



# Full wwPDB X-ray Structure Validation Report

Jun 16, 2014 – 08:43 PM BST

PDB ID : 4V5G  
Title : The crystal structure of the 70S ribosome bound to EF-Tu and tRNA  
Authors : Schmeing, T.M.; Voorhees, R.M.; Ramakrishnan, V.  
Deposited on : 2009-09-01  
Resolution : 3.60 Å(reported)

This is a full wwPDB 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 <http://wwpdb.org/ValidationPDFNotes.html>

---

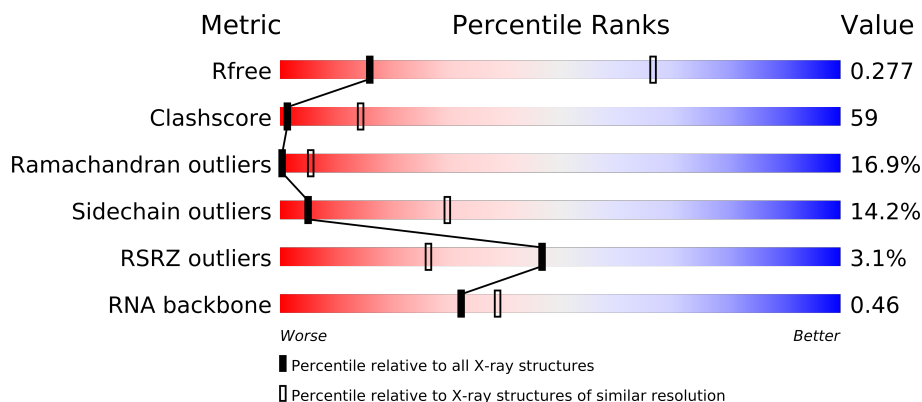
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467  
Mogul : 1.16 November 2013  
Xtriage (Phenix) : dev-1323  
EDS : stable23397  
Percentile statistics : 21963  
Refmac : 5.8.0049  
CCP4 : 6.3.0 (Settle)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)  
Validation Pipeline (wwPDB-VP) : stable23397

# 1 Overall quality at a glance

The reported resolution of this entry is 3.60 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	66092	1020 (3.86-3.34)
Clashscore	79885	1155 (3.80-3.40)
Ramachandran outliers	78287	1109 (3.80-3.40)
Sidechain outliers	78261	1108 (3.80-3.40)
RSRZ outliers	66119	1000 (3.84-3.36)
RNA backbone	1838	1012 (4.40-2.76)

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 on the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	AA	1522	
1	CA	1522	
2	AB	256	
2	CB	256	
3	AC	239	
3	CC	239	
4	AD	209	
4	CD	209	
5	AE	162	
5	CE	162	
6	AF	101	
6	CF	101	

Continued on next page...

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
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	135	
12	CL	135	
13	AM	126	
13	CM	126	
14	AN	61	
14	CN	61	
15	AO	89	
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	AV	76	
22	AW	76	
22	CV	76	
22	CW	76	
23	AX	27	
23	CX	27	
24	AY	77	
24	CY	77	
25	AZ	406	
25	CZ	406	
26	B0	85	
26	D0	85	

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
27	B1	98	
27	D1	98	
28	B2	72	
28	D2	72	
29	B3	60	
29	D3	60	
30	B4	71	
30	D4	71	
31	B5	60	
31	D5	60	
32	B6	54	
32	D6	54	
33	B7	49	
33	D7	49	
34	B8	65	
34	D8	65	
35	B9	37	
35	D9	37	
36	BA	2915	
36	DA	2915	
37	BB	122	
37	DB	122	
38	BC	229	
38	DC	229	
39	BD	276	
39	DD	276	
40	BE	206	
40	DE	206	
41	BF	210	
41	DF	210	
42	BG	182	
42	DG	182	
43	BH	180	
43	DH	180	
44	BJ	173	
44	DJ	173	
45	BK	147	
45	DK	147	
46	BN	140	
46	DN	140	
47	BO	122	
47	DO	122	

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
48	BP	150	
48	DP	150	
49	BQ	141	
49	DQ	141	
50	BR	118	
50	DR	118	
51	BS	112	
51	DS	112	
52	BT	146	
52	DT	146	
53	BU	118	
53	DU	118	
54	BV	101	
54	DV	101	
55	BW	113	
55	DW	113	
56	BX	96	
56	DX	96	
57	BY	110	
57	DY	110	
58	BZ	206	
58	DZ	206	

## 2 Entry composition

There are 63 unique types of molecules in this entry. The entry contains 306876 atoms, of which 0 are hydrogen and 0 are deuterium.

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	1504	Total	C	N	O	P	0	0	0
			32329	14390	5992	10444	1503			
1	CA	1504	Total	C	N	O	P	0	0	0
			32329	14390	5992	10444	1503			

- Molecule 2 is a protein called 30S RIBOSOMAL PROTEIN S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	235	Total	C	N	O	S	0	0	1
			1901	1213	342	341	5			
2	CB	235	Total	C	N	O	S	0	0	1
			1901	1213	342	341	5			

- Molecule 3 is a protein called 30S RIBOSOMAL PROTEIN S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	207	Total	C	N	O	S	0	0	1
			1613	1016	315	281	1			
3	CC	207	Total	C	N	O	S	0	0	1
			1613	1016	315	281	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
			1703	1066	339	291	7			
4	CD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			

- Molecule 5 is a protein called 30S RIBOSOMAL PROTEIN S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			
5	CE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			

- Molecule 6 is a protein called 30S RIBOSOMAL PROTEIN S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
6	CF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

- Molecule 7 is a protein called 30S RIBOSOMAL PROTEIN S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	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
			1116	705	215	193	3			
8	CH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

- Molecule 9 is a protein called 30S RIBOSOMAL PROTEIN S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	0	0	0
			1010	639	197	174			
9	CI	127	Total	C	N	O	0	0	0
			1010	639	197	174			

- Molecule 10 is a protein called 30S RIBOSOMAL PROTEIN S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	CJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

- Molecule 11 is a protein called 30S RIBOSOMAL PROTEIN S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			
11	CK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			

- Molecule 12 is a protein called 30S RIBOSOMAL PROTEIN S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	125	Total	C	N	O	S	0	0	1
			971	611	196	163	1			
12	CL	125	Total	C	N	O	S	0	0	1
			971	611	196	163	1			

- Molecule 13 is a protein called 30S RIBOSOMAL PROTEIN S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	125	Total	C	N	O	S	0	0	1
			988	611	206	169	2			
13	CM	125	Total	C	N	O	S	0	0	1
			988	611	206	169	2			

- Molecule 14 is a protein called 30S RIBOSOMAL PROTEIN S14 TYPE Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
14	CN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- 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
			734	459	147	126	2			
15	CO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			



- Molecule 16 is a protein called 30S RIBOSOMAL PROTEIN S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			
16	CP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			

- Molecule 17 is a protein called 30S RIBOSOMAL PROTEIN S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			
17	CQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			

- Molecule 18 is a protein called 30S RIBOSOMAL PROTEIN S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	70	Total	C	N	O	0	0	0
			574	367	112	95			
18	CR	70	Total	C	N	O	0	0	0
			574	367	112	95			

- Molecule 19 is a protein called 30S RIBOSOMAL PROTEIN S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			
19	CS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			

- Molecule 20 is a protein called 30S RIBOSOMAL PROTEIN S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			
20	CT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	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	1
			209	128	51	30			
21	CU	25	Total	C	N	O	0	0	1
			209	128	51	30			

- Molecule 22 is a RNA chain called E-SITE TRNA PHE OR P-SITE TRNA PHE.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	AW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	CV	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	CW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			

- Molecule 23 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AX	13	Total	C	N	O	P	0	0	0
			272	124	50	86	12			
23	CX	13	Total	C	N	O	P	0	0	0
			272	124	50	86	12			

- Molecule 24 is a RNA chain called A-SITE TRNA THR.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AY	77	Total	C	N	O	P	0	0	0
			1650	741	292	541	76			
24	CY	77	Total	C	N	O	P	0	0	0
			1650	741	292	541	76			

- Molecule 25 is a protein called ELONGATION FACTOR TU-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	AZ	374	Total	C	N	O	S	0	0	0
			2900	1832	508	548	12			
25	CZ	374	Total	C	N	O	S	0	0	0
			2900	1832	508	548	12			

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	B0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			
26	D0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	B1	94	Total	C	N	O	S	0	0	1
			732	460	146	125	1			
27	D1	94	Total	C	N	O	S	0	0	1
			732	460	146	125	1			

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	B2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			
28	D2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	B3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			
29	D3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	B4	45	Total	C	N	O	S	0	0	1
			341	218	58	61	4			
30	D4	45	Total	C	N	O	S	0	0	1
			341	218	58	61	4			

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	B5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	D5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	B6	50	Total	C	N	O	S	0	0	0
			433	270	88	71	4			
32	D6	50	Total	C	N	O	S	0	0	0
			433	270	88	71	4			

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	B7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			
33	D7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			

- Molecule 34 is a protein called 50S RIBOSOMAL PROTEIN L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	B8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			
34	D8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			

- Molecule 35 is a protein called 50S RIBOSOMAL PROTEIN L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	B9	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
35	D9	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 36 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BA	2901	Total	C	N	O	P	0	0	0
			62474	27806	11681	20087	2900			
36	DA	2901	Total	C	N	O	P	0	0	0
			62474	27806	11681	20087	2900			

- Molecule 37 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BB	119	Total	C	N	O	P	0	0	0
			2551	1136	471	826	118			
37	DB	119	Total	C	N	O	P	0	0	0
			2551	1136	471	826	118			

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BC	228	Total	C	N	O	S	0	0	0
			1742	1101	319	319	3			
38	DC	228	Total	C	N	O	S	0	0	0
			1742	1101	319	319	3			

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BD	275	Total	C	N	O	S	0	0	0
			2145	1353	428	361	3			
39	DD	275	Total	C	N	O	S	0	0	0
			2145	1353	428	361	3			

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BE	205	Total	C	N	O	S	0	0	1
			1564	988	300	270	6			
40	DE	205	Total	C	N	O	S	0	0	1
			1564	988	300	270	6			

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BF	208	Total	C	N	O	S	0	0	1
			1624	1035	304	282	3			
41	DF	208	Total	C	N	O	S	0	0	1
			1624	1035	304	282	3			

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BG	181	Total	C	N	O	S	0	0	0
			1474	942	268	260	4			
42	DG	181	Total	C	N	O	S	0	0	0
			1474	942	268	260	4			

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BH	160	Total	C	N	O	S	0	0	1
			1223	773	229	220	1			
43	DH	160	Total	C	N	O	S	0	0	1
			1223	773	229	220	1			

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
44	BJ	131	Total	C	N	O	0	0	1
			651	390	131	130			
44	DJ	131	Total	C	N	O	0	0	1
			651	390	131	130			

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L11.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	BK	141	Total	C	N	O	0	0	1
			701	420	141	140			
45	DK	141	Total	C	N	O	0	0	1
			701	420	141	140			

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BN	139	Total	C	N	O	S	0	0	1
			1105	712	207	182	4			
46	DN	139	Total	C	N	O	S	0	0	1
			1105	712	207	182	4			

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BO	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	DO	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	BP	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			
48	DP	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L16.

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

- Molecule 50 is a protein called 50S RIBOSOMAL PROTEIN L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	BR	117	Total	C	N	O		0	0	0
			960	599	202	159				
50	DR	117	Total	C	N	O		0	0	0
			960	599	202	159				

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	BS	99	Total	C	N	O		0	0	1
			771	486	155	130				
51	DS	99	Total	C	N	O		0	0	1
			771	486	155	130				

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	BT	138	Total	C	N	O	S	0	0	1
			1142	710	235	196	1			
52	DT	138	Total	C	N	O	S	0	0	1
			1142	710	235	196	1			

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	BU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			
53	DU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	BV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			
54	DV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	BW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			
55	DW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			

- Molecule 56 is a protein called 50S RIBOSOMAL PROTEIN L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
56	BX	93	Total	C	N	O	0	0	1
			726	471	132	123			
56	DX	93	Total	C	N	O	0	0	1
			726	471	132	123			

- Molecule 57 is a protein called 50S RIBOSOMAL PROTEIN L24.

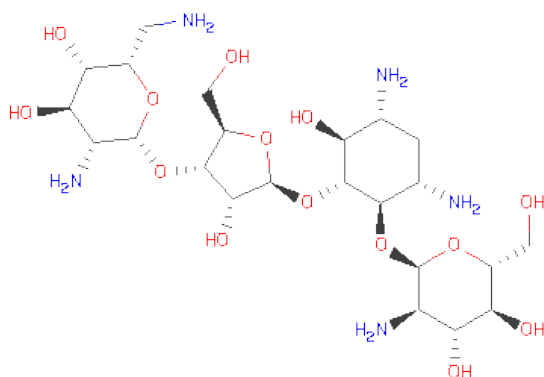
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	BY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			
57	DY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			

- Molecule 58 is a protein called 50S RIBOSOMAL PROTEIN L25.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	BZ	176	Total	C	N	O	S	0	0	0
			1403	897	252	252	2			
58	DZ	176	Total	C	N	O	S	0	0	0
			1403	897	252	252	2			

- Molecule 59 is PAROMOMYCIN (three-letter code: PAR) (formula:  $C_{23}H_{45}N_5O_{14}$ ).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
59	AA	1	Total	C	N	O	0	0
			42	23	5	14		
59	CA	1	Total	C	N	O	0	0
			42	23	5	14		

- Molecule 60 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	B4	1	Total	Zn	0	0
			1	1		
60	CN	1	Total	Zn	0	0
			1	1		
60	AN	1	Total	Zn	0	0
			1	1		
60	B9	1	Total	Zn	0	0
			1	1		
60	D9	1	Total	Zn	0	0
			1	1		
60	D4	1	Total	Zn	0	0
			1	1		

Continued on next page...

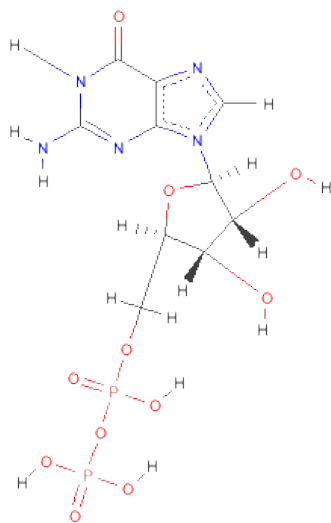
Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	CD	1	Total	Zn	0	0
			1	1		
60	AD	1	Total	Zn	0	0
			1	1		

- Molecule 61 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

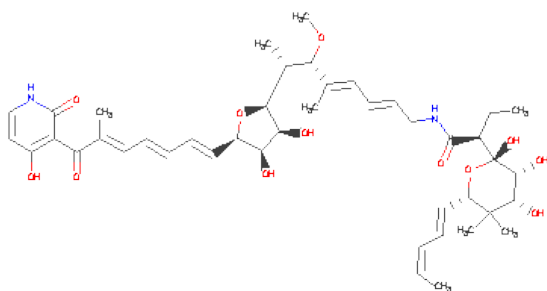
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	AY	1	Total	Mg	0	0
			1	1		
61	CY	1	Total	Mg	0	0
			1	1		

- Molecule 62 is GUANOSINE-5'-DIPHOSPHATE (three-letter code: GDP) (formula:  $C_{10}H_{15}N_5O_{11}P_2$ ).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
62	AZ	1	Total	C	N	O	P	0	0
			28	10	5	11	2		
62	CZ	1	Total	C	N	O	P	0	0
			28	10	5	11	2		

- Molecule 63 is KIRROMYCIN (three-letter code: KIR) (formula:  $C_{43}H_{60}N_2O_{12}$ ).



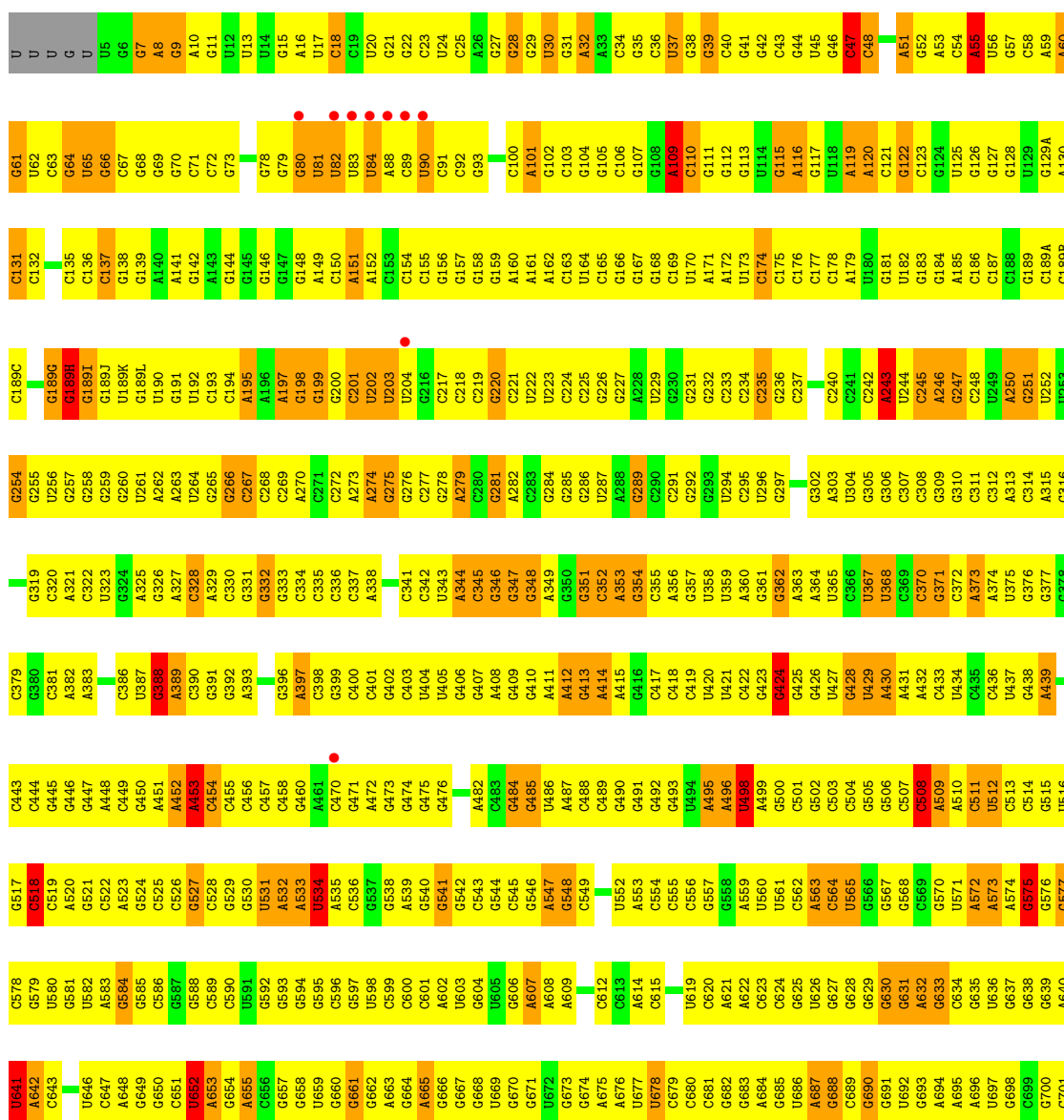
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
63	AZ	1	Total	C	N	O	0	0
			57	43	2	12		
63	CZ	1	Total	C	N	O	0	0
			57	43	2	12		

### 3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry 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

Chain AA: 



A1507	G1441	U1381	G1321	G1253	G1193	C1132	G1072	G1011	A889	G823	G763	A702
G1508	G1442	C1382	C1322	G1254	U1194	G1133	U1073	U1012	G890	G824	G764	G703
C1509	G1443	C1383	G1323	G1255	G1195	G1134	G1074	G1013	G891	G825	G765	A704
U1510	A1442B	G1384	A1324	A1256	U1196	U1135	C1075	A1014	G892	G826	A766	U705
G1511	G1443	G1385	G1325	U1257	G1197	U1136	C1076	A1015	G893	U827	A767	A706
U1512	G1444	G1386	C1326	G1258	G1198	C1137	G1077	A1016	G894	A828	A768	G707
A1513	G1445	G1387	G1327	C1259	U1199	G1138	U1078	G1017	G895	G829	G769	G708
C1514	U1446	C1388	C1328	G1260	U1200	G1139	G1079	C1018	G896	G830	G770	G709
G1515	A1447	C1389	A1329	A1261	A1201	C1140	A1080	C1019	G897	C832	U772	G711
G1516	C1452	U1390	U1330	C1262	G1202	C1141	G1081	U1020	G898	G833	U773	A712
G1517	G1456	U1391	G1331	C1263	C1203	G1142	G1082	G1021	G899	U833	G774	G713
A1518	G1457	C1392	A1332	C1264	A1204	U1143	U1083	C1022	A900	C834	G775	G714
A1519	C1393	U1393	A1333	A1269	U1205	G1144	G1084	G1024	A901	U835	G776	A715
G1520	A1460	A1394	G1334	C1270	G1206	G1145	C1085	U1025	G902	G836	A777	A716
G1521	G1461	C1395	C1335	G1271	G1207	A1146	U1086	G1026	G903	G837	G778	C719
U1522	G1462	G1396	C1336	G1272	C1208	C1147	G1087	C1027	C904	G838	G779	G720
G1523	G1463	C1397	G1337	G1274	C1209	U1148	G1088	C1028	U905	U839	G780	G721
C1524	G1464	A1398	G1338	A1275	C1210	C1149	G1089	C1030	A908	C840	A781	G722
G1525	G1465	C1399	A1339	G1276	U1211	U1150	U1090	G1030A	A909	C841	A782	G723
G1526	C1466	C1400	C1340	C1277	U1212	A1151	U1091	G1031	C912	C849	C783	U724
C1527	G1467	G1401	C1342	U1278	C1213	A1152	A1092	G1032	G913	U850	C784	G725
U1528	A1468	C1402	G1343	A1279	C1214	C1153	A1093	G1033	A913	G851	G785	G726
G1529	G1469	G1403	C1344	A1280	G1215	G1154	G1094	G1034	A914	G852	G786	G727
C1530	G1470	C1404	U1345	U1281	G1216	G1155	U1095	G1035	A915	G853	A787	A728
G1531	G1471	G1405	A1346	C1282	C1217	G1156	C1096	C1036	G916	G854	U788	A729
U	U1472	U1406	G1347	G1283	C1218	A1157	C1097	C1038	A917	G855	U789	G730
C	A1473	C1348	A1348	C1284	U1219	C1158	C1098	G1039	G918	C856	A790	G731
A	G1474	A1408	A1349	A1285	G1220	U1159	G1099	U1040	G980	C857	G791	G732
C	G1475	C1409	C1350	A1286	G1221	G1160	C1100	A1041	A919	G858	A792	A733
C	G1476	G1410	U1351	A1287	G1222	C1161	A1101	G1042	U920	G859	U793	G734
U	G1477	C1411	C1352	A1288	C1223	C1162	A1102	C1043	G922	A860	A794	C735
C	C1478	C1412	G1353	A1289	G1224	C1163	C1103	A1044	C984	G861	G795	C736
C	G1479	A1413	C1354	G1290	A1225	G1164	G1104	C1045	C985	G862	C796	A737
U	G1480	U1414	G1355	G1291	C1226	C1165	A1105	U1046	C986	U863	G797	G738
U	U1481	G1415	G1356	U1292	C1227	G1166	G1106	G1047	G925	A864	G798	C739
C	G1482	G1416	A1357	U1293	C1228	A1168	C1107	C1048	G927	G865	G799	U740
C	A1483	G1417	U1358	C1298	A1229	A1169	G1108	G1049	G928	C866	G800	G741
U	A1484	A1418	C1359	A1299	C1230	A1170	C1109	C1050	C989	G867	U801	A742
C	U1485	C1360	A1360	G1231	G1231	G1171	A1110	G1051	G990	C868	A802	G743
C	G1486	C1420	G1361	U1232	U1232	C1172	A1111	U1052	U991	C930	G803	U744
C	G1487	G1421	C1362	U1301	G1233	G1173	C1112	C1053	G992	C931	G804	C745
C	G1488	G1422	C1363	U1302	C1234	G1174	C1113	G1054	G993	C932	U804	C746
G1489	A1363A	G1423	A1363A	C1303	U1235	G1175	C1114	C1055	A994	G933	C805	A746
C1490	C1424	C1424	U1364	G1304	A1236	A1176	C1115	C1056	C995	A872	C806	C747
G1491	U1425	U1425	G1365	G1305	C1237	G1177	C1116	U1057	A996	G873	A807	C748
A1492	C1426	C1426	A1306	A1306	U1238	G1178	G1117	G1058	C936	G874	C808	C749
A1493	U1427	U1427	C1367	U1307	A1239	A1179	C1118	C1059	A937	C875	G809	G750
G1494	A1428	A1428	C1368	U1308	U1240	A1180	C1119	C1060	A938	G876	C810	U751
U1495	C1429	C1429	C1369	G1309	G1241	G1181	C1120	G1061	G939	C877	C811	G752
C1496	C1430	C1430	G1370	G1310	C1242	G1182	U1121	C1062	C940	G878	C812	A753
C	G1497	C1431	G1371	G1311	C1243	A1183	U1122	U1063	G941	C879	U813	C754
U1498	G1432	G1432	U1372	G1312	C1244	G1184	C1123	G1064	G942	C880	A814	G755
A1499	A1433	A1433	G1373	U1313	C1245	G1185	A1124	C1065	U943	G881	A815	C756
A1500	A1434	A1434	A1374	C1314	C1246	G1186	U1125	U1066	A1004	C882	A816	G757
C1501	G1435	G1435	A1375	U1315	U1247	G1187	U1126	C1066	A1005	G883	C817	U758
A1502	U1436	U1436	A1376	G1316	A1248	A1188	C1127	A1067	G946	U884	G818	G759
A1503	C1437	C1437	A1377	C1317	C1249	C1189	C1128	G1068	G947	G885	A819	A760
G1504	G1438	G1438	C1378	A1318	C1250	G1190	C1129	C1069	C948	C886	U820	G761
C	C1439	C1439	U1379	A1319	A1251	A1191	G1130	U1070	G949	G887	C821	C762
C	U1505	U1505	U1380	C1320	C1252	C1192	C1131	C1071	A950	G888	G822	A763

- Molecule 1: 16S RIBOSOMAL RNA

Chain CA:

[illegible]

G1010	G1011	G951	G890	C824	C764	G701	A640	G577	G517	C443	C381	G319	U956	C193C	C131	G61
G1012	G1013	G952	U891	G825	G765	A702	U641	C578	C518	C444	A382	C320	G257	G189C	C132	U62
G1014	G1015	G953	A892	C826	A766	G703	A642	C579	C519	G445	A383	A321	G258	G189G	G135	G63
A1016	A1017	G954	G893	U827	A767	A704	C643	U580	A520	G446	G386	C322	G259	G189H	G136	G64
G1018	G1019	U955	G894	A828	A768	A705	U646	U581	G521	G447	U387	U323	G260	G189I	G137	U65
G1020	G1021	U956	G895	G829	G769	A706	C647	U582	C522	A448	G388	G324	U261	G189J	G138	G66
G1022	G1023	U957	C897	U831	G771	C707	A648	U583	A523	C449	A389	A325	A262	U189K	G139	C67
G1024	G1025	A958	G898	C832	U772	C708	A649	U584	G524	C450	G390	A327	A263	U189L	G140	C68
G1026	G1027	A959	C899	U833	G773	G709	A648	U585	C525	A451	A391	A141	U264	U190	G141	C69
G1028	G1029	U960	A900	C834	G774	G710	G650	U586	G527	A452	G392	A328	G266	U191	G142	C70
G1030	G1031	U961	A901	U835	G775	A712	U652	U588	C528	A453	A393	A329	C267	U192	G143	C71
G1032	G1033	C962	G902	G836	G776	G713	A653	U589	C529	C454	G394	C330	C268	U193	G144	C72
G1034	G1035	G963	G903	G837	A777	G714	A654	C590	G530	C455	G395	G332	C269	C194	G145	C73
G1036	G1037	A964	C904	G838	G778	A715	A655	U591	U531	C457	G396	G333	A270	A195	G146	G78
G1038	G1039	A965	U905	U839	G779	A716	C656	U592	A532	C458	A397	C334	C271	A196	G147	G79
G1040	G1041	G966	U906	C940	A780	G719	G657	U593	A533	C459	G398	C335	C272	G198	G148	G80
G1042	G1043	C967	G907	U841	A781	C720	G658	U594	U534	A460	G399	C336	A273	G199	G149	U81
G1044	G1045	A968	A907	U842	A782	G721	U659	U595	A535	C470	C400	C337	A274	G200	C150	U82
G1046	G1047	A969	A908	C948	A783	G722	G660	U596	C536	C471	C401	A338	G275	G201	C151	U83
G1048	G1049	C970	A909	C949	C783	A723	G661	C597	G542	A472	G402	C341	G276	U202	A152	U84
G1050	G1051	G971	C912	U850	G784	U723	G662	U598	G543	A473	G403	C342	C277	U203	C153	A88
G1052	G1053	C972	A913	G851	G785	G724	G663	U599	A539	C474	U404	C343	C278	U204	C154	C89
G1054	G1055	G973	G914	G852	G786	G725	A663	U605	C545	C475	U405	C344	C279	U205	C155	U90
G1056	G1057	A974	A915	G853	A787	G726	G664	C601	G546	C476	G406	C345	C280	G216	C156	C91
G1058	G1059	C974	G916	G854	U788	C727	G665	C602	G547	G477	G407	C346	C281	G217	C157	C92
G1060	G1061	A975	G917	G855	U789	G728	G666	A602	G548	G478	G408	C347	C282	G218	C158	C93
G1062	G1063	C975	A918	C857	A790	A729	G667	U603	C549	A482	U409	C348	C283	G220	G159	C100
G1064	G1065	G976	U920	U858	A791	G730	G668	U604	G550	C483	G410	C349	C284	G221	C160	A101
G1066	G1067	A977	A919	G859	A792	G731	U669	U605	U551	C484	G411	C350	C285	U222	C161	G102
G1068	G1069	C978	U921	A860	A794	C732	G671	A607	G552	C485	A412	C351	C286	U223	C162	G103
G1070	G1071	U981	G922	G861	C795	A733	U672	A608	G553	C486	G413	C352	C287	U224	C163	C104
G1072	G1073	A982	A923	C862	C796	G734	G673	A609	U554	C487	G414	C353	C288	G225	C164	G105
G1074	G1075	C984	C924	U863	G797	C735	G674	C612	U555	C488	A415	C354	C289	G226	C165	C106
G1076	G1077	G985	G925	A864	G798	C736	A675	G613	U556	C489	G416	C355	C290	G227	C166	G107
G1078	G1079	A986	G926	A865	G799	A737	U676	A614	U557	C490	C417	C356	C291	U228	C167	G108
G1080	G1081	C987	G927	C866	G800	C738	U677	A615	A558	C491	C418	C357	C292	U229	C168	A109
G1082	G1083	G988	G928	G867	U801	C739	U678	C615	C554	C492	C419	C358	C293	G230	C169	C110
G1084	G1085	C989	G929	C868	A802	U740	C679	U619	C555	U494	U420	C359	C294	G231	C170	G111
G1086	G1087	A990	C930	G869	G803	G741	C680	C620	C556	A495	U421	C360	C295	G232	C171	G112
G1088	G1089	U991	U931	U870	U804	G742	C681	A621	G557	U496	C422	C361	C296	G233	C172	G113
G1090	G1091	C992	C932	U871	C805	U743	G682	G622	U558	U497	G423	C362	C297	G234	C173	G114
G1092	G1093	A993	G933	A872	C806	G744	G683	A623	A559	C498	G424	C363	G302	G235	C174	G115
G1094	G1095	C994	C934	G873	G807	C745	U684	C624	U560	C500	G425	C364	G303	G236	C175	A116
G1096	G1097	A995	A935	G874	C808	A746	G685	C625	U561	C501	G426	C365	G304	G237	C176	G117
G1098	G1099	C996	C936	C875	G809	C747	U686	U626	C562	G502	U427	C366	G305	G238	C177	G118
G1100	G1101	U997	A937	G876	C810	C748	A687	U627	A563	C503	G428	C367	G306	G239	C178	U119
G1102	G1103	G998	A938	C877	C811	C749	G688	G627	C564	C504	U429	C368	G307	G240	C179	A120
G1104	G1105	C999	G939	G878	C812	G750	C689	G628	U565	G505	A430	C369	C308	U244	C180	G121
G1106	G1107	A999	C940	C879	U813	U751	G690	G629	G566	G506	A431	C370	G309	G245	C181	G122
G1108	G1109	U1000	G941	C880	A814	G754	G691	G630	G567	C507	A432	C371	G310	G246	C182	U123
G1110	G1111	A1001	G942	U881	A815	C755	U692	G631	G568	C508	C433	C372	G311	A247	C183	G124
G1112	G1113	G1001A	U943	C882	A816	G756	G693	A632	C569	C509	U434	C373	G312	G247	C184	U125
G1114	G1115	G1002	G944	C883	C817	C757	A694	G633	G570	A510	C435	A374	G313	G248	C185	G126
G1116	G1117	U1003	G945	U884	G818	U757	A695	G634	U571	C511	C436	C375	G314	G249	C186	G127
G1118	G1119	A1004	A946	G885	A819	G758	A696	G635	A572	U512	U437	C376	G315	G250	C187	G128
G1120	G1121	G1005	G947	G886	U820	G759	U697	U636	A573	C513	G438	C377	G316	U252	C188	U129
G1122	G1123	C1006	C948	G887	G821	G761	G698	G637	A574	C514	A439	C378	G317	U253	C189	G129A
G1124	G1125	U1007	A949	G888	C822	C762	C999	G638	G575	C515	A441	C379	G318	G254	C190	G129B
G1126	G1127	G1008	U950	A889	G823	G763	G700	G639	G576	U516	C442	C380	G319	G255	C191	A130

G1069	G1129	G1190	G1250	A1318	G1378	C1439	G1504
U1070	A1130	A1191	A1251	A1319	G1379	C1440	G1505
C1071	G1131	A1192	A1252	C1320	U1380	G1441	U1506
G1072	G1132	G1193	G1253	C1321	U1381	G1442	A1507
U1073	G1133	G1194	G1254	C1322	C1382	A1442A	G1508
G1074	G1134	C1195	G1255	G1323	C1383	G1443	C1509
C1075	U1135	U1196	A1256	A1324	C1384	G1444	U1510
G1076	U1136	G1197	U1257	C1325	G1385	G1445	G1511
G1077	C1137	G1199	G1258	C1326	G1386	G1446	U1512
U1078	G1138	U1199	C1259	C1327	G1387	A1447	A1513
G1079	G1139	C1200	C1260	C1328	C1388	G1448	G1514
A1080	C1140	A1201	A1261	A1329	C1389	G1452	C1515
G1081	C1141	G1202	C1262	U1330	U1390	G1456	G1516
G1082	G1142	C1203		G1331	U1391	G1457	G1517
U1083	G1143	A1204	A1269	A1332	G1392	G1458	A1518
G1084	G1144	U1205	C1270	A1333	U1393	G1459	A1519
U1085	C1145	G1206	G1271	G1334	A1394	A1460	G1520
U1086	A1146	G1207	G1272	C1335	C1395	G1461	G1521
G1087	C1147	C1208	G1273	C1336	A1396	G1462	U1522
G1088	U1148	C1209	G1274	G1337	C1397	G1463	G1523
G1089	C1149	C1210	A1275	G1338	A1398	G1464	G1524
U1090	U1150	U1211	G1276	C1339	C1399	C1465	G1525
U1091	A1151	U1212	C1277	A1339	C1400	G1466	G1526
A1092	A1152	U1213	U1278	G1401	G1402	G1467	C1527
C1093	C1153	C1214	A1279	G1342	C1403	G1468	U1528
C1100	G1154	G1215	A1280	C1343		G1469	G1529
A1101	G1155	G1216	U1281	U1345	U1406	G1470	G1530
A1102	C1156	C1217	C1282	A1346	G1407	G1471	A1531
C1103	C1162	C1218	G1283	G1347	C1408	U1472	U
G1104	G1164	U1219	C1284	U1348	A1408	A1473	C
A1105	C1165	C1220	A1285	A1349	C1409	G1474	A
G1106	G1166	G1221	U1286	A1350	G1410	G1475	C
C1107	A1168	G1222	A1287	U1351	C1411	G1476	C
G1108	A1169	C1223	U1288	C1352	C1412	C1477	U
C1109	A1170	G1230	C1289	G1353	A1413	C1478	C
G1110	G1171	G1231	G1290	C1354	U1414	G1479	C
A1111	C1172	U1232	G1291	G1355	G1415	G1480	U
C1112	G1173	C1233	U1292	G1356	G1416	U1481	U
C1113	G1174	C1234	G1293	C1357	G1417	G1482	C
G1114	G1175	U1235	U1300	G1361	A1418	C1483	U
C1115	A1176	A1236	U1302	C1362	C1419	G1484	
C1116	G1177	C1237	G1303	C1363	C1420	U1485	
G1117	G1178	A1238	G1306	A1363A	G1421	G1486	
C1118	A1179	U1239	A1306	U1364	G1422	G1487	
C1119	G1180	U1240	U1307	G1365	G1423	G1488	
G1120	G1181	G1241	U1308	C1366	C1429	G1489	
U1121	G1182	C1242	G1309	G1367	C1430	C1490	
U1122	A1183	C1243	G1310	G1368	C1431	G1491	
G1123	G1184	C1244	G1311	G1370	G1432	G1492	
A1124	G1185	C1245	U1312	U1371	A1433	U1493	
U1125	G1186	C1246	U1313	G1372	A1434	A1494	
U1126	G1187	C1247	C1314	A1374	G1435	U1495	
G1127	A1188	A1248	G1315	U1375	U1436	A1496	
C1128	C1189	C1249	G1316	G1376	C1437	A1500	
			G1317	A1377	G1438	A1502	
						A1503	

• Molecule 2: 30S RIBOSOMAL PROTEIN S2

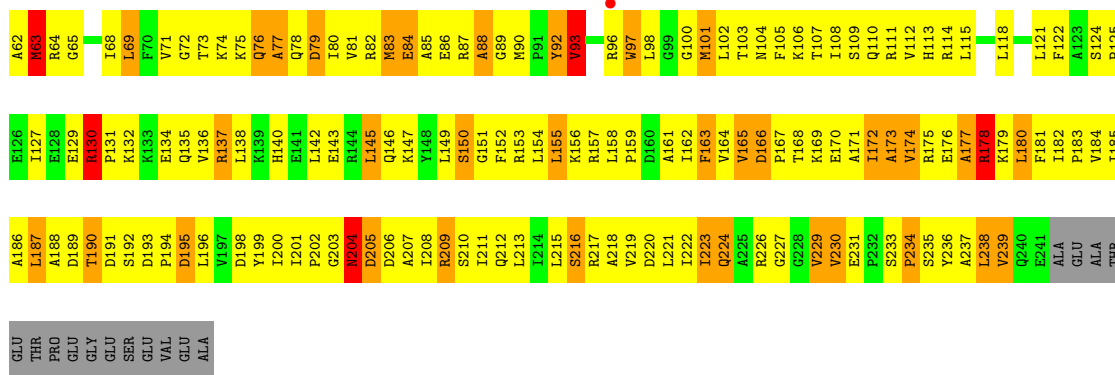
Chain AB:

MET	A62	P125	I185	THR
PRO	M63	E126	A186	GLU
VAL	R64	E127	A187	THR
GLU	G65	E128	A188	PRO
ILE		E129	D189	GLU
THR	I68	R130	T190	GLY
V7	L69	P131	D191	GLU
K8	F70	K132	S192	SER
E9	V71	K133	D193	GLU
L10	G72	E134	P194	VAL
L11	T73	Q135	D195	GLU
E12	K74	V136	L196	ALA
A13	K75	R137	V197	
G14	Q76	L138	D198	
V15	A77	K139	Y199	
H16	Q78	H140	T200	
F17	D79	E141	T201	
G18	I80	L142	P202	
H19	V81	E143	G203	
R82	R82	R144	N204	
M83	R21	L145	D205	
E84	R22	K146	D206	
A85	R23	K147	A207	
E86	W24	Y148	T208	
R87	N25	L149	R209	
A88	P26	S150	S210	
G89	K27	G151	T211	
M90	F28	F152	Q212	
A29	P91	R153	A29	
R30	Y92	L154	L213	
Y31	R93	L155	L214	
N94	Q95	K156	L215	
G96	R96	L157	S216	
L98	W97	L158	R217	
G99	L98	D160	A218	
M101	G100	I162	V219	
L102	L102	F163	D220	
T103	N104	V165	L221	
I42	F105	D166	G38	
D43	K106	P167	L39	
L44	T107	T168	I41	
Q45	I108	K169	I42	
K46	S109	E170	D43	
T47	Q110	A171	Q45	
M48	Q111	I172	T47	
L51	V112	A173	S232	
E52	H113	V174	S233	
R53	R114	R175	P234	
L115	L115	E176	S235	
L118	L118	A177	Y236	
L121	L121	R178	A237	
F122	F122	K179	L238	
A123	A123	L180	V239	
S124	S124	F181	Q240	
		E182	E241	
		D60	ALA	
		L61	GLU	
			ALA	

• Molecule 2: 30S RIBOSOMAL PROTEIN S2

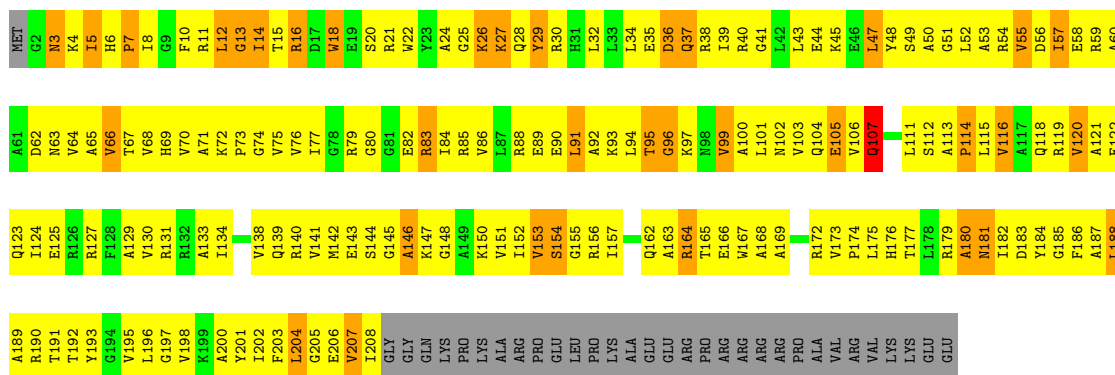
Chain CB:

MET	L51	E52	R53	F54	F55	R56	F57	I58	E59	L61
PRO	E52	R53	F54	F55	R56	F57	I58	E59	L61	
VAL	E52	R53	F54	F55	R56	F57	I58	E59	L61	
GLU	E52	R53	F54	F55	R56	F57	I58	E59	L61	
ILE	E52	R53	F54	F55	R56	F57	I58	E59	L61	
THR	E52	R53	F54	F55	R56	F57	I58	E59	L61	
V7	E52	R53	F54	F55	R56	F57	I58	E59	L61	
K8	E52	R53	F54	F55	R56	F57	I58	E59	L61	
E9	E52	R53	F54	F55	R56	F57	I58	E59	L61	
L10	E52	R53	F54	F55	R56	F57	I58	E59	L61	
L11	E52	R53	F54	F55	R56	F57	I58	E59	L61	
E12	E52	R53	F54	F55	R56	F57	I58	E59	L61	
A13	E52	R53	F54	F55	R56	F57	I58	E59	L61	
G14	E52	R53	F54	F55	R56	F57	I58	E59	L61	
V15	E52	R53	F54	F55	R56	F57	I58	E59	L61	
H16	E52	R53	F54	F55	R56	F57	I58	E59	L61	
F17	E52	R53	F54	F55	R56	F57	I58	E59	L61	
G18	E52	R53	F54	F55	R56	F57	I58	E59	L61	
H19	E52	R53	F54	F55	R56	F57	I58	E59	L61	
E20	E52	R53	F54	F55	R56	F57	I58	E59	L61	
R21	E52	R53	F54	F55	R56	F57	I58	E59	L61	
K22	E52	R53	F54	F55	R56	F57	I58	E59	L61	
R23	E52	R53	F54	F55	R56	F57	I58	E59	L61	
W24	E52	R53	F54	F55	R56	F57	I58	E59	L61	
N25	E52	R53	F54	F55	R56	F57	I58	E59	L61	
P26	E52	R53	F54	F55	R56	F57	I58	E59	L61	
K27	E52	R53	F54	F55	R56	F57	I58	E59	L61	
F28	E52	R53	F54	F55	R56	F57	I58	E59	L61	
A29	E52	R53	F54	F55	R56	F57	I58	E59	L61	
R30	E52	R53	F54	F55	R56	F57	I58	E59	L61	
Y31	E52	R53	F54	F55	R56	F57	I58	E59	L61	
I32	E52	R53	F54	F55	R56	F57	I58	E59	L61	
Y33	E52	R53	F54	F55	R56	F57	I58	E59	L61	
A34	E52	R53	F54	F55	R56	F57	I58	E59	L61	
E35	E52	R53	F54	F55	R56	F57	I58	E59	L61	
P59	E52	R53	F54	F55	R56	F57	I58	E59	L61	
R36	E52	R53	F54	F55	R56	F57	I58	E59	L61	
N37	E52	R53	F54	F55	R56	F57	I58	E59	L61	
G38	E52	R53	F54	F55	R56	F57	I58	E59	L61	
L39	E52	R53	F54	F55	R56	F57	I58	E59	L61	
H40	E52	R53	F54	F55	R56	F57	I58	E59	L61	
I41	E52	R53	F54	F55	R56	F57	I58	E59	L61	
I42	E52	R53	F54	F55	R56	F57	I58	E59	L61	
D43	E52	R53	F54	F55	R56	F57	I58	E59	L61	
L44	E52	R53	F54	F55	R56	F57	I58	E59	L61	
Q45	E52	R53	F54	F55	R56	F57	I58	E59	L61	
K46	E52	R53	F54	F55	R56	F57	I58	E59	L61	
T47	E52	R53	F54	F55	R56	F57	I58	E59	L61	
M48	E52	R53	F54	F55	R56	F57	I58	E59	L61	
L51	E52	R53	F54	F55	R56	F57	I58	E59	L61	
E52	E52	R53	F54	F55	R56	F57	I58	E59	L61	
R53	E52	R53	F54	F55	R56	F57	I58	E59	L61	
F54	E52	R53	F54	F55	R56	F57	I58	E59	L61	
F55	E52	R53	F54	F55	R56	F57	I58	E59	L61	
R56	E52	R53	F54	F55	R56	F57	I58	E59	L61	
F57	E52	R53	F54	F55	R56	F57	I58	E59	L61	
I58	E52	R53	F54	F55	R56	F57	I58	E59	L61	
E59	E52	R53	F54	F55	R56	F57	I58	E59	L61	
L61	E52	R53	F54	F55	R56	F57	I58	E59	L61	



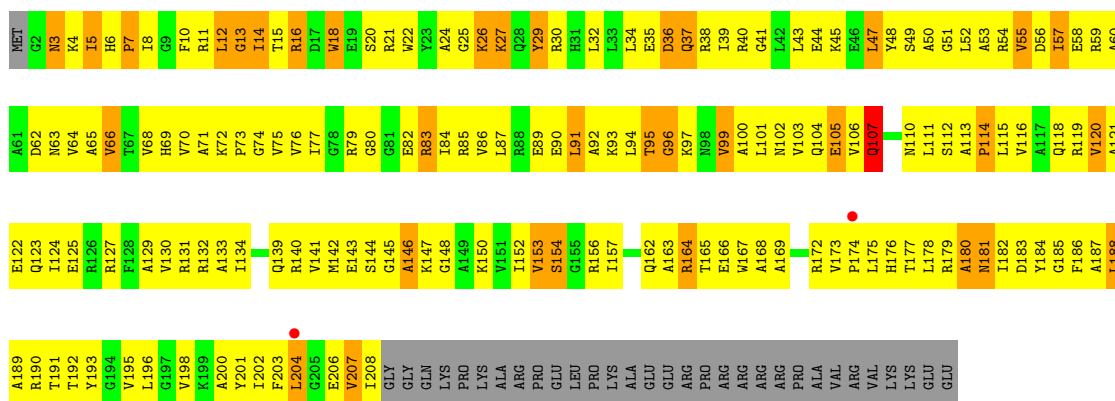
### • Molecule 3: 30S RIBOSOMAL PROTEIN S3

Chain AC:



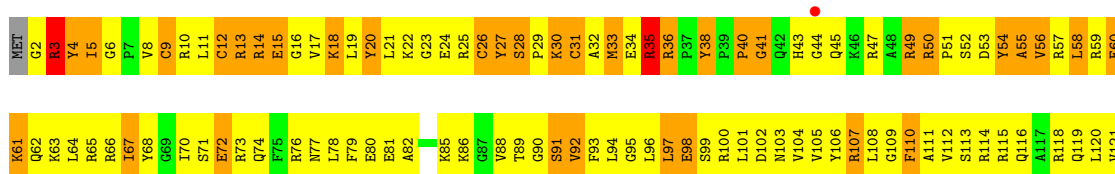
### • Molecule 3: 30S RIBOSOMAL PROTEIN S3

Chain CC:

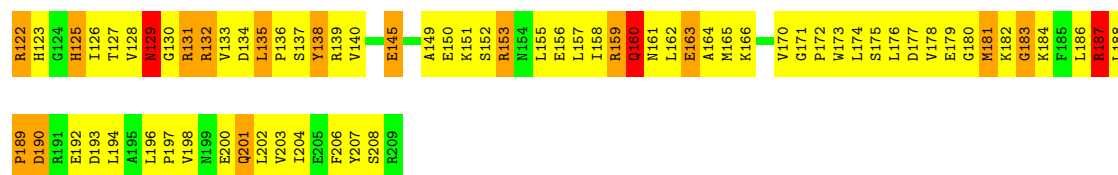


### • Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain AD:

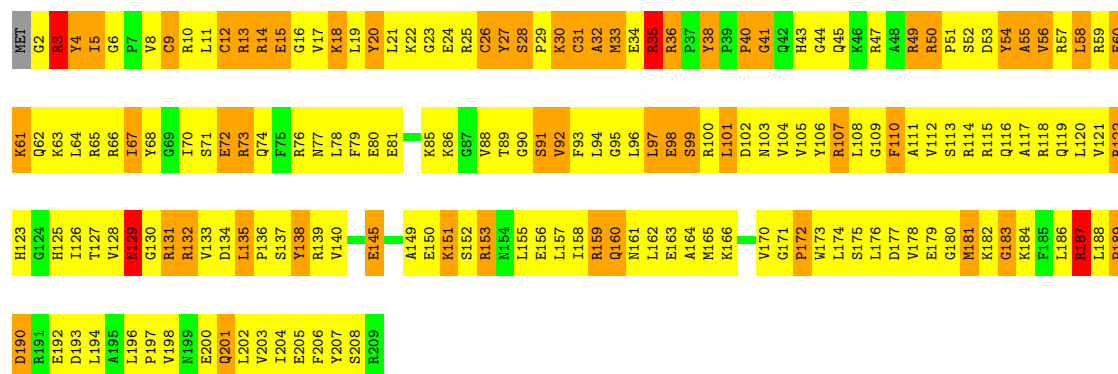






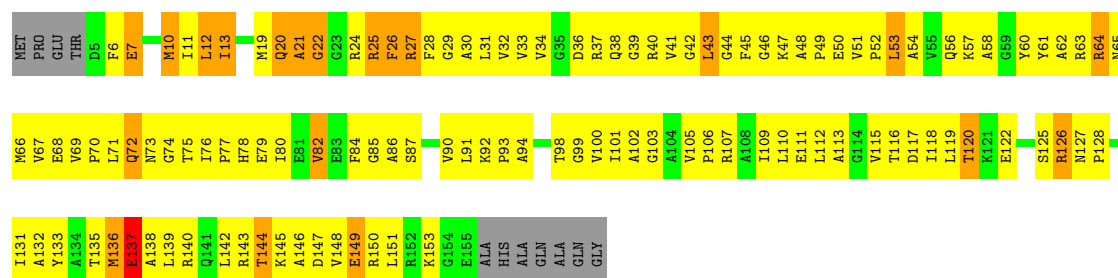
### • Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain CD:



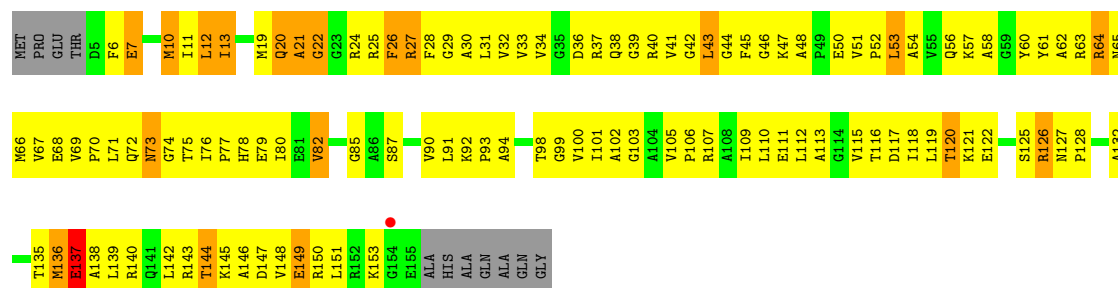
### • Molecule 5: 30S RIBOSOMAL PROTEIN S5

Chain AE:



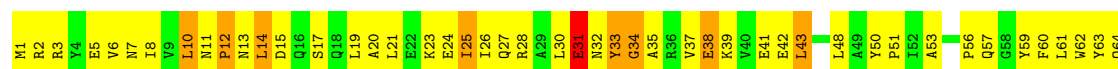
### • Molecule 5: 30S RIBOSOMAL PROTEIN S5

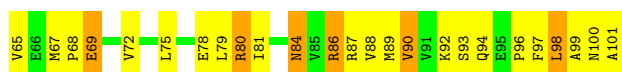
Chain CE:



### • Molecule 6: 30S RIBOSOMAL PROTEIN S6

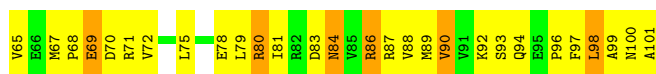
Chain AF:





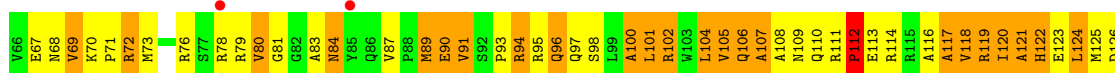
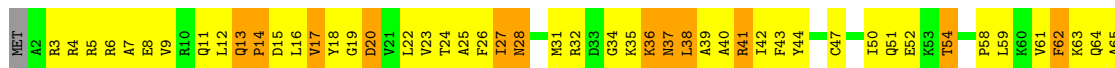
• Molecule 6: 30S RIBOSOMAL PROTEIN S6

Chain CF:



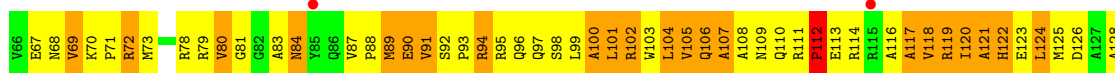
• Molecule 7: 30S RIBOSOMAL PROTEIN S7

Chain AG:



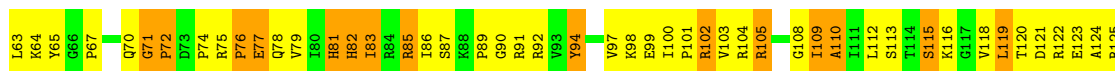
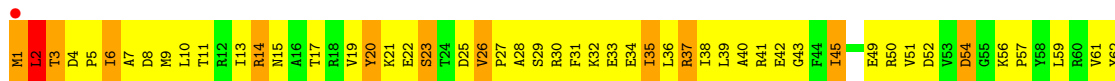
• Molecule 7: 30S RIBOSOMAL PROTEIN S7

Chain CG:



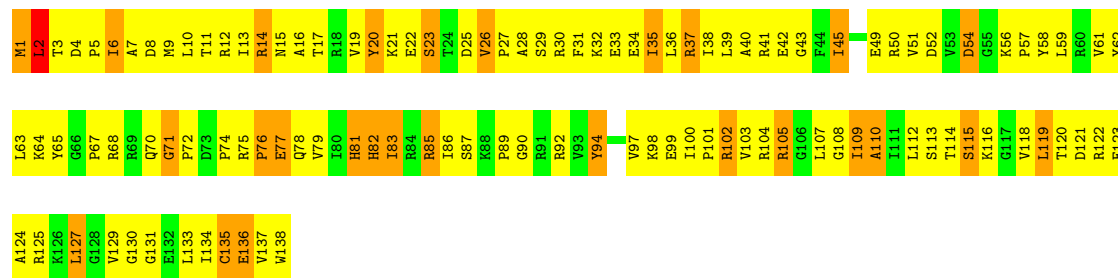
• Molecule 8: 30S RIBOSOMAL PROTEIN S8

Chain AH:



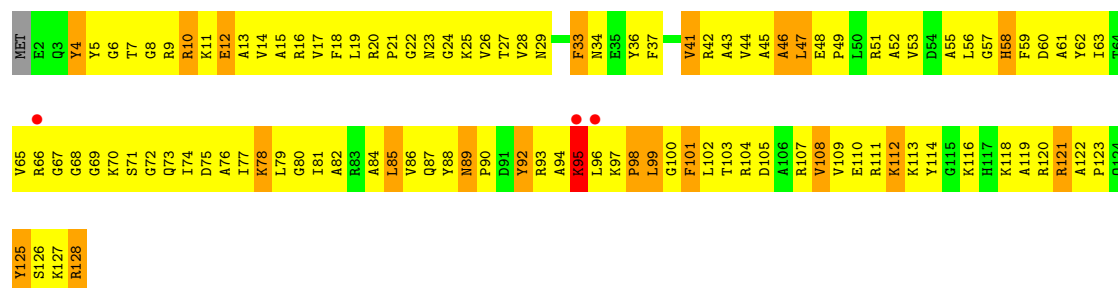
- Molecule 8: 30S RIBOSOMAL PROTEIN S8

Chain CH:



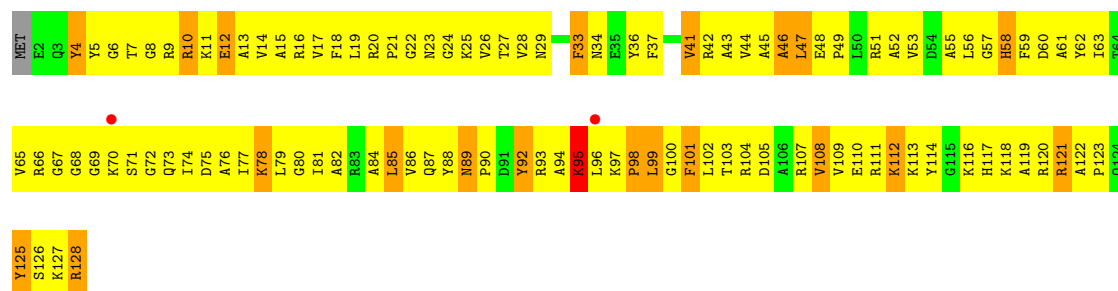
- Molecule 9: 30S RIBOSOMAL PROTEIN S9

Chain AI:



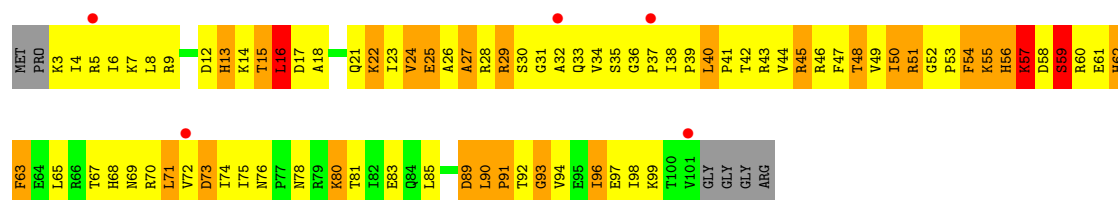
- Molecule 9: 30S RIBOSOMAL PROTEIN S9

Chain CI:



- Molecule 10: 30S RIBOSOMAL PROTEIN S10

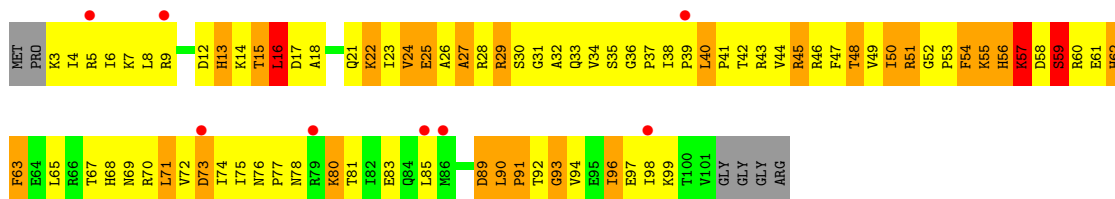
Chain AJ:



- Molecule 10: 30S RIBOSOMAL PROTEIN S10

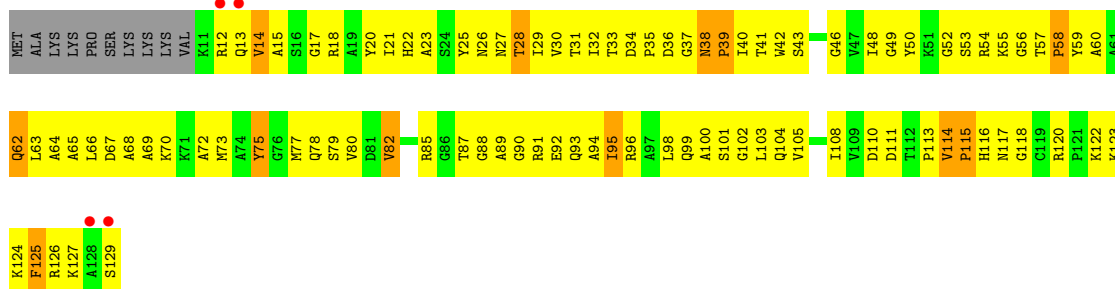
Chain CJ:





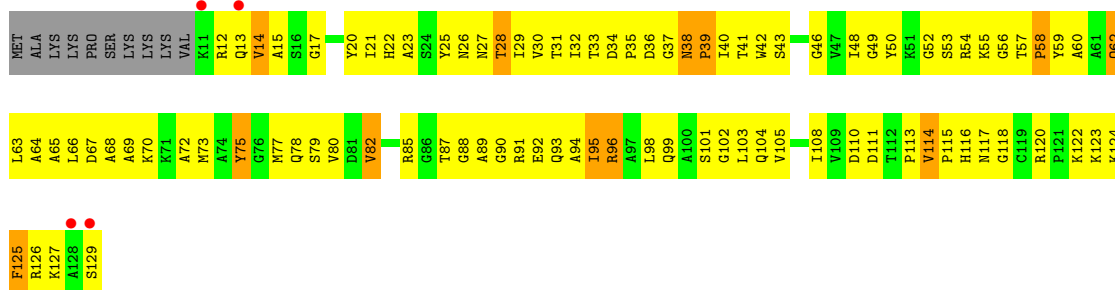
• Molecule 11: 30S RIBOSOMAL PROTEIN S11

Chain AK:



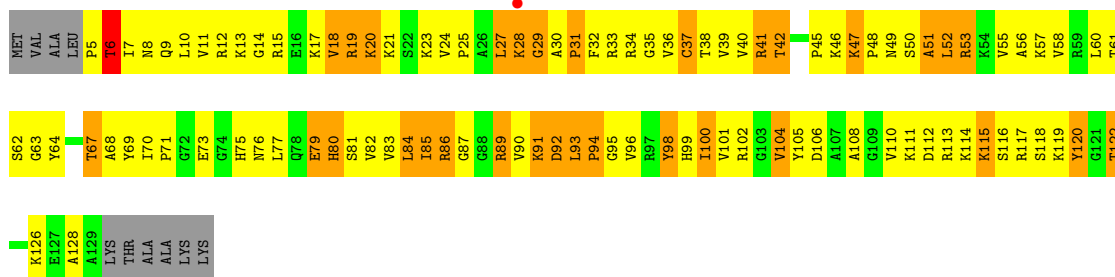
• Molecule 11: 30S RIBOSOMAL PROTEIN S11

Chain CK:



• Molecule 12: 30S RIBOSOMAL PROTEIN S12

Chain AL:



• Molecule 12: 30S RIBOSOMAL PROTEIN S12

Chain CL:

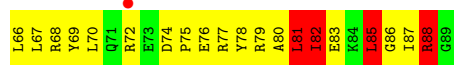






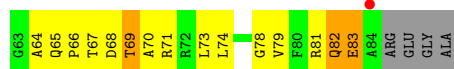
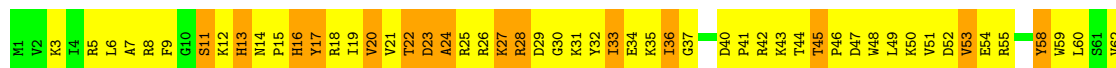
• Molecule 15: 30S RIBOSOMAL PROTEIN S15

Chain CO:



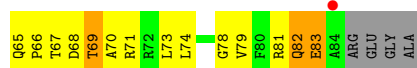
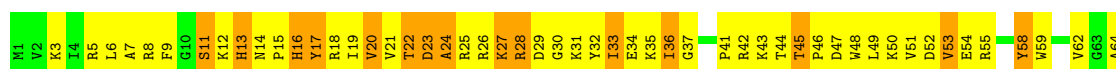
• Molecule 16: 30S RIBOSOMAL PROTEIN S16

Chain AP:



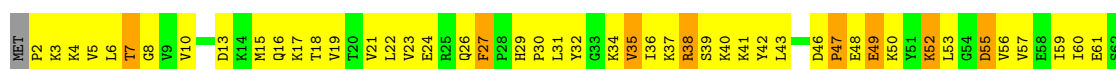
• Molecule 16: 30S RIBOSOMAL PROTEIN S16

Chain CP:



• Molecule 17: 30S RIBOSOMAL PROTEIN S17

Chain AQ:



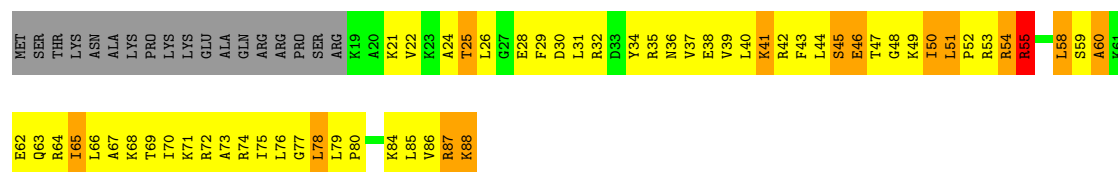
• Molecule 17: 30S RIBOSOMAL PROTEIN S17

Chain CQ:



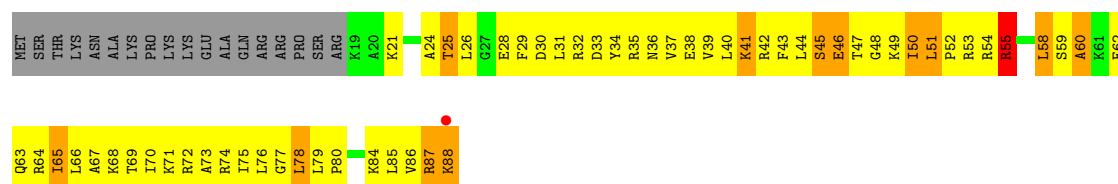
- Molecule 18: 30S RIBOSOMAL PROTEIN S18

Chain AR:



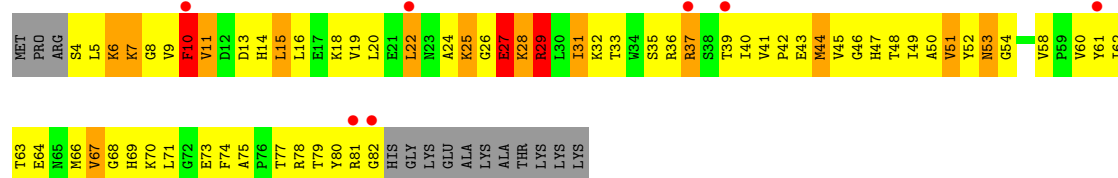
- Molecule 18: 30S RIBOSOMAL PROTEIN S18

Chain CR:



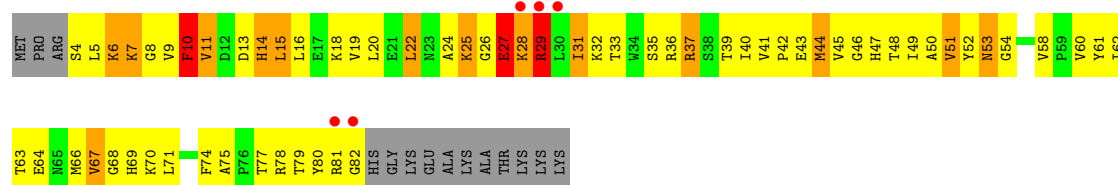
- Molecule 19: 30S RIBOSOMAL PROTEIN S19

Chain AS:



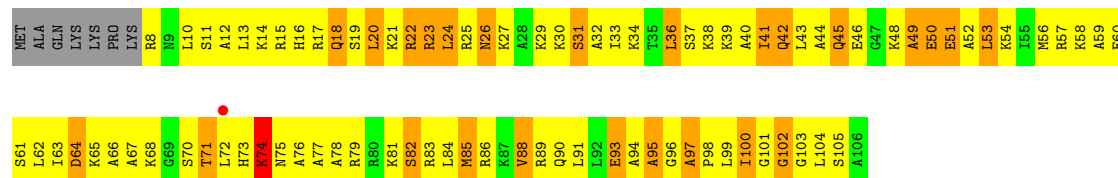
- Molecule 19: 30S RIBOSOMAL PROTEIN S19

Chain CS:



- Molecule 20: 30S RIBOSOMAL PROTEIN S20

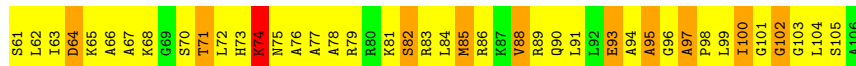
Chain AT:



- Molecule 20: 30S RIBOSOMAL PROTEIN S20

Chain CT:





- Molecule 21: 30S RIBOSOMAL PROTEIN THX

Chain AU:



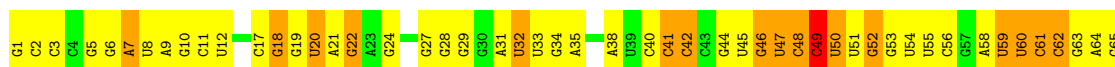
- Molecule 21: 30S RIBOSOMAL PROTEIN THX

Chain CU:



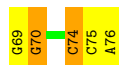
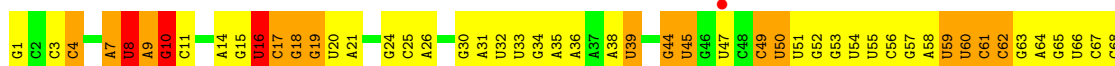
- Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE

Chain AV:



- Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE

Chain AW:



- Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE

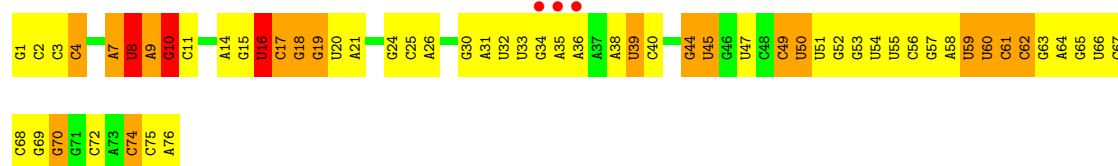
Chain CV:



- Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE

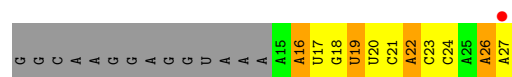
Chain CW:





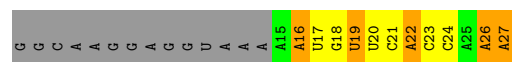
- Molecule 23: MRNA

Chain AX:



- Molecule 23: MRNA

Chain CX:



- Molecule 24: A-SITE TRNA THR

Chain AY:



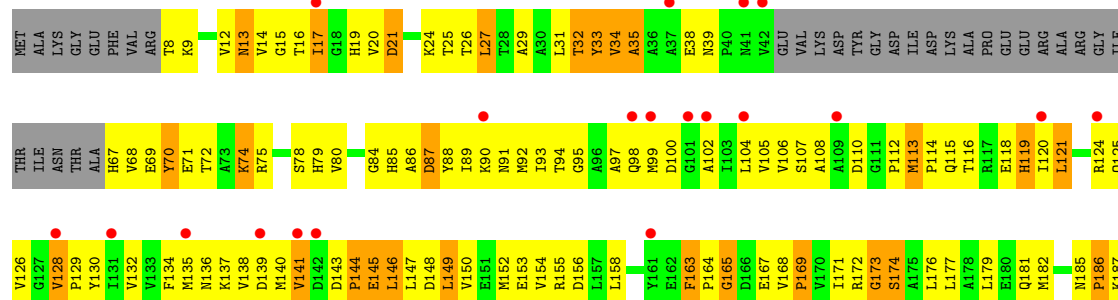
- Molecule 24: A-SITE TRNA THR

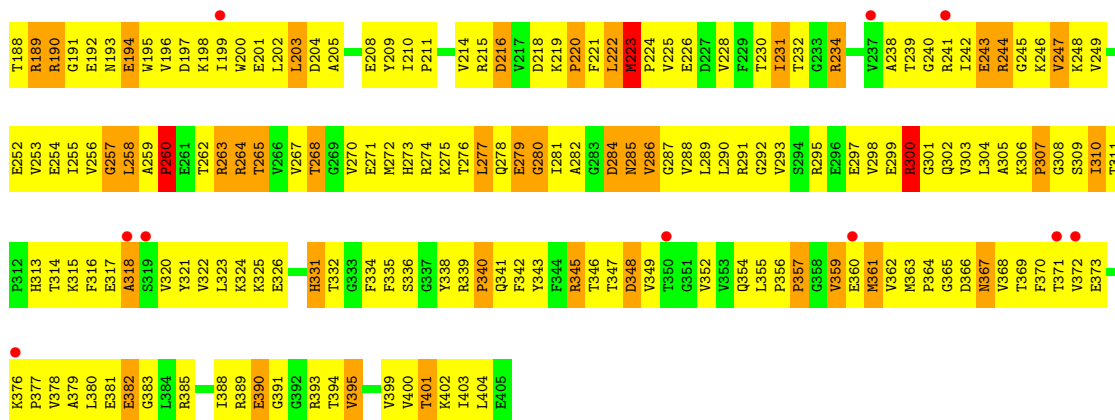
Chain CY:



- Molecule 25: ELONGATION FACTOR TU-A

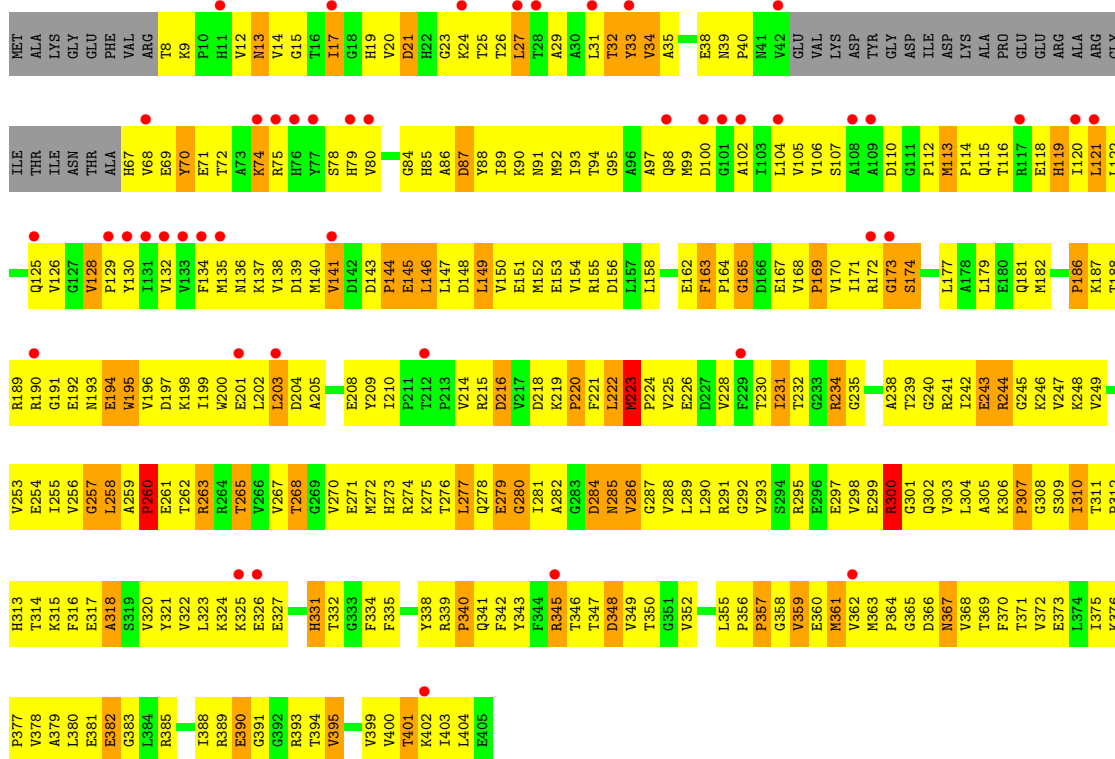
Chain AZ:





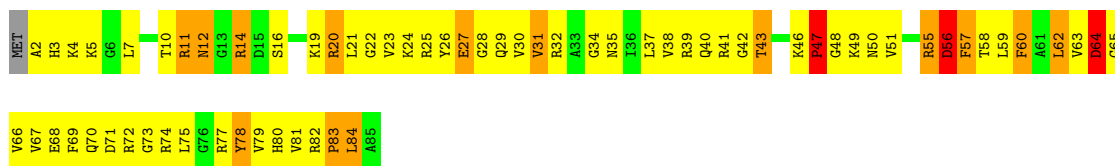
### • Molecule 25: ELONGATION FACTOR TU-A

Chain CZ:



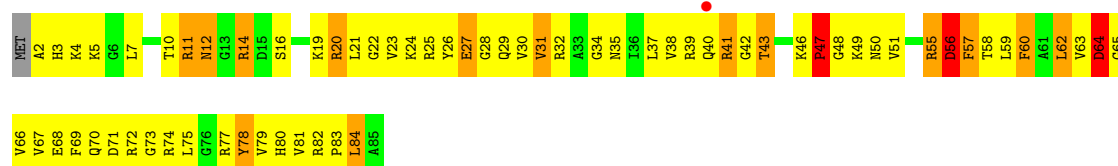
### • Molecule 26: 50S RIBOSOMAL PROTEIN L27

Chain B0:



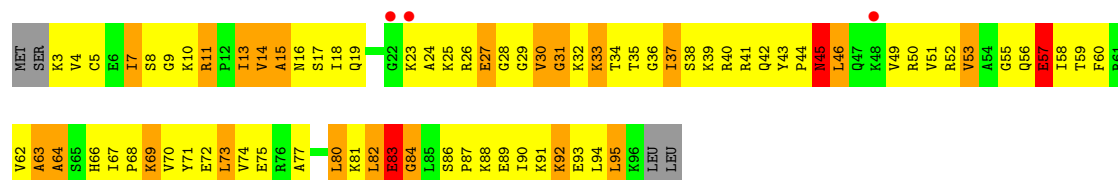
### • Molecule 26: 50S RIBOSOMAL PROTEIN L27

Chain D0:



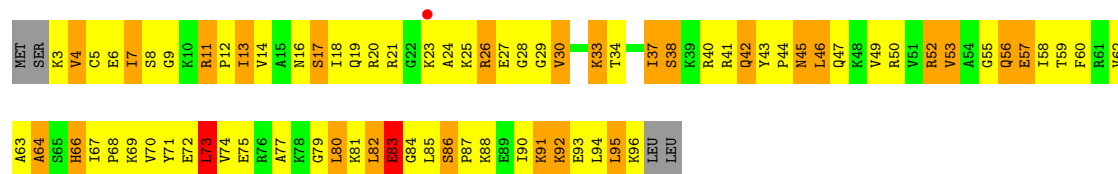
• Molecule 27: 50S RIBOSOMAL PROTEIN L28

Chain B1:



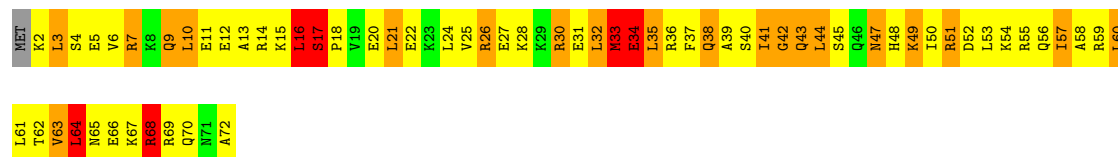
• Molecule 27: 50S RIBOSOMAL PROTEIN L28

Chain D1:



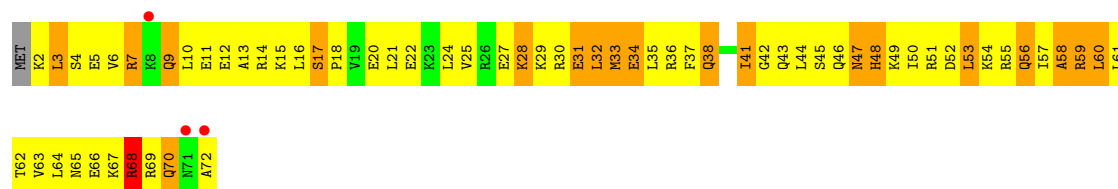
• Molecule 28: 50S RIBOSOMAL PROTEIN L29

Chain B2:



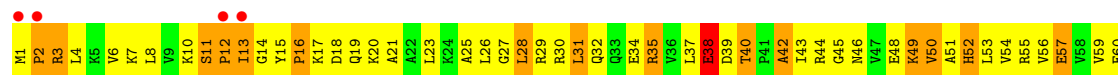
• Molecule 28: 50S RIBOSOMAL PROTEIN L29

Chain D2:



• Molecule 29: 50S RIBOSOMAL PROTEIN L30

Chain B3:



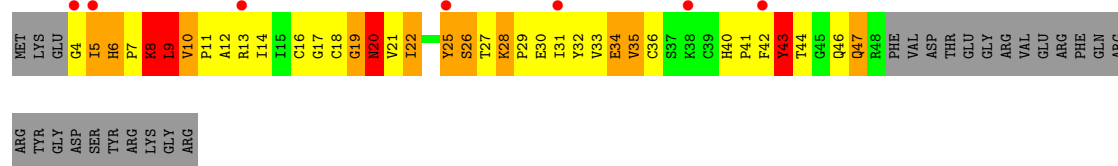
• Molecule 29: 50S RIBOSOMAL PROTEIN L30

Chain D3:



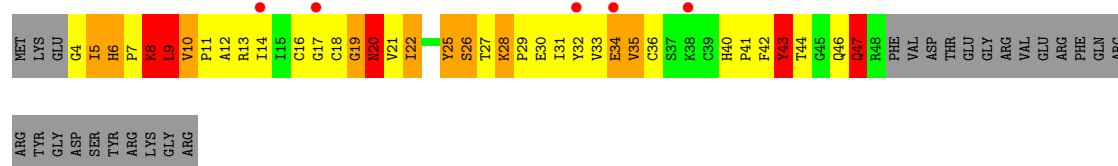
- Molecule 30: 50S RIBOSOMAL PROTEIN L31

Chain B4:



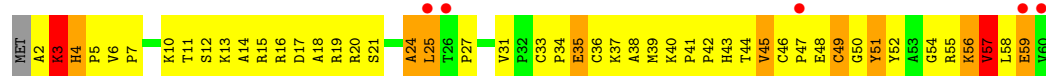
- Molecule 30: 50S RIBOSOMAL PROTEIN L31

Chain D4:



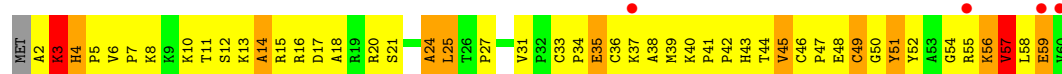
- Molecule 31: 50S RIBOSOMAL PROTEIN L32

Chain B5:



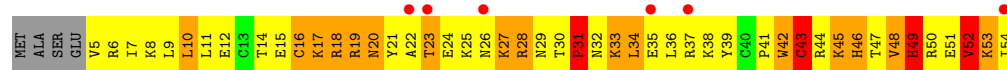
- Molecule 31: 50S RIBOSOMAL PROTEIN L32

Chain D5:



- Molecule 32: 50S RIBOSOMAL PROTEIN L33

Chain B6:



- Molecule 32: 50S RIBOSOMAL PROTEIN L33

Chain D6:



- Molecule 33: 50S RIBOSOMAL PROTEIN L34

Chain B7:



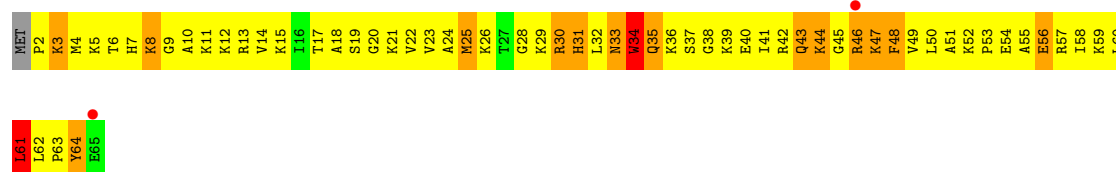
- Molecule 33: 50S RIBOSOMAL PROTEIN L34

Chain D7:



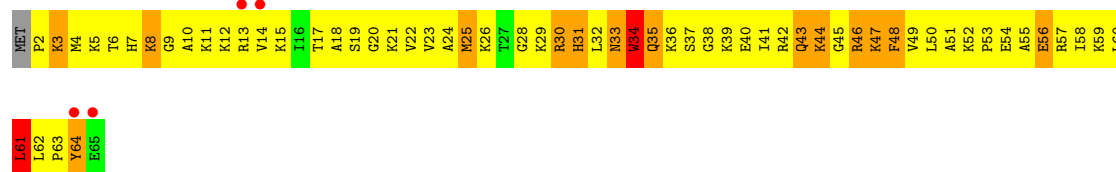
- Molecule 34: 50S RIBOSOMAL PROTEIN L35

Chain B8:



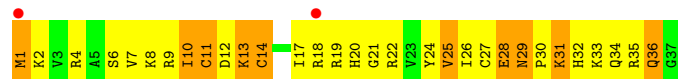
- Molecule 34: 50S RIBOSOMAL PROTEIN L35

Chain D8:



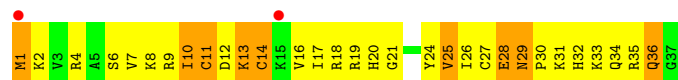
- Molecule 35: 50S RIBOSOMAL PROTEIN L36

Chain B9:



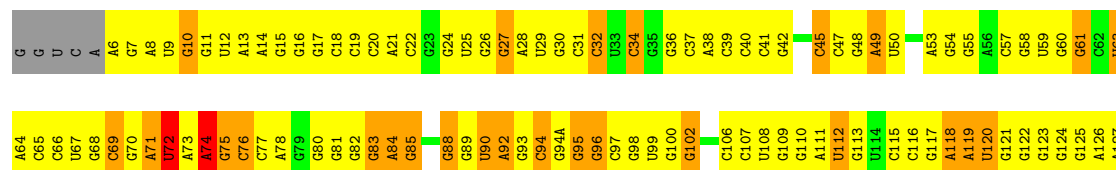
- Molecule 35: 50S RIBOSOMAL PROTEIN L36

Chain D9:



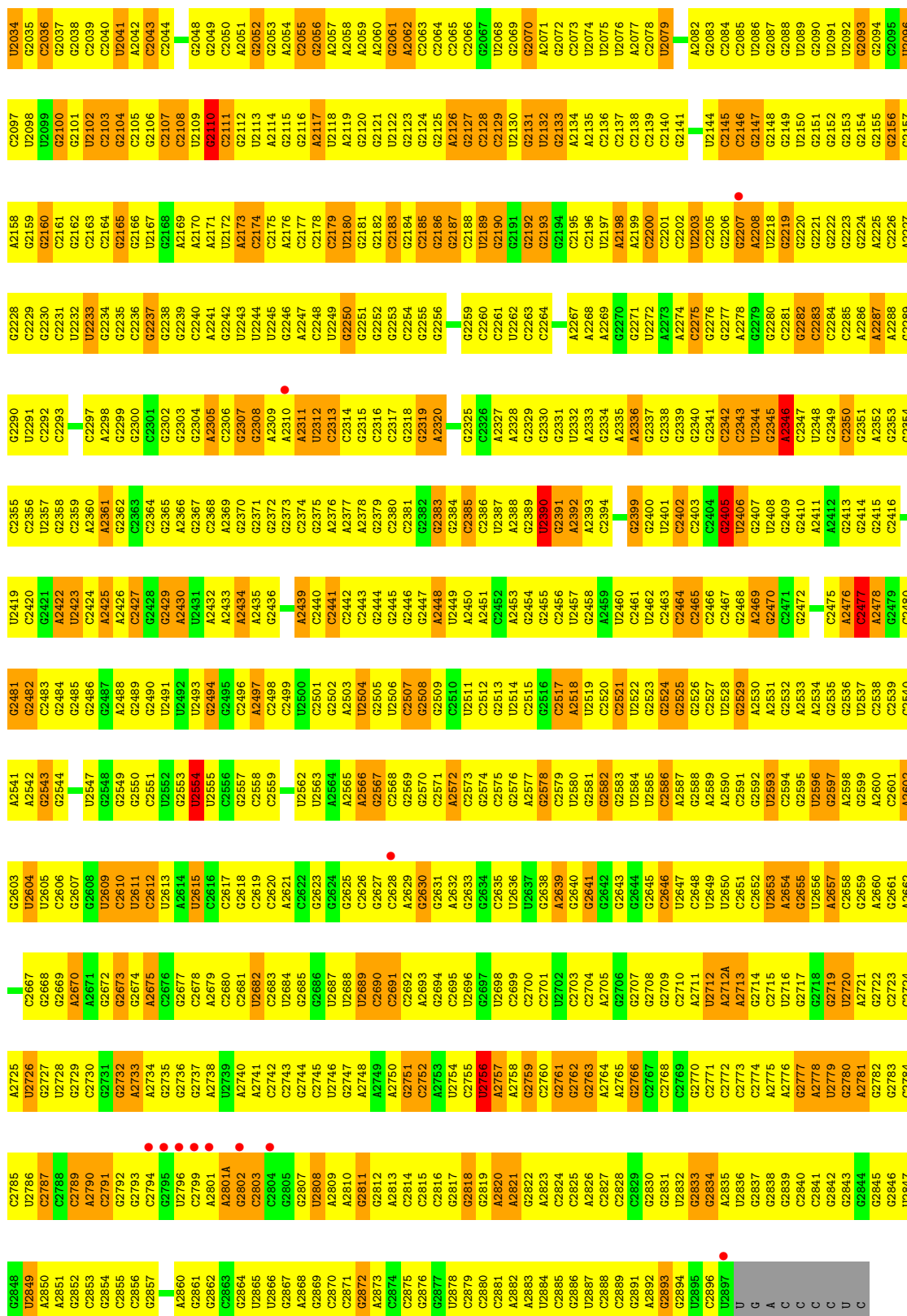
- Molecule 36: 23S RIBOSOMAL RNA

Chain BA:



C1006	C1007	C1008	C1009	C1010	C1011	C1012	C1013	C1014	C1017	C1018	C1019	C1020	C1021	C1022	C1023	C1024	C1025	C1026	C1027	C1028	C1029	C1030	C1031	C1032	C1033	C1034	C1035	C1036	C1037	C1038	C1039	C1040	C1041	C1042	C1043	C1044	C1045	C1046	C1047	C1048	C1049	C1050	C1051	C1052	C1053	C1054	C1055	C1056	C1057	C1058	C1059	C1060	C1061	C1062	C1063	C1064	C1065	C1066																																																																																																																																																																																																																																																																																																																																																															
G942	U943	G944	A945	G946	G947	G948	C949	G950	G951	G952	G953	G954	G955	G956	G957	G958	G959	G960	G961	G962	G963	G964	G965	G966	G967	G968	G969	G970	G971	G972	G973	G974	G975	G976	G977	G978	G979	A980	A981	A982	A983	A984	C985	C986	C987	A988	A989	A990	C991	C992	C993	C994	C995	A996	C997	C998	C1005																																																																																																																																																																																																																																																																																																																																																																
C876	U877	A878	G879	G880	G881	G882	G883	G884	G885	G886	G887	C888	C889	A890	G891	G892	C893	C894	U895	U896	A897	A898	A899	C900	C901	C902	C903	C904	C905	C906	C907	C908	C909	A910	A911	C912	C913	C914	C915	C916	A917	A918	C919	C920	C921	C922	C923	C924	C925	A926	C927	C928	C929	C930	C931	C932	C933	C934	C935	C936	C937	C938	C939	C940	A941																																																																																																																																																																																																																																																																																																																																																								
G814	C815	C816	C817	C818	C819	C820	A821	U822	G823	U826	U827	U828	A829	G830	G831	G832	G833	G834	U835	C836	C837	C838	C839	C840	A841	G842	G843	C844	G845	C846	U847	C848	C849	C850	C851	C852	C853	C854	C855	C856	C857	C858	C859	U860	C861	C862	C863	C864	C865	A866	C867	C868	C869	A870	C871	C872	C873	C874	C875	C876	C877	C878	C879	C880	C881	C882	C883	C884	C885	C886	C887	C888	C889	C890	C891	C892	C893	C894	C895	C896	C897	C898	C899	C900	C901	C902	C903	C904	C905	C906	C907	C908	C909	C910	C911	C912	C913	C914	C915	C916	C917	C918	C919	C920	C921	C922	C923	C924	C925	C926	C927	C928	C929	C930	C931	C932	C933	C934	C935	C936	C937	C938	C939	C940	C941	C942	C943	C944	C945	C946	C947	C948	C949	C950	C951	C952	C953	C954	C955	C956	C957	C958	C959	C960	C961	C962	C963	C964	C965	C966	C967	C968	C969	C970	C971	C972	C973	C974	C975	C976	C977	C978	C979	C980	C981	C982	C983	C984	C985	C986	C987	C988	C989	C990	C991	C992	C993	C994	C995	C996	C997	C998	C999	C1000																																																																																																																																																																																																																																	
C754	C755	C756	C757	C758	C759	C760	A761	U762	A763	A764	C765	C766	U767	C768	C769	C770	C771	C772	C773	A774	C775	C776	C777	C778	C779	C780	C781	C782	C783	C784	C785	C786	C787	C788	C789	C790	C791	C792	C793	C794	C795	C796	C797	C798	C799	C800	C801	C802	C803	C804	C805	C806	C807	C808	C809	C810	C811	C812	C813	C814	C815	C816	C817	C818	C819	C820	C821	C822	C823	C824	C825	C826	C827	C828	C829	C830	C831	C832	C833	C834	C835	C836	C837	C838	C839	C840	C841	C842	C843	C844	C845	C846	C847	C848	C849	C850	C851	C852	C853	C854	C855	C856	C857	C858	C859	C860	C861	C862	C863	C864	C865	C866	C867	C868	C869	C870	C871	C872	C873	C874	C875	C876	C877	C878	C879	C880	C881	C882	C883	C884	C885	C886	C887	C888	C889	C890	C891	C892	C893	C894	C895	C896	C897	C898	C899	C900	C901	C902	C903	C904	C905	C906	C907	C908	C909	C910	C911	C912	C913	C914	C915	C916	C917	C918	C919	C920	C921	C922	C923	C924	C925	C926	C927	C928	C929	C930	C931	C932	C933	C934	C935	C936	C937	C938	C939	C940	C941	C942	C943	C944	C945	C946	C947	C948	C949	C950	C951	C952	C953	C954	C955	C956	C957	C958	C959	C960	C961	C962	C963	C964	C965	C966	C967	C968	C969	C970	C971	C972	C973	C974	C975	C976	C977	C978	C979	C980	C981	C982	C983	C984	C985	C986	C987	C988	C989	C990	C991	C992	C993	C994	C995	C996	C997	C998	C999	C1000																																																																																																																																																																			
G654A	C654B	G654C	G654D	G654E	G654F	G654G	G654H	G654I	G654J	G654K	G654L	G654M	G654N	G654O	G654P	G654Q	G654R	G654S	G654T	A654U	A654V	A654W	A654X	A654Y	A654Z	U655	U656	U657	U658	U659	U660	U661	U662	U663	U664	U665	U666	U667	U668	U669	U670	U671	U672	U673	U674	U675	U676	U677	U678	U679	U680	U681	U682	U683	U684	U685	U686	U687	U688	U689	U690	U691	U692	U693	U694	U695	U696	U697	U698	U699	U700	U701	U702	U703	U704	U705	U706	U707	U708	U709	U710	U711	U712	U713	U714	U715	U716	U717	U718	U719	U720	U721	U722	U723	U724	U725	U726	U727	U728	U729	U730	U731	U732	U733	U734	U735	U736	U737	U738	U739	U740	U741	U742	U743	U744	U745	U746	U747	U748	U749	U750	U751	U752	U753	U754	U755	U756	U757	U758	U759	U760	U761	U762	U763	U764	U765	U766	U767	U768	U769	U770	U771	U772	U773	U774	U775	U776	U777	U778	U779	U780	U781	U782	U783	U784	U785	U786	U787	U788	U789	U790	U791	U792	U793	U794	U795	U796	U797	U798	U799	U800	U801	U802	U803	U804	U805	U806	U807	U808	U809	U810	U811	U812	U813	U814	U815	U816	U817	U818	U819	U820	U821	U822	U823	U824	U825	U826	U827	U828	U829	U830	U831	U832	U833	U834	U835	U836	U837	U838	U839	U840	U841	U842	U843	U844	U845	U846	U847	U848	U849	U850	U851	U852	U853	U854	U855	U856	U857	U858	U859	U860	U861	U862	U863	U864	U865	U866	U867	U868	U869	U870	U871	U872	U873	U874	U875	U876	U877	U878	U879	U880	U881	U882	U883	U884	U885	U886	U887	U888	U889	U890	U891	U892	U893	U894	U895	U896	U897	U898	U899	U900	U901	U902	U903	U904	U905	U906	U907	U908	U909	U910	U911	U912	U913	U914	U915	U916	U917	U918	U919	U920	U921	U922	U923	U924	U925	U926	U927	U928	U929	U930	U931	U932	U933	U934	U935	U936	U937	U938	U939	U940	U941	U942	U943	U944	U945	U946	U947	U948	U949	U950	U951	U952	U953	U954	U955	U956	U957	U958	U959	U960	U961	U962	U963	U964	U965	U966	U967	U968	U969	U970	U971	U972	U973	U974	U975	U976	U977	U978	U979	U980	U981	U982	U983	U984	U985	U986	U987	U988	U989	U990	U991	U992	U993	U994	U995	U996	U997	U998	U999	C1000																																						
U597	G598	G599	U594	C595	C596	C597	C598	C599	C600	C601	C602	C603	C604	C605	C606	C607	C608	C609	C610	C611	C612	C613	C614	C615	C616	C617	C618	C619	C620	C621	C622	C623	C624	C625	C626	C627	C628	C629	C630	C631	C632	C633	C634	C635	C636	C637	C638	C639	C640	C641	C642	C643	C644	C645	C646	C647	C648	C649	C650	C651	C652	C653	C654	C655	C656	C657	C658	C659	C660	C661	C662	C663	C664	C665	C666	C667	C668	C669	C670	C671	C672	C673	C674	C675	C676	C677	C678	C679	C680	C681	C682	C683	C684	C685	C686	C687	C688	C689	C690	C691	C692	C693	C694	C695	C696	C697	C698	C699	C700	C701	C702	C703	C704	C705	C706	C707	C708	C709	C710	C711	C712	C713	C714	C715	C716	C717	C718	C719	C720	C721	C722	C723	C724	C725	C726	C727	C728	C729	C730	C731	C732	C733	C734	C735	C736	C737	C738	C739	C740	C741	C742	C743	C744	C745	C746	C747	C748	C749	C750	C751	C752	C753	C754	C755	C756	C757	C758	C759	C760	C761	C762	C763	C764	C765	C766	C767	C768	C769	C770	C771	C772	C773	C774	C775	C776	C777	C778	C779	C780	C781	C782	C783	C784	C785	C786	C787	C788	C789	C790	C791	C792	C793	C794	C795	C796	C797	C798	C799	C800	C801	C802	C803	C804	C805	C806	C807	C808	C809	C810	C811	C812	C813	C814	C815	C816	C817	C818	C819	C820	C821	C822	C823	C824	C825	C826	C827	C828	C829	C830	C831	C832	C833	C834	C835	C836	C837	C838	C839	C840	C841	C842	C843	C844	C845	C846	C847	C848	C849	C850	C851	C852	C853	C854	C855	C856	C857	C858	C859	C860	C861	C862	C863	C864	C865	C866	C867	C868	C869	C870	C871	C872	C873	C874	C875	C876	C877	C878	C879	C880	C881	C882	C883	C884	C885	C886	C887	C888	C889	C890	C891	C892	C893	C894	C895	C896	C897	C898	C899	C900	C901	C902	C903	C904	C905	C906	C907	C908	C909	C910	C911	C912	C913	C914	C915	C916	C917	C918	C919	C920	C921	C922	C923	C924	C925	C926	C927	C928	C929	C930	C931	C932	C933	C934	C935	C936	C937	C938	C939	C940	C941	C942	C943	C944	C945	C946	C947	C948	C949	C950	C951	C952	C953	C954	C955	C956	C957	C958	C959	C960	C961	C962	C963	C964	C965	C966	C967	C968	C969	C970	C971	C972	C973	C974	C975	C976	C977	C978	C979	C980	C981	C982	C983	C984	C985	C986	C987	C988	C989	C990	C991	C992	C993	C994	C995	C996	C997	C998	C999	C1000
A471	A472	G473	G474	U475	U476	A477	A478	A479	A480	A481	A482	A483	A484	C485	C486	C487	C488	C489	C490	C491	C492	C493	C494	C495	C496	C497	C498	C499	C500	C501	C502	C503	C504	C505	C506	C507	C508	C509	C510	C511	C512	C513	C514	C515	C516	C517	C518	C519	C520	C521	C522	C523	C524	C525	C526	C527	C528	C529	C530	C531	C532	C533	C534	C535	C536	C537	C538	C539	C540	C541	C542	C543																																																																																																																																																																																																																																																																																																																																																	

G1968	G1969	A1970	A1971	A1972	G1973	C1974	U1834	C1774	G1695	G1635	A1572	A1509A	C1446	C1386	G1325	G1259	G1197	G1136	A1067
G1967	G1968	A1969	G1970	A1971	G1972	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
C1974						U1778	G1839	U1778	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C1450A	U1391	C1330	G1264	C1202	U1141	G1071
A1977	A1978	A1979	A1980	A1981	A1982	U1778	G1840	U1779	A1700	G1640	C1577	G1513	C14						





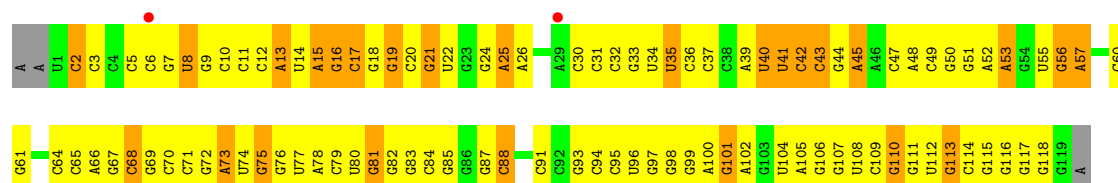


G1831	C1771	C1691	A1566	C1501	U1438	A1378	C1318	G1252	G1190	A1128	U1060	C995	C936
C1832	G1772	U1692	A1567	C1502	A1439	A1379	G1319	A1253	G1191	A1129	U1061	A996	U937
U1833	C1773	U1693	G1568	U1503	G1440	G1380	C1320	G1254	G1192	U1130	G1062	A997	G938
U1834	C1774	C1694	A1569	U1504	G1441	G1381	A1321	U1255	G1193	G1131	G1063	C998	G939
G1835	U1775	G1695	A1570	C1505	G1442	C1382	A1322	G1256	A1194	U1132	C1064	U999	G940
C1836	G1776	G1696	A1571	C1506		C1383	U1323	C1257	G1195	U1133	U1065		A941
C1837	U1777	G1697	A1572		A1445	A1384	G1324	C1258	G1196	C1135	U1066	C1005	G942
C1838	U1778	A1698	G1573	C1509	G1446	C1385	G1325	G1259	G1197	G1136	A1067	C1006	U943
G1839	U1779	G1699	A1509A	U1509	G1447	C1386	U1326	G1260	U1198	G1137	G1068	C1007	U944
U1840	A1780	C1699	A1509B	U1509B	G1447	C1387	C1327	G1261	U1199	G1138	A1069	G1008	A945
U1841	C1781	A1700	G1575	G1508	G1448	G1388	G1328	A1262	C1200	G1139	A1070	A1009	G946
G1842	G1782	G1702	U1576	C1511	G1448	G1389	U1329	U1263	C1201	G1140	G1071	A1010	G947
C1843	A1783	G1703	U1577	U1512	G1450	C1390	C1330	G1264	C1202	U1141	C1072	G1011	G948
C1844	U1784	G1704	U1578	C1513	G1450A	U1391	A1331	A1265	G1203	U1142	A1073	U1012	C949
G1845	A1785	A1579	A1580	U1514	C1451	U1392	G1332	G1266	A1204	A1142A	G1074	C1013	G950
G1846	U1786			G1515	A1452	A1393	C1333	U1267	U1205	A1143		U1014	G951
A1847	C1787	G1707	C1584	G1516	G1453	U1394	G1334	A1268	G1206	G1144		G1017	A953
A1848	G1788	G1708	A1586	G1517	G1455	U1395	U1335	A1269	C1207	C1145		C1018	G954
G1849	A1789	U1709	A1587	U1518		U1396	A1336	C1270	C1208	C1146		U1019	G955
	C1790	C1710		G1519	G1458	U1397	G1337	G1271	G1209		A1077		A1020
A1853	A1791	C1711	U1590	G1520	G1459	C1398	G1338	A1272	A1210	A1086		A1021	G956
A1854	G1792	C1712	U1591	U1523	A1460	C1399	G1339	U1273	U1211	G1150		A1022	G957
G1855	C1793	U1713	C1592	G1524	G1461	G1400	U1340	A1274	G1212	A1088		G1023	U958
G1856	U1794	G1714	G1593	G1525	G1462	G1401	U1341	A1275		G1089		U1024	A959
G1857	C1795	G1717	G1594	G1526	C1463	C1402	A1342	A1276	G1215	U1090		G1025	A960
G1858	U1796	G1718	G1595	G1527	C1464	C1403		G1277	G1216	G1154		G1026	C961
A1859	C1797	G1719	C1596	A1528	G1465	U1404	G1344	A1278	C1217	G1155		U1027	G962
G1860	U1798	U1720	A1597	A1528A	G1466	U1405	C1345	G1279	C1218	A1156		A1028	U963
G1861	G1799	C1721	U1598	G1529	G1467	U1406	G1346		G1219	G1157		A1029	C964
G1862	C1800	A1722	C1599		C1468	C1407	G1347		A1220	C1158		G1030	G965
G1863	G1801	U1739	G1600	G1536	A1469	C1408	G1348	G1285	C1221	U1159		G1031	G966
U1864	A1802	G1740	G1601	G1537	G1470	C1409	A1349		C1221A	U1097		A1032	C967
G1865	A1803	U1741	U1602	U1538	A1471	C1410	C1350	U1288	C1222	G1160		U1033	G968
C1866	C1804	G1742	A1603	G1539	A1472	C1411	C1351	C1289	G1223	G1161		G1034	U969
A1876	U1805	C1743	G1604	U1540	G1473	A1412	U1352	C1290	C1224	G1162		C1040	G970
A1877	G1806	C1744	G1605	G1541	C1474	G1413	A1353	C1291	G1225	G1163		U1035	C971
G1878	C1807	G1745	G1606	A1542	G1475	G1414	A1354	U1292	A1226	U1165		G1036	G972
C1879	U1808		G1607	C1543	C1476	U1415	G1355	C1293	G1227	C1166		G1037	A973
C1880	A1809	G1747	A1608	A1544	A1477	G1416	G1356	U1294	G1228	U1167		C1038	G974
C1881	A1810	C1747A		A1545	G1478	C1417	U1357		G1229	U1105		G1039	C975
C1882	G1811	G1748	C1611	C1546		G1418	G1358	C1297	C1230	G1168		G1040	G976
C1883	A1812	C1672	C1612	C1547	G1482	A1419	A1359	C1298	G1231	G1170		C1041	G977
A1884	G1813	G1750	G1613	C1548	G1483	U1420	A1360	C1299	G1232	G1171		C1042	G978
A1885	G1814	C1751	A1614	C1549	G1484	G1421	C1361	U1300	C1233	G1173		G1043	G979
C1886	A1815		C1615	C1550	G1485	G1422	C1362	A1301	U1234	A1174		G1044	
C1887	G1816	C1754	A1616	C1551	G1486	G1423	G1363	A1302		G1175		A1045	A980
G1888	G1817	A1755	C1617	G1552	G1487	G1424	G1364	G1303	G1238	U1176		A1046	G975A
A1889	U1818	G1756	A1618	A1553	G1488	G1425	A1365	C1304	G1239	G1177		G1047	A981
G1890	A1819	U1757	G1619	A1554	U1489	G1426	A1366	C1305	U1240	C1178		A1048	C982
C1891	U1820	G1758	G1620	G1555	A1490	A1427	A1367	G1306	A1241	C1179		C1049	A983
C1892	A1821	A1759	U1621	C1556	G1491	C1428	G1368	A1307	A1242	G1180		A1050	A984
C1893	G1822	C1760	G1622	C1557	G1492	G1429	G1369	A1308	G1243	C1181		G1051	C985
	A1823	C1761	G1623	A1558	C1493	A1430	C1370	G1309	G1244	G1182		C1052	C986
G1896	G1824	A1762	C1624	G1559	A1494	U1431	G1371	G1310	G1245	G1183		C1053	A988
G1897	A1825	G1763	C1625	G1560	A1495	U1432	U1372		A1246	G1184		A1054	G989
U1898	G1826	G1764	G1626	G1561	A1496	U1433	A1373	U1313	A1247	C1185		G1055	A990
G1899	C1827	C1765	G1627	A1562	U1497	A1434	G1374	C1314	G1248	G1186		G1056	C991
A1900	G1828		G1628	A1563	C1498	G1435	C1375	C1315	U1249	G1187		A1057	C992
A1901	A1829	G1769	C1499	C1564	G1499	U1316	C1376	U1316	G1250	U1188		G1058	G993
C1902	C1830	G1770	G1630	C1565	G1500	C1437	G1377	A1317	C1251	A1189		G1059	C994

A2775	G2715	G2595	G2534	G2475	G2409	U2348	C2283	G2222	G2151	G2090	G2027	C1965	G1903
A2776	U2716	U2596	G2535	C2475	G2410	G2349	C2284	G2223	G2152	G2091	U2028	A1966	G1904
A2777	G2717	G2597	G2536	A2476	A2411	C2350	C2285	G2224	G2153	U2092	A2029	C1967	C1905
A2778	G2718	A2598	U2537	C2477	G2412	G2351	C2286	A2225	G2154	G2093	G1968	G1966	G1906
G2779	G2719	G2599	C2538	A2478	G2413	A2352	A2287	G2226	G2155	G2094	A2031	A1969	G1907
G2780	U2720	A2600	C2539	G2479	G2414	G2353	A2288	A2227	G2156	C2095	A2032	A1970	C1908
A2781	C2601	C2602	C2540	C2480	G2415	G2354	G2289	G2228	G2157	U2096	A2033	A1971	C1909
G2782	G2722	A2603	A2541	C2481	U2419	C2355	G2290	G2229	A2158	C2097	A2034	A1972	G1910
G2783	C2723	G2604	A2542	G2482	C2420	C2356	U2291	G2230	G2159	U2098	G2035	G1973	U1911
C2784	G2724	U2605	C2483	C2483	G2421	U2357	G2292	G2231	G2160	U2099	C2036	C1974	A1912
C2785	A2725	G2644	G2544	G2484	G2422	G2358	C2293	U2232	C2161	G2100	G2037	G1975	A1913
U2786	G2726	U2645	G2545	G2485	U2423	C2359	U2294	U2233	G2162	G2101	G2038	U1976	C1914
G2787	G2727	G2607	U2546	G2486	U2424	G2360	U2295	G2234	C2163	G2102	C2039	A1977	U1915
C2788	U2728	G2608	U2547	G2487	C2424	A2361	A2298	G2235	C2164	C2103	C2040	A1978	A1916
G2789	G2729	U2609	G2548	A2488	A2425	G2362	A2299	G2236	G2165	G2104	U2041	U1979	U1917
A2790	C2730	C2610	G2549	G2489	A2426	C2363	G2300	G2237	G2166	G2105	A2042	G1980	A1918
C2791	G2731	U2611	G2550	G2490	C2427	G2364	C2301	G2238	U2167	G2106	C2043	A1981	A1919
G2792	G2732	G2612	C2551	U2491	G2428	G2365	G2302	G2239	C2168	C2107	C2044	C1982	G1920
G2793	A2733	U2613	U2552	U2492	G2429	A2366	G2303	C2240	A2170	C2108	G2045	C1983	G1921
C2794	A2734	A2614	U2553	U2493	A2430	G2367	G2304	A2241	A2171	U2109	G2046	G1984	G1922
G2795	G2735	U2615	U2554	G2494	U2431	C2368	C2305	G2242	U2172	G2110	G2049	G1985	U1923
U2796	G2736	C2616	U2555	G2495	A2434	A2369	C2306	U2243	A2173	C2111	C2050	A1986	C1924
C2797	G2737	C2617	C2556	C2496	A2435	G2370	G2307	U2244	C2174	G2112	A2051	G1987	C1925
A2798	A2738	G2618	G2557	A2497	G2436	G2371	G2308	U2245	C2175	U2113	G2052	C1988	U1926
A2801A	U2739	G2619	C2558	C2498	U2437	G2372	A2309	G2246	A2176	A2114	G2053	G1989	A1927
G2802	C2740	C2620	U2559	C2499	U2438	G2373	A2310	A2247	C2177	G2115	A2054	C1990	A1928
G2803	A2741	A2621	U2562	U2500	A2439	C2374	A2311	G2248	C2178	G2116	C2055	U1991	G1929
C2804	C2742	C2622	U2563	C2501	C2440	G2375	U2312	U2249	G2179	G2117	G2056	G1992	G1930
G2805	C2743	G2623	U2564	G2502	C2441	A2376	C2313	U2243	U2180	U2118	A2057	U1993	U1932
G2807	G2744	A2624	A2565	A2503	C2442	A2377	C2314	G2251	G2181	A2119	A2058	C1994	A1932
U2808	C2745	G2625	A2566	U2504	C2443	A2378	G2315	G2252	G2182	G2120	A2059	U1995	G1933
A2809	U2746	C2626	A2566	G2505	G2444	G2379	C2316	G2253	C2183	G2121	A2060	C1996	C1934
A2810	G2747	G2627	G2567	U2506	G2445	C2380	C2317	G2254	G2184	U2122	G2061	G1997	G1935
G2811	A2748	C2628	C2568	C2507	U2446	G2381	G2318	G2255	C2185	G2123	A2062	G1998	A1936
A2813	G2749	A2629	G2569	G2508	G2447	G2382	G2319	G2256	G2186	G2124	C2063	C1999	A1937
C2814	C2750	C2630	U2570	U2509	U2448	G2383	U2257	U2257	G2187	G2125	C2064	G2000	A1938
C2815	G2751	G2631	C2571	C2510	U2449	G2384	C2320	G2258	C2188	A2126	C2065	A2001	U1939
G2816	G2752	A2632	A2572	U2511	A2450	C2385	U2325	G2259	U2189	G2127	C2066	G2002	U1940
C2817	A2753	G2633	C2573	C2512	A2451	C2386	C2326	G2260	G2190	C2128	G2067	G2003	U1944
C2818	U2754	G2634	G2574	G2513	C2452	U2387	A2327	C2261	G2191	C2129	U2068	G2004	G1945
G2819	C2755	C2635	C2575	U2514	A2453	A2388	A2328	G2262	G2192	U2130	G2069	C2007	G1946
G2820	U2756	G2636	G2576	C2515	G2454	C2389	G2329	C2263	G2193	U2131	G2070	C2008	C1947
A2820	A2757	U2637	A2577	G2516	G2455	U2390	G2330	C2264	G2194	U2132	A2071	G2009	G1948
A2821	G2758	G2638	G2578	C2517	C2456	G2391	U2331	U2272	C2195	G2133	G2072	G2010	G1949
G2822	U2759	A2639	C2579	A2518	U2457	A2392	U2332	A2267	C2196	A2134	C2073	U2011	G1949
C2823	C2760	U2640	U2580	U2519	A2458	A2393	A2333	A2268	U2197	A2135	U2074	G2012	G1950
C2824	G2761	G2641	G2581	C2520	A2459	C2394	G2334	A2269	A2198	C2136	U2075	A2013	U1951
C2825	G2762	G2642	G2582	U2521	U2460	C2395	A2335	G2270	A2199	C2137	U2076	A2014	A1952
A2826	G2763	C2643	G2583	U2522	C2461	G2396	A2336	G2271	C2200	C2138	A2077	A2015	A1953
C2827	A2764	U2644	U2584	G2523	U2462	U2396	G2337	U2272	C2201	C2139	C2078	U2016	G1954
C2828	A2765	U2645	U2585	G2524	U2463	G2399	G2338	A2275	C2202	C2140	U2079	U2017	U1955
C2829	G2766	C2646	C2586	G2525	C2464	G2400	G2339	A2274	U2203	G2141	G2018	G2018	U1956
G2830	C2767	U2647	A2587	G2526	C2465	U2401	G2340	C2275	A2082	U2019	A2082	A2019	C1957
G2831	G2768	C2648	G2588	C2527	C2466	G2402	G2341	G2276	G2205	U2144	G2083	A2019	C1958
U2832	C2769	A2649	U2589	U2528	C2467	C2403	G2342	G2277	G2206	G2020	C2084	C2021	G1959
G2833	G2770	U2650	G2590	G2529	G2468	C2404	C2343	G2278	A2208	C2145	C2085	U2022	A1960
G2834	C2771	C2651	C2591	A2530	A2469	G2405	U2344	G2279	U2218	G2147	U2086	G2023	C1961
A2835	C2772	U2652	G2592	A2531	G2470	U2406	U2345	G2280	G2219	G2148	G2087	G2024	C1962
C2836	G2773	U2653	U2593	G2532	C2471	G2407	A2346	G2281	G2220	U2149	G2088	C2025	U1963
G2837	C2774	A2654	C2594	A2533	G2472	U2408	C2347	G2282	G2221	U2150	U2089	C2026	G1964

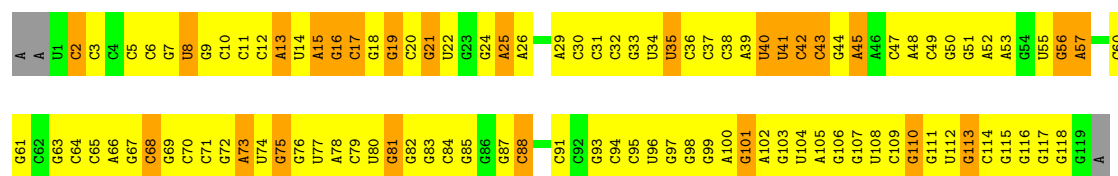
● Molecule 37: 5S RIBOSOMAL RNA

Chain BB:



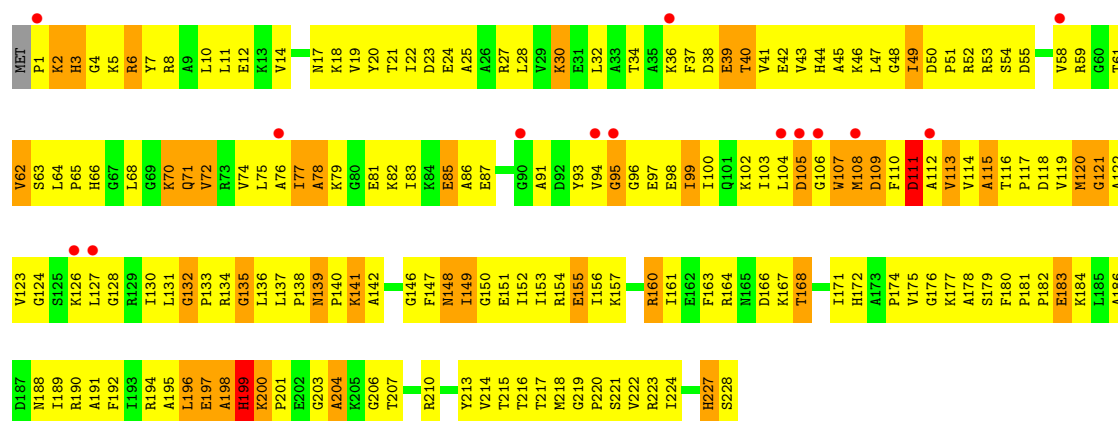
- Molecule 37: 5S RIBOSOMAL RNA

Chain DB:



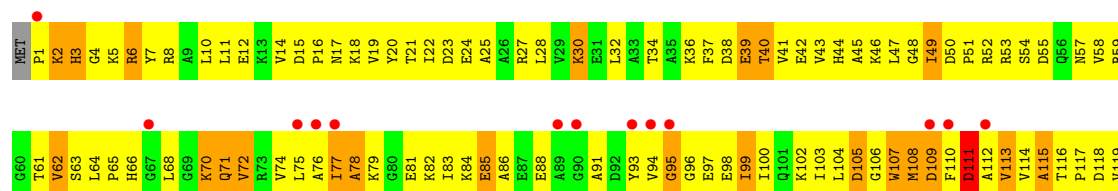
- Molecule 38: 50S RIBOSOMAL PROTEIN L1

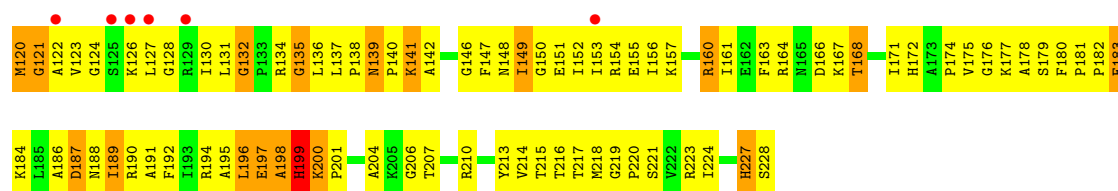
Chain BC:



- Molecule 38: 50S RIBOSOMAL PROTEIN L1

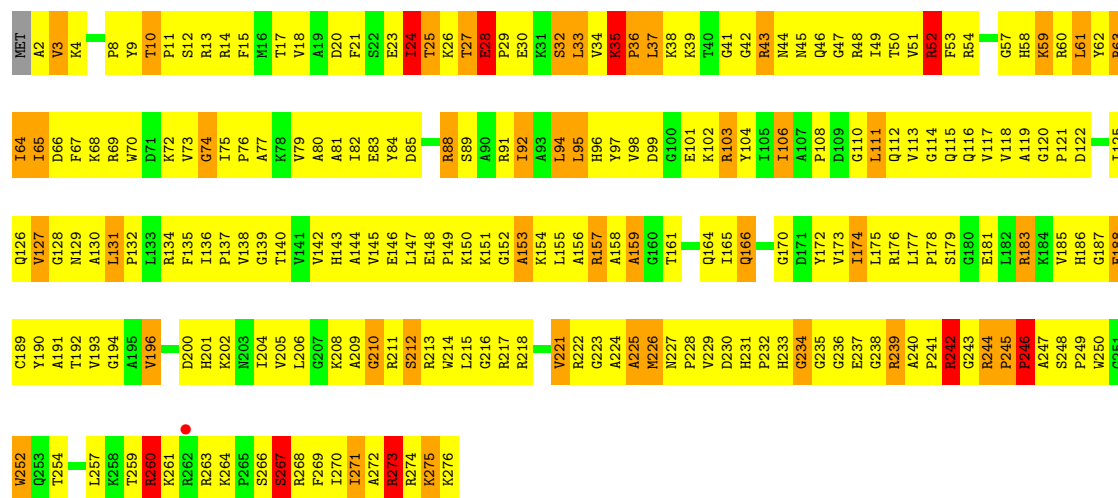
Chain DC:





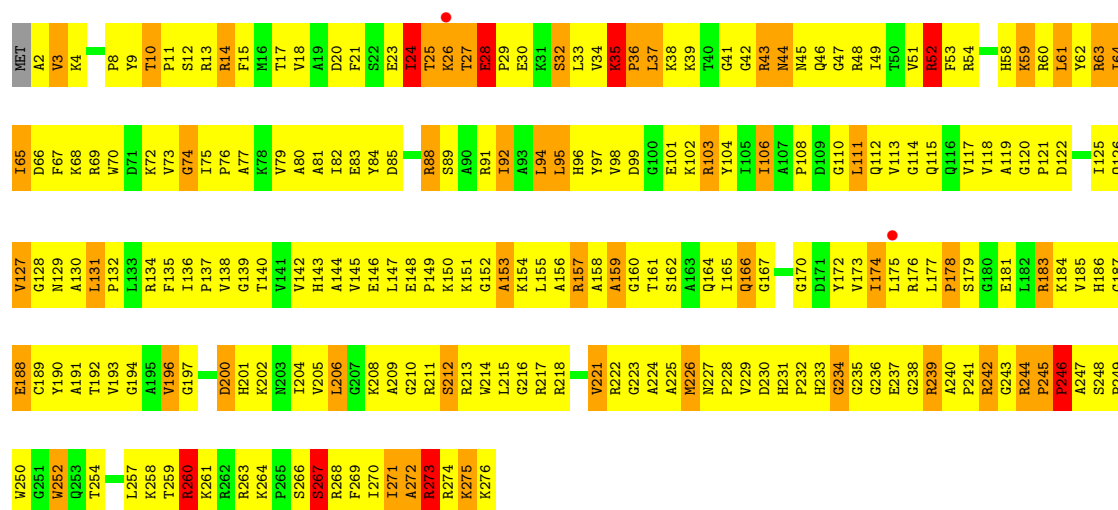
• Molecule 39: 50S RIBOSOMAL PROTEIN L2

Chain BD:



• Molecule 39: 50S RIBOSOMAL PROTEIN L2

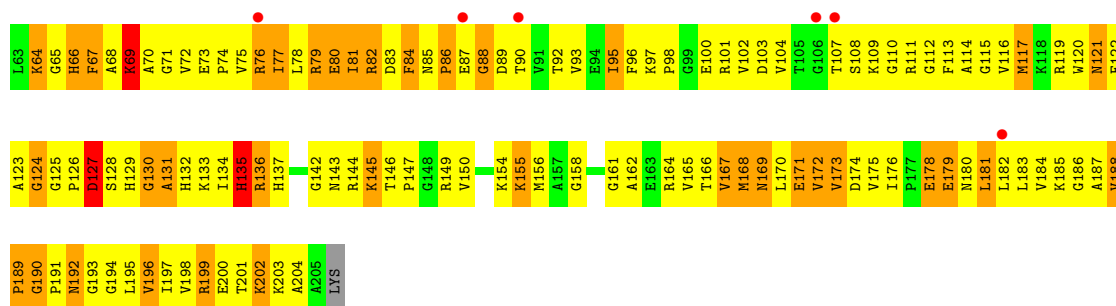
Chain DD:



• Molecule 40: 50S RIBOSOMAL PROTEIN L3

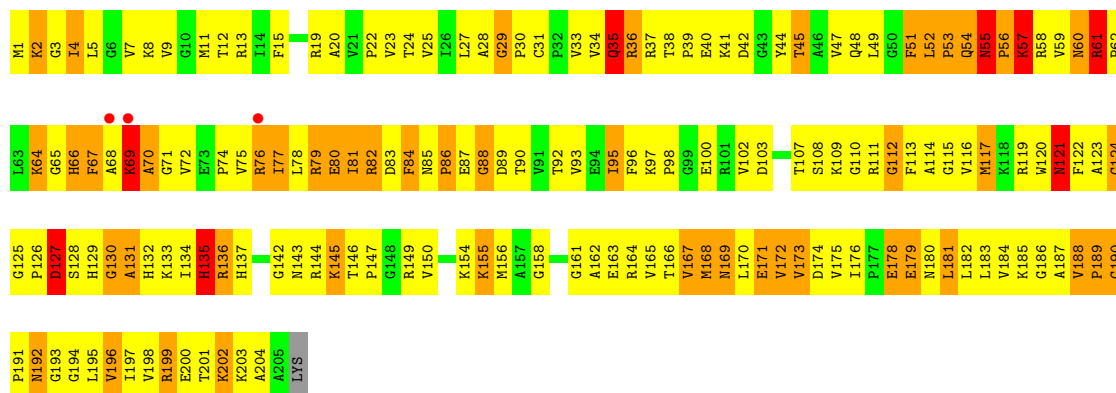
Chain BE:





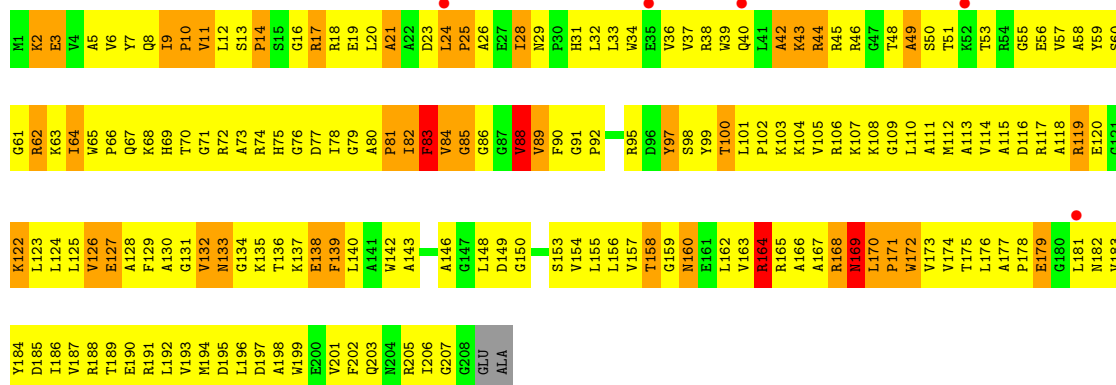
• Molecule 40: 50S RIBOSOMAL PROTEIN L3

Chain DE:



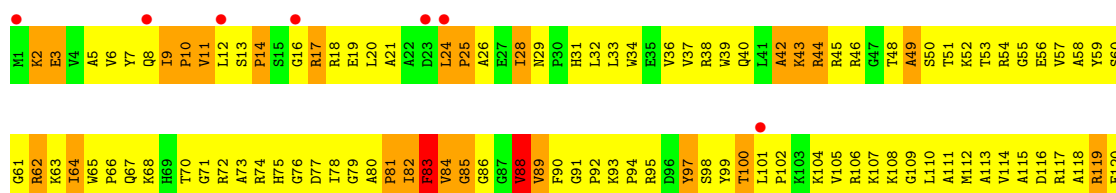
• Molecule 41: 50S RIBOSOMAL PROTEIN L4

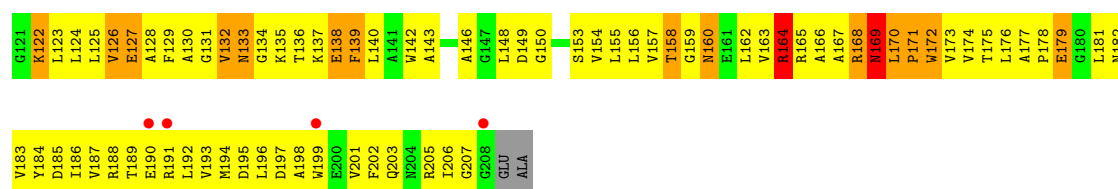
Chain BF:



• Molecule 41: 50S RIBOSOMAL PROTEIN L4

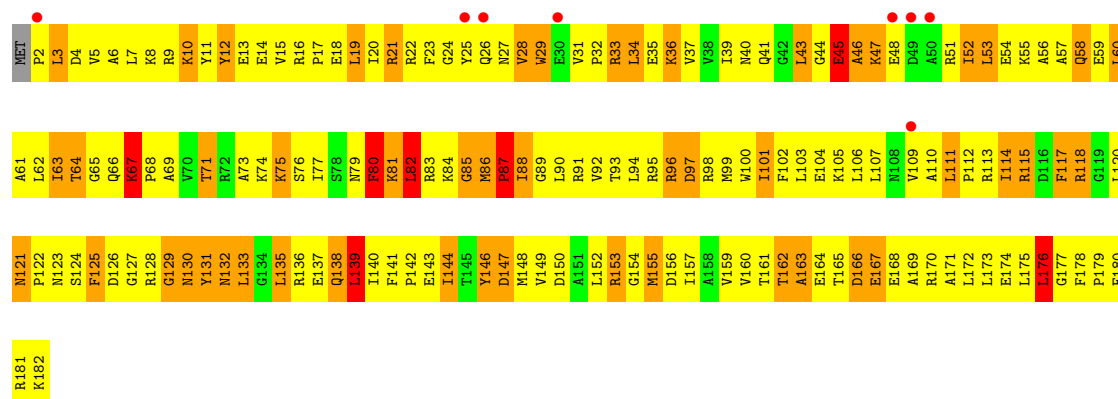
Chain DF:





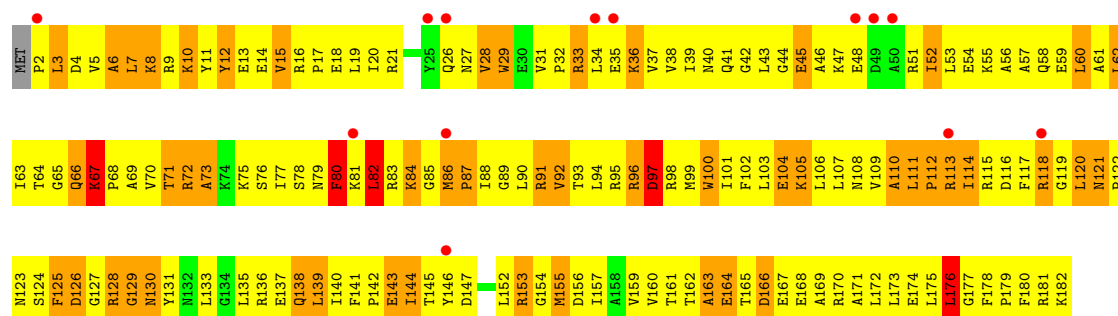
• Molecule 42: 50S RIBOSOMAL PROTEIN L5

Chain BG:



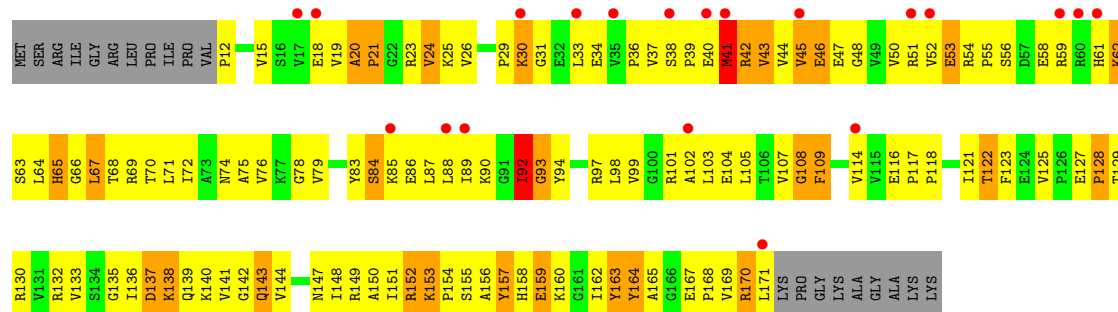
• Molecule 42: 50S RIBOSOMAL PROTEIN L5

Chain DG:



• Molecule 43: 50S RIBOSOMAL PROTEIN L6

Chain BH:

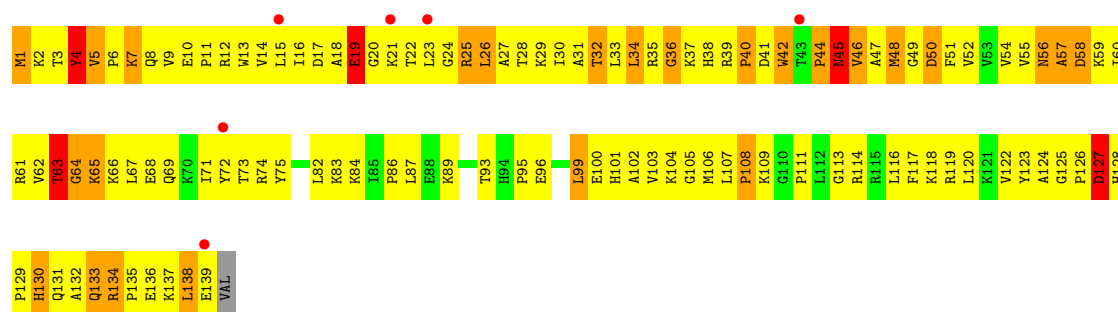


• Molecule 43: 50S RIBOSOMAL PROTEIN L6

Chain DH:

