ARG:NH1	22:AY:40:ARG:HB3	2.32	0.44
23:AV:19:G:C2	23:AV:57:A:N3	2.85	0.44
25:BA:12:U:H2'	25:BA:12:U:O2	2.17	0.44
25:BA:244:A:C2	25:BA:255:A:C4	3.05	0.44
25:BA:652(Q):G:C2'	25:BA:652(R):C:H5'	2.46	0.44
25:BA:666:G:O2'	25:BA:667:U:H5'	2.18	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:1031:G:C4'	55:B9:6:SER:HB2	2.48	0.44
25:BA:1435:G:H2'	25:BA:1436:G:O4'	2.18	0.44
25:BA:2183:C:C2'	25:BA:2184:G:H5'	2.47	0.44
25:BA:2308:G:O6	25:BA:2311:A:N7	2.51	0.44
25:BA:2349:G:H3'	25:BA:2350:C:H5''	1.99	0.44
25:BA:2556:C:H2'	25:BA:2557:G:O4'	2.17	0.44
28:BE:63:LEU:HD23	28:BE:63:LEU:HA	1.73	0.44
32:BI:33:ARG:HB3	32:BI:35:LEU:HG	1.99	0.44
33:BN:33:LEU:HD12	33:BN:33:LEU:HA	1.78	0.44
36:BQ:21:THR:CG2	36:BQ:101:ARG:HB2	2.36	0.44
37:BR:116:LEU:HD23	37:BR:116:LEU:HA	1.77	0.44
43:BX:25:LYS:HE2	43:BX:82:GLN:HE22	1.83	0.44
44:BY:78:ALA:HB3	44:BY:102:CYS:SG	2.58	0.44
45:BZ:29:TYR:HA	45:BZ:33:LEU:O	2.17	0.44
47:B1:73:LEU:HA	47:B1:73:LEU:HD23	1.67	0.44
1:CA:814:A:N7	1:CA:816:A:C4	2.85	0.44
1:CA:880:C:H2'	1:CA:881:G:H8	1.82	0.44
1:CA:1043:C:H2'	1:CA:1044:A:O4'	2.18	0.44
3:CC:92:ALA:HB2	3:CC:99:VAL:CB	2.48	0.44
4:CD:173:TRP:HB2	4:CD:187:ARG:O	2.18	0.44
13:CM:15:VAL:HG22	13:CM:42:ALA:O	2.18	0.44
13:CM:66:LEU:HD22	13:CM:66:LEU:HA	1.74	0.44
16:CP:68:ASP:C	16:CP:70:ALA:H	2.20	0.44
17:CQ:81:ARG:NH2	17:CQ:84:LEU:HD11	2.32	0.44
19:CS:52:TYR:HB2	19:CS:57:HIS:CE1	2.52	0.44
25:DA:734:A:O2'	25:DA:1635:G:H5'	2.17	0.44
25:DA:1007:C:H2'	25:DA:1008:C:C5	2.52	0.44
25:DA:1221(A):C:N4	25:DA:1228:G:H1	2.15	0.44
25:DA:1331:A:HO2'	25:DA:1332:G:H8	1.65	0.44
25:DA:1448:G:H2'	25:DA:1449:A:C8	2.52	0.44
25:DA:2854:G:H2'	25:DA:2855:C:C6	2.51	0.44
27:DD:258:LYS:HE2	27:DD:273:ARG:NH2	2.32	0.44
30:DG:135:LEU:HG	30:DG:155:MET:HE3	2.00	0.44
31:DH:3:ARG:NE	31:DH:3:ARG:HA	2.32	0.44
36:DQ:24:GLY:O	36:DQ:102:VAL:HG23	2.17	0.44
38:DS:15:ARG:O	38:DS:19:LYS:HG2	2.18	0.44
40:DU:5:LYS:HG2	40:DU:6:THR:N	2.32	0.44
41:DV:24:LYS:HA	41:DV:92:THR:OG1	2.18	0.44
1:AA:224:C:H2'	1:AA:225:C:C6	2.50	0.44
1:AA:832:C:O2'	1:AA:833:U:P	2.76	0.44
1:AA:928:G:C2	1:AA:1390:U:O2	2.70	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:981:U:O4	1:AA:1223:C:N4	2.50	0.44
1:AA:1168:A:C6	1:AA:1169:A:C6	3.06	0.44
1:AA:1226:C:H4'	1:AA:1227:A:OP1	2.18	0.44
1:AA:1278:U:H5'	1:AA:1279:A:C5'	2.47	0.44
6:AF:33:TYR:HE1	6:AF:78:GLU:HG2	1.82	0.44
10:AJ:42:THR:HG21	10:AJ:66:ARG:HD2	1.99	0.44
15:AO:74:ASP:OD2	15:AO:77:ARG:HD3	2.17	0.44
25:BA:320:A:H4'	25:BA:322:A:C8	2.53	0.44
25:BA:375:C:OP1	58:BA:4900:HOH:O	2.21	0.44
25:BA:823:G:C5	25:BA:835:A:C2	3.05	0.44
25:BA:969:U:OP1	49:B3:17:LYS:HG2	2.17	0.44
25:BA:1358:G:N2	25:BA:1372:U:C5	2.85	0.44
25:BA:1609:A:H5'	25:BA:1617:C:OP1	2.17	0.44
25:BA:1653:G:H3'	37:BR:2:ARG:HD3	1.99	0.44
25:BA:1854:A:H2'	25:BA:1855:G:O4'	2.18	0.44
25:BA:2418:A:OP2	54:B8:29:LYS:HE3	2.18	0.44
26:BB:84:C:OP1	49:B3:15:TYR:OH	2.28	0.44
27:BD:242:ARG:HG2	27:BD:246:PRO:HG3	1.99	0.44
31:BH:171:LEU:H	31:BH:171:LEU:HD22	1.81	0.44
34:BO:77:ILE:HG13	39:BT:74:ARG:HD3	1.99	0.44
42:BW:19:LEU:HD12	42:BW:19:LEU:HA	1.71	0.44
42:BW:71:VAL:HA	42:BW:107:LEU:HD12	2.00	0.44
52:B6:11:LEU:HD23	52:B6:11:LEU:HA	1.70	0.44
53:B7:10:ARG:O	53:B7:14:LYS:HG2	2.18	0.44
1:CA:119:A:H5'	1:CA:120:A:C4	2.52	0.44
1:CA:376:G:H2'	1:CA:377:G:C8	2.52	0.44
1:CA:425:G:N2	1:CA:426:G:H1'	2.33	0.44
1:CA:727:G:N2	1:CA:730:G:OP2	2.48	0.44
1:CA:838:G:H2'	1:CA:839:U:H5''	2.00	0.44
1:CA:1309:G:H5'	13:CM:78:ILE:HD11	1.99	0.44
1:CA:1516:G:H2'	1:CA:1518:A:OP2	2.18	0.44
5:CE:88:LYS:HB3	5:CE:123:LEU:HB2	2.00	0.44
9:CI:69:GLY:O	9:CI:73:GLN:N	2.37	0.44
17:CQ:67:LYS:O	17:CQ:68:ARG:HB3	2.17	0.44
25:DA:85:G:H1	25:DA:97:C:H42	1.66	0.44
25:DA:597:U:H2'	25:DA:598:G:C8	2.52	0.44
25:DA:866:A:C6	25:DA:914:C:C5	3.05	0.44
25:DA:1028:A:H61	25:DA:1125:G:H2'	1.83	0.44
25:DA:1142(A):A:N7	25:DA:1144:G:C5	2.86	0.44
25:DA:1498:C:O4'	25:DA:1577:C:H4'	2.18	0.44
25:DA:1608:A:H1'	25:DA:1610:A:OP2	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1665:A:H4'	34:DO:67:LYS:HB2	2.00	0.44
25:DA:1813:G:H1'	27:DD:50:THR:OG1	2.18	0.44
25:DA:2356:C:H2'	25:DA:2357:U:O4'	2.17	0.44
27:DD:242:ARG:HD3	27:DD:242:ARG:H	1.83	0.44
47:D1:82:LEU:HA	47:D1:85:LEU:HD23	1.99	0.44
53:D7:1:MET:O	53:D7:3:ARG:HG2	2.18	0.44
1:AA:437:U:C5	1:AA:438:G:N7	2.85	0.44
1:AA:748:C:H4'	1:AA:749:C:O5'	2.18	0.44
1:AA:790:A:OP1	23:AV:38:A:O2'	2.31	0.44
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.52	0.44
1:AA:1446:U:O2'	1:AA:1447:A:C8	2.70	0.44
4:AD:118:ARG:O	4:AD:121:VAL:N	2.51	0.44
11:AK:114:VAL:HA	11:AK:115:PRO:HD2	1.76	0.44
13:AM:49:THR:HG23	13:AM:52:GLU:OE2	2.17	0.44
16:AP:4:ILE:HA	16:AP:20:VAL:O	2.18	0.44
25:BA:271(I):G:C6	25:BA:271(J):C:N4	2.85	0.44
25:BA:306:U:H2'	25:BA:307:G:O4'	2.17	0.44
25:BA:528:A:C8	25:BA:528:A:H3'	2.53	0.44
25:BA:652(J):G:H1	25:BA:652(P):G:H22	1.65	0.44
25:BA:1630:G:N2	25:BA:1636:C:O2	2.41	0.44
25:BA:2032:G:N2	25:BA:2572:A:OP2	2.50	0.44
25:BA:2207:G:HO2'	25:BA:2208:A:P	2.38	0.44
26:BB:89:G:C6	26:BB:90:A:N6	2.85	0.44
30:BG:139:LEU:HD23	30:BG:149:VAL:HG11	1.98	0.44
31:BH:56:SER:OG	31:BH:58:GLU:N	2.42	0.44
37:BR:100:LEU:HD21	37:BR:113:LEU:HD23	2.00	0.44
37:BR:107:ASP:OD2	37:BR:107:ASP:N	2.28	0.44
46:B0:51:VAL:HG22	46:B0:81:VAL:HG23	1.99	0.44
48:B2:52:ASP:O	48:B2:56:GLN:HG3	2.17	0.44
1:CA:39:G:C6	1:CA:40:C:C5	3.06	0.44
1:CA:384:G:C6	1:CA:385:C:N4	2.85	0.44
1:CA:663:A:H2'	1:CA:664:G:O4'	2.18	0.44
1:CA:1347:G:N1	1:CA:1374:A:OP2	2.42	0.44
3:CC:4:LYS:HE3	3:CC:4:LYS:HB2	1.82	0.44
3:CC:114:PRO:O	3:CC:118:GLN:HG2	2.17	0.44
4:CD:73:ARG:O	4:CD:77:ASN:HB2	2.18	0.44
5:CE:88:LYS:HG2	5:CE:123:LEU:HB2	2.00	0.44
6:CF:26:ILE:O	6:CF:30:LEU:HD12	2.17	0.44
14:CN:45:ARG:O	14:CN:49:HIS:HD2	1.99	0.44
20:CT:38:LYS:HA	20:CT:41:ILE:HD11	1.99	0.44
25:DA:861:A:N3	26:DB:79:C:O2'	2.50	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:1344:G:H4'	25:DA:1384:A:C5	2.53	0.44
25:DA:1366:A:H2'	25:DA:1367:A:O4'	2.18	0.44
25:DA:1665:A:C4'	34:DO:67:LYS:HB2	2.47	0.44
25:DA:1857:G:H1'	25:DA:1885:A:N6	2.33	0.44
25:DA:2318:G:H2'	25:DA:2319:G:OP1	2.17	0.44
25:DA:2405:G:H8	25:DA:2405:G:O5'	2.00	0.44
25:DA:2456:C:N4	58:DA:3942:HOH:O	2.51	0.44
25:DA:2525:G:N2	25:DA:2539:C:C2	2.86	0.44
25:DA:2870:C:H2'	25:DA:2871:C:O4'	2.17	0.44
28:DE:111:ARG:HA	37:DR:1:MET:SD	2.58	0.44
30:DG:35:GLU:HB3	30:DG:160:VAL:O	2.18	0.44
32:DI:11:ASN:O	32:DI:12:LEU:HG	2.18	0.44
35:DP:47:ASP:HA	35:DP:48:PRO:HD3	1.72	0.44
40:DU:76:TYR:CZ	40:DU:80:ILE:HG13	2.52	0.44
41:DV:52:VAL:HG21	41:DV:55:ALA:HB3	1.98	0.44
52:D6:9:LEU:HD21	52:D6:25:LYS:HB3	2.00	0.44
1:AA:351:G:H4'	1:AA:352:C:OP1	2.17	0.44
1:AA:1092:A:C6	1:AA:1093:A:C6	3.06	0.44
1:AA:1173:G:C6	1:AA:1174:G:C5	3.06	0.44
2:AB:166:ASP:OD2	2:AB:167:PRO:HD2	2.18	0.44
4:AD:98:GLU:O	4:AD:103:ASN:ND2	2.50	0.44
8:AH:20:TYR:HE2	8:AH:75:ARG:HG2	1.83	0.44
25:BA:28:A:C2	25:BA:513:A:C8	3.06	0.44
25:BA:655:A:H8	25:BA:656:G:C1'	2.31	0.44
25:BA:1653:G:H4'	25:BA:1654:A:O5'	2.18	0.44
25:BA:2012:G:O3'	42:BW:96:ILE:HD12	2.18	0.44
25:BA:2295:C:OP1	38:BS:10:ARG:NH1	2.51	0.44
25:BA:2663:G:C6	25:BA:2664:G:C4	3.05	0.44
25:BA:2698:U:H2'	25:BA:2699:C:H6	1.82	0.44
25:BA:2793:G:N2	25:BA:2804:C:H1'	2.33	0.44
26:BB:30:C:H2'	26:BB:31:C:H5'	2.00	0.44
28:BE:12:THR:HG22	28:BE:13:ARG:H	1.82	0.44
29:BF:129:PHE:HA	29:BF:142:TRP:NE1	2.33	0.44
31:BH:69:ARG:HG3	31:BH:70:THR:N	2.32	0.44
34:BO:7:TYR:C	34:BO:8:LEU:HD22	2.38	0.44
35:BP:83:VAL:HG13	35:BP:112:LEU:HD21	1.98	0.44
39:BT:97:ALA:O	39:BT:98:LYS:HD3	2.18	0.44
42:BW:30:GLU:O	42:BW:34:ASN:ND2	2.45	0.44
42:BW:78:GLU:OE1	42:BW:99:ARG:HD3	2.18	0.44
1:CA:587:G:N1	1:CA:754:C:OP2	2.51	0.44
1:CA:790:A:N6	1:CA:1498:U:OP1	2.51	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1107:C:C4	1:CA:1108:G:N7	2.86	0.44
1:CA:1305:G:N2	1:CA:1331:G:O2'	2.49	0.44
1:CA:1508:G:H2'	1:CA:1509:C:O4'	2.17	0.44
2:CB:194:PRO:HB2	2:CB:195:ASP:OD1	2.18	0.44
3:CC:37:GLN:NE2	14:CN:52:GLN:OE1	2.39	0.44
3:CC:52:LEU:HA	3:CC:70:VAL:HA	1.99	0.44
4:CD:103:ASN:OD1	4:CD:114:ARG:NE	2.45	0.44
5:CE:39:GLY:O	5:CE:69:VAL:HG13	2.17	0.44
7:CG:10:ARG:HG2	7:CG:10:ARG:NH1	2.33	0.44
8:CH:29:SER:O	8:CH:32:LYS:HB2	2.17	0.44
12:CL:84:LEU:HD23	12:CL:105:TYR:HE1	1.82	0.44
13:CM:33:ALA:HA	13:CM:59:TYR:HE1	1.79	0.44
13:CM:106:ASN:OD1	13:CM:106:ASN:N	2.49	0.44
23:CV:40:C:O2'	23:CV:41:C:H5'	2.17	0.44
25:DA:218:A:C2	25:DA:235:U:H4'	2.53	0.44
25:DA:228:A:H2'	25:DA:230:U:O4'	2.18	0.44
25:DA:234:C:H2'	25:DA:235:U:C6	2.53	0.44
25:DA:299:A:H5''	44:DY:86:ARG:NH2	2.25	0.44
25:DA:588:U:H1'	29:DF:90:PHE:CG	2.53	0.44
25:DA:1344:G:H4'	25:DA:1384:A:N7	2.33	0.44
25:DA:1654:A:OP1	37:DR:1:MET:HA	2.18	0.44
25:DA:2017:U:H4'	51:D5:8:LYS:O	2.17	0.44
25:DA:2667:C:H1'	31:DH:109:PHE:CD2	2.53	0.44
25:DA:2774:C:H2'	25:DA:2775:A:O4'	2.18	0.44
27:DD:171:ASP:O	27:DD:187:GLY:N	2.49	0.44
28:DE:181:LEU:HD13	28:DE:181:LEU:HA	1.60	0.44
34:DO:69:ILE:H	34:DO:69:ILE:HG13	1.58	0.44
38:DS:96:GLY:CA	38:DS:100:ALA:H	2.30	0.44
1:AA:44:G:H2'	1:AA:45:U:O4'	2.17	0.44
1:AA:243:A:C2	1:AA:246:A:C8	3.06	0.44
1:AA:390:C:O3'	16:AP:28:ARG:NH2	2.50	0.44
1:AA:511:C:O2	1:AA:512:U:C6	2.71	0.44
1:AA:552:U:C2'	1:AA:553:A:H5'	2.48	0.44
1:AA:688:G:H2'	1:AA:689:C:C6	2.50	0.44
1:AA:690:G:C6	1:AA:691:G:C6	3.06	0.44
1:AA:783:C:OP1	1:AA:1515:C:O2'	2.33	0.44
1:AA:854:G:H3'	1:AA:871:U:O4	2.18	0.44
1:AA:1010:G:C2	1:AA:1011:G:C5	3.06	0.44
1:AA:1248:A:C6	1:AA:1249:C:C4	3.06	0.44
1:AA:1365:G:C6	1:AA:1366:C:C4	3.06	0.44
4:AD:173:TRP:NE1	4:AD:174:LEU:HG	2.33	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:15:ALA:HB2	9:AI:65:VAL:HG23	2.00	0.44
14:AN:27:CYS:C	14:AN:29:ARG:H	2.20	0.44
14:AN:53:LEU:HA	14:AN:54:PRO:HD3	1.86	0.44
25:BA:1003:G:N2	25:BA:1153:C:C2	2.85	0.44
25:BA:1810:A:H2'	25:BA:1811:G:O4'	2.18	0.44
25:BA:2432:A:H5''	25:BA:2433:A:OP2	2.18	0.44
25:BA:2751:G:C5	31:BH:2:SER:N	2.85	0.44
27:BD:172:TYR:HD1	27:BD:185:VAL:C	2.21	0.44
28:BE:78:LEU:C	28:BE:79:ARG:HG2	2.36	0.44
38:BS:35:ILE:HD11	38:BS:101:LEU:CD1	2.47	0.44
43:BX:60:ARG:HH11	43:BX:60:ARG:CB	2.27	0.44
48:B2:37:PHE:O	48:B2:41:ILE:HD13	2.18	0.44
52:B6:8:LYS:HA	52:B6:24:GLU:HA	2.00	0.44
55:B9:26:ILE:H	55:B9:26:ILE:HG13	1.49	0.44
1:CA:503:C:H2'	1:CA:504:C:C6	2.53	0.44
1:CA:1073:U:O4	1:CA:1102:A:N1	2.51	0.44
1:CA:1298:C:H2'	7:CG:114:ARG:NH1	2.33	0.44
1:CA:1300:G:O2'	1:CA:1301:U:P	2.76	0.44
2:CB:78:GLN:NE2	2:CB:94:ASN:O	2.51	0.44
3:CC:134:ILE:HG23	3:CC:151:VAL:HB	1.98	0.44
10:CJ:40:LEU:HD23	10:CJ:40:LEU:HA	1.70	0.44
12:CL:66:VAL:HG11	12:CL:98:TYR:CE1	2.52	0.44
25:DA:459:U:H5''	53:D7:40:TRP:CD2	2.53	0.44
25:DA:519:U:O2'	25:DA:520:G:H5'	2.17	0.44
25:DA:870:A:OP1	36:DQ:6:ARG:NE	2.50	0.44
25:DA:971:C:C2'	25:DA:972:G:H5'	2.48	0.44
25:DA:1022:G:N2	25:DA:1142(A):A:H2	2.16	0.44
25:DA:2079:U:OP1	47:D1:21:ARG:NH2	2.51	0.44
25:DA:2313:C:OP1	30:DG:71:THR:HG21	2.18	0.44
25:DA:2623:G:H4'	25:DA:2825:C:O2	2.18	0.44
26:DB:8:U:H6	26:DB:8:U:H5''	1.83	0.44
27:DD:119:ALA:HB2	27:DD:130:ALA:HB3	2.00	0.44
28:DE:119:ARG:HG2	28:DE:160:TYR:HB2	2.00	0.44
35:DP:46:LYS:HZ2	35:DP:46:LYS:HG2	1.73	0.44
45:DZ:119:GLU:OE2	45:DZ:122:ARG:NH1	2.51	0.44
45:DZ:160:GLY:HA2	45:DZ:161:VAL:HB	2.00	0.44
50:D4:14:ILE:HG22	50:D4:33:VAL:CG2	2.48	0.44
1:AA:189(E):U:O2'	1:AA:189(F):U:H5'	2.17	0.44
1:AA:245:C:O2	1:AA:283:C:N3	2.51	0.44
1:AA:658:G:H2'	1:AA:659:U:H6	1.82	0.44
1:AA:1118:C:O4'	1:AA:1179:A:H1'	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1201:A:O2'	1:AA:1202:G:OP2	2.34	0.44
1:AA:1486:G:H2'	1:AA:1487:G:O4'	2.18	0.44
2:AB:16:HIS:O	2:AB:210:SER:OG	2.35	0.44
3:AC:53:ALA:O	3:AC:54:ARG:HB2	2.18	0.44
7:AG:113:GLU:HG2	7:AG:119:ARG:HG2	1.98	0.44
7:AG:150:ALA:HA	11:AK:59:TYR:HB3	1.99	0.44
8:AH:11:THR:HG23	8:AH:14:ARG:HH12	1.82	0.44
9:AI:111:ARG:O	9:AI:113:LYS:HD2	2.17	0.44
12:AL:6:THR:O	12:AL:6:THR:OG1	2.36	0.44
12:AL:32:PHE:HB3	12:AL:85:ILE:O	2.17	0.44
17:AQ:45:HIS:CB	17:AQ:65:ILE:HD13	2.48	0.44
24:AX:5:U:O2'	24:AX:6:G:H5'	2.18	0.44
25:BA:271(M):G:HO2'	25:BA:271(N):U:P	2.41	0.44
25:BA:387:U:H4'	25:BA:388:G:O5'	2.18	0.44
25:BA:460:A:P	53:B7:41:ARG:HH22	2.41	0.44
25:BA:636:G:C2	35:BP:115:LEU:HD11	2.53	0.44
25:BA:826:U:C4'	35:BP:55:ARG:HB2	2.47	0.44
25:BA:1583:A:H5'	25:BA:1584:C:C5'	2.48	0.44
25:BA:1636:C:H2'	25:BA:1637:A:C8	2.53	0.44
25:BA:1693:U:H1'	27:BD:14:ARG:NH2	2.33	0.44
25:BA:2206:G:C5'	25:BA:2207:G:N7	2.80	0.44
28:BE:115:GLY:O	28:BE:119:ARG:HB2	2.17	0.44
30:BG:7:LEU:HD23	30:BG:7:LEU:HA	1.77	0.44
33:BN:67:LEU:O	33:BN:88:GLU:HG3	2.17	0.44
34:BO:45:GLU:HA	34:BO:54:GLU:HG2	2.00	0.44
34:BO:101:PRO:HA	34:BO:120:GLU:O	2.18	0.44
44:BY:34:LYS:HB3	44:BY:34:LYS:HE2	1.40	0.44
1:CA:634:C:H2'	1:CA:635:G:H8	1.83	0.44
1:CA:673:G:H5''	6:CF:87:ARG:NH1	2.33	0.44
1:CA:779:C:H5''	11:CK:122:LYS:HG2	2.00	0.44
1:CA:850:U:H2'	1:CA:851:G:H5''	2.00	0.44
1:CA:939:G:H1	1:CA:1344:C:N4	2.16	0.44
1:CA:1134:G:H2'	1:CA:1134:G:N3	2.33	0.44
1:CA:1266:G:N2	1:CA:1269:A:OP2	2.48	0.44
4:CD:64:LEU:HB2	4:CD:198:VAL:HG21	1.99	0.44
14:CN:26:ARG:HB3	14:CN:43:CYS:SG	2.58	0.44
23:CV:12:G:H1'	25:DA:1923:U:O2'	2.17	0.44
23:CV:43:A:C2	23:CV:44:A:C4	3.06	0.44
25:DA:144:C:H2'	25:DA:145:G:C8	2.53	0.44
25:DA:627:A:C6	25:DA:637:A:C8	3.06	0.44
25:DA:647:G:H8	25:DA:647:G:O5'	2.01	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:828:U:H4'	25:DA:831:G:N1	2.33	0.44
25:DA:925:C:C2	25:DA:926:A:C8	3.06	0.44
25:DA:977:G:N2	25:DA:986:C:O2	2.51	0.44
25:DA:1632:A:N6	58:DA:3968:HOH:O	2.50	0.44
31:DH:160:LYS:HE3	31:DH:160:LYS:HB2	1.84	0.44
33:DN:104:LYS:HB2	33:DN:117:PHE:HE1	1.78	0.44
33:DN:136:GLU:HG2	33:DN:137:LYS:O	2.17	0.44
36:DQ:11:LYS:HD2	36:DQ:87:LYS:HD3	1.99	0.44
40:DU:69:CYS:HB3	40:DU:74:LEU:HD13	1.99	0.44
46:D0:14:ARG:HG2	46:D0:14:ARG:HH11	1.83	0.44
1:AA:935:A:C2	1:AA:936:C:C2	3.05	0.43
2:AB:73:THR:HG23	2:AB:170:GLU:OE1	2.18	0.43
8:AH:12:ARG:NH2	8:AH:27:PRO:HD3	2.33	0.43
25:BA:15:G:OP2	58:BA:3992:HOH:O	2.21	0.43
25:BA:26:G:C6	25:BA:27:G:N1	2.86	0.43
25:BA:61:G:OP2	48:B2:54:LYS:NZ	2.51	0.43
25:BA:2078:C:H2'	25:BA:2079:U:O4'	2.18	0.43
26:BB:50:G:O5'	26:BB:50:G:H8	2.00	0.43
26:BB:95:C:H2'	26:BB:96:U:H6	1.81	0.43
27:BD:233:HIS:NE2	27:BD:246:PRO:HA	2.33	0.43
31:BH:26:VAL:HG12	31:BH:79:VAL:HG21	2.00	0.43
33:BN:137:LYS:HD3	33:BN:138:LEU:H	1.82	0.43
35:BP:84:ASN:ND2	35:BP:117:GLU:HB2	2.33	0.43
39:BT:37:GLY:HA2	39:BT:38:ASN:HA	1.75	0.43
43:BX:60:ARG:HH11	43:BX:60:ARG:CG	2.31	0.43
45:BZ:145:GLU:H	45:BZ:148:ASP:HB2	1.83	0.43
54:B8:39:LYS:HB2	54:B8:42:ARG:HH12	1.83	0.43
1:CA:35:G:O2'	12:CL:118:SER:O	2.35	0.43
1:CA:176:C:H2'	1:CA:177:C:C6	2.53	0.43
1:CA:558:G:O5'	1:CA:558:G:H8	2.01	0.43
1:CA:717:C:H6	1:CA:717:C:H5''	1.82	0.43
1:CA:1452:C:O2'	1:CA:1456:G:OP1	2.31	0.43
1:CA:1471:G:H2'	1:CA:1472:U:H6	1.83	0.43
7:CG:99:LEU:HD22	7:CG:103:TRP:CZ2	2.53	0.43
23:CV:69:C:C2'	23:CV:70:G:H5'	2.47	0.43
25:DA:13:A:N1	25:DA:525:U:H2'	2.33	0.43
25:DA:76:C:O3'	48:D2:59:ARG:HD3	2.18	0.43
25:DA:225:A:N6	25:DA:226:G:C2	2.86	0.43
25:DA:272(A):U:H6	25:DA:272(A):U:H5'	1.82	0.43
25:DA:372:G:O2'	25:DA:373:U:P	2.75	0.43
25:DA:499:U:H2'	25:DA:500:G:O4'	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:729:G:H2'	25:DA:1775:U:O2	2.17	0.43
25:DA:729:G:C6	27:DD:208:LYS:HB2	2.53	0.43
25:DA:892:G:H2'	25:DA:893:C:O4'	2.18	0.43
25:DA:1155:A:OP1	40:DU:55:ARG:HD3	2.18	0.43
25:DA:1264:G:OP1	51:D5:19:ARG:NH1	2.47	0.43
25:DA:2078:C:H2'	25:DA:2079:U:O4'	2.17	0.43
25:DA:2536:G:C5	25:DA:2537:U:C5	3.06	0.43
25:DA:2713:A:H2'	25:DA:2713:A:N3	2.33	0.43
26:DB:37:C:H2'	26:DB:38:C:H5'	2.00	0.43
26:DB:42:C:O2	30:DG:93:THR:N	2.38	0.43
27:DD:228:PRO:HD3	27:DD:235:GLY:HA3	1.99	0.43
28:DE:21:VAL:HA	28:DE:22:PRO:HD2	1.84	0.43
33:DN:96:GLU:OE2	33:DN:96:GLU:N	2.35	0.43
36:DQ:24:GLY:HA2	36:DQ:67:ARG:NH2	2.33	0.43
38:DS:30:ARG:HG3	38:DS:97:ARG:CZ	2.48	0.43
1:AA:96:U:O2'	1:AA:97:G:P	2.76	0.43
1:AA:144:G:H2'	1:AA:145:G:O4'	2.18	0.43
1:AA:160:A:O4'	1:AA:344:A:C2	2.71	0.43
1:AA:313:A:H2'	1:AA:314:C:H6	1.83	0.43
1:AA:545:C:H5'	4:AD:72:GLU:HG2	2.00	0.43
1:AA:840:C:H4'	1:AA:841:U:OP1	2.17	0.43
2:AB:97:TRP:HH2	2:AB:176:GLU:HG3	1.83	0.43
4:AD:101:LEU:HD23	4:AD:121:VAL:HG13	2.00	0.43
6:AF:76:ALA:HB1	6:AF:80:ARG:HH22	1.83	0.43
10:AJ:49:VAL:HG23	14:AN:41:ARG:CG	2.49	0.43
22:AY:9:ALA:HB1	22:AY:10:ILE:HA	1.99	0.43
22:AY:88:LEU:HA	22:AY:88:LEU:HD13	1.64	0.43
25:BA:154:G:H5''	25:BA:154:G:C8	2.53	0.43
25:BA:619:G:O6	29:BF:103:LYS:HE3	2.18	0.43
25:BA:2064:C:H2'	25:BA:2065:C:C6	2.53	0.43
25:BA:2285:C:C5	52:B6:6:ARG:NH2	2.86	0.43
32:BI:42:SER:OG	32:BI:43:ASN:N	2.51	0.43
35:BP:36:LYS:HB3	35:BP:37:GLY:H	1.59	0.43
45:BZ:45:ASP:O	45:BZ:49:ARG:HG3	2.18	0.43
46:B0:17:GLN:O	46:B0:19:LYS:HE3	2.18	0.43
1:CA:589:C:H2'	1:CA:590:C:C6	2.53	0.43
1:CA:665:A:H2'	1:CA:725:G:N2	2.33	0.43
1:CA:928:G:H1	1:CA:1389:C:N4	2.16	0.43
1:CA:1310:G:OP1	13:CM:77:ASN:ND2	2.48	0.43
1:CA:1319:A:H61	1:CA:1361:G:H21	1.67	0.43
2:CB:206:ASP:O	2:CB:211:ILE:HD11	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:5:PRO:O	8:CH:8:ASP:HB3	2.18	0.43
10:CJ:8:LEU:HD13	10:CJ:19:SER:OG	2.18	0.43
10:CJ:50:ILE:HA	10:CJ:60:ARG:HG2	2.00	0.43
23:CV:25:C:H2'	23:CV:26:G:O4'	2.17	0.43
25:DA:1140:C:OP2	33:DN:66:LYS:NZ	2.49	0.43
25:DA:2290:G:O2'	25:DA:2381:C:H1'	2.18	0.43
25:DA:2745:C:H4'	31:DH:142:GLY:O	2.19	0.43
25:DA:2815:C:H5'	51:D5:29:THR:HG21	1.99	0.43
25:DA:2820:A:C8	28:DE:109:LYS:HE2	2.53	0.43
29:DF:183:VAL:O	29:DF:187:VAL:HG23	2.17	0.43
37:DR:52:ILE:HD12	37:DR:94:TYR:CB	2.47	0.43
40:DU:39:LEU:HD23	40:DU:39:LEU:HA	1.68	0.43
50:D4:42:PHE:CA	50:D4:43:TYR:HB2	2.49	0.43
1:AA:37:U:H2'	1:AA:38:G:O4'	2.18	0.43
1:AA:342:C:N3	1:AA:348:G:C2	2.86	0.43
1:AA:564:C:C6	17:AQ:31:LEU:HD21	2.53	0.43
1:AA:601:C:O2'	1:AA:602:A:H5'	2.18	0.43
1:AA:693:G:H2'	1:AA:694:A:C8	2.53	0.43
1:AA:924:C:O2'	1:AA:1502:A:N6	2.52	0.43
2:AB:100:GLY:N	2:AB:176:GLU:OE2	2.40	0.43
4:AD:43:HIS:CE1	4:AD:46:LYS:HZ2	2.36	0.43
5:AE:89:ILE:HD13	5:AE:90:VAL:N	2.34	0.43
13:AM:56:LEU:O	13:AM:60:VAL:HG22	2.18	0.43
13:AM:63:THR:HG22	13:AM:64:TRP:CD2	2.54	0.43
25:BA:266:G:C6	25:BA:267:C:C5	3.06	0.43
25:BA:804:A:H5''	25:BA:805:G:OP1	2.18	0.43
25:BA:836:G:C5	25:BA:837:C:C4	3.06	0.43
25:BA:1567:A:O4'	25:BA:1568:G:C2	2.71	0.43
25:BA:1601:G:C5	25:BA:1602:U:C4	3.07	0.43
25:BA:1667:G:H2'	58:BA:4346:HOH:O	2.17	0.43
25:BA:2365:G:H4'	46:B0:60:PHE:CZ	2.54	0.43
25:BA:2615:U:C1'	51:B5:7:PRO:HB3	2.48	0.43
25:BA:2647:U:H2'	25:BA:2648:C:C6	2.53	0.43
26:BB:53:A:H2'	26:BB:54:G:O4'	2.18	0.43
27:BD:6:PHE:HB2	27:BD:13:ARG:O	2.18	0.43
27:BD:69:ARG:HD2	27:BD:105:ILE:HG21	2.00	0.43
27:BD:155:LEU:N	27:BD:155:LEU:CD1	2.80	0.43
27:BD:155:LEU:HD23	27:BD:177:LEU:HD22	2.00	0.43
31:BH:71:LEU:HD12	31:BH:71:LEU:HA	1.66	0.43
38:BS:61:ASN:OD1	38:BS:64:GLU:HG3	2.19	0.43
40:BU:44:ASN:ND2	41:BV:75:PHE:HB3	2.32	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BW:96:ILE:HD13	42:BW:96:ILE:HA	1.64	0.43
43:BX:50:LYS:N	43:BX:87:GLN:OE1	2.50	0.43
45:BZ:111:VAL:O	45:BZ:113:ALA:N	2.51	0.43
45:BZ:124:ILE:HD12	45:BZ:124:ILE:HA	1.79	0.43
45:BZ:146:ILE:HA	45:BZ:174:VAL:HG12	2.00	0.43
45:BZ:180:VAL:HG13	45:BZ:183:LEU:HD12	2.01	0.43
48:B2:28:LYS:HE3	48:B2:56:GLN:OE1	2.17	0.43
1:CA:33:A:H2'	1:CA:34:C:C6	2.53	0.43
1:CA:257:G:H2'	1:CA:258:G:H8	1.84	0.43
1:CA:874:G:H2'	1:CA:875:C:H6	1.83	0.43
1:CA:1181:G:H2'	1:CA:1182:G:C5	2.53	0.43
1:CA:1329:A:H2'	1:CA:1330:U:O4'	2.19	0.43
2:CB:24:TRP:HZ3	2:CB:29:ALA:HB2	1.82	0.43
2:CB:72:GLY:O	2:CB:94:ASN:HA	2.18	0.43
2:CB:211:ILE:O	2:CB:215:LEU:HB2	2.18	0.43
4:CD:65:ARG:HG2	4:CD:75:PHE:CD1	2.53	0.43
7:CG:75:VAL:HG13	7:CG:145:ALA:HB2	2.01	0.43
23:CV:3:C:N4	23:CV:70:G:H1	2.10	0.43
25:DA:9:U:N3	25:DA:2629:A:H2	2.13	0.43
25:DA:341:G:H2'	25:DA:342:G:O4'	2.18	0.43
25:DA:539:G:H2'	25:DA:540:C:H6	1.84	0.43
25:DA:616:G:H5'	29:DF:205:ARG:HH11	1.82	0.43
25:DA:910:A:C5	36:DQ:13:GLN:HG3	2.53	0.43
25:DA:924:C:H2'	25:DA:925:C:H6	1.82	0.43
25:DA:1815:A:C6	25:DA:1817:G:O6	2.71	0.43
25:DA:2193:G:H2'	25:DA:2194:G:O4'	2.19	0.43
25:DA:2228:G:C6	25:DA:2229:C:C4	3.06	0.43
25:DA:2262:U:H4'	25:DA:2328:A:C2	2.53	0.43
25:DA:2304:G:O6	58:DA:4705:HOH:O	2.21	0.43
25:DA:2562:U:H4'	34:DO:25:LEU:HD21	1.99	0.43
25:DA:2617:C:C2	25:DA:2618:G:C8	3.07	0.43
25:DA:2807:G:C6	25:DA:2808:U:C4	3.06	0.43
26:DB:91:C:OP1	36:DQ:16:ARG:HG2	2.17	0.43
27:DD:221:VAL:HG23	27:DD:226:MET:HE2	1.98	0.43
29:DF:61:GLY:HA2	29:DF:77:ASP:HB3	2.00	0.43
33:DN:111:PRO:HA	33:DN:114:ARG:NH1	2.33	0.43
36:DQ:77:LYS:HE3	36:DQ:84:GLY:O	2.18	0.43
39:DT:22:PHE:N	39:DT:22:PHE:CD2	2.86	0.43
39:DT:123:GLN:H	39:DT:123:GLN:HG3	1.59	0.43
44:DY:39:VAL:O	44:DY:42:VAL:HB	2.18	0.43
47:D1:58:ILE:HD11	47:D1:60:PHE:CZ	2.53	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:D2:10:LEU:HD23	48:D2:10:LEU:HA	1.82	0.43
51:D5:41:PRO:HG2	51:D5:44:THR:OG1	2.18	0.43
1:AA:347:G:C5	1:AA:348:G:C8	3.06	0.43
1:AA:892:A:H2'	1:AA:893:C:C6	2.53	0.43
1:AA:911:U:H2'	1:AA:912:C:C6	2.53	0.43
1:AA:1367:C:H5'	10:AJ:60:ARG:NH1	2.33	0.43
4:AD:119:GLN:O	4:AD:123:HIS:ND1	2.44	0.43
6:AF:72:VAL:HG13	6:AF:73:ASN:N	2.33	0.43
7:AG:51:GLN:HA	7:AG:55:GLY:HA2	1.99	0.43
9:AI:127:LYS:HG2	58:AV:205:HOH:O	2.17	0.43
18:AR:59:SER:OG	18:AR:62:GLU:HG3	2.18	0.43
19:AS:74:PHE:N	19:AS:74:PHE:CD2	2.87	0.43
25:BA:218:A:H2'	25:BA:219:G:O4'	2.17	0.43
25:BA:460:A:OP1	53:B7:41:ARG:NH2	2.49	0.43
25:BA:652(A):A:H2'	25:BA:652(A):A:N3	2.34	0.43
25:BA:1805:U:O2	27:BD:50:THR:HB	2.18	0.43
25:BA:2056:G:C2	25:BA:2057:A:C8	3.06	0.43
25:BA:2207:G:O2'	25:BA:2208:A:P	2.76	0.43
25:BA:2349:G:H5''	25:BA:2349:G:H8	1.82	0.43
33:BN:43:THR:HG22	33:BN:45:ASN:H	1.83	0.43
34:BO:2:ILE:N	34:BO:2:ILE:HD13	2.33	0.43
35:BP:65:ARG:HD2	54:B8:25:MET:SD	2.58	0.43
1:CA:37:U:O2'	1:CA:547:A:N1	2.40	0.43
1:CA:502:G:H4'	1:CA:550:G:H4'	2.00	0.43
1:CA:631:G:H2'	1:CA:631:G:N3	2.32	0.43
1:CA:1049:U:H4'	1:CA:1050:G:O5'	2.19	0.43
1:CA:1123:A:H2	10:CJ:39:PRO:HD2	1.83	0.43
1:CA:1134:G:C2	1:CA:1135:U:O4'	2.72	0.43
1:CA:1323:G:H4'	1:CA:1363:C:N3	2.34	0.43
1:CA:1434:A:H2'	1:CA:1435:G:O4'	2.18	0.43
2:CB:24:TRP:CZ3	2:CB:26:PRO:HA	2.53	0.43
5:CE:68:GLU:HG2	5:CE:70:PRO:HD3	2.00	0.43
9:CI:97:LYS:O	9:CI:100:GLY:N	2.46	0.43
15:CO:88:ARG:HH11	15:CO:88:ARG:HG3	1.84	0.43
17:CQ:74:LEU:HD22	17:CQ:74:LEU:HA	1.72	0.43
25:DA:27:G:C2	25:DA:512:G:N3	2.86	0.43
25:DA:280:C:C4	25:DA:361:G:N2	2.87	0.43
25:DA:651:G:H4'	54:D8:18:ALA:HB3	1.99	0.43
25:DA:1668:A:N3	25:DA:1670:C:C4	2.86	0.43
25:DA:1971:A:OP2	27:DD:242:ARG:NH2	2.51	0.43
25:DA:2805:G:C6	25:DA:2807:G:C5	3.06	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DQ:32:TYR:CE2	36:DQ:133:ARG:HG3	2.53	0.43
45:DZ:150:LEU:HG	45:DZ:172:ALA:HB3	2.00	0.43
48:D2:44:LEU:HD22	48:D2:47:ASN:HA	2.00	0.43
48:D2:51:ARG:H	48:D2:54:LYS:HB2	1.83	0.43
54:D8:50:LEU:HB2	54:D8:55:ALA:HB2	2.00	0.43
1:AA:567:G:H2'	1:AA:568:G:O4'	2.18	0.43
1:AA:991:U:HO2'	1:AA:992:U:P	2.42	0.43
1:AA:1051:C:H2'	1:AA:1052:U:C6	2.53	0.43
1:AA:1181:G:O2'	1:AA:1182:G:C6	2.72	0.43
1:AA:1350:A:C6	1:AA:1351:U:C4	3.07	0.43
2:AB:84:GLU:OE1	2:AB:216:SER:HA	2.18	0.43
3:AC:71:ALA:HA	3:AC:106:VAL:CB	2.48	0.43
3:AC:141:VAL:HG11	3:AC:149:ALA:CB	2.49	0.43
5:AE:101:ILE:O	5:AE:120:THR:HG23	2.17	0.43
9:AI:107:ARG:CG	9:AI:107:ARG:HH11	2.31	0.43
17:AQ:74:LEU:HD13	17:AQ:75:ARG:HB3	2.01	0.43
25:BA:41:C:H2'	25:BA:42:G:O4'	2.18	0.43
25:BA:271(I):G:O2'	25:BA:271(J):C:H5'	2.19	0.43
25:BA:652(C):G:H2'	25:BA:652(C):G:N3	2.34	0.43
25:BA:719:C:O5'	25:BA:719:C:H6	2.02	0.43
25:BA:973:A:H8	25:BA:973:A:OP1	2.01	0.43
25:BA:1049:C:H41	25:BA:1111:A:H2	1.63	0.43
25:BA:2307:G:H4'	25:BA:2308:G:O5'	2.17	0.43
25:BA:2398:U:H2'	25:BA:2399:G:C8	2.53	0.43
25:BA:2669:G:C2	25:BA:2670:A:C8	3.07	0.43
32:BI:4:ILE:HD11	32:BI:44:LEU:HD12	2.00	0.43
34:BO:90:GLN:O	34:BO:91:LEU:HB2	2.19	0.43
36:BQ:42:ILE:HG22	36:BQ:47:ILE:HG13	2.00	0.43
36:BQ:57:HIS:NE2	36:BQ:116:GLU:HB3	2.34	0.43
40:BU:27:LEU:N	40:BU:27:LEU:HD23	2.32	0.43
44:BY:92:ASN:N	44:BY:93:GLY:HA2	2.33	0.43
1:CA:675:A:H2'	1:CA:676:A:C8	2.53	0.43
1:CA:1128:C:O2'	1:CA:1130:A:C8	2.71	0.43
1:CA:1238:A:C8	1:CA:1303:C:H1'	2.54	0.43
5:CE:51:VAL:O	5:CE:54:ALA:HB3	2.17	0.43
7:CG:113:GLU:CD	7:CG:119:ARG:HG2	2.39	0.43
16:CP:72:ARG:HH11	16:CP:72:ARG:CG	2.22	0.43
17:CQ:29:HIS:HB3	17:CQ:33:GLY:N	2.33	0.43
25:DA:34:C:H2'	25:DA:35:G:H5'	2.01	0.43
25:DA:64:A:H2'	25:DA:65:C:C6	2.53	0.43
25:DA:243:U:OP1	54:D8:6:THR:OG1	2.17	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:530:G:N1	25:DA:2022:U:OP1	2.51	0.43
25:DA:612:C:H2'	25:DA:613:G:O4'	2.17	0.43
25:DA:637:A:H4'	25:DA:638:G:O5'	2.19	0.43
25:DA:691:C:H2'	25:DA:692:C:H6	1.83	0.43
25:DA:953:A:OP2	36:DQ:16:ARG:NE	2.50	0.43
25:DA:1265:A:H8	25:DA:1265:A:OP1	2.02	0.43
25:DA:1356:G:N1	25:DA:1357:U:C2	2.86	0.43
25:DA:1778:U:P	58:DA:4165:HOH:O	2.76	0.43
25:DA:2013:A:H4'	42:DW:96:ILE:HD13	2.00	0.43
25:DA:2307:G:H8	25:DA:2307:G:OP1	2.01	0.43
25:DA:2791:C:H1'	25:DA:2807:G:N2	2.33	0.43
26:DB:54:G:H21	30:DG:29:TRP:HZ2	1.66	0.43
26:DB:110:G:H2'	26:DB:111:G:H8	1.84	0.43
29:DF:78:ILE:H	29:DF:78:ILE:HG13	1.57	0.43
30:DG:23:PHE:HB2	30:DG:25:TYR:HH	1.83	0.43
35:DP:75:ILE:H	35:DP:75:ILE:HG12	1.39	0.43
38:DS:10:ARG:NE	38:DS:91:PRO:O	2.51	0.43
45:DZ:99:TYR:HB3	45:DZ:123:ASP:OD1	2.18	0.43
1:AA:44:G:N3	1:AA:399:G:C2	2.86	0.43
1:AA:160:A:O5'	1:AA:160:A:H8	2.02	0.43
1:AA:189(J):G:H2'	1:AA:189(K):U:H6	1.83	0.43
1:AA:198:G:H2'	1:AA:199:G:H8	1.84	0.43
1:AA:458:C:H3'	1:AA:460:G:H8	1.83	0.43
1:AA:511:C:C5	1:AA:541:G:N2	2.86	0.43
1:AA:539:A:OP1	12:AL:114:LYS:HG2	2.19	0.43
1:AA:659:U:O2'	1:AA:660:G:H5'	2.18	0.43
1:AA:1366:C:H2'	1:AA:1367:C:H6	1.83	0.43
2:AB:18:GLY:HA3	2:AB:41:ILE:HG23	2.00	0.43
2:AB:47:THR:HG23	2:AB:202:PRO:HG2	2.00	0.43
25:BA:469:G:O6	53:B7:37:LYS:HE3	2.17	0.43
25:BA:1421:G:C2	25:BA:1422:G:C8	3.07	0.43
25:BA:1581:G:C6	25:BA:1582:C:C4	3.06	0.43
25:BA:2630:G:C5	25:BA:2894:G:N2	2.87	0.43
25:BA:2773:C:H5''	28:BE:164:ARG:HG2	2.01	0.43
25:BA:2811:G:N2	25:BA:2891:G:H1'	2.34	0.43
26:BB:29:A:P	38:BS:32:LEU:HD12	2.59	0.43
27:BD:130:ALA:C	27:BD:131:LEU:HD12	2.39	0.43
27:BD:182:LEU:HD22	27:BD:182:LEU:HA	1.88	0.43
28:BE:134:ILE:O	28:BE:137:HIS:HB2	2.18	0.43
38:BS:15:ARG:NE	38:BS:88:ASP:OD2	2.50	0.43
38:BS:24:LEU:HA	38:BS:24:LEU:HD23	1.68	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BV:28:GLU:HG3	41:BV:29:PRO:HD2	2.00	0.43
42:BW:65:LEU:CD1	42:BW:68:ARG:HH21	2.31	0.43
44:BY:99:CYS:HB3	44:BY:102:CYS:SG	2.57	0.43
50:B4:9:LEU:HA	50:B4:9:LEU:HD23	1.78	0.43
51:B5:41:PRO:HA	51:B5:42:PRO:HD2	1.86	0.43
51:B5:48:GLU:OE1	51:B5:48:GLU:HA	2.18	0.43
1:CA:25:C:H5'	1:CA:524:G:H1'	2.00	0.43
1:CA:93:G:H1'	1:CA:96:U:H5'	2.00	0.43
1:CA:683:G:C2	1:CA:684:A:C4	3.06	0.43
1:CA:1053:G:N7	1:CA:1200:C:C5'	2.81	0.43
1:CA:1068:G:N3	1:CA:1191:A:C2	2.86	0.43
1:CA:1273:G:C5	1:CA:1274:G:C8	3.07	0.43
1:CA:1339:A:H2'	1:CA:1340:A:O4'	2.19	0.43
1:CA:1415:G:H1	1:CA:1485:U:H3	1.66	0.43
8:CH:58:TYR:O	8:CH:59:LEU:HD23	2.19	0.43
15:CO:79:ARG:HA	15:CO:82:ILE:HD11	2.01	0.43
15:CO:81:LEU:HG	15:CO:85:LEU:HD12	1.99	0.43
17:CQ:89:LEU:HD23	17:CQ:89:LEU:HA	1.85	0.43
25:DA:992:C:H42	25:DA:1162:G:H1	1.67	0.43
25:DA:1331:A:H2'	25:DA:1333:C:C5	2.53	0.43
25:DA:2300:G:N7	58:DA:3780:HOH:O	2.36	0.43
25:DA:2315:G:C6	25:DA:2316:C:C4	3.07	0.43
26:DB:38:C:O4'	38:DS:95:HIS:NE2	2.51	0.43
26:DB:50:G:OP2	38:DS:62:LYS:HD3	2.18	0.43
32:DI:79:ILE:HA	32:DI:80:PRO:HD3	1.69	0.43
33:DN:62:VAL:HG13	33:DN:66:LYS:HB2	2.01	0.43
34:DO:13:ASN:C	34:DO:15:GLY:N	2.71	0.43
37:DR:29:LEU:HD23	37:DR:70:LEU:HD11	2.00	0.43
37:DR:70:LEU:HD23	37:DR:70:LEU:HA	1.80	0.43
45:DZ:182:LYS:O	45:DZ:186:GLU:HG3	2.18	0.43
48:D2:17:SER:O	48:D2:21:LEU:HB2	2.18	0.43
1:AA:142:G:N3	1:AA:143:A:C8	2.86	0.43
1:AA:507:C:H3'	1:AA:508:C:H2'	2.00	0.43
1:AA:1149:C:H6	1:AA:1149:C:O5'	2.01	0.43
1:AA:1222:G:C6	1:AA:1223:C:C4	3.06	0.43
1:AA:1244:C:C2	1:AA:1294:G:N2	2.87	0.43
1:AA:1288:A:N1	1:AA:1371:G:H1'	2.34	0.43
1:AA:1392:G:N2	1:AA:1502:A:H8	2.06	0.43
4:AD:13:ARG:O	4:AD:14:ARG:HB3	2.19	0.43
4:AD:189:PRO:HB2	4:AD:194:LEU:HD21	1.99	0.43
4:AD:192:GLU:C	4:AD:194:LEU:H	2.21	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:94:ARG:HH22	19:AS:80:TYR:HB3	1.84	0.43
13:AM:115:LYS:HB2	13:AM:115:LYS:HE2	1.61	0.43
18:AR:44:LEU:HD23	18:AR:50:ILE:HA	2.01	0.43
19:AS:62:ILE:H	19:AS:62:ILE:HD12	1.84	0.43
20:AT:72:LEU:HD21	20:AT:77:ALA:N	2.34	0.43
22:AY:51:TYR:HB3	22:AY:55:ARG:HH21	1.84	0.43
23:AV:18:G:N3	23:AV:58:A:C2	2.87	0.43
25:BA:569:U:C4	25:BA:570:G:C6	3.06	0.43
25:BA:672:C:C2'	25:BA:673:C:H5'	2.49	0.43
25:BA:818:G:H4'	25:BA:838:C:O3'	2.18	0.43
25:BA:1106:G:H4'	25:BA:1107:G:OP1	2.16	0.43
25:BA:1306:C:C2'	25:BA:1307:A:H5'	2.49	0.43
25:BA:1403:C:H5''	25:BA:1471:A:C1'	2.37	0.43
25:BA:1529:G:H2'	25:BA:1530:C:C6	2.53	0.43
25:BA:1776:G:C2	25:BA:1777:U:C6	3.07	0.43
25:BA:2095:C:H2'	25:BA:2096:U:O4'	2.19	0.43
25:BA:2312:U:H5'	30:BG:88:ILE:HD11	2.01	0.43
32:BI:23:PRO:O	32:BI:26:ALA:HB3	2.18	0.43
34:BO:23:ARG:HG3	34:BO:24:VAL:N	2.33	0.43
39:BT:120:ARG:HA	39:BT:123:GLN:HG2	2.01	0.43
40:BU:20:LEU:HA	40:BU:20:LEU:HD23	1.36	0.43
46:B0:40:GLN:HG3	46:B0:42:GLY:O	2.18	0.43
1:CA:5:U:H5'	1:CA:6:G:C5	2.54	0.43
1:CA:392:G:H2'	1:CA:393:A:C8	2.53	0.43
1:CA:401:C:O5'	1:CA:401:C:H6	2.01	0.43
2:CB:102:LEU:O	2:CB:105:PHE:HB2	2.19	0.43
2:CB:105:PHE:HD2	2:CB:158:LEU:HD22	1.83	0.43
6:CF:53:ALA:HB3	6:CF:86:ARG:NH1	2.33	0.43
9:CI:4:TYR:CE1	9:CI:88:TYR:HA	2.54	0.43
11:CK:55:LYS:H	11:CK:55:LYS:HG2	1.60	0.43
11:CK:98:LEU:HD22	11:CK:98:LEU:HA	1.84	0.43
23:CV:19:G:H5'	23:CV:20:U:C5	2.54	0.43
23:CV:64:G:C6	23:CV:65:C:C4	3.06	0.43
25:DA:950:G:H2'	25:DA:951:C:O4'	2.19	0.43
25:DA:1007:C:OP1	33:DN:37:LYS:HE2	2.19	0.43
25:DA:1142(A):A:C8	25:DA:1144:G:N7	2.87	0.43
25:DA:1321:A:H2'	25:DA:1322:A:O4'	2.18	0.43
25:DA:1657:C:H2'	25:DA:1658:C:H6	1.84	0.43
25:DA:1945:G:H2'	25:DA:1946:U:C6	2.52	0.43
25:DA:2051:A:H8	25:DA:2051:A:OP2	2.00	0.43
27:DD:94:LEU:HD23	27:DD:94:LEU:HA	1.84	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DD:142:VAL:HG23	27:DD:193:VAL:HA	1.99	0.43
30:DG:139:LEU:H	30:DG:139:LEU:HG	1.55	0.43
32:DI:72:LEU:O	32:DI:73:GLU:HB3	2.19	0.43
35:DP:84:ASN:HB3	35:DP:86:LYS:HG2	2.01	0.43
45:DZ:93:ASP:O	45:DZ:131:ARG:NH2	2.51	0.43
48:D2:29:LYS:HD3	48:D2:57:ILE:HD12	1.99	0.43
48:D2:35:LEU:HD12	48:D2:53:LEU:HD12	1.99	0.43
48:D2:37:PHE:O	48:D2:40:SER:OG	2.34	0.43
51:D5:36:CYS:SG	51:D5:48:GLU:HB2	2.59	0.43
1:AA:129(A):G:N1	1:AA:189(D):C:N4	2.66	0.43
1:AA:149:A:O2'	1:AA:150:C:H6	2.00	0.43
1:AA:149:A:O2'	1:AA:150:C:C6	2.70	0.43
1:AA:392:G:OP2	16:AP:12:LYS:HG3	2.18	0.43
1:AA:806:C:O2'	1:AA:807:A:H5'	2.18	0.43
1:AA:1067:A:O2'	1:AA:1093:A:O3'	2.31	0.43
1:AA:1143:G:H2'	1:AA:1144:G:C8	2.53	0.43
1:AA:1443:G:C2	1:AA:1460:A:N3	2.87	0.43
2:AB:37:ASN:O	2:AB:39:ILE:HG13	2.18	0.43
2:AB:174:VAL:O	2:AB:178:ARG:HB2	2.19	0.43
5:AE:31:LEU:HD23	5:AE:31:LEU:HA	1.78	0.43
8:AH:86:ILE:HA	8:AH:86:ILE:HD13	1.67	0.43
14:AN:21:TYR:HE2	14:AN:23:ARG:NE	2.06	0.43
20:AT:69:GLY:O	20:AT:73:HIS:NE2	2.52	0.43
25:BA:524:U:H2'	25:BA:525:U:C6	2.54	0.43
25:BA:634:C:H2'	25:BA:635:C:C6	2.54	0.43
25:BA:1005:C:C2	25:BA:1143:A:C5	3.07	0.43
25:BA:1043:C:N4	25:BA:1044:G:N7	2.67	0.43
26:BB:43:C:OP1	50:B4:1:MET:HB3	2.19	0.43
29:BF:125:LEU:HD21	29:BF:199:TRP:CG	2.53	0.43
32:BI:17:GLN:HG2	32:BI:18:VAL:N	2.34	0.43
32:BI:27:ARG:O	32:BI:32:PRO:HD3	2.18	0.43
35:BP:59:LEU:HA	35:BP:59:LEU:HD23	1.77	0.43
36:BQ:32:TYR:OH	36:BQ:111:GLU:HB2	2.19	0.43
37:BR:54:LEU:HA	37:BR:54:LEU:HD12	1.33	0.43
47:B1:3:LYS:HB3	47:B1:4:VAL:H	1.64	0.43
1:CA:93:G:HO2'	1:CA:96:U:H6	1.66	0.43
1:CA:569:C:H42	1:CA:881:G:H1	1.66	0.43
1:CA:683:G:C6	1:CA:684:A:C6	3.07	0.43
1:CA:832:C:HO2'	1:CA:833:U:P	2.41	0.43
1:CA:854:G:N1	1:CA:855:G:C5	2.87	0.43
1:CA:1061:G:H5''	10:CJ:59:SER:CB	2.49	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1332:A:H8	1:CA:1332:A:O5'	2.02	0.43
5:CE:19:MET:SD	5:CE:24:ARG:HB3	2.58	0.43
11:CK:79:SER:HA	11:CK:104:GLN:HB2	2.00	0.43
15:CO:43:LEU:HA	15:CO:43:LEU:HD23	1.59	0.43
16:CP:2:VAL:O	16:CP:64:ALA:HA	2.18	0.43
17:CQ:32:TYR:O	17:CQ:34:LYS:N	2.51	0.43
25:DA:372:G:H8	47:D1:65:SER:O	2.02	0.43
25:DA:740:U:H2'	25:DA:741:G:C8	2.53	0.43
25:DA:838:C:H2'	25:DA:839:U:O4'	2.19	0.43
25:DA:995:C:OP2	40:DU:54:LYS:HE3	2.18	0.43
25:DA:1394:U:C4	25:DA:1395:A:C5	3.06	0.43
25:DA:1517:G:C6	25:DA:1518:U:C4	3.06	0.43
25:DA:1530:C:H1'	25:DA:1531:C:OP1	2.19	0.43
25:DA:2286:A:H4'	25:DA:2287:A:O4'	2.18	0.43
27:DD:70:TRP:CZ2	27:DD:150:LYS:HG3	2.53	0.43
27:DD:183:ARG:HG2	27:DD:183:ARG:HH11	1.84	0.43
29:DF:64:ILE:HG13	29:DF:65:TRP:N	2.32	0.43
29:DF:155:LEU:HD23	29:DF:186:ILE:HG13	2.00	0.43
31:DH:32:GLU:H	31:DH:32:GLU:HG2	1.70	0.43
38:DS:96:GLY:N	38:DS:99:LYS:H	2.17	0.43
40:DU:105:VAL:O	40:DU:108:GLU:HB2	2.19	0.43
45:DZ:44:PHE:CE2	45:DZ:48:PHE:HB2	2.53	0.43
54:D8:34:TRP:O	54:D8:35:GLN:HG2	2.19	0.43
1:AA:189(A):C:H2'	1:AA:189(B):C:C5	2.54	0.43
1:AA:359:U:H2'	1:AA:360:A:C8	2.53	0.43
1:AA:626:U:H2'	1:AA:627:G:H8	1.83	0.43
1:AA:684:A:C6	1:AA:685:G:C6	3.07	0.43
1:AA:900:A:H2'	1:AA:901:A:C8	2.54	0.43
1:AA:1190:G:OP1	3:AC:5:ILE:HG22	2.19	0.43
1:AA:1381:U:C5	1:AA:1382:C:C4	3.07	0.43
1:AA:1517:G:H1'	25:BA:1919:A:O3'	2.19	0.43
4:AD:146:ILE:HD12	4:AD:146:ILE:N	2.32	0.43
9:AI:9:ARG:CB	9:AI:104:ARG:HE	2.31	0.43
9:AI:30:GLY:C	9:AI:31:GLN:HG2	2.39	0.43
11:AK:43:SER:HB2	11:AK:68:ALA:HB2	2.00	0.43
12:AL:60:LEU:HA	12:AL:60:LEU:HD12	1.73	0.43
13:AM:102:ARG:HH21	13:AM:105:THR:HG23	1.84	0.43
14:AN:23:ARG:HD3	14:AN:23:ARG:HA	1.45	0.43
16:AP:74:LEU:O	16:AP:79:VAL:HB	2.19	0.43
25:BA:478:A:C6	25:BA:480:A:C6	3.06	0.43
25:BA:823:G:C6	25:BA:835:A:C2	3.07	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:2223:G:H2'	25:BA:2224:G:C5'	2.48	0.43
25:BA:2406:U:C2	35:BP:72:PRO:HG2	2.54	0.43
32:BI:67:ARG:O	32:BI:71:ILE:HB	2.19	0.43
33:BN:33:LEU:HD12	33:BN:38:HIS:CE1	2.53	0.43
33:BN:123:TYR:CZ	33:BN:129:PRO:HG2	2.53	0.43
36:BQ:57:HIS:HD2	36:BQ:117:ALA:HB2	1.83	0.43
41:BV:31:ALA:O	41:BV:61:VAL:HG13	2.18	0.43
45:BZ:106:GLY:O	45:BZ:108:PRO:HD3	2.18	0.43
45:BZ:108:PRO:HB2	45:BZ:111:VAL:HG23	2.00	0.43
50:B4:16:CYS:SG	50:B4:18:CYS:HB2	2.58	0.43
54:B8:47:LYS:O	54:B8:48:PHE:HB3	2.18	0.43
1:CA:452:A:C2	1:CA:453:A:C4	3.07	0.43
1:CA:1057:G:C5	1:CA:1204:A:C2	3.07	0.43
1:CA:1084:G:H5'	1:CA:1102:A:OP2	2.18	0.43
1:CA:1291:G:C6	1:CA:1292:U:C4	3.06	0.43
2:CB:111:ARG:O	2:CB:115:LEU:N	2.52	0.43
2:CB:216:SER:O	2:CB:219:VAL:N	2.52	0.43
5:CE:57:LYS:HD3	5:CE:61:TYR:HE2	1.83	0.43
25:DA:715:G:H2'	25:DA:716:A:O4'	2.18	0.43
25:DA:848:G:H2'	25:DA:849:A:H8	1.82	0.43
25:DA:993:G:O2'	41:DV:89:GLN:HG3	2.19	0.43
25:DA:1122:G:H2'	25:DA:1122:G:N3	2.34	0.43
25:DA:1278:A:H2'	25:DA:1279:G:C8	2.53	0.43
25:DA:1462:C:H4'	25:DA:2703:C:H5'	2.00	0.43
25:DA:1889:A:H2'	25:DA:1890:A:H8	1.76	0.43
25:DA:2660:A:C6	25:DA:2661:G:C6	3.07	0.43
25:DA:2666:C:O5'	25:DA:2666:C:H6	2.01	0.43
25:DA:2684:U:H2'	25:DA:2685:G:O4'	2.19	0.43
27:DD:97:TYR:HB2	27:DD:101:GLU:O	2.19	0.43
29:DF:33:LEU:O	29:DF:37:VAL:HG23	2.19	0.43
32:DI:6:LEU:HG	32:DI:36:ALA:HA	2.01	0.43
33:DN:38:HIS:O	40:DU:67:ALA:HB1	2.18	0.43
37:DR:81:ASP:N	37:DR:81:ASP:OD1	2.49	0.43
38:DS:39:ILE:HD13	38:DS:39:ILE:HA	1.80	0.43
43:DX:35:THR:HG22	43:DX:38:GLU:OE1	2.18	0.43
46:D0:24:LYS:O	46:D0:25:ARG:HD3	2.18	0.43
1:AA:189:G:C6	1:AA:189(L):G:C2	3.07	0.43
1:AA:270:A:C6	1:AA:271:C:C4	3.07	0.43
1:AA:663:A:H5''	18:AR:61:LYS:HE3	2.01	0.43
1:AA:1240:U:O4	7:AG:30:ILE:HG23	2.19	0.43
3:AC:36:ASP:OD2	3:AC:36:ASP:N	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:79:LEU:O	9:AI:83:ARG:HG2	2.18	0.43
13:AM:27:LYS:HD3	13:AM:27:LYS:HA	1.84	0.43
23:AV:19:G:H4'	23:AV:20:U:OP2	2.19	0.43
25:BA:514:A:H1'	25:BA:581:C:O2'	2.18	0.43
25:BA:557:U:H2'	25:BA:558:G:C8	2.53	0.43
25:BA:1439:A:H2'	25:BA:1440:G:O4'	2.18	0.43
25:BA:1472:A:C4	25:BA:1473:G:C8	3.07	0.43
25:BA:1488:G:H5''	25:BA:1488:G:H8	1.82	0.43
25:BA:1614:A:OP1	25:BA:1617:C:N4	2.50	0.43
25:BA:1945:G:C4	25:BA:1946:U:C5	3.07	0.43
25:BA:2070:G:H2'	25:BA:2071:A:O4'	2.18	0.43
27:BD:71:ASP:OD2	27:BD:103:ARG:NH2	2.50	0.43
27:BD:95:LEU:O	27:BD:102:LYS:HA	2.18	0.43
29:BF:31:HIS:HB2	35:BP:9:ASN:OD1	2.19	0.43
29:BF:194:MET:HE3	29:BF:199:TRP:HE3	1.84	0.43
30:BG:109:VAL:C	30:BG:112:PRO:HD2	2.39	0.43
31:BH:93:GLY:O	31:BH:95:ARG:NH2	2.51	0.43
35:BP:50:ARG:HG3	35:BP:50:ARG:NH2	2.33	0.43
38:BS:59:LYS:NZ	38:BS:60:GLY:HA2	2.34	0.43
42:BW:86:LEU:O	42:BW:94:ASP:N	2.47	0.43
1:CA:41:G:H2'	1:CA:42:G:C8	2.54	0.43
1:CA:447:G:H2'	1:CA:485:G:N2	2.34	0.43
1:CA:942:G:C2	1:CA:1342:C:C2	3.06	0.43
1:CA:1046:A:H3'	1:CA:1047:G:H8	1.84	0.43
1:CA:1058:G:H1	1:CA:1199:U:H3	1.67	0.43
3:CC:68:VAL:HG12	3:CC:70:VAL:HG22	2.00	0.43
9:CI:49:PRO:O	9:CI:52:ALA:N	2.44	0.43
11:CK:120:ARG:HA	11:CK:121:PRO:HD3	1.82	0.43
13:CM:23:TYR:CD1	13:CM:71:ARG:NH1	2.87	0.43
14:CN:53:LEU:HD23	14:CN:53:LEU:HA	1.70	0.43
25:DA:234:C:H2'	25:DA:235:U:H6	1.84	0.43
25:DA:614(C):A:C4	29:DF:180:GLY:HA2	2.54	0.43
25:DA:1165:U:H2'	25:DA:1166:C:C6	2.54	0.43
25:DA:1169:G:N2	25:DA:1181:C:C2	2.87	0.43
25:DA:1815:A:C6	25:DA:1817:G:C6	3.06	0.43
25:DA:2206:G:O2'	25:DA:2207:G:OP1	2.34	0.43
26:DB:33:G:C2	26:DB:50:G:C2	3.07	0.43
28:DE:103:ASP:OD1	28:DE:168:MET:HG3	2.19	0.43
29:DF:158:THR:HG21	29:DF:163:VAL:CG1	2.49	0.43
32:DI:9:LEU:HB3	32:DI:12:LEU:HB2	2.01	0.43
35:DP:3:LEU:HD12	35:DP:3:LEU:N	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DP:25:SER:OG	35:DP:26:GLY:N	2.52	0.43
37:DR:28:LEU:O	37:DR:28:LEU:HD22	2.19	0.43
44:DY:9:LYS:HA	44:DY:10:GLY:HA2	1.76	0.43
46:D0:48:GLY:H	46:D0:51:VAL:HB	1.83	0.43
47:D1:72:GLU:O	47:D1:72:GLU:HG2	2.19	0.43
55:D9:9:ARG:HB3	55:D9:14:CYS:HB2	2.01	0.43
1:AA:52:G:C4	1:AA:53:A:C8	3.06	0.42
1:AA:153:C:N3	1:AA:169:C:N3	2.67	0.42
1:AA:344:A:C8	1:AA:344:A:O5'	2.72	0.42
1:AA:690:G:H2'	1:AA:691:G:O4'	2.18	0.42
1:AA:1065:U:H5'	1:AA:1066:C:OP1	2.18	0.42
1:AA:1071:C:O2'	1:AA:1072:G:H5'	2.19	0.42
1:AA:1399:C:H4'	1:AA:1400:C:C5'	2.49	0.42
2:AB:52:GLU:O	2:AB:55:PHE:N	2.45	0.42
5:AE:31:LEU:HD23	5:AE:45:PHE:HB2	2.01	0.42
25:BA:272(H):C:N3	25:BA:363(B):G:O6	2.52	0.42
25:BA:278:A:O2'	25:BA:279:C:OP1	2.22	0.42
25:BA:337:C:H2'	25:BA:338:G:O4'	2.19	0.42
25:BA:395:U:O2'	25:BA:396:G:N7	2.45	0.42
25:BA:528:A:O2'	25:BA:529:A:H5'	2.19	0.42
25:BA:2106:G:N2	25:BA:2183:C:N3	2.55	0.42
25:BA:2412:A:H2'	25:BA:2413:G:O4'	2.19	0.42
29:BF:197:ASP:O	29:BF:201:VAL:HG12	2.18	0.42
38:BS:18:ILE:HD13	38:BS:18:ILE:HA	1.86	0.42
52:B6:11:LEU:HB3	52:B6:49:HIS:HB3	2.01	0.42
1:CA:153:C:H2'	1:CA:154:C:C6	2.54	0.42
1:CA:171:A:C2	1:CA:172:A:C4	3.07	0.42
1:CA:499:A:H4'	1:CA:500:G:H5'	2.00	0.42
1:CA:841:U:OP1	1:CA:841:U:H6	2.02	0.42
1:CA:1061:G:HO2'	1:CA:1062:U:P	2.40	0.42
1:CA:1207:G:H2'	1:CA:1208:C:H6	1.83	0.42
1:CA:1300:G:O2'	1:CA:1303:C:N4	2.52	0.42
4:CD:50:ARG:HA	4:CD:51:PRO:HD3	1.88	0.42
6:CF:3:ARG:HB2	6:CF:93:SER:HB2	2.00	0.42
7:CG:52:GLU:H	7:CG:52:GLU:HG2	1.57	0.42
9:CI:99:LEU:HB3	9:CI:101:PHE:HE1	1.82	0.42
12:CL:7:ILE:O	12:CL:11:VAL:HG23	2.18	0.42
12:CL:85:ILE:HD13	12:CL:85:ILE:HA	1.85	0.42
15:CO:37:ASN:HA	15:CO:40:SER:HB2	2.01	0.42
16:CP:55:ARG:O	16:CP:58:TYR:HB3	2.19	0.42
17:CQ:10:VAL:HG13	17:CQ:19:VAL:HG23	2.00	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:43:LEU:O	20:CT:47:GLY:N	2.52	0.42
25:DA:1223:G:OP2	41:DV:66:ARG:NH1	2.52	0.42
25:DA:1889:A:N1	25:DA:2234:G:H1'	2.33	0.42
25:DA:2016:U:H1'	51:D5:6:VAL:HG13	2.00	0.42
25:DA:2502:G:H5''	25:DA:2503:A:H5''	2.01	0.42
25:DA:2872:G:C2'	25:DA:2873:A:H5'	2.49	0.42
28:DE:6:GLY:HA2	28:DE:51:PHE:CZ	2.54	0.42
29:DF:32:LEU:HD22	29:DF:112:MET:HE1	2.00	0.42
29:DF:123:LEU:HD12	29:DF:124:LEU:H	1.84	0.42
30:DG:173:LEU:HD13	30:DG:178:PHE:CD2	2.54	0.42
33:DN:46:VAL:O	33:DN:47:ALA:HB3	2.19	0.42
33:DN:94:HIS:O	33:DN:97:ARG:HB2	2.19	0.42
35:DP:50:ARG:HG2	35:DP:51:PHE:N	2.33	0.42
37:DR:38:VAL:HB	37:DR:39:PRO:HD3	2.00	0.42
43:DX:29:TRP:CE3	43:DX:78:LYS:HB3	2.54	0.42
49:D3:7:LYS:HG3	49:D3:34:GLU:HG2	2.01	0.42
1:AA:15:G:H4'	5:AE:24:ARG:NH1	2.33	0.42
1:AA:189(K):U:H2'	1:AA:189(L):G:C8	2.55	0.42
1:AA:660:G:H2'	1:AA:661:G:O4'	2.20	0.42
1:AA:767:A:H2'	1:AA:768:A:O4'	2.19	0.42
1:AA:1128:C:H42	1:AA:1143:G:H1	1.67	0.42
6:AF:8:ILE:HG13	6:AF:88:VAL:HG22	2.02	0.42
7:AG:143:ARG:O	7:AG:145:ALA:O	2.36	0.42
13:AM:74:VAL:CG1	13:AM:78:ILE:HD11	2.48	0.42
25:BA:1956:U:H1'	25:BA:2552:U:OP1	2.18	0.42
25:BA:2325:G:H5''	25:BA:2326:C:OP2	2.20	0.42
25:BA:2536:G:C5	25:BA:2537:U:C5	3.06	0.42
39:BT:68:TYR:N	39:BT:68:TYR:CD2	2.87	0.42
42:BW:17:VAL:HG11	42:BW:103:ILE:HD13	2.01	0.42
55:B9:17:ILE:CG2	55:B9:24:TYR:HB2	2.49	0.42
1:CA:673:G:H5''	6:CF:87:ARG:CZ	2.49	0.42
1:CA:689:C:OP2	11:CK:55:LYS:NZ	2.41	0.42
1:CA:1346:A:N1	1:CA:1374:A:H5''	2.33	0.42
1:CA:1375:A:H2'	1:CA:1376:U:C6	2.54	0.42
1:CA:1480:G:H2'	1:CA:1481:U:O4'	2.19	0.42
2:CB:14:GLY:O	2:CB:15:VAL:HG22	2.19	0.42
2:CB:97:TRP:CH2	2:CB:176:GLU:CD	2.92	0.42
2:CB:158:LEU:HA	2:CB:159:PRO:HD3	1.94	0.42
7:CG:26:PHE:CE2	7:CG:30:ILE:HD11	2.55	0.42
25:DA:271(O):C:C4	25:DA:271(P):C:C4	3.08	0.42
25:DA:322:A:H3'	29:DF:169:ASN:OD1	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:722:A:H2'	25:DA:723:G:C8	2.54	0.42
25:DA:977:G:C2	25:DA:978:G:C8	3.07	0.42
25:DA:1138:G:O2'	33:DN:105:GLY:HA3	2.19	0.42
25:DA:1388:G:H2'	25:DA:1389:G:H8	1.84	0.42
25:DA:1530:C:HO2'	25:DA:1531:C:P	2.35	0.42
25:DA:2183:C:H2'	25:DA:2184:G:H8	1.79	0.42
25:DA:2207:G:O2'	25:DA:2208:A:OP1	2.33	0.42
26:DB:20:C:N4	26:DB:63:G:H1	2.16	0.42
28:DE:35:GLN:HG3	28:DE:36:ARG:N	2.34	0.42
29:DF:123:LEU:HD12	29:DF:124:LEU:N	2.34	0.42
33:DN:67:LEU:O	33:DN:88:GLU:HG3	2.19	0.42
33:DN:82:LEU:HD23	33:DN:84:LYS:HZ2	1.84	0.42
36:DQ:21:THR:CG2	36:DQ:101:ARG:HB2	2.47	0.42
38:DS:102:ALA:HA	38:DS:105:ALA:N	2.22	0.42
40:DU:65:ILE:HG13	40:DU:96:ALA:HB2	2.01	0.42
46:D0:21:LEU:HD23	46:D0:21:LEU:HA	1.87	0.42
1:AA:384:G:C4	1:AA:385:C:C5	3.08	0.42
1:AA:406:G:N2	4:AD:119:GLN:HE22	2.17	0.42
1:AA:622:A:C8	1:AA:623:C:C5	3.07	0.42
1:AA:639:G:O2'	1:AA:640:A:H5'	2.19	0.42
1:AA:753:A:H4'	1:AA:754:C:H5''	2.01	0.42
1:AA:1073:U:H2'	1:AA:1074:G:C8	2.53	0.42
1:AA:1127:G:H2'	1:AA:1128:C:H5'	2.01	0.42
1:AA:1492:A:O3'	1:AA:1493:A:H2'	2.19	0.42
15:AO:87:ILE:HG23	15:AO:88:ARG:N	2.34	0.42
16:AP:8:ARG:O	16:AP:9:PHE:CD2	2.72	0.42
22:AY:11:PRO:O	22:AY:13:GLY:N	2.52	0.42
22:AY:43:ILE:HA	22:AY:69:VAL:HA	2.02	0.42
25:BA:118:A:H3'	25:BA:119:A:C5'	2.49	0.42
25:BA:620:G:H4'	25:BA:621:A:O5'	2.19	0.42
25:BA:659:C:H5'	58:BA:4028:HOH:O	2.19	0.42
25:BA:722:A:H2'	25:BA:723:G:O4'	2.20	0.42
25:BA:1946:U:H2'	25:BA:1947:C:C6	2.54	0.42
27:BD:133:LEU:HD23	27:BD:133:LEU:HA	1.86	0.42
27:BD:246:PRO:O	27:BD:254:THR:HG22	2.19	0.42
28:BE:108:SER:O	28:BE:162:ALA:HA	2.19	0.42
31:BH:3:ARG:NH2	31:BH:5:GLY:H	2.17	0.42
32:BI:42:SER:O	32:BI:45:LYS:HB2	2.19	0.42
33:BN:21:LYS:NZ	33:BN:140:VAL:H	2.16	0.42
33:BN:107:LEU:HD23	33:BN:107:LEU:HA	1.69	0.42
35:BP:16:ARG:NH1	58:BP:303:HOH:O	2.52	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:125:VAL:HG23	35:BP:125:VAL:O	2.18	0.42
39:BT:29:ARG:HG3	39:BT:46:GLU:HB2	2.01	0.42
45:BZ:75:ASN:O	45:BZ:84:GLU:HB2	2.20	0.42
1:CA:131:C:H2'	1:CA:132:C:H6	1.84	0.42
1:CA:189(F):U:C5	17:CQ:72:ARG:NH2	2.87	0.42
1:CA:866:C:C4	1:CA:867:G:H1'	2.55	0.42
1:CA:1310:G:H1	1:CA:1327:C:N4	2.18	0.42
1:CA:1468:A:H2'	1:CA:1469:G:O4'	2.19	0.42
2:CB:86:GLU:C	2:CB:89:GLY:H	2.23	0.42
3:CC:12:LEU:HD23	3:CC:12:LEU:HA	1.87	0.42
3:CC:153:VAL:O	3:CC:165:THR:HG23	2.19	0.42
6:CF:2:ARG:NE	6:CF:69:GLU:HG2	2.34	0.42
6:CF:10:LEU:HD21	6:CF:61:LEU:HD22	2.02	0.42
10:CJ:42:THR:HG21	10:CJ:66:ARG:HB3	2.02	0.42
13:CM:69:GLU:HG3	13:CM:70:LEU:H	1.84	0.42
20:CT:51:GLU:O	20:CT:54:LYS:HB3	2.19	0.42
23:CV:63:G:N1	23:CV:64:G:C5	2.87	0.42
25:DA:31:C:N4	58:DA:4029:HOH:O	2.52	0.42
25:DA:195:A:H5''	25:DA:196:A:O5'	2.18	0.42
25:DA:298:G:H5''	25:DA:299:A:OP1	2.20	0.42
25:DA:543:C:C2	25:DA:551:G:N2	2.87	0.42
25:DA:561:G:H1'	40:DU:45:TYR:CE2	2.54	0.42
25:DA:1371:G:O6	58:DA:4145:HOH:O	2.21	0.42
25:DA:2292:C:H4'	25:DA:2375:G:H4'	2.01	0.42
29:DF:36:VAL:HG11	29:DF:183:VAL:HG11	2.01	0.42
29:DF:53:THR:HG23	29:DF:55:GLY:H	1.83	0.42
31:DH:57:ASP:O	31:DH:62:LYS:HE2	2.19	0.42
33:DN:59:LYS:HA	33:DN:59:LYS:HD3	1.85	0.42
35:DP:26:GLY:HA3	35:DP:27:HIS:HB2	2.02	0.42
38:DS:88:ASP:OD1	38:DS:88:ASP:C	2.58	0.42
39:DT:23:ARG:HG3	39:DT:120:ARG:CZ	2.49	0.42
44:DY:20:TYR:N	44:DY:20:TYR:CD1	2.86	0.42
47:D1:58:ILE:HD11	47:D1:60:PHE:CE2	2.54	0.42
1:AA:189(B):C:C2	1:AA:189(J):G:C2	3.07	0.42
1:AA:232:G:H1'	1:AA:262:A:N1	2.34	0.42
1:AA:373:A:N3	1:AA:374:A:C8	2.88	0.42
1:AA:618:C:H3'	1:AA:619:U:C5'	2.49	0.42
1:AA:625:G:C4	1:AA:626:U:C5	3.08	0.42
1:AA:1070:U:H2'	1:AA:1071:C:C6	2.54	0.42
2:AB:71:VAL:HG13	2:AB:93:VAL:CG2	2.49	0.42
3:AC:156:ARG:O	3:AC:159:GLY:N	2.25	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:83:GLU:HB3	5:AE:88:LYS:CB	2.48	0.42
6:AF:2:ARG:NE	6:AF:69:GLU:HG2	2.34	0.42
11:AK:27:ASN:OD1	11:AK:28:THR:N	2.50	0.42
12:AL:40:VAL:HG21	12:AL:78:GLN:HA	2.01	0.42
23:AV:21:A:O2'	23:AV:22:G:OP2	2.32	0.42
25:BA:1050:A:H2'	25:BA:1051:G:O4'	2.19	0.42
25:BA:1406:U:H2'	25:BA:1407:C:C6	2.55	0.42
25:BA:1885:A:H2'	25:BA:1886:C:O4'	2.18	0.42
25:BA:2463:C:O2'	25:BA:2464:C:H5'	2.19	0.42
25:BA:2508:G:H2'	25:BA:2509:G:H8	1.85	0.42
25:BA:2766:G:N3	25:BA:2766:G:H2'	2.35	0.42
25:BA:2880:C:O3'	37:BR:90:ARG:NH1	2.51	0.42
27:BD:26:LYS:HD3	27:BD:83:GLU:OE1	2.19	0.42
27:BD:77:ALA:HB2	27:BD:97:TYR:HA	2.02	0.42
28:BE:9:VAL:HG13	28:BE:25:VAL:O	2.19	0.42
33:BN:22:THR:HB	33:BN:25:ARG:HB2	2.01	0.42
37:BR:22:ARG:O	37:BR:26:LYS:HG3	2.19	0.42
40:BU:28:ARG:HH11	40:BU:28:ARG:HG2	1.83	0.42
44:BY:90:LEU:HD12	44:BY:90:LEU:HA	1.72	0.42
1:CA:66:G:H2'	1:CA:66:G:N3	2.34	0.42
1:CA:625:G:H4'	16:CP:16:HIS:CD2	2.55	0.42
1:CA:881:G:P	12:CL:12:ARG:NH2	2.92	0.42
2:CB:170:GLU:O	2:CB:173:ALA:N	2.50	0.42
6:CF:49:ALA:HB2	18:CR:78:LEU:O	2.19	0.42
7:CG:65:ALA:O	7:CG:69:VAL:HG23	2.18	0.42
8:CH:46:LYS:HB3	8:CH:46:LYS:HE2	1.75	0.42
8:CH:48:TYR:HA	8:CH:60:ARG:O	2.20	0.42
15:CO:4:THR:N	15:CO:7:GLU:OE2	2.46	0.42
15:CO:30:ALA:HA	15:CO:85:LEU:HD21	2.01	0.42
17:CQ:18:THR:HG22	17:CQ:19:VAL:N	2.34	0.42
25:DA:204:A:H8	25:DA:204:A:OP1	2.01	0.42
25:DA:438:G:H2'	25:DA:440:G:H8	1.85	0.42
25:DA:902:C:H2'	25:DA:903:C:C6	2.54	0.42
25:DA:902:C:H2'	25:DA:903:C:H6	1.84	0.42
25:DA:926:A:C8	58:DA:4231:HOH:O	2.71	0.42
25:DA:1359:A:N1	25:DA:1372:U:O4	2.52	0.42
25:DA:1654:A:C1'	25:DA:2823:A:H5'	2.48	0.42
25:DA:1952:A:OP1	34:DO:44:LYS:HE2	2.19	0.42
25:DA:2311:A:H3'	25:DA:2312:U:C6	2.54	0.42
25:DA:2324:C:H5''	25:DA:2325:G:C5'	2.49	0.42
25:DA:2340:G:H2'	25:DA:2341:G:H8	1.84	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:2546:U:H4'	25:DA:2566:A:H2	1.84	0.42
26:DB:11:C:OP2	26:DB:12:C:H5	2.03	0.42
29:DF:150:GLY:HA2	29:DF:172:TRP:CE3	2.54	0.42
31:DH:12:PRO:O	31:DH:15:VAL:HG12	2.20	0.42
32:DI:128:LEU:HD12	32:DI:142:VAL:HG21	2.02	0.42
33:DN:14:VAL:HG13	33:DN:138:LEU:HB2	2.00	0.42
41:DV:8:GLY:O	41:DV:10:LYS:HE2	2.20	0.42
49:D3:21:ALA:O	49:D3:24:LYS:N	2.50	0.42
52:D6:25:LYS:HE3	52:D6:30:THR:O	2.18	0.42
1:AA:59:A:H1'	1:AA:354:G:N2	2.35	0.42
1:AA:872:A:C8	1:AA:874:G:C8	3.07	0.42
4:AD:88:VAL:HG13	5:AE:97:GLY:HA2	2.00	0.42
5:AE:17:ALA:HA	5:AE:26:PHE:HA	2.02	0.42
5:AE:60:TYR:C	5:AE:60:TYR:CD1	2.92	0.42
19:AS:41:VAL:O	19:AS:44:MET:HB2	2.20	0.42
22:AY:16:GLU:O	22:AY:40:ARG:HA	2.19	0.42
25:BA:18:C:O3'	40:BU:23:GLY:HA2	2.19	0.42
25:BA:236:C:H2'	25:BA:237:C:H6	1.83	0.42
25:BA:715:G:H2'	25:BA:716:A:O4'	2.19	0.42
25:BA:1547:C:H2'	25:BA:1548:C:C6	2.54	0.42
25:BA:1550:C:H2'	25:BA:1551:C:H6	1.84	0.42
25:BA:1705:G:C5	25:BA:1706:U:C4	3.08	0.42
25:BA:1753:G:OP1	39:BT:95:ARG:HD3	2.19	0.42
25:BA:2467:C:O2'	25:BA:2468:G:H5'	2.19	0.42
26:BB:11:C:P	26:BB:12:C:H5	2.43	0.42
28:BE:119:ARG:HG2	28:BE:160:TYR:HB2	2.02	0.42
30:BG:47:LYS:HB3	30:BG:48:GLU:H	1.57	0.42
30:BG:139:LEU:HA	30:BG:144:ILE:HG22	2.00	0.42
37:BR:79:LEU:HA	37:BR:83:ILE:HD12	2.01	0.42
44:BY:54:LYS:O	44:BY:55:TYR:CD1	2.73	0.42
47:B1:4:VAL:O	47:B1:46:LEU:HD11	2.19	0.42
48:B2:36:ARG:O	48:B2:39:ALA:N	2.53	0.42
1:CA:112:G:H21	1:CA:354:G:C4'	2.33	0.42
1:CA:119:A:H4'	1:CA:120:A:O5'	2.19	0.42
1:CA:303:A:O2'	1:CA:555:C:H4'	2.20	0.42
1:CA:346:G:H2'	1:CA:347:G:O4'	2.20	0.42
1:CA:353:A:H5'	1:CA:353:A:C8	2.47	0.42
1:CA:404:U:H5''	4:CD:122:ARG:HD3	2.01	0.42
1:CA:451:A:N7	1:CA:481:G:C6	2.87	0.42
1:CA:601:C:C2	1:CA:638:G:N2	2.87	0.42
1:CA:1080:A:H5''	1:CA:1081:G:OP2	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:77:ALA:O	2:CB:81:VAL:HG23	2.18	0.42
4:CD:200:GLU:O	4:CD:204:ILE:HG12	2.20	0.42
8:CH:112:LEU:HB3	8:CH:133:LEU:HA	2.00	0.42
8:CH:121:ASP:O	8:CH:125:ARG:HG3	2.19	0.42
9:CI:11:LYS:HE3	9:CI:11:LYS:HB2	1.72	0.42
11:CK:38:ASN:HA	11:CK:39:PRO:HD3	1.92	0.42
14:CN:4:LYS:HA	14:CN:4:LYS:HZ2	1.85	0.42
17:CQ:45:HIS:CD2	17:CQ:47:PRO:HG3	2.54	0.42
23:CV:22:G:O5'	23:CV:22:G:H8	2.02	0.42
25:DA:221:A:C4	25:DA:266:G:N7	2.87	0.42
25:DA:524:U:H2'	25:DA:525:U:C6	2.55	0.42
25:DA:560:C:O2	40:DU:49:HIS:NE2	2.52	0.42
25:DA:1023:U:O2'	25:DA:1122:G:H5'	2.20	0.42
25:DA:1404:C:N3	25:DA:1405:U:C5	2.88	0.42
25:DA:1678:G:H2'	25:DA:1679:U:H5'	2.01	0.42
25:DA:2543:G:C1'	25:DA:2766:G:H5'	2.50	0.42
25:DA:2749:A:H1'	31:DH:63:SER:HB3	2.02	0.42
26:DB:31:C:O2'	26:DB:32:C:H5'	2.19	0.42
26:DB:32:C:C2	26:DB:51:G:N2	2.87	0.42
26:DB:110:G:H2'	26:DB:111:G:C8	2.54	0.42
31:DH:52:VAL:O	31:DH:65:HIS:NE2	2.48	0.42
32:DI:7:GLU:HB3	32:DI:8:PRO:HD2	2.01	0.42
33:DN:37:LYS:HA	33:DN:42:TRP:CD1	2.55	0.42
35:DP:45:LEU:HD23	35:DP:45:LEU:HA	1.56	0.42
35:DP:68:GLN:OE1	35:DP:68:GLN:HA	2.19	0.42
39:DT:80:SER:HA	39:DT:81:PRO:HD2	1.81	0.42
39:DT:117:ASP:OD2	39:DT:120:ARG:NE	2.52	0.42
1:AA:16:A:C2'	1:AA:17:U:H5'	2.49	0.42
1:AA:185:A:H2'	1:AA:186:C:H6	1.84	0.42
1:AA:343:U:C1'	1:AA:344:A:OP1	2.67	0.42
1:AA:631:G:H2'	1:AA:632:A:C8	2.54	0.42
2:AB:236:TYR:HB3	2:AB:237:ALA:H	1.56	0.42
5:AE:8:GLU:HB2	5:AE:34:VAL:HG23	2.01	0.42
5:AE:148:VAL:HG13	5:AE:152:ARG:CZ	2.50	0.42
8:AH:114:THR:OG1	8:AH:115:SER:N	2.53	0.42
22:AY:35:THR:HG22	22:AY:36:ALA:N	2.34	0.42
25:BA:234:C:H2'	25:BA:235:U:H6	1.84	0.42
25:BA:298:G:H1'	25:BA:340:A:H61	1.85	0.42
25:BA:412:A:H2'	25:BA:413:C:H5'	2.01	0.42
25:BA:434:U:H4'	58:BA:4020:HOH:O	2.19	0.42
25:BA:589:C:H2'	25:BA:590:A:C8	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:597:U:H2'	25:BA:598:G:C8	2.55	0.42
25:BA:668:G:H2'	25:BA:670:A:H62	1.85	0.42
25:BA:1279:G:O2'	25:BA:1280:G:H5'	2.19	0.42
25:BA:1996:C:H4'	25:BA:1997:G:OP1	2.20	0.42
25:BA:2323:G:C6	25:BA:2324:C:C4	3.07	0.42
25:BA:2359:C:H2'	25:BA:2360:A:O4'	2.20	0.42
25:BA:2545:G:H2'	25:BA:2546:U:O4'	2.19	0.42
25:BA:2820:A:H2'	25:BA:2820:A:N3	2.33	0.42
26:BB:1:U:O2	26:BB:1:U:H2'	2.20	0.42
26:BB:8:U:O3'	38:BS:25:ARG:NH2	2.52	0.42
30:BG:135:LEU:O	30:BG:154:GLY:HA3	2.20	0.42
34:BO:44:LYS:HD3	34:BO:44:LYS:HA	1.79	0.42
36:BQ:109:VAL:HG22	36:BQ:113:GLN:OE1	2.18	0.42
39:BT:107:ASP:O	39:BT:111:ARG:HG3	2.20	0.42
45:BZ:39:VAL:HG23	45:BZ:40:ASP:O	2.20	0.42
46:B0:19:LYS:HD3	46:B0:19:LYS:HA	1.56	0.42
46:B0:23:VAL:HA	46:B0:38:VAL:HG13	2.00	0.42
49:B3:12:PRO:O	49:B3:15:TYR:HB2	2.19	0.42
1:CA:105:G:H2'	1:CA:106:C:C6	2.55	0.42
1:CA:149:A:O2'	1:CA:150:C:O4'	2.38	0.42
1:CA:406:G:N3	4:CD:119:GLN:NE2	2.68	0.42
1:CA:433:C:O2'	1:CA:434:U:H5'	2.20	0.42
1:CA:948:C:OP2	13:CM:108:ARG:HB2	2.19	0.42
1:CA:1269:A:H2	1:CA:1312:G:H21	1.67	0.42
2:CB:95:GLN:HG3	2:CB:147:LYS:O	2.19	0.42
2:CB:215:LEU:HD23	2:CB:215:LEU:HA	1.65	0.42
4:CD:67:ILE:HG22	4:CD:68:TYR:CD1	2.55	0.42
8:CH:49:GLU:HG2	8:CH:62:TYR:HE2	1.85	0.42
20:CT:13:LEU:H	20:CT:13:LEU:HG	1.53	0.42
25:DA:104:U:O5'	25:DA:104:U:H6	2.02	0.42
25:DA:271(Q):G:O2'	25:DA:271(R):G:P	2.78	0.42
25:DA:271(U):G:H2'	25:DA:271(V):G:C8	2.50	0.42
25:DA:757:U:H2'	25:DA:758:C:O4'	2.20	0.42
25:DA:862:G:H2'	25:DA:863:A:O4'	2.19	0.42
25:DA:925:C:H2'	25:DA:926:A:O4'	2.20	0.42
25:DA:1195:G:N7	35:DP:15:ARG:NH1	2.68	0.42
25:DA:1688:U:H1'	25:DA:1701:A:C6	2.55	0.42
25:DA:1900:A:N1	25:DA:1970:A:C6	2.87	0.42
25:DA:2303:G:O2'	25:DA:2304:G:H5'	2.19	0.42
25:DA:2303:G:H2'	25:DA:2304:G:H8	1.84	0.42
25:DA:2328:A:H2'	25:DA:2329:G:C8	2.54	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DD:179:SER:O	27:DD:275:LYS:HD3	2.19	0.42
27:DD:206:LEU:HA	27:DD:206:LEU:HD23	1.43	0.42
28:DE:179:GLU:HB3	28:DE:181:LEU:CD2	2.50	0.42
30:DG:86:MET:HA	30:DG:87:PRO:HD3	1.78	0.42
30:DG:178:PHE:HA	30:DG:179:PRO:HD3	1.73	0.42
34:DO:29:ASN:OD1	34:DO:29:ASN:N	2.52	0.42
35:DP:100:LEU:HA	35:DP:100:LEU:HD23	1.70	0.42
36:DQ:41:TRP:HB3	36:DQ:94:VAL:HB	2.00	0.42
38:DS:76:LYS:O	38:DS:80:LEU:HD13	2.19	0.42
40:DU:72:HIS:HE2	40:DU:107:ALA:CB	2.32	0.42
49:D3:8:LEU:HD13	49:D3:31:LEU:CD2	2.50	0.42
1:AA:342:C:C2	1:AA:348:G:C2	3.08	0.42
1:AA:406:G:N3	4:AD:119:GLN:NE2	2.68	0.42
1:AA:769:G:H4'	1:AA:1513:A:H4'	2.01	0.42
1:AA:1399:C:C2	1:AA:1502:A:N6	2.87	0.42
1:AA:1493:A:OP2	12:AL:47:LYS:NZ	2.36	0.42
2:AB:21:ARG:HB2	2:AB:38:GLY:O	2.20	0.42
5:AE:11:ILE:HD11	5:AE:108:ALA:HB3	2.02	0.42
8:AH:114:THR:HB	8:AH:130:GLY:O	2.19	0.42
25:BA:271(F):C:H2'	25:BA:271(G):C:C6	2.49	0.42
25:BA:271(L):U:C4'	25:BA:271(M):G:OP1	2.66	0.42
25:BA:296:C:H2'	25:BA:297:C:H6	1.85	0.42
25:BA:455:C:N3	25:BA:473:G:H5'	2.34	0.42
25:BA:988:A:H8	25:BA:988:A:O5'	2.01	0.42
25:BA:1142(A):A:C4	25:BA:1144:G:N7	2.88	0.42
25:BA:1176:G:C4'	25:BA:1177:A:OP1	2.67	0.42
25:BA:1693:U:H4'	25:BA:1694:C:OP2	2.19	0.42
25:BA:2564:A:OP1	25:BA:2648:C:H4'	2.19	0.42
25:BA:2582:G:OP2	58:BA:5169:HOH:O	2.21	0.42
25:BA:2787:C:O3'	28:BE:61:ARG:HD3	2.19	0.42
27:BD:131:LEU:HD12	27:BD:131:LEU:N	2.34	0.42
30:BG:37:VAL:HG23	30:BG:99:MET:HG3	2.02	0.42
30:BG:161:THR:HG23	30:BG:172:LEU:HD23	2.00	0.42
32:BI:66:GLU:HA	32:BI:69:LYS:HB3	2.02	0.42
32:BI:133:HIS:ND1	32:BI:134:PRO:O	2.51	0.42
37:BR:117:VAL:HG12	37:BR:118:GLU:O	2.19	0.42
38:BS:35:ILE:HD11	38:BS:101:LEU:HD12	2.02	0.42
40:BU:29:SER:HB2	58:BU:301:HOH:O	2.20	0.42
42:BW:57:ASN:O	42:BW:61:ASN:HB2	2.20	0.42
45:BZ:67:LEU:HD12	45:BZ:90:VAL:HG11	2.01	0.42
45:BZ:126:VAL:HG11	45:BZ:161:VAL:HG23	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B2:3:LEU:HD23	48:B2:3:LEU:HA	1.82	0.42
49:B3:37:LEU:HA	49:B3:37:LEU:HD23	1.70	0.42
1:CA:160:A:H8	1:CA:160:A:O5'	2.03	0.42
1:CA:540:G:H2'	1:CA:541:G:O4'	2.20	0.42
1:CA:563:A:C8	1:CA:567:G:H1'	2.55	0.42
1:CA:617:G:H4'	16:CP:44:THR:O	2.18	0.42
1:CA:981:U:H2'	1:CA:982:U:C5	2.55	0.42
1:CA:1151:A:N3	10:CJ:39:PRO:HG3	2.34	0.42
1:CA:1179:A:O3'	9:CI:103:THR:HB	2.20	0.42
13:CM:64:TRP:CE3	13:CM:64:TRP:N	2.86	0.42
17:CQ:5:VAL:O	17:CQ:6:LEU:HD13	2.20	0.42
23:CV:73:A:H5''	23:CV:74:C:O5'	2.20	0.42
25:DA:29:U:H2'	25:DA:30:G:C8	2.54	0.42
25:DA:90:U:HO2'	25:DA:92:A:H8	1.59	0.42
25:DA:764:A:O4'	27:DD:213:ARG:HG3	2.20	0.42
25:DA:990:A:H1'	25:DA:1156:A:N3	2.35	0.42
25:DA:1204:A:H61	25:DA:1240:U:H2'	1.84	0.42
25:DA:1827:C:H2'	25:DA:1828:G:O4'	2.18	0.42
25:DA:2057:A:H2'	25:DA:2058:A:O4'	2.19	0.42
25:DA:2342:C:O2'	25:DA:2374:C:H5''	2.19	0.42
25:DA:2464:C:C2	25:DA:2487:G:N2	2.87	0.42
25:DA:2815:C:H2'	25:DA:2816:C:C6	2.55	0.42
26:DB:104:U:OP2	58:DB:317:HOH:O	2.21	0.42
27:DD:44:ASN:OD1	27:DD:46:GLN:HG3	2.20	0.42
28:DE:200:GLU:HG3	28:DE:201:THR:N	2.34	0.42
29:DF:184:TYR:O	29:DF:187:VAL:N	2.53	0.42
30:DG:73:ALA:HA	30:DG:88:ILE:HD11	2.00	0.42
31:DH:3:ARG:HG3	31:DH:3:ARG:HH11	1.84	0.42
33:DN:96:GLU:HB2	33:DN:122:VAL:HG12	2.02	0.42
35:DP:83:VAL:HG21	35:DP:100:LEU:HD11	2.01	0.42
35:DP:101:VAL:HA	35:DP:106:LEU:O	2.20	0.42
38:DS:96:GLY:N	38:DS:99:LYS:HB3	2.34	0.42
1:AA:300:A:H2'	1:AA:301:G:O4'	2.20	0.42
1:AA:374:A:C6	1:AA:375:U:C4	3.08	0.42
1:AA:570:G:H1'	1:AA:820:U:C4	2.55	0.42
1:AA:627:G:O2'	1:AA:628:G:H5'	2.20	0.42
1:AA:668:G:O2'	15:AO:46:HIS:HB3	2.20	0.42
1:AA:841:U:H5	1:AA:848:C:O2	2.03	0.42
2:AB:172:ILE:H	2:AB:172:ILE:HG13	1.52	0.42
5:AE:68:GLU:HG2	5:AE:70:PRO:HG3	2.02	0.42
7:AG:140:ASP:OD1	7:AG:143:ARG:NH2	2.53	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:34:C:O2	25:BA:34:C:H2'	2.18	0.42
25:BA:183:C:H1'	25:BA:433:C:H1'	2.01	0.42
25:BA:271(L):U:H4'	25:BA:271(M):G:OP1	2.19	0.42
25:BA:459:U:OP2	53:B7:39:ARG:NH1	2.53	0.42
25:BA:536:A:H2'	25:BA:537:C:C6	2.55	0.42
25:BA:1126:A:H8	25:BA:1126:A:OP1	2.03	0.42
25:BA:1252:G:C2	25:BA:1253:A:C2	3.08	0.42
25:BA:2815:C:H5'	51:B5:29:THR:HG21	2.00	0.42
27:BD:13:ARG:HA	27:BD:16:MET:HE3	2.01	0.42
31:BH:40:GLU:OE1	31:BH:61:HIS:NE2	2.44	0.42
46:B0:54:GLY:O	46:B0:57:PHE:N	2.39	0.42
1:CA:494:U:O5'	1:CA:494:U:H6	2.02	0.42
1:CA:590:C:H2'	1:CA:591:U:H6	1.84	0.42
1:CA:1101:A:C4	2:CB:99:GLY:HA3	2.55	0.42
1:CA:1154:G:C4	1:CA:1155:G:C8	3.07	0.42
2:CB:42:ILE:HG22	2:CB:43:ASP:N	2.34	0.42
2:CB:100:GLY:C	2:CB:108:ILE:HG13	2.40	0.42
5:CE:60:TYR:CD1	5:CE:60:TYR:C	2.92	0.42
6:CF:55:ASP:OD1	6:CF:56:PRO:HD2	2.20	0.42
9:CI:14:VAL:O	9:CI:65:VAL:HG23	2.19	0.42
9:CI:99:LEU:HB3	9:CI:101:PHE:CD1	2.55	0.42
13:CM:90:LEU:C	13:CM:92:HIS:H	2.23	0.42
14:CN:9:LYS:HB3	14:CN:9:LYS:HE3	1.90	0.42
19:CS:41:VAL:HA	19:CS:42:PRO:HD3	1.92	0.42
25:DA:66:C:H2'	25:DA:67:U:C6	2.52	0.42
25:DA:469:G:H2'	25:DA:470:A:H5''	2.00	0.42
25:DA:885:C:N4	25:DA:890:A:C6	2.47	0.42
25:DA:990:A:C6	25:DA:1186:G:H1'	2.55	0.42
25:DA:1011:G:C4	25:DA:1151:G:N2	2.88	0.42
25:DA:2320:A:H1'	25:DA:2321:G:C6	2.55	0.42
25:DA:2742:C:OP1	55:D9:35:ARG:HD3	2.20	0.42
27:DD:108:PRO:HB3	27:DD:143:HIS:HE1	1.82	0.42
27:DD:274:ARG:CB	27:DD:275:LYS:HB3	2.49	0.42
33:DN:55:VAL:CG2	33:DN:126:PRO:HA	2.50	0.42
48:D2:48:HIS:O	48:D2:52:ASP:HB2	2.19	0.42
52:D6:33:LYS:HE3	52:D6:51:GLU:HG2	2.01	0.42
1:AA:109:A:H2'	1:AA:326:G:H21	1.82	0.42
1:AA:119:A:H3'	58:AA:2057:HOH:O	2.18	0.42
1:AA:443:C:H2'	1:AA:444:C:H6	1.85	0.42
1:AA:655:A:C2	1:AA:656:C:C2	3.08	0.42
1:AA:674:G:N2	1:AA:717:C:O2	2.53	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1143:G:H2'	1:AA:1144:G:H8	1.84	0.42
1:AA:1143:G:H8	1:AA:1143:G:O5'	2.03	0.42
1:AA:1368:G:OP1	10:AJ:62:HIS:HE1	2.03	0.42
1:AA:1399:C:H4'	1:AA:1400:C:O5'	2.19	0.42
2:AB:162:ILE:HD12	2:AB:164:VAL:CG2	2.50	0.42
2:AB:189:ASP:OD1	2:AB:205:ASP:HB3	2.18	0.42
7:AG:90:GLU:H	7:AG:90:GLU:CD	2.23	0.42
8:AH:21:LYS:O	8:AH:63:LEU:HD21	2.20	0.42
9:AI:49:PRO:HA	9:AI:52:ALA:HB3	2.02	0.42
12:AL:38:THR:OG1	12:AL:39:VAL:N	2.52	0.42
15:AO:4:THR:OG1	15:AO:5:LYS:N	2.53	0.42
15:AO:87:ILE:CG2	15:AO:88:ARG:N	2.82	0.42
16:AP:23:ASP:O	16:AP:26:ARG:HB2	2.20	0.42
22:AY:23:GLN:HB3	22:AY:75:GLN:NE2	2.35	0.42
25:BA:263:C:H2'	25:BA:264:C:O4'	2.20	0.42
25:BA:573:G:O2'	25:BA:574:C:H3'	2.20	0.42
25:BA:749:C:C5	25:BA:1618:A:C6	3.08	0.42
25:BA:775:G:C4	25:BA:794:G:C8	3.08	0.42
25:BA:914:C:H2'	25:BA:915:C:H5'	2.02	0.42
25:BA:957:A:N6	25:BA:2459:A:C8	2.87	0.42
25:BA:1164:G:H2'	25:BA:1165:U:C6	2.55	0.42
25:BA:1472:A:H2'	25:BA:1473:G:C8	2.55	0.42
25:BA:2277:G:H2'	25:BA:2278:A:O5'	2.20	0.42
25:BA:2648:C:H2'	25:BA:2649:U:C6	2.54	0.42
28:BE:50:GLY:HA2	28:BE:77:ILE:O	2.19	0.42
29:BF:68:LYS:HE3	29:BF:68:LYS:HB3	1.60	0.42
30:BG:82:LEU:HB3	30:BG:86:MET:CB	2.50	0.42
30:BG:111:LEU:HD23	30:BG:111:LEU:HA	1.86	0.42
37:BR:33:ARG:HD3	37:BR:115:GLU:OE2	2.20	0.42
41:BV:14:VAL:HB	41:BV:96:ILE:HG13	2.02	0.42
41:BV:16:PRO:HA	41:BV:96:ILE:HG22	2.01	0.42
45:BZ:128:VAL:HG23	45:BZ:161:VAL:H	1.85	0.42
45:BZ:151:HIS:C	45:BZ:153:SER:H	2.23	0.42
47:B1:67:ILE:N	47:B1:68:PRO:HD2	2.35	0.42
1:CA:391:G:C6	1:CA:392:G:C5	3.08	0.42
1:CA:473:G:H2'	1:CA:474:G:C8	2.48	0.42
1:CA:612:C:H2'	1:CA:613:C:C6	2.55	0.42
1:CA:617:G:C2	1:CA:618:C:C5	3.08	0.42
1:CA:1013:G:N2	1:CA:1016:A:OP2	2.48	0.42
1:CA:1370:G:N7	9:CI:109:VAL:HG11	2.34	0.42
1:CA:1381:U:H2'	1:CA:1382:C:H5'	2.02	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1401:G:C2	1:CA:1402:C:H1'	2.55	0.42
1:CA:1427:U:H2'	1:CA:1428:A:H8	1.83	0.42
1:CA:1465:C:H2'	1:CA:1466:C:O4'	2.19	0.42
2:CB:127:ILE:C	2:CB:129:GLU:H	2.21	0.42
3:CC:22:TRP:HB3	3:CC:59:ARG:HB2	2.01	0.42
5:CE:142:LEU:O	5:CE:143:ARG:NE	2.42	0.42
7:CG:58:PRO:HA	7:CG:61:VAL:CG1	2.50	0.42
7:CG:115:ARG:O	7:CG:118:VAL:HG23	2.20	0.42
23:CV:49:G:O6	23:CV:65:C:N4	2.53	0.42
25:DA:545:G:H4'	25:DA:545:G:OP1	2.20	0.42
25:DA:1528:A:C6	25:DA:1528(A):A:C6	3.08	0.42
25:DA:1614:A:C2	42:DW:93:ALA:HB2	2.55	0.42
25:DA:2010:G:H5''	42:DW:42:ARG:HB2	2.02	0.42
25:DA:2279:G:O6	46:D0:14:ARG:HG3	2.20	0.42
25:DA:2355:C:O3'	46:D0:24:LYS:HE3	2.20	0.42
25:DA:2400:G:C5	25:DA:2401:U:C5	3.08	0.42
25:DA:2401:U:H3'	25:DA:2402:C:H6	1.85	0.42
25:DA:2522:U:O2'	25:DA:2647:U:OP1	2.20	0.42
25:DA:2577:A:H5''	25:DA:2578:G:C5'	2.48	0.42
25:DA:2816:C:O2	25:DA:2883:A:O2'	2.38	0.42
28:DE:13:ARG:O	39:DT:57:PHE:HE1	2.03	0.42
28:DE:134:ILE:O	28:DE:137:HIS:HB2	2.20	0.42
29:DF:107:LYS:HE2	29:DF:205:ARG:O	2.19	0.42
30:DG:107:LEU:HD13	30:DG:177:GLY:O	2.20	0.42
30:DG:129:GLY:O	30:DG:161:THR:HB	2.19	0.42
31:DH:149:ARG:HA	31:DH:162:ILE:CG2	2.50	0.42
37:DR:37:THR:HA	37:DR:111:LEU:HD12	2.02	0.42
42:DW:43:GLY:O	42:DW:47:VAL:HG23	2.20	0.42
45:DZ:10:ARG:NE	45:DZ:37:VAL:O	2.50	0.42
45:DZ:28:MET:O	45:DZ:35:ARG:N	2.45	0.42
45:DZ:129:SER:O	45:DZ:133:ILE:HG23	2.19	0.42
45:DZ:159:PRO:HA	45:DZ:160:GLY:HA2	1.82	0.42
45:DZ:166:SER:HA	45:DZ:167:PRO:HD3	1.80	0.42
47:D1:61:ARG:HE	47:D1:61:ARG:HB3	1.65	0.42
48:D2:45:SER:O	48:D2:46:GLN:CB	2.68	0.42
51:D5:46:CYS:CB	51:D5:49:CYS:SG	3.02	0.42
1:AA:128:G:O2'	17:AQ:3:LYS:NZ	2.44	0.42
1:AA:149:A:N3	1:AA:150:C:C5	2.88	0.42
1:AA:160:A:C6	1:AA:161:A:C5	3.08	0.42
1:AA:532:A:H2'	1:AA:533:A:OP1	2.20	0.42
1:AA:736:C:H2'	1:AA:737:A:H8	1.80	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:933:G:OP2	7:AG:3:ARG:HB2	2.19	0.42
1:AA:948:C:OP1	13:AM:109:THR:OG1	2.38	0.42
1:AA:1108:G:C5	1:AA:1109:C:C5	3.08	0.42
1:AA:1123:A:H4'	10:AJ:36:GLY:HA3	2.02	0.42
1:AA:1459:C:H2'	1:AA:1460:A:O4'	2.20	0.42
3:AC:182:ILE:HG12	3:AC:203:PHE:CD1	2.48	0.42
9:AI:9:ARG:HB2	9:AI:104:ARG:HE	1.85	0.42
11:AK:108:ILE:CG2	18:AR:87:ARG:HD2	2.50	0.42
19:AS:33:THR:HG23	19:AS:51:VAL:HA	2.02	0.42
19:AS:37:ARG:H	19:AS:37:ARG:HG3	1.33	0.42
22:AY:27:GLY:N	25:BA:2584:U:O2'	2.51	0.42
25:BA:103:A:H8	25:BA:103:A:O5'	2.03	0.42
25:BA:588:U:O4	25:BA:670:A:H1'	2.18	0.42
25:BA:1043:C:C4	25:BA:1044:G:C8	3.07	0.42
25:BA:1171:G:H5''	25:BA:1171:G:H8	1.85	0.42
25:BA:1500:G:C6	25:BA:1501:C:C4	3.07	0.42
25:BA:1766:U:H2'	25:BA:1767:C:H6	1.84	0.42
25:BA:1813:G:H1'	27:BD:50:THR:OG1	2.20	0.42
25:BA:2224:G:H4'	25:BA:2226:C:O2	2.20	0.42
25:BA:2590:A:H2'	25:BA:2591:C:C6	2.55	0.42
25:BA:2747:G:O6	25:BA:2755:C:H5''	2.20	0.42
25:BA:2846:G:H2'	25:BA:2847:U:O4'	2.20	0.42
29:BF:101:LEU:O	29:BF:106:ARG:HD3	2.20	0.42
33:BN:12:ARG:NH1	33:BN:50:ASP:OD2	2.52	0.42
34:BO:89:ASN:O	34:BO:91:LEU:HD23	2.20	0.42
35:BP:82:GLY:HA2	35:BP:113:LYS:O	2.20	0.42
41:BV:21:ARG:HG3	41:BV:91:TYR:CD1	2.55	0.42
49:B3:3:ARG:HH11	49:B3:60:GLU:CB	2.32	0.42
49:B3:23:LEU:HA	49:B3:23:LEU:HD12	1.69	0.42
1:CA:1170:A:N6	1:CA:1171:G:C2	2.87	0.42
1:CA:1219:U:O2'	19:CS:34:TRP:HB3	2.20	0.42
1:CA:1241:G:H2'	1:CA:1242:C:C6	2.54	0.42
1:CA:1327:C:H2'	1:CA:1328:C:C6	2.55	0.42
2:CB:105:PHE:HA	2:CB:108:ILE:HB	2.02	0.42
9:CI:45:ALA:HB1	9:CI:48:GLU:N	2.35	0.42
25:DA:52:A:OP2	25:DA:117:G:N1	2.41	0.42
25:DA:1033:U:OP1	55:D9:9:ARG:NH2	2.52	0.42
25:DA:1469:A:H2'	25:DA:1470:G:O4'	2.19	0.42
25:DA:1579:A:H5'	25:DA:1579:A:H8	1.84	0.42
25:DA:1639:U:H4'	25:DA:2699:C:H4'	2.02	0.42
25:DA:1788:C:H2'	25:DA:1789:A:O4'	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:2080:G:C2'	25:DA:2081:C:H5'	2.50	0.42
25:DA:2262:U:H2'	25:DA:2263:C:H6	1.85	0.42
25:DA:2288:A:H4'	25:DA:2289:G:OP2	2.20	0.42
25:DA:2557:G:H2'	25:DA:2558:C:H6	1.84	0.42
27:DD:52:ARG:HB2	27:DD:53:PHE:CE2	2.55	0.42
28:DE:94:GLU:OE1	28:DE:94:GLU:HA	2.20	0.42
30:DG:120:LEU:HB2	30:DG:180:PHE:CD2	2.55	0.42
32:DI:79:ILE:HG22	32:DI:81:VAL:HG13	2.00	0.42
33:DN:133:GLN:H	33:DN:133:GLN:HG2	1.59	0.42
37:DR:11:ASN:ND2	58:DR:303:HOH:O	2.42	0.42
38:DS:21:THR:HG23	38:DS:23:ARG:HB2	2.02	0.42
42:DW:1:MET:HG3	42:DW:2:GLU:N	2.35	0.42
43:DX:40:LYS:HG3	43:DX:51:VAL:HB	2.02	0.42
46:D0:39:ARG:HD3	46:D0:58:THR:OG1	2.20	0.42
46:D0:84:LEU:HG	46:D0:85:ALA:H	1.85	0.42
1:AA:258:G:H2'	1:AA:259:G:C8	2.54	0.41
1:AA:411:A:C8	1:AA:413:G:C8	3.08	0.41
1:AA:544:G:OP2	4:AD:66:ARG:NH2	2.53	0.41
1:AA:655:A:C2	1:AA:754:C:N4	2.88	0.41
1:AA:717:C:H5''	1:AA:717:C:H6	1.86	0.41
1:AA:1399:C:H4'	1:AA:1400:C:H5''	2.00	0.41
3:AC:172:ARG:HB3	3:AC:174:PRO:HD3	2.01	0.41
8:AH:64:LYS:CB	8:AH:79:VAL:HG21	2.49	0.41
12:AL:52:LEU:HD13	12:AL:52:LEU:HA	1.94	0.41
22:AY:2:ILE:HG13	22:AY:12:ASP:HA	2.00	0.41
25:BA:655:A:H2'	25:BA:656:G:O4'	2.20	0.41
25:BA:734:A:C5	25:BA:735:A:C8	3.08	0.41
25:BA:1509(A):A:H2'	25:BA:1509(B):A:O4'	2.19	0.41
25:BA:2701:C:H2'	25:BA:2702:U:H2'	2.02	0.41
27:BD:8:PRO:HB3	27:BD:14:ARG:CB	2.49	0.41
27:BD:228:PRO:HD3	27:BD:235:GLY:CA	2.50	0.41
31:BH:7:LEU:HG	31:BH:69:ARG:HH12	1.84	0.41
36:BQ:64:ILE:HG13	45:BZ:178:GLU:HG3	2.01	0.41
45:BZ:138:GLU:HG2	45:BZ:156:LYS:HE3	2.02	0.41
47:B1:7:ILE:HG23	47:B1:98:LEU:HD11	2.02	0.41
1:CA:32:A:N3	1:CA:32:A:H2'	2.34	0.41
1:CA:401:C:OP2	4:CD:73:ARG:NH1	2.53	0.41
1:CA:473:G:C5	1:CA:474:G:N7	2.88	0.41
1:CA:930:C:C4	1:CA:931:C:C5	3.08	0.41
1:CA:1192:C:N4	1:CA:1193:G:C4	2.88	0.41
1:CA:1288:A:H2'	1:CA:1289:A:C8	2.55	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1502:A:H5'	1:CA:1504:G:N7	2.35	0.41
4:CD:170:VAL:HG13	4:CD:174:LEU:O	2.20	0.41
9:CI:17:VAL:HG21	9:CI:80:GLY:O	2.20	0.41
16:CP:52:ASP:OD2	16:CP:55:ARG:N	2.26	0.41
25:DA:134:C:N4	25:DA:145:G:H1	2.12	0.41
25:DA:676:A:H2	25:DA:802:A:H61	1.68	0.41
25:DA:977:G:C4	25:DA:978:G:C8	3.07	0.41
25:DA:1223:G:C6	25:DA:1227:G:C6	3.07	0.41
25:DA:1296:G:O2'	25:DA:1297:C:H5'	2.20	0.41
25:DA:1525:G:C2	25:DA:1526:G:C4	3.08	0.41
25:DA:2236:C:H2'	25:DA:2237:G:H5'	2.01	0.41
25:DA:2463:C:O2'	25:DA:2464:C:H5'	2.20	0.41
25:DA:2820:A:P	37:DR:2:ARG:HH21	2.43	0.41
29:DF:40:GLN:OE1	29:DF:183:VAL:HG13	2.20	0.41
32:DI:25:TYR:HD2	32:DI:25:TYR:HA	1.68	0.41
34:DO:122:LEU:HA	34:DO:122:LEU:HD23	1.54	0.41
37:DR:48:VAL:O	37:DR:51:LEU:HB2	2.19	0.41
39:DT:26:ASP:CG	39:DT:120:ARG:HH22	2.23	0.41
40:DU:112:ARG:O	40:DU:115:ALA:HB3	2.20	0.41
44:DY:40:GLU:O	44:DY:42:VAL:HG23	2.20	0.41
1:AA:67:C:H2'	1:AA:68:G:H8	1.84	0.41
1:AA:127:G:N2	17:AQ:61:GLU:OE1	2.50	0.41
1:AA:129(A):G:C2	1:AA:189(H):G:C8	3.09	0.41
1:AA:194:C:H2'	1:AA:195:A:H5''	2.02	0.41
1:AA:244:U:C6	1:AA:894:G:N2	2.88	0.41
1:AA:357:G:C2	1:AA:358:U:C5	3.09	0.41
1:AA:377:G:OP1	16:AP:3:LYS:HD2	2.20	0.41
1:AA:576:G:OP1	58:AA:2251:HOH:O	2.22	0.41
1:AA:599:C:H5''	8:AH:95:VAL:O	2.19	0.41
1:AA:953:G:H2'	1:AA:954:G:O4'	2.20	0.41
1:AA:975:A:H5'	1:AA:975:A:H8	1.83	0.41
1:AA:1131:G:H1	1:AA:1143:G:N2	2.11	0.41
1:AA:1332:A:C2	1:AA:1333:A:C4	3.08	0.41
4:AD:204:ILE:O	4:AD:207:TYR:N	2.49	0.41
7:AG:15:ASP:O	7:AG:19:GLY:HA2	2.20	0.41
9:AI:3:GLN:OE1	9:AI:20:ARG:NH2	2.53	0.41
9:AI:83:ARG:HA	9:AI:86:VAL:HG22	2.02	0.41
10:AJ:40:LEU:HB2	10:AJ:69:ASN:HB2	2.01	0.41
14:AN:44:LEU:C	14:AN:44:LEU:HD12	2.40	0.41
15:AO:57:LEU:HD23	15:AO:57:LEU:HA	1.80	0.41
16:AP:49:LEU:HD13	16:AP:49:LEU:HA	1.72	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AQ:45:HIS:O	17:AQ:73:VAL:HG23	2.19	0.41
17:AQ:84:LEU:O	17:AQ:87:LYS:HB2	2.20	0.41
25:BA:11:G:H2'	25:BA:12:U:H5'	2.02	0.41
25:BA:271(P):C:OP1	32:BI:45:LYS:HD3	2.20	0.41
25:BA:365:C:H2'	25:BA:366:C:O4'	2.20	0.41
25:BA:784:A:C5	27:BD:229:VAL:HG21	2.55	0.41
25:BA:1582:C:H2'	25:BA:1583:A:H8	1.84	0.41
25:BA:1991:U:H2'	25:BA:1992:G:H5''	2.02	0.41
26:BB:33:G:C2	26:BB:50:G:C2	3.08	0.41
31:BH:35:VAL:O	31:BH:37:VAL:HG23	2.20	0.41
34:BO:60:ALA:HB1	34:BO:84:ALA:HB1	2.02	0.41
37:BR:29:LEU:HD12	37:BR:29:LEU:HA	1.84	0.41
48:B2:4:SER:HA	48:B2:7:ARG:HG3	2.01	0.41
50:B4:18:CYS:SG	50:B4:39:CYS:CB	2.96	0.41
1:CA:255:G:H1'	17:CQ:16:GLN:OE1	2.20	0.41
1:CA:616:G:H5''	58:CA:1925:HOH:O	2.19	0.41
1:CA:722:A:H2'	1:CA:724:G:C8	2.56	0.41
5:CE:69:VAL:O	5:CE:69:VAL:HG22	2.20	0.41
7:CG:18:TYR:CD2	7:CG:59:LEU:HD22	2.51	0.41
10:CJ:35:SER:CB	10:CJ:73:ASP:HB2	2.41	0.41
13:CM:69:GLU:OE1	13:CM:73:GLU:N	2.53	0.41
15:CO:87:ILE:CG2	15:CO:88:ARG:N	2.83	0.41
21:CU:5:ASP:O	21:CU:11:GLY:HA3	2.20	0.41
23:CV:18:G:C4	23:CV:58:A:C2	3.08	0.41
25:DA:192:C:H2'	25:DA:193:U:H5'	2.01	0.41
25:DA:320:A:H4'	25:DA:322:A:C8	2.55	0.41
25:DA:686:G:N7	53:D7:5:TRP:CH2	2.88	0.41
25:DA:805:G:H4'	35:DP:38:GLN:HB3	2.02	0.41
25:DA:910:A:N3	25:DA:2264:C:O2'	2.47	0.41
25:DA:977:G:N3	25:DA:978:G:C8	2.88	0.41
25:DA:1025:G:C4	25:DA:1135:C:H1'	2.55	0.41
25:DA:1168:G:C2	25:DA:1182:A:C2	3.08	0.41
25:DA:1643:G:H2'	25:DA:1644:C:H6	1.85	0.41
25:DA:1798:U:OP2	27:DD:274:ARG:NH2	2.53	0.41
25:DA:2730:C:H4'	28:DE:168:MET:O	2.20	0.41
27:DD:77:ALA:O	27:DD:116:GLN:HG3	2.21	0.41
27:DD:240:ALA:HB1	27:DD:241:PRO:HD2	2.02	0.41
29:DF:124:LEU:HB3	29:DF:193:VAL:HG22	2.02	0.41
37:DR:12:ARG:HD3	37:DR:16:HIS:CD2	2.55	0.41
37:DR:42:LYS:HG2	37:DR:45:ARG:NH2	2.34	0.41
39:DT:33:LYS:HE3	39:DT:82:LEU:HA	2.03	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DX:31:HIS:O	43:DX:34:ALA:HB3	2.20	0.41
45:DZ:99:TYR:HA	45:DZ:124:ILE:O	2.20	0.41
47:D1:40:ARG:HE	47:D1:40:ARG:HB2	1.59	0.41
47:D1:64:ALA:HA	47:D1:67:ILE:HD12	2.02	0.41
47:D1:86:SER:O	47:D1:89:GLU:HG2	2.20	0.41
49:D3:28:LEU:HD21	49:D3:35:ARG:HB2	2.02	0.41
1:AA:109:A:C6	1:AA:326:G:C6	3.07	0.41
1:AA:186:C:C2	1:AA:187:C:C5	3.08	0.41
1:AA:458:C:N4	1:AA:474:G:N1	2.68	0.41
1:AA:521:G:O6	1:AA:529:G:C2	2.73	0.41
1:AA:652:U:C2	1:AA:752:G:N2	2.88	0.41
1:AA:713:G:H2'	1:AA:714:G:C8	2.55	0.41
1:AA:923:A:C2	1:AA:924:C:C2	3.08	0.41
1:AA:1221:G:H4'	19:AS:77:THR:CG2	2.50	0.41
1:AA:1315:U:H2'	1:AA:1316:G:O4'	2.19	0.41
4:AD:15:GLU:OE1	4:AD:63:LYS:N	2.54	0.41
5:AE:15:ARG:HD2	5:AE:26:PHE:CD2	2.54	0.41
10:AJ:55:LYS:NZ	10:AJ:56:HIS:CE1	2.88	0.41
12:AL:66:VAL:HG11	12:AL:98:TYR:CE1	2.55	0.41
24:AX:2:A:H2'	24:AX:3:A:C8	2.54	0.41
25:BA:898:C:H2'	25:BA:899:A:O4'	2.20	0.41
25:BA:2030:A:H4'	25:BA:2031:A:C8	2.55	0.41
25:BA:2082:A:H2'	25:BA:2083:G:O4'	2.20	0.41
25:BA:2364:C:H2'	25:BA:2365:G:O4'	2.19	0.41
25:BA:2376:A:H2'	25:BA:2377:A:O4'	2.20	0.41
25:BA:2542:A:H4'	25:BA:2543:G:H8	1.85	0.41
25:BA:2662:A:H2'	25:BA:2663:G:O4'	2.20	0.41
25:BA:2687:U:H2'	25:BA:2688:U:O4'	2.21	0.41
30:BG:16:ARG:O	30:BG:20:ILE:HG13	2.20	0.41
30:BG:167:GLU:H	30:BG:167:GLU:CD	2.22	0.41
32:BI:2:LYS:HG2	32:BI:20:ASP:OD1	2.20	0.41
39:BT:15:VAL:HG12	39:BT:16:ARG:H	1.84	0.41
47:B1:5:CYS:CB	47:B1:8:SER:HG	2.31	0.41
47:B1:23:LYS:HE3	47:B1:23:LYS:HB2	1.92	0.41
54:B8:29:LYS:HZ2	54:B8:45:GLY:HA2	1.85	0.41
1:CA:922:G:H2'	1:CA:923:A:H8	1.84	0.41
1:CA:1077:G:C2	1:CA:1081:G:C6	3.08	0.41
1:CA:1092:A:C5	1:CA:1183:A:N7	2.88	0.41
3:CC:149:ALA:HA	3:CC:201:TYR:O	2.19	0.41
7:CG:48:LYS:O	7:CG:52:GLU:HG2	2.21	0.41
7:CG:101:LEU:HD13	7:CG:101:LEU:HA	1.87	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:9:PHE:CD2	16:CP:18:ARG:HG3	2.55	0.41
25:DA:873:G:N2	25:DA:905:U:C2	2.89	0.41
25:DA:1328:G:H2'	25:DA:1330:C:C5	2.55	0.41
25:DA:1416:G:O2'	25:DA:1417:C:H5	2.02	0.41
25:DA:1915:U:H5'	25:DA:1916:A:OP2	2.20	0.41
26:DB:46:A:C5	26:DB:47:C:C4	3.08	0.41
28:DE:78:LEU:O	28:DE:79:ARG:HG2	2.20	0.41
32:DI:120:ILE:HG21	32:DI:126:TYR:CE1	2.56	0.41
38:DS:110:LEU:HD12	38:DS:110:LEU:HA	1.71	0.41
40:DU:62:ILE:HG12	40:DU:76:TYR:CE1	2.56	0.41
42:DW:4:LYS:NZ	42:DW:6:ILE:HD11	2.35	0.41
45:DZ:8:TYR:HB2	45:DZ:38:TYR:CE2	2.55	0.41
46:D0:65:GLY:CA	46:D0:81:VAL:HG12	2.47	0.41
49:D3:23:LEU:HD22	49:D3:50:VAL:HG11	2.02	0.41
1:AA:131:C:O2	1:AA:231:G:N2	2.36	0.41
1:AA:649:G:C4	1:AA:650:G:C8	3.08	0.41
1:AA:1084:G:OP1	1:AA:1086:U:C4	2.73	0.41
1:AA:1240:U:P	7:AG:116:ALA:HB2	2.60	0.41
1:AA:1374:A:C4	1:AA:1375:A:C8	3.08	0.41
1:AA:1392:G:O2'	1:AA:1393:U:H5'	2.20	0.41
1:AA:1508:G:H2'	1:AA:1509:C:C6	2.56	0.41
2:AB:101:MET:HE3	2:AB:108:ILE:HG21	2.01	0.41
2:AB:158:LEU:HA	2:AB:159:PRO:HD3	1.81	0.41
6:AF:4:TYR:HA	6:AF:91:VAL:O	2.21	0.41
11:AK:66:LEU:HD21	11:AK:97:ALA:HB1	2.03	0.41
12:AL:83:VAL:CG1	12:AL:100:ILE:HG12	2.49	0.41
12:AL:102:ARG:HE	12:AL:102:ARG:HB3	1.79	0.41
18:AR:58:LEU:HD12	18:AR:58:LEU:HA	1.85	0.41
22:AY:6:ARG:H	22:AY:6:ARG:HG3	1.57	0.41
22:AY:57:LEU:HD23	22:AY:57:LEU:HA	1.88	0.41
25:BA:16:G:C2	25:BA:17:G:C8	3.08	0.41
25:BA:1108:U:O2'	25:BA:1109:C:C6	2.74	0.41
25:BA:1272:A:OP1	58:BA:4875:HOH:O	2.22	0.41
25:BA:2286:A:H3'	52:B6:30:THR:HG21	2.03	0.41
27:BD:127:VAL:HA	27:BD:193:VAL:HG22	2.03	0.41
29:BF:22:ALA:HB1	29:BF:24:LEU:HD22	2.02	0.41
29:BF:39:TRP:CE2	29:BF:43:LYS:HD3	2.55	0.41
29:BF:60:SER:OG	29:BF:61:GLY:N	2.53	0.41
30:BG:37:VAL:O	30:BG:94:LEU:HB2	2.20	0.41
30:BG:103:LEU:HD23	30:BG:103:LEU:HA	1.76	0.41
30:BG:124:SER:HB2	30:BG:131:TYR:CE1	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BU:65:ILE:CD1	40:BU:95:LEU:HB3	2.51	0.41
41:BV:85:LYS:HB2	41:BV:85:LYS:NZ	2.35	0.41
43:BX:8:ILE:O	48:B2:36:ARG:NH2	2.54	0.41
46:B0:56:ASP:O	46:B0:57:PHE:HB2	2.20	0.41
48:B2:51:ARG:HH11	48:B2:55:ARG:NH2	2.17	0.41
1:CA:475:G:H2'	1:CA:476:G:C8	2.55	0.41
1:CA:533:A:O2'	1:CA:535:A:OP2	2.26	0.41
1:CA:929:G:C6	1:CA:930:C:C4	3.08	0.41
1:CA:1015:A:O5'	1:CA:1015:A:H8	2.03	0.41
1:CA:1076:C:C2	1:CA:1082:G:N2	2.89	0.41
1:CA:1107:C:N4	1:CA:1108:G:N7	2.67	0.41
2:CB:102:LEU:HB2	2:CB:176:GLU:HB3	2.03	0.41
3:CC:178:LEU:HD13	3:CC:178:LEU:HA	1.78	0.41
5:CE:139:LEU:HD23	5:CE:139:LEU:HA	1.81	0.41
6:CF:41:GLU:HG2	6:CF:43:LEU:CD1	2.51	0.41
10:CJ:5:ARG:N	10:CJ:74:ILE:H	2.19	0.41
16:CP:12:LYS:C	16:CP:14:ASN:H	2.24	0.41
16:CP:51:VAL:HG12	16:CP:53:VAL:H	1.84	0.41
25:DA:548:A:N7	41:DV:19:LYS:HD2	2.36	0.41
25:DA:836:G:C5	25:DA:837:C:C4	3.08	0.41
25:DA:839:U:H3	25:DA:939:G:H1	1.68	0.41
25:DA:1580:A:OP2	25:DA:1580:A:H8	2.04	0.41
25:DA:2405:G:HO2'	25:DA:2406:U:P	2.44	0.41
25:DA:2445:G:OP1	29:DF:74:ARG:NH2	2.54	0.41
25:DA:2470:G:C2	25:DA:2471:C:C6	3.08	0.41
26:DB:55:U:H4'	30:DG:28:VAL:HG13	2.02	0.41
28:DE:28:ALA:HB3	28:DE:93:VAL:HG13	2.02	0.41
30:DG:11:TYR:OH	30:DG:16:ARG:HD3	2.21	0.41
32:DI:41:GLU:CD	32:DI:41:GLU:H	2.24	0.41
35:DP:93:GLY:O	35:DP:123:LEU:HD22	2.20	0.41
35:DP:125:VAL:O	35:DP:125:VAL:HG23	2.19	0.41
36:DQ:32:TYR:CE2	36:DQ:133:ARG:CG	3.03	0.41
39:DT:61:PHE:CE2	39:DT:76:PHE:HB2	2.55	0.41
45:DZ:70:LEU:HD23	45:DZ:70:LEU:HA	1.75	0.41
1:AA:189(F):U:C4	17:AQ:72:ARG:NH2	2.83	0.41
1:AA:258:G:N3	1:AA:259:G:C8	2.88	0.41
1:AA:390:C:H2'	1:AA:391:G:C8	2.55	0.41
1:AA:667:G:H4'	15:AO:51:HIS:ND1	2.34	0.41
1:AA:831:U:O2'	1:AA:832:C:H5'	2.21	0.41
1:AA:1186:G:H21	14:AN:61:TRP:C	2.24	0.41
1:AA:1404:C:H2'	1:AA:1405:G:C8	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:69:LEU:HD12	2:AB:70:PHE:N	2.36	0.41
11:AK:103:LEU:HD23	11:AK:103:LEU:HA	1.86	0.41
15:AO:67:LEU:HD22	15:AO:78:TYR:HE1	1.85	0.41
19:AS:61:TYR:O	19:AS:66:MET:HE3	2.21	0.41
25:BA:190:A:N3	25:BA:679:C:O2'	2.48	0.41
25:BA:272(B):G:H2'	25:BA:272(C):G:C8	2.55	0.41
25:BA:515:A:H1'	25:BA:581:C:H1'	2.02	0.41
25:BA:973:A:O4'	25:BA:1188:U:C6	2.73	0.41
25:BA:996:A:H4'	40:BU:91:ASP:OD1	2.20	0.41
25:BA:1582:C:C2	25:BA:1583:A:C8	3.09	0.41
25:BA:2267:A:H5''	25:BA:2268:A:H5'	2.03	0.41
25:BA:2808:U:H2'	25:BA:2809:A:C5'	2.51	0.41
27:BD:25:THR:OG1	27:BD:81:ALA:HB1	2.20	0.41
27:BD:227:ASN:O	27:BD:230:ASP:HB2	2.21	0.41
28:BE:188:VAL:HG13	28:BE:189:PRO:HD2	2.02	0.41
29:BF:11:VAL:HG22	29:BF:125:LEU:HB2	2.02	0.41
29:BF:103:LYS:HA	29:BF:106:ARG:HG3	2.03	0.41
30:BG:39:ILE:H	30:BG:39:ILE:HG13	1.66	0.41
30:BG:43:LEU:HD12	30:BG:43:LEU:HA	1.70	0.41
30:BG:121:ASN:HA	30:BG:122:PRO:HD3	1.68	0.41
40:BU:52:ARG:HA	40:BU:55:ARG:HG3	2.01	0.41
45:BZ:28:MET:O	45:BZ:34:ASN:HA	2.20	0.41
48:B2:17:SER:OG	48:B2:20:GLU:HG3	2.20	0.41
1:CA:338:A:H2'	1:CA:339:C:C6	2.56	0.41
1:CA:557:G:C6	1:CA:558:G:N1	2.88	0.41
1:CA:1292:U:C2	1:CA:1293:G:C8	3.08	0.41
1:CA:1309:G:C6	1:CA:1329:A:C2	3.08	0.41
4:CD:74:GLN:O	4:CD:78:LEU:HD13	2.20	0.41
7:CG:56:GLN:HB2	7:CG:57:GLU:H	1.64	0.41
9:CI:107:ARG:HH11	9:CI:107:ARG:CG	2.26	0.41
12:CL:93:LEU:HD23	12:CL:93:LEU:HA	1.75	0.41
20:CT:36:LEU:HA	20:CT:36:LEU:HD13	1.83	0.41
20:CT:51:GLU:HG2	20:CT:54:LYS:HD3	2.03	0.41
25:DA:249:C:O2	54:D8:12:LYS:NZ	2.43	0.41
25:DA:271(E):U:H3	25:DA:271(S):G:H1	1.69	0.41
25:DA:686:G:H21	25:DA:788:A:H61	1.67	0.41
25:DA:863:A:O2'	25:DA:864:G:H5'	2.20	0.41
25:DA:1224:C:O5'	25:DA:1224:C:H6	2.03	0.41
25:DA:1431:U:H2'	25:DA:1432:C:C6	2.56	0.41
25:DA:1462:C:H2'	25:DA:1463:C:O4'	2.21	0.41
25:DA:1778:U:H2'	25:DA:1784:A:N6	2.36	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DF:34:TRP:CE3	29:DF:35:GLU:HG2	2.56	0.41
30:DG:16:ARG:HD2	30:DG:16:ARG:HA	1.75	0.41
31:DH:44:VAL:HB	31:DH:51:ARG:O	2.21	0.41
32:DI:104:GLN:HG2	32:DI:105:HIS:CE1	2.55	0.41
33:DN:27:ALA:HA	33:DN:30:ILE:HD12	2.02	0.41
33:DN:93:THR:HB	33:DN:94:HIS:ND1	2.35	0.41
34:DO:97:ARG:HA	34:DO:117:LEU:HD22	2.02	0.41
45:DZ:156:LYS:HE3	45:DZ:156:LYS:HB3	1.88	0.41
50:D4:40:HIS:HB3	50:D4:43:TYR:CD1	2.55	0.41
1:AA:142:G:H2'	1:AA:143:A:H8	1.85	0.41
1:AA:148:G:N2	1:AA:175:C:C2	2.88	0.41
1:AA:204:U:H4'	1:AA:216:G:O5'	2.21	0.41
1:AA:945:G:N1	1:AA:1337:G:C2	2.89	0.41
2:AB:20:GLU:HB2	2:AB:190:THR:OG1	2.20	0.41
2:AB:114:ARG:NH1	2:AB:118:LEU:HD21	2.34	0.41
2:AB:170:GLU:O	2:AB:173:ALA:N	2.47	0.41
4:AD:50:ARG:HA	4:AD:51:PRO:HD3	1.93	0.41
5:AE:122:GLU:O	5:AE:123:LEU:HG	2.21	0.41
9:AI:7:THR:O	9:AI:83:ARG:HD2	2.21	0.41
14:AN:4:LYS:O	14:AN:7:ILE:HG22	2.21	0.41
14:AN:24:CYS:SG	14:AN:39:LEU:HA	2.60	0.41
25:BA:548:A:H61	41:BV:19:LYS:H	1.68	0.41
25:BA:751:A:C6	25:BA:789:A:C5	3.09	0.41
25:BA:1142(A):A:C5	25:BA:1144:G:C5	3.08	0.41
25:BA:1199:U:H2'	25:BA:1200:C:C6	2.55	0.41
25:BA:1605:C:P	58:BA:5261:HOH:O	2.78	0.41
25:BA:1844:C:H2'	25:BA:1845:G:H8	1.85	0.41
25:BA:1931:U:H2'	25:BA:1932:A:H8	1.85	0.41
25:BA:2543:G:C1'	25:BA:2766:G:H5'	2.49	0.41
25:BA:2708:G:H1'	37:BR:71:GLN:HE22	1.85	0.41
25:BA:2784:C:H1'	28:BE:37:ARG:NH1	2.35	0.41
26:BB:15:A:O4'	26:BB:110:G:C8	2.74	0.41
27:BD:82:ILE:HG23	27:BD:82:ILE:HD12	1.72	0.41
28:BE:117:MET:H	28:BE:117:MET:HG2	1.50	0.41
28:BE:178:GLU:H	28:BE:178:GLU:CD	2.22	0.41
29:BF:117:ARG:HA	29:BF:117:ARG:HD3	1.79	0.41
29:BF:157:VAL:HA	29:BF:176:LEU:O	2.20	0.41
30:BG:67:LYS:HA	30:BG:68:PRO:HD3	1.87	0.41
33:BN:99:LEU:O	33:BN:103:VAL:HG23	2.21	0.41
42:BW:68:ARG:HD3	42:BW:111:HIS:HA	2.02	0.41
43:BX:92:LEU:C	43:BX:94:GLY:H	2.24	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BZ:72:ARG:NH2	45:BZ:97:GLU:O	2.53	0.41
45:BZ:133:ILE:H	45:BZ:133:ILE:HG13	1.45	0.41
1:CA:375:U:OP1	16:CP:69:THR:HG21	2.20	0.41
1:CA:509:A:C6	1:CA:510:A:N1	2.87	0.41
1:CA:604:G:C6	1:CA:635:G:C6	3.09	0.41
1:CA:620:C:H2'	1:CA:621:A:O4'	2.20	0.41
1:CA:723:U:O2'	1:CA:724:G:P	2.79	0.41
1:CA:936:C:C4	1:CA:937:A:C5	3.08	0.41
1:CA:1323:G:H4'	1:CA:1363:C:C2	2.56	0.41
1:CA:1330:U:H4'	13:CM:23:TYR:CE2	2.55	0.41
2:CB:88:ALA:HB1	2:CB:222:ILE:HG21	2.02	0.41
4:CD:110:PHE:N	4:CD:110:PHE:HD1	2.18	0.41
7:CG:72:ARG:HG2	7:CG:142:GLU:OE2	2.21	0.41
8:CH:7:ALA:HB2	8:CH:85:ARG:HD2	2.03	0.41
8:CH:63:LEU:HD23	8:CH:65:TYR:OH	2.21	0.41
11:CK:80:VAL:HG23	11:CK:105:VAL:H	1.85	0.41
25:DA:57:C:O5'	25:DA:57:C:H6	2.04	0.41
25:DA:1210:A:H5''	25:DA:1212:G:C5'	2.49	0.41
25:DA:1796:U:H4'	27:DD:256:GLY:N	2.34	0.41
25:DA:2041:U:H2'	25:DA:2042:A:C8	2.55	0.41
25:DA:2236:C:C2'	25:DA:2237:G:H5'	2.51	0.41
25:DA:2505:G:O2'	25:DA:2506:U:H5''	2.21	0.41
26:DB:76:G:H2'	26:DB:77:U:O4'	2.20	0.41
26:DB:80:U:H2'	26:DB:81:G:C8	2.56	0.41
27:DD:37:LEU:HA	27:DD:37:LEU:HD12	1.71	0.41
28:DE:36:ARG:HG2	28:DE:47:VAL:HG22	2.02	0.41
33:DN:58:ASP:OD1	33:DN:124:ALA:HA	2.20	0.41
41:DV:62:LEU:HD11	41:DV:95:LEU:HB2	2.03	0.41
50:D4:42:PHE:HB3	50:D4:43:TYR:HB2	2.02	0.41
1:AA:105:G:H2'	1:AA:106:C:H6	1.83	0.41
1:AA:135:C:O2	16:AP:1:MET:HB3	2.21	0.41
1:AA:392:G:H2'	1:AA:393:A:H8	1.85	0.41
1:AA:797:C:O2'	1:AA:798:G:H5'	2.20	0.41
1:AA:1126:U:H6	1:AA:1280:A:C5	2.39	0.41
1:AA:1178:G:N2	1:AA:1181:G:C8	2.88	0.41
6:AF:19:LEU:O	6:AF:19:LEU:HD23	2.21	0.41
7:AG:9:VAL:HG13	7:AG:94:ARG:NH1	2.35	0.41
17:AQ:15:MET:H	17:AQ:15:MET:HG3	1.62	0.41
19:AS:66:MET:H	19:AS:66:MET:HG3	1.57	0.41
20:AT:32:ALA:O	20:AT:35:THR:HG22	2.20	0.41
25:BA:69:C:H2'	25:BA:70:G:C8	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:189:G:H2'	25:BA:205:G:N2	2.36	0.41
25:BA:272(A):U:H6	25:BA:272(A):U:H5'	1.86	0.41
25:BA:900:A:C4	25:BA:901:A:C8	3.08	0.41
25:BA:1803:A:H4'	27:BD:259:THR:HG22	2.01	0.41
25:BA:2314:C:H2'	25:BA:2315:G:H8	1.86	0.41
25:BA:2405:G:H2'	25:BA:2411:A:N6	2.35	0.41
25:BA:2466:C:O2'	25:BA:2467:C:H5'	2.20	0.41
25:BA:2572:A:N7	28:BE:145:LYS:HB2	2.35	0.41
25:BA:2657:A:O2'	31:BH:160:LYS:HE3	2.21	0.41
25:BA:2864:G:H2'	25:BA:2865:U:O4'	2.21	0.41
27:BD:118:VAL:HG22	27:BD:119:ALA:N	2.36	0.41
28:BE:2:LYS:HG3	28:BE:200:GLU:HB3	2.01	0.41
31:BH:89:ILE:HB	31:BH:129:THR:HG22	2.02	0.41
32:BI:79:ILE:HB	32:BI:144:VAL:HA	2.03	0.41
37:BR:36:THR:O	37:BR:111:LEU:HD12	2.21	0.41
45:BZ:18:LEU:O	45:BZ:21:ALA:N	2.48	0.41
45:BZ:160:GLY:CA	45:BZ:161:VAL:HG12	2.41	0.41
1:CA:25:C:O2'	1:CA:26:A:H5'	2.21	0.41
1:CA:403:C:O2'	1:CA:404:U:H5'	2.20	0.41
1:CA:451:A:C5	1:CA:481:G:C6	3.09	0.41
1:CA:511:C:HO2'	1:CA:512:U:H6	1.65	0.41
1:CA:579:G:C5	1:CA:580:U:C4	3.08	0.41
1:CA:719:C:N4	18:CR:71:LYS:HE2	2.35	0.41
1:CA:792:A:N3	1:CA:794:A:C5	2.89	0.41
1:CA:1144:G:H22	1:CA:1146:A:H62	1.68	0.41
2:CB:69:LEU:HD12	2:CB:70:PHE:H	1.86	0.41
2:CB:100:GLY:HA3	2:CB:104:ASN:HB3	2.03	0.41
3:CC:180:ALA:HB1	3:CC:203:PHE:HE1	1.86	0.41
4:CD:10:ARG:CB	4:CD:40:PRO:HG3	2.49	0.41
4:CD:74:GLN:NE2	4:CD:137:SER:HB3	2.36	0.41
5:CE:99:GLY:O	5:CE:117:ASP:HA	2.21	0.41
5:CE:126:ARG:CG	5:CE:126:ARG:NH1	2.81	0.41
5:CE:144:THR:HG22	5:CE:146:ALA:H	1.85	0.41
7:CG:145:ALA:C	7:CG:147:ALA:H	2.24	0.41
8:CH:42:GLU:HG3	8:CH:109:ILE:HD13	2.02	0.41
8:CH:96:GLY:H	8:CH:99:GLU:CD	2.24	0.41
25:DA:315:G:H2'	25:DA:316:C:O4'	2.20	0.41
25:DA:629:G:H1'	25:DA:639:U:O2'	2.20	0.41
25:DA:1296:G:H2'	25:DA:1297:C:H6	1.86	0.41
25:DA:1452:A:O2'	25:DA:2702:U:O4	2.28	0.41
25:DA:2363:C:O2	46:D0:39:ARG:NH2	2.46	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DI:98:ALA:CB	32:DI:111:PRO:HG3	2.51	0.41
33:DN:128:HIS:O	33:DN:128:HIS:CG	2.73	0.41
36:DQ:58:PHE:N	36:DQ:58:PHE:CD2	2.88	0.41
41:DV:21:ARG:HD2	41:DV:93:GLU:HG3	2.03	0.41
41:DV:89:GLN:HA	41:DV:90:PRO:HD2	1.79	0.41
44:DY:30:VAL:HG22	44:DY:37:VAL:HG12	2.03	0.41
49:D3:4:LEU:HD22	49:D3:56:VAL:HG11	2.02	0.41
54:D8:33:ASN:HA	54:D8:36:LYS:HG3	2.02	0.41
1:AA:70:G:H2'	1:AA:71:C:H6	1.81	0.41
1:AA:202:U:H3'	1:AA:203:U:C5	2.56	0.41
1:AA:266:G:H8	1:AA:266:G:H2'	1.60	0.41
1:AA:436:C:O2'	1:AA:437:U:OP2	2.34	0.41
1:AA:581:G:N2	1:AA:582:U:C4	2.89	0.41
1:AA:881:G:H2'	1:AA:882:C:O4'	2.21	0.41
1:AA:1184:G:OP1	1:AA:1184:G:C8	2.73	0.41
58:AA:2208:HOH:O	20:AT:103:GLY:HA2	2.20	0.41
14:AN:14:PRO:HB2	14:AN:16:PHE:H	1.85	0.41
18:AR:63:GLN:O	18:AR:66:LEU:HB3	2.21	0.41
25:BA:109:G:H2'	25:BA:110:G:O4'	2.20	0.41
25:BA:376:C:H2'	25:BA:377:C:H6	1.85	0.41
25:BA:422:A:H2'	25:BA:423:A:O4'	2.21	0.41
25:BA:460:A:H2'	25:BA:461:C:O4'	2.21	0.41
25:BA:963:U:OP1	58:BA:5218:HOH:O	2.21	0.41
25:BA:1141:U:OP1	33:BN:25:ARG:NH1	2.54	0.41
25:BA:1268:A:H2'	25:BA:1269:A:O4'	2.20	0.41
25:BA:1329:U:H5''	25:BA:1330:C:C5	2.52	0.41
25:BA:1509(A):A:C5	25:BA:1509(B):A:C8	3.09	0.41
25:BA:2328:A:H2'	25:BA:2329:G:O4'	2.20	0.41
25:BA:2340:G:H2'	25:BA:2341:G:C8	2.56	0.41
25:BA:2648:C:H2'	25:BA:2649:U:H6	1.86	0.41
25:BA:2788:C:N4	25:BA:2789:C:N4	2.69	0.41
29:BF:36:VAL:HG11	29:BF:183:VAL:CG1	2.50	0.41
36:BQ:118:LEU:HD23	36:BQ:118:LEU:HA	1.89	0.41
40:BU:105:VAL:H	40:BU:105:VAL:HG23	1.63	0.41
45:BZ:43:GLU:O	45:BZ:46:LYS:HB2	2.20	0.41
46:B0:51:VAL:CG2	46:B0:81:VAL:HG23	2.51	0.41
1:CA:65:U:C5	1:CA:381:C:N4	2.89	0.41
1:CA:129(A):G:C2	1:CA:189(H):G:C8	3.09	0.41
1:CA:175:C:H2'	1:CA:176:C:H6	1.86	0.41
1:CA:202:U:O2'	1:CA:203:U:O5'	2.27	0.41
1:CA:791:G:H2'	1:CA:792:A:H5'	2.02	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1194:U:H2'	1:CA:1195:C:C6	2.55	0.41
1:CA:1203:C:H2'	1:CA:1204:A:O4'	2.21	0.41
1:CA:1367:C:H5''	9:CI:114:TYR:HA	2.02	0.41
1:CA:1368:G:H2'	1:CA:1369:C:C6	2.56	0.41
3:CC:111:LEU:HD12	3:CC:111:LEU:N	2.35	0.41
5:CE:78:HIS:NE2	5:CE:142:LEU:HD23	2.35	0.41
6:CF:22:GLU:O	6:CF:26:ILE:HG13	2.21	0.41
10:CJ:55:LYS:HG2	10:CJ:56:HIS:N	2.36	0.41
11:CK:61:ALA:CB	11:CK:90:GLY:HA3	2.51	0.41
17:CQ:10:VAL:HG22	17:CQ:19:VAL:HG21	2.02	0.41
25:DA:528:A:H3'	25:DA:528:A:H8	1.84	0.41
25:DA:746:A:H2'	25:DA:2612:C:H5''	2.02	0.41
25:DA:847:U:C3'	25:DA:848:G:H5'	2.51	0.41
25:DA:870:A:C2	25:DA:908:C:C2	3.09	0.41
25:DA:1163:G:C2	25:DA:1164:G:C8	3.09	0.41
25:DA:1341:U:OP2	25:DA:1394:U:O2'	2.23	0.41
25:DA:1991:U:H2'	25:DA:1992:G:H5''	2.02	0.41
25:DA:2345:G:N3	25:DA:2381:C:H2'	2.36	0.41
25:DA:2619:C:H4'	28:DE:151:TYR:O	2.20	0.41
25:DA:2689:U:H4'	25:DA:2690:C:H5'	2.02	0.41
25:DA:2834:G:C5	25:DA:2879:C:C4	3.09	0.41
27:DD:44:ASN:ND2	27:DD:46:GLN:HG3	2.36	0.41
30:DG:41:GLN:NE2	30:DG:153:ARG:HG2	2.36	0.41
30:DG:60:LEU:HD12	30:DG:68:PRO:HG3	2.01	0.41
34:DO:45:GLU:HG2	34:DO:46:ALA:N	2.36	0.41
37:DR:55:ALA:HA	37:DR:80:PHE:CE1	2.56	0.41
37:DR:60:LEU:HD23	37:DR:60:LEU:HA	1.67	0.41
38:DS:32:LEU:HD23	38:DS:32:LEU:HA	1.83	0.41
45:DZ:128:VAL:HG22	45:DZ:132:ASN:O	2.21	0.41
51:D5:46:CYS:HB3	51:D5:49:CYS:SG	2.61	0.41
1:AA:270:A:H2'	1:AA:271:C:C6	2.55	0.41
1:AA:342:C:C2'	1:AA:343:U:H5'	2.47	0.41
1:AA:355:C:O2	1:AA:388:G:C2	2.74	0.41
1:AA:370:C:H2'	1:AA:371:G:O4'	2.21	0.41
1:AA:532:A:C2'	1:AA:533:A:OP1	2.68	0.41
1:AA:949:A:C2	1:AA:1233:G:N3	2.89	0.41
1:AA:1058:G:C6	1:AA:1059:C:N3	2.88	0.41
1:AA:1386:G:H2'	1:AA:1387:G:H8	1.86	0.41
2:AB:121:LEU:HD23	2:AB:121:LEU:O	2.19	0.41
2:AB:207:ALA:O	2:AB:211:ILE:HD12	2.21	0.41
3:AC:36:ASP:HA	3:AC:39:ILE:HD12	2.02	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:160:GLN:H	4:AD:160:GLN:HG3	1.71	0.41
7:AG:51:GLN:HG2	7:AG:55:GLY:CA	2.50	0.41
9:AI:43:ALA:HB1	9:AI:45:ALA:HB1	2.03	0.41
17:AQ:45:HIS:HB2	17:AQ:65:ILE:HD13	2.03	0.41
17:AQ:77:VAL:O	17:AQ:78:GLU:HB2	2.21	0.41
20:AT:55:ILE:O	20:AT:58:LYS:N	2.52	0.41
22:AY:48:LEU:HA	22:AY:49:PRO:HD3	1.93	0.41
22:AY:74:ALA:HA	22:AY:90:ARG:HH12	1.86	0.41
23:AV:52:G:C2	23:AV:63:G:C4	3.08	0.41
25:BA:200:U:H5''	25:BA:201:C:OP2	2.21	0.41
25:BA:614:U:O2	25:BA:614:U:O4'	2.36	0.41
25:BA:910:A:N1	25:BA:2277:G:H1'	2.36	0.41
25:BA:1168:G:C2	25:BA:1182:A:C2	3.08	0.41
25:BA:1249:U:OP1	58:BA:5380:HOH:O	2.22	0.41
25:BA:1662:C:C2'	25:BA:1663:C:H5'	2.51	0.41
25:BA:1833:U:H2'	25:BA:1834:U:H6	1.85	0.41
25:BA:1933:G:N2	25:BA:1968:G:H1'	2.36	0.41
25:BA:2086:U:O4	58:BA:3944:HOH:O	2.22	0.41
25:BA:2094:G:O2'	25:BA:2095:C:H5'	2.21	0.41
25:BA:2377:A:H2'	25:BA:2378:A:C8	2.55	0.41
25:BA:2378:A:C5	25:BA:2379:G:H1'	2.56	0.41
25:BA:2561:A:H2'	25:BA:2562:U:O4'	2.20	0.41
25:BA:2670:A:C2	25:BA:2671:A:C4	3.09	0.41
25:BA:2885:C:O2'	51:B5:34:PRO:HG3	2.20	0.41
26:BB:22:U:H3	26:BB:61:G:H1	1.68	0.41
26:BB:53:A:H5'	26:BB:53:A:N3	2.35	0.41
27:BD:259:THR:O	27:BD:260:ARG:C	2.59	0.41
28:BE:35:GLN:H	28:BE:48:GLN:HB3	1.85	0.41
29:BF:12:LEU:HD22	29:BF:12:LEU:HA	1.78	0.41
31:BH:56:SER:OG	31:BH:57:ASP:N	2.53	0.41
32:BI:29:TYR:HB3	32:BI:30:LEU:H	1.72	0.41
32:BI:104:GLN:O	32:BI:105:HIS:C	2.59	0.41
35:BP:47:ASP:OD1	35:BP:47:ASP:C	2.59	0.41
35:BP:70:GLN:O	35:BP:73:GLY:N	2.53	0.41
36:BQ:133:ARG:HG2	36:BQ:134:ARG:H	1.86	0.41
44:BY:102:CYS:SG	44:BY:104:GLY:N	2.84	0.41
45:BZ:118:GLN:O	45:BZ:120:ILE:HG13	2.20	0.41
47:B1:5:CYS:HG	47:B1:8:SER:HG	1.61	0.41
48:B2:28:LYS:HB3	48:B2:57:ILE:HG12	2.03	0.41
54:B8:39:LYS:HA	54:B8:42:ARG:NH1	2.35	0.41
1:CA:286:G:C6	1:CA:287:U:C4	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:324:G:OP1	20:CT:22:ARG:NE	2.54	0.41
1:CA:736:C:N4	1:CA:737:A:H62	2.18	0.41
1:CA:784:C:H4'	25:DA:1837:C:OP1	2.20	0.41
1:CA:1057:G:C2'	1:CA:1058:G:H5'	2.50	0.41
1:CA:1067:A:O5'	1:CA:1067:A:C8	2.72	0.41
1:CA:1300:G:O2'	1:CA:1301:U:OP2	2.24	0.41
1:CA:1318:A:O2'	19:CS:37:ARG:HB3	2.20	0.41
1:CA:1322:C:OP1	1:CA:1322:C:H6	2.04	0.41
1:CA:1342:C:H1'	9:CI:124:GLN:NE2	2.36	0.41
2:CB:54:THR:O	2:CB:58:ILE:HG13	2.21	0.41
3:CC:36:ASP:OD1	3:CC:57:ILE:HD12	2.21	0.41
5:CE:137:GLU:O	5:CE:141:GLN:HB2	2.20	0.41
6:CF:10:LEU:HD23	6:CF:61:LEU:HD13	2.03	0.41
12:CL:33:ARG:O	12:CL:85:ILE:HB	2.21	0.41
16:CP:55:ARG:HA	16:CP:55:ARG:HD2	1.69	0.41
17:CQ:27:PHE:CZ	17:CQ:36:ILE:HD11	2.56	0.41
19:CS:20:LEU:HA	19:CS:23:ASN:HB3	2.01	0.41
20:CT:91:LEU:HD22	20:CT:91:LEU:HA	1.78	0.41
23:CV:47:U:H2'	23:CV:50:U:OP1	2.20	0.41
25:DA:254:G:N7	54:D8:5:LYS:HE2	2.35	0.41
25:DA:781:A:C2	25:DA:1776:G:H2'	2.56	0.41
25:DA:856:C:O4'	46:D0:27:GLU:HB3	2.21	0.41
25:DA:862:G:H4'	26:DB:79:C:H5'	2.03	0.41
25:DA:1183:G:H4'	49:D3:29:ARG:HH12	1.86	0.41
25:DA:1278:A:H5''	37:DR:36:THR:HG22	2.03	0.41
25:DA:1506:C:C2'	25:DA:1507:A:H5'	2.51	0.41
25:DA:1629:U:H2'	25:DA:1630:G:O4'	2.20	0.41
25:DA:1751:C:O4'	25:DA:2860:A:C2	2.74	0.41
25:DA:2261:C:O2'	25:DA:2262:U:H5'	2.21	0.41
25:DA:2552:U:H2'	25:DA:2554:U:OP2	2.21	0.41
25:DA:2705:A:H2	37:DR:64:ARG:HH11	1.68	0.41
27:DD:77:ALA:HA	27:DD:97:TYR:HA	2.03	0.41
29:DF:116:ASP:OD2	35:DP:1:MET:HB2	2.21	0.41
30:DG:114:ILE:HB	30:DG:117:PHE:HB2	2.02	0.41
32:DI:61:ARG:C	32:DI:63:ALA:N	2.74	0.41
33:DN:34:LEU:HD12	33:DN:34:LEU:HA	1.66	0.41
33:DN:55:VAL:CG1	33:DN:126:PRO:HA	2.50	0.41
34:DO:44:LYS:HD2	34:DO:44:LYS:HA	1.92	0.41
34:DO:79:PHE:CD2	39:DT:72:VAL:HG22	2.56	0.41
35:DP:101:VAL:O	35:DP:104:GLY:N	2.38	0.41
36:DQ:72:LYS:HA	36:DQ:73:PRO:HD3	1.90	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:D0:19:LYS:HG2	46:D0:41:ARG:HH21	1.86	0.41
50:D4:15:ILE:O	50:D4:33:VAL:HG23	2.20	0.41
54:D8:39:LYS:O	54:D8:43:GLN:HG3	2.21	0.41
1:AA:344:A:C8	1:AA:344:A:OP2	2.74	0.41
1:AA:499:A:H4'	1:AA:500:G:OP1	2.21	0.41
1:AA:605:U:H2'	1:AA:606:G:H5'	2.02	0.41
1:AA:993:G:O6	1:AA:1045:C:N4	2.50	0.41
1:AA:1157:A:H4'	1:AA:1158:C:O4'	2.20	0.41
1:AA:1162:C:N4	1:AA:1174:G:H1	2.19	0.41
1:AA:1445:C:C4	1:AA:1446:U:C4	3.09	0.41
7:AG:65:ALA:HB3	7:AG:124:LEU:HD23	2.01	0.41
9:AI:8:GLY:HA3	9:AI:76:ALA:O	2.21	0.41
12:AL:11:VAL:HG13	17:AQ:29:HIS:CD2	2.56	0.41
14:AN:53:LEU:HA	14:AN:53:LEU:HD23	1.80	0.41
18:AR:73:ALA:O	18:AR:76:LEU:N	2.45	0.41
18:AR:73:ALA:HB1	18:AR:79:LEU:HG	2.03	0.41
20:AT:39:LYS:HE2	20:AT:39:LYS:HB2	1.90	0.41
21:AU:15:ARG:HH11	21:AU:15:ARG:HB2	1.86	0.41
22:AY:45:ALA:O	22:AY:46:SER:OG	2.39	0.41
25:BA:270:A:H1'	25:BA:370:G:C2	2.56	0.41
25:BA:436:C:H2'	25:BA:437:G:C8	2.56	0.41
25:BA:459:U:H4'	53:B7:40:TRP:CZ3	2.56	0.41
25:BA:757:U:H2'	25:BA:758:C:O4'	2.21	0.41
25:BA:805:G:H4'	35:BP:38:GLN:HB3	2.03	0.41
25:BA:962:G:H2'	25:BA:963:U:C6	2.55	0.41
25:BA:1278:A:H2'	25:BA:1279:G:H8	1.86	0.41
25:BA:1373:A:H2'	25:BA:1374:G:O4'	2.21	0.41
25:BA:1385:G:H4'	25:BA:1386:C:OP1	2.21	0.41
25:BA:1797:C:O2'	27:BD:259:THR:HB	2.21	0.41
25:BA:2405:G:O2'	25:BA:2406:U:P	2.79	0.41
25:BA:2699:C:H2'	25:BA:2700:C:O4'	2.21	0.41
25:BA:2854:G:H2'	25:BA:2855:C:C6	2.56	0.41
26:BB:12:C:N3	46:B0:74:ARG:NH2	2.68	0.41
30:BG:11:TYR:CE2	30:BG:16:ARG:HD3	2.56	0.41
33:BN:46:VAL:O	33:BN:47:ALA:HB3	2.21	0.41
37:BR:56:LYS:NZ	37:BR:87:TYR:O	2.44	0.41
38:BS:99:LYS:O	38:BS:102:ALA:HB3	2.20	0.41
39:BT:12:SER:HA	39:BT:15:VAL:HG23	2.03	0.41
41:BV:29:PRO:C	41:BV:31:ALA:H	2.25	0.41
41:BV:62:LEU:HD12	41:BV:62:LEU:HA	1.71	0.41
45:BZ:15:PRO:HB2	45:BZ:19:ARG:NH2	2.36	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BZ:53:ILE:HG22	45:BZ:71:VAL:O	2.21	0.41
45:BZ:163:LEU:HD12	45:BZ:163:LEU:HA	1.93	0.41
46:B0:54:GLY:O	46:B0:56:ASP:N	2.54	0.41
1:CA:367:U:C2	1:CA:369:C:C5	3.09	0.41
1:CA:719:C:O2'	18:CR:49:LYS:HB3	2.21	0.41
1:CA:1285:A:H1'	1:CA:1286:A:OP2	2.21	0.41
3:CC:5:ILE:HD12	3:CC:5:ILE:HA	1.90	0.41
6:CF:80:ARG:HG3	6:CF:80:ARG:NH2	2.36	0.41
7:CG:118:VAL:O	7:CG:121:ALA:HB3	2.21	0.41
13:CM:4:ILE:HG12	13:CM:9:ILE:HG13	2.03	0.41
13:CM:25:ILE:HD11	13:CM:66:LEU:HD11	2.02	0.41
15:CO:24:SER:O	15:CO:25:THR:C	2.60	0.41
16:CP:8:ARG:HA	16:CP:17:TYR:CD2	2.56	0.41
16:CP:41:PRO:O	16:CP:43:LYS:HD2	2.21	0.41
17:CQ:94:ASN:O	17:CQ:98:LEU:HD13	2.21	0.41
20:CT:20:LEU:O	20:CT:24:LEU:HD23	2.21	0.41
25:DA:28:A:C2'	25:DA:29:U:H5'	2.51	0.41
25:DA:1252:G:C4	40:DU:33:ARG:HD2	2.56	0.41
25:DA:1344:G:O2'	25:DA:1385:G:H2'	2.21	0.41
25:DA:1355:G:N2	25:DA:1376:C:O2	2.48	0.41
25:DA:2398:U:O2'	25:DA:2399:G:H5'	2.22	0.41
25:DA:2531:A:H5'	31:DH:157:TYR:CE1	2.56	0.41
25:DA:2817:G:C4	25:DA:2830:G:N2	2.89	0.41
27:DD:10:THR:HG23	27:DD:13:ARG:HB2	2.03	0.41
29:DF:181:LEU:CD1	29:DF:186:ILE:HD11	2.51	0.41
31:DH:20:ALA:HB1	31:DH:21:PRO:CD	2.51	0.41
45:DZ:16:SER:O	45:DZ:20:ARG:HB2	2.21	0.41
45:DZ:38:TYR:HD1	45:DZ:39:VAL:O	2.04	0.41
48:D2:10:LEU:HD22	48:D2:14:ARG:NH1	2.36	0.41
1:AA:448:A:C2	1:AA:487:A:C2	3.09	0.40
1:AA:787:A:H8	1:AA:787:A:H5''	1.86	0.40
1:AA:1261:A:H3'	1:AA:1262:C:C6	2.56	0.40
5:AE:79:GLU:H	5:AE:79:GLU:HG3	1.56	0.40
6:AF:62:TRP:CD1	18:AR:35:ARG:CZ	3.04	0.40
7:AG:24:THR:O	7:AG:27:ILE:HG22	2.21	0.40
9:AI:43:ALA:HB2	9:AI:74:ILE:HG12	2.03	0.40
17:AQ:31:LEU:HD23	17:AQ:32:TYR:CZ	2.56	0.40
22:AY:130:ALA:O	22:AY:131:MET:HG2	2.22	0.40
25:BA:190:A:P	25:BA:205:G:H22	2.44	0.40
25:BA:566:U:OP1	35:BP:29:LYS:HD2	2.21	0.40
25:BA:1166:C:O2	25:BA:1184:G:C2	2.74	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:1756:G:H4'	25:BA:1758:G:O4'	2.21	0.40
25:BA:2340:G:H2'	25:BA:2341:G:H8	1.85	0.40
25:BA:2652:C:C2'	25:BA:2653:U:H5'	2.51	0.40
25:BA:2835:A:C6	25:BA:2879:C:C6	3.10	0.40
28:BE:112:GLY:O	28:BE:159:HIS:HA	2.21	0.40
30:BG:152:LEU:HG	30:BG:152:LEU:O	2.21	0.40
32:BI:130:TYR:HB3	32:BI:138:ILE:HD13	2.02	0.40
38:BS:101:LEU:O	38:BS:102:ALA:C	2.58	0.40
45:BZ:45:ASP:O	45:BZ:46:LYS:C	2.60	0.40
52:B6:23:THR:OG1	52:B6:24:GLU:N	2.50	0.40
53:B7:9:ARG:HH21	53:B7:47:ARG:HG3	1.85	0.40
1:CA:1321:C:C3'	1:CA:1322:C:H5''	2.51	0.40
1:CA:1357:A:H5''	1:CA:1358:U:OP2	2.20	0.40
3:CC:18:TRP:HE3	3:CC:18:TRP:N	2.12	0.40
3:CC:66:VAL:O	3:CC:68:VAL:HG23	2.21	0.40
7:CG:23:VAL:HG13	7:CG:43:PHE:CE2	2.34	0.40
8:CH:33:GLU:HG2	8:CH:59:LEU:CD1	2.52	0.40
16:CP:18:ARG:NH1	16:CP:32:TYR:OH	2.55	0.40
16:CP:68:ASP:O	16:CP:70:ALA:N	2.54	0.40
17:CQ:68:ARG:H	17:CQ:70:ARG:HH11	1.68	0.40
20:CT:22:ARG:O	20:CT:25:ARG:N	2.53	0.40
25:DA:237:C:N3	25:DA:261:G:C2	2.89	0.40
25:DA:297:C:H2'	25:DA:298:G:O4'	2.21	0.40
25:DA:769:G:C2'	25:DA:770:G:H5'	2.51	0.40
25:DA:864:G:H1'	25:DA:914:C:N4	2.36	0.40
25:DA:872:A:OP1	36:DQ:5:ARG:NH1	2.54	0.40
25:DA:1031:G:O2'	55:D9:7:VAL:N	2.45	0.40
25:DA:1149:G:C2	25:DA:1150:C:C4	3.09	0.40
25:DA:1365:A:N6	25:DA:1366:A:C6	2.89	0.40
25:DA:1528(A):A:C8	25:DA:1529:G:C8	3.09	0.40
25:DA:1792:G:H2'	25:DA:1793:C:C6	2.56	0.40
25:DA:1945:G:C4	25:DA:1946:U:C5	3.09	0.40
25:DA:2056:G:O2'	51:D5:8:LYS:HD2	2.20	0.40
25:DA:2329:G:H2'	25:DA:2330:G:C8	2.55	0.40
25:DA:2510:C:H2'	25:DA:2511:U:C6	2.56	0.40
25:DA:2577:A:O4'	51:D5:3:LYS:HB2	2.21	0.40
25:DA:2699:C:H2'	25:DA:2700:C:O4'	2.21	0.40
25:DA:2740:A:C6	25:DA:2764:A:C8	3.09	0.40
29:DF:181:LEU:HD11	29:DF:186:ILE:HD11	2.03	0.40
35:DP:84:ASN:HB3	35:DP:117:GLU:O	2.20	0.40
35:DP:101:VAL:HG12	35:DP:102:ARG:N	2.36	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DP:143:GLY:C	35:DP:145:PRO:HD3	2.42	0.40
43:DX:2:LYS:HD2	43:DX:2:LYS:HA	1.85	0.40
45:DZ:48:PHE:CE2	45:DZ:71:VAL:HG11	2.52	0.40
1:AA:59:A:H2'	1:AA:59:A:N3	2.37	0.40
1:AA:157:G:H5''	58:AA:2201:HOH:O	2.20	0.40
1:AA:374:A:C4	1:AA:375:U:C5	3.09	0.40
1:AA:409:G:C2	1:AA:410:G:H1'	2.57	0.40
1:AA:427:U:H3'	1:AA:428:G:H2'	2.03	0.40
1:AA:458:C:H3'	1:AA:460:G:C8	2.56	0.40
1:AA:520:A:N1	1:AA:536:C:H1'	2.36	0.40
1:AA:827:U:C4	1:AA:870:U:C4	3.09	0.40
1:AA:1015:A:C6	1:AA:1016:A:C6	3.09	0.40
2:AB:27:LYS:HD2	2:AB:193:ASP:OD1	2.21	0.40
6:AF:9:VAL:HB	6:AF:87:ARG:HB2	2.02	0.40
9:AI:70:LYS:O	9:AI:73:GLN:HB2	2.21	0.40
18:AR:47:THR:HG23	18:AR:49:LYS:HG3	2.04	0.40
25:BA:71:A:H5'	25:BA:71:A:H8	1.86	0.40
25:BA:143:G:H2'	25:BA:143(A):C:C6	2.56	0.40
25:BA:271(N):U:O2'	25:BA:271(O):C:H5'	2.21	0.40
25:BA:305:U:H2'	25:BA:306:U:C6	2.56	0.40
25:BA:528:A:H2	25:BA:2043:C:H5'	1.87	0.40
25:BA:805:G:P	58:BA:5183:HOH:O	2.78	0.40
25:BA:903:C:H2'	25:BA:904:C:C6	2.56	0.40
25:BA:1047:G:N7	25:BA:1110:G:C6	2.90	0.40
25:BA:1593:G:H2'	25:BA:1594:G:H8	1.84	0.40
25:BA:1854:A:C8	25:BA:1855:G:C8	3.09	0.40
25:BA:2058:A:H5''	25:BA:2059:A:OP2	2.21	0.40
25:BA:2319:G:N2	38:BS:3:ARG:HB2	2.36	0.40
25:BA:2404:C:O5'	25:BA:2404:C:H6	2.04	0.40
25:BA:2659:G:P	31:BH:158:HIS:HE2	2.44	0.40
26:BB:31:C:O5'	26:BB:31:C:H6	2.03	0.40
26:BB:37:C:H2'	26:BB:38:C:H5'	2.03	0.40
26:BB:79:C:H42	26:BB:98:G:H1	1.69	0.40
27:BD:148:GLU:O	27:BD:151:LYS:HB2	2.21	0.40
27:BD:228:PRO:HD3	27:BD:235:GLY:N	2.37	0.40
28:BE:31:CYS:O	28:BE:91:VAL:HG23	2.21	0.40
29:BF:39:TRP:O	29:BF:43:LYS:HG2	2.21	0.40
29:BF:129:PHE:CD2	29:BF:129:PHE:N	2.89	0.40
31:BH:154:PRO:HB3	31:BH:163:TYR:CE2	2.56	0.40
38:BS:18:ILE:O	38:BS:21:THR:HG23	2.21	0.40
43:BX:72:LYS:HE2	43:BX:73:ARG:O	2.20	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B7:1:MET:HE2	53:B7:1:MET:HB2	1.87	0.40
1:CA:15:G:C5	1:CA:1396:A:C2	3.10	0.40
1:CA:254:G:OP1	17:CQ:67:LYS:O	2.39	0.40
1:CA:283:C:H2'	1:CA:284:G:O4'	2.22	0.40
1:CA:309:G:H1'	1:CA:608:A:C2	2.56	0.40
1:CA:579:G:H2'	1:CA:580:U:C6	2.56	0.40
1:CA:683:G:H2'	1:CA:684:A:O4'	2.21	0.40
1:CA:908:A:H8	1:CA:908:A:O5'	2.05	0.40
1:CA:983:A:H1'	1:CA:1049:U:O2	2.21	0.40
1:CA:1237:C:H5''	1:CA:1238:A:O4'	2.22	0.40
1:CA:1298:C:H2'	7:CG:114:ARG:HH12	1.86	0.40
1:CA:1319:A:N6	1:CA:1361:G:H21	2.17	0.40
1:CA:1324:A:O4'	1:CA:1362:C:H4'	2.21	0.40
1:CA:1492:A:C4'	1:CA:1493:A:OP1	2.67	0.40
2:CB:20:GLU:HB2	2:CB:190:THR:OG1	2.20	0.40
4:CD:9:CYS:O	4:CD:13:ARG:HG3	2.20	0.40
8:CH:132:GLU:O	8:CH:134:ILE:HG12	2.21	0.40
13:CM:82:MET:HA	13:CM:89:GLY:HA3	2.03	0.40
14:CN:60:SER:O	14:CN:61:TRP:HB3	2.20	0.40
16:CP:53:VAL:O	16:CP:56:ALA:N	2.55	0.40
23:CV:18:G:C2	23:CV:58:A:C4	3.10	0.40
25:DA:196:A:N3	25:DA:196:A:H2'	2.37	0.40
25:DA:307:G:H22	25:DA:310:A:P	2.44	0.40
25:DA:346:A:H2'	25:DA:346:A:N3	2.36	0.40
25:DA:817:C:H2'	25:DA:818:G:O4'	2.20	0.40
25:DA:1002:G:H2'	25:DA:1003:G:O4'	2.21	0.40
25:DA:1131:G:H4'	33:DN:82:LEU:HB2	2.03	0.40
25:DA:1153:C:OP1	40:DU:92:ARG:NH1	2.55	0.40
25:DA:1416:G:O2'	25:DA:1417:C:C5	2.74	0.40
25:DA:1418:G:H8	25:DA:1418:G:O5'	2.05	0.40
25:DA:1511:C:H2'	25:DA:1512:U:H6	1.85	0.40
25:DA:2296:U:H4'	25:DA:2297:C:OP1	2.20	0.40
25:DA:2448:A:N6	58:DA:3963:HOH:O	2.54	0.40
25:DA:2731:G:C6	25:DA:2732:G:O6	2.74	0.40
26:DB:6:C:H2'	26:DB:7:G:O4'	2.21	0.40
27:DD:25:THR:OG1	27:DD:81:ALA:HB1	2.21	0.40
28:DE:4:ILE:C	28:DE:5:LEU:HD23	2.42	0.40
30:DG:103:LEU:HA	30:DG:103:LEU:HD23	1.82	0.40
33:DN:19:GLU:CG	33:DN:20:GLY:H	2.34	0.40
45:DZ:29:TYR:CE2	45:DZ:87:ASP:HB3	2.57	0.40
53:D7:36:GLN:O	53:D7:36:GLN:HG2	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:D8:54:GLU:HA	54:D8:57:ARG:HD2	2.03	0.40
1:AA:445:G:H2'	1:AA:446:G:C8	2.57	0.40
1:AA:552:U:H4'	12:AL:86:ARG:HG2	2.02	0.40
1:AA:660:G:O2'	1:AA:661:G:OP1	2.38	0.40
1:AA:684:A:N6	1:AA:685:G:C6	2.89	0.40
1:AA:1298:C:O4'	1:AA:1299:A:C5	2.74	0.40
7:AG:144:MET:C	7:AG:145:ALA:O	2.60	0.40
9:AI:16:ARG:HB2	9:AI:64:THR:CG2	2.51	0.40
11:AK:12:ARG:CG	11:AK:75:TYR:HA	2.51	0.40
15:AO:39:LEU:CD1	15:AO:56:LEU:HB2	2.51	0.40
15:AO:59:MET:O	15:AO:62:GLN:HB3	2.21	0.40
16:AP:22:THR:HG23	16:AP:23:ASP:N	2.37	0.40
18:AR:76:LEU:HA	18:AR:76:LEU:HD13	1.75	0.40
20:AT:8:ARG:HH11	20:AT:8:ARG:HD3	1.76	0.40
23:AV:17:C:H5	23:AV:17(B):U:C5	2.39	0.40
23:AV:74:C:O2	25:BA:2252:G:N2	2.45	0.40
25:BA:7:G:H2'	25:BA:8:A:O4'	2.20	0.40
25:BA:272:G:H1	25:BA:404:C:H42	1.68	0.40
25:BA:662:G:H5'	35:BP:14:LYS:O	2.22	0.40
25:BA:2755:C:C5	55:B9:19:ARG:NH1	2.88	0.40
27:BD:168:ARG:HG2	27:BD:173:VAL:HG12	2.04	0.40
29:BF:155:LEU:HD11	29:BF:176:LEU:HD22	2.03	0.40
32:BI:79:ILE:HG22	32:BI:81:VAL:HG13	2.04	0.40
35:BP:96:THR:O	35:BP:100:LEU:HG	2.21	0.40
36:BQ:103:MET:HE3	36:BQ:103:MET:HB3	1.88	0.40
43:BX:9:LEU:HA	43:BX:9:LEU:HD23	1.76	0.40
45:BZ:48:PHE:O	45:BZ:52:SER:N	2.48	0.40
46:B0:55:ARG:HH11	46:B0:55:ARG:CB	2.29	0.40
48:B2:1:MET:HB3	48:B2:5:GLU:HB2	2.02	0.40
1:CA:736:C:C2	1:CA:737:A:N7	2.90	0.40
1:CA:1178:G:N2	1:CA:1180:A:H3'	2.36	0.40
1:CA:1342:C:H2'	1:CA:1343:G:C8	2.56	0.40
2:CB:118:LEU:HB3	2:CB:142:LEU:HG	2.03	0.40
3:CC:34:LEU:CD1	3:CC:38:ARG:HD2	2.51	0.40
4:CD:13:ARG:HD2	4:CD:38:TYR:O	2.21	0.40
4:CD:119:GLN:OE1	4:CD:123:HIS:CE1	2.74	0.40
9:CI:18:PHE:O	9:CI:62:TYR:N	2.37	0.40
13:CM:70:LEU:O	13:CM:70:LEU:HD22	2.21	0.40
19:CS:57:HIS:O	19:CS:59:PRO:HD3	2.21	0.40
25:DA:108:U:H2'	25:DA:109:G:C8	2.56	0.40
25:DA:387:U:P	58:DA:4631:HOH:O	2.79	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:724:U:H2'	25:DA:725:G:O4'	2.22	0.40
25:DA:969:U:OP1	49:D3:17:LYS:HB3	2.21	0.40
25:DA:2291:U:H5''	25:DA:2380:C:O2'	2.20	0.40
25:DA:2518:A:N3	25:DA:2518:A:H2'	2.36	0.40
25:DA:2652:C:H42	25:DA:2668:G:H1	1.70	0.40
25:DA:2687:U:H2'	25:DA:2688:U:O4'	2.21	0.40
25:DA:2697:G:H2'	25:DA:2698:U:O4'	2.21	0.40
25:DA:2769:C:H2'	25:DA:2770:G:O4'	2.22	0.40
26:DB:95:C:H2'	26:DB:96:U:C6	2.56	0.40
27:DD:75:ILE:HG21	27:DD:99:ASP:HB2	2.03	0.40
27:DD:274:ARG:CA	27:DD:275:LYS:HB3	2.52	0.40
28:DE:49:LEU:HA	28:DE:49:LEU:HD12	1.72	0.40
30:DG:122:PRO:HG3	30:DG:180:PHE:HB3	2.04	0.40
37:DR:54:LEU:O	37:DR:57:ARG:HB2	2.22	0.40
39:DT:121:ILE:HG22	39:DT:122:ASP:N	2.36	0.40
40:DU:55:ARG:HE	40:DU:55:ARG:HB3	1.51	0.40
54:D8:57:ARG:O	54:D8:58:ILE:C	2.60	0.40
1:AA:59:A:H3'	1:AA:331:G:H22	1.86	0.40
1:AA:157:G:H2'	1:AA:157:G:N3	2.36	0.40
1:AA:595:G:H1'	1:AA:596:C:C5	2.56	0.40
1:AA:719:C:C5	1:AA:720:C:C4	3.09	0.40
1:AA:926:G:H5''	1:AA:927:G:O5'	2.20	0.40
1:AA:1223:C:C5'	1:AA:1224:G:H5''	2.51	0.40
1:AA:1333:A:H2'	1:AA:1334:G:O4'	2.21	0.40
3:AC:156:ARG:HB3	3:AC:193:TYR:HD1	1.87	0.40
3:AC:204:LEU:HD23	3:AC:204:LEU:HA	1.79	0.40
8:AH:5:PRO:O	8:AH:8:ASP:HB3	2.21	0.40
8:AH:25:ASP:OD2	8:AH:60:ARG:HG3	2.21	0.40
8:AH:75:ARG:HA	8:AH:76:PRO:HD2	1.74	0.40
9:AI:95:LYS:O	9:AI:99:LEU:HD13	2.21	0.40
11:AK:29:ILE:HG23	11:AK:44:SER:CB	2.51	0.40
12:AL:30:ALA:HA	12:AL:31:PRO:HD3	1.90	0.40
13:AM:106:ASN:HB3	13:AM:107:ALA:H	1.61	0.40
16:AP:48:TRP:O	16:AP:49:LEU:HB2	2.22	0.40
19:AS:61:TYR:CE2	19:AS:63:THR:HG22	2.56	0.40
23:AV:49:G:C6	23:AV:50:U:C4	3.09	0.40
25:BA:44:G:H5''	25:BA:45:C:OP1	2.20	0.40
25:BA:296:C:H2'	25:BA:297:C:C6	2.56	0.40
25:BA:322:A:C6	25:BA:340:A:C2	3.10	0.40
25:BA:452:G:C2	25:BA:458:G:C5	3.10	0.40
25:BA:619:G:H5''	25:BA:620:G:OP2	2.22	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BA:800:A:H8	25:BA:800:A:OP1	2.04	0.40
25:BA:876:C:H2'	25:BA:877:U:O4'	2.21	0.40
25:BA:878:A:C2	25:BA:879:G:C5	3.09	0.40
25:BA:1402:C:H2'	25:BA:1403:C:H5'	2.03	0.40
25:BA:1494:A:C2	25:BA:1495:A:C4	3.09	0.40
25:BA:1632:A:C6	25:BA:1633:G:C6	3.10	0.40
25:BA:2238:G:H4'	25:BA:2239:G:OP1	2.21	0.40
25:BA:2356:C:H2'	25:BA:2357:U:O4'	2.21	0.40
25:BA:2552:U:C2	25:BA:2554:U:C5'	3.04	0.40
25:BA:2633:G:H2'	25:BA:2634:G:O4'	2.22	0.40
25:BA:2872:G:O2'	25:BA:2873:A:H5'	2.21	0.40
25:BA:2876:G:H4'	39:BT:2:ASN:ND2	2.36	0.40
26:BB:31:C:N4	38:BS:32:LEU:HD22	2.37	0.40
29:BF:199:TRP:HE1	29:BF:203:GLN:HE21	1.70	0.40
30:BG:60:LEU:HA	30:BG:60:LEU:HD13	1.87	0.40
31:BH:40:GLU:OE1	31:BH:60:ARG:NH1	2.55	0.40
31:BH:88:LEU:HD13	31:BH:88:LEU:HA	1.64	0.40
33:BN:75:TYR:HA	33:BN:81:GLY:O	2.22	0.40
38:BS:3:ARG:HE	38:BS:4:LEU:H	1.68	0.40
38:BS:56:LEU:C	38:BS:58:LEU:HD22	2.42	0.40
39:BT:36:GLU:HB3	39:BT:37:GLY:H	1.69	0.40
44:BY:51:VAL:HG22	44:BY:58:GLY:CA	2.48	0.40
52:B6:10:LEU:HD11	52:B6:54:ILE:HA	2.03	0.40
54:B8:61:LEU:C	54:B8:63:PRO:HD3	2.42	0.40
55:B9:25:VAL:O	55:B9:33:LYS:HA	2.21	0.40
1:CA:57:G:C5	1:CA:58:C:C4	3.10	0.40
1:CA:196:A:H5''	58:CA:1907:HOH:O	2.20	0.40
1:CA:307:C:C5	1:CA:308:C:C5	3.10	0.40
1:CA:393:A:C4	1:CA:394:G:C8	3.10	0.40
1:CA:409:G:C6	1:CA:410:G:C4	3.10	0.40
1:CA:431:A:H5''	1:CA:432:A:OP2	2.21	0.40
1:CA:960:U:O2	1:CA:960:U:H2'	2.22	0.40
1:CA:1332:A:O5'	1:CA:1332:A:C8	2.74	0.40
5:CE:121:LYS:HD3	5:CE:121:LYS:HA	1.97	0.40
5:CE:152:ARG:HB3	8:CH:43:GLY:HA3	2.03	0.40
7:CG:71:PRO:HG3	7:CG:103:TRP:CZ3	2.56	0.40
8:CH:49:GLU:O	8:CH:51:VAL:HG13	2.21	0.40
25:DA:330:A:H2	25:DA:1210:A:H2'	1.86	0.40
25:DA:1319:G:O2'	25:DA:1320:C:H5'	2.22	0.40
25:DA:1658:C:H2'	25:DA:1659:U:C6	2.57	0.40
25:DA:1854:A:H2'	25:DA:1855:G:O4'	2.21	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DA:2065:C:H2'	25:DA:2066:C:C6	2.57	0.40
25:DA:2298:A:H3'	25:DA:2299:G:H8	1.85	0.40
25:DA:2881:C:C4	25:DA:2882:A:N7	2.90	0.40
26:DB:19:G:N2	26:DB:64:C:N3	2.63	0.40
27:DD:125:ILE:HG22	27:DD:125:ILE:O	2.21	0.40
27:DD:148:GLU:OE1	27:DD:151:LYS:NZ	2.53	0.40
32:DI:132:PRO:HD3	32:DI:138:ILE:HG13	2.04	0.40
33:DN:39:ARG:NH2	33:DN:41:ASP:OD2	2.54	0.40
42:DW:100:THR:HG22	42:DW:100:THR:O	2.22	0.40
44:DY:67:LEU:HD22	44:DY:67:LEU:HA	1.88	0.40
45:DZ:57:ILE:HD13	45:DZ:71:VAL:HG23	2.02	0.40
52:D6:3:SER:N	52:D6:6:ARG:HB3	2.31	0.40
1:AA:24:U:H2'	1:AA:25:C:C6	2.56	0.40
1:AA:147:G:C2	1:AA:148:G:C4	3.09	0.40
1:AA:152:A:N6	1:AA:170:U:H3	2.19	0.40
1:AA:189(J):G:H2'	1:AA:189(K):U:C6	2.56	0.40
1:AA:407:G:O2'	4:AD:116:GLN:HA	2.22	0.40
1:AA:445:G:C6	1:AA:446:G:C6	3.10	0.40
1:AA:604:G:H2'	1:AA:605:U:O4'	2.21	0.40
1:AA:679:C:H2'	1:AA:680:C:H6	1.86	0.40
1:AA:1015:A:H2'	1:AA:1016:A:O4'	2.21	0.40
1:AA:1308:U:H5''	13:AM:98:VAL:CG1	2.51	0.40
6:AF:25:ILE:HG12	6:AF:25:ILE:H	1.41	0.40
9:AI:43:ALA:CA	9:AI:45:ALA:HA	2.51	0.40
9:AI:73:GLN:O	9:AI:77:ILE:HG13	2.22	0.40
10:AJ:38:ILE:HG12	10:AJ:71:LEU:C	2.41	0.40
11:AK:80:VAL:HG11	11:AK:103:LEU:HD13	2.02	0.40
12:AL:76:ASN:ND2	12:AL:106:ASP:O	2.55	0.40
22:AY:60:SER:HB3	25:BA:1947:C:OP1	2.22	0.40
23:AV:49:G:N2	23:AV:66:C:C2	2.90	0.40
25:BA:623:G:H2'	25:BA:624:C:C6	2.56	0.40
25:BA:945:A:C4	25:BA:2448:A:C2	3.10	0.40
25:BA:954:G:C5	25:BA:955:C:C5	3.10	0.40
25:BA:1152:C:C2'	25:BA:1153:C:H5'	2.52	0.40
25:BA:1494:A:C6	25:BA:1495:A:C6	3.10	0.40
25:BA:1682:G:C6	25:BA:1683:C:C4	3.09	0.40
25:BA:1835:G:H5''	25:BA:1836:C:OP2	2.21	0.40
25:BA:2553:G:H5''	25:BA:2554:U:OP2	2.21	0.40
25:BA:2820:A:OP1	37:BR:2:ARG:NH2	2.54	0.40
29:BF:110:LEU:HD23	29:BF:110:LEU:HA	1.73	0.40
31:BH:87:LEU:HA	31:BH:87:LEU:HD23	1.81	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BT:45:PHE:HE2	39:BT:63:VAL:CG1	2.35	0.40
44:BY:23:ARG:HB2	44:BY:23:ARG:NH1	2.34	0.40
46:B0:47:PRO:HB2	46:B0:51:VAL:O	2.22	0.40
52:B6:40:CYS:HA	52:B6:41:PRO:HD3	1.62	0.40
54:B8:35:GLN:O	54:B8:35:GLN:HG3	2.20	0.40
1:CA:51:A:C6	1:CA:353:A:C2	3.10	0.40
1:CA:373:A:N3	1:CA:374:A:C8	2.89	0.40
1:CA:425:G:C2'	1:CA:426:G:H5'	2.51	0.40
1:CA:435:C:H2'	1:CA:436:C:H5'	2.03	0.40
1:CA:450:G:H5'	16:CP:41:PRO:O	2.22	0.40
1:CA:624:C:H2'	1:CA:625:G:C8	2.57	0.40
1:CA:738:C:OP1	6:CF:2:ARG:NH1	2.53	0.40
1:CA:1118:C:OP1	9:CI:104:ARG:HG3	2.21	0.40
1:CA:1426:C:O2	1:CA:1475:G:C2	2.74	0.40
2:CB:21:ARG:HB2	2:CB:38:GLY:O	2.22	0.40
13:CM:92:HIS:CD2	13:CM:98:VAL:HG11	2.56	0.40
17:CQ:8:GLY:HA3	17:CQ:22:LEU:O	2.21	0.40
17:CQ:37:LYS:O	17:CQ:38:ARG:NH2	2.55	0.40
25:DA:68:G:H2'	25:DA:69:C:O4'	2.22	0.40
25:DA:271(P):C:C2'	25:DA:271(Q):G:H5'	2.52	0.40
25:DA:288:C:O2	25:DA:353:G:N2	2.29	0.40
25:DA:328:U:H4'	44:DY:68:HIS:NE2	2.36	0.40
25:DA:513:A:C2	25:DA:514:A:C5	3.09	0.40
25:DA:704:G:N3	25:DA:726:G:C2	2.90	0.40
25:DA:848:G:N9	25:DA:933:A:C8	2.88	0.40
25:DA:872:A:C5	25:DA:906:G:N2	2.90	0.40
25:DA:1328:G:H2'	25:DA:1330:C:C4	2.56	0.40
25:DA:1721:G:O6	25:DA:1739:U:H5''	2.21	0.40
25:DA:2091:U:O2'	47:D1:47:GLN:HG3	2.22	0.40
25:DA:2295:C:O2	25:DA:2338:G:C2	2.74	0.40
25:DA:2489:G:C6	25:DA:2490:G:N1	2.90	0.40
25:DA:2709:G:H2'	25:DA:2710:C:C6	2.57	0.40
26:DB:14:U:H1'	26:DB:108:U:O2'	2.21	0.40
27:DD:228:PRO:HD3	27:DD:235:GLY:CA	2.51	0.40
28:DE:60:ASN:OD1	28:DE:62:PRO:HD2	2.22	0.40
30:DG:15:VAL:HG13	30:DG:175:LEU:HB3	2.04	0.40
31:DH:9:ILE:HD11	31:DH:69:ARG:HD2	2.03	0.40
32:DI:62:LYS:O	32:DI:66:GLU:HB2	2.20	0.40
32:DI:116:LEU:HD11	32:DI:120:ILE:HG13	2.02	0.40
37:DR:1:MET:HB3	37:DR:2:ARG:H	1.54	0.40
38:DS:26:LEU:HD12	38:DS:39:ILE:HD11	2.04	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DV:20:LEU:HD12	41:DV:20:LEU:HA	1.84	0.40
45:DZ:30:ASN:HB2	45:DZ:89:PHE:CE2	2.56	0.40
47:D1:83:GLU:HA	47:D1:84:GLY:HA2	1.86	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:14:LEU:O	4:CD:20:TYR:OH[3_654]	2.11	0.09