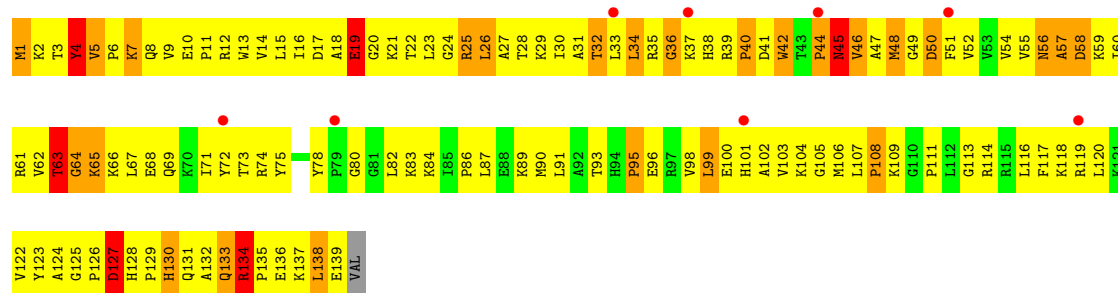






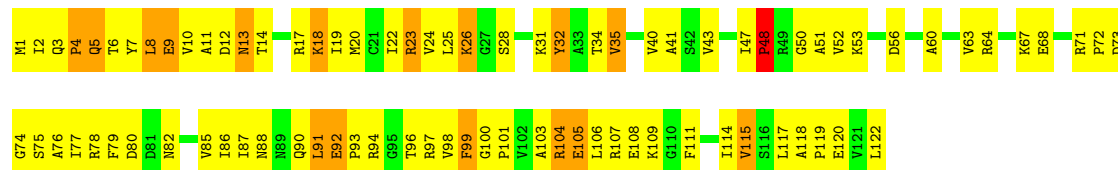
• Molecule 46: 50S RIBOSOMAL PROTEIN L13

Chain DN:



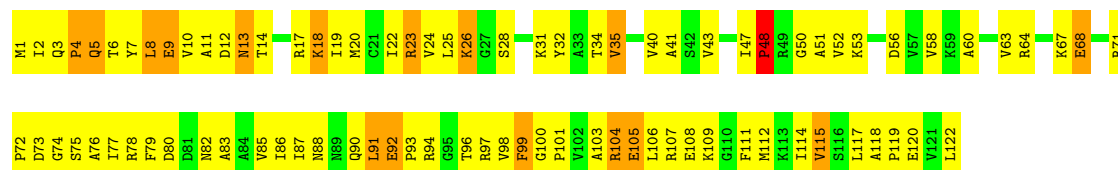
• Molecule 47: 50S RIBOSOMAL PROTEIN L14

Chain BO:



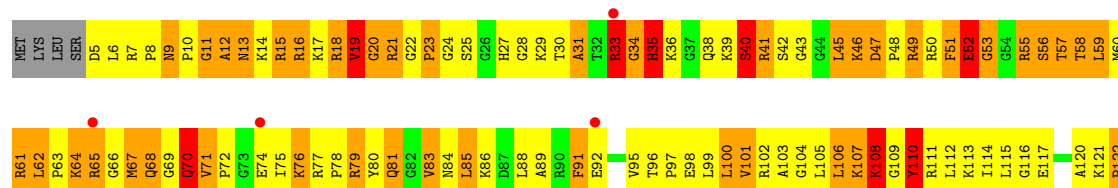
• Molecule 47: 50S RIBOSOMAL PROTEIN L14

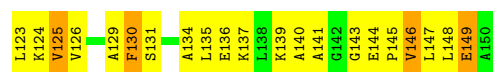
Chain DO:



• Molecule 48: 50S RIBOSOMAL PROTEIN L15

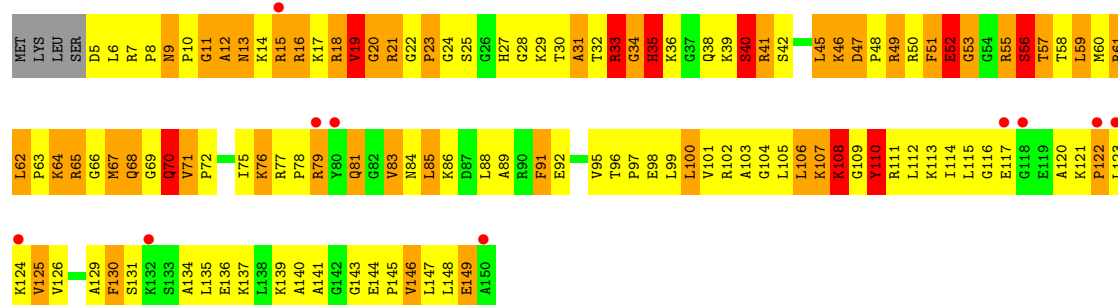
Chain BP:





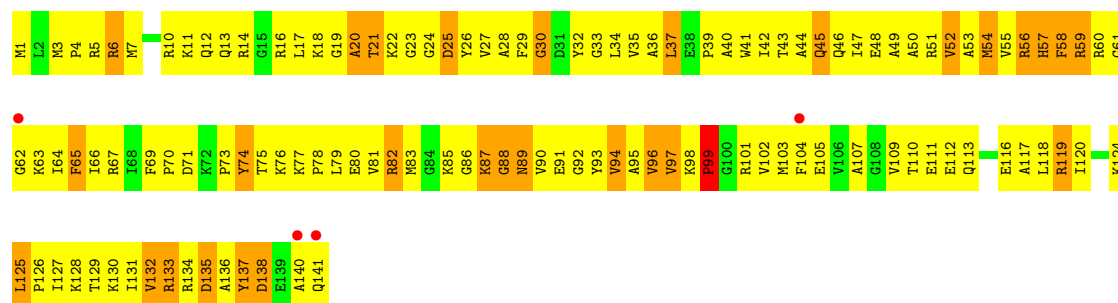
• Molecule 48: 50S RIBOSOMAL PROTEIN L15

Chain DP:



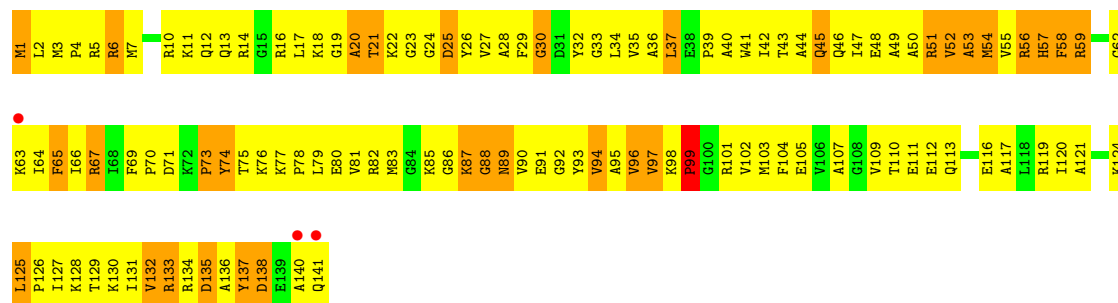
• Molecule 49: 50S RIBOSOMAL PROTEIN L16

Chain BQ:



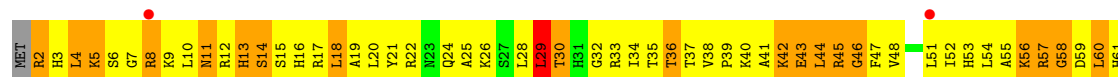
• Molecule 49: 50S RIBOSOMAL PROTEIN L16

Chain DQ:



• Molecule 50: 50S RIBOSOMAL PROTEIN L17

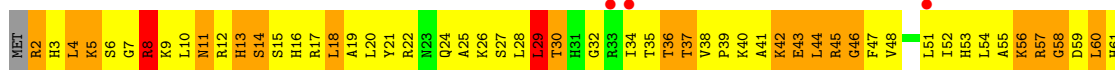
Chain BR:





• Molecule 50: 50S RIBOSOMAL PROTEIN L17

Chain DR:



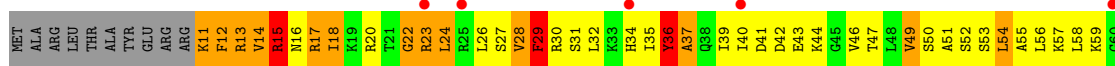
• Molecule 51: 50S RIBOSOMAL PROTEIN L18

Chain BS:



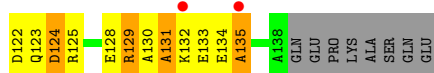
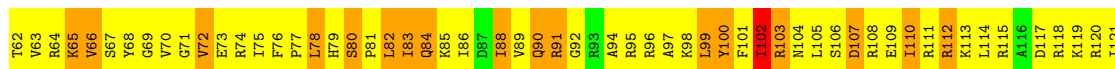
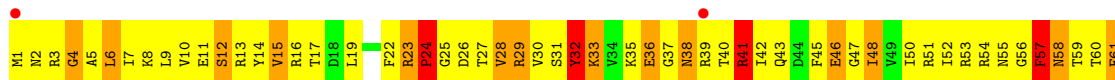
• Molecule 51: 50S RIBOSOMAL PROTEIN L18

Chain DS:



• Molecule 52: 50S RIBOSOMAL PROTEIN L19

Chain BT:

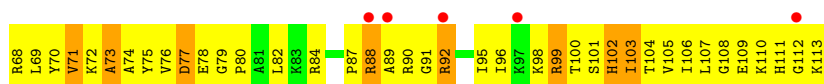


• Molecule 52: 50S RIBOSOMAL PROTEIN L19

Chain DT:







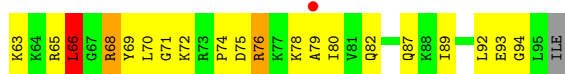
• Molecule 55: 50S RIBOSOMAL PROTEIN L22

Chain DW:



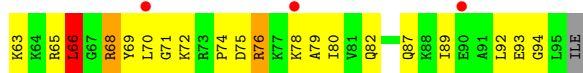
• Molecule 56: 50S RIBOSOMAL PROTEIN L23

Chain BX:



• Molecule 56: 50S RIBOSOMAL PROTEIN L23

Chain DX:



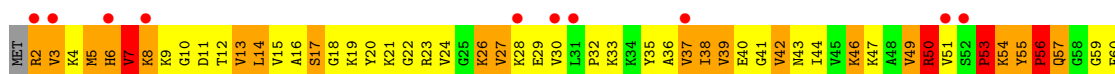
• Molecule 57: 50S RIBOSOMAL PROTEIN L24

Chain BY:



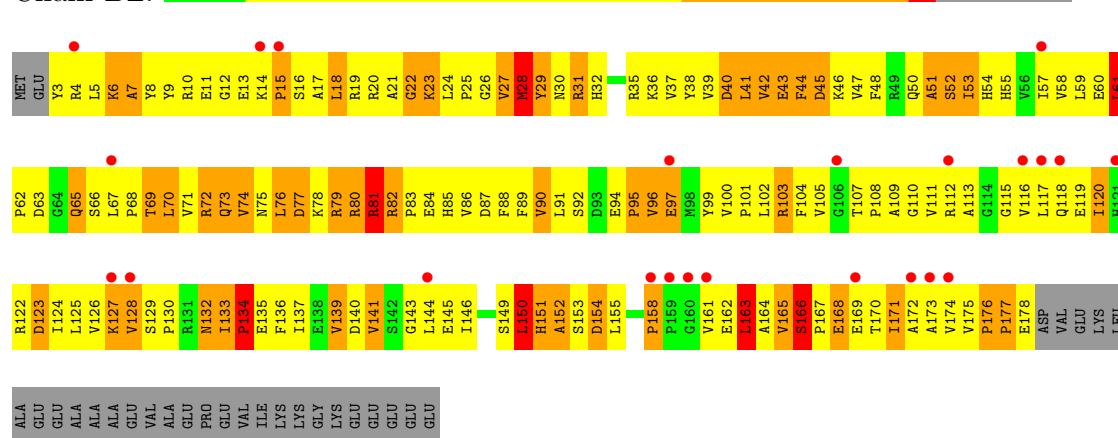
• Molecule 57: 50S RIBOSOMAL PROTEIN L24

Chain DY:



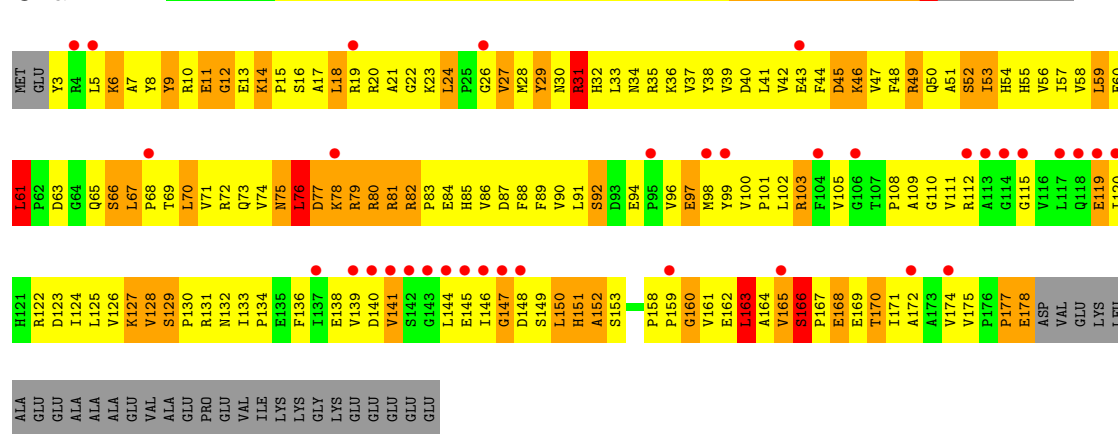
• Molecule 58: 50S RIBOSOMAL PROTEIN L25

Chain BZ:



• Molecule 58: 50S RIBOSOMAL PROTEIN L25

Chain DZ:



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	289.57Å 268.36Å 403.88Å 90.00° 91.01° 90.00°	Depositor
Resolution (Å)	50.00 – 3.60 49.91 – 3.48	Depositor EDS
% Data completeness (in resolution range)	93.6 (50.00-3.60) 87.3 (49.91-3.48)	Depositor EDS
$R_{merge}$	0.22	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.57 (at 3.48Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, $R_{free}$	0.281 , 0.315 0.261 , 0.277	Depositor DCC
$R_{free}$ test set	35772 reflections (5.27%)	DCC
Wilson B-factor (Å <sup>2</sup> )	102.0	Xtriage
Anisotropy	0.110	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.27 , 62.0	EDS
Estimated twinning fraction	0.098 for h,-k,-l	Xtriage
L-test for twinning	$\langle  L  \rangle = 0.37$ , $\langle L^2 \rangle = 0.19$	Xtriage
Outliers	0 of 714740 reflections	Xtriage
$F_o, F_c$ correlation	0.89	EDS
Total number of atoms	306876	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	106.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 15.21% of the height of the origin peak. No significant pseudotranslation is detected.*

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

## 5 Model quality

### 5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 5MU, GDP, PAR, H2U, MG, ZN, YG, KIR, 7MG, PSU

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	0.64	1/36190 (0.0%)	0.78	23/56486 (0.0%)
1	CA	0.64	0/36190	0.77	20/56486 (0.0%)
2	AB	0.44	0/1936	0.71	0/2611
2	CB	0.44	0/1936	0.72	0/2611
3	AC	0.46	0/1637	0.73	1/2207 (0.0%)
3	CC	0.47	0/1637	0.73	0/2207
4	AD	0.46	0/1733	0.75	1/2318 (0.0%)
4	CD	0.44	0/1733	0.73	2/2318 (0.1%)
5	AE	0.57	0/1163	0.79	1/1566 (0.1%)
5	CE	0.56	0/1163	0.78	0/1566
6	AF	0.42	0/856	0.67	0/1154
6	CF	0.42	0/856	0.67	0/1154
7	AG	0.41	0/1276	0.66	0/1709
7	CG	0.42	0/1276	0.66	0/1709
8	AH	0.51	0/1136	0.72	0/1527
8	CH	0.49	0/1136	0.74	0/1527
9	AI	0.39	0/1029	0.65	0/1379
9	CI	0.39	0/1029	0.65	0/1379
10	AJ	0.46	0/808	0.71	1/1087 (0.1%)
10	CJ	0.48	0/808	0.71	1/1087 (0.1%)
11	AK	0.48	0/900	0.73	0/1213
11	CK	0.48	0/900	0.73	0/1213
12	AL	0.52	0/987	0.81	0/1322
12	CL	0.54	0/987	0.81	0/1322
13	AM	0.43	0/999	0.75	0/1338
13	CM	0.43	0/999	0.74	0/1338
14	AN	0.52	0/501	0.73	0/664
14	CN	0.51	0/501	0.74	0/664
15	AO	0.45	0/745	0.73	0/992
15	CO	0.44	0/745	0.73	0/992
16	AP	0.48	0/717	0.72	0/965
16	CP	0.46	0/717	0.72	0/965



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	AQ	0.46	0/837	0.74	0/1119
17	CQ	0.48	0/837	0.74	0/1119
18	AR	0.50	0/579	0.75	1/768 (0.1%)
18	CR	0.49	0/579	0.75	1/768 (0.1%)
19	AS	0.47	0/643	0.67	0/867
19	CS	0.45	0/643	0.67	0/867
20	AT	0.38	0/765	0.70	0/1007
20	CT	0.36	0/765	0.70	0/1007
21	AU	0.55	0/213	0.63	0/279
21	CU	0.56	0/213	0.64	0/279
22	AV	0.53	0/1809	0.76	0/2819
22	AW	0.45	0/1809	0.73	0/2819
22	CV	0.49	0/1809	0.76	0/2819
22	CW	0.45	0/1809	0.72	0/2819
23	AX	0.71	0/304	0.83	0/471
23	CX	0.72	0/304	0.81	0/471
24	AY	0.50	1/1660 (0.1%)	0.72	1/2583 (0.0%)
24	CY	0.51	1/1660 (0.1%)	0.72	1/2583 (0.0%)
25	AZ	0.38	0/2957	0.65	0/4015
25	CZ	0.38	0/2957	0.65	0/4015
26	B0	0.40	0/671	0.67	0/892
26	D0	0.40	0/671	0.66	0/892
27	B1	0.57	0/739	0.91	0/983
27	D1	0.60	0/739	0.92	1/983 (0.1%)
28	B2	0.44	0/600	0.87	2/793 (0.3%)
28	D2	0.43	0/600	0.80	1/793 (0.1%)
29	B3	0.44	0/473	0.74	0/636
29	D3	0.42	0/473	0.75	0/636
30	B4	0.71	0/350	0.79	0/476
30	D4	0.73	1/350 (0.3%)	0.75	0/476
31	B5	0.44	0/473	0.72	0/639
31	D5	0.43	0/473	0.71	0/639
32	B6	0.53	0/440	0.91	0/586
32	D6	0.56	0/440	0.93	0/586
33	B7	0.50	0/427	0.75	0/563
33	D7	0.50	0/427	0.74	0/563
34	B8	0.51	0/516	0.78	0/681
34	D8	0.51	0/516	0.77	0/681
35	B9	0.42	0/310	0.66	0/407
35	D9	0.44	0/310	0.67	0/407
36	BA	0.61	2/69972 (0.0%)	0.76	36/109237 (0.0%)
36	DA	0.61	2/69972 (0.0%)	0.77	37/109237 (0.0%)
37	BB	0.46	0/2853	0.72	0/4451

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
37	DB	0.45	0/2853	0.72	0/4451
38	BC	0.45	2/1774 (0.1%)	0.69	0/2391
38	DC	0.44	2/1774 (0.1%)	0.69	0/2391
39	BD	0.59	0/2195	0.86	1/2955 (0.0%)
39	DD	0.57	0/2195	0.86	0/2955
40	BE	0.48	0/1597	0.75	0/2155
40	DE	0.47	0/1597	0.75	0/2155
41	BF	0.45	0/1659	0.73	0/2246
41	DF	0.43	0/1659	0.72	0/2246
42	BG	0.46	0/1499	0.81	3/2016 (0.1%)
42	DG	0.50	1/1499 (0.1%)	0.77	0/2016
43	BH	0.37	0/1246	0.70	0/1684
43	DH	0.36	0/1246	0.70	0/1684
46	BN	0.42	0/1132	0.75	1/1527 (0.1%)
46	DN	0.43	0/1132	0.75	1/1527 (0.1%)
47	BO	0.49	0/943	0.79	0/1269
47	DO	0.52	0/943	0.78	0/1269
48	BP	0.49	0/1131	1.00	7/1504 (0.5%)
48	DP	0.48	0/1131	0.99	6/1504 (0.4%)
49	BQ	0.44	0/1143	0.71	0/1527
49	DQ	0.43	0/1143	0.72	0/1527
50	BR	0.41	0/974	0.74	0/1302
50	DR	0.39	0/974	0.74	0/1302
51	BS	0.41	0/779	0.72	0/1038
51	DS	0.41	0/779	0.72	0/1038
52	BT	0.47	0/1156	0.75	0/1544
52	DT	0.44	0/1156	0.75	0/1544
53	BU	0.43	0/975	0.74	0/1297
53	DU	0.45	0/975	0.75	0/1297
54	BV	0.39	0/790	0.73	0/1057
54	DV	0.40	0/790	0.73	0/1057
55	BW	0.44	0/907	0.71	0/1216
55	DW	0.42	0/907	0.72	0/1216
56	BX	0.47	0/740	0.71	0/995
56	DX	0.45	0/740	0.71	0/995
57	BY	0.44	0/789	0.81	1/1053 (0.1%)
57	DY	0.43	0/789	0.81	1/1053 (0.1%)
58	BZ	0.43	0/1435	0.77	0/1949
58	DZ	0.45	0/1435	0.78	0/1949
All	All	0.57	13/329754 (0.0%)	0.76	152/492708 (0.0%)

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	1	68
1	CA	0	63
22	AV	0	2
22	AW	0	3
22	CV	0	2
22	CW	0	3
23	AX	0	1
23	CX	0	1
30	B4	0	1
30	D4	0	1
36	BA	2	84
36	DA	1	84
46	BN	0	1
46	DN	0	1
All	All	4	315

All (13) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	CY	1	G	OP3-P	-7.09	1.52	1.61
24	AY	1	G	OP3-P	-7.06	1.52	1.61
30	D4	47	GLN	C-N	-6.41	1.19	1.34
38	BC	218	MET	CG-SD	6.21	1.97	1.81
36	DA	2551	C	N1-C2	6.07	1.46	1.40
38	BC	120	MET	CG-SD	5.97	1.96	1.81
36	BA	761	A	C5-C6	-5.87	1.35	1.41
36	BA	733	G	C5-C6	-5.61	1.36	1.42
38	DC	218	MET	CG-SD	5.58	1.95	1.81
38	DC	120	MET	CG-SD	5.55	1.95	1.81
42	DG	67	LYS	CE-NZ	5.45	1.62	1.49
36	DA	2612	C	N1-C2	5.24	1.45	1.40
1	AA	18	C	N1-C2	5.03	1.45	1.40

All (152) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1498	U	C2'-C3'-O3'	11.14	134.01	109.50
1	AA	1050	G	N9-C1'-C2'	-9.97	101.03	112.00
1	CA	1050	G	N9-C1'-C2'	-9.73	101.29	112.00
1	AA	961	U	N1-C1'-C2'	-9.15	101.93	112.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	961	U	N1-C1'-C2'	-9.06	102.03	112.00
36	BA	1799	G	C2'-C3'-O3'	8.77	128.80	109.50
36	DA	1799	G	C2'-C3'-O3'	8.75	128.75	109.50
36	BA	1819	A	C2'-C3'-O3'	8.63	128.48	109.50
36	BA	2346	A	N9-C1'-C2'	8.34	124.85	114.00
36	DA	1819	A	C2'-C3'-O3'	8.21	127.56	109.50
48	BP	41	ARG	N-CA-C	-8.16	88.97	111.00
1	CA	1498	U	C2'-C3'-O3'	8.08	127.28	109.50
36	BA	1653	G	C2'-C3'-O3'	8.01	127.11	109.50
36	DA	1992	G	C2'-C3'-O3'	7.79	126.65	109.50
36	DA	2346	A	N9-C1'-C2'	7.69	123.99	114.00
36	DA	1653	G	C2'-C3'-O3'	7.55	126.11	109.50
1	AA	575	G	C2'-C3'-O3'	7.54	126.08	109.50
48	DP	41	ARG	N-CA-C	-7.45	90.87	111.00
1	AA	243	A	C2'-C3'-O3'	7.30	125.57	109.50
36	BA	1992	G	C2'-C3'-O3'	7.23	125.40	109.50
36	DA	2610	C	C2'-C3'-O3'	7.13	125.18	109.50
1	CA	575	G	C2'-C3'-O3'	7.12	125.16	109.50
48	DP	53	GLY	N-CA-C	-6.95	95.73	113.10
36	DA	1495	A	N9-C1'-C2'	6.95	123.03	114.00
36	BA	1820	U	C2'-C3'-O3'	6.95	124.81	113.70
48	BP	53	GLY	N-CA-C	-6.94	95.75	113.10
1	AA	534	U	N1-C1'-C2'	-6.93	104.38	112.00
48	BP	51	PHE	N-CA-C	6.91	129.65	111.00
36	BA	2405	G	N9-C1'-C2'	6.85	122.91	114.00
36	DA	2405	G	N9-C1'-C2'	6.85	122.91	114.00
48	DP	51	PHE	N-CA-C	6.83	129.45	111.00
1	CA	243	A	C2'-C3'-O3'	6.82	124.61	113.70
36	BA	1495	A	N9-C1'-C2'	6.81	122.85	114.00
1	CA	55	A	N9-C1'-C2'	6.74	122.76	114.00
48	BP	52	GLU	N-CA-C	6.67	129.00	111.00
48	DP	52	GLU	N-CA-C	6.66	128.98	111.00
57	DY	54	LYS	N-CA-C	-6.59	93.21	111.00
57	BY	54	LYS	N-CA-C	-6.49	93.48	111.00
1	AA	7	G	N9-C1'-C2'	6.47	122.41	114.00
1	AA	55	A	N9-C1'-C2'	6.44	122.37	114.00
1	CA	518	C	N1-C1'-C2'	6.43	122.36	114.00
36	DA	764	A	C1'-O4'-C4'	-6.37	104.80	109.90
36	BA	2610	C	C2'-C3'-O3'	6.31	123.80	113.70
36	DA	1786	A	N9-C1'-C2'	6.29	122.17	114.00
36	BA	1493	C	N1-C1'-C2'	6.28	122.17	114.00
36	DA	331	A	C2'-C3'-O3'	6.24	123.69	113.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1053	G	C2'-C3'-O3'	6.21	123.64	113.70
1	CA	534	U	N1-C1'-C2'	-6.21	105.17	112.00
36	DA	2525	G	N9-C1'-C2'	-6.17	105.21	112.00
46	BN	51	PHE	N-CA-C	-6.17	94.34	111.00
1	AA	498	U	N1-C1'-C2'	-6.15	105.23	112.00
42	BG	88	ILE	N-CA-C	6.13	127.56	111.00
36	BA	2525	G	N9-C1'-C2'	-6.12	105.27	112.00
1	CA	7	G	N9-C1'-C2'	6.12	121.95	114.00
1	CA	498	U	N1-C1'-C2'	-6.10	105.29	112.00
36	BA	1786	A	N9-C1'-C2'	6.07	121.89	114.00
36	DA	1493	C	N1-C1'-C2'	6.06	121.88	114.00
1	AA	1502	A	N9-C1'-C2'	6.01	121.81	114.00
1	AA	518	C	N1-C1'-C2'	6.00	121.81	114.00
36	BA	331	A	C2'-C3'-O3'	6.00	123.30	113.70
28	D2	32	LEU	N-CA-C	-5.98	94.86	111.00
1	AA	1487	G	N9-C1'-C2'	-5.94	105.46	112.00
36	DA	1660	C	N1-C1'-C2'	-5.94	105.47	112.00
36	DA	1819	A	C4'-C3'-O3'	5.92	124.85	113.00
48	BP	40	SER	N-CA-C	-5.90	95.06	111.00
1	CA	1528	U	N1-C1'-C2'	-5.90	105.51	112.00
4	AD	12	CYS	N-CA-C	-5.89	95.09	111.00
36	BA	1896	G	N9-C1'-C2'	-5.86	105.55	112.00
36	BA	352	G	N9-C1'-C2'	5.86	121.62	114.00
1	AA	508	C	N1-C1'-C2'	5.81	121.55	114.00
36	BA	2508	G	N9-C1'-C2'	-5.80	105.62	112.00
36	BA	243	U	N1-C1'-C2'	5.79	121.53	114.00
36	DA	2052	G	N9-C1'-C2'	-5.78	105.65	112.00
46	DN	51	PHE	N-CA-C	-5.75	95.49	111.00
36	DA	1820	U	C2'-C3'-O3'	5.74	122.89	113.70
4	CD	12	CYS	N-CA-C	-5.73	95.52	111.00
1	CA	388	G	N9-C1'-C2'	5.70	121.41	114.00
1	AA	982	U	N1-C1'-C2'	5.67	121.37	114.00
1	CA	982	U	N1-C1'-C2'	5.64	121.33	114.00
48	DP	40	SER	N-CA-C	-5.62	95.82	111.00
1	AA	28	G	N9-C1'-C2'	-5.60	105.84	112.00
1	AA	1053	G	C2'-C3'-O3'	5.59	122.64	113.70
36	DA	945	A	N9-C1'-C2'	5.59	121.26	114.00
36	BA	1698	A	O4'-C1'-N9	5.58	112.66	108.20
36	DA	352	G	N9-C1'-C2'	5.57	121.24	114.00
36	BA	2110	G	C2'-C3'-O3'	5.55	122.59	113.70
36	DA	1807	G	N9-C1'-C2'	-5.55	105.89	112.00
1	AA	47	C	N1-C1'-C2'	5.54	121.20	114.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	B2	32	LEU	N-CA-C	-5.54	96.05	111.00
18	AR	78	LEU	CA-CB-CG	-5.52	102.60	115.30
1	CA	652	U	N1-C1'-C2'	5.52	121.17	114.00
36	DA	2110	G	C2'-C3'-O3'	5.50	122.51	113.70
36	BA	1698	A	N9-C1'-C2'	5.49	121.14	114.00
36	BA	784	A	N9-C1'-C2'	5.49	121.14	114.00
36	DA	243	U	N1-C1'-C2'	5.48	121.12	114.00
24	CY	1	G	OP1-P-OP2	-5.47	111.39	119.60
42	BG	85	GLY	N-CA-C	-5.47	99.42	113.10
42	BG	67	LYS	CD-CE-NZ	5.46	124.26	111.70
18	CR	78	LEU	CA-CB-CG	-5.44	102.78	115.30
36	DA	1820	U	C4'-C3'-C2'	5.43	108.03	102.60
36	DA	1698	A	N9-C1'-C2'	5.39	121.00	114.00
36	BA	386	G	N9-C1'-C2'	5.38	121.00	114.00
36	DA	1698	A	O4'-C1'-N9	5.37	112.50	108.20
36	DA	748	G	O4'-C1'-N9	5.35	112.48	108.20
36	BA	1807	G	N9-C1'-C2'	-5.34	106.13	112.00
36	DA	2590	A	C5'-C4'-O4'	5.34	115.51	109.10
1	CA	1124	G	N9-C1'-C2'	5.34	120.94	114.00
36	DA	1970	A	C1'-O4'-C4'	-5.33	105.64	109.90
36	BA	1970	A	C1'-O4'-C4'	-5.31	105.65	109.90
24	AY	1	G	OP1-P-OP2	-5.31	111.64	119.60
10	CJ	93	GLY	N-CA-C	-5.29	99.86	113.10
1	AA	1077	G	N9-C1'-C2'	-5.29	106.18	112.00
1	AA	641	U	N1-C1'-C2'	5.29	120.88	114.00
36	BA	1820	U	C4'-C3'-C2'	5.28	107.88	102.60
1	AA	1124	G	N9-C1'-C2'	5.27	120.85	114.00
1	CA	47	C	N1-C1'-C2'	5.27	120.85	114.00
1	CA	508	C	N1-C1'-C2'	5.26	120.84	114.00
36	DA	1952	A	N9-C1'-C2'	5.25	120.83	114.00
1	CA	453	A	N9-C1'-C2'	-5.24	106.23	112.00
36	DA	784	A	N9-C1'-C2'	5.22	120.79	114.00
36	BA	1970	A	C5'-C4'-O4'	5.22	115.36	109.10
39	BD	210	GLY	N-CA-C	-5.21	100.08	113.10
36	DA	2035	G	N9-C1'-C2'	5.21	120.77	114.00
36	BA	967	C	N1-C1'-C2'	-5.19	106.29	112.00
5	AE	25	ARG	N-CA-C	-5.18	97.02	111.00
36	BA	2477	C	N1-C1'-C2'	5.17	120.72	114.00
36	BA	74	A	C2'-C3'-O3'	5.16	121.96	113.70
36	DA	748	G	N9-C1'-C2'	5.15	120.70	114.00
36	DA	1669	A	N9-C1'-C2'	5.15	120.70	114.00
36	BA	1799	G	C4'-C3'-O3'	5.15	123.30	113.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	DA	1896	G	N9-C1'-C2'	-5.14	106.35	112.00
36	BA	1920	C	N1-C1'-C2'	-5.13	106.35	112.00
36	DA	1909	C	C5'-C4'-C3'	-5.12	107.81	116.00
1	AA	641	U	C2'-C3'-O3'	5.11	121.88	113.70
36	DA	386	G	N9-C1'-C2'	5.09	120.62	114.00
48	BP	58	THR	N-CA-C	-5.08	97.27	111.00
3	AC	155	GLY	N-CA-C	5.08	125.80	113.10
36	BA	1459	G	N9-C1'-C2'	5.08	120.61	114.00
28	B2	16	LEU	N-CA-C	5.08	124.70	111.00
1	CA	1502	A	N9-C1'-C2'	5.07	120.59	114.00
48	DP	28	GLY	N-CA-C	-5.07	100.42	113.10
1	AA	652	U	N1-C1'-C2'	5.07	120.59	114.00
36	BA	764	A	C1'-O4'-C4'	-5.06	105.85	109.90
10	AJ	93	GLY	N-CA-C	-5.06	100.46	113.10
36	BA	1819	A	C4'-C3'-O3'	5.06	123.11	113.00
36	DA	74	A	C2'-C3'-O3'	5.05	121.78	113.70
36	BA	748	G	O4'-C1'-N9	5.04	112.24	108.20
36	BA	748	G	N9-C1'-C2'	5.03	120.54	114.00
1	AA	388	G	N9-C1'-C2'	5.03	120.54	114.00
27	D1	73	LEU	N-CA-C	-5.01	97.47	111.00
4	CD	32	ALA	N-CA-C	-5.01	97.47	111.00
48	BP	28	GLY	N-CA-C	-5.00	100.59	113.10

All (4) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	1498	U	C3'
36	BA	1799	G	C3'
36	BA	1819	A	C3'
36	DA	1819	A	C3'

All (315) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1054	C	Sidechain
1	AA	1058	G	Sidechain
1	AA	1067	A	Sidechain
1	AA	1081	G	Sidechain
1	AA	109	A	Sidechain
1	AA	1194	U	Sidechain
1	AA	1201	A	Sidechain
1	AA	1301	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	AA	1302	U	Sidechain
1	AA	1329	A	Sidechain
1	AA	1348	U	Sidechain
1	AA	1370	G	Sidechain
1	AA	1391	U	Sidechain
1	AA	1394	A	Sidechain
1	AA	1401	G	Sidechain
1	AA	1406	U	Sidechain
1	AA	1407	C	Sidechain
1	AA	1408	A	Sidechain
1	AA	1415	G	Sidechain
1	AA	1417	G	Sidechain
1	AA	1491	G	Sidechain
1	AA	1497	G	Sidechain
1	AA	1498	U	Sidechain
1	AA	1505	G	Sidechain
1	AA	1509	C	Sidechain
1	AA	1510	U	Sidechain
1	AA	1514	C	Sidechain
1	AA	189(H)	G	Sidechain
1	AA	235	C	Sidechain
1	AA	24	U	Sidechain
1	AA	245	C	Sidechain
1	AA	254	G	Sidechain
1	AA	362	G	Sidechain
1	AA	37	U	Sidechain
1	AA	371	G	Sidechain
1	AA	424	G	Sidechain
1	AA	453	A	Sidechain
1	AA	498	U	Sidechain
1	AA	534	U	Sidechain
1	AA	541	G	Sidechain
1	AA	559	A	Sidechain
1	AA	565	U	Sidechain
1	AA	584	G	Sidechain
1	AA	609	A	Sidechain
1	AA	641	U	Sidechain
1	AA	652	U	Sidechain
1	AA	655	A	Sidechain
1	AA	661	G	Sidechain
1	AA	678	U	Sidechain
1	AA	690	G	Sidechain

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	AA	7	G	Sidechain
1	AA	727	G	Sidechain
1	AA	788	U	Sidechain
1	AA	813	U	Sidechain
1	AA	816	A	Sidechain
1	AA	836	G	Sidechain
1	AA	858	G	Sidechain
1	AA	901	A	Sidechain
1	AA	917	G	Sidechain
1	AA	919	A	Sidechain
1	AA	920	U	Sidechain
1	AA	935	A	Sidechain
1	AA	936	C	Sidechain
1	AA	952	U	Sidechain
1	AA	955	U	Sidechain
1	AA	961	U	Sidechain
1	AA	978	A	Sidechain
1	AA	982	U	Sidechain
22	AV	32	U	Sidechain
22	AV	49	C	Sidechain
22	AW	10	G	Sidechain
22	AW	16	U	Sidechain
22	AW	8	U	Sidechain
23	AX	19	U	Sidechain
30	B4	43	TYR	Sidechain
36	BA	1234	U	Sidechain
36	BA	1251	C	Sidechain
36	BA	1343	G	Sidechain
36	BA	1357	U	Sidechain
36	BA	1420	U	Sidechain
36	BA	1433	U	Sidechain
36	BA	1435	G	Sidechain
36	BA	1447	G	Sidechain
36	BA	1504	C	Sidechain
36	BA	1528	A	Sidechain
36	BA	1614	A	Sidechain
36	BA	1619	G	Sidechain
36	BA	1633	G	Sidechain
36	BA	1690	A	Sidechain
36	BA	1772	G	Sidechain
36	BA	1777	U	Sidechain
36	BA	1779	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
36	BA	1791	A	Sidechain
36	BA	1804	C	Sidechain
36	BA	1812	A	Sidechain
36	BA	1833	U	Sidechain
36	BA	1834	U	Sidechain
36	BA	1849	G	Sidechain
36	BA	1927	A	Sidechain
36	BA	1938	A	Sidechain
36	BA	1944	U	Sidechain
36	BA	1955	U	Sidechain
36	BA	1962	C	Sidechain
36	BA	1971	A	Sidechain
36	BA	1972	A	Sidechain
36	BA	1980	G	Sidechain
36	BA	1987	G	Sidechain
36	BA	2052	G	Sidechain
36	BA	2070	G	Sidechain
36	BA	2079	U	Sidechain
36	BA	2233	U	Sidechain
36	BA	2237	G	Sidechain
36	BA	2250	G	Sidechain
36	BA	2344	U	Sidechain
36	BA	2346	A	Sidechain
36	BA	2357	U	Sidechain
36	BA	2390	U	Sidechain
36	BA	2464	C	Sidechain
36	BA	250	G	Sidechain
36	BA	2504	U	Sidechain
36	BA	2507	C	Sidechain
36	BA	2517	C	Sidechain
36	BA	2525	G	Sidechain
36	BA	2554	U	Sidechain
36	BA	2595	G	Sidechain
36	BA	2596	U	Sidechain
36	BA	2597	G	Sidechain
36	BA	2604	U	Sidechain
36	BA	269	U	Sidechain
36	BA	2719	G	Sidechain
36	BA	2756	U	Sidechain
36	BA	2779	U	Sidechain
36	BA	389	G	Sidechain
36	BA	395	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
36	BA	454	A	Sidechain
36	BA	463	G	Sidechain
36	BA	464	U	Sidechain
36	BA	532	A	Sidechain
36	BA	574	C	Sidechain
36	BA	606	U	Sidechain
36	BA	63	U	Sidechain
36	BA	676	A	Sidechain
36	BA	686	G	Sidechain
36	BA	688	U	Sidechain
36	BA	716	A	Sidechain
36	BA	72	U	Sidechain
36	BA	726	G	Sidechain
36	BA	746	A	Sidechain
36	BA	749	C	Sidechain
36	BA	763	G	Sidechain
36	BA	769	G	Sidechain
36	BA	776	G	Sidechain
36	BA	787	U	Sidechain
36	BA	792	G	Sidechain
36	BA	860	U	Sidechain
36	BA	945	A	Sidechain
36	BA	946	G	Sidechain
36	BA	972	G	Sidechain
36	BA	987	G	Sidechain
46	BN	4	TYR	Sidechain
1	CA	1054	C	Sidechain
1	CA	1058	G	Sidechain
1	CA	1081	G	Sidechain
1	CA	109	A	Sidechain
1	CA	1194	U	Sidechain
1	CA	1201	A	Sidechain
1	CA	1302	U	Sidechain
1	CA	1329	A	Sidechain
1	CA	1348	U	Sidechain
1	CA	1370	G	Sidechain
1	CA	1391	U	Sidechain
1	CA	1394	A	Sidechain
1	CA	1402	C	Sidechain
1	CA	1415	G	Sidechain
1	CA	1417	G	Sidechain
1	CA	1465	C	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	CA	1473	A	Sidechain
1	CA	1481	U	Sidechain
1	CA	1492	A	Sidechain
1	CA	1498	U	Sidechain
1	CA	1517	G	Sidechain
1	CA	1519	A	Sidechain
1	CA	1528	U	Sidechain
1	CA	189(H)	G	Sidechain
1	CA	24	U	Sidechain
1	CA	245	C	Sidechain
1	CA	37	U	Sidechain
1	CA	371	G	Sidechain
1	CA	424	G	Sidechain
1	CA	498	U	Sidechain
1	CA	521	G	Sidechain
1	CA	534	U	Sidechain
1	CA	541	G	Sidechain
1	CA	559	A	Sidechain
1	CA	565	U	Sidechain
1	CA	584	G	Sidechain
1	CA	609	A	Sidechain
1	CA	641	U	Sidechain
1	CA	652	U	Sidechain
1	CA	655	A	Sidechain
1	CA	661	G	Sidechain
1	CA	677	U	Sidechain
1	CA	678	U	Sidechain
1	CA	7	G	Sidechain
1	CA	727	G	Sidechain
1	CA	787	A	Sidechain
1	CA	788	U	Sidechain
1	CA	813	U	Sidechain
1	CA	816	A	Sidechain
1	CA	858	G	Sidechain
1	CA	901	A	Sidechain
1	CA	914	A	Sidechain
1	CA	917	G	Sidechain
1	CA	920	U	Sidechain
1	CA	921	U	Sidechain
1	CA	935	A	Sidechain
1	CA	936	C	Sidechain
1	CA	952	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	CA	955	U	Sidechain
1	CA	961	U	Sidechain
1	CA	974	A	Sidechain
1	CA	978	A	Sidechain
1	CA	982	U	Sidechain
22	CV	32	U	Sidechain
22	CV	49	C	Sidechain
22	CW	10	G	Sidechain
22	CW	16	U	Sidechain
22	CW	8	U	Sidechain
23	CX	19	U	Sidechain
30	D4	43	TYR	Sidechain
36	DA	1234	U	Sidechain
36	DA	1251	C	Sidechain
36	DA	1302	A	Sidechain
36	DA	1325	G	Sidechain
36	DA	1343	G	Sidechain
36	DA	1357	U	Sidechain
36	DA	1420	U	Sidechain
36	DA	1433	U	Sidechain
36	DA	1447	G	Sidechain
36	DA	1465	G	Sidechain
36	DA	1528	A	Sidechain
36	DA	1631(A)	A	Sidechain
36	DA	1633	G	Sidechain
36	DA	1701	A	Sidechain
36	DA	1772	G	Sidechain
36	DA	1777	U	Sidechain
36	DA	1779	U	Sidechain
36	DA	1791	A	Sidechain
36	DA	1804	C	Sidechain
36	DA	1808	U	Sidechain
36	DA	1823	G	Sidechain
36	DA	1834	U	Sidechain
36	DA	1849	G	Sidechain
36	DA	1923	U	Sidechain
36	DA	1927	A	Sidechain
36	DA	1944	U	Sidechain
36	DA	1955	U	Sidechain
36	DA	1968	G	Sidechain
36	DA	1971	A	Sidechain
36	DA	1980	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
36	DA	1987	G	Sidechain
36	DA	2000	G	Sidechain
36	DA	2009	G	Sidechain
36	DA	2031	A	Sidechain
36	DA	2052	G	Sidechain
36	DA	2070	G	Sidechain
36	DA	2079	U	Sidechain
36	DA	2224	G	Sidechain
36	DA	2233	U	Sidechain
36	DA	2237	G	Sidechain
36	DA	2250	G	Sidechain
36	DA	2344	U	Sidechain
36	DA	2346	A	Sidechain
36	DA	2390	U	Sidechain
36	DA	2464	C	Sidechain
36	DA	2491	U	Sidechain
36	DA	2504	U	Sidechain
36	DA	2525	G	Sidechain
36	DA	2554	U	Sidechain
36	DA	2581	G	Sidechain
36	DA	2595	G	Sidechain
36	DA	2596	U	Sidechain
36	DA	2597	G	Sidechain
36	DA	2604	U	Sidechain
36	DA	269	U	Sidechain
36	DA	2712(A)	A	Sidechain
36	DA	2719	G	Sidechain
36	DA	2756	U	Sidechain
36	DA	2779	U	Sidechain
36	DA	28	A	Sidechain
36	DA	389	G	Sidechain
36	DA	395	U	Sidechain
36	DA	45	C	Sidechain
36	DA	454	A	Sidechain
36	DA	463	G	Sidechain
36	DA	464	U	Sidechain
36	DA	498	G	Sidechain
36	DA	532	A	Sidechain
36	DA	606	U	Sidechain
36	DA	676	A	Sidechain
36	DA	686	G	Sidechain
36	DA	688	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
36	DA	72	U	Sidechain
36	DA	726	G	Sidechain
36	DA	746	A	Sidechain
36	DA	759	G	Sidechain
36	DA	763	G	Sidechain
36	DA	769	G	Sidechain
36	DA	776	G	Sidechain
36	DA	787	U	Sidechain
36	DA	860	U	Sidechain
36	DA	945	A	Sidechain
36	DA	972	G	Sidechain
36	DA	987	G	Sidechain
46	DN	4	TYR	Sidechain

## 5.2 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 hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32329	0	16318	2214	0
1	CA	32329	0	16318	2217	0
2	AB	1901	0	1951	376	1
2	CB	1901	0	1951	383	1
3	AC	1613	0	1677	265	0
3	CC	1613	0	1677	260	0
4	AD	1703	0	1764	296	0
4	CD	1703	0	1765	305	0
5	AE	1147	0	1207	196	0
5	CE	1147	0	1207	198	0
6	AF	843	0	857	86	0
6	CF	843	0	857	101	0
7	AG	1257	0	1296	187	0
7	CG	1257	0	1296	187	0
8	AH	1116	0	1177	192	0
8	CH	1116	0	1177	204	0
9	AI	1010	0	1037	165	0
9	CI	1010	0	1037	168	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
10	AJ	795	0	840	197	0
10	CJ	795	0	840	209	0
11	AK	885	0	904	130	0
11	CK	885	0	904	124	0
12	AL	971	0	1057	156	0
12	CL	971	0	1057	149	0
13	AM	988	0	1059	215	0
13	CM	988	0	1059	208	0
14	AN	492	0	529	130	0
14	CN	492	0	529	129	0
15	AO	734	0	771	94	0
15	CO	734	0	771	97	0
16	AP	701	0	720	116	0
16	CP	701	0	720	114	0
17	AQ	824	0	891	88	0
17	CQ	824	0	891	89	0
18	AR	574	0	644	97	0
18	CR	574	0	644	95	0
19	AS	630	0	652	129	0
19	CS	630	0	652	129	0
20	AT	763	0	861	148	0
20	CT	763	0	861	141	0
21	AU	209	0	221	30	0
21	CU	209	0	221	33	0
22	AV	1619	0	822	101	0
22	AW	1619	0	822	82	0
22	CV	1619	0	822	89	0
22	CW	1619	0	822	90	0
23	AX	272	0	142	23	0
23	CX	272	0	142	21	0
24	AY	1650	0	851	118	0
24	CY	1650	0	851	115	0
25	AZ	2900	0	2907	491	0
25	CZ	2900	0	2907	478	0
26	B0	662	0	688	112	0
26	D0	662	0	688	112	0
27	B1	732	0	808	156	0
27	D1	732	0	808	158	0
28	B2	598	0	653	166	0
28	D2	598	0	653	153	0
29	B3	468	0	523	74	0
29	D3	468	0	523	76	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	B4	341	0	337	72	0
30	D4	341	0	337	63	0
31	B5	459	0	480	98	0
31	D5	459	0	480	100	0
32	B6	433	0	461	157	0
32	D6	433	0	461	162	0
33	B7	419	0	467	71	0
33	D7	419	0	467	76	0
34	B8	508	0	576	141	0
34	D8	508	0	576	147	0
35	B9	307	0	335	74	0
35	D9	307	0	337	78	0
36	BA	62474	0	31497	4312	0
36	DA	62474	0	31497	4327	0
37	BB	2551	0	1295	152	0
37	DB	2551	0	1295	162	0
38	BC	1742	0	1800	269	1
38	DC	1742	0	1800	272	1
39	BD	2145	0	2234	441	0
39	DD	2145	0	2234	438	0
40	BE	1564	0	1629	331	0
40	DE	1564	0	1629	327	0
41	BF	1624	0	1677	362	0
41	DF	1624	0	1677	351	0
42	BG	1474	0	1535	396	0
42	DG	1474	0	1535	365	0
43	BH	1223	0	1282	214	0
43	DH	1223	0	1282	215	0
44	BJ	651	0	136	11	0
44	DJ	651	0	136	9	0
45	BK	701	0	157	35	0
45	DK	701	0	157	34	0
46	BN	1105	0	1180	233	0
46	DN	1105	0	1180	232	0
47	BO	933	0	996	121	0
47	DO	933	0	996	120	0
48	BP	1114	0	1187	309	0
48	DP	1114	0	1187	308	0
49	BQ	1122	0	1179	240	0
49	DQ	1122	0	1179	226	0
50	BR	960	0	1021	198	0
50	DR	960	0	1021	197	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
51	BS	771	0	832	195	0
51	DS	771	0	832	189	0
52	BT	1142	0	1202	274	0
52	DT	1142	0	1202	274	0
53	BU	958	0	1015	223	0
53	DU	958	0	1015	223	0
54	BV	779	0	852	167	0
54	DV	779	0	852	169	0
55	BW	896	0	953	153	0
55	DW	896	0	953	160	0
56	BX	726	0	778	118	0
56	DX	726	0	778	115	0
57	BY	776	0	870	208	0
57	DY	776	0	870	203	0
58	BZ	1403	0	1432	320	0
58	DZ	1403	0	1432	293	0
59	AA	42	0	45	4	0
59	CA	42	0	45	3	0
60	AD	1	0	0	1	0
60	AN	1	0	0	0	0
60	B4	1	0	0	0	0
60	B9	1	0	0	0	0
60	CD	1	0	0	0	0
60	CN	1	0	0	0	0
60	D4	1	0	0	0	0
60	D9	1	0	0	2	0
61	AY	1	0	0	0	0
61	CY	1	0	0	0	0
62	AZ	28	0	12	15	0
62	CZ	28	0	12	15	0
63	AZ	57	0	58	4	0
63	CZ	57	0	59	8	0
All	All	306876	0	208322	30320	2

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 59.

All (30320) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:356:PRO:O	25:AZ:359:VAL:CG2	1.74	1.32
27:B1:41:ARG:NH2	36:BA:1365:A:H5"	1.53	1.24
25:CZ:356:PRO:O	25:CZ:359:VAL:HG22	1.38	1.20

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:CY:41:G:H2'	24:CY:42:U:H5''	1.24	1.19
32:B6:45:LYS:H	32:B6:45:LYS:CD	1.48	1.19
36:DA:2012:G:H4'	55:DW:96:ILE:HD11	1.25	1.18
19:AS:16:LEU:HA	19:AS:19:VAL:HB	1.21	1.18
25:CZ:355:LEU:HB3	25:CZ:359:VAL:HG23	1.25	1.17
19:CS:16:LEU:HA	19:CS:19:VAL:HB	1.19	1.17
39:DD:147:LEU:HD11	39:DD:183:ARG:NH1	1.60	1.17
57:BY:46:LYS:H	57:BY:62:GLU:HG2	1.10	1.16
32:D6:45:LYS:H	32:D6:45:LYS:CD	1.49	1.16
25:AZ:38:GLU:HG3	25:AZ:189:ARG:NH1	1.60	1.15
28:D2:38:GLN:HB3	28:D2:44:LEU:HD13	1.24	1.15
36:BA:1887:C:H2'	36:BA:1888:G:H5''	1.22	1.15
24:AY:41:G:H2'	24:AY:42:U:H5''	1.22	1.15
12:AL:17:LYS:HD3	12:AL:18:VAL:H	1.12	1.14
24:CY:61:C:H2'	24:CY:62:U:H5''	1.18	1.14
36:DA:655:A:H4'	36:DA:656:G:H5'	1.17	1.14
36:DA:2523:G:H2'	36:DA:2524:G:H5''	1.23	1.14
24:AY:61:C:H2'	24:AY:62:U:H5''	1.16	1.14
1:AA:368:U:H5	25:AZ:234:ARG:HD3	1.05	1.14
36:DA:227:A:H5''	48:DP:76:LYS:HE3	1.29	1.14
8:AH:23:SER:HA	8:AH:63:LEU:HD23	1.22	1.14
27:B1:13:ILE:HD11	36:BA:396:G:H5'	1.14	1.14
1:CA:8:A:H62	4:CD:208:SER:HB2	1.13	1.14
56:BX:12:VAL:HB	56:BX:17:ALA:HB1	1.29	1.14
36:DA:2761:G:H2'	36:DA:2762:G:H5''	1.19	1.13
36:DA:271(M):G:H2'	36:DA:271(N):U:H5''	1.28	1.13
57:DY:50:ARG:HB3	57:DY:53:PRO:HG3	1.26	1.13
1:AA:1470:G:H2'	1:AA:1471:G:H8	1.10	1.13
38:DC:94:VAL:HG12	38:DC:95:GLY:H	1.12	1.13
25:CZ:268:THR:HG23	25:CZ:289:LEU:HD23	1.29	1.13
36:BA:2523:G:H2'	36:BA:2524:G:H5''	1.23	1.13
39:BD:147:LEU:HD11	39:BD:183:ARG:NH1	1.62	1.13
27:D1:13:ILE:HD11	36:DA:396:G:H5'	1.20	1.13
36:DA:797:C:H2'	36:DA:798:G:H8	1.13	1.13
9:AI:53:VAL:HG13	9:AI:95:LYS:HE3	1.30	1.12
25:AZ:356:PRO:O	25:AZ:359:VAL:HG22	1.39	1.12
1:CA:979:C:H3'	1:CA:980:C:H5''	1.14	1.12
40:DE:57:LYS:HA	40:DE:57:LYS:HE3	1.16	1.12
8:CH:23:SER:HA	8:CH:63:LEU:HD23	1.28	1.12
1:AA:1189:C:H5''	3:AC:5:ILE:HG21	1.24	1.12
36:BA:925:C:H2'	36:BA:926:A:H5''	1.14	1.11
10:CJ:16:LEU:HD11	10:CJ:70:ARG:HG3	1.30	1.11

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BY:50:ARG:HB3	57:BY:53:PRO:HG3	1.27	1.11
38:BC:114:VAL:HB	38:BC:149:ILE:HD11	1.16	1.11
1:CA:265:G:H2'	1:CA:266:G:H5''	1.26	1.11
38:DC:114:VAL:HB	38:DC:149:ILE:HD11	1.16	1.11
41:DF:64:ILE:HG23	41:DF:65:TRP:H	1.15	1.11
58:DZ:141:VAL:HA	58:DZ:144:LEU:HD23	1.32	1.11
42:DG:85:GLY:C	42:DG:87:PRO:HD3	1.69	1.11
36:BA:655:A:H4'	36:BA:656:G:H5'	1.18	1.11
24:CY:40:G:H2'	24:CY:41:G:H5''	1.32	1.11
36:DA:1887:C:H2'	36:DA:1888:G:H5''	1.21	1.11
43:BH:52:VAL:HB	43:BH:69:ARG:HD3	1.29	1.11
1:AA:1053:G:H4'	1:AA:1054:C:H5'	1.32	1.11
43:DH:52:VAL:HB	43:DH:69:ARG:HD3	1.27	1.11
36:BA:2761:G:H2'	36:BA:2762:G:H5''	1.16	1.11
28:B2:51:ARG:HD3	28:B2:55:ARG:HH22	0.96	1.11
41:BF:155:LEU:HA	41:BF:174:VAL:HB	1.33	1.11
36:DA:925:C:H2'	36:DA:926:A:H5''	1.14	1.11
34:B8:10:ALA:HA	34:B8:13:ARG:HG2	1.33	1.10
31:B5:4:HIS:HB2	31:B5:5:PRO:HD3	1.28	1.10
53:DU:112:ARG:HH12	54:DV:46:VAL:HG11	1.09	1.10
36:BA:2502:G:H5''	36:BA:2503:A:H5''	1.30	1.10
25:AZ:268:THR:HG23	25:AZ:289:LEU:HD23	1.30	1.10
1:CA:368:U:H5	25:CZ:234:ARG:HD3	1.11	1.10
10:AJ:16:LEU:HD11	10:AJ:70:ARG:HG3	1.28	1.10
42:BG:63:ILE:HG13	42:BG:64:THR:H	1.10	1.10
36:BA:271(M):G:H2'	36:BA:271(N):U:H5''	1.27	1.10
28:B2:38:GLN:HB3	28:B2:44:LEU:HD13	1.23	1.10
55:DW:8:ARG:HA	55:DW:102:HIS:HB3	1.29	1.10
11:CK:124:LYS:HD2	11:CK:125:PHE:HE1	1.17	1.10
56:DX:12:VAL:HB	56:DX:17:ALA:HB1	1.28	1.09
27:D1:62:VAL:HG21	27:D1:67:ILE:HA	1.20	1.09
36:DA:2645:G:H3'	36:DA:2646:C:H5'	1.34	1.09
36:DA:2523:G:C2'	36:DA:2524:G:H5''	1.81	1.09
1:CA:1189:C:H5''	3:CC:5:ILE:HG21	1.22	1.09
36:DA:2502:G:H5''	36:DA:2503:A:H5''	1.28	1.09
36:BA:833:U:H5''	48:BP:48:PRO:HB3	1.35	1.09
36:BA:2523:G:C2'	36:BA:2524:G:H5''	1.82	1.09
36:BA:227:A:H5''	48:BP:76:LYS:HE3	1.25	1.09
36:BA:797:C:H2'	36:BA:798:G:H8	1.12	1.09
41:BF:29:ASN:HD22	41:BF:32:LEU:HB2	1.18	1.09
26:D0:11:ARG:HB2	26:D0:11:ARG:HH11	1.15	1.09
2:AB:84:GLU:HB3	2:AB:219:VAL:HG21	1.32	1.09

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:138:VAL:HG21	25:AZ:173:GLY:H	0.92	1.08
42:BG:67:LYS:HD3	42:BG:67:LYS:N	1.64	1.08
36:BA:1484:G:H2'	36:BA:1485:G:H5''	1.35	1.08
27:B1:41:ARG:HH22	36:BA:1365:A:C5'	1.66	1.08
36:BA:511:U:H3'	36:BA:512:G:H5''	1.35	1.08
48:DP:146:VAL:HG22	48:DP:147:LEU:H	1.15	1.08
36:DA:94(A):G:H2'	36:DA:95:G:H5''	1.35	1.08
1:AA:386:C:H2'	1:AA:387:U:H5'	1.35	1.08
8:CH:10:LEU:HD22	8:CH:83:ILE:HD11	1.17	1.08
9:CI:53:VAL:HG13	9:CI:95:LYS:HE3	1.36	1.08
49:BQ:134:ARG:HD2	58:BZ:122:ARG:HH22	1.11	1.08
1:AA:265:G:H2'	1:AA:266:G:H5''	1.23	1.08
53:BU:112:ARG:HH12	54:BV:46:VAL:HG11	1.13	1.08
34:D8:10:ALA:HA	34:D8:13:ARG:HG2	1.34	1.08
1:CA:1053:G:H4'	1:CA:1054:C:H5'	1.31	1.08
51:BS:13:ARG:HG3	51:BS:14:VAL:H	1.19	1.08
32:B6:19:ARG:HD3	36:BA:2400:G:H4'	1.30	1.07
25:AZ:189:ARG:HG3	25:AZ:190:ARG:H	0.92	1.07
57:DY:46:LYS:H	57:DY:62:GLU:HG2	1.12	1.07
38:BC:94:VAL:HG12	38:BC:95:GLY:H	1.12	1.07
8:AH:10:LEU:HD22	8:AH:83:ILE:HD11	1.23	1.07
25:AZ:264:ARG:HG2	25:AZ:264:ARG:HH11	1.05	1.07
32:D6:27:LYS:HG3	32:D6:30:THR:HB	1.36	1.07
2:CB:84:GLU:HB3	2:CB:219:VAL:HG21	1.34	1.07
41:DF:155:LEU:HA	41:DF:174:VAL:HB	1.35	1.07
28:B2:41:ILE:HG13	28:B2:42:GLY:H	1.12	1.07
49:BQ:134:ARG:HD2	58:BZ:122:ARG:NH2	1.68	1.07
40:BE:57:LYS:HA	40:BE:57:LYS:HE3	1.19	1.07
25:AZ:356:PRO:O	25:AZ:359:VAL:HG23	1.51	1.07
36:BA:94(A):G:H2'	36:BA:95:G:H5''	1.34	1.07
3:CC:22:TRP:HZ3	3:CC:24:ALA:HB2	1.13	1.07
38:DC:23:ASP:HB3	38:DC:27:ARG:HH12	1.17	1.07
1:CA:736:C:H2'	1:CA:737:A:C8	1.89	1.07
24:AY:40:G:H2'	24:AY:41:G:H5''	1.31	1.07
36:BA:2840:C:H5''	50:BR:53:HIS:CD2	1.88	1.07
36:BA:2012:G:H4'	55:BW:96:ILE:HD11	1.27	1.07
42:BG:39:ILE:HD11	42:BG:60:LEU:HD11	1.27	1.07
12:CL:18:VAL:HG23	12:CL:19:ARG:H	1.15	1.07
32:B6:27:LYS:HG3	32:B6:30:THR:HB	1.37	1.07
48:BP:146:VAL:HG22	48:BP:147:LEU:H	1.14	1.06
36:DA:1516:C:H2'	36:DA:1517:G:H5''	1.36	1.06
12:AL:18:VAL:HG23	12:AL:19:ARG:H	1.13	1.06

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1047:G:H5''	14:AN:4:LYS:HE2	1.37	1.06
13:CM:97:PRO:HA	13:CM:110:ARG:HD3	1.36	1.06
55:BW:8:ARG:HA	55:BW:102:HIS:HB3	1.27	1.06
36:DA:2807:G:H3'	36:DA:2808:U:H5''	1.36	1.06
13:AM:97:PRO:HA	13:AM:110:ARG:HD3	1.37	1.06
48:BP:9:ASN:H	48:BP:10:PRO:HD2	1.18	1.06
36:DA:925:C:C2'	36:DA:926:A:H5''	1.86	1.06
36:DA:2672:G:H2'	36:DA:2673:G:H5''	1.36	1.06
3:AC:22:TRP:HZ3	3:AC:24:ALA:HB2	1.16	1.06
56:DX:36:LYS:HA	56:DX:39:ILE:HB	1.34	1.06
32:D6:19:ARG:HD3	36:DA:2400:G:H4'	1.31	1.06
1:AA:8:A:H62	4:AD:208:SER:HB2	1.19	1.06
39:DD:147:LEU:HD11	39:DD:183:ARG:HH12	0.94	1.06
25:CZ:138:VAL:HG21	25:CZ:173:GLY:H	0.92	1.06
56:BX:36:LYS:HA	56:BX:39:ILE:HB	1.34	1.06
52:BT:28:VAL:HG22	52:BT:47:GLY:H	1.14	1.06
36:BA:2807:G:H3'	36:BA:2808:U:H5''	1.34	1.06
25:CZ:355:LEU:HB3	25:CZ:359:VAL:CG2	1.83	1.05
36:DA:833:U:H5''	48:DP:48:PRO:HB3	1.31	1.05
52:DT:55:ASN:H	52:DT:59:THR:HG22	1.19	1.05
38:BC:23:ASP:HB3	38:BC:27:ARG:HH12	1.13	1.05
36:DA:1484:G:H2'	36:DA:1485:G:H5''	1.35	1.05
25:AZ:355:LEU:HD23	25:AZ:370:PHE:HB3	1.36	1.05
4:CD:28:SER:HB3	4:CD:29:PRO:HD2	1.36	1.05
58:BZ:152:ALA:HB1	58:BZ:167:PRO:HB2	1.36	1.05
57:DY:96:ILE:HG13	57:DY:99:CYS:HB3	1.34	1.05
36:BA:797:C:H2'	36:BA:798:G:C8	1.92	1.05
7:AG:12:LEU:HD11	7:AG:25:ALA:HB2	1.38	1.05
1:AA:736:C:H2'	1:AA:737:A:C8	1.91	1.05
35:D9:10:ILE:H	35:D9:10:ILE:HD12	1.17	1.05
1:AA:979:C:H3'	1:AA:980:C:H5''	1.14	1.05
36:BA:582:G:H2'	36:BA:583:G:H8	1.16	1.05
39:DD:147:LEU:CD1	39:DD:183:ARG:HH12	1.68	1.05
25:AZ:135:MET:O	25:AZ:138:VAL:HG22	1.56	1.05
39:BD:147:LEU:HD11	39:BD:183:ARG:HH12	0.94	1.05
36:BA:925:C:C2'	36:BA:926:A:H5''	1.85	1.05
4:AD:28:SER:HB3	4:AD:29:PRO:HD2	1.35	1.05
26:B0:11:ARG:HB2	26:B0:11:ARG:HH11	1.16	1.05
36:BA:2645:G:H3'	36:BA:2646:C:H5'	1.37	1.05
41:DF:29:ASN:HD22	41:DF:32:LEU:HB2	1.17	1.05
1:CA:386:C:H2'	1:CA:387:U:H5'	1.36	1.05
37:DB:80:U:H2'	37:DB:81:G:H21	1.17	1.05

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:135:MET:O	25:CZ:138:VAL:HG22	1.55	1.04
36:BA:1710:C:H2'	36:BA:1711:C:H6	1.20	1.04
48:DP:9:ASN:H	48:DP:10:PRO:HD2	1.18	1.04
47:BO:2:ILE:HD11	47:BO:82:ASN:HD22	1.16	1.04
58:BZ:96:VAL:HG22	58:BZ:97:GLU:H	1.15	1.04
31:D5:4:HIS:HB2	31:D5:5:PRO:HD3	1.31	1.04
56:DX:12:VAL:HG23	56:DX:13:LEU:H	1.19	1.04
36:DA:1710:C:H2'	36:DA:1711:C:H6	1.20	1.04
58:DZ:152:ALA:HB1	58:DZ:167:PRO:HB2	1.35	1.04
1:CA:1116:C:H2'	1:CA:1117:G:H5''	1.36	1.04
39:DD:112:GLN:H	39:DD:115:GLN:NE2	1.56	1.04
7:CG:69:VAL:HA	7:CG:138:LYS:HD2	1.39	1.04
24:AY:56:C:H2'	24:AY:57:G:H5'	1.38	1.04
22:CV:68:C:H2'	22:CV:69:G:H5''	1.39	1.04
12:CL:17:LYS:HD3	12:CL:18:VAL:H	1.17	1.03
47:DO:2:ILE:HD11	47:DO:82:ASN:HD22	1.18	1.03
36:BA:2672:G:H2'	36:BA:2673:G:H5''	1.37	1.03
1:AA:965:A:H4'	1:AA:966:G:OP2	1.56	1.03
22:AV:68:C:H2'	22:AV:69:G:H5''	1.40	1.03
39:BD:147:LEU:CD1	39:BD:183:ARG:HH12	1.70	1.03
3:AC:189:ALA:HB3	3:AC:196:LEU:HB2	1.41	1.03
3:CC:189:ALA:HB3	3:CC:196:LEU:HB2	1.37	1.03
36:DA:2833:G:H3'	36:DA:2834:G:C5'	1.88	1.03
37:BB:80:U:H2'	37:BB:81:G:H21	1.23	1.03
1:AA:1491:G:H2'	59:AA:1601:PAR:O31	1.59	1.03
36:BA:1516:C:H2'	36:BA:1517:G:H5''	1.37	1.03
11:AK:124:LYS:HD2	11:AK:125:PHE:HE1	1.18	1.03
28:B2:35:LEU:HD11	28:B2:50:ILE:HG13	1.40	1.03
19:AS:44:MET:HA	19:AS:47:HIS:HD2	1.22	1.03
36:BA:1024:G:H3'	36:BA:1025:G:H5''	1.41	1.03
47:BO:114:ILE:HD12	47:BO:114:ILE:H	1.18	1.03
36:DA:797:C:H2'	36:DA:798:G:C8	1.94	1.03
36:DA:582:G:H2'	36:DA:583:G:H8	1.17	1.03
40:DE:167:VAL:HG13	40:DE:170:LEU:HD11	1.40	1.03
52:DT:28:VAL:HG22	52:DT:47:GLY:H	1.16	1.03
36:DA:1665:A:C2'	36:DA:1666:G:H5''	1.89	1.03
6:CF:96:PRO:HB3	18:CR:30:ASP:OD2	1.58	1.03
41:BF:72:ARG:HA	41:BF:72:ARG:HH11	1.20	1.03
4:AD:187:ARG:HH11	4:AD:187:ARG:HB3	1.24	1.03
36:BA:2833:G:H3'	36:BA:2834:G:C5'	1.87	1.03
51:DS:13:ARG:HG3	51:DS:14:VAL:H	1.19	1.03
24:AY:61:C:C2'	24:AY:62:U:H5''	1.89	1.02

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:CY:56:C:H2'	24:CY:57:G:H5'	1.37	1.02
26:D0:40:GLN:HE22	26:D0:43:THR:HA	1.22	1.02
25:AZ:138:VAL:HG21	25:AZ:173:GLY:N	1.75	1.02
57:BY:96:ILE:HG13	57:BY:99:CYS:HB3	1.37	1.02
42:BG:163:ALA:HB1	42:BG:169:ALA:HB2	1.39	1.02
31:D5:41:PRO:HG2	31:D5:44:THR:OG1	1.58	1.02
32:B6:5:VAL:HG11	36:BA:2283:C:H5'	1.37	1.02
5:CE:33:VAL:HG21	5:CE:109:ILE:HG12	1.34	1.02
36:DA:2185:C:H2'	36:DA:2186:G:H5'	1.41	1.02
22:CV:20:U:H3'	22:CV:21:A:H5'	1.39	1.02
36:DA:1024:G:H3'	36:DA:1025:G:H5''	1.41	1.02
1:AA:1423:G:H2'	1:AA:1424:C:C6	1.95	1.02
35:B9:10:ILE:HD12	35:B9:10:ILE:H	1.21	1.02
1:CA:1047:G:H5''	14:CN:4:LYS:HE2	1.39	1.02
46:BN:133:GLN:HG2	46:BN:135:PRO:HD3	1.41	1.02
56:DX:65:ARG:HG2	56:DX:66:LEU:H	1.25	1.02
14:AN:13:THR:N	14:AN:14:PRO:HD2	1.73	1.02
51:DS:49:VAL:HG12	51:DS:50:SER:H	1.23	1.02
1:AA:17:U:H2'	1:AA:18:C:C6	1.95	1.02
1:CA:1423:G:H2'	1:CA:1424:C:H6	1.25	1.02
26:B0:40:GLN:HE22	26:B0:43:THR:HA	1.23	1.02
56:BX:12:VAL:HG23	56:BX:13:LEU:H	1.20	1.02
1:CA:1301:U:H3'	1:CA:1302:U:H5''	1.41	1.02
1:CA:17:U:H2'	1:CA:18:C:C6	1.95	1.02
55:BW:5:ALA:HB2	55:BW:54:ALA:HB2	1.41	1.02
32:D6:45:LYS:HD3	32:D6:45:LYS:H	1.24	1.01
36:DA:511:U:H3'	36:DA:512:G:H5''	1.39	1.01
5:AE:50:GLU:HG3	5:AE:52:PRO:HD2	1.42	1.01
40:BE:167:VAL:HG13	40:BE:170:LEU:HD11	1.39	1.01
2:AB:21:ARG:HB3	2:AB:39:ILE:HG23	1.40	1.01
36:BA:1590:U:H2'	36:BA:1591:G:H5''	1.40	1.01
46:DN:133:GLN:HG2	46:DN:135:PRO:HD3	1.43	1.01
39:DD:224:ALA:HB2	39:DD:233:HIS:HB3	1.38	1.01
48:BP:59:LEU:HA	48:BP:61:ARG:NE	1.74	1.01
25:AZ:191:GLY:HA3	25:AZ:197:ASP:HB2	1.39	1.01
1:CA:1190:G:H3'	3:CC:3:ASN:HD21	1.22	1.01
55:DW:5:ALA:HB2	55:DW:54:ALA:HB2	1.43	1.01
7:CG:12:LEU:HD11	7:CG:25:ALA:HB2	1.42	1.01
41:BF:9:ILE:HG12	41:BF:14:PRO:HA	1.43	1.01
9:AI:52:ALA:HB3	9:AI:95:LYS:HE2	1.41	1.01
47:DO:114:ILE:HD12	47:DO:114:ILE:H	1.19	1.01
24:CY:16:H2U:H61	24:CY:16:H2U:H5''	1.43	1.01

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BS:49:VAL:HG12	51:BS:50:SER:H	1.21	1.01
2:AB:200:ILE:HD12	2:AB:200:ILE:H	1.25	1.01
31:B5:41:PRO:HG2	31:B5:44:THR:OG1	1.60	1.01
36:BA:582:G:H2'	36:BA:583:G:C8	1.96	1.01
48:DP:59:LEU:HA	48:DP:61:ARG:NE	1.75	1.01
2:AB:87:ARG:HE	2:AB:233:SER:HB3	1.21	1.01
36:BA:2184:G:H2'	36:BA:2185:C:H1'	1.41	1.01
36:BA:1380:G:H2'	36:BA:1381:G:H8	1.24	1.01
54:DV:4:ILE:HG22	54:DV:39:LEU:HD23	1.39	1.01
36:BA:2712:U:H1'	36:BA:2712(A):A:C8	1.96	1.01
57:BY:8:LYS:HD2	57:BY:8:LYS:H	1.21	1.01
3:CC:91:LEU:HD11	3:CC:101:LEU:HD12	1.42	1.01
4:CD:187:ARG:HH11	4:CD:187:ARG:HB3	1.23	1.01
2:CB:87:ARG:HE	2:CB:233:SER:HB3	1.20	1.01
25:AZ:336:SER:OG	25:AZ:355:LEU:HB2	1.59	1.00
34:B8:15:LYS:HD3	48:BP:65:ARG:HH22	1.23	1.00
5:AE:33:VAL:HG21	5:AE:109:ILE:HG12	1.37	1.00
14:CN:57:ARG:HB3	14:CN:57:ARG:HH11	1.26	1.00
36:BA:2511:U:H4'	40:BE:124:GLY:HA2	1.41	1.00
22:AV:20:U:H3'	22:AV:21:A:H5'	1.40	1.00
24:AY:1:G:H1'	25:AZ:300:ARG:NH2	1.75	1.00
36:DA:2840:C:H5''	50:DR:53:HIS:CD2	1.95	1.00
48:DP:62:LEU:N	48:DP:62:LEU:HD23	1.76	1.00
36:DA:1598:C:H5'	56:DX:36:LYS:HG2	1.42	1.00
36:BA:1598:C:H5'	56:BX:36:LYS:HG2	1.41	1.00
1:AA:1116:C:H2'	1:AA:1117:G:H5''	1.38	1.00
19:CS:44:MET:HA	19:CS:47:HIS:HD2	1.26	1.00
46:BN:55:VAL:HG22	46:BN:126:PRO:HA	1.40	1.00
36:BA:143:G:H4'	56:BX:35:THR:HG21	1.43	1.00
1:CA:1366:C:H2'	1:CA:1367:C:H6	1.27	1.00
1:AA:1483:A:H2	36:BA:1960:A:H1'	1.25	1.00
14:AN:57:ARG:HH11	14:AN:57:ARG:HB3	1.24	1.00
36:DA:1590:U:H2'	36:DA:1591:G:H5''	1.39	1.00
36:BA:740:U:H2'	36:BA:741:G:C8	1.96	1.00
27:B1:4:VAL:HG23	27:B1:11:ARG:HG2	1.44	1.00
34:D8:15:LYS:HD3	48:DP:65:ARG:HH22	1.22	1.00
52:BT:55:ASN:H	52:BT:59:THR:HG22	1.22	1.00
57:DY:8:LYS:H	57:DY:8:LYS:HD2	1.23	1.00
34:D8:50:LEU:HD12	34:D8:51:ALA:H	1.23	1.00
36:BA:1665:A:C2'	36:BA:1666:G:H5''	1.91	1.00
52:BT:61:PHE:HE2	52:BT:76:PHE:HB2	1.26	1.00
41:BF:64:ILE:HG23	41:BF:65:TRP:H	1.24	1.00

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:CP:8:ARG:NH2	16:CP:15:PRO:HG3	1.77	1.00
16:AP:20:VAL:HG23	16:AP:35:LYS:HA	1.43	1.00
7:AG:69:VAL:HA	7:AG:138:LYS:HD2	1.42	1.00
1:CA:1003:G:H2'	1:CA:1004:A:H4'	1.43	1.00
36:DA:582:G:H2'	36:DA:583:G:C8	1.97	0.99
7:AG:69:VAL:HG11	7:AG:104:LEU:HD21	1.43	0.99
36:DA:1092:C:H42	36:DA:1100:C:H42	1.05	0.99
1:CA:78:G:H22	1:CA:91:C:H42	1.00	0.99
10:CJ:78:ASN:HD22	10:CJ:81:THR:HG21	1.25	0.99
52:DT:61:PHE:HE2	52:DT:76:PHE:HB2	1.26	0.99
20:CT:73:HIS:HB3	20:CT:74:LYS:HD3	1.45	0.99
24:AY:16:H2U:H5''	24:AY:16:H2U:H61	1.43	0.99
13:CM:66:LEU:HA	13:CM:70:LEU:HD12	1.44	0.99
32:B6:45:LYS:HD3	32:B6:45:LYS:H	1.22	0.99
34:B8:50:LEU:HD12	34:B8:51:ALA:H	1.25	0.99
57:DY:67:LEU:HD21	57:DY:71:LYS:HE2	1.42	0.99
6:AF:96:PRO:HB3	18:AR:30:ASP:OD2	1.62	0.99
55:BW:36:LEU:HD23	55:BW:36:LEU:H	1.25	0.99
1:AA:150:C:H2'	1:AA:151:A:H5''	1.44	0.99
32:D6:5:VAL:HG11	36:DA:2283:C:H5'	1.41	0.99
1:AA:368:U:C5	25:AZ:234:ARG:HD3	1.97	0.99
10:CJ:54:PHE:C	10:CJ:55:LYS:HE3	1.82	0.99
36:DA:1665:A:H2'	36:DA:1666:G:H5''	1.43	0.99
36:DA:1465:G:H2'	36:DA:1466:G:H8	1.27	0.99
22:CW:54:U:H4'	38:DC:54:SER:HB2	1.44	0.99
5:CE:50:GLU:HG3	5:CE:52:PRO:HD2	1.45	0.99
58:BZ:58:VAL:HG22	58:BZ:68:PRO:HA	1.45	0.99
22:AV:53:G:H1	22:AV:61:C:H42	1.10	0.99
40:DE:199:ARG:HG2	40:DE:200:GLU:H	1.27	0.99
24:CY:61:C:C2'	24:CY:62:U:H5''	1.92	0.99
25:CZ:138:VAL:HG21	25:CZ:173:GLY:N	1.75	0.99
9:CI:43:ALA:HA	9:CI:74:ILE:HG21	1.44	0.99
57:BY:67:LEU:HD21	57:BY:71:LYS:HE2	1.44	0.99
36:DA:2892:A:H62	36:DA:2893:G:H21	1.08	0.99
8:AH:30:ARG:HB3	8:AH:30:ARG:NH1	1.78	0.99
25:AZ:277:LEU:HD12	25:AZ:280:GLY:H	1.27	0.99
1:CA:155:C:H2'	1:CA:156:G:H8	1.27	0.99
7:CG:69:VAL:HG11	7:CG:104:LEU:HD21	1.44	0.99
36:BA:662:G:H2'	36:BA:663:G:H8	1.27	0.99
2:CB:21:ARG:HB3	2:CB:39:ILE:HG23	1.43	0.99
36:DA:143:G:H4'	56:DX:35:THR:HG21	1.44	0.99
36:DA:2464:C:HO2'	36:DA:2465:C:H6	1.08	0.99

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DF:72:ARG:HA	41:DF:72:ARG:HH11	1.22	0.99
1:AA:1190:G:H3'	3:AC:3:ASN:HD21	1.27	0.99
1:AA:1301:U:H3'	1:AA:1302:U:H5''	1.43	0.98
39:BD:224:ALA:HB2	39:BD:233:HIS:HB3	1.42	0.98
55:DW:36:LEU:HD23	55:DW:36:LEU:H	1.25	0.98
58:DZ:86:VAL:HG12	58:DZ:87:ASP:H	1.26	0.98
11:AK:22:HIS:HB3	11:AK:29:ILE:HG23	1.41	0.98
25:AZ:189:ARG:CG	25:AZ:190:ARG:H	1.75	0.98
36:DA:2184:G:H2'	36:DA:2185:C:H1'	1.42	0.98
46:DN:55:VAL:HG22	46:DN:126:PRO:HA	1.44	0.98
36:DA:710:G:H2'	36:DA:711:G:H8	1.26	0.98
36:BA:523:C:H2'	36:BA:524:U:H5'	1.45	0.98
36:BA:1665:A:H2'	36:BA:1666:G:H5''	1.45	0.98
58:BZ:10:ARG:HE	58:BZ:36:LYS:HB2	1.24	0.98
42:BG:34:LEU:HA	42:BG:161:THR:HG22	1.45	0.98
16:CP:20:VAL:HG23	16:CP:35:LYS:HA	1.45	0.98
1:AA:1512:U:H2'	1:AA:1513:A:H8	1.28	0.98
48:BP:62:LEU:HD23	48:BP:62:LEU:N	1.78	0.98
7:AG:108:ALA:O	7:AG:111:ARG:HB2	1.62	0.98
36:DA:1067:A:H3'	36:DA:1068:G:H5''	1.46	0.98
41:DF:9:ILE:HG12	41:DF:14:PRO:HA	1.41	0.98
43:BH:37:VAL:HG12	43:BH:38:SER:H	1.26	0.98
36:BA:2892:A:H62	36:BA:2893:G:H21	1.07	0.98
36:DA:862:G:H2'	36:DA:863:A:O4'	1.63	0.98
9:AI:4:TYR:HB2	9:AI:19:LEU:HB2	1.44	0.98
30:B4:22:ILE:H	30:B4:22:ILE:HD12	1.28	0.98
25:CZ:191:GLY:HA3	25:CZ:197:ASP:HB2	1.40	0.98
1:AA:1003:G:H2'	1:AA:1004:A:H4'	1.43	0.98
14:CN:13:THR:N	14:CN:14:PRO:HD2	1.76	0.98
34:B8:15:LYS:HD3	48:BP:65:ARG:NH2	1.78	0.98
43:BH:33:LEU:HD12	43:BH:75:ALA:HA	1.45	0.98
39:DD:261:LYS:NZ	39:DD:263:ARG:HB2	1.77	0.98
1:AA:962:C:H42	1:AA:974:A:H61	1.11	0.98
13:AM:19:LEU:HB3	13:AM:25:ILE:HG21	1.45	0.98
36:DA:17:G:H22	36:DA:524:U:H1'	1.26	0.98
43:DH:37:VAL:HG12	43:DH:38:SER:H	1.29	0.98
40:BE:199:ARG:HG2	40:BE:200:GLU:H	1.28	0.98
36:DA:271(P):C:H2'	36:DA:271(Q):G:H5'	1.44	0.98
1:CA:1305:G:N2	1:CA:1331:G:H2'	1.79	0.98
36:DA:27:G:N2	36:DA:512:G:H2'	1.78	0.98
42:BG:7:LEU:HB3	42:BG:100:TRP:HE3	1.29	0.98
4:CD:108:LEU:HD11	4:CD:176:LEU:HD13	1.43	0.98

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:271(L):U:H5''	36:DA:271(M):G:H5'	1.45	0.97
36:BA:2761:G:C2'	36:BA:2762:G:H5''	1.93	0.97
27:B1:45:ASN:HB3	27:B1:64:ALA:HB2	1.45	0.97
1:CA:1440:C:H1'	1:CA:1462:G:N2	1.77	0.97
54:BV:4:ILE:HG22	54:BV:39:LEU:HD23	1.42	0.97
8:CH:30:ARG:NH1	8:CH:30:ARG:HB3	1.79	0.97
1:CA:1205:U:H4'	3:CC:195:VAL:HG21	1.43	0.97
28:B2:6:VAL:HA	28:B2:9:GLN:HB2	1.46	0.97
10:AJ:54:PHE:C	10:AJ:55:LYS:HE3	1.82	0.97
28:B2:51:ARG:HD3	28:B2:55:ARG:NH2	1.79	0.97
39:BD:166:GLN:HA	39:BD:166:GLN:HE21	1.27	0.97
25:AZ:259:ALA:HB1	25:AZ:260:PRO:HD2	1.45	0.97
36:BA:1394:U:H4'	36:BA:1603:A:H4'	1.45	0.97
36:DA:2511:U:H4'	40:DE:124:GLY:HA2	1.47	0.97
39:BD:112:GLN:H	39:BD:115:GLN:NE2	1.62	0.97
10:AJ:78:ASN:HD22	10:AJ:81:THR:HG21	1.26	0.97
1:CA:979:C:H3'	1:CA:980:C:C5'	1.93	0.97
57:DY:95:LYS:HG3	57:DY:100:ALA:HA	1.43	0.97
36:DA:740:U:H2'	36:DA:741:G:C8	1.99	0.97
37:DB:7:G:H3'	37:DB:8:U:H5''	1.46	0.97
36:DA:1380:G:H2'	36:DA:1381:G:H8	1.27	0.97
1:AA:1366:C:H2'	1:AA:1367:C:H6	1.27	0.97
3:AC:26:LYS:HG3	3:AC:27:LYS:HG3	1.45	0.97
36:DA:1759:A:H2'	36:DA:1760:A:C8	1.99	0.97
39:DD:166:GLN:HE21	39:DD:166:GLN:HA	1.25	0.97
47:BO:2:ILE:HD11	47:BO:82:ASN:ND2	1.80	0.97
14:AN:22:THR:HB	14:AN:33:VAL:HG21	1.46	0.97
36:BA:598:G:H5'	48:BP:15:ARG:HD3	1.47	0.97
36:DA:2506:U:C6	36:DA:2506:U:H5'	2.00	0.97
36:BA:266:G:H2'	36:BA:267:C:H5''	1.44	0.97
36:DA:662:G:H2'	36:DA:663:G:H8	1.26	0.97
34:D8:15:LYS:HD3	48:DP:65:ARG:NH2	1.77	0.97
38:DC:82:LYS:HG3	38:DC:147:PHE:HD1	1.29	0.97
2:CB:200:ILE:HD12	2:CB:200:ILE:H	1.30	0.97
25:CZ:72:THR:HG22	25:CZ:203:LEU:HD23	1.43	0.97
36:BA:1067:A:H3'	36:BA:1068:G:H5''	1.45	0.97
38:DC:42:GLU:HB2	38:DC:215:THR:HG23	1.45	0.97
36:DA:266:G:H2'	36:DA:267:C:H5''	1.44	0.97
40:DE:120:TRP:CD1	40:DE:155:LYS:HB3	1.98	0.97
9:CI:52:ALA:HB3	9:CI:95:LYS:HE2	1.42	0.97
36:BA:1759:A:H2'	36:BA:1760:A:H8	1.29	0.97
36:BA:1494:A:H2'	36:BA:1495:A:H5''	1.44	0.97

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:19:LEU:HB3	13:CM:25:ILE:HG21	1.46	0.97
36:BA:695:G:OP1	36:BA:1380:G:H4'	1.64	0.97
52:BT:24:PRO:HD3	52:BT:52:ILE:HD12	1.47	0.97
36:BA:27:G:N2	36:BA:512:G:H2'	1.79	0.97
32:D6:19:ARG:HG3	32:D6:20:ASN:H	1.28	0.97
36:BA:2640:G:H2'	36:BA:2641:G:H5''	1.47	0.97
52:BT:58:ASN:ND2	52:BT:58:ASN:H	1.63	0.97
14:CN:22:THR:HB	14:CN:33:VAL:HG21	1.45	0.97
1:CA:1305:G:HO2'	1:CA:1306:A:H8	1.01	0.97
42:BG:52:ILE:HD13	42:BG:52:ILE:H	1.29	0.97
1:AA:1305:G:N2	1:AA:1331:G:H2'	1.79	0.97
25:CZ:259:ALA:HB1	25:CZ:260:PRO:HD2	1.46	0.97
36:BA:1759:A:H2'	36:BA:1760:A:C8	1.98	0.97
36:DA:459:U:H2'	36:DA:460:A:H8	1.29	0.97
42:DG:131:TYR:HE2	42:DG:133:LEU:HB3	1.30	0.97
43:BH:20:ALA:HB3	43:BH:23:ARG:HB2	1.45	0.97
39:BD:261:LYS:NZ	39:BD:263:ARG:HB2	1.79	0.96
40:BE:36:ARG:NH2	40:BE:88:GLY:HA2	1.79	0.96
1:AA:979:C:H3'	1:AA:980:C:C5'	1.93	0.96
36:BA:1494:A:C2'	36:BA:1495:A:H5''	1.95	0.96
11:CK:22:HIS:HB3	11:CK:29:ILE:HG23	1.42	0.96
3:CC:26:LYS:HG3	3:CC:27:LYS:HG3	1.46	0.96
37:BB:7:G:H3'	37:BB:8:U:H5''	1.47	0.96
25:CZ:277:LEU:HD12	25:CZ:280:GLY:H	1.28	0.96
40:DE:198:VAL:HG12	40:DE:199:ARG:H	1.26	0.96
36:BA:2822:G:H2'	36:BA:2823:A:H5''	1.47	0.96
36:BA:2185:C:H2'	36:BA:2186:G:H5'	1.44	0.96
36:DA:1378:A:H4'	36:DA:1379:A:OP1	1.63	0.96
36:BA:2464:C:HO2'	36:BA:2465:C:H6	1.08	0.96
10:CJ:43:ARG:HB2	10:CJ:67:THR:CG2	1.95	0.96
36:BA:1465:G:H2'	36:BA:1466:G:H8	1.28	0.96
36:DA:2761:G:C2'	36:DA:2762:G:H5''	1.95	0.96
9:CI:4:TYR:HB2	9:CI:19:LEU:HB2	1.44	0.96
1:AA:1205:U:H4'	3:AC:195:VAL:HG21	1.45	0.96
3:CC:22:TRP:CZ3	3:CC:24:ALA:HB2	2.00	0.96
52:DT:82:LEU:H	52:DT:82:LEU:HD12	1.27	0.96
50:BR:99:LYS:H	50:BR:99:LYS:HD2	1.27	0.96
25:AZ:388:ILE:O	25:AZ:395:VAL:HG22	1.64	0.96
25:CZ:355:LEU:HD23	25:CZ:370:PHE:HB3	1.43	0.96
28:D2:69:ARG:NH2	36:DA:111:A:H4'	1.80	0.96
57:DY:7:VAL:HB	57:DY:8:LYS:HD2	1.45	0.96
57:BY:8:LYS:HB2	57:BY:28:LYS:NZ	1.80	0.96

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AI:48:GLU:HA	9:AI:51:ARG:HD2	1.44	0.96
20:AT:73:HIS:HB3	20:AT:74:LYS:HD3	1.46	0.96
1:AA:155:C:H2'	1:AA:156:G:H8	1.30	0.96
1:CA:982:U:H4'	1:CA:983:A:O5'	1.64	0.96
43:DH:85:LYS:HZ3	43:DH:133:VAL:H	1.08	0.96
36:BA:1177:A:H5'	36:BA:1178:C:C6	2.01	0.96
32:B6:19:ARG:HG3	32:B6:20:ASN:H	1.27	0.96
56:BX:12:VAL:HG23	56:BX:13:LEU:N	1.81	0.96
50:BR:96:ARG:HH12	50:BR:117:VAL:HG23	1.30	0.96
57:DY:8:LYS:HB2	57:DY:28:LYS:NZ	1.80	0.96
42:DG:60:LEU:HD13	42:DG:63:ILE:HD11	1.44	0.96
25:AZ:189:ARG:HG3	25:AZ:190:ARG:N	1.76	0.96
52:BT:82:LEU:HD12	52:BT:82:LEU:H	1.27	0.96
10:AJ:50:ILE:H	10:AJ:50:ILE:HD13	1.28	0.96
47:BO:35:VAL:HG11	47:BO:103:ALA:HB3	1.48	0.96
40:BE:120:TRP:CD1	40:BE:155:LYS:HB3	2.00	0.96
36:DA:1177:A:H5'	36:DA:1178:C:C6	2.01	0.96
38:BC:127:LEU:CD2	38:BC:130:ILE:HD12	1.96	0.96
52:BT:28:VAL:O	52:BT:29:ARG:HD3	1.64	0.96
36:DA:2306:C:H4'	42:DG:136:ARG:NH2	1.81	0.96
36:DA:2306:C:H4'	42:DG:136:ARG:HH22	1.29	0.96
48:DP:39:LYS:HE2	48:DP:42:SER:HB3	1.47	0.96
24:AY:11:C:H2'	24:AY:12:U:H5''	1.45	0.96
43:DH:33:LEU:HD12	43:DH:75:ALA:HA	1.47	0.96
28:D2:2:LYS:HB3	36:DA:97:C:H5''	1.46	0.95
56:DX:12:VAL:HG23	56:DX:13:LEU:N	1.78	0.95
40:BE:77:ILE:HG22	40:BE:78:LEU:H	1.29	0.95
47:DO:35:VAL:HG11	47:DO:103:ALA:HB3	1.47	0.95
7:CG:108:ALA:O	7:CG:111:ARG:HB2	1.65	0.95
36:DA:1394:U:H4'	36:DA:1603:A:H4'	1.46	0.95
13:AM:66:LEU:HA	13:AM:70:LEU:HD12	1.44	0.95
1:CA:452:A:O2'	1:CA:453:A:H5''	1.66	0.95
57:BY:95:LYS:HG3	57:BY:100:ALA:HA	1.43	0.95
9:AI:43:ALA:HA	9:AI:74:ILE:HG21	1.44	0.95
36:BA:330:A:H2	36:BA:1210:A:H2'	1.31	0.95
1:CA:864:A:H5'	1:CA:865:A:OP2	1.65	0.95
36:DA:1058:G:H2'	36:DA:1059:G:H5''	1.46	0.95
24:CY:11:C:H2'	24:CY:12:U:H5''	1.46	0.95
1:AA:78:G:H22	1:AA:91:C:H42	1.03	0.95
38:DC:74:VAL:HA	38:DC:112:ALA:HB3	1.46	0.95
28:B2:69:ARG:HH12	36:BA:111:A:H4'	1.31	0.95
52:DT:24:PRO:HD3	52:DT:52:ILE:HD12	1.46	0.95

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:18:C:H5''	5:AE:127:ASN:HD21	1.29	0.95
1:CA:965:A:H4'	1:CA:966:G:OP2	1.62	0.95
52:DT:28:VAL:O	52:DT:29:ARG:HD3	1.66	0.95
36:BA:459:U:H2'	36:BA:460:A:H8	1.32	0.95
30:D4:22:ILE:H	30:D4:22:ILE:HD12	1.29	0.95
36:BA:710:G:H2'	36:BA:711:G:H8	1.26	0.95
1:CA:1190:G:H3'	3:CC:3:ASN:ND2	1.80	0.95
36:DA:523:C:H2'	36:DA:524:U:H5'	1.45	0.95
1:AA:1483:A:C2	36:BA:1960:A:H1'	2.00	0.95
21:CU:9:ARG:NH1	21:CU:22:ARG:HG3	1.82	0.95
58:BZ:19:ARG:HA	58:BZ:23:LYS:O	1.65	0.95
1:AA:438:G:H5'	4:AD:123:HIS:HD1	1.31	0.95
52:BT:61:PHE:CE2	52:BT:76:PHE:HB2	2.01	0.95
58:DZ:33:LEU:HD12	58:DZ:34:ASN:N	1.81	0.95
46:BN:26:LEU:HD11	46:BN:30:ILE:HD11	1.46	0.95
6:CF:56:PRO:HG2	6:CF:57:GLN:HE21	1.30	0.95
28:B2:13:ALA:HA	28:B2:16:LEU:HD12	1.47	0.95
1:CA:962:C:H42	1:CA:974:A:H61	1.09	0.95
38:BC:42:GLU:HB2	38:BC:215:THR:HG23	1.45	0.95
40:DE:77:ILE:HG22	40:DE:78:LEU:H	1.28	0.95
36:BA:1092:C:H42	36:BA:1100:C:H42	1.03	0.95
25:CZ:388:ILE:O	25:CZ:395:VAL:HG22	1.66	0.95
4:CD:131:ARG:HD3	4:CD:131:ARG:H	1.30	0.95
1:CA:585:G:H4'	12:CL:8:ASN:HD21	1.28	0.95
36:BA:1887:C:C2'	36:BA:1888:G:H5''	1.96	0.95
47:DO:2:ILE:HD11	47:DO:82:ASN:ND2	1.81	0.95
57:BY:7:VAL:HB	57:BY:8:LYS:HD2	1.45	0.95
56:BX:65:ARG:HG2	56:BX:66:LEU:H	1.27	0.95
36:DA:2631:G:N2	40:DE:61:ARG:HH12	1.64	0.95
51:BS:106:ARG:HH11	51:BS:107:GLU:H	0.98	0.95
43:DH:20:ALA:HB3	43:DH:23:ARG:HB2	1.47	0.95
5:CE:110:LEU:HD22	5:CE:115:VAL:HG21	1.48	0.95
43:BH:101:ARG:HG2	43:BH:117:PRO:HG3	1.49	0.95
36:BA:1058:G:H2'	36:BA:1059:G:H5''	1.49	0.95
12:CL:113:ARG:HB3	12:CL:122:THR:HG21	1.47	0.95
36:DA:2822:G:H2'	36:DA:2823:A:H5''	1.48	0.95
39:DD:43:ARG:HD2	39:DD:44:ASN:OD1	1.66	0.95
25:AZ:72:THR:HG22	25:AZ:203:LEU:HD23	1.45	0.95
36:DA:1816:G:H8	39:DD:62:TYR:HH	1.04	0.95
36:BA:2887:U:H2'	36:BA:2888:C:H6	1.31	0.95
37:BB:91:C:H5'	49:BQ:17:LEU:O	1.64	0.95
25:AZ:174:SER:OG	25:AZ:177:LEU:HD13	1.66	0.95

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:D6:6:ARG:HB3	32:D6:6:ARG:NH1	1.80	0.95
36:BA:2631:G:N2	40:BE:61:ARG:HH12	1.63	0.95
37:BB:55:U:H2'	37:BB:56:G:C8	2.02	0.95
46:DN:40:PRO:HB3	53:DU:68:ALA:HB2	1.49	0.95
36:BA:2506:U:C6	36:BA:2506:U:H5'	2.00	0.95
36:DA:997:G:OP1	53:DU:93:LYS:HD3	1.67	0.94
1:AA:386:C:C2'	1:AA:387:U:H5'	1.97	0.94
58:DZ:10:ARG:HB3	58:DZ:36:LYS:HB2	1.49	0.94
36:DA:1759:A:H2'	36:DA:1760:A:H8	1.32	0.94
36:BA:271(P):C:H2'	36:BA:271(Q):G:H5'	1.45	0.94
36:BA:862:G:H2'	36:BA:863:A:O4'	1.65	0.94
27:B1:3:LYS:HA	36:BA:1365:A:OP2	1.67	0.94
4:CD:30:LYS:C	4:CD:32:ALA:H	1.69	0.94
36:DA:2640:G:H2'	36:DA:2641:G:H5''	1.48	0.94
42:BG:36:LYS:HA	42:BG:99:MET:SD	2.07	0.94
16:CP:14:ASN:HA	16:CP:42:ARG:HH12	1.30	0.94
36:BA:997:G:OP1	53:BU:93:LYS:HD3	1.66	0.94
36:DA:2712:U:H1'	36:DA:2712(A):A:C8	2.02	0.94
1:AA:585:G:H4'	12:AL:8:ASN:HD21	1.30	0.94
36:DA:2887:U:H2'	36:DA:2888:C:H6	1.31	0.94
36:BA:1243:G:H2'	36:BA:1244:G:H5''	1.49	0.94
41:BF:29:ASN:ND2	41:BF:32:LEU:HB2	1.82	0.94
53:DU:112:ARG:NH1	54:DV:46:VAL:HG11	1.81	0.94
36:BA:271(L):U:H5''	36:BA:271(M):G:H5'	1.47	0.94
53:DU:61:TRP:O	53:DU:65:ILE:HD13	1.67	0.94
22:AW:17:C:N4	36:BA:2110:G:H21	1.63	0.94
7:AG:42:ILE:HG23	7:AG:117:ALA:HA	1.50	0.94
43:BH:83:TYR:HB2	43:BH:135:GLY:H	1.32	0.94
13:CM:108:ARG:N	13:CM:108:ARG:HD2	1.80	0.94
36:DA:1494:A:H2'	36:DA:1495:A:H5''	1.47	0.94
51:DS:106:ARG:HH11	51:DS:107:GLU:H	1.00	0.94
22:CV:53:G:H1	22:CV:61:C:H42	1.08	0.94
52:DT:61:PHE:CE2	52:DT:76:PHE:HB2	2.01	0.94
47:DO:47:ILE:HG23	47:DO:48:PRO:HD2	1.45	0.94
24:AY:48:C:H2'	24:AY:59:A:H1'	1.50	0.94
46:BN:40:PRO:HB3	53:BU:68:ALA:HB2	1.45	0.94
31:D5:27:PRO:HG3	55:DW:23:LEU:HD11	1.49	0.94
39:BD:35:LYS:HG2	39:BD:63:ARG:HG2	1.49	0.94
36:BA:1484:G:C2'	36:BA:1485:G:H5''	1.97	0.94
36:DA:1484:G:C2'	36:DA:1485:G:H5''	1.97	0.94
9:CI:48:GLU:HA	9:CI:51:ARG:HD2	1.48	0.94
10:CJ:44:VAL:HG12	10:CJ:46:ARG:HG2	1.50	0.94

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1543:C:H3'	36:BA:1544:A:H5''	1.47	0.94
34:D8:62:LEU:HD13	36:DA:242:G:H3'	1.50	0.94
41:DF:24:LEU:HB3	41:DF:25:PRO:HD2	1.48	0.94
1:CA:368:U:C5	25:CZ:234:ARG:HD3	2.02	0.94
36:DA:17:G:N2	36:DA:524:U:H1'	1.82	0.94
40:BE:24:THR:HG21	40:BE:188:VAL:HG11	1.50	0.94
10:AJ:43:ARG:HB2	10:AJ:67:THR:CG2	1.98	0.94
42:DG:51:ARG:NE	42:DG:51:ARG:HA	1.78	0.94
1:AA:1470:G:H2'	1:AA:1471:G:C8	2.02	0.94
38:BC:74:VAL:HA	38:BC:112:ALA:HB3	1.47	0.94
41:BF:24:LEU:HB3	41:BF:25:PRO:HD2	1.50	0.94
36:BA:2645:G:H3'	36:BA:2646:C:C5'	1.98	0.94
42:DG:37:VAL:HG22	42:DG:159:VAL:HG23	1.48	0.94
25:CZ:246:LYS:HB3	25:CZ:281:ILE:HG22	1.49	0.94
15:CO:82:ILE:HG23	15:CO:83:GLU:H	1.33	0.94
2:CB:107:THR:HG23	2:CB:110:GLN:NE2	1.83	0.94
36:DA:1887:C:C2'	36:DA:1888:G:H5''	1.96	0.94
52:DT:58:ASN:ND2	52:DT:58:ASN:H	1.62	0.94
25:AZ:246:LYS:HB3	25:AZ:281:ILE:HG22	1.48	0.94
51:BS:106:ARG:NH1	51:BS:107:GLU:H	1.64	0.94
1:CA:150:C:H2'	1:CA:151:A:H5''	1.45	0.94
27:B1:41:ARG:HH22	36:BA:1365:A:H5''	0.79	0.94
56:DX:12:VAL:CG2	56:DX:13:LEU:H	1.80	0.94
3:AC:22:TRP:CZ3	3:AC:24:ALA:HB2	2.02	0.93
36:BA:17:G:H22	36:BA:524:U:H1'	1.31	0.93
36:DA:695:G:OP1	36:DA:1380:G:H4'	1.66	0.93
43:DH:101:ARG:HG2	43:DH:117:PRO:HG3	1.50	0.93
4:AD:131:ARG:HD3	4:AD:131:ARG:H	1.32	0.93
1:AA:368:U:OP2	25:AZ:291:ARG:HD3	1.68	0.93
14:AN:57:ARG:HH11	14:AN:57:ARG:CB	1.81	0.93
36:DA:1785:A:OP2	36:DA:1982:C:H5'	1.68	0.93
41:DF:29:ASN:ND2	41:DF:32:LEU:HB2	1.83	0.93
27:D1:44:PRO:HG2	27:D1:46:LEU:CD2	1.98	0.93
16:AP:67:THR:H	16:AP:70:ALA:HB3	1.32	0.93
40:DE:24:THR:HG21	40:DE:188:VAL:HG11	1.51	0.93
1:CA:386:C:C2'	1:CA:387:U:H5'	1.98	0.93
41:BF:6:VAL:HG12	41:BF:7:TYR:H	1.33	0.93
1:AA:982:U:H4'	1:AA:983:A:O5'	1.66	0.93
34:B8:49:VAL:HG12	34:B8:53:PRO:HD3	1.49	0.93
4:AD:30:LYS:C	4:AD:32:ALA:H	1.69	0.93
49:BQ:141:GLN:NE2	58:BZ:72:ARG:HD3	1.82	0.93
16:CP:67:THR:H	16:CP:70:ALA:HB3	1.32	0.93

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1402:C:H2'	1:AA:1403:C:O4'	1.68	0.93
24:CY:1:G:H1'	25:CZ:300:ARG:NH2	1.83	0.93
2:AB:61:LEU:HA	2:AB:64:ARG:NE	1.83	0.93
1:AA:1426:C:H2'	1:AA:1427:U:C6	2.04	0.93
49:BQ:45:GLN:H	49:BQ:45:GLN:NE2	1.66	0.93
48:DP:57:THR:OG1	48:DP:59:LEU:HB3	1.69	0.93
36:DA:330:A:H2	36:DA:1210:A:H2'	1.31	0.93
36:BA:2181:G:H2'	36:BA:2182:G:H8	1.31	0.93
36:DA:1516:C:C2'	36:DA:1517:G:H5''	1.98	0.93
3:AC:91:LEU:HD11	3:AC:101:LEU:HD12	1.46	0.93
3:AC:95:THR:HG22	3:AC:97:LYS:HG3	1.50	0.93
36:DA:1543:C:H3'	36:DA:1544:A:H5''	1.48	0.93
12:AL:113:ARG:HB3	12:AL:122:THR:HG21	1.51	0.93
27:B1:87:PRO:HA	27:B1:90:ILE:HG12	1.47	0.93
32:B6:45:LYS:N	32:B6:45:LYS:CD	2.30	0.93
16:AP:8:ARG:NH2	16:AP:15:PRO:HG3	1.83	0.93
36:DA:1689:A:H62	36:DA:1698:A:H2	1.08	0.93
51:BS:106:ARG:HH11	51:BS:107:GLU:N	1.67	0.93
5:CE:147:ASP:HA	5:CE:150:ARG:HH11	1.31	0.93
29:D3:8:LEU:HD12	29:D3:28:LEU:HB2	1.49	0.93
34:B8:62:LEU:HD13	36:BA:242:G:H3'	1.51	0.93
32:D6:45:LYS:CD	32:D6:45:LYS:N	2.30	0.93
10:CJ:50:ILE:HD13	10:CJ:50:ILE:H	1.29	0.93
13:CM:63:THR:HG22	13:CM:64:TRP:H	1.33	0.93
29:D3:6:VAL:HB	29:D3:54:VAL:HG11	1.50	0.93
43:DH:44:VAL:HG12	43:DH:45:VAL:H	1.34	0.93
1:AA:831:U:H2'	1:AA:832:C:C6	2.04	0.93
36:DA:1243:G:H2'	36:DA:1244:G:H5''	1.50	0.93
17:CQ:68:ARG:O	17:CQ:70:ARG:HD2	1.68	0.93
36:DA:2645:G:H3'	36:DA:2646:C:C5'	1.99	0.93
25:AZ:264:ARG:HH11	25:AZ:264:ARG:CG	1.81	0.93
7:AG:24:THR:HA	7:AG:27:ILE:HD12	1.50	0.93
36:BA:1222:C:H2'	36:BA:1223:G:H5''	1.49	0.93
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.03	0.93
5:AE:147:ASP:HA	5:AE:150:ARG:HH11	1.31	0.93
46:BN:75:TYR:HD1	46:BN:82:LEU:HB2	1.32	0.93
1:CA:346:G:H5'	52:DT:41:ARG:HH21	1.34	0.93
4:AD:108:LEU:HD11	4:AD:176:LEU:HD13	1.51	0.93
6:AF:56:PRO:HG2	6:AF:57:GLN:HE21	1.32	0.93
25:CZ:355:LEU:HD22	25:CZ:359:VAL:HB	1.49	0.92
36:BA:1378:A:H4'	36:BA:1379:A:OP1	1.66	0.92
42:BG:21:ARG:NH2	42:BG:22:ARG:HA	1.84	0.92

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2181:G:H2'	36:DA:2182:G:H8	1.32	0.92
4:CD:187:ARG:NH1	4:CD:187:ARG:HB3	1.84	0.92
51:DS:106:ARG:NH1	51:DS:107:GLU:H	1.66	0.92
15:AO:82:ILE:HG23	15:AO:83:GLU:H	1.33	0.92
50:DR:96:ARG:HH12	50:DR:117:VAL:HG23	1.33	0.92
5:CE:102:ALA:HB1	5:CE:106:PRO:HG2	1.49	0.92
40:BE:198:VAL:HG12	40:BE:199:ARG:H	1.31	0.92
36:DA:1378:A:O2'	36:DA:1379:A:H5'	1.69	0.92
43:DH:83:TYR:HB2	43:DH:135:GLY:H	1.32	0.92
22:CV:41:C:H2'	22:CV:41:C:O2	1.69	0.92
21:AU:9:ARG:NH1	21:AU:22:ARG:HG3	1.83	0.92
56:DX:30:VAL:HG11	56:DX:39:ILE:HD11	1.51	0.92
57:BY:13:VAL:HG13	57:BY:14:LEU:H	1.34	0.92
38:DC:127:LEU:CD2	38:DC:130:ILE:HD12	1.98	0.92
1:AA:1124:G:H21	1:AA:1126:U:H3	1.15	0.92
28:D2:38:GLN:HB3	28:D2:44:LEU:CD1	1.99	0.92
38:BC:82:LYS:HG3	38:BC:147:PHE:HD1	1.28	0.92
52:DT:27:THR:O	52:DT:28:VAL:HG23	1.68	0.92
19:AS:51:VAL:HG23	19:AS:60:VAL:HG11	1.52	0.92
4:AD:189:PRO:HB2	4:AD:194:LEU:HD21	1.51	0.92
36:BA:1689:A:H62	36:BA:1698:A:H2	1.07	0.92
43:BH:85:LYS:HZ3	43:BH:133:VAL:H	1.17	0.92
42:BG:117:PHE:O	42:BG:118:ARG:HG3	1.69	0.92
55:BW:12:ILE:HD12	55:BW:42:ARG:NH1	1.84	0.92
2:CB:24:TRP:CZ3	2:CB:26:PRO:HA	2.04	0.92
38:BC:206:GLY:HA3	38:BC:210:ARG:HH22	1.34	0.92
2:CB:121:LEU:HD21	2:CB:127:ILE:HD11	1.50	0.92
1:AA:979:C:C3'	1:AA:980:C:H5''	1.98	0.92
7:CG:42:ILE:HG23	7:CG:117:ALA:HA	1.50	0.92
10:CJ:63:PHE:HB3	14:CN:58:LYS:HA	1.51	0.92
24:CY:56:C:C2'	24:CY:57:G:H5'	1.97	0.92
36:DA:1222:C:H2'	36:DA:1223:G:H5''	1.49	0.92
10:CJ:65:LEU:HD13	14:CN:56:VAL:N	1.84	0.92
38:DC:96:GLY:HA3	38:DC:99:ILE:HG12	1.50	0.92
11:CK:21:ILE:HG13	11:CK:30:VAL:HG12	1.50	0.92
36:BA:2502:G:H5''	36:BA:2503:A:C5'	1.99	0.92
48:BP:57:THR:OG1	48:BP:59:LEU:HB3	1.69	0.92
5:AE:100:VAL:HG23	5:AE:107:ARG:HH21	1.34	0.92
10:AJ:44:VAL:HG12	10:AJ:46:ARG:HG2	1.49	0.92
1:CA:376:G:H2'	1:CA:377:G:H8	1.35	0.92
4:AD:100:ARG:HH21	4:AD:118:ARG:HH12	0.95	0.92
1:AA:1422:G:H2'	1:AA:1423:G:H8	1.34	0.92

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BN:24:GLY:H	46:BN:27:ALA:H	1.17	0.92
53:BU:70:ARG:HA	53:BU:74:LEU:O	1.70	0.92
38:BC:100:ILE:HG21	38:BC:126:LYS:HB3	1.50	0.92
36:DA:144:C:H2'	36:DA:145:G:C8	2.05	0.92
4:CD:100:ARG:HH21	4:CD:118:ARG:HH12	0.94	0.92
1:CA:1124:G:H21	1:CA:1126:U:H3	1.14	0.92
52:BT:27:THR:O	52:BT:28:VAL:HG23	1.68	0.92
36:DA:144:C:H2'	36:DA:145:G:H8	1.30	0.92
36:BA:1095:A:H2'	36:BA:1096:A:H8	1.35	0.92
49:DQ:45:GLN:NE2	49:DQ:45:GLN:H	1.66	0.92
36:DA:2161:C:H2'	36:DA:2162:G:H8	1.34	0.92
46:DN:75:TYR:HD1	46:DN:82:LEU:HB2	1.33	0.92
10:AJ:91:PRO:HB2	10:AJ:94:VAL:HB	1.51	0.92
36:DA:2385:C:H2'	36:DA:2386:C:C6	2.05	0.92
36:DA:2502:G:H5''	36:DA:2503:A:C5'	1.98	0.92
1:CA:744:C:H2'	1:CA:745:C:H6	1.31	0.92
4:CD:189:PRO:HB2	4:CD:194:LEU:HD21	1.51	0.92
55:BW:11:ARG:NH1	55:BW:98:LYS:HB3	1.84	0.92
36:BA:2262:U:H2'	36:BA:2263:C:C6	2.05	0.92
1:CA:1154:G:H2'	1:CA:1155:G:H8	1.34	0.92
43:BH:44:VAL:HG12	43:BH:45:VAL:H	1.32	0.92
8:AH:109:ILE:HG12	8:AH:110:ALA:N	1.83	0.92
14:CN:57:ARG:CB	14:CN:57:ARG:HH11	1.83	0.92
36:BA:1578:U:H2'	36:BA:1579:A:H5''	1.50	0.92
3:CC:95:THR:HG22	3:CC:97:LYS:HG3	1.52	0.92
1:AA:1461:G:H2'	1:AA:1462:G:C8	2.05	0.92
38:BC:96:GLY:HA3	38:BC:99:ILE:HG12	1.50	0.92
36:DA:598:G:H5'	48:DP:15:ARG:HD3	1.50	0.92
26:B0:16:SER:OG	36:BA:2261:C:H3'	1.70	0.91
34:D8:10:ALA:HB2	48:DP:61:ARG:NH1	1.85	0.91
39:BD:65:ILE:HD13	39:BD:65:ILE:H	1.34	0.91
38:BC:127:LEU:HD23	38:BC:130:ILE:HD12	1.51	0.91
1:AA:1426:C:H2'	1:AA:1427:U:H6	1.34	0.91
50:DR:99:LYS:H	50:DR:99:LYS:HD2	1.31	0.91
57:BY:46:LYS:HB2	57:BY:62:GLU:CG	2.00	0.91
41:DF:181:LEU:HD11	41:DF:186:ILE:HD11	1.50	0.91
46:DN:26:LEU:HD11	46:DN:30:ILE:HD11	1.49	0.91
8:AH:109:ILE:HG12	8:AH:110:ALA:H	1.34	0.91
1:CA:18:C:H5''	5:CE:127:ASN:HD21	1.32	0.91
40:DE:36:ARG:NH2	40:DE:88:GLY:HA2	1.84	0.91
36:DA:1578:U:H2'	36:DA:1579:A:H5''	1.51	0.91
27:D1:25:LYS:HD2	36:DA:388:G:H4'	1.52	0.91

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:53:LYS:CD	32:B6:54:ILE:H	1.82	0.91
32:D6:45:LYS:H	32:D6:45:LYS:HD2	1.35	0.91
57:DY:46:LYS:HB2	57:DY:62:GLU:CG	1.99	0.91
11:CK:124:LYS:HD2	11:CK:125:PHE:CE1	2.05	0.91
20:AT:104:LEU:HD23	20:AT:105:SER:H	1.34	0.91
1:CA:8:A:N6	4:CD:208:SER:HB2	1.85	0.91
28:B2:38:GLN:O	28:B2:41:ILE:HG12	1.71	0.91
24:AY:56:C:C2'	24:AY:57:G:H5'	2.00	0.91
27:B1:25:LYS:HD2	36:BA:388:G:H4'	1.52	0.91
29:B3:15:TYR:HD2	29:B3:19:GLN:HE22	1.18	0.91
16:AP:14:ASN:HA	16:AP:42:ARG:HH12	1.34	0.91
27:B1:50:ARG:HG2	27:B1:59:THR:HG22	1.52	0.91
2:AB:121:LEU:HD21	2:AB:127:ILE:HD11	1.52	0.91
38:DC:30:LYS:HE2	38:DC:180:PHE:O	1.70	0.91
31:D5:3:LYS:HA	31:D5:3:LYS:HE3	1.53	0.91
41:DF:206:ILE:HG22	41:DF:207:GLY:H	1.36	0.91
1:AA:1190:G:H3'	3:AC:3:ASN:ND2	1.84	0.91
8:AH:11:THR:HG22	8:AH:15:ASN:HD21	1.34	0.91
22:AV:68:C:C2'	22:AV:69:G:H5''	2.00	0.91
42:DG:43:LEU:HD12	42:DG:45:GLU:OE1	1.70	0.91
36:BA:144:C:H2'	36:BA:145:G:H8	1.34	0.91
2:CB:209:ARG:NH1	2:CB:239:VAL:HG11	1.86	0.91
10:CJ:91:PRO:HB2	10:CJ:94:VAL:HB	1.51	0.91
1:CA:979:C:C3'	1:CA:980:C:H5''	2.00	0.91
24:AY:6:U:H2'	24:AY:7:A:H5''	1.52	0.91
38:DC:127:LEU:HD23	38:DC:130:ILE:HD12	1.52	0.91
36:BA:2068:U:N3	36:BA:2430:A:H2	1.68	0.91
36:BA:2161:C:H2'	36:BA:2162:G:H8	1.32	0.91
20:CT:89:ARG:HB2	20:CT:104:LEU:HD11	1.53	0.91
10:AJ:16:LEU:HD11	10:AJ:70:ARG:CG	2.00	0.91
36:DA:372:G:N2	36:DA:400:G:H2'	1.85	0.91
56:BX:35:THR:HG22	56:BX:37:THR:H	1.36	0.91
38:DC:100:ILE:HG21	38:DC:126:LYS:HB3	1.53	0.91
24:CY:48:C:H2'	24:CY:59:A:H1'	1.50	0.91
22:AV:41:C:H2'	22:AV:41:C:O2	1.71	0.91
13:AM:10:PRO:O	13:AM:11:ARG:HB2	1.71	0.91
52:BT:10:VAL:O	52:BT:13:ARG:HG2	1.70	0.91
52:DT:10:VAL:O	52:DT:13:ARG:HG2	1.71	0.91
1:CA:1116:C:C2'	1:CA:1117:G:H5''	1.99	0.91
2:AB:18:GLY:H	2:AB:42:ILE:HG22	1.34	0.91
37:DB:43:C:OP1	42:DG:67:LYS:HE2	1.69	0.91
57:BY:86:ARG:HG2	57:BY:87:LYS:H	1.36	0.91

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1494:A:C2'	36:DA:1495:A:H5''	1.99	0.91
36:BA:2068:U:H3	36:BA:2430:A:H2	1.14	0.91
41:BF:153:SER:HA	41:BF:172:TRP:HB2	1.51	0.91
58:DZ:70:LEU:HD21	58:DZ:91:LEU:HD21	1.52	0.91
56:BX:12:VAL:CG2	56:BX:13:LEU:H	1.83	0.91
10:CJ:16:LEU:HD11	10:CJ:70:ARG:CG	2.00	0.91
57:BY:77:PRO:HB2	57:BY:99:CYS:SG	2.10	0.91
53:DU:69:CYS:HB2	53:DU:74:LEU:HD11	1.53	0.91
1:CA:1054:C:N4	24:CY:34:G:H1'	1.85	0.91
40:BE:57:LYS:HA	40:BE:57:LYS:CE	2.01	0.91
36:BA:740:U:H2'	36:BA:741:G:H8	1.28	0.91
48:DP:121:LYS:O	48:DP:123:LEU:HD23	1.72	0.90
36:BA:1860:G:H1	36:BA:1882:C:N4	1.69	0.90
36:BA:1380:G:H2'	36:BA:1381:G:C8	2.06	0.90
2:CB:61:LEU:HA	2:CB:64:ARG:NE	1.86	0.90
32:B6:6:ARG:NH1	32:B6:6:ARG:HB3	1.85	0.90
46:BN:28:THR:HG23	46:BN:29:LYS:H	1.33	0.90
42:DG:7:LEU:HD22	42:DG:100:TRP:HZ3	1.32	0.90
24:CY:2:C:OP1	25:CZ:90:LYS:HD2	1.71	0.90
38:BC:30:LYS:HE2	38:BC:180:PHE:O	1.71	0.90
1:CA:119:A:H4'	1:CA:120:A:O5'	1.69	0.90
25:AZ:38:GLU:CG	25:AZ:189:ARG:NH1	2.33	0.90
40:DE:57:LYS:HA	40:DE:57:LYS:CE	2.00	0.90
56:BX:30:VAL:HG11	56:BX:39:ILE:HD11	1.50	0.90
42:BG:21:ARG:HH21	42:BG:22:ARG:HA	1.35	0.90
53:BU:61:TRP:O	53:BU:65:ILE:HD13	1.70	0.90
36:DA:2305:A:H61	42:DG:43:LEU:HD13	1.35	0.90
8:CH:116:LYS:O	8:CH:119:LEU:HD21	1.70	0.90
21:AU:18:TYR:HA	21:AU:22:ARG:HD3	1.53	0.90
36:BA:2802:G:H3'	36:BA:2803:C:H5''	1.54	0.90
1:AA:1154:G:H2'	1:AA:1155:G:H8	1.35	0.90
14:CN:4:LYS:O	14:CN:7:ILE:HG12	1.71	0.90
37:BB:106:G:H5'	58:BZ:31:ARG:HB3	1.52	0.90
58:DZ:130:PRO:HA	58:DZ:133:ILE:HD11	1.54	0.90
36:BA:265:A:C8	36:BA:266:G:H1'	2.06	0.90
27:B1:87:PRO:HA	27:B1:90:ILE:CG1	2.01	0.90
36:BA:372:G:N2	36:BA:400:G:H2'	1.85	0.90
1:AA:744:C:H2'	1:AA:745:C:H6	1.36	0.90
36:DA:1710:C:H2'	36:DA:1711:C:C6	2.07	0.90
1:CA:1277:C:HO2'	1:CA:1279:A:H8	1.08	0.90
10:CJ:32:ALA:HB1	10:CJ:75:ILE:HG13	1.53	0.90
29:B3:8:LEU:HD12	29:B3:28:LEU:HB2	1.51	0.90

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:DO:11:ALA:HB1	47:DO:98:VAL:HG23	1.54	0.90
36:DA:2008:C:H2'	36:DA:2009:G:H8	1.36	0.90
56:DX:89:ILE:HG21	56:DX:92:LEU:HD12	1.53	0.90
46:DN:3:THR:HG22	46:DN:4:TYR:H	1.36	0.90
8:CH:11:THR:HG22	8:CH:15:ASN:HD21	1.37	0.90
27:B1:4:VAL:HG22	27:B1:5:CYS:H	1.36	0.90
4:AD:129:ASN:H	4:AD:129:ASN:HD22	1.19	0.90
36:BA:119:A:H4'	36:BA:120:U:H5'	1.52	0.90
25:AZ:200:TRP:HA	25:AZ:203:LEU:HB2	1.52	0.90
22:CV:56:C:H1'	42:DG:76:SER:HB2	1.50	0.90
35:B9:36:GLN:HE22	36:BA:1031:G:N2	1.69	0.90
47:DO:107:ARG:HH12	52:DT:35:LYS:HD2	1.34	0.90
7:CG:69:VAL:CA	7:CG:138:LYS:HD2	2.02	0.90
36:BA:1629:U:H2'	36:BA:1630:G:C8	2.06	0.90
40:DE:34:VAL:O	40:DE:35:GLN:HB2	1.72	0.90
5:AE:110:LEU:HD22	5:AE:115:VAL:HG21	1.51	0.90
36:DA:910:A:H62	49:DQ:12:GLN:HA	1.37	0.90
16:CP:53:VAL:HG23	16:CP:54:GLU:H	1.37	0.90
1:AA:452:A:O2'	1:AA:453:A:H5''	1.72	0.90
1:CA:438:G:H5'	4:CD:123:HIS:HD1	1.31	0.90
34:B8:6:THR:HG23	34:B8:62:LEU:HD12	1.50	0.90
36:DA:2240:C:O2'	36:DA:2241:A:H5'	1.72	0.90
41:BF:181:LEU:HD11	41:BF:186:ILE:HD11	1.53	0.90
1:AA:265:G:C2'	1:AA:266:G:H5''	2.02	0.90
25:CZ:174:SER:OG	25:CZ:177:LEU:HD13	1.70	0.90
25:CZ:200:TRP:HA	25:CZ:203:LEU:HB2	1.53	0.90
7:CG:24:THR:HA	7:CG:27:ILE:HD12	1.52	0.90
36:BA:1516:C:C2'	36:BA:1517:G:H5''	2.00	0.90
3:CC:113:ALA:HB1	3:CC:200:ALA:HB3	1.52	0.90
37:BB:17:C:H42	37:BB:68:C:H42	1.18	0.90
47:BO:47:ILE:HG23	47:BO:48:PRO:HD2	1.52	0.90
36:BA:2385:C:H2'	36:BA:2386:C:C6	2.07	0.90
47:BO:119:PRO:HB2	52:BT:68:TYR:CZ	2.06	0.90
36:BA:2511:U:H4'	40:BE:124:GLY:CA	2.01	0.90
28:B2:5:GLU:HB2	28:B2:9:GLN:HE22	1.36	0.90
1:CA:881:G:P	12:CL:12:ARG:HH22	1.93	0.90
1:AA:1277:C:HO2'	1:AA:1279:A:H8	1.20	0.90
1:CA:831:U:H2'	1:CA:832:C:C6	2.04	0.90
2:AB:107:THR:HG23	2:AB:110:GLN:NE2	1.84	0.90
36:DA:272(H):C:H2'	36:DA:272(I):U:H5''	1.54	0.90
39:DD:232:PRO:HD2	39:DD:249:PRO:HA	1.51	0.90
36:BA:1824:G:OP1	39:BD:52:ARG:HD3	1.71	0.90

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2773:C:H5''	40:BE:164:ARG:HG2	1.51	0.90
36:DA:1465:G:H2'	36:DA:1466:G:C8	2.07	0.90
1:CA:1442:G:H2'	1:CA:1442(B):A:H2	1.37	0.90
1:CA:1503:A:H2'	23:CX:16:A:H62	1.36	0.90
1:AA:119:A:H4'	1:AA:120:A:O5'	1.72	0.90
12:AL:20:LYS:N	12:AL:20:LYS:HD3	1.87	0.90
36:DA:2262:U:H2'	36:DA:2263:C:C6	2.06	0.90
26:D0:40:GLN:NE2	26:D0:43:THR:HA	1.87	0.90
36:DA:84:A:H5'	57:DY:9:LYS:HD2	1.54	0.90
41:DF:154:VAL:HG11	41:DF:193:VAL:HG23	1.52	0.90
41:BF:154:VAL:HG11	41:BF:193:VAL:HG23	1.55	0.90
42:BG:56:ALA:O	42:BG:59:GLU:HG2	1.72	0.90
27:D1:67:ILE:N	27:D1:68:PRO:HD2	1.88	0.89
8:CH:10:LEU:CD2	8:CH:83:ILE:HD11	2.02	0.89
8:AH:11:THR:HG23	8:AH:14:ARG:HH12	1.37	0.89
1:AA:1420:C:H42	1:AA:1480:G:H1	1.20	0.89
4:CD:107:ARG:HH21	4:CD:194:LEU:HD12	1.36	0.89
2:CB:87:ARG:NE	2:CB:233:SER:HB3	1.88	0.89
36:DA:1087:G:H2'	36:DA:1088:A:H4'	1.52	0.89
48:BP:39:LYS:HE2	48:BP:42:SER:HB3	1.53	0.89
27:D1:44:PRO:HG2	27:D1:46:LEU:HD21	1.52	0.89
8:CH:109:ILE:HG12	8:CH:110:ALA:H	1.34	0.89
48:BP:121:LYS:O	48:BP:123:LEU:HD23	1.73	0.89
22:CV:68:C:C2'	22:CV:69:G:H5''	2.00	0.89
38:BC:99:ILE:HG23	38:BC:102:LYS:HZ3	1.36	0.89
38:DC:151:GLU:HA	38:DC:154:ARG:HH11	1.37	0.89
2:AB:209:ARG:NH1	2:AB:239:VAL:HG11	1.87	0.89
36:DA:271(H):G:HO2'	36:DA:271(I):G:H8	0.94	0.89
53:BU:112:ARG:NH1	54:BV:46:VAL:HG11	1.86	0.89
48:BP:111:ARG:HH11	48:BP:149:GLU:HG3	1.37	0.89
25:CZ:368:VAL:HG12	25:CZ:369:THR:H	1.37	0.89
36:BA:1710:C:H2'	36:BA:1711:C:C6	2.08	0.89
4:AD:187:ARG:NH1	4:AD:187:ARG:HB3	1.87	0.89
42:BG:5:VAL:H	42:BG:8:LYS:HB2	1.37	0.89
1:AA:1422:G:H2'	1:AA:1423:G:C8	2.07	0.89
47:DO:111:PHE:HB3	47:DO:114:ILE:HD13	1.53	0.89
56:DX:35:THR:HG22	56:DX:37:THR:H	1.37	0.89
36:BA:84:A:H5'	57:BY:9:LYS:HD2	1.53	0.89
36:BA:271(H):G:HO2'	36:BA:271(I):G:H8	0.95	0.89
41:DF:153:SER:HA	41:DF:172:TRP:HB2	1.53	0.89
41:BF:206:ILE:HG22	41:BF:207:GLY:H	1.36	0.89
42:BG:114:ILE:HG13	42:BG:135:LEU:HD21	1.54	0.89

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BS:28:VAL:HG12	51:BS:29:PHE:H	1.34	0.89
36:DA:710:G:H2'	36:DA:711:G:C8	2.07	0.89
54:BV:52:VAL:HG13	54:BV:55:ALA:HB3	1.54	0.89
2:AB:24:TRP:CZ3	2:AB:26:PRO:HA	2.08	0.89
4:CD:129:ASN:H	4:CD:129:ASN:HD22	1.20	0.89
39:BD:232:PRO:HD2	39:BD:249:PRO:HA	1.53	0.89
1:CA:1239:A:H62	1:CA:1299:A:N6	1.69	0.89
36:DA:1824:G:OP1	39:DD:52:ARG:HD3	1.71	0.89
36:DA:2385:C:H2'	36:DA:2386:C:H6	1.34	0.89
28:D2:35:LEU:HD11	28:D2:50:ILE:HG13	1.53	0.89
41:DF:24:LEU:HB3	41:DF:25:PRO:CD	2.02	0.89
5:CE:100:VAL:HG23	5:CE:107:ARG:HH21	1.36	0.89
36:DA:1193:G:H2'	36:DA:1194:A:O4'	1.73	0.89
13:CM:97:PRO:CA	13:CM:110:ARG:HD3	2.01	0.89
47:BO:111:PHE:HB3	47:BO:114:ILE:HD13	1.54	0.89
36:DA:1170:G:H22	36:DA:1179:C:H42	1.21	0.89
33:B7:40:TRP:CZ3	36:BA:459:U:H4'	2.07	0.89
36:BA:710:G:H2'	36:BA:711:G:C8	2.08	0.89
36:BA:1202:C:H2'	36:BA:1203:G:H5'	1.55	0.89
36:DA:492:A:H2'	36:DA:493:G:O4'	1.72	0.89
40:DE:33:VAL:HG21	40:DE:36:ARG:HH21	1.35	0.89
8:AH:116:LYS:O	8:AH:119:LEU:HD21	1.72	0.89
52:DT:5:ALA:O	52:DT:9:LEU:HG	1.73	0.89
58:BZ:139:VAL:HG12	58:BZ:140:ASP:H	1.38	0.89
26:B0:40:GLN:NE2	26:B0:43:THR:HA	1.85	0.89
40:BE:33:VAL:HG21	40:BE:36:ARG:HH21	1.37	0.89
52:DT:60:THR:HG22	52:DT:77:PRO:HA	1.55	0.89
36:BA:2187:G:H2'	36:BA:2188:C:H5'	1.55	0.89
36:BA:265:A:H8	36:BA:266:G:H1'	1.37	0.89
36:DA:427:U:HO2'	36:DA:428:A:H8	0.93	0.89
36:BA:144:C:H2'	36:BA:145:G:C8	2.08	0.89
24:CY:6:U:H2'	24:CY:7:A:H5''	1.54	0.89
2:AB:115:LEU:HD13	2:AB:145:LEU:HD12	1.55	0.89
37:DB:55:U:H2'	37:DB:56:G:C8	2.07	0.89
15:AO:87:ILE:HG22	15:AO:88:ARG:H	1.37	0.89
36:BA:511:U:H3'	36:BA:512:G:C5'	2.03	0.89
36:BA:2009:G:H4'	55:BW:40:ASN:ND2	1.86	0.89
3:AC:113:ALA:HB1	3:AC:200:ALA:HB3	1.54	0.89
36:DA:1590:U:C2'	36:DA:1591:G:H5''	2.02	0.89
37:DB:106:G:H2'	37:DB:107:G:H8	1.37	0.89
1:AA:1461:G:H2'	1:AA:1462:G:H8	1.38	0.89
36:DA:2691:C:H2'	36:DA:2692:C:H6	1.38	0.89