## 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 X-ray entries followed by that with respect to entries of similar resolution.

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	
2	AB	231/256 (90%)	179 (78%)	50 (22%)	2 (1%)	17	56
2	CB	233/256 (91%)	182 (78%)	45 (19%)	6 (3%)	5	31
3	AC	202/239 (84%)	165 (82%)	33 (16%)	4 (2%)	7	38
3	CC	204/239 (85%)	168 (82%)	36 (18%)	0	100	100
4	AD	206/209 (99%)	166 (81%)	35 (17%)	5 (2%)	6	34
4	CD	206/209 (99%)	178 (86%)	23 (11%)	5 (2%)	6	34
5	AE	146/162 (90%)	120 (82%)	26 (18%)	0	100	100
5	CE	147/162 (91%)	129 (88%)	13 (9%)	5 (3%)	3	24
6	AF	98/101 (97%)	95 (97%)	3 (3%)	0	100	100
6	CF	98/101 (97%)	89 (91%)	9 (9%)	0	100	100
7	AG	152/156 (97%)	134 (88%)	17 (11%)	1 (1%)	22	61
7	CG	152/156 (97%)	131 (86%)	20 (13%)	1 (1%)	22	61
8	AH	136/138 (99%)	122 (90%)	13 (10%)	1 (1%)	22	61

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
8	CH	136/138 (99%)	126 (93%)	10 (7%)	0	100	100
9	AI	123/128 (96%)	105 (85%)	15 (12%)	3 (2%)	6	34
9	CI	123/128 (96%)	106 (86%)	13 (11%)	4 (3%)	4	25
10	AJ	94/105 (90%)	81 (86%)	9 (10%)	4 (4%)	2	20
10	CJ	94/105 (90%)	74 (79%)	17 (18%)	3 (3%)	4	26
11	AK	113/129 (88%)	101 (89%)	11 (10%)	1 (1%)	17	56
11	CK	112/129 (87%)	98 (88%)	14 (12%)	0	100	100
12	AL	120/132 (91%)	108 (90%)	10 (8%)	2 (2%)	9	42
12	CL	120/132 (91%)	111 (92%)	7 (6%)	2 (2%)	9	42
13	AM	113/126 (90%)	89 (79%)	20 (18%)	4 (4%)	3	24
13	CM	110/126 (87%)	82 (74%)	21 (19%)	7 (6%)	1	10
14	AN	57/61 (93%)	44 (77%)	13 (23%)	0	100	100
14	CN	57/61 (93%)	48 (84%)	8 (14%)	1 (2%)	8	41
15	AO	86/89 (97%)	74 (86%)	12 (14%)	0	100	100
15	CO	86/89 (97%)	75 (87%)	11 (13%)	0	100	100
16	AP	79/88 (90%)	62 (78%)	14 (18%)	3 (4%)	3	22
16	CP	80/88 (91%)	66 (82%)	10 (12%)	4 (5%)	2	16
17	AQ	97/105 (92%)	83 (86%)	13 (13%)	1 (1%)	15	54
17	CQ	97/105 (92%)	83 (86%)	13 (13%)	1 (1%)	15	54
18	AR	66/88 (75%)	56 (85%)	10 (15%)	0	100	100
18	CR	66/88 (75%)	58 (88%)	8 (12%)	0	100	100
19	AS	79/93 (85%)	63 (80%)	15 (19%)	1 (1%)	12	47
19	CS	73/93 (78%)	60 (82%)	13 (18%)	0	100	100
20	AT	94/106 (89%)	73 (78%)	19 (20%)	2 (2%)	7	37
20	CT	102/106 (96%)	73 (72%)	26 (26%)	3 (3%)	4	28
21	AU	23/27 (85%)	21 (91%)	2 (9%)	0	100	100
21	CU	21/27 (78%)	19 (90%)	2 (10%)	0	100	100
22	AY	130/140 (93%)	107 (82%)	21 (16%)	2 (2%)	10	44
27	BD	273/276 (99%)	254 (93%)	19 (7%)	0	100	100
27	DD	273/276 (99%)	255 (93%)	16 (6%)	2 (1%)	22	61
28	BE	202/206 (98%)	189 (94%)	9 (4%)	4 (2%)	7	38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
28	DE	202/206 (98%)	187 (93%)	12 (6%)	3 (2%)	10	44
29	BF	198/210 (94%)	183 (92%)	15 (8%)	0	100	100
29	DF	198/210 (94%)	175 (88%)	23 (12%)	0	100	100
30	BG	179/182 (98%)	158 (88%)	17 (10%)	4 (2%)	6	35
30	DG	178/182 (98%)	150 (84%)	28 (16%)	0	100	100
31	BH	172/180 (96%)	160 (93%)	12 (7%)	0	100	100
31	DH	172/180 (96%)	153 (89%)	17 (10%)	2 (1%)	13	49
32	BI	145/148 (98%)	116 (80%)	25 (17%)	4 (3%)	5	29
32	DI	144/148 (97%)	119 (83%)	23 (16%)	2 (1%)	11	46
33	BN	138/140 (99%)	124 (90%)	11 (8%)	3 (2%)	6	35
33	DN	138/140 (99%)	117 (85%)	19 (14%)	2 (1%)	11	46
34	BO	120/122 (98%)	113 (94%)	6 (5%)	1 (1%)	19	58
34	DO	120/122 (98%)	112 (93%)	8 (7%)	0	100	100
35	BP	147/150 (98%)	128 (87%)	17 (12%)	2 (1%)	11	46
35	DP	147/150 (98%)	130 (88%)	15 (10%)	2 (1%)	11	46
36	BQ	139/141 (99%)	127 (91%)	10 (7%)	2 (1%)	11	46
36	DQ	139/141 (99%)	121 (87%)	18 (13%)	0	100	100
37	BR	116/118 (98%)	107 (92%)	9 (8%)	0	100	100
37	DR	116/118 (98%)	102 (88%)	14 (12%)	0	100	100
38	BS	108/112 (96%)	93 (86%)	12 (11%)	3 (3%)	5	29
38	DS	108/112 (96%)	88 (82%)	18 (17%)	2 (2%)	8	39
39	BT	130/146 (89%)	124 (95%)	6 (5%)	0	100	100
39	DT	128/146 (88%)	119 (93%)	9 (7%)	0	100	100
40	BU	114/118 (97%)	111 (97%)	3 (3%)	0	100	100
40	DU	114/118 (97%)	107 (94%)	7 (6%)	0	100	100
41	BV	98/101 (97%)	93 (95%)	5 (5%)	0	100	100
41	DV	98/101 (97%)	89 (91%)	9 (9%)	0	100	100
42	BW	110/113 (97%)	104 (94%)	6 (6%)	0	100	100
42	DW	109/113 (96%)	97 (89%)	12 (11%)	0	100	100
43	BX	93/96 (97%)	87 (94%)	6 (6%)	0	100	100
43	DX	93/96 (97%)	84 (90%)	9 (10%)	0	100	100

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
44	BY	105/110 (96%)	94 (90%)	10 (10%)	1 (1%)	15	54
44	DY	105/110 (96%)	96 (91%)	8 (8%)	1 (1%)	15	54
45	BZ	184/206 (89%)	161 (88%)	21 (11%)	2 (1%)	14	51
45	DZ	187/206 (91%)	163 (87%)	21 (11%)	3 (2%)	9	43
46	B0	74/85 (87%)	69 (93%)	5 (7%)	0	100	100
46	D0	75/85 (88%)	67 (89%)	8 (11%)	0	100	100
47	B1	95/98 (97%)	90 (95%)	4 (4%)	1 (1%)	14	51
47	D1	95/98 (97%)	91 (96%)	4 (4%)	0	100	100
48	B2	68/72 (94%)	62 (91%)	5 (7%)	1 (2%)	10	44
48	D2	69/72 (96%)	60 (87%)	9 (13%)	0	100	100
49	B3	57/60 (95%)	54 (95%)	2 (4%)	1 (2%)	8	41
49	D3	56/60 (93%)	52 (93%)	4 (7%)	0	100	100
50	B4	44/71 (62%)	36 (82%)	8 (18%)	0	100	100
50	D4	44/71 (62%)	34 (77%)	9 (20%)	1 (2%)	6	34
51	B5	57/60 (95%)	52 (91%)	5 (9%)	0	100	100
51	D5	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
52	B6	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
52	D6	51/54 (94%)	45 (88%)	6 (12%)	0	100	100
53	B7	46/49 (94%)	43 (94%)	1 (2%)	2 (4%)	2	20
53	D7	46/49 (94%)	41 (89%)	4 (9%)	1 (2%)	6	35
54	B8	62/65 (95%)	58 (94%)	4 (6%)	0	100	100
54	D8	62/65 (95%)	57 (92%)	5 (8%)	0	100	100
55	B9	34/37 (92%)	33 (97%)	1 (3%)	0	100	100
55	D9	33/37 (89%)	32 (97%)	1 (3%)	0	100	100
All	All	11478/12268 (94%)	10072 (88%)	1276 (11%)	130 (1%)	14	51

All (130) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	77	ALA
3	AC	99	VAL
3	AC	100	ALA
3	AC	157	ILE
4	AD	110	PHE

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type
9	AI	118	LYS
10	AJ	56	HIS
16	AP	53	VAL
17	AQ	49	GLU
22	AY	69	VAL
32	BI	107	VAL
2	CB	15	VAL
5	CE	73	ASN
9	CI	54	ASP
13	CM	7	VAL
13	CM	45	VAL
16	CP	44	THR
17	CQ	14	LYS
20	CT	46	GLU
4	AD	153	ARG
7	AG	147	ALA
9	AI	23	ASN
10	AJ	94	VAL
11	AK	13	GLN
13	AM	50	GLU
20	AT	10	LEU
20	AT	71	THR
2	CB	23	ARG
5	CE	8	GLU
9	CI	119	ALA
13	CM	10	PRO
16	CP	16	HIS
20	CT	96	GLY
2	AB	10	LEU
9	AI	103	THR
13	AM	49	THR
13	AM	84	ILE
16	AP	49	LEU
30	BG	14	GLU
30	BG	47	LYS
32	BI	75	LEU
32	BI	105	HIS
33	BN	19	GLU
38	BS	101	LEU
45	BZ	165	VAL
47	B1	83	GLU
2	CB	22	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	7	PRO
4	CD	177	ASP
5	CE	9	LYS
9	CI	21	PRO
12	CL	26	ALA
16	CP	15	PRO
16	CP	53	VAL
20	CT	95	ALA
33	DN	47	ALA
3	AC	111	LEU
4	AD	15	GLU
12	AL	12	ARG
12	AL	26	ALA
30	BG	82	LEU
33	BN	5	VAL
35	BP	36	LYS
36	BQ	135	ASP
48	B2	52	ASP
53	B7	46	VAL
4	CD	176	LEU
5	CE	98	THR
5	CE	146	ALA
9	CI	88	TYR
13	CM	66	LEU
31	DH	71	LEU
38	DS	62	LYS
4	AD	166	LYS
28	BE	118	LYS
30	BG	115	ARG
33	BN	4	TYR
38	BS	102	ALA
53	B7	45	ALA
10	CJ	89	ASP
10	CJ	90	LEU
13	CM	51	ALA
32	DI	10	GLU
44	DY	2	ARG
16	AP	79	VAL
19	AS	5	LEU
35	BP	141	ALA
44	BY	2	ARG
2	CB	177	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	5	ILE
7	CG	55	GLY
13	CM	63	THR
14	CN	14	PRO
27	DD	3	VAL
27	DD	275	LYS
31	DH	92	ILE
32	DI	107	VAL
33	DN	129	PRO
35	DP	53	GLY
38	DS	63	THR
53	D7	46	VAL
28	BE	52	LEU
32	BI	133	HIS
10	CJ	34	VAL
28	DE	52	LEU
45	DZ	128	VAL
4	AD	44	GLY
8	AH	57	PRO
38	BS	85	VAL
45	BZ	161	VAL
2	CB	239	VAL
45	DZ	161	VAL
22	AY	70	ILE
28	BE	72	VAL
28	BE	73	GLU
34	BO	48	PRO
2	CB	131	PRO
12	CL	25	PRO
50	D4	33	VAL
10	AJ	34	VAL
13	AM	7	VAL
36	BQ	27	VAL
49	B3	59	VAL
13	CM	40	ASN
28	DE	72	VAL
45	DZ	47	VAL
4	CD	197	PRO
10	AJ	91	PRO
28	DE	30	PRO
35	DP	72	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 X-ray entries followed by that with respect to entries of similar resolution.

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	
2	AB	180/220 (82%)	127 (71%)	53 (29%)	0	1
2	CB	181/220 (82%)	132 (73%)	49 (27%)	0	1
3	AC	112/188 (60%)	89 (80%)	23 (20%)	1	6
3	CC	114/188 (61%)	96 (84%)	18 (16%)	2	12
4	AD	139/181 (77%)	112 (81%)	27 (19%)	1	7
4	CD	142/181 (78%)	112 (79%)	30 (21%)	1	6
5	AE	108/123 (88%)	77 (71%)	31 (29%)	0	1
5	CE	109/123 (89%)	84 (77%)	25 (23%)	1	4
6	AF	77/90 (86%)	64 (83%)	13 (17%)	2	10
6	CF	76/90 (84%)	61 (80%)	15 (20%)	1	7
7	AG	103/127 (81%)	83 (81%)	20 (19%)	1	7
7	CG	102/127 (80%)	78 (76%)	24 (24%)	1	3
8	AH	103/119 (87%)	85 (82%)	18 (18%)	2	9
8	CH	104/119 (87%)	89 (86%)	15 (14%)	3	15
9	AI	64/99 (65%)	55 (86%)	9 (14%)	3	16
9	CI	62/99 (63%)	52 (84%)	10 (16%)	2	11
10	AJ	52/92 (56%)	38 (73%)	14 (27%)	0	2
10	CJ	52/92 (56%)	36 (69%)	16 (31%)	0	0
11	AK	83/99 (84%)	60 (72%)	23 (28%)	0	1
11	CK	81/99 (82%)	61 (75%)	20 (25%)	0	2
12	AL	92/109 (84%)	73 (79%)	19 (21%)	1	6
12	CL	91/109 (84%)	71 (78%)	20 (22%)	1	5
13	AM	66/101 (65%)	44 (67%)	22 (33%)	0	0
13	CM	62/101 (61%)	39 (63%)	23 (37%)	0	0
14	AN	46/50 (92%)	40 (87%)	6 (13%)	4	19
14	CN	45/50 (90%)	30 (67%)	15 (33%)	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
15	AO	77/80 (96%)	61 (79%)	16 (21%)	1	6
15	CO	77/80 (96%)	64 (83%)	13 (17%)	2	10
16	AP	63/74 (85%)	44 (70%)	19 (30%)	0	1
16	CP	65/74 (88%)	49 (75%)	16 (25%)	0	2
17	AQ	94/97 (97%)	79 (84%)	15 (16%)	2	11
17	CQ	93/97 (96%)	77 (83%)	16 (17%)	2	10
18	AR	49/77 (64%)	41 (84%)	8 (16%)	2	11
18	CR	49/77 (64%)	36 (74%)	13 (26%)	0	2
19	AS	43/80 (54%)	34 (79%)	9 (21%)	1	6
19	CS	42/80 (52%)	28 (67%)	14 (33%)	0	0
20	AT	66/82 (80%)	47 (71%)	19 (29%)	0	1
20	CT	72/82 (88%)	56 (78%)	16 (22%)	1	4
21	AU	20/22 (91%)	14 (70%)	6 (30%)	0	1
21	CU	14/22 (64%)	13 (93%)	1 (7%)	14	47
22	AY	108/115 (94%)	74 (68%)	34 (32%)	0	0
27	BD	214/218 (98%)	169 (79%)	45 (21%)	1	6
27	DD	215/218 (99%)	167 (78%)	48 (22%)	1	4
28	BE	163/166 (98%)	126 (77%)	37 (23%)	1	4
28	DE	163/166 (98%)	128 (78%)	35 (22%)	1	5
29	BF	158/166 (95%)	123 (78%)	35 (22%)	1	4
29	DF	159/166 (96%)	128 (80%)	31 (20%)	1	7
30	BG	128/156 (82%)	103 (80%)	25 (20%)	1	7
30	DG	127/156 (81%)	95 (75%)	32 (25%)	0	2
31	BH	141/148 (95%)	113 (80%)	28 (20%)	1	6
31	DH	141/148 (95%)	111 (79%)	30 (21%)	1	5
32	BI	105/124 (85%)	75 (71%)	30 (29%)	0	1
32	DI	104/124 (84%)	76 (73%)	28 (27%)	0	2
33	BN	117/119 (98%)	93 (80%)	24 (20%)	1	6
33	DN	117/119 (98%)	90 (77%)	27 (23%)	1	3
34	BO	98/100 (98%)	73 (74%)	25 (26%)	0	2
34	DO	98/100 (98%)	70 (71%)	28 (29%)	0	1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
35	BP	114/116 (98%)	87 (76%)	27 (24%)	1	3
35	DP	114/116 (98%)	90 (79%)	24 (21%)	1	6
36	BQ	111/111 (100%)	91 (82%)	20 (18%)	1	9
36	DQ	111/111 (100%)	93 (84%)	18 (16%)	2	11
37	BR	101/101 (100%)	79 (78%)	22 (22%)	1	5
37	DR	101/101 (100%)	79 (78%)	22 (22%)	1	5
38	BS	84/88 (96%)	66 (79%)	18 (21%)	1	5
38	DS	86/88 (98%)	68 (79%)	18 (21%)	1	6
39	BT	111/127 (87%)	90 (81%)	21 (19%)	1	8
39	DT	110/127 (87%)	82 (74%)	28 (26%)	0	2
40	BU	93/94 (99%)	77 (83%)	16 (17%)	2	10
40	DU	93/94 (99%)	77 (83%)	16 (17%)	2	10
41	BV	80/82 (98%)	66 (82%)	14 (18%)	2	9
41	DV	81/82 (99%)	56 (69%)	25 (31%)	0	1
42	BW	91/92 (99%)	71 (78%)	20 (22%)	1	5
42	DW	89/92 (97%)	74 (83%)	15 (17%)	2	10
43	BX	75/78 (96%)	63 (84%)	12 (16%)	2	11
43	DX	73/78 (94%)	61 (84%)	12 (16%)	2	11
44	BY	80/91 (88%)	63 (79%)	17 (21%)	1	5
44	DY	79/91 (87%)	59 (75%)	20 (25%)	0	2
45	BZ	156/179 (87%)	128 (82%)	28 (18%)	2	9
45	DZ	152/179 (85%)	119 (78%)	33 (22%)	1	5
46	B0	59/67 (88%)	47 (80%)	12 (20%)	1	6
46	D0	61/67 (91%)	47 (77%)	14 (23%)	1	3
47	B1	78/83 (94%)	61 (78%)	17 (22%)	1	5
47	D1	78/83 (94%)	58 (74%)	20 (26%)	0	2
48	B2	65/67 (97%)	49 (75%)	16 (25%)	0	2
48	D2	63/67 (94%)	50 (79%)	13 (21%)	1	6
49	B3	49/52 (94%)	44 (90%)	5 (10%)	7	29
49	D3	49/52 (94%)	40 (82%)	9 (18%)	1	8
50	B4	39/63 (62%)	28 (72%)	11 (28%)	0	1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
50	D4	39/63 (62%)	25 (64%)	14 (36%)	0	0
51	B5	50/52 (96%)	41 (82%)	9 (18%)	1	9
51	D5	49/52 (94%)	39 (80%)	10 (20%)	1	6
52	B6	50/52 (96%)	34 (68%)	16 (32%)	0	0
52	D6	48/52 (92%)	38 (79%)	10 (21%)	1	6
53	B7	41/42 (98%)	32 (78%)	9 (22%)	1	5
53	D7	38/42 (90%)	30 (79%)	8 (21%)	1	6
54	B8	52/55 (94%)	45 (86%)	7 (14%)	4	18
54	D8	52/55 (94%)	43 (83%)	9 (17%)	2	10
55	B9	32/34 (94%)	26 (81%)	6 (19%)	1	8
55	D9	32/34 (94%)	25 (78%)	7 (22%)	1	5
All	All	8835/10181 (87%)	6886 (78%)	1949 (22%)	1	4

All (1949) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	16	HIS
2	AB	17	PHE
2	AB	21	ARG
2	AB	23	ARG
2	AB	24	TRP
2	AB	44	LEU
2	AB	45	GLN
2	AB	48	MET
2	AB	49	GLU
2	AB	51	LEU
2	AB	60	ASP
2	AB	69	LEU
2	AB	71	VAL
2	AB	80	ILE
2	AB	82	ARG
2	AB	86	GLU
2	AB	87	ARG
2	AB	90	MET
2	AB	93	VAL
2	AB	107	THR
2	AB	108	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	AB	118	LEU
2	AB	119	GLU
2	AB	121	LEU
2	AB	126	GLU
2	AB	136	VAL
2	AB	137	ARG
2	AB	140	HIS
2	AB	145	LEU
2	AB	149	LEU
2	AB	153	ARG
2	AB	155	LEU
2	AB	156	LYS
2	AB	170	GLU
2	AB	172	ILE
2	AB	178	ARG
2	AB	185	ILE
2	AB	187	LEU
2	AB	192	SER
2	AB	195	ASP
2	AB	197	VAL
2	AB	200	ILE
2	AB	206	ASP
2	AB	208	ILE
2	AB	209	ARG
2	AB	210	SER
2	AB	215	LEU
2	AB	221	LEU
2	AB	230	VAL
2	AB	231	GLU
2	AB	236	TYR
2	AB	238	LEU
3	AC	3	ASN
3	AC	12	LEU
3	AC	16	ARG
3	AC	31	HIS
3	AC	32	LEU
3	AC	43	LEU
3	AC	47	LEU
3	AC	52	LEU
3	AC	104	GLN
3	AC	112	SER
3	AC	118	GLN

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
3	AC	126	ARG
3	AC	131	ARG
3	AC	134	ILE
3	AC	136	GLN
3	AC	141	VAL
3	AC	175	LEU
3	AC	179	ARG
3	AC	184	TYR
3	AC	188	LEU
3	AC	192	THR
3	AC	193	TYR
3	AC	202	ILE
4	AD	8	VAL
4	AD	12	CYS
4	AD	13	ARG
4	AD	15	GLU
4	AD	26	CYS
4	AD	33	MET
4	AD	35	ARG
4	AD	36	ARG
4	AD	57	ARG
4	AD	58	LEU
4	AD	59	ARG
4	AD	65	ARG
4	AD	107	ARG
4	AD	110	PHE
4	AD	122	ARG
4	AD	126	ILE
4	AD	127	THR
4	AD	134	ASP
4	AD	135	LEU
4	AD	138	TYR
4	AD	155	LEU
4	AD	158	ILE
4	AD	175	SER
4	AD	188	LEU
4	AD	194	LEU
4	AD	200	GLU
4	AD	201	GLN
5	AE	11	ILE
5	AE	16	THR
5	AE	18	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	AE	27	ARG
5	AE	38	GLN
5	AE	41	VAL
5	AE	47	LYS
5	AE	51	VAL
5	AE	53	LEU
5	AE	60	TYR
5	AE	65	ASN
5	AE	66	MET
5	AE	67	VAL
5	AE	73	ASN
5	AE	75	THR
5	AE	76	ILE
5	AE	78	HIS
5	AE	79	GLU
5	AE	82	VAL
5	AE	83	GLU
5	AE	87	SER
5	AE	89	ILE
5	AE	91	LEU
5	AE	100	VAL
5	AE	112	LEU
5	AE	117	ASP
5	AE	120	THR
5	AE	135	THR
5	AE	137	GLU
5	AE	147	ASP
5	AE	149	GLU
6	AF	1	MET
6	AF	14	LEU
6	AF	25	ILE
6	AF	36	ARG
6	AF	55	ASP
6	AF	57	GLN
6	AF	64	GLN
6	AF	65	VAL
6	AF	70	ASP
6	AF	74	ASP
6	AF	82	ARG
6	AF	89	MET
6	AF	98	LEU
7	AG	6	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	AG	12	LEU
7	AG	15	ASP
7	AG	21	VAL
7	AG	27	ILE
7	AG	32	ARG
7	AG	41	ARG
7	AG	51	GLN
7	AG	59	LEU
7	AG	61	VAL
7	AG	74	GLU
7	AG	89	MET
7	AG	104	LEU
7	AG	113	GLU
7	AG	120	ILE
7	AG	125	MET
7	AG	138	LYS
7	AG	142	GLU
7	AG	144	MET
7	AG	155	ARG
8	AH	21	LYS
8	AH	24	THR
8	AH	26	VAL
8	AH	35	ILE
8	AH	52	ASP
8	AH	60	ARG
8	AH	63	LEU
8	AH	68	ARG
8	AH	78	GLN
8	AH	83	ILE
8	AH	84	ARG
8	AH	91	ARG
8	AH	99	GLU
8	AH	107	LEU
8	AH	109	ILE
8	AH	114	THR
8	AH	127	LEU
8	AH	138	TRP
9	AI	11	LYS
9	AI	17	VAL
9	AI	31	GLN
9	AI	65	VAL
9	AI	83	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	AI	107	ARG
9	AI	108	VAL
9	AI	114	TYR
9	AI	124	GLN
10	AJ	16	LEU
10	AJ	19	SER
10	AJ	51	ARG
10	AJ	54	PHE
10	AJ	55	LYS
10	AJ	62	HIS
10	AJ	65	LEU
10	AJ	66	ARG
10	AJ	67	THR
10	AJ	68	HIS
10	AJ	94	VAL
10	AJ	96	ILE
10	AJ	97	GLU
10	AJ	100	THR
11	AK	12	ARG
11	AK	13	GLN
11	AK	14	VAL
11	AK	25	TYR
11	AK	29	ILE
11	AK	43	SER
11	AK	48	ILE
11	AK	51	LYS
11	AK	54	ARG
11	AK	62	GLN
11	AK	63	LEU
11	AK	70	LYS
11	AK	75	TYR
11	AK	81	ASP
11	AK	82	VAL
11	AK	84	VAL
11	AK	87	THR
11	AK	96	ARG
11	AK	104	GLN
11	AK	105	VAL
11	AK	107	SER
11	AK	117	ASN
11	AK	120	ARG
12	AL	33	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	AL	39	VAL
12	AL	44	THR
12	AL	52	LEU
12	AL	53	ARG
12	AL	54	LYS
12	AL	55	VAL
12	AL	60	LEU
12	AL	61	THR
12	AL	66	VAL
12	AL	67	THR
12	AL	81	SER
12	AL	84	LEU
12	AL	97	ARG
12	AL	104	VAL
12	AL	114	LYS
12	AL	115	LYS
12	AL	118	SER
12	AL	124	LYS
13	AM	3	ARG
13	AM	4	ILE
13	AM	14	ARG
13	AM	20	THR
13	AM	47	ASP
13	AM	49	THR
13	AM	59	TYR
13	AM	60	VAL
13	AM	64	TRP
13	AM	69	GLU
13	AM	70	LEU
13	AM	78	ILE
13	AM	98	VAL
13	AM	99	ARG
13	AM	102	ARG
13	AM	104	ARG
13	AM	108	ARG
13	AM	109	THR
13	AM	110	ARG
13	AM	114	ARG
13	AM	115	LYS
13	AM	116	THR
14	AN	7	ILE
14	AN	18	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	AN	23	ARG
14	AN	33	VAL
14	AN	41	ARG
14	AN	44	LEU
15	AO	3	ILE
15	AO	4	THR
15	AO	7	GLU
15	AO	13	GLN
15	AO	17	ARG
15	AO	26	GLU
15	AO	28	GLN
15	AO	35	ARG
15	AO	39	LEU
15	AO	47	LYS
15	AO	64	ARG
15	AO	65	ARG
15	AO	71	GLN
15	AO	73	GLU
15	AO	87	ILE
15	AO	88	ARG
16	AP	1	MET
16	AP	8	ARG
16	AP	11	SER
16	AP	20	VAL
16	AP	22	THR
16	AP	25	ARG
16	AP	27	LYS
16	AP	32	TYR
16	AP	40	ASP
16	AP	45	THR
16	AP	48	TRP
16	AP	49	LEU
16	AP	53	VAL
16	AP	55	ARG
16	AP	61	SER
16	AP	67	THR
16	AP	69	THR
16	AP	72	ARG
16	AP	76	GLN
17	AQ	6	LEU
17	AQ	14	LYS
17	AQ	18	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
17	AQ	21	VAL
17	AQ	24	GLU
17	AQ	29	HIS
17	AQ	35	VAL
17	AQ	48	GLU
17	AQ	57	VAL
17	AQ	60	ILE
17	AQ	68	ARG
17	AQ	77	VAL
17	AQ	79	SER
17	AQ	89	LEU
17	AQ	100	LYS
18	AR	29	PHE
18	AR	31	LEU
18	AR	32	ARG
18	AR	35	ARG
18	AR	47	THR
18	AR	55	ARG
18	AR	58	LEU
18	AR	69	THR
19	AS	7	LYS
19	AS	31	ILE
19	AS	33	THR
19	AS	37	ARG
19	AS	44	MET
19	AS	62	ILE
19	AS	66	MET
19	AS	70	LYS
19	AS	79	THR
20	AT	8	ARG
20	AT	10	LEU
20	AT	13	LEU
20	AT	19	SER
20	AT	20	LEU
20	AT	24	LEU
20	AT	30	LYS
20	AT	31	SER
20	AT	36	LEU
20	AT	39	LYS
20	AT	51	GLU
20	AT	56	MET
20	AT	62	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
20	AT	73	HIS
20	AT	74	LYS
20	AT	75	ASN
20	AT	80	ARG
20	AT	82	SER
20	AT	84	LEU
21	AU	12	LYS
21	AU	15	ARG
21	AU	17	THR
21	AU	20	LYS
21	AU	24	ARG
21	AU	26	LYS
22	AY	6	ARG
22	AY	10	ILE
22	AY	14	GLU
22	AY	18	THR
22	AY	33	THR
22	AY	40	ARG
22	AY	43	ILE
22	AY	44	ARG
22	AY	48	LEU
22	AY	54	GLU
22	AY	57	LEU
22	AY	65	SER
22	AY	67	ASP
22	AY	71	VAL
22	AY	73	LYS
22	AY	80	GLN
22	AY	81	GLU
22	AY	88	LEU
22	AY	91	LEU
22	AY	94	MET
22	AY	97	GLU
22	AY	103	LYS
22	AY	106	ARG
22	AY	108	THR
22	AY	112	ARG
22	AY	117	ARG
22	AY	118	ARG
22	AY	119	LEU
22	AY	122	LYS
22	AY	124	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
22	AY	125	LYS
22	AY	128	VAL
22	AY	131	MET
22	AY	132	ARG
27	BD	3	VAL
27	BD	12	SER
27	BD	13	ARG
27	BD	14	ARG
27	BD	18	VAL
27	BD	27	THR
27	BD	31	LYS
27	BD	35	LYS
27	BD	40	THR
27	BD	54	ARG
27	BD	61	LEU
27	BD	69	ARG
27	BD	71	ASP
27	BD	72	LYS
27	BD	94	LEU
27	BD	103	ARG
27	BD	104	TYR
27	BD	106	ILE
27	BD	112	GLN
27	BD	113	VAL
27	BD	116	GLN
27	BD	138	VAL
27	BD	142	VAL
27	BD	147	LEU
27	BD	150	LYS
27	BD	155	LEU
27	BD	164	GLN
27	BD	181	GLU
27	BD	182	LEU
27	BD	192	THR
27	BD	193	VAL
27	BD	200	ASP
27	BD	208	LYS
27	BD	211	ARG
27	BD	213	ARG
27	BD	217	ARG
27	BD	221	VAL
27	BD	229	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
27	BD	239	ARG
27	BD	242	ARG
27	BD	257	LEU
27	BD	260	ARG
27	BD	261	LYS
27	BD	271	ILE
27	BD	274	ARG
28	BE	2	LYS
28	BE	7	VAL
28	BE	9	VAL
28	BE	12	THR
28	BE	13	ARG
28	BE	16	ARG
28	BE	21	VAL
28	BE	24	THR
28	BE	33	VAL
28	BE	34	VAL
28	BE	39	PRO
28	BE	47	VAL
28	BE	49	LEU
28	BE	52	LEU
28	BE	61	ARG
28	BE	63	LEU
28	BE	72	VAL
28	BE	75	VAL
28	BE	76	ARG
28	BE	77	ILE
28	BE	79	ARG
28	BE	82	ARG
28	BE	91	VAL
28	BE	93	VAL
28	BE	113	PHE
28	BE	116	VAL
28	BE	117	MET
28	BE	119	ARG
28	BE	144	ARG
28	BE	154	LYS
28	BE	163	GLU
28	BE	170	LEU
28	BE	173	VAL
28	BE	175	VAL
28	BE	182	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	BE	200	GLU
28	BE	202	LYS
29	BF	12	LEU
29	BF	15	SER
29	BF	19	GLU
29	BF	32	LEU
29	BF	33	LEU
29	BF	38	ARG
29	BF	50	SER
29	BF	57	VAL
29	BF	60	SER
29	BF	62	ARG
29	BF	64	ILE
29	BF	74	ARG
29	BF	77	ASP
29	BF	82	ILE
29	BF	106	ARG
29	BF	129	PHE
29	BF	135	LYS
29	BF	136	THR
29	BF	137	LYS
29	BF	140	LEU
29	BF	152	GLU
29	BF	158	THR
29	BF	161	GLU
29	BF	162	LEU
29	BF	170	LEU
29	BF	175	THR
29	BF	189	THR
29	BF	190	GLU
29	BF	191	ARG
29	BF	194	MET
29	BF	196	LEU
29	BF	197	ASP
29	BF	200	GLU
29	BF	201	VAL
29	BF	205	ARG
30	BG	5	VAL
30	BG	7	LEU
30	BG	9	ARG
30	BG	13	GLU
30	BG	22	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
30	BG	28	VAL
30	BG	35	GLU
30	BG	39	ILE
30	BG	43	LEU
30	BG	60	LEU
30	BG	64	THR
30	BG	91	ARG
30	BG	103	LEU
30	BG	126	ASP
30	BG	128	ARG
30	BG	135	LEU
30	BG	139	LEU
30	BG	148	MET
30	BG	149	VAL
30	BG	152	LEU
30	BG	153	ARG
30	BG	155	MET
30	BG	161	THR
30	BG	165	THR
30	BG	170	ARG
31	BH	3	ARG
31	BH	6	ARG
31	BH	10	PRO
31	BH	24	VAL
31	BH	39	PRO
31	BH	41	MET
31	BH	43	VAL
31	BH	44	VAL
31	BH	45	VAL
31	BH	56	SER
31	BH	62	LYS
31	BH	69	ARG
31	BH	70	THR
31	BH	71	LEU
31	BH	72	ILE
31	BH	84	SER
31	BH	98	LEU
31	BH	101	ARG
31	BH	107	VAL
31	BH	111	HIS
31	BH	122	THR
31	BH	129	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
31	BH	136	ILE
31	BH	139	GLN
31	BH	149	ARG
31	BH	158	HIS
31	BH	169	VAL
31	BH	171	LEU
32	BI	1	MET
32	BI	9	LEU
32	BI	15	VAL
32	BI	21	VAL
32	BI	28	ASN
32	BI	31	LEU
32	BI	33	ARG
32	BI	35	LEU
32	BI	40	THR
32	BI	41	GLU
32	BI	42	SER
32	BI	51	ILE
32	BI	57	ARG
32	BI	72	LEU
32	BI	73	GLU
32	BI	75	LEU
32	BI	76	THR
32	BI	78	THR
32	BI	79	ILE
32	BI	85	GLU
32	BI	86	THR
32	BI	87	LYS
32	BI	92	VAL
32	BI	102	SER
32	BI	108	THR
32	BI	114	LEU
32	BI	116	LEU
32	BI	123	LEU
32	BI	140	LEU
32	BI	147	GLN
33	BN	1	MET
33	BN	5	VAL
33	BN	12	ARG
33	BN	28	THR
33	BN	33	LEU
33	BN	34	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
33	BN	35	ARG
33	BN	45	ASN
33	BN	48	MET
33	BN	60	ILE
33	BN	61	ARG
33	BN	62	VAL
33	BN	65	LYS
33	BN	67	LEU
33	BN	73	THR
33	BN	82	LEU
33	BN	85	ILE
33	BN	87	LEU
33	BN	89	LYS
33	BN	97	ARG
33	BN	99	LEU
33	BN	120	LEU
33	BN	121	LYS
33	BN	133	GLN
34	BO	10	VAL
34	BO	12	ASP
34	BO	17	ARG
34	BO	21	CYS
34	BO	22	ILE
34	BO	24	VAL
34	BO	29	ASN
34	BO	42	SER
34	BO	45	GLU
34	BO	52	VAL
34	BO	53	LYS
34	BO	68	GLU
34	BO	75	SER
34	BO	77	ILE
34	BO	86	ILE
34	BO	88	ASN
34	BO	91	LEU
34	BO	92	GLU
34	BO	94	ARG
34	BO	96	THR
34	BO	97	ARG
34	BO	104	ARG
34	BO	113	LYS
34	BO	114	ILE

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
34	BO	116	SER
35	BP	1	MET
35	BP	21	ARG
35	BP	32	THR
35	BP	33	ARG
35	BP	42	SER
35	BP	46	LYS
35	BP	49	ARG
35	BP	52	GLU
35	BP	55	ARG
35	BP	56	SER
35	BP	57	THR
35	BP	58	THR
35	BP	59	LEU
35	BP	64	LYS
35	BP	65	ARG
35	BP	67	MET
35	BP	75	ILE
35	BP	90	ARG
35	BP	94	GLU
35	BP	99	LEU
35	BP	106	LEU
35	BP	112	LEU
35	BP	117	GLU
35	BP	119	GLU
35	BP	126	VAL
35	BP	148	LEU
35	BP	149	GLU
36	BQ	1	MET
36	BQ	7	MET
36	BQ	8	LYS
36	BQ	11	LYS
36	BQ	21	THR
36	BQ	22	LYS
36	BQ	35	VAL
36	BQ	37	LEU
36	BQ	45	GLN
36	BQ	46	GLN
36	BQ	75	THR
36	BQ	81	VAL
36	BQ	101	ARG
36	BQ	106	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BQ	109	VAL
36	BQ	110	THR
36	BQ	111	GLU
36	BQ	115	MET
36	BQ	127	ILE
36	BQ	134	ARG
37	BR	2	ARG
37	BR	6	SER
37	BR	9	LYS
37	BR	18	LEU
37	BR	28	LEU
37	BR	29	LEU
37	BR	36	THR
37	BR	44	LEU
37	BR	54	LEU
37	BR	59	ASP
37	BR	60	LEU
37	BR	63	ARG
37	BR	65	LEU
37	BR	67	LEU
37	BR	72	ASP
37	BR	75	LEU
37	BR	79	LEU
37	BR	86	ARG
37	BR	90	ARG
37	BR	100	LEU
37	BR	111	LEU
37	BR	114	VAL
38	BS	3	ARG
38	BS	14	VAL
38	BS	20	ARG
38	BS	21	THR
38	BS	25	ARG
38	BS	32	LEU
38	BS	35	ILE
38	BS	36	TYR
38	BS	42	ASP
38	BS	50	SER
38	BS	69	VAL
38	BS	73	LEU
38	BS	78	LEU
38	BS	88	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	BS	95	HIS
38	BS	98	VAL
38	BS	101	LEU
38	BS	110	LEU
39	BT	1	MET
39	BT	6	LEU
39	BT	7	ILE
39	BT	13	ARG
39	BT	17	THR
39	BT	28	VAL
39	BT	35	LYS
39	BT	38	ASN
39	BT	39	ARG
39	BT	49	VAL
39	BT	51	ARG
39	BT	53	ARG
39	BT	64	ARG
39	BT	70	VAL
39	BT	85	LYS
39	BT	87	ASP
39	BT	89	VAL
39	BT	96	ARG
39	BT	113	LYS
39	BT	118	ARG
39	BT	119	LYS
40	BU	8	VAL
40	BU	13	LYS
40	BU	15	LYS
40	BU	31	SER
40	BU	36	ARG
40	BU	38	THR
40	BU	51	LYS
40	BU	55	ARG
40	BU	59	ARG
40	BU	60	LEU
40	BU	74	LEU
40	BU	83	LEU
40	BU	95	LEU
40	BU	104	GLN
40	BU	108	GLU
40	BU	112	ARG
41	BV	18	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	BV	20	LEU
41	BV	21	ARG
41	BV	32	THR
41	BV	35	LEU
41	BV	43	GLU
41	BV	51	VAL
41	BV	52	VAL
41	BV	62	LEU
41	BV	70	ILE
41	BV	73	SER
41	BV	79	VAL
41	BV	82	ARG
41	BV	85	LYS
42	BW	1	MET
42	BW	2	GLU
42	BW	6	ILE
42	BW	11	ARG
42	BW	19	LEU
42	BW	23	LEU
42	BW	24	ILE
42	BW	29	LEU
42	BW	51	LEU
42	BW	60	ASN
42	BW	67	ASP
42	BW	78	GLU
42	BW	83	LYS
42	BW	90	ARG
42	BW	92	ARG
42	BW	97	LYS
42	BW	100	THR
42	BW	101	SER
42	BW	107	LEU
42	BW	111	HIS
43	BX	33	LYS
43	BX	38	GLU
43	BX	45	THR
43	BX	48	LYS
43	BX	57	LEU
43	BX	60	ARG
43	BX	65	ARG
43	BX	70	LEU
43	BX	72	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
43	BX	73	ARG
43	BX	87	GLN
43	BX	92	LEU
44	BY	1	MET
44	BY	5	MET
44	BY	8	LYS
44	BY	9	LYS
44	BY	23	ARG
44	BY	34	LYS
44	BY	43	ASN
44	BY	47	LYS
44	BY	55	TYR
44	BY	70	SER
44	BY	72	VAL
44	BY	73	ARG
44	BY	83	THR
44	BY	90	LEU
44	BY	91	GLU
44	BY	97	ARG
44	BY	107	ASP
45	BZ	5	LEU
45	BZ	16	SER
45	BZ	18	LEU
45	BZ	19	ARG
45	BZ	25	PRO
45	BZ	31	ARG
45	BZ	32	HIS
45	BZ	41	LEU
45	BZ	46	LYS
45	BZ	56	VAL
45	BZ	57	ILE
45	BZ	67	LEU
45	BZ	72	ARG
45	BZ	74	VAL
45	BZ	76	LEU
45	BZ	82	ARG
45	BZ	86	VAL
45	BZ	87	ASP
45	BZ	91	LEU
45	BZ	129	SER
45	BZ	133	ILE
45	BZ	138	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	BZ	142	SER
45	BZ	156	LYS
45	BZ	157	LEU
45	BZ	161	VAL
45	BZ	170	THR
45	BZ	181	GLU
46	B0	9	SER
46	B0	10	THR
46	B0	17	GLN
46	B0	20	ARG
46	B0	29	GLN
46	B0	32	ARG
46	B0	37	LEU
46	B0	38	VAL
46	B0	41	ARG
46	B0	46	LYS
46	B0	55	ARG
46	B0	63	VAL
47	B1	21	ARG
47	B1	26	ARG
47	B1	32	LYS
47	B1	33	LYS
47	B1	40	ARG
47	B1	46	LEU
47	B1	50	ARG
47	B1	51	VAL
47	B1	53	VAL
47	B1	58	ILE
47	B1	59	THR
47	B1	62	VAL
47	B1	65	SER
47	B1	81	LYS
47	B1	83	GLU
47	B1	86	SER
47	B1	95	LEU
48	B2	3	LEU
48	B2	16	LEU
48	B2	28	LYS
48	B2	30	ARG
48	B2	32	LEU
48	B2	34	GLU
48	B2	41	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	B2	46	GLN
48	B2	47	ASN
48	B2	50	ILE
48	B2	51	ARG
48	B2	53	LEU
48	B2	55	ARG
48	B2	64	LEU
48	B2	68	ARG
48	B2	70	GLN
49	B3	6	VAL
49	B3	8	LEU
49	B3	23	LEU
49	B3	40	THR
49	B3	53	LEU
50	B4	1	MET
50	B4	5	ILE
50	B4	8	LYS
50	B4	22	ILE
50	B4	25	TYR
50	B4	27	THR
50	B4	30	GLU
50	B4	34	GLU
50	B4	37	SER
50	B4	39	CYS
50	B4	43	TYR
51	B5	6	VAL
51	B5	8	LYS
51	B5	16	ARG
51	B5	29	THR
51	B5	37	LYS
51	B5	40	LYS
51	B5	55	ARG
51	B5	57	VAL
51	B5	58	LEU
52	B6	6	ARG
52	B6	8	LYS
52	B6	9	LEU
52	B6	10	LEU
52	B6	13	CYS
52	B6	14	THR
52	B6	18	ARG
52	B6	23	THR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
52	B6	24	GLU
52	B6	27	LYS
52	B6	33	LYS
52	B6	37	ARG
52	B6	40	CYS
52	B6	44	ARG
52	B6	48	VAL
52	B6	49	HIS
53	B7	1	MET
53	B7	4	THR
53	B7	8	ASN
53	B7	14	LYS
53	B7	24	THR
53	B7	32	LYS
53	B7	43	THR
53	B7	44	PRO
53	B7	47	ARG
54	B8	15	LYS
54	B8	31	HIS
54	B8	34	TRP
54	B8	35	GLN
54	B8	37	SER
54	B8	58	ILE
54	B8	64	TYR
55	B9	2	LYS
55	B9	6	SER
55	B9	9	ARG
55	B9	18	ARG
55	B9	26	ILE
55	B9	36	GLN
2	CB	17	PHE
2	CB	21	ARG
2	CB	24	TRP
2	CB	30	ARG
2	CB	45	GLN
2	CB	48	MET
2	CB	50	GLU
2	CB	58	ILE
2	CB	60	ASP
2	CB	63	MET
2	CB	67	THR
2	CB	71	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	CB	73	THR
2	CB	80	ILE
2	CB	87	ARG
2	CB	90	MET
2	CB	93	VAL
2	CB	101	MET
2	CB	105	PHE
2	CB	107	THR
2	CB	108	ILE
2	CB	111	ARG
2	CB	116	GLU
2	CB	119	GLU
2	CB	121	LEU
2	CB	122	PHE
2	CB	126	GLU
2	CB	127	ILE
2	CB	138	LEU
2	CB	140	HIS
2	CB	142	LEU
2	CB	153	ARG
2	CB	154	LEU
2	CB	158	LEU
2	CB	164	VAL
2	CB	174	VAL
2	CB	175	ARG
2	CB	185	ILE
2	CB	187	LEU
2	CB	191	ASP
2	CB	193	ASP
2	CB	198	ASP
2	CB	200	ILE
2	CB	205	ASP
2	CB	221	LEU
2	CB	222	ILE
2	CB	229	VAL
2	CB	230	VAL
2	CB	231	GLU
3	CC	5	ILE
3	CC	18	TRP
3	CC	30	ARG
3	CC	31	HIS
3	CC	46	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	CC	47	LEU
3	CC	52	LEU
3	CC	57	ILE
3	CC	67	THR
3	CC	131	ARG
3	CC	132	ARG
3	CC	140	ARG
3	CC	153	VAL
3	CC	167	TRP
3	CC	178	LEU
3	CC	179	ARG
3	CC	193	TYR
3	CC	207	VAL
4	CD	5	ILE
4	CD	8	VAL
4	CD	10	ARG
4	CD	12	CYS
4	CD	15	GLU
4	CD	19	LEU
4	CD	26	CYS
4	CD	28	SER
4	CD	36	ARG
4	CD	58	LEU
4	CD	59	ARG
4	CD	65	ARG
4	CD	77	ASN
4	CD	97	LEU
4	CD	101	LEU
4	CD	106	TYR
4	CD	107	ARG
4	CD	119	GLN
4	CD	126	ILE
4	CD	127	THR
4	CD	135	LEU
4	CD	137	SER
4	CD	152	SER
4	CD	153	ARG
4	CD	156	GLU
4	CD	158	ILE
4	CD	162	LEU
4	CD	177	ASP
4	CD	188	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	201	GLN
5	CE	11	ILE
5	CE	13	ILE
5	CE	31	LEU
5	CE	37	ARG
5	CE	38	GLN
5	CE	41	VAL
5	CE	47	LYS
5	CE	51	VAL
5	CE	55	VAL
5	CE	71	LEU
5	CE	78	HIS
5	CE	81	GLU
5	CE	89	ILE
5	CE	90	VAL
5	CE	91	LEU
5	CE	101	ILE
5	CE	107	ARG
5	CE	112	LEU
5	CE	116	THR
5	CE	120	THR
5	CE	121	LYS
5	CE	126	ARG
5	CE	136	MET
5	CE	141	GLN
5	CE	153	LYS
6	CF	15	ASP
6	CF	19	LEU
6	CF	22	GLU
6	CF	25	ILE
6	CF	30	LEU
6	CF	36	ARG
6	CF	41	GLU
6	CF	42	GLU
6	CF	61	LEU
6	CF	63	TYR
6	CF	64	GLN
6	CF	70	ASP
6	CF	75	LEU
6	CF	80	ARG
6	CF	82	ARG
7	CG	12	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	CG	21	VAL
7	CG	27	ILE
7	CG	38	LEU
7	CG	51	GLN
7	CG	52	GLU
7	CG	56	GLN
7	CG	57	GLU
7	CG	72	ARG
7	CG	75	VAL
7	CG	80	VAL
7	CG	85	TYR
7	CG	96	GLN
7	CG	98	SER
7	CG	101	LEU
7	CG	104	LEU
7	CG	106	GLN
7	CG	111	ARG
7	CG	113	GLU
7	CG	118	VAL
7	CG	124	LEU
7	CG	142	GLU
7	CG	146	GLU
7	CG	155	ARG
8	CH	3	THR
8	CH	12	ARG
8	CH	13	ILE
8	CH	37	ARG
8	CH	83	ILE
8	CH	84	ARG
8	CH	85	ARG
8	CH	99	GLU
8	CH	112	LEU
8	CH	119	LEU
8	CH	123	GLU
8	CH	129	VAL
8	CH	134	ILE
8	CH	137	VAL
8	CH	138	TRP
9	CI	11	LYS
9	CI	31	GLN
9	CI	36	TYR
9	CI	74	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	CI	75	ASP
9	CI	86	VAL
9	CI	99	LEU
9	CI	107	ARG
9	CI	114	TYR
9	CI	124	GLN
10	CJ	8	LEU
10	CJ	13	HIS
10	CJ	16	LEU
10	CJ	19	SER
10	CJ	33	GLN
10	CJ	47	PHE
10	CJ	48	THR
10	CJ	49	VAL
10	CJ	55	LYS
10	CJ	59	SER
10	CJ	61	GLU
10	CJ	62	HIS
10	CJ	68	HIS
10	CJ	95	GLU
10	CJ	96	ILE
10	CJ	100	THR
11	CK	18	ARG
11	CK	24	SER
11	CK	30	VAL
11	CK	31	THR
11	CK	33	THR
11	CK	38	ASN
11	CK	48	ILE
11	CK	55	LYS
11	CK	57	THR
11	CK	63	LEU
11	CK	67	ASP
11	CK	70	LYS
11	CK	83	ILE
11	CK	95	ILE
11	CK	96	ARG
11	CK	98	LEU
11	CK	109	VAL
11	CK	111	ASP
11	CK	114	VAL
11	CK	119	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	CL	6	THR
12	CL	24	VAL
12	CL	33	ARG
12	CL	39	VAL
12	CL	40	VAL
12	CL	43	VAL
12	CL	44	THR
12	CL	46	LYS
12	CL	52	LEU
12	CL	60	LEU
12	CL	66	VAL
12	CL	67	THR
12	CL	70	ILE
12	CL	79	GLU
12	CL	84	LEU
12	CL	92	ASP
12	CL	97	ARG
12	CL	99	HIS
12	CL	104	VAL
12	CL	112	ASP
13	CM	4	ILE
13	CM	17	VAL
13	CM	23	TYR
13	CM	27	LYS
13	CM	37	THR
13	CM	40	ASN
13	CM	43	THR
13	CM	47	ASP
13	CM	52	GLU
13	CM	60	VAL
13	CM	64	TRP
13	CM	65	LYS
13	CM	66	LEU
13	CM	70	LEU
13	CM	77	ASN
13	CM	88	ARG
13	CM	91	ARG
13	CM	102	ARG
13	CM	105	THR
13	CM	106	ASN
13	CM	108	ARG
13	CM	109	THR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
13	CM	110	ARG
14	CN	3	ARG
14	CN	4	LYS
14	CN	7	ILE
14	CN	13	THR
14	CN	17	LYS
14	CN	22	THR
14	CN	29	ARG
14	CN	31	ARG
14	CN	33	VAL
14	CN	40	CYS
14	CN	41	ARG
14	CN	42	ILE
14	CN	44	LEU
14	CN	56	VAL
14	CN	60	SER
15	CO	3	ILE
15	CO	13	GLN
15	CO	17	ARG
15	CO	26	GLU
15	CO	38	ARG
15	CO	39	LEU
15	CO	40	SER
15	CO	41	GLU
15	CO	65	ARG
15	CO	71	GLN
15	CO	72	ARG
15	CO	87	ILE
15	CO	88	ARG
16	CP	1	MET
16	CP	2	VAL
16	CP	6	LEU
16	CP	20	VAL
16	CP	21	VAL
16	CP	28	ARG
16	CP	29	ASP
16	CP	42	ARG
16	CP	51	VAL
16	CP	54	GLU
16	CP	60	LEU
16	CP	62	VAL
16	CP	67	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	CP	69	THR
16	CP	72	ARG
16	CP	76	GLN
17	CQ	7	THR
17	CQ	9	VAL
17	CQ	13	ASP
17	CQ	14	LYS
17	CQ	19	VAL
17	CQ	39	SER
17	CQ	49	GLU
17	CQ	50	LYS
17	CQ	63	ARG
17	CQ	68	ARG
17	CQ	72	ARG
17	CQ	74	LEU
17	CQ	77	VAL
17	CQ	79	SER
17	CQ	90	ILE
17	CQ	97	SER
18	CR	21	LYS
18	CR	31	LEU
18	CR	32	ARG
18	CR	35	ARG
18	CR	36	ASN
18	CR	37	VAL
18	CR	47	THR
18	CR	69	THR
18	CR	75	ILE
18	CR	76	LEU
18	CR	82	THR
18	CR	85	LEU
18	CR	86	VAL
19	CS	11	VAL
19	CS	12	ASP
19	CS	14	HIS
19	CS	22	LEU
19	CS	23	ASN
19	CS	32	LYS
19	CS	33	THR
19	CS	36	ARG
19	CS	53	ASN
19	CS	57	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
19	CS	66	MET
19	CS	77	THR
19	CS	78	ARG
19	CS	79	THR
20	CT	4	LYS
20	CT	13	LEU
20	CT	14	LYS
20	CT	19	SER
20	CT	21	LYS
20	CT	50	GLU
20	CT	51	GLU
20	CT	56	MET
20	CT	71	THR
20	CT	72	LEU
20	CT	73	HIS
20	CT	75	ASN
20	CT	84	LEU
20	CT	90	GLN
20	CT	91	LEU
20	CT	93	GLU
21	CU	10	ARG
27	DD	3	VAL
27	DD	4	LYS
27	DD	10	THR
27	DD	12	SER
27	DD	27	THR
27	DD	30	GLU
27	DD	32	SER
27	DD	46	GLN
27	DD	58	HIS
27	DD	61	LEU
27	DD	64	ILE
27	DD	71	ASP
27	DD	72	LYS
27	DD	73	VAL
27	DD	94	LEU
27	DD	103	ARG
27	DD	105	ILE
27	DD	106	ILE
27	DD	111	LEU
27	DD	112	GLN
27	DD	113	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
27	DD	126	GLN
27	DD	127	VAL
27	DD	131	LEU
27	DD	136	ILE
27	DD	138	VAL
27	DD	147	LEU
27	DD	150	LYS
27	DD	155	LEU
27	DD	165	ILE
27	DD	171	ASP
27	DD	176	ARG
27	DD	192	THR
27	DD	200	ASP
27	DD	202	LYS
27	DD	211	ARG
27	DD	215	LEU
27	DD	218	ARG
27	DD	229	VAL
27	DD	239	ARG
27	DD	242	ARG
27	DD	257	LEU
27	DD	259	THR
27	DD	260	ARG
27	DD	264	LYS
27	DD	270	ILE
27	DD	275	LYS
27	DD	276	LYS
28	DE	1	MET
28	DE	5	LEU
28	DE	9	VAL
28	DE	11	MET
28	DE	12	THR
28	DE	21	VAL
28	DE	24	THR
28	DE	34	VAL
28	DE	40	GLU
28	DE	45	THR
28	DE	49	LEU
28	DE	52	LEU
28	DE	63	LEU
28	DE	72	VAL
28	DE	75	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	DE	77	ILE
28	DE	79	ARG
28	DE	82	ARG
28	DE	84	PHE
28	DE	89	ASP
28	DE	92	THR
28	DE	93	VAL
28	DE	113	PHE
28	DE	116	VAL
28	DE	119	ARG
28	DE	121	ASN
28	DE	144	ARG
28	DE	149	ARG
28	DE	154	LYS
28	DE	168	MET
28	DE	170	LEU
28	DE	179	GLU
28	DE	181	LEU
28	DE	182	LEU
28	DE	188	VAL
29	DF	6	VAL
29	DF	13	SER
29	DF	18	ARG
29	DF	23	ASP
29	DF	24	LEU
29	DF	33	LEU
29	DF	43	LYS
29	DF	68	LYS
29	DF	74	ARG
29	DF	78	ILE
29	DF	82	ILE
29	DF	98	SER
29	DF	99	TYR
29	DF	110	LEU
29	DF	112	MET
29	DF	126	VAL
29	DF	140	LEU
29	DF	149	ASP
29	DF	158	THR
29	DF	161	GLU
29	DF	162	LEU
29	DF	169	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
29	DF	170	LEU
29	DF	174	VAL
29	DF	179	GLU
29	DF	183	VAL
29	DF	186	ILE
29	DF	195	ASP
29	DF	197	ASP
29	DF	200	GLU
29	DF	201	VAL
30	DG	9	ARG
30	DG	12	TYR
30	DG	13	GLU
30	DG	14	GLU
30	DG	18	GLU
30	DG	21	ARG
30	DG	33	ARG
30	DG	34	LEU
30	DG	39	ILE
30	DG	60	LEU
30	DG	63	ILE
30	DG	80	PHE
30	DG	88	ILE
30	DG	91	ARG
30	DG	101	ILE
30	DG	116	ASP
30	DG	128	ARG
30	DG	130	ASN
30	DG	133	LEU
30	DG	135	LEU
30	DG	138	GLN
30	DG	139	LEU
30	DG	140	ILE
30	DG	148	MET
30	DG	149	VAL
30	DG	150	ASP
30	DG	155	MET
30	DG	162	THR
30	DG	165	THR
30	DG	167	GLU
30	DG	170	ARG
30	DG	173	LEU
31	DH	3	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
31	DH	7	LEU
31	DH	15	VAL
31	DH	17	VAL
31	DH	32	GLU
31	DH	41	MET
31	DH	43	VAL
31	DH	47	GLU
31	DH	59	ARG
31	DH	63	SER
31	DH	64	LEU
31	DH	69	ARG
31	DH	70	THR
31	DH	97	ARG
31	DH	104	GLU
31	DH	105	LEU
31	DH	121	ILE
31	DH	124	GLU
31	DH	127	GLU
31	DH	129	THR
31	DH	130	ARG
31	DH	134	SER
31	DH	136	ILE
31	DH	140	LYS
31	DH	148	ILE
31	DH	153	LYS
31	DH	158	HIS
31	DH	167	GLU
31	DH	169	VAL
31	DH	171	LEU
32	DI	1	MET
32	DI	2	LYS
32	DI	22	LYS
32	DI	25	TYR
32	DI	35	LEU
32	DI	37	VAL
32	DI	38	LEU
32	DI	41	GLU
32	DI	43	ASN
32	DI	57	ARG
32	DI	58	LEU
32	DI	61	ARG
32	DI	72	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
32	DI	74	ASN
32	DI	75	LEU
32	DI	77	LEU
32	DI	78	THR
32	DI	85	GLU
32	DI	86	THR
32	DI	93	THR
32	DI	97	ILE
32	DI	116	LEU
32	DI	123	LEU
32	DI	127	VAL
32	DI	129	THR
32	DI	138	ILE
32	DI	140	LEU
32	DI	142	VAL
33	DN	1	MET
33	DN	9	VAL
33	DN	12	ARG
33	DN	32	THR
33	DN	33	LEU
33	DN	34	LEU
33	DN	37	LYS
33	DN	38	HIS
33	DN	43	THR
33	DN	48	MET
33	DN	55	VAL
33	DN	58	ASP
33	DN	60	ILE
33	DN	61	ARG
33	DN	62	VAL
33	DN	83	LYS
33	DN	87	LEU
33	DN	93	THR
33	DN	99	LEU
33	DN	106	MET
33	DN	119	ARG
33	DN	120	LEU
33	DN	127	ASP
33	DN	133	GLN
33	DN	137	LYS
33	DN	138	LEU
33	DN	140	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	DO	7	TYR
34	DO	8	LEU
34	DO	10	VAL
34	DO	17	ARG
34	DO	23	ARG
34	DO	24	VAL
34	DO	28	SER
34	DO	32	TYR
34	DO	39	ILE
34	DO	44	LYS
34	DO	47	ILE
34	DO	58	VAL
34	DO	59	LYS
34	DO	62	VAL
34	DO	66	LYS
34	DO	69	ILE
34	DO	73	ASP
34	DO	75	SER
34	DO	78	ARG
34	DO	82	ASN
34	DO	85	VAL
34	DO	86	ILE
34	DO	88	ASN
34	DO	89	ASN
34	DO	94	ARG
34	DO	99	PHE
34	DO	115	VAL
34	DO	117	LEU
35	DP	21	ARG
35	DP	30	THR
35	DP	39	LYS
35	DP	42	SER
35	DP	46	LYS
35	DP	50	ARG
35	DP	55	ARG
35	DP	56	SER
35	DP	58	THR
35	DP	59	LEU
35	DP	64	LYS
35	DP	75	ILE
35	DP	92	GLU
35	DP	96	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	DP	100	LEU
35	DP	106	LEU
35	DP	111	ARG
35	DP	112	LEU
35	DP	119	GLU
35	DP	133	SER
35	DP	135	LEU
35	DP	139	LYS
35	DP	144	GLU
35	DP	146	VAL
36	DQ	1	MET
36	DQ	5	ARG
36	DQ	6	ARG
36	DQ	11	LYS
36	DQ	16	ARG
36	DQ	21	THR
36	DQ	45	GLN
36	DQ	54	MET
36	DQ	55	VAL
36	DQ	56	ARG
36	DQ	60	ARG
36	DQ	63	LYS
36	DQ	79	LEU
36	DQ	81	VAL
36	DQ	90	VAL
36	DQ	106	VAL
36	DQ	110	THR
36	DQ	112	GLU
37	DR	6	SER
37	DR	9	LYS
37	DR	18	LEU
37	DR	28	LEU
37	DR	29	LEU
37	DR	37	THR
37	DR	44	LEU
37	DR	45	ARG
37	DR	54	LEU
37	DR	60	LEU
37	DR	65	LEU
37	DR	73	VAL
37	DR	75	LEU
37	DR	79	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	DR	81	ASP
37	DR	86	ARG
37	DR	97	VAL
37	DR	100	LEU
37	DR	102	GLU
37	DR	104	ARG
37	DR	111	LEU
37	DR	118	GLU
38	DS	4	LEU
38	DS	10	ARG
38	DS	14	VAL
38	DS	19	LYS
38	DS	20	ARG
38	DS	29	PHE
38	DS	30	ARG
38	DS	36	TYR
38	DS	40	ILE
38	DS	43	GLU
38	DS	48	LEU
38	DS	52	SER
38	DS	64	GLU
38	DS	78	LEU
38	DS	83	LYS
38	DS	98	VAL
38	DS	101	LEU
38	DS	110	LEU
39	DT	6	LEU
39	DT	21	GLU
39	DT	23	ARG
39	DT	27	THR
39	DT	34	VAL
39	DT	36	GLU
39	DT	39	ARG
39	DT	40	THR
39	DT	51	ARG
39	DT	54	ARG
39	DT	58	ASN
39	DT	59	THR
39	DT	64	ARG
39	DT	67	SER
39	DT	73	GLU
39	DT	74	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	DT	85	LYS
39	DT	89	VAL
39	DT	90	GLN
39	DT	93	ARG
39	DT	95	ARG
39	DT	96	ARG
39	DT	105	LEU
39	DT	109	GLU
39	DT	111	ARG
39	DT	118	ARG
39	DT	121	ILE
39	DT	123	GLN
40	DU	20	LEU
40	DU	31	SER
40	DU	36	ARG
40	DU	51	LYS
40	DU	55	ARG
40	DU	58	ARG
40	DU	59	ARG
40	DU	63	VAL
40	DU	72	HIS
40	DU	74	LEU
40	DU	83	LEU
40	DU	88	ILE
40	DU	90	VAL
40	DU	100	VAL
40	DU	104	GLN
40	DU	108	GLU
41	DV	6	LYS
41	DV	10	LYS
41	DV	12	TYR
41	DV	13	ARG
41	DV	14	VAL
41	DV	18	LEU
41	DV	21	ARG
41	DV	28	GLU
41	DV	32	THR
41	DV	33	VAL
41	DV	35	LEU
41	DV	39	LEU
41	DV	43	GLU
41	DV	46	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	DV	51	VAL
41	DV	53	GLU
41	DV	61	VAL
41	DV	62	LEU
41	DV	72	VAL
41	DV	73	SER
41	DV	79	VAL
41	DV	85	LYS
41	DV	93	GLU
41	DV	95	LEU
41	DV	98	GLU
42	DW	11	ARG
42	DW	17	VAL
42	DW	18	ARG
42	DW	23	LEU
42	DW	39	THR
42	DW	51	LEU
42	DW	52	GLU
42	DW	65	LEU
42	DW	66	GLU
42	DW	92	ARG
42	DW	94	ASP
42	DW	95	ILE
42	DW	100	THR
42	DW	105	VAL
42	DW	107	LEU
43	DX	8	ILE
43	DX	23	GLU
43	DX	27	THR
43	DX	38	GLU
43	DX	53	LYS
43	DX	56	THR
43	DX	57	LEU
43	DX	70	LEU
43	DX	76	ARG
43	DX	80	ILE
43	DX	81	VAL
43	DX	92	LEU
44	DY	1	MET
44	DY	2	ARG
44	DY	9	LYS
44	DY	28	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
44	DY	30	VAL
44	DY	34	LYS
44	DY	38	ILE
44	DY	44	ILE
44	DY	45	VAL
44	DY	49	VAL
44	DY	52	SER
44	DY	61	ILE
44	DY	67	LEU
44	DY	72	VAL
44	DY	83	THR
44	DY	85	VAL
44	DY	86	ARG
44	DY	90	LEU
44	DY	97	ARG
44	DY	107	ASP
45	DZ	1	MET
45	DZ	11	GLU
45	DZ	19	ARG
45	DZ	24	LEU
45	DZ	29	TYR
45	DZ	30	ASN
45	DZ	31	ARG
45	DZ	40	ASP
45	DZ	41	LEU
45	DZ	56	VAL
45	DZ	58	VAL
45	DZ	66	SER
45	DZ	72	ARG
45	DZ	73	GLN
45	DZ	74	VAL
45	DZ	82	ARG
45	DZ	86	VAL
45	DZ	87	ASP
45	DZ	93	ASP
45	DZ	94	GLU
45	DZ	100	VAL
45	DZ	119	GLU
45	DZ	129	SER
45	DZ	131	ARG
45	DZ	133	ILE
45	DZ	135	GLU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
45	DZ	140	ASP
45	DZ	157	LEU
45	DZ	161	VAL
45	DZ	170	THR
45	DZ	175	VAL
45	DZ	179	ASP
45	DZ	185	GLU
46	D0	10	THR
46	D0	14	ARG
46	D0	16	SER
46	D0	19	LYS
46	D0	20	ARG
46	D0	41	ARG
46	D0	43	THR
46	D0	53	MET
46	D0	55	ARG
46	D0	56	ASP
46	D0	72	ARG
46	D0	74	ARG
46	D0	81	VAL
46	D0	84	LEU
47	D1	3	LYS
47	D1	4	VAL
47	D1	11	ARG
47	D1	21	ARG
47	D1	38	SER
47	D1	40	ARG
47	D1	41	ARG
47	D1	46	LEU
47	D1	51	VAL
47	D1	53	VAL
47	D1	58	ILE
47	D1	59	THR
47	D1	61	ARG
47	D1	62	VAL
47	D1	73	LEU
47	D1	80	LEU
47	D1	90	ILE
47	D1	95	LEU
47	D1	97	LEU
47	D1	98	LEU
48	D2	1	MET