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:45:LYS:HD3	32:B6:45:LYS:N	1.87	0.89
34:D8:10:ALA:HB2	48:DP:61:ARG:HH11	1.34	0.89
13:AM:63:THR:HG22	13:AM:64:TRP:H	1.37	0.89
53:DU:70:ARG:HA	53:DU:74:LEU:O	1.72	0.89
51:BS:97:ARG:HH21	51:BS:98:VAL:HA	1.37	0.89
52:DT:65:LYS:HE3	52:DT:66:VAL:H	1.38	0.89
58:BZ:151:HIS:HB2	58:BZ:169:GLU:O	1.72	0.89
1:CA:1366:C:H2'	1:CA:1367:C:C6	2.08	0.89
36:DA:2187:G:H2'	36:DA:2188:C:H5'	1.55	0.89
58:DZ:26:GLY:HA2	58:DZ:85:HIS:HD2	1.38	0.89
36:BA:1465:G:H2'	36:BA:1466:G:C8	2.07	0.89
11:AK:21:ILE:HG13	11:AK:30:VAL:HG12	1.54	0.89
38:DC:206:GLY:HA3	38:DC:210:ARG:HH22	1.35	0.89
36:DA:2802:G:H3'	36:DA:2803:C:H5''	1.53	0.89
34:B8:10:ALA:HB2	48:BP:61:ARG:HH11	1.38	0.88
19:CS:16:LEU:H	19:CS:16:LEU:HD12	1.38	0.88
34:D8:23:VAL:HG12	34:D8:46:ARG:HB3	1.55	0.88
48:DP:111:ARG:HH11	48:DP:149:GLU:HG3	1.38	0.88
35:B9:36:GLN:HE22	36:BA:1031:G:H21	1.16	0.88
30:B4:8:LYS:HG2	30:B4:9:LEU:N	1.86	0.88
11:AK:124:LYS:HD2	11:AK:125:PHE:CE1	2.08	0.88
15:CO:87:ILE:HG22	15:CO:88:ARG:H	1.38	0.88
36:DA:31:C:H2'	36:DA:32:C:H5''	1.55	0.88
2:AB:80:ILE:HD12	2:AB:80:ILE:H	1.38	0.88
2:CB:204:ASN:ND2	2:CB:206:ASP:H	1.71	0.88
41:BF:24:LEU:HB3	41:BF:25:PRO:CD	2.03	0.88
2:CB:18:GLY:H	2:CB:42:ILE:HG22	1.36	0.88
4:AD:107:ARG:HH21	4:AD:194:LEU:HD12	1.38	0.88
36:BA:2184:G:H2'	36:BA:2185:C:C1'	2.02	0.88
36:BA:17:G:N2	36:BA:524:U:H1'	1.86	0.88
36:DA:1297:C:OP1	36:DA:2710:C:H4'	1.71	0.88
49:BQ:34:LEU:HD11	49:BQ:129:THR:HB	1.55	0.88
2:AB:63:MET:HG3	2:AB:63:MET:O	1.70	0.88
28:D2:14:ARG:HH22	36:DA:78:A:H5'	1.35	0.88
32:B6:45:LYS:H	32:B6:45:LYS:HD2	1.35	0.88
36:BA:1291:C:H2'	36:BA:1292:U:H5'	1.55	0.88
50:BR:45:ARG:HG3	50:BR:46:GLY:H	1.35	0.88
8:CH:109:ILE:HG12	8:CH:110:ALA:N	1.82	0.88
1:CA:1053:G:H4'	1:CA:1054:C:C5'	2.03	0.88
32:D6:6:ARG:HH11	32:D6:6:ARG:HB3	1.35	0.88
34:B8:23:VAL:HG12	34:B8:46:ARG:HB3	1.56	0.88
58:BZ:70:LEU:HD21	58:BZ:91:LEU:HD21	1.55	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1116:C:C2'	1:AA:1117:G:H5''	2.01	0.88
36:DA:1095:A:H2'	36:DA:1096:A:H8	1.36	0.88
57:BY:75:ILE:O	57:BY:76:CYS:HB2	1.73	0.88
36:BA:1590:U:C2'	36:BA:1591:G:H5''	2.02	0.88
13:CM:45:VAL:HA	13:CM:48:LEU:HD11	1.55	0.88
42:DG:41:GLN:HB3	42:DG:43:LEU:CD2	2.04	0.88
51:DS:106:ARG:HH11	51:DS:107:GLU:N	1.69	0.88
29:B3:6:VAL:HB	29:B3:54:VAL:HG11	1.53	0.88
36:BA:2691:C:H2'	36:BA:2692:C:H6	1.38	0.88
50:DR:45:ARG:HG3	50:DR:46:GLY:H	1.38	0.88
8:CH:7:ALA:HB2	8:CH:85:ARG:HD3	1.54	0.88
1:CA:1053:G:C4'	1:CA:1054:C:H5'	2.02	0.88
5:AE:137:GLU:OE2	5:AE:140:ARG:HD2	1.72	0.88
36:BA:1677:A:H2'	36:BA:1678:G:C8	2.08	0.88
38:BC:23:ASP:HB3	38:BC:27:ARG:NH1	1.88	0.88
1:AA:1366:C:H2'	1:AA:1367:C:C6	2.09	0.88
36:DA:862:G:C2	36:DA:863:A:H1'	2.08	0.88
46:BN:28:THR:HG23	46:BN:29:LYS:N	1.87	0.88
21:CU:16:GLY:O	21:CU:17:THR:HG23	1.73	0.88
36:DA:2811:G:OP1	40:DE:60:ASN:HB2	1.72	0.88
2:CB:209:ARG:HH11	2:CB:239:VAL:HG11	1.38	0.88
37:BB:20:C:H2'	37:BB:21:G:H5''	1.53	0.88
36:DA:1441:G:O2'	36:DA:1442:G:H5'	1.73	0.88
32:D6:45:LYS:HD3	32:D6:45:LYS:N	1.88	0.88
34:D8:6:THR:HG23	34:D8:62:LEU:HD12	1.54	0.88
35:D9:36:GLN:HE22	36:DA:1031:G:H21	1.21	0.88
28:B2:51:ARG:CD	28:B2:55:ARG:HH22	1.85	0.88
30:B4:8:LYS:O	30:B4:9:LEU:HB2	1.73	0.88
4:CD:201:GLN:HA	4:CD:204:ILE:HD12	1.56	0.88
2:AB:48:MET:HA	2:AB:51:LEU:HD12	1.54	0.88
19:CS:51:VAL:HG23	19:CS:60:VAL:HG11	1.54	0.88
1:CA:78:G:N2	1:CA:91:C:H42	1.71	0.88
2:CB:77:ALA:HA	2:CB:80:ILE:HD13	1.55	0.88
31:B5:27:PRO:HG3	55:BW:23:LEU:HD11	1.56	0.88
25:AZ:322:VAL:HG12	25:AZ:364:PRO:HA	1.54	0.88
47:DO:119:PRO:HB2	52:DT:68:TYR:CZ	2.09	0.88
1:AA:902:G:H2'	1:AA:903:G:H8	1.39	0.88
36:DA:1568:G:H5''	39:DD:61:LEU:HD23	1.56	0.88
49:BQ:22:LYS:H	58:BZ:78:LYS:HE3	1.36	0.88
36:BA:1222:C:C2'	36:BA:1223:G:H5''	2.04	0.88
54:DV:72:VAL:HG23	54:DV:85:LYS:HB2	1.56	0.88
34:D8:49:VAL:HG12	34:D8:53:PRO:HD3	1.53	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D2:46:GLN:OE1	36:DA:95:G:H4'	1.73	0.88
13:AM:52:GLU:HA	13:AM:55:ARG:HB3	1.55	0.88
26:D0:11:ARG:NH1	26:D0:11:ARG:HB2	1.89	0.88
15:CO:36:ILE:HG23	15:CO:56:LEU:HD11	1.54	0.88
57:DY:77:PRO:HB2	57:DY:99:CYS:SG	2.14	0.88
36:BA:492:A:H2'	36:BA:493:G:O4'	1.74	0.88
2:AB:87:ARG:NE	2:AB:233:SER:HB3	1.88	0.88
10:AJ:65:LEU:HD13	14:AN:56:VAL:N	1.88	0.88
42:DG:162:THR:HG22	42:DG:164:GLU:OE2	1.73	0.88
20:AT:57:ARG:NH1	20:AT:103:GLY:H	1.71	0.88
36:BA:272(H):C:H2'	36:BA:272(I):U:H5''	1.55	0.88
1:AA:55:A:H2'	25:AZ:232:THR:HG21	1.55	0.88
46:DN:83:LYS:HG2	46:DN:84:LYS:H	1.39	0.88
1:AA:1239:A:H62	1:AA:1299:A:N6	1.72	0.88
33:B7:21:ARG:HG2	33:B7:21:ARG:HH11	1.39	0.88
32:D6:53:LYS:CD	32:D6:54:ILE:H	1.86	0.88
36:DA:372:G:H22	36:DA:400:G:H2'	1.37	0.88
17:AQ:68:ARG:O	17:AQ:70:ARG:HD2	1.73	0.88
36:DA:2773:C:H5''	40:DE:164:ARG:HG2	1.54	0.88
14:CN:48:ALA:HB2	14:CN:53:LEU:HD12	1.55	0.88
36:BA:2833:G:H3'	36:BA:2834:G:H5''	1.56	0.88
58:DZ:81:ARG:HB2	58:DZ:81:ARG:NH1	1.89	0.88
41:DF:6:VAL:HG12	41:DF:7:TYR:H	1.35	0.88
36:DA:265:A:C8	36:DA:266:G:H1'	2.08	0.88
36:BA:862:G:C2	36:BA:863:A:H1'	2.08	0.88
20:AT:89:ARG:HB2	20:AT:104:LEU:HD11	1.52	0.88
1:CA:715:A:H2'	1:CA:716:A:C8	2.09	0.88
47:BO:11:ALA:HB1	47:BO:98:VAL:HG23	1.55	0.88
6:CF:43:LEU:H	6:CF:43:LEU:HD22	1.39	0.88
34:B8:28:GLY:HA2	34:B8:32:LEU:HD23	1.56	0.88
48:BP:47:ASP:HB3	48:BP:49:ARG:N	1.89	0.88
36:BA:925:C:H2'	36:BA:926:A:C5'	2.04	0.88
43:BH:67:LEU:HG	43:BH:71:LEU:HD11	1.55	0.88
46:DN:24:GLY:H	46:DN:27:ALA:H	1.21	0.88
57:DY:75:ILE:O	57:DY:76:CYS:HB2	1.72	0.88
22:CW:54:U:H4'	38:DC:54:SER:CB	2.04	0.88
46:BN:23:LEU:HA	46:BN:26:LEU:HD23	1.56	0.88
46:BN:3:THR:HG22	46:BN:4:TYR:H	1.36	0.88
21:CU:18:TYR:HA	21:CU:22:ARG:HD3	1.55	0.88
49:BQ:27:VAL:HG12	49:BQ:29:PHE:H	1.38	0.88
8:AH:86:ILE:HG21	8:AH:133:LEU:HD23	1.56	0.88
46:BN:45:ASN:N	46:BN:45:ASN:HD22	1.71	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:575:A:O2'	36:BA:576:U:H5'	1.74	0.88
8:AH:7:ALA:HB2	8:AH:85:ARG:HD3	1.53	0.88
51:DS:28:VAL:HG12	51:DS:29:PHE:H	1.39	0.88
57:DY:86:ARG:HG2	57:DY:87:LYS:H	1.39	0.88
38:DC:99:ILE:HD12	38:DC:102:LYS:HZ3	1.35	0.88
20:CT:104:LEU:HD23	20:CT:105:SER:H	1.36	0.88
6:AF:43:LEU:HD22	6:AF:43:LEU:H	1.38	0.88
1:AA:419:C:H42	1:AA:424:G:H22	1.20	0.88
14:AN:4:LYS:O	14:AN:7:ILE:HG12	1.72	0.87
2:CB:48:MET:HA	2:CB:51:LEU:HD12	1.56	0.87
58:DZ:127:LYS:NZ	58:DZ:164:ALA:HB2	1.87	0.87
36:DA:2591:C:H2'	36:DA:2592:G:C8	2.09	0.87
37:DB:20:C:H2'	37:DB:21:G:H5''	1.53	0.87
36:BA:427:U:HO2'	36:BA:428:A:H8	0.93	0.87
2:CB:115:LEU:HD13	2:CB:145:LEU:HD12	1.57	0.87
3:CC:58:GLU:H	3:CC:65:ALA:HB3	1.36	0.87
1:CA:10:A:OP2	5:CE:126:ARG:HD3	1.74	0.87
1:CA:295:C:H2'	1:CA:296:U:H6	1.39	0.87
36:DA:2068:U:N3	36:DA:2430:A:H2	1.72	0.87
36:DA:860:U:O2'	36:DA:861:A:H5'	1.74	0.87
1:CA:1412:C:H42	1:CA:1488:G:H1	1.14	0.87
36:DA:2401:U:H2'	36:DA:2402:C:H5''	1.56	0.87
56:BX:89:ILE:HG21	56:BX:92:LEU:HD12	1.53	0.87
36:DA:398:G:H2'	36:DA:399:G:H8	1.40	0.87
42:DG:83:ARG:HB2	42:DG:84:LYS:HD2	1.54	0.87
36:DA:575:A:O2'	36:DA:576:U:H5'	1.73	0.87
1:AA:376:G:H2'	1:AA:377:G:H8	1.39	0.87
57:DY:37:VAL:HG23	57:DY:38:ILE:H	1.39	0.87
29:D3:15:TYR:HD2	29:D3:19:GLN:HE22	1.21	0.87
57:BY:79:CYS:SG	57:BY:80:GLY:N	2.47	0.87
42:BG:43:LEU:HB3	42:BG:45:GLU:HG2	1.55	0.87
10:AJ:34:VAL:HG22	10:AJ:74:ILE:HG22	1.55	0.87
40:DE:107:THR:O	40:DE:191:PRO:HD3	1.74	0.87
13:AM:45:VAL:HA	13:AM:48:LEU:HD11	1.56	0.87
42:BG:180:PHE:HB2	42:BG:182:LYS:NZ	1.89	0.87
1:AA:711:G:H2'	1:AA:712:A:H8	1.39	0.87
36:BA:2245:U:H5'	36:BA:2246:G:H5'	1.56	0.87
13:AM:108:ARG:N	13:AM:108:ARG:HD2	1.86	0.87
36:BA:894:C:H2'	36:BA:895:U:H5'	1.56	0.87
21:AU:16:GLY:O	21:AU:17:THR:HG23	1.74	0.87
36:DA:1291:C:H2'	36:DA:1292:U:H5'	1.55	0.87
28:D2:3:LEU:HD12	36:DA:98:G:H5''	1.55	0.87

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2482:G:H22	49:BQ:52:VAL:HG11	1.38	0.87
36:BA:1291:C:C2'	36:BA:1292:U:H5'	2.04	0.87
52:BT:28:VAL:CG2	52:BT:47:GLY:H	1.86	0.87
22:CW:54:U:C4'	38:DC:54:SER:HB2	2.04	0.87
41:BF:46:ARG:HH11	41:BF:46:ARG:HG3	1.38	0.87
36:DA:1380:G:H2'	36:DA:1381:G:C8	2.09	0.87
1:AA:881:G:P	12:AL:12:ARG:HH22	1.97	0.87
36:DA:2068:U:H3	36:DA:2430:A:H2	1.16	0.87
48:BP:64:LYS:O	48:BP:66:GLY:N	2.08	0.87
19:AS:16:LEU:H	19:AS:16:LEU:HD12	1.38	0.87
43:DH:67:LEU:HG	43:DH:71:LEU:HD11	1.56	0.87
31:B5:3:LYS:HA	31:B5:3:LYS:HE3	1.55	0.87
36:DA:1190:G:H5'	48:DP:35:HIS:N	1.90	0.87
36:BA:2807:G:H1	36:BA:2893:G:H1	1.23	0.87
57:DY:13:VAL:HG13	57:DY:14:LEU:H	1.37	0.87
1:AA:975:A:H4'	1:AA:976:G:H5''	1.55	0.87
10:AJ:50:ILE:HA	10:AJ:60:ARG:HB3	1.57	0.87
7:CG:118:VAL:HG23	7:CG:119:ARG:H	1.38	0.87
58:DZ:85:HIS:HD2	58:DZ:86:VAL:H	1.19	0.87
42:DG:5:VAL:HG12	42:DG:6:ALA:H	1.38	0.87
38:BC:151:GLU:HA	38:BC:154:ARG:HH11	1.39	0.87
28:B2:38:GLN:HB3	28:B2:44:LEU:CD1	2.04	0.87
6:CF:37:VAL:HA	6:CF:65:VAL:HG12	1.57	0.87
51:DS:97:ARG:HH21	51:DS:98:VAL:HA	1.40	0.87
36:DA:2184:G:H2'	36:DA:2185:C:C1'	2.04	0.87
1:AA:864:A:H5'	1:AA:865:A:OP2	1.74	0.87
53:BU:69:CYS:HB2	53:BU:74:LEU:HD11	1.56	0.87
30:D4:8:LYS:O	30:D4:9:LEU:HB2	1.73	0.87
55:DW:12:ILE:HD12	55:DW:42:ARG:NH1	1.88	0.87
7:CG:146:GLU:OE2	7:CG:149:ARG:HD2	1.73	0.87
36:BA:2385:C:H2'	36:BA:2386:C:H6	1.36	0.87
27:B1:13:ILE:H	27:B1:13:ILE:HD13	1.38	0.87
12:AL:17:LYS:HD3	12:AL:18:VAL:N	1.89	0.87
36:BA:2811:G:OP1	40:BE:60:ASN:HB2	1.73	0.87
13:CM:10:PRO:O	13:CM:11:ARG:HB2	1.71	0.87
8:CH:86:ILE:HG21	8:CH:133:LEU:HD23	1.57	0.87
2:AB:209:ARG:HH11	2:AB:239:VAL:HG11	1.40	0.87
36:BA:31:C:H2'	36:BA:32:C:H5''	1.56	0.87
36:BA:2735:G:H2'	36:BA:2736:G:C8	2.09	0.87
31:D5:36:CYS:HB3	31:D5:49:CYS:HB3	1.55	0.87
1:CA:769:G:O2'	1:CA:770:C:H5'	1.75	0.87
36:DA:2482:G:H22	49:DQ:52:VAL:HG11	1.38	0.87

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2245:U:H5'	36:DA:2246:G:H5'	1.54	0.87
1:CA:793:U:O2	1:CA:1516:G:H4'	1.74	0.87
36:DA:2009:G:H4'	55:DW:40:ASN:ND2	1.89	0.87
48:DP:64:LYS:O	48:DP:66:GLY:N	2.07	0.87
1:AA:1053:G:C4'	1:AA:1054:C:H5'	2.05	0.87
58:BZ:153:SER:H	58:BZ:167:PRO:HB2	1.40	0.87
1:CA:1423:G:H2'	1:CA:1424:C:C6	2.09	0.87
36:BA:910:A:H62	49:BQ:12:GLN:HA	1.36	0.87
56:BX:24:GLY:O	56:BX:82:GLN:HA	1.75	0.87
25:AZ:368:VAL:HG12	25:AZ:369:THR:H	1.40	0.87
50:DR:100:LEU:HD11	50:DR:113:LEU:HD13	1.55	0.87
36:BA:2082:A:H2'	36:BA:2083:G:O4'	1.75	0.87
54:DV:52:VAL:HG13	54:DV:55:ALA:HB3	1.55	0.87
52:BT:32:TYR:O	52:BT:33:LYS:HB2	1.74	0.87
25:AZ:244:ARG:HH11	25:AZ:244:ARG:HB3	1.40	0.87
49:DQ:27:VAL:HG12	49:DQ:29:PHE:H	1.39	0.87
30:D4:8:LYS:HG2	30:D4:9:LEU:N	1.88	0.87
54:BV:72:VAL:CG2	54:BV:85:LYS:HB2	2.05	0.87
38:BC:96:GLY:HA3	38:BC:99:ILE:CG1	2.05	0.87
50:DR:38:VAL:HB	50:DR:39:PRO:HD3	1.55	0.86
27:D1:44:PRO:O	27:D1:46:LEU:HD22	1.75	0.86
1:AA:254:G:H21	17:AQ:16:GLN:HE22	1.23	0.86
58:BZ:68:PRO:O	58:BZ:91:LEU:HG	1.75	0.86
10:CJ:50:ILE:HA	10:CJ:60:ARG:HB3	1.55	0.86
10:CJ:34:VAL:HG22	10:CJ:74:ILE:HG22	1.54	0.86
20:CT:57:ARG:NH1	20:CT:103:GLY:H	1.73	0.86
2:AB:77:ALA:HA	2:AB:80:ILE:HD13	1.57	0.86
41:DF:46:ARG:HG3	41:DF:46:ARG:HH11	1.40	0.86
36:BA:1193:G:H2'	36:BA:1194:A:O4'	1.75	0.86
5:CE:137:GLU:OE2	5:CE:140:ARG:HD2	1.75	0.86
1:CA:985:C:H2'	1:CA:986:A:H8	1.38	0.86
36:DA:740:U:H2'	36:DA:741:G:H8	1.35	0.86
16:AP:53:VAL:HG23	16:AP:54:GLU:H	1.38	0.86
50:DR:13:HIS:CE1	50:DR:16:HIS:H	1.93	0.86
13:AM:97:PRO:CA	13:AM:110:ARG:HD3	2.04	0.86
2:AB:42:ILE:HD11	2:AB:202:PRO:HB2	1.57	0.86
36:DA:1658:C:H2'	36:DA:1659:U:H6	1.39	0.86
1:AA:78:G:N2	1:AA:91:C:H42	1.72	0.86
33:B7:34:ARG:HD3	33:B7:39:ARG:HG3	1.58	0.86
22:CV:59:U:HO2'	22:CV:60:U:H6	0.91	0.86
52:DT:130:ALA:O	52:DT:132:LYS:HE2	1.75	0.86
36:BA:1087:G:H2'	36:BA:1088:A:H4'	1.54	0.86

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:985:C:H2'	1:AA:986:A:H8	1.38	0.86
36:DA:1202:C:H2'	36:DA:1203:G:H5'	1.54	0.86
12:CL:18:VAL:HG23	12:CL:19:ARG:N	1.90	0.86
37:BB:106:G:H2'	37:BB:107:G:H8	1.38	0.86
25:AZ:244:ARG:NH1	25:AZ:244:ARG:HB3	1.90	0.86
43:DH:23:ARG:O	43:DH:24:VAL:HG23	1.75	0.86
36:BA:904:C:H2'	36:BA:905:U:H6	1.40	0.86
1:CA:447:G:H2'	1:CA:485:G:N2	1.90	0.86
36:DA:2222:G:H2'	36:DA:2223:G:H8	1.40	0.86
36:BA:2796:U:O2'	36:BA:2799:C:H5'	1.75	0.86
52:BT:130:ALA:O	52:BT:132:LYS:HE2	1.76	0.86
26:D0:16:SER:OG	36:DA:2261:C:H3'	1.74	0.86
25:AZ:38:GLU:CB	25:AZ:189:ARG:HH11	1.88	0.86
12:AL:18:VAL:HG23	12:AL:19:ARG:N	1.89	0.86
42:BG:63:ILE:HG13	42:BG:64:THR:N	1.89	0.86
42:BG:34:LEU:HD11	42:BG:100:TRP:CZ2	2.10	0.86
36:DA:2185:C:C2'	36:DA:2186:G:H5'	2.06	0.86
36:BA:2124:G:H1'	38:BC:42:GLU:OE2	1.75	0.86
36:DA:1541:G:H1'	36:DA:1542:A:C4	2.11	0.86
25:CZ:322:VAL:HG12	25:CZ:364:PRO:HA	1.55	0.86
36:DA:2454:G:H2'	36:DA:2455:G:H8	1.40	0.86
2:CB:29:ALA:O	2:CB:32:ILE:HG22	1.74	0.86
31:B5:36:CYS:HB3	31:B5:49:CYS:HB3	1.56	0.86
36:DA:655:A:H4'	36:DA:656:G:C5'	2.05	0.86
5:AE:102:ALA:HB1	5:AE:106:PRO:HG2	1.54	0.86
47:BO:107:ARG:HH12	52:BT:35:LYS:HD2	1.40	0.86
52:BT:80:SER:HB3	52:BT:81:PRO:HD3	1.56	0.86
1:CA:1363(A):A:H4'	1:CA:1364:U:H5''	1.56	0.86
36:BA:310:A:OP1	57:BY:18:GLY:HA2	1.75	0.86
36:BA:1541:G:H1'	36:BA:1542:A:C4	2.11	0.86
3:CC:58:GLU:H	3:CC:65:ALA:CB	1.88	0.86
40:DE:107:THR:O	40:DE:190:GLY:HA2	1.75	0.86
36:DA:894:C:H2'	36:DA:895:U:H5'	1.57	0.86
36:DA:2735:G:H2'	36:DA:2736:G:C8	2.10	0.86
36:DA:119:A:H4'	36:DA:120:U:H5'	1.56	0.86
58:DZ:139:VAL:HG12	58:DZ:140:ASP:H	1.40	0.86
36:BA:1170:G:H22	36:BA:1179:C:H42	1.22	0.86
36:BA:2403:C:H42	36:BA:2414:G:H1	1.24	0.86
39:DD:186:HIS:NE2	39:DD:188:GLU:HB2	1.91	0.86
13:AM:91:ARG:HB3	13:AM:98:VAL:HG22	1.57	0.86
16:CP:14:ASN:HA	16:CP:42:ARG:NH1	1.89	0.86
33:D7:40:TRP:CZ3	36:DA:459:U:H4'	2.09	0.86

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:438:G:C5'	4:CD:123:HIS:HD1	1.88	0.86
39:DD:226:MET:HB3	39:DD:230:ASP:HB2	1.57	0.86
39:BD:226:MET:HB3	39:BD:230:ASP:HB2	1.56	0.86
46:BN:83:LYS:HG2	46:BN:84:LYS:H	1.39	0.86
38:BC:214:VAL:HG23	38:BC:224:ILE:HG21	1.57	0.86
10:AJ:32:ALA:HB1	10:AJ:75:ILE:HG13	1.55	0.86
10:CJ:12:ASP:HB3	10:CJ:15:THR:OG1	1.75	0.86
50:BR:38:VAL:HB	50:BR:39:PRO:HD3	1.55	0.86
36:DA:813:U:H2'	36:DA:814:C:C6	2.11	0.86
46:DN:28:THR:HG23	46:DN:29:LYS:H	1.40	0.86
52:DT:38:ASN:C	52:DT:38:ASN:HD22	1.78	0.86
52:DT:28:VAL:CG2	52:DT:47:GLY:H	1.88	0.86
42:BG:77:ILE:HB	42:BG:81:LYS:O	1.75	0.86
36:DA:1603:A:H8	36:DA:1603:A:H5'	1.41	0.86
38:DC:72:VAL:HG23	38:DC:111:ASP:HB3	1.55	0.86
36:BA:2401:U:H2'	36:BA:2402:C:H5''	1.56	0.86
34:B8:10:ALA:HB2	48:BP:61:ARG:NH1	1.90	0.86
32:D6:48:VAL:O	32:D6:49:HIS:ND1	2.09	0.86
1:AA:993:G:H22	1:AA:1046:A:H1'	1.39	0.86
2:CB:229:VAL:HG12	2:CB:230:VAL:H	1.41	0.86
4:AD:78:LEU:HD21	4:AD:96:LEU:HB3	1.57	0.86
58:DZ:68:PRO:O	58:DZ:91:LEU:HG	1.75	0.86
1:AA:419:C:N4	1:AA:424:G:H22	1.72	0.86
36:DA:612:C:H2'	36:DA:613:G:H5'	1.58	0.86
1:AA:405:U:H3'	1:AA:406:G:H5'	1.58	0.86
36:DA:2796:U:O2'	36:DA:2799:C:H5'	1.74	0.86
1:CA:408:A:H4'	4:CD:112:VAL:HG11	1.57	0.86
36:DA:2358:G:N2	36:DA:2359:C:H1'	1.89	0.86
57:BY:46:LYS:N	57:BY:62:GLU:HG2	1.91	0.86
36:BA:1860:G:H1	36:BA:1882:C:H42	1.21	0.86
1:AA:1054:C:N4	24:AY:34:G:H1'	1.91	0.86
36:BA:2454:G:H2'	36:BA:2455:G:H8	1.41	0.86
1:AA:8:A:N6	4:AD:208:SER:HB2	1.90	0.86
58:BZ:165:VAL:HG12	58:BZ:166:SER:N	1.87	0.86
9:CI:9:ARG:HB2	9:CI:104:ARG:HH12	1.41	0.86
4:CD:78:LEU:HD21	4:CD:96:LEU:HB3	1.57	0.86
19:CS:41:VAL:HB	19:CS:44:MET:HG2	1.56	0.86
42:DG:52:ILE:HB	42:DG:54:GLU:OE1	1.76	0.86
39:BD:35:LYS:CG	39:BD:63:ARG:HG2	2.05	0.85
36:DA:996:A:O2'	36:DA:997:G:H5'	1.76	0.85
57:DY:79:CYS:SG	57:DY:80:GLY:N	2.49	0.85
46:DN:10:GLU:HG3	46:DN:11:PRO:HD2	1.58	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:35:LYS:HG2	39:DD:63:ARG:HG2	1.57	0.85
36:DA:1222:C:C2'	36:DA:1223:G:H5''	2.05	0.85
1:AA:1203:C:OP1	14:AN:3:ARG:HD3	1.76	0.85
1:AA:751:U:H4'	15:AO:24:SER:HB2	1.56	0.85
39:DD:126:GLN:O	39:DD:193:VAL:HG11	1.75	0.85
48:DP:47:ASP:HB3	48:DP:49:ARG:N	1.90	0.85
36:BA:2760:C:H2'	36:BA:2761:G:H5''	1.59	0.85
28:B2:41:ILE:HG13	28:B2:42:GLY:N	1.90	0.85
50:BR:100:LEU:HD11	50:BR:113:LEU:HD13	1.59	0.85
1:AA:351:G:H4'	1:AA:352:C:OP2	1.76	0.85
25:CZ:244:ARG:NH1	25:CZ:244:ARG:HB3	1.91	0.85
1:CA:419:C:N4	1:CA:424:G:H22	1.73	0.85
24:AY:75:C:C5	25:AZ:231:ILE:HA	2.11	0.85
36:DA:1291:C:C2'	36:DA:1292:U:H5'	2.06	0.85
1:AA:1363(A):A:H4'	1:AA:1364:U:H5''	1.58	0.85
3:AC:58:GLU:H	3:AC:65:ALA:HB3	1.38	0.85
1:AA:1003:G:C2'	1:AA:1004:A:H4'	2.04	0.85
42:DG:103:LEU:O	42:DG:106:LEU:HB3	1.77	0.85
7:AG:118:VAL:HG23	7:AG:119:ARG:H	1.39	0.85
32:B6:5:VAL:CG1	36:BA:2283:C:H5'	2.07	0.85
28:D2:21:LEU:HD22	28:D2:64:LEU:HD12	1.58	0.85
41:DF:135:LYS:HB3	41:DF:138:GLU:HB2	1.58	0.85
38:DC:23:ASP:HB3	38:DC:27:ARG:NH1	1.91	0.85
36:DA:2893:G:H5'	36:DA:2894:G:H5'	1.59	0.85
9:AI:9:ARG:HB2	9:AI:104:ARG:HH12	1.39	0.85
22:CV:6:G:H1	22:CV:67:C:H42	1.24	0.85
22:AV:59:U:HO2'	22:AV:60:U:H6	0.87	0.85
36:DA:2124:G:H1'	38:DC:42:GLU:OE2	1.76	0.85
1:CA:1003:G:C2'	1:CA:1004:A:H4'	2.05	0.85
37:DB:17:C:H42	37:DB:68:C:H42	1.22	0.85
36:BA:1658:C:H2'	36:BA:1659:U:H6	1.41	0.85
58:BZ:81:ARG:HB2	58:BZ:81:ARG:CZ	2.04	0.85
1:CA:1410:G:O2'	1:CA:1411:C:H5'	1.75	0.85
39:BD:186:HIS:NE2	39:BD:188:GLU:HB2	1.91	0.85
26:B0:37:LEU:HB2	26:B0:59:LEU:HB2	1.59	0.85
1:CA:1480:G:H2'	1:CA:1481:U:O4'	1.76	0.85
40:BE:107:THR:O	40:BE:191:PRO:HD3	1.76	0.85
15:CO:10:LYS:HE3	15:CO:10:LYS:O	1.76	0.85
36:DA:407:G:H2'	36:DA:408:G:H8	1.42	0.85
31:D5:7:PRO:HA	36:DA:2615:U:C2	2.12	0.85
36:DA:483:A:H1'	57:DY:60:PHE:CE1	2.12	0.85
46:DN:23:LEU:HA	46:DN:26:LEU:HD23	1.59	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:117:G:O6	1:AA:289:G:H1'	1.76	0.85
40:BE:34:VAL:O	40:BE:35:GLN:HB2	1.75	0.85
52:DT:80:SER:HB3	52:DT:81:PRO:HD3	1.57	0.85
10:AJ:63:PHE:HB3	14:AN:58:LYS:HA	1.56	0.85
58:DZ:26:GLY:HA2	58:DZ:85:HIS:CD2	2.12	0.85
54:DV:72:VAL:CG2	54:DV:85:LYS:HB2	2.06	0.85
7:AG:146:GLU:OE2	7:AG:149:ARG:HD2	1.77	0.85
38:BC:147:PHE:C	38:BC:149:ILE:H	1.79	0.85
26:B0:11:ARG:HB2	26:B0:11:ARG:NH1	1.91	0.85
1:CA:1203:C:OP1	14:CN:3:ARG:HD3	1.75	0.85
42:DG:130:ASN:CG	42:DG:160:VAL:HG13	1.95	0.85
36:DA:1599:C:H2'	36:DA:1600:C:H6	1.42	0.85
36:DA:1629:U:H2'	36:DA:1630:G:C8	2.11	0.85
36:BA:1062:G:H1'	45:BK:75:UNK:CB	2.07	0.85
38:BC:72:VAL:HG23	38:BC:111:ASP:HB3	1.59	0.85
36:BA:813:U:H2'	36:BA:814:C:C6	2.11	0.85
28:B2:69:ARG:NH1	36:BA:111:A:H4'	1.91	0.85
41:DF:160:ASN:HB3	41:DF:163:VAL:HB	1.58	0.85
36:BA:329:G:H22	57:BY:19:LYS:HE3	1.40	0.85
42:BG:16:ARG:HD2	42:BG:20:ILE:HD11	1.57	0.85
36:DA:2591:C:H2'	36:DA:2592:G:H8	1.42	0.85
1:CA:1002:G:H2'	1:CA:1003:G:C8	2.10	0.85
10:CJ:43:ARG:HB2	10:CJ:67:THR:HG22	1.58	0.85
38:BC:10:LEU:HD12	38:BC:32:LEU:HD23	1.56	0.85
1:CA:751:U:H4'	15:CO:24:SER:HB2	1.57	0.85
4:AD:201:GLN:HA	4:AD:204:ILE:HD12	1.59	0.85
36:BA:407:G:H2'	36:BA:408:G:H8	1.42	0.85
32:B6:53:LYS:HD3	32:B6:54:ILE:H	1.39	0.85
36:DA:511:U:H3'	36:DA:512:G:C5'	2.05	0.85
57:BY:81:LYS:NZ	57:BY:99:CYS:HB2	1.91	0.85
46:DN:133:GLN:HG2	46:DN:134:ARG:H	1.40	0.85
2:AB:204:ASN:ND2	2:AB:206:ASP:H	1.75	0.85
36:DA:2200:C:H42	36:DA:2223:G:H1	1.24	0.85
46:DN:45:ASN:HD22	46:DN:45:ASN:N	1.72	0.85
1:CA:226:G:O2'	1:CA:227:G:H5'	1.77	0.85
35:D9:36:GLN:HE22	36:DA:1031:G:N2	1.75	0.85
1:AA:1053:G:H4'	1:AA:1054:C:C5'	2.06	0.85
36:DA:2833:G:H3'	36:DA:2834:G:H5''	1.56	0.85
1:AA:1002:G:H2'	1:AA:1003:G:C8	2.10	0.85
34:B8:25:MET:HG3	48:BP:64:LYS:HB2	1.56	0.85
32:D6:53:LYS:HD3	32:D6:54:ILE:H	1.42	0.85
1:CA:265:G:C2'	1:CA:266:G:H5''	2.06	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BO:2:ILE:CD1	47:BO:82:ASN:HD22	1.89	0.85
37:DB:80:U:H2'	37:DB:81:G:N2	1.91	0.85
1:AA:1498:U:C5	23:AX:20:U:H5'	2.12	0.85
42:BG:7:LEU:HB3	42:BG:100:TRP:CE3	2.11	0.85
46:BN:133:GLN:HG2	46:BN:134:ARG:H	1.41	0.85
54:BV:72:VAL:HG23	54:BV:85:LYS:HB2	1.56	0.85
25:AZ:322:VAL:CG1	25:AZ:364:PRO:HA	2.07	0.85
55:DW:11:ARG:NH1	55:DW:98:LYS:HB3	1.90	0.85
36:DA:612:C:H2'	36:DA:613:G:C5'	2.07	0.85
1:CA:419:C:H42	1:CA:424:G:H22	1.22	0.85
54:BV:19:LYS:HG2	54:BV:94:LEU:HB2	1.59	0.85
56:BX:60:ARG:HG3	56:BX:75:ASP:OD2	1.77	0.85
36:DA:1818:U:H2'	39:DD:157:ARG:HG3	1.58	0.84
36:BA:1353:A:H2'	36:BA:1354:A:C8	2.12	0.84
52:BT:38:ASN:C	52:BT:38:ASN:HD22	1.80	0.84
36:DA:1677:A:H2'	36:DA:1678:G:C8	2.12	0.84
58:BZ:153:SER:H	58:BZ:167:PRO:CB	1.90	0.84
1:CA:1348:U:H4'	9:CI:120:ARG:HD2	1.58	0.84
36:BA:2110:G:H22	36:BA:2178:C:H41	1.24	0.84
20:AT:72:LEU:HD22	20:AT:76:ALA:HB1	1.58	0.84
1:AA:1125:U:H3	10:AJ:5:ARG:NH2	1.75	0.84
36:DA:2020:A:O2'	36:DA:2021:C:H5'	1.77	0.84
30:B4:6:HIS:HB3	42:BG:67:LYS:HE3	1.57	0.84
8:CH:11:THR:HG23	8:CH:14:ARG:HH12	1.40	0.84
1:CA:1002:G:H2'	1:CA:1003:G:H8	1.42	0.84
36:DA:662:G:OP1	48:DP:18:ARG:HD2	1.78	0.84
36:BA:863:A:H2'	36:BA:864:G:C8	2.11	0.84
1:AA:1435:G:H2'	1:AA:1436:U:H6	1.39	0.84
1:CA:770:C:O2'	1:CA:771:G:H5'	1.77	0.84
36:BA:6:A:O2'	46:BN:130:HIS:HB2	1.77	0.84
52:BT:5:ALA:O	52:BT:9:LEU:HG	1.76	0.84
56:DX:24:GLY:O	56:DX:82:GLN:HA	1.77	0.84
11:AK:120:ARG:HH22	11:AK:126:ARG:HE	1.24	0.84
36:DA:234:C:H2'	36:DA:235:U:C6	2.12	0.84
36:BA:612:C:H2'	36:BA:613:G:H5'	1.59	0.84
36:BA:483:A:H1'	57:BY:60:PHE:CE1	2.11	0.84
25:CZ:268:THR:CG2	25:CZ:289:LEU:HD23	2.07	0.84
41:BF:137:LYS:HA	41:BF:140:LEU:CB	2.07	0.84
10:AJ:12:ASP:HB3	10:AJ:15:THR:OG1	1.75	0.84
36:DA:1132:A:N3	46:DN:73:THR:HG21	1.92	0.84
52:BT:65:LYS:HE3	52:BT:66:VAL:H	1.41	0.84
22:AV:6:G:H1	22:AV:67:C:H42	1.24	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:860:U:O2'	36:BA:861:A:H5'	1.76	0.84
36:BA:1576:U:H2'	36:BA:1577:C:C6	2.12	0.84
13:CM:52:GLU:HA	13:CM:55:ARG:HB3	1.58	0.84
1:AA:831:U:H2'	1:AA:832:C:C5	2.12	0.84
37:BB:68:C:H2'	37:BB:69:G:H8	1.43	0.84
1:AA:63:C:H42	1:AA:104:G:H1	1.22	0.84
52:BT:53:ARG:NH1	52:BT:53:ARG:HB3	1.92	0.84
5:CE:47:LYS:N	5:CE:47:LYS:HD3	1.93	0.84
36:DA:2082:A:H2'	36:DA:2083:G:O4'	1.77	0.84
36:DA:310:A:OP1	57:DY:18:GLY:HA2	1.77	0.84
37:BB:30:C:H2'	37:BB:31:C:O4'	1.77	0.84
49:DQ:20:ALA:H	58:DZ:79:ARG:NH2	1.76	0.84
36:DA:662:G:H2'	36:DA:663:G:C8	2.11	0.84
36:DA:1576:U:H2'	36:DA:1577:C:C6	2.11	0.84
4:CD:119:GLN:HG3	4:CD:123:HIS:CD2	2.13	0.84
1:AA:627:G:H2'	1:AA:628:G:H8	1.43	0.84
34:D8:28:GLY:HA2	34:D8:32:LEU:HD23	1.57	0.84
36:BA:1378:A:O2'	36:BA:1379:A:H5'	1.77	0.84
41:DF:137:LYS:HA	41:DF:140:LEU:CB	2.08	0.84
36:DA:2511:U:H4'	40:DE:124:GLY:CA	2.06	0.84
36:BA:1543:C:H3'	36:BA:1544:A:C5'	2.07	0.84
8:AH:64:LYS:HD2	8:AH:79:VAL:HG21	1.59	0.84
1:AA:1282:C:H2'	1:AA:1283:G:H8	1.42	0.84
38:DC:96:GLY:HA3	38:DC:99:ILE:CG1	2.06	0.84
1:CA:902:G:H2'	1:CA:903:G:H8	1.42	0.84
57:DY:43:ASN:C	57:DY:44:ILE:HD12	1.98	0.84
20:AT:36:LEU:CD1	20:AT:59:ALA:HB2	2.07	0.84
38:DC:63:SER:HA	38:DC:160:ARG:HA	1.59	0.84
1:CA:1324:A:H4'	1:CA:1362:C:H4'	1.59	0.84
36:DA:871:U:H4'	49:DQ:69:PHE:CE2	2.12	0.84
25:CZ:137:LYS:HG2	62:CZ:501:GDP:C6	2.12	0.84
36:BA:1682:G:H5'	36:BA:1762:A:O2'	1.77	0.84
36:DA:1773:A:H2'	36:DA:1774:C:O4'	1.78	0.84
49:DQ:67:ARG:HD3	49:DQ:102:VAL:HB	1.59	0.84
13:CM:14:ARG:HG3	13:CM:44:ARG:NH1	1.93	0.84
49:BQ:20:ALA:H	58:BZ:79:ARG:NH2	1.75	0.84
10:CJ:4:ILE:HG13	10:CJ:99:LYS:O	1.76	0.84
2:CB:63:MET:O	2:CB:63:MET:HG3	1.75	0.84
12:CL:20:LYS:N	12:CL:20:LYS:HD3	1.92	0.84
36:DA:1860:G:H1	36:DA:1882:C:N4	1.74	0.84
36:BA:622:G:O2'	36:BA:623:G:H5'	1.77	0.84
41:BF:160:ASN:HB3	41:BF:163:VAL:HB	1.57	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:137:LYS:HA	62:CZ:501:GDP:N1	1.91	0.84
1:CA:1359:C:OP2	14:CN:22:THR:HG21	1.77	0.84
19:AS:41:VAL:HB	19:AS:44:MET:HG2	1.59	0.84
1:AA:1423:G:H2'	1:AA:1424:C:H6	1.39	0.84
43:BH:23:ARG:O	43:BH:24:VAL:HG23	1.77	0.84
1:AA:35:G:H2'	1:AA:36:C:C6	2.12	0.84
38:BC:63:SER:HA	38:BC:160:ARG:HA	1.59	0.84
1:CA:351:G:H4'	1:CA:352:C:OP2	1.75	0.84
54:DV:81:TYR:C	54:DV:82:ARG:HD2	1.98	0.84
6:AF:37:VAL:HA	6:AF:65:VAL:HG12	1.58	0.84
32:D6:27:LYS:CG	32:D6:30:THR:HB	2.08	0.84
36:BA:1668:A:H4'	36:BA:1669:A:O5'	1.77	0.84
36:BA:2807:G:C3'	36:BA:2808:U:H5''	2.08	0.84
58:BZ:10:ARG:NE	58:BZ:36:LYS:HB2	1.92	0.84
57:BY:37:VAL:HG23	57:BY:38:ILE:H	1.42	0.84
16:CP:21:VAL:HG13	16:CP:33:ILE:HB	1.60	0.84
39:DD:65:ILE:H	39:DD:65:ILE:HD13	1.40	0.84
49:BQ:67:ARG:HD3	49:BQ:102:VAL:HB	1.59	0.84
36:BA:612:C:H2'	36:BA:613:G:C5'	2.08	0.84
34:D8:25:MET:HG3	48:DP:64:LYS:HB2	1.58	0.84
36:BA:655:A:C4'	36:BA:656:G:H5'	2.07	0.84
1:CA:975:A:H4'	1:CA:976:G:H5''	1.60	0.84
22:CV:20:U:H3'	22:CV:21:A:C5'	2.07	0.84
36:BA:662:G:H2'	36:BA:663:G:C8	2.13	0.84
43:DH:85:LYS:O	43:DH:132:ARG:HB2	1.78	0.84
25:CZ:244:ARG:HH11	25:CZ:244:ARG:HB3	1.40	0.84
38:BC:99:ILE:HD12	38:BC:102:LYS:HZ3	1.43	0.84
38:DC:82:LYS:HG3	38:DC:147:PHE:CD1	2.12	0.84
2:AB:229:VAL:HG12	2:AB:230:VAL:H	1.41	0.84
9:AI:43:ALA:HB2	9:AI:74:ILE:HD13	1.59	0.84
4:AD:119:GLN:HG3	4:AD:123:HIS:CD2	2.12	0.84
36:DA:2377:A:H2'	36:DA:2378:A:C8	2.13	0.84
38:DC:214:VAL:HG23	38:DC:224:ILE:HG21	1.60	0.84
36:DA:271:A:H2	36:DA:366:C:H1'	1.42	0.84
24:CY:53:G:H5''	25:CZ:332:THR:HG21	1.59	0.84
29:D3:4:LEU:HD11	29:D3:39:ASP:OD1	1.78	0.84
36:DA:2403:C:H42	36:DA:2414:G:H1	1.26	0.83
36:BA:1818:U:H2'	39:BD:157:ARG:HG3	1.57	0.83
38:BC:82:LYS:HG3	38:BC:147:PHE:CD1	2.13	0.83
36:DA:996:A:H5'	53:DU:94:ASN:HB2	1.60	0.83
36:DA:329:G:H22	57:DY:19:LYS:HE3	1.43	0.83
46:BN:10:GLU:HG3	46:BN:11:PRO:HD2	1.60	0.83

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:CJ:78:ASN:HB2	10:CJ:81:THR:HG23	1.59	0.83
49:DQ:140:ALA:HB1	58:DZ:99:TYR:HB2	1.57	0.83
54:DV:69:LYS:HB2	54:DV:88:ARG:HD3	1.60	0.83
36:BA:1441:G:O2'	36:BA:1442:G:H5'	1.78	0.83
36:BA:2039:C:H2'	36:BA:2040:C:H6	1.42	0.83
1:AA:1282:C:H2'	1:AA:1283:G:C8	2.13	0.83
1:CA:1125:U:H3	10:CJ:5:ARG:NH2	1.76	0.83
38:DC:40:THR:HA	38:DC:177:LYS:HA	1.60	0.83
26:D0:27:GLU:HA	26:D0:67:VAL:O	1.77	0.83
31:D5:48:GLU:O	31:D5:49:CYS:SG	2.35	0.83
39:BD:181:GLU:HA	39:BD:272:ALA:O	1.78	0.83
36:DA:833:U:H5''	48:DP:48:PRO:CB	2.07	0.83
25:AZ:268:THR:CG2	25:AZ:289:LEU:HD23	2.07	0.83
41:DF:132:VAL:HG22	41:DF:133:ASN:H	1.41	0.83
36:BA:2893:G:H5'	36:BA:2894:G:H5'	1.60	0.83
36:BA:2185:C:C2'	36:BA:2186:G:H5'	2.08	0.83
25:AZ:241:ARG:HB2	25:AZ:285:ASN:HD21	1.41	0.83
3:AC:58:GLU:H	3:AC:65:ALA:CB	1.91	0.83
36:DA:265:A:H8	36:DA:266:G:H1'	1.38	0.83
25:CZ:241:ARG:HB2	25:CZ:285:ASN:HD21	1.42	0.83
36:BA:271:A:H2	36:BA:366:C:H1'	1.42	0.83
1:CA:173:U:H5'	1:CA:197:A:O4'	1.78	0.83
36:BA:1010:A:H1'	36:BA:1153:C:H1'	1.60	0.83
36:BA:1047:G:N2	36:BA:1110:G:H2'	1.93	0.83
36:DA:1062:G:H1'	45:DK:75:UNK:CB	2.08	0.83
13:AM:37:THR:O	13:AM:39:ILE:HG13	1.77	0.83
32:B6:6:ARG:HH11	32:B6:6:ARG:HB3	1.42	0.83
57:BY:81:LYS:HD3	57:BY:97:ARG:O	1.78	0.83
42:BG:130:ASN:HB3	42:BG:160:VAL:HA	1.60	0.83
36:BA:2591:C:H2'	36:BA:2592:G:C8	2.13	0.83
39:DD:28:GLU:H	39:DD:29:PRO:HD2	1.43	0.83
15:AO:36:ILE:HG23	15:AO:56:LEU:HD11	1.58	0.83
29:B3:4:LEU:HD11	29:B3:39:ASP:OD1	1.78	0.83
37:DB:114:C:H4'	51:DS:46:VAL:HG13	1.60	0.83
32:B6:48:VAL:O	32:B6:49:HIS:ND1	2.12	0.83
12:CL:17:LYS:HD3	12:CL:18:VAL:N	1.93	0.83
1:CA:820:U:H4'	1:CA:821:G:OP2	1.77	0.83
4:CD:98:GLU:HG2	4:CD:189:PRO:HG3	1.58	0.83
25:AZ:67:HIS:HE1	25:AZ:98:GLN:HE22	1.25	0.83
33:D7:34:ARG:HD3	33:D7:39:ARG:HG3	1.60	0.83
25:CZ:67:HIS:HE1	25:CZ:98:GLN:HE22	1.22	0.83
37:DB:30:C:H2'	37:DB:31:C:O4'	1.77	0.83

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2476:A:H2'	36:BA:2477:C:H5''	1.61	0.83
41:BF:135:LYS:HB3	41:BF:138:GLU:HB2	1.59	0.83
46:DN:28:THR:HG23	46:DN:29:LYS:N	1.93	0.83
8:CH:10:LEU:HD22	8:CH:83:ILE:CD1	2.06	0.83
2:CB:165:VAL:HG23	2:CB:166:ASP:H	1.43	0.83
52:DT:88:ILE:HG22	52:DT:89:VAL:HG23	1.60	0.83
1:AA:1487:G:O2'	1:AA:1488:G:H5'	1.77	0.83
36:BA:2814:C:H2'	36:BA:2815:C:H6	1.43	0.83
1:CA:155:C:H2'	1:CA:156:G:C8	2.12	0.83
41:DF:11:VAL:HG12	41:DF:12:LEU:H	1.42	0.83
36:DA:1301:A:O2'	36:DA:1302:A:H2'	1.79	0.83
1:AA:1281:U:H5''	1:AA:1282:C:H5	1.43	0.83
23:CX:20:U:H2'	23:CX:21:C:H6	1.41	0.83
27:B1:13:ILE:CD1	36:BA:396:G:H5'	2.06	0.83
28:B2:68:ARG:HH12	28:B2:72:ALA:HB2	1.42	0.83
1:AA:355:C:H2'	1:AA:356:A:H8	1.44	0.83
8:AH:10:LEU:CD2	8:AH:83:ILE:HD11	2.08	0.83
56:BX:44:GLU:HG3	56:BX:50:LYS:HA	1.59	0.83
7:AG:69:VAL:CA	7:AG:138:LYS:HD2	2.07	0.83
9:CI:104:ARG:HG2	9:CI:105:ASP:H	1.44	0.83
36:BA:2302:G:H3'	36:BA:2303:G:H8	1.44	0.83
4:CD:107:ARG:NH2	4:CD:194:LEU:HD12	1.92	0.83
40:BE:132:HIS:HA	40:BE:135:HIS:CE1	2.14	0.83
36:DA:2377:A:H2'	36:DA:2378:A:H8	1.43	0.83
20:CT:49:ALA:O	20:CT:53:LEU:HD12	1.78	0.83
1:AA:194:C:H2'	1:AA:195:A:H5''	1.60	0.83
38:DC:214:VAL:HG23	38:DC:224:ILE:HD13	1.59	0.83
9:CI:57:GLY:O	9:CI:58:HIS:HB2	1.75	0.83
14:AN:48:ALA:HB2	14:AN:53:LEU:HD12	1.59	0.83
23:AX:23:C:H2'	23:AX:24:C:C6	2.13	0.83
1:AA:226:G:O2'	1:AA:227:G:H5'	1.78	0.83
27:D1:14:VAL:HG21	36:DA:188:G:H5'	1.61	0.83
34:B8:10:ALA:CA	34:B8:13:ARG:HG2	2.09	0.83
19:CS:16:LEU:CA	19:CS:19:VAL:HB	2.06	0.83
36:BA:2837:G:H2'	36:BA:2838:G:H8	1.43	0.83
36:BA:1503:U:H2'	36:BA:1504:C:C6	2.14	0.83
36:BA:1503:U:H2'	36:BA:1504:C:H6	1.44	0.83
40:BE:38:THR:HB	40:BE:41:LYS:HG2	1.60	0.83
36:BA:1301:A:O2'	36:BA:1302:A:H2'	1.79	0.83
36:BA:2122:U:H2'	36:BA:2123:G:C8	2.14	0.83
20:CT:72:LEU:HD22	20:CT:76:ALA:HB1	1.60	0.83
13:CM:49:THR:HG22	13:CM:51:ALA:H	1.42	0.83

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:D4:10:VAL:HG23	30:D4:11:PRO:HD2	1.61	0.83
1:AA:155:C:H2'	1:AA:156:G:C8	2.14	0.83
5:AE:150:ARG:HB2	5:AE:150:ARG:NH1	1.93	0.83
25:CZ:322:VAL:CG1	25:CZ:364:PRO:HA	2.07	0.83
1:CA:194:C:H2'	1:CA:195:A:H5''	1.61	0.83
2:CB:167:PRO:HG2	2:CB:192:SER:OG	1.79	0.83
1:CA:736:C:H2'	1:CA:737:A:H8	1.39	0.83
36:DA:2807:G:H1	36:DA:2893:G:H1	1.23	0.83
52:DT:68:TYR:O	52:DT:70:VAL:N	2.12	0.83
58:BZ:61:LEU:HD11	58:BZ:67:LEU:HD13	1.59	0.83
57:BY:8:LYS:HB2	57:BY:28:LYS:HZ1	1.42	0.83
1:CA:1301:U:H3'	1:CA:1302:U:C5'	2.08	0.83
1:CA:78:G:H22	1:CA:91:C:N4	1.77	0.83
58:DZ:76:LEU:HD11	58:DZ:81:ARG:HH12	1.43	0.83
36:BA:996:A:O2'	36:BA:997:G:H5'	1.79	0.83
42:BG:85:GLY:O	42:BG:86:MET:HB3	1.79	0.83
7:AG:64:GLN:HE21	7:AG:68:ASN:ND2	1.77	0.83
36:BA:372:G:H22	36:BA:400:G:H2'	1.39	0.83
36:BA:2841:C:H2'	36:BA:2842:G:C8	2.14	0.83
11:AK:52:GLY:O	11:AK:55:LYS:HE2	1.79	0.83
36:DA:2127:G:H4'	38:DC:37:PHE:CD1	2.13	0.83
36:BA:2379:G:H2'	36:BA:2380:C:C6	2.14	0.83
1:CA:368:U:OP2	25:CZ:291:ARG:HD3	1.78	0.83
48:BP:105:LEU:O	48:BP:106:LEU:HB2	1.77	0.83
52:BT:62:THR:HG22	52:BT:75:ILE:HG23	1.61	0.83
42:DG:7:LEU:HD22	42:DG:100:TRP:CZ3	2.14	0.83
40:DE:30:PRO:HD3	40:DE:180:ASN:ND2	1.94	0.83
25:CZ:215:ARG:HB3	25:CZ:282:ALA:HB3	1.61	0.83
4:CD:100:ARG:HE	4:CD:118:ARG:HH22	1.26	0.83
1:CA:1282:C:H2'	1:CA:1283:G:H8	1.43	0.83
49:DQ:42:ILE:O	49:DQ:94:VAL:HA	1.79	0.83
10:AJ:4:ILE:HG13	10:AJ:99:LYS:O	1.78	0.83
46:BN:83:LYS:HG2	46:BN:84:LYS:N	1.94	0.83
1:AA:408:A:H4'	4:AD:112:VAL:HG11	1.58	0.83
26:D0:37:LEU:HB2	26:D0:59:LEU:HB2	1.61	0.83
36:BA:884:C:H42	36:BA:893:C:H42	1.26	0.83
18:AR:45:SER:HA	18:AR:51:LEU:HD21	1.59	0.83
5:CE:102:ALA:HB1	5:CE:106:PRO:CG	2.08	0.83
36:BA:2122:U:H2'	36:BA:2123:G:H8	1.41	0.83
1:CA:35:G:H2'	1:CA:36:C:C6	2.13	0.83
1:CA:80:G:H1	1:CA:90:U:H5'	1.43	0.83
36:BA:1132:A:N3	46:BN:73:THR:HG21	1.94	0.83

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:80:ILE:H	2:CB:80:ILE:HD12	1.40	0.83
6:CF:84:ASN:N	6:CF:84:ASN:HD22	1.74	0.83
1:AA:447:G:H2'	1:AA:485:G:N2	1.92	0.83
36:DA:802:A:H2'	36:DA:803:U:C6	2.12	0.83
54:DV:29:PRO:HA	54:DV:61:VAL:CG2	2.09	0.83
36:DA:925:C:H2'	36:DA:926:A:C5'	2.04	0.82
22:AV:20:U:H3'	22:AV:21:A:C5'	2.09	0.82
37:DB:68:C:H2'	37:DB:69:G:H8	1.43	0.82
49:DQ:34:LEU:HD11	49:DQ:129:THR:HB	1.59	0.82
1:CA:811:C:H4'	1:CA:900:A:N6	1.94	0.82
52:BT:60:THR:HG22	52:BT:77:PRO:HA	1.60	0.82
23:AX:20:U:H2'	23:AX:21:C:H6	1.43	0.82
1:AA:1305:G:HO2'	1:AA:1306:A:H8	1.27	0.82
7:AG:113:GLU:HB2	7:AG:119:ARG:HG2	1.61	0.82
5:AE:110:LEU:HD13	5:AE:118:ILE:HG21	1.62	0.82
1:CA:711:G:H2'	1:CA:712:A:H8	1.41	0.82
7:AG:126:ASP:HB3	7:AG:131:LYS:O	1.78	0.82
20:AT:49:ALA:O	20:AT:53:LEU:HD12	1.78	0.82
36:BA:2208:A:H1'	36:BA:2219:G:N7	1.92	0.82
22:AV:63:G:H2'	22:AV:64:A:C8	2.14	0.82
43:BH:153:LYS:H	43:BH:153:LYS:HD3	1.43	0.82
1:AA:1324:A:H4'	1:AA:1362:C:H4'	1.61	0.82
36:BA:1803:A:O3'	39:BD:259:THR:HG21	1.80	0.82
4:AD:28:SER:HB3	4:AD:29:PRO:CD	2.09	0.82
41:BF:137:LYS:HA	41:BF:140:LEU:HB3	1.61	0.82
36:BA:2498:C:O2'	36:BA:2499:C:H5'	1.79	0.82
57:DY:81:LYS:NZ	57:DY:99:CYS:HB2	1.95	0.82
1:AA:18:C:H5''	5:AE:127:ASN:ND2	1.92	0.82
42:DG:114:ILE:HG23	42:DG:114:ILE:O	1.78	0.82
42:DG:5:VAL:H	42:DG:8:LYS:HB3	1.44	0.82
1:AA:80:G:H1	1:AA:90:U:H5'	1.43	0.82
49:BQ:44:ALA:HA	49:BQ:47:ILE:HD12	1.59	0.82
36:DA:145:G:H2'	36:DA:146:G:H5''	1.60	0.82
36:BA:827:U:H2'	36:BA:2068:U:C2	2.14	0.82
58:DZ:101:PRO:O	58:DZ:102:LEU:HD23	1.79	0.82
40:DE:195:LEU:HD12	40:DE:196:VAL:N	1.94	0.82
36:DA:2401:U:C2'	36:DA:2402:C:H5''	2.09	0.82
39:BD:30:GLU:HG3	39:BD:63:ARG:CZ	2.09	0.82
39:BD:34:VAL:HG23	39:BD:35:LYS:H	1.45	0.82
36:BA:659:C:H2'	36:BA:660:G:H8	1.43	0.82
54:DV:19:LYS:HG2	54:DV:94:LEU:HB2	1.61	0.82
51:BS:94:TYR:O	51:BS:95:HIS:HB3	1.77	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1297:C:OP1	36:BA:2710:C:H4'	1.79	0.82
1:AA:736:C:H2'	1:AA:737:A:H8	1.41	0.82
41:BF:11:VAL:HG12	41:BF:12:LEU:H	1.43	0.82
1:CA:80:G:N1	1:CA:90:U:H5'	1.93	0.82
36:DA:141:A:H8	36:DA:1408:C:HO2'	1.28	0.82
39:BD:126:GLN:O	39:BD:193:VAL:HG11	1.80	0.82
1:AA:80:G:N1	1:AA:90:U:H5'	1.94	0.82
5:CE:76:ILE:HG12	5:CE:78:HIS:H	1.43	0.82
2:CB:107:THR:HG23	2:CB:110:GLN:HE22	1.43	0.82
41:DF:53:THR:HG22	41:DF:56:GLU:HG3	1.58	0.82
11:CK:52:GLY:O	11:CK:55:LYS:HE2	1.78	0.82
15:AO:10:LYS:O	15:AO:10:LYS:HE3	1.80	0.82
36:DA:6:A:O2'	46:DN:130:HIS:HB2	1.79	0.82
1:AA:10:A:OP2	5:AE:126:ARG:HD3	1.78	0.82
57:BY:43:ASN:C	57:BY:44:ILE:HD12	1.99	0.82
36:DA:2837:G:H2'	36:DA:2838:G:H8	1.44	0.82
34:D8:10:ALA:CA	34:D8:13:ARG:HG2	2.09	0.82
36:DA:655:A:C4'	36:DA:656:G:H5'	2.06	0.82
13:AM:15:VAL:HG22	13:AM:41:PRO:O	1.80	0.82
36:DA:2039:C:H2'	36:DA:2040:C:H6	1.44	0.82
36:DA:1503:U:H2'	36:DA:1504:C:C6	2.14	0.82
31:D5:44:THR:HG22	31:D5:45:VAL:H	1.42	0.82
1:CA:1442(B):A:C2	52:DT:118:ARG:CZ	2.63	0.82
36:DA:1353:A:H4'	39:DD:38:LYS:HE3	1.61	0.82
1:AA:438:G:C5'	4:AD:123:HIS:HD1	1.93	0.82
36:DA:2841:C:H2'	36:DA:2842:G:C8	2.14	0.82
1:CA:892:A:O2'	1:CA:1415:G:H4'	1.79	0.82
55:DW:78:GLU:OE2	55:DW:99:ARG:HD2	1.80	0.82
36:DA:904:C:H2'	36:DA:905:U:H6	1.43	0.82
32:B6:16:CYS:O	32:B6:17:LYS:HG2	1.80	0.82
36:DA:2762:G:H8	36:DA:2762:G:H5'	1.43	0.82
36:DA:795:C:H2'	36:DA:796:C:C6	2.15	0.82
1:AA:1199:U:H4'	10:AJ:54:PHE:CZ	2.15	0.82
4:CD:194:LEU:HB3	4:CD:196:LEU:HD13	1.60	0.82
36:DA:2508:G:H1	36:DA:2580:U:H3	1.27	0.82
38:BC:100:ILE:CG2	38:BC:127:LEU:HG	2.10	0.82
48:BP:84:ASN:C	48:BP:86:LYS:H	1.81	0.82
32:D6:5:VAL:CG1	36:DA:2283:C:H5'	2.10	0.82
36:DA:2476:A:H2'	36:DA:2477:C:H5''	1.61	0.82
39:BD:65:ILE:N	39:BD:65:ILE:HD13	1.93	0.82
50:BR:13:HIS:CE1	50:BR:16:HIS:H	1.97	0.82
2:CB:42:ILE:HD11	2:CB:202:PRO:HB2	1.60	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:20:VAL:HA	25:CZ:24:LYS:HZ1	1.44	0.82
36:BA:662:G:OP1	48:BP:18:ARG:HD2	1.79	0.82
2:CB:21:ARG:CZ	2:CB:39:ILE:HG12	2.10	0.82
36:BA:2377:A:H2'	36:BA:2378:A:C8	2.15	0.82
43:BH:85:LYS:O	43:BH:132:ARG:HB2	1.80	0.82
10:AJ:40:LEU:HB2	10:AJ:41:PRO:HD2	1.62	0.82
32:D6:39:TYR:O	32:D6:41:PRO:HD3	1.80	0.82
36:BA:89:G:H3'	36:BA:90:U:H5''	1.60	0.82
36:BA:90:U:H1'	36:BA:92:A:C8	2.15	0.82
40:BE:82:ARG:HG3	40:BE:82:ARG:HH11	1.44	0.82
1:AA:337:C:H2'	1:AA:338:A:H8	1.44	0.82
1:AA:56:U:H2'	1:AA:57:G:C8	2.15	0.82
4:CD:28:SER:HB3	4:CD:29:PRO:CD	2.10	0.82
1:AA:1301:U:H3'	1:AA:1302:U:C5'	2.10	0.82
36:BA:1598:C:H5'	56:BX:36:LYS:CG	2.09	0.82
36:DA:1503:U:H2'	36:DA:1504:C:H6	1.45	0.82
1:CA:1203:C:H2'	1:CA:1204:A:H8	1.45	0.82
39:DD:35:LYS:C	39:DD:35:LYS:HD2	2.00	0.82
40:DE:117:MET:SD	40:DE:136:ARG:HG2	2.19	0.82
36:DA:1842:G:H2'	36:DA:1843:C:H6	1.42	0.82
36:BA:2020:A:O2'	36:BA:2021:C:H5'	1.79	0.82
36:DA:2760:C:H2'	36:DA:2761:G:H5''	1.60	0.82
36:BA:271(M):G:C2'	36:BA:271(N):U:H5''	2.08	0.82
57:BY:76:CYS:SG	57:BY:77:PRO:HD2	2.19	0.82
9:AI:46:ALA:C	9:AI:47:LEU:HD12	2.00	0.82
1:CA:1281:U:H5''	1:CA:1282:C:H5	1.43	0.82
38:BC:40:THR:HA	38:BC:177:LYS:HA	1.61	0.82
11:CK:120:ARG:HH22	11:CK:126:ARG:HE	1.27	0.82
49:BQ:12:GLN:HE21	49:BQ:73:PRO:HD2	1.44	0.82
24:AY:75:C:H6	25:AZ:231:ILE:HG23	1.43	0.82
36:DA:1860:G:H1	36:DA:1882:C:H42	1.25	0.82
36:BA:871:U:H4'	49:BQ:69:PHE:CE2	2.15	0.82
36:DA:2814:C:H2'	36:DA:2815:C:H6	1.43	0.82
38:DC:10:LEU:HD12	38:DC:32:LEU:HD23	1.61	0.82
25:AZ:38:GLU:HG3	25:AZ:189:ARG:HH11	1.41	0.82
25:AZ:38:GLU:HG3	25:AZ:189:ARG:HH12	1.41	0.82
42:BG:105:LYS:HE3	42:BG:143:GLU:OE1	1.80	0.82
32:B6:27:LYS:CG	32:B6:30:THR:HB	2.09	0.82
5:AE:102:ALA:HB1	5:AE:106:PRO:CG	2.09	0.82
4:AD:107:ARG:NH2	4:AD:194:LEU:HD12	1.94	0.82
36:DA:2122:U:H2'	36:DA:2123:G:H8	1.44	0.82
54:BV:81:TYR:C	54:BV:82:ARG:HD2	1.99	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D2:27:GLU:O	28:D2:30:ARG:N	2.12	0.81
28:D2:47:ASN:ND2	36:DA:94(A):G:H21	1.76	0.81
36:DA:659:C:H2'	36:DA:660:G:H8	1.45	0.81
57:DY:46:LYS:N	57:DY:62:GLU:HG2	1.93	0.81
26:D0:11:ARG:CB	26:D0:11:ARG:HH11	1.93	0.81
4:CD:62:GLN:O	4:CD:66:ARG:HB2	1.80	0.81
1:CA:1477:C:H2'	1:CA:1478:C:C6	2.15	0.81
56:DX:44:GLU:HG3	56:DX:50:LYS:HA	1.61	0.81
39:DD:35:LYS:HD2	39:DD:36:PRO:N	1.94	0.81
5:AE:76:ILE:HG12	5:AE:78:HIS:H	1.43	0.81
36:DA:1612:C:H42	36:DA:1619:G:H1	1.28	0.81
36:DA:1370:C:H3'	36:DA:1371:G:H8	1.45	0.81
36:DA:2208:A:H1'	36:DA:2219:G:N7	1.94	0.81
43:DH:153:LYS:HD3	43:DH:153:LYS:H	1.44	0.81
28:D2:25:VAL:HG11	28:D2:61:LEU:HD21	1.61	0.81
1:AA:972:C:H4'	10:AJ:57:LYS:HG3	1.62	0.81
41:BF:132:VAL:HG22	41:BF:133:ASN:H	1.42	0.81
1:AA:1070:U:H2'	1:AA:1071:C:H6	1.44	0.81
10:AJ:48:THR:HA	10:AJ:62:HIS:HB3	1.62	0.81
7:CG:16:LEU:CD1	9:CI:42:ARG:HA	2.10	0.81
36:DA:2122:U:H2'	36:DA:2123:G:C8	2.15	0.81
16:AP:21:VAL:HG13	16:AP:33:ILE:HB	1.62	0.81
36:DA:2302:G:H3'	36:DA:2303:G:H8	1.45	0.81
16:AP:14:ASN:HA	16:AP:42:ARG:NH1	1.93	0.81
36:BA:2248:C:H2'	36:BA:2249:U:H5'	1.62	0.81
7:CG:126:ASP:HB3	7:CG:131:LYS:O	1.80	0.81
36:BA:774:A:H2	36:BA:787:U:HO2'	1.23	0.81
36:DA:1314:C:H6	36:DA:1314:C:H5'	1.41	0.81
1:CA:117:G:O6	1:CA:289:G:H1'	1.81	0.81
32:B6:36:LEU:HD12	32:B6:50:ARG:NH2	1.94	0.81
36:BA:2401:U:C2'	36:BA:2402:C:H5''	2.10	0.81
36:DA:2010:G:OP1	55:DW:41:LYS:HD3	1.80	0.81
36:BA:483:A:H1'	57:BY:60:PHE:CZ	2.15	0.81
36:DA:622:G:O2'	36:DA:623:G:H5'	1.79	0.81
36:BA:2008:C:H2'	36:BA:2009:G:H8	1.41	0.81
36:DA:2022:U:O2'	36:DA:2617:C:H5'	1.80	0.81
2:AB:229:VAL:HG12	2:AB:230:VAL:N	1.95	0.81
32:D6:27:LYS:HG3	32:D6:30:THR:CB	2.09	0.81
36:BA:626:U:C2	48:BP:105:LEU:HG	2.16	0.81
1:CA:376:G:H2'	1:CA:377:G:C8	2.16	0.81
1:CA:1221:G:OP1	19:CS:36:ARG:HD3	1.80	0.81
36:DA:1543:C:H3'	36:DA:1544:A:C5'	2.09	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:523:C:C2'	36:BA:524:U:H5'	2.10	0.81
5:CE:150:ARG:HB2	5:CE:150:ARG:NH1	1.95	0.81
4:CD:100:ARG:NH2	4:CD:118:ARG:HH12	1.77	0.81
49:DQ:43:THR:HB	49:DQ:45:GLN:NE2	1.96	0.81
36:BA:145:G:H2'	36:BA:146:G:H5''	1.62	0.81
40:BE:107:THR:O	40:BE:190:GLY:HA2	1.79	0.81
2:AB:29:ALA:O	2:AB:32:ILE:HG22	1.80	0.81
4:CD:190:ASP:HB3	4:CD:193:ASP:OD2	1.79	0.81
18:CR:66:LEU:HG	18:CR:70:ILE:HD11	1.61	0.81
7:CG:84:ASN:OD1	22:CW:33:U:H5'	1.80	0.81
18:CR:45:SER:HA	18:CR:51:LEU:HD21	1.63	0.81
20:CT:36:LEU:CD1	20:CT:59:ALA:HB2	2.10	0.81
29:D3:35:ARG:HB2	29:D3:35:ARG:HH11	1.45	0.81
36:DA:774:A:H2	36:DA:787:U:HO2'	1.28	0.81
36:DA:90:U:H1'	36:DA:92:A:C8	2.15	0.81
36:DA:89:G:H3'	36:DA:90:U:H5''	1.61	0.81
36:BA:398:G:H2'	36:BA:399:G:H8	1.45	0.81
13:CM:91:ARG:HB3	13:CM:98:VAL:HG22	1.60	0.81
25:CZ:107:SER:OG	25:CZ:137:LYS:HD2	1.81	0.81
52:DT:32:TYR:O	52:DT:33:LYS:HB2	1.78	0.81
57:DY:8:LYS:HB2	57:DY:28:LYS:HZ1	1.43	0.81
24:CY:16:H2U:H61	24:CY:16:H2U:C5'	2.11	0.81
41:BF:51:THR:HG21	41:BF:91:GLY:HA3	1.62	0.81
1:AA:770:C:O2'	1:AA:771:G:H5'	1.79	0.81
10:AJ:78:ASN:HB2	10:AJ:81:THR:HG23	1.62	0.81
43:BH:85:LYS:HZ1	43:BH:132:ARG:HA	1.43	0.81
27:D1:17:SER:OG	27:D1:38:SER:HB2	1.80	0.81
36:BA:2508:G:H1	36:BA:2580:U:H3	1.25	0.81
40:BE:69:LYS:H	40:BE:69:LYS:HE2	1.45	0.81
1:CA:254:G:H21	17:CQ:16:GLN:HE22	1.25	0.81
42:DG:82:LEU:HD22	42:DG:87:PRO:HG3	1.61	0.81
43:DH:52:VAL:HG21	43:DH:69:ARG:HB2	1.60	0.81
55:DW:8:ARG:HA	55:DW:102:HIS:CB	2.10	0.81
41:DF:137:LYS:HA	41:DF:140:LEU:HB3	1.62	0.81
47:DO:2:ILE:CD1	47:DO:82:ASN:HD22	1.92	0.81
58:BZ:5:LEU:HB2	58:BZ:59:LEU:HD22	1.62	0.81
58:DZ:17:ALA:HA	58:DZ:20:ARG:HD3	1.62	0.81
1:AA:1389:C:H2'	1:AA:1390:U:O4'	1.80	0.81
1:CA:627:G:H2'	1:CA:628:G:H8	1.44	0.81
49:BQ:110:THR:HG23	49:BQ:113:GLN:H	1.45	0.81
44:BJ:25:UNK:HA	44:BJ:116:UNK:CB	2.11	0.81
34:B8:30:ARG:HA	34:B8:30:ARG:NE	1.96	0.81

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:D8:23:VAL:CG1	34:D8:46:ARG:HB3	2.10	0.81
38:BC:94:VAL:HG12	38:BC:95:GLY:N	1.95	0.81
28:B2:25:VAL:HG11	28:B2:61:LEU:HD21	1.62	0.81
2:CB:69:LEU:HD12	2:CB:71:VAL:HG23	1.63	0.81
34:B8:23:VAL:CG1	34:B8:46:ARG:HB3	2.10	0.81
1:AA:1372:U:H5''	9:AI:71:SER:HB3	1.62	0.81
31:B5:44:THR:HG21	50:BR:101:ALA:HB2	1.63	0.81
39:DD:34:VAL:HG23	39:DD:35:LYS:H	1.44	0.81
50:BR:99:LYS:N	50:BR:99:LYS:HD2	1.95	0.81
36:DA:2248:C:H2'	36:DA:2249:U:H5'	1.61	0.81
31:B5:48:GLU:O	31:B5:49:CYS:SG	2.39	0.81
36:BA:1314:C:H5'	36:BA:1314:C:H6	1.44	0.81
1:AA:295:C:H2'	1:AA:296:U:H6	1.42	0.81
32:D6:16:CYS:SG	32:D6:48:VAL:HG22	2.19	0.81
41:DF:39:TRP:CH2	41:DF:106:ARG:HD2	2.15	0.81
54:DV:15:GLU:HB3	54:DV:16:PRO:HD2	1.62	0.81
32:B6:27:LYS:HG3	32:B6:30:THR:CB	2.09	0.81
9:AI:104:ARG:HG2	9:AI:105:ASP:H	1.46	0.81
58:DZ:52:SER:O	58:DZ:53:ILE:HG23	1.81	0.81
8:CH:64:LYS:HD2	8:CH:79:VAL:HG21	1.60	0.81
1:CA:1282:C:H2'	1:CA:1283:G:C8	2.15	0.81
46:DN:83:LYS:HG2	46:DN:84:LYS:N	1.96	0.81
1:CA:405:U:H3'	1:CA:406:G:H5'	1.59	0.81
24:CY:54:5MU:H2'	24:CY:55:PSU:H5'	1.62	0.81
4:AD:190:ASP:HB3	4:AD:193:ASP:OD2	1.81	0.81
36:BA:537:C:N4	36:BA:556:G:H1	1.79	0.81
36:DA:676:A:H8	36:DA:2443:C:H1'	1.46	0.81
42:DG:29:TRP:CE3	42:DG:29:TRP:HA	2.16	0.81
36:BA:2328:A:H2'	36:BA:2329:G:C8	2.16	0.81
36:BA:1190:G:H5'	48:BP:35:HIS:N	1.94	0.81
36:DA:633:A:H5''	48:DP:77:ARG:HH12	1.46	0.81
48:DP:105:LEU:O	48:DP:106:LEU:HB2	1.80	0.81
36:DA:1259:G:O2'	36:DA:1260:G:H5'	1.81	0.81
1:AA:1225:A:H2'	1:AA:1226:C:C5	2.16	0.81
36:BA:2846:G:OP2	52:BT:54:ARG:HD2	1.81	0.81
49:BQ:140:ALA:HB1	58:BZ:99:TYR:CB	2.10	0.81
7:CG:113:GLU:HB2	7:CG:119:ARG:HG2	1.61	0.81
4:AD:79:PHE:HA	4:AD:93:PHE:CD2	2.16	0.81
14:AN:57:ARG:NH1	14:AN:57:ARG:HB3	1.95	0.81
36:DA:1353:A:H2'	36:DA:1354:A:C8	2.15	0.81
41:DF:51:THR:HG21	41:DF:91:GLY:HA3	1.62	0.81
36:BA:2025:C:H2'	36:BA:2026:C:H6	1.43	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:DC:100:ILE:CG2	38:DC:127:LEU:HG	2.11	0.81
20:AT:50:GLU:HG3	20:AT:100:ILE:HG12	1.61	0.81
20:CT:50:GLU:HG3	20:CT:100:ILE:HG12	1.61	0.81
29:B3:56:VAL:HG12	29:B3:57:GLU:H	1.45	0.81
1:CA:1438:G:H2'	1:CA:1439:C:H6	1.46	0.81
18:CR:58:LEU:HD22	18:CR:62:GLU:HB3	1.61	0.81
31:D5:31:VAL:HG11	36:DA:2886:G:H21	1.45	0.81
47:DO:23:ARG:HG3	47:DO:24:VAL:N	1.96	0.81
51:DS:94:TYR:O	51:DS:95:HIS:HB3	1.78	0.81
36:BA:2358:G:N2	36:BA:2359:C:H1'	1.94	0.81
36:DA:1290:C:H2'	36:DA:1291:C:H6	1.45	0.81
55:BW:8:ARG:HA	55:BW:102:HIS:CB	2.09	0.81
5:AE:47:LYS:N	5:AE:47:LYS:HD3	1.96	0.81
1:CA:344:A:H4'	1:CA:345:C:OP1	1.79	0.81
9:CI:43:ALA:HB2	9:CI:74:ILE:HD13	1.62	0.81
4:AD:100:ARG:HE	4:AD:118:ARG:HH22	1.27	0.81
36:BA:2206:G:N2	36:BA:2207:G:H4'	1.96	0.81
36:DA:151:C:H2'	36:DA:152:G:C8	2.16	0.81
36:DA:122:G:H1	36:DA:129:C:H42	1.28	0.81
54:BV:29:PRO:HA	54:BV:61:VAL:CG2	2.11	0.81
36:BA:1599:C:H2'	36:BA:1600:C:H6	1.45	0.81
58:DZ:96:VAL:HG22	58:DZ:97:GLU:H	1.46	0.81
22:CW:68:C:H2'	22:CW:69:G:C8	2.14	0.81
24:CY:41:G:C2'	24:CY:42:U:H5''	2.08	0.81
28:D2:3:LEU:HD12	36:DA:98:G:C5'	2.11	0.81
41:BF:137:LYS:HG2	41:BF:140:LEU:HD23	1.63	0.81
53:DU:95:LEU:HD12	54:DV:11:GLN:HE21	1.46	0.81
1:AA:737:A:H2'	1:AA:738:C:H6	1.45	0.81
36:BA:2672:G:C2'	36:BA:2673:G:H5''	2.11	0.81
36:DA:2110:G:H22	36:DA:2178:C:H41	1.28	0.81
36:DA:863:A:H2'	36:DA:864:G:C8	2.15	0.81
58:DZ:85:HIS:CD2	58:DZ:86:VAL:H	1.99	0.81
36:BA:996:A:H5'	53:BU:94:ASN:HB2	1.62	0.81
13:CM:37:THR:O	13:CM:39:ILE:HG13	1.81	0.81
1:CA:831:U:H2'	1:CA:832:C:C5	2.15	0.81
58:DZ:102:LEU:HD11	58:DZ:124:ILE:CG2	2.10	0.81
41:DF:82:ILE:O	41:DF:83:PHE:CB	2.29	0.81
1:CA:63:C:H42	1:CA:104:G:H1	1.28	0.81
36:BA:802:A:H2'	36:BA:803:U:C6	2.16	0.81
39:BD:35:LYS:HD2	39:BD:36:PRO:N	1.96	0.80
36:BA:926:A:H5'	36:BA:926:A:H8	1.46	0.80
41:BF:101:LEU:HD12	41:BF:102:PRO:HD2	1.62	0.80

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:14:ARG:HG3	13:AM:44:ARG:NH1	1.94	0.80
1:CA:744:C:H2'	1:CA:745:C:C6	2.15	0.80
47:DO:107:ARG:NH1	52:DT:35:LYS:HD2	1.96	0.80
4:AD:98:GLU:HG2	4:AD:189:PRO:HG3	1.60	0.80
40:DE:132:HIS:HA	40:DE:135:HIS:CE1	2.16	0.80
42:DG:142:PRO:HG2	42:DG:143:GLU:HG2	1.60	0.80
29:D3:56:VAL:HG12	29:D3:57:GLU:H	1.45	0.80
49:DQ:44:ALA:HA	49:DQ:47:ILE:HD12	1.61	0.80
36:BA:827:U:H2'	36:BA:2068:U:O2	1.81	0.80
36:BA:2801(A):A:H4'	36:BA:2802:G:H5'	1.63	0.80
1:AA:985:C:H2'	1:AA:986:A:C8	2.16	0.80
36:DA:2498:C:O2'	36:DA:2499:C:H5'	1.80	0.80
58:DZ:102:LEU:HD11	58:DZ:124:ILE:HG23	1.61	0.80
36:BA:654(N):G:H2'	36:BA:654(O):G:O4'	1.81	0.80
56:DX:60:ARG:HG3	56:DX:75:ASP:OD2	1.80	0.80
36:DA:1916:A:H2'	36:DA:1917:U:O4'	1.80	0.80
6:AF:84:ASN:HD22	6:AF:84:ASN:N	1.76	0.80
36:DA:733:G:O5'	36:DA:733:G:H8	1.64	0.80
25:AZ:38:GLU:CG	25:AZ:189:ARG:HH11	1.92	0.80
35:D9:1:MET:SD	36:DA:2477:C:H2'	2.21	0.80
52:BT:50:ILE:HA	52:BT:99:LEU:HD11	1.62	0.80
36:DA:298:G:N2	36:DA:339:U:H5	1.79	0.80
9:CI:46:ALA:C	9:CI:47:LEU:HD12	2.01	0.80
9:CI:10:ARG:HB2	9:CI:76:ALA:HB2	1.61	0.80
19:AS:62:ILE:HD12	19:AS:66:MET:HE2	1.63	0.80
1:AA:1002:G:H2'	1:AA:1003:G:H8	1.43	0.80
42:BG:85:GLY:O	42:BG:87:PRO:HD3	1.80	0.80
42:DG:5:VAL:HG12	42:DG:6:ALA:N	1.96	0.80
5:AE:147:ASP:HA	5:AE:150:ARG:NH1	1.97	0.80
1:CA:389:A:H2'	1:CA:390:C:H5'	1.62	0.80
1:AA:173:U:H5'	1:AA:197:A:O4'	1.80	0.80
7:CG:64:GLN:HE21	7:CG:68:ASN:ND2	1.79	0.80
36:DA:654(N):G:H2'	36:DA:654(O):G:O4'	1.82	0.80
23:CX:23:C:H2'	23:CX:24:C:C6	2.16	0.80
19:AS:6:LYS:HG2	19:AS:7:LYS:HE3	1.62	0.80
36:BA:1259:G:O2'	36:BA:1260:G:H5'	1.81	0.80
36:DA:626:U:C2	48:DP:105:LEU:HG	2.16	0.80
17:CQ:5:VAL:HG13	17:CQ:59:ILE:O	1.82	0.80
41:BF:39:TRP:CH2	41:BF:106:ARG:HD2	2.16	0.80
36:DA:523:C:C2'	36:DA:524:U:H5'	2.11	0.80
46:DN:111:PRO:HG3	46:DN:114:ARG:HH22	1.46	0.80
36:DA:106:C:H2'	36:DA:107:C:H6	1.47	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:DY:81:LYS:HD3	57:DY:97:ARG:O	1.80	0.80
37:BB:80:U:H2'	37:BB:81:G:N2	1.96	0.80
51:DS:35:ILE:HD11	51:DS:99:LYS:HE3	1.63	0.80
36:DA:769:G:O2'	36:DA:770:G:H5'	1.81	0.80
1:CA:1500:A:H5''	1:CA:1508:G:H5''	1.63	0.80
16:CP:27:LYS:HG2	16:CP:30:GLY:HA3	1.60	0.80
25:CZ:271:GLU:HG2	25:CZ:276:THR:HA	1.63	0.80
47:BO:87:ILE:HG22	47:BO:88:ASN:O	1.81	0.80
47:DO:87:ILE:HG22	47:DO:88:ASN:O	1.80	0.80
50:DR:84:ALA:HB3	50:DR:85:PRO:HD3	1.63	0.80
36:BA:819:A:H2'	36:BA:820:A:H5'	1.63	0.80
32:D6:11:LEU:HD13	32:D6:12:GLU:N	1.97	0.80
38:DC:147:PHE:C	38:DC:149:ILE:H	1.80	0.80
36:BA:2762:G:H8	36:BA:2762:G:H5'	1.43	0.80
36:BA:2840:C:H5''	50:BR:53:HIS:HD2	1.38	0.80
30:B4:10:VAL:HG23	30:B4:11:PRO:HD2	1.63	0.80
36:DA:1005:C:H2'	36:DA:1006:C:C6	2.17	0.80
1:AA:389:A:H2'	1:AA:390:C:H5'	1.61	0.80
1:AA:820:U:H4'	1:AA:821:G:OP2	1.82	0.80
1:CA:18:C:H5''	5:CE:127:ASN:ND2	1.96	0.80
38:BC:100:ILE:HG21	38:BC:126:LYS:CB	2.11	0.80
1:AA:78:G:H22	1:AA:91:C:N4	1.79	0.80
40:DE:38:THR:HB	40:DE:41:LYS:HG2	1.62	0.80
37:BB:20:C:C2'	37:BB:21:G:H5''	2.11	0.80
37:DB:91:C:H5'	49:DQ:17:LEU:O	1.81	0.80
36:BA:2246:G:H2'	36:BA:2247:A:C8	2.16	0.80
38:BC:214:VAL:HG23	38:BC:224:ILE:HD13	1.64	0.80
54:BV:24:LYS:HA	54:BV:92:THR:HG23	1.63	0.80
39:BD:177:LEU:O	39:BD:179:SER:N	2.14	0.80
53:BU:52:ARG:CZ	53:BU:55:ARG:HH22	1.94	0.80
1:AA:1432:G:OP1	52:BT:107:ASP:HB2	1.81	0.80
57:BY:39:VAL:HG12	57:BY:40:GLU:H	1.47	0.80
57:BY:81:LYS:HZ3	57:BY:99:CYS:HB2	1.46	0.80
42:BG:131:TYR:HE2	42:BG:133:LEU:HB3	1.46	0.80
27:B1:11:ARG:HB3	27:B1:11:ARG:NH1	1.96	0.80
24:AY:16:H2U:H61	24:AY:16:H2U:C5'	2.11	0.80
58:DZ:51:ALA:O	58:DZ:53:ILE:N	2.14	0.80
42:BG:71:THR:HB	42:BG:89:GLY:O	1.82	0.80
7:AG:16:LEU:CD1	9:AI:42:ARG:HA	2.12	0.80
43:BH:148:ILE:O	43:BH:162:ILE:HD13	1.82	0.80
1:CA:337:C:H2'	1:CA:338:A:H8	1.46	0.80
18:AR:66:LEU:HG	18:AR:70:ILE:HD11	1.62	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:634:C:H2'	36:BA:635:C:H6	1.45	0.80
1:CA:807:A:H2'	1:CA:808:C:H6	1.46	0.80
40:DE:69:LYS:H	40:DE:69:LYS:HE2	1.47	0.80
24:CY:75:C:C5	25:CZ:231:ILE:HA	2.17	0.80
1:AA:1041:A:H2'	1:AA:1042:G:C8	2.17	0.80
36:DA:1047:G:N2	36:DA:1110:G:H2'	1.95	0.80
36:DA:1754:C:H5''	52:DT:113:LYS:HZ3	1.46	0.80
36:DA:1803:A:O3'	39:DD:259:THR:HG21	1.82	0.80
39:DD:177:LEU:O	39:DD:179:SER:N	2.15	0.80
25:AZ:171:ILE:HG13	25:AZ:201:GLU:HB3	1.64	0.80
28:D2:69:ARG:CZ	36:DA:111:A:H4'	2.11	0.80
25:AZ:234:ARG:HB3	25:AZ:289:LEU:HD13	1.62	0.80
41:DF:64:ILE:HG23	41:DF:65:TRP:N	1.95	0.80
13:AM:49:THR:HG22	13:AM:51:ALA:H	1.46	0.80
2:AB:87:ARG:HD2	2:AB:87:ARG:O	1.82	0.80
36:BA:594:U:H2'	36:BA:595:C:C6	2.17	0.80
54:BV:5:VAL:HG23	54:BV:37:VAL:O	1.82	0.80
36:DA:1297:C:H2'	36:DA:1298:C:H6	1.47	0.80
36:DA:2506:U:H6	36:DA:2506:U:H5'	1.43	0.80
42:DG:112:PRO:HG2	42:DG:113:ARG:H	1.45	0.80
34:D8:15:LYS:CD	48:DP:65:ARG:HH22	1.94	0.80
24:AY:54:5MU:H2'	24:AY:55:PSU:H5'	1.64	0.80
8:AH:29:SER:HB3	8:AH:32:LYS:HB2	1.63	0.80
1:AA:346:G:H5'	52:BT:41:ARG:HH21	1.46	0.80
57:DY:37:VAL:HG23	57:DY:38:ILE:N	1.96	0.80
11:AK:124:LYS:HZ2	11:AK:124:LYS:HB2	1.47	0.80
1:AA:1305:G:H22	1:AA:1331:G:H2'	1.46	0.80
42:DG:48:GLU:HG3	42:DG:81:LYS:HE3	1.64	0.80
1:CA:1512:U:H2'	1:CA:1513:A:H8	1.44	0.80
36:BA:560:C:H1'	53:BU:49:HIS:HE1	1.46	0.80
38:DC:119:VAL:O	38:DC:123:VAL:HB	1.82	0.80
4:AD:4:TYR:O	4:AD:5:ILE:HB	1.81	0.80
36:BA:795:C:H2'	36:BA:796:C:C6	2.16	0.80
46:DN:21:LYS:HD3	46:DN:22:THR:H	1.45	0.80
22:CV:63:G:H2'	22:CV:64:A:C8	2.16	0.80
25:CZ:256:VAL:HG13	25:CZ:262:THR:HG22	1.64	0.80
32:B6:16:CYS:SG	32:B6:48:VAL:HG22	2.21	0.80
32:D6:16:CYS:O	32:D6:17:LYS:HG2	1.81	0.80
32:D6:52:VAL:HG13	32:D6:53:LYS:H	1.46	0.80
36:DA:926:A:H8	36:DA:926:A:H5'	1.46	0.80
40:BE:195:LEU:HD12	40:BE:196:VAL:N	1.96	0.80
10:AJ:16:LEU:CD1	10:AJ:70:ARG:HG3	2.10	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:44:LEU:H	2:CB:44:LEU:HD12	1.47	0.80
31:D5:44:THR:HG21	50:DR:101:ALA:HB2	1.62	0.80
36:DA:2590:A:H5''	39:DD:239:ARG:HB2	1.63	0.80
1:AA:150:C:C2'	1:AA:151:A:H5''	2.12	0.80
58:DZ:33:LEU:HD12	58:DZ:34:ASN:H	1.43	0.80
36:DA:768:G:H2'	36:DA:769:G:H8	1.46	0.80
13:CM:49:THR:HB	13:CM:52:GLU:HG3	1.64	0.80
36:BA:2377:A:H2'	36:BA:2378:A:H8	1.46	0.80
38:BC:99:ILE:HG23	38:BC:102:LYS:NZ	1.97	0.80
53:DU:37:GLU:HA	53:DU:40:PHE:CD1	2.17	0.80
26:D0:23:VAL:HA	26:D0:38:VAL:HG22	1.63	0.80
36:BA:1374:G:H2'	36:BA:1375:C:C6	2.16	0.80
36:DA:884:C:H42	36:DA:893:C:H42	1.26	0.80
36:BA:1820:U:O2'	39:BD:159:ALA:HB3	1.82	0.80
36:BA:2222:G:H2'	36:BA:2223:G:H8	1.44	0.80
48:DP:84:ASN:C	48:DP:86:LYS:H	1.84	0.80
36:BA:234:C:H2'	36:BA:235:U:C6	2.16	0.80
39:BD:91:ARG:HH11	39:BD:91:ARG:HG2	1.45	0.80
36:DA:271(M):G:C2'	36:DA:271(N):U:H5''	2.09	0.80
39:BD:30:GLU:HB2	39:BD:35:LYS:HE3	1.64	0.80
48:BP:9:ASN:N	48:BP:10:PRO:HD2	1.96	0.80
36:DA:819:A:H2'	36:DA:820:A:H5'	1.64	0.80
40:BE:80:GLU:O	40:BE:81:ILE:HG12	1.81	0.80
48:BP:146:VAL:HG22	48:BP:147:LEU:N	1.93	0.80
1:CA:1225:A:H2'	1:CA:1226:C:C5	2.17	0.80
58:BZ:96:VAL:HG22	58:BZ:97:GLU:N	1.95	0.80
1:CA:1372:U:H5''	9:CI:71:SER:HB3	1.64	0.80
42:BG:97:ASP:H	42:BG:100:TRP:HD1	1.30	0.80
1:AA:1529:G:H4'	1:AA:1530:G:OP2	1.79	0.80
14:CN:57:ARG:NH1	14:CN:57:ARG:HB3	1.97	0.80
49:DQ:22:LYS:H	58:DZ:78:LYS:HE3	1.45	0.80
1:AA:580:U:H2'	1:AA:581:G:O4'	1.81	0.80
43:DH:103:LEU:HB2	43:DH:123:PHE:HD2	1.47	0.80
10:CJ:40:LEU:HB2	10:CJ:41:PRO:HD2	1.64	0.80
39:BD:28:GLU:H	39:BD:29:PRO:HD2	1.46	0.80
39:BD:43:ARG:HD2	39:BD:44:ASN:OD1	1.81	0.80
36:BA:1785:A:OP2	36:BA:1982:C:H5'	1.81	0.80
41:BF:53:THR:HG22	41:BF:56:GLU:HG3	1.62	0.80
32:B6:5:VAL:HG11	36:BA:2283:C:C5'	2.12	0.80
36:DA:2402:C:C2'	36:DA:2403:C:H5'	2.12	0.80
24:AY:41:G:C2'	24:AY:42:U:H5''	2.07	0.80
36:DA:374:A:H2'	36:DA:375:C:O4'	1.82	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:227:A:C5'	48:BP:76:LYS:HE3	2.12	0.80
2:CB:229:VAL:HG12	2:CB:230:VAL:N	1.95	0.80
41:DF:137:LYS:HG2	41:DF:140:LEU:HD23	1.64	0.80
36:DA:2672:G:C2'	36:DA:2673:G:H5''	2.11	0.80
36:DA:1682:G:H5'	36:DA:1762:A:O2'	1.81	0.80
36:DA:1993:U:H4'	40:DE:128:SER:OG	1.82	0.80
55:BW:5:ALA:CB	55:BW:54:ALA:HB2	2.12	0.80
2:CB:87:ARG:HD2	2:CB:87:ARG:O	1.81	0.80
28:B2:2:LYS:HA	28:B2:5:GLU:OE2	1.82	0.80
36:DA:2206:G:N2	36:DA:2207:G:H4'	1.97	0.80
11:CK:120:ARG:HH12	11:CK:126:ARG:HD2	1.46	0.80
1:CA:985:C:H2'	1:CA:986:A:C8	2.17	0.80
51:DS:46:VAL:HG12	51:DS:47:THR:H	1.46	0.80
11:AK:57:THR:OG1	11:AK:58:PRO:HD2	1.81	0.80
24:AY:2:C:OP1	25:AZ:90:LYS:HD2	1.81	0.80
39:DD:139:GLY:H	39:DD:165:ILE:HB	1.46	0.80
1:AA:1292:U:H2'	1:AA:1293:G:C8	2.16	0.80
1:CA:1292:U:H2'	1:CA:1293:G:C8	2.17	0.80
48:DP:146:VAL:HG22	48:DP:147:LEU:N	1.95	0.79
25:CZ:234:ARG:HB3	25:CZ:289:LEU:HD13	1.61	0.79
50:BR:96:ARG:NH1	50:BR:117:VAL:HG23	1.98	0.79
40:BE:33:VAL:HG21	40:BE:36:ARG:NH2	1.97	0.79
25:CZ:191:GLY:HA2	25:CZ:196:VAL:HG12	1.62	0.79
36:DA:307:G:N2	36:DA:309:G:H3'	1.97	0.79
2:AB:21:ARG:CZ	2:AB:39:ILE:HG12	2.11	0.79
36:DA:1828:G:O6	39:DD:222:ARG:HD3	1.82	0.79
19:CS:62:ILE:HD12	19:CS:66:MET:HE2	1.65	0.79
36:DA:271(P):C:C2'	36:DA:271(Q):G:H5'	2.12	0.79
1:CA:1440:C:H1'	1:CA:1462:G:H22	1.46	0.79
28:B2:5:GLU:HB2	28:B2:9:GLN:NE2	1.96	0.79
39:DD:35:LYS:HZ2	39:DD:36:PRO:HD3	1.47	0.79
24:CY:11:C:C2'	24:CY:12:U:H5''	2.13	0.79
31:B5:38:ALA:CB	31:B5:48:GLU:HB3	2.12	0.79
41:BF:53:THR:HG23	41:BF:55:GLY:H	1.45	0.79
36:DA:1010:A:H1'	36:DA:1153:C:H1'	1.62	0.79
36:BA:1498:C:H2'	36:BA:1499:C:H5''	1.63	0.79
52:DT:53:ARG:HB3	52:DT:53:ARG:NH1	1.96	0.79
12:CL:89:ARG:NH1	12:CL:91:LYS:HD3	1.96	0.79
36:BA:833:U:H5''	48:BP:48:PRO:CB	2.11	0.79
36:DA:483:A:H1'	57:DY:60:PHE:CZ	2.16	0.79
58:DZ:115:GLY:HA2	58:DZ:174:VAL:HG13	1.64	0.79
56:DX:27:THR:HG22	56:DX:80:ILE:HG22	1.64	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2807:G:C3'	36:DA:2808:U:H5''	2.10	0.79
36:DA:38:A:H2'	36:DA:39:C:C6	2.18	0.79
36:DA:2303:G:H5''	42:DG:126:ASP:HB2	1.62	0.79
52:BT:53:ARG:HH11	52:BT:53:ARG:HB3	1.46	0.79
1:CA:56:U:H2'	1:CA:57:G:C8	2.18	0.79
36:BA:560:C:H1'	53:BU:49:HIS:CE1	2.18	0.79
1:CA:1438:G:H2'	1:CA:1439:C:C6	2.17	0.79
1:CA:1389:C:H2'	1:CA:1390:U:O4'	1.81	0.79
46:BN:21:LYS:HD3	46:BN:22:THR:H	1.46	0.79
44:DJ:25:UNK:HA	44:DJ:116:UNK:CB	2.11	0.79
32:B6:5:VAL:HB	36:BA:2284:C:OP2	1.82	0.79
50:DR:63:ARG:HG2	50:DR:80:PHE:HE2	1.45	0.79
25:AZ:25:THR:HB	62:AZ:501:GDP:O2B	1.82	0.79
28:D2:63:VAL:O	28:D2:66:GLU:HG2	1.82	0.79
36:BA:769:G:O2'	36:BA:770:G:H5'	1.82	0.79
1:CA:1199:U:H4'	10:CJ:54:PHE:CZ	2.17	0.79
52:BT:28:VAL:HG22	52:BT:47:GLY:N	1.97	0.79
52:BT:88:ILE:HG22	52:BT:89:VAL:HG23	1.63	0.79
57:DY:76:CYS:SG	57:DY:77:PRO:HD2	2.23	0.79
3:AC:30:ARG:HG3	14:AN:37:PHE:O	1.83	0.79
10:CJ:48:THR:HA	10:CJ:62:HIS:HB3	1.64	0.79
36:BA:2590:A:H5''	39:BD:239:ARG:HB2	1.63	0.79
36:BA:1005:C:H2'	36:BA:1006:C:C6	2.16	0.79
36:DA:1374:G:H2'	36:DA:1375:C:C6	2.17	0.79
42:DG:6:ALA:HB3	42:DG:104:GLU:OE2	1.82	0.79
42:DG:52:ILE:HG12	42:DG:53:LEU:H	1.47	0.79
36:BA:374:A:H2'	36:BA:375:C:O4'	1.82	0.79
2:AB:107:THR:HG23	2:AB:110:GLN:HE22	1.45	0.79
52:BT:107:ASP:CG	52:BT:108:ARG:H	1.83	0.79
22:AW:68:C:H2'	22:AW:69:G:C8	2.18	0.79
4:AD:57:ARG:HB3	4:AD:206:PHE:HB2	1.64	0.79
29:B3:35:ARG:HB2	29:B3:35:ARG:HH11	1.46	0.79
34:B8:15:LYS:CD	48:BP:65:ARG:HH22	1.95	0.79
48:DP:47:ASP:HB3	48:DP:49:ARG:H	1.48	0.79
56:BX:59:VAL:HG21	56:BX:78:LYS:HD3	1.65	0.79
36:DA:482:A:H4'	57:DY:47:LYS:HD3	1.65	0.79
36:DA:2781:A:C5'	36:DA:2782:G:H5'	2.13	0.79
5:AE:105:VAL:H	5:AE:106:PRO:HD2	1.46	0.79
1:AA:737:A:H2'	1:AA:738:C:C6	2.18	0.79
42:BG:32:PRO:C	42:BG:33:ARG:HG3	2.03	0.79
36:BA:2591:C:H2'	36:BA:2592:G:H8	1.47	0.79
39:BD:79:VAL:HG23	39:BD:115:GLN:O	1.83	0.79

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AY:11:C:C2'	24:AY:12:U:H5''	2.12	0.79
54:BV:69:LYS:HB2	54:BV:88:ARG:HD3	1.64	0.79
36:BA:2022:U:O2'	36:BA:2617:C:H5'	1.82	0.79
36:DA:2379:G:H2'	36:DA:2380:C:C6	2.15	0.79
33:D7:21:ARG:HG2	33:D7:21:ARG:HH11	1.48	0.79
36:DA:1411:C:H2'	36:DA:1412:A:H8	1.47	0.79
1:AA:1249:C:H5''	9:AI:70:LYS:NZ	1.96	0.79
36:DA:534:U:O2'	53:DU:49:HIS:HD2	1.65	0.79
16:AP:27:LYS:HG2	16:AP:30:GLY:HA3	1.64	0.79
36:DA:1598:C:H5'	56:DX:36:LYS:CG	2.12	0.79
25:CZ:145:GLU:C	25:CZ:149:LEU:HB3	2.03	0.79
52:BT:58:ASN:HD22	52:BT:58:ASN:H	1.31	0.79
52:DT:62:THR:HG22	52:DT:75:ILE:HG23	1.64	0.79
9:AI:10:ARG:HG3	9:AI:75:ASP:HB3	1.64	0.79
1:AA:797:C:OP1	11:AK:124:LYS:HE3	1.81	0.79
43:BH:103:LEU:HB2	43:BH:123:PHE:HD2	1.46	0.79
36:DA:2801(A):A:H4'	36:DA:2802:G:H5'	1.65	0.79
1:AA:1249:C:H5'	1:AA:1249:C:H6	1.47	0.79
24:CY:18:G:H3'	24:CY:18:G:OP1	1.83	0.79
24:AY:18:G:OP1	24:AY:18:G:H3'	1.83	0.79
24:CY:14:A:H2'	24:CY:15:G:O4'	1.82	0.79
32:D6:48:VAL:HG23	32:D6:49:HIS:H	1.44	0.79
36:DA:2328:A:H2'	36:DA:2329:G:C8	2.16	0.79
10:AJ:16:LEU:HD13	10:AJ:17:ASP:N	1.97	0.79
1:CA:737:A:H2'	1:CA:738:C:H6	1.47	0.79
49:BQ:141:GLN:HE22	58:BZ:72:ARG:HD3	1.46	0.79
26:B0:27:GLU:HA	26:B0:67:VAL:O	1.82	0.79
2:AB:87:ARG:HH21	2:AB:233:SER:N	1.81	0.79
39:DD:65:ILE:N	39:DD:65:ILE:HD13	1.95	0.79
25:CZ:15:GLY:HA2	25:CZ:79:HIS:CD2	2.18	0.79
1:AA:838:G:C6	1:AA:840:C:H1'	2.18	0.79
36:BA:2219:G:O2'	36:BA:2220:G:H5'	1.82	0.79
25:CZ:317:GLU:HG3	25:CZ:404:LEU:HD21	1.65	0.79
36:BA:1842:G:H2'	36:BA:1843:C:H6	1.48	0.79
36:DA:634:C:H2'	36:DA:635:C:H6	1.47	0.79
36:BA:1411:C:H2'	36:BA:1412:A:H8	1.48	0.79
6:AF:24:GLU:CD	6:AF:28:ARG:HH12	1.86	0.79
36:BA:1141:U:H2'	46:BN:63:THR:CG2	2.13	0.79
22:AW:38:A:H3'	22:AW:39:U:H5''	1.63	0.79
38:BC:119:VAL:O	38:BC:123:VAL:HB	1.81	0.79
40:DE:82:ARG:HG3	40:DE:82:ARG:HH11	1.47	0.79
39:DD:181:GLU:HA	39:DD:272:ALA:O	1.83	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:215:ARG:HB3	25:AZ:282:ALA:HB3	1.63	0.79
36:BA:38:A:H2'	36:BA:39:C:C6	2.18	0.79
36:BA:1773:A:H2'	36:BA:1774:C:O4'	1.82	0.79
10:AJ:34:VAL:HG13	10:AJ:73:ASP:O	1.83	0.79
1:CA:986:A:H1'	19:CS:54:GLY:O	1.82	0.79
1:CA:390:C:H4'	16:CP:28:ARG:HH11	1.48	0.79
36:DA:2443:C:O2'	36:DA:2444:G:H5'	1.83	0.79
36:DA:977:G:H2'	36:DA:978:G:H8	1.47	0.79
36:BA:1916:A:H2'	36:BA:1917:U:O4'	1.82	0.79
11:CK:59:TYR:O	11:CK:62:GLN:HB3	1.83	0.79
10:CJ:16:LEU:CD1	10:CJ:70:ARG:HG3	2.11	0.79
1:CA:267:C:H2'	1:CA:268:C:H6	1.47	0.79
36:BA:298:G:N2	36:BA:339:U:H5	1.80	0.79
31:B5:4:HIS:CB	31:B5:5:PRO:HD3	2.09	0.79
54:DV:24:LYS:HA	54:DV:92:THR:HG23	1.65	0.79
1:AA:1359:C:OP2	14:AN:22:THR:HG21	1.82	0.79
36:DA:491:G:O2'	36:DA:492:A:H5'	1.83	0.79
49:BQ:19:GLY:HA2	58:BZ:79:ARG:HH22	1.45	0.79
36:BA:1309:G:H1	36:BA:1605:C:H42	1.28	0.79
3:AC:92:ALA:N	3:AC:99:VAL:HG11	1.98	0.79
1:CA:1401:G:O5'	1:CA:1401:G:H8	1.66	0.79
2:CB:90:MET:HE2	2:CB:90:MET:HA	1.65	0.79
36:DA:2008:C:H2'	36:DA:2009:G:C8	2.17	0.79
43:BH:52:VAL:HG21	43:BH:69:ARG:HB2	1.63	0.79
50:BR:2:ARG:HD2	50:BR:2:ARG:O	1.83	0.79
36:DA:572:A:H61	36:DA:2029:G:H21	1.29	0.79
25:CZ:137:LYS:HA	62:CZ:501:GDP:HN1	1.46	0.79
1:AA:344:A:H4'	1:AA:345:C:OP1	1.83	0.79
58:BZ:55:HIS:ND1	58:BZ:135:GLU:HG2	1.98	0.79
36:BA:1061:U:H4'	36:BA:1070:A:H4'	1.64	0.79
8:CH:30:ARG:HH11	8:CH:30:ARG:HB3	1.46	0.79
10:CJ:7:LYS:O	10:CJ:96:ILE:HA	1.83	0.79
1:AA:1437:C:H2'	1:AA:1438:G:C8	2.18	0.79
31:B5:49:CYS:SG	31:B5:50:GLY:N	2.56	0.79
36:DA:1309:G:H1	36:DA:1605:C:H42	1.29	0.79
2:AB:36:ARG:H	2:AB:41:ILE:HD13	1.45	0.79
1:AA:1095:U:H2'	1:AA:1096:C:C6	2.18	0.79
57:DY:39:VAL:HG12	57:DY:40:GLU:H	1.46	0.79
32:B6:52:VAL:HG13	32:B6:53:LYS:H	1.46	0.79
26:B0:11:ARG:CB	26:B0:11:ARG:HH11	1.95	0.79
57:DY:86:ARG:HB3	57:DY:88:LYS:NZ	1.97	0.79
36:BA:1494:A:H2'	36:BA:1495:A:C5'	2.13	0.79

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DE:33:VAL:HG21	40:DE:36:ARG:NH2	1.98	0.79
40:DE:78:LEU:O	40:DE:78:LEU:HD12	1.83	0.79
5:CE:147:ASP:HA	5:CE:150:ARG:NH1	1.97	0.79
29:D3:7:LYS:O	29:D3:54:VAL:HA	1.83	0.79
52:DT:83:ILE:HG13	52:DT:84:GLN:N	1.97	0.79
18:CR:47:THR:HG21	18:CR:49:LYS:HZ1	1.48	0.79
29:D3:18:ASP:HB2	36:DA:850:C:H4'	1.65	0.79
7:AG:79:ARG:HG3	7:AG:83:ALA:C	2.03	0.79
32:B6:20:ASN:ND2	32:B6:41:PRO:HB3	1.98	0.78
36:BA:655:A:H4'	36:BA:656:G:C5'	2.06	0.78
36:DA:537:C:N4	36:DA:556:G:H1	1.80	0.78
51:BS:35:ILE:HD11	51:BS:99:LYS:HE3	1.65	0.78
58:BZ:27:VAL:HG23	58:BZ:36:LYS:HA	1.66	0.78
36:BA:2175:C:H5'	38:BC:219:GLY:O	1.83	0.78
31:B5:7:PRO:HA	36:BA:2615:U:C2	2.18	0.78
1:AA:811:C:H4'	1:AA:900:A:N6	1.98	0.78
31:D5:36:CYS:SG	31:D5:48:GLU:O	2.41	0.78
1:AA:1221:G:OP1	19:AS:36:ARG:HD3	1.83	0.78
26:B0:7:LEU:HD13	49:BQ:85:LYS:HG3	1.65	0.78
6:CF:24:GLU:CD	6:CF:28:ARG:HH12	1.86	0.78
36:DA:968:G:O2'	36:DA:969:U:H5'	1.82	0.78
32:B6:39:TYR:O	32:B6:41:PRO:HD3	1.82	0.78
40:DE:195:LEU:HD12	40:DE:196:VAL:H	1.46	0.78
39:DD:147:LEU:HD21	39:DD:183:ARG:NH2	1.99	0.78
39:DD:147:LEU:HD21	39:DD:183:ARG:HH22	1.49	0.78
41:DF:32:LEU:HD23	41:DF:32:LEU:O	1.83	0.78
16:AP:43:LYS:HG2	16:AP:48:TRP:CZ3	2.18	0.78
36:DA:1514:U:H2'	36:DA:1515:G:H8	1.48	0.78
52:DT:58:ASN:H	52:DT:58:ASN:HD22	1.29	0.78
35:D9:10:ILE:H	35:D9:10:ILE:CD1	1.95	0.78
1:AA:1520:G:H2'	1:AA:1521:G:H8	1.48	0.78
36:DA:1061:U:H4'	36:DA:1070:A:H4'	1.66	0.78
42:BG:5:VAL:H	42:BG:8:LYS:CB	1.96	0.78
36:BA:1901:A:O2'	36:BA:1902:C:H5'	1.82	0.78
37:DB:20:C:C2'	37:DB:21:G:H5''	2.12	0.78
39:BD:66:ASP:OD2	39:BD:69:ARG:HG3	1.82	0.78
38:BC:100:ILE:HG23	38:BC:127:LEU:HG	1.63	0.78
36:BA:537:C:H42	36:BA:556:G:H1	1.30	0.78
1:AA:1108:G:H5'	3:AC:176:HIS:CD2	2.19	0.78
36:BA:1230:C:O2'	36:BA:1231:G:H5'	1.83	0.78
36:BA:1754:C:H5''	52:BT:113:LYS:HZ3	1.45	0.78
32:B6:11:LEU:HD13	32:B6:12:GLU:N	1.98	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:483:A:H4'	57:BY:49:VAL:HG22	1.65	0.78
36:BA:2466:C:O2'	36:BA:2467:C:H5'	1.83	0.78
36:DA:560:C:H1'	53:DU:49:HIS:HE1	1.48	0.78
8:AH:17:THR:HB	8:AH:78:GLN:OE1	1.83	0.78
52:BT:68:TYR:O	52:BT:70:VAL:N	2.15	0.78
22:CW:17:C:N4	36:DA:2110:G:H21	1.81	0.78
3:CC:112:SER:HB3	3:CC:115:LEU:HD12	1.66	0.78
27:B1:67:ILE:N	27:B1:68:PRO:HD2	1.99	0.78
13:CM:15:VAL:HG22	13:CM:41:PRO:O	1.83	0.78
55:BW:78:GLU:OE2	55:BW:99:ARG:HD2	1.83	0.78
1:AA:744:C:H2'	1:AA:745:C:C6	2.17	0.78
36:BA:151:C:H2'	36:BA:152:G:C8	2.17	0.78
31:D5:38:ALA:CB	31:D5:48:GLU:HB3	2.13	0.78
36:DA:611:C:H2'	36:DA:612:C:H6	1.47	0.78
3:AC:6:HIS:ND1	14:AN:49:HIS:HB3	1.98	0.78
3:CC:92:ALA:N	3:CC:99:VAL:HG11	1.97	0.78
36:BA:2781:A:C5'	36:BA:2782:G:H5'	2.14	0.78
36:BA:269:U:H2'	36:BA:269:U:O2	1.83	0.78
36:DA:1141:U:H2'	46:DN:63:THR:CG2	2.14	0.78
19:AS:16:LEU:CA	19:AS:19:VAL:HB	2.08	0.78
36:DA:90:U:H1'	36:DA:92:A:N7	1.98	0.78
36:BA:659:C:H2'	36:BA:660:G:C8	2.19	0.78
50:BR:63:ARG:HG2	50:BR:80:PHE:HE2	1.47	0.78
1:AA:376:G:H2'	1:AA:377:G:C8	2.18	0.78
36:BA:1297:C:H2'	36:BA:1298:C:H6	1.49	0.78
1:CA:1371:G:O3'	9:CI:69:GLY:HA3	1.84	0.78
2:AB:22:LYS:HE2	2:AB:22:LYS:HA	1.64	0.78
3:CC:13:GLY:H	14:CN:57:ARG:HD2	1.47	0.78
39:DD:35:LYS:CG	39:DD:63:ARG:HG2	2.13	0.78
37:DB:42:C:HO2'	37:DB:43:C:H6	1.31	0.78
5:CE:92:LYS:O	5:CE:118:ILE:HD12	1.84	0.78
24:AY:6:U:C2'	24:AY:7:A:H5''	2.13	0.78
4:CD:100:ARG:HH21	4:CD:118:ARG:NH1	1.78	0.78
36:DA:2735:G:H2'	36:DA:2736:G:H8	1.49	0.78
48:DP:85:LEU:HD23	48:DP:115:LEU:O	1.84	0.78
36:BA:55:G:HO2'	36:BA:127:A:H2	1.32	0.78
36:BA:852:G:O2'	36:BA:853:G:H5'	1.83	0.78
11:AK:66:LEU:O	11:AK:69:ALA:HB3	1.84	0.78
11:AK:43:SER:HB3	11:AK:68:ALA:HB2	1.66	0.78
36:BA:1353:A:H4'	39:BD:38:LYS:HE3	1.64	0.78
27:D1:5:CYS:SG	27:D1:63:ALA:HB2	2.23	0.78
58:BZ:59:LEU:O	58:BZ:66:SER:HA	1.84	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B1:63:ALA:HB3	27:B1:66:HIS:HB2	1.66	0.78
25:CZ:80:VAL:HG21	25:CZ:98:GLN:OE1	1.84	0.78
49:BQ:42:ILE:O	49:BQ:94:VAL:HA	1.84	0.78
36:BA:2735:G:H2'	36:BA:2736:G:H8	1.49	0.78
36:BA:611:C:H2'	36:BA:612:C:H6	1.47	0.78
50:BR:84:ALA:HB3	50:BR:85:PRO:HD3	1.66	0.78
28:D2:13:ALA:HA	28:D2:16:LEU:HD12	1.66	0.78
11:CK:57:THR:OG1	11:CK:58:PRO:HD2	1.84	0.78
4:CD:4:TYR:O	4:CD:5:ILE:HB	1.82	0.78
32:D6:20:ASN:ND2	32:D6:41:PRO:HB3	1.98	0.78
48:DP:62:LEU:H	48:DP:62:LEU:HD23	1.47	0.78
28:D2:41:ILE:HG13	28:D2:43:GLN:H	1.49	0.78
36:DA:2466:C:O2'	36:DA:2467:C:H5'	1.83	0.78
41:BF:3:GLU:O	41:BF:19:GLU:HB2	1.83	0.78
1:AA:267:C:H2'	1:AA:268:C:H6	1.49	0.78
58:BZ:153:SER:CB	58:BZ:167:PRO:HB3	2.14	0.78
27:B1:7:ILE:HG21	27:B1:66:HIS:HB3	1.65	0.78
25:CZ:223:MET:O	25:CZ:223:MET:HE3	1.83	0.78
38:DC:100:ILE:HG21	38:DC:126:LYS:CB	2.13	0.78
26:B0:23:VAL:HA	26:B0:38:VAL:HG22	1.65	0.78
11:AK:59:TYR:O	11:AK:62:GLN:HB3	1.83	0.78
36:DA:2208:A:H1'	36:DA:2219:G:C5	2.18	0.78
1:AA:1142:G:H2'	1:AA:1143:G:H5'	1.66	0.78
52:BT:83:ILE:HG13	52:BT:84:GLN:N	1.98	0.78
25:CZ:355:LEU:CB	25:CZ:359:VAL:HG23	2.10	0.78
38:DC:114:VAL:CB	38:DC:149:ILE:HD11	2.08	0.78
36:BA:90:U:H1'	36:BA:92:A:N7	1.98	0.78
13:AM:54:VAL:HG11	30:B4:17:GLY:O	1.83	0.78
54:DV:20:LEU:H	54:DV:20:LEU:HD12	1.48	0.78
36:BA:2712:U:H1'	36:BA:2712(A):A:N7	1.99	0.78
36:DA:1230:C:O2'	36:DA:1231:G:H5'	1.84	0.78
43:BH:118:PRO:HG2	43:BH:121:ILE:HB	1.65	0.78
49:BQ:43:THR:HB	49:BQ:45:GLN:NE2	1.97	0.78
36:BA:2208:A:H1'	36:BA:2219:G:C5	2.19	0.78
19:AS:78:ARG:HB2	19:AS:81:ARG:HH11	1.49	0.78
36:BA:2402:C:C2'	36:BA:2403:C:H5'	2.14	0.78
48:DP:9:ASN:N	48:DP:10:PRO:HD2	1.96	0.78
36:BA:650:C:H3'	36:BA:651:G:H5'	1.65	0.78
31:B5:44:THR:HG22	31:B5:45:VAL:H	1.47	0.78
10:CJ:22:LYS:O	10:CJ:22:LYS:HD2	1.84	0.78
39:DD:30:GLU:HG3	39:DD:63:ARG:CZ	2.14	0.78
42:DG:15:VAL:HG12	42:DG:19:LEU:HG	1.63	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:CL:110:VAL:O	12:CL:122:THR:HB	1.84	0.78
36:BA:2506:U:H5'	36:BA:2506:U:H6	1.45	0.78
49:BQ:20:ALA:H	58:BZ:79:ARG:CZ	1.97	0.78
20:AT:57:ARG:NH1	20:AT:57:ARG:HB2	1.99	0.78
1:AA:742:G:H5''	15:AO:58:MET:HE1	1.64	0.78
15:CO:10:LYS:HE3	15:CO:10:LYS:C	2.04	0.78
36:DA:2219:G:O2'	36:DA:2220:G:H5'	1.83	0.78
31:B5:31:VAL:HG11	36:BA:2886:G:H21	1.48	0.78
36:BA:1612:C:H42	36:BA:1619:G:H1	1.29	0.78
39:DD:183:ARG:HD2	39:DD:270:ILE:HG22	1.64	0.78
39:BD:147:LEU:HD21	39:BD:183:ARG:HH22	1.48	0.78
1:AA:795:C:H1'	1:AA:1506:U:C6	2.18	0.78
47:BO:114:ILE:HD12	47:BO:114:ILE:N	1.99	0.78
36:DA:1496:A:H8	36:DA:1577:C:HO2'	1.32	0.78
15:CO:17:ARG:HD3	15:CO:26:GLU:HG3	1.66	0.78
54:BV:20:LEU:HD12	54:BV:20:LEU:H	1.47	0.78
11:AK:120:ARG:HH12	11:AK:126:ARG:HD2	1.49	0.78
1:AA:436:C:H2'	1:AA:437:U:C6	2.19	0.78
1:CA:178:C:H2'	1:CA:179:A:H8	1.47	0.78
37:BB:115:G:H2'	37:BB:116:G:H8	1.49	0.78
22:CW:38:A:H3'	22:CW:39:U:H5''	1.66	0.78
28:D2:38:GLN:O	28:D2:41:ILE:HG12	1.82	0.78
28:D2:2:LYS:HA	28:D2:5:GLU:OE2	1.83	0.78
35:B9:30:PRO:HB2	36:BA:2527:C:H4'	1.64	0.78
36:BA:1290:C:H2'	36:BA:1291:C:H6	1.48	0.78
27:D1:62:VAL:HG11	27:D1:67:ILE:HG12	1.64	0.78
53:DU:52:ARG:CZ	53:DU:55:ARG:HH22	1.97	0.78
16:AP:5:ARG:C	16:AP:6:LEU:HD12	2.05	0.78
8:CH:34:GLU:O	8:CH:38:ILE:HG13	1.83	0.78
51:BS:15:ARG:NH1	51:BS:15:ARG:HB2	1.99	0.78
25:AZ:264:ARG:HG2	25:AZ:264:ARG:NH1	1.87	0.78
5:AE:11:ILE:HD12	5:AE:31:LEU:CD1	2.14	0.78
25:CZ:72:THR:HG22	25:CZ:203:LEU:CD2	2.13	0.78
16:CP:5:ARG:C	16:CP:6:LEU:HD12	2.04	0.78
10:CJ:61:GLU:HG3	14:CN:58:LYS:HE2	1.64	0.78
48:BP:16:ARG:HH11	48:BP:16:ARG:C	1.87	0.78
36:BA:1496:A:H8	36:BA:1577:C:HO2'	1.32	0.78
2:AB:130:ARG:HA	2:AB:130:ARG:HE	1.49	0.78
29:B3:28:LEU:N	29:B3:28:LEU:HD23	1.99	0.78
54:BV:15:GLU:HB3	54:BV:16:PRO:HD2	1.65	0.78
22:CW:33:U:H2'	22:CW:35:A:OP2	1.84	0.78
40:BE:87:GLU:O	40:BE:89:ASP:N	2.17	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:684:A:H1'	11:AK:39:PRO:HD2	1.66	0.78
52:BT:129:ARG:CZ	52:BT:131:ALA:HB3	2.14	0.78
25:AZ:316:PHE:CE1	25:AZ:372:VAL:HB	2.18	0.78
26:B0:20:ARG:HD2	26:B0:20:ARG:H	1.49	0.78
6:AF:67:MET:HB2	6:AF:68:PRO:HD2	1.66	0.78
36:DA:2338:G:H2'	36:DA:2339:G:H8	1.48	0.77
25:AZ:191:GLY:HA2	25:AZ:196:VAL:HG12	1.65	0.77
39:BD:147:LEU:HD21	39:BD:183:ARG:NH2	1.99	0.77
8:CH:5:PRO:O	8:CH:8:ASP:HB3	1.83	0.77
1:AA:254:G:H21	17:AQ:16:GLN:NE2	1.81	0.77
36:DA:1668:A:H4'	36:DA:1669:A:O5'	1.84	0.77
9:AI:10:ARG:HB2	9:AI:76:ALA:HB2	1.64	0.77
9:CI:77:ILE:O	9:CI:81:ILE:HG12	1.83	0.77
1:AA:1510:U:H3	1:AA:1525:G:H1	1.32	0.77
55:BW:50:VAL:O	55:BW:105:VAL:HG21	1.83	0.77
48:BP:12:ALA:HB1	48:BP:16:ARG:HB3	1.66	0.77
42:DG:12:TYR:HA	42:DG:16:ARG:HG2	1.64	0.77
30:D4:9:LEU:HG	42:DG:98:ARG:NH1	1.99	0.77
1:AA:1203:C:H2'	1:AA:1204:A:H8	1.48	0.77
10:AJ:43:ARG:HB2	10:AJ:67:THR:HG22	1.63	0.77
1:CA:150:C:C2'	1:CA:151:A:H5''	2.13	0.77
38:DC:99:ILE:HG23	38:DC:102:LYS:NZ	1.99	0.77
10:CJ:34:VAL:HG13	10:CJ:73:ASP:O	1.83	0.77
1:AA:41:G:H2'	1:AA:42:G:C8	2.19	0.77
1:CA:1523:G:H2'	1:CA:1524:C:C6	2.19	0.77
1:CA:55:A:H2'	25:CZ:232:THR:HG21	1.64	0.77
36:BA:634:C:H2'	36:BA:635:C:C6	2.18	0.77
1:AA:932:C:H5''	7:AG:3:ARG:HD2	1.67	0.77
36:BA:886:C:O2'	36:BA:887:A:H4'	1.84	0.77
47:DO:25:LEU:O	47:DO:26:LYS:HG3	1.84	0.77
36:DA:2007:C:O2'	36:DA:2008:C:H5'	1.85	0.77
50:DR:2:ARG:HD2	50:DR:2:ARG:O	1.83	0.77
36:BA:1242:A:H5'	36:BA:1243:G:OP2	1.84	0.77
28:B2:25:VAL:C	28:B2:27:GLU:H	1.86	0.77
28:B2:43:GLN:O	28:B2:44:LEU:HB2	1.83	0.77
47:DO:72:PRO:C	47:DO:74:GLY:H	1.87	0.77
1:AA:1371:G:O3'	9:AI:69:GLY:HA3	1.83	0.77
1:AA:1348:U:H4'	9:AI:120:ARG:HD2	1.66	0.77
36:BA:2833:G:H3'	36:BA:2834:G:H5'	1.66	0.77
25:AZ:15:GLY:HA2	25:AZ:79:HIS:CD2	2.20	0.77
49:DQ:140:ALA:HB1	58:DZ:99:TYR:CB	2.13	0.77
36:BA:2306:C:H4'	42:BG:136:ARG:HH22	1.48	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:389:ARG:HA	25:AZ:395:VAL:HG13	1.66	0.77
36:DA:782:A:C2	39:DD:226:MET:HG2	2.19	0.77
1:AA:715:A:H2'	1:AA:716:A:C8	2.19	0.77
31:D5:36:CYS:SG	31:D5:38:ALA:HB3	2.24	0.77
53:DU:37:GLU:HA	53:DU:40:PHE:CE1	2.18	0.77
36:DA:886:C:O2'	36:DA:887:A:H4'	1.84	0.77
47:BO:25:LEU:O	47:BO:26:LYS:HG3	1.85	0.77
3:AC:153:VAL:O	3:AC:154:SER:HB3	1.83	0.77
25:AZ:20:VAL:HA	25:AZ:24:LYS:HZ1	1.48	0.77
38:DC:131:LEU:HB3	38:DC:136:LEU:HB2	1.65	0.77
39:BD:83:GLU:HB2	39:BD:92:ILE:HD11	1.67	0.77
1:AA:1191:A:H5''	3:AC:4:LYS:HZ2	1.48	0.77
4:AD:62:GLN:O	4:AD:66:ARG:HB2	1.84	0.77
36:DA:560:C:H1'	53:DU:49:HIS:CE1	2.18	0.77
1:AA:59:A:H1'	1:AA:354:G:N2	2.00	0.77
8:CH:9:MET:HG3	8:CH:26:VAL:HG21	1.66	0.77
36:DA:1518:U:H2'	36:DA:1519:G:O4'	1.84	0.77
47:BO:72:PRO:C	47:BO:74:GLY:H	1.85	0.77
19:AS:51:VAL:HG12	19:AS:52:TYR:H	1.49	0.77
36:BA:271(P):C:C2'	36:BA:271(Q):G:H5'	2.13	0.77
36:BA:2514:U:H2'	36:BA:2515:C:C6	2.19	0.77
16:AP:49:LEU:HD12	16:AP:50:LYS:N	2.00	0.77
36:BA:271:A:C2	36:BA:366:C:H1'	2.20	0.77
53:BU:37:GLU:HA	53:BU:40:PHE:CD1	2.18	0.77
33:D7:8:ASN:HD22	33:D7:9:ARG:N	1.80	0.77
36:BA:536:A:H2'	36:BA:537:C:C6	2.19	0.77
12:AL:25:PRO:C	12:AL:27:LEU:H	1.85	0.77
36:DA:2572:A:N7	40:DE:145:LYS:HB2	1.98	0.77
27:D1:40:ARG:NH2	27:D1:42:GLN:HE21	1.82	0.77
36:BA:1993:U:H4'	40:BE:128:SER:OG	1.83	0.77
36:BA:2029:G:H5''	36:BA:2030:A:OP2	1.84	0.77
34:D8:50:LEU:C	34:D8:53:PRO:HD2	2.05	0.77
48:DP:77:ARG:HD3	48:DP:78:PRO:HD2	1.65	0.77
56:DX:36:LYS:HA	56:DX:39:ILE:CB	2.14	0.77
1:CA:1346:A:N6	1:CA:1374:A:H3'	1.99	0.77
31:B5:42:PRO:HB2	36:BA:2815:C:O2'	1.84	0.77
3:CC:43:LEU:O	3:CC:47:LEU:HB2	1.84	0.77
25:AZ:80:VAL:HG21	25:AZ:98:GLN:OE1	1.83	0.77
8:AH:30:ARG:HB3	8:AH:30:ARG:HH11	1.43	0.77
37:DB:77:U:H4'	58:DZ:84:GLU:OE2	1.84	0.77
36:DA:1658:C:H2'	36:DA:1659:U:C6	2.20	0.77
42:DG:5:VAL:H	42:DG:8:LYS:CB	1.98	0.77

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:DQ:12:GLN:HE21	49:DQ:73:PRO:HD2	1.47	0.77
36:DA:2441:C:H2'	36:DA:2442:C:H6	1.47	0.77
24:CY:75:C:H6	25:CZ:231:ILE:HG23	1.49	0.77
36:BA:1231:G:H2'	36:BA:1232:G:C8	2.20	0.77
1:AA:673:G:H5''	6:AF:87:ARG:NH1	1.99	0.77
36:DA:806:C:O2'	36:DA:2445:G:H4'	1.84	0.77
11:CK:43:SER:HB3	11:CK:68:ALA:HB2	1.67	0.77
2:AB:90:MET:HE2	2:AB:90:MET:HA	1.65	0.77
1:CA:1041:A:H2'	1:CA:1042:G:C8	2.18	0.77
25:AZ:256:VAL:HG13	25:AZ:262:THR:HG22	1.65	0.77
25:AZ:107:SER:OG	25:AZ:137:LYS:HD2	1.83	0.77
24:AY:40:G:H2'	24:AY:41:G:C5'	2.14	0.77
41:BF:43:LYS:HB3	41:BF:98:SER:CB	2.13	0.77
37:BB:44:G:H4'	37:BB:45:A:C8	2.19	0.77
36:BA:676:A:H8	36:BA:2443:C:H1'	1.47	0.77
2:CB:22:LYS:HE2	2:CB:22:LYS:HA	1.65	0.77
31:B5:16:ARG:NH1	31:B5:20:ARG:HH11	1.82	0.77
42:DG:177:GLY:O	42:DG:179:PRO:HD3	1.85	0.77
36:BA:2127:G:H4'	38:BC:37:PHE:CD1	2.20	0.77
10:AJ:7:LYS:O	10:AJ:96:ILE:HA	1.83	0.77
1:AA:986:A:H1'	19:AS:54:GLY:O	1.84	0.77
36:DA:1612:C:N4	36:DA:1619:G:H1	1.83	0.77
36:DA:852:G:O2'	36:DA:853:G:H5'	1.83	0.77
18:AR:58:LEU:HD22	18:AR:62:GLU:HB3	1.64	0.77
36:DA:1165:U:H2'	36:DA:1166:C:H6	1.50	0.77
12:CL:83:VAL:HG11	12:CL:100:ILE:HG12	1.65	0.77
32:D6:48:VAL:HG23	32:D6:49:HIS:N	2.00	0.77
34:D8:61:LEU:CD1	34:D8:62:LEU:H	1.97	0.77
56:BX:27:THR:HG22	56:BX:80:ILE:HG22	1.67	0.77
38:DC:94:VAL:HG12	38:DC:95:GLY:N	1.95	0.77
53:DU:24:TYR:HB2	53:DU:29:SER:HB3	1.66	0.77
1:CA:972:C:H4'	10:CJ:57:LYS:HG3	1.65	0.77
1:AA:953:G:H2'	1:AA:954:G:O4'	1.85	0.77
36:DA:1484:G:C3'	36:DA:1485:G:H5''	2.14	0.77
57:DY:81:LYS:HZ3	57:DY:99:CYS:HB2	1.48	0.77
1:AA:1485:U:H2'	1:AA:1485:U:O2	1.82	0.77
56:DX:65:ARG:HG2	56:DX:66:LEU:N	2.00	0.77
2:AB:44:LEU:HD12	2:AB:44:LEU:H	1.48	0.77
1:CA:580:U:H2'	1:CA:581:G:O4'	1.83	0.77
5:CE:110:LEU:HD13	5:CE:118:ILE:HG21	1.66	0.77
36:DA:2887:U:H2'	36:DA:2888:C:C6	2.19	0.77
2:AB:165:VAL:HG23	2:AB:166:ASP:H	1.49	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:130:ARG:HE	2:CB:130:ARG:HA	1.50	0.77
58:DZ:70:LEU:CD2	58:DZ:91:LEU:HD21	2.15	0.77
36:BA:1599:C:H2'	36:BA:1600:C:C6	2.20	0.77
25:CZ:316:PHE:CE1	25:CZ:372:VAL:HB	2.20	0.77
36:DA:634:C:H2'	36:DA:635:C:C6	2.20	0.77
52:DT:109:GLU:O	52:DT:112:ARG:HG2	1.85	0.77
36:BA:2572:A:N7	40:BE:145:LYS:HB2	1.99	0.77
47:DO:7:TYR:HE1	47:DO:20:MET:HE3	1.48	0.77
36:BA:977:G:H2'	36:BA:978:G:H8	1.48	0.77
17:AQ:34:LYS:HG2	17:AQ:35:VAL:H	1.50	0.77
1:AA:178:C:H2'	1:AA:179:A:H8	1.49	0.77
38:DC:4:GLY:O	38:DC:8:ARG:HG3	1.84	0.77
1:CA:1142:G:H2'	1:CA:1143:G:H5'	1.64	0.77
36:BA:216:A:H2'	36:BA:217:G:O4'	1.84	0.77
1:AA:1452:C:H5'	1:AA:1456:G:C2	2.20	0.77
39:DD:166:GLN:HE21	39:DD:166:GLN:CA	1.97	0.77
32:D6:5:VAL:HG11	36:DA:2283:C:C5'	2.15	0.77
36:DA:2402:C:H2'	36:DA:2403:C:H5'	1.65	0.77
25:AZ:145:GLU:C	25:AZ:149:LEU:HB3	2.05	0.77
36:DA:483:A:H4'	57:DY:49:VAL:HG22	1.67	0.77
54:DV:5:VAL:HG23	54:DV:37:VAL:O	1.85	0.77
56:BX:44:GLU:OE2	56:BX:50:LYS:HG3	1.85	0.77
36:DA:1991:U:H2'	36:DA:1992:G:H5''	1.66	0.77
55:DW:5:ALA:CB	55:DW:54:ALA:HB2	2.14	0.77
3:AC:70:VAL:O	3:AC:106:VAL:HG23	1.84	0.77
3:AC:13:GLY:H	14:AN:57:ARG:HD2	1.48	0.77
36:DA:594:U:H2'	36:DA:595:C:C6	2.19	0.77
36:BA:711:G:H1	36:BA:720:C:H42	1.32	0.77
40:DE:52:LEU:HB2	40:DE:76:ARG:HB2	1.66	0.77
36:BA:904:C:H2'	36:BA:905:U:C6	2.20	0.77
36:DA:2454:G:H2'	36:DA:2455:G:C8	2.19	0.77
2:CB:36:ARG:H	2:CB:41:ILE:HD13	1.50	0.77
58:BZ:141:VAL:HA	58:BZ:144:LEU:HD23	1.67	0.77
31:D5:4:HIS:CB	31:D5:5:PRO:HD3	2.11	0.77
36:BA:2009:G:H4'	55:BW:40:ASN:HD22	1.50	0.77
36:DA:1665:A:C3'	36:DA:1666:G:H5''	2.15	0.77
37:BB:82:G:H2'	37:BB:83:G:H8	1.50	0.77
42:DG:122:PRO:HG2	42:DG:123:ASN:ND2	1.99	0.77
36:BA:709:U:H2'	36:BA:710:G:C8	2.20	0.77
42:BG:117:PHE:HZ	42:BG:179:PRO:HB2	1.49	0.77
41:BF:82:ILE:O	41:BF:83:PHE:CB	2.30	0.77
36:BA:2774:C:H2'	36:BA:2775:A:O4'	1.84	0.77