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	D2	3	LEU
48	D2	17	SER
48	D2	21	LEU
48	D2	26	ARG
48	D2	30	ARG
48	D2	43	GLN
48	D2	45	SER
48	D2	51	ARG
48	D2	53	LEU
48	D2	62	THR
48	D2	64	LEU
48	D2	65	ASN
49	D3	8	LEU
49	D3	11	SER
49	D3	23	LEU
49	D3	28	LEU
49	D3	31	LEU
49	D3	36	VAL
49	D3	37	LEU
49	D3	56	VAL
49	D3	57	GLU
50	D4	1	MET
50	D4	5	ILE
50	D4	8	LYS
50	D4	10	VAL
50	D4	13	ARG
50	D4	14	ILE
50	D4	16	CYS
50	D4	18	CYS
50	D4	31	ILE
50	D4	36	CYS
50	D4	39	CYS
50	D4	43	TYR
50	D4	44	THR
50	D4	46	GLN
51	D5	6	VAL
51	D5	9	LYS
51	D5	15	ARG
51	D5	16	ARG
51	D5	25	LEU
51	D5	26	THR
51	D5	33	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	D5	40	LYS
51	D5	55	ARG
51	D5	57	VAL
52	D6	4	GLU
52	D6	5	VAL
52	D6	8	LYS
52	D6	13	CYS
52	D6	18	ARG
52	D6	34	LEU
52	D6	38	LYS
52	D6	40	CYS
52	D6	43	CYS
52	D6	44	ARG
53	D7	1	MET
53	D7	8	ASN
53	D7	12	ARG
53	D7	14	LYS
53	D7	19	ARG
53	D7	24	THR
53	D7	32	LYS
53	D7	43	THR
54	D8	4	MET
54	D8	13	ARG
54	D8	14	VAL
54	D8	23	VAL
54	D8	25	MET
54	D8	26	LYS
54	D8	32	LEU
54	D8	34	TRP
54	D8	41	ILE
55	D9	2	LYS
55	D9	4	ARG
55	D9	7	VAL
55	D9	12	ASP
55	D9	22	ARG
55	D9	26	ILE
55	D9	33	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (46) such sidechains are listed below:

Mol	Chain	Res	Type
3	AC	6	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	AF	73	ASN
7	AG	153	HIS
10	AJ	56	HIS
15	AO	28	GLN
16	AP	14	ASN
16	AP	16	HIS
20	AT	18	GLN
22	AY	23	GLN
22	AY	75	GLN
22	AY	124	GLN
27	BD	143	HIS
30	BG	41	GLN
32	BI	105	HIS
32	BI	139	GLN
34	BO	5	GLN
35	BP	68	GLN
35	BP	84	ASN
37	BR	71	GLN
43	BX	31	HIS
45	BZ	54	HIS
52	B6	20	ASN
55	B9	36	GLN
2	CB	16	HIS
4	CD	123	HIS
6	CF	73	ASN
7	CG	28	ASN
9	CI	3	GLN
11	CK	99	GLN
13	CM	40	ASN
14	CN	49	HIS
15	CO	28	GLN
18	CR	63	GLN
19	CS	14	HIS
19	CS	23	ASN
28	DE	135	HIS
29	DF	75	HIS
33	DN	133	GLN
34	DO	88	ASN
40	DU	81	HIS
43	DX	31	HIS
43	DX	55	ASN
46	D0	12	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	D5	4	HIS
55	D9	29	ASN
55	D9	36	GLN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1462/1522 (96%)	386 (26%)	33 (2%)
1	CA	1457/1522 (95%)	367 (25%)	33 (2%)
23	AV	76/77 (98%)	20 (26%)	1 (1%)
23	CV	76/77 (98%)	21 (27%)	0
24	AX	5/16 (31%)	1 (20%)	0
24	CX	5/16 (31%)	0	0
25	BA	2744/2915 (94%)	642 (23%)	64 (2%)
25	DA	2711/2915 (93%)	632 (23%)	55 (2%)
26	BB	119/122 (97%)	24 (20%)	0
26	DB	119/122 (97%)	26 (21%)	2 (1%)
All	All	8774/9304 (94%)	2119 (24%)	188 (2%)

All (2119) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	7	G
1	AA	9	G
1	AA	13	U
1	AA	22	G
1	AA	28	G
1	AA	30	U
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	50	A
1	AA	51	A
1	AA	59	A
1	AA	60	A
1	AA	61	G
1	AA	63	C
1	AA	65	U
1	AA	76	C
1	AA	77	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	78	G
1	AA	92	C
1	AA	93	G
1	AA	96	U
1	AA	97	G
1	AA	98	G
1	AA	101	A
1	AA	115	G
1	AA	116	A
1	AA	120	A
1	AA	121	C
1	AA	131	C
1	AA	132	C
1	AA	143	A
1	AA	144	G
1	AA	150	C
1	AA	157	G
1	AA	163	C
1	AA	167	G
1	AA	169	C
1	AA	173	U
1	AA	181	G
1	AA	183	G
1	AA	184	G
1	AA	189(C)	C
1	AA	189(D)	C
1	AA	189(E)	U
1	AA	189(F)	U
1	AA	189(G)	G
1	AA	189(H)	G
1	AA	195	A
1	AA	197	A
1	AA	199	G
1	AA	201	C
1	AA	202	U
1	AA	203	U
1	AA	204	U
1	AA	216	G
1	AA	217	C
1	AA	222	U
1	AA	243	A
1	AA	247	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	251	G
1	AA	262	A
1	AA	266	G
1	AA	267	C
1	AA	272	C
1	AA	289	G
1	AA	301	G
1	AA	305	G
1	AA	308	C
1	AA	318	G
1	AA	320	C
1	AA	321	A
1	AA	328	C
1	AA	330	C
1	AA	331	G
1	AA	332	G
1	AA	335	C
1	AA	343	U
1	AA	344	A
1	AA	345	C
1	AA	346	G
1	AA	347	G
1	AA	348	G
1	AA	350	G
1	AA	351	G
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	355	C
1	AA	365	U
1	AA	367	U
1	AA	372	C
1	AA	373	A
1	AA	374	A
1	AA	383	A
1	AA	388	G
1	AA	392	G
1	AA	396	G
1	AA	397	A
1	AA	398	C
1	AA	405	U
1	AA	406	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	408	A
1	AA	411	A
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	421	U
1	AA	422	C
1	AA	423	G
1	AA	424	G
1	AA	429	U
1	AA	430	A
1	AA	435	C
1	AA	436	C
1	AA	437	U
1	AA	439	A
1	AA	442	C
1	AA	446	G
1	AA	452	A
1	AA	453	A
1	AA	460	G
1	AA	470	C
1	AA	472	A
1	AA	476	G
1	AA	482	A
1	AA	483	C
1	AA	484	G
1	AA	485	G
1	AA	495	A
1	AA	496	A
1	AA	498	U
1	AA	504	C
1	AA	505	G
1	AA	509	A
1	AA	510	A
1	AA	511	C
1	AA	518	C
1	AA	521	G
1	AA	527	G
1	AA	530	G
1	AA	532	A
1	AA	533	A
1	AA	534	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	545	C
1	AA	547	A
1	AA	559	A
1	AA	561	U
1	AA	562	C
1	AA	564	C
1	AA	572	A
1	AA	573	A
1	AA	576	G
1	AA	577	G
1	AA	587	G
1	AA	588	G
1	AA	592	G
1	AA	595	G
1	AA	596	C
1	AA	601	C
1	AA	615	C
1	AA	619	U
1	AA	623	C
1	AA	630	G
1	AA	632	A
1	AA	637	G
1	AA	653	A
1	AA	660	G
1	AA	661	G
1	AA	665	A
1	AA	674	G
1	AA	687	A
1	AA	688	G
1	AA	693	G
1	AA	722	A
1	AA	723	U
1	AA	729	A
1	AA	731	G
1	AA	734	G
1	AA	740	U
1	AA	742	G
1	AA	749	C
1	AA	751	U
1	AA	752	G
1	AA	753	A
1	AA	754	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	755	G
1	AA	775	G
1	AA	777	A
1	AA	778	G
1	AA	786	G
1	AA	792	A
1	AA	793	U
1	AA	794	A
1	AA	796	C
1	AA	802	A
1	AA	817	C
1	AA	828	A
1	AA	829	G
1	AA	833	U
1	AA	839	U
1	AA	840	C
1	AA	841	U
1	AA	848	C
1	AA	851	G
1	AA	853	G
1	AA	855	G
1	AA	859	A
1	AA	860	A
1	AA	863	U
1	AA	866	C
1	AA	870	U
1	AA	873	A
1	AA	876	G
1	AA	885	G
1	AA	891	U
1	AA	902	G
1	AA	914	A
1	AA	916	G
1	AA	919	A
1	AA	925	G
1	AA	926	G
1	AA	927	G
1	AA	934	C
1	AA	935	A
1	AA	936	C
1	AA	937	A
1	AA	940	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	960	U
1	AA	961	U
1	AA	969	A
1	AA	971	G
1	AA	972	C
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	978	A
1	AA	980	C
1	AA	981	U
1	AA	982	U
1	AA	989	C
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	1011	G
1	AA	1020	U
1	AA	1021	G
1	AA	1043	C
1	AA	1051	C
1	AA	1053	G
1	AA	1056	U
1	AA	1065	U
1	AA	1066	C
1	AA	1068	G
1	AA	1077	G
1	AA	1081	G
1	AA	1083	U
1	AA	1088	G
1	AA	1094	G
1	AA	1095	U
1	AA	1096	C
1	AA	1099	G
1	AA	1101	A
1	AA	1103	C
1	AA	1123	A
1	AA	1124	G
1	AA	1125	U
1	AA	1126	U
1	AA	1127	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1128	C
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G
1	AA	1134	G
1	AA	1136	U
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1146	A
1	AA	1148	U
1	AA	1150	U
1	AA	1151	A
1	AA	1152	A
1	AA	1159	U
1	AA	1160	G
1	AA	1165	C
1	AA	1166	G
1	AA	1175	G
1	AA	1181	G
1	AA	1182	G
1	AA	1183	A
1	AA	1184	G
1	AA	1193	G
1	AA	1196	U
1	AA	1201	A
1	AA	1202	G
1	AA	1206	G
1	AA	1210	C
1	AA	1211	U
1	AA	1212	U
1	AA	1213	A
1	AA	1225	A
1	AA	1226	C
1	AA	1227	A
1	AA	1238	A
1	AA	1241	G
1	AA	1250	A
1	AA	1255	G
1	AA	1257	U
1	AA	1258	G
1	AA	1260	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1261	A
1	AA	1263	C
1	AA	1264	C
1	AA	1268	A
1	AA	1269	A
1	AA	1270	C
1	AA	1272	G
1	AA	1273	G
1	AA	1275	A
1	AA	1278	U
1	AA	1279	A
1	AA	1280	A
1	AA	1281	U
1	AA	1282	C
1	AA	1286	A
1	AA	1287	A
1	AA	1291	G
1	AA	1294	G
1	AA	1299	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1304	G
1	AA	1305	G
1	AA	1313	U
1	AA	1317	C
1	AA	1319	A
1	AA	1320	C
1	AA	1322	C
1	AA	1338	G
1	AA	1341	U
1	AA	1346	A
1	AA	1347	G
1	AA	1353	G
1	AA	1359	C
1	AA	1360	A
1	AA	1363	C
1	AA	1363(A)	A
1	AA	1364	U
1	AA	1370	G
1	AA	1377	A
1	AA	1379	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1398	A
1	AA	1399	C
1	AA	1401	G
1	AA	1402	C
1	AA	1403	C
1	AA	1406	U
1	AA	1419	G
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1446	U
1	AA	1447	A
1	AA	1452	C
1	AA	1456	G
1	AA	1457	G
1	AA	1460	A
1	AA	1487	G
1	AA	1492	A
1	AA	1494	G
1	AA	1502	A
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1517	G
1	AA	1519	A
1	AA	1520	G
1	AA	1528	U
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A
1	AA	1532	U
23	AV	3	C
23	AV	8	U
23	AV	9	G
23	AV	10	G
23	AV	19	G
23	AV	21	A
23	AV	25	C
23	AV	31	G
23	AV	32	C
23	AV	33	U
23	AV	34	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
23	AV	41	C
23	AV	47	U
23	AV	48	C
23	AV	56	C
23	AV	59	A
23	AV	65	C
23	AV	69	C
23	AV	74	C
23	AV	76	A
24	AX	6	G
25	BA	27	G
25	BA	34	C
25	BA	35	G
25	BA	37	C
25	BA	42	G
25	BA	45	C
25	BA	47	C
25	BA	49	A
25	BA	51	G
25	BA	55	G
25	BA	63	U
25	BA	71	A
25	BA	72	U
25	BA	74	A
25	BA	75	G
25	BA	84	A
25	BA	90	U
25	BA	92	A
25	BA	97	C
25	BA	98	G
25	BA	99	U
25	BA	100	G
25	BA	102	G
25	BA	103	A
25	BA	112	U
25	BA	118	A
25	BA	119	A
25	BA	120	U
25	BA	121	G
25	BA	123	G
25	BA	125	G
25	BA	154	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	181	A
25	BA	182	A
25	BA	188	G
25	BA	196	A
25	BA	197	A
25	BA	199	A
25	BA	204	A
25	BA	205	G
25	BA	215	G
25	BA	216	A
25	BA	221	A
25	BA	222	A
25	BA	228	A
25	BA	229	A
25	BA	233	A
25	BA	240	G
25	BA	245	G
25	BA	248	G
25	BA	250	G
25	BA	252	G
25	BA	265	A
25	BA	269	U
25	BA	271(C)	C
25	BA	271(I)	G
25	BA	271(K)	U
25	BA	271(L)	U
25	BA	271(M)	G
25	BA	271(N)	U
25	BA	271(O)	C
25	BA	272(A)	U
25	BA	272(B)	G
25	BA	272(D)	G
25	BA	272(G)	C
25	BA	272(H)	C
25	BA	272(J)	C
25	BA	275	G
25	BA	279	C
25	BA	283	A
25	BA	308	G
25	BA	311	A
25	BA	325	G
25	BA	329	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	330	A
25	BA	333	G
25	BA	335	C
25	BA	343	C
25	BA	345	A
25	BA	352	G
25	BA	353	G
25	BA	354	G
25	BA	362	U
25	BA	363	G
25	BA	363(F)	A
25	BA	372	G
25	BA	385	C
25	BA	386	G
25	BA	396	G
25	BA	399	G
25	BA	400	G
25	BA	404	C
25	BA	405	U
25	BA	411	G
25	BA	412	A
25	BA	418	G
25	BA	428	A
25	BA	442	G
25	BA	444	C
25	BA	448	U
25	BA	470	A
25	BA	471	A
25	BA	475	U
25	BA	480	A
25	BA	481	G
25	BA	482	A
25	BA	494	G
25	BA	501	A
25	BA	504	U
25	BA	505	A
25	BA	509	C
25	BA	518	G
25	BA	521	G
25	BA	522	G
25	BA	523	C
25	BA	530	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	531	C
25	BA	532	A
25	BA	533	G
25	BA	545	G
25	BA	549	G
25	BA	563	G
25	BA	564	C
25	BA	571	A
25	BA	573	G
25	BA	575	A
25	BA	582	G
25	BA	586	A
25	BA	587	C
25	BA	588	U
25	BA	603	A
25	BA	604	G
25	BA	605	C
25	BA	607	U
25	BA	610	G
25	BA	614(B)	G
25	BA	615	G
25	BA	616	G
25	BA	619	G
25	BA	627	A
25	BA	632	A
25	BA	634	C
25	BA	637	A
25	BA	642	G
25	BA	645	C
25	BA	646	A
25	BA	648	G
25	BA	650	C
25	BA	652(B)	A
25	BA	652(C)	G
25	BA	652(D)	C
25	BA	652(E)	G
25	BA	652(I)	C
25	BA	652(P)	G
25	BA	652(R)	C
25	BA	652(T)	C
25	BA	652(U)	G
25	BA	654	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	669	G
25	BA	673	C
25	BA	686	G
25	BA	698	C
25	BA	717	G
25	BA	730	C
25	BA	738	G
25	BA	740	U
25	BA	750	A
25	BA	752	A
25	BA	753	C
25	BA	757	U
25	BA	764	A
25	BA	765	G
25	BA	774	A
25	BA	775	G
25	BA	776	G
25	BA	779	U
25	BA	782	A
25	BA	784	A
25	BA	785	G
25	BA	790	C
25	BA	792	G
25	BA	805	G
25	BA	811	U
25	BA	812	C
25	BA	819	A
25	BA	820	A
25	BA	827	U
25	BA	828	U
25	BA	831	G
25	BA	847	U
25	BA	859	G
25	BA	866	A
25	BA	867	C
25	BA	868	U
25	BA	869	G
25	BA	877	U
25	BA	878	A
25	BA	881	G
25	BA	884	C
25	BA	885	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	886	C
25	BA	887	A
25	BA	888	C
25	BA	889	C
25	BA	890	A
25	BA	895	U
25	BA	896	A
25	BA	897	C
25	BA	899	A
25	BA	900	A
25	BA	901	A
25	BA	910	A
25	BA	914	C
25	BA	916	G
25	BA	917	A
25	BA	919	G
25	BA	924	C
25	BA	932	G
25	BA	939	G
25	BA	940	G
25	BA	941	A
25	BA	945	A
25	BA	946	G
25	BA	958	U
25	BA	959	A
25	BA	961	C
25	BA	963	U
25	BA	965	C
25	BA	974	G
25	BA	975	C
25	BA	975(A)	G
25	BA	983	A
25	BA	990	A
25	BA	991	C
25	BA	996	A
25	BA	1012	U
25	BA	1013	C
25	BA	1020	A
25	BA	1022	G
25	BA	1023	U
25	BA	1025	G
25	BA	1026	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	1027	A
25	BA	1030	G
25	BA	1033	U
25	BA	1039	G
25	BA	1041	C
25	BA	1042	G
25	BA	1044	G
25	BA	1045	A
25	BA	1046	A
25	BA	1047	G
25	BA	1048	A
25	BA	1049	C
25	BA	1050	A
25	BA	1107	G
25	BA	1108	U
25	BA	1109	C
25	BA	1110	G
25	BA	1111	A
25	BA	1112	G
25	BA	1113	U
25	BA	1124	C
25	BA	1128	A
25	BA	1129	A
25	BA	1130	U
25	BA	1131	G
25	BA	1135	C
25	BA	1136	G
25	BA	1139	G
25	BA	1151	G
25	BA	1154	G
25	BA	1155	A
25	BA	1156	A
25	BA	1170	G
25	BA	1171	G
25	BA	1173	G
25	BA	1174	A
25	BA	1175	U
25	BA	1176	G
25	BA	1177	A
25	BA	1184	G
25	BA	1190	G
25	BA	1204	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	1210	A
25	BA	1211	U
25	BA	1218	C
25	BA	1229	G
25	BA	1240	U
25	BA	1244	G
25	BA	1253	A
25	BA	1254	A
25	BA	1256	G
25	BA	1267	U
25	BA	1271	G
25	BA	1272	A
25	BA	1273	U
25	BA	1287	A
25	BA	1288	U
25	BA	1292	U
25	BA	1298	C
25	BA	1300	U
25	BA	1301	A
25	BA	1307	A
25	BA	1310	G
25	BA	1312	U
25	BA	1319	G
25	BA	1321	A
25	BA	1329	U
25	BA	1332	G
25	BA	1341	U
25	BA	1345	C
25	BA	1348	G
25	BA	1349	A
25	BA	1352	U
25	BA	1359	A
25	BA	1360	A
25	BA	1365	A
25	BA	1368	G
25	BA	1370	C
25	BA	1371	G
25	BA	1379	A
25	BA	1384	A
25	BA	1385	G
25	BA	1386	C
25	BA	1402	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	1416	G
25	BA	1417	C
25	BA	1419	A
25	BA	1420	U
25	BA	1421	G
25	BA	1426	G
25	BA	1427	A
25	BA	1428	C
25	BA	1431	U
25	BA	1445	A
25	BA	1449	A
25	BA	1450	G
25	BA	1459	G
25	BA	1461	G
25	BA	1465	G
25	BA	1467	C
25	BA	1471	A
25	BA	1478	G
25	BA	1482	G
25	BA	1487	G
25	BA	1488	G
25	BA	1489	U
25	BA	1492	G
25	BA	1493	C
25	BA	1495	A
25	BA	1496	A
25	BA	1497	U
25	BA	1506	C
25	BA	1507	A
25	BA	1508	A
25	BA	1509	C
25	BA	1509(A)	A
25	BA	1523	U
25	BA	1525	G
25	BA	1540	U
25	BA	1542	A
25	BA	1543	C
25	BA	1546	C
25	BA	1554	A
25	BA	1558	A
25	BA	1559	G
25	BA	1569	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	1578	U
25	BA	1579	A
25	BA	1582	C
25	BA	1586	A
25	BA	1587	A
25	BA	1594	G
25	BA	1606	G
25	BA	1607	C
25	BA	1608	A
25	BA	1609	A
25	BA	1610	A
25	BA	1617	C
25	BA	1619	G
25	BA	1622	G
25	BA	1625	C
25	BA	1633	G
25	BA	1635	G
25	BA	1639	U
25	BA	1648	C
25	BA	1654	A
25	BA	1655	A
25	BA	1660	C
25	BA	1674	G
25	BA	1675	C
25	BA	1688	U
25	BA	1695	G
25	BA	1696	G
25	BA	1700	A
25	BA	1701	A
25	BA	1717	G
25	BA	1721	G
25	BA	1722	A
25	BA	1739	U
25	BA	1746	G
25	BA	1762	A
25	BA	1763	G
25	BA	1764	G
25	BA	1773	A
25	BA	1781	C
25	BA	1782	C
25	BA	1791	A
25	BA	1795	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	1799	G
25	BA	1800	C
25	BA	1801	G
25	BA	1802	A
25	BA	1811	G
25	BA	1812	A
25	BA	1816	G
25	BA	1819	A
25	BA	1820	U
25	BA	1828	G
25	BA	1829	A
25	BA	1834	U
25	BA	1835	G
25	BA	1837	C
25	BA	1847	A
25	BA	1858	G
25	BA	1876	A
25	BA	1877	A
25	BA	1878	G
25	BA	1889	A
25	BA	1896	G
25	BA	1900	A
25	BA	1904	G
25	BA	1906	G
25	BA	1913	A
25	BA	1914	C
25	BA	1915	U
25	BA	1921	G
25	BA	1929	G
25	BA	1930	G
25	BA	1931	U
25	BA	1936	A
25	BA	1938	A
25	BA	1955	U
25	BA	1963	U
25	BA	1964	G
25	BA	1967	C
25	BA	1969	A
25	BA	1970	A
25	BA	1971	A
25	BA	1972	A
25	BA	1975	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	1976	U
25	BA	1982	C
25	BA	1988	C
25	BA	1991	U
25	BA	1992	G
25	BA	1993	U
25	BA	1997	G
25	BA	2023	G
25	BA	2027	G
25	BA	2030	A
25	BA	2031	A
25	BA	2032	G
25	BA	2033	A
25	BA	2043	C
25	BA	2052	G
25	BA	2054	A
25	BA	2055	C
25	BA	2056	G
25	BA	2060	A
25	BA	2061	G
25	BA	2062	A
25	BA	2063	C
25	BA	2069	G
25	BA	2072	G
25	BA	2074	U
25	BA	2081	C
25	BA	2093	G
25	BA	2097	C
25	BA	2102	U
25	BA	2104	G
25	BA	2105	C
25	BA	2184	G
25	BA	2186	G
25	BA	2187	G
25	BA	2188	C
25	BA	2191	G
25	BA	2198	A
25	BA	2199	A
25	BA	2200	C
25	BA	2201	C
25	BA	2206	G
25	BA	2207	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	2208	A
25	BA	2218	U
25	BA	2225	A
25	BA	2234	G
25	BA	2238	G
25	BA	2243	U
25	BA	2268	A
25	BA	2269	A
25	BA	2273	A
25	BA	2274	A
25	BA	2275	C
25	BA	2278	A
25	BA	2279	G
25	BA	2283	C
25	BA	2287	A
25	BA	2288	A
25	BA	2289	G
25	BA	2294	C
25	BA	2298	A
25	BA	2305	A
25	BA	2306	C
25	BA	2307	G
25	BA	2308	G
25	BA	2311	A
25	BA	2315	G
25	BA	2318	G
25	BA	2319	G
25	BA	2320	A
25	BA	2321	G
25	BA	2322	A
25	BA	2325	G
25	BA	2327	A
25	BA	2334	G
25	BA	2335	A
25	BA	2336	A
25	BA	2340	G
25	BA	2347	C
25	BA	2348	U
25	BA	2349	G
25	BA	2350	C
25	BA	2357	U
25	BA	2365	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	2383	G
25	BA	2385	C
25	BA	2390	U
25	BA	2393	A
25	BA	2400	G
25	BA	2405	G
25	BA	2406	U
25	BA	2410	G
25	BA	2411	A
25	BA	2414	G
25	BA	2418	A
25	BA	2422	A
25	BA	2423	U
25	BA	2424	C
25	BA	2425	A
25	BA	2427	C
25	BA	2429	G
25	BA	2430	A
25	BA	2431	U
25	BA	2432	A
25	BA	2434	A
25	BA	2435	A
25	BA	2439	A
25	BA	2440	C
25	BA	2441	C
25	BA	2445	G
25	BA	2448	A
25	BA	2451	A
25	BA	2459	A
25	BA	2464	C
25	BA	2467	C
25	BA	2469	A
25	BA	2471	C
25	BA	2475	C
25	BA	2476	A
25	BA	2477	C
25	BA	2478	A
25	BA	2487	G
25	BA	2494	G
25	BA	2496	C
25	BA	2502	G
25	BA	2505	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	2506	U
25	BA	2518	A
25	BA	2520	C
25	BA	2525	G
25	BA	2529	G
25	BA	2535	G
25	BA	2554	U
25	BA	2566	A
25	BA	2567	G
25	BA	2573	C
25	BA	2574	G
25	BA	2585	U
25	BA	2586	C
25	BA	2596	U
25	BA	2602	A
25	BA	2604	U
25	BA	2609	U
25	BA	2610	C
25	BA	2611	U
25	BA	2612	C
25	BA	2615	U
25	BA	2617	C
25	BA	2629	A
25	BA	2630	G
25	BA	2657	A
25	BA	2670	A
25	BA	2679	A
25	BA	2689	U
25	BA	2690	C
25	BA	2691	C
25	BA	2701	C
25	BA	2702	U
25	BA	2703	C
25	BA	2712(A)	A
25	BA	2713	A
25	BA	2714	G
25	BA	2726	U
25	BA	2733	A
25	BA	2739	U
25	BA	2758	A
25	BA	2765	A
25	BA	2766	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	2769	C
25	BA	2778	A
25	BA	2790	A
25	BA	2791	C
25	BA	2792	G
25	BA	2802	G
25	BA	2808	U
25	BA	2818	G
25	BA	2820	A
25	BA	2821	A
25	BA	2826	A
25	BA	2833	G
25	BA	2834	G
25	BA	2835	A
25	BA	2848	G
25	BA	2858	C
25	BA	2870	C
25	BA	2872	G
25	BA	2873	A
25	BA	2892	A
25	BA	2895	U
25	BA	2897	U
26	BB	2	C
26	BB	8	U
26	BB	9	G
26	BB	12	C
26	BB	13	A
26	BB	15	A
26	BB	16	G
26	BB	20	C
26	BB	29	A
26	BB	35	U
26	BB	39	A
26	BB	42	C
26	BB	45	A
26	BB	47	C
26	BB	54	G
26	BB	56	G
26	BB	64	C
26	BB	67	G
26	BB	73	A
26	BB	84	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	BB	91	C
26	BB	106	G
26	BB	110	G
26	BB	120	A
1	CA	6	G
1	CA	7	G
1	CA	9	G
1	CA	10	A
1	CA	13	U
1	CA	22	G
1	CA	26	A
1	CA	32	A
1	CA	39	G
1	CA	40	C
1	CA	47	C
1	CA	48	C
1	CA	50	A
1	CA	51	A
1	CA	58	C
1	CA	60	A
1	CA	61	G
1	CA	65	U
1	CA	66	G
1	CA	73	G
1	CA	76	C
1	CA	96	U
1	CA	97	G
1	CA	101	A
1	CA	105	G
1	CA	112	G
1	CA	115	G
1	CA	116	A
1	CA	117	G
1	CA	120	A
1	CA	121	C
1	CA	129(A)	G
1	CA	131	C
1	CA	144	G
1	CA	146	G
1	CA	150	C
1	CA	154	C
1	CA	163	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	173	U
1	CA	182	U
1	CA	189(B)	C
1	CA	189(F)	U
1	CA	189(H)	G
1	CA	195	A
1	CA	197	A
1	CA	199	G
1	CA	200	G
1	CA	201	C
1	CA	202	U
1	CA	203	U
1	CA	204	U
1	CA	216	G
1	CA	227	G
1	CA	245	C
1	CA	247	G
1	CA	250	A
1	CA	251	G
1	CA	253	U
1	CA	266	G
1	CA	267	C
1	CA	275	G
1	CA	281	G
1	CA	289	G
1	CA	300	A
1	CA	305	G
1	CA	314	C
1	CA	319	G
1	CA	321	A
1	CA	328	C
1	CA	329	A
1	CA	331	G
1	CA	332	G
1	CA	344	A
1	CA	349	A
1	CA	352	C
1	CA	353	A
1	CA	354	G
1	CA	355	C
1	CA	363	A
1	CA	365	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	366	C
1	CA	367	U
1	CA	372	C
1	CA	373	A
1	CA	381	C
1	CA	382	A
1	CA	389	A
1	CA	397	A
1	CA	398	C
1	CA	404	U
1	CA	406	G
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	419	C
1	CA	421	U
1	CA	422	C
1	CA	424	G
1	CA	427	U
1	CA	429	U
1	CA	430	A
1	CA	431	A
1	CA	436	C
1	CA	437	U
1	CA	439	A
1	CA	441	A
1	CA	442	C
1	CA	445	G
1	CA	452	A
1	CA	461	A
1	CA	475	G
1	CA	484	G
1	CA	485	G
1	CA	491	G
1	CA	496	A
1	CA	498	U
1	CA	499	A
1	CA	505	G
1	CA	509	A
1	CA	510	A
1	CA	511	C
1	CA	513	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	518	C
1	CA	527	G
1	CA	532	A
1	CA	533	A
1	CA	541	G
1	CA	547	A
1	CA	549	C
1	CA	550	G
1	CA	558	G
1	CA	559	A
1	CA	561	U
1	CA	562	C
1	CA	564	C
1	CA	573	A
1	CA	575	G
1	CA	576	G
1	CA	577	G
1	CA	587	G
1	CA	588	G
1	CA	595	G
1	CA	596	C
1	CA	597	G
1	CA	602	A
1	CA	617	G
1	CA	623	C
1	CA	630	G
1	CA	632	A
1	CA	633	G
1	CA	650	G
1	CA	653	A
1	CA	657	G
1	CA	665	A
1	CA	666	G
1	CA	687	A
1	CA	688	G
1	CA	711	G
1	CA	721	G
1	CA	723	U
1	CA	724	G
1	CA	729	A
1	CA	731	G
1	CA	749	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	754	C
1	CA	755	G
1	CA	760	G
1	CA	763	G
1	CA	765	G
1	CA	776	G
1	CA	777	A
1	CA	782	A
1	CA	788	U
1	CA	792	A
1	CA	793	U
1	CA	794	A
1	CA	796	C
1	CA	799	G
1	CA	810	C
1	CA	812	C
1	CA	817	C
1	CA	819	A
1	CA	820	U
1	CA	821	G
1	CA	828	A
1	CA	829	G
1	CA	833	U
1	CA	839	U
1	CA	840	C
1	CA	841	U
1	CA	848	C
1	CA	851	G
1	CA	858	G
1	CA	859	A
1	CA	870	U
1	CA	872	A
1	CA	873	A
1	CA	876	G
1	CA	877	C
1	CA	878	G
1	CA	884	U
1	CA	885	G
1	CA	902	G
1	CA	906	G
1	CA	914	A
1	CA	919	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	926	G
1	CA	927	G
1	CA	934	C
1	CA	954	G
1	CA	960	U
1	CA	961	U
1	CA	966	G
1	CA	969	A
1	CA	972	C
1	CA	974	A
1	CA	975	A
1	CA	976	G
1	CA	977	A
1	CA	978	A
1	CA	980	C
1	CA	984	C
1	CA	992	U
1	CA	993	G
1	CA	995	C
1	CA	1009	G
1	CA	1011	G
1	CA	1017	G
1	CA	1045	C
1	CA	1050	G
1	CA	1053	G
1	CA	1054	C
1	CA	1055	A
1	CA	1057	G
1	CA	1058	G
1	CA	1062	U
1	CA	1065	U
1	CA	1066	C
1	CA	1068	G
1	CA	1069	C
1	CA	1079	G
1	CA	1081	G
1	CA	1086	U
1	CA	1093	A
1	CA	1095	U
1	CA	1101	A
1	CA	1104	G
1	CA	1113	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1117	G
1	CA	1124	G
1	CA	1125	U
1	CA	1126	U
1	CA	1127	G
1	CA	1134	G
1	CA	1136	U
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1140	C
1	CA	1147	C
1	CA	1148	U
1	CA	1152	A
1	CA	1154	G
1	CA	1159	U
1	CA	1160	G
1	CA	1170	A
1	CA	1171	G
1	CA	1178	G
1	CA	1179	A
1	CA	1182	G
1	CA	1185	G
1	CA	1188	A
1	CA	1190	G
1	CA	1193	G
1	CA	1196	U
1	CA	1197	G
1	CA	1201	A
1	CA	1202	G
1	CA	1203	C
1	CA	1211	U
1	CA	1212	U
1	CA	1213	A
1	CA	1215	G
1	CA	1218	C
1	CA	1224	G
1	CA	1225	A
1	CA	1226	C
1	CA	1227	A
1	CA	1228	C
1	CA	1236	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1238	A
1	CA	1239	A
1	CA	1240	U
1	CA	1241	G
1	CA	1248	A
1	CA	1256	A
1	CA	1257	U
1	CA	1258	G
1	CA	1260	C
1	CA	1263	C
1	CA	1269	A
1	CA	1270	C
1	CA	1273	G
1	CA	1277	C
1	CA	1279	A
1	CA	1280	A
1	CA	1282	C
1	CA	1283	G
1	CA	1286	A
1	CA	1287	A
1	CA	1299	A
1	CA	1300	G
1	CA	1301	U
1	CA	1302	U
1	CA	1305	G
1	CA	1311	G
1	CA	1312	G
1	CA	1317	C
1	CA	1320	C
1	CA	1321	C
1	CA	1322	C
1	CA	1323	G
1	CA	1331	G
1	CA	1335	C
1	CA	1336	C
1	CA	1346	A
1	CA	1347	G
1	CA	1353	G
1	CA	1358	U
1	CA	1359	C
1	CA	1363	C
1	CA	1365	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1369	C
1	CA	1370	G
1	CA	1378	C
1	CA	1382	C
1	CA	1388	C
1	CA	1389	C
1	CA	1397	C
1	CA	1398	A
1	CA	1406	U
1	CA	1411	C
1	CA	1419	G
1	CA	1425	U
1	CA	1442	G
1	CA	1442(A)	G
1	CA	1447	A
1	CA	1452	C
1	CA	1456	G
1	CA	1457	G
1	CA	1487	G
1	CA	1492	A
1	CA	1493	A
1	CA	1494	G
1	CA	1499	A
1	CA	1502	A
1	CA	1503	A
1	CA	1504	G
1	CA	1505	G
1	CA	1506	U
1	CA	1507	A
1	CA	1517	G
1	CA	1519	A
1	CA	1520	G
1	CA	1529	G
1	CA	1530	G
1	CA	1531	A
23	CV	7	G
23	CV	8	U
23	CV	9	G
23	CV	10	G
23	CV	13	C
23	CV	17	C
23	CV	18	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	CV	19	G
23	CV	20	U
23	CV	21	A
23	CV	22	G
23	CV	47	U
23	CV	48	C
23	CV	49	G
23	CV	50	U
23	CV	52	G
23	CV	56	C
23	CV	65	C
23	CV	70	G
23	CV	74	C
23	CV	76	A
25	DA	9	U
25	DA	10	G
25	DA	14	A
25	DA	15	G
25	DA	30	G
25	DA	34	C
25	DA	35	G
25	DA	36	G
25	DA	45	C
25	DA	55	G
25	DA	61	G
25	DA	64	A
25	DA	70	G
25	DA	71	A
25	DA	72	U
25	DA	74	A
25	DA	75	G
25	DA	84	A
25	DA	90	U
25	DA	92	A
25	DA	100	G
25	DA	102	G
25	DA	103	A
25	DA	118	A
25	DA	120	U
25	DA	133	C
25	DA	141	A
25	DA	153	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	154	G
25	DA	154(A)	C
25	DA	157	U
25	DA	172	C
25	DA	173	G
25	DA	181	A
25	DA	182	A
25	DA	183	C
25	DA	196	A
25	DA	197	A
25	DA	199	A
25	DA	200	U
25	DA	204	A
25	DA	205	G
25	DA	215	G
25	DA	216	A
25	DA	221	A
25	DA	222	A
25	DA	224	G
25	DA	228	A
25	DA	229	A
25	DA	232	G
25	DA	233	A
25	DA	245	G
25	DA	248	G
25	DA	250	G
25	DA	252	G
25	DA	271(I)	G
25	DA	271(K)	U
25	DA	271(L)	U
25	DA	271(M)	G
25	DA	271(N)	U
25	DA	271(O)	C
25	DA	271(R)	G
25	DA	272(A)	U
25	DA	272(B)	G
25	DA	281	G
25	DA	287	C
25	DA	308	G
25	DA	311	A
25	DA	324	A
25	DA	329	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	330	A
25	DA	342	G
25	DA	352	G
25	DA	353	G
25	DA	363	G
25	DA	363(B)	G
25	DA	363(C)	G
25	DA	363(F)	A
25	DA	386	G
25	DA	387	U
25	DA	389	G
25	DA	396	G
25	DA	406	G
25	DA	407	G
25	DA	411	G
25	DA	412	A
25	DA	427	U
25	DA	428	A
25	DA	444	C
25	DA	447	A
25	DA	455	C
25	DA	456	C
25	DA	457	A
25	DA	464	U
25	DA	470	A
25	DA	471	A
25	DA	472	A
25	DA	474	G
25	DA	475	U
25	DA	481	G
25	DA	482	A
25	DA	501	A
25	DA	504	U
25	DA	505	A
25	DA	508	G
25	DA	509	C
25	DA	510	C
25	DA	521	G
25	DA	530	G
25	DA	531	C
25	DA	532	A
25	DA	533	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	545	G
25	DA	546	C
25	DA	549	G
25	DA	563	G
25	DA	571	A
25	DA	573	G
25	DA	574	C
25	DA	575	A
25	DA	587	C
25	DA	588	U
25	DA	603	A
25	DA	604	G
25	DA	607	U
25	DA	615	G
25	DA	616	G
25	DA	620	G
25	DA	627	A
25	DA	637	A
25	DA	645	C
25	DA	646	A
25	DA	652(B)	A
25	DA	652(C)	G
25	DA	652(E)	G
25	DA	652(U)	G
25	DA	653	A
25	DA	668	G
25	DA	669	G
25	DA	670	A
25	DA	684	G
25	DA	686	G
25	DA	701	G
25	DA	708	C
25	DA	709	U
25	DA	717	G
25	DA	718	A
25	DA	726	G
25	DA	730	C
25	DA	731	C
25	DA	738	G
25	DA	740	U
25	DA	746	A
25	DA	747	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	748	G
25	DA	749	C
25	DA	753	C
25	DA	762	U
25	DA	765	G
25	DA	775	G
25	DA	776	G
25	DA	779	U
25	DA	782	A
25	DA	783	A
25	DA	784	A
25	DA	785	G
25	DA	790	C
25	DA	792	G
25	DA	805	G
25	DA	812	C
25	DA	819	A
25	DA	822	U
25	DA	827	U
25	DA	828	U
25	DA	829	A
25	DA	830	G
25	DA	839	U
25	DA	840	C
25	DA	846	C
25	DA	848	G
25	DA	855	G
25	DA	857	C
25	DA	859	G
25	DA	869	G
25	DA	874	G
25	DA	875	G
25	DA	880	G
25	DA	884	C
25	DA	885	C
25	DA	886	C
25	DA	887	A
25	DA	888	C
25	DA	889	C
25	DA	890	A
25	DA	893	C
25	DA	894	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	896	A
25	DA	900	A
25	DA	901	A
25	DA	905	U
25	DA	910	A
25	DA	911	A
25	DA	917	A
25	DA	931	G
25	DA	932	G
25	DA	933	A
25	DA	934	G
25	DA	938	G
25	DA	941	A
25	DA	944	G
25	DA	945	A
25	DA	946	G
25	DA	947	G
25	DA	957	A
25	DA	958	U
25	DA	959	A
25	DA	961	C
25	DA	968	G
25	DA	974	G
25	DA	975	C
25	DA	975(A)	G
25	DA	983	A
25	DA	991	C
25	DA	996	A
25	DA	999	U
25	DA	1004	C
25	DA	1005	C
25	DA	1009	A
25	DA	1010	A
25	DA	1012	U
25	DA	1013	C
25	DA	1020	A
25	DA	1021	A
25	DA	1022	G
25	DA	1023	U
25	DA	1026	U
25	DA	1027	A
25	DA	1033	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	1035	U
25	DA	1041	C
25	DA	1042	G
25	DA	1113	U
25	DA	1114	G
25	DA	1115	G
25	DA	1118	C
25	DA	1126	A
25	DA	1130	U
25	DA	1135	C
25	DA	1136	G
25	DA	1137	G
25	DA	1139	G
25	DA	1142(A)	A
25	DA	1143	A
25	DA	1150	C
25	DA	1155	A
25	DA	1170	G
25	DA	1171	G
25	DA	1204	A
25	DA	1205	U
25	DA	1210	A
25	DA	1211	U
25	DA	1212	G
25	DA	1213	A
25	DA	1219	G
25	DA	1220	A
25	DA	1236	G
25	DA	1237	A
25	DA	1240	U
25	DA	1241	A
25	DA	1244	G
25	DA	1253	A
25	DA	1256	G
25	DA	1262	A
25	DA	1264	G
25	DA	1268	A
25	DA	1271	G
25	DA	1272	A
25	DA	1273	U
25	DA	1278	A
25	DA	1287	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	1298	C
25	DA	1300	U
25	DA	1301	A
25	DA	1308	A
25	DA	1314	C
25	DA	1319	G
25	DA	1329	U
25	DA	1332	G
25	DA	1333	C
25	DA	1345	C
25	DA	1352	U
25	DA	1359	A
25	DA	1360	A
25	DA	1365	A
25	DA	1368	G
25	DA	1370	C
25	DA	1373	A
25	DA	1379	A
25	DA	1384	A
25	DA	1385	G
25	DA	1386	C
25	DA	1416	G
25	DA	1419	A
25	DA	1420	U
25	DA	1421	G
25	DA	1427	A
25	DA	1428	C
25	DA	1437	C
25	DA	1445	A
25	DA	1448	G
25	DA	1449	A
25	DA	1450	G
25	DA	1452	A
25	DA	1455	G
25	DA	1465	G
25	DA	1467	C
25	DA	1471	A
25	DA	1478	G
25	DA	1482	G
25	DA	1489	U
25	DA	1493	C
25	DA	1496	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	1497	U
25	DA	1507	A
25	DA	1508	A
25	DA	1509	C
25	DA	1509(A)	A
25	DA	1510	G
25	DA	1525	G
25	DA	1531	C
25	DA	1537	G
25	DA	1541	G
25	DA	1542	A
25	DA	1543	C
25	DA	1547	C
25	DA	1558	A
25	DA	1559	G
25	DA	1569	A
25	DA	1578	U
25	DA	1579	A
25	DA	1581	G
25	DA	1584	C
25	DA	1586	A
25	DA	1598	C
25	DA	1603	A
25	DA	1608	A
25	DA	1609	A
25	DA	1616	A
25	DA	1617	C
25	DA	1619	G
25	DA	1621	U
25	DA	1625	C
25	DA	1640	C
25	DA	1648	C
25	DA	1654	A
25	DA	1655	A
25	DA	1665	A
25	DA	1674	G
25	DA	1676	A
25	DA	1695	G
25	DA	1696	G
25	DA	1700	A
25	DA	1701	A
25	DA	1703	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	1721	G
25	DA	1722	A
25	DA	1740	G
25	DA	1742	G
25	DA	1746	G
25	DA	1752	C
25	DA	1756	G
25	DA	1758	G
25	DA	1762	A
25	DA	1763	G
25	DA	1764	G
25	DA	1769	G
25	DA	1773	A
25	DA	1779	U
25	DA	1780	A
25	DA	1781	C
25	DA	1782	C
25	DA	1786	A
25	DA	1791	A
25	DA	1799	G
25	DA	1800	C
25	DA	1801	G
25	DA	1811	G
25	DA	1812	A
25	DA	1816	G
25	DA	1819	A
25	DA	1820	U
25	DA	1827	C
25	DA	1828	G
25	DA	1829	A
25	DA	1834	U
25	DA	1835	G
25	DA	1842	G
25	DA	1847	A
25	DA	1859	A
25	DA	1860	G
25	DA	1861	G
25	DA	1877	A
25	DA	1878	G
25	DA	1896	G
25	DA	1900	A
25	DA	1906	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	1913	A
25	DA	1914	C
25	DA	1915	U
25	DA	1920	C
25	DA	1929	G
25	DA	1930	G
25	DA	1934	C
25	DA	1936	A
25	DA	1938	A
25	DA	1950	G
25	DA	1955	U
25	DA	1963	U
25	DA	1964	G
25	DA	1967	C
25	DA	1968	G
25	DA	1969	A
25	DA	1970	A
25	DA	1971	A
25	DA	1972	A
25	DA	1979	C
25	DA	1980	G
25	DA	1982	C
25	DA	1984	G
25	DA	1991	U
25	DA	1992	G
25	DA	1993	U
25	DA	1996	C
25	DA	1997	G
25	DA	2018	G
25	DA	2020	A
25	DA	2023	G
25	DA	2031	A
25	DA	2032	G
25	DA	2033	A
25	DA	2036	C
25	DA	2039	C
25	DA	2043	C
25	DA	2049	G
25	DA	2052	G
25	DA	2055	C
25	DA	2056	G
25	DA	2060	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	2061	G
25	DA	2062	A
25	DA	2069	G
25	DA	2070	G
25	DA	2082	A
25	DA	2097	C
25	DA	2099	U
25	DA	2103	C
25	DA	2104	G
25	DA	2105	C
25	DA	2185	C
25	DA	2187	G
25	DA	2188	C
25	DA	2191	G
25	DA	2192	G
25	DA	2193	G
25	DA	2198	A
25	DA	2199	A
25	DA	2200	C
25	DA	2201	C
25	DA	2206	G
25	DA	2207	G
25	DA	2208	A
25	DA	2219	G
25	DA	2225	A
25	DA	2238	G
25	DA	2239	G
25	DA	2240	C
25	DA	2257	U
25	DA	2275	C
25	DA	2279	G
25	DA	2283	C
25	DA	2287	A
25	DA	2288	A
25	DA	2289	G
25	DA	2298	A
25	DA	2304	G
25	DA	2305	A
25	DA	2311	A
25	DA	2319	G
25	DA	2320	A
25	DA	2321	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	2322	A
25	DA	2324	C
25	DA	2325	G
25	DA	2327	A
25	DA	2328	A
25	DA	2334	G
25	DA	2336	A
25	DA	2343	C
25	DA	2347	C
25	DA	2349	G
25	DA	2350	C
25	DA	2352	A
25	DA	2359	C
25	DA	2366	A
25	DA	2375	G
25	DA	2383	G
25	DA	2384	G
25	DA	2385	C
25	DA	2388	A
25	DA	2391	G
25	DA	2392	A
25	DA	2400	G
25	DA	2406	U
25	DA	2410	G
25	DA	2414	G
25	DA	2416	C
25	DA	2421	G
25	DA	2422	A
25	DA	2423	U
25	DA	2425	A
25	DA	2426	A
25	DA	2427	C
25	DA	2428	G
25	DA	2429	G
25	DA	2430	A
25	DA	2432	A
25	DA	2435	A
25	DA	2436	G
25	DA	2439	A
25	DA	2440	C
25	DA	2441	C
25	DA	2445	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	2448	A
25	DA	2459	A
25	DA	2469	A
25	DA	2470	G
25	DA	2474	C
25	DA	2476	A
25	DA	2479	G
25	DA	2480	C
25	DA	2481	G
25	DA	2486	G
25	DA	2497	A
25	DA	2502	G
25	DA	2504	U
25	DA	2505	G
25	DA	2506	U
25	DA	2509	G
25	DA	2517	C
25	DA	2518	A
25	DA	2520	C
25	DA	2525	G
25	DA	2529	G
25	DA	2535	G
25	DA	2553	G
25	DA	2554	U
25	DA	2566	A
25	DA	2567	G
25	DA	2569	G
25	DA	2572	A
25	DA	2573	C
25	DA	2582	G
25	DA	2585	U
25	DA	2586	C
25	DA	2601	C
25	DA	2602	A
25	DA	2608	G
25	DA	2609	U
25	DA	2611	U
25	DA	2612	C
25	DA	2615	U
25	DA	2623	G
25	DA	2629	A
25	DA	2630	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	2632	A
25	DA	2636	U
25	DA	2646	C
25	DA	2663	G
25	DA	2669	G
25	DA	2673	G
25	DA	2675	A
25	DA	2679	A
25	DA	2686	G
25	DA	2689	U
25	DA	2690	C
25	DA	2691	C
25	DA	2702	U
25	DA	2711	A
25	DA	2712(A)	A
25	DA	2713	A
25	DA	2714	G
25	DA	2722	G
25	DA	2726	U
25	DA	2727	G
25	DA	2733	A
25	DA	2735	G
25	DA	2744	G
25	DA	2752	C
25	DA	2756	U
25	DA	2758	A
25	DA	2761	G
25	DA	2764	A
25	DA	2765	A
25	DA	2766	G
25	DA	2769	C
25	DA	2778	A
25	DA	2780	G
25	DA	2787	C
25	DA	2789	C
25	DA	2790	A
25	DA	2791	C
25	DA	2802	G
25	DA	2803	C
25	DA	2807	G
25	DA	2808	U
25	DA	2812	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	2818	G
25	DA	2820	A
25	DA	2821	A
25	DA	2825	C
25	DA	2833	G
25	DA	2834	G
25	DA	2835	A
25	DA	2836	U
25	DA	2850	A
25	DA	2851	A
25	DA	2872	G
25	DA	2873	A
25	DA	2879	C
25	DA	2880	C
25	DA	2892	A
25	DA	2895	U
26	DB	2	C
26	DB	7	G
26	DB	9	G
26	DB	12	C
26	DB	13	A
26	DB	23	G
26	DB	24	G
26	DB	30	C
26	DB	31	C
26	DB	40	U
26	DB	44	G
26	DB	45	A
26	DB	52	A
26	DB	53	A
26	DB	54	G
26	DB	56	G
26	DB	67	G
26	DB	73	A
26	DB	84	C
26	DB	96	U
26	DB	97	G
26	DB	106	G
26	DB	110	G
26	DB	116	G
26	DB	117	G
26	DB	120	A

All (188) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	60	A
1	AA	115	G
1	AA	119	A
1	AA	266	G
1	AA	327	A
1	AA	343	U
1	AA	366	C
1	AA	428	G
1	AA	429	U
1	AA	509	A
1	AA	533	A
1	AA	560	U
1	AA	660	G
1	AA	687	A
1	AA	748	C
1	AA	793	U
1	AA	828	A
1	AA	913	A
1	AA	991	U
1	AA	992	U
1	AA	1019	C
1	AA	1065	U
1	AA	1067	A
1	AA	1126	U
1	AA	1165	C
1	AA	1201	A
1	AA	1256	A
1	AA	1281	U
1	AA	1285	A
1	AA	1300	G
1	AA	1456	G
1	AA	1504	G
1	AA	1530	G
23	AV	9	G
25	BA	34	C
25	BA	102	G
25	BA	196	A
25	BA	249	C
25	BA	271(K)	U
25	BA	271(L)	U
25	BA	271(M)	G
25	BA	278	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	352	G
25	BA	362	U
25	BA	363(E)	U
25	BA	405	U
25	BA	474	G
25	BA	481	G
25	BA	587	C
25	BA	652(A)	A
25	BA	685	A
25	BA	752	A
25	BA	764	A
25	BA	774	A
25	BA	827	U
25	BA	888	C
25	BA	900	A
25	BA	915	C
25	BA	1026	U
25	BA	1047	G
25	BA	1106	G
25	BA	1108	U
25	BA	1142(A)	A
25	BA	1174	A
25	BA	1175	U
25	BA	1176	G
25	BA	1210	A
25	BA	1253	A
25	BA	1286	A
25	BA	1301	A
25	BA	1379	A
25	BA	1420	U
25	BA	1427	A
25	BA	1507	A
25	BA	1558	A
25	BA	1559	G
25	BA	1608	A
25	BA	1609	A
25	BA	1653	G
25	BA	1781	C
25	BA	1799	G
25	BA	1819	A
25	BA	1914	C
25	BA	1992	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	BA	2062	A
25	BA	2318	G
25	BA	2319	G
25	BA	2335	A
25	BA	2405	G
25	BA	2406	U
25	BA	2422	A
25	BA	2439	A
25	BA	2506	U
25	BA	2610	C
25	BA	2689	U
25	BA	2778	A
25	BA	2789	C
25	BA	2834	G
1	CA	60	A
1	CA	65	U
1	CA	115	G
1	CA	119	A
1	CA	149	A
1	CA	266	G
1	CA	366	C
1	CA	428	G
1	CA	429	U
1	CA	509	A
1	CA	560	U
1	CA	562	C
1	CA	687	A
1	CA	748	C
1	CA	793	U
1	CA	828	A
1	CA	840	C
1	CA	913	A
1	CA	991	U
1	CA	992	U
1	CA	1049	U
1	CA	1061	G
1	CA	1064	G
1	CA	1065	U
1	CA	1067	A
1	CA	1201	A
1	CA	1256	A
1	CA	1279	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1285	A
1	CA	1300	G
1	CA	1492	A
1	CA	1504	G
1	CA	1530	G
25	DA	9	U
25	DA	34	C
25	DA	71	A
25	DA	102	G
25	DA	196	A
25	DA	249	C
25	DA	271(M)	G
25	DA	310	A
25	DA	363(E)	U
25	DA	474	G
25	DA	481	G
25	DA	503	A
25	DA	587	C
25	DA	669	G
25	DA	685	A
25	DA	746	A
25	DA	752	A
25	DA	774	A
25	DA	827	U
25	DA	856	C
25	DA	888	C
25	DA	900	A
25	DA	974	G
25	DA	1026	U
25	DA	1210	A
25	DA	1332	G
25	DA	1378	A
25	DA	1379	A
25	DA	1420	U
25	DA	1427	A
25	DA	1507	A
25	DA	1530	C
25	DA	1558	A
25	DA	1559	G
25	DA	1608	A
25	DA	1653	G
25	DA	1819	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	DA	1914	C
25	DA	1963	U
25	DA	1992	G
25	DA	2019	A
25	DA	2238	G
25	DA	2282	G
25	DA	2288	A
25	DA	2318	G
25	DA	2319	G
25	DA	2326	C
25	DA	2335	A
25	DA	2405	G
25	DA	2439	A
25	DA	2689	U
25	DA	2726	U
25	DA	2778	A
25	DA	2789	C
25	DA	2802	G
26	DB	44	G
26	DB	52	A

## 5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 2350 ligands modelled in this entry, 2350 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.



## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 6 Fit of model and data ⓘ

### 6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ > 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	AA	1466/1522 (96%)	-0.14	21 (1%) 75 63	43, 93, 137, 172	0
1	CA	1461/1522 (95%)	-0.02	31 (2%) 63 49	55, 104, 145, 167	0
2	AB	233/256 (91%)	-0.25	3 (1%) 77 65	72, 113, 134, 153	0
2	CB	235/256 (91%)	0.00	9 (3%) 40 26	100, 125, 139, 147	0
3	AC	204/239 (85%)	-0.17	2 (0%) 82 72	97, 112, 125, 133	0
3	CC	206/239 (86%)	0.10	8 (3%) 39 25	110, 125, 136, 142	0
4	AD	208/209 (99%)	-0.30	2 (0%) 82 72	76, 103, 118, 125	0
4	CD	208/209 (99%)	-0.35	0 100 100	85, 98, 114, 120	0
5	AE	148/162 (91%)	-0.37	1 (0%) 87 81	67, 89, 108, 134	0
5	CE	149/162 (91%)	-0.27	1 (0%) 87 81	83, 99, 110, 131	0
6	AF	100/101 (99%)	-0.47	0 100 100	68, 88, 104, 110	0
6	CF	100/101 (99%)	-0.42	0 100 100	78, 96, 110, 117	0
7	AG	154/156 (98%)	-0.17	5 (3%) 47 31	87, 102, 120, 133	0
7	CG	154/156 (98%)	0.11	11 (7%) 16 9	107, 119, 133, 144	0
8	AH	138/138 (100%)	-0.38	0 100 100	73, 91, 100, 111	0
8	CH	138/138 (100%)	-0.36	1 (0%) 87 81	82, 100, 111, 116	0
9	AI	125/128 (97%)	0.02	1 (0%) 86 78	71, 114, 126, 137	0
9	CI	125/128 (97%)	0.40	13 (10%) 6 4	101, 130, 138, 142	0
10	AJ	96/105 (91%)	0.37	9 (9%) 8 4	88, 119, 136, 140	0
10	CJ	96/105 (91%)	0.91	16 (16%) 1 1	111, 133, 141, 143	0
11	AK	115/129 (89%)	-0.36	0 100 100	53, 87, 104, 113	0
11	CK	114/129 (88%)	-0.26	1 (0%) 84 75	78, 103, 118, 127	0
12	AL	122/132 (92%)	-0.49	0 100 100	61, 84, 100, 111	0
12	CL	122/132 (92%)	-0.37	1 (0%) 86 78	72, 90, 105, 114	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	AM	115/126 (91%)	-0.33	0 100 100	66, 100, 113, 118	0
13	CM	112/126 (88%)	0.09	2 (1%) 68 55	102, 127, 135, 139	0
14	AN	59/61 (96%)	-0.06	1 (1%) 70 57	94, 106, 114, 121	0
14	CN	59/61 (96%)	0.47	5 (8%) 10 6	116, 125, 133, 135	0
15	AO	88/89 (98%)	-0.36	0 100 100	65, 86, 106, 117	0
15	CO	88/89 (98%)	-0.30	0 100 100	74, 96, 114, 118	0
16	AP	81/88 (92%)	-0.24	0 100 100	83, 100, 122, 127	0
16	CP	82/88 (93%)	-0.27	1 (1%) 79 67	84, 94, 112, 122	0
17	AQ	99/105 (94%)	-0.24	1 (1%) 82 72	68, 89, 104, 113	0
17	CQ	99/105 (94%)	-0.36	0 100 100	77, 95, 110, 113	0
18	AR	68/88 (77%)	-0.45	1 (1%) 73 61	69, 84, 102, 106	0
18	CR	68/88 (77%)	-0.27	0 100 100	82, 92, 111, 115	0
19	AS	81/93 (87%)	-0.02	2 (2%) 57 43	96, 110, 130, 141	0
19	CS	75/93 (80%)	0.62	5 (6%) 17 10	107, 131, 142, 146	0
20	AT	96/106 (90%)	-0.33	0 100 100	77, 97, 113, 118	0
20	CT	104/106 (98%)	-0.17	3 (2%) 51 36	81, 101, 123, 139	0
21	AU	25/27 (92%)	0.39	0 100 100	80, 98, 105, 107	0
21	CU	23/27 (85%)	1.41	4 (17%) 1 1	115, 126, 132, 134	0
22	AY	132/140 (94%)	1.53	37 (28%) 0 0	69, 110, 138, 152	0
23	AV	77/77 (100%)	-0.07	1 (1%) 77 65	55, 82, 112, 134	0
23	CV	77/77 (100%)	0.03	1 (1%) 77 65	73, 109, 133, 156	0
24	AX	6/16 (37%)	1.02	1 (16%) 1 1	67, 73, 127, 128	0
24	CX	6/16 (37%)	0.98	2 (33%) 0 0	89, 96, 142, 147	0
25	BA	2752/2915 (94%)	-0.43	27 (0%) 82 72	23, 43, 115, 170	0
25	DA	2722/2915 (93%)	-0.27	47 (1%) 70 57	44, 74, 127, 170	0
26	BB	120/122 (98%)	-0.47	0 100 100	36, 64, 90, 125	0
26	DB	120/122 (98%)	0.05	1 (0%) 86 78	73, 114, 129, 146	0
27	BD	275/276 (99%)	-0.69	1 (0%) 92 89	27, 43, 62, 110	0
27	DD	275/276 (99%)	-0.46	2 (0%) 87 81	41, 62, 82, 100	0
28	BE	204/206 (99%)	-0.70	0 100 100	22, 45, 71, 94	0
28	DE	204/206 (99%)	-0.46	0 100 100	43, 74, 100, 113	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
29	BF	203/210 (96%)	-0.62	0 100 100	26, 49, 87, 115	0
29	DF	203/210 (96%)	-0.42	0 100 100	47, 88, 114, 127	0
30	BG	181/182 (99%)	-0.47	0 100 100	58, 77, 105, 116	0
30	DG	180/182 (98%)	-0.18	1 (0%) 89 83	101, 117, 127, 136	0
31	BH	174/180 (96%)	-0.53	0 100 100	38, 65, 84, 98	0
31	DH	174/180 (96%)	0.30	8 (4%) 32 20	96, 116, 130, 140	0
32	BI	147/148 (99%)	-0.40	0 100 100	50, 95, 112, 128	0
32	DI	146/148 (98%)	-0.13	1 (0%) 87 81	68, 108, 126, 131	0
33	BN	140/140 (100%)	-0.71	0 100 100	30, 42, 69, 83	0
33	DN	140/140 (100%)	-0.35	0 100 100	64, 86, 107, 117	0
34	BO	122/122 (100%)	-0.70	0 100 100	33, 52, 71, 82	0
34	DO	122/122 (100%)	-0.59	0 100 100	57, 73, 88, 96	0
35	BP	149/150 (99%)	-0.61	0 100 100	25, 55, 86, 108	0
35	DP	149/150 (99%)	-0.31	0 100 100	52, 91, 116, 127	0
36	BQ	141/141 (100%)	-0.65	0 100 100	33, 50, 70, 90	0
36	DQ	141/141 (100%)	-0.35	2 (1%) 75 63	67, 90, 106, 114	0
37	BR	118/118 (100%)	-0.75	0 100 100	27, 41, 59, 67	0
37	DR	118/118 (100%)	-0.56	0 100 100	49, 65, 86, 95	0
38	BS	110/112 (98%)	-0.62	0 100 100	44, 62, 86, 97	0
38	DS	110/112 (98%)	-0.20	0 100 100	90, 109, 119, 127	0
39	BT	132/146 (90%)	-0.74	0 100 100	41, 55, 94, 127	0
39	DT	130/146 (89%)	-0.52	0 100 100	62, 77, 108, 123	0
40	BU	116/118 (98%)	-0.77	1 (0%) 84 75	25, 36, 55, 71	0
40	DU	116/118 (98%)	-0.40	1 (0%) 84 75	54, 82, 103, 108	0
41	BV	100/101 (99%)	-0.77	0 100 100	28, 46, 73, 90	0
41	DV	100/101 (99%)	-0.20	0 100 100	56, 98, 119, 123	0
42	BW	112/113 (99%)	-0.65	0 100 100	28, 37, 63, 89	0
42	DW	111/113 (98%)	-0.43	1 (0%) 84 75	49, 63, 89, 114	0
43	BX	95/96 (98%)	-0.66	0 100 100	34, 46, 77, 92	0
43	DX	95/96 (98%)	-0.45	0 100 100	61, 77, 100, 107	0
44	BY	107/110 (97%)	-0.49	0 100 100	41, 60, 91, 109	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
44	DY	107/110 (97%)	-0.04	7 (6%) 18 11	77, 96, 112, 124	0
45	BZ	186/206 (90%)	-0.52	0 100 100	49, 76, 104, 126	0
45	DZ	189/206 (91%)	0.05	5 (2%) 56 40	98, 114, 131, 139	0
46	B0	76/85 (89%)	-0.65	0 100 100	32, 42, 59, 83	0
46	D0	77/85 (90%)	-0.11	0 100 100	73, 85, 101, 124	0
47	B1	97/98 (98%)	-0.50	0 100 100	32, 51, 90, 104	0
47	D1	97/98 (98%)	-0.26	2 (2%) 63 49	50, 72, 105, 115	0
48	B2	70/72 (97%)	-0.54	0 100 100	41, 60, 78, 103	0
48	D2	71/72 (98%)	-0.29	1 (1%) 75 63	78, 94, 106, 110	0
49	B3	59/60 (98%)	-0.72	0 100 100	33, 41, 76, 93	0
49	D3	58/60 (96%)	-0.05	0 100 100	71, 84, 114, 128	0
50	B4	46/71 (64%)	-0.58	0 100 100	78, 96, 112, 114	0
50	D4	46/71 (64%)	-0.12	0 100 100	118, 126, 136, 138	0
51	B5	59/60 (98%)	-0.79	0 100 100	25, 41, 62, 74	0
51	D5	59/60 (98%)	-0.57	0 100 100	47, 66, 85, 106	0
52	B6	53/54 (98%)	-0.69	0 100 100	42, 49, 66, 76	0
52	D6	53/54 (98%)	-0.39	0 100 100	67, 81, 93, 101	0
53	B7	48/49 (97%)	-0.47	0 100 100	25, 33, 68, 88	0
53	D7	48/49 (97%)	-0.36	0 100 100	41, 53, 82, 105	0
54	B8	64/65 (98%)	-0.61	0 100 100	35, 41, 49, 72	0
54	D8	64/65 (98%)	-0.29	1 (1%) 72 59	60, 71, 83, 94	0
55	B9	36/37 (97%)	-0.38	0 100 100	33, 46, 58, 72	0
55	D9	35/37 (94%)	0.44	3 (8%) 10 5	73, 88, 103, 115	0
All	All	20489/21572 (94%)	-0.28	315 (1%) 73 61	22, 83, 131, 172	0

All (315) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
25	BA	1509	C	8.8
22	AY	34	SER	7.0
25	BA	2801(A)	A	5.7
1	CA	1286	A	5.6
25	BA	1508	A	5.5
22	AY	38	HIS	5.4

Continued on next page...

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
19	CS	53	ASN	5.1
25	DA	1509	C	5.1
25	DA	2802	G	5.1
10	CJ	10	GLY	4.9
19	CS	12	ASP	4.9
22	AY	104	ALA	4.8
25	BA	2802	G	4.7
22	AY	114	SER	4.7
2	CB	232	PRO	4.6
22	AY	126	SER	4.5
1	CA	1043	C	4.5
7	CG	82	GLY	4.4
25	DA	280	C	4.4
1	AA	1532	U	4.3
22	AY	116	GLU	4.3
25	BA	652(G)	G	4.3
20	CT	105	SER	4.3
25	DA	2896	C	4.3
22	AY	105	ARG	4.3
9	AI	8	GLY	4.2
23	AV	47	U	4.2
31	DH	96	ALA	4.1
10	AJ	10	GLY	4.1
25	DA	1508	A	4.1
10	CJ	34	VAL	4.1
25	DA	2790	A	4.1
25	DA	888	C	4.1
9	CI	124	GLN	4.0
1	AA	78	G	4.0
25	DA	2803	C	4.0
25	BA	652(J)	G	4.0
2	CB	132	LYS	4.0
25	DA	2805	G	3.9
10	CJ	20	ALA	3.9
9	CI	115	GLY	3.9
25	DA	652(C)	G	3.9
22	AY	125	LYS	3.9
47	D1	2	SER	3.9
25	DA	2801(A)	A	3.9
1	CA	1021	G	3.9
10	CJ	73	ASP	3.9
25	BA	652(H)	C	3.8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
55	D9	12	ASP	3.8
7	CG	155	ARG	3.8
25	BA	652(B)	A	3.8
21	CU	24	ARG	3.7
10	AJ	73	ASP	3.7
1	AA	1531	A	3.7
22	AY	11	PRO	3.7
25	BA	2896	C	3.7
14	CN	8	GLU	3.6
3	CC	154	SER	3.6
25	DA	2105	C	3.6
22	AY	75	GLN	3.6
7	CG	80	VAL	3.6
21	CU	17	THR	3.6
7	CG	81	GLY	3.5
3	CC	160	ALA	3.5
7	CG	154	TYR	3.5
25	DA	652(T)	C	3.4
19	CS	10	PHE	3.4
9	CI	9	ARG	3.4
25	DA	1536	C	3.4
10	CJ	27	ALA	3.4
25	BA	652(I)	C	3.4
22	AY	119	LEU	3.4
25	DA	6	A	3.4
19	CS	52	TYR	3.4
25	DA	2106	G	3.4
25	DA	2894	G	3.4
3	CC	155	GLY	3.4
14	AN	8	GLU	3.4
10	AJ	72	VAL	3.3
7	CG	83	ALA	3.3
22	AY	127	SER	3.3
45	DZ	179	ASP	3.3
2	AB	37	ASN	3.3
14	CN	25	VAL	3.3
22	AY	122	LYS	3.3
1	CA	1129	C	3.3
22	AY	124	GLN	3.3
1	CA	630	G	3.2
25	BA	1176	G	3.2
22	AY	35	THR	3.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
25	DA	272(A)	U	3.2
1	CA	999	C	3.2
3	CC	159	GLY	3.2
1	CA	1042	G	3.2
20	CT	106	ALA	3.2
7	AG	85	TYR	3.2
7	AG	154	TYR	3.2
31	DH	2	SER	3.2
25	BA	2106	G	3.1
1	AA	204	U	3.1
7	AG	82	GLY	3.1
25	DA	2807	G	3.1
22	AY	106	ARG	3.1
1	AA	91	C	3.1
1	AA	1286	A	3.1
24	AX	1	A	3.1
10	CJ	47	PHE	3.1
1	CA	1020	U	3.1
44	DY	90	LEU	3.1
1	AA	1019	C	3.1
22	AY	31	ASN	3.1
7	CG	78	ARG	3.1
25	DA	652(B)	A	3.1
25	BA	2803	C	3.1
21	CU	18	TYR	3.0
22	AY	12	ASP	3.0
10	CJ	72	VAL	3.0
1	CA	1044	A	3.0
44	DY	80	GLY	3.0
10	CJ	35	SER	3.0
25	DA	229	A	3.0
25	DA	2793	G	3.0
25	DA	2897	U	3.0
19	CS	11	VAL	3.0
22	AY	2	ILE	3.0
22	AY	22	ALA	3.0
42	DW	94	ASP	3.0
44	DY	89	PHE	3.0
1	AA	1129	C	3.0
3	CC	81	GLY	2.9
32	DI	85	GLU	3.0
25	BA	2805	G	2.9

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	CA	1018	C	2.9
1	CA	1019	C	2.9
22	AY	74	ALA	2.9
25	BA	652(C)	G	2.9
25	BA	892	G	2.9
9	CI	21	PRO	2.9
9	CI	30	GLY	2.9
22	AY	115	LYS	2.9
9	CI	123	PRO	2.9
25	BA	2105	C	2.9
25	DA	1043	C	2.9
25	DA	281	G	2.9
1	AA	92	C	2.9
25	DA	2804	C	2.9
22	AY	79	SER	2.9
1	AA	1020	U	2.9
10	AJ	37	PRO	2.9
2	CB	133	LYS	2.8
3	AC	189	ALA	2.8
10	CJ	38	ILE	2.8
44	DY	1	MET	2.8
2	CB	229	VAL	2.8
1	CA	1261	A	2.8
25	DA	2794	C	2.8
36	DQ	33	GLY	2.8
1	CA	998	G	2.8
25	DA	1533	G	2.8
2	CB	48	MET	2.8
24	CX	1	A	2.7
1	CA	1275	A	2.7
25	BA	652(F)	G	2.7
7	AG	78	ARG	2.7
10	CJ	48	THR	2.7
55	D9	14	CYS	2.7
10	CJ	19	SER	2.7
25	DA	890	A	2.7
55	D9	15	LYS	2.6
22	AY	117	ARG	2.6
25	DA	2792	G	2.6
44	DY	58	GLY	2.6
22	AY	77	TYR	2.6
27	BD	276	LYS	2.6

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
25	BA	652(S)	C	2.6
1	AA	73	G	2.6
3	CC	66	VAL	2.6
25	BA	652(Q)	G	2.6
25	DA	889	C	2.6
22	AY	121	SER	2.6
1	CA	1531	A	2.6
48	D2	1	MET	2.6
1	AA	630	G	2.6
1	CA	1124	G	2.6
7	AG	81	GLY	2.6
19	AS	12	ASP	2.6
10	AJ	8	LEU	2.6
1	AA	71	C	2.5
25	BA	885	C	2.5
25	DA	2104	G	2.5
1	AA	1044	A	2.5
10	AJ	69	ASN	2.5
25	DA	653	A	2.5
20	CT	3	GLN	2.5
25	DA	1042	G	2.5
1	AA	999	C	2.5
25	DA	652(U)	G	2.5
25	DA	879	G	2.5
2	CB	99	GLY	2.5
22	AY	128	VAL	2.5
31	DH	61	HIS	2.5
36	DQ	80	GLU	2.5
22	AY	99	THR	2.5
1	CA	1045	C	2.5
25	BA	2897	U	2.4
1	AA	1137	C	2.4
10	AJ	38	ILE	2.4
23	CV	1	C	2.4
27	DD	38	LYS	2.4
9	CI	7	THR	2.4
7	CG	85	TYR	2.4
22	AY	102	LYS	2.4
44	DY	55	TYR	2.4
1	CA	73	G	2.4
1	CA	1284	C	2.4
25	DA	652(V)	C	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
45	DZ	113	ALA	2.4
25	BA	1175	U	2.4
10	AJ	35	SER	2.4
7	CG	74	GLU	2.4
21	CU	14	TRP	2.4
22	AY	19	ALA	2.4
14	CN	35	ARG	2.3
25	DA	2895	U	2.3
47	D1	23	LYS	2.3
1	CA	994	A	2.3
4	AD	38	TYR	2.3
1	CA	1257	U	2.3
14	CN	17	LYS	2.3
10	CJ	63	PHE	2.3
45	DZ	114	GLY	2.3
9	CI	99	LEU	2.3
18	AR	85	LEU	2.3
1	AA	1447	A	2.3
3	CC	206	GLU	2.3
13	CM	43	THR	2.3
1	CA	204	U	2.3
1	CA	72	C	2.3
25	DA	2791	C	2.3
31	DH	101	ARG	2.3
30	DG	27	ASN	2.2
12	CL	18	VAL	2.2
8	CH	1	MET	2.2
10	CJ	6	ILE	2.2
1	AA	201	C	2.2
9	CI	126	SER	2.2
1	CA	1447	A	2.2
1	CA	1131	G	2.2
22	AY	27	GLY	2.2
25	DA	2190	G	2.2
5	AE	6	PHE	2.2
1	CA	1271	G	2.2
31	DH	110	SER	2.2
1	CA	1140	C	2.2
31	DH	102	ALA	2.2
17	AQ	98	LEU	2.2
5	CE	94	ALA	2.2
10	CJ	85	LEU	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
22	AY	103	LYS	2.2
25	DA	1537	G	2.2
13	CM	7	VAL	2.2
40	DU	89	GLU	2.2
16	CP	48	TRP	2.1
4	AD	37	PRO	2.1
1	AA	1042	G	2.1
25	BA	890	A	2.1
2	AB	232	PRO	2.1
45	DZ	1	MET	2.1
10	CJ	8	LEU	2.1
7	CG	77	SER	2.1
25	DA	885	C	2.1
31	DH	82	GLY	2.1
2	CB	15	VAL	2.1
1	CA	1285	A	2.1
25	BA	652(R)	C	2.1
10	CJ	97	GLU	2.1
22	AY	107	PRO	2.1
1	CA	1219	U	2.1
9	CI	110	GLU	2.1
11	CK	91	ARG	2.1
24	CX	2	A	2.1
14	CN	38	GLY	2.1
40	BU	117	GLN	2.1
25	DA	652(D)	C	2.1
2	CB	33	TYR	2.1
22	AY	37	ILE	2.1
26	DB	120	A	2.1
1	AA	1274	G	2.1
25	BA	2804	C	2.1
9	CI	61	ALA	2.1
25	DA	10	G	2.1
10	AJ	89	ASP	2.1
45	DZ	156	LYS	2.1
1	CA	995	C	2.1
25	BA	2104	G	2.1
25	DA	11	G	2.1
2	CB	101	MET	2.1
3	AC	193	TYR	2.0
2	AB	118	LEU	2.0
3	CC	77	ILE	2.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	CA	1260	C	2.0
22	AY	76	GLU	2.0
9	CI	125	TYR	2.0
44	DY	48	ALA	2.0
31	DH	103	LEU	2.0
25	DA	2833	G	2.0
54	D8	2	PRO	2.0
1	AA	98	G	2.0
22	AY	49	PRO	2.0
19	AS	39	THR	2.0
9	CI	62	TYR	2.0
25	DA	652(E)	G	2.0
22	AY	101	GLU	2.0
27	DD	276	LYS	2.0
7	CG	79	ARG	2.0