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:DZ:5:LEU:O	58:DZ:59:LEU:HA	1.84	0.77
36:BA:1064:C:H3'	36:BA:1065:U:H5''	1.66	0.77
32:D6:15:GLU:HA	32:D6:49:HIS:CE1	2.20	0.77
48:DP:96:THR:O	48:DP:99:LEU:HB3	1.83	0.77
41:DF:101:LEU:HD12	41:DF:102:PRO:HD2	1.65	0.77
41:DF:43:LYS:HB3	41:DF:98:SER:CB	2.15	0.77
39:BD:63:ARG:CG	39:BD:63:ARG:HH11	1.98	0.77
56:BX:8:ILE:O	56:BX:8:ILE:HG22	1.84	0.77
42:BG:39:ILE:HG22	42:BG:157:ILE:HG23	1.67	0.77
25:CZ:171:ILE:HG13	25:CZ:201:GLU:HB3	1.67	0.77
56:BX:36:LYS:HA	56:BX:39:ILE:CB	2.14	0.77
36:BA:2631:G:N2	40:BE:61:ARG:NH1	2.33	0.77
37:BB:106:G:C5'	58:BZ:31:ARG:HB3	2.13	0.77
51:DS:15:ARG:HB2	51:DS:15:ARG:NH1	1.99	0.77
36:DA:2144:U:H2'	36:DA:2146:C:H5	1.50	0.77
19:CS:9:VAL:O	19:CS:11:VAL:HG12	1.85	0.77
46:BN:111:PRO:HG3	46:BN:114:ARG:HH22	1.50	0.77
48:DP:16:ARG:C	48:DP:16:ARG:HH11	1.87	0.77
49:BQ:70:PRO:HA	49:BQ:94:VAL:O	1.85	0.77
29:D3:28:LEU:N	29:D3:28:LEU:HD23	1.98	0.77
51:BS:56:LEU:HD22	51:BS:58:LEU:HD22	1.66	0.77
1:AA:84:U:C2'	1:AA:88:A:H5'	2.15	0.77
28:D2:35:LEU:C	28:D2:35:LEU:HD13	2.05	0.77
36:DA:659:C:H2'	36:DA:660:G:C8	2.19	0.77
50:BR:13:HIS:O	50:BR:17:ARG:HB2	1.85	0.77
56:DX:59:VAL:HG21	56:DX:78:LYS:HD3	1.67	0.77
1:CA:838:G:C6	1:CA:840:C:H1'	2.19	0.77
36:DA:2774:C:H2'	36:DA:2775:A:O4'	1.84	0.77
9:AI:77:ILE:O	9:AI:81:ILE:HG12	1.84	0.77
10:CJ:49:VAL:CG2	14:CN:41:ARG:HB2	2.14	0.77
36:BA:307:G:N2	36:BA:309:G:H3'	2.00	0.77
42:BG:27:ASN:HD22	42:BG:29:TRP:HB2	1.50	0.77
36:DA:1775:U:H2'	36:DA:1776:G:C5'	2.15	0.77
36:DA:1092:C:N4	36:DA:1100:C:H42	1.83	0.77
1:CA:1305:G:H22	1:CA:1331:G:H2'	1.48	0.77
36:DA:2306:C:H4'	42:DG:136:ARG:NH1	2.00	0.77
57:BY:86:ARG:HG2	57:BY:87:LYS:N	2.00	0.77
36:DA:2631:G:N2	40:DE:61:ARG:NH1	2.33	0.77
2:AB:166:ASP:HB3	2:AB:169:LYS:HB2	1.66	0.77
38:DC:100:ILE:HG23	38:DC:127:LEU:HG	1.64	0.77
38:BC:99:ILE:HD12	38:BC:102:LYS:NZ	2.00	0.77
36:DA:1599:C:H2'	36:DA:1600:C:C6	2.18	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1064:C:H3'	36:DA:1065:U:H5''	1.67	0.77
55:DW:20:VAL:HG23	55:DW:47:VAL:HG21	1.67	0.77
34:B8:59:LYS:HD3	48:BP:50:ARG:HB3	1.67	0.76
32:D6:5:VAL:HB	36:DA:2284:C:OP2	1.85	0.76
36:DA:672:C:C2'	36:DA:673:C:H5''	2.15	0.76
1:CA:254:G:H21	17:CQ:16:GLN:NE2	1.83	0.76
43:DH:52:VAL:HG11	43:DH:66:GLY:H	1.50	0.76
28:B2:35:LEU:O	28:B2:35:LEU:HD22	1.85	0.76
48:BP:126:VAL:HA	48:BP:145:PRO:HB2	1.65	0.76
25:CZ:146:LEU:N	25:CZ:149:LEU:HB3	2.01	0.76
10:AJ:50:ILE:N	10:AJ:50:ILE:HD13	1.99	0.76
41:BF:72:ARG:NH1	41:BF:72:ARG:HA	1.97	0.76
39:DD:35:LYS:NZ	39:DD:36:PRO:HD3	1.99	0.76
43:DH:148:ILE:O	43:DH:162:ILE:HD13	1.84	0.76
10:CJ:89:ASP:O	10:CJ:90:LEU:HB2	1.84	0.76
36:BA:2243:U:H2'	36:BA:2244:U:C6	2.20	0.76
37:DB:115:G:H2'	37:DB:116:G:H8	1.50	0.76
53:BU:37:GLU:HA	53:BU:40:PHE:CE1	2.20	0.76
36:BA:1114:G:H2'	36:BA:1115:G:C8	2.20	0.76
1:CA:1108:G:H5'	3:CC:176:HIS:CD2	2.20	0.76
11:AK:82:VAL:HG12	11:AK:108:ILE:HA	1.67	0.76
46:DN:89:LYS:O	46:DN:93:THR:HG22	1.83	0.76
36:BA:122:G:H1	36:BA:129:C:H42	1.29	0.76
36:DA:1498:C:H2'	36:DA:1499:C:H5''	1.64	0.76
38:BC:131:LEU:HB3	38:BC:136:LEU:HB2	1.68	0.76
35:B9:1:MET:SD	36:BA:2477:C:H2'	2.25	0.76
28:B2:32:LEU:HA	28:B2:53:LEU:HD13	1.67	0.76
13:AM:3:ARG:HA	13:AM:9:ILE:HG13	1.67	0.76
40:BE:38:THR:HG22	40:BE:40:GLU:H	1.50	0.76
56:BX:39:ILE:HG21	56:BX:54:VAL:HG11	1.67	0.76
9:AI:13:ALA:HB2	9:AI:68:GLY:HA3	1.67	0.76
9:CI:10:ARG:HG3	9:CI:75:ASP:HB3	1.67	0.76
19:CS:44:MET:N	19:CS:44:MET:SD	2.58	0.76
40:BE:117:MET:SD	40:BE:136:ARG:HG2	2.25	0.76
1:CA:1124:G:N2	1:CA:1126:U:H3	1.82	0.76
20:AT:36:LEU:HD11	20:AT:59:ALA:HB2	1.65	0.76
33:D7:18:PHE:HZ	36:DA:117:G:H4'	1.49	0.76
1:AA:1314:C:OP2	19:AS:6:LYS:HG3	1.85	0.76
22:AW:33:U:H2'	22:AW:35:A:OP2	1.85	0.76
1:CA:1494:G:H2'	1:CA:1495:U:H6	1.51	0.76
1:CA:41:G:H2'	1:CA:42:G:C8	2.20	0.76
36:BA:203:C:H3'	36:BA:204:A:H5''	1.67	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:41:VAL:CG1	5:AE:113:ALA:HA	2.15	0.76
36:DA:1114:G:H2'	36:DA:1115:G:C8	2.21	0.76
19:CS:6:LYS:H	19:CS:6:LYS:HD2	1.50	0.76
19:CS:6:LYS:HG2	19:CS:7:LYS:HE3	1.68	0.76
25:AZ:271:GLU:HG2	25:AZ:276:THR:HA	1.66	0.76
39:BD:70:TRP:CH2	39:BD:150:LYS:HA	2.20	0.76
41:DF:72:ARG:HA	41:DF:72:ARG:NH1	1.99	0.76
41:BF:32:LEU:O	41:BF:32:LEU:HD23	1.85	0.76
42:BG:66:GLN:HG2	42:BG:67:LYS:H	1.50	0.76
36:DA:537:C:H42	36:DA:556:G:H1	1.32	0.76
2:CB:166:ASP:HB3	2:CB:169:LYS:HB2	1.65	0.76
56:DX:39:ILE:HG21	56:DX:54:VAL:HG11	1.67	0.76
52:DT:28:VAL:HG22	52:DT:47:GLY:N	1.98	0.76
58:BZ:128:VAL:HG22	58:BZ:129:SER:H	1.49	0.76
16:CP:67:THR:HG22	16:CP:68:ASP:H	1.51	0.76
7:CG:120:ILE:O	7:CG:124:LEU:HB2	1.85	0.76
22:AV:59:U:O2'	22:AV:60:U:H6	1.67	0.76
26:B0:77:ARG:HH22	36:BA:857:C:H5'	1.49	0.76
57:BY:37:VAL:HG23	57:BY:38:ILE:N	1.99	0.76
36:BA:2136:C:H42	36:BA:2155:G:H1	1.33	0.76
10:CJ:27:ALA:HA	10:CJ:30:SER:OG	1.85	0.76
36:BA:1899:G:N2	36:BA:1902:C:H41	1.83	0.76
10:AJ:22:LYS:O	10:AJ:22:LYS:HD2	1.84	0.76
36:DA:2306:C:H4'	42:DG:136:ARG:CZ	2.14	0.76
42:DG:36:LYS:HA	42:DG:99:MET:SD	2.25	0.76
2:CB:179:LYS:HA	8:CH:72:PRO:HD3	1.67	0.76
36:DA:1498:C:C3'	36:DA:1499:C:H5''	2.16	0.76
11:CK:66:LEU:O	11:CK:69:ALA:HB3	1.85	0.76
25:AZ:367:ASN:HD22	25:AZ:367:ASN:N	1.81	0.76
36:DA:1820:U:O2'	39:DD:159:ALA:HB3	1.86	0.76
40:BE:30:PRO:HD3	40:BE:180:ASN:ND2	2.01	0.76
36:DA:1327:C:N4	36:DA:1647:G:H21	1.82	0.76
36:BA:672:C:C2'	36:BA:673:C:H5''	2.14	0.76
34:D8:30:ARG:NE	34:D8:30:ARG:HA	1.98	0.76
1:CA:255:G:H1'	17:CQ:16:GLN:NE2	2.00	0.76
41:BF:113:ALA:O	41:BF:117:ARG:HB2	1.84	0.76
41:BF:37:VAL:HG22	41:BF:183:VAL:HG23	1.68	0.76
13:AM:49:THR:HB	13:AM:52:GLU:HG3	1.67	0.76
51:BS:15:ARG:HH11	51:BS:15:ARG:HB2	1.51	0.76
8:AH:34:GLU:O	8:AH:38:ILE:HG13	1.86	0.76
9:CI:99:LEU:HB3	9:CI:101:PHE:CD1	2.20	0.76
14:AN:13:THR:N	14:AN:14:PRO:CD	2.48	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:38:A:H2'	36:BA:39:C:H6	1.50	0.76
36:BA:1828:G:O6	39:BD:222:ARG:HD3	1.85	0.76
46:BN:28:THR:CG2	46:BN:29:LYS:H	1.99	0.76
39:DD:83:GLU:HB2	39:DD:92:ILE:HD11	1.67	0.76
37:DB:44:G:H4'	37:DB:45:A:C8	2.20	0.76
15:AO:17:ARG:HD3	15:AO:26:GLU:HG3	1.67	0.76
1:AA:741:G:H2'	1:AA:742:G:H8	1.51	0.76
36:DA:197:A:H5'	36:DA:197:A:C8	2.20	0.76
36:DA:2246:G:H2'	36:DA:2247:A:C8	2.21	0.76
1:CA:355:C:H2'	1:CA:356:A:H8	1.50	0.76
33:B7:8:ASN:HD22	33:B7:9:ARG:N	1.82	0.76
25:CZ:313:HIS:HB2	25:CZ:380:LEU:HD12	1.66	0.76
29:B3:18:ASP:HB2	36:BA:850:C:H4'	1.66	0.76
1:CA:932:C:H5''	7:CG:3:ARG:HD2	1.66	0.76
36:DA:1184:G:O2'	36:DA:1185:C:H5'	1.84	0.76
36:BA:991:C:H6	36:BA:991:C:H5'	1.50	0.76
36:BA:2553:G:H2'	36:BA:2554:U:O4'	1.86	0.76
25:AZ:72:THR:HG22	25:AZ:203:LEU:CD2	2.15	0.76
7:CG:72:ARG:CG	7:CG:73:MET:HG3	2.15	0.76
3:CC:6:HIS:ND1	14:CN:49:HIS:HB3	2.01	0.76
22:CV:68:C:C3'	22:CV:69:G:H5''	2.16	0.76
36:DA:2110:G:H1	36:DA:2178:C:N4	1.83	0.76
36:DA:2590:A:OP2	39:DD:238:GLY:HA2	1.85	0.76
1:CA:1152:A:O2'	1:CA:1153:C:H5'	1.86	0.76
36:BA:903:C:H2'	36:BA:904:C:C6	2.21	0.76
52:DT:107:ASP:CG	52:DT:108:ARG:H	1.87	0.76
52:DT:107:ASP:OD2	52:DT:109:GLU:HG3	1.84	0.76
36:DA:2064:C:H2'	36:DA:2065:C:C6	2.21	0.76
36:BA:2064:C:H2'	36:BA:2065:C:C6	2.21	0.76
36:DA:650:C:H3'	36:DA:651:G:H5''	1.67	0.76
32:B6:48:VAL:HG23	32:B6:49:HIS:H	1.50	0.76
36:BA:2389:G:H5''	36:BA:2390:U:H5'	1.68	0.76
48:BP:47:ASP:HB3	48:BP:49:ARG:H	1.48	0.76
36:BA:482:A:H4'	57:BY:47:LYS:HD3	1.67	0.76
36:BA:296:C:O2'	36:BA:297:C:H5'	1.84	0.76
31:B5:3:LYS:HD3	36:BA:747:U:P	2.26	0.76
1:CA:737:A:H2'	1:CA:738:C:C6	2.20	0.76
36:DA:1665:A:H2'	36:DA:1666:G:C5'	2.15	0.76
1:AA:1346:A:N6	1:AA:1374:A:H3'	2.01	0.76
36:DA:1693:U:C6	36:DA:1693:U:H5'	2.21	0.76
2:CB:87:ARG:HH21	2:CB:233:SER:N	1.84	0.76
27:B1:8:SER:OG	27:B1:10:LYS:HG3	1.86	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:CT:14:LYS:O	20:CT:18:GLN:HB2	1.85	0.76
36:BA:1603:A:H5'	36:BA:1603:A:H8	1.50	0.76
42:DG:163:ALA:HB1	42:DG:169:ALA:HB2	1.66	0.76
1:CA:1256:A:H5'	1:CA:1257:U:OP1	1.85	0.76
1:AA:584:G:H2'	1:AA:585:G:C8	2.20	0.76
3:CC:58:GLU:N	3:CC:65:ALA:HB3	2.00	0.76
4:CD:114:ARG:HG3	4:CD:114:ARG:HH11	1.51	0.76
36:DA:827:U:H2'	36:DA:2068:U:C2	2.20	0.76
33:D7:8:ASN:C	33:D7:8:ASN:HD22	1.87	0.76
31:D5:34:PRO:O	31:D5:35:GLU:HG2	1.86	0.76
31:B5:34:PRO:O	31:B5:35:GLU:HG2	1.84	0.76
25:AZ:317:GLU:HG3	25:AZ:404:LEU:HD21	1.67	0.76
25:CZ:367:ASN:HD22	25:CZ:367:ASN:N	1.82	0.76
1:CA:436:C:H2'	1:CA:437:U:C6	2.21	0.76
36:BA:968:G:O2'	36:BA:969:U:H5'	1.85	0.76
1:CA:84:U:C2'	1:CA:88:A:H5'	2.16	0.76
48:DP:126:VAL:HA	48:DP:145:PRO:HB2	1.66	0.76
25:AZ:138:VAL:CG2	25:AZ:173:GLY:H	1.87	0.76
4:CD:57:ARG:HB3	4:CD:206:PHE:HB2	1.67	0.76
40:BE:195:LEU:HD12	40:BE:196:VAL:H	1.49	0.76
1:CA:741:G:H2'	1:CA:742:G:H8	1.51	0.76
15:CO:56:LEU:O	15:CO:60:VAL:HG23	1.86	0.76
36:BA:1665:A:C3'	36:BA:1666:G:H5''	2.15	0.76
9:AI:9:ARG:HB2	9:AI:104:ARG:NH1	1.99	0.76
19:AS:44:MET:HA	19:AS:47:HIS:CD2	2.15	0.76
55:BW:5:ALA:HB2	55:BW:54:ALA:CB	2.16	0.76
53:BU:88:ILE:C	53:BU:90:VAL:H	1.88	0.76
10:AJ:27:ALA:HA	10:AJ:30:SER:OG	1.85	0.76
2:AB:167:PRO:HG2	2:AB:192:SER:OG	1.86	0.76
18:CR:53:ARG:NH2	18:CR:59:SER:HA	1.99	0.76
36:BA:2200:C:H42	36:BA:2223:G:H1	1.33	0.76
5:AE:64:ARG:O	5:AE:66:MET:HE2	1.86	0.76
50:DR:103:ARG:NH1	50:DR:110:PRO:HD3	2.01	0.76
52:DT:129:ARG:CZ	52:DT:131:ALA:HB3	2.15	0.76
36:BA:1184:G:O2'	36:BA:1185:C:H5'	1.86	0.76
3:AC:52:LEU:HD23	3:AC:52:LEU:H	1.51	0.76
36:DA:2422:A:H4'	36:DA:2423:U:OP1	1.85	0.76
31:D5:3:LYS:HD3	36:DA:747:U:P	2.25	0.76
27:B1:44:PRO:HG2	27:B1:46:LEU:HD23	1.67	0.76
24:AY:40:G:C2'	24:AY:41:G:H5''	2.15	0.76
41:DF:113:ALA:O	41:DF:117:ARG:HB2	1.85	0.76
28:B2:68:ARG:NH1	28:B2:72:ALA:HB2	2.01	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2846:G:OP2	52:DT:54:ARG:HD2	1.86	0.76
9:CI:13:ALA:HB2	9:CI:68:GLY:HA3	1.68	0.76
47:DO:114:ILE:H	47:DO:114:ILE:CD1	1.97	0.76
49:DQ:134:ARG:HD2	58:DZ:122:ARG:NH2	2.00	0.76
40:DE:80:GLU:O	40:DE:81:ILE:HG12	1.85	0.76
5:AE:144:THR:O	5:AE:148:VAL:HG23	1.86	0.76
55:BW:12:ILE:HB	55:BW:42:ARG:HH12	1.51	0.76
10:CJ:8:LEU:HG	10:CJ:96:ILE:HG22	1.67	0.76
1:CA:1154:G:H2'	1:CA:1155:G:C8	2.20	0.76
29:D3:59:VAL:HG12	29:D3:60:GLU:N	2.00	0.76
1:AA:105:G:H2'	1:AA:106:C:C6	2.20	0.76
58:DZ:57:ILE:N	58:DZ:57:ILE:HD12	2.00	0.76
1:AA:552:U:H2'	1:AA:553:A:H8	1.49	0.76
25:AZ:132:VAL:HG13	25:AZ:169:PRO:HB2	1.68	0.76
10:CJ:16:LEU:HD13	10:CJ:17:ASP:N	2.00	0.76
36:BA:2454:G:H2'	36:BA:2455:G:C8	2.21	0.76
36:DA:814:C:O2'	36:DA:815:C:H5'	1.86	0.76
1:AA:607:A:O2'	1:AA:608:A:H5'	1.85	0.76
48:BP:77:ARG:HD3	48:BP:78:PRO:HD2	1.67	0.76
51:DS:13:ARG:HG3	51:DS:14:VAL:N	1.99	0.76
39:DD:8:PRO:HB3	39:DD:14:ARG:HB2	1.68	0.76
3:CC:70:VAL:O	3:CC:106:VAL:HG23	1.84	0.76
1:CA:450:G:H5''	1:CA:451:A:H3'	1.67	0.76
13:CM:3:ARG:HA	13:CM:9:ILE:HG13	1.68	0.76
36:DA:1058:G:C2'	36:DA:1059:G:H5''	2.15	0.76
1:AA:1256:A:H5'	1:AA:1257:U:OP1	1.85	0.76
36:BA:2025:C:H2'	36:BA:2026:C:C6	2.20	0.76
1:AA:1124:G:N2	1:AA:1126:U:H3	1.83	0.76
36:DA:145:G:C2'	36:DA:146:G:H5''	2.16	0.76
10:AJ:89:ASP:O	10:AJ:90:LEU:HB2	1.85	0.76
50:DR:99:LYS:N	50:DR:99:LYS:HD2	2.00	0.76
36:DA:2262:U:H2'	36:DA:2263:C:C5	2.20	0.76
31:D5:49:CYS:SG	31:D5:50:GLY:N	2.59	0.76
36:BA:116:C:H2'	36:BA:117:G:C8	2.20	0.76
20:CT:36:LEU:HD11	20:CT:59:ALA:HB2	1.68	0.76
36:BA:534:U:O2'	53:BU:49:HIS:HD2	1.68	0.76
36:BA:1165:U:H2'	36:BA:1166:C:H6	1.51	0.76
36:BA:751:A:H5'	55:BW:90:ARG:HA	1.67	0.76
37:BB:34:U:H4'	37:BB:35:U:C5	2.20	0.76
36:DA:272(D):G:H2'	36:DA:272(E):G:H8	1.50	0.76
24:AY:14:A:H2'	24:AY:15:G:O4'	1.84	0.76
11:CK:38:ASN:N	11:CK:38:ASN:HD22	1.84	0.76

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CD:6:GLY:O	4:CD:8:VAL:HG13	1.86	0.76
1:CA:1249:C:H6	1:CA:1249:C:H5'	1.51	0.76
5:CE:41:VAL:CG1	5:CE:113:ALA:HA	2.15	0.76
25:CZ:356:PRO:N	25:CZ:359:VAL:HG21	2.01	0.76
41:DF:118:ALA:HA	41:DF:123:LEU:HB2	1.68	0.76
41:DF:24:LEU:CB	41:DF:25:PRO:HD2	2.16	0.76
25:AZ:234:ARG:HD2	25:AZ:289:LEU:HD22	1.68	0.76
38:BC:75:LEU:O	38:BC:114:VAL:HG22	1.86	0.76
43:BH:52:VAL:HG11	43:BH:66:GLY:H	1.51	0.76
36:DA:536:A:H2'	36:DA:537:C:C6	2.20	0.76
16:AP:67:THR:HG22	16:AP:68:ASP:H	1.49	0.76
2:CB:61:LEU:HD23	2:CB:68:ILE:HD11	1.68	0.76
7:AG:24:THR:HA	7:AG:27:ILE:CD1	2.16	0.76
10:CJ:78:ASN:HD22	10:CJ:81:THR:CG2	1.98	0.76
1:AA:1003:G:H2'	1:AA:1004:A:C4'	2.16	0.76
36:BA:83:G:HO2'	36:BA:84:A:H8	1.33	0.76
48:DP:12:ALA:HB1	48:DP:16:ARG:HB3	1.66	0.76
57:BY:86:ARG:HB3	57:BY:88:LYS:NZ	1.99	0.76
2:AB:204:ASN:HD21	2:AB:207:ALA:H	1.34	0.76
31:B5:36:CYS:SG	31:B5:38:ALA:HB3	2.25	0.76
1:AA:1323:G:O2'	1:AA:1324:A:H5'	1.86	0.76
52:BT:107:ASP:OD2	52:BT:109:GLU:HG3	1.85	0.76
36:DA:1411:C:H2'	36:DA:1412:A:C8	2.20	0.76
36:BA:1612:C:N4	36:BA:1619:G:H1	1.83	0.76
1:CA:1070:U:H2'	1:CA:1071:C:H6	1.50	0.76
36:DA:2570:G:H2'	36:DA:2571:C:H6	1.51	0.76
50:BR:103:ARG:NH1	50:BR:110:PRO:HD3	2.00	0.76
1:AA:807:A:H2'	1:AA:808:C:H6	1.51	0.76
32:D6:36:LEU:HD12	32:D6:50:ARG:NH2	2.00	0.75
56:BX:14:SER:O	56:BX:17:ALA:HB3	1.85	0.75
38:BC:114:VAL:CB	38:BC:149:ILE:HD11	2.08	0.75
8:AH:11:THR:HG22	8:AH:15:ASN:ND2	2.01	0.75
52:DT:89:VAL:CG1	52:DT:91:ARG:HE	1.99	0.75
58:DZ:127:LYS:HZ3	58:DZ:164:ALA:HB2	1.49	0.75
19:AS:44:MET:SD	19:AS:44:MET:N	2.58	0.75
36:BA:1539:G:C2	36:BA:1540:U:H1'	2.21	0.75
25:CZ:389:ARG:HA	25:CZ:395:VAL:HG13	1.66	0.75
42:DG:46:ALA:CB	42:DG:88:ILE:HG13	2.16	0.75
5:AE:92:LYS:O	5:AE:118:ILE:HD12	1.85	0.75
1:AA:1152:A:O2'	1:AA:1153:C:H5'	1.86	0.75
36:DA:2358:G:O2'	36:DA:2359:C:H5'	1.86	0.75
56:DX:56:THR:HG22	56:DX:79:ALA:CB	2.16	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BS:46:VAL:HG12	51:BS:47:THR:H	1.50	0.75
3:AC:64:VAL:O	3:AC:100:ALA:HB3	1.86	0.75
1:AA:1442(A):G:H5'	1:AA:1442(B):A:OP1	1.86	0.75
1:CA:1242:C:H2'	1:CA:1243:C:C6	2.20	0.75
34:D8:59:LYS:HD3	48:DP:50:ARG:HB3	1.67	0.75
36:BA:2228:G:OP2	39:BD:261:LYS:HE3	1.86	0.75
41:DF:3:GLU:O	41:DF:19:GLU:HB2	1.86	0.75
35:B9:36:GLN:NE2	36:BA:1031:G:H21	1.84	0.75
36:BA:2008:C:H2'	36:BA:2009:G:C8	2.21	0.75
48:BP:96:THR:O	48:BP:99:LEU:HB3	1.86	0.75
36:DA:1998:G:O2'	36:DA:1999:C:H5'	1.86	0.75
1:CA:1346:A:H61	1:CA:1374:A:H3'	1.50	0.75
36:BA:1514:U:H2'	36:BA:1515:G:H8	1.50	0.75
36:DA:508:G:H5'	36:DA:509:C:OP1	1.87	0.75
58:DZ:69:THR:HG22	58:DZ:90:VAL:HA	1.68	0.75
26:D0:77:ARG:HH22	36:DA:857:C:H5'	1.49	0.75
36:DA:440:G:N2	41:DF:46:ARG:HH21	1.85	0.75
2:CB:33:TYR:HB2	2:CB:43:ASP:HB2	1.66	0.75
36:DA:1842:G:H2'	36:DA:1843:C:C6	2.21	0.75
18:CR:50:ILE:HD12	18:CR:70:ILE:HG21	1.67	0.75
39:DD:66:ASP:CG	39:DD:103:ARG:HH21	1.87	0.75
1:AA:1292:U:H2'	1:AA:1293:G:H8	1.51	0.75
37:BB:34:U:H4'	37:BB:35:U:H5	1.50	0.75
12:AL:89:ARG:NH1	12:AL:91:LYS:HD3	2.00	0.75
9:AI:110:GLU:HG2	9:AI:113:LYS:NZ	2.01	0.75
49:DQ:110:THR:HG23	49:DQ:113:GLN:H	1.48	0.75
11:CK:82:VAL:HG12	11:CK:108:ILE:HA	1.68	0.75
34:B8:3:LYS:HD3	36:BA:242:G:O5'	1.86	0.75
41:DF:2:LYS:HG3	41:DF:25:PRO:HG2	1.69	0.75
40:BE:47:VAL:HG21	40:BE:85:ASN:HA	1.68	0.75
36:DA:811:U:OP2	48:DP:24:GLY:HA2	1.86	0.75
54:DV:22:VAL:HG22	54:DV:92:THR:O	1.87	0.75
51:BS:67:ARG:HH21	51:BS:100:ALA:HB3	1.49	0.75
56:BX:36:LYS:CA	56:BX:39:ILE:HB	2.15	0.75
52:BT:58:ASN:ND2	52:BT:58:ASN:N	2.34	0.75
25:AZ:225:VAL:HG12	25:AZ:300:ARG:HA	1.69	0.75
19:CS:63:THR:HG22	19:CS:66:MET:HG2	1.67	0.75
1:CA:1442:G:H2'	1:CA:1442(B):A:C2	2.21	0.75
49:DQ:70:PRO:HA	49:DQ:94:VAL:O	1.86	0.75
1:CA:619:U:C2	4:CD:135:LEU:HD21	2.21	0.75
36:BA:1370:C:H3'	36:BA:1371:G:H8	1.50	0.75
36:DA:269:U:O2	36:DA:269:U:H2'	1.85	0.75

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1013:C:O2'	36:BA:1014:U:H5'	1.86	0.75
41:BF:57:VAL:HG12	41:BF:58:ALA:N	2.01	0.75
56:BX:56:THR:HG22	56:BX:79:ALA:CB	2.16	0.75
40:DE:198:VAL:HG12	40:DE:199:ARG:N	2.01	0.75
39:BD:183:ARG:HD2	39:BD:270:ILE:HG22	1.68	0.75
2:CB:168:THR:HG23	2:CB:192:SER:CB	2.17	0.75
52:DT:13:ARG:NE	52:DT:13:ARG:HA	2.01	0.75
1:AA:1346:A:H61	1:AA:1374:A:H3'	1.51	0.75
1:CA:1251:A:H4'	9:CI:12:GLU:OE1	1.86	0.75
36:DA:709:U:H2'	36:DA:710:G:C8	2.21	0.75
43:BH:33:LEU:HD12	43:BH:75:ALA:CA	2.17	0.75
43:DH:118:PRO:HG2	43:DH:121:ILE:HB	1.69	0.75
42:DG:51:ARG:HE	42:DG:51:ARG:HA	1.47	0.75
36:DA:145:G:C3'	36:DA:146:G:H5''	2.16	0.75
2:AB:204:ASN:HD21	2:AB:207:ALA:N	1.84	0.75
19:AS:6:LYS:HD2	19:AS:6:LYS:H	1.49	0.75
36:DA:2752:C:H2'	36:DA:2752:C:O2	1.85	0.75
36:DA:2861:G:O2'	36:DA:2862:G:H5'	1.86	0.75
36:BA:2422:A:H4'	36:BA:2423:U:OP1	1.86	0.75
39:DD:166:GLN:HA	39:DD:166:GLN:NE2	2.00	0.75
41:DF:32:LEU:O	41:DF:36:VAL:HG23	1.87	0.75
36:DA:2025:C:H2'	36:DA:2026:C:H6	1.50	0.75
36:DA:2287:A:H62	36:DA:2344:U:H3	1.35	0.75
52:DT:50:ILE:HA	52:DT:99:LEU:HD11	1.66	0.75
36:DA:296:C:O2'	36:DA:297:C:H5'	1.87	0.75
10:CJ:50:ILE:HD13	10:CJ:50:ILE:N	1.99	0.75
14:CN:23:ARG:HA	14:CN:30:ALA:HA	1.69	0.75
1:AA:1489:G:O2'	1:AA:1490:C:H5'	1.87	0.75
4:AD:100:ARG:NH2	4:AD:118:ARG:HH12	1.80	0.75
36:BA:1208:C:H2'	36:BA:1209:G:H8	1.50	0.75
55:DW:5:ALA:HB2	55:DW:54:ALA:CB	2.17	0.75
3:CC:53:ALA:HB2	3:CC:115:LEU:HG	1.68	0.75
10:AJ:78:ASN:HD22	10:AJ:81:THR:CG2	1.98	0.75
36:BA:2306:C:H4'	42:BG:136:ARG:NH2	2.01	0.75
42:DG:63:ILE:HA	42:DG:143:GLU:CD	2.06	0.75
36:BA:687:C:H2'	36:BA:688:U:O4'	1.86	0.75
52:BT:109:GLU:O	52:BT:112:ARG:HG2	1.86	0.75
39:DD:66:ASP:OD2	39:DD:69:ARG:HG3	1.85	0.75
12:CL:45:PRO:HD3	12:CL:51:ALA:O	1.87	0.75
26:D0:20:ARG:H	26:D0:20:ARG:HD2	1.51	0.75
47:BO:4:PRO:O	47:BO:5:GLN:HB2	1.87	0.75
34:B8:61:LEU:CD1	34:B8:62:LEU:H	1.98	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2338:G:H2'	36:BA:2339:G:H8	1.50	0.75
34:D8:61:LEU:HD12	34:D8:62:LEU:H	1.50	0.75
5:CE:105:VAL:H	5:CE:106:PRO:HD2	1.50	0.75
41:BF:160:ASN:OD1	41:BF:163:VAL:HG23	1.87	0.75
17:AQ:5:VAL:HG13	17:AQ:59:ILE:O	1.86	0.75
2:CB:185:ILE:HG22	2:CB:199:TYR:HB2	1.68	0.75
15:CO:39:LEU:HD13	15:CO:56:LEU:HB2	1.69	0.75
36:BA:2287:A:H62	36:BA:2344:U:H3	1.33	0.75
37:DB:82:G:H2'	37:DB:83:G:H8	1.52	0.75
36:BA:1473:G:C2	36:BA:1474:C:H1'	2.22	0.75
42:BG:21:ARG:NH2	42:BG:22:ARG:HG2	2.01	0.75
4:CD:107:ARG:HH21	4:CD:194:LEU:CD1	1.99	0.75
42:DG:34:LEU:HD11	42:DG:100:TRP:CZ2	2.22	0.75
1:AA:1468:A:H2'	1:AA:1469:G:O4'	1.86	0.75
1:AA:401:C:H2'	1:AA:402:G:H8	1.51	0.75
31:D5:16:ARG:NH1	31:D5:20:ARG:HH11	1.84	0.75
33:D7:12:ARG:HH21	33:D7:44:PRO:HB3	1.52	0.75
36:DA:736:C:H42	36:DA:760:G:H1	1.34	0.75
1:AA:936:C:H2'	1:AA:937:A:H8	1.51	0.75
36:BA:1435:G:H1	36:BA:1557:C:H42	1.33	0.75
55:BW:3:ALA:O	55:BW:106:ILE:HA	1.87	0.75
48:BP:62:LEU:HD23	48:BP:62:LEU:H	1.49	0.75
36:DA:1242:A:H5'	36:DA:1243:G:OP2	1.87	0.75
36:DA:318:C:O2'	36:DA:319:C:H5'	1.86	0.75
36:BA:633:A:H5"	48:BP:77:ARG:HH12	1.49	0.75
52:BT:89:VAL:HG11	52:BT:91:ARG:HE	1.51	0.75
52:BT:89:VAL:CG1	52:BT:91:ARG:HE	2.00	0.75
6:AF:69:GLU:CD	6:AF:69:GLU:H	1.88	0.75
39:DD:79:VAL:HG23	39:DD:115:GLN:O	1.86	0.75
36:DA:2833:G:H3'	36:DA:2834:G:H5'	1.66	0.75
51:DS:15:ARG:HH11	51:DS:15:ARG:HB2	1.52	0.75
57:BY:13:VAL:HG13	57:BY:14:LEU:N	2.01	0.75
36:BA:2110:G:H1	36:BA:2178:C:N4	1.85	0.75
42:BG:87:PRO:O	42:BG:88:ILE:HD13	1.86	0.75
43:DH:92:ILE:C	43:DH:94:TYR:H	1.89	0.75
1:CA:584:G:H2'	1:CA:585:G:C8	2.21	0.75
36:BA:2887:U:H2'	36:BA:2888:C:C6	2.19	0.75
36:DA:271:A:C2	36:DA:366:C:H1'	2.20	0.75
33:B7:8:ASN:HD22	33:B7:8:ASN:C	1.89	0.75
7:CG:79:ARG:HG3	7:CG:83:ALA:C	2.06	0.75
50:BR:103:ARG:HH11	50:BR:110:PRO:HD3	1.52	0.75
6:CF:67:MET:HB2	6:CF:68:PRO:HD2	1.68	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:DO:4:PRO:O	47:DO:5:GLN:HB2	1.87	0.75
36:BA:2861:G:O2'	36:BA:2862:G:H5'	1.86	0.75
3:CC:150:LYS:HG3	3:CC:169:ALA:HB2	1.69	0.75
25:AZ:347:THR:HG22	25:AZ:348:ASP:H	1.51	0.75
11:CK:27:ASN:HA	11:CK:56:GLY:HA2	1.67	0.75
36:DA:2463:C:O2'	36:DA:2464:C:H5'	1.85	0.75
36:BA:1350:C:H2'	36:BA:1351:C:H6	1.51	0.75
39:BD:35:LYS:HZ3	39:BD:36:PRO:HD3	1.51	0.75
8:CH:9:MET:SD	8:CH:32:LYS:HG2	2.26	0.75
36:BA:1665:A:H2'	36:BA:1666:G:C5'	2.17	0.75
1:CA:386:C:H2'	1:CA:387:U:C5'	2.17	0.75
36:DA:1899:G:N2	36:DA:1902:C:H41	1.85	0.75
55:DW:71:VAL:HA	55:DW:107:LEU:HA	1.67	0.75
36:DA:38:A:H2'	36:DA:39:C:H6	1.51	0.75
36:BA:2201:C:H2'	36:BA:2202:C:H6	1.52	0.75
38:BC:6:ARG:HH11	38:BC:6:ARG:HG2	1.52	0.75
46:DN:21:LYS:C	46:DN:61:ARG:HB2	2.07	0.75
36:DA:1165:U:H2'	36:DA:1166:C:C6	2.22	0.75
36:BA:836:G:H2'	36:BA:837:C:C6	2.21	0.75
1:AA:219:C:H2'	1:AA:220:G:O4'	1.86	0.75
1:AA:688:G:H2'	1:AA:689:C:H6	1.52	0.75
36:BA:2542:A:H5'	36:BA:2543:G:OP1	1.86	0.75
36:DA:216:A:H2'	36:DA:217:G:O4'	1.86	0.75
36:DA:2136:C:H42	36:DA:2155:G:H1	1.32	0.75
34:D8:50:LEU:HD12	34:D8:51:ALA:N	2.00	0.75
1:CA:8:A:H5'	5:CE:120:THR:O	1.86	0.75
40:DE:55:ASN:ND2	40:DE:75:VAL:HG22	2.01	0.75
1:CA:1054:C:H6	1:CA:1196:U:C4	2.04	0.75
4:CD:31:CYS:C	4:CD:33:MET:H	1.89	0.75
48:BP:100:LEU:HB3	48:BP:106:LEU:HD13	1.69	0.75
36:BA:1998:G:O2'	36:BA:1999:C:H5'	1.87	0.75
52:DT:89:VAL:HG11	52:DT:91:ARG:HE	1.52	0.75
51:DS:67:ARG:HH21	51:DS:100:ALA:HB3	1.52	0.75
36:BA:2262:U:H2'	36:BA:2263:C:C5	2.21	0.75
2:CB:204:ASN:HD21	2:CB:207:ALA:N	1.83	0.75
1:CA:1512:U:H2'	1:CA:1513:A:C8	2.21	0.75
46:BN:21:LYS:HE3	46:BN:25:ARG:HB3	1.69	0.75
18:AR:53:ARG:NH2	18:AR:59:SER:HA	2.01	0.75
36:DA:1327:C:H42	36:DA:1647:G:N2	1.85	0.75
1:CA:1249:C:H5''	9:CI:70:LYS:NZ	2.02	0.75
55:BW:71:VAL:HA	55:BW:107:LEU:HA	1.67	0.75
36:BA:287:C:H2'	36:BA:288:C:C6	2.22	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BH:130:ARG:NH1	43:BH:130:ARG:HB3	2.02	0.75
28:D2:11:GLU:O	28:D2:15:LYS:HG2	1.87	0.75
29:B3:59:VAL:HG12	29:B3:60:GLU:N	1.99	0.75
41:BF:118:ALA:HA	41:BF:123:LEU:HB2	1.69	0.74
41:BF:5:ALA:HA	41:BF:123:LEU:HD23	1.67	0.74
43:DH:42:ARG:O	43:DH:43:VAL:HG13	1.87	0.74
36:BA:1268:A:H2'	36:BA:1269:A:O4'	1.87	0.74
13:AM:52:GLU:HG2	13:AM:55:ARG:HH11	1.51	0.74
42:BG:91:ARG:C	42:BG:91:ARG:HD2	2.08	0.74
47:BO:107:ARG:NH1	52:BT:35:LYS:HD2	2.02	0.74
10:AJ:61:GLU:HG3	14:AN:58:LYS:HE2	1.68	0.74
10:CJ:50:ILE:CD1	10:CJ:50:ILE:H	2.00	0.74
14:CN:22:THR:O	14:CN:23:ARG:HB3	1.87	0.74
4:AD:194:LEU:HB3	4:AD:196:LEU:HD13	1.68	0.74
4:CD:79:PHE:HA	4:CD:93:PHE:CD2	2.22	0.74
13:CM:68:GLY:C	13:CM:70:LEU:H	1.90	0.74
58:DZ:28:MET:HA	58:DZ:88:PHE:HB2	1.69	0.74
3:AC:26:LYS:HG3	3:AC:27:LYS:H	1.52	0.74
36:BA:2305:A:H61	42:BG:43:LEU:HD13	1.52	0.74
36:BA:458:G:N2	36:BA:469:G:H2'	2.01	0.74
36:BA:1027:A:N3	36:BA:1027:A:H2'	2.02	0.74
36:DA:2243:U:H2'	36:DA:2244:U:C6	2.22	0.74
25:AZ:313:HIS:HB2	25:AZ:380:LEU:HD12	1.67	0.74
36:DA:1164:G:O2'	36:DA:1165:U:H5'	1.87	0.74
1:CA:1169:A:H2'	1:CA:1170:A:C8	2.23	0.74
36:BA:1949:G:H1	36:BA:1957:C:H42	1.33	0.74
37:DB:34:U:H4'	37:DB:35:U:C5	2.21	0.74
1:CA:688:G:H2'	1:CA:689:C:H6	1.52	0.74
19:CS:78:ARG:HB2	19:CS:81:ARG:HH11	1.52	0.74
1:CA:1202:G:H4'	14:CN:29:ARG:HD3	1.67	0.74
1:CA:987:G:H2'	1:CA:988:G:H8	1.52	0.74
48:DP:100:LEU:HB3	48:DP:106:LEU:HD13	1.67	0.74
41:DF:5:ALA:HA	41:DF:123:LEU:HD23	1.68	0.74
24:AY:53:G:H5''	25:AZ:332:THR:HG21	1.68	0.74
36:BA:768:G:H2'	36:BA:769:G:H8	1.49	0.74
41:BF:20:LEU:HD12	41:BF:199:TRP:HH2	1.52	0.74
36:DA:2108:C:O2	36:DA:2108:C:H2'	1.86	0.74
1:CA:17:U:H2'	1:CA:18:C:H6	1.52	0.74
1:CA:818:G:O2'	1:CA:819:A:H5'	1.87	0.74
47:DO:111:PHE:O	47:DO:115:VAL:HG23	1.87	0.74
3:CC:148:GLY:HA3	3:CC:172:ARG:O	1.86	0.74
2:CB:87:ARG:HE	2:CB:233:SER:CB	2.00	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DG:133:LEU:HD12	42:DG:157:ILE:HB	1.68	0.74
1:AA:80:G:C3'	1:AA:81:U:H5'	2.17	0.74
42:DG:46:ALA:HB3	42:DG:88:ILE:HG13	1.69	0.74
20:CT:57:ARG:NH1	20:CT:57:ARG:HB2	2.01	0.74
36:DA:272(H):C:C2'	36:DA:272(I):U:H5''	2.17	0.74
36:BA:2441:C:H2'	36:BA:2442:C:H6	1.51	0.74
1:CA:673:G:H5''	6:CF:87:ARG:NH1	2.02	0.74
31:B5:36:CYS:SG	31:B5:48:GLU:O	2.45	0.74
1:AA:1493:A:N1	24:AY:37:YG:H5''	2.01	0.74
36:BA:1411:C:H2'	36:BA:1412:A:C8	2.21	0.74
1:AA:1320:C:H5''	19:AS:70:LYS:HG3	1.68	0.74
36:BA:364:C:H2'	36:BA:364:C:O2	1.86	0.74
34:B8:61:LEU:HD13	34:B8:62:LEU:HG	1.67	0.74
36:DA:2840:C:H5''	50:DR:53:HIS:HD2	1.48	0.74
28:D2:38:GLN:CB	28:D2:44:LEU:HD13	2.13	0.74
22:CV:56:C:C1'	42:DG:76:SER:HB2	2.17	0.74
6:AF:92:LYS:O	6:AF:94:GLN:HG3	1.88	0.74
42:BG:34:LEU:HA	42:BG:161:THR:CG2	2.18	0.74
36:BA:491:G:O2'	36:BA:492:A:H5'	1.86	0.74
19:CS:51:VAL:HG12	19:CS:52:TYR:H	1.51	0.74
9:AI:99:LEU:HB3	9:AI:101:PHE:CD1	2.22	0.74
40:DE:38:THR:HG22	40:DE:40:GLU:H	1.52	0.74
25:CZ:347:THR:HG22	25:CZ:348:ASP:H	1.53	0.74
55:DW:11:ARG:C	55:DW:11:ARG:HE	1.89	0.74
36:BA:979:G:H8	36:BA:979:G:O5'	1.68	0.74
36:BA:2108:C:O2	36:BA:2108:C:H2'	1.86	0.74
36:BA:1327:C:N4	36:BA:1647:G:H21	1.84	0.74
1:CA:100:C:H2'	1:CA:101:A:C8	2.22	0.74
36:BA:898:C:H2'	36:BA:899:A:H5'	1.67	0.74
36:BA:2402:C:H2'	36:BA:2403:C:H5'	1.68	0.74
34:D8:61:LEU:HD13	34:D8:62:LEU:HG	1.69	0.74
35:B9:4:ARG:HB2	36:BA:2466:C:OP1	1.87	0.74
32:B6:7:ILE:HG22	32:B6:7:ILE:O	1.88	0.74
22:CW:17:C:H41	36:DA:2110:G:H21	1.34	0.74
1:CA:1003:G:H2'	1:CA:1004:A:C4'	2.16	0.74
49:DQ:32:TYR:CE2	49:DQ:111:GLU:HG3	2.21	0.74
58:DZ:77:ASP:O	58:DZ:78:LYS:HB2	1.87	0.74
39:BD:136:ILE:HD12	39:BD:136:ILE:N	2.02	0.74
36:BA:508:G:H5'	36:BA:509:C:OP1	1.88	0.74
43:BH:118:PRO:HG3	43:BH:121:ILE:HD12	1.68	0.74
43:BH:44:VAL:HG12	43:BH:45:VAL:N	2.02	0.74
1:AA:450:G:H5''	1:AA:451:A:H3'	1.69	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:CY:6:U:C2'	24:CY:7:A:H5''	2.17	0.74
29:B3:7:LYS:O	29:B3:54:VAL:HA	1.87	0.74
39:BD:248:SER:HB2	39:BD:249:PRO:HD2	1.69	0.74
1:AA:711:G:H2'	1:AA:712:A:C8	2.23	0.74
1:AA:627:G:H2'	1:AA:628:G:C8	2.21	0.74
36:DA:116:C:H2'	36:DA:117:G:C8	2.22	0.74
46:BN:21:LYS:C	46:BN:61:ARG:HB2	2.08	0.74
16:CP:49:LEU:HD12	16:CP:50:LYS:N	2.03	0.74
12:CL:25:PRO:C	12:CL:27:LEU:H	1.88	0.74
36:DA:271(F):C:H2'	36:DA:271(G):C:O4'	1.88	0.74
36:BA:2144:U:H2'	36:BA:2146:C:H5	1.51	0.74
39:BD:35:LYS:HD2	39:BD:35:LYS:C	2.06	0.74
40:BE:111:ARG:HA	50:BR:2:ARG:CG	2.16	0.74
42:BG:140:ILE:HD12	42:BG:141:PHE:N	2.03	0.74
53:DU:92:ARG:HD2	54:DV:11:GLN:CG	2.17	0.74
2:CB:172:ILE:H	2:CB:172:ILE:HD12	1.52	0.74
13:AM:120:LYS:O	13:AM:121:LYS:HG3	1.88	0.74
10:AJ:49:VAL:CG2	14:AN:41:ARG:HB2	2.17	0.74
9:CI:9:ARG:HB2	9:CI:104:ARG:NH1	2.01	0.74
37:DB:18:G:H2'	37:DB:19:G:O4'	1.87	0.74
13:CM:57:ARG:HG2	13:CM:61:GLU:HB2	1.68	0.74
42:DG:46:ALA:HB3	42:DG:88:ILE:CG1	2.18	0.74
10:AJ:8:LEU:HG	10:AJ:96:ILE:HG22	1.70	0.74
27:D1:50:ARG:NH2	36:DA:2200:C:H5'	2.02	0.74
54:BV:22:VAL:HG22	54:BV:92:THR:O	1.87	0.74
36:DA:234:C:H2'	36:DA:235:U:H6	1.50	0.74
1:CA:627:G:H2'	1:CA:628:G:C8	2.22	0.74
36:BA:2570:G:H2'	36:BA:2571:C:H6	1.53	0.74
36:BA:271(F):C:H2'	36:BA:271(G):C:O4'	1.87	0.74
22:CW:74:C:H5'	22:CW:75:C:OP2	1.88	0.74
36:DA:991:C:H5'	36:DA:991:C:H6	1.51	0.74
36:BA:2359:C:C2'	36:BA:2360:A:H5'	2.18	0.74
50:DR:96:ARG:NH1	50:DR:117:VAL:HG23	2.01	0.74
50:DR:13:HIS:O	50:DR:17:ARG:HB2	1.88	0.74
50:DR:32:GLY:HA2	50:DR:116:LEU:HG	1.70	0.74
25:AZ:146:LEU:N	25:AZ:149:LEU:HB3	2.03	0.74
36:BA:1279:G:H1	36:BA:1291:C:H42	1.35	0.74
36:BA:2007:C:O2'	36:BA:2008:C:H5'	1.88	0.74
36:BA:2827:C:H2'	36:BA:2828:C:C6	2.23	0.74
50:BR:32:GLY:HA2	50:BR:116:LEU:HG	1.70	0.74
53:DU:88:ILE:C	53:DU:90:VAL:H	1.91	0.74
36:BA:1484:G:H2'	36:BA:1485:G:C5'	2.17	0.74

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:254:G:N2	17:AQ:16:GLN:HE22	1.85	0.74
1:CA:1047:G:H1	1:CA:1210:C:H42	1.32	0.74
2:CB:17:PHE:O	2:CB:17:PHE:HD2	1.70	0.74
37:DB:81:G:H2'	37:DB:82:G:H5'	1.70	0.74
1:AA:1016:A:H2'	1:AA:1017:G:O4'	1.86	0.74
2:AB:17:PHE:HD2	2:AB:17:PHE:O	1.69	0.74
36:DA:862:G:N3	36:DA:863:A:H1'	2.01	0.74
1:AA:1154:G:H2'	1:AA:1155:G:C8	2.20	0.74
36:DA:827:U:H2'	36:DA:2068:U:O2	1.87	0.74
36:DA:904:C:H2'	36:DA:905:U:C6	2.22	0.74
1:AA:473:G:H2'	1:AA:474:G:C8	2.23	0.74
29:D3:11:SER:HB3	36:DA:988:A:P	2.27	0.74
36:DA:898:C:H2'	36:DA:899:A:H5'	1.69	0.74
36:BA:106:C:H2'	36:BA:107:C:H6	1.52	0.74
17:AQ:99:SER:C	17:AQ:100:LYS:HG3	2.08	0.74
36:BA:1051:G:OP1	36:BA:2752:C:H1'	1.87	0.74
27:B1:71:TYR:O	27:B1:74:VAL:HB	1.87	0.74
36:DA:1208:C:H2'	36:DA:1209:G:H8	1.52	0.74
47:BO:7:TYR:HE1	47:BO:20:MET:HE3	1.50	0.74
1:AA:734:G:O2'	1:AA:735:C:H5'	1.87	0.74
36:DA:1290:C:H2'	36:DA:1291:C:C6	2.23	0.74
40:DE:47:VAL:HG21	40:DE:85:ASN:HA	1.69	0.74
36:DA:2389:G:H5''	36:DA:2390:U:H5'	1.69	0.74
43:BH:63:SER:O	43:BH:67:LEU:HB2	1.87	0.74
14:AN:7:ILE:O	14:AN:11:LYS:HG3	1.88	0.74
42:BG:60:LEU:HD22	42:BG:63:ILE:HD11	1.69	0.74
1:AA:1106:G:O2'	1:AA:1107:C:H5'	1.88	0.74
22:AV:68:C:C3'	22:AV:69:G:H5''	2.17	0.74
36:BA:1335:U:H2'	36:BA:1336:A:C8	2.22	0.74
39:BD:139:GLY:H	39:BD:165:ILE:HB	1.53	0.74
57:DY:86:ARG:HG2	57:DY:87:LYS:N	2.03	0.74
39:DD:63:ARG:CG	39:DD:63:ARG:HH11	2.00	0.74
39:DD:64:ILE:HG13	39:DD:65:ILE:N	2.02	0.74
8:CH:17:THR:HB	8:CH:78:GLN:OE1	1.86	0.74
38:DC:99:ILE:HD12	38:DC:102:LYS:NZ	2.03	0.74
37:BB:18:G:H2'	37:BB:19:G:O4'	1.87	0.74
39:BD:186:HIS:HB3	39:BD:189:CYS:SG	2.26	0.74
36:DA:1385:G:H4'	36:DA:1386:C:OP1	1.85	0.74
1:CA:607:A:O2'	1:CA:608:A:H5'	1.87	0.74
1:CA:1292:U:H2'	1:CA:1293:G:H8	1.53	0.74
36:BA:733:G:H8	36:BA:733:G:O5'	1.71	0.74
10:CJ:80:LYS:HB3	10:CJ:80:LYS:NZ	2.03	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1268:A:H2'	36:DA:1269:A:O4'	1.87	0.74
50:DR:60:LEU:O	50:DR:63:ARG:HB2	1.88	0.74
38:DC:75:LEU:O	38:DC:114:VAL:HG22	1.88	0.74
38:BC:94:VAL:CG1	38:BC:95:GLY:H	1.94	0.74
41:BF:2:LYS:HG3	41:BF:25:PRO:HG2	1.69	0.74
36:DA:2040:C:H2'	36:DA:2041:U:C6	2.23	0.74
41:DF:84:VAL:HG12	41:DF:85:GLY:N	2.03	0.74
40:BE:52:LEU:HB2	40:BE:76:ARG:HB2	1.69	0.74
6:CF:69:GLU:H	6:CF:69:GLU:CD	1.91	0.74
58:BZ:163:LEU:HD21	58:BZ:165:VAL:HG23	1.68	0.74
57:DY:37:VAL:O	57:DY:38:ILE:HB	1.87	0.74
57:DY:73:ARG:HA	57:DY:73:ARG:HE	1.52	0.74
58:DZ:153:SER:H	58:DZ:167:PRO:HB2	1.52	0.74
7:CG:24:THR:HA	7:CG:27:ILE:CD1	2.18	0.74
3:CC:181:ASN:HD21	3:CC:204:LEU:HD12	1.52	0.74
3:AC:58:GLU:N	3:AC:65:ALA:HB3	2.03	0.74
36:DA:139(A):G:N2	56:DX:44:GLU:OE1	2.20	0.74
56:DX:44:GLU:OE2	56:DX:50:LYS:HG3	1.87	0.74
36:DA:768:G:H2'	36:DA:769:G:C8	2.23	0.74
42:DG:169:ALA:O	42:DG:173:LEU:HG	1.88	0.74
12:CL:113:ARG:CB	12:CL:122:THR:HG21	2.17	0.74
2:AB:69:LEU:HD12	2:AB:71:VAL:HG23	1.67	0.74
27:D1:70:VAL:O	27:D1:73:LEU:HB2	1.88	0.74
36:DA:608:A:H2'	36:DA:609:A:C8	2.23	0.74
36:DA:904:C:H4'	58:DZ:169:GLU:OE1	1.86	0.74
20:CT:62:LEU:HD23	20:CT:62:LEU:O	1.87	0.74
36:BA:1498:C:C3'	36:BA:1499:C:H5''	2.17	0.74
27:D1:40:ARG:HH22	27:D1:42:GLN:HE21	1.33	0.74
1:CA:1314:C:OP2	19:CS:6:LYS:HG3	1.87	0.74
1:CA:936:C:H2'	1:CA:937:A:H8	1.51	0.74
36:BA:272(D):G:H2'	36:BA:272(E):G:H8	1.52	0.74
6:CF:60:PHE:CZ	18:CR:78:LEU:HD21	2.22	0.74
13:AM:94:ARG:HG2	19:AS:82:GLY:N	2.03	0.74
11:CK:17:GLY:HA3	11:CK:77:MET:SD	2.27	0.74
22:CV:74:C:N4	36:DA:2252:G:H1	1.86	0.74
24:CY:40:G:H2'	24:CY:41:G:C5'	2.14	0.74
36:DA:628:G:H2'	36:DA:629:G:H5''	1.68	0.74
1:AA:373:A:O2'	1:AA:374:A:H5'	1.88	0.74
8:CH:14:ARG:HG3	8:CH:83:ILE:CG2	2.17	0.74
47:BO:76:ALA:HB3	52:BT:75:ILE:HD13	1.70	0.74
3:CC:70:VAL:HG12	3:CC:71:ALA:N	2.03	0.74
39:BD:129:ASN:O	39:BD:193:VAL:HG12	1.88	0.74

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:664:C:O2'	36:DA:665:C:H5'	1.88	0.74
1:AA:167:G:H2'	1:AA:168:G:H8	1.53	0.74
36:BA:1092:C:H42	36:BA:1100:C:N4	1.83	0.74
1:CA:1512:U:H3	1:CA:1523:G:H1	1.35	0.74
39:DD:129:ASN:O	39:DD:193:VAL:HG12	1.86	0.74
54:BV:98:GLU:OE2	54:BV:100:ARG:HD3	1.88	0.74
36:DA:2157:G:O2'	36:DA:2158:A:H5'	1.87	0.74
12:CL:86:ARG:HG2	12:CL:87:GLY:H	1.52	0.74
3:AC:43:LEU:O	3:AC:47:LEU:HB2	1.87	0.74
36:DA:2854:G:H2'	36:DA:2855:C:C6	2.23	0.74
36:DA:287:C:H2'	36:DA:288:C:C6	2.22	0.74
4:AD:88:VAL:HG12	4:AD:90:GLY:H	1.53	0.74
46:BN:89:LYS:O	46:BN:93:THR:HG22	1.88	0.74
24:CY:30:C:O2	24:CY:30:C:H2'	1.88	0.74
32:B6:36:LEU:HD12	32:B6:50:ARG:CZ	2.17	0.74
40:DE:57:LYS:CA	40:DE:57:LYS:HE3	2.09	0.74
36:BA:2010:G:OP1	55:BW:41:LYS:HD3	1.87	0.74
1:CA:797:C:OP1	11:CK:124:LYS:HE3	1.86	0.74
1:AA:255:G:H1'	17:AQ:16:GLN:NE2	2.03	0.74
6:CF:37:VAL:HG12	6:CF:38:GLU:N	2.03	0.74
1:CA:953:G:H2'	1:CA:954:G:O4'	1.85	0.74
52:BT:64:ARG:HB2	52:BT:73:GLU:HG2	1.68	0.74
3:CC:30:ARG:HG3	14:CN:37:PHE:O	1.88	0.74
14:CN:59:ALA:HB1	14:CN:61:TRP:HZ3	1.52	0.74
1:AA:1396:A:H2	5:AE:19:MET:HG3	1.53	0.74
47:BO:111:PHE:O	47:BO:115:VAL:HG23	1.87	0.74
42:BG:5:VAL:HG12	42:BG:6:ALA:H	1.53	0.74
36:DA:729:G:N7	39:DD:208:LYS:HB2	2.03	0.74
13:CM:66:LEU:HA	13:CM:70:LEU:CD1	2.17	0.74
40:DE:77:ILE:HG22	40:DE:78:LEU:N	2.02	0.74
51:BS:106:ARG:HD2	51:BS:107:GLU:N	2.03	0.74
36:BA:862:G:N3	36:BA:863:A:H1'	2.03	0.74
43:DH:102:ALA:HA	43:DH:117:PRO:HD3	1.69	0.74
36:DA:2201:C:H2'	36:DA:2202:C:H6	1.51	0.74
11:AK:38:ASN:HD22	11:AK:38:ASN:N	1.83	0.74
36:DA:1013:C:O2'	36:DA:1014:U:H5'	1.88	0.74
1:CA:552:U:H2'	1:CA:553:A:H8	1.53	0.74
1:AA:575:G:OP1	1:AA:575:G:H4'	1.88	0.74
25:CZ:339:ARG:NE	25:CZ:352:VAL:HG22	2.03	0.74
17:CQ:99:SER:C	17:CQ:100:LYS:HG3	2.07	0.74
1:CA:574:A:N3	1:CA:883:C:H1'	2.03	0.74
34:B8:61:LEU:HD12	34:B8:62:LEU:H	1.53	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:270:ILE:O	39:DD:270:ILE:HD12	1.87	0.73
39:DD:70:TRP:CH2	39:DD:150:LYS:HA	2.23	0.73
32:D6:52:VAL:HG13	32:D6:53:LYS:N	2.02	0.73
34:D8:3:LYS:HD3	36:DA:242:G:O5'	1.88	0.73
34:D8:24:ALA:HA	34:D8:46:ARG:HH11	1.51	0.73
28:D2:38:GLN:CB	28:D2:44:LEU:HD22	2.18	0.73
5:CE:11:ILE:HD12	5:CE:31:LEU:CD1	2.17	0.73
36:DA:487:C:H1'	55:DW:53:SER:HA	1.69	0.73
25:AZ:252:GLU:CD	25:AZ:264:ARG:HD2	2.07	0.73
41:DF:160:ASN:OD1	41:DF:163:VAL:HG23	1.85	0.73
6:CF:92:LYS:O	6:CF:94:GLN:HG3	1.88	0.73
22:AW:17:C:H41	36:BA:2110:G:H21	1.36	0.73
27:B1:7:ILE:HG22	27:B1:8:SER:N	2.02	0.73
10:CJ:42:THR:HG23	10:CJ:68:HIS:HA	1.70	0.73
1:CA:1388:C:H2'	1:CA:1389:C:C6	2.23	0.73
49:DQ:109:VAL:HG12	49:DQ:110:THR:N	2.03	0.73
36:BA:271(E):U:H2'	36:BA:271(F):C:C6	2.22	0.73
36:BA:2752:C:H2'	36:BA:2752:C:O2	1.88	0.73
6:AF:60:PHE:CZ	18:AR:78:LEU:HD21	2.22	0.73
22:CW:57:G:H2'	22:CW:58:A:H5'	1.70	0.73
27:B1:3:LYS:HD3	36:BA:1364:G:C8	2.23	0.73
32:B6:52:VAL:HG13	32:B6:53:LYS:N	2.02	0.73
41:BF:29:ASN:HD22	41:BF:32:LEU:CB	1.99	0.73
42:BG:67:LYS:N	42:BG:67:LYS:CD	2.49	0.73
36:BA:1484:G:C3'	36:BA:1485:G:H5''	2.17	0.73
40:BE:55:ASN:ND2	40:BE:75:VAL:HG22	2.02	0.73
1:AA:1251:A:H4'	9:AI:12:GLU:OE1	1.87	0.73
36:DA:2150:U:H2'	36:DA:2151:G:C8	2.22	0.73
37:DB:21:G:H2'	37:DB:22:U:O4'	1.88	0.73
43:BH:92:ILE:C	43:BH:94:TYR:H	1.90	0.73
36:DA:1494:A:H2'	36:DA:1495:A:C5'	2.17	0.73
2:CB:204:ASN:HD21	2:CB:207:ALA:H	1.34	0.73
27:D1:58:ILE:CG1	27:D1:59:THR:H	2.00	0.73
1:CA:684:A:H1'	11:CK:39:PRO:HD2	1.68	0.73
1:CA:22:G:H4'	1:CA:885:G:C8	2.23	0.73
1:CA:105:G:H2'	1:CA:106:C:C6	2.23	0.73
32:B6:48:VAL:HG23	32:B6:49:HIS:N	2.04	0.73
28:D2:53:LEU:HA	28:D2:56:GLN:HB2	1.68	0.73
36:BA:1654:A:OP1	50:BR:2:ARG:HA	1.88	0.73
42:BG:141:PHE:HB2	42:BG:144:ILE:HG22	1.70	0.73
51:BS:13:ARG:HG3	51:BS:14:VAL:N	2.00	0.73
36:DA:2681:C:H6	36:DA:2683:C:H41	1.34	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:DY:13:VAL:HG13	57:DY:14:LEU:N	2.03	0.73
4:AD:107:ARG:HH21	4:AD:194:LEU:CD1	2.01	0.73
36:DA:1901:A:O2'	36:DA:1902:C:H5'	1.88	0.73
58:DZ:51:ALA:HA	58:DZ:55:HIS:CD2	2.23	0.73
36:BA:1092:C:N4	36:BA:1100:C:H42	1.82	0.73
36:BA:1058:G:C2'	36:BA:1059:G:H5''	2.18	0.73
36:BA:145:G:C3'	36:BA:146:G:H5''	2.18	0.73
29:D3:1:MET:SD	29:D3:40:THR:HG22	2.28	0.73
15:AO:10:LYS:C	15:AO:10:LYS:HE3	2.09	0.73
1:CA:614:A:O2'	1:CA:615:C:H5'	1.88	0.73
36:BA:1498:C:C2'	36:BA:1499:C:H5''	2.18	0.73
49:BQ:6:ARG:O	49:BQ:7:MET:HG3	1.87	0.73
41:DF:57:VAL:HG12	41:DF:58:ALA:N	2.03	0.73
26:B0:43:THR:HG22	36:BA:2331:G:O2'	1.87	0.73
36:BA:814:C:O2'	36:BA:815:C:H5'	1.88	0.73
41:BF:84:VAL:HG12	41:BF:85:GLY:N	2.03	0.73
35:D9:30:PRO:HB2	36:DA:2527:C:H4'	1.69	0.73
43:DH:63:SER:O	43:DH:67:LEU:HB2	1.88	0.73
36:DA:2781:A:H5''	36:DA:2782:G:H5'	1.68	0.73
36:DA:996:A:O2'	53:DU:92:ARG:HG3	1.88	0.73
54:DV:38:LEU:C	54:DV:39:LEU:HD13	2.09	0.73
2:CB:54:THR:HG22	2:CB:58:ILE:HD11	1.69	0.73
7:CG:69:VAL:C	7:CG:138:LYS:HD2	2.08	0.73
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.23	0.73
36:BA:1518:U:H2'	36:BA:1519:G:O4'	1.87	0.73
36:BA:2443:C:O2'	36:BA:2444:G:H5'	1.87	0.73
14:CN:13:THR:N	14:CN:14:PRO:CD	2.51	0.73
53:BU:92:ARG:HD2	54:BV:11:GLN:CG	2.18	0.73
39:BD:166:GLN:NE2	39:BD:166:GLN:HA	2.02	0.73
56:BX:65:ARG:HG2	56:BX:66:LEU:N	2.01	0.73
42:BG:51:ARG:HA	42:BG:51:ARG:HE	1.52	0.73
42:DG:62:LEU:HD12	42:DG:62:LEU:H	1.52	0.73
42:DG:63:ILE:HG13	42:DG:64:THR:H	1.53	0.73
25:CZ:277:LEU:CD1	25:CZ:280:GLY:H	2.01	0.73
20:AT:14:LYS:O	20:AT:18:GLN:HB2	1.88	0.73
2:AB:169:LYS:HB3	2:AB:170:GLU:OE2	1.89	0.73
55:BW:11:ARG:C	55:BW:11:ARG:HE	1.91	0.73
36:BA:145:G:C2'	36:BA:146:G:H5''	2.18	0.73
36:DA:2359:C:C2'	36:DA:2360:A:H5'	2.18	0.73
38:DC:6:ARG:HH11	38:DC:6:ARG:HG2	1.51	0.73
36:DA:761:A:H8	36:DA:761:A:O5'	1.71	0.73
1:CA:688:G:H2'	1:CA:689:C:C6	2.24	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:473:G:H5''	16:AP:81:ARG:CZ	2.18	0.73
22:AV:74:C:N4	36:BA:2252:G:H1	1.86	0.73
36:BA:2036:C:H6	36:BA:2036:C:H5'	1.52	0.73
12:AL:83:VAL:HG11	12:AL:100:ILE:HG12	1.71	0.73
26:D0:43:THR:HG22	36:DA:2331:G:O2'	1.89	0.73
40:BE:111:ARG:HA	50:BR:2:ARG:HG2	1.69	0.73
42:BG:135:LEU:O	42:BG:154:GLY:HA3	1.87	0.73
36:DA:2029:G:H5''	36:DA:2030:A:OP2	1.88	0.73
48:BP:97:PRO:O	48:BP:98:GLU:HB3	1.88	0.73
36:BA:1991:U:H2'	36:BA:1992:G:H5''	1.68	0.73
2:AB:21:ARG:NE	2:AB:39:ILE:HG12	2.04	0.73
1:CA:1425:U:H2'	1:CA:1426:C:C6	2.22	0.73
51:BS:49:VAL:HG12	51:BS:50:SER:N	2.01	0.73
36:BA:2179:C:H5''	36:BA:2180:U:OP1	1.89	0.73
36:DA:143(A):C:H4'	56:DX:38:GLU:OE1	1.88	0.73
36:DA:723:G:H2'	36:DA:724:U:C6	2.23	0.73
1:AA:1512:U:H2'	1:AA:1513:A:C8	2.18	0.73
36:DA:2306:C:H4'	42:DG:136:ARG:HH12	1.54	0.73
2:AB:97:TRP:CH2	2:AB:173:ALA:HA	2.24	0.73
36:DA:903:C:H2'	36:DA:904:C:C6	2.24	0.73
48:BP:85:LEU:HD23	48:BP:115:LEU:O	1.89	0.73
29:B3:1:MET:SD	29:B3:40:THR:HG22	2.28	0.73
1:CA:373:A:O2'	1:CA:374:A:H5'	1.89	0.73
1:CA:125:U:H2'	1:CA:126:G:C8	2.23	0.73
22:CW:1:G:N3	22:CW:1:G:H2'	2.02	0.73
29:B3:11:SER:HB3	36:BA:988:A:P	2.28	0.73
51:DS:56:LEU:HD22	51:DS:58:LEU:HD22	1.71	0.73
36:DA:2048:G:H1	36:DA:2620:C:H42	1.36	0.73
51:BS:101:LEU:O	51:BS:101:LEU:HD12	1.89	0.73
13:AM:97:PRO:HA	13:AM:110:ARG:CD	2.17	0.73
36:BA:1667:G:OP2	36:BA:1667:G:H8	1.72	0.73
52:BT:58:ASN:N	52:BT:58:ASN:HD22	1.84	0.73
1:AA:1060:C:O2'	1:AA:1061:G:H5'	1.87	0.73
19:AS:63:THR:HG22	19:AS:66:MET:HG2	1.71	0.73
35:B9:10:ILE:H	35:B9:10:ILE:CD1	1.97	0.73
1:CA:1333:A:H2'	1:CA:1334:G:O4'	1.87	0.73
55:DW:6:ILE:HG12	55:DW:104:THR:HG22	1.70	0.73
2:AB:18:GLY:N	2:AB:42:ILE:HG22	2.04	0.73
3:AC:53:ALA:HB2	3:AC:115:LEU:HG	1.69	0.73
36:DA:1539:G:C2	36:DA:1540:U:H1'	2.23	0.73
1:AA:1512:U:H3	1:AA:1523:G:H1	1.37	0.73
39:BD:136:ILE:HG22	39:BD:140:THR:OG1	1.89	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DG:7:LEU:HD13	42:DG:100:TRP:CE3	2.23	0.73
13:AM:68:GLY:C	13:AM:70:LEU:H	1.90	0.73
36:BA:723:G:H2'	36:BA:724:U:C6	2.24	0.73
1:CA:401:C:H2'	1:CA:402:G:H8	1.53	0.73
31:D5:42:PRO:HB2	36:DA:2815:C:O2'	1.89	0.73
1:CA:321:A:H4'	1:CA:1436:U:H5'	1.71	0.73
25:AZ:271:GLU:O	25:AZ:286:VAL:HG23	1.88	0.73
50:DR:103:ARG:HH11	50:DR:110:PRO:HD3	1.53	0.73
42:DG:119:GLY:HA3	42:DG:181:ARG:CA	2.18	0.73
1:CA:219:C:H2'	1:CA:220:G:O4'	1.89	0.73
36:BA:2053:G:N2	36:BA:2054:A:H1'	2.04	0.73
13:AM:6:GLY:C	13:AM:8:GLU:H	1.91	0.73
5:AE:94:ALA:HB3	5:AE:117:ASP:O	1.88	0.73
25:CZ:338:TYR:CD2	25:CZ:340:PRO:HD3	2.24	0.73
3:AC:150:LYS:HG3	3:AC:169:ALA:HB2	1.70	0.73
48:BP:62:LEU:N	48:BP:62:LEU:CD2	2.52	0.73
25:CZ:234:ARG:HD2	25:CZ:289:LEU:HD22	1.70	0.73
36:BA:1568:G:H5''	39:BD:61:LEU:HD23	1.69	0.73
1:CA:993:G:H22	1:CA:1046:A:H1'	1.53	0.73
36:BA:626:U:N3	48:BP:105:LEU:HG	2.04	0.73
36:DA:106:C:H2'	36:DA:107:C:C6	2.23	0.73
1:AA:1118:C:H1'	1:AA:1179:A:C5	2.23	0.73
36:DA:1095:A:H2'	36:DA:1096:A:C8	2.24	0.73
42:BG:37:VAL:HG23	42:BG:99:MET:HG3	1.70	0.73
1:CA:819:A:H4'	1:CA:820:U:OP2	1.89	0.73
3:CC:52:LEU:HD23	3:CC:52:LEU:H	1.52	0.73
25:AZ:277:LEU:CD1	25:AZ:280:GLY:H	2.00	0.73
39:BD:8:PRO:HB3	39:BD:14:ARG:CB	2.18	0.73
22:CV:59:U:O2'	22:CV:60:U:H6	1.68	0.73
37:BB:17:C:N4	37:BB:68:C:H42	1.87	0.73
27:D1:49:VAL:HG21	27:D1:71:TYR:HE1	1.54	0.73
36:BA:1170:G:N2	36:BA:1179:C:H42	1.87	0.73
54:DV:28:GLU:O	54:DV:61:VAL:HG21	1.88	0.73
1:AA:1380:U:H4'	1:AA:1381:U:O5'	1.88	0.73
13:CM:94:ARG:HG2	19:CS:82:GLY:N	2.04	0.73
38:BC:4:GLY:O	38:BC:8:ARG:HG3	1.88	0.73
4:AD:114:ARG:HG3	4:AD:114:ARG:HH11	1.52	0.73
1:AA:1169:A:H2'	1:AA:1170:A:C8	2.23	0.73
1:AA:601:C:H2'	1:AA:602:A:H8	1.53	0.73
36:DA:1690:A:H2'	36:DA:1691:C:H5'	1.69	0.73
7:AG:72:ARG:CG	7:AG:73:MET:HG3	2.18	0.73
34:B8:28:GLY:HA2	34:B8:32:LEU:CD2	2.18	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:B8:50:LEU:C	34:B8:53:PRO:HD2	2.08	0.73
36:BA:2502:G:C5'	36:BA:2503:A:H5''	2.14	0.73
36:BA:673:C:O2'	36:BA:674:G:H5'	1.89	0.73
40:DE:111:ARG:HA	50:DR:2:ARG:CG	2.19	0.73
11:CK:124:LYS:HB2	11:CK:124:LYS:HZ2	1.52	0.73
2:CB:215:LEU:O	2:CB:219:VAL:HG23	1.88	0.73
52:DT:85:LYS:NZ	52:DT:85:LYS:HB3	2.04	0.73
36:BA:1708:C:H2'	36:BA:1709:U:C6	2.24	0.73
7:CG:36:LYS:HA	7:CG:39:ALA:HB3	1.71	0.73
39:DD:81:ALA:HA	39:DD:113:VAL:CG2	2.19	0.73
1:AA:1520:G:H2'	1:AA:1521:G:C8	2.23	0.73
22:CV:21:A:O2'	22:CV:22:G:H5''	1.89	0.73
3:AC:148:GLY:HA3	3:AC:172:ARG:O	1.88	0.73
36:DA:1099:G:H2'	36:DA:1100:C:C6	2.23	0.73
36:DA:711:G:H1	36:DA:720:C:H42	1.35	0.73
42:DG:135:LEU:O	42:DG:154:GLY:HA3	1.89	0.73
36:DA:979:G:H8	36:DA:979:G:O5'	1.72	0.73
12:CL:82:VAL:HG12	12:CL:105:TYR:HD1	1.54	0.73
36:BA:1327:C:H42	36:BA:1647:G:N2	1.86	0.73
36:DA:271(E):U:H2'	36:DA:271(F):C:C6	2.24	0.73
30:D4:42:PHE:O	30:D4:42:PHE:CG	2.42	0.73
36:BA:1750:G:O2'	36:BA:1751:C:H5'	1.89	0.73
1:AA:306:G:O2'	1:AA:307:C:H5'	1.89	0.73
11:AK:17:GLY:HA3	11:AK:77:MET:SD	2.29	0.73
36:BA:811:U:OP2	48:BP:24:GLY:HA2	1.88	0.73
32:D6:36:LEU:HB2	32:D6:50:ARG:NH1	2.04	0.73
48:DP:97:PRO:C	48:DP:99:LEU:H	1.92	0.73
28:D2:59:ARG:O	28:D2:63:VAL:HG23	1.89	0.73
36:BA:1822:G:H2'	36:BA:1823:G:H8	1.54	0.73
1:AA:1047:G:H1	1:AA:1210:C:H42	1.35	0.73
4:CD:15:GLU:O	4:CD:17:VAL:HG23	1.88	0.73
7:CG:69:VAL:HG13	7:CG:69:VAL:O	1.88	0.73
57:BY:37:VAL:O	57:BY:38:ILE:HB	1.87	0.73
36:DA:2101:G:H2'	36:DA:2102:U:H5''	1.71	0.73
1:AA:1525:G:O2'	1:AA:1526:G:H5'	1.89	0.73
2:AB:87:ARG:HE	2:AB:233:SER:CB	2.00	0.73
1:CA:1442(A):G:H5''	52:DT:118:ARG:NH1	2.04	0.73
43:DH:118:PRO:HG3	43:DH:121:ILE:HD12	1.70	0.73
43:BH:102:ALA:HA	43:BH:117:PRO:HD3	1.70	0.73
1:AA:851:G:H2'	1:AA:852:G:H8	1.53	0.73
27:D1:80:LEU:HD23	27:D1:81:LYS:H	1.54	0.73
36:BA:1165:U:H2'	36:BA:1166:C:C6	2.23	0.73

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:734:G:O2'	1:CA:735:C:H5'	1.89	0.73
25:AZ:338:TYR:CD2	25:AZ:340:PRO:HD3	2.24	0.73
22:AW:74:C:H5'	22:AW:75:C:OP2	1.89	0.73
27:D1:3:LYS:HG2	27:D1:4:VAL:HG12	1.70	0.73
51:BS:67:ARG:HH21	51:BS:100:ALA:CB	2.02	0.73
1:AA:8:A:H2'	1:AA:8:A:OP2	1.89	0.73
14:AN:59:ALA:HB1	14:AN:61:TRP:HZ3	1.54	0.73
1:AA:818:G:O2'	1:AA:819:A:H5'	1.89	0.73
39:DD:8:PRO:HB3	39:DD:14:ARG:CB	2.19	0.73
36:BA:449:A:C4'	53:BU:3:ARG:HH21	2.02	0.73
24:AY:9:A:N6	24:AY:23:A:H62	1.87	0.73
40:DE:4:ILE:HG13	40:DE:31:CYS:SG	2.29	0.73
2:AB:54:THR:HG22	2:AB:58:ILE:HD11	1.70	0.73
36:BA:2040:C:H2'	36:BA:2041:U:C6	2.24	0.73
58:DZ:70:LEU:HD21	58:DZ:91:LEU:CD2	2.18	0.73
33:B7:21:ARG:NH1	33:B7:21:ARG:HG2	2.02	0.73
36:BA:1175:U:O3'	36:BA:1176:G:H3'	1.89	0.73
36:BA:608:A:H2'	36:BA:609:A:C8	2.23	0.73
20:AT:65:LYS:HA	20:AT:68:LYS:HG3	1.71	0.73
39:DD:131:LEU:HD13	39:DD:136:ILE:HD11	1.69	0.73
37:DB:34:U:H4'	37:DB:35:U:H5	1.52	0.73
36:BA:2854:G:H2'	36:BA:2855:C:C6	2.23	0.73
36:DA:2553:G:H2'	36:DA:2554:U:O4'	1.89	0.73
36:BA:2240:C:O2'	36:BA:2241:A:H5'	1.88	0.73
49:BQ:39:PRO:HG3	49:BQ:99:PRO:HD2	1.70	0.73
36:BA:2282:G:H21	36:BA:2390:U:H3	1.35	0.72
36:DA:619:G:H3'	36:DA:620:G:H21	1.54	0.72
36:DA:377:C:H2'	36:DA:378:C:C6	2.24	0.72
41:BF:24:LEU:CB	41:BF:25:PRO:HD2	2.18	0.72
1:CA:1190:G:OP1	3:CC:4:LYS:HA	1.88	0.72
36:DA:20:C:H2'	36:DA:21:A:H8	1.54	0.72
41:DF:160:ASN:ND2	41:DF:162:LEU:HD13	2.03	0.72
40:BE:77:ILE:HG22	40:BE:78:LEU:N	2.03	0.72
1:AA:1349:A:OP1	9:AI:120:ARG:HB2	1.89	0.72
36:DA:2147:G:H2'	36:DA:2148:G:O4'	1.89	0.72
36:BA:2110:G:H1	36:BA:2178:C:H41	1.36	0.72
58:DZ:85:HIS:CD2	58:DZ:86:VAL:N	2.57	0.72
46:BN:3:THR:HG22	46:BN:4:TYR:N	2.04	0.72
53:BU:95:LEU:HD12	54:BV:11:GLN:HG3	1.69	0.72
39:DD:63:ARG:HH11	39:DD:63:ARG:HG3	1.53	0.72
36:DA:1231:G:H2'	36:DA:1232:G:C8	2.23	0.72
36:BA:1658:C:H2'	36:BA:1659:U:C6	2.23	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:958:U:H5''	49:BQ:14:ARG:HD3	1.70	0.72
46:BN:40:PRO:CB	53:BU:68:ALA:HB2	2.19	0.72
10:CJ:71:LEU:HD12	10:CJ:72:VAL:N	2.03	0.72
36:BA:2262:U:H2'	36:BA:2263:C:H6	1.53	0.72
36:BA:197:A:H5'	36:BA:197:A:C8	2.24	0.72
39:DD:248:SER:HB2	39:DD:249:PRO:HD2	1.71	0.72
25:AZ:339:ARG:NE	25:AZ:352:VAL:HG22	2.03	0.72
9:CI:126:SER:O	9:CI:127:LYS:HB3	1.89	0.72
27:D1:95:LEU:O	27:D1:95:LEU:HG	1.89	0.72
39:DD:91:ARG:HG2	39:DD:91:ARG:HH11	1.54	0.72
58:DZ:145:GLU:HG3	58:DZ:146:ILE:H	1.53	0.72
1:CA:601:C:H2'	1:CA:602:A:H8	1.53	0.72
1:AA:189(B):C:H2'	1:AA:189(C):C:C6	2.24	0.72
36:BA:570:G:H2'	36:BA:2030:A:N7	2.04	0.72
39:DD:186:HIS:HB3	39:DD:189:CYS:SG	2.29	0.72
36:BA:487:C:H1'	55:BW:53:SER:HA	1.71	0.72
34:D8:28:GLY:HA2	34:D8:32:LEU:CD2	2.18	0.72
48:DP:111:ARG:NH1	48:DP:149:GLU:HG3	2.03	0.72
41:DF:28:ILE:HD13	41:DF:28:ILE:H	1.54	0.72
39:BD:270:ILE:HD12	39:BD:270:ILE:O	1.88	0.72
36:BA:2463:C:O2'	36:BA:2464:C:H5'	1.87	0.72
30:B4:5:ILE:O	30:B4:5:ILE:HG12	1.88	0.72
53:DU:42:ALA:HA	53:DU:45:TYR:HB2	1.71	0.72
22:CV:68:C:H2'	22:CV:69:G:C5'	2.18	0.72
36:BA:2101:G:H2'	36:BA:2102:U:H5''	1.71	0.72
39:BD:8:PRO:HB3	39:BD:14:ARG:HB2	1.70	0.72
42:DG:141:PHE:HB2	42:DG:144:ILE:HG22	1.71	0.72
25:CZ:258:LEU:HD23	25:CZ:376:LYS:HB3	1.69	0.72
15:CO:82:ILE:HG23	15:CO:83:GLU:N	2.04	0.72
12:AL:110:VAL:O	12:AL:122:THR:HB	1.89	0.72
20:AT:50:GLU:HB2	20:AT:100:ILE:HD13	1.69	0.72
36:BA:272(H):C:C2'	36:BA:272(I):U:H5''	2.18	0.72
6:CF:87:ARG:HG2	6:CF:87:ARG:HH11	1.55	0.72
36:BA:270:A:O2'	36:BA:271:A:H5'	1.89	0.72
31:D5:43:HIS:CE1	36:DA:2816:C:H1'	2.25	0.72
1:AA:1314:C:H2'	1:AA:1315:U:C6	2.24	0.72
52:DT:53:ARG:HH11	52:DT:53:ARG:HB3	1.51	0.72
36:DA:1498:C:C2'	36:DA:1499:C:H5''	2.18	0.72
12:CL:55:VAL:HG21	12:CL:67:THR:HG22	1.68	0.72
30:D4:46:GLN:HG3	30:D4:47:GLN:N	2.04	0.72
12:AL:37:CYS:HB2	12:AL:81:SER:O	1.88	0.72
36:DA:1435:G:H1	36:DA:1557:C:H42	1.37	0.72

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DP:75:ILE:HD12	48:DP:75:ILE:N	2.05	0.72
17:AQ:29:HIS:CE1	17:AQ:31:LEU:H	2.08	0.72
36:DA:2053:G:N2	36:DA:2054:A:H1'	2.04	0.72
1:AA:20:U:H2'	1:AA:21:G:O4'	1.89	0.72
1:CA:412:A:H4'	1:CA:413:G:H8	1.54	0.72
32:B6:15:GLU:HA	32:B6:49:HIS:CE1	2.24	0.72
36:BA:571:A:O2'	36:BA:572:A:H5''	1.89	0.72
36:DA:747:U:H5	36:DA:2613:U:C5	2.08	0.72
48:DP:110:TYR:CD1	48:DP:111:ARG:HD2	2.25	0.72
36:DA:2415:G:H4'	48:DP:66:GLY:C	2.10	0.72
35:D9:24:TYR:O	35:D9:25:VAL:HG23	1.89	0.72
35:D9:4:ARG:HB2	36:DA:2466:C:OP1	1.89	0.72
36:DA:398:G:H2'	36:DA:399:G:C8	2.25	0.72
5:AE:80:ILE:HD11	5:AE:138:ALA:HB1	1.71	0.72
2:CB:177:ALA:HA	2:CB:182:ILE:HD12	1.69	0.72
48:BP:97:PRO:C	48:BP:99:LEU:H	1.93	0.72
5:AE:12:LEU:O	5:AE:13:ILE:HG13	1.89	0.72
36:DA:2772:C:H5'	40:DE:168:MET:HE3	1.71	0.72
47:DO:76:ALA:HB3	52:DT:75:ILE:HD13	1.68	0.72
57:DY:82:PRO:O	57:DY:96:ILE:HG22	1.90	0.72
37:BB:81:G:H2'	37:BB:82:G:H5'	1.71	0.72
1:CA:920:U:H1'	1:CA:1080:A:C2	2.25	0.72
16:AP:20:VAL:HG21	16:AP:32:TYR:CD2	2.24	0.72
36:DA:864:G:H1'	36:DA:914:C:H42	1.54	0.72
53:BU:92:ARG:HD2	54:BV:11:GLN:HG2	1.71	0.72
54:BV:38:LEU:C	54:BV:39:LEU:HD13	2.09	0.72
1:AA:1305:G:O2'	1:AA:1306:A:H8	1.72	0.72
42:DG:36:LYS:HG2	42:DG:37:VAL:N	2.02	0.72
1:AA:1493:A:N1	24:AY:36:U:O2'	2.19	0.72
1:AA:1388:C:H2'	1:AA:1389:C:C6	2.24	0.72
42:DG:29:TRP:HE3	42:DG:29:TRP:HA	1.52	0.72
36:DA:364:C:O2	36:DA:364:C:H2'	1.88	0.72
36:DA:2827:C:H2'	36:DA:2828:C:C6	2.25	0.72
34:B8:50:LEU:HD12	34:B8:51:ALA:N	2.02	0.72
36:BA:1251:C:OP2	53:BU:10:ARG:NE	2.23	0.72
36:DA:626:U:N3	48:DP:105:LEU:HG	2.04	0.72
36:DA:2523:G:H2'	36:DA:2524:G:C5'	2.12	0.72
36:DA:227:A:C5'	48:DP:76:LYS:HE3	2.16	0.72
28:B2:47:ASN:HD22	36:BA:94(A):G:H21	1.35	0.72
4:CD:19:LEU:O	4:CD:31:CYS:SG	2.48	0.72
8:AH:14:ARG:HG3	8:AH:83:ILE:CG2	2.18	0.72
1:CA:742:G:H5''	15:CO:58:MET:HE1	1.72	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2773:C:H5"	40:DE:164:ARG:CG	2.19	0.72
51:DS:89:ARG:HE	51:DS:91:PRO:HG2	1.54	0.72
46:DN:10:GLU:CG	46:DN:11:PRO:HD2	2.19	0.72
36:BA:2150:U:H2'	36:BA:2151:G:C8	2.24	0.72
58:DZ:86:VAL:HG12	58:DZ:87:ASP:N	2.02	0.72
42:BG:80:PHE:O	42:BG:81:LYS:HB2	1.86	0.72
40:DE:52:LEU:CB	40:DE:76:ARG:HB2	2.20	0.72
2:AB:72:GLY:HA2	2:AB:165:VAL:HG22	1.72	0.72
36:BA:1095:A:H2'	36:BA:1096:A:C8	2.22	0.72
41:BF:153:SER:HA	41:BF:172:TRP:CB	2.19	0.72
10:AJ:40:LEU:N	10:AJ:40:LEU:HD23	2.03	0.72
55:DW:14:PRO:HG3	55:DW:101:SER:OG	1.89	0.72
20:AT:59:ALA:O	20:AT:63:ILE:HG13	1.89	0.72
2:AB:33:TYR:HB2	2:AB:43:ASP:HB2	1.72	0.72
36:BA:2195:C:O2'	36:BA:2196:C:H5'	1.89	0.72
12:AL:83:VAL:HG12	12:AL:84:LEU:N	2.04	0.72
17:CQ:34:LYS:HG2	17:CQ:35:VAL:H	1.54	0.72
36:BA:1927:A:H2'	36:BA:1928:A:C8	2.25	0.72
1:CA:473:G:H5"	16:CP:81:ARG:CZ	2.18	0.72
32:B6:36:LEU:HB2	32:B6:50:ARG:NH1	2.04	0.72
36:BA:669:G:N3	36:BA:669:G:H2'	2.04	0.72
32:D6:11:LEU:HD21	32:D6:52:VAL:H	1.54	0.72
32:D6:52:VAL:CG1	32:D6:53:LYS:N	2.53	0.72
36:BA:768:G:H2'	36:BA:769:G:C8	2.25	0.72
1:CA:250:A:H4'	1:CA:251:G:O5'	1.89	0.72
56:BX:8:ILE:HD11	56:BX:43:VAL:HG22	1.71	0.72
36:BA:2048:G:H1	36:BA:2620:C:H42	1.37	0.72
51:BS:89:ARG:HE	51:BS:91:PRO:HG2	1.55	0.72
34:B8:19:SER:HB2	36:BA:651:G:OP1	1.90	0.72
34:B8:24:ALA:HA	34:B8:46:ARG:HH11	1.53	0.72
37:BB:75:G:H5'	37:BB:76:G:OP2	1.90	0.72
36:DA:329:G:N7	57:DY:71:LYS:HE3	2.05	0.72
7:AG:69:VAL:HG11	7:AG:104:LEU:CD2	2.19	0.72
47:DO:114:ILE:HD12	47:DO:114:ILE:N	2.00	0.72
36:DA:1350:C:H2'	36:DA:1351:C:H6	1.54	0.72
13:CM:52:GLU:HG2	13:CM:55:ARG:HH11	1.55	0.72
42:DG:130:ASN:ND2	42:DG:160:VAL:HG13	2.03	0.72
58:BZ:81:ARG:HB2	58:BZ:81:ARG:NH1	2.03	0.72
49:BQ:44:ALA:O	49:BQ:47:ILE:HB	1.90	0.72
6:AF:48:LEU:HB2	6:AF:56:PRO:O	1.90	0.72
1:CA:1323:G:O2'	1:CA:1324:A:H5'	1.89	0.72
33:B7:11:LYS:HZ3	36:BA:686:G:H5"	1.54	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:803:U:H2'	36:BA:804:A:H5'	1.71	0.72
24:CY:40:G:C2'	24:CY:41:G:H5''	2.17	0.72
36:BA:811:U:C5	48:BP:24:GLY:HA3	2.24	0.72
35:D9:7:VAL:HG21	35:D9:36:GLN:HB2	1.71	0.72
1:AA:1054:C:H3'	1:AA:1054:C:O2	1.89	0.72
13:AM:57:ARG:HG2	13:AM:61:GLU:HB2	1.70	0.72
4:CD:67:ILE:HG22	4:CD:68:TYR:CE1	2.24	0.72
1:AA:1333:A:H2'	1:AA:1334:G:O4'	1.89	0.72
56:DX:36:LYS:CA	56:DX:39:ILE:HB	2.15	0.72
36:BA:2773:C:H5''	40:BE:164:ARG:CG	2.19	0.72
58:BZ:51:ALA:CB	58:BZ:57:ILE:HD11	2.19	0.72
10:AJ:50:ILE:CD1	10:AJ:50:ILE:H	2.00	0.72
36:BA:2147:G:H2'	36:BA:2148:G:O4'	1.90	0.72
36:DA:2712:U:H1'	36:DA:2712(A):A:N7	2.04	0.72
36:DA:2305:A:N6	42:DG:43:LEU:HD13	2.05	0.72
2:AB:61:LEU:HD23	2:AB:68:ILE:HD11	1.71	0.72
20:AT:44:ALA:HB1	20:AT:88:VAL:HG13	1.71	0.72
36:DA:270:A:O2'	36:DA:271:A:H5'	1.89	0.72
52:BT:107:ASP:CG	52:BT:109:GLU:H	1.93	0.72
36:BA:1041:C:O2'	36:BA:1042:G:H5'	1.89	0.72
36:DA:1327:C:H42	36:DA:1647:G:H21	1.35	0.72
55:BW:20:VAL:HG23	55:BW:47:VAL:HG21	1.71	0.72
1:AA:100:C:H2'	1:AA:101:A:C8	2.24	0.72
22:AW:1:G:H2'	22:AW:1:G:N3	2.04	0.72
12:AL:45:PRO:HD3	12:AL:51:ALA:O	1.89	0.72
36:BA:2653:U:H3'	36:BA:2654:A:H8	1.54	0.72
1:CA:1337:G:H5''	1:CA:1338:G:OP2	1.90	0.72
32:B6:19:ARG:HG3	32:B6:20:ASN:N	2.04	0.72
50:DR:100:LEU:HD22	50:DR:100:LEU:N	2.05	0.72
34:D8:52:LYS:N	34:D8:53:PRO:HD2	2.04	0.72
28:D2:69:ARG:HH22	36:DA:111:A:H4'	1.54	0.72
36:BA:1243:G:C2'	36:BA:1244:G:H5''	2.19	0.72
41:BF:28:ILE:HD13	41:BF:28:ILE:H	1.53	0.72
4:AD:31:CYS:C	4:AD:33:MET:H	1.92	0.72
36:DA:996:A:N6	36:DA:1160:G:C6	2.58	0.72
1:CA:1054:C:C6	1:CA:1196:U:C4	2.77	0.72
1:CA:967:C:H2'	1:CA:968:A:C8	2.25	0.72
32:D6:7:ILE:O	32:D6:7:ILE:HG22	1.89	0.72
48:BP:110:TYR:CD1	48:BP:111:ARG:HD2	2.24	0.72
36:DA:1473:G:C2	36:DA:1474:C:H1'	2.24	0.72
1:AA:1202:G:H4'	14:AN:29:ARG:HD3	1.70	0.72
51:DS:49:VAL:HG12	51:DS:50:SER:N	2.03	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:819:A:H4'	1:AA:820:U:OP2	1.89	0.72
37:DB:7:G:C3'	37:DB:8:U:H5''	2.19	0.72
36:BA:2311:A:N1	42:BG:80:PHE:HB3	2.05	0.72
22:AV:56:C:O4'	42:BG:76:SER:HB2	1.89	0.72
13:CM:7:VAL:CG2	42:DG:115:ARG:HA	2.20	0.72
36:DA:2311:A:H2	42:DG:77:ILE:HG21	1.54	0.72
36:DA:1170:G:N2	36:DA:1179:C:H42	1.86	0.72
40:DE:64:LYS:HG2	40:DE:66:HIS:HB2	1.70	0.72
43:BH:87:LEU:HD23	43:BH:164:TYR:HA	1.72	0.72
36:BA:1170:G:H1	36:BA:1179:C:N4	1.88	0.72
41:DF:53:THR:HG23	41:DF:55:GLY:H	1.55	0.72
25:AZ:347:THR:HG22	25:AZ:348:ASP:N	2.05	0.72
2:AB:9:GLU:N	2:AB:9:GLU:OE2	2.22	0.72
36:BA:2350:C:H2'	36:BA:2351:G:O4'	1.89	0.72
36:DA:1822:G:H2'	36:DA:1823:G:H8	1.54	0.72
35:B9:7:VAL:HG21	35:B9:36:GLN:HB2	1.72	0.72
36:BA:2839:G:H1	36:BA:2878:U:H3	1.37	0.72
41:DF:158:THR:HA	41:DF:198:ALA:HB2	1.72	0.72
36:BA:2681:C:H6	36:BA:2683:C:H41	1.35	0.72
7:CG:133:GLY:O	7:CG:136:LYS:HB2	1.89	0.72
1:CA:1359:C:P	14:CN:22:THR:HG21	2.30	0.72
41:BF:64:ILE:HG23	41:BF:65:TRP:N	2.02	0.72
36:BA:310:A:P	57:BY:18:GLY:HA2	2.29	0.72
42:BG:180:PHE:HB2	42:BG:182:LYS:HZ3	1.55	0.72
36:BA:20:C:H2'	36:BA:21:A:H8	1.54	0.72
36:DA:1639:U:H2'	36:DA:1640:C:H5''	1.72	0.72
36:DA:265:A:H4'	36:DA:266:G:O5'	1.89	0.72
36:BA:1657:C:O2'	36:BA:1658:C:H5'	1.90	0.72
36:BA:2039:C:H2'	36:BA:2040:C:C6	2.25	0.72
38:DC:98:GLU:C	38:DC:100:ILE:H	1.92	0.72
36:DA:2802:G:C3'	36:DA:2803:C:H5''	2.19	0.72
10:AJ:42:THR:HG23	10:AJ:68:HIS:HA	1.70	0.72
36:BA:2249:U:H4'	36:BA:2275:C:C5	2.25	0.72
25:AZ:360:GLU:O	25:AZ:362:VAL:HG23	1.90	0.72
36:BA:2157:G:O2'	36:BA:2158:A:H5'	1.89	0.72
53:BU:49:HIS:HA	53:BU:52:ARG:HB2	1.71	0.72
49:BQ:74:TYR:HD1	49:BQ:75:THR:H	1.38	0.72
37:BB:51:G:H2'	37:BB:52:A:C8	2.24	0.72
22:AW:57:G:H2'	22:AW:58:A:H5'	1.70	0.72
36:DA:76:C:H2'	36:DA:77:C:H6	1.55	0.72
1:CA:1049:U:H2'	14:CN:2:ALA:N	2.05	0.72
36:DA:2074:U:H2'	36:DA:2075:U:C6	2.24	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:584:C:H2'	36:BA:585:G:H5'	1.72	0.72
38:DC:94:VAL:CG1	38:DC:95:GLY:H	1.94	0.72
1:CA:1191:A:H5''	3:CC:4:LYS:HZ2	1.55	0.72
36:DA:2514:U:H2'	36:DA:2515:C:C6	2.25	0.72
14:CN:7:ILE:O	14:CN:11:LYS:HG3	1.89	0.72
25:CZ:132:VAL:HG13	25:CZ:169:PRO:HB2	1.70	0.72
36:BA:1681:G:O2'	36:BA:1762:A:H2'	1.90	0.72
52:BT:80:SER:CB	52:BT:81:PRO:HD3	2.19	0.72
51:DS:51:ALA:HB2	51:DS:73:LEU:HG	1.72	0.72
36:DA:2175:C:H5'	38:DC:219:GLY:O	1.89	0.72
25:AZ:255:ILE:HG12	25:AZ:304:LEU:HD22	1.72	0.72
1:CA:1320:C:H5''	19:CS:70:LYS:HG3	1.72	0.72
1:CA:80:G:C3'	1:CA:81:U:H5'	2.20	0.72
36:BA:440:G:N2	41:BF:46:ARG:HH21	1.87	0.72
49:BQ:70:PRO:O	49:BQ:93:TYR:HB3	1.90	0.72
1:CA:858:G:C6	1:CA:869:G:N7	2.58	0.72
36:BA:1162:G:H4'	54:BV:24:LYS:HB2	1.71	0.72
36:DA:203:C:H3'	36:DA:204:A:H5''	1.72	0.72
52:BT:107:ASP:CG	52:BT:108:ARG:N	2.43	0.72
58:BZ:146:ILE:HA	58:BZ:174:VAL:CG1	2.20	0.72
1:CA:1095:U:H2'	1:CA:1096:C:C6	2.25	0.72
37:BB:15:A:H1'	37:BB:110:G:C6	2.25	0.72
3:CC:153:VAL:O	3:CC:154:SER:HB3	1.90	0.72
36:BA:57:C:O2'	36:BA:58:G:H5'	1.90	0.72
26:B0:34:GLY:HA3	36:BA:2353:G:H1'	1.72	0.72
36:BA:1690:A:H2'	36:BA:1691:C:H5'	1.70	0.72
34:D8:24:ALA:HA	34:D8:46:ARG:NH1	2.05	0.72
25:AZ:164:PRO:O	25:AZ:168:VAL:HG23	1.90	0.72
39:BD:35:LYS:NZ	39:BD:36:PRO:HD3	2.05	0.72
4:AD:15:GLU:O	4:AD:17:VAL:HG23	1.89	0.72
36:BA:2482:G:H22	49:BQ:52:VAL:CG1	2.01	0.72
1:AA:390:C:H4'	16:AP:28:ARG:HH11	1.53	0.72
48:BP:111:ARG:NH1	48:BP:149:GLU:HG3	2.04	0.72
40:BE:64:LYS:HG2	40:BE:66:HIS:HB2	1.71	0.72
47:DO:64:ARG:HH21	47:DO:100:GLY:HA3	1.55	0.72
7:AG:31:MET:O	7:AG:32:ARG:HG3	1.89	0.72
1:AA:1490:C:O2'	1:AA:1491:G:H5'	1.90	0.72
36:DA:1335:U:H2'	36:DA:1336:A:C8	2.25	0.72
36:DA:1693:U:H6	36:DA:1693:U:H5'	1.54	0.72
36:BA:1246:A:H2'	36:BA:1247:A:H5'	1.70	0.72
53:BU:95:LEU:HD12	54:BV:11:GLN:HE21	1.54	0.72
54:BV:39:LEU:HD22	54:BV:39:LEU:N	2.05	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:691:C:O2'	36:DA:692:C:H5'	1.89	0.72
43:BH:20:ALA:HB1	43:BH:21:PRO:CD	2.20	0.72
11:AK:20:TYR:C	11:AK:21:ILE:HD12	2.09	0.72
1:CA:711:G:H2'	1:CA:712:A:C8	2.24	0.72
10:AJ:71:LEU:HD12	10:AJ:72:VAL:N	2.05	0.72
36:DA:1062:G:C2	36:DA:1063:G:H1'	2.25	0.72
15:AO:56:LEU:O	15:AO:60:VAL:HG23	1.90	0.72
3:AC:8:ILE:HG13	3:AC:184:TYR:HB3	1.72	0.72
33:B7:12:ARG:HG3	36:BA:686:G:O6	1.90	0.72
36:BA:1231:G:H2'	36:BA:1232:G:H8	1.52	0.72
12:CL:45:PRO:HG3	12:CL:53:ARG:HD3	1.72	0.72
36:BA:1327:C:H42	36:BA:1647:G:H21	1.37	0.72
46:DN:57:ALA:HB3	46:DN:124:ALA:HA	1.71	0.72
56:DX:76:ARG:N	56:DX:76:ARG:HD3	2.05	0.72
1:AA:574:A:N3	1:AA:883:C:H1'	2.05	0.72
48:BP:75:ILE:N	48:BP:75:ILE:HD12	2.05	0.72
1:AA:621:A:O2'	1:AA:622:A:H5'	1.90	0.72
36:DA:2881:C:H2'	36:DA:2882:A:C8	2.25	0.71
5:CE:12:LEU:CD1	5:CE:31:LEU:HB3	2.20	0.71
36:BA:1817:G:O2'	36:BA:1818:U:H5'	1.90	0.71
41:DF:64:ILE:CG2	41:DF:65:TRP:H	2.00	0.71
46:DN:3:THR:HG22	46:DN:4:TYR:N	2.02	0.71
54:DV:39:LEU:HD22	54:DV:39:LEU:N	2.05	0.71
40:BE:78:LEU:O	40:BE:78:LEU:HD12	1.90	0.71
37:BB:106:G:H2'	37:BB:107:G:C8	2.24	0.71
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.24	0.71
1:AA:1505:G:H4'	1:AA:1506:U:H5'	1.72	0.71
51:DS:89:ARG:HG3	51:DS:92:TYR:CA	2.20	0.71
36:DA:2144:U:H2'	36:DA:2146:C:C5	2.24	0.71
36:DA:2110:G:H1	36:DA:2178:C:H41	1.34	0.71
36:BA:996:A:O2'	53:BU:92:ARG:HG3	1.90	0.71
39:BD:66:ASP:CG	39:BD:103:ARG:HH21	1.94	0.71
1:CA:1513:A:H2'	1:CA:1514:C:C6	2.25	0.71
36:DA:686:G:N2	36:DA:788:A:H61	1.88	0.71
1:CA:1380:U:H4'	1:CA:1381:U:O5'	1.90	0.71
1:AA:552:U:H2'	1:AA:553:A:C8	2.25	0.71
56:DX:8:ILE:O	56:DX:8:ILE:HG22	1.90	0.71
37:BB:65:C:H2'	37:BB:109:C:H41	1.54	0.71
36:BA:2721:A:H2'	36:BA:2722:G:H8	1.55	0.71
27:B1:40:ARG:HG3	27:B1:41:ARG:N	2.03	0.71
25:AZ:24:LYS:HG2	62:AZ:501:GDP:O3B	1.89	0.71
41:BF:29:ASN:O	41:BF:33:LEU:HD23	1.91	0.71

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:76:C:H2'	36:BA:77:C:H6	1.53	0.71
41:BF:139:PHE:CE1	41:BF:143:ALA:HB2	2.25	0.71
50:BR:55:ALA:HA	50:BR:80:PHE:HE1	1.55	0.71
30:B4:5:ILE:O	42:BG:67:LYS:HE2	1.90	0.71
40:BE:4:ILE:HG13	40:BE:31:CYS:SG	2.30	0.71
36:DA:1667:G:OP2	36:DA:1667:G:H8	1.73	0.71
7:AG:36:LYS:HA	7:AG:39:ALA:HB3	1.70	0.71
1:CA:939:G:H5''	7:CG:102:ARG:HH22	1.55	0.71
51:DS:98:VAL:HG12	51:DS:100:ALA:H	1.55	0.71
2:AB:237:ALA:O	2:AB:238:LEU:HB3	1.90	0.71
16:CP:43:LYS:HG2	16:CP:48:TRP:CZ3	2.25	0.71
36:DA:449:A:C4'	53:DU:3:ARG:HH21	2.04	0.71
30:D4:9:LEU:HG	42:DG:98:ARG:HH12	1.54	0.71
54:BV:69:LYS:HA	54:BV:87:HIS:O	1.90	0.71
1:AA:328:C:H4'	1:AA:329:A:H5'	1.72	0.71
10:CJ:40:LEU:HD23	10:CJ:40:LEU:N	2.05	0.71
36:DA:80:G:O2'	36:DA:81:G:H5'	1.90	0.71
36:BA:272(H):C:H2'	36:BA:272(I):U:C5'	2.20	0.71
1:AA:624:C:H2'	1:AA:625:G:H8	1.55	0.71
18:CR:43:PHE:C	18:CR:44:LEU:HD12	2.11	0.71
4:CD:121:VAL:HG12	4:CD:134:ASP:HA	1.71	0.71
3:CC:90:GLU:HA	3:CC:93:LYS:HB3	1.70	0.71
36:BA:547:A:H2'	36:BA:548:A:H8	1.55	0.71
1:CA:189(B):C:H2'	1:CA:189(C):C:C6	2.25	0.71
1:CA:923:A:H5''	5:CE:21:ALA:HB2	1.72	0.71
20:AT:83:ARG:HA	20:AT:86:ARG:HB3	1.72	0.71
36:DA:2408:U:O5'	36:DA:2408:U:H6	1.72	0.71
36:BA:2415:G:H4'	48:BP:66:GLY:C	2.11	0.71
28:B2:14:ARG:HH22	36:BA:78:A:H5'	1.55	0.71
41:BF:178:PRO:HG2	41:BF:179:GLU:OE1	1.89	0.71
36:DA:1516:C:C3'	36:DA:1517:G:H5''	2.20	0.71
36:DA:2892:A:H62	36:DA:2893:G:N2	1.87	0.71
52:DT:58:ASN:N	52:DT:58:ASN:HD22	1.83	0.71
47:BO:114:ILE:H	47:BO:114:ILE:CD1	1.97	0.71
57:BY:73:ARG:HE	57:BY:73:ARG:HA	1.55	0.71
42:BG:20:ILE:HG23	42:BG:25:TYR:HB2	1.72	0.71
2:AB:18:GLY:H	2:AB:42:ILE:CG2	2.01	0.71
25:AZ:258:LEU:HD23	25:AZ:376:LYS:HB3	1.71	0.71
3:AC:112:SER:HB3	3:AC:115:LEU:HD12	1.72	0.71
3:AC:15:THR:HG21	3:AC:181:ASN:HA	1.71	0.71
36:DA:1092:C:H42	36:DA:1100:C:N4	1.84	0.71
20:AT:73:HIS:O	20:AT:76:ALA:HB3	1.90	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AI:43:ALA:C	9:AI:45:ALA:H	1.90	0.71
1:AA:1434:A:H2'	1:AA:1435:G:C8	2.25	0.71
1:AA:663:A:O2'	1:AA:664:G:H5'	1.90	0.71
47:DO:11:ALA:CB	47:DO:98:VAL:HG23	2.19	0.71
46:DN:21:LYS:HE3	46:DN:25:ARG:HB3	1.72	0.71
36:BA:1842:G:H2'	36:BA:1843:C:C6	2.24	0.71
2:AB:36:ARG:C	2:AB:38:GLY:H	1.94	0.71
47:BO:19:ILE:HG22	47:BO:43:VAL:HA	1.72	0.71
36:BA:760:G:H3'	36:BA:761:A:C8	2.26	0.71
12:AL:82:VAL:HG12	12:AL:105:TYR:HD1	1.55	0.71
1:CA:1338:G:H2'	1:CA:1339:A:C8	2.25	0.71
4:AD:6:GLY:O	4:AD:8:VAL:HG13	1.89	0.71
36:DA:370:G:H2'	36:DA:423:A:N7	2.04	0.71
32:B6:11:LEU:HD21	32:B6:52:VAL:H	1.55	0.71
36:DA:2009:G:H4'	55:DW:40:ASN:HD22	1.55	0.71
32:D6:35:GLU:HG2	32:D6:51:GLU:HG3	1.72	0.71
24:AY:29:C:H42	24:AY:41:G:H1	1.38	0.71
36:BA:601:C:O2	36:BA:605:C:H5''	1.90	0.71
43:BH:42:ARG:O	43:BH:43:VAL:HG13	1.89	0.71
56:DX:12:VAL:HG12	56:DX:27:THR:C	2.11	0.71
36:DA:2777:G:H5''	36:DA:2778:A:H5'	1.71	0.71
36:DA:811:U:C5	48:DP:24:GLY:HA3	2.25	0.71
4:CD:20:TYR:HA	4:CD:26:CYS:HB3	1.72	0.71
51:BS:37:ALA:HB2	51:BS:99:LYS:NZ	2.06	0.71
40:BE:44:TYR:O	40:BE:45:THR:HB	1.90	0.71
36:DA:1999:C:H2'	36:DA:2000:G:H8	1.54	0.71
1:CA:346:G:H5'	52:DT:41:ARG:NH2	2.05	0.71
58:BZ:128:VAL:HG22	58:BZ:129:SER:N	2.05	0.71
1:AA:1251:A:O2'	1:AA:1370:G:H5'	1.90	0.71
7:CG:105:VAL:O	7:CG:106:GLN:C	2.28	0.71
22:AV:68:C:H2'	22:AV:69:G:C5'	2.19	0.71
55:BW:6:ILE:HG12	55:BW:104:THR:HG22	1.71	0.71
37:DB:75:G:H5'	37:DB:76:G:OP2	1.90	0.71
1:CA:1016:A:H2'	1:CA:1017:G:O4'	1.90	0.71
36:BA:598:G:H5'	48:BP:15:ARG:CD	2.20	0.71
43:DH:33:LEU:HD12	43:DH:75:ALA:CA	2.20	0.71
25:CZ:255:ILE:HG12	25:CZ:304:LEU:HD22	1.72	0.71
29:D3:6:VAL:HB	29:D3:54:VAL:CG1	2.20	0.71
25:CZ:360:GLU:O	25:CZ:362:VAL:HG23	1.88	0.71
16:CP:3:LYS:HG2	16:CP:65:GLN:HB2	1.70	0.71
49:BQ:32:TYR:CE2	49:BQ:111:GLU:HG3	2.25	0.71
49:DQ:6:ARG:O	49:DQ:7:MET:HG3	1.90	0.71

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:CT:83:ARG:HA	20:CT:86:ARG:HB3	1.73	0.71
36:DA:673:C:O2'	36:DA:674:G:H5'	1.89	0.71
41:BF:32:LEU:O	41:BF:36:VAL:HG23	1.90	0.71
4:AD:30:LYS:C	4:AD:32:ALA:N	2.43	0.71
28:B2:35:LEU:CD1	28:B2:50:ILE:HG13	2.19	0.71
42:BG:114:ILE:HD12	42:BG:135:LEU:HD11	1.72	0.71
36:DA:571:A:O2'	36:DA:572:A:H5''	1.91	0.71
8:CH:11:THR:HG22	8:CH:15:ASN:ND2	2.05	0.71
2:CB:169:LYS:HB3	2:CB:170:GLU:OE2	1.89	0.71
7:AG:23:VAL:O	7:AG:27:ILE:HG13	1.89	0.71
14:AN:23:ARG:HA	14:AN:30:ALA:HA	1.71	0.71
14:AN:29:ARG:HG3	14:AN:29:ARG:HH11	1.56	0.71
27:B1:45:ASN:CB	36:BA:2230:G:H1'	2.20	0.71
37:DB:15:A:H1'	37:DB:110:G:C6	2.26	0.71
36:BA:2306:C:H5'	36:BA:2307:G:O5'	1.91	0.71
36:BA:864:G:H1'	36:BA:914:C:H42	1.56	0.71
1:AA:1258:G:O2'	1:AA:1259:C:H5'	1.90	0.71
43:DH:44:VAL:HG12	43:DH:45:VAL:N	2.03	0.71
18:CR:66:LEU:O	18:CR:70:ILE:HG13	1.90	0.71
53:BU:24:TYR:HB2	53:BU:29:SER:HB3	1.71	0.71
36:BA:1064:C:H3'	36:BA:1065:U:C5'	2.20	0.71
36:DA:1065:U:O2'	36:DA:1066:U:H5''	1.90	0.71
12:AL:86:ARG:HG2	12:AL:87:GLY:H	1.55	0.71
29:B3:12:PRO:HG2	29:B3:13:ILE:H	1.55	0.71
12:AL:55:VAL:HG21	12:AL:67:THR:HG22	1.71	0.71
27:B1:83:GLU:OE1	27:B1:83:GLU:N	2.24	0.71
27:D1:18:ILE:HG22	27:D1:19:GLN:N	2.05	0.71
2:CB:9:GLU:N	2:CB:9:GLU:OE2	2.24	0.71
1:AA:256:U:H2'	1:AA:257:G:C8	2.25	0.71
46:BN:57:ALA:HB3	46:BN:124:ALA:HA	1.70	0.71
36:DA:1027:A:N3	36:DA:1027:A:H2'	2.05	0.71
36:BA:1512:U:O2	36:BA:1512:U:H2'	1.91	0.71
50:DR:10:LEU:O	50:DR:11:ASN:HB2	1.90	0.71
26:D0:55:ARG:O	26:D0:57:PHE:N	2.23	0.71
36:BA:377:C:H2'	36:BA:378:C:C6	2.26	0.71
38:DC:86:ALA:HB3	38:DC:94:VAL:HG11	1.73	0.71
36:DA:1853:A:H2'	36:DA:1854:A:C8	2.25	0.71
36:BA:2170:A:H5''	38:BC:134:ARG:HE	1.55	0.71
40:BE:198:VAL:HG12	40:BE:199:ARG:N	2.05	0.71
30:B4:26:SER:HB2	42:BG:143:GLU:OE1	1.91	0.71
2:CB:168:THR:HG23	2:CB:192:SER:OG	1.91	0.71
2:CB:18:GLY:N	2:CB:42:ILE:HG22	2.06	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BE:4:ILE:HD13	40:BE:28:ALA:HB1	1.73	0.71
36:DA:1708:C:H2'	36:DA:1709:U:C6	2.26	0.71
3:CC:8:ILE:HG13	3:CC:184:TYR:HB3	1.71	0.71
3:AC:70:VAL:HG12	3:AC:71:ALA:N	2.03	0.71
36:BA:1775:U:H2'	36:BA:1776:G:C5'	2.21	0.71
46:BN:36:GLY:H	46:BN:49:GLY:CA	2.04	0.71
36:BA:1578:U:C2'	36:BA:1579:A:H5''	2.21	0.71
2:AB:172:ILE:HD12	2:AB:172:ILE:H	1.55	0.71
2:AB:177:ALA:HA	2:AB:182:ILE:HD12	1.71	0.71
55:BW:14:PRO:CG	55:BW:78:GLU:HB2	2.19	0.71
41:DF:153:SER:HA	41:DF:172:TRP:CB	2.20	0.71
25:CZ:271:GLU:O	25:CZ:286:VAL:HG23	1.90	0.71
37:BB:114:C:H4'	51:BS:46:VAL:HG13	1.73	0.71
1:AA:987:G:H2'	1:AA:988:G:H8	1.55	0.71
26:D0:34:GLY:HA3	36:DA:2353:G:H1'	1.72	0.71
22:AW:3:C:H2'	22:AW:4:C:O4'	1.89	0.71
36:BA:2260:C:H42	36:BA:2280:G:H1	1.39	0.71
36:DA:1279:G:H1	36:DA:1291:C:H42	1.38	0.71
28:D2:21:LEU:HD21	28:D2:60:LEU:HD22	1.71	0.71
41:BF:160:ASN:ND2	41:BF:162:LEU:HD13	2.06	0.71
2:CB:151:GLY:O	2:CB:153:ARG:N	2.24	0.71
1:CA:1251:A:O2'	1:CA:1370:G:H5'	1.89	0.71
9:CI:33:PHE:CZ	9:CI:47:LEU:HD11	2.25	0.71
36:DA:1827:C:H2'	36:DA:1828:G:O4'	1.91	0.71
55:DW:52:GLU:C	55:DW:54:ALA:H	1.93	0.71
31:B5:40:LYS:HZ2	31:B5:45:VAL:HA	1.53	0.71
22:AV:21:A:O2'	22:AV:22:G:H5''	1.90	0.71
3:AC:181:ASN:HD21	3:AC:204:LEU:HD12	1.55	0.71
1:CA:167:G:H2'	1:CA:168:G:H8	1.55	0.71
36:BA:2590:A:OP2	39:BD:238:GLY:HA2	1.91	0.71
42:DG:131:TYR:CE2	42:DG:133:LEU:HB3	2.21	0.71
36:BA:2802:G:C3'	36:BA:2803:C:H5''	2.20	0.71
37:BB:21:G:H2'	37:BB:22:U:O4'	1.89	0.71
49:DQ:51:ARG:O	49:DQ:54:MET:HB3	1.91	0.71
36:DA:118:A:N3	36:DA:178:G:H1'	2.05	0.71
36:DA:687:C:H2'	36:DA:688:U:O4'	1.90	0.71
36:DA:751:A:H5'	55:DW:90:ARG:HA	1.71	0.71
32:B6:52:VAL:CG1	32:B6:53:LYS:N	2.53	0.71
48:BP:59:LEU:HA	48:BP:61:ARG:CD	2.20	0.71
50:DR:55:ALA:HA	50:DR:80:PHE:HE1	1.54	0.71
36:DA:1243:G:C2'	36:DA:1244:G:H5''	2.21	0.71
57:DY:46:LYS:HB2	57:DY:62:GLU:HG2	1.72	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2170:A:H5''	38:DC:134:ARG:HE	1.54	0.71
36:DA:2233:U:H2'	36:DA:2234:G:C8	2.26	0.71
43:DH:41:MET:HG3	43:DH:42:ARG:N	2.05	0.71
28:B2:56:GLN:O	28:B2:60:LEU:HD12	1.90	0.71
36:BA:61:G:H1	36:BA:94:C:H42	1.39	0.71
36:BA:318:C:O2'	36:BA:319:C:H5'	1.90	0.71
41:BF:158:THR:HA	41:BF:198:ALA:HB2	1.72	0.71
40:BE:47:VAL:HG23	40:BE:84:PHE:O	1.90	0.71
36:DA:2039:C:H2'	36:DA:2040:C:C6	2.26	0.71
9:CI:4:TYR:HA	9:CI:88:TYR:CE1	2.26	0.71
1:CA:963:G:H21	10:CJ:55:LYS:HD3	1.56	0.71
51:BS:89:ARG:HG3	51:BS:92:TYR:CA	2.20	0.71
1:CA:1118:C:H1'	1:CA:1179:A:C5	2.26	0.71
7:CG:72:ARG:HG2	7:CG:73:MET:HG3	1.71	0.71
9:CI:104:ARG:HG2	9:CI:105:ASP:N	2.06	0.71
9:CI:43:ALA:CB	9:CI:74:ILE:HD13	2.20	0.71
4:AD:170:VAL:HG12	4:AD:171:GLY:N	2.06	0.71
36:DA:2179:C:H5''	36:DA:2180:U:OP1	1.90	0.71
22:CW:53:G:N2	22:CW:62:C:H42	1.88	0.71
22:CW:62:C:H2'	22:CW:63:G:H8	1.56	0.71
54:DV:69:LYS:HA	54:DV:87:HIS:O	1.91	0.71
42:DG:39:ILE:HG22	42:DG:157:ILE:HG12	1.72	0.71
3:CC:26:LYS:HG3	3:CC:27:LYS:H	1.55	0.71
1:CA:983:A:H2'	1:CA:983:A:N3	2.04	0.71
49:BQ:37:LEU:HD11	49:BQ:129:THR:O	1.91	0.71
49:BQ:34:LEU:HD12	49:BQ:130:LYS:O	1.90	0.71
42:DG:52:ILE:HD13	42:DG:52:ILE:H	1.53	0.71
4:AD:109:GLY:O	4:AD:111:ALA:N	2.20	0.71
26:B0:38:VAL:HB	26:B0:59:LEU:HD12	1.72	0.71
36:BA:2875:C:H4'	52:BT:5:ALA:HB3	1.73	0.71
49:DQ:39:PRO:HG3	49:DQ:99:PRO:HD2	1.72	0.71
36:BA:1946:U:H2'	36:BA:1947:C:H6	1.56	0.71
39:DD:175:LEU:HD12	39:DD:185:VAL:HG21	1.72	0.71
13:CM:6:GLY:C	13:CM:8:GLU:H	1.94	0.71
36:BA:2359:C:H2'	36:BA:2360:A:H5'	1.73	0.71
36:BA:1853:A:H2'	36:BA:1854:A:C8	2.25	0.71
36:BA:1818:U:C2'	39:BD:157:ARG:HG3	2.20	0.71
1:AA:1054:C:H6	1:AA:1196:U:C4	2.09	0.71
56:DX:14:SER:O	56:DX:17:ALA:HB3	1.90	0.71
54:DV:98:GLU:OE2	54:DV:100:ARG:HD3	1.91	0.71
2:AB:215:LEU:O	2:AB:219:VAL:HG23	1.90	0.71
1:AA:1105:A:O2'	1:AA:1106:G:H5'	1.91	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:DZ:128:VAL:HG21	58:DZ:160:GLY:O	1.91	0.71
46:BN:10:GLU:CG	46:BN:11:PRO:HD2	2.21	0.71
14:AN:12:ARG:C	14:AN:14:PRO:HD2	2.11	0.71
14:AN:12:ARG:HB3	14:AN:14:PRO:HG2	1.71	0.71
4:CD:173:TRP:HB3	4:CD:187:ARG:NH2	2.06	0.71
46:DN:55:VAL:HG22	46:DN:56:ASN:H	1.56	0.71
49:BQ:27:VAL:HG23	49:BQ:137:TYR:CD1	2.26	0.71
13:CM:108:ARG:HA	13:CM:108:ARG:HH11	1.56	0.71
36:DA:272(H):C:H2'	36:DA:272(I):U:C5'	2.20	0.71
12:AL:20:LYS:H	12:AL:20:LYS:HD3	1.55	0.71
1:CA:781:A:H2'	1:CA:782:A:H5'	1.73	0.71
46:BN:129:PRO:O	46:BN:130:HIS:HB3	1.91	0.71
6:AF:37:VAL:HG12	6:AF:38:GLU:N	2.06	0.71
26:D0:38:VAL:HB	26:D0:59:LEU:HD12	1.73	0.71
33:B7:18:PHE:HZ	36:BA:117:G:H4'	1.54	0.71
18:CR:53:ARG:HH21	18:CR:59:SER:HA	1.54	0.71
7:CG:63:LYS:NZ	7:CG:67:GLU:HB2	2.06	0.71
29:B3:1:MET:HB2	29:B3:38:GLU:HG3	1.73	0.71
36:BA:761:A:H8	36:BA:761:A:O5'	1.74	0.71
36:DA:2756:U:H1'	36:DA:2757:A:H5''	1.72	0.71
45:DK:31:UNK:O	45:DK:63:UNK:HA	1.91	0.71
44:BJ:56:UNK:HA	44:BJ:83:UNK:HA	1.72	0.71
1:AA:512:U:H2'	1:AA:513:C:H6	1.56	0.71
50:DR:34:ILE:HB	50:DR:114:VAL:HG23	1.73	0.71
55:DW:41:LYS:C	55:DW:43:GLY:H	1.93	0.71
32:D6:19:ARG:HG3	32:D6:20:ASN:N	2.04	0.71
25:AZ:139:ASP:O	25:AZ:140:MET:HG2	1.90	0.71
28:D2:51:ARG:HB2	28:D2:55:ARG:NH2	2.06	0.71
39:BD:35:LYS:HG2	39:BD:63:ARG:CG	2.21	0.71
1:AA:1190:G:OP1	3:AC:4:LYS:HA	1.91	0.71
36:DA:581:C:H2'	36:DA:582:G:C8	2.25	0.71
46:DN:35:ARG:HG3	46:DN:35:ARG:O	1.90	0.71
8:CH:14:ARG:HH11	8:CH:14:ARG:CB	2.04	0.71
41:DF:132:VAL:HG22	41:DF:133:ASN:N	2.05	0.71
47:BO:101:PRO:HD3	52:BT:68:TYR:HB2	1.72	0.71
52:DT:80:SER:CB	52:DT:81:PRO:HD3	2.20	0.71
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.25	0.71
10:CJ:50:ILE:HG22	10:CJ:60:ARG:HG2	1.73	0.71
46:DN:14:VAL:HG11	46:DN:137:LYS:HG3	1.73	0.71
1:CA:547:A:H4'	1:CA:548:G:O5'	1.91	0.71
36:DA:142:A:H5'	36:DA:142(A):C:OP2	1.91	0.71
39:DD:24:ILE:O	39:DD:25:THR:O	2.08	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:265:A:H4'	36:BA:266:G:O5'	1.90	0.71
9:AI:43:ALA:CB	9:AI:74:ILE:HD13	2.20	0.71
24:CY:9:A:N6	24:CY:23:A:H62	1.89	0.71
10:AJ:67:THR:HG23	10:AJ:67:THR:O	1.91	0.71
36:BA:234:C:H2'	36:BA:235:U:H6	1.55	0.71
39:DD:136:ILE:HG22	39:DD:140:THR:OG1	1.90	0.71
36:BA:212:G:O2'	36:BA:213:A:H5'	1.90	0.71
36:BA:2491:U:H4'	36:BA:2570:G:OP1	1.91	0.71
1:AA:473:G:H2'	1:AA:474:G:H8	1.54	0.71
36:BA:106:C:H2'	36:BA:107:C:C6	2.25	0.71
1:AA:892:A:O2'	1:AA:1415:G:H4'	1.91	0.71
10:AJ:80:LYS:HB3	10:AJ:80:LYS:NZ	2.05	0.71
1:CA:660:G:H2'	1:CA:661:G:H8	1.56	0.71
36:BA:410:G:H1	36:BA:417:C:H42	1.39	0.71
36:BA:80:G:O2'	36:BA:81:G:H5'	1.91	0.71
51:DS:83:LYS:HG2	51:DS:105:ALA:HB2	1.73	0.71
26:B0:41:ARG:NH2	36:BA:2387:U:H1'	2.06	0.70
57:BY:46:LYS:HB2	57:BY:62:GLU:HG2	1.72	0.70
24:AY:30:C:H2'	24:AY:30:C:O2	1.90	0.70
12:AL:18:VAL:CG2	12:AL:19:ARG:H	1.95	0.70
10:AJ:56:HIS:O	10:AJ:58:ASP:N	2.24	0.70
2:CB:44:LEU:O	2:CB:47:THR:HB	1.91	0.70
38:DC:23:ASP:CB	38:DC:27:ARG:HH12	2.00	0.70
36:BA:628:G:H2'	36:BA:629:G:H5'	1.73	0.70
1:AA:8:A:H5'	5:AE:120:THR:O	1.91	0.70
7:AG:69:VAL:O	7:AG:69:VAL:HG13	1.90	0.70
7:CG:31:MET:HG2	7:CG:32:ARG:N	2.06	0.70
14:CN:48:ALA:CB	14:CN:53:LEU:HD12	2.20	0.70
36:BA:329:G:N7	57:BY:71:LYS:HE3	2.06	0.70
49:DQ:140:ALA:HB3	58:DZ:53:ILE:HD12	1.71	0.70
43:BH:33:LEU:CD1	43:BH:75:ALA:HA	2.20	0.70
28:B2:5:GLU:CB	28:B2:9:GLN:HE22	2.02	0.70
13:CM:32:GLU:O	13:CM:35:GLU:HG2	1.91	0.70
8:CH:98:LYS:HG3	8:CH:99:GLU:HG3	1.73	0.70
43:DH:20:ALA:HB1	43:DH:21:PRO:CD	2.21	0.70
58:BZ:76:LEU:CD2	58:BZ:82:ARG:H	2.04	0.70
25:CZ:347:THR:HG22	25:CZ:348:ASP:N	2.05	0.70
1:AA:858:G:C6	1:AA:869:G:N7	2.59	0.70
54:BV:88:ARG:O	54:BV:90:PRO:HD3	1.91	0.70
2:AB:121:LEU:HA	2:AB:124:SER:HB3	1.73	0.70
20:CT:57:ARG:NH1	20:CT:102:GLY:HA3	2.06	0.70
4:AD:145:GLU:HA	4:AD:184:LYS:HA	1.73	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:AR:50:ILE:HD12	18:AR:70:ILE:HG21	1.73	0.70
58:DZ:102:LEU:HD21	58:DZ:124:ILE:CD1	2.21	0.70
18:CR:59:SER:H	18:CR:62:GLU:HB2	1.56	0.70
36:BA:1164:G:O2'	36:BA:1165:U:H5'	1.89	0.70
26:B0:4:LYS:HD3	36:BA:2252:G:O6	1.91	0.70
36:DA:2721:A:H2'	36:DA:2722:G:H8	1.56	0.70
1:AA:189(I):G:H2'	1:AA:189(J):G:H8	1.55	0.70
36:BA:806:C:O2'	36:BA:2445:G:H4'	1.89	0.70
36:DA:2839:G:H1	36:DA:2878:U:H3	1.37	0.70
28:D2:3:LEU:HB3	36:DA:98:G:OP1	1.90	0.70
41:DF:108:LYS:O	41:DF:112:MET:HB2	1.90	0.70
41:DF:110:LEU:HD13	41:DF:111:ALA:N	2.06	0.70
36:BA:1353:A:H2'	36:BA:1354:A:H8	1.54	0.70
36:BA:692:C:O2'	36:BA:693:C:H5'	1.90	0.70
43:DH:42:ARG:HB2	43:DH:42:ARG:NH1	2.06	0.70
31:B5:2:ALA:N	36:BA:2015:A:H1'	2.07	0.70
55:DW:8:ARG:CA	55:DW:102:HIS:HB3	2.15	0.70
36:DA:2025:C:H2'	36:DA:2026:C:C6	2.26	0.70
36:BA:143(A):C:H4'	56:BX:38:GLU:OE1	1.92	0.70
51:DS:67:ARG:HH21	51:DS:100:ALA:CB	2.04	0.70
57:BY:96:ILE:CG1	57:BY:99:CYS:HB3	2.19	0.70
36:BA:2189:U:H2'	36:BA:2190:G:C4'	2.21	0.70
49:DQ:27:VAL:HG23	49:DQ:137:TYR:CD1	2.26	0.70
49:DQ:37:LEU:HD11	49:DQ:129:THR:O	1.91	0.70
58:DZ:79:ARG:O	58:DZ:80:ARG:C	2.28	0.70
1:AA:1003:G:N2	1:AA:1039:C:H42	1.89	0.70
1:CA:1305:G:O2'	1:CA:1306:A:H8	1.73	0.70
36:BA:996:A:N6	36:BA:1160:G:C6	2.59	0.70
39:DD:59:LYS:HG3	39:DD:60:ARG:N	2.05	0.70
36:BA:265:A:H1'	36:BA:266:G:O4'	1.91	0.70
20:AT:104:LEU:HD23	20:AT:105:SER:N	2.06	0.70
20:CT:50:GLU:HB2	20:CT:100:ILE:HD13	1.72	0.70
1:AA:1104:G:H4'	2:AB:111:ARG:NH1	2.06	0.70
34:D8:43:GLN:O	34:D8:44:LYS:HD2	1.90	0.70
39:BD:175:LEU:HD12	39:BD:185:VAL:HG21	1.71	0.70
49:BQ:109:VAL:HG12	49:BQ:110:THR:N	2.06	0.70
36:DA:2064:C:H1'	36:DA:2450:A:C6	2.25	0.70
1:AA:1442(B):A:H5''	52:BT:122:ASP:OD1	1.90	0.70
22:AV:74:C:H42	36:BA:2252:G:H1	1.38	0.70
1:AA:781:A:H2'	1:AA:782:A:H5'	1.72	0.70
36:BA:74:A:H5''	36:BA:75:G:H1'	1.73	0.70
39:BD:4:LYS:NZ	39:BD:20:ASP:HA	2.07	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:DQ:74:TYR:HD1	49:DQ:75:THR:H	1.39	0.70
28:D2:4:SER:HA	28:D2:7:ARG:HD2	1.71	0.70
36:BA:581:C:H2'	36:BA:582:G:C8	2.26	0.70
25:AZ:193:ASN:HB3	25:AZ:196:VAL:HG23	1.73	0.70
36:DA:83:G:C2	36:DA:102:G:H2'	2.26	0.70
36:DA:2475:C:H42	36:DA:2529:G:H22	1.38	0.70
36:BA:619:G:H3'	36:BA:620:G:H21	1.57	0.70
35:B9:7:VAL:HG13	35:B9:34:GLN:CG	2.21	0.70
28:B2:10:LEU:HA	28:B2:13:ALA:HB3	1.72	0.70
36:DA:1162:G:H4'	54:DV:24:LYS:HB2	1.71	0.70
1:CA:993:G:H2'	1:CA:993:G:N3	2.05	0.70
36:DA:330:A:C2	36:DA:1210:A:H2'	2.21	0.70
36:BA:2673:G:H5'	36:BA:2673:G:H8	1.56	0.70
36:DA:1060:U:H1'	36:DA:1061:U:O5'	1.91	0.70
36:BA:328:U:H4'	57:BY:68:HIS:NE2	2.06	0.70
42:BG:161:THR:C	42:BG:163:ALA:H	1.94	0.70
31:D5:56:LYS:HE2	31:D5:59:GLU:OE2	1.92	0.70
46:BN:14:VAL:HG11	46:BN:137:LYS:HG3	1.73	0.70
19:CS:40:ILE:HB	19:CS:67:VAL:O	1.91	0.70
37:DB:106:G:H2'	37:DB:107:G:C8	2.23	0.70
37:DB:103:G:N2	58:DZ:73:GLN:OE1	2.23	0.70
42:BG:87:PRO:HG2	42:BG:88:ILE:H	1.54	0.70
33:B7:41:ARG:HH22	36:BA:460:A:P	2.14	0.70
1:AA:983:A:H2'	1:AA:983:A:N3	2.04	0.70
2:CB:134:GLU:C	2:CB:136:VAL:H	1.94	0.70
20:AT:57:ARG:NH1	20:AT:103:GLY:N	2.38	0.70
27:B1:24:ALA:N	27:B1:32:LYS:HE3	2.06	0.70
2:AB:179:LYS:HA	8:AH:72:PRO:HD3	1.73	0.70
36:BA:2074:U:H2'	36:BA:2075:U:C6	2.26	0.70
36:DA:612:C:O2'	36:DA:613:G:H5''	1.91	0.70
24:AY:37:YG:H31	24:AY:37:YG:H1'	1.73	0.70
36:BA:2781:A:H5''	36:BA:2782:G:H5'	1.72	0.70
12:CL:83:VAL:HG12	12:CL:84:LEU:N	2.06	0.70
36:BA:968:G:H2'	36:BA:969:U:C6	2.25	0.70
36:BA:1946:U:H2'	36:BA:1947:C:C6	2.26	0.70
9:AI:7:THR:O	9:AI:80:GLY:HA2	1.90	0.70
2:CB:7:VAL:HA	2:CB:11:LEU:HG	1.72	0.70
1:AA:125:U:H2'	1:AA:126:G:C8	2.26	0.70
40:BE:9:VAL:CG1	40:BE:25:VAL:HB	2.21	0.70
36:DA:1946:U:H2'	36:DA:1947:C:C6	2.26	0.70
6:AF:99:ALA:HB3	18:AR:29:PHE:CE2	2.26	0.70
2:AB:7:VAL:HA	2:AB:11:LEU:HG	1.73	0.70

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:104:LEU:HD11	25:AZ:116:THR:HG23	1.72	0.70
36:BA:572:A:H61	36:BA:2029:G:H21	1.38	0.70
40:DE:47:VAL:HG23	40:DE:84:PHE:O	1.91	0.70
36:BA:660:G:H5'	41:BF:99:TYR:CD2	2.27	0.70
36:BA:1290:C:H2'	36:BA:1291:C:C6	2.26	0.70
36:BA:2881:C:H2'	36:BA:2882:A:C8	2.26	0.70
50:BR:34:ILE:HB	50:BR:114:VAL:HG23	1.72	0.70
13:AM:14:ARG:O	13:AM:17:VAL:HB	1.91	0.70
1:AA:250:A:H4'	1:AA:251:G:O5'	1.91	0.70
2:CB:18:GLY:H	2:CB:42:ILE:CG2	2.04	0.70
41:DF:136:THR:O	41:DF:140:LEU:HB2	1.91	0.70
38:BC:22:ILE:HG13	38:BC:228:SER:OG	1.92	0.70
1:CA:1375:A:H2'	1:CA:1376:U:O4'	1.91	0.70
9:CI:43:ALA:C	9:CI:45:ALA:H	1.92	0.70
19:AS:9:VAL:O	19:AS:11:VAL:HG12	1.91	0.70
25:AZ:376:LYS:O	25:AZ:378:VAL:HG13	1.92	0.70
36:BA:438:G:H2'	36:BA:440:G:C8	2.26	0.70
46:BN:35:ARG:O	46:BN:35:ARG:HG3	1.91	0.70
38:DC:137:LEU:O	38:DC:139:ASN:N	2.23	0.70
2:CB:121:LEU:HA	2:CB:124:SER:HB3	1.72	0.70
29:B3:27:GLY:C	29:B3:28:LEU:HD23	2.10	0.70
8:AH:98:LYS:HG3	8:AH:99:GLU:HG3	1.73	0.70
36:DA:2071:A:H2'	36:DA:2072:G:C8	2.26	0.70
36:DA:55:G:HO2'	36:DA:127:A:H2	1.39	0.70
36:BA:1385:G:H4'	36:BA:1386:C:OP1	1.90	0.70
1:AA:1321:C:H5''	1:AA:1322:C:H5''	1.73	0.70
36:BA:189:G:H2'	36:BA:205:G:N2	2.06	0.70
1:CA:473:G:H2'	1:CA:474:G:C8	2.25	0.70
46:DN:58:ASP:C	46:DN:60:ILE:H	1.93	0.70
1:CA:707:C:O2'	1:CA:708:C:H5'	1.90	0.70
58:DZ:40:ASP:OD1	58:DZ:42:VAL:HG12	1.92	0.70
5:CE:94:ALA:HB3	5:CE:117:ASP:O	1.92	0.70
6:CF:99:ALA:HB3	18:CR:29:PHE:CE2	2.25	0.70
9:CI:110:GLU:HG2	9:CI:113:LYS:NZ	2.07	0.70
36:DA:2496:C:OP1	49:DQ:83:MET:HG2	1.90	0.70
47:DO:17:ARG:O	47:DO:18:LYS:HB2	1.91	0.70
51:DS:72:ALA:O	51:DS:75:GLU:HB3	1.91	0.70
10:CJ:92:THR:HG23	10:CJ:93:GLY:N	2.05	0.70
1:CA:142:G:H1	1:CA:221:C:H42	1.39	0.70
46:DN:5:VAL:HG12	46:DN:7:LYS:HG3	1.74	0.70
53:BU:14:HIS:HD2	53:BU:32:PHE:CB	2.04	0.70
50:DR:55:ALA:HA	50:DR:80:PHE:CE1	2.26	0.70

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:D8:10:ALA:O	34:D8:14:VAL:HG12	1.90	0.70
41:DF:37:VAL:HG22	41:DF:183:VAL:HG23	1.73	0.70
41:DF:29:ASN:O	41:DF:33:LEU:HD23	1.91	0.70
56:BX:12:VAL:HG12	56:BX:27:THR:C	2.11	0.70
39:BD:24:ILE:O	39:BD:25:THR:O	2.09	0.70
1:CA:254:G:N2	17:CQ:16:GLN:HE22	1.89	0.70
36:DA:2653:U:H3'	36:DA:2654:A:H8	1.54	0.70
36:DA:2502:G:C5'	36:DA:2503:A:H5''	2.15	0.70
46:DN:28:THR:CG2	46:DN:29:LYS:H	2.04	0.70
54:DV:49:THR:HB	54:DV:50:PRO:CD	2.21	0.70
2:CB:200:ILE:HG22	2:CB:202:PRO:HD3	1.73	0.70
6:CF:69:GLU:O	6:CF:72:VAL:HG12	1.92	0.70
25:CZ:164:PRO:O	25:CZ:168:VAL:HG23	1.90	0.70
52:BT:89:VAL:HG12	52:BT:91:ARG:HG3	1.73	0.70
52:DT:28:VAL:HG21	52:DT:46:GLU:HA	1.72	0.70
6:AF:69:GLU:O	6:AF:72:VAL:HG12	1.90	0.70
36:DA:1902:C:H4'	39:DD:244:ARG:HB2	1.73	0.70
42:DG:16:ARG:HD2	42:DG:20:ILE:HD11	1.74	0.70
36:BA:1657:C:H6	36:BA:1657:C:O5'	1.73	0.70
46:BN:75:TYR:CD1	46:BN:82:LEU:HB2	2.23	0.70
49:DQ:70:PRO:O	49:DQ:93:TYR:HB3	1.92	0.70
38:DC:40:THR:HG23	38:DC:177:LYS:HD2	1.73	0.70
20:CT:57:ARG:NH1	20:CT:103:GLY:N	2.39	0.70
1:AA:662:G:H2'	1:AA:663:A:H8	1.57	0.70
36:DA:25:U:C5'	55:DW:79:GLY:HA2	2.21	0.70
36:BA:31:C:H2'	36:BA:32:C:C5'	2.21	0.70
36:DA:2482:G:H22	49:DQ:52:VAL:CG1	2.03	0.70
1:CA:409:G:C5'	4:CD:25:ARG:HB2	2.21	0.70
36:BA:686:G:N2	36:BA:788:A:H61	1.89	0.70
1:CA:390:C:O3'	16:CP:28:ARG:NH1	2.25	0.70
20:CT:59:ALA:O	20:CT:63:ILE:HG13	1.92	0.70
36:BA:2144:U:H2'	36:BA:2146:C:C5	2.25	0.70
10:CJ:92:THR:HG23	10:CJ:93:GLY:H	1.57	0.70
38:BC:103:ILE:HG22	38:BC:103:ILE:O	1.91	0.70
47:BO:23:ARG:HG3	47:BO:24:VAL:N	2.06	0.70
37:DB:51:G:H2'	37:DB:52:A:C8	2.26	0.70
1:AA:9:G:OP1	5:AE:122:GLU:HG3	1.91	0.70
44:DJ:56:UNK:HA	44:DJ:83:UNK:HA	1.74	0.70
32:D6:12:GLU:CD	32:D6:54:ILE:HG22	2.12	0.70
28:D2:68:ARG:NH2	28:D2:72:ALA:HB1	2.06	0.70
39:BD:63:ARG:HG3	39:BD:63:ARG:HH11	1.55	0.70
36:DA:2228:G:OP2	39:DD:261:LYS:HE3	1.91	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BH:42:ARG:NH1	43:BH:42:ARG:HB2	2.06	0.70
49:BQ:55:VAL:HG23	58:BZ:178:GLU:CD	2.12	0.70
53:DU:92:ARG:HD2	54:DV:11:GLN:HG2	1.71	0.70
53:DU:95:LEU:HD12	54:DV:11:GLN:HG3	1.71	0.70
12:CL:18:VAL:CG2	12:CL:19:ARG:H	1.97	0.70
13:CM:97:PRO:HA	13:CM:110:ARG:CD	2.17	0.70
36:DA:1484:G:H2'	36:DA:1485:G:C5'	2.17	0.70
7:CG:100:ALA:O	7:CG:104:LEU:HD23	1.91	0.70
7:CG:69:VAL:HG11	7:CG:104:LEU:CD2	2.18	0.70
57:BY:97:ARG:O	57:BY:97:ARG:HG3	1.91	0.70
46:BN:55:VAL:HG22	46:BN:56:ASN:H	1.57	0.70
36:BA:1771:C:C4	36:BA:1772:G:N7	2.60	0.70
54:BV:49:THR:HB	54:BV:50:PRO:CD	2.20	0.70
36:DA:2708:G:H2'	36:DA:2709:G:H8	1.56	0.70
54:DV:88:ARG:O	54:DV:90:PRO:HD3	1.91	0.70
7:AG:63:LYS:NZ	7:AG:67:GLU:HB2	2.05	0.70
36:BA:2071:A:H2'	36:BA:2072:G:C8	2.27	0.70
1:AA:1321:C:H3'	1:AA:1322:C:H5''	1.72	0.70
1:CA:321:A:O2'	1:CA:322:C:H5'	1.91	0.70
36:BA:1065:U:O2'	36:BA:1066:U:H5''	1.92	0.70
1:CA:1321:C:H3'	1:CA:1322:C:H5''	1.73	0.70
36:BA:1458:C:H4'	36:BA:1459:G:O4'	1.92	0.70
1:AA:409:G:C5'	4:AD:25:ARG:HB2	2.22	0.70
36:DA:1817:G:O2'	36:DA:1818:U:H5'	1.91	0.70
36:DA:2260:C:H42	36:DA:2280:G:H1	1.40	0.70
36:BA:398:G:H2'	36:BA:399:G:C8	2.27	0.70
39:BD:64:ILE:HG13	39:BD:65:ILE:N	2.05	0.70
36:BA:654(V):A:H8	36:BA:655:A:H2'	1.56	0.70
43:BH:61:HIS:C	43:BH:63:SER:H	1.95	0.70
24:AY:33:U:H2'	24:AY:34:G:H3'	1.71	0.70
36:DA:570:G:H2'	36:DA:2030:A:N7	2.05	0.70
36:DA:996:A:H4'	53:DU:92:ARG:HG2	1.74	0.70
36:DA:1251:C:OP2	53:DU:10:ARG:NE	2.24	0.70
53:DU:88:ILE:O	53:DU:88:ILE:HG13	1.91	0.70
8:AH:5:PRO:O	8:AH:8:ASP:HB3	1.92	0.70
25:CZ:193:ASN:HB3	25:CZ:196:VAL:HG23	1.74	0.70
58:DZ:165:VAL:HG12	58:DZ:166:SER:N	2.06	0.70
7:CG:20:ASP:HB3	7:CG:23:VAL:HG23	1.74	0.70
1:AA:1401:G:O2'	1:AA:1402:C:H5'	1.92	0.70
1:AA:1417:G:N2	1:AA:1482:G:H2'	2.06	0.70
2:CB:21:ARG:NE	2:CB:39:ILE:HG12	2.06	0.70
36:DA:139:G:C6	36:DA:140:G:H2'	2.26	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1440:C:H2'	1:CA:1441:G:H5'	1.73	0.70
36:DA:1297:C:H2'	36:DA:1298:C:C6	2.27	0.70
42:BG:51:ARG:NE	42:BG:51:ARG:HA	2.05	0.70
13:CM:3:ARG:HB2	30:D4:34:GLU:HG2	1.74	0.70
36:DA:1170:G:H1	36:DA:1179:C:N4	1.88	0.70
5:CE:39:GLY:HA2	5:CE:69:VAL:HB	1.74	0.70
20:AT:57:ARG:HH11	20:AT:57:ARG:HB2	1.55	0.70
13:AM:108:ARG:HH11	13:AM:108:ARG:HA	1.56	0.70
2:CB:36:ARG:C	2:CB:38:GLY:H	1.94	0.70
36:BA:2574:G:H2'	36:BA:2575:C:O4'	1.92	0.70
1:CA:1087:G:N2	1:CA:1099:G:H1'	2.06	0.70
36:BA:191:A:O2'	36:BA:192:C:H5'	1.92	0.70
27:B1:35:THR:O	27:B1:35:THR:HG23	1.92	0.70
36:BA:34:C:N4	36:BA:447:A:H61	1.90	0.70
32:D6:36:LEU:HD12	32:D6:50:ARG:CZ	2.22	0.70
28:D2:47:ASN:O	28:D2:50:ILE:HD13	1.91	0.70
36:DA:61:G:H1	36:DA:94:C:H42	1.39	0.70
42:DG:86:MET:N	42:DG:87:PRO:HD3	2.06	0.70
36:BA:2745:C:H1'	43:BH:143:GLN:HG2	1.72	0.70
28:B2:54:LYS:HG2	36:BA:73:A:OP1	1.91	0.70
41:BF:155:LEU:HD11	41:BF:176:LEU:HD22	1.73	0.70
13:AM:32:GLU:O	13:AM:35:GLU:HG2	1.91	0.70
36:DA:584:C:H2'	36:DA:585:G:H5'	1.73	0.70
46:DN:107:LEU:HB3	46:DN:108:PRO:HD2	1.74	0.70
54:DV:49:THR:HB	54:DV:50:PRO:HD2	1.74	0.70
1:CA:1226:C:H6	13:CM:103:THR:HG1	1.39	0.70
55:BW:8:ARG:CA	55:BW:102:HIS:HB3	2.14	0.70
57:DY:81:LYS:HD2	57:DY:96:ILE:HD12	1.72	0.70
1:AA:1502:A:H2	1:AA:1505:G:H1	1.37	0.70
4:AD:121:VAL:HG12	4:AD:134:ASP:HA	1.72	0.70
36:DA:2111:C:N4	36:DA:2145:C:H2'	2.07	0.70
1:AA:1531:A:H8	1:AA:1531:A:O5'	1.74	0.70
1:CA:18:C:C5'	5:CE:127:ASN:HD21	2.04	0.70
10:AJ:31:GLY:HA3	10:AJ:78:ASN:ND2	2.07	0.70
42:DG:106:LEU:HD12	42:DG:110:ALA:CB	2.22	0.70
36:BA:716:A:H2'	36:BA:717:G:H5'	1.74	0.70
11:CK:20:TYR:C	11:CK:21:ILE:HD12	2.12	0.70
37:BB:17:C:H2'	37:BB:18:G:C8	2.27	0.70
5:CE:135:THR:O	5:CE:138:ALA:HB3	1.91	0.70
39:DD:140:THR:O	39:DD:165:ILE:HG12	1.92	0.70
1:CA:1432:G:OP1	52:DT:107:ASP:HB2	1.91	0.70
1:CA:84:U:H2'	1:CA:88:A:H5'	1.73	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:64:ARG:O	5:CE:66:MET:HE2	1.90	0.70
4:CD:133:VAL:HG13	4:CD:135:LEU:HD22	1.73	0.70
22:CV:74:C:H42	36:DA:2252:G:H1	1.39	0.70
1:AA:652:U:O2'	1:AA:653:A:H5''	1.92	0.70
36:BA:2690:C:H4'	36:BA:2872:G:N2	2.07	0.70
18:AR:47:THR:HG21	18:AR:49:LYS:HZ1	1.55	0.70
36:BA:811:U:H5	48:BP:24:GLY:HA3	1.57	0.70
50:DR:24:GLN:HB2	50:DR:44:LEU:HD21	1.73	0.70
36:DA:111:A:H2'	36:DA:112:U:O4'	1.92	0.70
36:DA:92:A:H2'	36:DA:93:G:O4'	1.92	0.70
36:DA:2472:G:H2'	36:DA:2475:C:N4	2.06	0.70
36:BA:2523:G:H2'	36:BA:2524:G:C5'	2.13	0.70
36:BA:2475:C:H42	36:BA:2529:G:H22	1.36	0.70
28:B2:21:LEU:HD23	28:B2:24:LEU:HB3	1.74	0.70
36:BA:2820:A:N6	40:BE:192:ASN:HB3	2.05	0.70
50:BR:60:LEU:O	50:BR:63:ARG:HB2	1.91	0.70
50:BR:73:VAL:O	50:BR:76:VAL:HG12	1.92	0.70
42:BG:60:LEU:HA	42:BG:63:ILE:HD11	1.72	0.70
53:DU:49:HIS:HA	53:DU:52:ARG:HB2	1.73	0.70
32:D6:8:LYS:HE3	32:D6:25:LYS:HD3	1.73	0.70
52:BT:50:ILE:HG23	52:BT:99:LEU:HD12	1.73	0.70
47:DO:107:ARG:HH11	52:DT:36:GLU:HG3	1.57	0.70
4:AD:173:TRP:HB3	4:AD:187:ARG:NH2	2.06	0.70
31:D5:40:LYS:HZ3	31:D5:45:VAL:HA	1.57	0.70
58:DZ:71:VAL:HG11	58:DZ:74:VAL:HG23	1.74	0.70
36:DA:692:C:O2'	36:DA:693:C:H5'	1.91	0.70
5:CE:144:THR:O	5:CE:148:VAL:HG23	1.91	0.70
25:CZ:225:VAL:HG12	25:CZ:300:ARG:HA	1.74	0.70
36:BA:25:U:C5'	55:BW:79:GLY:HA2	2.22	0.70
36:BA:118:A:N3	36:BA:178:G:H1'	2.07	0.70
55:DW:12:ILE:HB	55:DW:42:ARG:HH12	1.56	0.70
36:DA:438:G:H2'	36:DA:440:G:C8	2.26	0.70
36:BA:1062:G:C2	36:BA:1063:G:H1'	2.27	0.70
52:BT:113:LYS:O	52:BT:114:LEU:HD23	1.92	0.70
36:BA:2064:C:H1'	36:BA:2450:A:C6	2.27	0.70
29:B3:1:MET:HE1	29:B3:40:THR:HA	1.73	0.70
2:CB:7:VAL:HG13	2:CB:11:LEU:HD11	1.73	0.70
58:DZ:24:LEU:HD12	58:DZ:41:LEU:HA	1.74	0.70
42:DG:55:LYS:O	42:DG:55:LYS:HD3	1.91	0.70
32:B6:15:GLU:CD	32:B6:18:ARG:CZ	2.61	0.70
36:DA:2820:A:N6	40:DE:192:ASN:HB3	2.07	0.70
25:CZ:234:ARG:HB3	25:CZ:289:LEU:CD1	2.22	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BD:154:LYS:C	39:BD:155:LEU:HD12	2.12	0.70
41:BF:43:LYS:HB3	41:BF:98:SER:HB3	1.74	0.70
43:BH:37:VAL:HG12	43:BH:38:SER:N	2.03	0.70
43:DH:37:VAL:HG12	43:DH:38:SER:N	2.05	0.70
28:B2:57:ILE:O	28:B2:61:LEU:HG	1.92	0.70
42:BG:66:GLN:C	42:BG:67:LYS:HD3	2.11	0.70
1:CA:1054:C:O2	1:CA:1054:C:H3'	1.91	0.70
1:CA:426:G:H2'	1:CA:427:U:C6	2.27	0.70
8:AH:14:ARG:CB	8:AH:14:ARG:HH11	2.05	0.70
1:CA:851:G:H2'	1:CA:852:G:H8	1.57	0.70
36:BA:1999:C:H2'	36:BA:2000:G:H8	1.56	0.70
52:BT:28:VAL:HG21	52:BT:46:GLU:HA	1.74	0.70
36:DA:2772:C:H2'	36:DA:2773:C:C6	2.26	0.70
52:DT:89:VAL:HG21	52:DT:91:ARG:HH21	1.57	0.70
38:BC:47:LEU:HD12	38:BC:47:LEU:N	2.07	0.70
1:AA:1352:C:H42	1:AA:1370:G:H1	1.38	0.70
6:AF:2:ARG:HD2	6:AF:69:GLU:HB3	1.73	0.70
36:BA:330:A:C2	36:BA:1210:A:H2'	2.22	0.70
16:CP:21:VAL:HG12	16:CP:34:GLU:O	1.91	0.70
42:DG:106:LEU:HD12	42:DG:110:ALA:HB3	1.74	0.70
36:DA:1578:U:C2'	36:DA:1579:A:H5''	2.20	0.70
8:AH:64:LYS:HG2	8:AH:65:TYR:N	2.07	0.70
15:AO:82:ILE:HG23	15:AO:83:GLU:N	2.05	0.70
55:BW:14:PRO:HG3	55:BW:101:SER:OG	1.91	0.70
55:BW:12:ILE:HD12	55:BW:42:ARG:HH11	1.56	0.70
3:CC:94:LEU:HD12	3:CC:94:LEU:O	1.92	0.70
4:CD:100:ARG:HG2	4:CD:102:ASP:OD1	1.92	0.70
1:AA:1437:C:H2'	1:AA:1438:G:H8	1.54	0.70
36:DA:958:U:H5''	49:DQ:14:ARG:HD3	1.74	0.70
40:DE:87:GLU:O	40:DE:89:ASP:N	2.18	0.70
48:DP:86:LYS:HB3	48:DP:86:LYS:NZ	2.07	0.70
1:CA:328:C:H4'	1:CA:329:A:H5'	1.74	0.70
36:DA:547:A:H2'	36:DA:548:A:H8	1.57	0.70
32:B6:15:GLU:HB2	32:B6:20:ASN:HB3	1.74	0.69
32:B6:53:LYS:CG	32:B6:54:ILE:N	2.55	0.69
36:BA:448:U:O4	36:BA:583:G:H1'	1.92	0.69
48:BP:23:PRO:HB3	48:BP:29:LYS:HB3	1.74	0.69
36:DA:1654:A:OP1	50:DR:2:ARG:HA	1.91	0.69
25:AZ:38:GLU:CB	25:AZ:189:ARG:NH1	2.52	0.69
41:DF:61:GLY:O	41:DF:62:ARG:C	2.30	0.69
55:BW:40:ASN:O	55:BW:41:LYS:HG2	1.91	0.69
51:BS:98:VAL:HG12	51:BS:100:ALA:H	1.55	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:102:LEU:HD23	2:CB:182:ILE:CD1	2.22	0.69
40:BE:34:VAL:O	40:BE:34:VAL:HG22	1.92	0.69
1:CA:956:U:O2'	1:CA:957:U:H5'	1.92	0.69
52:DT:89:VAL:HG12	52:DT:91:ARG:HG3	1.74	0.69
1:CA:1250:A:H4'	9:CI:68:GLY:N	2.07	0.69
36:BA:1060:U:H1'	36:BA:1061:U:O5'	1.92	0.69
1:CA:918:A:H2'	1:CA:919:A:C8	2.28	0.69
36:DA:458:G:N2	36:DA:469:G:H2'	2.07	0.69
46:DN:40:PRO:CB	53:DU:68:ALA:HB2	2.22	0.69
51:DS:106:ARG:HD2	51:DS:107:GLU:N	2.07	0.69
36:BA:1224:C:O3'	54:BV:86:GLY:HA3	1.91	0.69
1:AA:1436:U:H3	1:AA:1465:C:H42	1.41	0.69
36:DA:1087:G:H21	36:DA:1103:A:H61	1.38	0.69
18:CR:58:LEU:CD2	18:CR:62:GLU:HB3	2.22	0.69
46:BN:21:LYS:HE3	46:BN:25:ARG:CB	2.22	0.69
38:BC:161:ILE:HD12	38:BC:161:ILE:C	2.13	0.69
1:AA:1119:C:H2'	1:AA:1120:G:C8	2.26	0.69
26:D0:7:LEU:HD13	49:DQ:85:LYS:HG3	1.71	0.69
36:DA:1458:C:H4'	36:DA:1459:G:O4'	1.92	0.69
1:AA:412:A:H4'	1:AA:413:G:H8	1.54	0.69
18:CR:73:ALA:CB	18:CR:79:LEU:HD12	2.22	0.69
36:DA:68:G:H2'	36:DA:69:C:C6	2.27	0.69
32:B6:53:LYS:CG	32:B6:54:ILE:H	2.04	0.69
36:DA:1818:U:C2'	39:DD:157:ARG:HG3	2.21	0.69
50:BR:10:LEU:O	50:BR:11:ASN:HB2	1.90	0.69
25:AZ:252:GLU:OE2	25:AZ:264:ARG:HD2	1.92	0.69
52:BT:67:SER:O	52:BT:68:TYR:HB2	1.90	0.69
36:DA:2640:G:C2'	36:DA:2641:G:H5''	2.22	0.69
36:DA:298:G:H21	36:DA:339:U:H5	1.39	0.69
1:AA:939:G:H5''	7:AG:102:ARG:HH22	1.58	0.69
51:DS:12:PHE:O	51:DS:14:VAL:HG23	1.91	0.69
55:DW:50:VAL:O	55:DW:105:VAL:HG21	1.91	0.69
20:CT:73:HIS:O	20:CT:76:ALA:HB3	1.91	0.69
49:DQ:132:VAL:HG11	58:DZ:81:ARG:HD2	1.74	0.69
36:BA:83:G:C2	36:BA:102:G:H2'	2.27	0.69
33:D7:30:VAL:CG1	36:DA:466:A:H4'	2.22	0.69
33:D7:41:ARG:HH22	36:DA:460:A:P	2.15	0.69
36:DA:1175:U:O3'	36:DA:1176:G:H3'	1.92	0.69
36:DA:1058:G:H2'	36:DA:1059:G:C5'	2.22	0.69
47:BO:11:ALA:CB	47:BO:98:VAL:HG23	2.22	0.69
55:DW:14:PRO:CG	55:DW:78:GLU:HB2	2.21	0.69
54:BV:28:GLU:O	54:BV:61:VAL:HG21	1.92	0.69

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1041:C:O2'	36:DA:1042:G:H5'	1.90	0.69
22:AW:62:C:H2'	22:AW:63:G:H8	1.57	0.69
4:CD:149:ALA:O	4:CD:153:ARG:HG3	1.91	0.69
38:BC:28:LEU:HD23	38:BC:28:LEU:O	1.92	0.69
1:CA:642:A:H1'	8:CH:113:SER:OG	1.92	0.69
58:DZ:58:VAL:HA	58:DZ:67:LEU:O	1.92	0.69
25:AZ:143:ASP:O	25:AZ:147:LEU:HD23	1.91	0.69
36:DA:94(A):G:H2'	36:DA:95:G:C5'	2.18	0.69
41:BF:154:VAL:HG13	41:BF:191:ARG:O	1.91	0.69
36:BA:298:G:H21	36:BA:339:U:H5	1.40	0.69
40:BE:47:VAL:HG21	40:BE:86:PRO:HD2	1.74	0.69
42:BG:62:LEU:H	42:BG:62:LEU:HD12	1.57	0.69
53:BU:107:ALA:O	53:BU:110:VAL:HB	1.93	0.69
1:CA:662:G:H2'	1:CA:663:A:H8	1.58	0.69
48:BP:105:LEU:H	48:BP:105:LEU:HD12	1.57	0.69
7:CG:70:LYS:C	7:CG:138:LYS:HE3	2.13	0.69
57:BY:81:LYS:HD2	57:BY:96:ILE:HD12	1.74	0.69
31:B5:43:HIS:CE1	36:BA:2816:C:H1'	2.27	0.69
4:CD:170:VAL:HG12	4:CD:171:GLY:N	2.07	0.69
3:AC:95:THR:CG2	3:AC:97:LYS:HG3	2.21	0.69
36:BA:1827:C:H2'	36:BA:1828:G:O4'	1.93	0.69
36:DA:1246:A:H2'	36:DA:1247:A:H5'	1.74	0.69
36:DA:265:A:H1'	36:DA:266:G:O4'	1.92	0.69
42:BG:77:ILE:HG22	42:BG:80:PHE:H	1.56	0.69
42:DG:7:LEU:HD13	42:DG:100:TRP:HE3	1.58	0.69
20:AT:56:MET:HG3	20:AT:84:LEU:HG	1.73	0.69
20:CT:57:ARG:HH11	20:CT:57:ARG:HB2	1.58	0.69
36:DA:2201:C:H2'	36:DA:2202:C:C6	2.27	0.69
1:AA:751:U:H4'	15:AO:24:SER:CB	2.22	0.69
1:CA:520:A:N1	1:CA:536:C:H1'	2.07	0.69
36:BA:271(U):G:O2'	36:BA:271(V):G:H5'	1.92	0.69
29:D3:12:PRO:HG2	29:D3:13:ILE:H	1.57	0.69
36:DA:669:G:N3	36:DA:669:G:H2'	2.06	0.69
39:DD:76:PRO:HG2	39:DD:98:VAL:HG21	1.74	0.69
56:DX:63:LYS:HE2	56:DX:72:LYS:HG2	1.72	0.69
47:DO:86:ILE:HG22	47:DO:94:ARG:HB2	1.74	0.69
51:BS:83:LYS:HG2	51:BS:105:ALA:HB2	1.73	0.69
24:CY:29:C:H42	24:CY:41:G:H1	1.41	0.69
31:D5:2:ALA:N	36:DA:2015:A:H1'	2.07	0.69
50:DR:100:LEU:HD22	50:DR:100:LEU:H	1.55	0.69
26:D0:41:ARG:NH2	36:DA:2387:U:H1'	2.07	0.69
28:B2:14:ARG:O	28:B2:67:LYS:NZ	2.24	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BF:131:GLY:HA2	41:BF:138:GLU:OE1	1.92	0.69
50:BR:24:GLN:HB2	50:BR:44:LEU:HD21	1.72	0.69
42:BG:60:LEU:HD13	42:BG:63:ILE:HD11	1.73	0.69
36:DA:2023:G:H5'	36:DA:2617:C:H4'	1.75	0.69
36:DA:2037:G:H2'	36:DA:2038:G:C8	2.27	0.69
9:CI:4:TYR:CE2	9:CI:88:TYR:HB2	2.27	0.69
41:DF:139:PHE:CE1	41:DF:143:ALA:HB2	2.27	0.69
36:BA:2708:G:H2'	36:BA:2709:G:H8	1.56	0.69
52:BT:13:ARG:NE	52:BT:13:ARG:HA	2.07	0.69
36:BA:2892:A:H62	36:BA:2893:G:N2	1.86	0.69
58:BZ:163:LEU:HD21	58:BZ:165:VAL:CG2	2.22	0.69
58:DZ:168:GLU:O	58:DZ:168:GLU:HG3	1.93	0.69
9:CI:17:VAL:HG11	9:CI:81:ILE:HD13	1.74	0.69
36:BA:1343:G:H2'	36:BA:1344:G:H5'	1.74	0.69
10:CJ:31:GLY:HA3	10:CJ:78:ASN:ND2	2.07	0.69
1:AA:769:G:O2'	1:AA:770:C:H5'	1.93	0.69
36:BA:1549:C:H2'	36:BA:1550:C:H5'	1.74	0.69
38:BC:98:GLU:C	38:BC:100:ILE:H	1.94	0.69
7:AG:120:ILE:O	7:AG:124:LEU:HB2	1.92	0.69
36:BA:1099:G:H2'	36:BA:1100:C:C6	2.26	0.69
29:D3:27:GLY:C	29:D3:28:LEU:HD23	2.12	0.69
10:CJ:38:ILE:HD11	10:CJ:71:LEU:CD2	2.23	0.69
20:AT:45:GLN:HB3	20:AT:91:LEU:HD13	1.74	0.69
36:DA:31:C:H2'	36:DA:32:C:C5'	2.21	0.69
2:CB:204:ASN:HD21	2:CB:206:ASP:H	1.39	0.69
49:DQ:63:LYS:HD2	58:DZ:175:VAL:HG21	1.74	0.69
36:DA:442:G:O4'	41:DF:46:ARG:HD3	1.92	0.69
36:BA:1087:G:H21	36:BA:1103:A:H61	1.40	0.69
46:DN:129:PRO:O	46:DN:130:HIS:HB3	1.90	0.69
36:DA:1064:C:H3'	36:DA:1065:U:C5'	2.20	0.69
12:CL:92:ASP:O	12:CL:93:LEU:HD23	1.92	0.69
1:CA:1527:C:H2'	1:CA:1528:U:C6	2.27	0.69
38:DC:161:ILE:HD12	38:DC:161:ILE:C	2.12	0.69
40:DE:169:ASN:ND2	40:DE:169:ASN:O	2.22	0.69
3:CC:64:VAL:O	3:CC:100:ALA:HB3	1.91	0.69
3:CC:207:VAL:HG12	3:CC:207:VAL:O	1.92	0.69
22:CW:59:U:H2'	22:CW:60:U:H5'	1.73	0.69
36:DA:628:G:C2'	36:DA:629:G:H5''	2.23	0.69
38:DC:79:LYS:HG2	38:DC:118:ASP:OD2	1.93	0.69
36:BA:1428:C:N4	36:BA:1569:A:H3'	2.07	0.69
27:D1:13:ILE:HD11	36:DA:396:G:C5'	2.11	0.69
41:BF:108:LYS:O	41:BF:112:MET:HB2	1.92	0.69