## 6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

## 6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95<sup>th</sup> percentile and maximum values of B factors of atoms in the group. The column labelled 'Q < 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3293	1/1	0.36	0.16	94,94,94,94	0
56	MG	CA	1773	1/1	0.41	0.15	124,124,124,124	0
56	MG	DA	3258	1/1	0.44	0.43	91,91,91,91	0
56	MG	CA	1638	1/1	0.48	0.56	99,99,99,99	0
56	MG	BA	3256	1/1	0.49	0.21	77,77,77,77	0
56	MG	DA	3278	1/1	0.49	0.60	66,66,66,66	0
56	MG	DA	3025	1/1	0.49	0.35	76,76,76,76	0
56	MG	DA	3654	1/1	0.50	0.41	118,118,118,118	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
56	MG	DA	3509	1/1	0.52	0.30	122,122,122,122	0
56	MG	CA	1797	1/1	0.52	0.41	121,121,121,121	0
56	MG	AA	1901	1/1	0.53	0.17	119,119,119,119	0
56	MG	DA	3259	1/1	0.54	0.53	78,78,78,78	0
56	MG	DA	3588	1/1	0.55	0.11	109,109,109,109	0
56	MG	AA	1932	1/1	0.55	0.26	116,116,116,116	0
56	MG	CA	1796	1/1	0.56	0.16	102,102,102,102	0
56	MG	D0	102	1/1	0.56	0.38	99,99,99,99	0
56	MG	BA	3035	1/1	0.57	0.23	82,82,82,82	0
56	MG	CA	1802	1/1	0.57	0.10	115,115,115,115	0
56	MG	CA	1817	1/1	0.57	0.24	111,111,111,111	0
56	MG	CA	1704	1/1	0.57	0.23	93,93,93,93	0
56	MG	AA	1911	1/1	0.58	0.30	106,106,106,106	0
56	MG	CA	1780	1/1	0.58	0.15	90,90,90,90	0
56	MG	AA	1937	1/1	0.58	0.14	79,79,79,79	0
56	MG	DA	3335	1/1	0.59	0.48	74,74,74,74	0
56	MG	CA	1664	1/1	0.59	0.36	76,76,76,76	0
56	MG	DA	3519	1/1	0.59	0.09	93,93,93,93	0
56	MG	CA	1808	1/1	0.59	0.29	102,102,102,102	0
56	MG	AA	1915	1/1	0.59	0.17	121,121,121,121	0
56	MG	DA	3678	1/1	0.59	0.27	89,89,89,89	0
56	MG	AA	1899	1/1	0.59	0.22	115,115,115,115	0
56	MG	BA	3384	1/1	0.61	0.78	72,72,72,72	0
56	MG	CA	1703	1/1	0.61	0.33	100,100,100,100	0
56	MG	DA	3117	1/1	0.62	0.30	70,70,70,70	0
56	MG	AA	1715	1/1	0.62	0.46	72,72,72,72	0
56	MG	AA	1620	1/1	0.63	0.55	74,74,74,74	0
56	MG	DA	3009	1/1	0.63	0.10	90,90,90,90	0
56	MG	BB	219	1/1	0.63	0.21	85,85,85,85	0
56	MG	BA	3857	1/1	0.64	0.21	78,78,78,78	0
56	MG	BA	3237	1/1	0.64	0.36	59,59,59,59	0
56	MG	BX	101	1/1	0.64	0.44	78,78,78,78	0
56	MG	DA	3082	1/1	0.64	0.12	89,89,89,89	0
56	MG	AA	1867	1/1	0.64	1.12	80,80,80,80	0
56	MG	CA	1661	1/1	0.64	0.15	101,101,101,101	0
56	MG	AA	1679	1/1	0.64	0.28	84,84,84,84	0
56	MG	BA	3456	1/1	0.64	0.41	73,73,73,73	0
56	MG	CA	1745	1/1	0.65	0.23	99,99,99,99	0
56	MG	DA	3052	1/1	0.65	1.02	79,79,79,79	0
56	MG	CA	1795	1/1	0.65	0.13	100,100,100,100	0
56	MG	AK	201	1/1	0.66	0.47	107,107,107,107	0
56	MG	AV	113	1/1	0.66	0.55	84,84,84,84	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1812	1/1	0.66	0.28	114,114,114,114	0
56	MG	AA	1695	1/1	0.66	0.22	102,102,102,102	0
56	MG	AA	1823	1/1	0.67	0.99	77,77,77,77	0
56	MG	DA	3674	1/1	0.67	0.24	105,105,105,105	0
56	MG	CA	1818	1/1	0.67	0.26	87,87,87,87	0
56	MG	AA	1699	1/1	0.67	0.21	109,109,109,109	0
56	MG	AA	1686	1/1	0.68	0.43	112,112,112,112	0
56	MG	DA	3072	1/1	0.68	0.38	65,65,65,65	0
56	MG	BA	3258	1/1	0.68	0.40	71,71,71,71	0
56	MG	BA	3885	1/1	0.68	0.27	91,91,91,91	0
56	MG	DA	3532	1/1	0.68	0.21	90,90,90,90	0
56	MG	DA	3136	1/1	0.68	1.06	67,67,67,67	0
56	MG	DA	3224	1/1	0.68	0.46	75,75,75,75	0
56	MG	BA	3888	1/1	0.68	0.13	99,99,99,99	0
56	MG	BA	3272	1/1	0.68	0.41	72,72,72,72	0
56	MG	DA	3690	1/1	0.68	0.07	107,107,107,107	0
56	MG	AA	1893	1/1	0.68	0.32	95,95,95,95	0
56	MG	BA	3332	1/1	0.69	0.36	74,74,74,74	0
56	MG	DA	3265	1/1	0.69	0.39	68,68,68,68	0
56	MG	AA	1737	1/1	0.69	0.42	88,88,88,88	0
56	MG	AA	1789	1/1	0.69	0.37	77,77,77,77	0
56	MG	DA	3296	1/1	0.69	0.31	80,80,80,80	0
56	MG	BA	3523	1/1	0.69	0.43	76,76,76,76	0
56	MG	DA	3432	1/1	0.69	0.14	85,85,85,85	0
56	MG	BA	3742	1/1	0.69	0.22	72,72,72,72	0
56	MG	DA	3232	1/1	0.70	0.39	91,91,91,91	0
56	MG	AA	1762	1/1	0.70	0.30	74,74,74,74	0
56	MG	BA	3493	1/1	0.70	0.40	62,62,62,62	0
56	MG	AA	1939	1/1	0.70	0.33	105,105,105,105	0
56	MG	DA	3539	1/1	0.70	0.25	102,102,102,102	0
56	MG	DA	3271	1/1	0.70	0.45	68,68,68,68	0
56	MG	AA	1944	1/1	0.70	0.27	97,97,97,97	0
56	MG	CA	1642	1/1	0.70	0.54	84,84,84,84	0
56	MG	AA	1749	1/1	0.70	0.75	69,69,69,69	0
56	MG	DA	3319	1/1	0.70	0.54	69,69,69,69	0
56	MG	BA	3397	1/1	0.70	0.35	66,66,66,66	0
56	MG	CV	106	1/1	0.71	0.36	78,78,78,78	0
56	MG	DA	3497	1/1	0.71	0.20	70,70,70,70	0
56	MG	BB	211	1/1	0.71	0.20	66,66,66,66	0
56	MG	DA	3203	1/1	0.71	0.31	91,91,91,91	0
56	MG	BA	3800	1/1	0.71	0.14	111,111,111,111	0
56	MG	BA	3499	1/1	0.71	0.30	73,73,73,73	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3304	1/1	0.71	0.44	67,67,67,67	0
56	MG	AA	1922	1/1	0.71	0.19	106,106,106,106	0
56	MG	DA	3326	1/1	0.71	0.41	62,62,62,62	0
56	MG	BA	3025	1/1	0.71	0.50	68,68,68,68	0
56	MG	DA	3347	1/1	0.71	0.58	77,77,77,77	0
56	MG	DA	3375	1/1	0.71	0.14	84,84,84,84	0
56	MG	DA	3238	1/1	0.72	0.31	65,65,65,65	0
56	MG	DA	3377	1/1	0.72	0.44	89,89,89,89	0
56	MG	AA	1724	1/1	0.72	0.36	92,92,92,92	0
56	MG	CA	1775	1/1	0.72	0.14	99,99,99,99	0
56	MG	BA	3799	1/1	0.72	0.10	72,72,72,72	0
56	MG	AA	1736	1/1	0.72	0.52	82,82,82,82	0
56	MG	DA	3058	1/1	0.72	0.43	83,83,83,83	0
56	MG	AA	1668	1/1	0.72	0.34	65,65,65,65	0
56	MG	AA	1827	1/1	0.72	0.20	69,69,69,69	0
56	MG	CA	1666	1/1	0.72	0.28	73,73,73,73	0
56	MG	CA	1699	1/1	0.72	0.22	97,97,97,97	0
56	MG	AA	1746	1/1	0.72	0.37	81,81,81,81	0
56	MG	AA	1685	1/1	0.72	0.61	91,91,91,91	0
56	MG	DA	3691	1/1	0.72	0.10	91,91,91,91	0
56	MG	DA	3694	1/1	0.72	0.13	95,95,95,95	0
56	MG	DB	209	1/1	0.72	0.39	86,86,86,86	0
56	MG	BA	3728	1/1	0.72	0.24	68,68,68,68	0
56	MG	CA	1694	1/1	0.73	0.48	80,80,80,80	0
56	MG	AA	1720	1/1	0.73	0.42	92,92,92,92	0
56	MG	DA	3616	1/1	0.73	0.48	115,115,115,115	0
56	MG	DA	3083	1/1	0.73	0.41	82,82,82,82	0
56	MG	CA	1788	1/1	0.73	0.28	118,118,118,118	0
56	MG	CA	1701	1/1	0.73	0.20	109,109,109,109	0
56	MG	AA	1627	1/1	0.73	0.67	83,83,83,83	0
56	MG	BA	3463	1/1	0.73	0.34	57,57,57,57	0
56	MG	AV	112	1/1	0.73	0.38	79,79,79,79	0
56	MG	DA	3309	1/1	0.73	0.41	88,88,88,88	0
56	MG	CA	1612	1/1	0.73	0.24	84,84,84,84	0
56	MG	AA	1678	1/1	0.74	0.26	90,90,90,90	0
56	MG	AA	1778	1/1	0.74	0.61	83,83,83,83	0
56	MG	DA	3545	1/1	0.74	0.11	83,83,83,83	0
56	MG	BA	3446	1/1	0.74	0.23	87,87,87,87	0
56	MG	DA	3255	1/1	0.74	0.24	72,72,72,72	0
56	MG	AA	1900	1/1	0.74	0.12	110,110,110,110	0
56	MG	CA	1807	1/1	0.74	0.13	100,100,100,100	0
56	MG	CA	1770	1/1	0.74	0.15	93,93,93,93	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3763	1/1	0.74	0.10	84,84,84,84	0
56	MG	CA	1683	1/1	0.74	0.32	71,71,71,71	0
56	MG	BA	3342	1/1	0.74	0.46	66,66,66,66	0
56	MG	BA	3373	1/1	0.74	0.39	69,69,69,69	0
56	MG	DA	3299	1/1	0.74	0.69	57,57,57,57	0
56	MG	DA	3217	1/1	0.75	0.18	68,68,68,68	0
56	MG	BA	3309	1/1	0.75	0.47	56,56,56,56	0
56	MG	AA	1826	1/1	0.75	0.14	63,63,63,63	0
56	MG	AA	1667	1/1	0.75	0.34	71,71,71,71	0
56	MG	DA	3325	1/1	0.75	0.38	62,62,62,62	0
56	MG	DA	3610	1/1	0.75	0.25	97,97,97,97	0
56	MG	BA	3359	1/1	0.75	0.47	72,72,72,72	0
56	MG	AA	1718	1/1	0.75	0.22	70,70,70,70	0
56	MG	DA	3339	1/1	0.75	0.34	74,74,74,74	0
56	MG	BA	3139	1/1	0.75	0.43	56,56,56,56	0
56	MG	CA	1722	1/1	0.75	0.33	76,76,76,76	0
56	MG	AA	1815	1/1	0.75	0.52	69,69,69,69	0
56	MG	AA	1711	1/1	0.75	0.42	76,76,76,76	0
56	MG	AV	104	1/1	0.75	0.29	81,81,81,81	0
56	MG	AA	1923	1/1	0.75	0.15	115,115,115,115	0
56	MG	AA	1828	1/1	0.76	0.42	70,70,70,70	0
56	MG	CA	1708	1/1	0.76	1.03	91,91,91,91	0
56	MG	CA	1680	1/1	0.76	0.33	70,70,70,70	0
56	MG	BA	3855	1/1	0.76	0.47	103,103,103,103	0
56	MG	DA	3199	1/1	0.76	1.07	81,81,81,81	0
56	MG	DA	3202	1/1	0.76	0.20	73,73,73,73	0
56	MG	DA	3625	1/1	0.76	0.26	80,80,80,80	0
56	MG	DA	3629	1/1	0.76	0.37	104,104,104,104	0
56	MG	DA	3288	1/1	0.76	0.31	83,83,83,83	0
56	MG	AA	1611	1/1	0.76	0.16	97,97,97,97	0
56	MG	DA	3379	1/1	0.76	0.41	80,80,80,80	0
56	MG	CA	1654	1/1	0.76	0.48	74,74,74,74	0
56	MG	DA	3491	1/1	0.76	0.15	101,101,101,101	0
56	MG	BB	227	1/1	0.76	0.06	81,81,81,81	0
56	MG	AA	1803	1/1	0.76	0.92	92,92,92,92	0
56	MG	DA	3081	1/1	0.76	0.41	65,65,65,65	0
56	MG	CA	1757	1/1	0.77	0.29	94,94,94,94	0
56	MG	DA	3538	1/1	0.77	0.25	96,96,96,96	0
56	MG	AA	1743	1/1	0.77	0.52	80,80,80,80	0
56	MG	CA	1675	1/1	0.77	0.47	77,77,77,77	0
56	MG	BA	3406	1/1	0.77	0.21	64,64,64,64	0
56	MG	BA	3431	1/1	0.77	0.28	75,75,75,75	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3440	1/1	0.77	0.71	56,56,56,56	0
56	MG	B2	102	1/1	0.77	0.34	66,66,66,66	0
56	MG	AA	1689	1/1	0.77	0.18	77,77,77,77	0
56	MG	BA	3448	1/1	0.77	0.36	60,60,60,60	0
56	MG	BA	3048	1/1	0.77	0.35	54,54,54,54	0
56	MG	BA	3363	1/1	0.77	0.38	63,63,63,63	0
56	MG	BA	3104	1/1	0.77	0.26	50,50,50,50	0
56	MG	DA	3135	1/1	0.77	0.39	66,66,66,66	0
56	MG	AA	1819	1/1	0.77	0.62	91,91,91,91	0
56	MG	DA	3166	1/1	0.77	0.66	66,66,66,66	0
56	MG	CA	1816	1/1	0.77	0.26	110,110,110,110	0
56	MG	BA	3778	1/1	0.78	0.17	92,92,92,92	0
56	MG	AA	1637	1/1	0.78	0.12	73,73,73,73	0
56	MG	AA	1796	1/1	0.78	0.33	77,77,77,77	0
56	MG	CA	1782	1/1	0.78	0.39	96,96,96,96	0
56	MG	BA	3192	1/1	0.78	0.33	53,53,53,53	0
56	MG	AA	1802	1/1	0.78	0.40	67,67,67,67	0
56	MG	AA	1650	1/1	0.78	0.50	65,65,65,65	0
56	MG	AA	1948	1/1	0.78	0.10	88,88,88,88	0
56	MG	AA	1807	1/1	0.78	0.36	84,84,84,84	0
56	MG	CA	1700	1/1	0.78	0.75	90,90,90,90	0
56	MG	AA	1672	1/1	0.78	0.29	78,78,78,78	0
56	MG	CA	1811	1/1	0.78	0.07	102,102,102,102	0
56	MG	AA	1905	1/1	0.78	0.15	130,130,130,130	0
56	MG	BA	3339	1/1	0.78	0.36	70,70,70,70	0
56	MG	AA	1687	1/1	0.78	0.55	105,105,105,105	0
56	MG	BA	3346	1/1	0.78	0.26	43,43,43,43	0
56	MG	AA	1674	1/1	0.78	0.44	74,74,74,74	0
56	MG	AA	1665	1/1	0.78	0.29	73,73,73,73	0
56	MG	DA	3024	1/1	0.78	0.40	60,60,60,60	0
56	MG	AA	1733	1/1	0.78	0.15	94,94,94,94	0
56	MG	BA	3524	1/1	0.79	0.17	81,81,81,81	0
56	MG	DA	3002	1/1	0.79	0.32	69,69,69,69	0
56	MG	BA	3882	1/1	0.79	0.09	73,73,73,73	0
56	MG	CA	1702	1/1	0.79	0.34	114,114,114,114	0
56	MG	DA	3205	1/1	0.79	0.23	68,68,68,68	0
56	MG	CA	1653	1/1	0.79	0.39	78,78,78,78	0
56	MG	DA	3027	1/1	0.79	0.40	72,72,72,72	0
56	MG	AA	1658	1/1	0.79	0.77	73,73,73,73	0
56	MG	AA	1788	1/1	0.79	0.46	62,62,62,62	0
56	MG	BB	203	1/1	0.79	0.35	63,63,63,63	0
56	MG	DA	3341	1/1	0.79	0.53	60,60,60,60	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3102	1/1	0.79	0.16	51,51,51,51	0
56	MG	AA	1943	1/1	0.79	0.14	92,92,92,92	0
56	MG	DA	3376	1/1	0.79	0.30	69,69,69,69	0
56	MG	AA	1741	1/1	0.79	0.48	85,85,85,85	0
56	MG	DA	3378	1/1	0.79	0.33	64,64,64,64	0
56	MG	BA	3517	1/1	0.79	0.40	58,58,58,58	0
56	MG	DA	3398	1/1	0.79	0.12	58,58,58,58	0
56	MG	BA	3853	1/1	0.79	0.31	76,76,76,76	0
56	MG	AA	1712	1/1	0.79	0.19	72,72,72,72	0
56	MG	BO	201	1/1	0.80	0.32	62,62,62,62	0
56	MG	DA	3214	1/1	0.80	0.30	64,64,64,64	0
56	MG	AA	1834	1/1	0.80	0.39	76,76,76,76	0
56	MG	BA	3736	1/1	0.80	0.21	59,59,59,59	0
56	MG	DA	3381	1/1	0.80	0.19	88,88,88,88	0
56	MG	AA	1838	1/1	0.80	0.20	72,72,72,72	0
56	MG	DA	3005	1/1	0.80	0.37	73,73,73,73	0
56	MG	CA	1622	1/1	0.80	0.76	80,80,80,80	0
56	MG	AA	1723	1/1	0.80	0.23	102,102,102,102	0
56	MG	BA	3280	1/1	0.80	0.31	58,58,58,58	0
56	MG	DA	3510	1/1	0.80	0.23	77,77,77,77	0
56	MG	BA	3294	1/1	0.80	0.13	67,67,67,67	0
56	MG	DA	3029	1/1	0.80	0.78	68,68,68,68	0
56	MG	AE	201	1/1	0.80	0.46	83,83,83,83	0
56	MG	BA	3801	1/1	0.80	0.38	93,93,93,93	0
56	MG	DA	3289	1/1	0.80	0.18	86,86,86,86	0
56	MG	DA	3570	1/1	0.80	0.22	79,79,79,79	0
56	MG	BA	3317	1/1	0.80	0.36	61,61,61,61	0
56	MG	AF	201	1/1	0.80	0.36	79,79,79,79	0
56	MG	BA	3082	1/1	0.80	0.27	45,45,45,45	0
56	MG	CA	1676	1/1	0.80	0.17	83,83,83,83	0
56	MG	DA	3089	1/1	0.80	0.51	82,82,82,82	0
56	MG	AI	202	1/1	0.80	0.40	90,90,90,90	0
56	MG	AA	1784	1/1	0.80	0.32	69,69,69,69	0
56	MG	DA	3676	1/1	0.80	0.28	94,94,94,94	0
56	MG	BA	3510	1/1	0.80	0.26	60,60,60,60	0
56	MG	DA	3682	1/1	0.80	0.12	90,90,90,90	0
56	MG	AY	201	1/1	0.80	0.21	111,111,111,111	0
56	MG	DA	3192	1/1	0.80	0.59	71,71,71,71	0
56	MG	AA	1809	1/1	0.80	0.21	83,83,83,83	0
56	MG	DA	3695	1/1	0.80	0.14	107,107,107,107	0
56	MG	DB	205	1/1	0.80	0.21	79,79,79,79	0
56	MG	AV	106	1/1	0.80	0.23	68,68,68,68	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DB	213	1/1	0.80	0.35	115,115,115,115	0
56	MG	DT	201	1/1	0.80	0.20	73,73,73,73	0
56	MG	BA	3571	1/1	0.80	0.17	31,31,31,31	0
56	MG	AA	1742	1/1	0.81	0.20	93,93,93,93	0
56	MG	BB	206	1/1	0.81	0.16	61,61,61,61	0
56	MG	AA	1844	1/1	0.81	0.35	86,86,86,86	0
56	MG	AA	1822	1/1	0.81	0.41	77,77,77,77	0
56	MG	DA	3210	1/1	0.81	0.36	74,74,74,74	0
56	MG	DA	3211	1/1	0.81	0.34	83,83,83,83	0
56	MG	BA	3395	1/1	0.81	0.17	100,100,100,100	0
56	MG	CA	1819	1/1	0.81	0.26	96,96,96,96	0
56	MG	BG	201	1/1	0.81	0.32	54,54,54,54	0
56	MG	CV	107	1/1	0.81	0.30	70,70,70,70	0
56	MG	DA	3233	1/1	0.81	0.33	80,80,80,80	0
56	MG	DA	3236	1/1	0.81	0.47	68,68,68,68	0
56	MG	AA	1884	1/1	0.81	0.16	82,82,82,82	0
56	MG	DA	3254	1/1	0.81	0.36	71,71,71,71	0
56	MG	BA	3300	1/1	0.81	0.12	70,70,70,70	0
56	MG	BA	3408	1/1	0.81	0.28	44,44,44,44	0
56	MG	CA	1604	1/1	0.81	0.45	114,114,114,114	0
56	MG	AA	1931	1/1	0.81	0.24	103,103,103,103	0
56	MG	CA	1748	1/1	0.81	0.15	75,75,75,75	0
56	MG	DA	3603	1/1	0.81	0.51	100,100,100,100	0
56	MG	AA	1708	1/1	0.81	0.28	79,79,79,79	0
56	MG	DA	3614	1/1	0.81	0.38	98,98,98,98	0
56	MG	DA	3282	1/1	0.81	0.60	75,75,75,75	0
56	MG	DA	3033	1/1	0.81	0.13	74,74,74,74	0
56	MG	DA	3040	1/1	0.81	0.17	78,78,78,78	0
56	MG	BA	3325	1/1	0.81	0.23	83,83,83,83	0
56	MG	DA	3671	1/1	0.81	0.11	92,92,92,92	0
56	MG	BA	3125	1/1	0.81	0.55	48,48,48,48	0
56	MG	AA	1719	1/1	0.81	0.26	70,70,70,70	0
56	MG	DA	3302	1/1	0.81	0.32	76,76,76,76	0
56	MG	AA	1785	1/1	0.81	0.31	68,68,68,68	0
56	MG	DA	3688	1/1	0.81	0.15	80,80,80,80	0
56	MG	BA	3479	1/1	0.81	0.43	63,63,63,63	0
56	MG	BA	3483	1/1	0.81	0.30	70,70,70,70	0
56	MG	AA	1693	1/1	0.81	0.38	103,103,103,103	0
56	MG	CA	1671	1/1	0.81	0.20	82,82,82,82	0
56	MG	DA	3696	1/1	0.81	0.23	96,96,96,96	0
56	MG	DA	3331	1/1	0.81	0.49	77,77,77,77	0
56	MG	CA	1674	1/1	0.81	0.34	79,79,79,79	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1760	1/1	0.81	0.83	64,64,64,64	0
56	MG	BA	3501	1/1	0.81	0.36	80,80,80,80	0
56	MG	BA	3509	1/1	0.81	0.50	54,54,54,54	0
56	MG	D6	102	1/1	0.81	0.96	82,82,82,82	0
56	MG	AA	1913	1/1	0.82	0.14	109,109,109,109	0
56	MG	BA	3472	1/1	0.82	0.67	58,58,58,58	0
56	MG	BA	3194	1/1	0.82	0.30	70,70,70,70	0
56	MG	BA	3812	1/1	0.82	0.10	87,87,87,87	0
56	MG	BA	3223	1/1	0.82	0.24	59,59,59,59	0
56	MG	CA	1659	1/1	0.82	0.11	85,85,85,85	0
56	MG	AA	1739	1/1	0.82	0.54	99,99,99,99	0
56	MG	DA	3035	1/1	0.82	0.20	76,76,76,76	0
56	MG	BA	3045	1/1	0.82	0.30	35,35,35,35	0
56	MG	CA	1665	1/1	0.82	0.65	64,64,64,64	0
56	MG	BA	3874	1/1	0.82	0.30	90,90,90,90	0
56	MG	DA	3269	1/1	0.82	0.17	85,85,85,85	0
56	MG	BA	3377	1/1	0.82	0.45	50,50,50,50	0
56	MG	AA	1812	1/1	0.82	0.33	122,122,122,122	0
56	MG	BA	3054	1/1	0.82	0.25	58,58,58,58	0
56	MG	AA	1722	1/1	0.82	0.38	68,68,68,68	0
56	MG	DA	3087	1/1	0.82	0.36	40,40,40,40	0
56	MG	BA	3087	1/1	0.82	0.10	77,77,77,77	0
56	MG	BA	3089	1/1	0.82	0.43	54,54,54,54	0
56	MG	DA	3122	1/1	0.82	0.71	65,65,65,65	0
56	MG	CA	1810	1/1	0.82	0.08	92,92,92,92	0
56	MG	CA	1688	1/1	0.82	0.34	68,68,68,68	0
56	MG	BA	3415	1/1	0.82	0.31	50,50,50,50	0
56	MG	DA	3189	1/1	0.82	0.20	63,63,63,63	0
56	MG	CA	1814	1/1	0.82	0.09	114,114,114,114	0
56	MG	DA	3197	1/1	0.82	0.27	82,82,82,82	0
56	MG	AA	1930	1/1	0.82	0.13	58,58,58,58	0
56	MG	AA	1773	1/1	0.82	0.31	58,58,58,58	0
56	MG	AA	1694	1/1	0.82	0.32	74,74,74,74	0
56	MG	BA	3002	1/1	0.82	0.34	65,65,65,65	0
56	MG	DA	3206	1/1	0.82	0.17	92,92,92,92	0
56	MG	DA	3363	1/1	0.82	0.24	64,64,64,64	0
56	MG	DA	3369	1/1	0.82	0.21	94,94,94,94	0
56	MG	DA	3208	1/1	0.82	0.29	91,91,91,91	0
56	MG	DB	212	1/1	0.82	0.14	111,111,111,111	0
56	MG	BA	3764	1/1	0.82	0.07	85,85,85,85	0
56	MG	DE	301	1/1	0.82	0.21	64,64,64,64	0
56	MG	BA	3158	1/1	0.82	0.40	48,48,48,48	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3213	1/1	0.82	0.41	89,89,89,89	0
56	MG	BA	3797	1/1	0.82	0.21	91,91,91,91	0
56	MG	BA	3858	1/1	0.83	0.26	70,70,70,70	0
56	MG	AA	1754	1/1	0.83	0.35	59,59,59,59	0
56	MG	BA	3880	1/1	0.83	0.09	84,84,84,84	0
56	MG	BA	3542	1/1	0.83	0.14	79,79,79,79	0
56	MG	AA	1925	1/1	0.83	0.10	86,86,86,86	0
56	MG	BA	3589	1/1	0.83	0.13	38,38,38,38	0
56	MG	BA	3892	1/1	0.83	0.21	94,94,94,94	0
56	MG	BA	3350	1/1	0.83	0.20	69,69,69,69	0
56	MG	BA	3008	1/1	0.83	0.19	84,84,84,84	0
56	MG	BB	209	1/1	0.83	0.36	79,79,79,79	0
56	MG	AA	1612	1/1	0.83	0.26	60,60,60,60	0
56	MG	BA	3291	1/1	0.83	0.35	61,61,61,61	0
56	MG	AA	1820	1/1	0.83	0.28	86,86,86,86	0
56	MG	AA	1843	1/1	0.83	0.12	73,73,73,73	0
56	MG	BA	3780	1/1	0.83	0.24	86,86,86,86	0
56	MG	BA	3191	1/1	0.83	0.39	78,78,78,78	0
56	MG	DA	3223	1/1	0.83	0.57	70,70,70,70	0
56	MG	AA	1726	1/1	0.83	0.24	55,55,55,55	0
56	MG	DA	3227	1/1	0.83	0.32	79,79,79,79	0
56	MG	DA	3007	1/1	0.83	0.14	82,82,82,82	0
56	MG	CA	1603	1/1	0.83	0.68	72,72,72,72	0
56	MG	DA	3013	1/1	0.83	0.13	97,97,97,97	0
56	MG	DA	3557	1/1	0.83	0.54	93,93,93,93	0
56	MG	DA	3017	1/1	0.83	0.32	69,69,69,69	0
56	MG	DA	3582	1/1	0.83	0.13	85,85,85,85	0
56	MG	AA	1731	1/1	0.83	0.17	70,70,70,70	0
56	MG	CA	1605	1/1	0.83	0.52	59,59,59,59	0
56	MG	DA	3256	1/1	0.83	0.35	73,73,73,73	0
56	MG	BA	3329	1/1	0.83	0.14	85,85,85,85	0
56	MG	CA	1728	1/1	0.83	0.15	83,83,83,83	0
56	MG	CA	1734	1/1	0.83	0.24	80,80,80,80	0
56	MG	DA	3267	1/1	0.83	0.46	66,66,66,66	0
56	MG	CA	1737	1/1	0.83	0.30	90,90,90,90	0
56	MG	DA	3036	1/1	0.83	0.18	57,57,57,57	0
56	MG	AA	1775	1/1	0.83	0.12	77,77,77,77	0
56	MG	DA	3280	1/1	0.83	0.39	80,80,80,80	0
56	MG	CA	1624	1/1	0.83	0.26	64,64,64,64	0
56	MG	DA	3286	1/1	0.83	0.35	69,69,69,69	0
56	MG	DA	3685	1/1	0.83	0.19	96,96,96,96	0
56	MG	DA	3055	1/1	0.83	0.25	57,57,57,57	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1751	1/1	0.83	0.10	86,86,86,86	0
56	MG	CA	1631	1/1	0.83	0.58	66,66,66,66	0
56	MG	CA	1632	1/1	0.83	0.40	77,77,77,77	0
56	MG	BA	3819	1/1	0.83	0.13	71,71,71,71	0
56	MG	BA	3513	1/1	0.83	0.15	60,60,60,60	0
56	MG	CA	1645	1/1	0.83	0.40	74,74,74,74	0
56	MG	CA	1648	1/1	0.83	0.20	73,73,73,73	0
56	MG	CA	1783	1/1	0.83	0.06	78,78,78,78	0
56	MG	BA	3416	1/1	0.83	0.21	58,58,58,58	0
56	MG	DA	3123	1/1	0.83	0.44	61,61,61,61	0
56	MG	DA	3329	1/1	0.83	0.45	63,63,63,63	0
56	MG	DA	3128	1/1	0.83	0.48	59,59,59,59	0
56	MG	AA	1793	1/1	0.83	0.25	72,72,72,72	0
56	MG	DA	3383	1/1	0.84	0.45	76,76,76,76	0
56	MG	BA	3081	1/1	0.84	0.22	53,53,53,53	0
56	MG	CA	1657	1/1	0.84	0.14	64,64,64,64	0
56	MG	DA	3466	1/1	0.84	0.07	75,75,75,75	0
56	MG	DA	3160	1/1	0.84	0.32	69,69,69,69	0
56	MG	AA	1917	1/1	0.84	0.17	71,71,71,71	0
56	MG	AA	1657	1/1	0.84	0.46	67,67,67,67	0
56	MG	DA	3010	1/1	0.84	0.23	78,78,78,78	0
56	MG	BA	3485	1/1	0.84	0.24	52,52,52,52	0
56	MG	DA	3528	1/1	0.84	0.22	88,88,88,88	0
56	MG	BA	3491	1/1	0.84	0.32	41,41,41,41	0
56	MG	AA	1817	1/1	0.84	0.81	93,93,93,93	0
56	MG	BD	302	1/1	0.84	0.38	51,51,51,51	0
56	MG	DA	3295	1/1	0.84	0.11	75,75,75,75	0
56	MG	AA	1846	1/1	0.84	0.34	90,90,90,90	0
56	MG	AA	1641	1/1	0.84	0.49	44,44,44,44	0
56	MG	DA	3575	1/1	0.84	0.11	65,65,65,65	0
56	MG	AA	1795	1/1	0.84	0.53	70,70,70,70	0
56	MG	AA	1697	1/1	0.84	0.31	75,75,75,75	0
56	MG	DA	3307	1/1	0.84	0.26	65,65,65,65	0
56	MG	BA	3820	1/1	0.84	0.42	93,93,93,93	0
56	MG	DA	3310	1/1	0.84	0.89	72,72,72,72	0
56	MG	DA	3312	1/1	0.84	0.29	52,52,52,52	0
56	MG	DA	3618	1/1	0.84	0.20	80,80,80,80	0
56	MG	CA	1685	1/1	0.84	0.31	64,64,64,64	0
56	MG	DA	3046	1/1	0.84	0.12	79,79,79,79	0
56	MG	BA	3827	1/1	0.84	0.16	77,77,77,77	0
56	MG	DA	3662	1/1	0.84	0.09	53,53,53,53	0
56	MG	BA	3411	1/1	0.84	0.22	55,55,55,55	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3154	1/1	0.84	0.33	53,53,53,53	0
56	MG	AA	1801	1/1	0.84	0.38	65,65,65,65	0
56	MG	DA	3338	1/1	0.84	0.46	69,69,69,69	0
56	MG	DA	3073	1/1	0.84	0.57	63,63,63,63	0
56	MG	BA	3424	1/1	0.84	0.21	42,42,42,42	0
56	MG	DA	3342	1/1	0.84	0.32	70,70,70,70	0
56	MG	DA	3234	1/1	0.84	0.35	62,62,62,62	0
56	MG	DA	3348	1/1	0.84	0.31	77,77,77,77	0
56	MG	DA	3355	1/1	0.84	0.26	55,55,55,55	0
56	MG	DA	3360	1/1	0.84	0.25	61,61,61,61	0
56	MG	BA	3871	1/1	0.84	0.12	46,46,46,46	0
56	MG	AA	1662	1/1	0.84	0.47	71,71,71,71	0
56	MG	DA	3372	1/1	0.84	0.34	78,78,78,78	0
56	MG	AA	1706	1/1	0.84	0.24	62,62,62,62	0
56	MG	AA	1642	1/1	0.84	0.31	73,73,73,73	0
56	MG	DB	214	1/1	0.84	0.28	83,83,83,83	0
56	MG	AA	1833	1/1	0.84	0.19	70,70,70,70	0
56	MG	DO	201	1/1	0.84	0.30	80,80,80,80	0
56	MG	CA	1647	1/1	0.84	0.24	71,71,71,71	0
56	MG	AA	1787	1/1	0.84	0.27	66,66,66,66	0
56	MG	AA	1602	1/1	0.84	0.19	104,104,104,104	0
56	MG	B1	101	1/1	0.85	0.29	60,60,60,60	0
56	MG	DA	3247	1/1	0.85	0.30	58,58,58,58	0
56	MG	AA	1830	1/1	0.85	0.40	57,57,57,57	0
56	MG	AV	110	1/1	0.85	0.28	80,80,80,80	0
56	MG	DA	3084	1/1	0.85	0.33	76,76,76,76	0
56	MG	BA	3399	1/1	0.85	0.09	95,95,95,95	0
56	MG	BA	3844	1/1	0.85	0.17	99,99,99,99	0
56	MG	DA	3400	1/1	0.85	0.28	53,53,53,53	0
56	MG	DA	3430	1/1	0.85	0.21	83,83,83,83	0
56	MG	DA	3105	1/1	0.85	0.44	52,52,52,52	0
56	MG	DA	3443	1/1	0.85	0.13	70,70,70,70	0
56	MG	DA	3113	1/1	0.85	0.23	59,59,59,59	0
56	MG	DA	3472	1/1	0.85	0.14	78,78,78,78	0
56	MG	DA	3482	1/1	0.85	0.20	63,63,63,63	0
56	MG	BA	3849	1/1	0.85	0.19	83,83,83,83	0
56	MG	CA	1613	1/1	0.85	0.41	75,75,75,75	0
56	MG	DA	3274	1/1	0.85	0.76	70,70,70,70	0
56	MG	AA	1894	1/1	0.85	0.40	83,83,83,83	0
56	MG	DA	3279	1/1	0.85	0.24	74,74,74,74	0
56	MG	DA	3126	1/1	0.85	0.23	69,69,69,69	0
56	MG	BA	3315	1/1	0.85	0.41	54,54,54,54	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1629	1/1	0.85	0.74	74,74,74,74	0
56	MG	AA	1669	1/1	0.85	0.37	84,84,84,84	0
56	MG	CX	101	1/1	0.85	0.25	99,99,99,99	0
56	MG	DA	3292	1/1	0.85	0.24	69,69,69,69	0
56	MG	DA	3566	1/1	0.85	0.19	84,84,84,84	0
56	MG	DA	3162	1/1	0.85	0.76	54,54,54,54	0
56	MG	DA	3294	1/1	0.85	0.22	82,82,82,82	0
56	MG	DA	3579	1/1	0.85	0.20	104,104,104,104	0
56	MG	AA	1646	1/1	0.85	0.45	64,64,64,64	0
56	MG	DA	3174	1/1	0.85	0.53	68,68,68,68	0
56	MG	DA	3590	1/1	0.85	0.29	89,89,89,89	0
56	MG	DA	3185	1/1	0.85	0.30	58,58,58,58	0
56	MG	DA	3188	1/1	0.85	0.49	77,77,77,77	0
56	MG	DA	3611	1/1	0.85	0.28	80,80,80,80	0
56	MG	AA	1837	1/1	0.85	0.17	66,66,66,66	0
56	MG	CA	1640	1/1	0.85	0.23	72,72,72,72	0
56	MG	CA	1736	1/1	0.85	0.09	97,97,97,97	0
56	MG	DA	3623	1/1	0.85	0.31	85,85,85,85	0
56	MG	BA	3873	1/1	0.85	0.09	74,74,74,74	0
56	MG	AA	1821	1/1	0.85	0.22	78,78,78,78	0
56	MG	DA	3316	1/1	0.85	0.13	80,80,80,80	0
56	MG	AA	1703	1/1	0.85	0.34	74,74,74,74	0
56	MG	BA	3439	1/1	0.85	0.29	82,82,82,82	0
56	MG	DA	3673	1/1	0.85	0.39	111,111,111,111	0
56	MG	BA	3341	1/1	0.85	0.25	53,53,53,53	0
56	MG	AA	1811	1/1	0.85	0.26	120,120,120,120	0
56	MG	AA	1914	1/1	0.85	0.19	104,104,104,104	0
56	MG	DA	3332	1/1	0.85	0.40	63,63,63,63	0
56	MG	DA	3334	1/1	0.85	0.33	83,83,83,83	0
56	MG	AA	1704	1/1	0.85	0.29	79,79,79,79	0
56	MG	AA	1851	1/1	0.85	0.15	80,80,80,80	0
56	MG	AA	1771	1/1	0.85	0.28	68,68,68,68	0
56	MG	DA	3216	1/1	0.85	0.23	46,46,46,46	0
56	MG	BA	3367	1/1	0.85	0.80	50,50,50,50	0
56	MG	DA	3344	1/1	0.85	0.34	88,88,88,88	0
56	MG	DB	203	1/1	0.85	0.27	105,105,105,105	0
56	MG	DA	3218	1/1	0.85	0.55	71,71,71,71	0
56	MG	BA	3792	1/1	0.85	0.20	48,48,48,48	0
56	MG	BA	3371	1/1	0.85	0.18	66,66,66,66	0
56	MG	AA	1880	1/1	0.85	0.41	79,79,79,79	0
56	MG	BA	3488	1/1	0.85	0.70	35,35,35,35	0
56	MG	DB	216	1/1	0.85	0.10	109,109,109,109	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3364	1/1	0.85	0.17	94,94,94,94	0
56	MG	DA	3366	1/1	0.85	0.16	81,81,81,81	0
56	MG	DA	3064	1/1	0.85	0.27	66,66,66,66	0
56	MG	AA	1651	1/1	0.85	0.24	80,80,80,80	0
56	MG	BA	3098	1/1	0.85	0.28	51,51,51,51	0
56	MG	DA	3204	1/1	0.86	0.38	76,76,76,76	0
56	MG	DA	3507	1/1	0.86	0.20	109,109,109,109	0
56	MG	BD	301	1/1	0.86	0.27	65,65,65,65	0
56	MG	BA	3334	1/1	0.86	0.43	51,51,51,51	0
56	MG	AA	1825	1/1	0.86	0.28	64,64,64,64	0
56	MG	DA	3527	1/1	0.86	0.27	81,81,81,81	0
56	MG	BA	3514	1/1	0.86	0.27	58,58,58,58	0
56	MG	BA	3828	1/1	0.86	0.16	99,99,99,99	0
56	MG	BA	3420	1/1	0.86	0.23	65,65,65,65	0
56	MG	CA	1787	1/1	0.86	0.17	98,98,98,98	0
56	MG	DA	3318	1/1	0.86	0.19	83,83,83,83	0
56	MG	AA	1774	1/1	0.86	0.29	69,69,69,69	0
56	MG	DA	3056	1/1	0.86	0.30	59,59,59,59	0
56	MG	DA	3567	1/1	0.86	0.29	77,77,77,77	0
56	MG	CA	1793	1/1	0.86	0.27	73,73,73,73	0
56	MG	AA	1751	1/1	0.86	0.21	74,74,74,74	0
56	MG	AA	1794	1/1	0.86	0.52	68,68,68,68	0
56	MG	DA	3226	1/1	0.86	0.76	62,62,62,62	0
56	MG	DA	3333	1/1	0.86	0.42	50,50,50,50	0
56	MG	AA	1629	1/1	0.86	0.38	68,68,68,68	0
56	MG	DA	3228	1/1	0.86	0.34	90,90,90,90	0
56	MG	CA	1606	1/1	0.86	0.26	77,77,77,77	0
56	MG	CA	1684	1/1	0.86	0.16	70,70,70,70	0
56	MG	CA	1608	1/1	0.86	0.51	80,80,80,80	0
56	MG	AA	1887	1/1	0.86	0.23	90,90,90,90	0
56	MG	BA	3866	1/1	0.86	0.08	82,82,82,82	0
56	MG	DA	3620	1/1	0.86	0.28	95,95,95,95	0
56	MG	BA	3663	1/1	0.86	0.16	21,21,21,21	0
56	MG	DA	3624	1/1	0.86	0.25	82,82,82,82	0
56	MG	AA	1888	1/1	0.86	0.20	97,97,97,97	0
56	MG	BA	3290	1/1	0.86	0.26	63,63,63,63	0
56	MG	AA	1603	1/1	0.86	0.12	78,78,78,78	0
56	MG	AA	1798	1/1	0.86	0.41	54,54,54,54	0
56	MG	DA	3664	1/1	0.86	0.22	97,97,97,97	0
56	MG	DA	3666	1/1	0.86	0.41	100,100,100,100	0
56	MG	CA	1635	1/1	0.86	0.44	72,72,72,72	0
56	MG	CV	105	1/1	0.86	0.15	106,106,106,106	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1898	1/1	0.86	0.13	98,98,98,98	0
56	MG	CA	1713	1/1	0.86	0.11	71,71,71,71	0
56	MG	CV	109	1/1	0.86	0.09	102,102,102,102	0
56	MG	DA	3148	1/1	0.86	0.57	80,80,80,80	0
56	MG	DA	3277	1/1	0.86	0.26	67,67,67,67	0
56	MG	CA	1717	1/1	0.86	0.50	77,77,77,77	0
56	MG	AA	1690	1/1	0.86	0.35	65,65,65,65	0
56	MG	DA	3004	1/1	0.86	0.42	75,75,75,75	0
56	MG	DA	3382	1/1	0.86	0.71	72,72,72,72	0
56	MG	BA	3388	1/1	0.86	0.33	77,77,77,77	0
56	MG	DA	3395	1/1	0.86	0.15	58,58,58,58	0
56	MG	CA	1644	1/1	0.86	0.17	69,69,69,69	0
56	MG	AV	118	1/1	0.86	0.09	83,83,83,83	0
56	MG	DB	206	1/1	0.86	0.29	77,77,77,77	0
56	MG	AA	1786	1/1	0.86	0.32	69,69,69,69	0
56	MG	DA	3290	1/1	0.86	0.36	79,79,79,79	0
56	MG	AA	1638	1/1	0.86	0.31	78,78,78,78	0
56	MG	DA	3448	1/1	0.86	0.16	73,73,73,73	0
56	MG	AA	1904	1/1	0.86	0.07	118,118,118,118	0
56	MG	DA	3469	1/1	0.86	0.09	84,84,84,84	0
56	MG	BA	3331	1/1	0.86	0.26	66,66,66,66	0
56	MG	DA	3480	1/1	0.86	0.20	70,70,70,70	0
56	MG	AA	1709	1/1	0.86	0.11	86,86,86,86	0
56	MG	CA	1767	1/1	0.86	0.25	62,62,62,62	0
56	MG	AA	1680	1/1	0.87	0.12	65,65,65,65	0
56	MG	CA	1639	1/1	0.87	0.77	96,96,96,96	0
56	MG	DA	3303	1/1	0.87	0.28	54,54,54,54	0
56	MG	AA	1912	1/1	0.87	0.14	106,106,106,106	0
56	MG	BA	3400	1/1	0.87	0.06	122,122,122,122	0
56	MG	BA	3405	1/1	0.87	0.41	62,62,62,62	0
56	MG	BA	3307	1/1	0.87	0.30	48,48,48,48	0
56	MG	DA	3207	1/1	0.87	0.15	74,74,74,74	0
56	MG	DA	3030	1/1	0.87	0.52	66,66,66,66	0
56	MG	BA	3407	1/1	0.87	0.22	44,44,44,44	0
56	MG	DA	3541	1/1	0.87	0.11	106,106,106,106	0
56	MG	DA	3544	1/1	0.87	0.11	79,79,79,79	0
56	MG	BA	3535	1/1	0.87	0.15	68,68,68,68	0
56	MG	DA	3549	1/1	0.87	0.19	87,87,87,87	0
56	MG	DA	3320	1/1	0.87	0.24	56,56,56,56	0
56	MG	BA	3140	1/1	0.87	0.24	53,53,53,53	0
56	MG	BA	3314	1/1	0.87	0.31	65,65,65,65	0
56	MG	DA	3043	1/1	0.87	0.18	61,61,61,61	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3895	1/1	0.87	0.12	78,78,78,78	0
56	MG	BA	3147	1/1	0.87	0.14	54,54,54,54	0
56	MG	AV	103	1/1	0.87	0.30	53,53,53,53	0
56	MG	BA	3708	1/1	0.87	0.07	85,85,85,85	0
56	MG	BA	3155	1/1	0.87	0.43	58,58,58,58	0
56	MG	DA	3061	1/1	0.87	0.75	78,78,78,78	0
56	MG	DA	3606	1/1	0.87	0.08	76,76,76,76	0
56	MG	DA	3607	1/1	0.87	0.14	90,90,90,90	0
56	MG	CA	1791	1/1	0.87	0.24	85,85,85,85	0
56	MG	BA	3423	1/1	0.87	0.18	85,85,85,85	0
56	MG	DA	3612	1/1	0.87	0.20	87,87,87,87	0
56	MG	AA	1717	1/1	0.87	0.18	76,76,76,76	0
56	MG	DA	3343	1/1	0.87	0.65	70,70,70,70	0
56	MG	CA	1673	1/1	0.87	0.27	54,54,54,54	0
56	MG	BA	3188	1/1	0.87	0.33	74,74,74,74	0
56	MG	BA	3438	1/1	0.87	0.37	62,62,62,62	0
56	MG	CA	1804	1/1	0.87	0.22	103,103,103,103	0
56	MG	DA	3359	1/1	0.87	0.16	59,59,59,59	0
56	MG	AA	1883	1/1	0.87	0.06	86,86,86,86	0
56	MG	DA	3088	1/1	0.87	0.30	73,73,73,73	0
56	MG	AA	1800	1/1	0.87	0.73	76,76,76,76	0
56	MG	AA	1752	1/1	0.87	0.37	88,88,88,88	0
56	MG	DA	3368	1/1	0.87	0.13	80,80,80,80	0
56	MG	AA	1902	1/1	0.87	0.26	121,121,121,121	0
56	MG	DA	3260	1/1	0.87	0.21	71,71,71,71	0
56	MG	DA	3114	1/1	0.87	0.19	70,70,70,70	0
56	MG	BA	3226	1/1	0.87	0.22	36,36,36,36	0
56	MG	CA	1687	1/1	0.87	0.26	81,81,81,81	0
56	MG	BA	3457	1/1	0.87	0.20	59,59,59,59	0
56	MG	AA	1903	1/1	0.87	0.20	117,117,117,117	0
56	MG	DA	3380	1/1	0.87	0.18	84,84,84,84	0
56	MG	DA	3276	1/1	0.87	0.22	63,63,63,63	0
56	MG	AA	1721	1/1	0.87	0.28	84,84,84,84	0
56	MG	DA	3693	1/1	0.87	0.33	103,103,103,103	0
56	MG	BA	3478	1/1	0.87	0.25	67,67,67,67	0
56	MG	AA	1643	1/1	0.87	0.56	59,59,59,59	0
56	MG	BA	3259	1/1	0.87	0.32	66,66,66,66	0
56	MG	DA	3157	1/1	0.87	0.31	82,82,82,82	0
56	MG	DA	3421	1/1	0.87	0.12	52,52,52,52	0
56	MG	DA	3283	1/1	0.87	0.55	76,76,76,76	0
56	MG	DB	208	1/1	0.87	0.12	98,98,98,98	0
56	MG	BA	3265	1/1	0.87	0.23	67,67,67,67	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3014	1/1	0.87	0.43	49,49,49,49	0
56	MG	BA	3112	1/1	0.87	0.24	56,56,56,56	0
56	MG	BA	3281	1/1	0.87	0.52	72,72,72,72	0
56	MG	DA	3468	1/1	0.87	0.08	80,80,80,80	0
56	MG	CA	1714	1/1	0.87	0.14	74,74,74,74	0
56	MG	BA	3283	1/1	0.87	0.23	47,47,47,47	0
56	MG	DQ	201	1/1	0.87	0.46	43,43,43,43	0
56	MG	BA	3120	1/1	0.87	0.26	51,51,51,51	0
56	MG	DU	201	1/1	0.87	0.31	72,72,72,72	0
56	MG	BA	3123	1/1	0.87	0.25	58,58,58,58	0
56	MG	D0	104	1/1	0.87	0.26	86,86,86,86	0
56	MG	CA	1637	1/1	0.87	0.26	80,80,80,80	0
56	MG	D7	101	1/1	0.87	0.69	63,63,63,63	0
56	MG	DA	3021	1/1	0.88	0.24	58,58,58,58	0
56	MG	BA	3437	1/1	0.88	0.53	63,63,63,63	0
56	MG	DA	3314	1/1	0.88	0.17	52,52,52,52	0
56	MG	CA	1747	1/1	0.88	0.17	96,96,96,96	0
56	MG	DA	3317	1/1	0.88	0.20	84,84,84,84	0
56	MG	BA	3656	1/1	0.88	0.17	63,63,63,63	0
56	MG	BA	3001	1/1	0.88	0.18	35,35,35,35	0
56	MG	AA	1870	1/1	0.88	0.14	85,85,85,85	0
56	MG	BA	3095	1/1	0.88	0.16	48,48,48,48	0
56	MG	AA	1698	1/1	0.88	0.19	97,97,97,97	0
56	MG	DA	3563	1/1	0.88	0.11	73,73,73,73	0
56	MG	AA	1783	1/1	0.88	0.26	61,61,61,61	0
56	MG	CA	1774	1/1	0.88	0.16	111,111,111,111	0
56	MG	BA	3298	1/1	0.88	0.24	50,50,50,50	0
56	MG	BA	3379	1/1	0.88	0.28	39,39,39,39	0
56	MG	BA	3383	1/1	0.88	0.21	45,45,45,45	0
56	MG	BA	3103	1/1	0.88	0.42	54,54,54,54	0
56	MG	CA	1785	1/1	0.88	0.10	87,87,87,87	0
56	MG	BA	3201	1/1	0.88	0.28	54,54,54,54	0
56	MG	BA	3205	1/1	0.88	0.38	43,43,43,43	0
56	MG	BA	3396	1/1	0.88	0.15	95,95,95,95	0
56	MG	BA	3313	1/1	0.88	0.28	66,66,66,66	0
56	MG	BZ	302	1/1	0.88	0.53	62,62,62,62	0
56	MG	AA	1768	1/1	0.88	0.26	88,88,88,88	0
56	MG	B2	101	1/1	0.88	0.22	63,63,63,63	0
56	MG	DA	3349	1/1	0.88	0.45	72,72,72,72	0
56	MG	CA	1798	1/1	0.88	0.16	94,94,94,94	0
56	MG	DA	3356	1/1	0.88	0.15	85,85,85,85	0
56	MG	AA	1613	1/1	0.88	0.55	68,68,68,68	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3085	1/1	0.88	0.30	64,64,64,64	0
56	MG	BA	3815	1/1	0.88	0.10	51,51,51,51	0
56	MG	BA	3492	1/1	0.88	0.24	61,61,61,61	0
56	MG	BA	3402	1/1	0.88	0.44	55,55,55,55	0
56	MG	DA	3102	1/1	0.88	0.24	60,60,60,60	0
56	MG	CA	1689	1/1	0.88	0.85	84,84,84,84	0
56	MG	BA	3494	1/1	0.88	0.30	62,62,62,62	0
56	MG	BA	3230	1/1	0.88	0.09	57,57,57,57	0
56	MG	DA	3667	1/1	0.88	0.13	74,74,74,74	0
56	MG	BA	3842	1/1	0.88	0.16	85,85,85,85	0
56	MG	BA	3040	1/1	0.88	0.09	46,46,46,46	0
56	MG	BA	3246	1/1	0.88	0.45	53,53,53,53	0
56	MG	AA	1734	1/1	0.88	0.28	80,80,80,80	0
56	MG	BA	3512	1/1	0.88	0.32	56,56,56,56	0
56	MG	DA	3129	1/1	0.88	0.17	53,53,53,53	0
56	MG	CV	102	1/1	0.88	0.21	85,85,85,85	0
56	MG	AA	1701	1/1	0.88	0.28	57,57,57,57	0
56	MG	DA	3138	1/1	0.88	0.41	58,58,58,58	0
56	MG	DA	3144	1/1	0.88	0.39	71,71,71,71	0
56	MG	CA	1709	1/1	0.88	0.66	82,82,82,82	0
56	MG	DA	3156	1/1	0.88	0.48	57,57,57,57	0
56	MG	DA	3287	1/1	0.88	0.40	62,62,62,62	0
56	MG	AA	1865	1/1	0.88	0.20	81,81,81,81	0
56	MG	DA	3435	1/1	0.88	0.09	70,70,70,70	0
56	MG	DA	3441	1/1	0.88	0.18	72,72,72,72	0
56	MG	BA	3864	1/1	0.88	0.11	79,79,79,79	0
56	MG	DB	207	1/1	0.88	0.12	79,79,79,79	0
56	MG	BA	3264	1/1	0.88	0.25	59,59,59,59	0
56	MG	DA	3464	1/1	0.88	0.17	82,82,82,82	0
56	MG	DA	3291	1/1	0.88	0.17	50,50,50,50	0
56	MG	DA	3163	1/1	0.88	0.65	68,68,68,68	0
56	MG	BA	3063	1/1	0.88	0.14	53,53,53,53	0
56	MG	BA	3266	1/1	0.88	0.44	59,59,59,59	0
56	MG	DA	3178	1/1	0.88	0.41	77,77,77,77	0
56	MG	DF	301	1/1	0.88	0.29	71,71,71,71	0
56	MG	DA	3182	1/1	0.88	0.28	68,68,68,68	0
56	MG	DA	3483	1/1	0.88	0.16	84,84,84,84	0
56	MG	AV	114	1/1	0.88	0.23	67,67,67,67	0
56	MG	AA	1670	1/1	0.88	0.29	88,88,88,88	0
56	MG	BA	3435	1/1	0.88	0.14	84,84,84,84	0
56	MG	CA	1740	1/1	0.88	0.16	73,73,73,73	0
56	MG	CA	1741	1/1	0.88	0.05	92,92,92,92	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1742	1/1	0.88	0.27	89,89,89,89	0
56	MG	DA	3397	1/1	0.89	0.11	35,35,35,35	0
56	MG	BA	3498	1/1	0.89	0.20	54,54,54,54	0
56	MG	BA	3050	1/1	0.89	0.29	60,60,60,60	0
56	MG	CV	110	1/1	0.89	0.10	100,100,100,100	0
56	MG	BA	3879	1/1	0.89	0.17	53,53,53,53	0
56	MG	AA	1688	1/1	0.89	0.12	96,96,96,96	0
56	MG	BA	3389	1/1	0.89	0.60	38,38,38,38	0
56	MG	DA	3230	1/1	0.89	0.13	68,68,68,68	0
56	MG	CA	1681	1/1	0.89	0.28	70,70,70,70	0
56	MG	BA	3392	1/1	0.89	0.25	54,54,54,54	0
56	MG	BA	3394	1/1	0.89	0.30	58,58,58,58	0
56	MG	BA	3288	1/1	0.89	0.12	77,77,77,77	0
56	MG	BA	3893	1/1	0.89	0.15	30,30,30,30	0
56	MG	DA	3239	1/1	0.89	0.46	62,62,62,62	0
56	MG	BA	3057	1/1	0.89	0.23	30,30,30,30	0
56	MG	DA	3018	1/1	0.89	0.29	51,51,51,51	0
56	MG	BA	3896	1/1	0.89	0.15	72,72,72,72	0
56	MG	CA	1692	1/1	0.89	0.68	84,84,84,84	0
56	MG	CA	1693	1/1	0.89	0.35	83,83,83,83	0
56	MG	AA	1878	1/1	0.89	0.14	46,46,46,46	0
56	MG	BA	3161	1/1	0.89	0.31	49,49,49,49	0
56	MG	BA	3181	1/1	0.89	0.33	69,69,69,69	0
56	MG	BA	3187	1/1	0.89	0.21	47,47,47,47	0
56	MG	DA	3034	1/1	0.89	0.44	77,77,77,77	0
56	MG	DA	3522	1/1	0.89	0.22	76,76,76,76	0
56	MG	BB	212	1/1	0.89	0.27	62,62,62,62	0
56	MG	DA	3273	1/1	0.89	0.36	62,62,62,62	0
56	MG	BB	216	1/1	0.89	0.19	38,38,38,38	0
56	MG	BA	3538	1/1	0.89	0.14	33,33,33,33	0
56	MG	CA	1706	1/1	0.89	0.89	75,75,75,75	0
56	MG	BA	3404	1/1	0.89	0.17	52,52,52,52	0
56	MG	BA	3301	1/1	0.89	0.12	70,70,70,70	0
56	MG	CA	1712	1/1	0.89	0.25	83,83,83,83	0
56	MG	BA	3078	1/1	0.89	0.54	49,49,49,49	0
56	MG	BA	3605	1/1	0.89	0.19	75,75,75,75	0
56	MG	AA	1808	1/1	0.89	0.38	75,75,75,75	0
56	MG	BA	3310	1/1	0.89	0.27	54,54,54,54	0
56	MG	CA	1727	1/1	0.89	0.23	74,74,74,74	0
56	MG	BY	203	1/1	0.89	0.57	65,65,65,65	0
56	MG	CA	1732	1/1	0.89	0.23	81,81,81,81	0
56	MG	AA	1614	1/1	0.89	0.16	72,72,72,72	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3713	1/1	0.89	0.11	85,85,85,85	0
56	MG	BA	3724	1/1	0.89	0.19	88,88,88,88	0
56	MG	AA	1842	1/1	0.89	0.64	89,89,89,89	0
56	MG	B3	102	1/1	0.89	0.28	56,56,56,56	0
56	MG	B7	101	1/1	0.89	0.22	51,51,51,51	0
56	MG	BA	3004	1/1	0.89	0.25	57,57,57,57	0
56	MG	DA	3609	1/1	0.89	0.25	75,75,75,75	0
56	MG	DA	3092	1/1	0.89	0.19	92,92,92,92	0
56	MG	BA	3090	1/1	0.89	0.40	46,46,46,46	0
56	MG	BA	3748	1/1	0.89	0.15	28,28,28,28	0
56	MG	CA	1749	1/1	0.89	0.22	92,92,92,92	0
56	MG	BA	3214	1/1	0.89	0.14	49,49,49,49	0
56	MG	DA	3116	1/1	0.89	0.27	79,79,79,79	0
56	MG	AA	1696	1/1	0.89	0.52	95,95,95,95	0
56	MG	CA	1762	1/1	0.89	0.22	76,76,76,76	0
56	MG	BA	3770	1/1	0.89	0.19	49,49,49,49	0
56	MG	BA	3009	1/1	0.89	0.18	83,83,83,83	0
56	MG	CA	1618	1/1	0.89	0.15	78,78,78,78	0
56	MG	DA	3631	1/1	0.89	0.29	94,94,94,94	0
56	MG	DA	3634	1/1	0.89	0.13	70,70,70,70	0
56	MG	BA	3012	1/1	0.89	0.51	69,69,69,69	0
56	MG	DA	3659	1/1	0.89	0.22	77,77,77,77	0
56	MG	BA	3790	1/1	0.89	0.20	75,75,75,75	0
56	MG	DA	3663	1/1	0.89	0.11	81,81,81,81	0
56	MG	AA	1653	1/1	0.89	0.71	82,82,82,82	0
56	MG	BA	3336	1/1	0.89	0.26	46,46,46,46	0
56	MG	BA	3244	1/1	0.89	0.40	60,60,60,60	0
56	MG	DA	3146	1/1	0.89	0.25	66,66,66,66	0
56	MG	BA	3017	1/1	0.89	0.21	64,64,64,64	0
56	MG	DA	3155	1/1	0.89	0.29	56,56,56,56	0
56	MG	BA	3109	1/1	0.89	0.24	58,58,58,58	0
56	MG	AA	1677	1/1	0.89	0.55	84,84,84,84	0
56	MG	BA	3813	1/1	0.89	0.08	66,66,66,66	0
56	MG	AA	1761	1/1	0.89	0.31	58,58,58,58	0
56	MG	BA	3352	1/1	0.89	0.31	68,68,68,68	0
56	MG	BA	3260	1/1	0.89	0.27	60,60,60,60	0
56	MG	BA	3469	1/1	0.89	0.31	77,77,77,77	0
56	MG	CA	1646	1/1	0.89	0.10	73,73,73,73	0
56	MG	DA	3180	1/1	0.89	0.11	75,75,75,75	0
56	MG	CA	1801	1/1	0.89	0.13	83,83,83,83	0
56	MG	BA	3362	1/1	0.89	0.43	51,51,51,51	0
56	MG	DA	3186	1/1	0.89	0.32	76,76,76,76	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1803	1/1	0.89	0.19	102,102,102,102	0
56	MG	AV	108	1/1	0.89	0.19	98,98,98,98	0
56	MG	DA	3191	1/1	0.89	0.18	77,77,77,77	0
56	MG	CA	1806	1/1	0.89	0.06	102,102,102,102	0
56	MG	CA	1649	1/1	0.89	0.13	78,78,78,78	0
56	MG	CA	1652	1/1	0.89	0.41	75,75,75,75	0
56	MG	CA	1809	1/1	0.89	0.09	101,101,101,101	0
56	MG	BA	3364	1/1	0.89	0.20	69,69,69,69	0
56	MG	AA	1791	1/1	0.89	0.26	99,99,99,99	0
56	MG	BA	3368	1/1	0.89	0.24	63,63,63,63	0
56	MG	CA	1658	1/1	0.89	0.17	91,91,91,91	0
56	MG	BA	3135	1/1	0.89	0.31	58,58,58,58	0
56	MG	BA	3490	1/1	0.89	0.29	49,49,49,49	0
56	MG	CA	1662	1/1	0.89	0.46	92,92,92,92	0
56	MG	BA	3267	1/1	0.89	0.31	53,53,53,53	0
56	MG	DX	101	1/1	0.89	0.24	55,55,55,55	0
56	MG	CT	201	1/1	0.89	0.37	67,67,67,67	0
56	MG	AA	1707	1/1	0.89	0.18	64,64,64,64	0
56	MG	BA	3274	1/1	0.89	0.21	35,35,35,35	0
56	MG	BA	3049	1/1	0.89	0.43	49,49,49,49	0
56	MG	BA	3861	1/1	0.90	0.08	66,66,66,66	0
56	MG	BA	3277	1/1	0.90	0.17	65,65,65,65	0
56	MG	DA	3078	1/1	0.90	0.42	75,75,75,75	0
56	MG	BA	3344	1/1	0.90	0.17	62,62,62,62	0
56	MG	BA	3870	1/1	0.90	0.29	100,100,100,100	0
56	MG	AA	1619	1/1	0.90	0.41	68,68,68,68	0
56	MG	BA	3421	1/1	0.90	0.29	75,75,75,75	0
56	MG	DA	3262	1/1	0.90	0.66	67,67,67,67	0
56	MG	DA	3263	1/1	0.90	0.30	67,67,67,67	0
56	MG	BA	3011	1/1	0.90	0.34	54,54,54,54	0
56	MG	AA	1890	1/1	0.90	0.19	89,89,89,89	0
56	MG	DA	3268	1/1	0.90	0.32	64,64,64,64	0
56	MG	DA	3493	1/1	0.90	0.21	80,80,80,80	0
56	MG	CA	1655	1/1	0.90	0.51	66,66,66,66	0
56	MG	DA	3499	1/1	0.90	0.17	68,68,68,68	0
56	MG	CA	1656	1/1	0.90	0.28	77,77,77,77	0
56	MG	BA	3591	1/1	0.90	0.28	64,64,64,64	0
56	MG	BA	3358	1/1	0.90	0.80	63,63,63,63	0
56	MG	BA	3883	1/1	0.90	0.29	43,43,43,43	0
56	MG	DA	3107	1/1	0.90	0.21	58,58,58,58	0
56	MG	DA	3524	1/1	0.90	0.19	99,99,99,99	0
56	MG	BA	3651	1/1	0.90	0.16	49,49,49,49	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3886	1/1	0.90	0.26	94,94,94,94	0
56	MG	CA	1799	1/1	0.90	0.13	94,94,94,94	0
56	MG	DA	3533	1/1	0.90	0.17	95,95,95,95	0
56	MG	DA	3535	1/1	0.90	0.36	96,96,96,96	0
56	MG	BA	3284	1/1	0.90	0.22	41,41,41,41	0
56	MG	AA	1648	1/1	0.90	0.21	65,65,65,65	0
56	MG	DA	3285	1/1	0.90	0.41	62,62,62,62	0
56	MG	AA	1764	1/1	0.90	0.29	72,72,72,72	0
56	MG	AA	1921	1/1	0.90	0.12	97,97,97,97	0
56	MG	BA	3366	1/1	0.90	0.37	52,52,52,52	0
56	MG	BA	3293	1/1	0.90	0.32	45,45,45,45	0
56	MG	DA	3134	1/1	0.90	0.16	61,61,61,61	0
56	MG	BA	3032	1/1	0.90	0.13	45,45,45,45	0
56	MG	BA	3741	1/1	0.90	0.12	63,63,63,63	0
56	MG	DA	3569	1/1	0.90	0.09	76,76,76,76	0
56	MG	BA	3370	1/1	0.90	0.16	64,64,64,64	0
56	MG	BA	3744	1/1	0.90	0.43	44,44,44,44	0
56	MG	DA	3576	1/1	0.90	0.31	75,75,75,75	0
56	MG	BA	3296	1/1	0.90	0.30	43,43,43,43	0
56	MG	DA	3580	1/1	0.90	0.11	76,76,76,76	0
56	MG	AA	1897	1/1	0.90	0.22	74,74,74,74	0
56	MG	DA	3150	1/1	0.90	0.10	65,65,65,65	0
56	MG	DA	3152	1/1	0.90	0.36	69,69,69,69	0
56	MG	DA	3153	1/1	0.90	0.80	66,66,66,66	0
56	MG	DA	3154	1/1	0.90	0.34	65,65,65,65	0
56	MG	BA	3225	1/1	0.90	0.23	46,46,46,46	0
56	MG	BA	3471	1/1	0.90	0.27	49,49,49,49	0
56	MG	BA	3777	1/1	0.90	0.33	65,65,65,65	0
56	MG	DA	3159	1/1	0.90	0.26	66,66,66,66	0
56	MG	BF	302	1/1	0.90	0.41	41,41,41,41	0
56	MG	AA	1767	1/1	0.90	0.20	59,59,59,59	0
56	MG	AA	1714	1/1	0.90	0.23	74,74,74,74	0
56	MG	DA	3165	1/1	0.90	0.57	65,65,65,65	0
56	MG	BO	202	1/1	0.90	0.34	42,42,42,42	0
56	MG	DA	3171	1/1	0.90	0.25	66,66,66,66	0
56	MG	BT	201	1/1	0.90	0.14	53,53,53,53	0
56	MG	DA	3175	1/1	0.90	0.22	75,75,75,75	0
56	MG	BA	3781	1/1	0.90	0.11	84,84,84,84	0
56	MG	DA	3330	1/1	0.90	0.65	78,78,78,78	0
56	MG	AA	1618	1/1	0.90	0.29	61,61,61,61	0
56	MG	BA	3238	1/1	0.90	0.30	55,55,55,55	0
56	MG	DA	3655	1/1	0.90	0.23	75,75,75,75	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3656	1/1	0.90	0.08	90,90,90,90	0
56	MG	AA	1635	1/1	0.90	0.20	65,65,65,65	0
56	MG	AA	1753	1/1	0.90	0.34	86,86,86,86	0
56	MG	DA	3187	1/1	0.90	0.29	109,109,109,109	0
56	MG	DA	3003	1/1	0.90	0.20	43,43,43,43	0
56	MG	AA	1625	1/1	0.90	0.17	69,69,69,69	0
56	MG	AA	1813	1/1	0.90	0.13	121,121,121,121	0
56	MG	B5	101	1/1	0.90	0.27	50,50,50,50	0
56	MG	BA	3808	1/1	0.90	0.13	70,70,70,70	0
56	MG	DA	3198	1/1	0.90	0.33	80,80,80,80	0
56	MG	BA	3324	1/1	0.90	0.59	62,62,62,62	0
56	MG	DA	3201	1/1	0.90	0.59	80,80,80,80	0
56	MG	DA	3681	1/1	0.90	0.12	71,71,71,71	0
56	MG	DA	3011	1/1	0.90	0.15	66,66,66,66	0
56	MG	DA	3350	1/1	0.90	0.29	72,72,72,72	0
56	MG	DA	3351	1/1	0.90	0.37	57,57,57,57	0
56	MG	DA	3689	1/1	0.90	0.19	104,104,104,104	0
56	MG	BA	3061	1/1	0.90	0.27	45,45,45,45	0
56	MG	AA	1755	1/1	0.90	0.30	70,70,70,70	0
56	MG	BA	3070	1/1	0.90	0.42	51,51,51,51	0
56	MG	CA	1607	1/1	0.90	0.16	73,73,73,73	0
56	MG	BA	3401	1/1	0.90	0.23	57,57,57,57	0
56	MG	BA	3822	1/1	0.90	0.17	66,66,66,66	0
56	MG	DB	202	1/1	0.90	0.42	73,73,73,73	0
56	MG	BA	3823	1/1	0.90	0.16	78,78,78,78	0
56	MG	BA	3824	1/1	0.90	0.27	90,90,90,90	0
56	MG	BA	3826	1/1	0.90	0.47	92,92,92,92	0
56	MG	BA	3156	1/1	0.90	0.76	54,54,54,54	0
56	MG	BA	3505	1/1	0.90	0.33	64,64,64,64	0
56	MG	BA	3841	1/1	0.90	0.28	91,91,91,91	0
56	MG	BA	3403	1/1	0.90	0.46	51,51,51,51	0
56	MG	DA	3221	1/1	0.90	0.37	82,82,82,82	0
56	MG	BA	3843	1/1	0.90	0.14	78,78,78,78	0
56	MG	DB	215	1/1	0.90	0.17	94,94,94,94	0
56	MG	CA	1636	1/1	0.90	0.45	50,50,50,50	0
56	MG	BA	3333	1/1	0.90	0.24	58,58,58,58	0
56	MG	AA	1781	1/1	0.90	0.50	68,68,68,68	0
56	MG	CA	1752	1/1	0.90	0.20	58,58,58,58	0
56	MG	AA	1945	1/1	0.90	0.08	107,107,107,107	0
56	MG	DA	3057	1/1	0.90	0.31	66,66,66,66	0
56	MG	BA	3338	1/1	0.90	0.35	63,63,63,63	0
56	MG	DA	3059	1/1	0.90	0.39	67,67,67,67	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1675	1/1	0.90	1.10	78,78,78,78	0
56	MG	DA	3237	1/1	0.90	0.25	61,61,61,61	0
56	MG	AD	303	1/1	0.90	0.19	93,93,93,93	0
56	MG	DA	3069	1/1	0.90	0.37	83,83,83,83	0
56	MG	BB	222	1/1	0.91	0.11	70,70,70,70	0
56	MG	BA	3018	1/1	0.91	0.39	53,53,53,53	0
56	MG	BA	3020	1/1	0.91	0.14	44,44,44,44	0
56	MG	AV	102	1/1	0.91	0.19	66,66,66,66	0
56	MG	BA	3026	1/1	0.91	0.30	92,92,92,92	0
56	MG	BA	3240	1/1	0.91	0.20	57,57,57,57	0
56	MG	BG	202	1/1	0.91	0.07	82,82,82,82	0
56	MG	BA	3428	1/1	0.91	0.23	63,63,63,63	0
56	MG	AA	1766	1/1	0.91	0.17	53,53,53,53	0
56	MG	DA	3039	1/1	0.91	0.21	50,50,50,50	0
56	MG	BA	3433	1/1	0.91	0.27	30,30,30,30	0
56	MG	CA	1711	1/1	0.91	0.32	70,70,70,70	0
56	MG	BU	201	1/1	0.91	0.35	38,38,38,38	0
56	MG	DA	3235	1/1	0.91	0.25	53,53,53,53	0
56	MG	DA	3474	1/1	0.91	0.11	76,76,76,76	0
56	MG	BA	3749	1/1	0.91	0.18	76,76,76,76	0
56	MG	AA	1926	1/1	0.91	0.10	90,90,90,90	0
56	MG	BA	3340	1/1	0.91	0.31	55,55,55,55	0
56	MG	DA	3489	1/1	0.91	0.11	68,68,68,68	0
56	MG	B0	102	1/1	0.91	0.17	50,50,50,50	0
56	MG	DA	3240	1/1	0.91	0.13	74,74,74,74	0
56	MG	BA	3122	1/1	0.91	0.31	56,56,56,56	0
56	MG	DA	3250	1/1	0.91	0.40	62,62,62,62	0
56	MG	DA	3251	1/1	0.91	0.27	62,62,62,62	0
56	MG	BA	3039	1/1	0.91	0.18	34,34,34,34	0
56	MG	BA	3124	1/1	0.91	0.22	34,34,34,34	0
56	MG	DA	3511	1/1	0.91	0.22	77,77,77,77	0
56	MG	B3	101	1/1	0.91	0.51	57,57,57,57	0
56	MG	DA	3066	1/1	0.91	0.56	68,68,68,68	0
56	MG	BA	3444	1/1	0.91	0.19	74,74,74,74	0
56	MG	AA	1928	1/1	0.91	0.10	71,71,71,71	0
56	MG	DA	3261	1/1	0.91	0.31	69,69,69,69	0
56	MG	CA	1738	1/1	0.91	0.19	98,98,98,98	0
56	MG	BA	3782	1/1	0.91	0.43	75,75,75,75	0
56	MG	CA	1601	1/1	0.91	0.84	79,79,79,79	0
56	MG	DA	3266	1/1	0.91	0.22	62,62,62,62	0
56	MG	BA	3785	1/1	0.91	0.17	69,69,69,69	0
56	MG	BA	3349	1/1	0.91	0.20	52,52,52,52	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3454	1/1	0.91	0.24	58,58,58,58	0
56	MG	AV	107	1/1	0.91	0.33	87,87,87,87	0
56	MG	DA	3546	1/1	0.91	0.10	73,73,73,73	0
56	MG	DA	3272	1/1	0.91	0.19	68,68,68,68	0
56	MG	AA	1626	1/1	0.91	0.43	62,62,62,62	0
56	MG	BA	3357	1/1	0.91	0.24	82,82,82,82	0
56	MG	DA	3564	1/1	0.91	0.13	88,88,88,88	0
56	MG	BA	3464	1/1	0.91	0.34	53,53,53,53	0
56	MG	BA	3466	1/1	0.91	0.32	50,50,50,50	0
56	MG	CA	1615	1/1	0.91	0.23	74,74,74,74	0
56	MG	AA	1682	1/1	0.91	0.31	118,118,118,118	0
56	MG	AA	1744	1/1	0.91	0.23	68,68,68,68	0
56	MG	DA	3110	1/1	0.91	0.31	60,60,60,60	0
56	MG	BA	3269	1/1	0.91	0.19	55,55,55,55	0
56	MG	CA	1628	1/1	0.91	0.38	51,51,51,51	0
56	MG	BA	3148	1/1	0.91	0.21	50,50,50,50	0
56	MG	BA	3152	1/1	0.91	0.11	42,42,42,42	0
56	MG	DA	3119	1/1	0.91	0.44	39,39,39,39	0
56	MG	DA	3591	1/1	0.91	0.18	86,86,86,86	0
56	MG	BA	3481	1/1	0.91	0.15	87,87,87,87	0
56	MG	CA	1633	1/1	0.91	0.43	81,81,81,81	0
56	MG	BA	3365	1/1	0.91	0.20	69,69,69,69	0
56	MG	CA	1786	1/1	0.91	0.13	80,80,80,80	0
56	MG	BA	3484	1/1	0.91	0.32	49,49,49,49	0
56	MG	DA	3133	1/1	0.91	0.52	51,51,51,51	0
56	MG	BA	3275	1/1	0.91	0.25	55,55,55,55	0
56	MG	BA	3487	1/1	0.91	0.20	53,53,53,53	0
56	MG	DA	3615	1/1	0.91	0.20	77,77,77,77	0
56	MG	AA	1885	1/1	0.91	0.24	90,90,90,90	0
56	MG	BA	3835	1/1	0.91	0.29	86,86,86,86	0
56	MG	DA	3141	1/1	0.91	0.24	60,60,60,60	0
56	MG	BA	3055	1/1	0.91	0.15	37,37,37,37	0
56	MG	AA	1906	1/1	0.91	0.21	89,89,89,89	0
56	MG	BA	3157	1/1	0.91	0.43	42,42,42,42	0
56	MG	DA	3627	1/1	0.91	0.21	81,81,81,81	0
56	MG	DA	3149	1/1	0.91	0.17	51,51,51,51	0
56	MG	AA	1907	1/1	0.91	0.16	78,78,78,78	0
56	MG	BA	3848	1/1	0.91	0.20	43,43,43,43	0
56	MG	DA	3648	1/1	0.91	0.23	53,53,53,53	0
56	MG	DA	3649	1/1	0.91	0.12	73,73,73,73	0
56	MG	BA	3287	1/1	0.91	0.24	82,82,82,82	0
56	MG	BA	3378	1/1	0.91	0.20	40,40,40,40	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1650	1/1	0.91	0.38	61,61,61,61	0
56	MG	AA	1758	1/1	0.91	0.26	72,72,72,72	0
56	MG	BA	3162	1/1	0.91	0.18	36,36,36,36	0
56	MG	BA	3174	1/1	0.91	0.25	62,62,62,62	0
56	MG	AA	1610	1/1	0.91	0.40	48,48,48,48	0
56	MG	BA	3071	1/1	0.91	0.34	41,41,41,41	0
56	MG	AA	1805	1/1	0.91	0.84	89,89,89,89	0
56	MG	DA	3668	1/1	0.91	0.17	100,100,100,100	0
56	MG	DA	3670	1/1	0.91	0.11	83,83,83,83	0
56	MG	DA	3164	1/1	0.91	0.42	87,87,87,87	0
56	MG	BA	3297	1/1	0.91	0.24	53,53,53,53	0
56	MG	BA	3189	1/1	0.91	0.28	49,49,49,49	0
56	MG	BA	3006	1/1	0.91	0.20	55,55,55,55	0
56	MG	DA	3172	1/1	0.91	0.44	51,51,51,51	0
56	MG	BA	3521	1/1	0.91	0.42	68,68,68,68	0
56	MG	CA	1663	1/1	0.91	0.47	63,63,63,63	0
56	MG	DA	3683	1/1	0.91	0.28	94,94,94,94	0
56	MG	DA	3684	1/1	0.91	0.19	98,98,98,98	0
56	MG	DA	3176	1/1	0.91	0.28	67,67,67,67	0
56	MG	DA	3177	1/1	0.91	0.45	75,75,75,75	0
56	MG	AA	1790	1/1	0.91	0.16	70,70,70,70	0
56	MG	DA	3179	1/1	0.91	0.24	67,67,67,67	0
56	MG	DA	3346	1/1	0.91	0.26	70,70,70,70	0
56	MG	DA	3692	1/1	0.91	0.24	46,46,46,46	0
56	MG	AA	1639	1/1	0.91	0.12	74,74,74,74	0
56	MG	BA	3196	1/1	0.91	0.14	66,66,66,66	0
56	MG	CA	1667	1/1	0.91	0.32	66,66,66,66	0
56	MG	BA	3197	1/1	0.91	0.23	41,41,41,41	0
56	MG	CA	1672	1/1	0.91	0.33	76,76,76,76	0
56	MG	DA	3352	1/1	0.91	0.42	68,68,68,68	0
56	MG	CV	108	1/1	0.91	0.30	79,79,79,79	0
56	MG	BA	3312	1/1	0.91	0.28	54,54,54,54	0
56	MG	BA	3558	1/1	0.91	0.14	61,61,61,61	0
56	MG	AA	1617	1/1	0.91	0.06	58,58,58,58	0
56	MG	DA	3193	1/1	0.91	0.15	67,67,67,67	0
56	MG	DA	3194	1/1	0.91	0.51	65,65,65,65	0
56	MG	BA	3577	1/1	0.91	0.12	78,78,78,78	0
56	MG	CA	1677	1/1	0.91	0.13	88,88,88,88	0
56	MG	AA	1763	1/1	0.91	0.24	54,54,54,54	0
56	MG	BA	3213	1/1	0.91	0.22	37,37,37,37	0
56	MG	DD	303	1/1	0.91	0.27	59,59,59,59	0
56	MG	BA	3593	1/1	0.91	0.12	54,54,54,54	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3008	1/1	0.91	0.28	108,108,108,108	0
56	MG	BA	3091	1/1	0.91	0.32	60,60,60,60	0
56	MG	BA	3640	1/1	0.91	0.10	33,33,33,33	0
56	MG	BA	3649	1/1	0.91	0.12	60,60,60,60	0
56	MG	DT	203	1/1	0.91	0.20	73,73,73,73	0
56	MG	BA	3321	1/1	0.91	0.33	52,52,52,52	0
56	MG	DV	201	1/1	0.91	0.25	62,62,62,62	0
56	MG	BA	3217	1/1	0.91	0.14	38,38,38,38	0
56	MG	D0	101	1/1	0.91	0.22	79,79,79,79	0
56	MG	AA	1607	1/1	0.91	0.29	44,44,44,44	0
56	MG	DA	3019	1/1	0.91	0.10	65,65,65,65	0
56	MG	AA	1829	1/1	0.91	0.17	63,63,63,63	0
56	MG	DA	3023	1/1	0.91	0.20	56,56,56,56	0
56	MG	DA	3370	1/1	0.92	0.56	67,67,67,67	0
56	MG	BA	3043	1/1	0.92	0.95	42,42,42,42	0
56	MG	DA	3374	1/1	0.92	0.40	75,75,75,75	0
56	MG	DA	3181	1/1	0.92	0.21	59,59,59,59	0
56	MG	CA	1815	1/1	0.92	0.14	119,119,119,119	0
56	MG	AA	1735	1/1	0.92	0.71	84,84,84,84	0
56	MG	BA	3142	1/1	0.92	0.35	44,44,44,44	0
56	MG	BA	3144	1/1	0.92	0.11	34,34,34,34	0
56	MG	BA	3046	1/1	0.92	0.14	49,49,49,49	0
56	MG	CD	302	1/1	0.92	0.38	53,53,53,53	0
56	MG	AA	1772	1/1	0.92	0.33	77,77,77,77	0
56	MG	BA	3149	1/1	0.92	0.21	35,35,35,35	0
56	MG	CV	103	1/1	0.92	0.19	88,88,88,88	0
56	MG	BA	3500	1/1	0.92	0.19	93,93,93,93	0
56	MG	BA	3276	1/1	0.92	0.23	57,57,57,57	0
56	MG	BA	3151	1/1	0.92	0.22	38,38,38,38	0
56	MG	BA	3507	1/1	0.92	0.31	53,53,53,53	0
56	MG	DA	3426	1/1	0.92	0.16	42,42,42,42	0
56	MG	AA	1615	1/1	0.92	0.10	75,75,75,75	0
56	MG	BA	3868	1/1	0.92	0.20	34,34,34,34	0
56	MG	AA	1692	1/1	0.92	0.29	67,67,67,67	0
56	MG	BA	3511	1/1	0.92	0.35	48,48,48,48	0
56	MG	BA	3872	1/1	0.92	0.19	24,24,24,24	0
56	MG	AA	1608	1/1	0.92	0.17	80,80,80,80	0
56	MG	DA	3457	1/1	0.92	0.30	102,102,102,102	0
56	MG	DA	3460	1/1	0.92	0.28	67,67,67,67	0
56	MG	AA	1759	1/1	0.92	0.30	60,60,60,60	0
56	MG	AA	1779	1/1	0.92	0.30	60,60,60,60	0
56	MG	BA	3515	1/1	0.92	0.46	49,49,49,49	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AV	115	1/1	0.92	0.19	65,65,65,65	0
56	MG	AV	117	1/1	0.92	0.10	69,69,69,69	0
56	MG	BA	3068	1/1	0.92	0.10	56,56,56,56	0
56	MG	CA	1679	1/1	0.92	0.26	65,65,65,65	0
56	MG	DA	3016	1/1	0.92	0.29	42,42,42,42	0
56	MG	AA	1645	1/1	0.92	0.30	54,54,54,54	0
56	MG	DA	3219	1/1	0.92	0.18	67,67,67,67	0
56	MG	BA	3176	1/1	0.92	0.15	63,63,63,63	0
56	MG	DA	3222	1/1	0.92	0.52	73,73,73,73	0
56	MG	AA	1848	1/1	0.92	0.43	71,71,71,71	0
56	MG	AA	1655	1/1	0.92	0.27	77,77,77,77	0
56	MG	AA	1621	1/1	0.92	0.15	54,54,54,54	0
56	MG	AA	1942	1/1	0.92	0.26	93,93,93,93	0
56	MG	BA	3190	1/1	0.92	0.21	42,42,42,42	0
56	MG	BA	3302	1/1	0.92	0.22	53,53,53,53	0
56	MG	BA	3305	1/1	0.92	0.16	35,35,35,35	0
56	MG	BA	3592	1/1	0.92	0.08	52,52,52,52	0
56	MG	DA	3032	1/1	0.92	0.16	51,51,51,51	0
56	MG	AA	1647	1/1	0.92	0.30	77,77,77,77	0
56	MG	CA	1695	1/1	0.92	0.13	94,94,94,94	0
56	MG	DA	3529	1/1	0.92	0.13	82,82,82,82	0
56	MG	CA	1698	1/1	0.92	0.73	114,114,114,114	0
56	MG	BB	214	1/1	0.92	0.21	51,51,51,51	0
56	MG	DA	3038	1/1	0.92	0.11	50,50,50,50	0
56	MG	AA	1659	1/1	0.92	0.47	97,97,97,97	0
56	MG	DA	3242	1/1	0.92	0.28	77,77,77,77	0
56	MG	BA	3010	1/1	0.92	0.60	56,56,56,56	0
56	MG	DA	3249	1/1	0.92	0.26	55,55,55,55	0
56	MG	DA	3042	1/1	0.92	0.16	47,47,47,47	0
56	MG	BB	220	1/1	0.92	0.11	44,44,44,44	0
56	MG	DA	3252	1/1	0.92	0.11	58,58,58,58	0
56	MG	BA	3311	1/1	0.92	0.19	59,59,59,59	0
56	MG	DA	3050	1/1	0.92	0.20	67,67,67,67	0
56	MG	BB	224	1/1	0.92	0.12	57,57,57,57	0
56	MG	DA	3257	1/1	0.92	0.73	51,51,51,51	0
56	MG	CA	1705	1/1	0.92	0.44	112,112,112,112	0
56	MG	BA	3413	1/1	0.92	0.19	58,58,58,58	0
56	MG	BA	3652	1/1	0.92	0.14	53,53,53,53	0
56	MG	AA	1873	1/1	0.92	0.15	60,60,60,60	0
56	MG	BE	305	1/1	0.92	0.11	22,22,22,22	0
56	MG	BA	3094	1/1	0.92	0.21	45,45,45,45	0
56	MG	DA	3062	1/1	0.92	0.24	65,65,65,65	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BF	306	1/1	0.92	0.22	48,48,48,48	0
56	MG	DA	3583	1/1	0.92	0.18	96,96,96,96	0
56	MG	DA	3585	1/1	0.92	0.22	104,104,104,104	0
56	MG	DA	3065	1/1	0.92	1.02	59,59,59,59	0
56	MG	BA	3665	1/1	0.92	0.14	44,44,44,44	0
56	MG	BA	3683	1/1	0.92	0.17	31,31,31,31	0
56	MG	CA	1718	1/1	0.92	0.36	88,88,88,88	0
56	MG	AA	1874	1/1	0.92	0.24	95,95,95,95	0
56	MG	DA	3077	1/1	0.92	0.24	74,74,74,74	0
56	MG	CA	1723	1/1	0.92	0.08	96,96,96,96	0
56	MG	AA	1806	1/1	0.92	0.38	59,59,59,59	0
56	MG	BA	3206	1/1	0.92	0.32	31,31,31,31	0
56	MG	CA	1731	1/1	0.92	0.43	84,84,84,84	0
56	MG	BA	3319	1/1	0.92	0.15	59,59,59,59	0
56	MG	BA	3425	1/1	0.92	0.30	46,46,46,46	0
56	MG	BY	202	1/1	0.92	0.29	54,54,54,54	0
56	MG	BA	3207	1/1	0.92	0.30	41,41,41,41	0
56	MG	DA	3284	1/1	0.92	0.43	75,75,75,75	0
56	MG	BA	3430	1/1	0.92	0.18	69,69,69,69	0
56	MG	DA	3090	1/1	0.92	0.53	76,76,76,76	0
56	MG	BA	3209	1/1	0.92	0.28	25,25,25,25	0
56	MG	DA	3098	1/1	0.92	0.22	39,39,39,39	0
56	MG	BA	3210	1/1	0.92	0.28	36,36,36,36	0
56	MG	BA	3326	1/1	0.92	0.13	100,100,100,100	0
56	MG	BA	3756	1/1	0.92	0.12	56,56,56,56	0
56	MG	DA	3109	1/1	0.92	0.20	74,74,74,74	0
56	MG	BA	3328	1/1	0.92	0.10	68,68,68,68	0