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:B2:53:LEU:HA	28:B2:56:GLN:HB2	1.74	0.69
28:B2:47:ASN:ND2	36:BA:94(A):G:H21	1.90	0.69
36:BA:747:U:H5	36:BA:2613:U:C5	2.10	0.69
36:BA:2866:U:C6	36:BA:2868:A:H1'	2.26	0.69
50:BR:100:LEU:N	50:BR:100:LEU:HD22	2.08	0.69
42:BG:155:MET:O	42:BG:157:ILE:HG13	1.92	0.69
54:DV:39:LEU:HD22	54:DV:39:LEU:H	1.55	0.69
10:CJ:56:HIS:O	10:CJ:58:ASP:N	2.25	0.69
8:AH:14:ARG:HG3	8:AH:83:ILE:HG23	1.75	0.69
48:BP:102:ARG:HB2	48:BP:102:ARG:NH2	2.07	0.69
1:CA:346:G:C5'	52:DT:41:ARG:HH21	2.03	0.69
1:AA:1375:A:H2'	1:AA:1376:U:O4'	1.93	0.69
7:AG:69:VAL:C	7:AG:138:LYS:HD2	2.13	0.69
14:AN:22:THR:O	14:AN:23:ARG:HB3	1.91	0.69
1:AA:967:C:H2'	1:AA:968:A:C8	2.27	0.69
36:BA:1516:C:C3'	36:BA:1517:G:H5''	2.21	0.69
36:DA:764:A:H3'	36:DA:765:G:H5'	1.72	0.69
3:CC:68:VAL:HG12	3:CC:70:VAL:CG2	2.22	0.69
4:CD:88:VAL:HG12	4:CD:90:GLY:H	1.58	0.69
9:AI:4:TYR:HA	9:AI:88:TYR:CE1	2.28	0.69
14:CN:12:ARG:C	14:CN:14:PRO:HD2	2.12	0.69
36:DA:2707:G:O2'	36:DA:2708:G:H5'	1.93	0.69
36:DA:1657:C:H6	36:DA:1657:C:O5'	1.74	0.69
42:BG:47:LYS:HZ1	42:BG:81:LYS:HB3	1.56	0.69
42:BG:76:SER:OG	42:BG:83:ARG:HB3	1.93	0.69
43:DH:87:LEU:HD23	43:DH:164:TYR:HA	1.74	0.69
38:BC:137:LEU:O	38:BC:139:ASN:N	2.24	0.69
49:DQ:44:ALA:O	49:DQ:47:ILE:HB	1.91	0.69
1:AA:1337:G:H5''	1:AA:1338:G:OP2	1.91	0.69
36:DA:1224:C:O3'	54:DV:86:GLY:HA3	1.92	0.69
1:CA:621:A:O2'	1:CA:622:A:H5'	1.92	0.69
36:BA:1019:U:H3	36:BA:1142(A):A:H62	1.41	0.69
1:CA:1119:C:H2'	1:CA:1120:G:C8	2.27	0.69
40:BE:169:ASN:O	40:BE:169:ASN:ND2	2.25	0.69
32:D6:15:GLU:CD	32:D6:18:ARG:CZ	2.61	0.69
48:DP:97:PRO:O	48:DP:98:GLU:HB3	1.91	0.69
25:AZ:234:ARG:HD2	25:AZ:289:LEU:CD2	2.22	0.69
36:DA:479:A:HO2'	36:DA:481:G:H8	1.39	0.69
1:AA:1054:C:C6	1:AA:1196:U:C4	2.80	0.69
1:AA:386:C:H2'	1:AA:387:U:C5'	2.18	0.69
1:AA:390:C:O3'	16:AP:28:ARG:NH1	2.25	0.69
25:CZ:139:ASP:O	25:CZ:140:MET:HG2	1.91	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:130:C:O3'	36:BA:1349:A:H1'	1.93	0.69
14:AN:60:SER:O	14:AN:61:TRP:HB3	1.92	0.69
51:DS:37:ALA:HB2	51:DS:99:LYS:NZ	2.07	0.69
36:DA:2186:G:H2'	36:DA:2187:G:C8	2.28	0.69
55:DW:3:ALA:O	55:DW:106:ILE:HA	1.91	0.69
25:AZ:67:HIS:HA	25:AZ:79:HIS:O	1.93	0.69
13:CM:2:ALA:O	13:CM:9:ILE:HG23	1.92	0.69
42:DG:138:GLN:OE1	42:DG:153:ARG:HG2	1.93	0.69
42:DG:67:LYS:N	42:DG:67:LYS:HD3	2.08	0.69
42:DG:4:ASP:HA	42:DG:8:LYS:HG2	1.74	0.69
25:AZ:342:PHE:CD2	25:AZ:388:ILE:HG12	2.28	0.69
43:DH:85:LYS:HZ1	43:DH:132:ARG:HA	1.58	0.69
49:BQ:43:THR:OG1	49:BQ:46:GLN:HG3	1.92	0.69
20:AT:57:ARG:NH1	20:AT:102:GLY:HA3	2.08	0.69
20:AT:62:LEU:HD23	20:AT:62:LEU:O	1.91	0.69
36:BA:272(B):G:H1	36:BA:366:C:H42	1.38	0.69
27:D1:16:ASN:HD21	27:D1:37:ILE:HG22	1.57	0.69
33:B7:11:LYS:HE2	36:BA:686:G:N3	2.07	0.69
36:BA:635:C:H2'	36:BA:636:G:O4'	1.91	0.69
1:CA:807:A:H2'	1:CA:808:C:C6	2.28	0.69
1:CA:1388:C:H2'	1:CA:1389:C:H6	1.58	0.69
46:BN:38:HIS:C	53:BU:67:ALA:HB1	2.12	0.69
36:DA:2001:A:H4'	36:DA:2689:U:H2'	1.75	0.69
36:BA:1564:C:O2'	36:BA:1565:C:H5'	1.92	0.69
29:B3:23:LEU:C	29:B3:25:ALA:H	1.93	0.69
38:BC:2:LYS:HD3	38:BC:2:LYS:O	1.93	0.69
6:CF:19:LEU:HD23	6:CF:20:ALA:N	2.08	0.69
22:CW:3:C:H2'	22:CW:4:C:O4'	1.91	0.69
11:AK:27:ASN:HA	11:AK:56:GLY:HA2	1.73	0.69
28:D2:32:LEU:HD12	28:D2:57:ILE:HG13	1.73	0.69
41:DF:20:LEU:HD12	41:DF:199:TRP:HH2	1.56	0.69
41:DF:184:TYR:HE1	48:DP:7:ARG:NH2	1.91	0.69
43:BH:41:MET:HG3	43:BH:42:ARG:N	2.07	0.69
1:AA:517:G:H5'	1:AA:519:C:O2	1.93	0.69
1:AA:993:G:N3	1:AA:993:G:H2'	2.06	0.69
4:AD:67:ILE:HG22	4:AD:68:TYR:CE1	2.26	0.69
1:AA:963:G:H21	10:AJ:55:LYS:HD3	1.57	0.69
36:BA:94(A):G:H2'	36:BA:95:G:C5'	2.18	0.69
31:B5:4:HIS:C	36:BA:2056:G:H1	1.95	0.69
13:AM:19:LEU:O	13:AM:22:ILE:HD13	1.92	0.69
42:BG:141:PHE:HB2	42:BG:144:ILE:CG2	2.22	0.69
36:DA:1514:U:H2'	36:DA:1515:G:C8	2.27	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:120:LYS:O	13:CM:121:LYS:HG3	1.93	0.69
36:BA:142:A:H5'	36:BA:142(A):C:OP2	1.92	0.69
36:BA:2640:G:C2'	36:BA:2641:G:H5''	2.21	0.69
3:AC:30:ARG:CD	14:AN:38:GLY:HA3	2.22	0.69
1:CA:1349:A:OP1	9:CI:120:ARG:HB2	1.91	0.69
1:AA:965:A:O2'	1:AA:966:G:H5''	1.93	0.69
55:BW:52:GLU:C	55:BW:54:ALA:H	1.95	0.69
16:AP:21:VAL:HG12	16:AP:34:GLU:O	1.92	0.69
1:CA:1003:G:N2	1:CA:1039:C:H42	1.90	0.69
41:BF:46:ARG:NH1	41:BF:46:ARG:HG3	2.08	0.69
43:DH:76:VAL:O	43:DH:79:VAL:HG22	1.93	0.69
22:CV:40:C:H2'	22:CV:41:C:H6	1.58	0.69
36:BA:31:C:H2'	36:BA:32:C:O4'	1.93	0.69
48:BP:83:VAL:H	48:BP:115:LEU:HD21	1.56	0.69
39:DD:144:ALA:HB3	39:DD:192:THR:HG22	1.75	0.69
6:AF:25:ILE:HA	6:AF:28:ARG:HD2	1.75	0.69
1:AA:932:C:H5''	7:AG:3:ARG:CD	2.23	0.69
1:AA:688:G:H2'	1:AA:689:C:C6	2.26	0.69
1:CA:552:U:H2'	1:CA:553:A:C8	2.26	0.69
7:AG:72:ARG:HG2	7:AG:73:MET:HG3	1.73	0.69
22:AW:57:G:C2'	22:AW:58:A:H5'	2.23	0.69
1:AA:127:G:HO2'	17:AQ:2:PRO:N	1.90	0.69
49:DQ:66:ILE:O	49:DQ:66:ILE:HG13	1.93	0.69
37:DB:65:C:H2'	37:DB:109:C:H41	1.58	0.69
36:DA:74:A:H5''	36:DA:75:G:H1'	1.75	0.69
1:AA:269:C:H2'	1:AA:270:A:C8	2.27	0.69
36:BA:2345:G:N3	36:BA:2381:C:H2'	2.07	0.69
43:DH:130:ARG:HB3	43:DH:130:ARG:NH1	2.07	0.69
50:DR:32:GLY:CA	50:DR:116:LEU:HG	2.23	0.69
50:DR:73:VAL:O	50:DR:76:VAL:HG12	1.90	0.69
19:AS:16:LEU:HA	19:AS:19:VAL:CB	2.13	0.69
34:D8:24:ALA:O	34:D8:46:ARG:HA	1.92	0.69
36:DA:654(V):A:H8	36:DA:655:A:H2'	1.57	0.69
41:DF:154:VAL:HG11	41:DF:193:VAL:CG2	2.22	0.69
5:CE:12:LEU:HD22	5:CE:13:ILE:N	2.08	0.69
35:D9:29:ASN:HD21	35:D9:32:HIS:CE1	2.11	0.69
36:DA:537:C:H42	36:DA:556:G:H22	1.40	0.69
8:AH:10:LEU:HD22	8:AH:83:ILE:CD1	2.11	0.69
1:AA:1359:C:P	14:AN:22:THR:HG21	2.32	0.69
14:CN:22:THR:CB	14:CN:33:VAL:HG21	2.21	0.69
23:AX:20:U:O2'	23:AX:21:C:H5'	1.93	0.69
1:CA:16:A:O2'	1:CA:17:U:H5'	1.93	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:CS:31:ILE:HG23	19:CS:49:ILE:HA	1.73	0.69
58:DZ:51:ALA:HA	58:DZ:55:HIS:HD2	1.56	0.69
54:BV:39:LEU:H	54:BV:39:LEU:HD22	1.56	0.69
13:CM:13:LYS:O	13:CM:45:VAL:HG23	1.93	0.69
2:AB:168:THR:HG23	2:AB:192:SER:CB	2.22	0.69
20:CT:104:LEU:HD23	20:CT:105:SER:N	2.08	0.69
36:BA:2161:C:H2'	36:BA:2162:G:C8	2.23	0.69
36:BA:271(H):G:O2'	36:BA:271(I):G:H8	1.73	0.69
8:AH:119:LEU:N	8:AH:119:LEU:HD23	2.08	0.69
1:CA:892:A:H2'	1:CA:893:C:H6	1.57	0.69
12:CL:41:ARG:HG3	12:CL:41:ARG:HH11	1.56	0.69
27:D1:58:ILE:HD11	27:D1:91:LYS:HD2	1.72	0.69
36:DA:2195:C:O2'	36:DA:2196:C:H5'	1.91	0.69
7:AG:139:GLU:O	7:AG:143:ARG:HG3	1.92	0.69
36:DA:635:C:H2'	36:DA:636:G:O4'	1.92	0.69
36:DA:1019:U:H3	36:DA:1142(A):A:H62	1.40	0.69
36:DA:271(U):G:O2'	36:DA:271(V):G:H5'	1.92	0.69
27:B1:73:LEU:HB3	27:B1:94:LEU:HD23	1.74	0.69
36:DA:382:G:O2'	36:DA:383:U:H5'	1.92	0.69
36:DA:34:C:N4	36:DA:447:A:H61	1.90	0.69
19:CS:5:LEU:HD12	19:CS:8:GLY:O	1.91	0.69
1:CA:512:U:H2'	1:CA:513:C:H6	1.57	0.69
1:AA:22:G:H4'	1:AA:885:G:C8	2.28	0.69
55:DW:37:ARG:HG3	55:DW:37:ARG:HH11	1.58	0.69
38:DC:103:ILE:HG23	38:DC:107:TRP:HB2	1.74	0.69
9:CI:7:THR:HG22	9:CI:8:GLY:H	1.57	0.69
11:AK:25:TYR:HE1	11:AK:87:THR:HB	1.58	0.69
15:CO:25:THR:O	15:CO:29:VAL:HG23	1.93	0.69
1:CA:157:G:H2'	1:CA:158:G:H8	1.58	0.69
1:AA:642:A:H1'	8:AH:113:SER:OG	1.92	0.69
36:DA:2350:C:H2'	36:DA:2351:G:O4'	1.92	0.69
25:CZ:356:PRO:O	25:CZ:359:VAL:CG2	2.30	0.69
36:BA:832:G:OP1	48:BP:40:SER:HB2	1.93	0.69
36:DA:2745:C:H1'	43:DH:143:GLN:HG2	1.74	0.69
1:CA:274:A:O2'	1:CA:275:G:O4'	2.10	0.69
36:BA:1242:A:C6	48:BP:8:PRO:HG3	2.28	0.69
43:DH:61:HIS:C	43:DH:63:SER:H	1.94	0.69
46:DN:36:GLY:H	46:DN:49:GLY:CA	2.06	0.69
36:BA:1297:C:H2'	36:BA:1298:C:C6	2.28	0.69
36:BA:1639:U:H2'	36:BA:1640:C:H5''	1.74	0.69
36:DA:1664:A:H1'	36:DA:2726:U:C5	2.28	0.69
52:DT:24:PRO:HD3	52:DT:52:ILE:CD1	2.20	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BC:23:ASP:CB	38:BC:27:ARG:HH12	1.98	0.69
36:BA:1473:G:H2'	36:BA:1474:C:O4'	1.93	0.69
39:DD:4:LYS:NZ	39:DD:20:ASP:HA	2.08	0.69
36:DA:1428:C:N4	36:DA:1569:A:H3'	2.08	0.69
42:DG:125:PHE:O	42:DG:127:GLY:N	2.26	0.69
9:AI:33:PHE:CZ	9:AI:47:LEU:HD11	2.28	0.69
5:CE:110:LEU:CD2	5:CE:115:VAL:HG21	2.23	0.69
1:CA:859:A:H2'	1:CA:860:A:O4'	1.93	0.69
2:AB:134:GLU:C	2:AB:136:VAL:H	1.93	0.69
1:AA:841:U:O2'	1:AA:848:C:H5'	1.93	0.69
36:DA:2262:U:H2'	36:DA:2263:C:H6	1.56	0.69
36:BA:537:C:H42	36:BA:556:G:H22	1.41	0.69
36:BA:525:U:O5'	36:BA:556:G:H5'	1.93	0.69
46:DN:21:LYS:HD3	46:DN:22:THR:N	2.07	0.69
36:BA:2716:U:O2'	36:BA:2717:G:H5'	1.93	0.69
22:CW:57:G:C2'	22:CW:58:A:H5'	2.22	0.69
12:AL:92:ASP:O	12:AL:93:LEU:HD23	1.93	0.69
36:BA:817:C:H2'	36:BA:818:G:O4'	1.93	0.69
1:AA:660:G:H2'	1:AA:661:G:H8	1.58	0.69
32:B6:11:LEU:HD22	32:B6:12:GLU:H	1.58	0.69
48:DP:105:LEU:H	48:DP:105:LEU:HD12	1.58	0.69
36:DA:601:C:O2	36:DA:605:C:H5''	1.93	0.69
31:B5:5:PRO:HA	36:BA:2056:G:H22	1.58	0.69
1:CA:1189:C:H5''	3:CC:5:ILE:CG2	2.13	0.69
5:AE:100:VAL:HG23	5:AE:107:ARG:NH2	2.08	0.69
36:DA:1681:G:O2'	36:DA:1762:A:H2'	1.92	0.69
9:AI:10:ARG:O	9:AI:11:LYS:HB3	1.92	0.69
36:BA:2186:G:H2'	36:BA:2187:G:C8	2.28	0.69
3:CC:15:THR:HG21	3:CC:181:ASN:HA	1.74	0.69
4:CD:85:LYS:HD3	4:CD:92:VAL:CG1	2.23	0.69
24:AY:1:G:N3	24:AY:1:G:H2'	2.08	0.69
37:DB:17:C:H2'	37:DB:18:G:C8	2.28	0.69
58:DZ:14:LYS:HB2	58:DZ:17:ALA:HB2	1.75	0.69
58:DZ:16:SER:O	58:DZ:20:ARG:HG2	1.93	0.69
36:DA:1231:G:H2'	36:DA:1232:G:H8	1.58	0.69
38:BC:127:LEU:HD22	38:BC:130:ILE:HD12	1.74	0.69
25:CZ:241:ARG:HA	25:CZ:285:ASN:ND2	2.07	0.69
49:DQ:45:GLN:H	49:DQ:45:GLN:HE21	1.41	0.69
23:CX:20:U:H2'	23:CX:21:C:C6	2.27	0.69
36:DA:176:G:O2'	36:DA:177:G:H5'	1.93	0.69
1:CA:407:G:H2'	1:CA:408:A:C8	2.28	0.69
20:CT:65:LYS:HA	20:CT:68:LYS:HG3	1.74	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:D8:19:SER:HB2	36:DA:651:G:OP1	1.92	0.69
36:DA:1946:U:H2'	36:DA:1947:C:H6	1.58	0.69
36:BA:935:C:H2'	36:BA:936:C:H6	1.58	0.69
10:AJ:92:THR:HG23	10:AJ:93:GLY:N	2.08	0.69
39:BD:76:PRO:HG2	39:BD:98:VAL:HG21	1.74	0.69
50:DR:61:HIS:CE1	50:DR:65:LEU:HD22	2.28	0.68
32:D6:42:TRP:C	32:D6:44:ARG:H	1.96	0.68
39:BD:24:ILE:HD13	39:BD:25:THR:H	1.59	0.68
27:D1:44:PRO:HG2	27:D1:46:LEU:HD22	1.73	0.68
41:BF:117:ARG:HG2	41:BF:192:LEU:HD13	1.75	0.68
48:BP:10:PRO:O	48:BP:11:GLY:O	2.11	0.68
36:BA:92:A:H2'	36:BA:93:G:O4'	1.92	0.68
36:BA:1292:U:H2'	36:BA:1293:C:C6	2.28	0.68
50:BR:32:GLY:CA	50:BR:116:LEU:HG	2.23	0.68
13:AM:34:LEU:HD13	13:AM:41:PRO:HG3	1.76	0.68
30:B4:6:HIS:CB	42:BG:67:LYS:HE3	2.22	0.68
46:DN:75:TYR:CD1	46:DN:82:LEU:HB2	2.24	0.68
36:BA:2712:U:O2'	36:BA:2712(A):A:H3'	1.93	0.68
58:BZ:133:ILE:N	58:BZ:134:PRO:HD3	2.08	0.68
57:DY:14:LEU:HD13	57:DY:24:VAL:HG22	1.74	0.68
4:AD:100:ARG:HH21	4:AD:118:ARG:NH1	1.81	0.68
36:DA:2110:G:N2	36:DA:2178:C:H41	1.92	0.68
25:AZ:241:ARG:HA	25:AZ:285:ASN:ND2	2.08	0.68
39:BD:81:ALA:HA	39:BD:113:VAL:CG2	2.23	0.68
43:DH:85:LYS:C	43:DH:85:LYS:HE2	2.13	0.68
25:CZ:215:ARG:HB3	25:CZ:282:ALA:CB	2.23	0.68
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.73	0.68
53:BU:34:LYS:HA	53:BU:34:LYS:HE2	1.75	0.68
33:D7:12:ARG:HG3	36:DA:686:G:O6	1.92	0.68
1:AA:1220:G:H2'	1:AA:1221:G:H8	1.58	0.68
27:B1:71:TYR:HA	27:B1:74:VAL:HG23	1.74	0.68
17:AQ:56:VAL:CG2	17:AQ:81:ARG:HG3	2.23	0.68
25:CZ:104:LEU:HD11	25:CZ:116:THR:HG23	1.75	0.68
36:BA:2825:C:H6	36:BA:2825:C:O5'	1.76	0.68
1:AA:707:C:O2'	1:AA:708:C:H5'	1.94	0.68
1:CA:693:G:O2'	1:CA:694:A:H5'	1.93	0.68
53:DU:47:TYR:HA	53:DU:50:ARG:HD2	1.74	0.68
1:AA:1242:C:H2'	1:AA:1243:C:C6	2.27	0.68
36:DA:94(A):G:C2'	36:DA:95:G:H5''	2.19	0.68
36:BA:2756:U:H1'	36:BA:2757:A:H5''	1.76	0.68
41:BF:136:THR:O	41:BF:140:LEU:HB2	1.92	0.68
36:DA:2777:G:H5''	36:DA:2778:A:C5'	2.23	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:CY:33:U:H2'	24:CY:34:G:H3'	1.75	0.68
2:CB:170:GLU:HA	2:CB:172:ILE:CD1	2.23	0.68
41:DF:178:PRO:HB2	41:DF:201:VAL:HG11	1.75	0.68
40:DE:165:VAL:HG12	40:DE:166:THR:N	2.09	0.68
57:DY:96:ILE:HD11	57:DY:99:CYS:SG	2.33	0.68
1:CA:1348:U:HO2'	1:CA:1349:A:H8	1.41	0.68
51:DS:97:ARG:NH2	51:DS:98:VAL:HA	2.08	0.68
57:BY:82:PRO:O	57:BY:96:ILE:HG22	1.93	0.68
42:BG:29:TRP:CE3	42:BG:29:TRP:HA	2.27	0.68
39:DD:210:GLY:O	39:DD:211:ARG:HB3	1.92	0.68
2:CB:237:ALA:O	2:CB:238:LEU:HB3	1.93	0.68
20:CT:26:ASN:HB2	20:CT:71:THR:HG23	1.76	0.68
36:BA:1693:U:H5'	36:BA:1693:U:C6	2.27	0.68
36:BA:461:C:O2'	36:BA:462:C:H5'	1.94	0.68
12:AL:113:ARG:CB	12:AL:122:THR:HG21	2.23	0.68
1:AA:1441:G:H4'	1:AA:1442:G:C4	2.28	0.68
36:DA:31:C:C2'	36:DA:32:C:H5''	2.23	0.68
36:DA:1549:C:H2'	36:DA:1550:C:H5'	1.75	0.68
12:CL:20:LYS:H	12:CL:20:LYS:HD3	1.58	0.68
1:CA:59:A:H1'	1:CA:354:G:N2	2.08	0.68
36:DA:193:U:H3	36:DA:202:U:H3	1.40	0.68
48:BP:86:LYS:NZ	48:BP:86:LYS:HB3	2.08	0.68
7:CG:79:ARG:NH2	22:CW:33:U:H4'	2.08	0.68
39:DD:95:LEU:HD12	39:DD:103:ARG:O	1.92	0.68
36:DA:968:G:H2'	36:DA:969:U:C6	2.28	0.68
46:DN:86:PRO:HG2	46:DN:89:LYS:HG2	1.74	0.68
1:CA:1258:G:O2'	1:CA:1259:C:H5'	1.93	0.68
6:CF:78:GLU:HA	6:CF:81:ILE:HD11	1.74	0.68
25:CZ:97:ALA:N	25:CZ:126:VAL:HG11	2.08	0.68
36:BA:1122:G:O2'	36:BA:1123:C:H5'	1.93	0.68
1:AA:1328:C:H2'	1:AA:1329:A:H8	1.56	0.68
43:DH:156:ALA:C	43:DH:158:HIS:N	2.46	0.68
34:D8:10:ALA:HA	34:D8:13:ARG:CG	2.20	0.68
25:AZ:176:LEU:HB2	62:AZ:501:GDP:C5	2.27	0.68
35:D9:36:GLN:NE2	36:DA:1031:G:H21	1.90	0.68
36:BA:696:G:N3	36:BA:696:G:H2'	2.08	0.68
36:DA:672:C:H2'	36:DA:673:C:H5''	1.76	0.68
4:CD:30:LYS:C	4:CD:32:ALA:N	2.43	0.68
8:AH:9:MET:HG3	8:AH:26:VAL:HG21	1.73	0.68
34:B8:24:ALA:HA	34:B8:46:ARG:NH1	2.08	0.68
36:DA:2673:G:H5'	36:DA:2673:G:H8	1.58	0.68
52:BT:28:VAL:CG2	52:BT:46:GLU:HA	2.23	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BT:19:LEU:HD13	52:BT:78:LEU:HD22	1.74	0.68
52:DT:23:ARG:O	52:DT:25:GLY:N	2.26	0.68
57:DY:96:ILE:CG1	57:DY:99:CYS:HB3	2.18	0.68
7:AG:31:MET:HG2	7:AG:32:ARG:N	2.08	0.68
9:AI:104:ARG:HG2	9:AI:105:ASP:N	2.07	0.68
9:CI:10:ARG:O	9:CI:11:LYS:HB3	1.92	0.68
36:BA:2110:G:N2	36:BA:2178:C:H41	1.89	0.68
3:AC:16:ARG:HH21	3:AC:183:ASP:HA	1.58	0.68
58:DZ:71:VAL:HG11	58:DZ:74:VAL:CG2	2.23	0.68
57:DY:86:ARG:HB3	57:DY:88:LYS:HZ1	1.54	0.68
36:DA:1568:G:P	39:DD:63:ARG:HH22	2.16	0.68
43:DH:33:LEU:CD1	43:DH:75:ALA:HA	2.23	0.68
15:AO:25:THR:O	15:AO:29:VAL:HG23	1.93	0.68
7:CG:139:GLU:O	7:CG:143:ARG:HG3	1.93	0.68
27:D1:83:GLU:OE1	27:D1:83:GLU:N	2.26	0.68
54:BV:19:LYS:HE2	54:BV:19:LYS:HA	1.75	0.68
57:DY:39:VAL:HG12	57:DY:40:GLU:N	2.08	0.68
1:AA:84:U:H2'	1:AA:88:A:H5'	1.73	0.68
1:CA:1314:C:H2'	1:CA:1315:U:C6	2.28	0.68
1:AA:157:G:H2'	1:AA:158:G:H8	1.59	0.68
1:AA:568:G:O6	12:AL:5:PRO:HD3	1.93	0.68
36:DA:935:C:H2'	36:DA:936:C:H6	1.59	0.68
29:B3:10:LYS:O	29:B3:53:LEU:HD22	1.93	0.68
36:DA:2574:G:H2'	36:DA:2575:C:O4'	1.93	0.68
45:BK:31:UNK:O	45:BK:63:UNK:HA	1.92	0.68
25:AZ:186:PRO:O	25:AZ:187:LYS:HG3	1.93	0.68
51:DS:77:ALA:C	51:DS:79:ALA:H	1.96	0.68
36:DA:302:C:H42	36:DA:315:G:H1	1.41	0.68
25:AZ:263:ARG:HH21	25:AZ:297:GLU:HB3	1.57	0.68
34:B8:49:VAL:CG1	34:B8:53:PRO:HD3	2.22	0.68
4:AD:19:LEU:O	4:AD:31:CYS:SG	2.51	0.68
27:D1:45:ASN:HB3	27:D1:64:ALA:HB2	1.74	0.68
36:DA:448:U:O4	36:DA:583:G:H1'	1.94	0.68
8:CH:29:SER:HB3	8:CH:32:LYS:HB2	1.74	0.68
40:BE:4:ILE:CD1	40:BE:28:ALA:HB1	2.24	0.68
36:BA:650:C:C3'	36:BA:651:G:H5''	2.23	0.68
1:CA:957:U:H4'	19:CS:79:THR:HB	1.74	0.68
1:AA:957:U:H4'	19:AS:79:THR:HB	1.74	0.68
13:AM:90:LEU:O	13:AM:91:ARG:HB2	1.93	0.68
13:AM:96:LEU:HB3	13:AM:97:PRO:HD2	1.74	0.68
36:BA:2772:C:H2'	36:BA:2773:C:C6	2.28	0.68
52:DT:28:VAL:CG2	52:DT:46:GLU:HA	2.23	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:328:U:H4'	57:DY:68:HIS:NE2	2.09	0.68
1:AA:1351:U:O2'	1:AA:1352:C:H5'	1.94	0.68
3:CC:30:ARG:CD	14:CN:38:GLY:HA3	2.22	0.68
1:AA:1498:U:C6	23:AX:20:U:H5'	2.29	0.68
19:AS:51:VAL:HG12	19:AS:52:TYR:N	2.09	0.68
36:DA:1899:G:N2	36:DA:1902:C:N4	2.41	0.68
36:BA:2123:G:H2'	36:BA:2124:G:H8	1.59	0.68
16:CP:8:ARG:HH22	16:CP:15:PRO:HG3	1.55	0.68
20:CT:56:MET:HG3	20:CT:84:LEU:HG	1.75	0.68
38:BC:40:THR:HG23	38:BC:177:LYS:HD2	1.74	0.68
7:CG:144:MET:O	7:CG:148:ASN:ND2	2.26	0.68
29:D3:1:MET:HE1	29:D3:40:THR:HA	1.75	0.68
15:AO:39:LEU:HD13	15:AO:56:LEU:HB2	1.74	0.68
23:AX:23:C:H2'	23:AX:24:C:H6	1.57	0.68
36:BA:1341:U:O2'	36:BA:1342:A:H5'	1.93	0.68
1:CA:178:C:H2'	1:CA:179:A:C8	2.28	0.68
1:CA:936:C:O2'	1:CA:937:A:H5'	1.93	0.68
46:BN:58:ASP:C	46:BN:60:ILE:H	1.96	0.68
2:AB:7:VAL:HG13	2:AB:11:LEU:HD11	1.74	0.68
36:BA:2001:A:H4'	36:BA:2689:U:H2'	1.75	0.68
36:BA:1565:C:H2'	39:BD:21:PHE:HE1	1.58	0.68
1:CA:256:U:H2'	1:CA:257:G:C8	2.28	0.68
55:DW:65:LEU:HD23	55:DW:68:ARG:HD2	1.76	0.68
36:DA:258:G:O2'	36:DA:259:G:H5'	1.94	0.68
1:CA:189(I):G:H2'	1:CA:189(J):G:H8	1.58	0.68
18:CR:88:LYS:HD3	18:CR:88:LYS:C	2.13	0.68
3:AC:90:GLU:HA	3:AC:93:LYS:HB3	1.73	0.68
1:CA:1316:G:N2	1:CA:1318:A:H3'	2.08	0.68
1:AA:1444:C:H2'	1:AA:1445:C:C6	2.29	0.68
36:DA:2345:G:N3	36:DA:2381:C:H2'	2.08	0.68
24:CY:37:YG:H1'	24:CY:37:YG:H31	1.74	0.68
32:D6:11:LEU:HD22	32:D6:12:GLU:H	1.58	0.68
36:DA:1242:A:C6	48:DP:8:PRO:HG3	2.28	0.68
38:BC:86:ALA:HB3	38:BC:94:VAL:HG11	1.74	0.68
42:DG:73:ALA:HB3	42:DG:85:GLY:HA2	1.74	0.68
35:B9:29:ASN:HD21	35:B9:32:HIS:CE1	2.11	0.68
36:BA:111:A:H2'	36:BA:112:U:O4'	1.93	0.68
46:DN:111:PRO:HG3	46:DN:114:ARG:NH2	2.08	0.68
48:DP:23:PRO:HD2	48:DP:33:ARG:NH2	2.08	0.68
1:CA:996:A:H2'	1:CA:997:U:C6	2.28	0.68
13:CM:86:CYS:O	13:CM:89:GLY:N	2.23	0.68
25:CZ:137:LYS:HA	62:CZ:501:GDP:C6	2.27	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BE:167:VAL:HG11	40:BE:188:VAL:HA	1.76	0.68
58:BZ:7:ALA:HB2	58:BZ:59:LEU:HD13	1.75	0.68
1:CA:1352:C:H42	1:CA:1370:G:H1	1.41	0.68
7:CG:70:LYS:O	7:CG:138:LYS:HE3	1.93	0.68
36:BA:2302:G:H1'	42:BG:128:ARG:HG3	1.75	0.68
3:CC:16:ARG:HH21	3:CC:183:ASP:HA	1.58	0.68
3:CC:70:VAL:HG21	3:CC:76:VAL:HG11	1.75	0.68
3:AC:96:GLY:O	3:AC:97:LYS:HG2	1.94	0.68
20:CT:16:HIS:O	20:CT:19:SER:HB3	1.94	0.68
36:DA:716:A:H2'	36:DA:717:G:H5''	1.74	0.68
37:DB:112:U:H2'	37:DB:113:G:C8	2.29	0.68
13:CM:19:LEU:O	13:CM:22:ILE:HD13	1.93	0.68
36:DA:471:A:H2'	36:DA:472:A:C5'	2.24	0.68
3:CC:26:LYS:HZ3	3:CC:27:LYS:HD2	1.57	0.68
37:BB:112:U:H2'	37:BB:113:G:C8	2.28	0.68
13:AM:66:LEU:HA	13:AM:70:LEU:CD1	2.19	0.68
25:CZ:342:PHE:CD2	25:CZ:388:ILE:HG12	2.28	0.68
39:DD:144:ALA:HB3	39:DD:192:THR:CG2	2.23	0.68
36:DA:1021:A:H8	36:DA:1022:G:H4'	1.58	0.68
36:DA:1146:C:O2'	36:DA:1147:C:H5'	1.93	0.68
36:BA:751:A:C5'	55:BW:90:ARG:HA	2.24	0.68
46:BN:86:PRO:HG2	46:BN:89:LYS:HG2	1.75	0.68
36:DA:2073:C:H4'	39:DD:228:PRO:HB2	1.75	0.68
1:AA:409:G:H5'	4:AD:25:ARG:HB2	1.75	0.68
12:AL:41:ARG:HH11	12:AL:41:ARG:HG3	1.57	0.68
1:AA:142:G:H1	1:AA:221:C:H42	1.40	0.68
26:B0:50:ASN:HD22	26:B0:63:VAL:HG21	1.58	0.68
38:DC:2:LYS:HD3	38:DC:2:LYS:O	1.92	0.68
30:D4:5:ILE:HG12	30:D4:5:ILE:O	1.91	0.68
36:DA:2036:C:H6	36:DA:2036:C:H5'	1.57	0.68
36:BA:702:G:O2'	36:BA:703:U:H5'	1.94	0.68
38:DC:183:GLU:CD	38:DC:183:GLU:H	1.95	0.68
50:DR:42:LYS:O	50:DR:45:ARG:HG2	1.92	0.68
48:DP:100:LEU:O	48:DP:103:ALA:HB3	1.94	0.68
25:AZ:234:ARG:HB3	25:AZ:289:LEU:CD1	2.23	0.68
43:BH:52:VAL:CB	43:BH:69:ARG:HD3	2.18	0.68
43:DH:68:THR:HA	43:DH:71:LEU:HB2	1.75	0.68
41:BF:132:VAL:HG22	41:BF:133:ASN:N	2.06	0.68
50:BR:55:ALA:HA	50:BR:80:PHE:CE1	2.28	0.68
51:BS:97:ARG:NH2	51:BS:98:VAL:HA	2.06	0.68
52:DT:48:ILE:HD12	52:DT:64:ARG:O	1.93	0.68
51:DS:101:LEU:O	51:DS:101:LEU:HD12	1.94	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BG:131:TYR:CE2	42:BG:133:LEU:HB3	2.28	0.68
38:DC:215:THR:OG1	38:DC:216:THR:N	2.26	0.68
25:AZ:97:ALA:N	25:AZ:126:VAL:HG11	2.09	0.68
3:AC:142:MET:C	3:AC:144:SER:H	1.97	0.68
16:CP:15:PRO:HB2	16:CP:41:PRO:HG3	1.76	0.68
36:BA:1246:A:C2'	36:BA:1247:A:H5'	2.24	0.68
36:BA:729:G:N7	39:BD:208:LYS:HB2	2.09	0.68
39:BD:239:ARG:HG2	39:BD:239:ARG:HH21	1.58	0.68
54:BV:49:THR:HB	54:BV:50:PRO:HD2	1.74	0.68
42:DG:130:ASN:HB3	42:DG:160:VAL:HA	1.74	0.68
42:DG:66:GLN:OE1	42:DG:94:LEU:HD23	1.93	0.68
36:BA:1132:A:H2'	36:BA:1133:U:C6	2.28	0.68
36:DA:828:U:C5	36:DA:829:A:N6	2.61	0.68
11:AK:111:ASP:CB	18:AR:84:LYS:HD2	2.23	0.68
36:DA:218:A:H2'	36:DA:219:G:O4'	1.94	0.68
36:BA:258:G:O2'	36:BA:259:G:H5'	1.93	0.68
29:D3:1:MET:HB2	29:D3:38:GLU:HG3	1.76	0.68
36:BA:2777:G:H5''	36:BA:2778:A:H5'	1.75	0.68
36:BA:1779:U:H5	36:BA:1784:A:N7	1.90	0.68
25:CZ:313:HIS:HB3	25:CZ:403:ILE:HG21	1.76	0.68
36:BA:1018:C:H2'	36:BA:1019:U:H6	1.58	0.68
1:CA:20:U:H2'	1:CA:21:G:O4'	1.94	0.68
36:DA:1690:A:C2'	36:DA:1691:C:H5'	2.23	0.68
36:BA:2352:A:H2'	36:BA:2353:G:H5'	1.75	0.68
46:DN:58:ASP:O	46:DN:60:ILE:N	2.26	0.68
36:DA:955:C:C2'	36:DA:956:G:H5'	2.24	0.68
38:BC:103:ILE:HG23	38:BC:107:TRP:HB2	1.74	0.68
22:AW:59:U:H2'	22:AW:60:U:H5'	1.74	0.68
48:DP:135:LEU:HD13	48:DP:135:LEU:O	1.93	0.68
16:AP:3:LYS:HG2	16:AP:65:GLN:HB2	1.74	0.68
36:BA:1694:C:H1'	36:BA:1695:G:N2	2.09	0.68
34:B8:52:LYS:N	34:B8:53:PRO:HD2	2.09	0.68
36:BA:2358:G:O2'	36:BA:2359:C:H5'	1.92	0.68
31:D5:4:HIS:C	36:DA:2056:G:H1	1.97	0.68
40:DE:47:VAL:HG21	40:DE:86:PRO:HD2	1.75	0.68
19:CS:16:LEU:HA	19:CS:19:VAL:CB	2.11	0.68
1:AA:1157:A:H4'	1:AA:1158:C:O5'	1.94	0.68
31:B5:4:HIS:HB2	31:B5:5:PRO:CD	2.15	0.68
47:DO:35:VAL:HG11	47:DO:103:ALA:CB	2.23	0.68
36:BA:1514:U:H2'	36:BA:1515:G:C8	2.29	0.68
36:DA:2181:G:H2'	36:DA:2182:G:C8	2.23	0.68
2:AB:48:MET:CA	2:AB:51:LEU:HD12	2.24	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B1:66:HIS:C	27:B1:68:PRO:HD2	2.14	0.68
13:CM:55:ARG:HA	13:CM:58:GLU:HG3	1.76	0.68
43:DH:23:ARG:NH1	43:DH:36:PRO:HB3	2.08	0.68
36:BA:1058:G:H2'	36:BA:1059:G:C5'	2.23	0.68
31:D5:25:LEU:O	31:D5:27:PRO:HD3	1.94	0.68
24:CY:1:G:N3	24:CY:1:G:H2'	2.09	0.68
1:AA:831:U:H2'	1:AA:832:C:H6	1.59	0.68
36:BA:176:G:O2'	36:BA:177:G:H5'	1.93	0.68
36:DA:31:C:H2'	36:DA:32:C:O4'	1.93	0.68
10:AJ:38:ILE:HD11	10:AJ:71:LEU:CD2	2.24	0.68
52:DT:113:LYS:O	52:DT:114:LEU:HD23	1.93	0.68
18:AR:53:ARG:HH21	18:AR:59:SER:HA	1.57	0.68
36:DA:1184:G:C2'	36:DA:1185:C:H5'	2.24	0.68
56:DX:8:ILE:HD11	56:DX:43:VAL:HG22	1.75	0.68
36:BA:1565:C:H2'	39:BD:21:PHE:CE1	2.29	0.68
1:CA:1317:C:H2'	1:CA:1318:A:H5'	1.76	0.68
36:DA:1949:G:H1	36:DA:1957:C:H42	1.38	0.68
1:CA:306:G:O2'	1:CA:307:C:H5'	1.93	0.68
36:BA:664:C:O2'	36:BA:665:C:H5'	1.94	0.68
36:DA:817:C:H2'	36:DA:818:G:O4'	1.93	0.68
22:CW:10:G:O2'	22:CW:11:C:H5'	1.94	0.68
1:AA:1087:G:N2	1:AA:1099:G:H1'	2.07	0.68
36:BA:582:G:H1	36:BA:1258:C:H42	1.42	0.68
40:DE:111:ARG:HA	50:DR:2:ARG:HG2	1.74	0.68
36:DA:605:C:H1'	36:DA:657:U:O2'	1.93	0.68
55:BW:41:LYS:C	55:BW:43:GLY:H	1.96	0.68
53:DU:14:HIS:HD2	53:DU:32:PHE:CB	2.07	0.68
2:CB:102:LEU:HB3	2:CB:180:LEU:CD1	2.24	0.68
6:CF:2:ARG:HD2	6:CF:69:GLU:HB3	1.76	0.68
48:BP:146:VAL:CG2	48:BP:147:LEU:H	1.95	0.68
13:CM:81:LEU:HD23	13:CM:81:LEU:N	2.08	0.68
13:CM:90:LEU:O	13:CM:91:ARG:HB2	1.94	0.68
36:BA:142:A:H1'	36:BA:1408:C:H1'	1.76	0.68
47:BO:104:ARG:HB2	47:BO:104:ARG:NH1	2.09	0.68
47:BO:64:ARG:HH21	47:BO:100:GLY:HA3	1.58	0.68
36:DA:1988:C:H2'	36:DA:1989:G:O4'	1.92	0.68
58:BZ:165:VAL:HG12	58:BZ:166:SER:H	1.59	0.68
58:BZ:5:LEU:HB2	58:BZ:59:LEU:CD2	2.24	0.68
1:CA:1347:G:C8	9:CI:107:ARG:HB3	2.28	0.68
57:BY:7:VAL:HB	57:BY:8:LYS:CD	2.23	0.68
37:BB:30:C:H1'	37:BB:57:A:H61	1.58	0.68
42:BG:34:LEU:O	42:BG:34:LEU:HD12	1.93	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:817:C:H4'	1:CA:818:G:O5'	1.93	0.68
25:AZ:223:MET:O	25:AZ:223:MET:HE3	1.93	0.68
58:DZ:17:ALA:O	58:DZ:20:ARG:HG2	1.94	0.68
46:BN:107:LEU:HB3	46:BN:108:PRO:HD2	1.75	0.68
39:BD:131:LEU:HD13	39:BD:136:ILE:HD11	1.75	0.68
39:DD:24:ILE:HD13	39:DD:25:THR:H	1.59	0.68
47:BO:35:VAL:HG11	47:BO:103:ALA:CB	2.22	0.68
36:DA:1419:A:O2'	36:DA:1420:U:H5''	1.94	0.68
42:DG:57:ALA:O	42:DG:68:PRO:HG2	1.93	0.68
49:DQ:43:THR:OG1	49:DQ:46:GLN:HG3	1.92	0.68
2:AB:80:ILE:CD1	2:AB:80:ILE:H	2.05	0.68
13:AM:108:ARG:NH1	13:AM:108:ARG:HA	2.09	0.68
6:CF:84:ASN:HD22	6:CF:84:ASN:H	1.41	0.68
36:DA:2715:C:H2'	36:DA:2716:U:H6	1.57	0.68
7:AG:79:ARG:HG3	7:AG:83:ALA:O	1.94	0.68
52:DT:107:ASP:CG	52:DT:109:GLU:H	1.97	0.68
36:DA:410:G:H1	36:DA:417:C:H42	1.41	0.68
1:AA:855:G:H2'	1:AA:856:C:H6	1.59	0.68
36:DA:654(T):C:H2'	36:DA:654(U):A:O4'	1.94	0.68
36:BA:666:G:H2'	36:BA:667:U:C6	2.28	0.68
36:DA:1652:A:H2'	36:DA:1653:G:H5'	1.76	0.68
50:DR:10:LEU:HD22	50:DR:17:ARG:NE	2.08	0.68
36:DA:245:G:N2	36:DA:254:G:H1'	2.08	0.68
48:DP:62:LEU:N	48:DP:62:LEU:CD2	2.49	0.68
40:BE:199:ARG:CG	40:BE:200:GLU:H	2.04	0.68
36:DA:819:A:C2'	36:DA:820:A:H5'	2.24	0.68
8:CH:31:PHE:O	8:CH:34:GLU:HG2	1.93	0.68
38:DC:22:ILE:HD13	38:DC:190:ARG:HG2	1.75	0.68
58:BZ:61:LEU:HD11	58:BZ:67:LEU:CD1	2.23	0.68
7:AG:105:VAL:O	7:AG:106:GLN:C	2.32	0.68
7:CG:23:VAL:O	7:CG:27:ILE:HG13	1.93	0.68
35:B9:13:LYS:HD2	35:B9:28:GLU:HB2	1.75	0.68
36:BA:2175:C:H5''	38:BC:220:PRO:HA	1.76	0.68
13:CM:14:ARG:O	13:CM:17:VAL:HB	1.94	0.68
40:DE:30:PRO:HD3	40:DE:180:ASN:HD21	1.57	0.68
40:DE:4:ILE:CD1	40:DE:28:ALA:HB1	2.23	0.68
37:BB:91:C:C5'	49:BQ:17:LEU:O	2.39	0.68
36:BA:2037:G:H2'	36:BA:2038:G:C8	2.28	0.68
1:CA:409:G:H5'	4:CD:25:ARG:HB2	1.76	0.68
14:AN:48:ALA:CB	14:AN:53:LEU:HD12	2.24	0.68
18:AR:43:PHE:C	18:AR:44:LEU:HD12	2.13	0.68
36:DA:803:U:H2'	36:DA:804:A:H5'	1.74	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:536:A:H2	36:BA:557:U:H3	1.42	0.68
53:BU:53:ARG:O	53:BU:56:ASP:HB2	1.94	0.68
18:AR:58:LEU:CD2	18:AR:62:GLU:HB3	2.24	0.68
36:DA:650:C:C3'	36:DA:651:G:H5''	2.24	0.68
36:DA:2053:G:C2	36:DA:2054:A:H1'	2.29	0.68
1:AA:778:G:H1	1:AA:804:U:H3	1.42	0.68
38:DC:103:ILE:HG22	38:DC:103:ILE:O	1.93	0.68
36:DA:1750:G:O2'	36:DA:1751:C:H5'	1.94	0.68
50:DR:18:LEU:HD13	50:DR:19:ALA:N	2.09	0.68
36:BA:2408:U:O5'	36:BA:2408:U:H6	1.76	0.68
36:DA:586:A:H5'	41:DF:89:VAL:HG21	1.76	0.68
25:CZ:356:PRO:CD	25:CZ:359:VAL:HG21	2.23	0.68
36:BA:2028:U:H2'	36:BA:2029:G:O4'	1.93	0.68
40:DE:83:ASP:O	40:DE:84:PHE:HB2	1.94	0.68
55:DW:40:ASN:O	55:DW:41:LYS:HG2	1.94	0.68
48:DP:102:ARG:HB2	48:DP:102:ARG:NH2	2.08	0.68
48:DP:59:LEU:HA	48:DP:61:ARG:CD	2.23	0.68
36:BA:1889:A:O2'	36:BA:2087:G:H5'	1.94	0.68
36:DA:1242:A:N1	48:DP:8:PRO:HG3	2.09	0.68
5:CE:53:LEU:O	5:CE:56:GLN:N	2.27	0.68
35:D9:7:VAL:HG13	35:D9:34:GLN:CG	2.23	0.68
50:BR:24:GLN:HE22	50:BR:40:LYS:HD2	1.59	0.68
13:AM:34:LEU:CD1	13:AM:41:PRO:HG3	2.24	0.68
42:BG:60:LEU:HA	42:BG:63:ILE:CD1	2.24	0.68
54:DV:19:LYS:HE2	54:DV:19:LYS:HA	1.75	0.68
2:AB:84:GLU:HB3	2:AB:219:VAL:CG2	2.18	0.68
49:BQ:134:ARG:CD	58:BZ:122:ARG:NH2	2.53	0.68
51:BS:51:ALA:HB2	51:BS:73:LEU:HG	1.76	0.68
2:CB:170:GLU:HA	2:CB:172:ILE:HD12	1.76	0.68
25:CZ:143:ASP:O	25:CZ:147:LEU:HD23	1.94	0.68
52:DT:38:ASN:C	52:DT:38:ASN:ND2	2.47	0.68
58:BZ:53:ILE:CG2	58:BZ:71:VAL:HB	2.23	0.68
36:DA:337:C:H3'	36:DA:338:G:H5''	1.76	0.68
1:CA:1060:C:O2'	1:CA:1061:G:H5'	1.94	0.68
7:CG:31:MET:O	7:CG:32:ARG:HG3	1.93	0.68
1:AA:1401:G:C2'	1:AA:1402:C:H5'	2.24	0.68
36:DA:1789:A:OP1	39:DD:222:ARG:HG3	1.94	0.68
31:B5:56:LYS:HE2	31:B5:59:GLU:OE2	1.94	0.68
31:B5:55:ARG:HD3	31:B5:56:LYS:N	2.09	0.68
21:CU:6:ARG:HD3	21:CU:15:ARG:NH1	2.08	0.68
39:DD:30:GLU:HB2	39:DD:35:LYS:HE3	1.74	0.68
36:DA:2580:U:H5'	40:DE:131:ALA:HB2	1.76	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:D7:30:VAL:HG11	36:DA:466:A:H4'	1.76	0.68
36:DA:2306:C:H5'	36:DA:2307:G:O5'	1.94	0.68
42:DG:130:ASN:OD1	42:DG:163:ALA:HB3	1.94	0.68
58:BZ:76:LEU:HD21	58:BZ:82:ARG:H	1.59	0.68
42:DG:92:VAL:HG13	42:DG:92:VAL:O	1.92	0.68
25:CZ:376:LYS:O	25:CZ:378:VAL:HG13	1.94	0.68
38:DC:127:LEU:HD22	38:DC:130:ILE:HD12	1.76	0.68
3:CC:95:THR:CG2	3:CC:97:LYS:HG3	2.24	0.68
46:BN:45:ASN:N	46:BN:45:ASN:ND2	2.40	0.68
36:BA:2580:U:H3'	36:BA:2581:G:C2	2.29	0.68
52:BT:106:SER:O	52:BT:107:ASP:HB3	1.93	0.68
48:DP:83:VAL:H	48:DP:115:LEU:HD21	1.58	0.68
36:BA:1021:A:H8	36:BA:1022:G:H4'	1.59	0.68
52:DT:106:SER:O	52:DT:107:ASP:HB3	1.94	0.68
51:BS:72:ALA:O	51:BS:75:GLU:HB3	1.94	0.68
52:BT:111:ARG:HG2	52:BT:111:ARG:HH11	1.59	0.68
47:DO:96:THR:O	47:DO:97:ARG:HG2	1.94	0.68
36:BA:1146:C:O2'	36:BA:1147:C:H5'	1.94	0.68
32:B6:18:ARG:HG2	32:B6:18:ARG:HH11	1.59	0.67
36:DA:1292:U:H2'	36:DA:1293:C:C6	2.28	0.67
36:DA:2291:U:H3	36:DA:2341:G:H1	1.41	0.67
36:BA:605:C:H1'	36:BA:657:U:O2'	1.95	0.67
36:BA:2011:U:H2'	36:BA:2012:G:O4'	1.93	0.67
13:AM:4:ILE:HD11	13:AM:10:PRO:HD3	1.76	0.67
53:DU:21:ALA:HB1	53:DU:24:TYR:CD1	2.29	0.67
13:AM:91:ARG:HH12	13:AM:103:THR:HG21	1.59	0.67
40:BE:165:VAL:HG12	40:BE:166:THR:N	2.10	0.67
58:BZ:153:SER:HB3	58:BZ:167:PRO:HB3	1.74	0.67
9:AI:17:VAL:HG11	9:AI:81:ILE:HD13	1.76	0.67
22:CV:6:G:H1	22:CV:67:C:N4	1.92	0.67
1:AA:1496:C:H4'	36:BA:1920:C:O2'	1.94	0.67
42:BG:162:THR:O	42:BG:164:GLU:N	2.27	0.67
56:DX:65:ARG:CG	56:DX:66:LEU:H	2.03	0.67
1:AA:817:C:H4'	1:AA:818:G:O5'	1.94	0.67
36:BA:2101:G:H2'	36:BA:2102:U:O4'	1.93	0.67
36:BA:2136:C:N4	36:BA:2155:G:H1	1.92	0.67
25:AZ:226:GLU:HG3	25:AZ:240:GLY:HA2	1.77	0.67
36:DA:1466:G:H3'	36:DA:1547:C:H41	1.60	0.67
49:DQ:141:GLN:HE22	58:DZ:72:ARG:HD3	1.59	0.67
43:BH:76:VAL:O	43:BH:79:VAL:HG22	1.93	0.67
20:AT:16:HIS:O	20:AT:19:SER:HB3	1.94	0.67
8:CH:89:PRO:HA	8:CH:92:ARG:HH11	1.59	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:914:C:H2'	36:BA:915:C:H5'	1.75	0.67
43:BH:85:LYS:NZ	43:BH:132:ARG:HA	2.09	0.67
38:DC:151:GLU:CA	38:DC:154:ARG:HH11	2.05	0.67
39:BD:223:GLY:HA2	39:BD:226:MET:SD	2.34	0.67
2:CB:80:ILE:H	2:CB:80:ILE:CD1	2.07	0.67
36:DA:2249:U:H4'	36:DA:2275:C:C5	2.29	0.67
36:DA:212:G:O2'	36:DA:213:A:H5'	1.94	0.67
36:BA:2580:U:H5'	40:BE:131:ALA:HB2	1.76	0.67
36:DA:2491:U:H4'	36:DA:2570:G:OP1	1.94	0.67
1:CA:927:G:H8	1:CA:927:G:H5'	1.59	0.67
1:AA:189:G:H2'	1:AA:189(A):C:C6	2.29	0.67
46:BN:5:VAL:HG12	46:BN:7:LYS:HG3	1.77	0.67
56:BX:76:ARG:N	56:BX:76:ARG:HD3	2.09	0.67
9:AI:126:SER:O	9:AI:127:LYS:HB3	1.93	0.67
36:DA:821:A:H5''	36:DA:822:U:H6	1.59	0.67
1:CA:775:G:O2'	1:CA:776:G:H5'	1.94	0.67
36:BA:1038:C:C3'	36:BA:1039:G:H5''	2.23	0.67
36:DA:2866:U:C6	36:DA:2868:A:H1'	2.29	0.67
36:DA:1824:G:H5''	39:DD:52:ARG:NH1	2.09	0.67
32:D6:15:GLU:HB2	32:D6:20:ASN:HB3	1.76	0.67
36:DA:1858:G:H1'	36:DA:1884:A:N6	2.09	0.67
35:B9:24:TYR:O	35:B9:25:VAL:HG23	1.94	0.67
36:BA:2472:G:H2'	36:BA:2475:C:N4	2.09	0.67
41:BF:139:PHE:HB3	41:BF:166:ALA:HB1	1.75	0.67
53:BU:110:VAL:O	53:BU:113:ALA:HB3	1.94	0.67
32:B6:8:LYS:HE3	32:B6:25:LYS:HD3	1.75	0.67
36:BA:2707:G:O2'	36:BA:2708:G:H5'	1.95	0.67
52:BT:85:LYS:NZ	52:BT:85:LYS:HB3	2.07	0.67
58:BZ:60:GLU:HA	58:BZ:66:SER:HA	1.75	0.67
10:CJ:63:PHE:HA	14:CN:59:ALA:H	1.59	0.67
57:BY:19:LYS:HB2	57:BY:20:TYR:CE1	2.29	0.67
1:AA:1478:C:H2'	1:AA:1479:C:C6	2.29	0.67
1:AA:1508:G:H1	1:AA:1527:C:H42	1.42	0.67
1:CA:571:U:H2'	1:CA:572:A:H5''	1.74	0.67
3:CC:187:ALA:O	3:CC:188:LEU:HD22	1.93	0.67
27:B1:4:VAL:HG22	27:B1:5:CYS:N	2.09	0.67
36:BA:594:U:H2'	36:BA:595:C:H6	1.59	0.67
36:BA:38:A:H5'	41:BF:50:SER:OG	1.94	0.67
14:CN:12:ARG:HB3	14:CN:14:PRO:HG2	1.76	0.67
53:BU:88:ILE:HG13	53:BU:88:ILE:O	1.93	0.67
37:BB:7:G:C3'	37:BB:8:U:H5''	2.21	0.67
25:CZ:79:HIS:HD2	25:CZ:80:VAL:N	1.92	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1104:G:H4'	2:CB:111:ARG:NH1	2.10	0.67
1:CA:1497:G:H2'	1:CA:1498:U:H5'	1.76	0.67
1:AA:407:G:H2'	1:AA:408:A:C8	2.29	0.67
7:AG:144:MET:O	7:AG:148:ASN:ND2	2.27	0.67
1:CA:751:U:H4'	15:CO:24:SER:CB	2.24	0.67
1:CA:225:C:H2'	1:CA:226:G:H8	1.59	0.67
15:AO:12:ILE:HG22	15:AO:13:GLN:N	2.09	0.67
6:AF:87:ARG:HG2	6:AF:87:ARG:HH11	1.58	0.67
46:DN:38:HIS:C	53:DU:67:ALA:HB1	2.15	0.67
1:CA:189:G:H2'	1:CA:189(A):C:C6	2.29	0.67
45:DK:90:UNK:HA	58:DZ:112:ARG:NH2	2.10	0.67
38:DC:124:GLY:HA2	38:DC:128:GLY:HA3	1.75	0.67
26:B0:30:VAL:HA	26:B0:66:VAL:HA	1.76	0.67
26:D0:50:ASN:HD22	26:D0:63:VAL:HG21	1.59	0.67
45:DK:7:UNK:HA	45:DK:58:UNK:HA	1.76	0.67
45:DK:80:UNK:C	45:DK:82:UNK:H	2.07	0.67
25:AZ:356:PRO:CD	25:AZ:359:VAL:HG21	2.24	0.67
34:B8:43:GLN:O	34:B8:44:LYS:HD2	1.94	0.67
36:BA:819:A:C2'	36:BA:820:A:H5'	2.25	0.67
48:BP:40:SER:O	48:BP:41:ARG:HD2	1.94	0.67
53:BU:10:ARG:HA	53:BU:13:LYS:HG2	1.76	0.67
36:DA:2282:G:H21	36:DA:2390:U:H3	1.41	0.67
41:DF:29:ASN:HD22	41:DF:32:LEU:CB	1.99	0.67
1:CA:8:A:OP2	1:CA:8:A:H2'	1.93	0.67
36:BA:1652:A:H2'	36:BA:1653:G:H5'	1.76	0.67
1:AA:337:C:H2'	1:AA:338:A:C8	2.28	0.67
36:DA:2286:A:H4'	36:DA:2287:A:O4'	1.94	0.67
41:DF:155:LEU:HD11	41:DF:176:LEU:HD22	1.75	0.67
34:B8:24:ALA:O	34:B8:46:ARG:HA	1.93	0.67
1:AA:1308:U:O2'	1:AA:1309:G:H5'	1.93	0.67
36:BA:139:G:C6	36:BA:140:G:H2'	2.29	0.67
36:BA:142(A):C:O2'	36:BA:143:G:H5'	1.94	0.67
7:AG:20:ASP:HB3	7:AG:23:VAL:HG23	1.76	0.67
36:BA:2833:G:C3'	36:BA:2834:G:H5''	2.24	0.67
46:DN:133:GLN:HG2	46:DN:134:ARG:N	2.09	0.67
16:CP:15:PRO:O	16:CP:16:HIS:ND1	2.27	0.67
39:BD:131:LEU:N	39:BD:131:LEU:HD12	2.09	0.67
39:DD:35:LYS:HZ2	39:DD:35:LYS:HB3	1.58	0.67
36:BA:1419:A:O2'	36:BA:1420:U:H5''	1.94	0.67
51:BS:106:ARG:HB3	51:BS:106:ARG:NH1	2.09	0.67
29:B3:6:VAL:HB	29:B3:54:VAL:CG1	2.22	0.67
36:DA:2716:U:O2'	36:DA:2717:G:H5'	1.93	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:DN:21:LYS:HE3	46:DN:25:ARG:CB	2.23	0.67
1:AA:684:A:N3	11:AK:39:PRO:HG2	2.09	0.67
1:CA:1471:G:O2'	1:CA:1472:U:H5'	1.94	0.67
1:CA:1106:G:O2'	1:CA:1107:C:H5'	1.95	0.67
1:CA:473:G:H2'	1:CA:474:G:H8	1.59	0.67
1:AA:520:A:N1	1:AA:536:C:H1'	2.09	0.67
36:DA:2352:A:H2'	36:DA:2353:G:H5'	1.76	0.67
36:BA:1747(A):G:H2'	36:BA:1748:G:O4'	1.95	0.67
45:BK:80:UNK:C	45:BK:82:UNK:H	2.07	0.67
18:AR:88:LYS:HD3	18:AR:88:LYS:C	2.14	0.67
27:B1:88:LYS:C	27:B1:88:LYS:HD3	2.14	0.67
34:B8:10:ALA:O	34:B8:14:VAL:HG12	1.94	0.67
48:DP:126:VAL:HG13	48:DP:145:PRO:HB2	1.74	0.67
36:BA:2233:U:H2'	36:BA:2234:G:C8	2.28	0.67
48:DP:7:ARG:HB3	48:DP:8:PRO:HD3	1.76	0.67
36:DA:2472:G:H2'	36:DA:2475:C:H42	1.59	0.67
25:CZ:234:ARG:HD2	25:CZ:289:LEU:CD2	2.23	0.67
41:BF:24:LEU:O	41:BF:115:ALA:HB1	1.93	0.67
4:AD:30:LYS:O	4:AD:32:ALA:N	2.26	0.67
13:AM:2:ALA:O	13:AM:9:ILE:HG23	1.93	0.67
13:AM:40:ASN:OD1	13:AM:41:PRO:HD2	1.93	0.67
53:DU:34:LYS:HE2	53:DU:34:LYS:HA	1.77	0.67
2:CB:213:LEU:O	2:CB:216:SER:HB3	1.93	0.67
1:CA:663:A:O2'	1:CA:664:G:H5'	1.93	0.67
52:BT:23:ARG:O	52:BT:25:GLY:N	2.27	0.67
52:DT:82:LEU:H	52:DT:82:LEU:CD1	2.04	0.67
35:D9:27:CYS:SG	35:D9:28:GLU:N	2.67	0.67
10:CJ:51:ARG:HE	10:CJ:61:GLU:HB2	1.59	0.67
14:CN:48:ALA:HA	14:CN:53:LEU:HB2	1.76	0.67
11:AK:125:PHE:N	11:AK:125:PHE:HD1	1.91	0.67
19:AS:31:ILE:HG23	19:AS:49:ILE:HA	1.76	0.67
19:AS:40:ILE:HB	19:AS:67:VAL:O	1.93	0.67
36:BA:675:A:OP1	41:BF:63:LYS:HE2	1.95	0.67
9:AI:4:TYR:CE2	9:AI:88:TYR:HB2	2.29	0.67
39:BD:144:ALA:HB3	39:BD:192:THR:CG2	2.24	0.67
36:BA:1579:A:H2'	36:BA:1580:A:C1'	2.24	0.67
2:AB:170:GLU:HA	2:AB:172:ILE:CD1	2.25	0.67
36:BA:31:C:C2'	36:BA:32:C:H5''	2.24	0.67
5:AE:87:SER:OG	5:AE:125:SER:HB3	1.94	0.67
12:AL:89:ARG:HD2	12:AL:91:LYS:HE2	1.75	0.67
1:CA:127:G:HO2'	17:CQ:2:PRO:N	1.93	0.67
20:CT:10:LEU:HD12	20:CT:11:SER:N	2.09	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:CQ:56:VAL:CG2	17:CQ:81:ARG:HG3	2.25	0.67
36:BA:392:C:C2'	36:BA:393:C:H5'	2.25	0.67
38:DC:28:LEU:O	38:DC:28:LEU:HD23	1.93	0.67
6:CF:98:LEU:H	6:CF:98:LEU:HD12	1.57	0.67
22:CW:34:G:H22	23:CX:18:G:H22	1.41	0.67
1:AA:996:A:H2'	1:AA:997:U:C6	2.29	0.67
40:DE:9:VAL:CG1	40:DE:25:VAL:HB	2.23	0.67
36:BA:2092:U:H4'	36:BA:2093:G:H5''	1.75	0.67
36:DA:1030:G:OP2	49:DQ:128:LYS:HE2	1.94	0.67
5:CE:33:VAL:HG21	5:CE:109:ILE:CG1	2.19	0.67
36:DA:2760:C:C2'	36:DA:2761:G:H5''	2.25	0.67
39:BD:145:VAL:HB	39:BD:155:LEU:HB2	1.77	0.67
36:DA:371:A:H61	36:DA:401:A:H3'	1.60	0.67
36:DA:21:A:H2'	36:DA:22:C:C6	2.30	0.67
2:CB:72:GLY:HA2	2:CB:165:VAL:HG22	1.77	0.67
41:DF:178:PRO:HG2	41:DF:179:GLU:OE1	1.93	0.67
1:CA:1226:C:C4	13:CM:104:ARG:HB2	2.29	0.67
25:CZ:194:GLU:HB3	25:CZ:198:LYS:NZ	2.10	0.67
58:BZ:12:GLY:HA3	58:BZ:36:LYS:HZ2	1.59	0.67
58:BZ:70:LEU:CD2	58:BZ:91:LEU:HD21	2.23	0.67
1:AA:1179:A:H4'	9:AI:103:THR:HA	1.77	0.67
58:DZ:153:SER:H	58:DZ:167:PRO:CB	2.07	0.67
3:AC:35:GLU:OE2	3:AC:59:ARG:NH1	2.26	0.67
25:AZ:277:LEU:HD12	25:AZ:280:GLY:N	2.05	0.67
1:CA:1442(B):A:H5''	52:DT:122:ASP:OD1	1.94	0.67
13:CM:34:LEU:HD13	13:CM:41:PRO:HG3	1.76	0.67
8:CH:119:LEU:N	8:CH:119:LEU:HD23	2.10	0.67
3:CC:56:ASP:OD2	3:CC:69:HIS:NE2	2.28	0.67
36:BA:2201:C:H2'	36:BA:2202:C:C6	2.29	0.67
36:BA:2126:A:H4'	36:BA:2127:G:O5'	1.94	0.67
31:B5:25:LEU:O	31:B5:27:PRO:HD3	1.94	0.67
1:CA:1499:A:O2'	1:CA:1500:A:H5'	1.95	0.67
27:D1:69:LYS:O	27:D1:73:LEU:HD12	1.95	0.67
36:DA:1018:C:H2'	36:DA:1019:U:H6	1.57	0.67
22:CW:39:U:H4'	22:CW:39:U:OP2	1.94	0.67
18:AR:59:SER:H	18:AR:62:GLU:HB2	1.60	0.67
36:BA:2652:C:H2'	36:BA:2653:U:C6	2.30	0.67
36:DA:2690:C:H4'	36:DA:2872:G:N2	2.10	0.67
10:AJ:92:THR:HG23	10:AJ:93:GLY:H	1.59	0.67
36:DA:2688:U:O2	36:DA:2688:U:H3'	1.94	0.67
6:AF:98:LEU:H	6:AF:98:LEU:HD12	1.59	0.67
30:B4:42:PHE:O	30:B4:42:PHE:CG	2.47	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:42:TRP:C	32:B6:44:ARG:H	1.97	0.67
32:D6:22:ALA:HB2	32:D6:39:TYR:CE2	2.30	0.67
34:D8:8:LYS:HG2	34:D8:11:LYS:CD	2.25	0.67
41:DF:24:LEU:O	41:DF:115:ALA:HB1	1.95	0.67
41:DF:117:ARG:HG2	41:DF:192:LEU:HD13	1.77	0.67
41:BF:184:TYR:HE1	48:BP:7:ARG:NH2	1.92	0.67
53:DU:107:ALA:O	53:DU:110:VAL:HB	1.94	0.67
51:BS:12:PHE:O	51:BS:14:VAL:HG23	1.95	0.67
1:CA:841:U:O2'	1:CA:848:C:H5'	1.95	0.67
5:AE:12:LEU:CD1	5:AE:31:LEU:HB3	2.24	0.67
25:CZ:138:VAL:CG2	25:CZ:173:GLY:H	1.87	0.67
36:BA:139(A):G:N2	56:BX:44:GLU:OE1	2.27	0.67
47:BO:107:ARG:HH11	52:BT:36:GLU:HG3	1.58	0.67
57:DY:97:ARG:O	57:DY:97:ARG:HG3	1.94	0.67
7:AG:133:GLY:O	7:AG:136:LYS:HB2	1.93	0.67
11:AK:124:LYS:O	11:AK:127:LYS:HG2	1.94	0.67
36:DA:2101:G:H2'	36:DA:2102:U:O4'	1.94	0.67
1:CA:863:U:C2'	1:CA:864:A:H5''	2.23	0.67
36:DA:1902:C:O2'	39:DD:244:ARG:HB2	1.93	0.67
3:AC:181:ASN:ND2	3:AC:204:LEU:HB2	2.10	0.67
36:BA:729:G:O2'	36:BA:763:G:H4'	1.95	0.67
37:DB:68:C:H2'	37:DB:69:G:C8	2.28	0.67
36:DA:2712:U:O2'	36:DA:2713:A:H5'	1.93	0.67
36:BA:471:A:H2'	36:BA:472:A:C5'	2.24	0.67
36:BA:1058:G:O5'	36:BA:1058:G:H8	1.77	0.67
43:BH:85:LYS:C	43:BH:85:LYS:HE2	2.14	0.67
1:AA:321:A:O2'	1:AA:322:C:H5'	1.95	0.67
20:CT:44:ALA:HB1	20:CT:88:VAL:HG13	1.76	0.67
36:BA:782:A:C2	39:BD:226:MET:HG2	2.30	0.67
36:DA:2875:C:H4'	52:DT:5:ALA:HB3	1.75	0.67
1:CA:778:G:H1	1:CA:804:U:H3	1.43	0.67
1:CA:624:C:H2'	1:CA:625:G:H8	1.58	0.67
36:DA:2136:C:N4	36:DA:2155:G:H1	1.92	0.67
37:BB:110:G:O2'	37:BB:111:G:H5'	1.94	0.67
48:BP:75:ILE:H	48:BP:75:ILE:HD12	1.60	0.67
36:BA:1038:C:H2'	36:BA:1039:G:H5''	1.77	0.67
25:CZ:186:PRO:O	25:CZ:187:LYS:HG3	1.95	0.67
47:BO:86:ILE:HG22	47:BO:94:ARG:HB2	1.77	0.67
52:BT:4:GLY:O	52:BT:7:ILE:HB	1.94	0.67
36:BA:672:C:H2'	36:BA:673:C:H5''	1.75	0.67
25:AZ:193:ASN:HB3	25:AZ:196:VAL:CG2	2.25	0.67
25:AZ:25:THR:CB	62:AZ:501:GDP:O2B	2.42	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2760:C:C2'	36:BA:2761:G:H5''	2.23	0.67
42:BG:146:TYR:O	42:BG:148:MET:N	2.26	0.67
56:DX:26:TYR:CE2	56:DX:89:ILE:HB	2.30	0.67
2:CB:82:ARG:O	2:CB:86:GLU:HG3	1.95	0.67
41:DF:139:PHE:HB3	41:DF:166:ALA:HB1	1.75	0.67
36:BA:1988:C:H2'	36:BA:1989:G:O4'	1.94	0.67
40:DE:165:VAL:HG12	40:DE:166:THR:H	1.59	0.67
38:BC:22:ILE:HD13	38:BC:190:ARG:HG2	1.75	0.67
4:AD:188:LEU:HD23	4:AD:189:PRO:O	1.95	0.67
36:BA:329:G:H1	57:BY:19:LYS:HE3	1.59	0.67
25:AZ:215:ARG:HB3	25:AZ:282:ALA:CB	2.25	0.67
19:CS:44:MET:HA	19:CS:47:HIS:CD2	2.19	0.67
36:DA:266:G:C2'	36:DA:267:C:H5''	2.22	0.67
5:CE:71:LEU:O	5:CE:72:GLN:HG3	1.95	0.67
1:CA:1101:A:H4'	1:CA:1102:A:O5'	1.95	0.67
2:AB:170:GLU:HA	2:AB:172:ILE:HD12	1.77	0.67
8:AH:20:TYR:HE2	8:AH:75:ARG:HD2	1.59	0.67
5:AE:150:ARG:HB2	5:AE:150:ARG:HH11	1.59	0.67
1:CA:831:U:H2'	1:CA:832:C:H6	1.58	0.67
38:BC:151:GLU:CA	38:BC:154:ARG:HH11	2.08	0.67
36:DA:612:C:C2'	36:DA:613:G:H5''	2.24	0.67
9:CI:22:GLY:O	9:CI:59:PHE:N	2.27	0.67
33:D7:18:PHE:CZ	36:DA:117:G:H4'	2.27	0.67
22:AW:39:U:OP2	22:AW:39:U:H4'	1.94	0.67
1:AA:178:C:H2'	1:AA:179:A:C8	2.29	0.67
1:CA:932:C:H5''	7:CG:3:ARG:CD	2.24	0.67
9:AI:6:GLY:HA3	9:AI:84:ALA:HB2	1.77	0.67
36:BA:2689:U:H4'	36:BA:2690:C:H6	1.60	0.67
7:AG:80:VAL:HG12	7:AG:81:GLY:N	2.10	0.67
2:CB:16:HIS:HB3	2:CB:210:SER:CB	2.25	0.67
36:BA:654(T):C:H2'	36:BA:654(U):A:O4'	1.95	0.67
6:AF:15:ASP:OD2	6:AF:17:SER:HB2	1.95	0.67
36:BA:68:G:H2'	36:BA:69:C:C6	2.29	0.67
1:CA:652:U:O2'	1:CA:653:A:H5''	1.95	0.67
5:CE:26:PHE:O	5:CE:27:ARG:HB2	1.94	0.67
36:DA:1038:C:C3'	36:DA:1039:G:H5''	2.23	0.67
25:CZ:355:LEU:C	25:CZ:359:VAL:CG2	2.63	0.67
26:B0:55:ARG:O	26:B0:57:PHE:N	2.27	0.67
48:BP:36:LYS:CB	48:BP:41:ARG:HB3	2.25	0.67
53:BU:6:THR:O	53:BU:9:VAL:HG22	1.95	0.67
31:D5:4:HIS:HB2	31:D5:5:PRO:CD	2.18	0.67
34:D8:22:VAL:HG21	34:D8:53:PRO:HB2	1.77	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:795:C:H2'	36:DA:796:C:H6	1.60	0.67
54:DV:19:LYS:HG2	54:DV:94:LEU:CB	2.25	0.67
16:AP:15:PRO:HB2	16:AP:41:PRO:HG3	1.75	0.67
8:CH:36:LEU:HD12	8:CH:59:LEU:HD13	1.77	0.67
51:BS:65:VAL:O	51:BS:69:VAL:HG12	1.95	0.67
40:BE:23:VAL:HG12	40:BE:173:VAL:HG21	1.76	0.67
40:DE:167:VAL:HB	40:DE:189:PRO:HD3	1.77	0.67
58:BZ:27:VAL:O	58:BZ:27:VAL:HG13	1.94	0.67
58:BZ:69:THR:HG23	58:BZ:90:VAL:HA	1.77	0.67
36:DA:329:G:H1	57:DY:19:LYS:HE3	1.60	0.67
1:AA:1368:G:O2'	1:AA:1369:C:H5'	1.94	0.67
14:AN:22:THR:CB	14:AN:33:VAL:HG21	2.23	0.67
1:CA:1368:G:O2'	1:CA:1369:C:H5'	1.94	0.67
4:AD:133:VAL:HG13	4:AD:135:LEU:HD22	1.75	0.67
57:BY:13:VAL:HG22	57:BY:14:LEU:N	2.09	0.67
3:AC:94:LEU:HD12	3:AC:94:LEU:O	1.95	0.67
36:DA:864:G:H1'	36:DA:914:C:N4	2.09	0.67
36:DA:914:C:H2'	36:DA:915:C:H5'	1.76	0.67
46:BN:54:VAL:HB	46:BN:122:VAL:HG13	1.77	0.67
25:CZ:248:LYS:HD3	25:CZ:279:GLU:HG3	1.77	0.67
37:BB:91:C:OP1	49:BQ:17:LEU:N	2.27	0.67
36:DA:2304:G:N2	36:DA:2312:U:H3	1.92	0.67
1:AA:530:G:O2'	24:AY:35:G:H4'	1.94	0.67
53:BU:42:ALA:HA	53:BU:45:TYR:HB2	1.74	0.67
18:AR:53:ARG:C	18:AR:55:ARG:H	1.97	0.67
36:BA:1285:G:H4'	50:BR:105:ARG:NH1	2.10	0.67
36:BA:1690:A:C2'	36:BA:1691:C:H5'	2.25	0.67
12:AL:41:ARG:NH1	12:AL:41:ARG:HG3	2.10	0.67
37:DB:98:G:H2'	37:DB:99:G:H8	1.60	0.67
1:CA:269:C:H2'	1:CA:270:A:C8	2.29	0.67
38:BC:183:GLU:H	38:BC:183:GLU:CD	1.96	0.67
36:DA:1390:U:H3	36:DA:1395:A:H62	1.43	0.67
12:AL:6:THR:OG1	12:AL:9:GLN:HG3	1.95	0.67
36:DA:1564:C:O2'	36:DA:1565:C:H5'	1.95	0.67
38:DC:43:VAL:HG21	38:DC:175:VAL:HG21	1.77	0.67
17:AQ:8:GLY:HA3	17:AQ:22:LEU:O	1.93	0.67
36:BA:1536:C:H2'	36:BA:1537:G:H4'	1.77	0.67
48:BP:23:PRO:HD2	48:BP:33:ARG:NH2	2.09	0.67
50:DR:24:GLN:HE22	50:DR:40:LYS:HD2	1.60	0.67
56:BX:14:SER:OG	56:BX:17:ALA:HB2	1.95	0.67
43:DH:65:HIS:C	43:DH:67:LEU:H	1.99	0.67
50:BR:62:ALA:O	50:BR:66:VAL:HG23	1.94	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:10:PRO:HG3	13:AM:18:ALA:HB1	1.77	0.67
37:BB:42:C:HO2'	37:BB:43:C:H6	1.43	0.67
46:DN:48:MET:HE3	46:DN:48:MET:N	2.10	0.67
53:DU:10:ARG:HA	53:DU:13:LYS:HG2	1.75	0.67
8:AH:9:MET:SD	8:AH:32:LYS:HG2	2.35	0.67
1:AA:346:G:N3	1:AA:346:G:H2'	2.09	0.67
58:BZ:102:LEU:HD21	58:BZ:124:ILE:CD1	2.25	0.67
35:D9:13:LYS:HD2	35:D9:28:GLU:HB2	1.77	0.67
4:AD:79:PHE:HA	4:AD:93:PHE:CE2	2.30	0.67
42:BG:9:ARG:NH1	42:BG:9:ARG:HB3	2.10	0.67
36:DA:2111:C:H42	36:DA:2145:C:H2'	1.58	0.67
36:BA:996:A:H4'	53:BU:92:ARG:HG2	1.75	0.67
36:DA:696:G:N3	36:DA:696:G:H2'	2.10	0.67
42:DG:96:ARG:O	42:DG:98:ARG:N	2.28	0.67
3:CC:96:GLY:O	3:CC:97:LYS:HG2	1.94	0.67
38:DC:151:GLU:HA	38:DC:154:ARG:HD2	1.77	0.67
37:DB:30:C:H1'	37:DB:57:A:H61	1.58	0.67
36:BA:1605:C:H2'	36:BA:1606:G:H5'	1.75	0.67
39:BD:148:GLU:CB	39:BD:151:LYS:HD2	2.25	0.67
36:BA:218:A:H2'	36:BA:219:G:O4'	1.95	0.67
36:BA:193:U:H3	36:BA:202:U:H3	1.43	0.67
1:CA:530:G:O2'	24:CY:35:G:H4'	1.95	0.67
36:DA:1512:U:H2'	36:DA:1512:U:O2	1.92	0.67
36:BA:2688:U:H3'	36:BA:2688:U:O2	1.95	0.67
36:BA:944:G:H5'	36:BA:945:A:O5'	1.95	0.67
36:DA:836:G:H2'	36:DA:837:C:C6	2.30	0.67
1:CA:855:G:H2'	1:CA:856:C:H6	1.59	0.67
25:AZ:9:LYS:HD2	25:AZ:74:LYS:O	1.95	0.67
17:CQ:29:HIS:CE1	17:CQ:31:LEU:H	2.12	0.67
48:BP:47:ASP:HB2	48:BP:51:PHE:HB2	1.77	0.67
27:B1:13:ILE:HD13	27:B1:13:ILE:N	2.09	0.67
36:BA:1568:G:H4'	39:BD:59:LYS:HG2	1.77	0.67
38:BC:79:LYS:HG2	38:BC:118:ASP:OD2	1.95	0.67
42:BG:111:LEU:HB2	42:BG:112:PRO:CD	2.25	0.67
11:CK:124:LYS:O	11:CK:127:LYS:HG2	1.94	0.67
36:DA:2028:U:H2'	36:DA:2029:G:O4'	1.95	0.67
1:CA:1158:C:O2'	1:CA:1159:U:H4'	1.95	0.67
13:CM:91:ARG:HH12	13:CM:103:THR:HG21	1.59	0.67
13:AM:81:LEU:HD23	13:AM:81:LEU:N	2.10	0.67
52:DT:56:GLY:O	52:DT:59:THR:HG23	1.94	0.67
52:DT:50:ILE:HG23	52:DT:99:LEU:HD12	1.76	0.67
39:DD:213:ARG:HD2	39:DD:217:ARG:O	1.95	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:DQ:34:LEU:HD12	49:DQ:130:LYS:O	1.95	0.67
36:BA:1422:G:H4'	36:BA:1493:C:OP2	1.95	0.67
10:CJ:67:THR:HG23	10:CJ:67:THR:O	1.94	0.67
36:BA:1528(A):A:H2'	36:BA:1529:G:O4'	1.94	0.67
1:CA:824:C:H2'	1:CA:825:G:C8	2.29	0.67
49:DQ:12:GLN:NE2	49:DQ:73:PRO:HD2	2.10	0.67
16:CP:53:VAL:HG23	16:CP:54:GLU:N	2.09	0.67
4:CD:145:GLU:HA	4:CD:184:LYS:HA	1.77	0.67
5:CE:80:ILE:HD11	5:CE:138:ALA:HB1	1.76	0.67
18:AR:66:LEU:O	18:AR:70:ILE:HG13	1.95	0.67
39:DD:136:ILE:N	39:DD:136:ILE:HD12	2.08	0.67
19:AS:78:ARG:HB2	19:AS:81:ARG:NH1	2.08	0.67
17:CQ:85:VAL:O	17:CQ:89:LEU:HG	1.95	0.67
32:B6:12:GLU:CD	32:B6:54:ILE:HG22	2.16	0.66
50:DR:29:LEU:HD21	50:DR:52:ILE:HD11	1.76	0.66
28:D2:3:LEU:CD1	36:DA:98:G:H5''	2.23	0.66
36:DA:660:G:H5'	41:DF:99:TYR:CD2	2.29	0.66
5:CE:102:ALA:CB	5:CE:120:THR:HG21	2.24	0.66
27:D1:13:ILE:CD1	36:DA:396:G:H5'	2.11	0.66
36:DA:525:U:O5'	36:DA:556:G:H5'	1.95	0.66
16:AP:67:THR:N	16:AP:70:ALA:HB3	2.07	0.66
1:AA:274:A:O2'	1:AA:275:G:O4'	2.14	0.66
40:BE:31:CYS:CB	40:BE:49:LEU:HD12	2.25	0.66
1:CA:1308:U:O2'	1:CA:1309:G:H5'	1.95	0.66
36:BA:1664:A:H1'	36:BA:2726:U:C5	2.30	0.66
36:DA:1988:C:O2'	36:DA:1989:G:H5'	1.95	0.66
52:DT:45:PHE:CE1	52:DT:74:ARG:HG3	2.30	0.66
38:BC:20:TYR:HB3	38:BC:24:GLU:CB	2.25	0.66
1:CA:1179:A:H4'	9:CI:103:THR:HA	1.76	0.66
1:AA:1411:C:O2'	1:AA:1412:C:H5'	1.95	0.66
36:DA:2189:U:H2'	36:DA:2190:G:C4'	2.24	0.66
3:AC:56:ASP:OD2	3:AC:69:HIS:NE2	2.28	0.66
49:DQ:134:ARG:HD2	58:DZ:122:ARG:HH21	1.58	0.66
36:BA:21:A:H2'	36:BA:22:C:C6	2.29	0.66
4:CD:109:GLY:O	4:CD:111:ALA:N	2.26	0.66
36:DA:1351:C:H2'	36:DA:1352:U:C6	2.30	0.66
39:DD:34:VAL:HG23	39:DD:35:LYS:N	2.10	0.66
13:CM:12:ASN:ND2	13:CM:46:LYS:HB2	2.09	0.66
36:DA:471:A:H2'	36:DA:472:A:H5''	1.77	0.66
40:DE:4:ILE:HD13	40:DE:28:ALA:HB1	1.75	0.66
24:AY:8:U:H5'	24:AY:49:G:OP2	1.95	0.66
5:AE:39:GLY:HA2	5:AE:69:VAL:HB	1.77	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B1:25:LYS:HB3	36:BA:388:G:H5'	1.77	0.66
20:CT:45:GLN:HB3	20:CT:91:LEU:HD13	1.75	0.66
24:CY:8:U:H5'	24:CY:49:G:OP2	1.96	0.66
1:AA:724:G:O2'	1:AA:725:G:H5'	1.95	0.66
10:CJ:32:ALA:HB1	10:CJ:75:ILE:CG1	2.24	0.66
1:AA:675:A:H2'	1:AA:676:A:C8	2.31	0.66
41:DF:82:ILE:O	41:DF:83:PHE:HB3	1.94	0.66
27:B1:77:ALA:O	27:B1:82:LEU:HD22	1.95	0.66
6:CF:17:SER:O	6:CF:21:LEU:HD23	1.95	0.66
36:BA:392:C:H2'	36:BA:393:C:H5'	1.76	0.66
49:DQ:18:LYS:HB3	49:DQ:98:LYS:NZ	2.10	0.66
49:BQ:3:MET:HB2	49:BQ:4:PRO:HD2	1.76	0.66
26:D0:19:LYS:O	26:D0:21:LEU:HG	1.94	0.66
36:DA:191:A:O2'	36:DA:192:C:H5'	1.95	0.66
32:B6:53:LYS:HG2	32:B6:54:ILE:N	2.10	0.66
36:DA:1651:G:O2'	36:DA:1652:A:H5'	1.95	0.66
36:DA:2882:A:H5'	50:DR:96:ARG:HG3	1.77	0.66
39:BD:23:GLU:O	39:BD:82:ILE:HD12	1.95	0.66
36:BA:1242:A:N1	48:BP:8:PRO:HG3	2.10	0.66
4:AD:20:TYR:HA	4:AD:26:CYS:HB3	1.77	0.66
50:BR:100:LEU:H	50:BR:100:LEU:HD22	1.60	0.66
2:CB:229:VAL:CG1	2:CB:230:VAL:H	2.09	0.66
2:CB:97:TRP:CH2	2:CB:173:ALA:HA	2.29	0.66
40:BE:57:LYS:HE3	40:BE:57:LYS:CA	2.11	0.66
36:BA:2810:A:O2'	40:BE:61:ARG:HB2	1.96	0.66
52:DT:64:ARG:HB2	52:DT:73:GLU:HG2	1.75	0.66
57:DY:13:VAL:HG22	57:DY:14:LEU:N	2.09	0.66
1:AA:1250:A:H4'	9:AI:68:GLY:N	2.09	0.66
22:AV:50:U:O2'	22:AV:51:U:H5'	1.94	0.66
1:AA:1498:U:C4	23:AX:20:U:H4'	2.31	0.66
51:DS:98:VAL:C	51:DS:100:ALA:H	1.98	0.66
51:DS:65:VAL:O	51:DS:69:VAL:HG12	1.94	0.66
42:BG:162:THR:O	42:BG:164:GLU:HG3	1.95	0.66
42:BG:19:LEU:HD23	42:BG:175:LEU:HD12	1.77	0.66
42:BG:180:PHE:HB2	42:BG:182:LYS:HZ2	1.59	0.66
36:DA:1566:A:OP1	39:DD:211:ARG:NH1	2.28	0.66
58:DZ:10:ARG:NH2	58:DZ:26:GLY:O	2.29	0.66
39:BD:166:GLN:CA	39:BD:166:GLN:HE21	1.98	0.66
36:BA:1390:U:O2'	36:BA:1391:U:H5'	1.95	0.66
36:DA:2580:U:C5	36:DA:2581:G:C6	2.84	0.66
42:DG:34:LEU:HA	42:DG:161:THR:HG22	1.77	0.66
8:CH:94:TYR:CD1	8:CH:94:TYR:N	2.64	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1422:G:H4'	36:DA:1493:C:OP2	1.95	0.66
42:BG:117:PHE:CG	42:BG:118:ARG:N	2.62	0.66
10:CJ:91:PRO:CB	10:CJ:94:VAL:HB	2.24	0.66
11:CK:111:ASP:CB	18:CR:84:LYS:HD2	2.25	0.66
1:AA:401:C:H2'	1:AA:402:G:C8	2.30	0.66
1:AA:750:G:N3	15:AO:23:GLY:HA3	2.11	0.66
18:AR:44:LEU:HD23	18:AR:48:GLY:O	1.94	0.66
36:BA:871:U:H4'	49:BQ:69:PHE:CZ	2.30	0.66
46:BN:21:LYS:HD3	46:BN:22:THR:N	2.09	0.66
36:BA:1754:C:H5''	52:BT:113:LYS:NZ	2.09	0.66
25:AZ:313:HIS:HB3	25:AZ:403:ILE:HG21	1.75	0.66
41:BF:57:VAL:HG12	41:BF:58:ALA:H	1.58	0.66
39:BD:210:GLY:O	39:BD:211:ARG:HB3	1.96	0.66
36:BA:1120:G:H2'	36:BA:1121:C:C6	2.30	0.66
20:CT:10:LEU:HD12	20:CT:11:SER:H	1.61	0.66
22:AW:10:G:O2'	22:AW:11:C:H5'	1.95	0.66
12:AL:47:LYS:HB3	12:AL:48:PRO:CD	2.25	0.66
1:CA:1200:C:O2'	1:CA:1201:A:P	2.53	0.66
36:DA:963:U:H2'	36:DA:964:C:C6	2.30	0.66
32:D6:18:ARG:HG2	32:D6:18:ARG:HH11	1.60	0.66
28:D2:2:LYS:HA	28:D2:5:GLU:CD	2.16	0.66
25:AZ:234:ARG:CD	25:AZ:289:LEU:HD22	2.25	0.66
1:CA:965:A:O2'	1:CA:966:G:H5''	1.94	0.66
41:DF:131:GLY:HA2	41:DF:138:GLU:OE1	1.94	0.66
40:BE:52:LEU:CB	40:BE:76:ARG:HB2	2.25	0.66
25:CZ:193:ASN:HB3	25:CZ:196:VAL:CG2	2.24	0.66
52:BT:38:ASN:ND2	52:BT:38:ASN:C	2.48	0.66
9:AI:103:THR:HG22	9:AI:104:ARG:O	1.94	0.66
36:BA:1520:G:H2'	36:BA:1523:U:O4'	1.95	0.66
4:AD:85:LYS:HD3	4:AD:92:VAL:CG1	2.25	0.66
19:CS:40:ILE:HG21	19:CS:67:VAL:HA	1.77	0.66
36:DA:142(A):C:O2'	36:DA:143:G:H5'	1.95	0.66
36:BA:1902:C:H4'	39:BD:244:ARG:HB2	1.76	0.66
39:BD:144:ALA:HB3	39:BD:192:THR:HG22	1.75	0.66
36:DA:2580:U:H3'	36:DA:2581:G:C2	2.30	0.66
13:CM:4:ILE:HD11	13:CM:10:PRO:HD3	1.77	0.66
42:DG:102:PHE:HA	42:DG:105:LYS:HZ3	1.60	0.66
42:DG:15:VAL:HG12	42:DG:19:LEU:CG	2.24	0.66
36:BA:1466:G:H3'	36:BA:1547:C:H41	1.60	0.66
43:DH:85:LYS:NZ	43:DH:132:ARG:HA	2.10	0.66
36:DA:1058:G:H8	36:DA:1058:G:O5'	1.77	0.66
27:B1:50:ARG:HG2	27:B1:59:THR:CG2	2.26	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:BV:24:LYS:H	54:BV:91:TYR:HA	1.60	0.66
1:AA:614:A:O2'	1:AA:615:C:H5'	1.94	0.66
1:AA:1388:C:H2'	1:AA:1389:C:H6	1.60	0.66
36:BA:1809:A:H2'	36:BA:1810:A:C8	2.31	0.66
33:D7:21:ARG:HG2	33:D7:21:ARG:NH1	2.10	0.66
36:DA:1144:G:H2'	36:DA:1145:C:C6	2.30	0.66
36:BA:2572:A:C8	40:BE:144:ARG:HD2	2.31	0.66
1:CA:1321:C:H5''	1:CA:1322:C:H5''	1.77	0.66
36:DA:271(B):C:H42	36:DA:271(W):G:N2	1.94	0.66
1:CA:160:A:H2'	1:CA:161:A:O4'	1.95	0.66
36:BA:2693:A:O2'	36:BA:2694:G:H5'	1.96	0.66
45:BK:7:UNK:HA	45:BK:58:UNK:HA	1.77	0.66
2:AB:151:GLY:O	2:AB:153:ARG:N	2.28	0.66
1:AA:160:A:H2'	1:AA:161:A:O4'	1.94	0.66
36:DA:776:G:H4'	36:DA:777:A:O5'	1.95	0.66
11:CK:25:TYR:HE1	11:CK:87:THR:HB	1.60	0.66
4:AD:149:ALA:O	4:AD:153:ARG:HG3	1.95	0.66
36:BA:582:G:H1	36:BA:1258:C:N4	1.93	0.66
36:DA:2413:G:H2'	36:DA:2414:G:H8	1.61	0.66
36:BA:1855:G:H2'	36:BA:1856:G:C8	2.31	0.66
56:BX:26:TYR:CE2	56:BX:89:ILE:HB	2.30	0.66
10:AJ:55:LYS:HE3	10:AJ:55:LYS:N	2.09	0.66
30:B4:9:LEU:HD13	30:B4:10:VAL:H	1.61	0.66
27:D1:62:VAL:CG1	27:D1:67:ILE:HG12	2.24	0.66
36:DA:582:G:H1	36:DA:1258:C:H42	1.44	0.66
48:DP:36:LYS:CB	48:DP:41:ARG:HB3	2.24	0.66
54:DV:35:LEU:HD22	54:DV:35:LEU:N	2.10	0.66
48:BP:100:LEU:O	48:BP:103:ALA:HB3	1.95	0.66
5:AE:46:GLY:C	5:AE:47:LYS:HD3	2.16	0.66
40:BE:165:VAL:HG12	40:BE:166:THR:H	1.59	0.66
58:BZ:7:ALA:O	58:BZ:62:PRO:HD3	1.95	0.66
36:BA:1067:A:H3'	36:BA:1068:G:C5'	2.23	0.66
36:DA:1067:A:H3'	36:DA:1068:G:C5'	2.23	0.66
31:D5:55:ARG:HD3	31:D5:56:LYS:N	2.10	0.66
36:DA:2123:G:H2'	36:DA:2124:G:H8	1.60	0.66
1:AA:1424:C:H2'	1:AA:1425:U:H6	1.59	0.66
1:AA:1015:A:H1'	1:AA:1218:C:O2'	1.96	0.66
1:AA:17:U:H2'	1:AA:18:C:H6	1.55	0.66
55:DW:72:LYS:HE2	55:DW:108:GLY:HA3	1.78	0.66
55:DW:27:LYS:O	55:DW:70:TYR:HB2	1.94	0.66
3:CC:142:MET:C	3:CC:144:SER:H	1.99	0.66
36:DA:1528(A):A:H2'	36:DA:1529:G:O4'	1.95	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1899:G:N2	36:BA:1902:C:N4	2.44	0.66
16:CP:20:VAL:HG21	16:CP:32:TYR:CD2	2.30	0.66
40:DE:120:TRP:HB3	40:DE:155:LYS:HE3	1.77	0.66
42:DG:32:PRO:HA	42:DG:162:THR:HB	1.76	0.66
42:DG:46:ALA:HA	42:DG:51:ARG:HB3	1.77	0.66
25:CZ:67:HIS:HA	25:CZ:79:HIS:O	1.94	0.66
36:BA:1030:G:OP2	49:BQ:128:LYS:HE2	1.94	0.66
8:CH:64:LYS:HG2	8:CH:65:TYR:N	2.09	0.66
11:CK:92:GLU:HG3	11:CK:96:ARG:HH11	1.60	0.66
36:DA:871:U:H4'	49:DQ:69:PHE:CZ	2.30	0.66
18:CR:53:ARG:C	18:CR:55:ARG:H	1.98	0.66
36:BA:1399:C:O2'	36:BA:1400:G:H5'	1.96	0.66
1:AA:1317:C:H2'	1:AA:1318:A:H5'	1.77	0.66
47:DO:19:ILE:HG22	47:DO:43:VAL:HA	1.77	0.66
36:BA:1064:C:C3'	36:BA:1065:U:H5''	2.25	0.66
12:CL:55:VAL:CG2	12:CL:67:THR:HG22	2.25	0.66
22:AW:53:G:N2	22:AW:62:C:H42	1.92	0.66
1:CA:1507:A:H8	1:CA:1507:A:H5''	1.61	0.66
36:BA:382:G:O2'	36:BA:383:U:H5'	1.95	0.66
36:DA:2542:A:H5'	36:DA:2543:G:OP1	1.94	0.66
36:DA:2667:C:H2'	36:DA:2668:G:O4'	1.96	0.66
53:BU:47:TYR:HA	53:BU:50:ARG:HD2	1.78	0.66
56:DX:49:VAL:HB	56:DX:87:GLN:NE2	2.11	0.66
43:BH:105:LEU:HD23	43:BH:105:LEU:H	1.59	0.66
52:DT:4:GLY:O	52:DT:7:ILE:HB	1.95	0.66
37:BB:98:G:H2'	37:BB:99:G:H8	1.60	0.66
7:AG:58:PRO:HG2	7:AG:59:LEU:H	1.59	0.66
27:D1:56:GLN:OE1	27:D1:87:PRO:HD3	1.95	0.66
27:B1:3:LYS:NZ	27:B1:3:LYS:HB3	2.11	0.66
39:BD:59:LYS:HG3	39:BD:60:ARG:N	2.09	0.66
49:BQ:51:ARG:O	49:BQ:54:MET:HB3	1.94	0.66
36:BA:1651:G:O2'	36:BA:1652:A:H5'	1.96	0.66
37:BB:42:C:N4	42:BG:91:ARG:CZ	2.58	0.66
52:BT:24:PRO:HD3	52:BT:52:ILE:CD1	2.21	0.66
1:CA:346:G:H2'	1:CA:346:G:N3	2.11	0.66
40:DE:167:VAL:HG11	40:DE:188:VAL:HA	1.77	0.66
47:DO:101:PRO:HD3	52:DT:68:TYR:HB2	1.76	0.66
22:CV:50:U:O2'	22:CV:51:U:H5'	1.96	0.66
1:AA:922:G:H1'	5:AE:19:MET:HB2	1.76	0.66
1:AA:571:U:H2'	1:AA:572:A:H5''	1.77	0.66
31:B5:57:VAL:C	31:B5:58:LEU:HD12	2.15	0.66
3:CC:12:LEU:O	3:CC:14:ILE:N	2.29	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CC:113:ALA:HB1	3:CC:200:ALA:CB	2.23	0.66
3:AC:12:LEU:O	3:AC:14:ILE:N	2.27	0.66
3:AC:36:ASP:O	3:AC:40:ARG:HG3	1.95	0.66
36:BA:593:G:O2'	36:BA:594:U:H5'	1.95	0.66
48:BP:16:ARG:HB2	48:BP:16:ARG:NH1	2.11	0.66
36:BA:764:A:H3'	36:BA:765:G:H5'	1.76	0.66
36:BA:18:C:O2'	53:BU:23:GLY:HA2	1.95	0.66
46:BN:32:THR:HB	46:BN:33:LEU:HD12	1.77	0.66
46:BN:34:LEU:HD21	46:BN:120:LEU:HD23	1.78	0.66
36:BA:83:G:O2'	36:BA:84:A:C8	2.49	0.66
22:AV:56:C:C1'	42:BG:76:SER:HB2	2.25	0.66
30:D4:16:CYS:HB2	30:D4:36:CYS:SG	2.36	0.66
51:DS:106:ARG:HB3	51:DS:106:ARG:NH1	2.11	0.66
36:BA:2485:G:H5''	49:BQ:46:GLN:NE2	2.11	0.66
1:CA:867:G:O2'	1:CA:868:C:H5'	1.95	0.66
8:AH:89:PRO:HA	8:AH:92:ARG:HH11	1.59	0.66
36:DA:1399:C:O2'	36:DA:1400:G:H5'	1.95	0.66
22:AV:63:G:H2'	22:AV:64:A:H8	1.59	0.66
33:B7:12:ARG:HH21	33:B7:44:PRO:HB3	1.58	0.66
36:DA:1605:C:H2'	36:DA:1606:G:H5'	1.78	0.66
36:BA:1141:U:H2'	46:BN:63:THR:HG22	1.76	0.66
1:AA:1321:C:C3'	1:AA:1322:C:H5''	2.26	0.66
36:DA:751:A:C5'	55:DW:90:ARG:HA	2.26	0.66
58:DZ:11:GLU:OE1	58:DZ:38:TYR:HE2	1.78	0.66
36:DA:2687:U:C5	36:DA:2688:U:C5	2.83	0.66
36:DA:1038:C:H2'	36:DA:1039:G:H5''	1.77	0.66
36:BA:465:G:H2'	36:BA:466:A:C8	2.29	0.66
17:AQ:85:VAL:O	17:AQ:89:LEU:HG	1.96	0.66
36:DA:1423:G:H2'	36:DA:1424:G:C8	2.30	0.66
12:AL:98:TYR:N	12:AL:98:TYR:CD1	2.62	0.66
55:BW:37:ARG:HG3	55:BW:37:ARG:HH11	1.60	0.66
36:DA:1694:C:H1'	36:DA:1695:G:N2	2.11	0.66
25:CZ:356:PRO:N	25:CZ:359:VAL:CG2	2.57	0.66
36:DA:2011:U:H2'	36:DA:2012:G:O4'	1.94	0.66
25:AZ:204:ASP:O	25:AZ:208:GLU:HG2	1.96	0.66
4:AD:20:TYR:HA	4:AD:26:CYS:SG	2.34	0.66
53:DU:110:VAL:O	53:DU:113:ALA:HB3	1.94	0.66
36:DA:811:U:H5	48:DP:24:GLY:HA3	1.58	0.66
1:CA:501:C:O2'	1:CA:502:G:H5'	1.95	0.66
5:AE:53:LEU:O	5:AE:56:GLN:N	2.28	0.66
58:BZ:58:VAL:HG22	58:BZ:68:PRO:CA	2.24	0.66
10:CJ:47:PHE:O	10:CJ:62:HIS:HB2	1.95	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:AV:6:G:H1	22:AV:67:C:N4	1.92	0.66
23:AX:20:U:H2'	23:AX:21:C:C6	2.28	0.66
42:BG:10:LYS:HD2	42:BG:13:GLU:OE1	1.95	0.66
36:DA:2113:U:H2'	36:DA:2114:A:C8	2.31	0.66
39:DD:239:ARG:HG2	39:DD:239:ARG:HH21	1.59	0.66
54:BV:35:LEU:N	54:BV:35:LEU:HD22	2.10	0.66
21:AU:2:GLY:C	21:AU:4:GLY:H	1.99	0.66
36:DA:2810:A:O2'	40:DE:61:ARG:HB2	1.95	0.66
5:CE:76:ILE:HG13	5:CE:77:PRO:HD2	1.78	0.66
49:BQ:21:THR:O	49:BQ:22:LYS:HB3	1.96	0.66
36:BA:2071:A:H2'	36:BA:2072:G:H8	1.61	0.66
27:D1:58:ILE:CG1	27:D1:59:THR:N	2.58	0.66
36:DA:407:G:H2'	36:DA:408:G:C8	2.29	0.66
36:BA:2777:G:H5''	36:BA:2778:A:C5'	2.25	0.66
53:BU:21:ALA:HB1	53:BU:24:TYR:CD1	2.31	0.66
1:CA:553:A:H2'	1:CA:554:C:C6	2.30	0.66
27:B1:80:LEU:HD23	27:B1:81:LYS:H	1.59	0.66
58:DZ:11:GLU:H	58:DZ:11:GLU:CD	1.97	0.66
11:AK:87:THR:O	11:AK:91:ARG:HG3	1.96	0.66
25:CZ:118:GLU:O	25:CZ:121:LEU:HD23	1.95	0.66
36:BA:1144:G:H2'	36:BA:1145:C:C6	2.30	0.66
33:B7:30:VAL:CG1	36:BA:466:A:H4'	2.25	0.66
51:BS:42:ASP:C	51:BS:44:LYS:H	1.99	0.66
1:CA:633:G:H5'	1:CA:634:C:OP2	1.96	0.66
36:BA:2405:G:H2'	36:BA:2411:A:N6	2.11	0.66
2:CB:194:PRO:HG2	2:CB:195:ASP:H	1.61	0.66
36:DA:1285:G:H4'	50:DR:105:ARG:NH1	2.10	0.66
36:DA:1747(A):G:H2'	36:DA:1748:G:O4'	1.96	0.66
25:AZ:356:PRO:N	25:AZ:359:VAL:HG21	2.10	0.66
36:DA:1278:A:H5''	50:DR:36:THR:HG22	1.76	0.66
50:DR:63:ARG:HG2	50:DR:80:PHE:CE2	2.29	0.66
34:D8:59:LYS:CD	48:DP:50:ARG:HB3	2.25	0.66
28:D2:49:LYS:O	28:D2:53:LEU:HB2	1.96	0.66
25:CZ:234:ARG:CD	25:CZ:289:LEU:HD22	2.26	0.66
36:DA:1889:A:O2'	36:DA:2087:G:H5'	1.95	0.66
1:AA:426:G:H4'	4:AD:41:GLY:O	1.96	0.66
50:BR:29:LEU:HD21	50:BR:52:ILE:HD11	1.76	0.66
13:AM:34:LEU:HD22	13:AM:39:ILE:O	1.95	0.66
11:CK:125:PHE:N	11:CK:125:PHE:HD1	1.92	0.66
56:DX:10:ALA:HB1	56:DX:11:PRO:HD2	1.78	0.66
36:DA:2027:G:O2'	36:DA:2028:U:H5'	1.96	0.66
8:CH:14:ARG:HG3	8:CH:83:ILE:HG23	1.78	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:974:A:H2'	1:CA:974:A:N3	2.11	0.66
38:DC:22:ILE:HG13	38:DC:228:SER:OG	1.95	0.66
52:BT:19:LEU:HD13	52:BT:78:LEU:CD2	2.26	0.66
36:BA:2892:A:N7	36:BA:2893:G:N3	2.44	0.66
7:CG:69:VAL:HA	7:CG:138:LYS:CD	2.19	0.66
14:CN:48:ALA:CA	14:CN:53:LEU:HD12	2.25	0.66
36:DA:2833:G:C3'	36:DA:2834:G:H5''	2.25	0.66
36:DA:2121:G:H2'	36:DA:2122:U:C6	2.31	0.66
36:DA:2175:C:O3'	38:DC:221:SER:HB3	1.95	0.66
1:AA:920:U:H1'	1:AA:1080:A:C2	2.31	0.66
25:AZ:255:ILE:HD11	25:AZ:290:LEU:HD22	1.77	0.66
3:AC:187:ALA:O	3:AC:188:LEU:HD22	1.95	0.66
13:CM:11:ARG:O	13:CM:13:LYS:N	2.29	0.66
42:BG:76:SER:CB	42:BG:83:ARG:HB3	2.26	0.66
43:BH:23:ARG:NH1	43:BH:36:PRO:HB3	2.10	0.66
20:AT:64:ASP:O	20:AT:67:ALA:HB3	1.94	0.66
43:DH:19:VAL:HG12	43:DH:20:ALA:N	2.11	0.66
1:AA:1255:G:H21	1:AA:1258:G:H21	1.44	0.66
5:AE:76:ILE:HG13	5:AE:77:PRO:HD2	1.77	0.66
22:CV:41:C:C2'	22:CV:41:C:O2	2.44	0.66
12:CL:37:CYS:HB2	12:CL:81:SER:O	1.96	0.66
37:BB:68:C:H2'	37:BB:69:G:C8	2.27	0.66
36:DA:953:A:H2'	36:DA:954:G:H8	1.60	0.66
11:AK:92:GLU:HG3	11:AK:96:ARG:HH11	1.60	0.66
1:AA:1152:A:OP1	10:AJ:68:HIS:NE2	2.28	0.66
36:DA:189:G:H2'	36:DA:205:G:N2	2.11	0.66
57:BY:39:VAL:HG12	57:BY:40:GLU:N	2.10	0.66
12:CL:89:ARG:HD2	12:CL:91:LYS:HE2	1.77	0.66
1:AA:936:C:O2'	1:AA:937:A:H5'	1.96	0.66
1:CA:332:G:O2'	1:CA:333:G:H5'	1.95	0.66
41:BF:82:ILE:O	41:BF:83:PHE:HB3	1.94	0.66
14:CN:29:ARG:HH11	14:CN:29:ARG:HG3	1.60	0.66
36:BA:1106:G:C2'	36:BA:1107:G:H5'	2.25	0.66
34:B8:39:LYS:HZ2	36:BA:2364:C:H5	1.43	0.66
36:DA:2693:A:O2'	36:DA:2694:G:H5'	1.96	0.66
36:BA:878:A:H5'	36:BA:878:A:N3	2.11	0.66
38:BC:124:GLY:HA2	38:BC:128:GLY:HA3	1.76	0.66
34:B8:13:ARG:NH2	36:BA:250:G:OP2	2.28	0.66
32:D6:10:LEU:H	32:D6:10:LEU:HD22	1.61	0.66
32:D6:14:THR:O	32:D6:49:HIS:HA	1.96	0.66
39:BD:34:VAL:HG23	39:BD:35:LYS:N	2.11	0.66
36:DA:2235:G:H2'	36:DA:2236:C:C6	2.31	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BQ:48:GLU:HG2	49:BQ:52:VAL:HG23	1.76	0.66
28:B2:32:LEU:HD12	28:B2:57:ILE:HG13	1.77	0.66
1:CA:952:U:O2'	1:CA:953:G:H5'	1.95	0.66
5:AE:100:VAL:CG2	5:AE:107:ARG:HH21	2.07	0.66
52:BT:45:PHE:CE1	52:BT:74:ARG:HG3	2.30	0.66
9:AI:105:ASP:OD1	9:AI:107:ARG:HD3	1.96	0.66
10:AJ:50:ILE:HG22	10:AJ:60:ARG:HG2	1.76	0.66
58:DZ:163:LEU:HD11	58:DZ:165:VAL:CG2	2.26	0.66
9:CI:112:LYS:C	9:CI:112:LYS:HD3	2.15	0.66
42:BG:36:LYS:HG2	42:BG:37:VAL:N	2.10	0.66
36:DA:2137:C:N4	36:DA:2154:G:H22	1.93	0.66
1:AA:866:C:H4'	1:AA:919:A:OP1	1.96	0.66
36:BA:2111:C:N4	36:BA:2145:C:H2'	2.10	0.66
36:BA:2175:C:O3'	38:BC:221:SER:HB3	1.96	0.66
58:DZ:12:GLY:HA3	58:DZ:36:LYS:HZ2	1.60	0.66
13:CM:40:ASN:OD1	13:CM:41:PRO:HD2	1.96	0.66
5:AE:71:LEU:O	5:AE:72:GLN:HG3	1.96	0.66
29:B3:26:LEU:HB2	29:B3:28:LEU:HD21	1.78	0.66
5:CE:87:SER:OG	5:CE:125:SER:HB3	1.96	0.66
10:AJ:32:ALA:HB1	10:AJ:75:ILE:CG1	2.26	0.66
56:BX:57:LEU:HD22	56:BX:57:LEU:O	1.96	0.66
9:AI:7:THR:HG22	9:AI:8:GLY:H	1.60	0.66
1:CA:1255:G:H21	1:CA:1258:G:H21	1.43	0.66
1:AA:943:U:H2'	1:AA:944:G:H5'	1.76	0.66
38:DC:47:LEU:N	38:DC:47:LEU:HD12	2.11	0.66
30:B4:20:ASN:HD22	30:B4:21:VAL:N	1.94	0.66
58:BZ:149:SER:CB	58:BZ:173:ALA:HA	2.26	0.66
1:AA:606:G:N2	1:AA:631:G:H2'	2.10	0.66
28:D2:41:ILE:HG13	28:D2:42:GLY:N	2.09	0.66
41:DF:123:LEU:HD12	41:DF:124:LEU:H	1.60	0.66
8:CH:63:LEU:H	8:CH:63:LEU:CD2	2.09	0.66
4:CD:30:LYS:O	4:CD:32:ALA:N	2.27	0.66
51:BS:77:ALA:C	51:BS:79:ALA:H	1.96	0.66
2:CB:48:MET:CA	2:CB:51:LEU:HD12	2.24	0.66
52:BT:94:ALA:C	52:BT:96:ARG:H	1.99	0.66
36:BA:2632:A:O2'	40:BE:61:ARG:NH2	2.29	0.66
36:DA:1673:U:O2	36:DA:1675:C:H5'	1.96	0.66
47:DO:104:ARG:NH1	47:DO:104:ARG:HB2	2.09	0.66
57:DY:7:VAL:HG21	57:DY:8:LYS:NZ	2.10	0.66
19:AS:44:MET:O	19:AS:47:HIS:HB2	1.94	0.66
51:DS:89:ARG:O	51:DS:92:TYR:HB3	1.95	0.66
36:DA:2180:U:H2'	36:DA:2181:G:C8	2.31	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BN:131:GLN:HE22	46:BN:133:GLN:HA	1.61	0.66
20:CT:67:ALA:HA	20:CT:72:LEU:O	1.96	0.66
36:DA:709:U:H2'	36:DA:710:G:H8	1.61	0.66
48:DP:16:ARG:HD3	48:DP:18:ARG:H	1.60	0.66
13:CM:10:PRO:HG3	13:CM:18:ALA:HB1	1.77	0.66
36:DA:461:C:O2'	36:DA:462:C:H5'	1.96	0.66
9:AI:43:ALA:O	9:AI:45:ALA:N	2.29	0.66
1:AA:585:G:H1	1:AA:756:C:H42	1.44	0.66
36:DA:2485:G:H5''	49:DQ:46:GLN:NE2	2.11	0.66
1:CA:1513:A:H2'	1:CA:1514:C:H6	1.59	0.66
36:DA:2359:C:H2'	36:DA:2360:A:H5'	1.76	0.66
36:BA:406:G:H2'	36:BA:407:G:C8	2.31	0.66
54:BV:3:ALA:HB3	54:BV:14:VAL:HG23	1.78	0.66
36:BA:272(B):G:H2'	36:BA:272(C):G:H8	1.61	0.66
36:BA:803:U:C2'	36:BA:804:A:H5'	2.26	0.66
7:AG:84:ASN:OD1	22:AW:33:U:H5'	1.95	0.66
6:CF:25:ILE:HA	6:CF:28:ARG:HD2	1.77	0.66
40:BE:179:GLU:O	40:BE:180:ASN:HB2	1.94	0.66
1:AA:185:A:N3	20:AT:81:LYS:NZ	2.43	0.66
45:DK:32:UNK:HA	45:DK:63:UNK:O	1.96	0.66
39:BD:76:PRO:HG2	39:BD:98:VAL:CG2	2.26	0.66
29:D3:10:LYS:O	29:D3:53:LEU:HD22	1.96	0.66
48:BP:136:GLU:HA	48:BP:139:LYS:HB2	1.78	0.66
3:CC:116:VAL:O	3:CC:119:ARG:HB3	1.96	0.66
7:AG:125:MET:O	7:AG:128:ALA:HB3	1.95	0.66
36:BA:565:C:H4'	36:BA:1253:A:N1	2.11	0.66
31:D5:5:PRO:HA	36:DA:2056:G:H22	1.61	0.66
36:DA:1654:A:OP2	50:DR:3:HIS:HD2	1.78	0.66
25:AZ:194:GLU:HB3	25:AZ:198:LYS:NZ	2.10	0.66
5:CE:101:ILE:O	5:CE:120:THR:HG22	1.95	0.66
38:DC:147:PHE:C	38:DC:149:ILE:N	2.49	0.66
50:BR:42:LYS:O	50:BR:45:ARG:HG2	1.96	0.66
50:BR:42:LYS:O	50:BR:45:ARG:N	2.24	0.66
50:BR:45:ARG:HG3	50:BR:46:GLY:N	2.09	0.66
50:BR:52:ILE:CD1	50:BR:79:LEU:HD21	2.26	0.66
13:AM:30:ALA:C	13:AM:32:GLU:H	1.99	0.66
1:AA:250:A:H2	1:AA:274:A:N1	1.94	0.66
40:BE:78:LEU:O	40:BE:79:ARG:HD2	1.96	0.66
5:AE:102:ALA:CB	5:AE:120:THR:HG21	2.26	0.66
52:DT:19:LEU:HD13	52:DT:78:LEU:HD22	1.76	0.66
31:D5:57:VAL:C	31:D5:58:LEU:HD12	2.17	0.66
4:CD:188:LEU:HD23	4:CD:189:PRO:O	1.96	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:79:HIS:HD2	25:AZ:80:VAL:N	1.94	0.66
19:CS:43:GLU:C	19:CS:45:VAL:H	1.96	0.66
3:AC:177:THR:HB	3:AC:180:ALA:HB2	1.77	0.66
36:DA:1592:C:H2'	36:DA:1593:G:H8	1.61	0.66
21:CU:2:GLY:C	21:CU:4:GLY:H	2.00	0.66
53:BU:88:ILE:HB	53:BU:90:VAL:CG2	2.26	0.66
36:DA:38:A:H5'	41:DF:50:SER:OG	1.95	0.66
1:CA:1328:C:H2'	1:CA:1329:A:H8	1.60	0.66
42:BG:46:ALA:HB3	42:BG:88:ILE:HG13	1.77	0.66
42:DG:113:ARG:O	42:DG:115:ARG:N	2.27	0.66
40:BE:135:HIS:O	40:BE:136:ARG:HG3	1.95	0.66
13:CM:108:ARG:NH1	13:CM:108:ARG:HA	2.10	0.66
36:DA:1579:A:H2'	36:DA:1580:A:C1'	2.26	0.66
36:BA:1028:A:N6	36:BA:1125:G:H2'	2.11	0.66
36:BA:2023:G:H5'	36:BA:2617:C:H4'	1.77	0.66
22:AV:40:C:H2'	22:AV:41:C:H6	1.61	0.66
36:DA:1064:C:C3'	36:DA:1065:U:H5''	2.25	0.66
25:AZ:118:GLU:C	25:AZ:120:ILE:H	2.00	0.66
36:BA:481:G:H1'	36:BA:506:G:N2	2.10	0.66
12:CL:6:THR:OG1	12:CL:9:GLN:HG3	1.96	0.66
26:B0:43:THR:O	26:B0:43:THR:HG23	1.96	0.65
32:B6:15:GLU:OE2	32:B6:41:PRO:CB	2.45	0.65
36:DA:83:G:N2	36:DA:102:G:H2'	2.11	0.65
48:BP:7:ARG:HB3	48:BP:8:PRO:HD3	1.77	0.65
1:AA:532:A:H2	1:AA:1206:G:H21	1.44	0.65
13:AM:21:TYR:C	13:AM:22:ILE:HD12	2.15	0.65
36:DA:532:A:H5''	53:DU:28:ARG:HH12	1.61	0.65
2:AB:212:GLN:NE2	2:AB:216:SER:HB2	2.10	0.65
51:BS:77:ALA:HA	51:BS:80:LEU:HD12	1.78	0.65
51:BS:27:SER:HA	51:BS:88:ASP:HB3	1.77	0.65
51:BS:98:VAL:C	51:BS:100:ALA:H	1.99	0.65
36:BA:2286:A:H4'	36:BA:2287:A:O4'	1.96	0.65
36:DA:1515:G:H4'	36:DA:1556:C:O2'	1.96	0.65
36:DA:1520:G:H2'	36:DA:1523:U:O4'	1.95	0.65
36:BA:2772:C:H5'	40:BE:168:MET:HE3	1.77	0.65
52:BT:89:VAL:HG21	52:BT:91:ARG:HH21	1.59	0.65
9:CI:103:THR:HG22	9:CI:104:ARG:O	1.96	0.65
36:BA:2183:C:O2'	36:BA:2184:G:H5'	1.96	0.65
36:BA:1971:A:N3	39:BD:240:ALA:HA	2.11	0.65
58:DZ:76:LEU:CD1	58:DZ:81:ARG:HH12	2.08	0.65
21:AU:6:ARG:HD3	21:AU:15:ARG:NH1	2.11	0.65
36:DA:2310:A:O2'	36:DA:2311:A:H5''	1.95	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DG:5:VAL:CG1	42:DG:6:ALA:H	2.09	0.65
38:BC:140:PRO:C	38:BC:142:ALA:H	1.98	0.65
2:CB:130:ARG:CZ	2:CB:134:GLU:HG3	2.26	0.65
36:BA:2068:U:N3	36:BA:2430:A:C2	2.54	0.65
1:CA:675:A:H2'	1:CA:676:A:C8	2.31	0.65
36:BA:894:C:C2'	36:BA:895:U:H5'	2.25	0.65
1:CA:1403:C:H6	1:CA:1403:C:O5'	1.79	0.65
39:DD:148:GLU:HB3	39:DD:151:LYS:HD2	1.78	0.65
14:AN:48:ALA:HA	14:AN:53:LEU:HB2	1.79	0.65
36:BA:2579:C:O2'	40:BE:131:ALA:CB	2.44	0.65
19:AS:5:LEU:HD12	19:AS:8:GLY:O	1.96	0.65
39:BD:148:GLU:HB3	39:BD:151:LYS:HD2	1.77	0.65
36:DA:272(D):G:H2'	36:DA:272(E):G:C8	2.31	0.65
17:AQ:66:SER:OG	17:AQ:69:LYS:HB3	1.96	0.65
9:AI:57:GLY:O	9:AI:58:HIS:HB2	1.96	0.65
2:CB:154:LEU:HD23	2:CB:156:LYS:NZ	2.12	0.65
1:CA:606:G:N2	1:CA:631:G:H2'	2.10	0.65
36:BA:2496:C:OP1	49:BQ:83:MET:HG2	1.96	0.65
47:BO:17:ARG:O	47:BO:18:LYS:HB2	1.95	0.65
1:AA:927:G:H5'	1:AA:927:G:H8	1.61	0.65
49:BQ:66:ILE:HG13	49:BQ:66:ILE:O	1.95	0.65
1:CA:575:G:OP1	1:CA:575:G:H4'	1.94	0.65
30:D4:20:ASN:HD22	30:D4:21:VAL:N	1.94	0.65
36:BA:614(A):U:H4'	36:BA:614(B):G:OP2	1.95	0.65
39:DD:2:ALA:O	39:DD:3:VAL:O	2.14	0.65
32:B6:15:GLU:HB2	32:B6:20:ASN:CB	2.27	0.65
36:BA:2361:A:H2'	36:BA:2362:G:H8	1.60	0.65
31:D5:4:HIS:O	36:DA:2056:G:N2	2.29	0.65
36:DA:1824:G:H5''	39:DD:52:ARG:HH11	1.61	0.65
5:CE:100:VAL:HG23	5:CE:107:ARG:NH2	2.10	0.65
36:DA:2230:G:H2'	36:DA:2231:C:C6	2.31	0.65
1:CA:250:A:H2	1:CA:274:A:N1	1.93	0.65
42:BG:138:GLN:O	42:BG:140:ILE:HG13	1.96	0.65
42:BG:146:TYR:C	42:BG:148:MET:H	1.99	0.65
1:CA:973:G:H1'	10:CJ:55:LYS:NZ	2.12	0.65
32:D6:6:ARG:HH11	32:D6:6:ARG:CB	2.07	0.65
36:DA:1343:G:H2'	36:DA:1344:G:H5'	1.77	0.65
40:BE:167:VAL:HB	40:BE:189:PRO:HD3	1.79	0.65
52:BT:117:ASP:OD2	52:BT:120:ARG:HG3	1.96	0.65
36:DA:2726:U:H5'	36:DA:2726:U:O2	1.96	0.65
36:DA:729:G:H2'	36:DA:1775:U:O2	1.96	0.65
36:BA:2181:G:H2'	36:BA:2182:G:C8	2.23	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CC:77:ILE:HA	3:CC:84:ILE:HG22	1.76	0.65
1:CA:167:G:O2'	1:CA:168:G:H5'	1.97	0.65
36:BA:442:G:O4'	41:BF:46:ARG:HD3	1.96	0.65
37:DB:17:C:N4	37:DB:68:C:H42	1.91	0.65
36:BA:523:C:H4'	36:BA:540:C:O2	1.95	0.65
13:CM:34:LEU:CD1	13:CM:41:PRO:HG3	2.26	0.65
36:DA:473:G:H5''	36:DA:508:G:N2	2.11	0.65
42:DG:125:PHE:C	42:DG:127:GLY:H	1.99	0.65
1:AA:80:G:C2'	1:AA:81:U:H5'	2.26	0.65
36:BA:471:A:H2'	36:BA:472:A:H5''	1.77	0.65
43:BH:83:TYR:HB3	43:BH:135:GLY:O	1.96	0.65
20:AT:45:GLN:HA	20:AT:91:LEU:HB3	1.79	0.65
36:DA:782:A:H5'	36:DA:783:A:C2	2.31	0.65
36:DA:1224:C:O2'	54:DV:85:LYS:HA	1.97	0.65
36:DA:760:G:H3'	36:DA:761:A:C8	2.32	0.65
22:AW:64:A:H2'	22:AW:65:G:C8	2.32	0.65
36:BA:185:U:H4'	36:BA:218:A:H4'	1.78	0.65
36:DA:1106:G:C2'	36:DA:1107:G:H5'	2.26	0.65
36:BA:2656:U:C2'	36:BA:2657:A:H5''	2.26	0.65
1:CA:924:C:H2'	1:CA:925:G:C8	2.31	0.65
16:CP:45:THR:C	16:CP:47:ASP:H	1.98	0.65
36:BA:2304:G:N2	36:BA:2312:U:H3	1.94	0.65
47:BO:96:THR:O	47:BO:97:ARG:HG2	1.96	0.65
36:DA:1927:A:H2'	36:DA:1928:A:C8	2.31	0.65
34:B8:22:VAL:HG21	34:B8:53:PRO:HB2	1.78	0.65
34:B8:34:TRP:HA	36:BA:2420:C:OP1	1.96	0.65
34:B8:59:LYS:CD	48:BP:50:ARG:HB3	2.26	0.65
36:DA:628:G:H2'	36:DA:629:G:C5'	2.25	0.65
28:D2:38:GLN:HB2	28:D2:44:LEU:HD22	1.78	0.65
36:DA:90:U:O2'	36:DA:92:A:H5''	1.96	0.65
36:BA:1568:G:P	39:BD:63:ARG:HH22	2.20	0.65
36:DA:2084:C:H2'	36:DA:2085:C:H6	1.62	0.65
43:BH:65:HIS:C	43:BH:67:LEU:H	2.00	0.65
36:BA:2007:C:H5'	36:BA:2824:C:H1'	1.78	0.65
50:BR:61:HIS:CE1	50:BR:65:LEU:HD22	2.31	0.65
13:AM:12:ASN:ND2	13:AM:46:LYS:HB2	2.11	0.65
36:DA:2656:U:C2'	36:DA:2657:A:H5''	2.27	0.65
46:DN:54:VAL:HB	46:DN:122:VAL:HG13	1.77	0.65
1:AA:375:U:OP1	16:AP:69:THR:HG21	1.96	0.65
2:CB:84:GLU:HB3	2:CB:219:VAL:CG2	2.20	0.65
40:BE:38:THR:HG22	40:BE:40:GLU:N	2.10	0.65
1:CA:767:A:H2'	1:CA:768:A:C8	2.31	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:91:ARG:CB	13:AM:98:VAL:HG22	2.25	0.65
25:CZ:138:VAL:HG11	25:CZ:172:ARG:HB3	1.79	0.65
36:BA:2631:G:H21	40:BE:61:ARG:HH12	1.43	0.65
7:CG:102:ARG:HG2	7:CG:106:GLN:HE21	1.60	0.65
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.62	0.65
11:AK:125:PHE:N	11:AK:125:PHE:CD1	2.64	0.65
46:BN:133:GLN:HG2	46:BN:134:ARG:N	2.11	0.65
1:AA:18:C:C5'	5:AE:127:ASN:HD21	2.05	0.65
36:BA:1592:C:H2'	36:BA:1593:G:H8	1.61	0.65
1:CA:1015:A:H1'	1:CA:1218:C:O2'	1.95	0.65
43:DH:86:GLU:N	43:DH:86:GLU:OE2	2.30	0.65
36:BA:1177:A:H5'	36:BA:1178:C:C5	2.32	0.65
36:DA:1170:G:H22	36:DA:1179:C:N4	1.94	0.65
1:CA:382:A:O2'	1:CA:383:A:H5'	1.96	0.65
43:BH:132:ARG:O	43:BH:132:ARG:HG3	1.97	0.65
42:DG:42:GLY:HA2	42:DG:90:LEU:H	1.61	0.65
2:AB:168:THR:HG23	2:AB:192:SER:OG	1.97	0.65
2:AB:189:ASP:HB3	2:AB:203:GLY:O	1.97	0.65
53:BU:38:THR:O	53:BU:41:ALA:HB3	1.96	0.65
36:DA:2125:G:H5'	38:DC:40:THR:OG1	1.96	0.65
1:CA:892:A:H2'	1:CA:893:C:C6	2.30	0.65
1:CA:1516:G:H2'	1:CA:1518:A:OP2	1.97	0.65
49:BQ:12:GLN:NE2	49:BQ:73:PRO:HD2	2.09	0.65
39:DD:148:GLU:CB	39:DD:151:LYS:HD2	2.26	0.65
47:BO:88:ASN:HD21	47:BO:92:GLU:HB3	1.60	0.65
11:CK:57:THR:HG23	11:CK:60:ALA:H	1.61	0.65
52:BT:129:ARG:O	52:BT:129:ARG:HG3	1.96	0.65
25:AZ:306:LYS:HB3	25:AZ:309:SER:HB2	1.78	0.65
36:DA:76:C:H2'	36:DA:77:C:C6	2.31	0.65
46:BN:58:ASP:O	46:BN:60:ILE:N	2.29	0.65
1:CA:307:C:H2'	1:CA:307:C:O2	1.97	0.65
6:AF:19:LEU:HD23	6:AF:20:ALA:N	2.10	0.65
26:D0:19:LYS:HB3	26:D0:21:LEU:HD21	1.76	0.65
36:BA:371:A:H61	36:BA:401:A:H3'	1.62	0.65
34:B8:4:MET:HE3	34:B8:61:LEU:HD21	1.78	0.65
36:BA:2337:G:H2'	36:BA:2338:G:H8	1.61	0.65
36:DA:2015:A:H2'	36:DA:2016:U:O4'	1.96	0.65
26:D0:43:THR:O	26:D0:43:THR:HG23	1.96	0.65
41:BF:124:LEU:HD12	41:BF:125:LEU:H	1.61	0.65
41:BF:24:LEU:O	41:BF:26:ALA:N	2.30	0.65
1:AA:972:C:O3'	10:AJ:57:LYS:CG	2.44	0.65
10:AJ:54:PHE:CA	10:AJ:55:LYS:HE3	2.25	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:B2:31:GLU:C	28:B2:33:MET:N	2.45	0.65
36:BA:94(A):G:C2'	36:BA:95:G:H5''	2.19	0.65
53:DU:88:ILE:HB	53:DU:90:VAL:CG2	2.26	0.65
36:DA:1473:G:H2'	36:DA:1474:C:O4'	1.96	0.65
36:DA:2892:A:N7	36:DA:2893:G:N3	2.44	0.65
40:BE:167:VAL:HG21	40:BE:187:ALA:O	1.97	0.65
52:BT:52:ILE:HG12	52:BT:61:PHE:HB3	1.76	0.65
7:AG:100:ALA:O	7:AG:104:LEU:HD23	1.96	0.65
1:AA:1491:G:C2'	59:AA:1601:PAR:O31	2.42	0.65
19:AS:43:GLU:C	19:AS:45:VAL:H	1.98	0.65
36:DA:1902:C:O4'	39:DD:244:ARG:HG3	1.96	0.65
2:AB:47:THR:HG23	2:AB:202:PRO:HG2	1.78	0.65
4:CD:79:PHE:HA	4:CD:93:PHE:CE2	2.32	0.65
10:CJ:27:ALA:O	10:CJ:31:GLY:N	2.30	0.65
36:DA:142:A:H1'	36:DA:1408:C:H1'	1.78	0.65
46:BN:48:MET:N	46:BN:48:MET:HE3	2.12	0.65
53:BU:88:ILE:HB	53:BU:90:VAL:HG23	1.78	0.65
39:DD:23:GLU:O	39:DD:82:ILE:HD12	1.96	0.65
36:BA:709:U:H2'	36:BA:710:G:H8	1.61	0.65
25:CZ:389:ARG:NH2	25:CZ:393:ARG:N	2.45	0.65
12:CL:119:LYS:O	12:CL:120:TYR:CG	2.50	0.65
43:BH:89:ILE:O	43:BH:89:ILE:HG13	1.96	0.65
27:B1:24:ALA:HB2	27:B1:32:LYS:NZ	2.11	0.65
1:AA:547:A:H4'	1:AA:548:G:O5'	1.94	0.65
54:BV:19:LYS:HG2	54:BV:94:LEU:CB	2.25	0.65
36:DA:2126:A:H4'	36:DA:2127:G:O5'	1.95	0.65
36:DA:2159:G:H2'	36:DA:2160:G:H5''	1.79	0.65
1:AA:1431:C:H2'	1:AA:1432:G:O4'	1.96	0.65
39:DD:142:VAL:HG23	39:DD:192:THR:O	1.96	0.65
58:BZ:109:ALA:HB3	58:BZ:144:LEU:O	1.96	0.65
22:AW:55:U:H5	22:AW:58:A:OP1	1.79	0.65
58:DZ:23:LYS:HD3	58:DZ:38:TYR:CD1	2.31	0.65
6:CF:80:ARG:NH1	6:CF:88:VAL:HB	2.10	0.65
1:CA:563:A:H2'	1:CA:563:A:N3	2.12	0.65
2:AB:16:HIS:HB3	2:AB:210:SER:CB	2.26	0.65
36:DA:292:C:O2'	36:DA:293:U:H5'	1.96	0.65
36:BA:1799:G:H5'	36:BA:1819:A:H61	1.61	0.65
48:DP:136:GLU:HA	48:DP:139:LYS:HB2	1.77	0.65
55:BW:65:LEU:HD23	55:BW:68:ARG:HD2	1.79	0.65
27:B1:3:LYS:HD3	36:BA:1364:G:N7	2.12	0.65
36:DA:2007:C:H5'	36:DA:2824:C:H1'	1.77	0.65
34:D8:13:ARG:NH1	48:DP:59:LEU:HG	2.11	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1796:U:H2'	36:BA:1797:C:C6	2.31	0.65
36:BA:691:C:O2'	36:BA:692:C:H5'	1.96	0.65
43:BH:67:LEU:HG	43:BH:71:LEU:CD1	2.26	0.65
41:BF:171:PRO:O	41:BF:173:VAL:N	2.30	0.65
53:DU:20:LEU:H	53:DU:20:LEU:CD2	2.09	0.65
10:CJ:55:LYS:N	10:CJ:55:LYS:HE3	2.10	0.65
13:CM:96:LEU:HB3	13:CM:97:PRO:HD2	1.78	0.65
1:AA:1226:C:N4	13:AM:104:ARG:HD2	2.11	0.65
25:CZ:204:ASP:O	25:CZ:208:GLU:HG2	1.95	0.65
57:DY:7:VAL:HB	57:DY:8:LYS:CD	2.24	0.65
57:BY:14:LEU:HD13	57:BY:24:VAL:HG22	1.78	0.65
36:BA:328:U:H4'	57:BY:68:HIS:CE1	2.31	0.65
57:BY:7:VAL:HG21	57:BY:8:LYS:NZ	2.10	0.65
57:BY:96:ILE:HD11	57:BY:99:CYS:SG	2.36	0.65
3:CC:181:ASN:ND2	3:CC:204:LEU:HB2	2.11	0.65
1:CA:1320:C:N4	19:CS:36:ARG:HG3	2.10	0.65
36:BA:864:G:H1'	36:BA:914:C:N4	2.12	0.65
58:BZ:77:ASP:O	58:BZ:78:LYS:HB2	1.97	0.65
1:AA:46:G:H1'	1:AA:396:G:N2	2.11	0.65
36:DA:271(H):G:O2'	36:DA:271(I):G:H8	1.72	0.65
2:AB:204:ASN:HD21	2:AB:206:ASP:H	1.43	0.65
1:CA:750:G:N3	15:CO:23:GLY:HA3	2.11	0.65
46:DN:45:ASN:N	46:DN:45:ASN:ND2	2.42	0.65
11:AK:57:THR:HG23	11:AK:60:ALA:H	1.60	0.65
48:DP:131:SER:OG	48:DP:134:ALA:HB3	1.97	0.65
1:AA:1321:C:C5'	1:AA:1322:C:H5''	2.26	0.65
36:BA:1673:U:O2	36:BA:1675:C:H5'	1.96	0.65
41:DF:57:VAL:HG12	41:DF:58:ALA:H	1.60	0.65
25:AZ:118:GLU:O	25:AZ:121:LEU:HD23	1.96	0.65
36:BA:380:U:H2'	36:BA:381:G:C8	2.32	0.65
9:AI:22:GLY:O	9:AI:59:PHE:N	2.29	0.65
36:DA:1799:G:H5'	36:DA:1819:A:H61	1.62	0.65
49:DQ:79:LEU:HD23	49:DQ:80:GLU:N	2.11	0.65
36:BA:519:U:H5''	55:BW:25:ARG:NH1	2.12	0.65
25:AZ:356:PRO:HD2	25:AZ:359:VAL:HG21	1.79	0.65
32:B6:15:GLU:OE1	32:B6:18:ARG:NE	2.30	0.65
36:DA:747:U:O3'	55:DW:89:ALA:HB2	1.96	0.65
36:DA:2087:G:O2'	36:DA:2088:G:H5'	1.95	0.65
38:BC:147:PHE:C	38:BC:149:ILE:N	2.48	0.65
40:BE:83:ASP:O	40:BE:84:PHE:HB2	1.95	0.65
42:BG:107:LEU:O	42:BG:111:LEU:HD11	1.97	0.65
27:D1:45:ASN:O	27:D1:64:ALA:HB2	1.96	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2626:C:H2'	36:DA:2627:G:C8	2.32	0.65
36:DA:523:C:H4'	36:DA:540:C:O2	1.96	0.65
5:AE:12:LEU:HD22	5:AE:13:ILE:N	2.11	0.65
52:BT:56:GLY:O	52:BT:59:THR:HG23	1.97	0.65
36:BA:2787:C:O2	36:BA:2787:C:H2'	1.97	0.65
40:DE:202:LYS:HD2	40:DE:202:LYS:N	2.11	0.65
3:AC:30:ARG:HD2	14:AN:38:GLY:HA3	1.78	0.65
6:AF:2:ARG:CZ	6:AF:69:GLU:HG3	2.27	0.65
1:AA:795:C:H1'	1:AA:1506:U:C5	2.30	0.65
51:DS:27:SER:HA	51:DS:88:ASP:HB3	1.76	0.65
36:BA:2113:U:H2'	36:BA:2114:A:C8	2.31	0.65
3:AC:120:VAL:O	3:AC:124:ILE:HG13	1.96	0.65
22:CW:53:G:N2	22:CW:62:C:N4	2.45	0.65
25:AZ:248:LYS:HD3	25:AZ:279:GLU:HG3	1.79	0.65
36:BA:1902:C:H1'	39:BD:244:ARG:NE	2.12	0.65
53:BU:79:PHE:O	53:BU:83:LEU:HD13	1.97	0.65
42:DG:138:GLN:HB3	42:DG:153:ARG:O	1.97	0.65
40:DE:38:THR:HG22	40:DE:40:GLU:N	2.11	0.65
36:DA:2632:A:O2'	40:DE:61:ARG:NH2	2.30	0.65
37:BB:20:C:H2'	37:BB:21:G:C5'	2.25	0.65
2:CB:75:LYS:O	2:CB:77:ALA:N	2.28	0.65
49:DQ:48:GLU:HG2	49:DQ:52:VAL:HG23	1.79	0.65
27:D1:70:VAL:HA	27:D1:73:LEU:HD13	1.79	0.65
1:AA:225:C:H2'	1:AA:226:G:H8	1.62	0.65
6:CF:10:LEU:HD12	6:CF:10:LEU:N	2.11	0.65
48:BP:131:SER:OG	48:BP:134:ALA:HB3	1.96	0.65
55:BW:27:LYS:O	55:BW:70:TYR:HB2	1.97	0.65
55:BW:82:LEU:HB3	55:BW:84:ARG:NH1	2.12	0.65
48:DP:122:PRO:HB3	48:DP:141:ALA:HB1	1.78	0.65
36:DA:845:G:OP2	36:DA:845:G:H8	1.79	0.65
36:DA:678:C:H2'	36:DA:679:C:H6	1.62	0.65
55:DW:29:LEU:O	55:DW:33:ARG:HG3	1.97	0.65
36:BA:2317:C:C2'	36:BA:2318:G:H5'	2.26	0.65
25:AZ:355:LEU:HB3	25:AZ:359:VAL:HB	1.78	0.65
34:B8:8:LYS:HA	34:B8:11:LYS:HB3	1.77	0.65
32:D6:15:GLU:OE2	32:D6:41:PRO:CB	2.45	0.65
36:DA:2393:A:C2'	36:DA:2394:C:H5'	2.26	0.65
34:D8:34:TRP:HA	36:DA:2420:C:OP1	1.96	0.65
34:D8:52:LYS:HG2	48:DP:58:THR:HG21	1.78	0.65
28:D2:48:HIS:O	28:D2:52:ASP:HB2	1.97	0.65
27:B1:44:PRO:O	27:B1:46:LEU:N	2.30	0.65
35:D9:29:ASN:O	35:D9:29:ASN:ND2	2.30	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:B4:16:CYS:SG	30:B4:17:GLY:N	2.70	0.65
48:DP:23:PRO:HD2	48:DP:33:ARG:HH21	1.62	0.65
2:AB:213:LEU:O	2:AB:216:SER:HB3	1.96	0.65
40:BE:4:ILE:O	40:BE:5:LEU:HD23	1.97	0.65
38:DC:20:TYR:HB3	38:DC:24:GLU:CB	2.26	0.65
58:BZ:151:HIS:HA	58:BZ:171:ILE:HD11	1.77	0.65
1:CA:1351:U:O2'	1:CA:1352:C:H5'	1.97	0.65
4:AD:100:ARG:HG2	4:AD:102:ASP:OD1	1.96	0.65
4:AD:95:GLY:O	4:AD:98:GLU:N	2.28	0.65
1:CA:15:G:C4'	5:CE:24:ARG:HH21	2.09	0.65
1:CA:1442(A):G:H5''	52:DT:118:ARG:HH12	1.60	0.65
46:BN:42:TRP:CZ2	46:BN:44:PRO:HA	2.32	0.65
39:BD:166:GLN:HB3	39:BD:174:ILE:HB	1.79	0.65
36:DA:1657:C:O2'	36:DA:1658:C:H5'	1.97	0.65
25:CZ:241:ARG:CB	25:CZ:285:ASN:HD21	2.09	0.65
36:BA:2023:G:H4'	36:BA:2617:C:O3'	1.97	0.65
38:DC:140:PRO:C	38:DC:142:ALA:H	1.98	0.65
36:DA:272(I):U:H2'	36:DA:272(J):C:H5'	1.79	0.65
36:DA:2875:C:H4'	52:DT:5:ALA:CB	2.27	0.65
1:CA:675:A:H2'	1:CA:676:A:H8	1.61	0.65
12:CL:41:ARG:HG3	12:CL:41:ARG:NH1	2.09	0.65
36:DA:2245:U:H5'	36:DA:2246:G:C5'	2.27	0.65
1:CA:1497:G:C2'	1:CA:1498:U:H5'	2.25	0.65
36:DA:894:C:C2'	36:DA:895:U:H5'	2.26	0.65
36:BA:612:C:C2'	36:BA:613:G:H5''	2.27	0.65
36:DA:272(B):G:H1	36:DA:366:C:H42	1.41	0.65
25:CZ:310:ILE:HD11	25:CZ:381:GLU:HB3	1.79	0.65
36:DA:1018:C:H2'	36:DA:1019:U:C6	2.32	0.65
1:AA:935:A:H2'	1:AA:936:C:C6	2.32	0.65
36:BA:216:A:O2'	36:BA:217:G:H5'	1.96	0.65
36:BA:1326:U:H2'	36:BA:1327:C:C6	2.31	0.65
27:B1:71:TYR:HA	27:B1:74:VAL:CG2	2.26	0.65
1:AA:307:C:H2'	1:AA:307:C:O2	1.96	0.65
36:DA:1390:U:O2'	36:DA:1391:U:H5'	1.96	0.65
26:B0:19:LYS:O	26:B0:21:LEU:HG	1.96	0.65
57:DY:2:ARG:HD3	57:DY:3:VAL:HG23	1.76	0.65
3:AC:207:VAL:HG12	3:AC:207:VAL:O	1.95	0.65
26:D0:30:VAL:HA	26:D0:66:VAL:HA	1.78	0.65
48:BP:135:LEU:O	48:BP:135:LEU:HD13	1.97	0.65
2:AB:154:LEU:O	2:AB:156:LYS:N	2.30	0.65
29:D3:23:LEU:C	29:D3:25:ALA:H	1.97	0.65
38:DC:58:VAL:HG22	38:DC:201:PRO:CD	2.26	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2290:G:N2	36:DA:2343:C:H1'	2.11	0.65
28:D2:32:LEU:HA	28:D2:53:LEU:HD13	1.78	0.65
36:BA:1858:G:H1'	36:BA:1884:A:N6	2.11	0.65
43:DH:52:VAL:CB	43:DH:69:ARG:HD3	2.16	0.65
36:BA:344:G:OP2	36:BA:344:G:H3'	1.96	0.65
41:BF:178:PRO:HB2	41:BF:201:VAL:HG11	1.76	0.65
13:AM:11:ARG:O	13:AM:13:LYS:N	2.29	0.65
36:DA:1132:A:H2'	36:DA:1133:U:C6	2.31	0.65
48:DP:23:PRO:HB3	48:DP:29:LYS:HB3	1.78	0.65
53:DU:53:ARG:O	53:DU:56:ASP:HB2	1.96	0.65
8:AH:14:ARG:NH1	8:AH:14:ARG:HB2	2.12	0.65
32:D6:8:LYS:HE3	32:D6:25:LYS:CD	2.26	0.65
41:DF:178:PRO:CB	41:DF:201:VAL:HG11	2.27	0.65
34:B8:23:VAL:HG13	34:B8:47:LYS:O	1.96	0.65
10:AJ:63:PHE:HA	14:AN:59:ALA:H	1.62	0.65
36:BA:2180:U:H2'	36:BA:2181:G:C8	2.32	0.65
38:BC:215:THR:OG1	38:BC:216:THR:N	2.29	0.65
25:AZ:241:ARG:CB	25:AZ:285:ASN:HD21	2.10	0.65
3:AC:68:VAL:HG12	3:AC:70:VAL:CG2	2.26	0.65
36:BA:1423:G:H2'	36:BA:1424:G:C8	2.31	0.65
20:AT:26:ASN:HB2	20:AT:71:THR:HG23	1.78	0.65
1:CA:454:C:H5''	1:CA:455:C:C5	2.31	0.65
42:DG:51:ARG:HD3	42:DG:53:LEU:HD21	1.77	0.65
2:CB:179:LYS:HA	8:CH:72:PRO:CD	2.27	0.65
49:BQ:45:GLN:H	49:BQ:45:GLN:HE21	1.41	0.65
27:B1:25:LYS:CB	36:BA:388:G:H5'	2.27	0.65
1:AA:1338:G:H2'	1:AA:1339:A:C8	2.32	0.65
1:CA:673:G:H5''	6:CF:87:ARG:CZ	2.27	0.65
36:DA:8:A:H2'	36:DA:9:U:C5	2.32	0.65
1:AA:673:G:H5''	6:AF:87:ARG:CZ	2.26	0.65
55:BW:72:LYS:HE2	55:BW:108:GLY:HA3	1.77	0.65
36:BA:736:C:H42	36:BA:760:G:H1	1.43	0.65
25:CZ:118:GLU:C	25:CZ:120:ILE:H	2.00	0.65
36:DA:1563:G:O2'	36:DA:1564:C:H5'	1.97	0.65
36:DA:702:G:O2'	36:DA:703:U:H5'	1.96	0.65
55:BW:29:LEU:O	55:BW:33:ARG:HG3	1.96	0.65
36:DA:1120:G:H2'	36:DA:1121:C:C6	2.31	0.65
6:AF:80:ARG:NH1	6:AF:88:VAL:HB	2.12	0.65
53:BU:20:LEU:H	53:BU:20:LEU:HD22	1.62	0.65
48:DP:102:ARG:HH21	48:DP:102:ARG:HB2	1.60	0.65
12:AL:17:LYS:NZ	12:AL:18:VAL:HG22	2.12	0.65
43:DH:52:VAL:HG21	43:DH:69:ARG:CB	2.27	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:B2:38:GLN:CB	28:B2:44:LEU:HD22	2.27	0.65
36:BA:2619:C:O2'	36:BA:2620:C:H5'	1.96	0.65
36:DA:534:U:O2'	53:DU:49:HIS:CD2	2.50	0.65
53:DU:88:ILE:HB	53:DU:90:VAL:HG23	1.78	0.65
54:DV:62:LEU:HD21	54:DV:95:LEU:HB2	1.79	0.65
4:CD:20:TYR:HA	4:CD:26:CYS:SG	2.37	0.65
8:AH:25:ASP:O	8:AH:26:VAL:HB	1.97	0.65
5:AE:105:VAL:N	5:AE:106:PRO:HD2	2.10	0.65
7:AG:102:ARG:HG2	7:AG:106:GLN:HE21	1.61	0.65
10:AJ:49:VAL:HG23	14:AN:41:ARG:HB2	1.79	0.65
1:CA:939:G:H2'	1:CA:940:C:C5	2.31	0.65
1:CA:943:U:H2'	1:CA:944:G:H5'	1.79	0.65
19:AS:40:ILE:HG21	19:AS:67:VAL:HA	1.79	0.65
3:AC:70:VAL:HG12	3:AC:71:ALA:H	1.61	0.65
3:AC:70:VAL:HG21	3:AC:76:VAL:HG11	1.77	0.65
36:DA:907:U:H4'	49:DQ:101:ARG:HH12	1.62	0.65
49:DQ:36:ALA:C	49:DQ:37:LEU:HD23	2.18	0.65
1:AA:167:G:O2'	1:AA:168:G:H5'	1.97	0.65
36:DA:2484:G:O2'	36:DA:2485:G:H5'	1.97	0.65
1:AA:1460:A:H2'	1:AA:1461:G:O4'	1.96	0.65
36:DA:598:G:H5'	48:DP:15:ARG:CD	2.23	0.65
37:DB:24:G:O6	37:DB:56:G:H2'	1.97	0.65
36:BA:2875:C:H4'	52:BT:5:ALA:CB	2.26	0.65
1:AA:491:G:H2'	1:AA:492:G:H8	1.62	0.65
31:D5:43:HIS:HE1	36:DA:2816:C:H1'	1.61	0.65
36:DA:2134:A:N6	36:DA:2157:G:H1'	2.11	0.65
36:BA:1409:C:H2'	36:BA:1410:G:H8	1.62	0.65
46:BN:62:VAL:CG2	46:BN:66:LYS:HD2	2.25	0.65
36:BA:1326:U:H2'	36:BA:1327:C:H6	1.61	0.65
36:DA:1208:C:H2'	36:DA:1209:G:C8	2.31	0.65
9:CI:7:THR:O	9:CI:80:GLY:HA2	1.95	0.65
40:DE:9:VAL:HG13	40:DE:25:VAL:HB	1.79	0.65
49:BQ:79:LEU:HD23	49:BQ:80:GLU:N	2.12	0.65
3:CC:157:ILE:CD1	3:CC:166:GLU:HB2	2.27	0.65
36:BA:302:C:H42	36:BA:315:G:H1	1.45	0.65
25:CZ:226:GLU:HG3	25:CZ:240:GLY:HA2	1.78	0.65
36:BA:963:U:H2'	36:BA:964:C:C6	2.31	0.65
20:AT:10:LEU:HD12	20:AT:11:SER:N	2.12	0.65
24:CY:28:A:H2'	24:CY:29:C:H6	1.61	0.65
34:B8:10:ALA:HA	34:B8:13:ARG:CG	2.19	0.65
36:BA:667:U:H2'	36:BA:668:G:O4'	1.96	0.65
41:DF:24:LEU:O	41:DF:26:ALA:N	2.30	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DF:43:LYS:HB3	41:DF:98:SER:HB3	1.77	0.65
36:DA:481:G:H1'	36:DA:506:G:N2	2.12	0.65
9:AI:89:ASN:HB3	9:AI:92:TYR:CD1	2.31	0.65
4:AD:70:ILE:HG23	4:AD:74:GLN:HB2	1.79	0.65
36:BA:76:C:H2'	36:BA:77:C:C6	2.31	0.65
13:AM:13:LYS:O	13:AM:45:VAL:HG23	1.97	0.65
30:B4:16:CYS:HB2	30:B4:36:CYS:SG	2.36	0.65
56:DX:10:ALA:HB3	56:DX:29:TRP:HD1	1.62	0.65
53:DU:6:THR:O	53:DU:9:VAL:HG22	1.96	0.65
16:AP:8:ARG:HH22	16:AP:15:PRO:HG3	1.61	0.65
36:BA:2334:G:H5'	51:BS:13:ARG:HD3	1.78	0.65
13:AM:91:ARG:NH1	13:AM:96:LEU:HD13	2.12	0.65
1:AA:1348:U:HO2'	1:AA:1349:A:H8	1.40	0.65
9:AI:112:LYS:HD3	9:AI:112:LYS:C	2.18	0.65
3:CC:30:ARG:HD2	14:CN:38:GLY:HA3	1.78	0.65
10:CJ:49:VAL:HG23	14:CN:41:ARG:HB2	1.78	0.65
22:AV:50:U:H2'	22:AV:51:U:O4'	1.97	0.65
36:DA:2833:G:C3'	36:DA:2834:G:C5'	2.71	0.65
26:B0:77:ARG:NH2	36:BA:857:C:H5'	2.10	0.65
42:BG:125:PHE:HZ	42:BG:173:LEU:HD12	1.60	0.65
42:BG:130:ASN:OD1	42:BG:163:ALA:HB3	1.97	0.65
3:CC:68:VAL:HG12	3:CC:70:VAL:HG23	1.77	0.65
36:DA:1543:C:C3'	36:DA:1544:A:H5''	2.26	0.65
46:BN:23:LEU:HD12	46:BN:102:ALA:CB	2.27	0.65
39:BD:140:THR:O	39:BD:165:ILE:HG12	1.97	0.65
36:DA:428:A:N3	36:DA:428:A:H2'	2.12	0.65
2:CB:124:SER:OG	2:CB:125:PRO:HD2	1.97	0.65
49:DQ:42:ILE:C	49:DQ:94:VAL:HG12	2.17	0.65
36:DA:2161:C:H2'	36:DA:2162:G:C8	2.25	0.65
1:AA:1155:G:O2'	1:AA:1156:G:H5'	1.97	0.65
36:BA:272(I):U:H2'	36:BA:272(J):C:H5'	1.78	0.65
36:DA:2199:A:H3'	36:DA:2200:C:H6	1.62	0.65
36:DA:612:C:C2'	36:DA:613:G:C5'	2.74	0.65
36:BA:8:A:H2'	36:BA:9:U:C5	2.32	0.65
48:BP:84:ASN:C	48:BP:86:LYS:N	2.50	0.65
33:B7:18:PHE:CZ	36:BA:117:G:H4'	2.32	0.65
36:BA:686:G:H21	36:BA:788:A:H61	1.45	0.65
7:CG:22:LEU:HD23	7:CG:22:LEU:O	1.97	0.65
25:CZ:306:LYS:HB3	25:CZ:309:SER:HB2	1.78	0.65
3:AC:153:VAL:O	3:AC:154:SER:CB	2.45	0.65
6:AF:87:ARG:NH1	6:AF:87:ARG:HG2	2.12	0.65
1:CA:885:G:O2'	1:CA:886:G:H5'	1.96	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2053:G:C2	36:BA:2054:A:H1'	2.31	0.65
51:DS:11:LYS:N	51:DS:11:LYS:HD2	2.11	0.65
22:AW:24:G:H2'	22:AW:25:C:O4'	1.97	0.65
37:DB:60:C:H2'	37:DB:61:G:H8	1.62	0.65
32:B6:14:THR:CG2	32:B6:50:ARG:HB2	2.26	0.64
34:B8:7:HIS:O	34:B8:11:LYS:HB2	1.97	0.64
48:BP:23:PRO:HD2	48:BP:33:ARG:HH21	1.62	0.64
40:DE:196:VAL:O	40:DE:196:VAL:HG23	1.97	0.64
38:DC:76:ALA:HB3	38:DC:94:VAL:HG13	1.79	0.64
1:AA:974:A:N3	1:AA:974:A:H2'	2.11	0.64
49:BQ:51:ARG:O	49:BQ:55:VAL:HG12	1.96	0.64
1:AA:1237:C:H4'	1:AA:1334:G:N2	2.12	0.64
11:AK:124:LYS:NZ	11:AK:124:LYS:HB2	2.11	0.64
36:BA:1208:C:H2'	36:BA:1209:G:C8	2.30	0.64
42:BG:27:ASN:ND2	42:BG:29:TRP:HB2	2.12	0.64
42:BG:4:ASP:HA	42:BG:8:LYS:HG2	1.78	0.64
3:CC:91:LEU:CD1	3:CC:101:LEU:HD12	2.25	0.64
30:D4:10:VAL:HG23	30:D4:11:PRO:CD	2.27	0.64
1:AA:1427:U:H2'	1:AA:1428:A:C8	2.32	0.64
1:CA:826:C:H2'	1:CA:827:U:H6	1.61	0.64
20:AT:50:GLU:HA	20:AT:100:ILE:HB	1.79	0.64
36:DA:1549:C:C2'	36:DA:1550:C:H5'	2.27	0.64
6:CF:87:ARG:HG2	6:CF:87:ARG:NH1	2.09	0.64
54:BV:62:LEU:HD21	54:BV:95:LEU:HB2	1.79	0.64
48:BP:86:LYS:HZ3	48:BP:86:LYS:HB3	1.62	0.64
36:BA:2580:U:C5	36:BA:2581:G:C6	2.84	0.64
6:AF:84:ASN:N	6:AF:84:ASN:ND2	2.45	0.64
39:DD:69:ARG:NH2	39:DD:192:THR:HB	2.12	0.64
1:AA:522:C:H2'	1:AA:523:A:H8	1.62	0.64
51:DS:77:ALA:HA	51:DS:80:LEU:HD12	1.78	0.64
36:DA:1963:U:H4'	36:DA:1964:G:OP1	1.96	0.64
26:B0:70:GLN:NE2	26:B0:80:HIS:HE2	1.95	0.64
36:DA:1718:G:H8	36:DA:1718:G:H5'	1.62	0.64
38:BC:43:VAL:HG21	38:BC:175:VAL:HG21	1.78	0.64
36:BA:2790:A:H2	36:BA:2791:C:H2'	1.61	0.64
36:BA:845:G:H8	36:BA:845:G:OP2	1.79	0.64
39:DD:273:ARG:HH11	39:DD:273:ARG:HG2	1.61	0.64
36:DA:2317:C:C2'	36:DA:2318:G:H5'	2.27	0.64
36:BA:1718:G:H5'	36:BA:1718:G:H8	1.62	0.64
4:AD:150:GLU:CD	4:AD:151:LYS:H	2.00	0.64
36:BA:673:C:H6	36:BA:673:C:H5'	1.62	0.64
25:AZ:38:GLU:CD	25:AZ:200:TRP:HH2	2.00	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:BX:12:VAL:CB	56:BX:17:ALA:HB1	2.17	0.64
36:DA:2230:G:H2'	36:DA:2231:C:H6	1.61	0.64
41:BF:110:LEU:HD13	41:BF:111:ALA:N	2.12	0.64
41:BF:122:LYS:H	41:BF:122:LYS:HE3	1.63	0.64
1:AA:426:G:H2'	1:AA:427:U:C6	2.31	0.64
1:AA:973:G:H1'	10:AJ:55:LYS:CE	2.27	0.64
36:BA:92:A:O2'	36:BA:93:G:H5'	1.97	0.64
42:BG:111:LEU:O	42:BG:114:ILE:HG22	1.98	0.64
41:DF:84:VAL:O	41:DF:86:GLY:N	2.30	0.64
36:DA:1012:U:C5	46:DN:28:THR:HG21	2.32	0.64
16:AP:15:PRO:O	16:AP:16:HIS:ND1	2.29	0.64
1:CA:542:G:OP1	4:CD:10:ARG:NH2	2.30	0.64
36:BA:628:G:C2'	36:BA:629:G:H5''	2.27	0.64
5:AE:45:PHE:CD2	5:AE:47:LYS:HD2	2.32	0.64
16:CP:67:THR:N	16:CP:70:ALA:HB3	2.07	0.64
1:CA:1237:C:H4'	1:CA:1334:G:N2	2.11	0.64
36:DA:729:G:C5	39:DD:208:LYS:HB2	2.32	0.64
36:BA:2814:C:H2'	36:BA:2815:C:C6	2.30	0.64
36:DA:1568:G:H4'	39:DD:59:LYS:HG2	1.79	0.64
13:CM:34:LEU:HD22	13:CM:39:ILE:O	1.97	0.64
30:D4:9:LEU:HD13	30:D4:10:VAL:H	1.62	0.64
49:BQ:43:THR:C	49:BQ:45:GLN:HE21	2.00	0.64
1:AA:859:A:H2'	1:AA:860:A:O4'	1.96	0.64
10:CJ:90:LEU:H	10:CJ:91:PRO:HD3	1.62	0.64
1:AA:1074:G:O4'	2:AB:104:ASN:ND2	2.31	0.64
27:D1:90:ILE:O	27:D1:94:LEU:CD1	2.45	0.64
36:DA:1341:U:H4'	56:DX:57:LEU:HB3	1.80	0.64
36:BA:2131:G:H4'	36:BA:2132:U:OP2	1.95	0.64
36:DA:1859:A:N6	36:DA:1883:G:O2'	2.30	0.64
23:AX:22:A:H61	24:AY:36:U:H3	1.45	0.64
36:DA:2814:C:H2'	36:DA:2815:C:C6	2.30	0.64
18:CR:44:LEU:HD23	18:CR:48:GLY:O	1.97	0.64
36:BA:1018:C:H2'	36:BA:1019:U:C6	2.32	0.64
25:AZ:354:GLN:HE21	25:AZ:371:THR:HB	1.62	0.64
1:CA:1470:G:O5'	1:CA:1470:G:H8	1.81	0.64
1:CA:1321:C:C3'	1:CA:1322:C:H5''	2.27	0.64
36:BA:272(D):G:H2'	36:BA:272(E):G:C8	2.33	0.64
36:BA:271(B):C:H42	36:BA:271(W):G:N2	1.94	0.64
36:DA:1565:C:H2'	39:DD:21:PHE:CE1	2.33	0.64
7:CG:125:MET:O	7:CG:128:ALA:HB3	1.97	0.64
5:CE:99:GLY:HA2	5:CE:116:THR:O	1.97	0.64
1:AA:200:G:H1	1:AA:217:C:H42	1.44	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BP:122:PRO:HB3	48:BP:141:ALA:HB1	1.79	0.64
36:BA:2173:A:N3	36:BA:2173:A:H3'	2.11	0.64
58:BZ:17:ALA:HA	58:BZ:20:ARG:HG2	1.79	0.64
25:CZ:356:PRO:HD2	25:CZ:359:VAL:HG21	1.77	0.64
32:B6:22:ALA:HB2	32:B6:39:TYR:CE2	2.32	0.64
36:BA:1817:G:C2'	36:BA:1818:U:H5'	2.28	0.64
38:BC:134:ARG:O	38:BC:136:LEU:N	2.30	0.64
36:BA:657:U:H2'	36:BA:658:C:C6	2.32	0.64
43:BH:68:THR:HA	43:BH:71:LEU:HB2	1.79	0.64
40:BE:47:VAL:CG2	40:BE:85:ASN:HA	2.26	0.64
41:BF:61:GLY:O	41:BF:62:ARG:C	2.35	0.64
32:B6:7:ILE:O	32:B6:27:LYS:HD2	1.97	0.64
48:BP:102:ARG:HH21	48:BP:102:ARG:HB2	1.61	0.64
48:BP:126:VAL:HG13	48:BP:145:PRO:HB2	1.79	0.64
36:BA:142:A:H5''	36:BA:142(A):C:H5	1.61	0.64
1:CA:375:U:OP1	16:CP:69:THR:HG21	1.97	0.64
1:AA:925:G:O5'	1:AA:925:G:H8	1.79	0.64
37:DB:117:G:H5'	51:DS:55:ALA:HB1	1.77	0.64
1:AA:1525:G:H2'	1:AA:1526:G:C8	2.32	0.64
3:CC:70:VAL:HG12	3:CC:71:ALA:H	1.62	0.64
36:BA:266:G:C2'	36:BA:267:C:H5''	2.23	0.64
36:DA:593:G:O2'	36:DA:594:U:H5'	1.96	0.64
21:CU:12:LYS:HG3	21:CU:17:THR:O	1.97	0.64
1:AA:741:G:O2'	1:AA:742:G:H5'	1.97	0.64
21:AU:12:LYS:HG3	21:AU:17:THR:O	1.97	0.64
36:DA:1341:U:O2'	36:DA:1342:A:H5'	1.97	0.64
36:BA:2134:A:N6	36:BA:2157:G:H1'	2.11	0.64
38:BC:152:ILE:O	38:BC:155:GLU:HG3	1.98	0.64
14:AN:48:ALA:CA	14:AN:53:LEU:HD12	2.27	0.64
33:D7:11:LYS:HE2	36:DA:686:G:N3	2.12	0.64
36:DA:2444:G:P	41:DF:68:LYS:HE3	2.38	0.64
1:AA:1320:C:N4	19:AS:36:ARG:HG3	2.12	0.64
1:CA:522:C:H2'	1:CA:523:A:H8	1.63	0.64
14:CN:42:ILE:HG22	14:CN:43:CYS:N	2.13	0.64
46:DN:57:ALA:HB2	46:DN:123:TYR:O	1.97	0.64
36:DA:956:G:N2	36:DA:959:A:H3'	2.11	0.64
36:DA:1573:G:H2'	36:DA:1574:C:H5'	1.79	0.64
1:CA:1298:C:C4	7:CG:114:ARG:HD2	2.33	0.64
37:BB:94:C:O2'	37:BB:95:C:H5'	1.98	0.64
36:BA:2290:G:N2	36:BA:2343:C:H1'	2.12	0.64
50:DR:57:ARG:O	50:DR:59:ASP:N	2.30	0.64
48:DP:10:PRO:O	48:DP:11:GLY:O	2.16	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2761:G:H1'	43:DH:143:GLN:OE1	1.97	0.64
8:CH:63:LEU:H	8:CH:63:LEU:HD22	1.63	0.64
36:BA:2821:A:H61	50:BR:4:LEU:HD23	1.62	0.64
36:DA:18:C:O2'	36:DA:554:U:H5''	1.98	0.64
46:DN:35:ARG:HH21	46:DN:42:TRP:HH2	1.46	0.64
53:DU:92:ARG:HH22	54:DV:10:LYS:CB	2.10	0.64
2:AB:229:VAL:CG1	2:AB:230:VAL:H	2.09	0.64
8:CH:14:ARG:NH1	8:CH:14:ARG:HB2	2.12	0.64
4:CD:70:ILE:HG23	4:CD:74:GLN:HB2	1.79	0.64
1:AA:956:U:O2'	1:AA:957:U:H5'	1.97	0.64
52:DT:77:PRO:O	52:DT:78:LEU:HB2	1.95	0.64
1:AA:1352:C:N4	1:AA:1370:G:H1	1.94	0.64
1:AA:1363(A):A:H4'	1:AA:1364:U:OP2	1.96	0.64
7:CG:102:ARG:HG2	7:CG:106:GLN:NE2	2.12	0.64
36:DA:2175:C:H5''	38:DC:220:PRO:HA	1.79	0.64
27:B1:45:ASN:HD22	27:B1:45:ASN:C	2.00	0.64
13:CM:68:GLY:H	13:CM:71:ARG:HB3	1.61	0.64
36:DA:142:A:H5''	36:DA:142(A):C:H5	1.63	0.64
37:DB:110:G:O2'	37:DB:111:G:H5'	1.96	0.64
46:BN:111:PRO:HG3	46:BN:114:ARG:NH2	2.13	0.64
36:DA:2579:C:O2'	40:DE:131:ALA:CB	2.46	0.64
43:BH:19:VAL:HG12	43:BH:20:ALA:N	2.12	0.64
36:BA:473:G:H5''	36:BA:508:G:N2	2.13	0.64
25:CZ:299:GLU:O	25:CZ:300:ARG:O	2.15	0.64
10:AJ:91:PRO:CB	10:AJ:94:VAL:HB	2.26	0.64
36:BA:30:G:H2'	36:BA:31:C:C6	2.33	0.64
1:AA:436:C:H2'	1:AA:437:U:H6	1.63	0.64
25:AZ:310:ILE:HD11	25:AZ:381:GLU:HB3	1.80	0.64
1:AA:689:C:P	11:AK:46:GLY:HA3	2.36	0.64
19:CS:78:ARG:HB2	19:CS:81:ARG:NH1	2.12	0.64
36:BA:2854:G:H2'	36:BA:2855:C:H6	1.63	0.64
1:AA:523:A:N1	12:AL:92:ASP:HB2	2.11	0.64
9:CI:6:GLY:HA3	9:CI:84:ALA:HB2	1.79	0.64
36:BA:1023:U:O2'	36:BA:1122:G:H5''	1.97	0.64
45:DK:86:UNK:O	45:DK:87:UNK:CB	2.46	0.64
2:AB:194:PRO:HG2	2:AB:195:ASP:H	1.63	0.64
51:DS:42:ASP:C	51:DS:44:LYS:H	2.01	0.64
12:CL:47:LYS:HB3	12:CL:48:PRO:CD	2.27	0.64
36:DA:57:C:O2'	36:DA:58:G:H5'	1.96	0.64
1:CA:1148:U:H4'	9:CI:14:VAL:HG11	1.79	0.64
31:D5:39:MET:O	55:DW:38:TYR:HE2	1.81	0.64
32:B6:36:LEU:HD23	32:B6:36:LEU:C	2.18	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:252:G:H2'	36:BA:253:C:C6	2.32	0.64
31:D5:3:LYS:HD3	36:DA:747:U:OP1	1.97	0.64
40:DE:199:ARG:CG	40:DE:200:GLU:H	2.04	0.64
50:DR:62:ALA:O	50:DR:66:VAL:HG23	1.97	0.64
36:DA:619:G:H3'	36:DA:620:G:N2	2.11	0.64
48:DP:7:ARG:HB3	48:DP:8:PRO:CD	2.27	0.64
36:DA:1855:G:H2'	36:DA:1856:G:C8	2.32	0.64
10:CJ:14:LYS:C	10:CJ:16:LEU:H	2.01	0.64
48:BP:7:ARG:HB3	48:BP:8:PRO:CD	2.28	0.64
13:AM:15:VAL:HG23	13:AM:16:ASP:N	2.12	0.64
42:BG:137:GLU:O	42:BG:154:GLY:HA2	1.98	0.64
56:DX:14:SER:OG	56:DX:17:ALA:HB2	1.98	0.64
36:DA:2023:G:H4'	36:DA:2617:C:O3'	1.97	0.64
36:DA:536:A:H2	36:DA:557:U:H3	1.44	0.64
53:DU:20:LEU:H	53:DU:20:LEU:HD22	1.60	0.64
10:CJ:54:PHE:CA	10:CJ:55:LYS:HE3	2.28	0.64
41:DF:177:ALA:HB1	41:DF:178:PRO:HD2	1.79	0.64
56:BX:49:VAL:HB	56:BX:87:GLN:NE2	2.13	0.64
36:BA:2785:C:H2'	36:BA:2786:U:C6	2.31	0.64
58:DZ:151:HIS:HA	58:DZ:171:ILE:CD1	2.28	0.64
1:CA:1060:C:H5''	10:CJ:51:ARG:HB3	1.78	0.64
9:CI:108:VAL:HG12	9:CI:109:VAL:H	1.62	0.64
9:CI:45:ALA:O	9:CI:47:LEU:N	2.28	0.64
14:CN:48:ALA:N	14:CN:53:LEU:HD12	2.12	0.64
14:CN:60:SER:O	14:CN:61:TRP:HB3	1.98	0.64
22:CW:17:C:H42	36:DA:2180:U:H3	1.45	0.64
1:AA:16:A:O2'	1:AA:17:U:H5'	1.98	0.64
4:CD:85:LYS:HD3	4:CD:92:VAL:HG13	1.78	0.64
3:AC:181:ASN:HD21	3:AC:204:LEU:HB2	1.62	0.64
1:CA:38:G:H22	1:CA:397:A:H5''	1.63	0.64
13:CM:68:GLY:O	13:CM:72:ALA:HB3	1.97	0.64
37:DB:20:C:H2'	37:DB:21:G:C5'	2.26	0.64
49:DQ:141:GLN:C	58:DZ:53:ILE:HB	2.17	0.64
36:BA:83:G:N2	36:BA:102:G:H2'	2.12	0.64
9:AI:45:ALA:O	9:AI:47:LEU:N	2.29	0.64
42:DG:91:ARG:HG2	42:DG:92:VAL:N	2.13	0.64
10:CJ:65:LEU:HD13	14:CN:56:VAL:H	1.63	0.64
49:DQ:43:THR:C	49:DQ:45:GLN:HE21	2.01	0.64
2:AB:107:THR:HA	2:AB:110:GLN:HE21	1.63	0.64
1:CA:359:U:H2'	1:CA:360:A:H8	1.62	0.64
42:DG:27:ASN:ND2	42:DG:29:TRP:HB2	2.12	0.64
46:DN:62:VAL:CG2	46:DN:66:LYS:HD2	2.27	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1142:G:C2'	1:AA:1143:G:H5'	2.27	0.64
36:DA:1042:G:C2	36:DA:1043:C:H1'	2.32	0.64
1:CA:924:C:H5'	1:CA:1399:C:OP2	1.98	0.64
39:DD:76:PRO:HG2	39:DD:98:VAL:CG2	2.28	0.64
36:BA:479:A:HO2'	36:BA:481:G:H8	1.45	0.64
36:DA:1122:G:O2'	36:DA:1123:C:H5'	1.96	0.64
36:DA:666:G:H2'	36:DA:667:U:C6	2.32	0.64
36:DA:1536:C:H2'	36:DA:1537:G:H4'	1.78	0.64
36:BA:1416:G:H1'	36:BA:1417:C:C5	2.32	0.64
43:DH:105:LEU:H	43:DH:105:LEU:HD23	1.61	0.64
17:CQ:86:GLU:O	17:CQ:90:ILE:HG12	1.98	0.64
25:CZ:355:LEU:CB	25:CZ:359:VAL:CG2	2.69	0.64
36:BA:2331:G:N2	36:BA:2385:C:C4	2.66	0.64
36:DA:83:G:HO2'	36:DA:84:A:H8	1.42	0.64
28:B2:64:LEU:O	28:B2:68:ARG:HB2	1.97	0.64
41:BF:137:LYS:HA	41:BF:140:LEU:HB2	1.80	0.64
36:DA:1132:A:C2	46:DN:73:THR:HG21	2.33	0.64
5:AE:135:THR:O	5:AE:138:ALA:HB3	1.96	0.64
36:BA:1640:C:O2'	36:BA:1641:A:H5'	1.97	0.64
57:DY:19:LYS:HB2	57:DY:20:TYR:CE1	2.31	0.64
10:AJ:47:PHE:HB2	10:AJ:63:PHE:O	1.98	0.64
1:CA:1113:C:H2'	1:CA:1114:C:H6	1.63	0.64
7:CG:113:GLU:HB2	7:CG:119:ARG:CG	2.28	0.64
46:BN:132:ALA:O	46:BN:133:GLN:HB2	1.96	0.64
36:BA:2114:A:H2'	36:BA:2115:G:H5'	1.77	0.64
4:CD:81:GLU:OE1	4:CD:139:ARG:NH1	2.30	0.64
19:CS:42:PRO:O	19:CS:44:MET:SD	2.55	0.64
58:DZ:31:ARG:HD2	58:DZ:94:GLU:OE2	1.98	0.64
58:DZ:79:ARG:O	58:DZ:81:ARG:N	2.30	0.64
36:BA:1390:U:H3	36:BA:1395:A:H62	1.44	0.64
25:AZ:389:ARG:NH2	25:AZ:393:ARG:N	2.46	0.64
36:DA:1603:A:C8	36:DA:1603:A:H5'	2.30	0.64
6:CF:48:LEU:HB2	6:CF:56:PRO:O	1.98	0.64
43:BH:86:GLU:OE2	43:BH:86:GLU:N	2.31	0.64
25:CZ:255:ILE:HD11	25:CZ:290:LEU:HD22	1.78	0.64
1:AA:824:C:H2'	1:AA:825:G:C8	2.31	0.64
11:CK:85:ARG:HG2	11:CK:111:ASP:O	1.98	0.64
1:CA:491:G:H2'	1:CA:492:G:H8	1.63	0.64
25:AZ:230:THR:O	25:AZ:231:ILE:HD13	1.98	0.64
36:DA:185:U:H4'	36:DA:218:A:H4'	1.77	0.64
36:DA:2444:G:OP1	41:DF:68:LYS:HE3	1.97	0.64
6:AF:84:ASN:HD22	6:AF:84:ASN:H	1.44	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:DO:88:ASN:HD21	47:DO:92:GLU:HB3	1.62	0.64
1:AA:693:G:O2'	1:AA:694:A:H5'	1.98	0.64
36:BA:2715:C:H2'	36:BA:2716:U:H6	1.61	0.64
36:DA:1141:U:H2'	46:DN:63:THR:HG22	1.77	0.64
52:DT:107:ASP:CG	52:DT:108:ARG:N	2.47	0.64
1:CA:1142:G:C2'	1:CA:1143:G:H5'	2.27	0.64
40:BE:30:PRO:HD3	40:BE:180:ASN:HD21	1.61	0.64
36:DA:1028:A:N6	36:DA:1125:G:H2'	2.13	0.64
1:AA:650:G:O2'	1:AA:651:C:H5'	1.97	0.64
36:BA:2689:U:H4'	36:BA:2690:C:C6	2.33	0.64
36:DA:392:C:C2'	36:DA:393:C:H5'	2.28	0.64
1:CA:650:G:O2'	1:CA:651:C:H5'	1.96	0.64
1:CA:1045:C:H2'	1:CA:1045:C:O2	1.98	0.64
10:CJ:25:GLU:O	10:CJ:29:ARG:HB3	1.98	0.64
1:CA:1407:C:O2'	36:DA:1912:A:N1	2.26	0.64
36:DA:1809:A:H2'	36:DA:1810:A:C8	2.32	0.64
34:D8:13:ARG:NH2	36:DA:250:G:OP2	2.30	0.64
56:BX:10:ALA:HB3	56:BX:29:TRP:HD1	1.63	0.64
1:AA:1472:U:C2'	1:AA:1473:A:H5'	2.28	0.64
38:DC:134:ARG:O	38:DC:136:LEU:N	2.30	0.64
36:BA:1824:G:N3	39:BD:254:THR:OG1	2.31	0.64
1:AA:1189:C:H5''	3:AC:5:ILE:CG2	2.15	0.64
1:AA:973:G:H1'	10:AJ:55:LYS:NZ	2.12	0.64
46:DN:23:LEU:HD12	46:DN:102:ALA:CB	2.27	0.64
46:DN:46:VAL:CG1	46:DN:48:MET:HG3	2.28	0.64
1:CA:426:G:H4'	4:CD:41:GLY:O	1.98	0.64
40:BE:36:ARG:HH22	40:BE:88:GLY:HA2	1.62	0.64
52:BT:90:GLN:O	52:BT:92:GLY:N	2.31	0.64
52:DT:19:LEU:HD13	52:DT:78:LEU:CD2	2.28	0.64
52:DT:94:ALA:C	52:DT:96:ARG:H	2.01	0.64
7:AG:70:LYS:C	7:AG:138:LYS:HE3	2.18	0.64
10:AJ:49:VAL:HG13	10:AJ:49:VAL:O	1.98	0.64
37:BB:24:G:O6	37:BB:56:G:H2'	1.97	0.64
42:BG:174:GLU:HA	42:BG:180:PHE:HE1	1.62	0.64
42:BG:29:TRP:HA	42:BG:29:TRP:HE3	1.62	0.64
2:AB:200:ILE:H	2:AB:200:ILE:CD1	1.99	0.64
36:BA:2152:G:O2'	36:BA:2153:G:H5'	1.98	0.64
3:CC:50:ALA:O	3:CC:71:ALA:HB3	1.98	0.64
3:AC:77:ILE:HA	3:AC:84:ILE:HG22	1.78	0.64
27:B1:8:SER:CB	27:B1:10:LYS:HG3	2.28	0.64
1:CA:1441:G:H4'	1:CA:1442:G:C4	2.32	0.64
54:BV:39:LEU:HA	54:BV:47:VAL:CG1	2.28	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1374:G:H2'	36:DA:1375:C:H6	1.62	0.64
36:BA:428:A:N3	36:BA:428:A:H2'	2.13	0.64
42:DG:97:ASP:N	42:DG:100:TRP:HD1	1.96	0.64
42:DG:41:GLN:HB3	42:DG:43:LEU:HD21	1.80	0.64
36:DA:1177:A:H5'	36:DA:1178:C:C5	2.32	0.64
48:DP:39:LYS:CE	48:DP:42:SER:HB3	2.23	0.64
7:AG:113:GLU:HB2	7:AG:119:ARG:CG	2.27	0.64
1:AA:757:U:H2'	1:AA:758:G:O4'	1.98	0.64
36:BA:2485:G:O2'	36:BA:2486:G:H5'	1.98	0.64
22:AV:41:C:O2	22:AV:41:C:C2'	2.44	0.64
1:AA:382:A:O2'	1:AA:383:A:H5'	1.97	0.64
26:D0:49:LYS:O	26:D0:51:VAL:HG23	1.98	0.64
36:BA:1169:G:H1	36:BA:1180:C:H42	1.45	0.64
20:CT:33:ILE:HG12	20:CT:62:LEU:HD22	1.79	0.64
33:D7:15:THR:HG22	33:D7:16:HIS:CD2	2.32	0.64
1:CA:1401:G:O5'	1:CA:1401:G:C8	2.50	0.64
36:BA:1184:G:C2'	36:BA:1185:C:H5'	2.28	0.64
57:BY:2:ARG:HD3	57:BY:3:VAL:HG23	1.79	0.64
36:BA:2721:A:H2'	36:BA:2722:G:C8	2.32	0.64
27:B1:70:VAL:HA	27:B1:73:LEU:HD12	1.79	0.64
46:BN:57:ALA:HB2	46:BN:123:TYR:O	1.97	0.64
1:CA:1318:A:H1'	19:CS:37:ARG:HH21	1.62	0.64
40:DE:9:VAL:O	40:DE:9:VAL:HG22	1.97	0.64
36:BA:359:A:H2'	36:BA:360:G:O4'	1.98	0.64
1:AA:563:A:N7	1:AA:567:G:H1'	2.12	0.64
6:AF:10:LEU:HD12	6:AF:10:LEU:N	2.12	0.64
20:CT:38:LYS:O	20:CT:42:GLN:HB2	1.98	0.64
36:DA:2790:A:H2	36:DA:2791:C:H2'	1.62	0.64
36:BA:370:G:H2'	36:BA:423:A:N7	2.13	0.64
11:CK:110:ASP:HB3	18:CR:85:LEU:HD23	1.79	0.64
36:DA:1416:G:H1'	36:DA:1417:C:C5	2.32	0.64
36:BA:631:A:H1'	36:BA:2415:G:O2'	1.98	0.64
36:DA:2821:A:OP2	40:DE:110:GLY:HA3	1.98	0.64
39:BD:34:VAL:C	39:BD:36:PRO:HD2	2.18	0.64
41:DF:70:THR:HG22	41:DF:72:ARG:HG2	1.80	0.64
28:B2:68:ARG:NH2	28:B2:72:ALA:HB1	2.12	0.64
46:DN:32:THR:HB	46:DN:33:LEU:HD12	1.80	0.64
46:DN:46:VAL:HG13	46:DN:48:MET:HG3	1.80	0.64
53:DU:90:VAL:O	53:DU:92:ARG:N	2.30	0.64
36:DA:572:A:H5'	54:DV:78:LYS:NZ	2.13	0.64
1:CA:973:G:H1'	10:CJ:55:LYS:CE	2.27	0.64
8:AH:36:LEU:HD12	8:AH:59:LEU:HD13	1.78	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DF:175:THR:O	41:DF:176:LEU:HD12	1.97	0.64
1:AA:1226:C:C4	13:AM:104:ARG:HB2	2.33	0.64
7:AG:102:ARG:HG2	7:AG:106:GLN:NE2	2.12	0.64
1:AA:1347:G:C8	9:AI:107:ARG:HB3	2.33	0.64
1:CA:1116:C:C3'	1:CA:1117:G:H5''	2.28	0.64
46:DN:131:GLN:HE22	46:DN:133:GLN:HA	1.63	0.64
36:DA:1788:C:O2'	36:DA:1789:A:H5'	1.97	0.64
36:DA:496:G:H1'	55:DW:61:ASN:HD22	1.63	0.64
36:BA:2110:G:H22	36:BA:2178:C:N4	1.92	0.64
25:AZ:299:GLU:O	25:AZ:300:ARG:O	2.16	0.64
19:CS:44:MET:O	19:CS:47:HIS:HB2	1.98	0.64
46:BN:126:PRO:O	46:BN:127:ASP:HB2	1.97	0.64
27:B1:45:ASN:HB2	36:BA:2230:G:H1'	1.80	0.64
39:DD:34:VAL:C	39:DD:36:PRO:HD2	2.17	0.64
39:DD:65:ILE:N	39:DD:65:ILE:CD1	2.60	0.64
13:CM:40:ASN:HD22	13:CM:43:THR:HG23	1.61	0.64
42:DG:58:GLN:O	42:DG:61:ALA:HB3	1.97	0.64
43:DH:83:TYR:HB3	43:DH:135:GLY:O	1.97	0.64
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.32	0.64
36:DA:2485:G:H5''	49:DQ:46:GLN:HE21	1.62	0.64
36:DA:2071:A:H2'	36:DA:2072:G:H8	1.62	0.64
23:CX:20:U:O2'	23:CX:21:C:H5'	1.98	0.64
39:BD:149:PRO:HG3	39:BD:186:HIS:CD2	2.32	0.64
36:DA:406:G:H2'	36:DA:407:G:C8	2.33	0.64
36:BA:612:C:O2'	36:BA:613:G:H5''	1.97	0.64
18:AR:67:ALA:O	18:AR:71:LYS:HG3	1.97	0.64
48:BP:134:ALA:HB2	48:BP:137:LYS:HZ2	1.63	0.64
36:BA:1341:U:H4'	56:BX:57:LEU:HB3	1.79	0.64
36:DA:2570:G:H2'	36:DA:2571:C:C6	2.33	0.64
55:BW:62:HIS:O	55:BW:64:MET:HG3	1.98	0.64
36:BA:287:C:H2'	36:BA:288:C:H6	1.63	0.64
49:BQ:18:LYS:HB3	49:BQ:98:LYS:NZ	2.13	0.64
12:AL:45:PRO:HG3	12:AL:53:ARG:HD3	1.79	0.64
12:AL:55:VAL:CG2	12:AL:67:THR:HG22	2.28	0.64
58:BZ:117:LEU:HD11	58:BZ:172:ALA:HB1	1.80	0.64
6:AF:78:GLU:HA	6:AF:81:ILE:HD11	1.79	0.64
36:DA:1833:U:O2'	36:DA:1969:A:N1	2.28	0.64
36:DA:1705:G:O2'	36:DA:1706:U:H5'	1.98	0.64
49:DQ:3:MET:HB2	49:DQ:4:PRO:HD2	1.80	0.64
51:BS:11:LYS:N	51:BS:11:LYS:HD2	2.12	0.64
36:BA:2291:U:H3	36:BA:2341:G:H1	1.45	0.64
34:B8:26:LYS:NZ	36:BA:2361:A:OP2	2.30	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BU:9:VAL:O	53:BU:13:LYS:HE2	1.98	0.64
50:DR:73:VAL:HG12	50:DR:77:ARG:NH1	2.12	0.64
32:D6:16:CYS:SG	32:D6:48:VAL:CG2	2.85	0.64
34:D8:49:VAL:CG1	34:D8:53:PRO:HD3	2.27	0.64
25:AZ:138:VAL:HG11	25:AZ:172:ARG:HB3	1.79	0.64
25:AZ:26:THR:HG21	62:AZ:501:GDP:C8	2.33	0.64
39:BD:26:LYS:O	39:BD:27:THR:HB	1.97	0.64
36:BA:2469:A:H1'	36:BA:2482:G:C5	2.32	0.64
56:DX:12:VAL:HG12	56:DX:27:THR:O	1.98	0.64
54:DV:39:LEU:HA	54:DV:47:VAL:CG1	2.27	0.64
2:AB:212:GLN:HE22	2:AB:216:SER:HB2	1.63	0.64
1:CA:1157:A:H4'	1:CA:1158:C:O5'	1.98	0.64
41:DF:162:LEU:HD12	41:DF:162:LEU:H	1.61	0.64
36:DA:1405:U:H2'	36:DA:1406:U:C6	2.33	0.64
25:CZ:145:GLU:O	25:CZ:148:ASP:N	2.31	0.64
58:BZ:151:HIS:HA	58:BZ:171:ILE:CD1	2.28	0.64
58:BZ:28:MET:O	58:BZ:29:TYR:HB3	1.98	0.64
9:CI:48:GLU:HB3	9:CI:101:PHE:HE2	1.62	0.64
39:DD:112:GLN:HB2	39:DD:115:GLN:HE21	1.61	0.64
36:BA:856:C:H2'	36:BA:857:C:C6	2.33	0.64
36:DA:2114:A:H2'	36:DA:2115:G:H5'	1.78	0.64
1:CA:918:A:H2'	1:CA:919:A:H8	1.62	0.64
46:DN:132:ALA:O	46:DN:133:GLN:HB2	1.97	0.64
36:DA:1826:G:H4'	39:DD:242:ARG:HH21	1.62	0.64
36:BA:2137:C:N4	36:BA:2154:G:H22	1.96	0.64
36:BA:2179:C:H4'	36:BA:2180:U:O5'	1.96	0.64
36:BA:2189:U:H2'	36:BA:2190:G:H4'	1.79	0.64
36:BA:1223:G:N2	36:BA:1225:G:H3'	2.13	0.64
36:BA:1132:A:H2'	36:BA:1133:U:H6	1.63	0.64
46:BN:75:TYR:HA	46:BN:82:LEU:HA	1.80	0.64
29:B3:56:VAL:HG12	29:B3:57:GLU:N	2.12	0.64
36:BA:2073:C:H4'	39:BD:228:PRO:HB2	1.80	0.64
11:AK:85:ARG:HG2	11:AK:111:ASP:O	1.97	0.64
36:DA:514:A:H2'	36:DA:515:A:C8	2.33	0.64
27:D1:82:LEU:O	27:D1:83:GLU:HG3	1.98	0.64
1:AA:1385:G:O2'	1:AA:1386:G:H5'	1.98	0.64
36:DA:1409:C:H2'	36:DA:1410:G:H8	1.63	0.64
1:CA:319:G:O2'	1:CA:320:C:H5'	1.96	0.64
17:AQ:34:LYS:HG2	17:AQ:35:VAL:N	2.12	0.64
1:AA:807:A:H2'	1:AA:808:C:C6	2.31	0.64
36:DA:2854:G:H2'	36:DA:2855:C:H6	1.63	0.64
36:BA:916:G:O2'	36:BA:917:A:H5''	1.98	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:614(A):U:H4'	36:DA:614(B):G:OP2	1.98	0.64
37:BB:60:C:H2'	37:BB:61:G:H8	1.63	0.64
1:AA:1228:C:H4'	13:AM:116:THR:O	1.98	0.64
36:BA:435:C:O2'	36:BA:436:C:H5'	1.98	0.64
5:AE:99:GLY:HA2	5:AE:116:THR:O	1.98	0.64
36:DA:2620:C:H1'	40:DE:156:MET:HB2	1.80	0.64
50:DR:12:ARG:HB3	50:DR:16:HIS:CD2	2.33	0.64
48:DP:92:GLU:HA	48:DP:123:LEU:HD13	1.81	0.64
28:D2:38:GLN:O	28:D2:43:GLN:O	2.15	0.64
24:AY:28:A:H2'	24:AY:29:C:H6	1.63	0.64
36:BA:2761:G:H1'	43:BH:143:GLN:OE1	1.98	0.64
42:BG:55:LYS:O	42:BG:58:GLN:HG3	1.97	0.64
11:CK:124:LYS:NZ	11:CK:124:LYS:HB2	2.13	0.64
4:CD:31:CYS:C	4:CD:33:MET:N	2.50	0.64
41:DF:137:LYS:HA	41:DF:140:LEU:HB2	1.79	0.64
36:DA:130:C:O3'	36:DA:1349:A:H1'	1.97	0.64
40:BE:23:VAL:HA	40:BE:184:VAL:O	1.98	0.64
40:DE:23:VAL:HG12	40:DE:173:VAL:HG21	1.80	0.64
58:BZ:133:ILE:N	58:BZ:134:PRO:CD	2.61	0.64
58:BZ:163:LEU:HD11	58:BZ:165:VAL:HG23	1.80	0.64
1:CA:1250:A:H2'	1:CA:1251:A:C8	2.33	0.64
1:CA:1352:C:N4	1:CA:1370:G:H1	1.96	0.64
19:AS:45:VAL:HG12	19:AS:63:THR:O	1.97	0.64
36:DA:2183:C:O2'	36:DA:2184:G:H5'	1.96	0.64
1:CA:1220:G:H2'	1:CA:1221:G:H8	1.62	0.64
48:BP:16:ARG:HD3	48:BP:18:ARG:H	1.63	0.64
58:DZ:27:VAL:HG23	58:DZ:35:ARG:O	1.97	0.64
10:AJ:27:ALA:O	10:AJ:31:GLY:N	2.30	0.64
48:DP:16:ARG:HD3	48:DP:18:ARG:N	2.13	0.64
36:BA:1549:C:C2'	36:BA:1550:C:H5'	2.28	0.64
43:DH:122:THR:O	43:DH:133:VAL:HG13	1.98	0.64
43:DH:136:ILE:HD12	43:DH:136:ILE:N	2.13	0.64
5:CE:150:ARG:HB2	5:CE:150:ARG:HH11	1.61	0.64
29:D3:56:VAL:HG12	29:D3:57:GLU:N	2.12	0.64
36:DA:442:G:H21	41:DF:48:THR:HB	1.63	0.64
1:CA:447:G:H2'	1:CA:485:G:H22	1.61	0.64
36:DA:1341:U:O2	36:DA:1398:C:H5'	1.97	0.64
36:BA:271(Z):C:O2	36:BA:272(C):G:H1'	1.98	0.64
36:DA:1326:U:H2'	36:DA:1327:C:C6	2.33	0.64
52:DT:129:ARG:O	52:DT:129:ARG:HG3	1.98	0.64
12:AL:89:ARG:HH11	12:AL:91:LYS:HA	1.63	0.64
46:BN:6:PRO:O	46:BN:9:VAL:HG23	1.98	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:CF:15:ASP:OD2	6:CF:17:SER:HB2	1.98	0.64
36:BA:391:G:C2'	36:BA:392:C:H5'	2.29	0.64
26:B0:19:LYS:HB3	26:B0:21:LEU:HD21	1.79	0.64
22:AW:7:A:H4'	22:AW:8:U:OP1	1.97	0.64
25:CZ:182:MET:SD	25:CZ:188:THR:HB	2.38	0.64
36:BA:1186:G:H2'	36:BA:1187:G:O4'	1.98	0.64
7:CG:58:PRO:HG2	7:CG:59:LEU:H	1.61	0.64
36:BA:821:A:H5''	36:BA:822:U:H6	1.63	0.64
54:BV:36:PRO:HA	54:BV:56:SER:CB	2.27	0.64
12:CL:98:TYR:CD1	12:CL:98:TYR:N	2.66	0.64
26:D0:70:GLN:NE2	26:D0:80:HIS:HE2	1.95	0.64
32:B6:35:GLU:HG2	32:B6:51:GLU:HG3	1.80	0.63
53:BU:9:VAL:HG23	53:BU:10:ARG:H	1.63	0.63
39:DD:154:LYS:C	39:DD:155:LEU:HD12	2.19	0.63
56:BX:12:VAL:CG2	56:BX:13:LEU:N	2.48	0.63
56:BX:20:GLY:O	56:BX:25:LYS:HB2	1.98	0.63
28:B2:68:ARG:HH22	28:B2:72:ALA:HB1	1.63	0.63
41:BF:175:THR:O	41:BF:176:LEU:HD12	1.98	0.63
13:AM:3:ARG:HB2	30:B4:34:GLU:HG2	1.79	0.63
36:DA:2026:C:H42	36:DA:2037:G:H1	1.47	0.63
36:DA:582:G:H1	36:DA:1258:C:N4	1.95	0.63
46:DN:42:TRP:CZ2	46:DN:44:PRO:HA	2.33	0.63
54:DV:95:LEU:HD23	54:DV:95:LEU:C	2.18	0.63
40:BE:202:LYS:HD2	40:BE:202:LYS:N	2.12	0.63
47:BO:2:ILE:CD1	47:BO:82:ASN:ND2	2.55	0.63
47:BO:64:ARG:NE	52:BT:70:VAL:HG21	2.12	0.63
36:DA:1999:C:H2'	36:DA:2000:G:C8	2.33	0.63
49:BQ:140:ALA:HB1	58:BZ:99:TYR:HB2	1.79	0.63
58:BZ:58:VAL:HG13	58:BZ:67:LEU:C	2.18	0.63
42:BG:9:ARG:C	42:BG:11:TYR:H	1.99	0.63
1:AA:863:U:C2'	1:AA:864:A:H5''	2.28	0.63
1:AA:918:A:H2'	1:AA:919:A:C8	2.33	0.63
36:BA:1789:A:OP1	39:BD:222:ARG:HG3	1.98	0.63
53:BU:92:ARG:HH22	54:BV:10:LYS:CB	2.12	0.63
13:CM:15:VAL:HG23	13:CM:16:ASP:N	2.13	0.63
13:CM:30:ALA:C	13:CM:32:GLU:H	2.01	0.63
42:BG:47:LYS:O	42:BG:51:ARG:HB2	1.98	0.63
30:D4:31:ILE:CG2	30:D4:33:VAL:HG23	2.28	0.63
42:DG:66:GLN:CD	42:DG:94:LEU:HD23	2.18	0.63
43:DH:107:VAL:HG23	43:DH:152:ARG:HD3	1.79	0.63
13:AM:68:GLY:H	13:AM:71:ARG:HB3	1.62	0.63
40:DE:179:GLU:O	40:DE:180:ASN:HB2	1.97	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:585:G:H1	1:CA:756:C:H42	1.45	0.63
2:AB:124:SER:OG	2:AB:125:PRO:HD2	1.98	0.63
1:AA:454:C:H5''	1:AA:455:C:C5	2.34	0.63
36:DA:856:C:H2'	36:DA:857:C:C6	2.34	0.63
1:AA:675:A:H2'	1:AA:676:A:H8	1.60	0.63
1:AA:405:U:O2	1:AA:498:U:H2'	1.98	0.63
1:CA:401:C:H2'	1:CA:402:G:C8	2.33	0.63
54:DV:29:PRO:HA	54:DV:61:VAL:HG23	1.79	0.63
16:CP:28:ARG:HG2	16:CP:29:ASP:OD2	1.98	0.63
58:DZ:96:VAL:HG22	58:DZ:97:GLU:N	2.12	0.63
36:BA:639:U:H2'	36:BA:640:C:C6	2.33	0.63
36:DA:1754:C:H5''	52:DT:113:LYS:NZ	2.13	0.63
36:DA:2715:C:H2'	36:DA:2716:U:C6	2.33	0.63
36:DA:216:A:O2'	36:DA:217:G:H5'	1.98	0.63
27:D1:18:ILE:HG22	27:D1:19:GLN:H	1.63	0.63
1:AA:892:A:H2'	1:AA:893:C:H6	1.63	0.63
36:DA:549:G:O2'	36:DA:551:G:H5'	1.98	0.63
33:B7:26:GLY:O	33:B7:30:VAL:HG23	1.98	0.63
1:AA:1113:C:H2'	1:AA:1114:C:H6	1.63	0.63
36:DA:489:G:H1'	36:DA:1284:A:C5	2.33	0.63
52:DT:111:ARG:HG2	52:DT:111:ARG:HH11	1.63	0.63
36:BA:242:G:N2	36:BA:254:G:H2'	2.13	0.63
50:DR:45:ARG:HG3	50:DR:46:GLY:N	2.10	0.63
41:DF:184:TYR:CE1	48:DP:7:ARG:NH2	2.66	0.63
43:DH:67:LEU:HG	43:DH:71:LEU:CD1	2.26	0.63
36:BA:90:U:O2'	36:BA:92:A:H5''	1.98	0.63
36:BA:2454:G:O2'	36:BA:2455:G:H5'	1.98	0.63
36:BA:2850:A:H2	50:BR:61:HIS:CD2	2.15	0.63
13:AM:55:ARG:HA	13:AM:58:GLU:HG3	1.79	0.63
36:DA:572:A:N6	36:DA:2029:G:H21	1.96	0.63
54:DV:24:LYS:H	54:DV:91:TYR:HA	1.63	0.63
1:CA:1206:G:O2'	1:CA:1207:G:H5'	1.98	0.63
41:DF:171:PRO:O	41:DF:173:VAL:N	2.30	0.63
36:DA:2675:A:H5'	47:DO:31:LYS:NZ	2.13	0.63
52:DT:32:TYR:CD2	52:DT:32:TYR:N	2.66	0.63
1:AA:1250:A:H2'	1:AA:1251:A:C8	2.33	0.63
22:CV:50:U:H2'	22:CV:51:U:O4'	1.97	0.63
1:AA:1396:A:C2	5:AE:19:MET:HG3	2.32	0.63
1:AA:1422:G:C2	1:AA:1423:G:C5	2.86	0.63
36:DA:1775:U:C2'	36:DA:1776:G:H5'	2.28	0.63
19:CS:51:VAL:HG12	19:CS:52:TYR:N	2.12	0.63
3:AC:122:GLU:O	3:AC:125:GLU:N	2.31	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:113:ALA:HB1	3:AC:200:ALA:CB	2.27	0.63
58:DZ:13:GLU:C	58:DZ:14:LYS:HG3	2.18	0.63
36:BA:2310:A:O2'	36:BA:2311:A:H5''	1.97	0.63
42:DG:102:PHE:HA	42:DG:105:LYS:NZ	2.13	0.63
36:BA:1541:G:H1'	36:BA:1542:A:N9	2.12	0.63
40:BE:120:TRP:HB3	40:BE:155:LYS:HE3	1.80	0.63
36:DA:1169:G:H1	36:DA:1180:C:H42	1.46	0.63
8:CH:20:TYR:HE2	8:CH:75:ARG:HD2	1.63	0.63
2:AB:130:ARG:CZ	2:AB:134:GLU:HG3	2.28	0.63
1:CA:495:A:H61	4:CD:119:GLN:HE22	1.46	0.63
1:AA:1152:A:H2'	1:AA:1153:C:H6	1.63	0.63
36:DA:2361:A:H2'	36:DA:2362:G:H8	1.62	0.63
1:CA:54:C:H2'	1:CA:352:C:N4	2.13	0.63
36:BA:786:C:O2'	36:BA:787:U:H5'	1.98	0.63
36:BA:988:A:H8	36:BA:988:A:O5'	1.81	0.63
39:BD:210:GLY:HA2	39:BD:213:ARG:HB2	1.79	0.63
1:CA:640:A:N3	8:CH:115:SER:HB3	2.14	0.63
1:CA:361:G:H2'	1:CA:362:G:O4'	1.99	0.63
38:BC:58:VAL:HG22	38:BC:201:PRO:CD	2.28	0.63
36:BA:2360:A:O2'	36:BA:2361:A:O4'	2.16	0.63
40:DE:47:VAL:CG2	40:DE:85:ASN:HA	2.29	0.63
39:DD:166:GLN:HB3	39:DD:174:ILE:HB	1.80	0.63
32:D6:36:LEU:HD23	32:D6:36:LEU:C	2.19	0.63
32:D6:53:LYS:CG	32:D6:54:ILE:N	2.62	0.63
34:D8:7:HIS:O	34:D8:11:LYS:HB2	1.98	0.63
28:D2:35:LEU:HD13	28:D2:36:ARG:N	2.13	0.63
5:CE:12:LEU:O	5:CE:13:ILE:HG13	1.97	0.63
1:CA:250:A:H5''	1:CA:251:G:OP1	1.98	0.63
42:DG:85:GLY:C	42:DG:87:PRO:CD	2.59	0.63
48:BP:9:ASN:H	48:BP:10:PRO:CD	2.04	0.63
1:AA:501:C:O2'	1:AA:502:G:H5'	1.98	0.63
42:BG:60:LEU:HD22	42:BG:63:ILE:CD1	2.28	0.63
56:DX:20:GLY:O	56:DX:25:LYS:HB2	1.97	0.63
48:BP:92:GLU:HA	48:BP:123:LEU:HD13	1.80	0.63
52:BT:28:VAL:CG2	52:BT:47:GLY:N	2.60	0.63
58:BZ:51:ALA:HB1	58:BZ:57:ILE:HD11	1.78	0.63
36:DA:298:G:N2	36:DA:339:U:C5	2.65	0.63
10:AJ:51:ARG:HE	10:AJ:61:GLU:HB2	1.64	0.63
9:CI:105:ASP:OD1	9:CI:107:ARG:HD3	1.97	0.63
51:DS:69:VAL:O	51:DS:73:LEU:HB2	1.98	0.63
57:BY:14:LEU:HD12	57:BY:23:ARG:O	1.98	0.63
35:B9:27:CYS:SG	35:B9:28:GLU:N	2.70	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2111:C:H42	36:BA:2145:C:H2'	1.62	0.63
27:B1:43:TYR:HB2	36:BA:2230:G:O3'	1.99	0.63
36:BA:1902:C:O4'	39:BD:244:ARG:HG3	1.99	0.63
36:BA:729:G:H2'	36:BA:1775:U:O2	1.99	0.63
46:BN:26:LEU:HG	46:BN:27:ALA:N	2.12	0.63
5:AE:110:LEU:CD2	5:AE:115:VAL:HG21	2.26	0.63
10:AJ:90:LEU:H	10:AJ:91:PRO:HD3	1.64	0.63
36:DA:2248:C:C2'	36:DA:2249:U:H5'	2.29	0.63
36:DA:612:C:H2'	36:DA:613:G:H5''	1.80	0.63
6:CF:84:ASN:ND2	6:CF:84:ASN:H	1.96	0.63
36:BA:2777:G:C4'	36:BA:2778:A:H5'	2.29	0.63
50:DR:83:ILE:HA	50:DR:86:ARG:HD3	1.79	0.63
18:AR:53:ARG:O	18:AR:55:ARG:N	2.31	0.63
36:DA:1326:U:H2'	36:DA:1327:C:H6	1.64	0.63
1:CA:1321:C:C5'	1:CA:1322:C:H5''	2.28	0.63
36:BA:761:A:C8	36:BA:761:A:O5'	2.52	0.63
39:BD:4:LYS:HZ1	39:BD:20:ASP:HA	1.64	0.63
36:BA:2092:U:C4'	36:BA:2093:G:H5''	2.27	0.63
1:AA:1147:C:H2'	9:AI:16:ARG:HD3	1.80	0.63
22:CW:7:A:H4'	22:CW:8:U:OP1	1.97	0.63
28:D2:45:SER:O	28:D2:46:GLN:HG2	1.98	0.63
27:B1:13:ILE:HD11	36:BA:396:G:C5'	2.09	0.63
41:DF:154:VAL:HG13	41:DF:191:ARG:O	1.98	0.63
36:DA:479:A:O2'	36:DA:481:G:H5'	1.97	0.63
41:BF:123:LEU:HD12	41:BF:124:LEU:H	1.60	0.63
1:AA:538:G:O2'	1:AA:539:A:H5'	1.98	0.63
36:BA:2476:A:C2'	36:BA:2477:C:H5''	2.29	0.63
40:BE:82:ARG:HG3	40:BE:82:ARG:NH1	2.14	0.63
8:CH:109:ILE:CG1	8:CH:110:ALA:N	2.61	0.63
5:AE:142:LEU:O	5:AE:143:ARG:HD3	1.99	0.63
8:AH:85:ARG:HG3	8:AH:85:ARG:HH11	1.63	0.63
47:BO:72:PRO:C	47:BO:74:GLY:N	2.51	0.63
58:BZ:24:LEU:C	58:BZ:24:LEU:HD23	2.18	0.63
57:DY:84:ARG:NH2	57:DY:97:ARG:HB2	2.13	0.63
7:AG:70:LYS:O	7:AG:138:LYS:HE3	1.99	0.63
10:AJ:47:PHE:O	10:AJ:62:HIS:HB2	1.98	0.63
9:CI:43:ALA:O	9:CI:45:ALA:N	2.31	0.63
36:BA:1024:G:H3'	36:BA:1025:G:C5'	2.22	0.63
36:BA:337:C:H3'	36:BA:338:G:H5''	1.81	0.63
3:CC:101:LEU:HD23	3:CC:102:ASN:N	2.13	0.63
36:DA:1541:G:H1'	36:DA:1542:A:N9	2.13	0.63
46:BN:33:LEU:HD12	46:BN:33:LEU:N	2.13	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BD:73:VAL:HG13	39:BD:120:GLY:HA2	1.80	0.63
36:DA:1353:A:H2'	36:DA:1354:A:H8	1.59	0.63
30:D4:35:VAL:HG12	42:DG:112:PRO:HG3	1.79	0.63
38:BC:100:ILE:HG23	38:BC:127:LEU:CG	2.29	0.63
57:BY:86:ARG:HB3	57:BY:88:LYS:HZ1	1.61	0.63
2:CB:134:GLU:HA	2:CB:137:ARG:HB2	1.81	0.63
1:CA:1239:A:H4'	1:CA:1240:U:O5'	1.98	0.63
2:CB:80:ILE:HD12	2:CB:80:ILE:N	2.12	0.63
20:AT:33:ILE:HG12	20:AT:62:LEU:HD22	1.78	0.63
58:DZ:102:LEU:HD21	58:DZ:124:ILE:HG12	1.80	0.63
43:DH:153:LYS:HD3	43:DH:153:LYS:N	2.13	0.63
1:CA:115:G:H1'	1:CA:116:A:N7	2.13	0.63
39:DD:95:LEU:H	39:DD:95:LEU:HD12	1.64	0.63
25:CZ:310:ILE:CD1	25:CZ:381:GLU:HB3	2.29	0.63
28:D2:16:LEU:O	28:D2:17:SER:O	2.15	0.63
1:CA:1469:G:C2	1:CA:1470:G:C5	2.87	0.63
36:DA:2721:A:H2'	36:DA:2722:G:C8	2.33	0.63
36:DA:821:A:H5''	36:DA:822:U:C6	2.34	0.63
36:BA:1367:A:H2'	36:BA:1368:G:H5'	1.78	0.63
38:DC:152:ILE:O	38:DC:155:GLU:HG3	1.98	0.63
5:AE:37:ARG:O	5:AE:38:GLN:HG2	1.98	0.63
23:AX:26:A:N3	23:AX:26:A:H2'	2.14	0.63
10:AJ:25:GLU:O	10:AJ:29:ARG:HB3	1.99	0.63
36:DA:2537:U:H2'	36:DA:2538:C:H6	1.63	0.63
48:BP:45:LEU:HD22	48:BP:46:LYS:H	1.64	0.63
50:DR:52:ILE:CD1	50:DR:79:LEU:HD21	2.28	0.63
41:DF:124:LEU:HD12	41:DF:125:LEU:H	1.63	0.63
41:DF:34:TRP:HB2	48:DP:10:PRO:HB2	1.81	0.63
36:BA:925:C:C3'	36:BA:926:A:H5''	2.28	0.63
41:BF:154:VAL:HG11	41:BF:193:VAL:CG2	2.26	0.63
1:AA:539:A:OP2	12:AL:115:LYS:HE3	1.97	0.63
10:AJ:14:LYS:C	10:AJ:16:LEU:H	2.00	0.63
54:DV:3:ALA:HB3	54:DV:14:VAL:HG23	1.79	0.63
1:CA:506:G:H2'	1:CA:507:C:C6	2.34	0.63
1:CA:971:G:H5''	1:CA:972:C:H5''	1.80	0.63
2:CB:164:VAL:HG12	2:CB:165:VAL:N	2.12	0.63
6:CF:2:ARG:CZ	6:CF:69:GLU:HG3	2.29	0.63
13:AM:93:ARG:HG3	36:BA:888:C:P	2.38	0.63
52:DT:90:GLN:O	52:DT:92:GLY:N	2.32	0.63
58:BZ:99:TYR:HA	58:BZ:124:ILE:O	1.98	0.63
58:BZ:51:ALA:HA	58:BZ:55:HIS:HD2	1.63	0.63
58:BZ:58:VAL:O	58:BZ:59:LEU:HD23	1.99	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:DZ:153:SER:CB	58:DZ:167:PRO:HB3	2.28	0.63
39:DD:81:ALA:HA	39:DD:113:VAL:HG22	1.81	0.63
1:AA:1486:G:H2'	1:AA:1487:G:O4'	1.97	0.63
24:CY:56:C:C1'	36:DA:1067:A:H1'	2.29	0.63
39:DD:4:LYS:HZ1	39:DD:20:ASP:HA	1.64	0.63
55:DW:62:HIS:O	55:DW:64:MET:HG3	1.98	0.63
1:CA:80:G:C2'	1:CA:81:U:H5'	2.29	0.63
49:DQ:67:ARG:HD2	49:DQ:105:GLU:OE1	1.98	0.63
40:DE:116:VAL:O	40:DE:117:MET:HB2	1.99	0.63
40:DE:78:LEU:O	40:DE:79:ARG:HD2	1.99	0.63
5:CE:76:ILE:HD11	5:CE:78:HIS:O	1.99	0.63
36:BA:1132:A:C2	46:BN:73:THR:HG21	2.33	0.63
55:BW:12:ILE:CB	55:BW:42:ARG:HH12	2.12	0.63
36:DA:2454:G:O2'	36:DA:2455:G:H5'	1.98	0.63
36:DA:2455:G:O2'	36:DA:2456:C:H5'	1.99	0.63
36:DA:803:U:C2'	36:DA:804:A:H5'	2.29	0.63
39:DD:130:ALA:HB2	39:DD:192:THR:HB	1.80	0.63
25:AZ:310:ILE:CD1	25:AZ:381:GLU:HB3	2.29	0.63
58:BZ:105:VAL:O	58:BZ:141:VAL:HG23	1.98	0.63
1:CA:1105:A:O2'	1:CA:1106:G:H5'	1.98	0.63
29:B3:59:VAL:CG1	29:B3:60:GLU:N	2.60	0.63
42:DG:119:GLY:O	42:DG:181:ARG:HB2	1.98	0.63
3:CC:64:VAL:CG1	3:CC:66:VAL:HG23	2.29	0.63
11:CK:87:THR:O	11:CK:91:ARG:HG3	1.99	0.63
36:DA:2096:U:O2'	36:DA:2097:C:H5'	1.99	0.63
36:DA:359:A:H2'	36:DA:360:G:O4'	1.99	0.63
40:BE:97:LYS:O	40:BE:100:GLU:HG3	1.97	0.63
32:B6:16:CYS:SG	32:B6:48:VAL:CG2	2.87	0.63
36:BA:1215:G:H5'	53:BU:12:ARG:NH2	2.14	0.63
36:DA:2008:C:O2'	36:DA:2009:G:H5'	1.98	0.63
36:DA:252:G:H2'	36:DA:253:C:C6	2.33	0.63
36:BA:1859:A:N6	36:BA:1883:G:O2'	2.31	0.63
36:DA:672:C:H2'	36:DA:673:C:C5'	2.29	0.63
36:DA:673:C:H5'	36:DA:673:C:H6	1.64	0.63
1:CA:254:G:O2'	1:CA:255:G:H5'	1.99	0.63
28:B2:22:GLU:HG2	28:B2:64:LEU:HD11	1.79	0.63
36:BA:749:C:O2	36:BA:1618:A:H2'	1.98	0.63
46:DN:34:LEU:HD21	46:DN:120:LEU:HD23	1.80	0.63
1:CA:972:C:O3'	10:CJ:57:LYS:CG	2.47	0.63
2:CB:102:LEU:HB3	2:CB:180:LEU:HD12	1.80	0.63
52:BT:52:ILE:HA	52:BT:61:PHE:HA	1.79	0.63
36:DA:310:A:P	57:DY:18:GLY:HA2	2.38	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AN:59:ALA:O	14:AN:60:SER:HB2	1.99	0.63
36:BA:1405:U:H2'	36:BA:1406:U:C6	2.33	0.63
4:AD:78:LEU:O	4:AD:78:LEU:HD23	1.98	0.63
57:BY:10:GLY:C	57:BY:27:VAL:HG13	2.19	0.63
36:DA:1024:G:H3'	36:DA:1025:G:C5'	2.24	0.63
41:BF:127:GLU:HB2	41:BF:196:LEU:HD12	1.79	0.63
1:CA:449:C:H3'	1:CA:450:G:H8	1.64	0.63
2:CB:22:LYS:CA	2:CB:22:LYS:HE2	2.28	0.63
36:BA:2589:A:H2'	36:BA:2590:A:H8	1.63	0.63
58:DZ:71:VAL:CG1	58:DZ:74:VAL:HG23	2.29	0.63
56:BX:65:ARG:HH11	56:BX:65:ARG:HG2	1.63	0.63
33:D7:38:GLY:O	36:DA:458:G:H3'	1.98	0.63
42:DG:35:GLU:HG2	42:DG:36:LYS:HE3	1.81	0.63
36:BA:1551:C:H2'	36:BA:1552:G:H5'	1.80	0.63
43:DH:89:ILE:O	43:DH:89:ILE:HG13	1.97	0.63
43:DH:92:ILE:O	43:DH:94:TYR:N	2.31	0.63
43:BH:122:THR:O	43:BH:133:VAL:HG13	1.99	0.63
1:CA:1152:A:H2'	1:CA:1153:C:H6	1.64	0.63
20:CT:50:GLU:HA	20:CT:100:ILE:HB	1.80	0.63
36:BA:2802:G:H3'	36:BA:2803:C:C5'	2.27	0.63
1:AA:741:G:H2'	1:AA:742:G:C8	2.33	0.63
26:D0:77:ARG:NH2	36:DA:857:C:H5'	2.11	0.63
36:DA:2199:A:H2'	36:DA:2199:A:N3	2.13	0.63
36:DA:2358:G:H21	36:DA:2359:C:H1'	1.63	0.63
36:BA:407:G:H2'	36:BA:408:G:C8	2.28	0.63
43:BH:153:LYS:HD3	43:BH:153:LYS:N	2.13	0.63
22:CW:64:A:H2'	22:CW:65:G:C8	2.33	0.63
36:DA:761:A:C8	36:DA:761:A:O5'	2.52	0.63
23:CX:23:C:H2'	23:CX:24:C:H6	1.61	0.63
46:BN:61:ARG:HG3	46:BN:61:ARG:HH11	1.64	0.63
1:CA:1494:G:H2'	1:CA:1495:U:C6	2.32	0.63
24:AY:13:C:O2'	24:AY:14:A:H5''	1.98	0.63
5:CE:64:ARG:O	5:CE:66:MET:N	2.31	0.63
22:CW:55:U:H5	22:CW:58:A:OP1	1.81	0.63
48:DP:75:ILE:HD12	48:DP:75:ILE:H	1.62	0.63
22:CW:24:G:H2'	22:CW:25:C:O4'	1.97	0.63
36:DA:361:G:H2'	36:DA:362:U:H4'	1.80	0.63
36:BA:489:G:H1'	36:BA:1284:A:C5	2.34	0.63
4:CD:150:GLU:CD	4:CD:151:LYS:H	2.01	0.63
1:AA:592:G:H2'	1:AA:593:G:H8	1.64	0.63
36:DA:654(E):G:O2'	36:DA:654(F):C:H5'	1.99	0.63
36:BA:953:A:H2'	36:BA:954:G:H8	1.62	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:116:THR:HG22	13:CM:118:ALA:H	1.64	0.63
27:B1:14:VAL:HG13	27:B1:40:ARG:O	1.98	0.63
32:D6:10:LEU:HD22	32:D6:10:LEU:N	2.14	0.63
28:D2:35:LEU:HD11	28:D2:50:ILE:CG1	2.29	0.63
36:DA:2762:G:H5'	36:DA:2762:G:C8	2.30	0.63
1:AA:1206:G:O2'	1:AA:1207:G:H5'	1.99	0.63
43:DH:41:MET:HG3	43:DH:42:ARG:O	1.97	0.63
40:BE:196:VAL:HG23	40:BE:196:VAL:O	1.98	0.63
50:BR:63:ARG:HG2	50:BR:80:PHE:CE2	2.32	0.63
11:CK:125:PHE:N	11:CK:125:PHE:CD1	2.64	0.63
56:DX:11:PRO:HG2	56:DX:13:LEU:CG	2.29	0.63
36:DA:2652:C:H2'	36:DA:2653:U:C6	2.33	0.63
53:DU:9:VAL:HG23	53:DU:10:ARG:H	1.64	0.63
54:DV:39:LEU:HA	54:DV:47:VAL:HG11	1.79	0.63
8:CH:81:HIS:ND1	8:CH:138:TRP:OXT	2.31	0.63
2:CB:185:ILE:CG2	2:CB:199:TYR:HB2	2.28	0.63
52:DT:52:ILE:HA	52:DT:61:PHE:HA	1.80	0.63
1:AA:1288:A:H1'	1:AA:1352:C:O2'	1.99	0.63
41:BF:70:THR:HG22	41:BF:72:ARG:HG2	1.80	0.63
31:D5:45:VAL:HG13	31:D5:51:TYR:HB2	1.81	0.63
36:DA:2179:C:H4'	36:DA:2180:U:O5'	1.97	0.63
36:DA:1775:U:H2'	36:DA:1776:G:H5'	1.80	0.63
55:DW:6:ILE:HG22	55:DW:7:ALA:N	2.14	0.63
3:CC:187:ALA:HB3	3:CC:198:VAL:HB	1.81	0.63
1:AA:1000:U:H2'	1:AA:1001:A:H8	1.64	0.63
36:BA:2305:A:H1'	42:BG:136:ARG:CG	2.29	0.63
1:CA:977:A:N3	1:CA:977:A:H2'	2.14	0.63
36:DA:2785:C:H2'	36:DA:2786:U:C6	2.34	0.63
38:BC:40:THR:HG22	38:BC:176:GLY:O	1.98	0.63
36:DA:2802:G:H3'	36:DA:2803:C:C5'	2.26	0.63
16:AP:53:VAL:HG23	16:AP:54:GLU:N	2.09	0.63
36:BA:612:C:C2'	36:BA:613:G:C5'	2.76	0.63
56:DX:56:THR:HG22	56:DX:79:ALA:HB2	1.79	0.63
36:DA:988:A:H8	36:DA:988:A:O5'	1.82	0.63
30:D4:46:GLN:HG3	30:D4:47:GLN:H	1.63	0.63
36:BA:2352:A:C2'	36:BA:2353:G:H5'	2.28	0.63
40:BE:9:VAL:O	40:BE:9:VAL:HG22	1.97	0.63
36:BA:2687:U:C5	36:BA:2688:U:C5	2.86	0.63
16:CP:45:THR:HG22	16:CP:47:ASP:HB3	1.80	0.63
5:AE:26:PHE:O	5:AE:27:ARG:HB2	1.97	0.63
1:CA:1031:G:H2'	1:CA:1032:G:O4'	1.99	0.63
36:DA:2173:A:H3'	36:DA:2173:A:N3	2.12	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:DV:36:PRO:HA	54:DV:56:SER:CB	2.29	0.63
36:DA:749:C:O2	36:DA:1618:A:H2'	1.98	0.63
50:DR:13:HIS:HE1	50:DR:15:SER:OG	1.81	0.63
32:D6:15:GLU:HB2	32:D6:20:ASN:CB	2.28	0.63
25:AZ:145:GLU:O	25:AZ:148:ASP:N	2.31	0.63
41:DF:33:LEU:HD11	41:DF:113:ALA:HB2	1.81	0.63
40:DE:57:LYS:HE2	40:DE:59:VAL:HG12	1.81	0.63
41:BF:101:LEU:CD1	41:BF:102:PRO:HD2	2.29	0.63
41:BF:184:TYR:CE1	48:BP:7:ARG:NH2	2.67	0.63
36:BA:2540:C:O2'	36:BA:2541:A:H5'	1.99	0.63
31:B5:5:PRO:HA	36:BA:2056:G:N2	2.14	0.63
1:CA:724:G:O2'	1:CA:725:G:H5'	1.98	0.63
52:BT:48:ILE:HD12	52:BT:64:ARG:O	1.99	0.63
58:BZ:53:ILE:HG23	58:BZ:71:VAL:HB	1.80	0.63
1:AA:1369:C:H2'	1:AA:1370:G:O4'	1.99	0.63
7:CG:69:VAL:CG1	7:CG:104:LEU:HD21	2.24	0.63
19:AS:52:TYR:O	19:AS:53:ASN:HB3	1.99	0.63
4:AD:79:PHE:HA	4:AD:93:PHE:HD2	1.64	0.63
57:BY:73:ARG:HB3	57:BY:80:GLY:HA3	1.81	0.63
39:DD:210:GLY:HA2	39:DD:213:ARG:HB2	1.81	0.63
3:CC:177:THR:HB	3:CC:180:ALA:HB2	1.81	0.63
3:CC:181:ASN:HD21	3:CC:204:LEU:HB2	1.64	0.63
36:BA:445:C:H2'	36:BA:446:G:O4'	1.98	0.63
36:BA:729:G:C5	39:BD:208:LYS:HB2	2.34	0.63
49:DQ:20:ALA:H	58:DZ:79:ARG:CZ	2.12	0.63
46:DN:126:PRO:O	46:DN:127:ASP:HB2	1.98	0.63
36:DA:718:A:H2'	36:DA:719:C:H5'	1.79	0.63
53:BU:90:VAL:O	53:BU:92:ARG:N	2.32	0.63
36:DA:1376:C:O2'	36:DA:1377:G:H5'	1.98	0.63
39:DD:26:LYS:O	39:DD:27:THR:HB	1.99	0.63
43:BH:20:ALA:CB	43:BH:23:ARG:HB2	2.24	0.63
36:BA:1448:G:H2'	36:BA:1449:A:C8	2.34	0.63
43:DH:132:ARG:HG3	43:DH:132:ARG:O	1.98	0.63
1:CA:757:U:H2'	1:CA:758:G:O4'	1.98	0.63
49:BQ:36:ALA:C	49:BQ:37:LEU:HD23	2.18	0.63
25:CZ:222:LEU:HD23	25:CZ:244:ARG:NH2	2.14	0.63
1:AA:977:A:H2'	1:AA:977:A:N3	2.12	0.63
15:AO:82:ILE:HD13	15:AO:83:GLU:N	2.13	0.63
1:AA:38:G:H22	1:AA:397:A:H5''	1.63	0.63
10:CJ:75:ILE:HG13	10:CJ:76:ASN:H	1.64	0.63
2:AB:204:ASN:C	2:AB:204:ASN:HD22	2.03	0.63
55:DW:12:ILE:HD12	55:DW:42:ARG:HH11	1.63	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2469:A:H1'	36:DA:2482:G:C5	2.34	0.63
4:CD:23:GLY:HA3	4:CD:112:VAL:HG22	1.79	0.63
1:CA:337:C:H2'	1:CA:338:A:C8	2.29	0.63
7:CG:79:ARG:HG3	7:CG:83:ALA:O	1.98	0.63
12:CL:89:ARG:HH11	12:CL:91:LYS:HA	1.63	0.63
56:BX:56:THR:HG22	56:BX:79:ALA:HB1	1.80	0.63
1:CA:686:U:H2'	1:CA:687:A:H8	1.63	0.63
12:AL:84:LEU:HD23	12:AL:85:ILE:N	2.13	0.63
36:DA:1565:C:H2'	39:DD:21:PHE:HE1	1.64	0.63
36:BA:944:G:H22	48:BP:38:GLN:NE2	1.97	0.63
1:CA:1228:C:H4'	13:CM:116:THR:O	1.99	0.63
36:DA:435:C:O2'	36:DA:436:C:H5'	1.98	0.63
42:DG:69:ALA:O	42:DG:71:THR:N	2.31	0.63
45:BK:86:UNK:O	45:BK:87:UNK:CB	2.46	0.63
36:DA:878:A:N3	36:DA:878:A:H5'	2.13	0.63
36:BA:2403:C:N4	36:BA:2414:G:H1	1.93	0.63
57:BY:46:LYS:C	57:BY:47:LYS:HG3	2.19	0.63
32:D6:14:THR:CG2	32:D6:50:ARG:HB2	2.29	0.63
34:D8:4:MET:HE3	34:D8:61:LEU:HD21	1.81	0.63
34:D8:8:LYS:HA	34:D8:11:LYS:HB3	1.79	0.63
34:D8:8:LYS:HG2	34:D8:11:LYS:HD3	1.81	0.63
28:D2:35:LEU:CD1	28:D2:50:ILE:HG13	2.28	0.63
41:DF:122:LYS:H	41:DF:122:LYS:HE3	1.62	0.63
41:BF:36:VAL:O	41:BF:39:TRP:HB3	1.99	0.63
4:AD:31:CYS:O	4:AD:31:CYS:SG	2.56	0.63
28:B2:35:LEU:HD13	28:B2:36:ARG:N	2.14	0.63
41:BF:178:PRO:CB	41:BF:201:VAL:HG11	2.29	0.63
50:BR:10:LEU:HD22	50:BR:17:ARG:NE	2.12	0.63
13:AM:40:ASN:HD22	13:AM:43:THR:HG23	1.64	0.63
42:BG:58:GLN:HE22	42:BG:62:LEU:HD11	1.62	0.63
16:AP:28:ARG:HG2	16:AP:29:ASP:OD2	1.98	0.63
37:BB:37:C:O2	51:BS:95:HIS:NE2	2.31	0.63
48:BP:91:PHE:CE2	48:BP:95:VAL:HG12	2.34	0.63
36:BA:141:A:H8	36:BA:1408:C:HO2'	1.47	0.63
36:BA:1999:C:H2'	36:BA:2000:G:C8	2.34	0.63
7:CG:72:ARG:HG3	7:CG:73:MET:HG3	1.80	0.63
37:BB:55:U:H2'	37:BB:56:G:H8	1.60	0.63
46:BN:36:GLY:H	46:BN:49:GLY:HA2	1.62	0.63
54:BV:38:LEU:HD23	54:BV:39:LEU:N	2.14	0.63
56:BX:65:ARG:CG	56:BX:66:LEU:H	2.05	0.63
36:DA:1246:A:C2'	36:DA:1247:A:H5'	2.28	0.63
53:DU:3:ARG:HH11	53:DU:5:LYS:HB3	1.64	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:459:U:H2'	36:DA:460:A:C8	2.21	0.63
37:BB:8:U:H3	37:BB:113:G:H1	1.46	0.63
36:BA:718:A:H2'	36:BA:719:C:H5'	1.81	0.63
36:DA:2631:G:H21	40:DE:61:ARG:HH12	1.44	0.63
36:DA:2304:G:H22	36:DA:2312:U:H3	1.47	0.63
36:DA:1782:C:O2	36:DA:2609:U:H5''	1.98	0.63
3:CC:36:ASP:O	3:CC:40:ARG:HG3	1.98	0.63
36:DA:858:U:O2	36:DA:2268:A:H2'	1.98	0.63
41:DF:46:ARG:HG3	41:DF:46:ARG:NH1	2.08	0.63
1:CA:1480:G:C2	1:CA:1481:U:H1'	2.33	0.63
52:BT:53:ARG:HH11	52:BT:53:ARG:CB	2.11	0.63
36:BA:1345:C:C2'	36:BA:1346:G:H5'	2.29	0.63
1:AA:1249:C:H5''	9:AI:70:LYS:HZ3	1.62	0.63
36:DA:2572:A:C8	40:DE:144:ARG:HD2	2.34	0.63
36:DA:1064:C:H42	36:DA:1074:G:H1	1.46	0.63
36:BA:2553:G:H2'	36:BA:2554:U:C4'	2.29	0.63
2:CB:7:VAL:CG1	2:CB:11:LEU:HD11	2.29	0.63
40:BE:9:VAL:HG13	40:BE:25:VAL:HB	1.79	0.63
6:AF:99:ALA:O	6:AF:100:ASN:HB2	1.98	0.63
45:BK:32:UNK:HA	45:BK:63:UNK:O	1.98	0.63
1:AA:563:A:H2'	1:AA:563:A:N3	2.13	0.63
36:BA:966:G:H2'	36:BA:967:C:C6	2.33	0.63
36:BA:2667:C:H2'	36:BA:2668:G:O4'	1.99	0.63
37:DB:94:C:O2'	37:DB:95:C:H5'	1.98	0.63
36:DA:181:A:H2'	36:DA:182:A:O4'	1.98	0.63
1:CA:200:G:H2'	1:CA:201:C:C6	2.34	0.63
50:BR:18:LEU:HD13	50:BR:19:ALA:N	2.14	0.63
36:BA:1431:U:O2'	36:BA:1432:C:H5'	1.99	0.63
50:DR:116:LEU:O	50:DR:117:VAL:HG12	1.99	0.62
36:BA:1803:A:O3'	39:BD:259:THR:CG2	2.47	0.62
35:B9:1:MET:SD	36:BA:2477:C:H3'	2.40	0.62
36:BA:747:U:O3'	55:BW:89:ALA:HB2	1.99	0.62
42:BG:63:ILE:HG13	42:BG:64:THR:HG22	1.80	0.62
27:D1:62:VAL:CG2	27:D1:67:ILE:HA	2.13	0.62
36:DA:565:C:H2'	36:DA:566:U:H6	1.64	0.62
25:AZ:264:ARG:NH1	25:AZ:264:ARG:CG	2.49	0.62
5:AE:100:VAL:O	5:AE:101:ILE:HD13	1.99	0.62
5:AE:33:VAL:HG21	5:AE:109:ILE:CG1	2.23	0.62
36:BA:2726:U:O2	36:BA:2726:U:H5'	1.98	0.62
47:BO:64:ARG:O	47:BO:82:ASN:HA	1.99	0.62
52:BT:32:TYR:CD2	52:BT:32:TYR:N	2.67	0.62
40:DE:201:THR:C	40:DE:202:LYS:HD2	2.19	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:9:TYR:CE2	58:BZ:61:LEU:HD13	2.34	0.62
57:DY:14:LEU:HD12	57:DY:23:ARG:O	1.99	0.62
9:CI:78:LYS:HE3	9:CI:101:PHE:CZ	2.34	0.62
1:AA:1497:G:C2'	1:AA:1498:U:H5'	2.29	0.62
1:AA:619:U:C2	4:AD:135:LEU:HD21	2.33	0.62
36:DA:2334:G:H5'	51:DS:13:ARG:HD3	1.80	0.62
51:DS:35:ILE:O	51:DS:35:ILE:HG12	1.99	0.62
51:DS:64:GLU:O	51:DS:67:ARG:HG3	1.99	0.62
51:DS:92:TYR:CG	51:DS:93:LYS:N	2.66	0.62
57:BY:84:ARG:NH2	57:BY:97:ARG:HB2	2.13	0.62
42:BG:171:ALA:O	42:BG:175:LEU:HG	1.99	0.62
2:AB:22:LYS:HE2	2:AB:22:LYS:CA	2.28	0.62
36:BA:18:C:O2'	36:BA:554:U:H5''	1.99	0.62
36:DA:1248:G:P	41:DF:92:PRO:HG3	2.39	0.62
36:DA:2579:C:O2'	40:DE:131:ALA:HB2	1.99	0.62
42:BG:52:ILE:HD13	42:BG:52:ILE:N	2.09	0.62
36:DA:2306:C:C4'	42:DG:136:ARG:HH22	2.05	0.62
42:DG:32:PRO:HA	42:DG:162:THR:CB	2.29	0.62
20:AT:17:ARG:C	20:AT:19:SER:H	2.02	0.62
36:DA:2312:U:C2'	36:DA:2313:C:H5''	2.29	0.62
38:DC:100:ILE:HG23	38:DC:127:LEU:CD1	2.29	0.62
55:BW:12:ILE:CD1	55:BW:42:ARG:NH1	2.60	0.62
36:DA:2485:G:O2'	36:DA:2486:G:H5'	1.99	0.62
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.33	0.62
2:AB:75:LYS:O	2:AB:77:ALA:N	2.31	0.62
36:DA:198:C:H5'	36:DA:2244:U:OP1	1.99	0.62
36:DA:272(B):G:H2'	36:DA:272(C):G:H8	1.64	0.62
36:DA:271(Z):C:O2	36:DA:272(C):G:H1'	1.98	0.62
29:D3:3:ARG:HB2	29:D3:59:VAL:O	1.99	0.62
29:D3:59:VAL:CG1	29:D3:60:GLU:N	2.62	0.62
54:DV:29:PRO:HA	54:DV:61:VAL:HG21	1.81	0.62
36:BA:1341:U:O2	36:BA:1398:C:H5'	1.98	0.62
52:DT:106:SER:O	52:DT:107:ASP:CB	2.47	0.62
36:BA:1183:G:H2'	36:BA:1184:G:H8	1.62	0.62
27:B1:94:LEU:O	27:B1:95:LEU:C	2.37	0.62
36:BA:410:G:N2	36:BA:2407:G:C5	2.67	0.62
58:DZ:24:LEU:HB3	58:DZ:39:VAL:O	1.99	0.62
9:CI:82:ALA:O	9:CI:85:LEU:HD12	1.98	0.62
36:BA:520:G:H2'	36:BA:521:G:C8	2.33	0.62
36:DA:874:G:H2'	36:DA:875:G:H8	1.63	0.62
25:AZ:182:MET:SD	25:AZ:188:THR:HB	2.38	0.62
36:BA:2367:G:O2'	36:BA:2368:C:H5'	1.98	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2533:A:C2'	36:DA:2534:A:H5'	2.29	0.62
32:D6:53:LYS:CG	32:D6:54:ILE:H	2.11	0.62
34:D8:30:ARG:NH2	36:DA:2419:U:O4	2.32	0.62
36:BA:2085:C:O2'	36:BA:2086:U:H5'	1.99	0.62
36:DA:657:U:H2'	36:DA:658:C:C6	2.33	0.62
24:AY:54:5MU:OP2	24:AY:54:5MU:H71	1.99	0.62
56:BX:10:ALA:HB1	56:BX:11:PRO:HD2	1.81	0.62
39:BD:24:ILE:HD13	39:BD:25:THR:N	2.13	0.62
1:AA:1158:C:O2'	1:AA:1159:U:H4'	1.99	0.62
1:AA:506:G:H2'	1:AA:507:C:C6	2.34	0.62
28:B2:10:LEU:HD23	28:B2:14:ARG:HG3	1.80	0.62
28:B2:35:LEU:HD21	28:B2:50:ILE:CG1	2.30	0.62
36:BA:2455:G:O2'	36:BA:2456:C:H5'	1.99	0.62
31:B5:3:LYS:HD3	36:BA:747:U:OP1	1.99	0.62
27:D1:5:CYS:SG	27:D1:8:SER:N	2.71	0.62
48:DP:36:LYS:CD	48:DP:41:ARG:HB3	2.29	0.62
1:AA:375:U:H4'	16:AP:17:TYR:CE2	2.35	0.62
52:DT:102:ILE:HG13	52:DT:103:ARG:N	2.12	0.62
52:DT:28:VAL:CG2	52:DT:47:GLY:N	2.60	0.62
52:DT:67:SER:O	52:DT:68:TYR:HB2	1.98	0.62
35:D9:11:CYS:SG	60:D9:101:ZN:ZN	1.88	0.62
1:AA:924:C:H2'	1:AA:925:G:C8	2.33	0.62
1:CA:946:A:H2'	1:CA:947:G:C8	2.34	0.62
3:AC:101:LEU:HD23	3:AC:102:ASN:N	2.14	0.62
1:CA:1217:C:H2'	1:CA:1218:C:C6	2.34	0.62
28:B2:2:LYS:HD2	28:B2:5:GLU:CD	2.19	0.62
57:DY:88:LYS:O	57:DY:89:PHE:HB2	1.99	0.62
36:DA:2712:U:O2'	36:DA:2712(A):A:H3'	1.99	0.62
1:AA:881:G:H2'	1:AA:882:C:O4'	1.99	0.62
2:CB:107:THR:HA	2:CB:110:GLN:HE21	1.64	0.62
2:AB:102:LEU:HB3	2:AB:180:LEU:CD1	2.29	0.62
1:AA:1464:G:O2'	1:AA:1465:C:H5'	1.98	0.62
1:AA:1439:C:H42	1:AA:1463:C:N4	1.97	0.62
36:DA:783:A:H8	36:DA:784:A:H4'	1.64	0.62
16:AP:52:ASP:OD1	16:AP:55:ARG:HG3	1.98	0.62
26:B0:58:THR:HG22	26:B0:59:LEU:N	2.14	0.62
36:BA:2134:A:H61	36:BA:2157:G:H1'	1.64	0.62
14:AN:48:ALA:N	14:AN:53:LEU:HD12	2.13	0.62
36:DA:2134:A:H61	36:DA:2157:G:H1'	1.64	0.62
36:BA:1605:C:C2'	36:BA:1606:G:H5'	2.29	0.62
36:DA:786:C:O2'	36:DA:787:U:H5'	1.99	0.62
22:CV:63:G:H2'	22:CV:64:A:H8	1.62	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1409:C:H2'	36:BA:1410:G:C8	2.34	0.62
1:CA:1312:G:H2'	1:CA:1313:U:H6	1.64	0.62
1:CA:935:A:H2'	1:CA:936:C:C6	2.33	0.62
36:BA:1328:G:C2	36:BA:1647:G:N2	2.67	0.62
36:DA:391:G:C2'	36:DA:392:C:H5'	2.29	0.62
27:B1:88:LYS:O	27:B1:88:LYS:HD3	1.99	0.62
5:AE:26:PHE:CD1	5:AE:26:PHE:N	2.67	0.62
36:BA:637:A:H4'	36:BA:638:G:O5'	1.98	0.62
36:DA:1924:C:H2'	36:DA:1925:C:H6	1.64	0.62
17:AQ:10:VAL:HG21	17:AQ:55:ASP:HB2	1.80	0.62
36:DA:654(J):A:C8	36:DA:654(L):G:H8	2.17	0.62
40:BE:108:SER:O	40:BE:162:ALA:HA	1.99	0.62
36:BA:2096:U:O2'	36:BA:2097:C:H5'	1.99	0.62
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.34	0.62
27:D1:6:GLU:OE1	27:D1:60:PHE:CD1	2.51	0.62
34:B8:8:LYS:HG2	34:B8:11:LYS:CD	2.29	0.62
53:BU:20:LEU:CD2	53:BU:20:LEU:H	2.12	0.62
50:DR:28:LEU:O	50:DR:30:THR:N	2.32	0.62
36:DA:92:A:O2'	36:DA:93:G:H5'	1.98	0.62
39:BD:65:ILE:N	39:BD:65:ILE:CD1	2.58	0.62
41:BF:33:LEU:HD11	41:BF:113:ALA:HB2	1.80	0.62
43:BH:41:MET:HG3	43:BH:42:ARG:O	1.99	0.62
1:AA:540:G:H2'	1:AA:541:G:H8	1.64	0.62
36:BA:2762:G:H5'	36:BA:2762:G:C8	2.31	0.62
36:BA:2762:G:H2'	36:BA:2763:G:H5'	1.80	0.62
13:AM:30:ALA:O	13:AM:32:GLU:N	2.32	0.62
36:DA:21:A:O2'	36:DA:22:C:H5'	1.99	0.62
36:DA:1215:G:H5''	53:DU:12:ARG:NH2	2.14	0.62
53:DU:90:VAL:HG12	53:DU:91:ASP:N	2.14	0.62
41:BF:61:GLY:HA2	41:BF:77:ASP:HB3	1.82	0.62
8:CH:36:LEU:CD1	8:CH:59:LEU:HD13	2.29	0.62
5:AE:136:MET:O	5:AE:138:ALA:N	2.33	0.62
40:BE:81:ILE:O	40:BE:81:ILE:HG22	1.99	0.62
6:CF:37:VAL:HG12	6:CF:38:GLU:H	1.63	0.62
56:BX:35:THR:HG22	56:BX:37:THR:N	2.09	0.62
36:DA:1763:G:N2	36:DA:1765:C:H5''	2.13	0.62
1:AA:1116:C:C3'	1:AA:1117:G:H5''	2.29	0.62
37:BB:82:G:H2'	37:BB:83:G:C8	2.33	0.62
41:BF:65:TRP:CZ3	41:BF:75:HIS:CD2	2.87	0.62
25:AZ:98:GLN:HG2	25:AZ:98:GLN:O	1.98	0.62
4:CD:109:GLY:HA3	4:CD:165:MET:HE2	1.82	0.62
54:BV:39:LEU:HA	54:BV:47:VAL:HG11	1.79	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:769:G:H2'	36:DA:770:G:H8	1.65	0.62
42:BG:85:GLY:C	42:BG:87:PRO:HD3	2.19	0.62
36:BA:1543:C:C3'	36:BA:1544:A:H5''	2.25	0.62
1:AA:167:G:H2'	1:AA:168:G:C8	2.35	0.62
40:BE:132:HIS:HA	40:BE:135:HIS:HE1	1.62	0.62
40:DE:51:PHE:O	40:DE:74:PRO:HB3	1.98	0.62
1:CA:598:U:H4'	8:CH:94:TYR:CD2	2.35	0.62
43:BH:92:ILE:O	43:BH:94:TYR:N	2.31	0.62
1:CA:1152:A:OP1	10:CJ:68:HIS:NE2	2.30	0.62
36:BA:2162:G:O2'	36:BA:2163:C:H5'	1.99	0.62
8:AH:94:TYR:N	8:AH:94:TYR:CD1	2.65	0.62
11:AK:111:ASP:HB2	18:AR:84:LYS:HD2	1.81	0.62
36:DA:686:G:H21	36:DA:788:A:H61	1.47	0.62
36:DA:122:G:H1	36:DA:129:C:N4	1.96	0.62
39:BD:45:ASN:CG	39:BD:46:GLN:H	2.02	0.62
1:CA:928:G:C2'	1:CA:929:G:H5'	2.29	0.62
36:BA:1229:G:H2'	36:BA:1230:C:O4'	1.98	0.62
56:BX:56:THR:HG22	56:BX:79:ALA:HB2	1.81	0.62
45:DK:90:UNK:HA	58:DZ:112:ARG:HH22	1.63	0.62
56:DX:48:LYS:O	56:DX:49:VAL:HG13	2.00	0.62
33:B7:30:VAL:HG11	36:BA:466:A:H4'	1.80	0.62
36:DA:1023:U:O2'	36:DA:1122:G:H5''	1.99	0.62
45:BK:90:UNK:HA	58:BZ:112:ARG:HH22	1.62	0.62
1:AA:849:C:H2'	1:AA:850:U:O4'	1.99	0.62
1:AA:92:C:H2'	1:AA:93:G:H8	1.63	0.62
36:BA:2562:U:H2'	36:BA:2563:U:H5'	1.80	0.62
36:BA:245:G:N2	36:BA:254:G:H1'	2.14	0.62
36:DA:2850:A:H2	50:DR:61:HIS:CD2	2.17	0.62
48:DP:79:ARG:O	48:DP:110:TYR:HB3	1.98	0.62
48:DP:147:LEU:HG	48:DP:148:LEU:N	2.15	0.62
28:D2:51:ARG:HB2	28:D2:55:ARG:HH22	1.62	0.62
36:DA:600:G:H2'	36:DA:601:C:C6	2.34	0.62
8:AH:63:LEU:H	8:AH:63:LEU:CD2	2.12	0.62
38:DC:83:ILE:HD11	38:DC:97:GLU:OE2	1.99	0.62
36:DA:2090:G:N2	36:DA:2229:C:O2	2.32	0.62
43:DH:41:MET:O	43:DH:42:ARG:HB3	1.99	0.62
36:BA:2472:G:H2'	36:BA:2475:C:H42	1.63	0.62
36:BA:298:G:N2	36:BA:339:U:C5	2.66	0.62
50:BR:12:ARG:HB3	50:BR:16:HIS:CD2	2.34	0.62
40:BE:57:LYS:HE2	40:BE:59:VAL:HG12	1.80	0.62
40:BE:51:PHE:O	40:BE:74:PRO:HB3	1.99	0.62
36:BA:628:G:H2'	36:BA:629:G:C5'	2.29	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:952:U:O2'	1:AA:953:G:H5'	1.99	0.62
57:DY:73:ARG:HB3	57:DY:80:GLY:HA3	1.80	0.62
14:AN:29:ARG:CG	14:AN:29:ARG:HH11	2.13	0.62
14:AN:59:ALA:HB1	14:AN:61:TRP:CZ3	2.35	0.62
1:AA:923:A:H5''	5:AE:21:ALA:HB2	1.82	0.62
41:BF:65:TRP:CZ3	41:BF:75:HIS:HD2	2.17	0.62
51:DS:17:ARG:HA	51:DS:20:ARG:NH1	2.14	0.62
42:BG:125:PHE:CZ	42:BG:131:TYR:HD1	2.16	0.62
36:DA:2187:G:C2'	36:DA:2188:C:H5'	2.29	0.62
39:DD:241:PRO:O	39:DD:243:GLY:N	2.31	0.62
31:B5:45:VAL:HG13	31:B5:51:TYR:HB2	1.81	0.62
19:CS:63:THR:HG22	19:CS:66:MET:CG	2.29	0.62
16:AP:20:VAL:HG21	16:AP:32:TYR:CE2	2.34	0.62
49:DQ:21:THR:O	49:DQ:22:LYS:HB3	1.99	0.62
41:DF:127:GLU:HB2	41:DF:196:LEU:HD12	1.80	0.62
36:DA:594:U:H2'	36:DA:595:C:H6	1.64	0.62
36:DA:1659:U:OP2	40:DE:132:HIS:HE1	1.81	0.62
42:DG:43:LEU:HB3	42:DG:45:GLU:HG2	1.80	0.62
36:BA:1465:G:H5'	36:BA:1528:A:C8	2.35	0.62
36:BA:1659:U:OP2	40:BE:132:HIS:HE1	1.81	0.62
1:CA:881:G:H2'	1:CA:882:C:O4'	1.99	0.62
1:AA:585:G:H2'	1:AA:586:C:C6	2.34	0.62
2:AB:102:LEU:HD23	2:AB:182:ILE:CD1	2.28	0.62
36:BA:2485:G:H5''	49:BQ:46:GLN:HE21	1.63	0.62
36:BA:2125:G:H5'	38:BC:40:THR:OG1	1.99	0.62
36:BA:782:A:H5'	36:BA:783:A:C2	2.34	0.62
5:CE:136:MET:O	5:CE:138:ALA:N	2.32	0.62
36:DA:957:A:N1	36:DA:2458:G:H4'	2.15	0.62
36:DA:205:G:H1'	36:DA:206:U:H5	1.65	0.62
41:DF:80:ALA:HB1	41:DF:81:PRO:HD2	1.81	0.62
38:DC:120:MET:O	38:DC:123:VAL:HG12	1.99	0.62
48:DP:134:ALA:HB2	48:DP:137:LYS:NZ	2.14	0.62
36:DA:1141:U:C5	46:DN:64:GLY:HA3	2.34	0.62
36:BA:1064:C:H42	36:BA:1074:G:H1	1.47	0.62
1:CA:106:C:O2'	1:CA:107:G:H5'	1.99	0.62
46:DN:60:ILE:HD13	46:DN:99:LEU:HD23	1.82	0.62
2:CB:14:GLY:O	2:CB:15:VAL:HG13	2.00	0.62
1:CA:1298:C:N4	7:CG:114:ARG:HD2	2.13	0.62
27:D1:6:GLU:OE1	27:D1:60:PHE:HD1	1.82	0.62
36:DA:520:G:H2'	36:DA:521:G:C8	2.33	0.62
17:CQ:66:SER:OG	17:CQ:69:LYS:HB3	1.98	0.62
1:AA:1031:G:H2'	1:AA:1032:G:O4'	1.99	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1367:A:H2'	36:DA:1368:G:H5'	1.79	0.62
37:BB:87:G:H8	37:BB:87:G:O5'	1.82	0.62
46:DN:17:ASP:OD1	46:DN:19:GLU:HG2	1.98	0.62
50:BR:21:TYR:HB3	50:BR:47:PHE:CE2	2.33	0.62
34:B8:3:LYS:HD3	36:BA:242:G:C5'	2.29	0.62
34:D8:28:GLY:O	34:D8:32:LEU:HD23	2.00	0.62
36:DA:631:A:H1'	36:DA:2415:G:O2'	1.98	0.62
39:BD:32:SER:O	39:BD:36:PRO:HG3	2.00	0.62
38:BC:71:GLN:HE22	38:BC:157:LYS:HD3	1.63	0.62
1:AA:1049:U:H2'	14:AN:2:ALA:N	2.14	0.62
36:BA:2882:A:H5'	50:BR:96:ARG:HG3	1.80	0.62
30:B4:7:PRO:O	30:B4:8:LYS:HB3	1.99	0.62
36:DA:1188:U:H4'	54:DV:79:VAL:HG13	1.82	0.62
8:AH:31:PHE:O	8:AH:34:GLU:HG2	1.99	0.62
32:D6:8:LYS:HA	32:D6:27:LYS:HD3	1.81	0.62
32:B6:8:LYS:HE3	32:B6:25:LYS:CD	2.30	0.62
25:CZ:38:GLU:CD	25:CZ:200:TRP:HH2	2.01	0.62
36:DA:2772:C:H5'	40:DE:168:MET:CE	2.28	0.62
52:DT:70:VAL:HG12	52:DT:71:GLY:N	2.14	0.62
58:DZ:132:ASN:ND2	58:DZ:160:GLY:HA3	2.14	0.62
1:CA:1348:U:O2'	1:CA:1349:A:H8	1.81	0.62
10:CJ:47:PHE:HB2	10:CJ:63:PHE:O	2.00	0.62
51:DS:99:LYS:O	51:DS:100:ALA:C	2.38	0.62
36:BA:329:G:N2	57:BY:19:LYS:HE3	2.12	0.62
42:BG:27:ASN:O	42:BG:29:TRP:N	2.31	0.62
36:DA:2152:G:O2'	36:DA:2153:G:H5'	1.99	0.62
36:DA:729:G:O2'	36:DA:763:G:H4'	1.98	0.62
36:BA:2187:G:C2'	36:BA:2188:C:H5'	2.28	0.62
55:DW:36:LEU:CD2	55:DW:36:LEU:H	2.06	0.62
58:DZ:12:GLY:HA2	58:DZ:36:LYS:HZ3	1.63	0.62
58:DZ:81:ARG:HB2	58:DZ:81:ARG:HH11	1.63	0.62
31:B5:16:ARG:NH1	31:B5:20:ARG:NH1	2.47	0.62
36:DA:1639:U:O2'	36:DA:2699:C:H4'	1.99	0.62
48:DP:16:ARG:NH1	48:DP:16:ARG:HB2	2.15	0.62
42:BG:45:GLU:C	42:BG:47:LYS:H	2.02	0.62
25:CZ:98:GLN:O	25:CZ:98:GLN:HG2	1.98	0.62
3:CC:20:SER:HB2	3:CC:40:ARG:HH22	1.64	0.62
49:DQ:43:THR:OG1	49:DQ:45:GLN:HG2	1.99	0.62
1:AA:419:C:C2'	1:AA:420:U:H5'	2.30	0.62
57:BY:43:ASN:O	57:BY:44:ILE:HD12	1.98	0.62
36:DA:639:U:H2'	36:DA:640:C:C6	2.33	0.62
1:CA:1432:G:O2'	1:CA:1468:A:N6	2.33	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:107:THR:CG2	58:BZ:111:VAL:HG21	2.29	0.62
36:DA:1183:G:H2'	36:DA:1184:G:H8	1.64	0.62
40:BE:142:GLY:C	40:BE:143:ASN:HD22	2.02	0.62
1:CA:775:G:H2'	1:CA:776:G:O4'	1.98	0.62
20:AT:10:LEU:HD12	20:AT:11:SER:H	1.64	0.62
56:BX:63:LYS:HE2	56:BX:72:LYS:HG2	1.82	0.62
8:AH:134:ILE:HG22	8:AH:135:CYS:SG	2.39	0.62
42:DG:2:PRO:O	42:DG:3:LEU:HB2	2.00	0.62
46:BN:17:ASP:OD1	46:BN:19:GLU:HG2	2.00	0.62
1:CA:909:A:OP1	12:CL:21:LYS:HD3	1.99	0.62
1:CA:92:C:H2'	1:CA:93:G:H8	1.64	0.62
1:CA:789:U:O2	1:CA:791:G:C8	2.53	0.62
34:B8:52:LYS:HG2	48:BP:58:THR:HG21	1.78	0.62
48:BP:63:PRO:O	48:BP:64:LYS:C	2.38	0.62
36:DA:2007:C:H5'	36:DA:2824:C:C1'	2.28	0.62
34:D8:62:LEU:HD22	36:DA:242:G:H5'	1.81	0.62
34:D8:33:ASN:ND2	36:DA:2419:U:H5"	2.15	0.62
48:DP:6:LEU:H	48:DP:6:LEU:HD23	1.64	0.62
5:CE:100:VAL:O	5:CE:101:ILE:HD13	1.99	0.62
9:AI:53:VAL:HG11	9:AI:92:TYR:CE2	2.35	0.62
43:BH:41:MET:O	43:BH:42:ARG:HB3	1.99	0.62
50:BR:28:LEU:O	50:BR:30:THR:N	2.33	0.62
42:BG:58:GLN:O	42:BG:61:ALA:HB3	2.00	0.62
46:DN:18:ALA:HB2	46:DN:26:LEU:HD13	1.82	0.62
36:DA:18:C:O2'	53:DU:23:GLY:HA2	1.99	0.62
54:DV:18:LEU:HD23	54:DV:19:LYS:N	2.15	0.62
8:CH:25:ASP:O	8:CH:26:VAL:HB	1.99	0.62
1:CA:538:G:O2'	1:CA:539:A:H5'	2.00	0.62
48:BP:148:LEU:O	48:BP:149:GLU:HB2	2.00	0.62
1:CA:1425:U:H2'	1:CA:1426:C:H6	1.63	0.62
3:CC:120:VAL:O	3:CC:124:ILE:HG13	1.99	0.62
3:AC:20:SER:HB2	3:AC:40:ARG:HH22	1.64	0.62
48:BP:16:ARG:CZ	48:BP:16:ARG:HB2	2.29	0.62
36:BA:1791:A:O3'	39:BD:206:LEU:HB2	2.00	0.62
58:DZ:27:VAL:O	58:DZ:87:ASP:HA	1.99	0.62
53:BU:59:ARG:O	53:BU:62:ILE:N	2.31	0.62
57:DY:85:VAL:HG12	57:DY:86:ARG:N	2.15	0.62
9:AI:43:ALA:C	9:AI:45:ALA:N	2.53	0.62
40:DE:29:GLY:HA2	40:DE:180:ASN:ND2	2.15	0.62
36:DA:1779:U:H5	36:DA:1784:A:N7	1.96	0.62
36:BA:2801(A):A:C4'	36:BA:2802:G:H5'	2.29	0.62
1:AA:665:A:H2'	1:AA:725:G:N2	2.13	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:137:C:H2'	1:AA:137:C:O2	1.97	0.62
18:CR:53:ARG:CZ	18:CR:60:ALA:N	2.62	0.62
54:BV:29:PRO:HA	54:BV:61:VAL:HG23	1.81	0.62
56:DX:60:ARG:HA	56:DX:75:ASP:CG	2.20	0.62
1:AA:1249:C:H5''	9:AI:70:LYS:HZ1	1.63	0.62
11:AK:38:ASN:ND2	11:AK:38:ASN:N	2.45	0.62
12:CL:84:LEU:HD23	12:CL:85:ILE:N	2.15	0.62
36:BA:122:G:H1	36:BA:129:C:N4	1.96	0.62
1:AA:686:U:H2'	1:AA:687:A:H8	1.62	0.62
1:CA:1398:A:H61	5:CE:21:ALA:HA	1.65	0.62
38:DC:106:GLY:O	38:DC:107:TRP:CB	2.47	0.62
26:D0:25:ARG:NH2	26:D0:35:ASN:HD22	1.97	0.62
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.34	0.62
25:CZ:9:LYS:HD2	25:CZ:74:LYS:O	2.00	0.62
37:DB:2:C:H2'	37:DB:3:C:H6	1.64	0.62
11:CK:72:ALA:O	11:CK:75:TYR:HB2	1.99	0.62
46:BN:96:GLU:N	46:BN:96:GLU:OE2	2.33	0.62
36:BA:1188:U:H4'	54:BV:79:VAL:HG13	1.82	0.62
36:DA:1796:U:H2'	36:DA:1797:C:C6	2.34	0.62
28:D2:64:LEU:O	28:D2:64:LEU:HD23	1.99	0.62
28:D2:54:LYS:NZ	36:DA:60:G:H5''	2.13	0.62
36:DA:621:A:H2'	36:DA:622:G:O4'	2.00	0.62
5:CE:105:VAL:N	5:CE:106:PRO:HD2	2.13	0.62
57:DY:50:ARG:HG3	57:DY:56:PRO:O	1.99	0.62
39:BD:70:TRP:CZ3	39:BD:150:LYS:HA	2.35	0.62
39:BD:273:ARG:HH11	39:BD:273:ARG:HG2	1.64	0.62
36:DA:2085:C:O2'	36:DA:2086:U:H5'	2.00	0.62
38:BC:76:ALA:HB3	38:BC:94:VAL:HG13	1.82	0.62
42:DG:83:ARG:O	42:DG:85:GLY:N	2.32	0.62
36:BA:1202:C:C2'	36:BA:1203:G:H5'	2.28	0.62
28:B2:59:ARG:HA	28:B2:62:THR:OG1	2.00	0.62
41:BF:162:LEU:H	41:BF:162:LEU:HD12	1.64	0.62
56:DX:12:VAL:CB	56:DX:17:ALA:HB1	2.17	0.62
36:DA:2892:A:C8	36:DA:2893:G:H1'	2.35	0.62
36:BA:1664:A:H61	36:BA:1996:C:H42	1.48	0.62
40:BE:201:THR:C	40:BE:202:LYS:HD2	2.20	0.62
36:BA:2892:A:C8	36:BA:2893:G:H1'	2.35	0.62
52:DT:55:ASN:N	52:DT:59:THR:HG22	2.03	0.62
58:BZ:27:VAL:HA	58:BZ:37:VAL:HG22	1.80	0.62
57:DY:10:GLY:C	57:DY:27:VAL:HG13	2.19	0.62
1:AA:1348:U:O2'	1:AA:1349:A:H8	1.82	0.62
1:CA:377:G:H1	1:CA:386:C:H42	1.47	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:DB:79:C:O2'	37:DB:80:U:H5'	1.99	0.62
1:CA:939:G:H2'	1:CA:940:C:C6	2.35	0.62
9:CI:77:ILE:HG23	9:CI:81:ILE:HD11	1.81	0.62
22:AV:51:U:H2'	22:AV:52:G:C8	2.34	0.62
1:AA:815:A:N6	1:AA:1509:C:H1'	2.14	0.62
36:BA:2182:G:H2'	36:BA:2183:C:C6	2.35	0.62
1:CA:44:G:OP2	16:CP:12:LYS:HE3	2.00	0.62
55:BW:36:LEU:H	55:BW:36:LEU:CD2	2.06	0.62
53:BU:66:ASN:CG	53:BU:76:TYR:HB2	2.20	0.62
53:BU:66:ASN:HB2	53:BU:76:TYR:HB2	1.82	0.62
57:BY:9:LYS:HE2	57:BY:94:LYS:HE2	1.80	0.62
36:DA:444:C:OP2	41:DF:49:ALA:HB2	2.00	0.62
13:CM:63:THR:HG22	13:CM:64:TRP:N	2.12	0.62
42:DG:111:LEU:O	42:DG:114:ILE:HG22	2.00	0.62
25:CZ:277:LEU:HD12	25:CZ:280:GLY:N	2.07	0.62
38:DC:98:GLU:C	38:DC:100:ILE:N	2.52	0.62
1:CA:781:A:C2'	1:CA:782:A:H5'	2.30	0.62
54:BV:95:LEU:C	54:BV:95:LEU:HD23	2.19	0.62
57:DY:43:ASN:O	57:DY:44:ILE:HD12	1.98	0.62
33:B7:11:LYS:NZ	36:BA:686:G:H5'	2.14	0.62
36:DA:55:G:O2'	36:DA:127:A:H2	1.82	0.62
48:DP:130:PHE:N	48:DP:130:PHE:CD2	2.67	0.62
37:BB:115:G:H2'	37:BB:116:G:C8	2.34	0.62
36:DA:2352:A:C2'	36:DA:2353:G:H5'	2.30	0.62
9:AI:82:ALA:O	9:AI:85:LEU:HD12	1.99	0.62
46:DN:6:PRO:O	46:DN:9:VAL:HG23	2.00	0.62
27:B1:34:THR:HG22	27:B1:35:THR:N	2.14	0.62
2:CB:154:LEU:O	2:CB:156:LYS:N	2.33	0.62
1:CA:1298:C:P	7:CG:114:ARG:HH22	2.23	0.62
36:BA:2677:G:H2'	36:BA:2678:C:H6	1.65	0.62
15:AO:18:PHE:CD1	15:AO:18:PHE:O	2.53	0.62
36:DA:1362:C:C2'	36:DA:1363:C:H5'	2.30	0.62
36:DA:1362:C:O2'	36:DA:1363:C:H5'	1.99	0.62
1:AA:343:U:O2	1:AA:347:G:N1	2.32	0.62
17:CQ:8:GLY:HA3	17:CQ:22:LEU:O	1.99	0.62
57:BY:61:ILE:O	57:BY:62:GLU:HB2	2.00	0.62
36:BA:1855:G:H2'	36:BA:1856:G:H8	1.63	0.62
36:DA:1244:G:H4'	48:DP:11:GLY:HA2	1.80	0.62
5:CE:51:VAL:HB	5:CE:52:PRO:HD3	1.82	0.62
36:DA:2467:C:O2'	36:DA:2468:G:H5'	1.99	0.62
57:DY:46:LYS:HB2	57:DY:62:GLU:CD	2.20	0.62
57:DY:46:LYS:C	57:DY:47:LYS:HG3	2.20	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:261:LYS:HZ1	39:DD:263:ARG:HB2	1.65	0.62
48:DP:30:THR:HG22	48:DP:31:ALA:N	2.14	0.62
1:AA:275:G:O2'	1:AA:276:G:H5'	1.98	0.62
38:DC:186:ALA:O	38:DC:190:ARG:HG3	2.00	0.62
25:CZ:143:ASP:HB3	25:CZ:146:LEU:HB3	1.82	0.62
47:DO:2:ILE:CD1	47:DO:82:ASN:ND2	2.58	0.62
58:BZ:24:LEU:HD23	58:BZ:25:PRO:N	2.15	0.62
7:AG:31:MET:HG2	7:AG:32:ARG:H	1.63	0.62
36:BA:2444:G:P	41:BF:68:LYS:HE3	2.40	0.62
36:BA:2833:G:C3'	36:BA:2834:G:C5'	2.70	0.62
42:BG:28:VAL:HG12	42:BG:28:VAL:O	1.99	0.62
2:AB:87:ARG:NH2	2:AB:233:SER:N	2.47	0.62
2:CB:87:ARG:HH21	2:CB:233:SER:HB3	1.64	0.62
19:CS:9:VAL:O	19:CS:11:VAL:N	2.33	0.62
3:AC:120:VAL:HG12	3:AC:121:ALA:N	2.14	0.62
3:AC:142:MET:SD	3:AC:148:GLY:N	2.73	0.62
13:CM:23:TYR:HB3	13:CM:67:GLU:HB3	1.82	0.62
56:DX:35:THR:HG22	56:DX:37:THR:N	2.10	0.62
33:D7:26:GLY:O	33:D7:30:VAL:HG23	2.00	0.62
20:AT:67:ALA:HA	20:AT:72:LEU:O	1.99	0.62
7:AG:64:GLN:NE2	7:AG:68:ASN:ND2	2.47	0.62
36:BA:1057:A:H2'	36:BA:1058:G:O4'	2.00	0.62
43:BH:107:VAL:HG23	43:BH:152:ARG:HD3	1.80	0.62
55:BW:12:ILE:CG1	55:BW:42:ARG:HH12	2.13	0.62
36:DA:1551:C:H2'	36:DA:1552:G:H5'	1.81	0.62
1:AA:1152:A:H5''	10:AJ:13:HIS:HB2	1.81	0.62
36:BA:1783:A:C2	36:BA:2587:A:C2	2.88	0.62
1:AA:553:A:H2'	1:AA:554:C:C6	2.34	0.62
1:AA:775:G:H2'	1:AA:776:G:O4'	2.00	0.62
58:DZ:146:ILE:HG13	58:DZ:147:GLY:H	1.65	0.62
1:AA:522:C:H2'	1:AA:523:A:C8	2.34	0.62
1:AA:708:C:H2'	1:AA:709:G:H8	1.65	0.62
26:B0:30:VAL:HA	26:B0:65:GLY:C	2.20	0.62
36:DA:1909:C:H42	36:DA:1921:G:H1	1.48	0.62
39:DD:164:GLN:OE1	39:DD:176:ARG:NH2	2.33	0.62
6:AF:50:TYR:HB2	6:AF:51:PRO:HD2	1.80	0.62
10:AJ:45:ARG:NE	14:AN:36:PHE:CE2	2.68	0.62
36:DA:1186:G:H2'	36:DA:1187:G:O4'	2.00	0.62
34:D8:35:GLN:O	34:D8:36:LYS:HG3	2.00	0.62
27:D1:26:ARG:HD3	27:D1:27:GLU:OE2	2.00	0.62
36:BA:1438:U:H2'	36:BA:1439:A:C8	2.34	0.62
1:AA:242:C:H2'	1:AA:243:A:H5'	1.81	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:263:ARG:HH21	25:CZ:297:GLU:HB3	1.64	0.62
36:DA:2405:G:H2'	36:DA:2411:A:N6	2.13	0.62
36:BA:2389:G:H5''	36:BA:2390:U:C5'	2.29	0.62
48:BP:66:GLY:O	48:BP:67:MET:CB	2.47	0.62
48:DP:91:PHE:CE2	48:DP:95:VAL:HG12	2.35	0.62
28:D2:27:GLU:O	28:D2:28:LYS:C	2.37	0.62
36:DA:83:G:H5''	36:DA:84:A:OP2	2.00	0.62
12:AL:17:LYS:HD3	12:AL:18:VAL:HG22	1.82	0.62
5:CE:46:GLY:C	5:CE:47:LYS:HD3	2.19	0.62
36:DA:2762:G:H2'	36:DA:2763:G:H5'	1.82	0.62
4:AD:31:CYS:C	4:AD:33:MET:N	2.53	0.62
28:B2:37:PHE:O	28:B2:40:SER:HB2	1.99	0.62
50:BR:35:THR:HG23	50:BR:112:ALA:O	1.99	0.62
30:B4:8:LYS:O	30:B4:9:LEU:CB	2.48	0.62
46:DN:26:LEU:HG	46:DN:27:ALA:N	2.15	0.62
1:AA:115:G:H1'	1:AA:116:A:N7	2.15	0.62
1:AA:361:G:O2'	1:AA:362:G:H5'	1.98	0.62
4:CD:59:ARG:O	4:CD:63:LYS:HB2	2.00	0.62
1:CA:669:U:H2'	1:CA:670:G:H8	1.65	0.62
1:CA:741:G:H2'	1:CA:742:G:C8	2.32	0.62
36:DA:1519:G:H5'	36:DA:1520:G:OP2	1.99	0.62
58:BZ:52:SER:O	58:BZ:53:ILE:HG23	1.99	0.62
9:AI:11:LYS:C	9:AI:13:ALA:H	2.03	0.62
36:BA:1068:G:H1'	36:BA:1069:A:OP2	1.99	0.62
36:BA:328:U:H4'	57:BY:68:HIS:CD2	2.35	0.62
36:DA:2182:G:H2'	36:DA:2183:C:C6	2.34	0.62
1:CA:920:U:C1'	1:CA:1080:A:C2	2.82	0.62
3:CC:147:LYS:O	3:CC:203:PHE:HD2	1.81	0.62
27:B1:7:ILE:CG2	27:B1:8:SER:N	2.62	0.62
20:CT:64:ASP:O	20:CT:67:ALA:HB3	1.99	0.62
36:BA:1775:U:C2'	36:BA:1776:G:H5'	2.29	0.62
36:BA:1902:C:O2'	39:BD:244:ARG:HB2	2.00	0.62
39:BD:176:ARG:HG2	39:BD:176:ARG:HH11	1.65	0.62
39:BD:69:ARG:NH2	39:BD:192:THR:HB	2.15	0.62
36:DA:1570:A:H2'	36:DA:1571:A:C8	2.34	0.62
3:AC:26:LYS:HZ3	3:AC:27:LYS:HD2	1.65	0.62
36:DA:1247:A:OP2	48:DP:18:ARG:NH1	2.33	0.62
42:DG:96:ARG:O	42:DG:99:MET:N	2.32	0.62
38:BC:98:GLU:C	38:BC:100:ILE:N	2.53	0.62
13:AM:68:GLY:O	13:AM:72:ALA:HB3	2.00	0.62
57:BY:88:LYS:O	57:BY:89:PHE:HB2	1.99	0.62
7:AG:22:LEU:HD23	7:AG:22:LEU:O	1.98	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2312:U:H2'	36:DA:2313:C:C5'	2.29	0.62
1:AA:867:G:O2'	1:AA:868:C:H5'	2.00	0.62
38:BC:40:THR:HG23	38:BC:177:LYS:CD	2.30	0.62
1:CA:119:A:C4'	1:CA:120:A:O5'	2.45	0.62
1:CA:678:U:H2'	1:CA:679:C:O4'	1.99	0.62
1:CA:405:U:O2	1:CA:498:U:H2'	1.99	0.62
38:BC:120:MET:O	38:BC:123:VAL:HG12	1.99	0.62
40:BE:126:PRO:O	40:BE:128:SER:N	2.32	0.62
1:AA:775:G:O2'	1:AA:776:G:H5'	1.99	0.62
12:AL:90:VAL:HG22	12:AL:99:HIS:CE1	2.35	0.62
27:D1:19:GLN:OE1	27:D1:19:GLN:HA	1.99	0.62
36:DA:380:U:H2'	36:DA:381:G:C8	2.34	0.62
25:CZ:113:MET:O	25:CZ:116:THR:HB	2.00	0.62
17:AQ:52:LYS:HD2	17:AQ:52:LYS:H	1.64	0.62
1:AA:102:G:O2'	1:AA:103:C:H5'	2.00	0.62
17:AQ:86:GLU:O	17:AQ:90:ILE:HG12	1.99	0.62
35:D9:19:ARG:C	35:D9:21:GLY:H	2.04	0.62
36:BA:2413:G:H2'	36:BA:2414:G:H8	1.65	0.62
48:BP:24:GLY:CA	48:BP:33:ARG:NH1	2.63	0.62
34:D8:50:LEU:CD1	34:D8:51:ALA:H	2.06	0.62
36:DA:83:G:O2'	36:DA:84:A:C8	2.51	0.62
41:DF:102:PRO:O	41:DF:106:ARG:HG3	2.00	0.62
43:BH:52:VAL:HG21	43:BH:69:ARG:CB	2.29	0.62
4:AD:12:CYS:SG	4:AD:19:LEU:O	2.58	0.62
40:BE:47:VAL:HG21	40:BE:86:PRO:CD	2.29	0.62
42:BG:143:GLU:O	42:BG:144:ILE:C	2.39	0.62
36:DA:581:C:H2'	36:DA:582:G:H8	1.63	0.62
48:DP:40:SER:O	48:DP:41:ARG:HD2	1.99	0.62
1:AA:1117:G:N2	1:AA:1180:A:H1'	2.15	0.62
7:AG:138:LYS:O	7:AG:142:GLU:HG3	1.99	0.62
14:AN:42:ILE:HG22	14:AN:43:CYS:N	2.15	0.62
36:DA:2113:U:H2'	36:DA:2114:A:H8	1.65	0.62
31:B5:40:LYS:HD3	31:B5:44:THR:HB	1.80	0.62
3:AC:76:VAL:HG23	3:AC:77:ILE:HG13	1.81	0.62
49:DQ:67:ARG:HB2	49:DQ:102:VAL:O	2.00	0.62
58:DZ:31:ARG:HD3	58:DZ:32:HIS:NE2	2.14	0.62
36:BA:523:C:H2'	36:BA:524:U:C5'	2.26	0.62
40:DE:116:VAL:O	40:DE:117:MET:CB	2.48	0.62
42:DG:39:ILE:HG22	42:DG:157:ILE:HA	1.81	0.62
42:DG:12:TYR:HA	42:DG:16:ARG:CG	2.29	0.62
36:BA:1093:G:H4'	43:BH:170:ARG:HH12	1.63	0.62
1:AA:1255:G:H21	1:AA:1258:G:N2	1.97	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1074:G:O4'	2:CB:104:ASN:ND2	2.33	0.62
2:AB:166:ASP:O	2:AB:169:LYS:HB2	2.00	0.62
36:BA:2024:G:H2'	36:BA:2025:C:O4'	2.00	0.62
38:DC:100:ILE:HG23	38:DC:127:LEU:CG	2.29	0.62
1:AA:1128:C:H2'	1:AA:1139:G:O6	1.99	0.62
3:CC:58:GLU:N	3:CC:65:ALA:CB	2.60	0.62
1:AA:678:U:O2'	1:AA:679:C:H5'	2.00	0.62
58:DZ:177:PRO:O	58:DZ:178:GLU:OE1	2.18	0.62
36:BA:1169:G:H1	36:BA:1180:C:N4	1.98	0.62
36:DA:685:A:C2	36:DA:787:U:H1'	2.35	0.62
36:BA:2226:C:H2'	36:BA:2227:A:O4'	2.00	0.62
25:CZ:339:ARG:HE	25:CZ:352:VAL:HG22	1.65	0.62
36:BA:547:A:H2'	36:BA:548:A:C8	2.34	0.62
38:BC:106:GLY:O	38:BC:107:TRP:CB	2.47	0.62
36:BA:34:C:H41	36:BA:447:A:N6	1.98	0.62
11:CK:110:ASP:CB	18:CR:85:LEU:HD23	2.29	0.62
36:DA:2410:G:H2'	36:DA:2411:A:H8	1.63	0.62
36:DA:790:C:O2'	36:DA:791:C:OP1	2.17	0.62
36:DA:2367:G:O2'	36:DA:2368:C:H5'	1.99	0.62
25:AZ:385:ARG:HD3	63:AZ:502:KIR:H452	1.82	0.62
1:AA:767:A:H2'	1:AA:768:A:C8	2.35	0.62
7:CG:80:VAL:HG12	7:CG:81:GLY:N	2.13	0.62
1:CA:9:G:H1	1:CA:25:C:H42	1.46	0.62
36:BA:869:G:O2'	36:BA:870:A:H5'	2.00	0.62
36:BA:2605:U:H2'	36:BA:2606:C:C6	2.35	0.62
25:CZ:152:MET:HE2	25:CZ:156:ASP:HB2	1.80	0.62
36:BA:669:G:N2	36:BA:670:A:C2	2.68	0.61
36:DA:1651:G:H4'	50:DR:39:PRO:HG2	1.82	0.61
36:DA:2048:G:H1	36:DA:2620:C:N4	1.97	0.61
36:DA:2821:A:H61	50:DR:4:LEU:HD23	1.64	0.61
50:DR:35:THR:HG23	50:DR:112:ALA:O	2.00	0.61
48:DP:55:ARG:O	48:DP:57:THR:N	2.32	0.61
25:AZ:143:ASP:HB3	25:AZ:146:LEU:HB3	1.80	0.61
36:BA:2084:C:H2'	36:BA:2085:C:H6	1.64	0.61
36:BA:1818:U:H2'	39:BD:157:ARG:CG	2.30	0.61
58:DZ:108:PRO:C	58:DZ:110:GLY:H	2.04	0.61
36:BA:1654:A:C2	40:BE:113:PHE:CD2	2.88	0.61
36:DA:973:A:H5'	36:DA:1188:U:H1'	1.81	0.61
36:BA:227:A:H5''	48:BP:76:LYS:CE	2.16	0.61
8:CH:81:HIS:N	8:CH:81:HIS:ND1	2.48	0.61
9:CI:89:ASN:HB3	9:CI:92:TYR:CD1	2.36	0.61
8:AH:36:LEU:CD1	8:AH:59:LEU:HD13	2.29	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:DC:21:THR:HB	38:DC:228:SER:HB2	1.82	0.61
1:CA:737:A:OP1	6:CF:92:LYS:N	2.33	0.61
52:DT:52:ILE:HG12	52:DT:61:PHE:HB3	1.81	0.61
37:DB:82:G:H2'	37:DB:83:G:C8	2.35	0.61
14:CN:59:ALA:O	14:CN:60:SER:HB2	1.99	0.61
31:D5:40:LYS:HE2	31:D5:46:CYS:SG	2.40	0.61
4:CD:170:VAL:HG12	4:CD:171:GLY:H	1.65	0.61
3:AC:120:VAL:HG13	3:AC:124:ILE:HD11	1.81	0.61
10:AJ:65:LEU:HD22	14:AN:56:VAL:HG22	1.82	0.61
27:B1:11:ARG:CB	27:B1:11:ARG:CZ	2.78	0.61
36:BA:1693:U:H5'	36:BA:1693:U:H6	1.64	0.61
46:BN:23:LEU:HD12	46:BN:102:ALA:HB2	1.82	0.61
39:DD:27:THR:OG1	39:DD:83:GLU:HG2	2.00	0.61
40:DE:120:TRP:CG	40:DE:155:LYS:HE3	2.35	0.61
36:DA:472:A:H5'	36:DA:472:A:H8	1.65	0.61
9:AI:99:LEU:C	9:AI:101:PHE:H	2.03	0.61
2:AB:164:VAL:HG12	2:AB:165:VAL:N	2.14	0.61
21:AU:10:ARG:O	21:AU:13:ILE:N	2.33	0.61
38:DC:98:GLU:O	38:DC:100:ILE:N	2.33	0.61
36:BA:514:A:H2'	36:BA:515:A:C8	2.35	0.61
3:CC:40:ARG:CZ	3:CC:57:ILE:HD12	2.30	0.61
38:BC:30:LYS:HZ3	38:BC:30:LYS:HA	1.65	0.61
1:AA:726:C:H2'	1:AA:727:G:H8	1.65	0.61
38:BC:151:GLU:HA	38:BC:154:ARG:HD2	1.80	0.61
36:BA:1170:G:H22	36:BA:1179:C:N4	1.96	0.61
36:BA:2159:G:H2'	36:BA:2160:G:H5''	1.81	0.61
1:CA:137:C:O2	1:CA:137:C:H2'	1.98	0.61
6:AF:84:ASN:H	6:AF:84:ASN:ND2	1.97	0.61
1:AA:1318:A:H1'	19:AS:37:ARG:HH21	1.65	0.61
26:D0:4:LYS:HD3	36:DA:2252:G:O6	1.99	0.61
36:BA:2653:U:H3'	36:BA:2654:A:C8	2.35	0.61
1:AA:892:A:H2'	1:AA:893:C:C6	2.35	0.61
36:DA:1458:C:H4'	36:DA:1459:G:C5'	2.30	0.61
1:AA:1444:C:H2'	1:AA:1445:C:H6	1.62	0.61
37:BB:2:C:H2'	37:BB:3:C:H6	1.64	0.61
31:B5:39:MET:O	55:BW:38:TYR:HE2	1.83	0.61
17:AQ:26:GLN:O	17:AQ:27:PHE:HB3	1.99	0.61
34:B8:30:ARG:NH2	36:BA:2419:U:O4	2.33	0.61
36:BA:1188:U:O2'	36:BA:1189:A:H5'	2.00	0.61
36:BA:1258:C:O2'	36:BA:1259:G:H5'	1.99	0.61
36:BA:1882:C:H5'	36:BA:1883:G:OP2	1.99	0.61
36:BA:2007:C:H5'	36:BA:2824:C:C1'	2.30	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1654:A:H2	40:BE:113:PHE:CD2	2.18	0.61
30:B4:31:ILE:CG2	30:B4:33:VAL:HG23	2.29	0.61
36:DA:2777:G:C4'	36:DA:2778:A:H5'	2.29	0.61
1:AA:359:U:H2'	1:AA:360:A:H8	1.65	0.61
1:AA:59:A:H1'	1:AA:354:G:C2	2.34	0.61
1:CA:517:G:H5'	1:CA:519:C:O2	2.00	0.61
4:CD:29:PRO:C	4:CD:30:LYS:HG2	2.21	0.61
36:DA:1384:A:N3	36:DA:1405:U:H1'	2.16	0.61
13:CM:91:ARG:NH1	13:CM:96:LEU:HD13	2.15	0.61
13:AM:86:CYS:O	13:AM:89:GLY:N	2.25	0.61
52:BT:98:LYS:CG	52:BT:100:TYR:HE1	2.12	0.61
52:DT:16:ARG:HB2	52:DT:19:LEU:HD11	1.82	0.61
38:BC:195:ALA:O	38:BC:198:ALA:HB3	2.00	0.61
36:DA:328:U:H4'	57:DY:68:HIS:CD2	2.36	0.61
1:CA:1288:A:H1'	1:CA:1352:C:O2'	1.99	0.61
9:CI:11:LYS:C	9:CI:13:ALA:H	2.03	0.61
39:DD:81:ALA:HA	39:DD:113:VAL:HG21	1.83	0.61
19:AS:63:THR:HG22	19:AS:66:MET:CG	2.30	0.61
51:DS:29:PHE:HD2	51:DS:30:ARG:N	1.98	0.61
42:BG:165:THR:OG1	42:BG:168:GLU:HG3	1.99	0.61
36:DA:2101:G:H2'	36:DA:2102:U:C5'	2.30	0.61
36:DA:2176:A:H4'	38:DC:213:TYR:CD1	2.35	0.61
2:AB:200:ILE:HG22	2:AB:202:PRO:HD3	1.81	0.61
36:BA:1902:C:H1'	39:BD:244:ARG:HE	1.64	0.61
36:BA:1826:G:H4'	39:BD:242:ARG:HE	1.65	0.61
37:DB:8:U:H3	37:DB:113:G:H1	1.46	0.61
36:DA:1375:C:O2'	36:DA:1376:C:H5'	2.00	0.61
36:DA:1229:G:H2'	36:DA:1230:C:O4'	1.99	0.61
36:DA:445:C:H2'	36:DA:446:G:O4'	1.99	0.61
40:DE:34:VAL:O	40:DE:34:VAL:HG22	1.99	0.61
4:CD:131:ARG:H	4:CD:131:ARG:CD	2.09	0.61
49:BQ:20:ALA:N	58:BZ:79:ARG:NH2	2.48	0.61
25:CZ:99:MET:N	25:CZ:241:ARG:NH2	2.48	0.61
1:AA:1145:C:H1'	1:AA:1146:A:C8	2.34	0.61
3:CC:35:GLU:OE2	3:CC:59:ARG:NH1	2.28	0.61
1:AA:190:U:O2'	1:AA:191:G:H5'	1.99	0.61
2:AB:134:GLU:HA	2:AB:137:ARG:HB2	1.82	0.61
20:CT:45:GLN:HA	20:CT:91:LEU:HB3	1.82	0.61
2:AB:80:ILE:HD12	2:AB:80:ILE:N	2.10	0.61
36:DA:1605:C:C2'	36:DA:1606:G:H5'	2.30	0.61
6:AF:24:GLU:CG	6:AF:28:ARG:HH12	2.13	0.61
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.15	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:CF:24:GLU:CG	6:CF:28:ARG:HH12	2.12	0.61
36:BA:181:A:H2'	36:BA:182:A:O4'	1.99	0.61
1:CA:523:A:N1	12:CL:92:ASP:HB2	2.15	0.61
36:DA:2553:G:H2'	36:DA:2554:U:C4'	2.30	0.61
36:DA:959:A:O2'	36:DA:960:A:H5'	2.00	0.61
49:DQ:74:TYR:HD1	49:DQ:75:THR:N	1.98	0.61
47:DO:13:ASN:ND2	47:DO:97:ARG:HB2	2.15	0.61
5:CE:26:PHE:N	5:CE:26:PHE:CD1	2.67	0.61
47:BO:12:ASP:HA	47:BO:97:ARG:O	2.00	0.61
58:BZ:20:ARG:HB2	58:BZ:20:ARG:NH1	2.15	0.61
1:CA:200:G:H1	1:CA:217:C:H42	1.46	0.61
36:BA:2537:U:H2'	36:BA:2538:C:H6	1.66	0.61
1:AA:1005:A:OP2	1:AA:1006:C:N3	2.33	0.61
1:CA:1353:G:H2'	1:CA:1354:C:C6	2.34	0.61
36:BA:1907:G:O2'	36:BA:1908:C:H5'	1.99	0.61
36:BA:1866:C:H2'	36:BA:1876:A:O4'	2.00	0.61
23:CX:26:A:H2'	23:CX:26:A:N3	2.15	0.61
47:DO:22:ILE:HG12	47:DO:41:ALA:HA	1.82	0.61
6:CF:50:TYR:HB2	6:CF:51:PRO:HD2	1.82	0.61
36:DA:1652:A:C2'	36:DA:1653:G:H5'	2.30	0.61
36:DA:1817:G:C2'	36:DA:1818:U:H5'	2.30	0.61
34:D8:50:LEU:O	34:D8:53:PRO:HD2	2.00	0.61
57:DY:9:LYS:HE2	57:DY:94:LYS:HE2	1.81	0.61
12:AL:17:LYS:CD	12:AL:18:VAL:HG22	2.30	0.61
36:DA:226:G:H1	36:DA:418:G:H21	1.46	0.61
38:DC:71:GLN:HE22	38:DC:157:LYS:HD3	1.63	0.61
36:BA:695:G:OP1	36:BA:1380:G:C4'	2.46	0.61
58:DZ:109:ALA:HB3	58:DZ:144:LEU:O	2.01	0.61
42:DG:76:SER:HB3	42:DG:83:ARG:HB3	1.83	0.61
36:BA:600:G:H2'	36:BA:601:C:C6	2.35	0.61
43:DH:68:THR:HG22	43:DH:72:ILE:HG12	1.82	0.61
36:BA:1278:A:C2	36:BA:1293:C:N3	2.69	0.61
36:BA:1652:A:C2'	36:BA:1653:G:H5'	2.30	0.61
1:AA:355:C:H2'	1:AA:356:A:C8	2.30	0.61
1:CA:1047:G:O2'	1:CA:1048:G:H5'	2.00	0.61
4:CD:61:LYS:HE2	4:CD:65:ARG:HE	1.65	0.61
35:D9:12:ASP:C	35:D9:14:CYS:H	2.03	0.61
14:CN:59:ALA:HB1	14:CN:61:TRP:CZ3	2.33	0.61
57:BY:29:GLU:N	57:BY:29:GLU:OE1	2.33	0.61
42:BG:28:VAL:C	42:BG:31:VAL:HG12	2.20	0.61
56:DX:65:ARG:HH11	56:DX:65:ARG:HG2	1.65	0.61
36:DA:1826:G:C4'	39:DD:242:ARG:HH21	2.12	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:44:LEU:O	2:AB:47:THR:HB	2.00	0.61
36:BA:2121:G:H2'	36:BA:2122:U:C6	2.34	0.61
39:BD:241:PRO:O	39:BD:243:GLY:N	2.34	0.61
37:DB:18:G:H2'	37:DB:19:G:C1'	2.30	0.61
53:BU:65:ILE:HD11	53:BU:96:ALA:HB3	1.82	0.61
57:BY:9:LYS:CE	57:BY:94:LYS:HE2	2.29	0.61
36:DA:39:C:H2'	36:DA:40:C:C6	2.35	0.61
36:DA:2582:G:H2'	36:DA:2582:G:N3	2.15	0.61
42:DG:133:LEU:CD1	42:DG:157:ILE:HB	2.30	0.61
43:BH:97:ARG:HH21	43:BH:99:VAL:HG21	1.65	0.61
29:D3:26:LEU:HB2	29:D3:28:LEU:HD21	1.82	0.61
1:AA:826:C:H2'	1:AA:827:U:H6	1.64	0.61
55:BW:14:PRO:HG2	55:BW:78:GLU:CD	2.21	0.61
55:BW:14:PRO:HG3	55:BW:78:GLU:HB2	1.80	0.61
16:CP:52:ASP:OD1	16:CP:55:ARG:HG3	2.01	0.61
2:CB:204:ASN:ND2	2:CB:207:ALA:H	1.99	0.61
1:CA:676:A:H5''	11:CK:113:PRO:HB2	1.81	0.61
55:DW:14:PRO:HG3	55:DW:78:GLU:HB2	1.82	0.61
36:DA:2360:A:O2'	36:DA:2361:A:O4'	2.19	0.61
36:BA:534:U:O2'	53:BU:49:HIS:CD2	2.52	0.61
39:DD:73:VAL:HG13	39:DD:120:GLY:HA2	1.81	0.61
52:DT:53:ARG:HH11	52:DT:53:ARG:CB	2.13	0.61
1:AA:1320:C:H5''	19:AS:70:LYS:CG	2.29	0.61
12:AL:25:PRO:C	12:AL:27:LEU:N	2.52	0.61
36:BA:1042:G:C2	36:BA:1043:C:H1'	2.35	0.61
12:CL:92:ASP:C	12:CL:93:LEU:HD23	2.21	0.61
1:CA:1170:A:H2'	1:CA:1171:G:H5'	1.80	0.61
49:BQ:39:PRO:HD3	49:BQ:99:PRO:HG2	1.82	0.61
36:BA:955:C:C2'	36:BA:956:G:H5'	2.30	0.61
36:BA:956:G:N2	36:BA:959:A:H3'	2.16	0.61
22:AW:62:C:O2'	38:BC:53:ARG:HG2	2.00	0.61
36:BA:2297:C:O2'	36:BA:2298:A:H5'	2.00	0.61
3:AC:206:GLU:HG2	3:AC:207:VAL:H	1.66	0.61
51:DS:78:LEU:HD11	51:DS:103:GLU:HB2	1.82	0.61
1:CA:1147:C:H2'	9:CI:16:ARG:HD3	1.80	0.61
1:AA:1045:C:H2'	1:AA:1045:C:O2	1.99	0.61
36:BA:1702:G:H2'	36:BA:1703:G:O4'	2.00	0.61
32:B6:45:LYS:O	32:B6:46:HIS:HB3	1.99	0.61
36:BA:588:U:H1'	41:BF:90:PHE:CG	2.35	0.61
32:D6:15:GLU:OE1	32:D6:18:ARG:NE	2.33	0.61
34:D8:13:ARG:HD2	48:DP:61:ARG:HD2	1.81	0.61
48:DP:47:ASP:HB2	48:DP:51:PHE:HB2	1.82	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DF:24:LEU:CB	41:DF:25:PRO:CD	2.77	0.61
41:DF:43:LYS:HB3	41:DF:98:SER:HB2	1.81	0.61
28:B2:27:GLU:O	28:B2:30:ARG:N	2.32	0.61
36:BA:110:G:O2'	36:BA:111:A:H5'	2.00	0.61
36:DA:925:C:C3'	36:DA:926:A:H5''	2.29	0.61
36:BA:2620:C:H1'	40:BE:156:MET:HB2	1.83	0.61
50:BR:28:LEU:HD23	50:BR:29:LEU:N	2.15	0.61
30:B4:10:VAL:HG23	30:B4:11:PRO:CD	2.29	0.61
46:DN:33:LEU:N	46:DN:33:LEU:HD12	2.16	0.61
48:DP:24:GLY:CA	48:DP:33:ARG:NH1	2.63	0.61
36:DA:1190:G:H5'	48:DP:35:HIS:H	1.61	0.61
2:AB:222:ILE:O	2:AB:226:ARG:HB2	2.01	0.61
1:AA:250:A:H5''	1:AA:251:G:OP1	2.01	0.61
1:CA:1054:C:H6	1:CA:1196:U:C5	2.18	0.61
1:CA:665:A:H2'	1:CA:725:G:N2	2.15	0.61
36:DA:1343:G:N2	36:DA:1405:U:C2	2.69	0.61
1:AA:954:G:H4'	13:AM:120:LYS:CD	2.30	0.61
52:BT:65:LYS:O	52:BT:72:VAL:HG23	2.00	0.61
9:AI:108:VAL:HG12	9:AI:109:VAL:H	1.65	0.61
35:D9:14:CYS:HA	35:D9:26:ILE:O	2.00	0.61
1:CA:1117:G:N2	1:CA:1180:A:H1'	2.14	0.61
7:CG:113:GLU:CB	7:CG:119:ARG:HG2	2.30	0.61
39:DD:112:GLN:H	39:DD:115:GLN:HE22	1.45	0.61
22:AV:5:G:H2'	22:AV:6:G:C8	2.35	0.61
4:AD:85:LYS:HD3	4:AD:92:VAL:HG13	1.81	0.61
1:AA:1217:C:H2'	1:AA:1218:C:C6	2.35	0.61
55:DW:59:VAL:O	55:DW:63:ASP:N	2.29	0.61
31:B5:46:CYS:HB2	31:B5:47:PRO:HD2	1.82	0.61
36:BA:2101:G:H2'	36:BA:2102:U:C5'	2.30	0.61
27:B1:64:ALA:O	27:B1:67:ILE:HG13	2.01	0.61
36:DA:1465:G:H5'	36:DA:1528:A:C8	2.35	0.61
36:BA:36:G:H4'	36:BA:451:C:C2	2.34	0.61
58:DZ:10:ARG:CB	58:DZ:36:LYS:HB2	2.27	0.61
58:DZ:81:ARG:CB	58:DZ:81:ARG:CZ	2.79	0.61
16:CP:19:ILE:O	16:CP:36:ILE:HG13	2.01	0.61
42:DG:63:ILE:HG13	42:DG:64:THR:N	2.14	0.61
40:BE:116:VAL:O	40:BE:117:MET:CB	2.48	0.61
43:BH:116:GLU:HG3	43:BH:117:PRO:HD2	1.81	0.61
12:CL:119:LYS:O	12:CL:120:TYR:CB	2.48	0.61
1:AA:332:G:O2'	1:AA:333:G:H5'	2.00	0.61
38:DC:40:THR:HG22	38:DC:176:GLY:O	2.01	0.61
52:BT:106:SER:O	52:BT:107:ASP:CB	2.48	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:189(I):G:H2'	1:AA:189(J):G:C8	2.35	0.61
49:DQ:75:THR:HG21	49:DQ:87:LYS:NZ	2.15	0.61
1:AA:200:G:H2'	1:AA:201:C:C6	2.35	0.61
1:CA:1354:C:H2'	1:CA:1355:G:O4'	2.00	0.61
1:AA:286:G:O2'	1:AA:287:U:H5'	2.00	0.61
17:CQ:10:VAL:HG23	17:CQ:55:ASP:O	2.00	0.61
1:AA:1234:C:O2'	1:AA:1235:U:H5'	2.00	0.61
49:DQ:96:VAL:HG12	49:DQ:96:VAL:O	2.01	0.61
1:AA:633:G:H5'	1:AA:634:C:OP2	1.99	0.61
43:DH:169:VAL:O	43:DH:171:LEU:N	2.34	0.61
36:DA:1269:A:H61	36:DA:2011:U:H3	1.46	0.61
36:DA:1654:A:H2	40:DE:113:PHE:CD2	2.19	0.61
34:D8:28:GLY:CA	34:D8:32:LEU:HD23	2.31	0.61
34:D8:62:LEU:CD1	36:DA:242:G:H3'	2.28	0.61
36:DA:1242:A:H3'	36:DA:1243:G:H8	1.65	0.61
56:BX:29:TRP:CZ3	56:BX:78:LYS:HD2	2.35	0.61
35:D9:1:MET:SD	36:DA:2477:C:C2'	2.88	0.61
35:D9:1:MET:SD	36:DA:2477:C:H3'	2.40	0.61
36:DA:944:G:H5'	36:DA:945:A:O5'	2.00	0.61
53:DU:76:TYR:CE2	53:DU:80:ILE:HG13	2.35	0.61
54:DV:19:LYS:HB2	54:DV:96:ILE:HD11	1.81	0.61
1:CA:1181:G:O2'	1:CA:1182:G:H5'	2.00	0.61
32:D6:26:ASN:O	32:D6:27:LYS:HB2	2.01	0.61
47:DO:63:VAL:HG23	47:DO:64:ARG:HG3	1.81	0.61
47:DO:71:ARG:HB3	47:DO:72:PRO:HD2	1.82	0.61
52:DT:75:ILE:HD12	52:DT:75:ILE:N	2.16	0.61
58:BZ:57:ILE:N	58:BZ:57:ILE:HD12	2.15	0.61
36:BA:1519:G:H5'	36:BA:1520:G:OP2	2.01	0.61
36:BA:1515:G:H4'	36:BA:1556:C:O2'	1.99	0.61
1:CA:947:G:H2'	1:CA:948:C:C6	2.35	0.61
39:DD:224:ALA:HB2	39:DD:233:HIS:CB	2.23	0.61
36:DA:1902:C:H1'	39:DD:244:ARG:NE	2.16	0.61
2:AB:87:ARG:HH21	2:AB:233:SER:HB3	1.65	0.61
4:CD:189:PRO:HB2	4:CD:194:LEU:CD2	2.28	0.61
3:AC:15:THR:CG2	3:AC:181:ASN:HA	2.30	0.61
49:DQ:141:GLN:O	58:DZ:53:ILE:HB	2.01	0.61
58:DZ:12:GLY:HA3	58:DZ:36:LYS:NZ	2.15	0.61
37:DB:105:A:H4'	58:DZ:89:PHE:CE2	2.36	0.61
46:BN:35:ARG:HH21	46:BN:42:TRP:HH2	1.47	0.61
39:BD:81:ALA:HA	39:BD:113:VAL:HG22	1.82	0.61
39:DD:24:ILE:HD13	39:DD:25:THR:N	2.14	0.61
36:DA:428:A:H3'	36:DA:429:A:H8	1.65	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DG:114:ILE:O	42:DG:114:ILE:CG2	2.47	0.61
42:DG:32:PRO:CA	42:DG:162:THR:HB	2.31	0.61
36:BA:1093:G:H4'	43:BH:170:ARG:NH1	2.15	0.61
43:DH:19:VAL:HG12	43:DH:20:ALA:H	1.65	0.61
1:AA:758:G:H8	1:AA:758:G:O5'	1.84	0.61
43:DH:116:GLU:HG3	43:DH:117:PRO:HD2	1.82	0.61
36:BA:45:C:H42	36:BA:179:G:H1	1.49	0.61
36:DA:1550:C:H2'	36:DA:1551:C:C6	2.36	0.61
2:CB:32:ILE:HG12	2:CB:33:TYR:N	2.16	0.61
20:AT:63:ILE:HG22	20:AT:77:ALA:HB1	1.82	0.61
59:CA:1601:PAR:H642	59:CA:1601:PAR:H43	1.81	0.61
1:CA:41:G:H2'	1:CA:42:G:H8	1.64	0.61
36:DA:1328:G:C2	36:DA:1647:G:N2	2.68	0.61
6:CF:99:ALA:O	6:CF:100:ASN:HB2	2.01	0.61
36:DA:2689:U:H4'	36:DA:2690:C:H6	1.64	0.61
1:AA:886:G:H2'	1:AA:887:G:O4'	2.00	0.61
36:BA:384:U:H2'	36:BA:385:C:H6	1.66	0.61
17:CQ:29:HIS:CG	17:CQ:30:PRO:HD2	2.35	0.61
25:CZ:263:ARG:HB2	25:CZ:263:ARG:CZ	2.31	0.61
8:CH:2:LEU:HD22	8:CH:3:THR:H	1.65	0.61
11:AK:110:ASP:HB3	18:AR:85:LEU:HD23	1.81	0.61
48:DP:71:VAL:HG13	48:DP:72:PRO:HD3	1.82	0.61
12:AL:119:LYS:O	12:AL:120:TYR:CG	2.53	0.61
1:CA:849:C:H2'	1:CA:850:U:O4'	1.99	0.61
16:AP:45:THR:C	16:AP:47:ASP:H	2.01	0.61
30:B4:46:GLN:HG3	30:B4:47:GLN:N	2.14	0.61
36:BA:697:C:O2'	36:BA:698:C:H5'	2.00	0.61
36:DA:869:G:O2'	36:DA:870:A:H5'	1.99	0.61
28:D2:53:LEU:CA	28:D2:56:GLN:HB2	2.31	0.61
41:DF:36:VAL:O	41:DF:39:TRP:HB3	2.01	0.61
5:CE:100:VAL:CG2	5:CE:107:ARG:HH21	2.09	0.61
36:BA:1824:G:H5''	39:BD:52:ARG:HH11	1.66	0.61
43:DH:61:HIS:O	43:DH:63:SER:N	2.33	0.61
36:BA:2482:G:N2	49:BQ:52:VAL:HG11	2.12	0.61
50:BR:57:ARG:O	50:BR:59:ASP:N	2.33	0.61
2:AB:82:ARG:O	2:AB:86:GLU:HG3	1.99	0.61
51:BS:17:ARG:HA	51:BS:20:ARG:NH1	2.16	0.61
51:BS:96:GLY:C	51:BS:98:VAL:H	2.02	0.61
36:BA:1999:C:H5''	36:BA:2723:C:O2'	2.00	0.61
52:BT:52:ILE:HG12	52:BT:61:PHE:CB	2.30	0.61
38:BC:45:ALA:O	38:BC:171:ILE:HG22	2.00	0.61
57:DY:81:LYS:HG2	57:DY:96:ILE:HB	1.81	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:D9:10:ILE:O	35:D9:11:CYS:SG	2.58	0.61
7:CG:121:ALA:O	7:CG:124:LEU:N	2.34	0.61
22:CV:51:U:H2'	22:CV:52:G:C8	2.35	0.61
51:DS:36:TYR:HD1	51:DS:36:TYR:H	1.48	0.61
36:BA:2302:G:H3'	36:BA:2303:G:C8	2.32	0.61
36:DA:2189:U:H2'	36:DA:2190:G:H4'	1.82	0.61
35:B9:14:CYS:HA	35:B9:26:ILE:O	2.00	0.61
39:DD:243:GLY:O	39:DD:244:ARG:HB3	2.01	0.61
3:AC:105:GLU:HG2	3:AC:106:VAL:H	1.66	0.61
3:AC:68:VAL:HG12	3:AC:70:VAL:HG23	1.81	0.61
16:CP:8:ARG:HG2	16:CP:8:ARG:HH11	1.66	0.61
36:DA:1541:G:H4'	36:DA:1542:A:O5'	2.01	0.61
1:CA:167:G:H2'	1:CA:168:G:C8	2.35	0.61
36:BA:36:G:O2'	36:BA:37:C:H5'	2.01	0.61
36:BA:21:A:O2'	36:BA:22:C:H5'	2.01	0.61
39:BD:130:ALA:HB2	39:BD:192:THR:HB	1.83	0.61
57:DY:86:ARG:HD2	57:DY:88:LYS:HE3	1.83	0.61
42:DG:100:TRP:O	42:DG:102:PHE:N	2.34	0.61
42:DG:167:GLU:O	42:DG:170:ARG:HB3	2.01	0.61
38:BC:100:ILE:HG23	38:BC:127:LEU:CD1	2.30	0.61
24:CY:24:G:H2'	24:CY:25:C:C6	2.36	0.61
42:DG:42:GLY:HA2	42:DG:89:GLY:HA2	1.82	0.61
2:CB:132:LYS:HA	2:CB:135:GLN:HB2	1.82	0.61
10:CJ:65:LEU:HD22	14:CN:56:VAL:HG22	1.82	0.61
1:CA:1128:C:H2'	1:CA:1139:G:O6	2.00	0.61
1:AA:44:G:OP2	16:AP:12:LYS:HE3	2.00	0.61
20:CT:100:ILE:HG22	20:CT:100:ILE:O	2.00	0.61
37:BB:18:G:H2'	37:BB:19:G:C1'	2.30	0.61
49:DQ:51:ARG:O	49:DQ:55:VAL:HG12	1.99	0.61
4:AD:23:GLY:HA3	4:AD:112:VAL:HG22	1.82	0.61
54:BV:14:VAL:HB	54:BV:96:ILE:HG21	1.83	0.61
1:AA:194:C:O2'	1:AA:195:A:H4'	2.01	0.61
24:CY:54:5MU:OP2	24:CY:54:5MU:H71	2.00	0.61
36:DA:2131:G:H4'	36:DA:2132:U:OP2	2.00	0.61
2:AB:32:ILE:HG12	2:AB:33:TYR:N	2.16	0.61
19:AS:6:LYS:HD2	19:AS:6:LYS:N	2.16	0.61
25:CZ:286:VAL:CG2	25:CZ:287:GLY:N	2.63	0.61
1:AA:523:A:N6	12:AL:53:ARG:HH12	1.98	0.61
22:AW:53:G:N2	22:AW:62:C:N4	2.48	0.61
18:CR:79:LEU:HD23	18:CR:80:PRO:HD2	1.81	0.61
49:BQ:79:LEU:CD2	49:BQ:80:GLU:HG3	2.31	0.61
36:DA:1994:C:O2'	36:DA:1995:U:H5'	1.99	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:654(E):G:O2'	36:BA:654(F):C:H5'	2.00	0.61
36:BA:654(J):A:C8	36:BA:654(L):G:H8	2.18	0.61
36:DA:1812:A:C1'	39:DD:46:GLN:HE22	2.14	0.61
34:D8:30:ARG:O	34:D8:31:HIS:HB3	2.00	0.61
1:AA:1054:C:N4	24:AY:34:G:O2'	2.32	0.61
36:DA:2043:C:H42	36:DA:2625:G:H1	1.48	0.61
1:CA:973:G:C1'	10:CJ:55:LYS:HE2	2.31	0.61
51:BS:36:TYR:HD1	51:BS:36:TYR:H	1.49	0.61
32:D6:8:LYS:O	32:D6:27:LYS:HA	2.00	0.61
48:BP:79:ARG:O	48:BP:110:TYR:HB3	1.99	0.61
25:CZ:149:LEU:HD12	25:CZ:149:LEU:O	2.01	0.61
36:BA:2811:G:P	40:BE:60:ASN:HB2	2.41	0.61
52:DT:117:ASP:OD2	52:DT:120:ARG:HG3	2.01	0.61
58:BZ:165:VAL:CG1	58:BZ:166:SER:N	2.60	0.61
36:BA:2733:A:O2'	36:BA:2734:A:H5'	2.01	0.61
36:DA:2123:G:H1'	38:DC:172:HIS:HB3	1.83	0.61
1:CA:15:G:H4'	5:CE:24:ARG:HH21	1.65	0.61
22:AW:17:C:N4	36:BA:2110:G:N2	2.44	0.61
3:CC:122:GLU:O	3:CC:125:GLU:N	2.33	0.61
36:BA:444:C:OP2	41:BF:49:ALA:HB2	2.00	0.61
4:AD:131:ARG:N	4:AD:131:ARG:HD3	2.11	0.61
1:AA:1126:U:O2'	1:AA:1127:G:H5'	2.00	0.61
1:CA:1145:C:H1'	1:CA:1146:A:C8	2.35	0.61
20:AT:38:LYS:O	20:AT:42:GLN:HB2	2.01	0.61
48:BP:39:LYS:CE	48:BP:42:SER:HB3	2.30	0.61
1:AA:55:A:H2'	25:AZ:232:THR:CG2	2.30	0.61
5:CE:142:LEU:O	5:CE:143:ARG:HD3	2.00	0.61
10:AJ:75:ILE:HG13	10:AJ:76:ASN:H	1.66	0.61
36:DA:201:C:H2'	36:DA:202:U:H5'	1.82	0.61
36:BA:2043:C:H42	36:BA:2625:G:H1	1.48	0.61
36:BA:2199:A:H3'	36:BA:2200:C:H6	1.65	0.61
57:BY:2:ARG:C	57:BY:4:LYS:H	2.03	0.61
1:CA:125:U:H2'	1:CA:126:G:H8	1.66	0.61
36:BA:1458:C:H4'	36:BA:1459:G:C5'	2.29	0.61
36:DA:547:A:H2'	36:DA:548:A:C8	2.36	0.61
1:CA:1255:G:H21	1:CA:1258:G:N2	1.97	0.61
30:D4:5:ILE:H	30:D4:5:ILE:HD13	1.66	0.61
36:BA:874:G:H2'	36:BA:875:G:H8	1.64	0.61
17:CQ:52:LYS:H	17:CQ:52:LYS:HD2	1.66	0.61
4:AD:155:LEU:O	4:AD:159:ARG:HG2	2.01	0.61
19:CS:24:ALA:O	19:CS:25:LYS:HB2	2.00	0.61
1:AA:728:A:H2'	1:AA:729:A:C8	2.35	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1331:A:HO2'	36:BA:1332:G:H8	1.48	0.61
17:CQ:26:GLN:O	17:CQ:27:PHE:HB3	1.99	0.61
32:D6:12:GLU:HG2	32:D6:54:ILE:HG21	1.81	0.61
34:D8:3:LYS:HD3	36:DA:242:G:C5'	2.31	0.61
36:BA:2087:G:O2'	36:BA:2088:G:H5'	2.00	0.61
38:DC:113:VAL:HG21	38:DC:136:LEU:HB3	1.83	0.61
36:BA:2048:G:H1	36:BA:2620:C:N4	1.98	0.61
13:AM:15:VAL:HG23	13:AM:16:ASP:H	1.66	0.61
54:DV:14:VAL:HB	54:DV:96:ILE:HG21	1.82	0.61
51:BS:69:VAL:O	51:BS:73:LEU:HB2	2.01	0.61
41:DF:195:ASP:HB3	41:DF:198:ALA:HB3	1.83	0.61
7:AG:69:VAL:HA	7:AG:138:LYS:CD	2.24	0.61
1:CA:1348:U:H4'	9:CI:120:ARG:CD	2.28	0.61
3:CC:120:VAL:HG13	3:CC:124:ILE:HD11	1.82	0.61
3:AC:187:ALA:HB3	3:AC:198:VAL:HB	1.83	0.61
36:DA:1099:G:H2'	36:DA:1100:C:H6	1.65	0.61
1:AA:1475:G:H4'	36:BA:1689:A:H4'	1.82	0.61
36:BA:1826:G:H4'	39:BD:242:ARG:HH21	1.64	0.61
9:AI:48:GLU:HB3	9:AI:101:PHE:HE2	1.65	0.61
1:AA:319:G:O2'	1:AA:320:C:H5'	2.00	0.61
38:BC:206:GLY:HA3	38:BC:210:ARG:NH2	2.11	0.61
3:CC:58:GLU:HB2	3:CC:65:ALA:HB2	1.82	0.61
36:BA:2263:C:O2'	36:BA:2264:C:H5'	2.00	0.61
2:AB:132:LYS:HA	2:AB:135:GLN:HB2	1.82	0.61
36:DA:2801(A):A:C4'	36:DA:2802:G:H5'	2.31	0.61
2:AB:204:ASN:ND2	2:AB:204:ASN:C	2.54	0.61
31:D5:16:ARG:NH1	31:D5:20:ARG:NH1	2.49	0.61
36:BA:2131:G:O4'	36:BA:2133:G:N2	2.31	0.61
36:BA:6:A:H2'	36:BA:7:G:C8	2.36	0.61
37:DB:5:C:H2'	37:DB:6:C:H6	1.66	0.61
25:CZ:321:TYR:CE2	25:CZ:323:LEU:HD12	2.36	0.61
1:CA:522:C:H2'	1:CA:523:A:C8	2.35	0.61
12:CL:90:VAL:HG22	12:CL:99:HIS:CE1	2.35	0.61
55:BW:72:LYS:O	55:BW:73:ALA:HB2	2.01	0.61
1:CA:106:C:C2'	1:CA:107:G:H5'	2.30	0.61
12:AL:92:ASP:C	12:AL:93:LEU:HD23	2.20	0.61
36:BA:549:G:O2'	36:BA:551:G:H5'	1.99	0.61
36:DA:2756:U:H4'	36:DA:2757:A:O5'	2.00	0.61
36:DA:955:C:H2'	36:DA:956:G:H5'	1.83	0.61
12:AL:41:ARG:HH12	12:AL:57:LYS:NZ	1.98	0.61
34:B8:35:GLN:O	34:B8:36:LYS:HG3	2.01	0.61
36:DA:2562:U:H2'	36:DA:2563:U:H5'	1.82	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1148:U:H4'	9:AI:14:VAL:HG11	1.81	0.61
1:CA:592:G:H2'	1:CA:593:G:H8	1.66	0.61
36:BA:483:A:O3'	57:BY:49:VAL:HG22	2.01	0.61
36:DA:2476:A:H2	36:DA:2477:C:C5	2.18	0.61
28:B2:30:ARG:HA	56:BX:5:TYR:CD2	2.36	0.61
27:D1:62:VAL:HG21	27:D1:67:ILE:CA	2.14	0.61
36:DA:564:C:O2'	36:DA:565:C:H5'	2.00	0.61
36:DA:819:A:H2'	36:DA:820:A:C5'	2.31	0.61
53:DU:66:ASN:HB2	53:DU:76:TYR:HB2	1.83	0.61
54:DV:38:LEU:HD23	54:DV:39:LEU:N	2.15	0.61
1:CA:968:A:O2'	1:CA:969:A:OP1	2.19	0.61
2:CB:166:ASP:O	2:CB:169:LYS:HB2	2.00	0.61
40:BE:31:CYS:HB2	40:BE:49:LEU:HD12	1.83	0.61
1:CA:739:C:O2'	1:CA:740:U:H5'	2.01	0.61
32:B6:8:LYS:HA	32:B6:27:LYS:HD3	1.81	0.61
5:AE:50:GLU:HA	5:AE:50:GLU:OE2	2.00	0.61
25:CZ:137:LYS:HE2	62:CZ:501:GDP:C4	2.36	0.61
25:CZ:32:THR:O	25:CZ:33:TYR:C	2.38	0.61
36:BA:2892:A:N6	36:BA:2893:G:H21	1.89	0.61
40:DE:23:VAL:HA	40:DE:184:VAL:O	2.01	0.61
58:DZ:165:VAL:HG12	58:DZ:167:PRO:HA	1.81	0.61
7:CG:28:ASN:O	7:CG:31:MET:HB3	2.00	0.61
42:BG:131:TYR:HB3	42:BG:159:VAL:CG1	2.31	0.61
1:AA:16:A:N1	1:AA:919:A:H2	1.99	0.61
55:DW:72:LYS:O	55:DW:73:ALA:HB2	2.01	0.61
31:B5:43:HIS:HE1	36:BA:2816:C:H1'	1.65	0.61
25:AZ:221:PHE:O	25:AZ:222:LEU:HB2	2.01	0.61
25:AZ:99:MET:N	25:AZ:241:ARG:NH2	2.48	0.61
19:CS:63:THR:CG2	19:CS:66:MET:HG2	2.31	0.61
8:AH:30:ARG:CB	8:AH:30:ARG:HH11	2.13	0.61
36:BA:39:C:H2'	36:BA:40:C:C6	2.35	0.61
36:DA:2302:G:H3'	36:DA:2303:G:C8	2.33	0.61
14:AN:3:ARG:HG2	14:AN:3:ARG:O	2.01	0.61
36:DA:2787:C:H2'	36:DA:2787:C:O2	2.00	0.61
49:BQ:29:PHE:HB2	49:BQ:105:GLU:OE2	2.00	0.61
24:AY:6:U:C3'	24:AY:7:A:H5''	2.31	0.61
1:CA:1152:A:H5''	10:CJ:13:HIS:HB2	1.83	0.61
1:AA:1101:A:H4'	1:AA:1102:A:O5'	2.00	0.61
36:DA:958:U:O4	49:DQ:17:LEU:HD21	2.01	0.61
1:AA:1239:A:N6	1:AA:1299:A:N6	2.48	0.61
36:BA:2248:C:C2'	36:BA:2249:U:H5'	2.30	0.61
36:BA:2275:C:H6	36:BA:2275:C:OP1	1.83	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:442:G:N3	41:DF:48:THR:HG21	2.16	0.61
54:BV:18:LEU:HD23	54:BV:19:LYS:N	2.16	0.61
36:DA:774:A:H2	36:DA:787:U:O2'	1.83	0.61
1:AA:1312:G:H2'	1:AA:1313:U:H6	1.66	0.61
36:BA:1779:U:C5	36:BA:1784:A:N7	2.69	0.61
36:BA:848:G:N3	36:BA:933:A:H1'	2.15	0.61
50:BR:83:ILE:HA	50:BR:86:ARG:HD3	1.81	0.61
58:BZ:144:LEU:N	58:BZ:144:LEU:HD22	2.15	0.61
36:BA:205:G:H1'	36:BA:206:U:H5	1.66	0.61
1:AA:687:A:H1'	1:AA:688:G:OP2	2.01	0.61
25:CZ:19:HIS:HD2	25:CZ:115:GLN:H	1.47	0.61
25:CZ:188:THR:HG23	25:CZ:192:GLU:OE2	2.01	0.61
1:CA:1356:G:O2'	1:CA:1357:A:H5'	2.01	0.61
11:CK:41:THR:HG21	11:CK:72:ALA:HA	1.82	0.61
4:CD:162:LEU:O	4:CD:162:LEU:HD13	1.99	0.61
53:BU:102:GLU:CB	53:BU:105:VAL:HB	2.31	0.61
1:AA:1081:G:H2'	1:AA:1082:G:H8	1.65	0.61
25:CZ:355:LEU:HD22	25:CZ:359:VAL:CB	2.29	0.61
32:B6:14:THR:O	32:B6:49:HIS:HA	2.00	0.61
48:BP:30:THR:HG22	48:BP:31:ALA:N	2.14	0.61
25:AZ:137:LYS:HA	62:AZ:501:GDP:N1	2.16	0.61
56:BX:11:PRO:HG2	56:BX:13:LEU:CG	2.31	0.61
36:DA:2475:C:H2'	36:DA:2477:C:OP1	2.01	0.61
1:AA:1470:G:C2'	1:AA:1471:G:H8	1.99	0.61
38:DC:75:LEU:HB3	38:DC:93:TYR:HD2	1.66	0.61
36:BA:619:G:H3'	36:BA:620:G:N2	2.15	0.61
36:BA:2529:G:H5''	36:BA:2530:A:H5''	1.82	0.61
2:CB:189:ASP:HB3	2:CB:203:GLY:O	2.01	0.61
36:BA:2724:C:H2'	36:BA:2725:A:C8	2.36	0.61
38:BC:47:LEU:HD11	38:BC:171:ILE:HG22	1.83	0.61
58:BZ:10:ARG:HG2	58:BZ:12:GLY:H	1.66	0.61
36:DA:344:G:OP2	36:DA:344:G:H3'	2.01	0.61
36:DA:329:G:N2	57:DY:19:LYS:HE3	2.15	0.61
1:AA:1353:G:H2'	1:AA:1354:C:C6	2.35	0.61
1:AA:1354:C:H2'	1:AA:1355:G:O4'	2.01	0.61
1:AA:1372:U:H5''	9:AI:71:SER:CB	2.30	0.61
7:CG:42:ILE:HG23	7:CG:117:ALA:CA	2.29	0.61
10:CJ:50:ILE:HA	10:CJ:60:ARG:CB	2.30	0.61
26:B0:48:GLY:H	26:B0:51:VAL:HB	1.65	0.61
36:BA:1343:G:C2'	36:BA:1344:G:H5'	2.30	0.61
36:DA:496:G:C1'	55:DW:61:ASN:HD22	2.13	0.61
19:CS:52:TYR:O	19:CS:53:ASN:HB3	2.01	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:39:ILE:HG22	2:CB:40:HIS:N	2.16	0.61
58:DZ:73:GLN:H	58:DZ:87:ASP:HB2	1.66	0.61
16:CP:20:VAL:HA	16:CP:36:ILE:CG1	2.31	0.61
36:DA:1199:U:H2'	36:DA:1200:C:C6	2.35	0.61
36:DA:1223:G:N2	36:DA:1225:G:H3'	2.16	0.61
36:DA:744:G:OP1	40:DE:132:HIS:HB3	2.01	0.61
36:DA:464:U:O2'	36:DA:465:G:H5'	2.01	0.61
42:DG:131:TYR:HB3	42:DG:159:VAL:HG12	1.81	0.61
7:AG:61:VAL:O	7:AG:62:PHE:C	2.39	0.61
4:CD:131:ARG:HD3	4:CD:131:ARG:N	2.10	0.61
51:BS:106:ARG:HD2	51:BS:107:GLU:C	2.21	0.61
36:BA:907:U:OP1	49:BQ:24:GLY:N	2.33	0.61
27:D1:25:LYS:HD2	36:DA:388:G:C4'	2.27	0.61
58:DZ:69:THR:C	58:DZ:70:LEU:HD23	2.21	0.61
1:CA:1239:A:N6	1:CA:1299:A:N6	2.47	0.61
55:DW:12:ILE:CG1	55:DW:42:ARG:HH12	2.13	0.61
58:DZ:177:PRO:C	58:DZ:178:GLU:OE1	2.39	0.61
36:DA:1345:C:C2'	36:DA:1346:G:H5'	2.31	0.61
1:CA:194:C:O2'	1:CA:195:A:H4'	2.01	0.61
36:DA:1845:G:O2'	36:DA:1846:G:H5'	2.01	0.61
36:BA:2579:C:O2'	40:BE:131:ALA:HB2	2.01	0.61
36:BA:795:C:H2'	36:BA:796:C:H6	1.64	0.61
24:CY:13:C:O2'	24:CY:14:A:H5''	2.00	0.61
36:BA:203:C:C3'	36:BA:204:A:H5''	2.28	0.61
1:AA:106:C:O2'	1:AA:107:G:H5'	1.99	0.61
11:CK:38:ASN:N	11:CK:38:ASN:ND2	2.43	0.61
47:BO:7:TYR:HA	47:BO:19:ILE:O	2.01	0.61
1:AA:708:C:O2'	1:AA:709:G:H5'	2.01	0.61
36:DA:2297:C:O2'	36:DA:2298:A:H5'	2.00	0.61
41:DF:45:ARG:CZ	41:DF:97:TYR:CE1	2.84	0.61
54:BV:99:ILE:N	54:BV:99:ILE:HD13	2.16	0.61
46:BN:65:LYS:HB3	46:BN:65:LYS:NZ	2.16	0.61
27:B1:41:ARG:NH1	36:BA:1365:A:O4'	2.26	0.60
36:BA:572:A:H5'	54:BV:78:LYS:NZ	2.15	0.60
31:D5:5:PRO:HA	36:DA:2056:G:N2	2.15	0.60
36:DA:2403:C:N4	36:DA:2414:G:H1	1.96	0.60
25:AZ:171:ILE:CG1	25:AZ:201:GLU:HB3	2.29	0.60
36:DA:1202:C:C2'	36:DA:1203:G:H5'	2.30	0.60
56:BX:12:VAL:HG12	56:BX:27:THR:O	2.01	0.60
39:BD:27:THR:O	39:BD:27:THR:HG23	2.01	0.60
41:DF:61:GLY:HA2	41:DF:77:ASP:HB3	1.83	0.60
41:BF:43:LYS:HB3	41:BF:98:SER:HB2	1.81	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1403:C:H5''	36:DA:1471:A:C1'	2.31	0.60
1:CA:954:G:H4'	13:CM:120:LYS:CD	2.30	0.60
1:AA:946:A:H2'	1:AA:947:G:C8	2.37	0.60
36:BA:2773:C:O3'	40:BE:164:ARG:HB3	2.01	0.60
36:BA:2807:G:H3'	36:BA:2808:U:C5'	2.22	0.60
57:DY:29:GLU:OE1	57:DY:29:GLU:N	2.34	0.60
7:AG:69:VAL:CG1	7:AG:104:LEU:HD21	2.25	0.60
7:AG:5:ARG:O	7:AG:7:ALA:N	2.34	0.60
1:AA:669:U:H2'	1:AA:670:G:H8	1.65	0.60
36:BA:2675:A:H5'	47:BO:31:LYS:NZ	2.16	0.60
36:DA:1709:U:H2'	36:DA:1710:C:C6	2.36	0.60
1:CA:1376:U:H2'	1:CA:1377:A:C8	2.36	0.60
1:CA:1372:U:H5''	9:CI:71:SER:CB	2.31	0.60
36:DA:2110:G:H22	36:DA:2178:C:N4	1.96	0.60
1:CA:1426:C:N3	1:CA:1475:G:C6	2.69	0.60
3:AC:58:GLU:HB2	3:AC:65:ALA:HB2	1.83	0.60
36:BA:2230:G:H2'	36:BA:2231:C:C6	2.36	0.60
16:AP:19:ILE:O	16:AP:36:ILE:HG13	2.01	0.60
1:CA:1000:U:H2'	1:CA:1001:A:H8	1.65	0.60
36:BA:1012:U:C5	46:BN:28:THR:HG21	2.36	0.60
39:BD:95:LEU:HD12	39:BD:103:ARG:O	2.00	0.60
36:DA:1640:C:O2'	36:DA:1641:A:H5'	2.01	0.60
40:DE:132:HIS:HA	40:DE:135:HIS:HE1	1.63	0.60
42:BG:41:GLN:HB3	42:BG:43:LEU:HD21	1.83	0.60
42:DG:120:LEU:HD12	42:DG:179:PRO:HD2	1.81	0.60
43:DH:86:GLU:OE1	43:DH:165:ALA:HB2	2.00	0.60
40:DE:81:ILE:HG22	40:DE:81:ILE:O	2.00	0.60
49:BQ:19:GLY:HA2	58:BZ:79:ARG:NH2	2.16	0.60
49:BQ:37:LEU:HD23	49:BQ:37:LEU:N	2.16	0.60
25:CZ:222:LEU:O	25:CZ:223:MET:HB3	2.01	0.60
2:CB:112:VAL:O	2:CB:115:LEU:N	2.33	0.60
36:BA:1224:C:O2'	54:BV:85:LYS:HA	2.00	0.60
10:CJ:65:LEU:HD22	14:CN:56:VAL:CG2	2.31	0.60
36:BA:198:C:H5'	36:BA:2244:U:OP1	2.01	0.60
2:AB:112:VAL:O	2:AB:115:LEU:N	2.33	0.60
27:D1:84:GLY:C	27:D1:86:SER:H	2.04	0.60
15:CO:12:ILE:HG22	15:CO:13:GLN:N	2.15	0.60
33:D7:8:ASN:C	33:D7:8:ASN:ND2	2.55	0.60
36:DA:2375:G:N3	36:DA:2379:G:N2	2.48	0.60
25:CZ:316:PHE:O	25:CZ:371:THR:HG23	2.01	0.60
36:BA:2715:C:H2'	36:BA:2716:U:C6	2.36	0.60
36:DA:1141:U:H2'	46:DN:63:THR:HG21	1.83	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:CL:25:PRO:C	12:CL:27:LEU:N	2.54	0.60
36:BA:2570:G:H2'	36:BA:2571:C:C6	2.36	0.60
1:AA:1170:A:H2'	1:AA:1171:G:H5'	1.82	0.60
1:CA:473:G:H5''	16:CP:81:ARG:NE	2.17	0.60
1:CA:925:G:H1	1:CA:1391:U:H3	1.48	0.60
1:CA:773:G:H1	1:CA:806:C:H42	1.47	0.60
36:BA:1038:C:H3'	36:BA:1039:G:H5''	1.82	0.60
36:DA:1747(A):G:H2'	36:DA:1748:G:H5''	1.81	0.60
36:BA:479:A:O2'	36:BA:481:G:H5'	2.00	0.60
1:CA:1406:U:H2'	1:CA:1407:C:H6	1.65	0.60
36:BA:1431:U:C2'	36:BA:1432:C:H5'	2.31	0.60
36:BA:1909:C:H42	36:BA:1921:G:H1	1.49	0.60
48:DP:71:VAL:CG1	48:DP:72:PRO:HD3	2.31	0.60
36:DA:2092:U:H4'	36:DA:2093:G:H5''	1.81	0.60
36:DA:1431:U:C2'	36:DA:1432:C:H5'	2.30	0.60
36:DA:757:U:H2'	36:DA:758:C:O4'	2.01	0.60
43:BH:169:VAL:O	43:BH:171:LEU:N	2.34	0.60
12:AL:111:LYS:O	12:AL:112:ASP:HB2	2.00	0.60
36:DA:2629:A:N3	36:DA:2629:A:H2'	2.16	0.60
43:BH:12:PRO:O	43:BH:15:VAL:HG22	2.01	0.60
32:B6:12:GLU:HG2	32:B6:54:ILE:HG21	1.81	0.60
34:B8:30:ARG:O	34:B8:31:HIS:HB3	2.01	0.60
36:BA:809:G:O4'	36:BA:1254:A:H1'	2.01	0.60
36:DA:1806:C:N4	36:DA:1811:G:H1	1.99	0.60
39:DD:149:PRO:HG3	39:DD:186:HIS:CD2	2.36	0.60
48:DP:66:GLY:O	48:DP:67:MET:CB	2.49	0.60
41:DF:122:LYS:HG3	41:DF:191:ARG:HG3	1.82	0.60
56:BX:11:PRO:HA	56:BX:28:PHE:HB3	1.83	0.60
1:CA:275:G:O2'	1:CA:276:G:H5'	2.01	0.60
43:BH:61:HIS:O	43:BH:63:SER:N	2.34	0.60
28:B2:13:ALA:O	28:B2:16:LEU:HB2	2.01	0.60
50:BR:52:ILE:O	50:BR:55:ALA:HB3	2.01	0.60
42:BG:114:ILE:O	42:BG:114:ILE:HG23	2.00	0.60
46:DN:23:LEU:HD12	46:DN:102:ALA:HB2	1.81	0.60
48:DP:23:PRO:HA	48:DP:29:LYS:O	2.01	0.60
53:DU:31:SER:HB3	53:DU:34:LYS:HB2	1.83	0.60
1:CA:544:G:N1	1:CA:545:C:C2	2.69	0.60
2:CB:222:ILE:O	2:CB:226:ARG:HB2	2.00	0.60
2:CB:96:ARG:O	2:CB:97:TRP:C	2.39	0.60
36:BA:2636:U:OP1	40:BE:80:GLU:HG3	2.01	0.60
1:CA:668:G:H5'	15:CO:49:ASP:HA	1.81	0.60
1:AA:346:G:H5'	52:BT:41:ARG:NH2	2.16	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BT:10:VAL:C	52:BT:12:SER:H	2.05	0.60
36:DA:1678:G:O5'	36:DA:1678:G:H8	1.83	0.60
38:BC:186:ALA:O	38:BC:190:ARG:HG3	2.01	0.60
58:BZ:133:ILE:O	58:BZ:133:ILE:HG22	2.01	0.60
9:CI:33:PHE:CE2	9:CI:47:LEU:HD11	2.36	0.60
39:DD:112:GLN:N	39:DD:115:GLN:NE2	2.40	0.60
1:AA:925:G:H1	1:AA:1391:U:H3	1.48	0.60
42:BG:130:ASN:ND2	42:BG:160:VAL:HG13	2.16	0.60
47:DO:111:PHE:HB3	47:DO:114:ILE:CD1	2.30	0.60
3:CC:15:THR:HG22	3:CC:16:ARG:N	2.16	0.60
36:DA:1448:G:H2'	36:DA:1449:A:C8	2.36	0.60
37:DB:72:G:N2	37:DB:104:U:H5	1.99	0.60
36:DA:1169:G:H1	36:DA:1180:C:N4	1.99	0.60
36:DA:1057:A:H2'	36:DA:1058:G:O4'	2.01	0.60
43:BH:94:TYR:CE2	43:BH:152:ARG:HG2	2.36	0.60
49:BQ:43:THR:OG1	49:BQ:45:GLN:HG2	2.01	0.60
20:AT:100:ILE:HG22	20:AT:100:ILE:O	2.01	0.60
2:CB:204:ASN:C	2:CB:204:ASN:HD22	2.04	0.60
36:DA:1440:G:N2	36:DA:1552:G:H1'	2.16	0.60
36:DA:2226:C:H2'	36:DA:2227:A:O4'	2.00	0.60
56:DX:57:LEU:HD22	56:DX:57:LEU:O	2.01	0.60
1:CA:225:C:H2'	1:CA:226:G:C8	2.35	0.60
41:DF:53:THR:HG22	41:DF:56:GLU:CG	2.32	0.60
54:BV:29:PRO:HA	54:BV:61:VAL:HG21	1.82	0.60
5:AE:64:ARG:O	5:AE:66:MET:N	2.32	0.60
3:AC:64:VAL:CG1	3:AC:66:VAL:HG23	2.30	0.60
36:BA:496:G:C1'	55:BW:61:ASN:HD22	2.14	0.60
1:CA:218:C:H5'	1:CA:470:C:H42	1.65	0.60
7:AG:72:ARG:HG3	7:AG:73:MET:HG3	1.83	0.60
2:CB:7:VAL:C	2:CB:11:LEU:HG	2.21	0.60
2:AB:7:VAL:CG1	2:AB:11:LEU:HD11	2.30	0.60
36:DA:2689:U:H4'	36:DA:2690:C:C6	2.36	0.60
36:DA:392:C:H2'	36:DA:393:C:H5'	1.84	0.60
1:AA:640:A:N3	8:AH:115:SER:HB3	2.16	0.60
36:BA:391:G:O5'	36:BA:391:G:H8	1.84	0.60
6:AF:14:LEU:HD13	6:AF:15:ASP:H	1.65	0.60
36:BA:916:G:C2'	36:BA:917:A:H5''	2.30	0.60
35:B9:19:ARG:C	35:B9:21:GLY:H	2.03	0.60
30:D4:40:HIS:CD2	30:D4:41:PRO:HA	2.36	0.60
8:CH:45:ILE:HG21	8:CH:61:VAL:CG1	2.31	0.60
50:BR:56:LYS:O	50:BR:58:GLY:N	2.34	0.60
18:AR:79:LEU:HD23	18:AR:80:PRO:HD2	1.83	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2825:C:H6	36:DA:2825:C:O5'	1.85	0.60
33:B7:19:ARG:HD3	36:BA:125:G:O5'	2.02	0.60
11:AK:13:GLN:HG2	11:AK:75:TYR:O	2.01	0.60
36:BA:581:C:H2'	36:BA:582:G:H8	1.66	0.60
48:BP:36:LYS:CD	48:BP:41:ARG:HB3	2.31	0.60
26:D0:55:ARG:C	26:D0:57:PHE:H	2.04	0.60
36:DA:271(M):G:H2'	36:DA:271(N):U:C5'	2.18	0.60
38:DC:131:LEU:HD22	38:DC:136:LEU:HD12	1.83	0.60
36:BA:1824:G:H5''	39:BD:52:ARG:NH1	2.16	0.60
38:BC:113:VAL:HG21	38:BC:136:LEU:HB3	1.83	0.60
35:B9:1:MET:CG	35:B9:31:LYS:O	2.50	0.60
41:BF:195:ASP:OD2	41:BF:197:ASP:HB2	2.00	0.60
50:BR:11:ASN:O	50:BR:12:ARG:HB2	2.01	0.60
50:BR:14:SER:HA	50:BR:17:ARG:NH1	2.16	0.60
46:DN:75:TYR:HA	46:DN:82:LEU:HA	1.83	0.60
1:CA:539:A:OP2	12:CL:115:LYS:HE3	2.02	0.60
2:CB:162:ILE:HG22	2:CB:183:PRO:O	2.02	0.60
6:CF:3:ARG:NH1	6:CF:38:GLU:OE1	2.34	0.60
1:CA:955:U:O2'	1:CA:956:U:H5'	2.02	0.60
52:BT:77:PRO:O	52:BT:78:LEU:HB2	2.01	0.60
52:DT:38:ASN:ND2	52:DT:40:THR:OG1	2.34	0.60
37:BB:72:G:N2	37:BB:104:U:H5	1.99	0.60
9:CI:43:ALA:C	9:CI:45:ALA:N	2.55	0.60
4:AD:170:VAL:HG12	4:AD:171:GLY:H	1.63	0.60
36:DA:1060:U:H1'	36:DA:1061:U:C5'	2.31	0.60
42:BG:163:ALA:HB1	42:BG:169:ALA:CB	2.24	0.60
42:BG:21:ARG:CZ	42:BG:22:ARG:HA	2.30	0.60
2:AB:87:ARG:NH2	2:AB:233:SER:HB3	2.17	0.60
46:BN:55:VAL:CG2	46:BN:126:PRO:HA	2.25	0.60
46:BN:18:ALA:HB2	46:BN:26:LEU:HD13	1.83	0.60
53:BU:90:VAL:HG12	53:BU:91:ASP:N	2.14	0.60
54:BV:51:VAL:HG12	54:BV:52:VAL:H	1.65	0.60
8:CH:30:ARG:CB	8:CH:30:ARG:HH11	2.14	0.60
36:BA:744:G:OP1	40:BE:132:HIS:HB3	2.02	0.60
43:DH:20:ALA:CB	43:DH:23:ARG:HB2	2.27	0.60
36:BA:1057:A:C2	36:BA:1058:G:H1'	2.36	0.60
13:CM:108:ARG:CB	13:CM:108:ARG:HH11	2.15	0.60
36:DA:2377:A:H4'	51:DS:107:GLU:O	2.00	0.60
5:AE:76:ILE:HD11	5:AE:78:HIS:O	2.01	0.60
2:CB:121:LEU:CD2	2:CB:127:ILE:HD11	2.29	0.60
1:AA:448:A:H2'	1:AA:449:C:C6	2.36	0.60
16:CP:55:ARG:NH2	16:CP:58:TYR:CD2	2.69	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2469:A:O2'	49:DQ:56:ARG:HG3	2.01	0.60
1:AA:295:C:O2'	1:AA:296:U:H5'	2.01	0.60
39:BD:106:ILE:O	39:BD:108:PRO:HD3	2.01	0.60
1:AA:218:C:H5'	1:AA:470:C:H42	1.67	0.60
36:BA:2654:A:N3	36:BA:2656:U:N3	2.49	0.60
51:DS:83:LYS:HG2	51:DS:105:ALA:CB	2.32	0.60
36:DA:2720:U:O2	36:DA:2720:U:H2'	2.00	0.60
46:DN:5:VAL:CG1	46:DN:7:LYS:HG3	2.30	0.60
36:DA:669:G:N2	36:DA:670:A:C2	2.68	0.60
6:CF:14:LEU:HD13	6:CF:15:ASP:H	1.66	0.60
25:CZ:19:HIS:CD2	25:CZ:115:GLN:HB2	2.36	0.60
36:DA:1747(A):G:C3'	36:DA:1748:G:H5''	2.31	0.60
40:DE:108:SER:O	40:DE:162:ALA:HA	2.00	0.60
1:AA:503:C:H2'	1:AA:504:C:H6	1.65	0.60
36:BA:1215:G:H2'	36:BA:1216:G:H8	1.66	0.60
36:BA:672:C:H2'	36:BA:673:C:C5'	2.31	0.60
36:BA:819:A:H2'	36:BA:820:A:C5'	2.31	0.60
39:DD:172:TYR:HD1	39:DD:186:HIS:HA	1.66	0.60
1:AA:1181:G:O2'	1:AA:1182:G:H5'	2.02	0.60
41:BF:34:TRP:HB2	48:BP:10:PRO:HB2	1.83	0.60
4:AD:29:PRO:C	4:AD:30:LYS:HG2	2.21	0.60
36:BA:342:G:H2'	36:BA:343:C:H6	1.65	0.60
41:BF:177:ALA:HB1	41:BF:178:PRO:HD2	1.82	0.60
30:B4:9:LEU:C	30:B4:10:VAL:HG12	2.22	0.60
30:B4:8:LYS:HG2	30:B4:9:LEU:H	1.64	0.60
36:DA:832:G:OP1	48:DP:40:SER:HB2	2.00	0.60
53:DU:20:LEU:N	53:DU:20:LEU:HD22	2.16	0.60
53:DU:38:THR:O	53:DU:41:ALA:HB3	2.00	0.60
53:DU:52:ARG:HA	53:DU:55:ARG:HH12	1.65	0.60
53:DU:59:ARG:O	53:DU:62:ILE:N	2.34	0.60
40:BE:39:PRO:HD3	40:BE:45:THR:OG1	2.02	0.60