56	MG	DA	3112	1/1	0.92	0.32	61,61,61,61	0
56	MG	BA	3099	1/1	0.92	0.21	32,32,32,32	0
56	MG	AA	1909	1/1	0.92	0.05	91,91,91,91	0
56	MG	DA	3297	1/1	0.92	0.21	81,81,81,81	0
56	MG	DA	3298	1/1	0.92	0.23	55,55,55,55	0
56	MG	BA	3771	1/1	0.92	0.17	79,79,79,79	0
56	MG	BA	3772	1/1	0.92	0.10	26,26,26,26	0
56	MG	DA	3665	1/1	0.92	0.09	87,87,87,87	0
56	MG	DA	3118	1/1	0.92	0.23	50,50,50,50	0
56	MG	AA	1879	1/1	0.92	0.21	71,71,71,71	0
56	MG	AA	1661	1/1	0.92	0.40	56,56,56,56	0
56	MG	CA	1764	1/1	0.92	0.11	75,75,75,75	0
56	MG	CA	1765	1/1	0.92	0.34	61,61,61,61	0
56	MG	DA	3311	1/1	0.92	0.36	68,68,68,68	0
56	MG	BA	3779	1/1	0.92	0.39	80,80,80,80	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3313	1/1	0.92	0.24	74,74,74,74	0
56	MG	BA	3022	1/1	0.92	0.12	85,85,85,85	0
56	MG	BA	3111	1/1	0.92	0.26	66,66,66,66	0
56	MG	BA	3337	1/1	0.92	0.19	51,51,51,51	0
56	MG	CA	1610	1/1	0.92	0.11	63,63,63,63	0
56	MG	BA	3455	1/1	0.92	0.48	22,22,22,22	0
56	MG	DA	3137	1/1	0.92	0.21	39,39,39,39	0
56	MG	BA	3228	1/1	0.92	0.24	59,59,59,59	0
56	MG	AA	1605	1/1	0.92	0.28	81,81,81,81	0
56	MG	CA	1784	1/1	0.92	0.15	96,96,96,96	0
56	MG	BA	3796	1/1	0.92	0.38	83,83,83,83	0
56	MG	DA	3147	1/1	0.92	0.30	70,70,70,70	0
56	MG	BA	3460	1/1	0.92	0.41	52,52,52,52	0
56	MG	CA	1623	1/1	0.92	0.26	68,68,68,68	0
56	MG	BA	3234	1/1	0.92	0.29	43,43,43,43	0
56	MG	BA	3113	1/1	0.92	0.18	46,46,46,46	0
56	MG	DA	3336	1/1	0.92	0.41	71,71,71,71	0
56	MG	DA	3337	1/1	0.92	0.23	65,65,65,65	0
56	MG	DB	204	1/1	0.92	0.26	107,107,107,107	0
56	MG	CA	1792	1/1	0.92	0.12	82,82,82,82	0
56	MG	BA	3117	1/1	0.92	0.33	46,46,46,46	0
56	MG	BA	3803	1/1	0.92	0.23	71,71,71,71	0
56	MG	BA	3807	1/1	0.92	0.17	64,64,64,64	0
56	MG	BA	3467	1/1	0.92	0.32	56,56,56,56	0
56	MG	DB	211	1/1	0.92	0.07	83,83,83,83	0
56	MG	DA	3158	1/1	0.92	0.65	82,82,82,82	0
56	MG	DA	3345	1/1	0.92	0.10	67,67,67,67	0
56	MG	AT	201	1/1	0.92	0.27	111,111,111,111	0
56	MG	BA	3121	1/1	0.92	0.15	40,40,40,40	0
56	MG	CA	1800	1/1	0.92	0.05	105,105,105,105	0
56	MG	AA	1702	1/1	0.92	0.25	71,71,71,71	0
56	MG	DD	304	1/1	0.92	0.38	65,65,65,65	0
56	MG	BA	3250	1/1	0.92	0.41	27,27,27,27	0
56	MG	DE	304	1/1	0.92	0.21	70,70,70,70	0
56	MG	BA	3033	1/1	0.92	0.34	55,55,55,55	0
56	MG	BA	3480	1/1	0.92	0.31	59,59,59,59	0
56	MG	DA	3170	1/1	0.92	0.33	96,96,96,96	0
56	MG	DQ	202	1/1	0.92	0.38	77,77,77,77	0
56	MG	BA	3257	1/1	0.92	0.26	48,48,48,48	0
56	MG	DA	3357	1/1	0.92	0.24	51,51,51,51	0
56	MG	BA	3482	1/1	0.92	0.15	73,73,73,73	0
56	MG	AA	1831	1/1	0.92	0.18	63,63,63,63	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1886	1/1	0.92	0.11	79,79,79,79	0
56	MG	BA	3127	1/1	0.92	0.17	41,41,41,41	0
56	MG	BA	3262	1/1	0.92	0.27	57,57,57,57	0
56	MG	DA	3367	1/1	0.92	0.11	75,75,75,75	0
56	MG	AA	1920	1/1	0.92	0.11	86,86,86,86	0
56	MG	CA	1813	1/1	0.92	0.20	113,113,113,113	0
56	MG	D8	201	1/1	0.92	0.22	67,67,67,67	0
56	MG	BA	3076	1/1	0.93	0.52	39,39,39,39	0
56	MG	BZ	301	1/1	0.93	0.20	54,54,54,54	0
56	MG	DA	3513	1/1	0.93	0.17	59,59,59,59	0
56	MG	BA	3810	1/1	0.93	0.12	27,27,27,27	0
56	MG	BA	3522	1/1	0.93	0.32	62,62,62,62	0
56	MG	AA	1624	1/1	0.93	0.50	57,57,57,57	0
56	MG	DA	3525	1/1	0.93	0.18	77,77,77,77	0
56	MG	BA	3193	1/1	0.93	0.25	45,45,45,45	0
56	MG	BA	3527	1/1	0.93	0.09	90,90,90,90	0
56	MG	BA	3261	1/1	0.93	0.19	69,69,69,69	0
56	MG	BA	3079	1/1	0.93	0.51	54,54,54,54	0
56	MG	AA	1818	1/1	0.93	0.19	73,73,73,73	0
56	MG	AA	1919	1/1	0.93	0.22	63,63,63,63	0
56	MG	CA	1710	1/1	0.93	0.17	95,95,95,95	0
56	MG	BA	3200	1/1	0.93	0.45	35,35,35,35	0
56	MG	BA	3083	1/1	0.93	0.18	48,48,48,48	0
56	MG	DA	3012	1/1	0.93	0.10	76,76,76,76	0
56	MG	DA	3300	1/1	0.93	0.29	55,55,55,55	0
56	MG	BA	3580	1/1	0.93	0.10	68,68,68,68	0
56	MG	DA	3548	1/1	0.93	0.17	72,72,72,72	0
56	MG	BA	3582	1/1	0.93	0.20	30,30,30,30	0
56	MG	BA	3086	1/1	0.93	0.34	51,51,51,51	0
56	MG	BA	3322	1/1	0.93	0.23	54,54,54,54	0
56	MG	BA	3459	1/1	0.93	0.20	49,49,49,49	0
56	MG	DA	3020	1/1	0.93	0.44	75,75,75,75	0
56	MG	BA	3323	1/1	0.93	0.27	45,45,45,45	0
56	MG	CA	1724	1/1	0.93	0.29	88,88,88,88	0
56	MG	CA	1726	1/1	0.93	0.26	70,70,70,70	0
56	MG	BA	3847	1/1	0.93	0.30	82,82,82,82	0
56	MG	BA	3597	1/1	0.93	0.08	66,66,66,66	0
56	MG	BA	3602	1/1	0.93	0.22	22,22,22,22	0
56	MG	CA	1617	1/1	0.93	0.47	61,61,61,61	0
56	MG	DA	3581	1/1	0.93	0.10	46,46,46,46	0
56	MG	BA	3850	1/1	0.93	0.27	82,82,82,82	0
56	MG	CA	1619	1/1	0.93	0.28	71,71,71,71	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3322	1/1	0.93	0.33	52,52,52,52	0
56	MG	DA	3190	1/1	0.93	0.37	70,70,70,70	0
56	MG	AA	1856	1/1	0.93	0.11	66,66,66,66	0
56	MG	BA	3620	1/1	0.93	0.06	49,49,49,49	0
56	MG	BA	3628	1/1	0.93	0.14	66,66,66,66	0
56	MG	CA	1626	1/1	0.93	0.31	50,50,50,50	0
56	MG	DA	3196	1/1	0.93	0.13	77,77,77,77	0
56	MG	BA	3273	1/1	0.93	0.30	63,63,63,63	0
56	MG	BA	3642	1/1	0.93	0.07	78,78,78,78	0
56	MG	BA	3465	1/1	0.93	0.29	40,40,40,40	0
56	MG	AV	105	1/1	0.93	0.21	64,64,64,64	0
56	MG	BA	3867	1/1	0.93	0.19	60,60,60,60	0
56	MG	DA	3049	1/1	0.93	0.17	76,76,76,76	0
56	MG	CA	1750	1/1	0.93	0.18	56,56,56,56	0
56	MG	DA	3051	1/1	0.93	0.40	60,60,60,60	0
56	MG	BA	3042	1/1	0.93	0.23	37,37,37,37	0
56	MG	DA	3622	1/1	0.93	0.19	74,74,74,74	0
56	MG	AA	1797	1/1	0.93	0.34	65,65,65,65	0
56	MG	CA	1756	1/1	0.93	0.84	84,84,84,84	0
56	MG	BA	3330	1/1	0.93	0.22	57,57,57,57	0
56	MG	DA	3626	1/1	0.93	0.24	103,103,103,103	0
56	MG	CA	1760	1/1	0.93	0.74	103,103,103,103	0
56	MG	AA	1601	1/1	0.93	0.21	65,65,65,65	0
56	MG	DA	3060	1/1	0.93	0.19	90,90,90,90	0
56	MG	BA	3668	1/1	0.93	0.13	29,29,29,29	0
56	MG	DA	3640	1/1	0.93	0.11	63,63,63,63	0
56	MG	AA	1691	1/1	0.93	0.33	121,121,121,121	0
56	MG	BA	3398	1/1	0.93	0.22	62,62,62,62	0
56	MG	CA	1768	1/1	0.93	0.24	94,94,94,94	0
56	MG	AA	1810	1/1	0.93	0.28	84,84,84,84	0
56	MG	CA	1772	1/1	0.93	0.11	77,77,77,77	0
56	MG	BA	3881	1/1	0.93	0.10	75,75,75,75	0
56	MG	DA	3358	1/1	0.93	0.23	60,60,60,60	0
56	MG	AV	111	1/1	0.93	0.27	85,85,85,85	0
56	MG	DA	3076	1/1	0.93	0.19	51,51,51,51	0
56	MG	DA	3362	1/1	0.93	0.42	75,75,75,75	0
56	MG	BA	3015	1/1	0.93	0.54	59,59,59,59	0
56	MG	CA	1776	1/1	0.93	0.54	90,90,90,90	0
56	MG	BA	3884	1/1	0.93	0.08	66,66,66,66	0
56	MG	DA	3669	1/1	0.93	0.10	93,93,93,93	0
56	MG	DA	3231	1/1	0.93	0.26	74,74,74,74	0
56	MG	BA	3053	1/1	0.93	0.21	44,44,44,44	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1710	1/1	0.93	0.11	76,76,76,76	0
56	MG	CA	1651	1/1	0.93	0.36	54,54,54,54	0
56	MG	DA	3371	1/1	0.93	0.21	65,65,65,65	0
56	MG	BA	3229	1/1	0.93	0.17	41,41,41,41	0
56	MG	BA	3891	1/1	0.93	0.20	74,74,74,74	0
56	MG	BA	3486	1/1	0.93	0.33	60,60,60,60	0
56	MG	BA	3746	1/1	0.93	0.27	77,77,77,77	0
56	MG	AA	1705	1/1	0.93	0.19	55,55,55,55	0
56	MG	BA	3292	1/1	0.93	0.15	47,47,47,47	0
56	MG	BA	3750	1/1	0.93	0.12	65,65,65,65	0
56	MG	BA	3110	1/1	0.93	0.29	51,51,51,51	0
56	MG	BB	208	1/1	0.93	0.31	54,54,54,54	0
56	MG	BA	3236	1/1	0.93	0.15	50,50,50,50	0
56	MG	BA	3345	1/1	0.93	0.19	74,74,74,74	0
56	MG	BA	3412	1/1	0.93	0.21	56,56,56,56	0
56	MG	BB	213	1/1	0.93	0.39	58,58,58,58	0
56	MG	AI	201	1/1	0.93	0.26	66,66,66,66	0
56	MG	BA	3495	1/1	0.93	0.55	56,56,56,56	0
56	MG	CA	1668	1/1	0.93	0.13	59,59,59,59	0
56	MG	DA	3425	1/1	0.93	0.18	50,50,50,50	0
56	MG	BB	217	1/1	0.93	0.10	80,80,80,80	0
56	MG	BA	3414	1/1	0.93	0.15	72,72,72,72	0
56	MG	BA	3058	1/1	0.93	0.30	46,46,46,46	0
56	MG	AA	1747	1/1	0.93	0.31	93,93,93,93	0
56	MG	DA	3439	1/1	0.93	0.08	42,42,42,42	0
56	MG	BA	3419	1/1	0.93	0.25	62,62,62,62	0
56	MG	BA	3504	1/1	0.93	0.22	57,57,57,57	0
56	MG	DA	3444	1/1	0.93	0.08	54,54,54,54	0
56	MG	DA	3264	1/1	0.93	0.21	74,74,74,74	0
56	MG	BA	3351	1/1	0.93	0.11	51,51,51,51	0
56	MG	CA	1678	1/1	0.93	0.18	84,84,84,84	0
56	MG	DA	3462	1/1	0.93	0.11	50,50,50,50	0
56	MG	DD	301	1/1	0.93	0.17	84,84,84,84	0
56	MG	BA	3506	1/1	0.93	0.27	61,61,61,61	0
56	MG	AA	1814	1/1	0.93	0.29	81,81,81,81	0
56	MG	DA	3467	1/1	0.93	0.18	91,91,91,91	0
56	MG	BA	3353	1/1	0.93	0.21	57,57,57,57	0
56	MG	BF	305	1/1	0.93	0.22	52,52,52,52	0
56	MG	BA	3354	1/1	0.93	0.11	34,34,34,34	0
56	MG	DO	202	1/1	0.93	0.13	95,95,95,95	0
56	MG	BA	3356	1/1	0.93	0.17	66,66,66,66	0
56	MG	DA	3476	1/1	0.93	0.17	71,71,71,71	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3118	1/1	0.93	0.58	44,44,44,44	0
56	MG	DT	202	1/1	0.93	0.17	38,38,38,38	0
56	MG	DA	3142	1/1	0.93	0.26	50,50,50,50	0
56	MG	AA	1671	1/1	0.93	0.62	94,94,94,94	0
56	MG	BA	3303	1/1	0.93	0.61	51,51,51,51	0
56	MG	CV	101	1/1	0.93	0.19	59,59,59,59	0
56	MG	BA	3802	1/1	0.93	0.20	71,71,71,71	0
56	MG	DA	3495	1/1	0.93	0.10	62,62,62,62	0
56	MG	D0	103	1/1	0.93	0.18	55,55,55,55	0
56	MG	DA	3281	1/1	0.93	0.26	70,70,70,70	0
56	MG	BA	3028	1/1	0.93	0.16	33,33,33,33	0
56	MG	BA	3805	1/1	0.93	0.19	63,63,63,63	0
56	MG	BA	3029	1/1	0.93	0.21	33,33,33,33	0
57	ZN	CN	101	1/1	0.93	0.10	165,165,165,165	0
57	ZN	D9	101	1/1	0.93	0.16	117,117,117,117	0
56	MG	DA	3428	1/1	0.94	0.14	53,53,53,53	0
56	MG	BA	3745	1/1	0.94	0.13	75,75,75,75	0
56	MG	BA	3203	1/1	0.94	0.19	44,44,44,44	0
56	MG	AA	1853	1/1	0.94	0.20	93,93,93,93	0
56	MG	AA	1676	1/1	0.94	0.57	72,72,72,72	0
56	MG	AA	1777	1/1	0.94	0.35	61,61,61,61	0
56	MG	BA	3754	1/1	0.94	0.14	68,68,68,68	0
56	MG	DA	3031	1/1	0.94	0.11	49,49,49,49	0
56	MG	DA	3220	1/1	0.94	0.17	83,83,83,83	0
56	MG	BA	3409	1/1	0.94	0.15	45,45,45,45	0
56	MG	BB	228	1/1	0.94	0.09	69,69,69,69	0
56	MG	BA	3760	1/1	0.94	0.08	68,68,68,68	0
56	MG	CA	1707	1/1	0.94	1.37	72,72,72,72	0
56	MG	DA	3465	1/1	0.94	0.14	104,104,104,104	0
56	MG	AA	1866	1/1	0.94	0.34	86,86,86,86	0
56	MG	DA	3037	1/1	0.94	0.14	83,83,83,83	0
56	MG	BD	305	1/1	0.94	0.39	54,54,54,54	0
56	MG	DA	3229	1/1	0.94	0.43	52,52,52,52	0
56	MG	DA	3471	1/1	0.94	0.08	87,87,87,87	0
56	MG	BA	3496	1/1	0.94	0.26	61,61,61,61	0
56	MG	BA	3767	1/1	0.94	0.13	51,51,51,51	0
56	MG	BF	303	1/1	0.94	0.11	41,41,41,41	0
56	MG	DA	3479	1/1	0.94	0.12	68,68,68,68	0
56	MG	BF	304	1/1	0.94	0.39	44,44,44,44	0
56	MG	DA	3481	1/1	0.94	0.37	85,85,85,85	0
56	MG	BA	3044	1/1	0.94	0.13	46,46,46,46	0
56	MG	DA	3047	1/1	0.94	0.27	65,65,65,65	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3487	1/1	0.94	0.05	70,70,70,70	0
56	MG	AA	1729	1/1	0.94	0.18	79,79,79,79	0
56	MG	AA	1868	1/1	0.94	0.28	62,62,62,62	0
56	MG	CA	1719	1/1	0.94	0.23	85,85,85,85	0
56	MG	BA	3774	1/1	0.94	0.28	72,72,72,72	0
56	MG	DA	3053	1/1	0.94	0.16	55,55,55,55	0
56	MG	DA	3241	1/1	0.94	0.13	76,76,76,76	0
56	MG	DA	3504	1/1	0.94	0.08	94,94,94,94	0
56	MG	DA	3505	1/1	0.94	0.16	81,81,81,81	0
56	MG	BA	3216	1/1	0.94	0.14	28,28,28,28	0
56	MG	DA	3244	1/1	0.94	0.34	64,64,64,64	0
56	MG	BA	3150	1/1	0.94	0.49	54,54,54,54	0
56	MG	BP	201	1/1	0.94	0.34	33,33,33,33	0
56	MG	BP	202	1/1	0.94	0.16	62,62,62,62	0
56	MG	DA	3514	1/1	0.94	0.20	76,76,76,76	0
56	MG	BA	3348	1/1	0.94	0.26	62,62,62,62	0
56	MG	DA	3520	1/1	0.94	0.07	67,67,67,67	0
56	MG	AA	1700	1/1	0.94	0.22	116,116,116,116	0
56	MG	BA	3224	1/1	0.94	0.22	33,33,33,33	0
56	MG	CA	1733	1/1	0.94	0.08	90,90,90,90	0
56	MG	DA	3526	1/1	0.94	0.09	64,64,64,64	0
56	MG	BA	3508	1/1	0.94	0.25	41,41,41,41	0
56	MG	AA	1663	1/1	0.94	0.22	76,76,76,76	0
56	MG	BA	3788	1/1	0.94	0.15	48,48,48,48	0
56	MG	DA	3530	1/1	0.94	0.30	72,72,72,72	0
56	MG	BA	3153	1/1	0.94	0.20	56,56,56,56	0
56	MG	DA	3070	1/1	0.94	0.14	74,74,74,74	0
56	MG	BA	3227	1/1	0.94	0.36	41,41,41,41	0
56	MG	B0	103	1/1	0.94	0.17	68,68,68,68	0
56	MG	DA	3074	1/1	0.94	0.30	69,69,69,69	0
56	MG	DA	3075	1/1	0.94	0.42	84,84,84,84	0
56	MG	BA	3426	1/1	0.94	0.14	46,46,46,46	0
56	MG	CA	1743	1/1	0.94	0.59	86,86,86,86	0
56	MG	CA	1744	1/1	0.94	0.06	80,80,80,80	0
56	MG	DA	3079	1/1	0.94	0.40	57,57,57,57	0
56	MG	BA	3013	1/1	0.94	0.30	57,57,57,57	0
56	MG	DA	3270	1/1	0.94	0.22	70,70,70,70	0
56	MG	CA	1746	1/1	0.94	0.09	65,65,65,65	0
56	MG	BA	3798	1/1	0.94	0.20	45,45,45,45	0
56	MG	BA	3051	1/1	0.94	0.37	41,41,41,41	0
56	MG	BA	3299	1/1	0.94	0.25	58,58,58,58	0
56	MG	DA	3086	1/1	0.94	0.33	32,32,32,32	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3052	1/1	0.94	0.29	35,35,35,35	0
56	MG	DA	3571	1/1	0.94	0.11	57,57,57,57	0
56	MG	AA	1649	1/1	0.94	0.15	60,60,60,60	0
56	MG	BA	3436	1/1	0.94	0.07	70,70,70,70	0
56	MG	DA	3578	1/1	0.94	0.16	50,50,50,50	0
56	MG	CA	1754	1/1	0.94	0.21	70,70,70,70	0
56	MG	BA	3235	1/1	0.94	0.06	55,55,55,55	0
56	MG	DA	3094	1/1	0.94	0.17	34,34,34,34	0
56	MG	DA	3095	1/1	0.94	0.36	41,41,41,41	0
56	MG	BA	3806	1/1	0.94	0.21	57,57,57,57	0
56	MG	DA	3101	1/1	0.94	0.32	53,53,53,53	0
56	MG	DA	3586	1/1	0.94	0.28	50,50,50,50	0
56	MG	CA	1759	1/1	0.94	0.18	76,76,76,76	0
56	MG	DA	3104	1/1	0.94	0.43	60,60,60,60	0
56	MG	AA	1622	1/1	0.94	0.70	56,56,56,56	0
56	MG	DA	3596	1/1	0.94	0.19	67,67,67,67	0
56	MG	DA	3106	1/1	0.94	0.27	48,48,48,48	0
56	MG	DA	3604	1/1	0.94	0.17	97,97,97,97	0
56	MG	AA	1816	1/1	0.94	0.19	107,107,107,107	0
56	MG	AA	1656	1/1	0.94	0.08	72,72,72,72	0
56	MG	DA	3608	1/1	0.94	0.07	82,82,82,82	0
56	MG	BA	3811	1/1	0.94	0.12	85,85,85,85	0
56	MG	DA	3111	1/1	0.94	0.28	51,51,51,51	0
56	MG	BA	3441	1/1	0.94	0.32	47,47,47,47	0
56	MG	BA	3308	1/1	0.94	0.20	51,51,51,51	0
56	MG	BA	3239	1/1	0.94	0.16	49,49,49,49	0
56	MG	DA	3115	1/1	0.94	0.59	75,75,75,75	0
56	MG	CA	1614	1/1	0.94	0.11	81,81,81,81	0
56	MG	BA	3561	1/1	0.94	0.14	64,64,64,64	0
56	MG	BA	3567	1/1	0.94	0.15	55,55,55,55	0
56	MG	BA	3821	1/1	0.94	0.08	76,76,76,76	0
56	MG	BA	3568	1/1	0.94	0.15	70,70,70,70	0
56	MG	CA	1777	1/1	0.94	0.11	82,82,82,82	0
56	MG	DA	3305	1/1	0.94	0.19	76,76,76,76	0
56	MG	DA	3306	1/1	0.94	0.07	106,106,106,106	0
56	MG	BA	3167	1/1	0.94	0.25	31,31,31,31	0
56	MG	BA	3241	1/1	0.94	0.31	38,38,38,38	0
56	MG	AA	1941	1/1	0.94	0.17	94,94,94,94	0
56	MG	CA	1625	1/1	0.94	0.42	71,71,71,71	0
56	MG	DA	3639	1/1	0.94	0.10	82,82,82,82	0
56	MG	BA	3372	1/1	0.94	0.16	77,77,77,77	0
56	MG	DA	3643	1/1	0.94	0.14	89,89,89,89	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3646	1/1	0.94	0.17	62,62,62,62	0
56	MG	DA	3647	1/1	0.94	0.20	70,70,70,70	0
56	MG	BA	3175	1/1	0.94	0.38	34,34,34,34	0
56	MG	BA	3458	1/1	0.94	0.30	44,44,44,44	0
56	MG	DA	3315	1/1	0.94	0.52	47,47,47,47	0
56	MG	CA	1630	1/1	0.94	0.53	70,70,70,70	0
56	MG	CA	1789	1/1	0.94	0.23	66,66,66,66	0
56	MG	DA	3657	1/1	0.94	0.07	89,89,89,89	0
56	MG	DA	3658	1/1	0.94	0.18	79,79,79,79	0
56	MG	DA	3139	1/1	0.94	0.46	64,64,64,64	0
56	MG	BA	3837	1/1	0.94	0.24	33,33,33,33	0
56	MG	BA	3375	1/1	0.94	0.27	47,47,47,47	0
56	MG	BA	3060	1/1	0.94	0.14	52,52,52,52	0
56	MG	DA	3323	1/1	0.94	0.13	57,57,57,57	0
56	MG	DA	3145	1/1	0.94	0.17	41,41,41,41	0
56	MG	BA	3461	1/1	0.94	0.16	58,58,58,58	0
56	MG	BA	3599	1/1	0.94	0.10	52,52,52,52	0
56	MG	BA	3251	1/1	0.94	0.47	51,51,51,51	0
56	MG	BA	3316	1/1	0.94	0.21	48,48,48,48	0
56	MG	BA	3612	1/1	0.94	0.08	61,61,61,61	0
56	MG	DA	3672	1/1	0.94	0.10	87,87,87,87	0
56	MG	BA	3613	1/1	0.94	0.25	40,40,40,40	0
56	MG	BA	3851	1/1	0.94	0.14	35,35,35,35	0
56	MG	BA	3614	1/1	0.94	0.45	58,58,58,58	0
56	MG	BA	3179	1/1	0.94	0.26	45,45,45,45	0
56	MG	BA	3318	1/1	0.94	0.16	63,63,63,63	0
56	MG	BA	3632	1/1	0.94	0.12	59,59,59,59	0
56	MG	BA	3860	1/1	0.94	0.04	57,57,57,57	0
56	MG	BA	3634	1/1	0.94	0.08	46,46,46,46	0
56	MG	BA	3638	1/1	0.94	0.25	54,54,54,54	0
56	MG	BA	3865	1/1	0.94	0.14	97,97,97,97	0
56	MG	AA	1636	1/1	0.94	0.42	65,65,65,65	0
56	MG	AA	1738	1/1	0.94	0.15	84,84,84,84	0
56	MG	BA	3644	1/1	0.94	0.11	72,72,72,72	0
56	MG	BA	3869	1/1	0.94	0.11	64,64,64,64	0
56	MG	DA	3168	1/1	0.94	0.31	53,53,53,53	0
56	MG	BA	3647	1/1	0.94	0.13	61,61,61,61	0
56	MG	BA	3391	1/1	0.94	0.25	27,27,27,27	0
56	MG	BA	3066	1/1	0.94	0.17	35,35,35,35	0
56	MG	BA	3474	1/1	0.94	0.32	56,56,56,56	0
56	MG	BA	3655	1/1	0.94	0.12	46,46,46,46	0
56	MG	BA	3875	1/1	0.94	0.38	74,74,74,74	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3475	1/1	0.94	0.21	42,42,42,42	0
56	MG	BA	3477	1/1	0.94	0.31	45,45,45,45	0
56	MG	BA	3119	1/1	0.94	0.16	50,50,50,50	0
56	MG	AA	1804	1/1	0.94	0.18	115,115,115,115	0
56	MG	CV	104	1/1	0.94	0.22	92,92,92,92	0
56	MG	BA	3672	1/1	0.94	0.15	41,41,41,41	0
56	MG	DA	3183	1/1	0.94	0.17	106,106,106,106	0
56	MG	DA	3365	1/1	0.94	0.12	71,71,71,71	0
56	MG	AA	1683	1/1	0.94	0.28	106,106,106,106	0
56	MG	AA	1740	1/1	0.94	0.49	72,72,72,72	0
56	MG	BA	3075	1/1	0.94	0.18	47,47,47,47	0
56	MG	BA	3714	1/1	0.94	0.30	62,62,62,62	0
56	MG	BA	3718	1/1	0.94	0.12	87,87,87,87	0
56	MG	BA	3719	1/1	0.94	0.12	71,71,71,71	0
56	MG	BA	3723	1/1	0.94	0.09	51,51,51,51	0
56	MG	AA	1757	1/1	0.94	0.21	58,58,58,58	0
56	MG	BA	3725	1/1	0.94	0.13	69,69,69,69	0
56	MG	BB	201	1/1	0.94	0.39	57,57,57,57	0
56	MG	BB	202	1/1	0.94	0.15	57,57,57,57	0
56	MG	AA	1725	1/1	0.94	0.19	65,65,65,65	0
56	MG	CA	1682	1/1	0.94	0.49	73,73,73,73	0
56	MG	BB	204	1/1	0.94	0.36	57,57,57,57	0
56	MG	DA	3200	1/1	0.94	0.64	53,53,53,53	0
56	MG	BA	3730	1/1	0.94	0.06	63,63,63,63	0
56	MG	BA	3034	1/1	0.94	0.21	23,23,23,23	0
56	MG	DA	3386	1/1	0.94	0.29	47,47,47,47	0
56	MG	DA	3390	1/1	0.94	0.14	55,55,55,55	0
56	MG	DA	3391	1/1	0.94	0.17	48,48,48,48	0
56	MG	BA	3737	1/1	0.94	0.08	60,60,60,60	0
56	MG	BB	210	1/1	0.94	0.40	53,53,53,53	0
56	MG	BA	3740	1/1	0.94	0.17	48,48,48,48	0
56	MG	D1	101	1/1	0.94	0.30	61,61,61,61	0
56	MG	BA	3199	1/1	0.94	0.34	29,29,29,29	0
56	MG	DA	3419	1/1	0.94	0.25	35,35,35,35	0
56	MG	BA	3133	1/1	0.94	0.54	27,27,27,27	0
56	MG	AA	1852	1/1	0.94	0.14	93,93,93,93	0
56	MG	BB	215	1/1	0.94	0.16	62,62,62,62	0
56	MG	BA	3429	1/1	0.95	0.24	54,54,54,54	0
56	MG	B5	102	1/1	0.95	0.18	58,58,58,58	0
56	MG	AA	1728	1/1	0.95	0.50	81,81,81,81	0
56	MG	B9	102	1/1	0.95	0.28	43,43,43,43	0
56	MG	DA	3488	1/1	0.95	0.69	73,73,73,73	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1755	1/1	0.95	0.17	93,93,93,93	0
56	MG	BA	3114	1/1	0.95	0.40	37,37,37,37	0
56	MG	BA	3115	1/1	0.95	0.23	52,52,52,52	0
56	MG	AA	1918	1/1	0.95	0.13	68,68,68,68	0
56	MG	BA	3575	1/1	0.95	0.11	44,44,44,44	0
56	MG	AA	1716	1/1	0.95	0.14	70,70,70,70	0
56	MG	DA	3502	1/1	0.95	0.16	68,68,68,68	0
56	MG	DA	3503	1/1	0.95	0.15	80,80,80,80	0
56	MG	BA	3579	1/1	0.95	0.17	64,64,64,64	0
56	MG	BA	3279	1/1	0.95	0.11	50,50,50,50	0
56	MG	DA	3100	1/1	0.95	0.28	45,45,45,45	0
56	MG	CA	1609	1/1	0.95	0.12	70,70,70,70	0
56	MG	AA	1849	1/1	0.95	0.21	59,59,59,59	0
56	MG	DA	3103	1/1	0.95	0.51	45,45,45,45	0
56	MG	CA	1769	1/1	0.95	0.20	93,93,93,93	0
56	MG	BA	3584	1/1	0.95	0.14	54,54,54,54	0
56	MG	DA	3516	1/1	0.95	0.17	50,50,50,50	0
56	MG	BA	3016	1/1	0.95	0.43	52,52,52,52	0
56	MG	DA	3275	1/1	0.95	0.33	42,42,42,42	0
56	MG	BA	3282	1/1	0.95	0.16	59,59,59,59	0
56	MG	DA	3108	1/1	0.95	0.28	45,45,45,45	0
56	MG	AA	1850	1/1	0.95	0.47	85,85,85,85	0
56	MG	BA	3442	1/1	0.95	0.30	45,45,45,45	0
56	MG	BA	3595	1/1	0.95	0.12	45,45,45,45	0
56	MG	BA	3355	1/1	0.95	0.35	62,62,62,62	0
56	MG	CA	1621	1/1	0.95	0.20	100,100,100,100	0
56	MG	AA	1730	1/1	0.95	0.17	61,61,61,61	0
56	MG	BA	3285	1/1	0.95	0.15	55,55,55,55	0
56	MG	BA	3451	1/1	0.95	0.21	47,47,47,47	0
56	MG	BA	3829	1/1	0.95	0.37	82,82,82,82	0
56	MG	BA	3611	1/1	0.95	0.14	43,43,43,43	0
56	MG	AA	1765	1/1	0.95	0.16	48,48,48,48	0
56	MG	DA	3121	1/1	0.95	0.32	37,37,37,37	0
56	MG	AA	1666	1/1	0.95	0.25	70,70,70,70	0
56	MG	BA	3361	1/1	0.95	0.23	60,60,60,60	0
56	MG	DA	3124	1/1	0.95	0.51	50,50,50,50	0
56	MG	DA	3125	1/1	0.95	0.18	65,65,65,65	0
56	MG	BA	3069	1/1	0.95	0.33	42,42,42,42	0
56	MG	DA	3551	1/1	0.95	0.25	42,42,42,42	0
56	MG	DA	3556	1/1	0.95	0.08	58,58,58,58	0
56	MG	BA	3625	1/1	0.95	0.10	41,41,41,41	0
56	MG	BA	3626	1/1	0.95	0.08	70,70,70,70	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3132	1/1	0.95	0.17	66,66,66,66	0
56	MG	AA	1732	1/1	0.95	0.10	65,65,65,65	0
56	MG	BA	3128	1/1	0.95	0.35	60,60,60,60	0
56	MG	DA	3568	1/1	0.95	0.17	82,82,82,82	0
56	MG	BA	3130	1/1	0.95	0.08	30,30,30,30	0
56	MG	BA	3637	1/1	0.95	0.09	62,62,62,62	0
56	MG	BA	3212	1/1	0.95	0.15	35,35,35,35	0
56	MG	DA	3573	1/1	0.95	0.17	42,42,42,42	0
56	MG	BA	3639	1/1	0.95	0.09	63,63,63,63	0
56	MG	AA	1857	1/1	0.95	0.22	62,62,62,62	0
56	MG	BA	3134	1/1	0.95	0.22	35,35,35,35	0
56	MG	BA	3073	1/1	0.95	0.67	39,39,39,39	0
56	MG	DA	3143	1/1	0.95	0.22	50,50,50,50	0
56	MG	BA	3645	1/1	0.95	0.13	46,46,46,46	0
56	MG	BA	3863	1/1	0.95	0.09	72,72,72,72	0
56	MG	BA	3137	1/1	0.95	0.32	55,55,55,55	0
56	MG	BA	3219	1/1	0.95	0.44	43,43,43,43	0
56	MG	BA	3468	1/1	0.95	0.21	54,54,54,54	0
56	MG	DA	3587	1/1	0.95	0.18	86,86,86,86	0
56	MG	AA	1929	1/1	0.95	0.15	48,48,48,48	0
56	MG	AV	109	1/1	0.95	0.19	81,81,81,81	0
56	MG	BA	3376	1/1	0.95	0.35	43,43,43,43	0
56	MG	BA	3657	1/1	0.95	0.25	51,51,51,51	0
56	MG	BA	3141	1/1	0.95	0.15	38,38,38,38	0
56	MG	BA	3304	1/1	0.95	0.22	45,45,45,45	0
56	MG	DA	3605	1/1	0.95	0.20	101,101,101,101	0
56	MG	DA	3321	1/1	0.95	0.62	50,50,50,50	0
56	MG	BA	3077	1/1	0.95	0.34	45,45,45,45	0
56	MG	BA	3380	1/1	0.95	0.19	44,44,44,44	0
56	MG	DA	3324	1/1	0.95	0.14	55,55,55,55	0
56	MG	BA	3381	1/1	0.95	0.37	19,19,19,19	0
56	MG	BA	3684	1/1	0.95	0.20	42,42,42,42	0
56	MG	BA	3697	1/1	0.95	0.15	51,51,51,51	0
56	MG	BA	3700	1/1	0.95	0.28	26,26,26,26	0
56	MG	BA	3703	1/1	0.95	0.08	65,65,65,65	0
56	MG	BA	3704	1/1	0.95	0.15	44,44,44,44	0
56	MG	DA	3617	1/1	0.95	0.10	86,86,86,86	0
56	MG	BA	3706	1/1	0.95	0.22	29,29,29,29	0
56	MG	DA	3619	1/1	0.95	0.12	39,39,39,39	0
56	MG	BA	3382	1/1	0.95	0.16	68,68,68,68	0
56	MG	BA	3306	1/1	0.95	0.18	45,45,45,45	0
56	MG	BA	3030	1/1	0.95	0.18	36,36,36,36	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3889	1/1	0.95	0.17	80,80,80,80	0
56	MG	BA	3890	1/1	0.95	0.07	70,70,70,70	0
56	MG	DA	3173	1/1	0.95	0.28	62,62,62,62	0
56	MG	BA	3717	1/1	0.95	0.17	21,21,21,21	0
56	MG	BA	3385	1/1	0.95	0.17	58,58,58,58	0
56	MG	BA	3031	1/1	0.95	0.22	29,29,29,29	0
56	MG	BA	3721	1/1	0.95	0.24	23,23,23,23	0
56	MG	DA	3637	1/1	0.95	0.09	57,57,57,57	0
56	MG	BA	3080	1/1	0.95	0.19	44,44,44,44	0
56	MG	AA	1634	1/1	0.95	0.33	47,47,47,47	0
56	MG	BA	3232	1/1	0.95	0.16	40,40,40,40	0
56	MG	DA	3645	1/1	0.95	0.06	93,93,93,93	0
56	MG	BA	3233	1/1	0.95	0.23	22,22,22,22	0
56	MG	AA	1770	1/1	0.95	0.39	76,76,76,76	0
56	MG	BA	3731	1/1	0.95	0.14	53,53,53,53	0
56	MG	BA	3733	1/1	0.95	0.17	49,49,49,49	0
56	MG	AA	1623	1/1	0.95	0.19	59,59,59,59	0
56	MG	BA	3084	1/1	0.95	0.26	43,43,43,43	0
56	MG	AA	1792	1/1	0.95	0.17	44,44,44,44	0
56	MG	BA	3038	1/1	0.95	0.20	33,33,33,33	0
56	MG	CA	1691	1/1	0.95	0.45	53,53,53,53	0
56	MG	AA	1654	1/1	0.95	0.34	80,80,80,80	0
56	MG	DA	3660	1/1	0.95	0.11	78,78,78,78	0
56	MG	AA	1940	1/1	0.95	0.14	92,92,92,92	0
56	MG	BA	3497	1/1	0.95	0.20	61,61,61,61	0
56	MG	BA	3041	1/1	0.95	0.09	43,43,43,43	0
56	MG	DA	3195	1/1	0.95	0.17	58,58,58,58	0
56	MG	CA	1697	1/1	0.95	0.58	117,117,117,117	0
56	MG	BA	3243	1/1	0.95	0.43	35,35,35,35	0
56	MG	BB	218	1/1	0.95	0.12	57,57,57,57	0
56	MG	BA	3092	1/1	0.95	0.27	34,34,34,34	0
56	MG	DA	3028	1/1	0.95	0.52	56,56,56,56	0
56	MG	AA	1616	1/1	0.95	0.13	65,65,65,65	0
56	MG	BA	3751	1/1	0.95	0.08	56,56,56,56	0
56	MG	BA	3503	1/1	0.95	0.24	51,51,51,51	0
56	MG	DA	3373	1/1	0.95	0.35	75,75,75,75	0
56	MG	BA	3248	1/1	0.95	0.24	24,24,24,24	0
56	MG	BA	3759	1/1	0.95	0.22	40,40,40,40	0
56	MG	DA	3679	1/1	0.95	0.22	76,76,76,76	0
56	MG	AA	1632	1/1	0.95	0.50	51,51,51,51	0
56	MG	BA	3761	1/1	0.95	0.21	77,77,77,77	0
56	MG	BD	303	1/1	0.95	0.40	29,29,29,29	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3762	1/1	0.95	0.14	48,48,48,48	0
56	MG	BE	303	1/1	0.95	0.18	32,32,32,32	0
56	MG	BA	3327	1/1	0.95	0.26	80,80,80,80	0
56	MG	AA	1877	1/1	0.95	0.08	70,70,70,70	0
56	MG	BA	3410	1/1	0.95	0.50	54,54,54,54	0
56	MG	AA	1836	1/1	0.95	0.16	59,59,59,59	0
56	MG	DA	3388	1/1	0.95	0.09	74,74,74,74	0
56	MG	AA	1910	1/1	0.95	0.18	87,87,87,87	0
56	MG	BA	3005	1/1	0.95	0.14	59,59,59,59	0
56	MG	DA	3394	1/1	0.95	0.10	36,36,36,36	0
56	MG	BA	3178	1/1	0.95	0.35	43,43,43,43	0
56	MG	CA	1721	1/1	0.95	0.10	75,75,75,75	0
56	MG	BA	3776	1/1	0.95	0.53	68,68,68,68	0
56	MG	AA	1681	1/1	0.95	0.25	91,91,91,91	0
56	MG	DA	3405	1/1	0.95	0.24	43,43,43,43	0
56	MG	DA	3411	1/1	0.95	0.36	55,55,55,55	0
56	MG	DA	3418	1/1	0.95	0.34	52,52,52,52	0
56	MG	BA	3180	1/1	0.95	0.36	41,41,41,41	0
56	MG	CA	1725	1/1	0.95	0.16	79,79,79,79	0
56	MG	BA	3417	1/1	0.95	0.43	44,44,44,44	0
56	MG	BA	3106	1/1	0.95	0.17	28,28,28,28	0
56	MG	BQ	201	1/1	0.95	0.17	18,18,18,18	0
56	MG	CA	1730	1/1	0.95	0.35	69,69,69,69	0
56	MG	BQ	202	1/1	0.95	0.18	46,46,46,46	0
56	MG	BR	202	1/1	0.95	0.27	30,30,30,30	0
56	MG	BA	3185	1/1	0.95	0.11	57,57,57,57	0
56	MG	DA	3063	1/1	0.95	0.45	50,50,50,50	0
56	MG	BA	3186	1/1	0.95	0.46	27,27,27,27	0
56	MG	AA	1664	1/1	0.95	0.13	51,51,51,51	0
56	MG	BA	3786	1/1	0.95	0.16	44,44,44,44	0
56	MG	DA	3451	1/1	0.95	0.28	39,39,39,39	0
56	MG	DF	303	1/1	0.95	0.12	77,77,77,77	0
56	MG	DA	3452	1/1	0.95	0.35	60,60,60,60	0
56	MG	DA	3453	1/1	0.95	0.15	77,77,77,77	0
56	MG	DA	3454	1/1	0.95	0.14	91,91,91,91	0
56	MG	DA	3067	1/1	0.95	0.16	45,45,45,45	0
56	MG	DR	201	1/1	0.95	0.23	44,44,44,44	0
56	MG	BA	3787	1/1	0.95	0.06	35,35,35,35	0
56	MG	CA	1739	1/1	0.95	0.20	79,79,79,79	0
56	MG	DA	3463	1/1	0.95	0.10	68,68,68,68	0
56	MG	AA	1633	1/1	0.95	0.50	32,32,32,32	0
56	MG	AA	1684	1/1	0.95	0.18	102,102,102,102	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3243	1/1	0.95	0.07	78,78,78,78	0
56	MG	BA	3529	1/1	0.95	0.14	49,49,49,49	0
56	MG	BA	3532	1/1	0.95	0.23	34,34,34,34	0
56	MG	DA	3248	1/1	0.95	0.22	53,53,53,53	0
56	MG	AA	1727	1/1	0.95	0.48	73,73,73,73	0
56	MG	B1	102	1/1	0.95	0.15	45,45,45,45	0
56	MG	D5	101	1/1	0.95	0.61	62,62,62,62	0
56	MG	BA	3427	1/1	0.95	0.22	48,48,48,48	0
56	MG	BA	3343	1/1	0.95	0.25	37,37,37,37	0
56	MG	DA	3478	1/1	0.95	0.35	90,90,90,90	0
56	MG	BA	3553	1/1	0.95	0.11	29,29,29,29	0
57	ZN	D4	101	1/1	0.95	0.13	178,178,178,178	0
56	MG	BA	3556	1/1	0.95	0.22	52,52,52,52	0
56	MG	BA	3814	1/1	0.96	0.26	86,86,86,86	0
56	MG	AA	1630	1/1	0.96	0.21	98,98,98,98	0
56	MG	BA	3816	1/1	0.96	0.15	85,85,85,85	0
56	MG	CA	1602	1/1	0.96	0.25	72,72,72,72	0
56	MG	CA	1753	1/1	0.96	0.22	61,61,61,61	0
56	MG	DA	3500	1/1	0.96	0.10	68,68,68,68	0
56	MG	DA	3501	1/1	0.96	0.12	81,81,81,81	0
56	MG	DA	3091	1/1	0.96	0.11	47,47,47,47	0
56	MG	BA	3818	1/1	0.96	0.28	86,86,86,86	0
56	MG	DA	3093	1/1	0.96	0.29	77,77,77,77	0
56	MG	BA	3489	1/1	0.96	0.12	55,55,55,55	0
56	MG	AA	1933	1/1	0.96	0.13	54,54,54,54	0
56	MG	DA	3508	1/1	0.96	0.17	87,87,87,87	0
56	MG	DA	3096	1/1	0.96	0.21	41,41,41,41	0
56	MG	BA	3096	1/1	0.96	0.14	37,37,37,37	0
56	MG	BA	3215	1/1	0.96	0.40	16,16,16,16	0
56	MG	AA	1881	1/1	0.96	0.15	50,50,50,50	0
56	MG	CA	1761	1/1	0.96	0.29	68,68,68,68	0
56	MG	BA	3286	1/1	0.96	0.17	61,61,61,61	0
56	MG	BA	3648	1/1	0.96	0.17	49,49,49,49	0
56	MG	CA	1611	1/1	0.96	0.13	74,74,74,74	0
56	MG	CA	1766	1/1	0.96	0.10	106,106,106,106	0
56	MG	DA	3523	1/1	0.96	0.09	86,86,86,86	0
56	MG	BA	3021	1/1	0.96	0.11	35,35,35,35	0
56	MG	BA	3650	1/1	0.96	0.09	46,46,46,46	0
56	MG	BA	3418	1/1	0.96	0.25	59,59,59,59	0
56	MG	BA	3834	1/1	0.96	0.19	27,27,27,27	0
56	MG	BA	3100	1/1	0.96	0.15	48,48,48,48	0
56	MG	BA	3289	1/1	0.96	0.23	61,61,61,61	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3220	1/1	0.96	0.37	27,27,27,27	0
56	MG	CA	1620	1/1	0.96	0.14	70,70,70,70	0
56	MG	BA	3056	1/1	0.96	0.28	50,50,50,50	0
56	MG	BA	3658	1/1	0.96	0.26	44,44,44,44	0
56	MG	DA	3537	1/1	0.96	0.51	68,68,68,68	0
56	MG	AA	1938	1/1	0.96	0.10	84,84,84,84	0
56	MG	CA	1781	1/1	0.96	0.19	103,103,103,103	0
56	MG	BA	3024	1/1	0.96	0.27	36,36,36,36	0
56	MG	DA	3542	1/1	0.96	0.09	84,84,84,84	0
56	MG	DA	3120	1/1	0.96	0.15	42,42,42,42	0
56	MG	BA	3105	1/1	0.96	0.16	45,45,45,45	0
56	MG	BA	3670	1/1	0.96	0.07	57,57,57,57	0
56	MG	DA	3547	1/1	0.96	0.10	83,83,83,83	0
56	MG	CA	1627	1/1	0.96	0.56	50,50,50,50	0
56	MG	BA	3295	1/1	0.96	0.23	45,45,45,45	0
56	MG	BA	3675	1/1	0.96	0.19	33,33,33,33	0
56	MG	DA	3554	1/1	0.96	0.30	49,49,49,49	0
56	MG	DA	3555	1/1	0.96	0.05	94,94,94,94	0
56	MG	BA	3680	1/1	0.96	0.08	46,46,46,46	0
56	MG	AA	1882	1/1	0.96	0.13	55,55,55,55	0
56	MG	DA	3558	1/1	0.96	0.25	59,59,59,59	0
56	MG	CA	1790	1/1	0.96	0.30	64,64,64,64	0
56	MG	DA	3131	1/1	0.96	0.34	46,46,46,46	0
56	MG	BA	3856	1/1	0.96	0.14	68,68,68,68	0
56	MG	BA	3360	1/1	0.96	0.21	51,51,51,51	0
56	MG	BA	3686	1/1	0.96	0.13	26,26,26,26	0
56	MG	BA	3690	1/1	0.96	0.10	27,27,27,27	0
56	MG	BA	3694	1/1	0.96	0.13	29,29,29,29	0
56	MG	BA	3107	1/1	0.96	0.14	44,44,44,44	0
56	MG	BA	3160	1/1	0.96	0.42	41,41,41,41	0
56	MG	DA	3574	1/1	0.96	0.14	53,53,53,53	0
56	MG	BA	3108	1/1	0.96	0.12	41,41,41,41	0
56	MG	CA	1641	1/1	0.96	0.23	80,80,80,80	0
56	MG	AA	1854	1/1	0.96	0.16	73,73,73,73	0
56	MG	BA	3165	1/1	0.96	0.47	17,17,17,17	0
56	MG	BA	3707	1/1	0.96	0.14	25,25,25,25	0
56	MG	AA	1855	1/1	0.96	0.18	80,80,80,80	0
56	MG	BA	3172	1/1	0.96	0.48	44,44,44,44	0
56	MG	AA	1750	1/1	0.96	0.15	79,79,79,79	0
56	MG	DA	3584	1/1	0.96	0.10	76,76,76,76	0
56	MG	BA	3067	1/1	0.96	0.11	40,40,40,40	0
56	MG	BA	3518	1/1	0.96	0.23	33,33,33,33	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3520	1/1	0.96	0.35	38,38,38,38	0
56	MG	AA	1799	1/1	0.96	0.13	95,95,95,95	0
56	MG	DA	3327	1/1	0.96	0.41	64,64,64,64	0
56	MG	DA	3328	1/1	0.96	0.15	59,59,59,59	0
56	MG	DA	3592	1/1	0.96	0.13	69,69,69,69	0
56	MG	DA	3594	1/1	0.96	0.22	44,44,44,44	0
56	MG	BA	3722	1/1	0.96	0.05	61,61,61,61	0
56	MG	DA	3598	1/1	0.96	0.34	69,69,69,69	0
56	MG	DA	3601	1/1	0.96	0.31	53,53,53,53	0
56	MG	BA	3177	1/1	0.96	0.22	46,46,46,46	0
56	MG	AA	1859	1/1	0.96	0.11	91,91,91,91	0
56	MG	BA	3445	1/1	0.96	0.14	68,68,68,68	0
56	MG	BA	3727	1/1	0.96	0.12	66,66,66,66	0
56	MG	BA	3525	1/1	0.96	0.10	40,40,40,40	0
56	MG	AA	1863	1/1	0.96	0.26	54,54,54,54	0
56	MG	CA	1660	1/1	0.96	0.23	92,92,92,92	0
56	MG	BA	3528	1/1	0.96	0.09	71,71,71,71	0
56	MG	BA	3732	1/1	0.96	0.19	36,36,36,36	0
56	MG	BA	3242	1/1	0.96	0.25	47,47,47,47	0
56	MG	DA	3340	1/1	0.96	0.46	55,55,55,55	0
56	MG	BA	3735	1/1	0.96	0.05	58,58,58,58	0
56	MG	BA	3531	1/1	0.96	0.04	59,59,59,59	0
56	MG	BA	3450	1/1	0.96	0.26	42,42,42,42	0
56	MG	AA	1947	1/1	0.96	0.08	63,63,63,63	0
56	MG	BA	3894	1/1	0.96	0.19	52,52,52,52	0
56	MG	CA	1669	1/1	0.96	0.83	78,78,78,78	0
56	MG	BA	3536	1/1	0.96	0.15	42,42,42,42	0
56	MG	BA	3452	1/1	0.96	0.33	55,55,55,55	0
56	MG	BA	3453	1/1	0.96	0.59	63,63,63,63	0
56	MG	BA	3543	1/1	0.96	0.12	56,56,56,56	0
56	MG	DA	3001	1/1	0.96	0.14	58,58,58,58	0
56	MG	BA	3548	1/1	0.96	0.25	39,39,39,39	0
56	MG	DA	3628	1/1	0.96	0.11	80,80,80,80	0
56	MG	DA	3353	1/1	0.96	0.62	80,80,80,80	0
56	MG	AA	1864	1/1	0.96	0.14	67,67,67,67	0
56	MG	BA	3245	1/1	0.96	0.33	42,42,42,42	0
56	MG	BB	207	1/1	0.96	0.27	44,44,44,44	0
56	MG	BA	3182	1/1	0.96	0.41	25,25,25,25	0
56	MG	BA	3074	1/1	0.96	0.15	52,52,52,52	0
56	MG	BA	3562	1/1	0.96	0.21	53,53,53,53	0
56	MG	DA	3644	1/1	0.96	0.05	80,80,80,80	0
56	MG	DA	3361	1/1	0.96	0.19	60,60,60,60	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3563	1/1	0.96	0.12	45,45,45,45	0
56	MG	BA	3757	1/1	0.96	0.15	28,28,28,28	0
56	MG	BA	3758	1/1	0.96	0.09	60,60,60,60	0
56	MG	AD	302	1/1	0.96	0.39	79,79,79,79	0
56	MG	DA	3651	1/1	0.96	0.05	61,61,61,61	0
56	MG	DA	3015	1/1	0.96	0.14	66,66,66,66	0
56	MG	CA	1686	1/1	0.96	0.14	72,72,72,72	0
56	MG	BA	3036	1/1	0.96	0.34	54,54,54,54	0
56	MG	BA	3570	1/1	0.96	0.12	60,60,60,60	0
56	MG	BA	3253	1/1	0.96	0.38	20,20,20,20	0
56	MG	BA	3037	1/1	0.96	0.14	37,37,37,37	0
56	MG	BA	3462	1/1	0.96	0.34	47,47,47,47	0
56	MG	DA	3022	1/1	0.96	0.10	46,46,46,46	0
56	MG	BA	3766	1/1	0.96	0.19	38,38,38,38	0
56	MG	BA	3387	1/1	0.96	0.16	48,48,48,48	0
56	MG	BA	3769	1/1	0.96	0.18	55,55,55,55	0
56	MG	DA	3026	1/1	0.96	0.29	64,64,64,64	0
56	MG	AA	1891	1/1	0.96	0.05	75,75,75,75	0
56	MG	BA	3581	1/1	0.96	0.18	29,29,29,29	0
56	MG	BB	230	1/1	0.96	0.18	56,56,56,56	0
56	MG	AA	1840	1/1	0.96	0.16	83,83,83,83	0
56	MG	BA	3773	1/1	0.96	0.07	44,44,44,44	0
56	MG	AA	1776	1/1	0.96	0.22	89,89,89,89	0
56	MG	DA	3384	1/1	0.96	0.20	51,51,51,51	0
56	MG	BA	3775	1/1	0.96	0.27	74,74,74,74	0
56	MG	DA	3675	1/1	0.96	0.10	75,75,75,75	0
56	MG	BE	301	1/1	0.96	0.43	36,36,36,36	0
56	MG	BA	3007	1/1	0.96	0.10	91,91,91,91	0
56	MG	DA	3212	1/1	0.96	0.28	66,66,66,66	0
56	MG	BE	304	1/1	0.96	0.44	14,14,14,14	0
56	MG	AA	1713	1/1	0.96	0.32	60,60,60,60	0
56	MG	BF	301	1/1	0.96	0.21	40,40,40,40	0
56	MG	BA	3129	1/1	0.96	0.29	49,49,49,49	0
56	MG	DA	3399	1/1	0.96	0.38	47,47,47,47	0
56	MG	DA	3687	1/1	0.96	0.08	64,64,64,64	0
56	MG	BA	3470	1/1	0.96	0.28	52,52,52,52	0
56	MG	DA	3041	1/1	0.96	0.48	54,54,54,54	0
56	MG	AA	1673	1/1	0.96	0.22	74,74,74,74	0
56	MG	DA	3412	1/1	0.96	0.12	52,52,52,52	0
56	MG	DA	3414	1/1	0.96	0.17	50,50,50,50	0
56	MG	AA	1769	1/1	0.96	0.14	84,84,84,84	0
56	MG	DA	3044	1/1	0.96	0.20	62,62,62,62	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3598	1/1	0.96	0.04	54,54,54,54	0
56	MG	DA	3424	1/1	0.96	0.15	72,72,72,72	0
56	MG	DB	201	1/1	0.96	0.21	61,61,61,61	0
56	MG	BA	3783	1/1	0.96	0.23	74,74,74,74	0
56	MG	CA	1715	1/1	0.96	0.13	66,66,66,66	0
56	MG	CA	1716	1/1	0.96	0.24	66,66,66,66	0
56	MG	BA	3085	1/1	0.96	0.29	35,35,35,35	0
56	MG	AA	1640	1/1	0.96	0.19	43,43,43,43	0
56	MG	DA	3434	1/1	0.96	0.20	48,48,48,48	0
56	MG	BA	3603	1/1	0.96	0.12	32,32,32,32	0
56	MG	DA	3438	1/1	0.96	0.09	66,66,66,66	0
56	MG	DB	210	1/1	0.96	0.18	91,91,91,91	0
56	MG	CA	1720	1/1	0.96	0.24	84,84,84,84	0
56	MG	BA	3476	1/1	0.96	0.11	50,50,50,50	0
56	MG	DA	3442	1/1	0.96	0.18	56,56,56,56	0
56	MG	BA	3607	1/1	0.96	0.29	59,59,59,59	0
56	MG	BA	3608	1/1	0.96	0.14	81,81,81,81	0
56	MG	BA	3793	1/1	0.96	0.47	69,69,69,69	0
56	MG	BA	3794	1/1	0.96	0.17	80,80,80,80	0
56	MG	BA	3609	1/1	0.96	0.07	53,53,53,53	0
56	MG	AA	1782	1/1	0.96	0.23	51,51,51,51	0
56	MG	BV	201	1/1	0.96	0.38	39,39,39,39	0
56	MG	DE	302	1/1	0.96	0.52	55,55,55,55	0
56	MG	DE	303	1/1	0.96	0.45	63,63,63,63	0
56	MG	CA	1729	1/1	0.96	0.18	80,80,80,80	0
56	MG	BV	202	1/1	0.96	0.19	67,67,67,67	0
56	MG	DF	302	1/1	0.96	0.33	75,75,75,75	0
56	MG	DA	3461	1/1	0.96	0.28	50,50,50,50	0
56	MG	BA	3271	1/1	0.96	0.16	44,44,44,44	0
56	MG	BA	3202	1/1	0.96	0.16	42,42,42,42	0
56	MG	BA	3088	1/1	0.96	0.27	45,45,45,45	0
56	MG	DA	3246	1/1	0.96	0.17	48,48,48,48	0
56	MG	BA	3619	1/1	0.96	0.06	86,86,86,86	0
56	MG	DA	3071	1/1	0.96	0.38	44,44,44,44	0
56	MG	AA	1876	1/1	0.96	0.08	89,89,89,89	0
56	MG	B0	101	1/1	0.96	0.37	43,43,43,43	0
56	MG	BA	3621	1/1	0.96	0.19	30,30,30,30	0
56	MG	BA	3804	1/1	0.96	0.14	59,59,59,59	0
56	MG	DA	3473	1/1	0.96	0.14	81,81,81,81	0
56	MG	DA	3253	1/1	0.96	0.36	67,67,67,67	0
56	MG	BA	3624	1/1	0.96	0.15	57,57,57,57	0
56	MG	AA	1609	1/1	0.96	0.69	61,61,61,61	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1748	1/1	0.96	0.16	90,90,90,90	0
56	MG	BA	3208	1/1	0.96	0.12	57,57,57,57	0
56	MG	DA	3080	1/1	0.96	0.34	36,36,36,36	0
56	MG	BA	3278	1/1	0.96	0.10	59,59,59,59	0
56	MG	D6	103	1/1	0.96	0.31	93,93,93,93	0
56	MG	BA	3633	1/1	0.96	0.11	52,52,52,52	0
56	MG	DA	3485	1/1	0.96	0.11	42,42,42,42	0
57	ZN	CD	301	1/1	0.96	0.28	90,90,90,90	0
56	MG	BA	3143	1/1	0.96	0.32	20,20,20,20	0
56	MG	AA	1756	1/1	0.96	0.23	90,90,90,90	0
56	MG	B5	103	1/1	0.96	0.12	61,61,61,61	0
56	MG	BA	3003	1/1	0.97	0.11	59,59,59,59	0
56	MG	BQ	204	1/1	0.97	0.15	41,41,41,41	0
56	MG	BA	3533	1/1	0.97	0.11	61,61,61,61	0
56	MG	BA	3027	1/1	0.97	0.19	44,44,44,44	0
56	MG	AA	1916	1/1	0.97	0.07	82,82,82,82	0
56	MG	BA	3659	1/1	0.97	0.18	60,60,60,60	0
56	MG	BA	3809	1/1	0.97	0.18	40,40,40,40	0
56	MG	DA	3184	1/1	0.97	0.44	57,57,57,57	0
56	MG	BA	3661	1/1	0.97	0.24	53,53,53,53	0
56	MG	BA	3195	1/1	0.97	0.34	19,19,19,19	0
56	MG	BA	3539	1/1	0.97	0.11	22,22,22,22	0
56	MG	BA	3666	1/1	0.97	0.06	28,28,28,28	0
56	MG	BA	3540	1/1	0.97	0.16	19,19,19,19	0
56	MG	AA	1875	1/1	0.97	0.22	59,59,59,59	0
56	MG	BA	3671	1/1	0.97	0.06	41,41,41,41	0
56	MG	AA	1631	1/1	0.97	0.31	59,59,59,59	0
56	MG	BA	3674	1/1	0.97	0.12	27,27,27,27	0
56	MG	DA	3559	1/1	0.97	0.13	76,76,76,76	0
56	MG	DA	3560	1/1	0.97	0.21	64,64,64,64	0
56	MG	DA	3562	1/1	0.97	0.25	69,69,69,69	0
56	MG	BA	3544	1/1	0.97	0.11	45,45,45,45	0
56	MG	BA	3676	1/1	0.97	0.17	20,20,20,20	0
56	MG	BA	3679	1/1	0.97	0.05	34,34,34,34	0
56	MG	BA	3545	1/1	0.97	0.12	53,53,53,53	0
56	MG	BA	3681	1/1	0.97	0.14	52,52,52,52	0
56	MG	DA	3045	1/1	0.97	0.24	62,62,62,62	0
56	MG	BA	3198	1/1	0.97	0.21	17,17,17,17	0
56	MG	BA	3552	1/1	0.97	0.06	39,39,39,39	0
56	MG	DA	3354	1/1	0.97	0.23	43,43,43,43	0
56	MG	DA	3048	1/1	0.97	0.13	74,74,74,74	0
56	MG	AA	1745	1/1	0.97	0.28	64,64,64,64	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	B6	102	1/1	0.97	0.07	73,73,73,73	0
56	MG	BA	3555	1/1	0.97	0.10	47,47,47,47	0
56	MG	B8	101	1/1	0.97	0.55	49,49,49,49	0
56	MG	BA	3830	1/1	0.97	0.14	31,31,31,31	0
56	MG	BA	3831	1/1	0.97	0.14	22,22,22,22	0
56	MG	DA	3209	1/1	0.97	0.20	89,89,89,89	0
56	MG	BA	3832	1/1	0.97	0.15	40,40,40,40	0
56	MG	BA	3693	1/1	0.97	0.10	38,38,38,38	0
56	MG	AA	1889	1/1	0.97	0.17	71,71,71,71	0
56	MG	BA	3836	1/1	0.97	0.20	23,23,23,23	0
56	MG	BA	3696	1/1	0.97	0.07	30,30,30,30	0
56	MG	BA	3839	1/1	0.97	0.12	33,33,33,33	0
56	MG	DA	3589	1/1	0.97	0.07	81,81,81,81	0
56	MG	BA	3840	1/1	0.97	0.06	41,41,41,41	0
56	MG	BA	3557	1/1	0.97	0.05	62,62,62,62	0
56	MG	BA	3698	1/1	0.97	0.08	44,44,44,44	0
56	MG	DA	3593	1/1	0.97	0.07	75,75,75,75	0
56	MG	AA	1606	1/1	0.97	0.27	35,35,35,35	0
56	MG	DA	3595	1/1	0.97	0.14	43,43,43,43	0
56	MG	BA	3702	1/1	0.97	0.22	49,49,49,49	0
56	MG	BA	3560	1/1	0.97	0.18	39,39,39,39	0
56	MG	DA	3600	1/1	0.97	0.21	57,57,57,57	0
56	MG	DA	3068	1/1	0.97	0.33	44,44,44,44	0
56	MG	AA	1652	1/1	0.97	0.28	69,69,69,69	0
56	MG	BA	3252	1/1	0.97	0.49	20,20,20,20	0
56	MG	CA	1616	1/1	0.97	0.67	54,54,54,54	0
56	MG	AA	1892	1/1	0.97	0.08	84,84,84,84	0
56	MG	BA	3564	1/1	0.97	0.10	63,63,63,63	0
56	MG	BA	3852	1/1	0.97	0.22	59,59,59,59	0
56	MG	BA	3566	1/1	0.97	0.05	54,54,54,54	0
56	MG	BA	3254	1/1	0.97	0.39	21,21,21,21	0
56	MG	BA	3715	1/1	0.97	0.14	21,21,21,21	0
56	MG	DA	3385	1/1	0.97	0.18	48,48,48,48	0
56	MG	DA	3613	1/1	0.97	0.11	60,60,60,60	0
56	MG	BA	3716	1/1	0.97	0.16	40,40,40,40	0
56	MG	BA	3255	1/1	0.97	0.34	16,16,16,16	0
56	MG	BA	3859	1/1	0.97	0.15	31,31,31,31	0
56	MG	BA	3569	1/1	0.97	0.24	49,49,49,49	0
56	MG	DA	3392	1/1	0.97	0.10	42,42,42,42	0
56	MG	DA	3393	1/1	0.97	0.30	63,63,63,63	0
56	MG	BA	3204	1/1	0.97	0.20	52,52,52,52	0
56	MG	BA	3159	1/1	0.97	0.27	43,43,43,43	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3396	1/1	0.97	0.13	37,37,37,37	0
56	MG	BA	3572	1/1	0.97	0.07	66,66,66,66	0
56	MG	BA	3573	1/1	0.97	0.07	54,54,54,54	0
56	MG	CA	1771	1/1	0.97	0.20	78,78,78,78	0
56	MG	BA	3574	1/1	0.97	0.17	36,36,36,36	0
56	MG	DA	3401	1/1	0.97	0.29	36,36,36,36	0
56	MG	DA	3403	1/1	0.97	0.42	60,60,60,60	0
56	MG	DA	3630	1/1	0.97	0.21	47,47,47,47	0
56	MG	BA	3062	1/1	0.97	0.14	34,34,34,34	0
56	MG	DA	3632	1/1	0.97	0.31	69,69,69,69	0
56	MG	DA	3633	1/1	0.97	0.26	62,62,62,62	0
56	MG	DA	3406	1/1	0.97	0.11	48,48,48,48	0
56	MG	DA	3635	1/1	0.97	0.17	88,88,88,88	0
56	MG	DA	3245	1/1	0.97	0.14	39,39,39,39	0
56	MG	BA	3576	1/1	0.97	0.13	66,66,66,66	0
56	MG	DA	3413	1/1	0.97	0.29	40,40,40,40	0
56	MG	DA	3642	1/1	0.97	0.10	71,71,71,71	0
56	MG	BA	3422	1/1	0.97	0.07	82,82,82,82	0
56	MG	DA	3416	1/1	0.97	0.12	53,53,53,53	0
56	MG	BA	3578	1/1	0.97	0.15	68,68,68,68	0
56	MG	AA	1908	1/1	0.97	0.11	97,97,97,97	0
56	MG	CA	1778	1/1	0.97	0.34	81,81,81,81	0
56	MG	DA	3423	1/1	0.97	0.26	45,45,45,45	0
56	MG	BA	3093	1/1	0.97	0.12	42,42,42,42	0
56	MG	BA	3164	1/1	0.97	0.14	26,26,26,26	0
56	MG	DA	3653	1/1	0.97	0.19	59,59,59,59	0
56	MG	BA	3734	1/1	0.97	0.12	40,40,40,40	0
56	MG	BA	3065	1/1	0.97	0.12	28,28,28,28	0
56	MG	DA	3429	1/1	0.97	0.06	73,73,73,73	0
56	MG	BA	3263	1/1	0.97	0.16	41,41,41,41	0
56	MG	CA	1643	1/1	0.97	0.40	53,53,53,53	0
56	MG	DA	3433	1/1	0.97	0.26	46,46,46,46	0
56	MG	BA	3588	1/1	0.97	0.17	78,78,78,78	0
56	MG	DA	3661	1/1	0.97	0.18	61,61,61,61	0
56	MG	BA	3739	1/1	0.97	0.07	42,42,42,42	0
56	MG	DA	3437	1/1	0.97	0.18	70,70,70,70	0
56	MG	BA	3369	1/1	0.97	0.43	65,65,65,65	0
56	MG	BA	3166	1/1	0.97	0.46	30,30,30,30	0
56	MG	AA	1780	1/1	0.97	0.22	55,55,55,55	0
56	MG	BA	3743	1/1	0.97	0.32	71,71,71,71	0
56	MG	BA	3169	1/1	0.97	0.44	14,14,14,14	0
56	MG	BA	3594	1/1	0.97	0.15	44,44,44,44	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3445	1/1	0.97	0.14	43,43,43,43	0
56	MG	DA	3446	1/1	0.97	0.14	40,40,40,40	0
56	MG	DA	3447	1/1	0.97	0.19	62,62,62,62	0
56	MG	BA	3432	1/1	0.97	0.17	29,29,29,29	0
56	MG	DA	3450	1/1	0.97	0.32	59,59,59,59	0
56	MG	BA	3596	1/1	0.97	0.06	39,39,39,39	0
56	MG	BA	3170	1/1	0.97	0.18	43,43,43,43	0
56	MG	BA	3268	1/1	0.97	0.13	52,52,52,52	0
56	MG	BA	3320	1/1	0.97	0.33	58,58,58,58	0
56	MG	DA	3680	1/1	0.97	0.09	79,79,79,79	0
56	MG	DA	3456	1/1	0.97	0.18	56,56,56,56	0
56	MG	BA	3753	1/1	0.97	0.26	31,31,31,31	0
56	MG	BA	3171	1/1	0.97	0.36	38,38,38,38	0
56	MG	BA	3270	1/1	0.97	0.39	53,53,53,53	0
56	MG	AA	1927	1/1	0.97	0.12	85,85,85,85	0
56	MG	BA	3502	1/1	0.97	0.27	33,33,33,33	0
56	MG	CA	1805	1/1	0.97	0.13	88,88,88,88	0
56	MG	BA	3218	1/1	0.97	0.23	20,20,20,20	0
56	MG	AA	1860	1/1	0.97	0.11	85,85,85,85	0
56	MG	BA	3132	1/1	0.97	0.14	44,44,44,44	0
56	MG	BA	3222	1/1	0.97	0.37	28,28,28,28	0
56	MG	AA	1895	1/1	0.97	0.18	87,87,87,87	0
56	MG	DA	3470	1/1	0.97	0.27	73,73,73,73	0
56	MG	AA	1871	1/1	0.97	0.07	71,71,71,71	0
56	MG	BA	3615	1/1	0.97	0.23	68,68,68,68	0
56	MG	BA	3618	1/1	0.97	0.10	46,46,46,46	0
56	MG	CA	1670	1/1	0.97	0.18	69,69,69,69	0
56	MG	DA	3475	1/1	0.97	0.20	78,78,78,78	0
56	MG	BA	3768	1/1	0.97	0.04	90,90,90,90	0
56	MG	BA	3447	1/1	0.97	0.11	45,45,45,45	0
56	MG	BA	3386	1/1	0.97	0.17	54,54,54,54	0
56	MG	BA	3449	1/1	0.97	0.51	34,34,34,34	0
56	MG	BA	3622	1/1	0.97	0.16	65,65,65,65	0
56	MG	BA	3623	1/1	0.97	0.05	75,75,75,75	0
56	MG	AA	1872	1/1	0.97	0.18	41,41,41,41	0
56	MG	DA	3484	1/1	0.97	0.12	45,45,45,45	0
56	MG	BA	3136	1/1	0.97	0.26	32,32,32,32	0
56	MG	BA	3072	1/1	0.97	0.65	48,48,48,48	0
56	MG	BB	221	1/1	0.97	0.10	44,44,44,44	0
56	MG	BA	3627	1/1	0.97	0.07	56,56,56,56	0
56	MG	BA	3019	1/1	0.97	0.22	33,33,33,33	0
56	MG	DA	3492	1/1	0.97	0.12	63,63,63,63	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DD	302	1/1	0.97	0.52	48,48,48,48	0
56	MG	BA	3516	1/1	0.97	0.33	56,56,56,56	0
56	MG	AV	116	1/1	0.97	0.15	84,84,84,84	0
56	MG	DA	3496	1/1	0.97	0.19	47,47,47,47	0
56	MG	BA	3393	1/1	0.97	0.14	28,28,28,28	0
56	MG	BA	3635	1/1	0.97	0.14	75,75,75,75	0
56	MG	DA	3301	1/1	0.97	0.12	62,62,62,62	0
56	MG	BA	3636	1/1	0.97	0.07	63,63,63,63	0
56	MG	BA	3784	1/1	0.97	0.20	88,88,88,88	0
56	MG	DA	3151	1/1	0.97	0.22	45,45,45,45	0
56	MG	BA	3519	1/1	0.97	0.39	53,53,53,53	0
56	MG	CA	1690	1/1	0.97	0.32	74,74,74,74	0
56	MG	BA	3335	1/1	0.97	0.32	47,47,47,47	0
56	MG	DA	3308	1/1	0.97	0.17	60,60,60,60	0
56	MG	BA	3184	1/1	0.97	0.29	31,31,31,31	0
56	MG	BA	3231	1/1	0.97	0.20	31,31,31,31	0
56	MG	DA	3006	1/1	0.97	0.18	56,56,56,56	0
56	MG	BA	3789	1/1	0.97	0.12	41,41,41,41	0
56	MG	BA	3641	1/1	0.97	0.11	62,62,62,62	0
56	MG	CA	1696	1/1	0.97	0.11	99,99,99,99	0
56	MG	AA	1862	1/1	0.97	0.08	45,45,45,45	0
56	MG	AA	1847	1/1	0.97	0.27	98,98,98,98	0
56	MG	BA	3047	1/1	0.97	0.32	32,32,32,32	0
56	MG	BA	3795	1/1	0.97	0.17	84,84,84,84	0
56	MG	BA	3526	1/1	0.97	0.08	40,40,40,40	0
56	MG	DA	3167	1/1	0.97	0.37	67,67,67,67	0
56	MG	BF	307	1/1	0.97	0.22	42,42,42,42	0
56	MG	BA	3023	1/1	0.97	0.13	46,46,46,46	0
56	MG	BA	3146	1/1	0.97	0.30	49,49,49,49	0
56	MG	AA	1934	1/1	0.97	0.08	48,48,48,48	0
56	MG	BA	3530	1/1	0.97	0.11	49,49,49,49	0
57	ZN	AD	301	1/1	0.97	0.29	93,93,93,93	0
57	ZN	AN	101	1/1	0.97	0.15	164,164,164,164	0
57	ZN	B4	101	1/1	0.97	0.05	137,137,137,137	0
56	MG	AA	1936	1/1	0.97	0.18	84,84,84,84	0
56	MG	BA	3653	1/1	0.97	0.17	38,38,38,38	0
57	ZN	DY	201	1/1	0.97	0.07	123,123,123,123	0
56	MG	BA	3654	1/1	0.97	0.19	59,59,59,59	0
57	ZN	D6	101	1/1	0.97	0.09	106,106,106,106	0
56	MG	DA	3536	1/1	0.97	0.33	54,54,54,54	0
56	MG	AA	1858	1/1	0.98	0.04	90,90,90,90	0
56	MG	DA	3225	1/1	0.98	0.38	43,43,43,43	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3838	1/1	0.98	0.20	28,28,28,28	0
56	MG	DA	3014	1/1	0.98	0.21	38,38,38,38	0
56	MG	BE	302	1/1	0.98	0.54	51,51,51,51	0
56	MG	AA	1896	1/1	0.98	0.09	88,88,88,88	0
56	MG	BA	3183	1/1	0.98	0.40	22,22,22,22	0
56	MG	BA	3682	1/1	0.98	0.20	28,28,28,28	0
56	MG	BA	3211	1/1	0.98	0.29	46,46,46,46	0
56	MG	AA	1660	1/1	0.98	0.22	59,59,59,59	0
56	MG	BA	3685	1/1	0.98	0.07	40,40,40,40	0
56	MG	DA	3621	1/1	0.98	0.07	73,73,73,73	0
56	MG	BA	3846	1/1	0.98	0.18	27,27,27,27	0
56	MG	BA	3765	1/1	0.98	0.07	59,59,59,59	0
56	MG	DA	3477	1/1	0.98	0.09	78,78,78,78	0
56	MG	DA	3127	1/1	0.98	0.29	37,37,37,37	0
56	MG	BA	3064	1/1	0.98	0.16	41,41,41,41	0
56	MG	BA	3687	1/1	0.98	0.20	23,23,23,23	0
56	MG	DA	3130	1/1	0.98	0.09	52,52,52,52	0
56	MG	BA	3688	1/1	0.98	0.12	25,25,25,25	0
56	MG	BA	3689	1/1	0.98	0.09	25,25,25,25	0
56	MG	BA	3097	1/1	0.98	0.15	34,34,34,34	0
56	MG	BA	3691	1/1	0.98	0.10	31,31,31,31	0
56	MG	BA	3854	1/1	0.98	0.18	25,25,25,25	0
56	MG	BA	3692	1/1	0.98	0.11	30,30,30,30	0
56	MG	CA	1763	1/1	0.98	0.09	62,62,62,62	0
56	MG	DA	3636	1/1	0.98	0.13	78,78,78,78	0
56	MG	DA	3490	1/1	0.98	0.24	45,45,45,45	0
56	MG	DA	3638	1/1	0.98	0.12	48,48,48,48	0
56	MG	BA	3116	1/1	0.98	0.29	37,37,37,37	0
56	MG	BA	3138	1/1	0.98	0.20	33,33,33,33	0
56	MG	DA	3641	1/1	0.98	0.15	50,50,50,50	0
56	MG	DA	3140	1/1	0.98	0.52	44,44,44,44	0
56	MG	DA	3494	1/1	0.98	0.20	70,70,70,70	0
56	MG	BQ	203	1/1	0.98	0.24	62,62,62,62	0
56	MG	AA	1832	1/1	0.98	0.40	75,75,75,75	0
56	MG	BA	3163	1/1	0.98	0.16	40,40,40,40	0
56	MG	DA	3498	1/1	0.98	0.08	51,51,51,51	0
56	MG	BA	3629	1/1	0.98	0.09	64,64,64,64	0
56	MG	BA	3699	1/1	0.98	0.14	38,38,38,38	0
56	MG	DA	3650	1/1	0.98	0.16	43,43,43,43	0
56	MG	BA	3862	1/1	0.98	0.10	59,59,59,59	0
56	MG	DA	3652	1/1	0.98	0.08	85,85,85,85	0
56	MG	BA	3630	1/1	0.98	0.13	23,23,23,23	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3701	1/1	0.98	0.13	26,26,26,26	0
56	MG	BA	3249	1/1	0.98	0.29	24,24,24,24	0
56	MG	BA	3537	1/1	0.98	0.15	47,47,47,47	0
56	MG	AA	1861	1/1	0.98	0.13	71,71,71,71	0
56	MG	BA	3705	1/1	0.98	0.25	79,79,79,79	0
56	MG	AA	1644	1/1	0.98	0.28	48,48,48,48	0
56	MG	CA	1779	1/1	0.98	0.18	95,95,95,95	0
56	MG	BA	3583	1/1	0.98	0.10	22,22,22,22	0
56	MG	BA	3221	1/1	0.98	0.33	17,17,17,17	0
56	MG	B0	105	1/1	0.98	0.15	76,76,76,76	0
56	MG	DA	3515	1/1	0.98	0.23	51,51,51,51	0
56	MG	BA	3709	1/1	0.98	0.13	49,49,49,49	0
56	MG	DA	3518	1/1	0.98	0.23	46,46,46,46	0
56	MG	BA	3710	1/1	0.98	0.17	58,58,58,58	0
56	MG	DA	3054	1/1	0.98	0.29	78,78,78,78	0
56	MG	DA	3521	1/1	0.98	0.52	60,60,60,60	0
56	MG	DA	3161	1/1	0.98	0.20	45,45,45,45	0
56	MG	B1	103	1/1	0.98	0.23	36,36,36,36	0
56	MG	BA	3585	1/1	0.98	0.06	35,35,35,35	0
56	MG	BA	3791	1/1	0.98	0.24	29,29,29,29	0
56	MG	BA	3877	1/1	0.98	0.21	21,21,21,21	0
56	MG	BA	3878	1/1	0.98	0.13	81,81,81,81	0
56	MG	BA	3586	1/1	0.98	0.12	52,52,52,52	0
56	MG	DA	3677	1/1	0.98	0.27	51,51,51,51	0
56	MG	BA	3587	1/1	0.98	0.14	48,48,48,48	0
56	MG	DA	3169	1/1	0.98	0.19	51,51,51,51	0
56	MG	BA	3541	1/1	0.98	0.08	35,35,35,35	0
56	MG	BA	3374	1/1	0.98	0.36	24,24,24,24	0
56	MG	DA	3534	1/1	0.98	0.12	73,73,73,73	0
56	MG	BA	3643	1/1	0.98	0.05	54,54,54,54	0
56	MG	BA	3590	1/1	0.98	0.07	56,56,56,56	0
56	MG	BA	3720	1/1	0.98	0.17	22,22,22,22	0
56	MG	BA	3101	1/1	0.98	0.35	26,26,26,26	0
56	MG	BA	3887	1/1	0.98	0.27	17,17,17,17	0
56	MG	BA	3646	1/1	0.98	0.13	44,44,44,44	0
56	MG	AA	1839	1/1	0.98	0.06	69,69,69,69	0
56	MG	BA	3168	1/1	0.98	0.15	27,27,27,27	0
56	MG	DA	3402	1/1	0.98	0.11	38,38,38,38	0
56	MG	BA	3546	1/1	0.98	0.07	48,48,48,48	0
56	MG	BA	3726	1/1	0.98	0.35	48,48,48,48	0
56	MG	BA	3547	1/1	0.98	0.04	49,49,49,49	0
56	MG	DA	3409	1/1	0.98	0.07	64,64,64,64	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3410	1/1	0.98	0.24	55,55,55,55	0
56	MG	DA	3552	1/1	0.98	0.28	39,39,39,39	0
56	MG	BA	3443	1/1	0.98	0.15	41,41,41,41	0
56	MG	BA	3729	1/1	0.98	0.09	59,59,59,59	0
56	MG	AV	101	1/1	0.98	0.34	48,48,48,48	0
56	MG	BA	3145	1/1	0.98	0.26	26,26,26,26	0
56	MG	DA	3415	1/1	0.98	0.44	33,33,33,33	0
56	MG	BA	3554	1/1	0.98	0.14	55,55,55,55	0
56	MG	BA	3600	1/1	0.98	0.26	36,36,36,36	0
56	MG	BA	3601	1/1	0.98	0.15	24,24,24,24	0
56	MG	DA	3420	1/1	0.98	0.10	38,38,38,38	0
56	MG	AA	1824	1/1	0.98	0.27	33,33,33,33	0
56	MG	DA	3565	1/1	0.98	0.12	50,50,50,50	0
56	MG	AA	1946	1/1	0.98	0.11	81,81,81,81	0
56	MG	BA	3604	1/1	0.98	0.06	80,80,80,80	0
56	MG	BA	3738	1/1	0.98	0.36	42,42,42,42	0
56	MG	BA	3817	1/1	0.98	0.18	22,22,22,22	0
56	MG	DA	3427	1/1	0.98	0.29	45,45,45,45	0
56	MG	BA	3660	1/1	0.98	0.08	28,28,28,28	0
56	MG	DA	3572	1/1	0.98	0.26	45,45,45,45	0
56	MG	BA	3173	1/1	0.98	0.18	31,31,31,31	0
56	MG	BA	3662	1/1	0.98	0.15	30,30,30,30	0
56	MG	DA	3431	1/1	0.98	0.14	33,33,33,33	0
56	MG	BA	3606	1/1	0.98	0.09	63,63,63,63	0
56	MG	DA	3577	1/1	0.98	0.22	95,95,95,95	0
56	MG	BA	3664	1/1	0.98	0.14	31,31,31,31	0
56	MG	AA	1841	1/1	0.98	0.10	75,75,75,75	0
56	MG	BA	3126	1/1	0.98	0.45	40,40,40,40	0
56	MG	DA	3436	1/1	0.98	0.29	50,50,50,50	0
56	MG	DO	203	1/1	0.98	0.18	79,79,79,79	0
56	MG	BA	3825	1/1	0.98	0.05	37,37,37,37	0
56	MG	AA	1935	1/1	0.98	0.18	56,56,56,56	0
56	MG	AA	1924	1/1	0.98	0.10	80,80,80,80	0
56	MG	DA	3097	1/1	0.98	0.45	31,31,31,31	0
56	MG	BA	3059	1/1	0.98	0.33	25,25,25,25	0
56	MG	DA	3099	1/1	0.98	0.42	42,42,42,42	0
56	MG	AA	1835	1/1	0.98	0.08	88,88,88,88	0
56	MG	BB	223	1/1	0.98	0.18	38,38,38,38	0
56	MG	CA	1634	1/1	0.98	0.40	63,63,63,63	0
56	MG	BA	3673	1/1	0.98	0.17	43,43,43,43	0
56	MG	BB	225	1/1	0.98	0.14	56,56,56,56	0
56	MG	DA	3449	1/1	0.98	0.27	45,45,45,45	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BB	226	1/1	0.98	0.07	61,61,61,61	0
56	MG	BA	3752	1/1	0.98	0.23	28,28,28,28	0
56	MG	DA	3215	1/1	0.98	0.59	46,46,46,46	0
56	MG	DA	3597	1/1	0.98	0.10	57,57,57,57	0
56	MG	CA	1735	1/1	0.98	0.07	78,78,78,78	0
56	MG	DA	3599	1/1	0.98	0.26	50,50,50,50	0
56	MG	BA	3131	1/1	0.98	0.16	34,34,34,34	0
56	MG	DA	3455	1/1	0.98	0.13	61,61,61,61	0
56	MG	DA	3602	1/1	0.98	0.19	47,47,47,47	0
57	ZN	BY	201	1/1	0.98	0.06	70,70,70,70	0
56	MG	BB	229	1/1	0.98	0.04	67,67,67,67	0
57	ZN	B5	104	1/1	0.98	0.09	75,75,75,75	0
57	ZN	B6	101	1/1	0.98	0.11	48,48,48,48	0
56	MG	BA	3833	1/1	0.98	0.12	41,41,41,41	0
56	MG	DA	3459	1/1	0.98	0.37	46,46,46,46	0
56	MG	BA	3390	1/1	0.98	0.19	28,28,28,28	0
56	MG	BA	3616	1/1	0.98	0.23	40,40,40,40	0
57	ZN	D5	102	1/1	0.98	0.08	88,88,88,88	0
56	MG	BA	3677	1/1	0.98	0.20	29,29,29,29	0
56	MG	BD	304	1/1	0.98	0.42	20,20,20,20	0
56	MG	DA	3553	1/1	0.99	0.22	46,46,46,46	0
56	MG	BA	3549	1/1	0.99	0.24	19,19,19,19	0
56	MG	DA	3422	1/1	0.99	0.10	47,47,47,47	0
56	MG	DA	3506	1/1	0.99	0.15	66,66,66,66	0
56	MG	BA	3550	1/1	0.99	0.26	27,27,27,27	0
56	MG	BA	3695	1/1	0.99	0.07	29,29,29,29	0
56	MG	BA	3551	1/1	0.99	0.03	68,68,68,68	0
56	MG	DA	3387	1/1	0.99	0.16	40,40,40,40	0
56	MG	DA	3561	1/1	0.99	0.17	70,70,70,70	0
56	MG	BA	3565	1/1	0.99	0.13	34,34,34,34	0
56	MG	DA	3512	1/1	0.99	0.32	49,49,49,49	0
56	MG	DA	3389	1/1	0.99	0.09	66,66,66,66	0
56	MG	BA	3247	1/1	0.99	0.19	20,20,20,20	0
56	MG	BA	3678	1/1	0.99	0.14	22,22,22,22	0
56	MG	AA	1845	1/1	0.99	0.56	59,59,59,59	0
56	MG	DA	3517	1/1	0.99	0.17	64,64,64,64	0
56	MG	BA	3747	1/1	0.99	0.15	20,20,20,20	0
56	MG	BA	3845	1/1	0.99	0.14	37,37,37,37	0
56	MG	BA	3610	1/1	0.99	0.10	41,41,41,41	0
56	MG	BA	3434	1/1	0.99	0.48	22,22,22,22	0
56	MG	BA	3534	1/1	0.99	0.06	44,44,44,44	0
56	MG	B8	102	1/1	0.99	0.14	49,49,49,49	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BR	201	1/1	0.99	0.24	19,19,19,19	0
56	MG	AA	1604	1/1	0.99	0.22	42,42,42,42	0
56	MG	DA	3440	1/1	0.99	0.06	47,47,47,47	0
56	MG	BB	205	1/1	0.99	0.13	29,29,29,29	0
56	MG	AA	1628	1/1	0.99	0.28	22,22,22,22	0
56	MG	BA	3876	1/1	0.99	0.10	54,54,54,54	0
56	MG	DA	3404	1/1	0.99	0.11	56,56,56,56	0
56	MG	DA	3531	1/1	0.99	0.23	66,66,66,66	0
56	MG	DA	3486	1/1	0.99	0.24	42,42,42,42	0
56	MG	DA	3686	1/1	0.99	0.23	74,74,74,74	0
56	MG	BA	3631	1/1	0.99	0.08	25,25,25,25	0
56	MG	AA	1869	1/1	0.99	0.30	81,81,81,81	0
56	MG	DA	3407	1/1	0.99	0.11	44,44,44,44	0
56	MG	DA	3408	1/1	0.99	0.08	71,71,71,71	0
56	MG	BA	3667	1/1	0.99	0.10	27,27,27,27	0
56	MG	CA	1758	1/1	0.99	0.21	56,56,56,56	0
56	MG	BA	3559	1/1	0.99	0.09	53,53,53,53	0
56	MG	DA	3540	1/1	0.99	0.26	57,57,57,57	0
56	MG	BA	3669	1/1	0.99	0.10	34,34,34,34	0
56	MG	BA	3711	1/1	0.99	0.16	24,24,24,24	0
56	MG	DA	3543	1/1	0.99	0.05	74,74,74,74	0
56	MG	BA	3712	1/1	0.99	0.21	48,48,48,48	0
56	MG	CA	1794	1/1	0.99	0.13	59,59,59,59	0
57	ZN	B9	101	1/1	0.99	0.08	51,51,51,51	0
56	MG	BA	3617	1/1	0.99	0.07	58,58,58,58	0
56	MG	DA	3417	1/1	0.99	0.38	46,46,46,46	0
56	MG	DA	3458	1/1	0.99	0.12	49,49,49,49	0
56	MG	BA	3473	1/1	0.99	0.33	22,22,22,22	0
56	MG	DA	3550	1/1	0.99	0.42	42,42,42,42	0
56	MG	B0	104	1/1	0.99	0.18	58,58,58,58	0
56	MG	BA	3347	1/1	0.99	0.47	20,20,20,20	0
56	MG	BA	3755	1/1	1.00	0.10	40,40,40,40	0

## 6.5 Other polymers [\(i\)](#)

There are no such residues in this entry.