13:CM:91:ARG:CB	13:CM:98:VAL:HG22	2.28	0.60
52:DT:11:GLU:H	52:DT:11:GLU:CD	2.05	0.60
52:DT:63:VAL:O	52:DT:73:GLU:HA	2.01	0.60
9:CI:99:LEU:C	9:CI:101:PHE:H	2.04	0.60
4:AD:102:ASP:O	4:AD:105:VAL:HB	2.01	0.60
4:AD:121:VAL:O	4:AD:134:ASP:HA	2.00	0.60
31:D5:46:CYS:HB2	31:D5:47:PRO:HD2	1.82	0.60
1:AA:1423:G:C4	1:AA:1424:C:C5	2.89	0.60
1:CA:1237:C:C4'	1:CA:1334:G:N2	2.65	0.60
41:BF:7:TYR:HD2	41:BF:16:GLY:H	1.48	0.60
36:BA:2117:A:N6	36:BA:2171:A:H61	1.99	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:40:ARG:CZ	3:AC:57:ILE:HD12	2.31	0.60
46:BN:46:VAL:HG13	46:BN:48:MET:HG3	1.83	0.60
30:D4:16:CYS:SG	30:D4:17:GLY:N	2.74	0.60
57:BY:85:VAL:HG12	57:BY:86:ARG:N	2.16	0.60
40:DE:44:TYR:O	40:DE:45:THR:HB	1.99	0.60
36:BA:2377:A:H4'	51:BS:107:GLU:O	2.01	0.60
1:AA:319:G:H4'	1:AA:1468:A:H5'	1.83	0.60
38:DC:206:GLY:HA3	38:DC:210:ARG:NH2	2.14	0.60
2:AB:204:ASN:ND2	2:AB:207:ALA:H	2.00	0.60
2:CB:76:GLN:O	2:CB:77:ALA:HB2	2.02	0.60
55:DW:14:PRO:HG2	55:DW:78:GLU:CD	2.21	0.60
38:BC:5:LYS:HG3	38:BC:6:ARG:N	2.16	0.60
7:CG:61:VAL:O	7:CG:62:PHE:C	2.39	0.60
1:AA:1108:G:H5'	3:AC:176:HIS:HD2	1.67	0.60
1:CA:1095:U:H5'	1:CA:1109:C:O2	2.01	0.60
1:CA:1314:C:N4	19:CS:4:SER:HB2	2.17	0.60
1:CA:436:C:H2'	1:CA:437:U:H6	1.67	0.60
36:BA:1011:G:O2'	36:BA:1013:C:H5''	2.01	0.60
3:CC:153:VAL:O	3:CC:154:SER:CB	2.50	0.60
1:CA:185:A:N3	20:CT:81:LYS:NZ	2.47	0.60
25:AZ:113:MET:O	25:AZ:116:THR:HB	2.01	0.60
25:AZ:19:HIS:HD2	25:AZ:115:GLN:H	1.48	0.60
58:DZ:58:VAL:HG13	58:DZ:67:LEU:O	2.02	0.60
36:BA:2315:G:H2'	36:BA:2316:C:C6	2.36	0.60
57:DY:2:ARG:C	57:DY:4:LYS:H	2.04	0.60
17:AQ:10:VAL:HG23	17:AQ:55:ASP:O	2.01	0.60
39:DD:176:ARG:HH11	39:DD:176:ARG:HG2	1.64	0.60
36:BA:1924:C:H2'	36:BA:1925:C:H6	1.66	0.60
1:AA:1235:U:O3'	21:AU:3:LYS:HB2	2.02	0.60
18:AR:73:ALA:CB	18:AR:79:LEU:HD12	2.31	0.60
32:D6:32:ASN:CG	32:D6:33:LYS:H	2.05	0.60
17:AQ:13:ASP:C	17:AQ:15:MET:H	2.03	0.60
1:AA:526:C:H2'	1:AA:527:G:H4'	1.82	0.60
25:AZ:355:LEU:HD22	25:AZ:359:VAL:HB	1.83	0.60
34:B8:15:LYS:HD3	48:BP:65:ARG:CZ	2.32	0.60
34:D8:15:LYS:HD3	48:DP:65:ARG:CZ	2.30	0.60
36:BA:2235:G:H2'	36:BA:2236:C:C6	2.36	0.60
35:D9:1:MET:CG	35:D9:31:LYS:O	2.49	0.60
36:DA:2476:A:C2'	36:DA:2477:C:H5''	2.29	0.60
38:DC:131:LEU:HD22	38:DC:136:LEU:CD1	2.31	0.60
1:AA:1199:U:H4'	10:AJ:54:PHE:CE2	2.37	0.60
28:B2:59:ARG:HA	36:BA:76:C:O2'	2.01	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BF:171:PRO:C	41:BF:173:VAL:H	2.04	0.60
36:BA:2840:C:C5'	50:BR:53:HIS:CD2	2.76	0.60
36:DA:2654:A:N3	36:DA:2656:U:N3	2.49	0.60
36:DA:1188:U:O2'	36:DA:1189:A:H5'	2.02	0.60
36:DA:523:C:H2'	36:DA:524:U:C5'	2.25	0.60
54:DV:51:VAL:HG12	54:DV:52:VAL:H	1.66	0.60
8:CH:85:ARG:HH11	8:CH:85:ARG:HG3	1.65	0.60
1:CA:503:C:H2'	1:CA:504:C:H6	1.65	0.60
51:BS:92:TYR:CG	51:BS:93:LYS:N	2.69	0.60
8:AH:81:HIS:ND1	8:AH:138:TRP:OXT	2.34	0.60
2:CB:44:LEU:H	2:CB:44:LEU:CD1	2.07	0.60
47:DO:64:ARG:NE	52:DT:70:VAL:HG21	2.16	0.60
52:DT:52:ILE:HG12	52:DT:61:PHE:CB	2.31	0.60
36:DA:1503:U:C6	36:DA:1504:C:H5	2.19	0.60
49:BQ:140:ALA:HB1	58:BZ:99:TYR:HB3	1.84	0.60
1:AA:1372:U:OP1	9:AI:72:GLY:N	2.35	0.60
36:BA:2673:G:H2'	36:BA:2674:G:H8	1.66	0.60
4:AD:189:PRO:HB2	4:AD:194:LEU:CD2	2.29	0.60
51:DS:96:GLY:C	51:DS:98:VAL:H	2.04	0.60
57:BY:73:ARG:O	57:BY:74:PRO:O	2.19	0.60
42:BG:133:LEU:HD12	42:BG:133:LEU:C	2.21	0.60
1:CA:1237:C:H4'	1:CA:1334:G:H22	1.65	0.60
2:AB:39:ILE:HG22	2:AB:40:HIS:N	2.16	0.60
36:BA:1826:G:C4'	39:BD:242:ARG:HH21	2.14	0.60
1:CA:1305:G:H21	1:CA:1331:G:H2'	1.67	0.60
42:BG:46:ALA:HA	42:BG:53:LEU:HD23	1.82	0.60
42:DG:106:LEU:O	42:DG:110:ALA:HB3	2.02	0.60
2:CB:104:ASN:OD1	2:CB:107:THR:HB	2.01	0.60
27:D1:25:LYS:HB3	36:DA:388:G:H5'	1.84	0.60
20:CT:57:ARG:HH12	20:CT:103:GLY:H	1.50	0.60
1:AA:1239:A:H4'	1:AA:1240:U:O5'	2.01	0.60
54:BV:17:GLY:C	54:BV:18:LEU:HD13	2.22	0.60
1:AA:447:G:H2'	1:AA:485:G:H22	1.63	0.60
36:BA:2219:G:C2'	36:BA:2220:G:H5'	2.30	0.60
36:BA:2196:C:O2'	36:BA:2197:U:H5'	2.02	0.60
48:DP:84:ASN:C	48:DP:86:LYS:N	2.53	0.60
36:BA:1141:U:H2'	46:BN:63:THR:HG21	1.84	0.60
1:CA:1310:G:O2'	1:CA:1311:G:H5'	2.00	0.60
40:BE:29:GLY:HA2	40:BE:180:ASN:ND2	2.16	0.60
1:CA:1385:G:O2'	1:CA:1386:G:H5'	2.01	0.60
47:BO:7:TYR:HE1	47:BO:20:MET:CE	2.15	0.60
1:CA:630:G:H2'	1:CA:631:G:H5'	1.83	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:DQ:79:LEU:CD2	49:DQ:80:GLU:HG3	2.32	0.60
36:DA:678:C:H2'	36:DA:679:C:C6	2.36	0.60
4:AD:162:LEU:HD13	4:AD:162:LEU:O	2.00	0.60
36:DA:1431:U:O2'	36:DA:1432:C:H5'	2.01	0.60
36:BA:1722:A:C2	36:BA:1740:G:H2'	2.37	0.60
58:DZ:149:SER:HB3	58:DZ:172:ALA:O	2.01	0.60
1:AA:697:U:H2'	1:AA:698:G:H5'	1.82	0.60
53:DU:102:GLU:CB	53:DU:105:VAL:HB	2.31	0.60
8:AH:28:ALA:HB3	8:AH:57:PRO:O	2.02	0.60
32:B6:19:ARG:CD	36:BA:2400:G:H4'	2.20	0.60
36:DA:2338:G:H2'	36:DA:2339:G:C8	2.35	0.60
28:D2:68:ARG:NH1	28:D2:72:ALA:HB2	2.17	0.60
36:DA:110:G:O2'	36:DA:111:A:H5'	2.01	0.60
48:DP:9:ASN:H	48:DP:10:PRO:CD	2.03	0.60
24:AY:55:PSU:H3'	24:AY:55:PSU:O4	2.00	0.60
36:BA:1570:A:H2'	36:BA:1571:A:C8	2.37	0.60
41:BF:102:PRO:O	41:BF:106:ARG:HG3	2.01	0.60
1:AA:973:G:H3'	1:AA:974:A:H5''	1.81	0.60
10:AJ:54:PHE:C	10:AJ:55:LYS:CE	2.67	0.60
36:BA:2476:A:H2	36:BA:2477:C:C5	2.19	0.60
36:BA:89:G:H3'	36:BA:90:U:C5'	2.31	0.60
31:B5:4:HIS:O	36:BA:2056:G:N2	2.33	0.60
36:BA:2453:A:O2'	36:BA:2454:G:H5'	2.02	0.60
36:DA:1137:G:H2'	36:DA:1138:G:C8	2.36	0.60
53:DU:49:HIS:O	53:DU:53:ARG:N	2.29	0.60
53:DU:65:ILE:HD11	53:DU:96:ALA:HB3	1.84	0.60
54:DV:19:LYS:HB3	54:DV:94:LEU:O	2.02	0.60
4:CD:17:VAL:HG21	4:CD:63:LYS:NZ	2.16	0.60
1:CA:668:G:O2'	15:CO:46:HIS:HB3	2.01	0.60
36:DA:1403:C:H5''	36:DA:1471:A:H1'	1.83	0.60
36:DA:1675:C:O2	40:DE:129:HIS:HA	2.01	0.60
38:BC:198:ALA:O	38:BC:200:LYS:N	2.35	0.60
36:DA:328:U:H4'	57:DY:68:HIS:CE1	2.37	0.60
36:DA:916:G:C2'	36:DA:917:A:H5''	2.31	0.60
9:CI:48:GLU:HB3	9:CI:101:PHE:CE2	2.36	0.60
36:BA:1343:G:N2	36:BA:1405:U:C2	2.70	0.60
47:BO:91:LEU:HD13	47:BO:111:PHE:CE1	2.37	0.60
57:BY:81:LYS:HG2	57:BY:96:ILE:HB	1.84	0.60
55:BW:6:ILE:HG22	55:BW:7:ALA:N	2.16	0.60
36:DA:1902:C:C4'	39:DD:244:ARG:HB2	2.31	0.60
3:CC:76:VAL:HG23	3:CC:77:ILE:HG13	1.82	0.60
49:DQ:141:GLN:HB3	58:DZ:98:MET:HA	1.82	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1442(B):A:C2	52:DT:118:ARG:NH1	2.69	0.60
36:DA:2312:U:O2'	36:DA:2313:C:H5''	2.00	0.60
36:BA:2484:G:O2'	36:BA:2485:G:H5'	2.01	0.60
2:AB:130:ARG:NE	2:AB:131:PRO:HD2	2.16	0.60
29:B3:7:LYS:HA	29:B3:34:GLU:HA	1.83	0.60
1:AA:1102:A:H2'	1:AA:1103:C:H6	1.65	0.60
1:CA:749:C:O2'	1:CA:750:G:H5'	2.02	0.60
36:DA:2127:G:H2'	36:DA:2128:C:H6	1.67	0.60
58:DZ:100:VAL:HG13	58:DZ:101:PRO:HD2	1.84	0.60
33:D7:11:LYS:HZ3	36:DA:686:G:H5''	1.67	0.60
36:BA:1345:C:H2'	36:BA:1346:G:H5'	1.83	0.60
48:DP:115:LEU:HG	48:DP:116:GLY:N	2.17	0.60
36:DA:978:G:H1	36:DA:985:C:N4	1.99	0.60
1:CA:1108:G:H5'	3:CC:176:HIS:HD2	1.67	0.60
25:AZ:286:VAL:CG2	25:AZ:287:GLY:N	2.63	0.60
4:CD:121:VAL:O	4:CD:134:ASP:HA	2.01	0.60
49:BQ:39:PRO:HG3	49:BQ:99:PRO:CD	2.32	0.60
49:BQ:74:TYR:HD1	49:BQ:75:THR:N	1.99	0.60
39:BD:213:ARG:HD2	39:BD:217:ARG:O	2.01	0.60
1:CA:708:C:H2'	1:CA:709:G:H8	1.65	0.60
36:BA:520:G:H2'	36:BA:521:G:H8	1.67	0.60
36:DA:183:C:H5'	36:DA:433:C:H4'	1.83	0.60
36:BA:2584:U:O5'	36:BA:2584:U:O2	2.20	0.60
36:DA:637:A:H4'	36:DA:638:G:O5'	2.02	0.60
34:B8:61:LEU:O	34:B8:64:TYR:N	2.31	0.60
36:BA:2283:C:H5	36:BA:2389:G:H2'	1.66	0.60
36:DA:2012:G:H4'	55:DW:96:ILE:CD1	2.16	0.60
34:D8:50:LEU:O	34:D8:52:LYS:N	2.30	0.60
28:D2:50:ILE:N	28:D2:50:ILE:HD12	2.17	0.60
5:CE:45:PHE:CD2	5:CE:47:LYS:HD2	2.36	0.60
38:BC:75:LEU:HB3	38:BC:93:TYR:HD2	1.66	0.60
36:BA:658:C:H2'	36:BA:659:C:C6	2.37	0.60
1:AA:972:C:OP2	10:AJ:57:LYS:HE2	2.01	0.60
50:BR:73:VAL:HG12	50:BR:77:ARG:NH1	2.16	0.60
36:BA:271(M):G:H2'	36:BA:271(N):U:C5'	2.17	0.60
4:CD:201:GLN:HA	4:CD:204:ILE:CD1	2.31	0.60
51:BS:29:PHE:HD2	51:BS:30:ARG:N	1.98	0.60
51:BS:64:GLU:O	51:BS:67:ARG:HG3	2.01	0.60
25:CZ:195:TRP:O	25:CZ:199:ILE:HG12	2.01	0.60
36:DA:1992:G:N2	36:DA:1996:C:O2	2.26	0.60
36:DA:1999:C:H5''	36:DA:2723:C:O2'	2.02	0.60
47:DO:64:ARG:O	47:DO:82:ASN:HA	2.01	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:DT:103:ARG:O	52:DT:105:LEU:N	2.34	0.60
7:AG:28:ASN:O	7:AG:31:MET:HB3	2.01	0.60
58:DZ:127:LYS:O	58:DZ:128:VAL:HB	2.01	0.60
10:CJ:49:VAL:O	10:CJ:49:VAL:HG13	2.01	0.60
1:AA:1401:G:H8	1:AA:1401:G:O5'	1.84	0.60
36:DA:1693:U:O2'	39:DD:14:ARG:NH2	2.35	0.60
36:DA:2593:U:H2'	36:DA:2594:C:H6	1.66	0.60
2:AB:87:ARG:CZ	2:AB:233:SER:HB3	2.31	0.60
36:BA:2113:U:H2'	36:BA:2114:A:H8	1.65	0.60
10:AJ:65:LEU:HD13	14:AN:56:VAL:H	1.66	0.60
1:CA:46:G:H1'	1:CA:396:G:N2	2.16	0.60
37:DB:19:G:H5'	37:DB:20:C:OP2	2.02	0.60
43:BH:136:ILE:HD12	43:BH:136:ILE:N	2.17	0.60
39:DD:27:THR:HG23	39:DD:27:THR:O	2.01	0.60
36:BA:1550:C:H2'	36:BA:1551:C:C6	2.37	0.60
1:CA:599:C:H4'	8:CH:130:GLY:HA3	1.84	0.60
43:DH:44:VAL:CG1	43:DH:45:VAL:H	2.13	0.60
3:CC:40:ARG:NH2	3:CC:57:ILE:HD12	2.16	0.60
1:AA:41:G:H2'	1:AA:42:G:H8	1.61	0.60
38:DC:40:THR:HG23	38:DC:177:LYS:CD	2.32	0.60
36:BA:783:A:H8	36:BA:784:A:H4'	1.67	0.60
26:D0:47:PRO:O	26:D0:78:TYR:HD2	1.84	0.60
36:DA:2482:G:N2	49:DQ:52:VAL:HG11	2.13	0.60
54:BV:24:LYS:HA	54:BV:92:THR:CG2	2.31	0.60
38:DC:5:LYS:HG3	38:DC:6:ARG:N	2.16	0.60
36:BA:528:A:H2	36:BA:2043:C:H4'	1.67	0.60
36:BA:2199:A:N3	36:BA:2199:A:H2'	2.16	0.60
22:AW:67:C:O2'	22:AW:68:C:H5'	2.02	0.60
25:CZ:381:GLU:O	25:CZ:382:GLU:O	2.20	0.60
25:AZ:321:TYR:CE2	25:AZ:323:LEU:HD12	2.37	0.60
2:AB:14:GLY:O	2:AB:15:VAL:HG13	2.02	0.60
47:DO:12:ASP:HA	47:DO:97:ARG:O	2.01	0.60
26:D0:28:GLY:H	26:D0:66:VAL:HG13	1.66	0.60
36:BA:361:G:H2'	36:BA:362:U:H4'	1.82	0.60
36:BA:821:A:H5''	36:BA:822:U:C6	2.35	0.60
1:AA:1298:C:P	7:AG:114:ARG:HH22	2.25	0.60
1:CA:1005:A:OP2	1:CA:1006:C:N3	2.35	0.60
36:DA:966:G:H2'	36:DA:967:C:C6	2.36	0.60
57:DY:21:LYS:O	57:DY:21:LYS:HG2	2.02	0.60
32:B6:36:LEU:HD12	32:B6:50:ARG:NH1	2.15	0.60
36:DA:2619:C:O2'	36:DA:2620:C:H5'	2.02	0.60
39:DD:48:ARG:NH1	39:DD:48:ARG:HG3	2.16	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:BX:18:TYR:O	56:BX:20:GLY:N	2.34	0.60
36:DA:271(L):U:H5''	36:DA:271(M):G:C5'	2.27	0.60
1:AA:544:G:N1	1:AA:545:C:C2	2.70	0.60
30:B4:6:HIS:HB3	42:BG:67:LYS:CE	2.30	0.60
36:DA:553:G:H2'	36:DA:554:U:O4'	2.02	0.60
36:DA:810:U:OP1	36:DA:1253:A:N7	2.34	0.60
48:BP:100:LEU:HD13	48:BP:103:ALA:HB3	1.82	0.60
36:BA:1669:A:H2'	36:BA:1670:C:H5'	1.84	0.60
38:BC:65:PRO:HD2	38:BC:188:ASN:OD1	2.02	0.60
36:DA:342:G:H2'	36:DA:343:C:H6	1.66	0.60
1:CA:1363(A):A:H4'	1:CA:1364:U:C5'	2.29	0.60
19:AS:11:VAL:O	19:AS:11:VAL:HG13	2.02	0.60
42:BG:5:VAL:HG12	42:BG:6:ALA:N	2.16	0.60
36:DA:1787:A:H2'	36:DA:1788:C:C6	2.37	0.60
2:CB:87:ARG:NH2	2:CB:233:SER:HB3	2.17	0.60
2:CB:87:ARG:CZ	2:CB:233:SER:HB3	2.31	0.60
1:CA:1320:C:H5''	19:CS:70:LYS:CG	2.31	0.60
3:AC:113:ALA:HB3	3:AC:185:GLY:H	1.67	0.60
3:AC:50:ALA:O	3:AC:71:ALA:HB3	2.01	0.60
20:CT:74:LYS:HD3	20:CT:74:LYS:N	2.17	0.60
9:AI:78:LYS:HE3	9:AI:101:PHE:CZ	2.37	0.60
1:CA:960:U:O2	1:CA:960:U:H2'	2.01	0.60
24:AY:9:A:H62	24:AY:23:A:H62	1.50	0.60
36:DA:1496:A:H8	36:DA:1577:C:O2'	1.83	0.60
11:CK:90:GLY:HA2	11:CK:93:GLN:HB2	1.83	0.60
8:AH:118:VAL:C	8:AH:119:LEU:HD23	2.22	0.60
1:CA:295:C:H2'	1:CA:296:U:C6	2.30	0.60
27:D1:58:ILE:HG13	27:D1:59:THR:H	1.66	0.60
27:D1:7:ILE:HD12	27:D1:70:VAL:CG2	2.32	0.60
36:DA:203:C:C3'	36:DA:204:A:H5''	2.32	0.60
36:BA:55:G:O2'	36:BA:127:A:H2	1.84	0.60
29:B3:1:MET:O	29:B3:3:ARG:N	2.34	0.60
36:DA:287:C:H2'	36:DA:288:C:H6	1.63	0.60
36:BA:987:G:C2	36:BA:988:A:H1'	2.37	0.60
25:AZ:339:ARG:HE	25:AZ:352:VAL:HG22	1.64	0.60
17:CQ:34:LYS:HG2	17:CQ:35:VAL:N	2.16	0.60
12:AL:94:PRO:O	12:AL:96:VAL:N	2.35	0.60
1:CA:922:G:H1'	5:CE:19:MET:HB2	1.83	0.60
1:CA:512:U:H2'	1:CA:513:C:C6	2.37	0.60
36:BA:2312:U:C2'	36:BA:2313:C:H5''	2.32	0.60
22:AW:8:U:O2'	22:AW:9:A:H5''	2.01	0.60
17:AQ:10:VAL:CG2	17:AQ:55:ASP:HB2	2.31	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:342:C:H2'	1:CA:343:U:O4'	2.02	0.60
3:AC:173:VAL:N	3:AC:174:PRO:HD3	2.15	0.60
1:AA:1008:C:H42	1:AA:1021:G:H1	1.50	0.60
36:DA:1438:U:H2'	36:DA:1439:A:C8	2.36	0.60
36:DA:990:A:H5'	36:DA:1157:G:H5''	1.83	0.60
11:CK:99:GLN:HG2	11:CK:105:VAL:HG11	1.83	0.60
11:AK:99:GLN:HG2	11:AK:105:VAL:HG11	1.84	0.60
25:AZ:152:MET:HE2	25:AZ:156:ASP:HB2	1.82	0.60
51:BS:78:LEU:HD11	51:BS:103:GLU:HB2	1.83	0.60
20:CT:75:ASN:HA	20:CT:78:ALA:HB3	1.82	0.60
36:DA:1866:C:H2'	36:DA:1876:A:O4'	2.01	0.60
50:DR:29:LEU:O	50:DR:30:THR:HB	2.02	0.60
34:D8:23:VAL:HG13	34:D8:47:LYS:O	2.02	0.60
36:BA:1887:C:C3'	36:BA:1888:G:H5''	2.32	0.60
41:DF:28:ILE:HG22	41:DF:116:ASP:HB2	1.83	0.60
36:DA:2084:C:H2'	36:DA:2085:C:C6	2.37	0.60
41:BF:202:PHE:O	41:BF:206:ILE:HG12	2.02	0.60
36:DA:223:A:N7	36:DA:422:A:H1'	2.17	0.60
36:DA:20:C:H2'	36:DA:21:A:C8	2.36	0.60
53:DU:95:LEU:CD1	54:DV:11:GLN:HG3	2.32	0.60
36:DA:2789:C:H1'	36:DA:2892:A:C2	2.37	0.60
47:BO:63:VAL:HG23	47:BO:64:ARG:HG3	1.83	0.60
52:BT:16:ARG:HB2	52:BT:19:LEU:HD11	1.84	0.60
52:BT:70:VAL:HG12	52:BT:71:GLY:N	2.15	0.60
40:DE:201:THR:HG23	40:DE:203:LYS:H	1.67	0.60
36:DA:307:G:H22	36:DA:310:A:P	2.24	0.60
1:AA:864:A:H2	1:AA:917:G:N3	1.98	0.60
25:AZ:223:MET:HB2	25:AZ:241:ARG:O	2.01	0.60
19:CS:43:GLU:C	19:CS:45:VAL:N	2.54	0.60
3:AC:40:ARG:NH2	3:AC:57:ILE:HD12	2.17	0.60
36:BA:442:G:N3	41:BF:48:THR:HG21	2.17	0.60
39:BD:9:TYR:CD2	39:BD:10:THR:HG22	2.37	0.60
49:DQ:24:GLY:O	49:DQ:26:TYR:N	2.35	0.60
13:CM:21:TYR:C	13:CM:22:ILE:HD12	2.21	0.60
42:DG:39:ILE:CG2	42:DG:157:ILE:HG12	2.31	0.60
38:BC:98:GLU:O	38:BC:100:ILE:N	2.34	0.60
1:CA:452:A:HO2'	1:CA:453:A:H8	1.50	0.60
40:DE:178:GLU:HG3	40:DE:179:GLU:N	2.16	0.60
40:DE:36:ARG:HH22	40:DE:88:GLY:HA2	1.64	0.60
27:B1:23:LYS:HB3	27:B1:29:GLY:H	1.66	0.60
36:BA:777:A:H2'	36:BA:778:G:C8	2.36	0.60
26:D0:48:GLY:H	26:D0:51:VAL:HB	1.67	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CD:112:VAL:HG12	4:CD:116:GLN:OE1	2.01	0.60
36:DA:6:A:H2'	36:DA:7:G:C8	2.37	0.60
33:B7:18:PHE:H	33:B7:43:THR:HG21	1.66	0.60
18:CR:53:ARG:O	18:CR:55:ARG:N	2.33	0.60
41:DF:81:PRO:O	41:DF:82:ILE:C	2.40	0.60
1:AA:1271:G:C5'	1:AA:1314:C:H5''	2.31	0.60
36:BA:1563:G:O2'	36:BA:1564:C:H5'	2.02	0.60
38:DC:47:LEU:HD11	38:DC:171:ILE:HG22	1.83	0.60
3:AC:206:GLU:O	3:AC:208:ILE:N	2.35	0.60
25:AZ:385:ARG:HD3	63:AZ:502:KIR:C45	2.32	0.60
1:CA:343:U:O2	1:CA:347:G:N1	2.34	0.60
36:DA:1865:G:H5'	36:DA:1866:C:P	2.41	0.60
36:BA:1362:C:C2'	36:BA:1363:C:H5'	2.32	0.60
36:DA:1702:G:H2'	36:DA:1703:G:O4'	2.01	0.60
1:CA:556:C:O2'	1:CA:557:G:H5'	2.02	0.60
48:BP:68:GLN:HA	48:BP:68:GLN:NE2	2.15	0.60
42:BG:149:VAL:O	42:BG:149:VAL:HG23	2.01	0.60
48:DP:68:GLN:NE2	48:DP:68:GLN:HA	2.16	0.60
36:DA:1654:A:C2	40:DE:113:PHE:CD2	2.90	0.60
36:DA:1798:U:H5'	39:DD:259:THR:HB	1.84	0.60
39:DD:147:LEU:CD1	39:DD:183:ARG:NH1	2.42	0.60
39:DD:48:ARG:HG3	39:DD:48:ARG:HH11	1.66	0.60
48:DP:63:PRO:O	48:DP:64:LYS:C	2.40	0.60
28:D2:22:GLU:HG2	28:D2:64:LEU:HD11	1.84	0.60
28:D2:67:LYS:C	28:D2:69:ARG:H	2.04	0.60
41:DF:101:LEU:CD1	41:DF:102:PRO:HD2	2.31	0.60
36:DA:1855:G:H2'	36:DA:1856:G:H8	1.64	0.60
41:BF:185:ASP:HA	41:BF:188:ARG:HD3	1.84	0.60
43:BH:66:GLY:HA2	43:BH:69:ARG:HE	1.66	0.60
4:AD:11:LEU:N	4:AD:11:LEU:HD23	2.17	0.60
28:B2:50:ILE:N	28:B2:50:ILE:HD12	2.17	0.60
41:BF:157:VAL:CG2	41:BF:194:MET:HG2	2.31	0.60
41:BF:168:ARG:HG2	41:BF:169:ASN:H	1.67	0.60
1:CA:540:G:H2'	1:CA:541:G:H8	1.66	0.60
51:BS:35:ILE:O	51:BS:35:ILE:HG12	2.01	0.60
8:AH:14:ARG:HB2	8:AH:14:ARG:HH11	1.66	0.60
1:CA:840:C:H5'	1:CA:841:U:OP1	2.02	0.60
52:BT:10:VAL:C	52:BT:12:SER:N	2.52	0.60
36:BA:2630:G:H1'	36:BA:2894:G:H1'	1.83	0.60
1:AA:1250:A:H2'	1:AA:1251:A:H8	1.67	0.60
9:AI:77:ILE:HG23	9:AI:81:ILE:HD11	1.83	0.60
1:CA:1060:C:H4'	10:CJ:52:GLY:N	2.17	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:CG:31:MET:HG2	7:CG:32:ARG:H	1.64	0.60
1:AA:1498:U:C4	23:AX:20:U:H5'	2.37	0.60
36:DA:2589:A:H2'	36:DA:2590:A:H8	1.67	0.60
3:AC:18:TRP:HE1	14:AN:55:GLY:N	1.99	0.60
36:BA:1971:A:C2	39:BD:240:ALA:HA	2.37	0.60
30:B4:22:ILE:N	30:B4:22:ILE:HD12	2.10	0.60
36:BA:1009:A:N3	36:BA:1154:G:H5'	2.17	0.60
48:DP:16:ARG:CZ	48:DP:16:ARG:HB2	2.31	0.60
49:BQ:34:LEU:CD1	49:BQ:129:THR:HB	2.31	0.60
1:AA:880:C:H2'	1:AA:881:G:H8	1.66	0.60
25:CZ:285:ASN:N	25:CZ:285:ASN:HD22	2.00	0.60
24:CY:6:U:C3'	24:CY:7:A:H5''	2.32	0.60
29:B3:56:VAL:O	29:B3:57:GLU:HB2	2.01	0.60
1:AA:119:A:C4'	1:AA:120:A:O5'	2.49	0.60
36:BA:2073:C:O2'	36:BA:2074:U:H5'	2.02	0.60
36:BA:779:U:H2'	36:BA:780:G:C8	2.36	0.60
36:DA:2442:C:O2	36:DA:2442:C:H2'	2.00	0.60
1:AA:676:A:H1'	11:AK:115:PRO:HB3	1.84	0.60
15:AO:7:GLU:O	15:AO:10:LYS:HB3	2.02	0.60
7:CG:64:GLN:NE2	7:CG:68:ASN:ND2	2.49	0.60
41:BF:78:ILE:O	41:BF:80:ALA:N	2.35	0.60
1:AA:106:C:C2'	1:AA:107:G:H5'	2.32	0.60
36:BA:496:G:H1'	55:BW:61:ASN:HD22	1.65	0.60
49:BQ:39:PRO:CD	49:BQ:99:PRO:HG2	2.31	0.60
27:B1:72:GLU:O	27:B1:73:LEU:HG	2.01	0.60
49:DQ:39:PRO:HG3	49:DQ:99:PRO:CD	2.31	0.60
1:AA:781:A:C2'	1:AA:782:A:H5'	2.30	0.60
1:AA:642:A:H2'	1:AA:643:C:C6	2.36	0.60
2:CB:16:HIS:HB3	2:CB:210:SER:HA	1.84	0.60
1:CA:577:G:H1'	1:CA:816:A:C4	2.37	0.60
36:DA:2677:G:H2'	36:DA:2678:C:H6	1.66	0.60
3:AC:72:LYS:O	3:AC:74:GLY:N	2.35	0.60
52:DT:42:ILE:O	52:DT:42:ILE:HG13	2.02	0.60
57:DY:6:HIS:N	57:DY:6:HIS:CD2	2.69	0.60
41:BF:17:ARG:HG3	41:BF:17:ARG:HH11	1.67	0.60
34:B8:28:GLY:CA	34:B8:32:LEU:HD23	2.30	0.59
36:BA:2394:C:OP1	48:BP:63:PRO:HD2	2.01	0.59
36:DA:1803:A:O3'	39:DD:259:THR:CG2	2.50	0.59
36:DA:483:A:H1'	57:DY:60:PHE:HE1	1.66	0.59
1:AA:1472:U:O2'	1:AA:1473:A:H5'	2.01	0.59
10:CJ:17:ASP:CG	10:CJ:70:ARG:HH21	2.05	0.59
48:BP:6:LEU:H	48:BP:6:LEU:HD23	1.67	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:B9:29:ASN:ND2	35:B9:29:ASN:O	2.34	0.59
36:BA:957:A:N1	36:BA:2458:G:H4'	2.17	0.59
30:B4:9:LEU:HG	42:BG:98:ARG:NH1	2.17	0.59
36:DA:2777:G:C5'	36:DA:2778:A:H5'	2.31	0.59
16:AP:41:PRO:O	16:AP:43:LYS:HG3	2.02	0.59
2:CB:167:PRO:HG2	2:CB:192:SER:CB	2.31	0.59
36:DA:1343:G:C2'	36:DA:1344:G:H5'	2.32	0.59
25:CZ:139:ASP:OD2	25:CZ:177:LEU:HD21	2.01	0.59
7:AG:31:MET:CG	7:AG:32:ARG:H	2.15	0.59
7:CG:5:ARG:O	7:CG:7:ALA:N	2.35	0.59
37:BB:79:C:O2'	37:BB:80:U:H5'	2.02	0.59
36:BA:1403:C:H5''	36:BA:1471:A:H1'	1.84	0.59
19:AS:49:ILE:O	19:AS:60:VAL:HG13	2.02	0.59
4:AD:121:VAL:HG12	4:AD:134:ASP:C	2.22	0.59
57:BY:7:VAL:HG21	57:BY:8:LYS:HZ2	1.67	0.59
36:DA:1794:U:O4'	36:DA:1900:A:C2	2.55	0.59
39:DD:18:VAL:HG23	39:DD:211:ARG:NH2	2.17	0.59
3:AC:114:PRO:O	3:AC:118:GLN:HG3	2.02	0.59
3:AC:35:GLU:OE1	3:AC:97:LYS:HE2	2.02	0.59
10:AJ:24:VAL:O	10:AJ:27:ALA:N	2.35	0.59
43:BH:118:PRO:CG	43:BH:121:ILE:HB	2.32	0.59
1:CA:1155:G:O2'	1:CA:1156:G:H5'	2.01	0.59
36:DA:440:G:N2	41:DF:46:ARG:NH2	2.50	0.59
33:D7:13:ALA:O	33:D7:17:GLY:HA3	2.01	0.59
41:BF:80:ALA:HB1	41:BF:81:PRO:HD2	1.82	0.59
12:AL:90:VAL:O	12:AL:92:ASP:N	2.35	0.59
1:AA:186:C:O3'	20:AT:82:SER:HB3	2.01	0.59
1:AA:512:U:H2'	1:AA:513:C:C6	2.36	0.59
1:AA:639:G:H2'	1:AA:640:A:H8	1.67	0.59
1:AA:630:G:H2'	1:AA:631:G:H5'	1.84	0.59
40:BE:100:GLU:O	40:BE:172:VAL:HG23	2.01	0.59
1:AA:1356:G:O2'	1:AA:1357:A:H5'	2.01	0.59
1:AA:1298:C:N4	7:AG:114:ARG:HD2	2.17	0.59
1:CA:594:G:H2'	1:CA:595:G:H5'	1.84	0.59
1:CA:697:U:H2'	1:CA:698:G:H5'	1.84	0.59
36:BA:2393:A:C2'	36:BA:2394:C:H5'	2.32	0.59
36:DA:2051:A:H5'	36:DA:2578:G:O4'	2.03	0.59
57:BY:46:LYS:HB2	57:BY:62:GLU:CD	2.22	0.59
36:DA:2331:G:N2	36:DA:2385:C:C4	2.70	0.59
48:DP:126:VAL:HG22	48:DP:145:PRO:CB	2.32	0.59
25:AZ:32:THR:O	25:AZ:33:TYR:C	2.38	0.59
38:BC:75:LEU:HG	38:BC:112:ALA:O	2.02	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2476:A:H2	36:BA:2477:C:C6	2.20	0.59
36:BA:2008:C:O2'	36:BA:2009:G:H5'	2.02	0.59
5:AE:44:GLY:O	5:AE:58:ALA:HB1	2.02	0.59
52:BT:82:LEU:CD1	52:BT:82:LEU:H	2.03	0.59
36:DA:1669:A:H2'	36:DA:1670:C:H5'	1.83	0.59
52:DT:13:ARG:HH22	52:DT:15:VAL:HG11	1.67	0.59
1:AA:968:A:O2'	1:AA:969:A:OP1	2.17	0.59
42:BG:7:LEU:HB2	42:BG:104:GLU:OE2	2.02	0.59
35:B9:12:ASP:C	35:B9:14:CYS:H	2.04	0.59
3:CC:120:VAL:HG12	3:CC:121:ALA:N	2.17	0.59
4:CD:138:TYR:HD2	4:CD:139:ARG:N	1.99	0.59
2:CB:87:ARG:NH2	2:CB:233:SER:N	2.49	0.59
41:BF:51:THR:HG21	41:BF:91:GLY:CA	2.30	0.59
36:BA:1340:U:O2	36:BA:1603:A:C8	2.55	0.59
39:BD:136:ILE:CD1	39:BD:136:ILE:N	2.65	0.59
39:DD:35:LYS:HG2	39:DD:63:ARG:CG	2.30	0.59
39:DD:35:LYS:N	39:DD:36:PRO:HD2	2.16	0.59
36:DA:1639:U:H2'	36:DA:1640:C:C5'	2.32	0.59
36:DA:2699:C:O2'	36:DA:2700:C:H5'	2.02	0.59
36:DA:426:C:O2'	36:DA:427:U:H5'	2.02	0.59
40:BE:116:VAL:HG23	40:BE:120:TRP:HB2	1.84	0.59
40:DE:31:CYS:CB	40:DE:49:LEU:HD12	2.32	0.59
1:CA:880:C:H2'	1:CA:881:G:H8	1.66	0.59
36:DA:2786:U:O2'	40:DE:62:PRO:HA	2.02	0.59
42:BG:117:PHE:HZ	42:BG:179:PRO:CB	2.13	0.59
3:CC:18:TRP:HE1	14:CN:55:GLY:N	2.00	0.59
1:CA:1126:U:O2'	1:CA:1127:G:H5'	2.02	0.59
27:B1:50:ARG:CG	27:B1:59:THR:HG22	2.29	0.59
1:CA:295:C:O2'	1:CA:296:U:H5'	2.02	0.59
36:DA:2068:U:N3	36:DA:2430:A:C2	2.57	0.59
36:DA:1386:C:H3'	36:DA:1386:C:H6	1.67	0.59
18:CR:66:LEU:HG	18:CR:70:ILE:CD1	2.32	0.59
36:BA:1345:C:O2'	36:BA:1346:G:H5'	2.02	0.59
36:BA:678:C:H2'	36:BA:679:C:H6	1.66	0.59
3:CC:90:GLU:O	3:CC:93:LYS:HB3	2.02	0.59
1:CA:1507:A:C8	1:CA:1507:A:H5''	2.36	0.59
1:CA:186:C:O3'	20:CT:82:SER:HB3	2.02	0.59
1:CA:1316:G:C3'	1:CA:1317:C:H5''	2.33	0.59
1:AA:1088:G:H2'	1:AA:1089:G:H8	1.66	0.59
36:DA:777:A:H2'	36:DA:778:G:C8	2.36	0.59
38:DC:45:ALA:O	38:DC:171:ILE:HG22	2.02	0.59
6:AF:10:LEU:HD13	6:AF:59:TYR:HD2	1.67	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:116:THR:HG22	13:AM:118:ALA:H	1.66	0.59
36:BA:1438:U:H2'	36:BA:1439:A:H8	1.68	0.59
12:AL:119:LYS:O	12:AL:120:TYR:CB	2.50	0.59
11:AK:72:ALA:O	11:AK:75:TYR:HB2	2.02	0.59
50:DR:21:TYR:HB3	50:DR:47:PHE:CE2	2.37	0.59
1:CA:242:C:H2'	1:CA:243:A:H5'	1.84	0.59
54:DV:99:ILE:HD13	54:DV:99:ILE:N	2.17	0.59
36:DA:1304:C:O2'	36:DA:1305:C:H5'	2.02	0.59
36:BA:1963:U:H4'	36:BA:1964:G:OP1	2.01	0.59
37:BB:10:C:O2'	37:BB:11:C:H5'	2.03	0.59
34:B8:28:GLY:O	34:B8:32:LEU:HD23	2.01	0.59
40:DE:82:ARG:HG3	40:DE:82:ARG:NH1	2.15	0.59
8:AH:63:LEU:H	8:AH:63:LEU:HD22	1.66	0.59
36:DA:2476:A:H2	36:DA:2477:C:C6	2.21	0.59
58:DZ:108:PRO:C	58:DZ:110:GLY:N	2.56	0.59
41:BF:20:LEU:H	41:BF:24:LEU:HD21	1.68	0.59
43:DH:66:GLY:HA2	43:DH:69:ARG:HE	1.66	0.59
42:BG:139:LEU:HD22	42:BG:146:TYR:HB2	1.85	0.59
36:DA:1132:A:H2'	36:DA:1133:U:H6	1.67	0.59
36:DA:2781:A:H5'	36:DA:2782:G:H5'	1.84	0.59
53:DU:92:ARG:NH2	54:DV:10:LYS:HA	2.17	0.59
1:CA:1046:A:H3'	1:CA:1047:G:H8	1.67	0.59
4:CD:67:ILE:HG22	4:CD:68:TYR:CD1	2.36	0.59
51:BS:94:TYR:O	51:BS:95:HIS:CB	2.48	0.59
38:DC:20:TYR:HB3	38:DC:24:GLU:HB3	1.85	0.59
1:AA:1060:C:H5''	10:AJ:51:ARG:HB3	1.83	0.59
36:DA:916:G:O2'	36:DA:917:A:H5''	2.02	0.59
1:CA:1369:C:H2'	1:CA:1370:G:O4'	2.02	0.59
41:BF:6:VAL:HG12	41:BF:7:TYR:N	2.12	0.59
1:CA:80:G:C2	1:CA:90:U:H5'	2.38	0.59
20:CT:17:ARG:C	20:CT:19:SER:H	2.04	0.59
36:BA:1899:G:H21	36:BA:1902:C:H41	1.48	0.59
14:CN:3:ARG:HG2	14:CN:3:ARG:O	2.01	0.59
36:BA:428:A:H3'	36:BA:429:A:H8	1.67	0.59
42:BG:57:ALA:HB2	42:BG:90:LEU:HD21	1.84	0.59
42:DG:112:PRO:O	42:DG:114:ILE:N	2.35	0.59
36:BA:1526:G:O2'	36:BA:1527:G:H5'	2.01	0.59
7:AG:42:ILE:HG23	7:AG:117:ALA:CA	2.30	0.59
36:DA:1057:A:C2	36:DA:1058:G:H1'	2.37	0.59
2:AB:96:ARG:O	2:AB:97:TRP:C	2.40	0.59
20:AT:57:ARG:HH12	20:AT:103:GLY:H	1.49	0.59
38:DC:30:LYS:NZ	38:DC:30:LYS:HA	2.17	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1805:U:H4'	39:BD:250:TRP:CZ2	2.37	0.59
55:DW:12:ILE:CB	55:DW:42:ARG:HH12	2.14	0.59
1:CA:769:G:C2'	1:CA:770:C:H5'	2.32	0.59
39:DD:126:GLN:HG3	39:DD:129:ASN:ND2	2.18	0.59
54:BV:3:ALA:CB	54:BV:14:VAL:HG23	2.32	0.59
18:CR:69:THR:O	18:CR:70:ILE:C	2.41	0.59
40:BE:69:LYS:N	40:BE:69:LYS:HE2	2.17	0.59
36:BA:2626:C:H2'	36:BA:2627:G:C8	2.37	0.59
36:BA:1784:A:H4'	36:BA:1785:A:O5'	2.02	0.59
36:DA:1409:C:H2'	36:DA:1410:G:C8	2.36	0.59
5:AE:64:ARG:CZ	5:AE:64:ARG:HB2	2.33	0.59
36:BA:968:G:H2'	36:BA:969:U:H6	1.65	0.59
56:DX:56:THR:HG22	56:DX:79:ALA:HB1	1.83	0.59
1:AA:691:G:H2'	1:AA:692:U:C6	2.38	0.59
36:BA:271(D):G:H2'	36:BA:271(E):U:O4'	2.02	0.59
17:AQ:29:HIS:CG	17:AQ:30:PRO:HD2	2.37	0.59
2:CB:7:VAL:CA	2:CB:11:LEU:HG	2.32	0.59
36:DA:669:G:C2	36:DA:801:G:C6	2.90	0.59
3:CC:206:GLU:O	3:CC:208:ILE:N	2.35	0.59
36:DA:34:C:H41	36:DA:447:A:N6	1.98	0.59
36:DA:1038:C:C2'	36:DA:1039:G:H5''	2.32	0.59
22:CW:8:U:O2'	22:CW:9:A:H5''	2.01	0.59
17:CQ:10:VAL:HG21	17:CQ:55:ASP:HB2	1.84	0.59
1:AA:1298:C:C4	7:AG:114:ARG:HD2	2.38	0.59
5:CE:37:ARG:O	5:CE:38:GLN:HG2	2.03	0.59
1:CA:102:G:O2'	1:CA:103:C:H5'	2.01	0.59
8:CH:134:ILE:HG22	8:CH:135:CYS:SG	2.42	0.59
39:DD:9:TYR:CD2	39:DD:10:THR:HG22	2.37	0.59
55:DW:95:ILE:O	55:DW:95:ILE:HG13	2.03	0.59
17:AQ:47:PRO:HG2	17:AQ:48:GLU:H	1.67	0.59
25:CZ:356:PRO:O	25:CZ:357:PRO:C	2.40	0.59
36:BA:973:A:H5'	36:BA:1188:U:H1'	1.84	0.59
36:DA:2048:G:C2	36:DA:2621:A:C2	2.91	0.59
50:DR:42:LYS:O	50:DR:45:ARG:N	2.27	0.59
1:CA:8:A:C5'	5:CE:120:THR:O	2.51	0.59
56:BX:18:TYR:HA	56:BX:21:PHE:CE1	2.38	0.59
36:BA:1351:C:H2'	36:BA:1352:U:C6	2.38	0.59
36:BA:621:A:H2'	36:BA:622:G:C5'	2.32	0.59
36:BA:621:A:H2'	36:BA:622:G:H5'	1.85	0.59
1:AA:1054:C:H6	1:AA:1196:U:C5	2.20	0.59
50:BR:45:ARG:O	50:BR:46:GLY:C	2.41	0.59
56:DX:11:PRO:HG2	56:DX:13:LEU:HG	1.83	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1138:G:C2	36:DA:1139:G:H1'	2.38	0.59
36:DA:28:A:N6	36:DA:512:G:O2'	2.35	0.59
36:DA:554:U:H2'	36:DA:555:U:C6	2.37	0.59
36:BA:1503:U:C6	36:BA:1504:C:H5	2.21	0.59
8:CH:109:ILE:CG2	8:CH:137:VAL:HB	2.33	0.59
36:DA:1344:G:H4'	36:DA:1384:A:C5	2.37	0.59
40:DE:167:VAL:HG21	40:DE:187:ALA:O	2.01	0.59
52:DT:28:VAL:CG1	52:DT:46:GLU:HA	2.32	0.59
1:AA:939:G:H1	1:AA:1344:C:H42	1.50	0.59
36:BA:1060:U:H1'	36:BA:1061:U:C5'	2.32	0.59
1:AA:1497:G:H2'	1:AA:1498:U:H5'	1.85	0.59
4:AD:138:TYR:HD2	4:AD:139:ARG:N	2.00	0.59
1:CA:863:U:H2'	1:CA:864:A:H5''	1.84	0.59
36:DA:1902:C:H5''	39:DD:246:PRO:CD	2.32	0.59
36:BA:2189:U:H2'	36:BA:2190:G:O4'	2.02	0.59
3:AC:15:THR:HG22	3:AC:16:ARG:N	2.18	0.59
27:B1:45:ASN:HB3	27:B1:64:ALA:CB	2.28	0.59
48:BP:16:ARG:HD3	48:BP:18:ARG:N	2.16	0.59
39:DD:61:LEU:O	39:DD:63:ARG:NH1	2.35	0.59
36:BA:2311:A:C2	42:BG:80:PHE:HB3	2.37	0.59
37:DB:43:C:O2	42:DG:95:ARG:NE	2.32	0.59
43:DH:94:TYR:CE2	43:DH:152:ARG:HG2	2.37	0.59
36:DA:1340:U:O2	36:DA:1603:A:C8	2.55	0.59
7:AG:113:GLU:CB	7:AG:119:ARG:HG2	2.30	0.59
40:DE:52:LEU:HB3	40:DE:76:ARG:H	1.67	0.59
36:DA:2313:C:H5'	36:DA:2313:C:H6	1.67	0.59
38:DC:100:ILE:O	38:DC:104:LEU:HD23	2.02	0.59
1:CA:824:C:H2'	1:CA:825:G:H8	1.66	0.59
11:CK:95:ILE:O	11:CK:98:LEU:N	2.35	0.59
1:AA:449:C:H3'	1:AA:450:G:H8	1.68	0.59
38:BC:30:LYS:NZ	38:BC:30:LYS:HA	2.17	0.59
8:AH:101:PRO:C	8:AH:102:ARG:HD3	2.23	0.59
1:CA:1403:C:C6	1:CA:1403:C:O5'	2.55	0.59
36:DA:47:C:C4	36:DA:48:G:N7	2.69	0.59
1:CA:1324:A:C4'	1:CA:1362:C:H4'	2.32	0.59
37:BB:5:C:H2'	37:BB:6:C:H6	1.66	0.59
25:AZ:311:THR:HG1	25:AZ:313:HIS:HE2	1.48	0.59
41:BF:81:PRO:O	41:BF:82:ILE:C	2.40	0.59
36:DA:1288:U:C2	36:DA:1327:C:O2	2.55	0.59
12:AL:83:VAL:HG12	12:AL:84:LEU:H	1.66	0.59
1:CA:923:A:C5'	5:CE:21:ALA:HB2	2.31	0.59
20:CT:81:LYS:C	20:CT:83:ARG:H	2.06	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B1:70:VAL:O	27:B1:73:LEU:HD12	2.03	0.59
1:AA:649:G:O2'	1:AA:650:G:H5'	2.03	0.59
36:BA:2312:U:H2'	36:BA:2313:C:C5'	2.32	0.59
15:CO:18:PHE:O	15:CO:18:PHE:CD1	2.56	0.59
36:DA:1331:A:HO2'	36:DA:1332:G:H8	1.50	0.59
36:BA:738:G:C2'	36:BA:739:G:H5'	2.32	0.59
39:BD:2:ALA:O	39:BD:3:VAL:O	2.21	0.59
44:BJ:114:UNK:O	44:BJ:115:UNK:CB	2.50	0.59
36:DA:1847:A:N3	36:DA:1847:A:H2'	2.17	0.59
3:CC:173:VAL:N	3:CC:174:PRO:HD3	2.17	0.59
8:AH:2:LEU:HD22	8:AH:3:THR:N	2.16	0.59
32:B6:10:LEU:HD22	32:B6:10:LEU:H	1.68	0.59
36:DA:1278:A:C2	36:DA:1293:C:N3	2.70	0.59
40:DE:47:VAL:HG21	40:DE:86:PRO:CD	2.32	0.59
48:DP:52:GLU:HA	48:DP:52:GLU:OE1	2.03	0.59
25:AZ:139:ASP:OD2	25:AZ:177:LEU:HD21	2.03	0.59
41:DF:185:ASP:HA	41:DF:188:ARG:HD3	1.85	0.59
36:DA:2529:G:H5''	36:DA:2530:A:H5''	1.84	0.59
36:DA:2540:C:O2'	36:DA:2541:A:H5'	2.03	0.59
8:CH:63:LEU:N	8:CH:63:LEU:HD22	2.16	0.59
41:BF:117:ARG:HG2	41:BF:192:LEU:CD1	2.33	0.59
1:AA:1200:C:O2'	1:AA:1201:A:P	2.60	0.59
50:BR:28:LEU:HD23	50:BR:28:LEU:C	2.22	0.59
36:DA:568:U:C6	36:DA:570:G:OP2	2.56	0.59
54:DV:64:HIS:ND1	54:DV:92:THR:HG22	2.17	0.59
2:AB:229:VAL:CG1	2:AB:230:VAL:N	2.65	0.59
8:CH:14:ARG:HH11	8:CH:14:ARG:HB2	1.68	0.59
1:AA:254:G:O2'	1:AA:255:G:H5'	2.02	0.59
36:DA:2630:G:H1'	36:DA:2894:G:H1'	1.84	0.59
1:AA:1237:C:C4'	1:AA:1334:G:N2	2.65	0.59
19:AS:29:ARG:HD2	19:AS:29:ARG:N	2.17	0.59
57:BY:37:VAL:CG2	57:BY:38:ILE:H	2.09	0.59
22:AW:17:C:H42	36:BA:2110:G:H21	1.46	0.59
19:CS:11:VAL:HG13	19:CS:11:VAL:O	2.02	0.59
39:DD:24:ILE:CG1	39:DD:25:THR:N	2.64	0.59
36:DA:1658:C:C2	36:DA:1659:U:C5	2.90	0.59
50:BR:99:LYS:CD	50:BR:99:LYS:H	2.02	0.59
43:DH:149:ARG:HD3	43:DH:164:TYR:CD1	2.37	0.59
43:DH:33:LEU:HD21	43:DH:136:ILE:HG22	1.83	0.59
33:B7:38:GLY:O	36:BA:458:G:H3'	2.03	0.59
36:BA:472:A:H8	36:BA:472:A:H5'	1.67	0.59
36:BA:711:G:H1	36:BA:720:C:N4	1.98	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:585:G:H2'	1:CA:586:C:C6	2.38	0.59
15:CO:82:ILE:HD13	15:CO:83:GLU:N	2.17	0.59
2:CB:130:ARG:NH2	2:CB:131:PRO:HD2	2.18	0.59
36:BA:828:U:C5	36:BA:829:A:N6	2.70	0.59
1:CA:190:U:O2'	1:CA:191:G:H5'	2.01	0.59
13:AM:108:ARG:HH11	13:AM:108:ARG:CB	2.15	0.59
55:DW:12:ILE:CD1	55:DW:42:ARG:NH1	2.62	0.59
27:D1:50:ARG:HH22	36:DA:2200:C:H5'	1.65	0.59
24:CY:54:5MU:C2'	24:CY:55:PSU:H5'	2.31	0.59
26:D0:24:LYS:HD2	36:DA:2355:C:H4'	1.84	0.59
36:DA:7:G:N2	36:DA:8:A:H1'	2.17	0.59
36:BA:1783:A:N1	36:BA:2587:A:C2	2.71	0.59
36:BA:2781:A:H5'	36:BA:2782:G:H5'	1.82	0.59
1:CA:1495:U:O2'	36:DA:1919:A:N1	2.36	0.59
5:CE:64:ARG:HB2	5:CE:64:ARG:CZ	2.32	0.59
1:AA:473:G:H5''	16:AP:81:ARG:NE	2.18	0.59
36:DA:1011:G:O2'	36:DA:1013:C:H5''	2.03	0.59
12:AL:37:CYS:O	12:AL:80:HIS:HA	2.02	0.59
37:BB:65:C:H2'	37:BB:109:C:N4	2.16	0.59
2:AB:7:VAL:C	2:AB:11:LEU:HG	2.23	0.59
1:AA:9:G:H5''	5:AE:122:GLU:OE1	2.01	0.59
36:BA:1747(A):G:H2'	36:BA:1748:G:H5''	1.84	0.59
36:BA:2312:U:O2'	36:BA:2313:C:H5''	2.02	0.59
38:DC:58:VAL:HG22	38:DC:201:PRO:CG	2.33	0.59
11:CK:13:GLN:HG2	11:CK:75:TYR:O	2.02	0.59
11:AK:110:ASP:CB	18:AR:85:LEU:HD23	2.32	0.59
1:AA:784:C:H4'	36:BA:1837:C:OP1	2.03	0.59
43:DH:12:PRO:O	43:DH:15:VAL:HG22	2.02	0.59
1:CA:1008:C:H42	1:CA:1021:G:H1	1.50	0.59
43:DH:155:SER:O	43:DH:157:TYR:N	2.36	0.59
1:CA:246:A:O3'	1:CA:247:G:H4'	2.02	0.59
36:BA:2292:C:O2'	36:BA:2293:C:H5'	2.02	0.59
50:DR:14:SER:HA	50:DR:17:ARG:NH1	2.18	0.59
48:DP:101:VAL:C	48:DP:103:ALA:H	2.05	0.59
48:DP:91:PHE:N	48:DP:91:PHE:CD1	2.70	0.59
36:DA:2762:G:H8	36:DA:2762:G:C5'	2.15	0.59
39:BD:85:ASP:OD2	39:BD:88:ARG:NH1	2.36	0.59
38:BC:83:ILE:HD11	38:BC:97:GLU:OE2	2.02	0.59
1:AA:972:C:O3'	10:AJ:57:LYS:HG3	2.02	0.59
28:B2:12:GLU:O	28:B2:16:LEU:HG	2.02	0.59
50:BR:116:LEU:O	50:BR:117:VAL:HG12	2.02	0.59
46:DN:36:GLY:H	46:DN:49:GLY:HA2	1.66	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:DN:3:THR:CG2	46:DN:4:TYR:H	2.13	0.59
9:CI:53:VAL:HG11	9:CI:92:TYR:CE2	2.38	0.59
1:CA:1207:G:H2'	1:CA:1208:C:H6	1.68	0.59
1:CA:973:G:H3'	1:CA:974:A:H5''	1.82	0.59
51:BS:89:ARG:O	51:BS:92:TYR:HB3	2.01	0.59
40:BE:52:LEU:HB3	40:BE:76:ARG:H	1.68	0.59
36:DA:2675:A:H5'	47:DO:31:LYS:HZ2	1.67	0.59
52:BT:64:ARG:HH11	52:BT:102:ILE:HD11	1.68	0.59
36:BA:2786:U:O2'	40:BE:62:PRO:HA	2.02	0.59
36:DA:1991:U:C2'	36:DA:1992:G:H5''	2.31	0.59
52:DT:13:ARG:CA	52:DT:13:ARG:NE	2.65	0.59
38:BC:21:THR:HB	38:BC:228:SER:HB2	1.85	0.59
58:BZ:28:MET:SD	58:BZ:35:ARG:O	2.60	0.59
57:DY:10:GLY:CA	57:DY:27:VAL:HG13	2.32	0.59
10:AJ:50:ILE:HD11	14:AN:41:ARG:HD2	1.85	0.59
1:CA:375:U:H4'	16:CP:17:TYR:CE2	2.38	0.59
7:CG:138:LYS:O	7:CG:142:GLU:HG3	2.03	0.59
56:DX:65:ARG:O	56:DX:66:LEU:HB2	2.02	0.59
3:CC:147:LYS:O	3:CC:172:ARG:HB2	2.02	0.59
4:CD:95:GLY:O	4:CD:98:GLU:N	2.32	0.59
25:AZ:285:ASN:HD22	25:AZ:285:ASN:N	2.00	0.59
1:CA:165:C:O2'	1:CA:166:G:H5'	2.03	0.59
46:BN:46:VAL:CG1	46:BN:48:MET:HG3	2.33	0.59
36:DA:428:A:H3'	36:DA:429:A:C8	2.38	0.59
36:BA:1091:G:H2'	36:BA:1092:C:H6	1.67	0.59
49:BQ:42:ILE:C	49:BQ:94:VAL:HG12	2.23	0.59
1:CA:829:G:O2'	1:CA:830:G:H5'	2.02	0.59
58:DZ:91:LEU:N	58:DZ:91:LEU:HD23	2.17	0.59
1:AA:665:A:H2'	1:AA:725:G:H22	1.66	0.59
4:CD:128:VAL:O	4:CD:129:ASN:C	2.41	0.59
36:BA:792:G:H2'	36:BA:2440:C:O2	2.03	0.59
58:BZ:139:VAL:HG12	58:BZ:140:ASP:N	2.12	0.59
36:DA:1342:A:OP2	36:DA:1602:U:O4	2.21	0.59
56:BX:60:ARG:HA	56:BX:75:ASP:CG	2.23	0.59
1:AA:225:C:H2'	1:AA:226:G:C8	2.37	0.59
48:BP:115:LEU:HG	48:BP:116:GLY:N	2.17	0.59
36:DA:2219:G:C2'	36:DA:2220:G:H5'	2.32	0.59
1:CA:116:A:H2'	1:CA:117:G:O4'	2.02	0.59
36:BA:2582:G:H2'	36:BA:2582:G:N3	2.17	0.59
36:DA:979:G:H21	36:DA:985:C:H42	1.50	0.59
52:BT:113:LYS:C	52:BT:114:LEU:HD23	2.23	0.59
25:AZ:315:LYS:HB3	25:AZ:404:LEU:HB2	1.84	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:673:G:H2'	1:AA:674:G:C8	2.38	0.59
12:CL:32:PHE:HB3	12:CL:84:LEU:CD2	2.32	0.59
1:AA:1442(A):G:H3'	52:BT:118:ARG:HH11	1.67	0.59
36:BA:271(D):G:O2'	36:BA:271(E):U:H5'	2.02	0.59
1:CA:601:C:H2'	1:CA:602:A:C8	2.37	0.59
36:DA:2073:C:O2'	36:DA:2074:U:H5'	2.02	0.59
1:AA:573:A:OP2	1:AA:574:A:OP2	2.21	0.59
46:DN:6:PRO:O	46:DN:7:LYS:O	2.20	0.59
58:BZ:118:GLN:NE2	58:BZ:120:ILE:HD11	2.17	0.59
1:AA:200:G:H1	1:AA:217:C:N4	2.01	0.59
36:BA:2562:U:C2'	36:BA:2563:U:H5'	2.33	0.59
51:BS:102:ALA:O	51:BS:103:GLU:HG2	2.02	0.59
1:CA:1081:G:H2'	1:CA:1082:G:H8	1.68	0.59
55:DW:82:LEU:HB3	55:DW:84:ARG:NH1	2.17	0.59
36:DA:645:C:O2	36:DA:645:C:H3'	2.03	0.59
12:CL:111:LYS:O	12:CL:112:ASP:HB2	2.02	0.59
3:CC:86:VAL:O	3:CC:89:GLU:HB3	2.03	0.59
5:CE:68:GLU:O	5:CE:68:GLU:HG3	2.02	0.59
36:BA:531:C:C5	36:BA:2035:G:C2	2.91	0.59
36:BA:2337:G:H2'	36:BA:2338:G:C8	2.37	0.59
36:BA:586:A:H5'	41:BF:89:VAL:HG21	1.84	0.59
25:AZ:195:TRP:O	25:AZ:199:ILE:HG12	2.02	0.59
28:D2:47:ASN:HD21	36:DA:94(A):G:H21	1.48	0.59
36:DA:483:A:O3'	57:DY:49:VAL:HG22	2.03	0.59
36:BA:1244:G:H4'	48:BP:11:GLY:HA2	1.84	0.59
43:BH:67:LEU:C	43:BH:71:LEU:HG	2.23	0.59
4:AD:17:VAL:HG21	4:AD:63:LYS:NZ	2.17	0.59
36:BA:2012:G:H4'	55:BW:96:ILE:CD1	2.18	0.59
36:BA:1651:G:H4'	50:BR:39:PRO:HG2	1.85	0.59
50:BR:59:ASP:O	50:BR:61:HIS:N	2.36	0.59
42:BG:68:PRO:HG3	42:BG:92:VAL:HB	1.83	0.59
36:DA:588:U:H1'	41:DF:90:PHE:CG	2.36	0.59
41:DF:171:PRO:C	41:DF:173:VAL:H	2.05	0.59
13:AM:89:GLY:C	13:AM:90:LEU:O	2.40	0.59
1:AA:1070:U:H2'	1:AA:1071:C:C6	2.33	0.59
36:BA:2444:G:OP1	41:BF:68:LYS:HE3	2.02	0.59
1:CA:1426:C:H2'	1:CA:1427:U:C6	2.37	0.59
36:DA:1771:C:C4	36:DA:1772:G:N7	2.70	0.59
3:AC:120:VAL:CG1	3:AC:121:ALA:N	2.66	0.59
36:BA:763:G:C4	36:BA:765:G:C8	2.91	0.59
37:DB:78:A:C6	37:DB:100:A:C8	2.90	0.59
36:BA:1496:A:H8	36:BA:1577:C:O2'	1.84	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1573:G:H2'	36:BA:1574:C:H5'	1.83	0.59
42:DG:144:ILE:HG23	42:DG:144:ILE:O	2.03	0.59
42:DG:173:LEU:HD22	42:DG:178:PHE:CZ	2.37	0.59
42:DG:5:VAL:CG1	42:DG:6:ALA:N	2.66	0.59
36:BA:1541:G:H4'	36:BA:1542:A:O5'	2.03	0.59
9:AI:48:GLU:HB3	9:AI:101:PHE:CE2	2.38	0.59
24:AY:24:G:H2'	24:AY:25:C:C6	2.37	0.59
36:BA:1099:G:H8	36:BA:1099:G:O5'	1.86	0.59
36:DA:2810:A:C8	36:DA:2811:G:H1'	2.38	0.59
5:CE:145:LYS:O	5:CE:148:VAL:HB	2.03	0.59
51:DS:24:LEU:HB3	51:DS:85:VAL:HG12	1.85	0.59
25:CZ:221:PHE:O	25:CZ:222:LEU:HB2	2.02	0.59
1:CA:151:A:H2'	1:CA:152:A:H5'	1.83	0.59
5:AE:150:ARG:CB	5:AE:150:ARG:HH11	2.14	0.59
36:DA:149:A:C2	36:DA:150:C:C2	2.91	0.59
36:DA:45:C:H42	36:DA:179:G:H1	1.51	0.59
36:DA:1882:C:H5'	36:DA:1883:G:OP2	2.03	0.59
36:BA:2777:G:H4'	36:BA:2778:A:H5'	1.84	0.59
51:DS:94:TYR:O	51:DS:95:HIS:CB	2.49	0.59
36:BA:1386:C:H3'	36:BA:1386:C:H6	1.66	0.59
19:AS:6:LYS:HG2	19:AS:7:LYS:CE	2.30	0.59
36:BA:1141:U:C5	46:BN:64:GLY:HA3	2.38	0.59
57:DY:39:VAL:CG1	57:DY:40:GLU:H	2.09	0.59
36:BA:183:C:H5'	36:BA:433:C:H4'	1.83	0.59
1:CA:1312:G:H2'	1:CA:1313:U:C6	2.38	0.59
36:DA:2062:A:O2'	36:DA:2063:C:H5'	2.02	0.59
29:B3:3:ARG:HB2	29:B3:59:VAL:O	2.02	0.59
37:BB:15:A:H1'	37:BB:110:G:C5	2.38	0.59
25:AZ:19:HIS:HA	25:AZ:115:GLN:HB2	1.83	0.59
1:AA:9:G:H1	1:AA:25:C:H42	1.49	0.59
58:BZ:117:LEU:HD12	58:BZ:173:ALA:O	2.02	0.59
36:BA:2494:G:O2'	49:BQ:80:GLU:HA	2.01	0.59
25:AZ:188:THR:HG23	25:AZ:192:GLU:OE2	2.02	0.59
51:DS:102:ALA:O	51:DS:103:GLU:HG2	2.02	0.59
8:AH:2:LEU:HD22	8:AH:3:THR:H	1.66	0.59
49:DQ:135:ASP:O	49:DQ:138:ASP:OD2	2.19	0.59
36:BA:1892:C:H2'	36:BA:1893:C:C6	2.38	0.59
8:AH:45:ILE:HG21	8:AH:61:VAL:CG1	2.32	0.59
36:BA:1364:G:H5''	36:BA:1365:A:OP2	2.02	0.59
26:B0:55:ARG:C	26:B0:57:PHE:H	2.04	0.59
36:BA:28:A:N6	36:BA:512:G:O2'	2.36	0.59
36:DA:1801:G:H3'	36:DA:1802:A:H5'	1.85	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:44:ASN:OD1	39:DD:44:ASN:N	2.35	0.59
36:DA:2290:G:H2'	36:DA:2291:U:O4'	2.03	0.59
28:D2:38:GLN:HB3	28:D2:44:LEU:CG	2.32	0.59
28:D2:2:LYS:CB	36:DA:97:C:H5''	2.26	0.59
57:DY:9:LYS:CE	57:DY:94:LYS:HE2	2.33	0.59
56:BX:11:PRO:HG2	56:BX:13:LEU:HG	1.85	0.59
38:BC:131:LEU:HD22	38:BC:136:LEU:CD1	2.33	0.59
4:AD:67:ILE:HG22	4:AD:68:TYR:CD1	2.37	0.59
43:DH:67:LEU:C	43:DH:71:LEU:HG	2.22	0.59
36:BA:2475:C:H42	36:BA:2529:G:N2	2.00	0.59
28:B2:10:LEU:CD2	28:B2:14:ARG:HG3	2.33	0.59
28:B2:54:LYS:O	28:B2:57:ILE:HG12	2.03	0.59
36:BA:1269:A:H61	36:BA:2011:U:H3	1.50	0.59
10:AJ:17:ASP:CG	10:AJ:70:ARG:HH21	2.05	0.59
56:DX:18:TYR:O	56:DX:20:GLY:N	2.36	0.59
36:DA:401:A:H2'	36:DA:402:A:C8	2.36	0.59
53:DU:79:PHE:O	53:DU:83:LEU:HD13	2.01	0.59
54:DV:17:GLY:C	54:DV:18:LEU:HD13	2.23	0.59
8:CH:109:ILE:CG1	8:CH:110:ALA:H	2.09	0.59
2:CB:101:MET:C	2:CB:102:LEU:HD12	2.23	0.59
38:DC:195:ALA:O	38:DC:198:ALA:HB3	2.02	0.59
36:BA:1661:G:O2'	36:BA:1662:C:H5'	2.03	0.59
52:DT:13:ARG:NH2	52:DT:15:VAL:HG11	2.18	0.59
38:BC:20:TYR:HB3	38:BC:24:GLU:HB2	1.84	0.59
7:AG:100:ALA:O	7:AG:101:LEU:C	2.41	0.59
1:CA:377:G:OP1	16:CP:5:ARG:HD3	2.02	0.59
36:BA:1708:C:H2'	36:BA:1709:U:H6	1.68	0.59
1:CA:1060:C:C5'	10:CJ:51:ARG:HB3	2.33	0.59
1:CA:1363(A):A:H4'	1:CA:1364:U:OP2	2.00	0.59
11:AK:124:LYS:NZ	11:AK:124:LYS:CB	2.66	0.59
42:BG:34:LEU:CA	42:BG:161:THR:HG22	2.29	0.59
35:B9:10:ILE:O	35:B9:11:CYS:SG	2.60	0.59
36:BA:2101:G:H22	36:BA:2189:U:H3	1.50	0.59
4:CD:78:LEU:O	4:CD:78:LEU:HD23	2.02	0.59
3:AC:53:ALA:HB2	3:AC:115:LEU:CD2	2.32	0.59
3:AC:53:ALA:HB2	3:AC:115:LEU:CG	2.33	0.59
1:CA:448:A:H2'	1:CA:449:C:C6	2.38	0.59
16:CP:14:ASN:CA	16:CP:42:ARG:HH12	2.12	0.59
16:AP:20:VAL:HA	16:AP:36:ILE:CG1	2.33	0.59
36:BA:1788:C:O2'	36:BA:1789:A:H5'	2.03	0.59
49:DQ:140:ALA:O	49:DQ:141:GLN:HG2	2.02	0.59
43:BH:33:LEU:HD21	43:BH:136:ILE:HG22	1.83	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:996:A:H1'	53:BU:92:ARG:HE	1.68	0.59
46:BN:46:VAL:O	46:BN:47:ALA:HB3	2.02	0.59
36:DA:1301:A:H4'	36:DA:1302:A:OP1	2.03	0.59
40:DE:117:MET:HA	40:DE:122:PHE:H	1.67	0.59
30:D4:9:LEU:C	30:D4:10:VAL:HG12	2.22	0.59
49:BQ:22:LYS:N	58:BZ:78:LYS:HE3	2.12	0.59
42:DG:88:ILE:HG22	42:DG:89:GLY:N	2.18	0.59
1:AA:1468:A:H2'	1:AA:1469:G:C1'	2.31	0.59
20:CT:89:ARG:HB2	20:CT:104:LEU:CD1	2.31	0.59
12:CL:37:CYS:O	12:CL:80:HIS:HA	2.02	0.59
36:BA:47:C:C4	36:BA:48:G:N7	2.71	0.59
39:DD:223:GLY:HA2	39:DD:226:MET:SD	2.43	0.59
11:AK:95:ILE:O	11:AK:98:LEU:N	2.35	0.59
58:DZ:139:VAL:HG12	58:DZ:140:ASP:N	2.13	0.59
39:BD:149:PRO:CG	39:BD:186:HIS:HD2	2.16	0.59
36:DA:2131:G:OP1	36:DA:2132:U:H3'	2.02	0.59
1:CA:291:C:O2'	1:CA:292:G:H5'	2.03	0.59
3:AC:64:VAL:HG12	3:AC:66:VAL:HG23	1.84	0.59
1:CA:1317:C:C2'	1:CA:1318:A:H5'	2.33	0.59
36:DA:416:C:C2'	36:DA:417:C:H5'	2.32	0.59
36:BA:1038:C:C2'	36:BA:1039:G:H5''	2.32	0.59
36:DA:2315:G:H2'	36:DA:2316:C:C6	2.38	0.59
4:CD:155:LEU:O	4:CD:159:ARG:HG2	2.03	0.59
36:BA:2533:A:C2'	36:BA:2534:A:H5'	2.33	0.59
36:DA:1722:A:O2'	36:DA:1739:U:C5'	2.51	0.59
7:CG:94:ARG:O	7:CG:97:GLN:N	2.35	0.59
43:BH:30:LYS:HA	43:BH:30:LYS:HE2	1.84	0.59
20:AT:8:ARG:HG3	20:AT:8:ARG:HH11	1.68	0.59
49:DQ:59:ARG:C	49:DQ:59:ARG:HD2	2.23	0.59
36:BA:1190:G:H5'	48:BP:35:HIS:H	1.66	0.59
34:D8:7:HIS:C	34:D8:9:GLY:H	2.06	0.59
36:DA:2292:C:O2'	36:DA:2293:C:H5'	2.02	0.59
36:DA:2393:A:H2'	36:DA:2394:C:H5'	1.84	0.59
36:DA:271(J):C:H2'	36:DA:271(J):C:O2	2.02	0.59
1:AA:973:G:C1'	10:AJ:55:LYS:HE2	2.32	0.59
35:B9:2:LYS:HE2	36:BA:2526:G:H1'	1.84	0.59
36:DA:1192:G:O6	48:DP:29:LYS:NZ	2.36	0.59
53:DU:52:ARG:HA	53:DU:55:ARG:NH1	2.18	0.59
1:AA:274:A:H4'	1:AA:275:G:OP1	2.02	0.59
51:BS:13:ARG:CG	51:BS:14:VAL:H	2.05	0.59
8:AH:25:ASP:O	8:AH:26:VAL:CB	2.51	0.59
36:BA:1988:C:O2'	36:BA:1989:G:H5'	2.02	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1639:U:O2'	36:BA:2699:C:H4'	2.02	0.59
40:BE:103:ASP:HA	40:BE:168:MET:HA	1.83	0.59
49:BQ:135:ASP:O	49:BQ:138:ASP:OD2	2.20	0.59
58:BZ:100:VAL:O	58:BZ:124:ILE:HG12	2.02	0.59
36:BA:858:U:O2	36:BA:2268:A:H2'	2.02	0.59
36:DA:1069:A:H1'	36:DA:1070:A:P	2.43	0.59
36:BA:38:A:O2'	36:BA:39:C:H5'	2.02	0.59
36:DA:907:U:OP1	49:DQ:24:GLY:N	2.35	0.59
36:DA:769:G:H2'	36:DA:770:G:C8	2.37	0.59
40:DE:120:TRP:NE1	40:DE:155:LYS:HB3	2.18	0.59
36:DA:473:G:O2'	36:DA:474:G:H5'	2.02	0.59
7:AG:63:LYS:HZ2	7:AG:67:GLU:HB2	1.66	0.59
1:AA:495:A:H61	4:AD:119:GLN:HE22	1.50	0.59
8:CH:89:PRO:HA	8:CH:92:ARG:HD2	1.85	0.59
13:CM:108:ARG:CA	13:CM:108:ARG:HH11	2.15	0.59
36:DA:1496:A:H1'	36:DA:1578:U:O2'	2.02	0.59
1:CA:1124:G:H2'	1:CA:1145:C:H41	1.67	0.59
27:D1:25:LYS:HB2	36:DA:388:G:OP1	2.02	0.59
27:B1:26:ARG:HG3	27:B1:27:GLU:H	1.67	0.59
20:CT:43:LEU:HB3	20:CT:48:LYS:HG3	1.83	0.59
24:CY:64:C:C4'	25:CZ:391:GLY:HA2	2.32	0.59
36:DA:30:G:H2'	36:DA:31:C:C6	2.37	0.59
1:CA:673:G:H2'	1:CA:674:G:C8	2.38	0.59
13:AM:108:ARG:HH11	13:AM:108:ARG:CA	2.16	0.59
36:BA:2131:G:OP1	36:BA:2132:U:H3'	2.03	0.59
54:BV:19:LYS:HB2	54:BV:96:ILE:HD11	1.82	0.59
39:DD:28:GLU:H	39:DD:29:PRO:CD	2.15	0.59
27:D1:14:VAL:CG2	36:DA:188:G:H5'	2.31	0.59
5:AE:125:SER:O	5:AE:126:ARG:HG3	2.02	0.59
36:DA:2131:G:O4'	36:DA:2133:G:N2	2.33	0.59
33:D7:19:ARG:HD3	36:DA:125:G:O5'	2.03	0.59
36:BA:1600:C:H2'	36:BA:1601:G:C8	2.38	0.59
39:BD:44:ASN:HB2	39:BD:48:ARG:O	2.02	0.59
1:CA:1271:G:C5'	1:CA:1314:C:H5''	2.32	0.59
36:DA:2065:C:H2'	36:DA:2066:C:C6	2.38	0.59
1:CA:68:G:H1	1:CA:101:A:H61	1.49	0.59
12:AL:84:LEU:HD23	12:AL:85:ILE:H	1.67	0.59
26:B0:56:ASP:O	26:B0:56:ASP:OD1	2.21	0.59
36:DA:381:G:C2	36:DA:394:A:C2	2.90	0.59
2:AB:154:LEU:HD23	2:AB:156:LYS:NZ	2.18	0.59
1:AA:1082:G:O2'	1:AA:1083:U:H5'	2.01	0.59
36:DA:2584:U:H2'	36:DA:2585:U:H5'	1.85	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:32:ASN:O	32:B6:33:LYS:HB2	2.03	0.59
40:DE:199:ARG:CZ	40:DE:199:ARG:HB2	2.33	0.59
32:D6:10:LEU:HD12	34:D8:34:TRP:HB2	1.85	0.59
41:DF:40:GLN:HE22	41:DF:182:ASN:HB2	1.68	0.59
5:CE:102:ALA:CB	5:CE:106:PRO:HG2	2.28	0.59
41:BF:40:GLN:HE22	41:BF:182:ASN:HB2	1.66	0.59
43:BH:40:GLU:HB2	43:BH:64:LEU:CD1	2.33	0.59
4:AD:59:ARG:O	4:AD:63:LYS:HB2	2.03	0.59
56:BX:8:ILE:HD12	56:BX:8:ILE:N	2.18	0.59
41:BF:157:VAL:HG22	41:BF:194:MET:HG2	1.85	0.59
40:BE:1:MET:N	40:BE:84:PHE:HB2	2.17	0.59
36:BA:271(L):U:H5''	36:BA:271(M):G:C5'	2.29	0.59
4:CD:12:CYS:SG	4:CD:19:LEU:O	2.58	0.59
41:DF:135:LYS:HB3	41:DF:138:GLU:CB	2.31	0.59
36:BA:2712:U:O2'	36:BA:2713:A:H5'	2.03	0.59
40:BE:13:ARG:O	52:BT:57:PHE:HE1	1.85	0.59
36:BA:2772:C:H5'	40:BE:168:MET:CE	2.33	0.59
36:BA:2631:G:H22	40:BE:61:ARG:NH1	2.00	0.59
58:BZ:52:SER:OG	58:BZ:53:ILE:HG12	2.03	0.59
36:BA:860:U:C2'	36:BA:861:A:H5'	2.33	0.59
19:AS:43:GLU:C	19:AS:45:VAL:N	2.56	0.59
4:AD:121:VAL:HG12	4:AD:134:ASP:CA	2.32	0.59
22:CV:21:A:C2'	22:CV:22:G:H5''	2.33	0.59
3:AC:147:LYS:O	3:AC:172:ARG:HB2	2.03	0.59
36:BA:1971:A:C4	39:BD:241:PRO:HD3	2.38	0.59
39:BD:243:GLY:O	39:BD:244:ARG:HB3	2.03	0.59
49:DQ:29:PHE:HB2	49:DQ:105:GLU:OE2	2.02	0.59
58:DZ:30:ASN:N	58:DZ:33:LEU:O	2.32	0.59
36:BA:20:C:H2'	36:BA:21:A:C8	2.37	0.59
39:BD:77:ALA:CB	39:BD:97:TYR:HA	2.33	0.59
3:AC:26:LYS:NZ	3:AC:27:LYS:HD2	2.18	0.59
48:DP:16:ARG:CD	48:DP:18:ARG:H	2.16	0.59
13:CM:49:THR:O	13:CM:53:VAL:HG23	2.03	0.59
36:DA:2306:C:C4'	42:DG:136:ARG:HH12	2.15	0.59
42:DG:96:ARG:O	42:DG:97:ASP:C	2.39	0.59
40:BE:120:TRP:CG	40:BE:155:LYS:HE3	2.38	0.59
38:BC:100:ILE:O	38:BC:104:LEU:HD23	2.03	0.59
57:BY:95:LYS:CG	57:BY:100:ALA:HA	2.27	0.59
36:BA:1099:G:H2'	36:BA:1100:C:H6	1.68	0.59
51:BS:24:LEU:CB	51:BS:85:VAL:HG12	2.33	0.59
2:AB:101:MET:C	2:AB:102:LEU:HD12	2.24	0.59
4:AD:128:VAL:O	4:AD:130:GLY:N	2.36	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:48:G:N2	36:BA:177:G:N2	2.50	0.59
1:CA:438:G:C4'	4:CD:123:HIS:HD1	2.16	0.59
39:DD:231:HIS:CD2	39:DD:249:PRO:HB3	2.37	0.59
1:CA:770:C:C2'	1:CA:771:G:H5'	2.32	0.59
54:BV:15:GLU:O	54:BV:96:ILE:HB	2.03	0.59
50:DR:83:ILE:HG22	50:DR:87:TYR:HE2	1.67	0.59
36:BA:1812:A:O2'	36:BA:1813:G:H5'	2.02	0.59
36:BA:2715:C:O2'	36:BA:2716:U:H5'	2.03	0.59
36:BA:2885:C:H2'	36:BA:2886:G:O4'	2.02	0.59
1:CA:1431:C:H2'	1:CA:1432:G:O4'	2.03	0.59
1:CA:684:A:N3	11:CK:39:PRO:HG2	2.17	0.59
41:BF:57:VAL:CG1	41:BF:58:ALA:H	2.16	0.59
1:AA:688:G:O2'	1:AA:689:C:H5'	2.03	0.59
17:AQ:99:SER:O	17:AQ:100:LYS:HG3	2.02	0.59
39:DD:175:LEU:HD12	39:DD:185:VAL:CG2	2.33	0.59
4:AD:25:ARG:C	4:AD:27:TYR:H	2.05	0.59
51:BS:83:LYS:HG2	51:BS:105:ALA:CB	2.33	0.59
1:AA:221:C:O2'	1:AA:222:U:H5'	2.02	0.59
36:BA:1747(A):G:C3'	36:BA:1748:G:H5''	2.32	0.59
36:DA:295:G:H5'	57:DY:3:VAL:HG22	1.85	0.59
50:BR:21:TYR:HB3	50:BR:47:PHE:CD2	2.37	0.59
36:DA:1438:U:H2'	36:DA:1439:A:H8	1.68	0.59
3:CC:173:VAL:O	3:CC:175:LEU:HD12	2.03	0.59
42:DG:117:PHE:CG	42:DG:118:ARG:N	2.71	0.59
37:DB:25:A:N3	37:DB:25:A:H2'	2.18	0.59
34:B8:7:HIS:C	34:B8:9:GLY:H	2.07	0.58
36:BA:568:U:C6	36:BA:570:G:OP2	2.55	0.58
39:BD:35:LYS:N	39:BD:36:PRO:HD2	2.17	0.58
38:BC:131:LEU:HD22	38:BC:136:LEU:HD12	1.84	0.58
41:BF:124:LEU:HD22	41:BF:191:ARG:NH2	2.18	0.58
1:AA:971:G:H5''	1:AA:972:C:H5''	1.84	0.58
4:AD:61:LYS:HE2	4:AD:65:ARG:HE	1.68	0.58
36:BA:1654:A:OP2	50:BR:3:HIS:HD2	1.85	0.58
36:BA:2015:A:H2'	36:BA:2016:U:O4'	2.03	0.58
13:AM:2:ALA:C	13:AM:9:ILE:HG23	2.23	0.58
30:B4:14:ILE:N	30:B4:14:ILE:HD12	2.18	0.58
42:BG:92:VAL:HG13	42:BG:92:VAL:O	2.03	0.58
36:DA:1138:G:H1	36:DA:1143:A:H2	1.51	0.58
4:CD:20:TYR:HA	4:CD:26:CYS:CB	2.33	0.58
2:CB:165:VAL:HG23	2:CB:166:ASP:N	2.15	0.58
12:CL:17:LYS:NZ	12:CL:18:VAL:HG22	2.18	0.58
1:AA:1237:C:H4'	1:AA:1334:G:H22	1.67	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:BX:48:LYS:O	56:BX:49:VAL:HG13	2.02	0.58
36:BA:1763:G:N2	36:BA:1765:C:H5'	2.18	0.58
36:BA:1994:C:O2'	36:BA:1995:U:H5'	2.02	0.58
52:DT:52:ILE:O	52:DT:52:ILE:HG22	2.03	0.58
35:D9:11:CYS:SG	35:D9:12:ASP:N	2.75	0.58
36:BA:2645:G:C3'	36:BA:2646:C:H5'	2.25	0.58
7:CG:31:MET:CG	7:CG:32:ARG:H	2.16	0.58
10:CJ:50:ILE:HD11	14:CN:41:ARG:HD2	1.84	0.58
1:AA:1410:G:O2'	1:AA:1411:C:H5'	2.02	0.58
1:AA:1499:A:H1'	1:AA:1520:G:H5'	1.83	0.58
36:BA:2115:G:H22	36:BA:2119:A:P	2.25	0.58
19:CS:45:VAL:HG12	19:CS:63:THR:O	2.03	0.58
10:CJ:28:ARG:C	10:CJ:30:SER:H	2.06	0.58
36:DA:1464:C:O2'	36:DA:1528:A:C8	2.55	0.58
36:BA:1247:A:OP2	48:BP:18:ARG:NH1	2.36	0.58
1:CA:1015:A:H2'	1:CA:1016:A:C8	2.38	0.58
53:BU:92:ARG:NH2	54:BV:10:LYS:HA	2.17	0.58
36:DA:1568:G:OP2	39:DD:63:ARG:NH2	2.33	0.58
39:DD:26:LYS:O	39:DD:27:THR:CB	2.51	0.58
39:DD:27:THR:HG21	39:DD:82:ILE:O	2.03	0.58
39:DD:32:SER:O	39:DD:36:PRO:HG3	2.03	0.58
36:DA:1636:C:H2'	36:DA:1637:A:C8	2.38	0.58
48:DP:20:GLY:O	48:DP:21:ARG:HB2	2.03	0.58
40:DE:116:VAL:HG23	40:DE:120:TRP:HB2	1.84	0.58
25:AZ:389:ARG:HG2	25:AZ:394:THR:HA	1.84	0.58
20:AT:14:LYS:HA	20:AT:17:ARG:NH2	2.18	0.58
25:CZ:300:ARG:O	25:CZ:302:GLN:N	2.35	0.58
10:CJ:97:GLU:HB3	10:CJ:99:LYS:HE2	1.84	0.58
10:CJ:91:PRO:HB2	10:CJ:94:VAL:CB	2.29	0.58
36:BA:776:G:H4'	36:BA:777:A:O5'	2.02	0.58
36:BA:782:A:H4'	36:BA:783:A:O5'	2.03	0.58
1:CA:678:U:O2'	1:CA:679:C:H5'	2.03	0.58
1:CA:1498:U:C5	23:CX:20:U:H5'	2.38	0.58
1:CA:419:C:C2'	1:CA:420:U:H5'	2.33	0.58
1:CA:353:A:H8	1:CA:353:A:H5'	1.68	0.58
29:D3:1:MET:O	29:D3:3:ARG:N	2.36	0.58
36:DA:753:C:O2'	36:DA:754:C:H5'	2.03	0.58
20:CT:33:ILE:HG23	20:CT:63:ILE:HG12	1.83	0.58
11:CK:57:THR:HG22	11:CK:60:ALA:HB3	1.84	0.58
12:CL:32:PHE:HB3	12:CL:84:LEU:HD21	1.85	0.58
51:BS:56:LEU:C	51:BS:58:LEU:H	2.06	0.58
49:DQ:109:VAL:HG12	49:DQ:110:THR:H	1.68	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2543:G:H8	36:BA:2543:G:H5'	1.68	0.58
36:DA:987:G:C2	36:DA:988:A:H1'	2.38	0.58
20:CT:86:ARG:O	20:CT:90:GLN:HG2	2.03	0.58
10:AJ:80:LYS:HB3	10:AJ:80:LYS:HZ3	1.67	0.58
39:BD:76:PRO:O	39:BD:98:VAL:HG23	2.03	0.58
36:DA:1038:C:H3'	36:DA:1039:G:H5''	1.84	0.58
49:DQ:18:LYS:HB3	49:DQ:98:LYS:HZ1	1.66	0.58
36:BA:2304:G:H22	36:BA:2312:U:H3	1.49	0.58
36:BA:1362:C:O2'	36:BA:1363:C:H5'	2.02	0.58
11:AK:34:ASP:O	11:AK:36:ASP:N	2.34	0.58
1:CA:1457:G:H2'	1:CA:1458:G:H8	1.68	0.58
43:BH:74:ASN:OD1	43:BH:138:LYS:HD3	2.03	0.58
18:CR:75:ILE:C	18:CR:77:GLY:H	2.05	0.58
26:D0:56:ASP:O	26:D0:56:ASP:OD1	2.20	0.58
30:B4:40:HIS:CD2	30:B4:41:PRO:HA	2.37	0.58
8:CH:28:ALA:HB3	8:CH:57:PRO:O	2.02	0.58
34:B8:38:GLY:HA3	34:B8:42:ARG:HH12	1.67	0.58
34:B8:7:HIS:CE1	34:B8:9:GLY:HA3	2.38	0.58
48:DP:78:PRO:HB2	48:DP:111:ARG:HH21	1.68	0.58
48:DP:50:ARG:NH1	48:DP:51:PHE:CE2	2.71	0.58
36:BA:769:G:O4'	36:BA:1379:A:N6	2.36	0.58
39:BD:26:LYS:O	39:BD:27:THR:CB	2.50	0.58
36:BA:2469:A:O2'	49:BQ:56:ARG:HG3	2.03	0.58
50:BR:9:LYS:O	50:BR:10:LEU:HD23	2.03	0.58
56:DX:12:VAL:CG2	56:DX:13:LEU:N	2.45	0.58
56:DX:18:TYR:HA	56:DX:21:PHE:CE1	2.38	0.58
54:DV:24:LYS:HA	54:DV:92:THR:CG2	2.33	0.58
1:CA:532:A:H2	1:CA:1206:G:H21	1.49	0.58
1:CA:972:C:OP2	10:CJ:57:LYS:HE2	2.04	0.58
51:BS:28:VAL:HG12	51:BS:29:PHE:N	2.13	0.58
51:BS:89:ARG:HG3	51:BS:92:TYR:HA	1.85	0.58
36:DA:320:A:C6	41:DF:136:THR:HG21	2.39	0.58
41:DF:167:ALA:C	41:DF:173:VAL:HG11	2.23	0.58
36:BA:1636:C:H2'	36:BA:1637:A:C8	2.38	0.58
52:BT:102:ILE:HG13	52:BT:103:ARG:N	2.11	0.58
52:BT:75:ILE:N	52:BT:75:ILE:HD12	2.18	0.58
49:BQ:138:ASP:HB2	58:BZ:53:ILE:HD11	1.85	0.58
36:DA:308:G:H2'	36:DA:309:G:C8	2.38	0.58
51:DS:89:ARG:HG3	51:DS:92:TYR:HA	1.86	0.58
31:D5:40:LYS:HD3	31:D5:44:THR:HB	1.83	0.58
36:DA:2117:A:N6	36:DA:2171:A:H61	2.01	0.58
36:DA:1826:G:H4'	39:DD:242:ARG:HE	1.68	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
55:DW:64:MET:HB3	55:DW:109:GLU:CG	2.33	0.58
3:AC:91:LEU:CD1	3:AC:101:LEU:HD12	2.29	0.58
1:CA:398:C:O2'	1:CA:399:G:H5'	2.03	0.58
39:DD:27:THR:CG2	39:DD:82:ILE:O	2.52	0.58
42:BG:77:ILE:HG22	42:BG:80:PHE:N	2.17	0.58
42:BG:47:LYS:NZ	42:BG:81:LYS:HB3	2.18	0.58
40:BE:117:MET:HA	40:BE:122:PHE:H	1.68	0.58
13:AM:68:GLY:O	13:AM:70:LEU:N	2.36	0.58
5:CE:118:ILE:HG13	5:CE:119:LEU:N	2.18	0.58
25:CZ:79:HIS:CD2	25:CZ:80:VAL:N	2.71	0.58
2:AB:174:VAL:O	2:AB:177:ALA:HB3	2.03	0.58
15:AO:78:TYR:O	15:AO:82:ILE:HG22	2.03	0.58
36:DA:2162:G:O2'	36:DA:2163:C:H5'	2.03	0.58
36:BA:135:G:O2'	36:BA:136:G:H5'	2.03	0.58
1:CA:1522:U:O2'	1:CA:1523:G:H5'	2.03	0.58
1:CA:59:A:H1'	1:CA:354:G:C2	2.38	0.58
36:BA:1376:C:O2'	36:BA:1377:G:H5'	2.03	0.58
36:DA:733:G:C8	36:DA:733:G:O5'	2.52	0.58
39:DD:142:VAL:HG22	39:DD:143:HIS:N	2.17	0.58
36:BA:1020:A:N1	36:BA:1141:U:H1'	2.18	0.58
1:AA:1095:U:H5'	1:AA:1109:C:O2	2.04	0.58
12:CL:105:TYR:CD2	12:CL:105:TYR:N	2.69	0.58
1:CA:1495:U:O4	59:CA:1601:PAR:N12	2.36	0.58
12:CL:53:ARG:N	12:CL:53:ARG:HD2	2.17	0.58
12:AL:53:ARG:HD2	12:AL:53:ARG:N	2.18	0.58
36:DA:384:U:H2'	36:DA:385:C:H6	1.67	0.58
2:AB:16:HIS:HB3	2:AB:210:SER:HA	1.85	0.58
16:AP:45:THR:HG22	16:AP:47:ASP:HB3	1.84	0.58
37:DB:87:G:O5'	37:DB:87:G:H8	1.85	0.58
1:CA:728:A:H2'	1:CA:729:A:C8	2.37	0.58
5:AE:20:GLN:NE2	5:AE:25:ARG:CZ	2.66	0.58
19:AS:24:ALA:O	19:AS:25:LYS:HB2	2.02	0.58
36:BA:2282:G:H5''	36:BA:2283:C:O4'	2.02	0.58
36:BA:2320:A:H2'	36:BA:2320:A:N3	2.17	0.58
34:D8:61:LEU:O	34:D8:64:TYR:N	2.29	0.58
41:DF:5:ALA:HB3	41:DF:18:ARG:O	2.03	0.58
36:DA:271(L):U:C5'	36:DA:271(M):G:H5'	2.27	0.58
38:DC:75:LEU:HG	38:DC:112:ALA:O	2.03	0.58
36:DA:1887:C:C3'	36:DA:1888:G:H5''	2.33	0.58
28:B2:63:VAL:O	28:B2:66:GLU:N	2.36	0.58
36:DA:1258:C:O2'	36:DA:1259:G:H5'	2.04	0.58
36:DA:566:U:O4	54:DV:78:LYS:HE2	2.04	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:944:G:H22	48:DP:38:GLN:NE2	2.01	0.58
36:DA:1138:G:H1'	46:DN:105:GLY:O	2.03	0.58
48:DP:34:GLY:O	48:DP:35:HIS:HB2	2.04	0.58
53:DU:92:ARG:NH2	54:DV:10:LYS:HG2	2.18	0.58
2:AB:8:LYS:NZ	2:AB:217:ARG:NH1	2.51	0.58
2:CB:189:ASP:O	2:CB:191:ASP:N	2.35	0.58
40:BE:54:GLN:O	40:BE:75:VAL:HG23	2.03	0.58
52:BT:80:SER:HB3	52:BT:81:PRO:CD	2.32	0.58
40:DE:103:ASP:HA	40:DE:168:MET:HA	1.84	0.58
52:DT:28:VAL:HG11	52:DT:46:GLU:HA	1.84	0.58
58:BZ:55:HIS:CE1	58:BZ:135:GLU:HG2	2.37	0.58
1:AA:1288:A:H2'	1:AA:1289:A:H8	1.67	0.58
1:AA:1349:A:P	9:AI:120:ARG:HB2	2.44	0.58
36:BA:1709:U:H2'	36:BA:1710:C:C6	2.38	0.58
1:CA:1250:A:H2'	1:CA:1251:A:H8	1.67	0.58
22:CV:5:G:H2'	22:CV:6:G:C8	2.38	0.58
26:B0:69:PHE:CD2	26:B0:79:VAL:HG22	2.39	0.58
1:AA:1488:G:O2'	1:AA:1489:G:H5'	2.04	0.58
36:BA:1384:A:N3	36:BA:1405:U:H1'	2.18	0.58
1:AA:1015:A:H4'	14:AN:15:LYS:NZ	2.17	0.58
1:CA:865:A:O2'	1:CA:866:C:H5'	2.03	0.58
36:DA:763:G:C4	36:DA:765:G:C8	2.92	0.58
36:DA:1971:A:N3	39:DD:240:ALA:HA	2.18	0.58
22:AW:19:G:N7	36:BA:2169:A:C2	2.71	0.58
3:CC:53:ALA:HB2	3:CC:115:LEU:CD2	2.33	0.58
53:BU:3:ARG:HH11	53:BU:5:LYS:HB3	1.68	0.58
36:BA:1775:U:H2'	36:BA:1776:G:H5'	1.84	0.58
37:DB:70:C:O2'	37:DB:71:C:H5'	2.03	0.58
49:DQ:141:GLN:NE2	58:DZ:72:ARG:HD3	2.18	0.58
36:BA:554:U:H2'	36:BA:555:U:C6	2.38	0.58
53:BU:92:ARG:HD3	53:BU:94:ASN:HB3	1.85	0.58
53:BU:92:ARG:NH2	54:BV:10:LYS:HG2	2.18	0.58
54:BV:38:LEU:CD1	54:BV:57:VAL:HB	2.33	0.58
13:CM:30:ALA:O	13:CM:32:GLU:N	2.36	0.58
43:BH:19:VAL:HG12	43:BH:20:ALA:H	1.67	0.58
21:CU:10:ARG:O	21:CU:13:ILE:N	2.35	0.58
25:CZ:223:MET:CB	25:CZ:242:ILE:HA	2.32	0.58
25:CZ:223:MET:HB2	25:CZ:241:ARG:O	2.02	0.58
43:DH:97:ARG:HH21	43:DH:99:VAL:HG21	1.67	0.58
5:AE:148:VAL:C	5:AE:150:ARG:H	2.06	0.58
1:AA:1124:G:H2'	1:AA:1145:C:H41	1.66	0.58
2:AB:76:GLN:O	2:AB:77:ALA:HB2	2.03	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:CK:111:ASP:OD2	18:CR:84:LYS:HE3	2.03	0.58
36:DA:2275:C:H6	36:DA:2275:C:OP1	1.86	0.58
1:CA:1509:C:N3	1:CA:1526:G:N2	2.45	0.58
36:DA:1345:C:H2'	36:DA:1346:G:H5'	1.83	0.58
20:AT:75:ASN:HA	20:AT:78:ALA:HB3	1.85	0.58
6:AF:37:VAL:HG12	6:AF:38:GLU:H	1.66	0.58
20:AT:43:LEU:HB3	20:AT:48:LYS:HG3	1.85	0.58
1:AA:928:G:C2'	1:AA:929:G:H5'	2.34	0.58
1:CA:1249:C:H5''	9:CI:70:LYS:HZ1	1.66	0.58
30:D4:46:GLN:CG	30:D4:47:GLN:N	2.65	0.58
34:B8:39:LYS:NZ	36:BA:2364:C:H5	2.01	0.58
36:BA:416:C:C2'	36:BA:417:C:H5'	2.33	0.58
36:DA:552:G:H1'	36:DA:1220:A:N1	2.18	0.58
36:DA:410:G:N2	36:DA:2407:G:C5	2.72	0.58
1:CA:1082:G:O2'	1:CA:1083:U:H5'	2.03	0.58
36:BA:1644:C:H2'	36:BA:1644:C:O2	2.02	0.58
17:CQ:47:PRO:HG2	17:CQ:48:GLU:H	1.67	0.58
4:CD:177:ASP:O	4:CD:181:MET:N	2.36	0.58
43:BH:156:ALA:C	43:BH:158:HIS:N	2.50	0.58
36:BA:645:C:H3'	36:BA:645:C:O2	2.04	0.58
28:B2:7:ARG:O	28:B2:11:GLU:HG3	2.03	0.58
48:BP:52:GLU:HA	48:BP:52:GLU:OE1	2.02	0.58
34:B8:33:ASN:ND2	36:BA:2419:U:H5''	2.19	0.58
36:DA:1655:A:H4'	40:DE:115:GLY:H	1.68	0.58
40:DE:111:ARG:HA	50:DR:2:ARG:HG3	1.85	0.58
36:DA:1818:U:H2'	39:DD:157:ARG:CG	2.32	0.58
36:DA:2320:A:N3	36:DA:2320:A:H2'	2.18	0.58
48:DP:100:LEU:HD13	48:DP:103:ALA:HB3	1.85	0.58
41:DF:124:LEU:HD22	41:DF:191:ARG:NH2	2.18	0.58
36:DA:2235:G:H2'	36:DA:2236:C:H6	1.66	0.58
41:BF:122:LYS:HG3	41:BF:191:ARG:HG3	1.85	0.58
43:BH:68:THR:HG22	43:BH:72:ILE:HG12	1.85	0.58
36:DA:2758:A:H62	43:DH:67:LEU:HD11	1.68	0.58
43:DH:37:VAL:CG1	43:DH:38:SER:H	2.12	0.58
36:BA:1655:A:H4'	40:BE:114:ALA:HA	1.86	0.58
42:BG:66:GLN:HG2	42:BG:67:LYS:N	2.14	0.58
36:DA:2024:G:H2'	36:DA:2025:C:O4'	2.04	0.58
51:BS:99:LYS:O	51:BS:100:ALA:C	2.40	0.58
25:CZ:181:GLN:HG2	25:CZ:193:ASN:CG	2.24	0.58
56:BX:35:THR:HB	56:BX:38:GLU:HG3	1.84	0.58
52:BT:42:ILE:O	52:BT:42:ILE:HG13	2.02	0.58
36:DA:1998:G:H4'	36:DA:2724:C:H4'	1.85	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DE:126:PRO:O	40:DE:128:SER:N	2.37	0.58
52:DT:10:VAL:C	52:DT:12:SER:N	2.56	0.58
58:BZ:10:ARG:HH21	58:BZ:36:LYS:CB	2.17	0.58
9:AI:112:LYS:HA	9:AI:119:ALA:HB2	1.84	0.58
58:DZ:132:ASN:C	58:DZ:134:PRO:HD3	2.24	0.58
58:DZ:165:VAL:HG12	58:DZ:166:SER:OG	2.03	0.58
51:DS:30:ARG:HH11	51:DS:35:ILE:HB	1.69	0.58
36:DA:1068:G:H1'	36:DA:1069:A:OP2	2.04	0.58
31:D5:51:TYR:HB3	31:D5:54:GLY:HA3	1.85	0.58
2:AB:200:ILE:HG22	2:AB:201:ILE:N	2.18	0.58
19:CS:29:ARG:HD2	19:CS:29:ARG:N	2.18	0.58
36:DA:1091:G:H2'	36:DA:1092:C:H6	1.68	0.58
1:CA:80:G:O2'	1:CA:81:U:H5'	2.03	0.58
36:BA:1693:U:O2'	39:BD:14:ARG:NH2	2.36	0.58
36:BA:1137:G:H2'	36:BA:1138:G:C8	2.37	0.58
37:DB:8:U:H2'	37:DB:9:G:C8	2.38	0.58
36:BA:1496:A:H1'	36:BA:1578:U:O2'	2.03	0.58
42:DG:103:LEU:HD23	42:DG:106:LEU:HD23	1.85	0.58
1:AA:154:C:H2'	1:AA:155:C:C6	2.38	0.58
13:AM:23:TYR:HB3	13:AM:67:GLU:HB3	1.85	0.58
51:BS:24:LEU:HB3	51:BS:85:VAL:HG12	1.84	0.58
36:DA:1785:A:P	36:DA:1982:C:H5'	2.44	0.58
1:AA:824:C:H2'	1:AA:825:G:H8	1.67	0.58
5:AE:72:GLN:NE2	5:AE:144:THR:HG22	2.19	0.58
55:BW:12:ILE:HD12	55:BW:42:ARG:HH12	1.66	0.58
55:BW:14:PRO:HG2	55:BW:78:GLU:HB2	1.85	0.58
3:CC:35:GLU:OE1	3:CC:97:LYS:HE2	2.03	0.58
11:AK:111:ASP:O	11:AK:113:PRO:HD3	2.03	0.58
36:BA:7:G:N2	36:BA:8:A:H1'	2.17	0.58
1:CA:355:C:H2'	1:CA:356:A:C8	2.35	0.58
33:B7:8:ASN:ND2	33:B7:8:ASN:C	2.55	0.58
36:BA:1374:G:H2'	36:BA:1375:C:H6	1.66	0.58
36:BA:685:A:C2	36:BA:787:U:H1'	2.38	0.58
20:CT:63:ILE:HG22	20:CT:77:ALA:HB1	1.84	0.58
36:BA:1820:U:C2	39:BD:202:LYS:HB3	2.39	0.58
12:CL:83:VAL:HG12	12:CL:84:LEU:H	1.67	0.58
47:DO:43:VAL:HG23	47:DO:56:ASP:O	2.03	0.58
41:BF:57:VAL:CG1	41:BF:58:ALA:N	2.66	0.58
1:CA:689:C:O2'	1:CA:690:G:H5'	2.03	0.58
17:CQ:99:SER:O	17:CQ:100:LYS:HG3	2.03	0.58
49:BQ:5:ARG:O	49:BQ:6:ARG:HG2	2.03	0.58
9:AI:5:TYR:O	9:AI:84:ALA:HA	2.04	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:67:U:C5	36:BA:68:G:N7	2.72	0.58
27:D1:53:VAL:C	27:D1:55:GLY:H	2.07	0.58
36:DA:2494:G:O2'	49:DQ:80:GLU:HA	2.02	0.58
36:DA:519:U:H5''	55:DW:25:ARG:NH1	2.18	0.58
1:AA:525:C:C4	1:AA:526:C:N4	2.72	0.58
1:AA:823:G:H21	8:AH:1:MET:HE3	1.67	0.58
1:CA:524:G:C6	1:CA:525:C:N4	2.72	0.58
42:DG:145:THR:HG22	42:DG:147:ASP:H	1.67	0.58
44:DJ:114:UNK:O	44:DJ:115:UNK:CB	2.51	0.58
17:CQ:13:ASP:C	17:CQ:15:MET:H	2.07	0.58
12:CL:71:PRO:O	12:CL:102:ARG:NH1	2.36	0.58
50:DR:52:ILE:O	50:DR:55:ALA:HB3	2.03	0.58
19:CS:16:LEU:C	19:CS:18:LYS:H	2.07	0.58
34:D8:60:LEU:O	34:D8:63:PRO:HG2	2.02	0.58
48:DP:148:LEU:O	48:DP:149:GLU:HB2	2.03	0.58
25:AZ:137:LYS:HA	62:AZ:501:GDP:HN1	1.69	0.58
36:DA:84:A:H2	36:DA:98:G:H21	1.52	0.58
41:DF:28:ILE:HG21	41:DF:116:ASP:OD1	2.03	0.58
41:DF:39:TRP:HZ2	41:DF:43:LYS:HZ3	1.52	0.58
36:DA:2467:C:C2'	36:DA:2468:G:H5'	2.34	0.58
57:DY:61:ILE:O	57:DY:62:GLU:HB2	2.03	0.58
39:BD:61:LEU:O	39:BD:63:ARG:NH1	2.36	0.58
1:CA:264:U:H4'	17:CQ:63:ARG:HD3	1.86	0.58
41:BF:203:GLN:C	41:BF:205:ARG:H	2.06	0.58
41:BF:5:ALA:HB3	41:BF:18:ARG:O	2.03	0.58
35:B9:1:MET:SD	36:BA:2477:C:C2'	2.91	0.58
36:BA:2475:C:H2'	36:BA:2477:C:OP1	2.04	0.58
50:BR:13:HIS:ND1	50:BR:14:SER:N	2.52	0.58
50:BR:13:HIS:HE1	50:BR:15:SER:OG	1.85	0.58
36:BA:271(L):U:C5'	36:BA:271(M):G:H5'	2.29	0.58
8:AH:81:HIS:N	8:AH:81:HIS:ND1	2.50	0.58
1:CA:1100:C:OP2	2:CB:96:ARG:HG2	2.04	0.58
2:CB:8:LYS:NZ	2:CB:217:ARG:NH1	2.52	0.58
36:BA:2636:U:H4'	40:BE:80:GLU:OE1	2.03	0.58
40:BE:51:PHE:CD1	40:BE:52:LEU:N	2.72	0.58
13:CM:89:GLY:C	13:CM:90:LEU:O	2.41	0.58
36:DA:2673:G:H2'	36:DA:2674:G:H8	1.68	0.58
5:AE:57:LYS:HE3	5:AE:61:TYR:HE2	1.69	0.58
25:CZ:197:ASP:HA	25:CZ:200:TRP:CD1	2.39	0.58
36:DA:1665:A:H4'	47:DO:67:LYS:HB2	1.84	0.58
47:DO:72:PRO:C	47:DO:74:GLY:N	2.54	0.58
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.19	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1344:G:H4'	36:BA:1384:A:C5	2.39	0.58
57:BY:73:ARG:HB3	57:BY:80:GLY:CA	2.34	0.58
36:DA:1774:C:H4'	36:DA:1979:C:O2	2.03	0.58
36:DA:1899:G:H21	36:DA:1902:C:H41	1.49	0.58
3:CC:15:THR:CG2	3:CC:181:ASN:HA	2.32	0.58
49:DQ:37:LEU:N	49:DQ:37:LEU:HD23	2.18	0.58
58:DZ:73:GLN:O	58:DZ:87:ASP:OD1	2.20	0.58
15:CO:64:ARG:HH11	15:CO:64:ARG:HG3	1.69	0.58
36:BA:83:G:H5''	36:BA:84:A:OP2	2.03	0.58
39:BD:126:GLN:HG3	39:BD:129:ASN:ND2	2.17	0.58
36:BA:1541:G:O2'	36:BA:1542:A:H5''	2.03	0.58
40:BE:116:VAL:O	40:BE:117:MET:HB2	2.01	0.58
40:DE:39:PRO:HD3	40:DE:45:THR:OG1	2.03	0.58
53:BU:27:LEU:O	53:BU:31:SER:HB3	2.04	0.58
1:AA:1441:G:H4'	1:AA:1442:G:C2	2.38	0.58
38:DC:38:ASP:O	38:DC:177:LYS:HE3	2.03	0.58
1:AA:381:C:H2'	1:AA:382:A:O4'	2.04	0.58
39:BD:229:VAL:HG23	39:BD:230:ASP:N	2.19	0.58
11:CK:111:ASP:HB2	18:CR:84:LYS:HD2	1.85	0.58
49:DQ:62:GLY:O	58:DZ:178:GLU:OE1	2.20	0.58
27:D1:58:ILE:HG12	27:D1:59:THR:N	2.18	0.58
24:CY:55:PSU:O4	24:CY:55:PSU:H3'	2.03	0.58
48:BP:130:PHE:CD2	48:BP:130:PHE:N	2.68	0.58
1:AA:1312:G:H2'	1:AA:1313:U:C6	2.38	0.58
36:BA:2195:C:H2'	36:BA:2196:C:H6	1.68	0.58
25:CZ:315:LYS:O	25:CZ:403:ILE:HG23	2.02	0.58
36:BA:1409:C:O5'	36:BA:1409:C:H6	1.87	0.58
6:AF:24:GLU:HA	6:AF:27:GLN:HG2	1.86	0.58
4:CD:121:VAL:HG12	4:CD:134:ASP:CA	2.33	0.58
1:CA:689:C:P	11:CK:46:GLY:HA3	2.42	0.58
36:BA:898:C:C2'	36:BA:899:A:H5'	2.34	0.58
36:DA:271(D):G:O2'	36:DA:271(E):U:H5'	2.03	0.58
47:BO:7:TYR:CE1	47:BO:20:MET:HE3	2.37	0.58
58:DZ:146:ILE:HG13	58:DZ:147:GLY:N	2.18	0.58
1:AA:68:G:H1	1:AA:101:A:H61	1.51	0.58
1:CA:1398:A:N6	5:CE:21:ALA:HA	2.19	0.58
36:BA:1566:A:OP1	39:BD:211:ARG:NH1	2.35	0.58
36:DA:1121:C:H2'	36:DA:1122:G:C8	2.38	0.58
32:D6:32:ASN:O	32:D6:33:LYS:HB2	2.03	0.58
1:CA:245:C:O2'	1:CA:246:A:O5'	2.22	0.58
36:BA:292:C:O2'	36:BA:293:U:H5'	2.03	0.58
36:DA:282:A:H2'	36:DA:282:A:N3	2.18	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:155:LEU:HD11	2:AB:159:PRO:HD3	1.83	0.58
11:CK:79:SER:HA	11:CK:104:GLN:HB3	1.85	0.58
5:CE:57:LYS:HE3	5:CE:61:TYR:HE2	1.67	0.58
36:DA:1798:U:C2	36:DA:1822:G:N2	2.72	0.58
32:D6:45:LYS:O	32:D6:46:HIS:HB3	2.01	0.58
34:D8:5:LYS:HG2	36:DA:242:G:C8	2.39	0.58
36:DA:477:A:H2'	36:DA:478:A:C8	2.39	0.58
10:CJ:17:ASP:HB2	10:CJ:70:ARG:NH2	2.18	0.58
22:CV:56:C:H1'	42:DG:76:SER:CB	2.28	0.58
36:BA:1242:A:N6	48:BP:8:PRO:HG3	2.18	0.58
41:BF:28:ILE:HG22	41:BF:116:ASP:HB2	1.84	0.58
41:BF:20:LEU:H	41:BF:24:LEU:CD2	2.16	0.58
4:AD:13:ARG:O	4:AD:15:GLU:N	2.37	0.58
1:CA:797:C:O2'	1:CA:798:G:H5'	2.04	0.58
36:DA:2653:U:H3'	36:DA:2654:A:C8	2.36	0.58
36:DA:1215:G:H2'	36:DA:1216:G:H8	1.69	0.58
36:DA:2777:G:H4'	36:DA:2778:A:H5'	1.86	0.58
4:CD:200:GLU:O	4:CD:204:ILE:HG13	2.02	0.58
8:AH:37:ARG:O	8:AH:37:ARG:HG2	2.01	0.58
48:BP:101:VAL:C	48:BP:103:ALA:H	2.07	0.58
48:BP:78:PRO:HB2	48:BP:111:ARG:HH21	1.66	0.58
52:BT:63:VAL:O	52:BT:73:GLU:HA	2.03	0.58
52:DT:32:TYR:HD2	52:DT:32:TYR:N	2.01	0.58
40:DE:13:ARG:O	52:DT:57:PHE:HE1	1.87	0.58
52:DT:59:THR:OG1	52:DT:78:LEU:HD12	2.03	0.58
58:BZ:163:LEU:CD2	58:BZ:165:VAL:HG23	2.33	0.58
35:D9:12:ASP:OD2	35:D9:13:LYS:HG3	2.04	0.58
36:BA:2647:U:O2'	36:BA:2648:C:H5'	2.03	0.58
1:AA:865:A:O2'	1:AA:866:C:H5'	2.04	0.58
1:AA:918:A:H2'	1:AA:919:A:H8	1.69	0.58
1:CA:1423:G:C4	1:CA:1424:C:C5	2.92	0.58
36:DA:1825:A:H2'	36:DA:1826:G:C8	2.39	0.58
36:DA:496:G:H1'	55:DW:61:ASN:ND2	2.19	0.58
36:BA:2189:U:H3'	36:BA:2190:G:H5''	1.84	0.58
3:AC:94:LEU:O	3:AC:95:THR:OG1	2.17	0.58
39:BD:14:ARG:HG3	39:BD:15:PHE:N	2.19	0.58
16:CP:20:VAL:HG21	16:CP:32:TYR:CE2	2.39	0.58
36:BA:1138:G:H1'	46:BN:105:GLY:O	2.03	0.58
36:BA:1337:G:H2'	36:BA:1338:G:C8	2.38	0.58
36:BA:597:U:H4'	48:BP:15:ARG:CZ	2.34	0.58
36:BA:1464:C:O2'	36:BA:1528:A:C8	2.56	0.58
47:DO:47:ILE:HG23	47:DO:48:PRO:CD	2.28	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:D3:7:LYS:HA	29:D3:34:GLU:HA	1.86	0.58
2:CB:130:ARG:NE	2:CB:131:PRO:HD2	2.19	0.58
10:CJ:40:LEU:CB	10:CJ:41:PRO:HD2	2.34	0.58
20:AT:44:ALA:CB	20:AT:88:VAL:HG13	2.32	0.58
36:BA:2127:G:H2'	36:BA:2128:C:H6	1.69	0.58
37:BB:17:C:H2'	37:BB:18:G:H8	1.67	0.58
37:BB:19:G:H5'	37:BB:20:C:OP2	2.04	0.58
36:BA:2073:C:H2'	36:BA:2074:U:H6	1.69	0.58
36:DA:31:C:H2'	36:DA:32:C:C4'	2.34	0.58
36:DA:1440:G:H22	36:DA:1552:G:H1'	1.68	0.58
1:CA:1509:C:O2'	1:CA:1510:U:H5'	2.03	0.58
27:D1:49:VAL:HG21	27:D1:71:TYR:CE1	2.38	0.58
39:BD:175:LEU:HD12	39:BD:185:VAL:CG2	2.32	0.58
40:DE:69:LYS:O	40:DE:71:GLY:N	2.33	0.58
52:DT:113:LYS:C	52:DT:114:LEU:HD23	2.23	0.58
46:DN:61:ARG:HH11	46:DN:61:ARG:HG3	1.67	0.58
39:DD:131:LEU:N	39:DD:131:LEU:HD12	2.19	0.58
36:BA:1672:C:N3	36:BA:1673:U:C5	2.72	0.58
1:CA:552:U:O2'	1:CA:553:A:H5'	2.03	0.58
36:BA:2853:C:H2'	36:BA:2854:G:C8	2.39	0.58
3:CC:90:GLU:CA	3:CC:93:LYS:HB3	2.34	0.58
46:BN:60:ILE:HD13	46:BN:99:LEU:HD23	1.85	0.58
1:CA:189(I):G:H2'	1:CA:189(J):G:C8	2.38	0.58
26:B0:28:GLY:H	26:B0:66:VAL:HG13	1.68	0.58
36:DA:1921:G:O2'	36:DA:1922:G:H5'	2.04	0.58
1:AA:1082:G:C2'	1:AA:1083:U:H5'	2.33	0.58
32:B6:33:LYS:O	32:B6:34:LEU:HB2	2.04	0.58
46:DN:2:LYS:HZ1	54:DV:12:TYR:HA	1.69	0.58
36:BA:2629:A:N3	36:BA:2629:A:H2'	2.18	0.58
49:BQ:59:ARG:HD2	49:BQ:59:ARG:C	2.24	0.58
36:BA:1847:A:H2'	36:BA:1847:A:N3	2.19	0.58
18:AR:24:ALA:C	18:AR:26:LEU:H	2.07	0.58
1:CA:1492:A:C2	1:CA:1493:A:N1	2.72	0.58
41:BF:88:VAL:HG22	41:BF:89:VAL:H	1.68	0.58
34:D8:38:GLY:HA3	34:D8:42:ARG:HH12	1.68	0.58
26:D0:55:ARG:HH21	36:DA:2386:C:H5''	1.68	0.58
35:D9:25:VAL:O	35:D9:25:VAL:HG12	2.03	0.58
36:DA:675:A:OP1	41:DF:63:LYS:HE2	2.03	0.58
36:BA:621:A:H2'	36:BA:622:G:O4'	2.02	0.58
36:DA:2758:A:H2	36:DA:2759:G:H1'	1.69	0.58
1:AA:389:A:C2'	1:AA:390:C:H5'	2.33	0.58
1:AA:57:G:H2'	1:AA:58:C:C6	2.39	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CH:11:THR:O	8:CH:15:ASN:ND2	2.37	0.58
2:CB:229:VAL:CG1	2:CB:230:VAL:N	2.64	0.58
48:BP:126:VAL:HG22	48:BP:145:PRO:CB	2.34	0.58
5:AE:6:PHE:HB2	5:AE:34:VAL:HG22	1.84	0.58
25:CZ:136:ASN:C	25:CZ:138:VAL:H	2.06	0.58
36:BA:1301:A:H4'	36:BA:1302:A:OP1	2.02	0.58
36:DA:1661:G:O2'	36:DA:1662:C:H5'	2.04	0.58
57:DY:8:LYS:HB2	57:DY:28:LYS:HZ3	1.67	0.58
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.39	0.58
1:CA:376:G:H5''	16:CP:5:ARG:HB2	1.85	0.58
1:CA:940:C:H2'	1:CA:941:G:H8	1.69	0.58
19:AS:63:THR:CG2	19:AS:66:MET:HG2	2.33	0.58
36:DA:1337:G:H2'	36:DA:1338:G:C8	2.39	0.58
4:CD:173:TRP:HB3	4:CD:187:ARG:HH22	1.67	0.58
3:AC:20:SER:HB2	3:AC:40:ARG:NH2	2.19	0.58
1:AA:151:A:H2'	1:AA:152:A:H5'	1.85	0.58
36:BA:661:C:H2'	36:BA:662:G:C8	2.39	0.58
36:BA:1902:C:C4'	39:BD:244:ARG:HB2	2.34	0.58
30:D4:14:ILE:N	30:D4:14:ILE:HD12	2.19	0.58
43:DH:136:ILE:HD12	43:DH:136:ILE:H	1.68	0.58
36:BA:459:U:H2'	36:BA:460:A:C8	2.24	0.58
40:DE:3:GLY:O	40:DE:4:ILE:HB	2.04	0.58
25:CZ:389:ARG:HG2	25:CZ:394:THR:HA	1.86	0.58
36:DA:2811:G:P	40:DE:60:ASN:HB2	2.42	0.58
5:CE:92:LYS:H	5:CE:118:ILE:HD11	1.67	0.58
1:AA:398:C:O2'	1:AA:399:G:H5'	2.03	0.58
1:AA:726:C:H2'	1:AA:727:G:C8	2.39	0.58
2:AB:74:LYS:HE3	2:AB:206:ASP:OD2	2.04	0.58
2:CB:204:ASN:C	2:CB:204:ASN:ND2	2.56	0.58
2:CB:74:LYS:HE3	2:CB:206:ASP:OD2	2.03	0.58
24:AY:75:C:C6	25:AZ:231:ILE:HG23	2.33	0.58
38:DC:214:VAL:CG2	38:DC:224:ILE:HG21	2.33	0.58
48:BP:83:VAL:H	48:BP:115:LEU:CD2	2.16	0.58
1:AA:1068:G:N7	1:AA:1108:G:N2	2.51	0.58
1:CA:688:G:O2'	1:CA:689:C:H5'	2.02	0.58
1:CA:691:G:H2'	1:CA:692:U:C6	2.38	0.58
41:DF:57:VAL:CG1	41:DF:58:ALA:H	2.17	0.58
1:AA:184:G:H2'	1:AA:185:A:H8	1.67	0.58
26:B0:25:ARG:NH2	26:B0:35:ASN:HD22	2.01	0.58
26:D0:30:VAL:HA	26:D0:65:GLY:C	2.24	0.58
26:D0:25:ARG:HH21	26:D0:35:ASN:HD22	1.50	0.58
26:D0:30:VAL:HG12	26:D0:66:VAL:HG23	1.84	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:909:A:P	12:CL:21:LYS:HD3	2.43	0.58
36:BA:1722:A:O2'	36:BA:1739:U:C5'	2.52	0.58
8:AH:2:LEU:CD2	8:AH:3:THR:H	2.17	0.58
1:AA:475:G:O2'	1:AA:476:G:H5'	2.04	0.58
46:DN:65:LYS:NZ	46:DN:65:LYS:HB3	2.18	0.58
18:CR:25:THR:HG22	18:CR:42:ARG:NH1	2.19	0.58
37:DB:10:C:O2'	37:DB:11:C:H5'	2.04	0.58
40:BE:15:PHE:CD1	40:BE:20:ALA:HB2	2.38	0.58
4:AD:49:ARG:O	4:AD:51:PRO:N	2.36	0.58
6:AF:30:LEU:O	6:AF:35:ALA:HB3	2.04	0.58
36:BA:1396:U:H2'	36:BA:1396:U:O2	2.03	0.58
32:B6:18:ARG:HG2	32:B6:18:ARG:NH1	2.17	0.58
34:B8:62:LEU:HD22	36:BA:242:G:H5'	1.85	0.58
39:DD:44:ASN:HB2	39:DD:48:ARG:O	2.04	0.58
28:D2:33:MET:O	28:D2:34:GLU:C	2.42	0.58
36:BA:1861:G:H1	36:BA:1881:C:H42	1.52	0.58
36:DA:621:A:H2'	36:DA:622:G:C5'	2.34	0.58
41:BF:19:GLU:O	41:BF:20:LEU:HD23	2.03	0.58
36:BA:2757:A:N3	36:BA:2757:A:H2'	2.18	0.58
1:AA:1047:G:O2'	1:AA:1048:G:H5'	2.04	0.58
28:B2:30:ARG:O	28:B2:33:MET:HB3	2.03	0.58
28:B2:63:VAL:O	28:B2:65:ASN:N	2.36	0.58
36:BA:749:C:H4'	36:BA:1271:G:N3	2.19	0.58
10:AJ:14:LYS:O	10:AJ:16:LEU:N	2.32	0.58
36:DA:2733:A:O2'	36:DA:2734:A:H5'	2.03	0.58
36:DA:1009:A:N3	36:DA:1154:G:H5'	2.19	0.58
1:AA:361:G:H2'	1:AA:362:G:O4'	2.04	0.58
1:CA:541:G:O2'	1:CA:542:G:H5'	2.03	0.58
51:BS:66:ALA:HB1	51:BS:99:LYS:HD3	1.86	0.58
1:CA:954:G:H2'	1:CA:955:U:C6	2.39	0.58
5:AE:101:ILE:O	5:AE:120:THR:HG22	2.04	0.58
36:BA:1348:G:O2'	36:BA:1349:A:H5''	2.04	0.58
38:BC:20:TYR:HB3	38:BC:24:GLU:HB3	1.85	0.58
58:BZ:5:LEU:O	58:BZ:59:LEU:HA	2.04	0.58
58:BZ:99:TYR:HE2	58:BZ:125:LEU:HD13	1.68	0.58
57:DY:74:PRO:HG2	57:DY:80:GLY:O	2.03	0.58
57:DY:73:ARG:O	57:DY:74:PRO:O	2.21	0.58
1:CA:1346:A:N1	1:CA:1374:A:H5''	2.19	0.58
22:AV:49:C:OP2	22:AV:49:C:H2'	2.03	0.58
1:AA:1515:C:O2'	1:AA:1516:G:H5'	2.03	0.58
22:AW:34:G:H22	23:AX:18:G:H22	1.51	0.58
36:BA:336:C:H4'	57:BY:7:VAL:CG2	2.34	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1484:C:H2'	1:AA:1485:U:O4'	2.04	0.58
36:BA:2176:A:H4'	38:BC:213:TYR:CD1	2.39	0.58
3:CC:105:GLU:HG2	3:CC:106:VAL:H	1.68	0.58
3:CC:142:MET:SD	3:CC:148:GLY:N	2.77	0.58
22:AV:21:A:C2'	22:AV:22:G:H5''	2.33	0.58
25:AZ:223:MET:CB	25:AZ:242:ILE:HA	2.33	0.58
10:AJ:65:LEU:HD22	14:AN:56:VAL:CG2	2.34	0.58
36:BA:1199:U:H3	36:BA:1246:A:H61	1.51	0.58
36:BA:84:A:H2	36:BA:98:G:H21	1.51	0.58
36:BA:1392:A:H2'	36:BA:1393:A:O4'	2.02	0.58
36:DA:1274:A:N3	36:DA:1297:C:H1'	2.19	0.58
36:BA:428:A:H3'	36:BA:429:A:C8	2.39	0.58
9:AI:33:PHE:CE2	9:AI:47:LEU:HD11	2.39	0.58
36:DA:2636:U:OP1	40:DE:80:GLU:HG3	2.03	0.58
8:CH:94:TYR:HD1	8:CH:94:TYR:N	2.01	0.58
49:BQ:137:TYR:CZ	58:BZ:81:ARG:NH2	2.72	0.58
1:CA:1102:A:H2'	1:CA:1103:C:H6	1.69	0.58
55:BW:13:SER:O	55:BW:17:VAL:HG23	2.04	0.58
4:CD:101:LEU:O	4:CD:104:VAL:HB	2.03	0.58
24:CY:65:C:C5'	25:CZ:341:GLN:HG2	2.34	0.58
2:CB:75:LYS:C	2:CB:77:ALA:H	2.07	0.58
11:CK:111:ASP:O	11:CK:113:PRO:HD3	2.04	0.58
36:DA:2195:C:H2'	36:DA:2196:C:H6	1.69	0.58
39:BD:149:PRO:HG3	39:BD:186:HIS:HD2	1.67	0.58
1:CA:194:C:C2'	1:CA:195:A:H5''	2.32	0.58
1:AA:689:C:O2'	1:AA:690:G:H5'	2.04	0.58
36:DA:271(D):G:H2'	36:DA:271(E):U:O4'	2.04	0.58
10:CJ:80:LYS:HZ2	10:CJ:80:LYS:HB3	1.69	0.58
1:CA:573:A:OP2	1:CA:574:A:OP2	2.22	0.58
1:CA:639:G:H2'	1:CA:640:A:H8	1.68	0.58
1:AA:709:G:H2'	1:AA:710:G:H8	1.68	0.58
36:BA:66:C:O4'	36:BA:456:C:N3	2.36	0.58
1:CA:1148:U:H2'	1:CA:1149:C:O4'	2.04	0.58
37:BB:3:C:H42	37:BB:118:G:H1	1.51	0.58
2:CB:155:LEU:HD11	2:CB:159:PRO:HD3	1.85	0.58
36:BA:2764:A:C2	36:BA:2766:G:H1'	2.38	0.58
36:DA:2193:G:H8	36:DA:2193:G:H5'	1.69	0.58
11:AK:79:SER:HA	11:AK:104:GLN:HB3	1.85	0.58
36:BA:1968:G:C2'	36:BA:1969:A:H5''	2.34	0.58
36:BA:1782:C:O2	36:BA:2609:U:H5''	2.04	0.58
36:BA:333:G:N3	36:BA:333:G:H2'	2.19	0.58
36:BA:1705:G:O2'	36:BA:1706:U:H5'	2.03	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2290:G:H2'	36:BA:2291:U:O4'	2.03	0.58
5:CE:50:GLU:OE2	5:CE:50:GLU:HA	2.03	0.58
36:BA:2756:U:H4'	36:BA:2757:A:O5'	2.04	0.58
43:BH:51:ARG:O	43:BH:52:VAL:HG23	2.04	0.58
36:BA:108:U:H2'	36:BA:109:G:H8	1.68	0.58
16:AP:13:HIS:C	16:AP:15:PRO:HD3	2.24	0.58
8:CH:37:ARG:O	8:CH:41:ARG:HB2	2.04	0.58
32:B6:6:ARG:HH11	32:B6:6:ARG:CB	2.13	0.58
36:BA:1639:U:H2'	36:BA:1640:C:C5'	2.32	0.58
52:BT:28:VAL:CG1	52:BT:46:GLU:HA	2.33	0.58
58:BZ:130:PRO:O	58:BZ:133:ILE:HD11	2.04	0.58
36:DA:336:C:H4'	57:DY:7:VAL:CG2	2.33	0.58
1:AA:739:C:O2'	1:AA:740:U:H5'	2.04	0.58
58:DZ:92:SER:O	58:DZ:130:PRO:HG2	2.04	0.58
7:CG:100:ALA:O	7:CG:101:LEU:C	2.41	0.58
4:AD:81:GLU:OE1	4:AD:139:ARG:NH1	2.36	0.58
57:BY:74:PRO:HG2	57:BY:80:GLY:O	2.04	0.58
36:DA:2145:C:H2'	36:DA:2147:G:H22	1.67	0.58
55:DW:69:LEU:HA	55:DW:108:GLY:O	2.03	0.58
3:CC:53:ALA:HB2	3:CC:115:LEU:CG	2.33	0.58
41:DF:9:ILE:HG12	41:DF:14:PRO:CA	2.25	0.58
36:BA:2206:G:H5''	36:BA:2206:G:N3	2.19	0.58
37:DB:44:G:O2'	37:DB:45:A:H5''	2.04	0.58
8:CH:119:LEU:HD12	8:CH:124:ALA:HA	1.86	0.58
43:BH:149:ARG:HD3	43:BH:164:TYR:CD1	2.38	0.58
51:DS:106:ARG:HD2	51:DS:107:GLU:C	2.23	0.58
4:AD:165:MET:HE3	4:AD:176:LEU:HD21	1.85	0.58
38:DC:99:ILE:HG23	38:DC:102:LYS:HZ3	1.68	0.58
2:AB:130:ARG:NH2	2:AB:131:PRO:HD2	2.19	0.58
1:AA:452:A:HO2'	1:AA:453:A:H8	1.52	0.58
36:BA:31:C:H5''	36:BA:1239:G:OP1	2.04	0.58
49:DQ:51:ARG:HH11	49:DQ:51:ARG:HG3	1.68	0.58
45:BK:72:UNK:O	45:BK:73:UNK:C	2.52	0.58
36:BA:611:C:H2'	36:BA:612:C:C6	2.35	0.58
36:BA:2375:G:N3	36:BA:2379:G:N2	2.52	0.58
18:CR:67:ALA:O	18:CR:71:LYS:HG3	2.03	0.58
47:DO:7:TYR:HE1	47:DO:20:MET:CE	2.17	0.58
22:AW:58:A:H2'	22:AW:61:C:H41	1.69	0.58
20:AT:83:ARG:CA	20:AT:86:ARG:HB3	2.33	0.58
3:CC:64:VAL:HG12	3:CC:66:VAL:HG23	1.83	0.58
40:BE:169:ASN:C	40:BE:169:ASN:HD22	2.07	0.58
46:BN:5:VAL:CG1	46:BN:7:LYS:HG3	2.33	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CH:2:LEU:HD22	8:CH:3:THR:N	2.18	0.58
36:DA:1722:A:C2	36:DA:1740:G:H2'	2.38	0.58
8:CH:1:MET:HE2	8:CH:1:MET:H3	1.68	0.58
36:DA:2746:U:H2'	36:DA:2747:G:H8	1.69	0.58
1:CA:1418:A:H1'	36:DA:1959:G:O4'	2.04	0.58
47:BO:22:ILE:HG12	47:BO:41:ALA:HA	1.84	0.58
3:AC:86:VAL:O	3:AC:89:GLU:HB3	2.04	0.58
32:B6:10:LEU:HD22	32:B6:10:LEU:N	2.19	0.58
32:B6:19:ARG:CG	32:B6:20:ASN:H	1.98	0.58
50:DR:13:HIS:ND1	50:DR:14:SER:N	2.52	0.58
57:BY:50:ARG:HG3	57:BY:56:PRO:O	2.03	0.58
48:DP:78:PRO:CB	48:DP:111:ARG:NH2	2.67	0.58
48:DP:97:PRO:C	48:DP:99:LEU:N	2.57	0.58
36:DA:621:A:H2'	36:DA:622:G:H5'	1.86	0.58
41:DF:19:GLU:O	41:DF:20:LEU:HD23	2.03	0.58
25:AZ:291:ARG:HG3	25:AZ:292:GLY:N	2.19	0.58
8:AH:23:SER:HB2	8:AH:62:TYR:HA	1.85	0.58
38:DC:116:THR:HG21	38:DC:147:PHE:CD1	2.39	0.58
38:DC:75:LEU:HD11	38:DC:113:VAL:HA	1.86	0.58
39:BD:27:THR:OG1	39:BD:83:GLU:HG2	2.03	0.58
41:BF:101:LEU:HD12	41:BF:102:PRO:CD	2.31	0.58
36:BA:2840:C:C5'	50:BR:53:HIS:HD2	2.11	0.58
50:BR:77:ARG:C	50:BR:79:LEU:H	2.08	0.58
42:BG:105:LYS:HD2	42:BG:142:PRO:HG3	1.86	0.58
27:D1:3:LYS:O	27:D1:12:PRO:HD2	2.03	0.58
48:DP:23:PRO:HG2	48:DP:33:ARG:HE	1.69	0.58
1:AA:376:G:OP2	16:AP:67:THR:HG21	2.04	0.58
1:AA:246:A:O3'	1:AA:247:G:H4'	2.04	0.58
8:AH:11:THR:HG23	8:AH:14:ARG:NH1	2.15	0.58
8:AH:6:ILE:N	8:AH:6:ILE:HD12	2.18	0.58
32:D6:7:ILE:O	32:D6:27:LYS:HD2	2.03	0.58
2:CB:88:ALA:HB2	2:CB:219:VAL:HG13	1.86	0.58
41:DF:131:GLY:HA3	41:DF:139:PHE:HA	1.86	0.58
48:BP:101:VAL:CG2	48:BP:102:ARG:N	2.67	0.58
36:BA:2639:A:H2'	36:BA:2640:G:O4'	2.04	0.58
52:DT:80:SER:HB3	52:DT:81:PRO:CD	2.32	0.58
38:BC:166:ASP:OD2	38:BC:168:THR:HG23	2.04	0.58
57:DY:10:GLY:HA2	57:DY:27:VAL:HG13	1.85	0.58
1:AA:939:G:H2'	1:AA:940:C:C6	2.38	0.58
1:CA:1363:C:H5'	1:CA:1363(A):A:O5'	2.04	0.58
36:BA:1069:A:H1'	36:BA:1070:A:P	2.43	0.58
19:AS:42:PRO:O	19:AS:44:MET:SD	2.62	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BF:64:ILE:CG2	41:BF:65:TRP:H	2.09	0.58
36:BA:2110:G:O2'	36:BA:2111:C:OP1	2.22	0.58
25:AZ:214:VAL:HG22	25:AZ:215:ARG:N	2.19	0.58
25:AZ:222:LEU:HD23	25:AZ:244:ARG:NH2	2.18	0.58
27:B1:11:ARG:HB3	27:B1:11:ARG:HH11	1.67	0.58
36:BA:1777:U:O2'	36:BA:1778:U:H5'	2.04	0.58
36:BA:1902:C:H5''	39:BD:246:PRO:CD	2.34	0.58
49:DQ:27:VAL:HG12	49:DQ:29:PHE:N	2.16	0.58
36:DA:723:G:C2	36:DA:724:U:C2	2.91	0.58
41:DF:7:TYR:HD2	41:DF:16:GLY:H	1.50	0.58
3:AC:26:LYS:HG3	3:AC:27:LYS:CG	2.28	0.58
36:DA:2710:C:O2'	36:DA:2711:A:H5'	2.04	0.58
3:CC:26:LYS:NZ	3:CC:27:LYS:HD2	2.18	0.58
42:DG:52:ILE:HG12	42:DG:53:LEU:N	2.18	0.58
2:AB:102:LEU:HB3	2:AB:180:LEU:HD12	1.86	0.58
29:D3:56:VAL:O	29:D3:57:GLU:HB2	2.03	0.58
10:CJ:96:ILE:N	10:CJ:96:ILE:HD13	2.19	0.58
38:DC:30:LYS:HZ3	38:DC:30:LYS:HA	1.67	0.58
4:AD:128:VAL:O	4:AD:129:ASN:C	2.42	0.58
1:CA:495:A:N6	4:CD:119:GLN:HE22	2.02	0.58
2:AB:75:LYS:HA	2:AB:78:GLN:HG3	1.86	0.58
7:CG:143:ARG:O	7:CG:145:ALA:O	2.22	0.58
22:CW:31:A:H2'	22:CW:32:U:H6	1.69	0.58
27:D1:58:ILE:HG12	27:D1:59:THR:H	1.68	0.58
54:BV:64:HIS:ND1	54:BV:92:THR:HG22	2.19	0.58
1:AA:612:C:H42	1:AA:628:G:H1	1.51	0.58
37:DB:115:G:H2'	37:DB:116:G:C8	2.34	0.58
1:AA:1310:G:O2'	1:AA:1311:G:H5'	2.02	0.58
39:BD:91:ARG:HH11	39:BD:91:ARG:CG	2.16	0.58
36:BA:1806:C:N4	36:BA:1811:G:H1	2.02	0.58
12:CL:84:LEU:HD12	12:CL:104:VAL:HG11	1.86	0.58
19:CS:6:LYS:HG2	19:CS:7:LYS:CE	2.33	0.58
1:AA:552:U:O2'	1:AA:553:A:H5'	2.04	0.58
22:CV:74:C:H2'	22:CV:75:C:H5'	1.85	0.58
2:AB:7:VAL:CA	2:AB:11:LEU:HG	2.33	0.58
36:DA:67:U:C5	36:DA:68:G:N7	2.72	0.58
26:B0:30:VAL:O	26:B0:31:VAL:HG13	2.04	0.58
36:BA:304:G:H2'	36:BA:305:U:C6	2.38	0.58
1:CA:9:G:OP1	5:CE:122:GLU:HG3	2.03	0.58
1:AA:1044:A:H2'	1:AA:1045:C:O4'	2.04	0.58
1:CA:784:C:H4'	36:DA:1837:C:OP1	2.04	0.58
36:BA:2856:C:C2'	36:BA:2857:G:H5'	2.34	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2737:G:H2'	36:DA:2738:A:C8	2.39	0.58
40:DE:15:PHE:CD1	40:DE:20:ALA:HB2	2.38	0.58
13:CM:65:LYS:HD2	13:CM:69:GLU:O	2.03	0.58
32:B6:15:GLU:O	32:B6:17:LYS:N	2.37	0.57
48:BP:55:ARG:O	48:BP:57:THR:N	2.37	0.57
36:DA:2881:C:H2'	36:DA:2882:A:H8	1.67	0.57
40:DE:1:MET:N	40:DE:84:PHE:HB2	2.19	0.57
36:DA:1824:G:N3	39:DD:254:THR:OG1	2.37	0.57
32:D6:53:LYS:HG2	32:D6:54:ILE:N	2.19	0.57
25:AZ:154:VAL:HG12	25:AZ:158:LEU:HD11	1.86	0.57
36:BA:2090:G:N2	36:BA:2229:C:O2	2.37	0.57
25:CZ:291:ARG:HG3	25:CZ:292:GLY:N	2.18	0.57
1:CA:261:U:O2	1:CA:263:A:C8	2.57	0.57
42:DG:83:ARG:C	42:DG:85:GLY:H	2.07	0.57
4:AD:17:VAL:HG11	4:AD:197:PRO:HB2	1.86	0.57
10:AJ:58:ASP:O	10:AJ:59:SER:C	2.43	0.57
36:BA:2010:G:O2'	36:BA:2011:U:H5'	2.03	0.57
10:AJ:12:ASP:C	10:AJ:14:LYS:H	2.06	0.57
13:AM:57:ARG:HG2	13:AM:61:GLU:CB	2.35	0.57
56:DX:11:PRO:HA	56:DX:28:PHE:HB3	1.86	0.57
53:DU:86:ALA:O	53:DU:88:ILE:HG23	2.04	0.57
1:CA:726:C:H2'	1:CA:727:G:H8	1.69	0.57
32:B6:26:ASN:O	32:B6:27:LYS:HB2	2.01	0.57
1:CA:953:G:C2	1:CA:954:G:H1'	2.39	0.57
1:AA:947:G:H2'	1:AA:948:C:C6	2.39	0.57
52:BT:11:GLU:CD	52:BT:11:GLU:H	2.08	0.57
36:DA:2773:C:O3'	40:DE:164:ARG:HB3	2.03	0.57
37:BB:75:G:O2'	58:BZ:27:VAL:HG21	2.04	0.57
49:BQ:141:GLN:O	58:BZ:70:LEU:HD12	2.04	0.57
36:DA:343:C:H2'	36:DA:344:G:O5'	2.04	0.57
26:B0:49:LYS:O	26:B0:51:VAL:HG23	2.04	0.57
57:BY:10:GLY:CA	57:BY:27:VAL:HG13	2.34	0.57
1:CA:1334:G:H3'	1:CA:1335:C:H5"	1.86	0.57
36:BA:2151:G:H2'	36:BA:2152:G:H8	1.68	0.57
3:CC:14:ILE:HG12	3:CC:15:THR:N	2.17	0.57
25:AZ:222:LEU:O	25:AZ:223:MET:HB3	2.03	0.57
19:CS:49:ILE:O	19:CS:60:VAL:HG13	2.04	0.57
3:AC:58:GLU:N	3:AC:65:ALA:CB	2.63	0.57
48:BP:16:ARG:HD3	48:BP:17:LYS:N	2.18	0.57
36:BA:2589:A:H2'	36:BA:2590:A:C8	2.39	0.57
36:BA:1826:G:OP2	39:BD:222:ARG:HB3	2.03	0.57
58:DZ:12:GLY:CA	58:DZ:36:LYS:NZ	2.67	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:DZ:14:LYS:HB2	58:DZ:17:ALA:CB	2.34	0.57
9:AI:18:PHE:HB2	9:AI:62:TYR:HB3	1.86	0.57
1:CA:1011:G:C2	1:CA:1019:C:N3	2.73	0.57
53:BU:95:LEU:CD1	54:BV:11:GLN:HG3	2.32	0.57
42:DG:170:ARG:O	42:DG:173:LEU:N	2.35	0.57
42:DG:18:GLU:OE1	42:DG:21:ARG:NH2	2.36	0.57
38:BC:139:ASN:OD1	38:BC:140:PRO:HD2	2.04	0.57
1:AA:80:G:C2	1:AA:90:U:H5'	2.39	0.57
33:B7:40:TRP:CE3	36:BA:459:U:H4'	2.39	0.57
8:AH:74:PRO:O	8:AH:75:ARG:C	2.42	0.57
20:AT:89:ARG:HB2	20:AT:104:LEU:CD1	2.31	0.57
24:CY:50:G:H2'	24:CY:51:C:C6	2.39	0.57
36:BA:223:A:N7	36:BA:422:A:H1'	2.18	0.57
1:AA:836:G:C6	1:AA:851:G:C6	2.93	0.57
36:DA:2263:C:O2'	36:DA:2264:C:H5'	2.03	0.57
36:BA:2442:C:O2	36:BA:2442:C:H2'	2.02	0.57
8:AH:89:PRO:HA	8:AH:92:ARG:HD2	1.85	0.57
11:AK:90:GLY:HA2	11:AK:93:GLN:HB2	1.84	0.57
36:DA:195:A:N7	36:DA:197:A:OP1	2.36	0.57
36:BA:2249:U:H4'	36:BA:2275:C:H5	1.69	0.57
34:D8:26:LYS:NZ	36:DA:2361:A:OP2	2.35	0.57
36:BA:6:A:H2'	36:BA:7:G:H8	1.69	0.57
48:BP:116:GLY:O	48:BP:137:LYS:NZ	2.37	0.57
37:BB:6:C:H42	37:BB:115:G:H1	1.51	0.57
12:CL:55:VAL:HG22	12:CL:56:ALA:N	2.18	0.57
1:CA:886:G:H2'	1:CA:887:G:O4'	2.04	0.57
6:AF:17:SER:O	6:AF:21:LEU:HD23	2.04	0.57
3:AC:179:ARG:HD2	3:AC:207:VAL:HA	1.86	0.57
38:BC:58:VAL:HG22	38:BC:201:PRO:CG	2.34	0.57
34:D8:39:LYS:NZ	36:DA:2364:C:H5	2.00	0.57
34:B8:59:LYS:O	34:B8:60:LEU:HD23	2.03	0.57
50:DR:55:ALA:CB	50:DR:79:LEU:HD11	2.34	0.57
32:D6:36:LEU:HD12	32:D6:50:ARG:NH1	2.18	0.57
25:AZ:146:LEU:O	25:AZ:150:VAL:HG23	2.04	0.57
25:AZ:181:GLN:HG2	25:AZ:193:ASN:CG	2.23	0.57
36:BA:1801:G:H3'	36:BA:1802:A:H5'	1.86	0.57
36:BA:1822:G:C4	36:BA:1823:G:C8	2.92	0.57
36:DA:681:G:H2'	36:DA:682:G:C8	2.39	0.57
36:BA:1242:A:H3'	36:BA:1243:G:H8	1.69	0.57
36:BA:2758:A:H2	36:BA:2759:G:H1'	1.69	0.57
28:B2:63:VAL:HA	28:B2:66:GLU:HG2	1.86	0.57
36:BA:343:C:H2'	36:BA:344:G:O5'	2.05	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:DU:16:LYS:C	53:DU:17:ILE:HD12	2.25	0.57
1:AA:377:G:H1	1:AA:386:C:H42	1.53	0.57
54:BV:40:LEU:HD13	54:BV:46:VAL:H	1.69	0.57
36:DA:320:A:C5	41:DF:136:THR:HG21	2.39	0.57
41:DF:195:ASP:OD2	41:DF:197:ASP:HB2	2.04	0.57
1:CA:1226:C:C5	13:CM:104:ARG:HB2	2.39	0.57
13:CM:119:GLY:O	13:CM:120:LYS:HB2	2.04	0.57
36:BA:1678:G:O5'	36:BA:1678:G:H8	1.88	0.57
36:BA:2789:C:H1'	36:BA:2892:A:C2	2.38	0.57
40:DE:165:VAL:HG11	40:DE:189:PRO:HB3	1.86	0.57
52:DT:68:TYR:C	52:DT:70:VAL:H	2.07	0.57
36:DA:327:G:O2'	36:DA:328:U:H5'	2.04	0.57
7:CG:36:LYS:CA	7:CG:39:ALA:HB3	2.34	0.57
1:AA:789:U:O2	1:AA:791:G:C8	2.57	0.57
36:DA:2110:G:N2	36:DA:2178:C:H5	2.02	0.57
1:CA:864:A:H2	1:CA:917:G:N3	2.02	0.57
36:BA:2230:G:H2'	36:BA:2231:C:H6	1.69	0.57
36:BA:1248:G:P	41:BF:92:PRO:HG3	2.44	0.57
58:DZ:45:ASP:O	58:DZ:47:VAL:N	2.37	0.57
13:CM:30:ALA:C	13:CM:32:GLU:N	2.57	0.57
21:AU:2:GLY:O	21:AU:4:GLY:N	2.36	0.57
42:DG:47:LYS:HG3	42:DG:81:LYS:HG3	1.86	0.57
40:DE:60:ASN:OD1	40:DE:62:PRO:HD2	2.05	0.57
49:BQ:24:GLY:O	49:BQ:26:TYR:N	2.36	0.57
36:DA:1577:C:H2'	36:DA:1578:U:C6	2.39	0.57
1:AA:1155:G:H2'	1:AA:1156:G:H8	1.69	0.57
1:AA:840:C:H5'	1:AA:841:U:OP1	2.04	0.57
1:AA:419:C:H42	1:AA:424:G:N2	1.98	0.57
1:CA:489:C:H2'	1:CA:490:G:H8	1.69	0.57
27:D1:73:LEU:O	27:D1:77:ALA:HB2	2.05	0.57
7:AG:149:ARG:HD3	11:AK:59:TYR:CE1	2.39	0.57
1:AA:226:G:C2'	1:AA:227:G:H5'	2.34	0.57
36:BA:1375:C:O2'	36:BA:1376:C:H5'	2.02	0.57
33:D7:9:ARG:HG2	36:DA:1309:G:P	2.44	0.57
36:BA:2777:G:C5'	36:BA:2778:A:H5'	2.34	0.57
39:BD:48:ARG:NH1	39:BD:48:ARG:HG3	2.19	0.57
25:CZ:315:LYS:HB3	25:CZ:404:LEU:HB2	1.84	0.57
36:DA:848:G:N3	36:DA:933:A:H1'	2.19	0.57
25:AZ:315:LYS:O	25:AZ:403:ILE:HG23	2.04	0.57
2:CB:36:ARG:O	2:CB:38:GLY:N	2.38	0.57
36:BA:1949:G:H1	36:BA:1957:C:N4	2.01	0.57
12:AL:105:TYR:N	12:AL:105:TYR:CD2	2.71	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:D4:46:GLN:CG	30:D4:47:GLN:H	2.16	0.57
37:DB:65:C:H2'	37:DB:109:C:N4	2.19	0.57
36:DA:416:C:H2'	36:DA:417:C:H5'	1.85	0.57
1:CA:1200:C:O2'	1:CA:1201:A:OP2	2.21	0.57
25:CZ:263:ARG:HB2	25:CZ:263:ARG:NH1	2.19	0.57
1:CA:9:G:H5''	5:CE:122:GLU:OE1	2.04	0.57
32:D6:33:LYS:O	32:D6:34:LEU:HB2	2.05	0.57
5:AE:20:GLN:HE22	5:AE:25:ARG:NH2	2.02	0.57
1:CA:526:C:H2'	1:CA:527:G:H4'	1.85	0.57
36:BA:226:G:H1	36:BA:418:G:H21	1.51	0.57
7:AG:94:ARG:O	7:AG:97:GLN:N	2.37	0.57
36:DA:2856:C:C2'	36:DA:2857:G:H5'	2.34	0.57
36:BA:1304:C:O2'	36:BA:1305:C:H5'	2.03	0.57
36:DA:653:A:H2'	36:DA:653:A:N3	2.19	0.57
3:CC:72:LYS:O	3:CC:74:GLY:N	2.36	0.57
25:CZ:355:LEU:HB3	25:CZ:359:VAL:CB	2.34	0.57
36:BA:811:U:O2	36:BA:1251:C:C5	2.57	0.57
50:DR:28:LEU:HD23	50:DR:29:LEU:N	2.18	0.57
28:D2:6:VAL:HA	28:D2:9:GLN:HB2	1.86	0.57
24:AY:54:5MU:C2'	24:AY:55:PSU:H5'	2.32	0.57
41:BF:28:ILE:HG21	41:BF:116:ASP:OD1	2.04	0.57
36:BA:749:C:H5'	36:BA:1271:G:H1'	1.85	0.57
54:DV:40:LEU:HA	54:DV:45:THR:HB	1.86	0.57
13:AM:14:ARG:N	13:AM:44:ARG:HH11	2.02	0.57
56:DX:29:TRP:CZ3	56:DX:78:LYS:HD2	2.39	0.57
36:DA:565:C:H4'	36:DA:1253:A:N1	2.19	0.57
4:CD:61:LYS:HA	4:CD:203:VAL:HG13	1.87	0.57
15:CO:39:LEU:HD22	15:CO:43:LEU:HG	1.86	0.57
32:B6:8:LYS:HA	32:B6:27:LYS:CD	2.34	0.57
48:BP:97:PRO:C	48:BP:99:LEU:N	2.58	0.57
1:AA:1334:G:H3'	1:AA:1335:C:H5''	1.86	0.57
52:DT:74:ARG:C	52:DT:75:ILE:HD12	2.24	0.57
58:BZ:102:LEU:HD21	58:BZ:124:ILE:HD13	1.86	0.57
58:BZ:25:PRO:O	58:BZ:85:HIS:HD2	1.87	0.57
57:DY:73:ARG:HB3	57:DY:80:GLY:CA	2.34	0.57
1:CA:976:G:H5'	1:CA:1358:U:O2'	2.04	0.57
1:CA:1349:A:P	9:CI:120:ARG:HB2	2.44	0.57
51:DS:68:GLN:HA	51:DS:71:ARG:HD3	1.86	0.57
42:BG:165:THR:O	42:BG:168:GLU:HB2	2.04	0.57
42:BG:27:ASN:C	42:BG:29:TRP:H	2.07	0.57
58:DZ:17:ALA:O	58:DZ:20:ARG:CG	2.52	0.57
1:CA:1325:C:H5''	21:CU:15:ARG:NH2	2.19	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1442(A):G:H5'	1:CA:1442(B):A:OP1	2.05	0.57
57:BY:6:HIS:N	57:BY:6:HIS:CD2	2.70	0.57
39:DD:85:ASP:OD2	39:DD:88:ARG:NH1	2.37	0.57
36:DA:38:A:O2'	36:DA:39:C:H5'	2.04	0.57
48:DP:16:ARG:HD3	48:DP:17:LYS:N	2.19	0.57
21:AU:4:GLY:O	21:AU:6:ARG:N	2.37	0.57
25:CZ:272:MET:HB3	25:CZ:277:LEU:HD23	1.86	0.57
36:BA:1528(A):A:H62	36:BA:1541:G:N2	2.03	0.57
57:BY:86:ARG:CG	57:BY:87:LYS:H	2.15	0.57
36:BA:471:A:C2'	36:BA:472:A:H5''	2.34	0.57
21:CU:18:TYR:HB3	21:CU:22:ARG:HG2	1.86	0.57
5:CE:150:ARG:CB	5:CE:150:ARG:HH11	2.17	0.57
43:BH:103:LEU:HB2	43:BH:123:PHE:CD2	2.32	0.57
24:AY:50:G:H2'	24:AY:51:C:C6	2.39	0.57
10:AJ:91:PRO:HB2	10:AJ:94:VAL:CB	2.30	0.57
36:DA:857:C:H5'	36:DA:858:U:OP2	2.04	0.57
55:DW:42:ARG:O	55:DW:42:ARG:HG2	2.04	0.57
11:CK:120:ARG:HH12	11:CK:126:ARG:CD	2.17	0.57
38:BC:6:ARG:O	38:BC:10:LEU:HD23	2.05	0.57
36:BA:535:C:O3'	53:BU:53:ARG:HD3	2.04	0.57
53:BU:52:ARG:HA	53:BU:55:ARG:HH12	1.69	0.57
39:BD:196:VAL:HG12	39:BD:196:VAL:O	2.04	0.57
12:CL:105:TYR:HD2	12:CL:105:TYR:N	2.02	0.57
12:CL:84:LEU:HD23	12:CL:85:ILE:H	1.69	0.57
1:CA:319:G:C4'	1:CA:1468:A:H4'	2.34	0.57
58:BZ:145:GLU:HG3	58:BZ:146:ILE:H	1.69	0.57
1:CA:523:A:N6	12:CL:53:ARG:HH12	2.01	0.57
1:CA:22:G:H2'	1:CA:23:C:O4'	2.04	0.57
51:DS:56:LEU:HD23	51:DS:56:LEU:O	2.05	0.57
12:AL:55:VAL:HG23	12:AL:68:ALA:O	2.04	0.57
36:DA:548:A:H2'	36:DA:549:G:H5'	1.84	0.57
1:AA:269:C:H2'	1:AA:270:A:H8	1.69	0.57
32:B6:32:ASN:CG	32:B6:33:LYS:H	2.06	0.57
36:BA:41:C:H2'	36:BA:42:G:O4'	2.05	0.57
5:CE:6:PHE:HB2	5:CE:34:VAL:HG22	1.86	0.57
49:DQ:10:ARG:HB2	49:DQ:10:ARG:HH11	1.68	0.57
25:CZ:355:LEU:C	25:CZ:359:VAL:HG23	2.25	0.57
34:B8:13:ARG:HD2	48:BP:61:ARG:HD2	1.87	0.57
53:BU:16:LYS:C	53:BU:17:ILE:HD12	2.23	0.57
50:DR:54:LEU:HB3	50:DR:62:ALA:HB1	1.85	0.57
32:D6:15:GLU:O	32:D6:17:LYS:N	2.38	0.57
36:DA:2289:G:H5''	36:DA:2384:G:H4'	1.87	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D2:3:LEU:CB	36:DA:98:G:OP1	2.51	0.57
35:D9:2:LYS:HE2	36:DA:2526:G:H1'	1.85	0.57
38:DC:131:LEU:HB3	38:DC:136:LEU:CB	2.35	0.57
38:BC:116:THR:HG21	38:BC:147:PHE:CD1	2.39	0.57
35:B9:1:MET:HG3	35:B9:31:LYS:O	2.04	0.57
40:BE:1:MET:O	40:BE:2:LYS:C	2.43	0.57
36:DA:528:A:H2	36:DA:2043:C:H4'	1.68	0.57
48:DP:36:LYS:HB3	48:DP:41:ARG:HB3	1.86	0.57
53:DU:28:ARG:HD3	53:DU:38:THR:HG23	1.86	0.57
54:DV:38:LEU:CD1	54:DV:57:VAL:HB	2.34	0.57
4:CD:10:ARG:HH11	4:CD:10:ARG:HG2	1.70	0.57
15:CO:53:HIS:O	15:CO:56:LEU:N	2.37	0.57
1:CA:1226:C:H6	13:CM:103:THR:OG1	1.85	0.57
1:CA:1226:C:N4	13:CM:104:ARG:HD2	2.20	0.57
36:BA:2785:C:H2'	36:BA:2786:U:H6	1.69	0.57
36:DA:2724:C:H2'	36:DA:2725:A:C8	2.38	0.57
58:BZ:10:ARG:HG2	58:BZ:12:GLY:N	2.19	0.57
7:AG:36:LYS:CA	7:AG:39:ALA:HB3	2.33	0.57
1:AA:1490:C:N3	1:AA:1491:G:N7	2.52	0.57
1:AA:1490:C:C4	1:AA:1491:G:N7	2.73	0.57
36:BA:2123:G:H1'	38:BC:172:HIS:HB3	1.86	0.57
25:AZ:98:GLN:HA	25:AZ:241:ARG:NH2	2.19	0.57
20:CT:22:ARG:O	20:CT:26:ASN:ND2	2.37	0.57
48:BP:20:GLY:O	48:BP:21:ARG:HB2	2.04	0.57
36:BA:2591:C:OP2	39:BD:239:ARG:HB3	2.05	0.57
36:DA:769:G:O4'	36:DA:1379:A:N6	2.37	0.57
13:CM:15:VAL:HG23	13:CM:16:ASP:H	1.68	0.57
42:DG:67:LYS:CD	42:DG:67:LYS:N	2.67	0.57
40:DE:51:PHE:CD1	40:DE:52:LEU:N	2.72	0.57
8:CH:120:THR:C	8:CH:122:ARG:H	2.07	0.57
25:CZ:68:VAL:HG22	25:CZ:79:HIS:HB3	1.86	0.57
1:AA:1439:C:H42	1:AA:1463:C:H42	1.50	0.57
29:B3:15:TYR:HB3	29:B3:19:GLN:NE2	2.19	0.57
36:BA:195:A:N7	36:BA:197:A:OP1	2.38	0.57
1:AA:837:G:O2'	1:AA:838:G:H5'	2.04	0.57
10:AJ:96:ILE:HD13	10:AJ:96:ILE:N	2.19	0.57
36:DA:1308:A:H2'	36:DA:1309:G:O4'	2.05	0.57
48:DP:116:GLY:O	48:DP:137:LYS:NZ	2.36	0.57
1:AA:1109:C:C2'	1:AA:1110:A:H5'	2.34	0.57
40:BE:178:GLU:HG3	40:BE:179:GLU:N	2.20	0.57
1:CA:1166:G:H1'	1:CA:1171:G:H22	1.69	0.57
1:CA:687:A:H1'	1:CA:688:G:OP2	2.04	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:6:GLY:O	13:AM:8:GLU:N	2.36	0.57
36:DA:76:C:O2'	36:DA:77:C:H5'	2.05	0.57
20:CT:83:ARG:CA	20:CT:86:ARG:HB3	2.34	0.57
36:DA:2757:A:H2'	36:DA:2757:A:N3	2.18	0.57
51:BS:83:LYS:C	51:BS:105:ALA:HB3	2.25	0.57
3:CC:206:GLU:HG2	3:CC:207:VAL:H	1.68	0.57
1:CA:649:G:O2'	1:CA:650:G:H5'	2.04	0.57
33:B7:19:ARG:NH2	36:BA:124:G:N7	2.52	0.57
46:BN:16:ILE:O	46:BN:16:ILE:HG23	2.04	0.57
40:BE:149:ARG:HG3	40:BE:149:ARG:HH11	1.69	0.57
1:AA:71:C:H2'	1:AA:72:C:C6	2.39	0.57
27:B1:56:GLN:O	27:B1:57:GLU:O	2.21	0.57
27:B1:56:GLN:O	27:B1:57:GLU:C	2.42	0.57
16:AP:23:ASP:O	16:AP:25:ARG:N	2.37	0.57
45:BK:113:UNK:O	45:BK:114:UNK:CB	2.52	0.57
3:CC:191:THR:HG21	3:CC:193:TYR:CZ	2.39	0.57
18:AR:25:THR:O	18:AR:25:THR:HG22	2.04	0.57
36:BA:1623:G:O2'	36:BA:1624:G:H5'	2.05	0.57
36:BA:2333:A:H1'	36:BA:2335:A:C5	2.39	0.57
48:BP:36:LYS:HB3	48:BP:41:ARG:HB3	1.86	0.57
32:D6:19:ARG:CD	36:DA:2400:G:H4'	2.21	0.57
28:D2:27:GLU:O	28:D2:29:LYS:N	2.38	0.57
28:D2:67:LYS:O	28:D2:69:ARG:N	2.31	0.57
41:DF:182:ASN:OD1	41:DF:185:ASP:N	2.29	0.57
8:AH:63:LEU:N	8:AH:63:LEU:HD22	2.19	0.57
36:DA:674:G:H1'	41:DF:74:ARG:HD3	1.86	0.57
1:AA:1190:G:P	3:AC:5:ILE:HG23	2.45	0.57
50:BR:28:LEU:HA	50:BR:34:ILE:HG13	1.85	0.57
13:AM:30:ALA:C	13:AM:32:GLU:N	2.58	0.57
42:BG:146:TYR:CG	42:BG:147:ASP:N	2.72	0.57
11:CK:124:LYS:NZ	11:CK:124:LYS:CB	2.67	0.57
2:AB:8:LYS:HD3	2:AB:217:ARG:NH2	2.19	0.57
1:AA:116:A:H2'	1:AA:117:G:O4'	2.04	0.57
51:BS:30:ARG:HH11	51:BS:35:ILE:HB	1.68	0.57
36:DA:321:G:H1'	41:DF:168:ARG:NH2	2.18	0.57
48:BP:147:LEU:HG	48:BP:148:LEU:N	2.20	0.57
48:BP:78:PRO:CB	48:BP:111:ARG:NH2	2.67	0.57
36:DA:2892:A:N6	36:DA:2893:G:H21	1.90	0.57
36:BA:2864:G:OP1	52:BT:119:LYS:HD2	2.05	0.57
40:BE:60:ASN:OD1	40:BE:62:PRO:HD2	2.05	0.57
58:BZ:127:LYS:NZ	58:BZ:164:ALA:HB2	2.20	0.57
7:AG:24:THR:HA	7:AG:27:ILE:CG1	2.34	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:CG:101:LEU:O	7:CG:104:LEU:HB2	2.04	0.57
1:AA:1495:U:OP1	13:AM:125:ARG:HD3	2.04	0.57
1:AA:1516:G:H2'	1:AA:1518:A:OP2	2.04	0.57
4:AD:76:ARG:O	4:AD:80:GLU:HG2	2.04	0.57
36:DA:1902:C:H1'	39:DD:244:ARG:HE	1.69	0.57
36:DA:2605:U:H2'	36:DA:2606:C:C6	2.40	0.57
7:CG:12:LEU:CD1	7:CG:25:ALA:HB2	2.27	0.57
41:BF:10:PRO:HG2	41:BF:11:VAL:H	1.70	0.57
56:DX:35:THR:HB	56:DX:38:GLU:HG3	1.86	0.57
20:AT:19:SER:O	20:AT:21:LYS:N	2.38	0.57
49:BQ:67:ARG:HD2	49:BQ:105:GLU:OE1	2.03	0.57
42:DG:52:ILE:HB	42:DG:54:GLU:CD	2.24	0.57
25:CZ:228:VAL:HG21	25:CZ:298:VAL:O	2.04	0.57
1:AA:1435:G:C4	1:AA:1436:U:C5	2.93	0.57
53:BU:31:SER:HB3	53:BU:34:LYS:HB2	1.85	0.57
16:AP:12:LYS:C	16:AP:14:ASN:H	2.06	0.57
25:CZ:341:GLN:NE2	25:CZ:341:GLN:N	2.53	0.57
1:AA:598:U:H2'	1:AA:599:C:C6	2.39	0.57
1:CA:1413:A:C2	1:CA:1488:G:N2	2.73	0.57
49:DQ:50:ALA:O	49:DQ:51:ARG:C	2.41	0.57
4:AD:112:VAL:HG12	4:AD:116:GLN:OE1	2.03	0.57
1:CA:748:C:O2'	1:CA:749:C:O5'	2.22	0.57
1:CA:57:G:N1	1:CA:356:A:C6	2.73	0.57
1:AA:445:G:H2'	1:AA:446:G:H8	1.69	0.57
41:DF:78:ILE:O	41:DF:80:ALA:N	2.38	0.57
36:BA:654(N):G:O2'	36:BA:654(O):G:H5'	2.04	0.57
7:CG:63:LYS:HZ2	7:CG:67:GLU:HB2	1.68	0.57
48:DP:83:VAL:H	48:DP:115:LEU:CD2	2.17	0.57
12:AL:32:PHE:HB3	12:AL:84:LEU:CD2	2.35	0.57
1:AA:601:C:H2'	1:AA:602:A:C8	2.37	0.57
1:CA:709:G:H2'	1:CA:710:G:H8	1.68	0.57
58:DZ:7:ALA:HA	58:DZ:39:VAL:HG12	1.85	0.57
3:CC:179:ARG:HD2	3:CC:207:VAL:HA	1.86	0.57
25:CZ:19:HIS:HA	25:CZ:115:GLN:HB2	1.87	0.57
36:BA:873:G:O2'	36:BA:874:G:H5'	2.05	0.57
47:BO:13:ASN:ND2	47:BO:97:ARG:HB2	2.20	0.57
53:DU:102:GLU:HB2	53:DU:105:VAL:HB	1.86	0.57
36:DA:1892:C:H2'	36:DA:1893:C:C6	2.40	0.57
36:DA:1356:G:H2'	36:DA:1357:U:O4'	2.03	0.57
36:DA:284:U:O5'	36:DA:284:U:H6	1.88	0.57
40:DE:95:ILE:N	40:DE:95:ILE:HD13	2.19	0.57
36:DA:1644:C:O2	36:DA:1644:C:H2'	2.03	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:B0:55:ARG:NH1	36:BA:2384:G:OP2	2.38	0.57
36:BA:2289:G:H5''	36:BA:2384:G:H4'	1.86	0.57
36:BA:2338:G:H2'	36:BA:2339:G:C8	2.37	0.57
32:D6:11:LEU:HD13	32:D6:11:LEU:C	2.25	0.57
36:DA:2337:G:H2'	36:DA:2338:G:H8	1.68	0.57
36:DA:631:A:H1'	36:DA:2415:G:HO2'	1.70	0.57
25:AZ:136:ASN:C	25:AZ:138:VAL:H	2.07	0.57
25:AZ:181:GLN:HG2	25:AZ:193:ASN:CB	2.35	0.57
39:BD:37:LEU:O	39:BD:62:TYR:HB3	2.04	0.57
41:DF:65:TRP:CZ3	41:DF:75:HIS:CD2	2.93	0.57
10:CJ:12:ASP:C	10:CJ:14:LYS:H	2.08	0.57
1:CA:274:A:H4'	1:CA:275:G:OP1	2.04	0.57
41:BF:45:ARG:CZ	41:BF:97:TYR:CE1	2.88	0.57
36:BA:2762:G:C2'	36:BA:2763:G:H5'	2.35	0.57
36:BA:1278:A:H5''	50:BR:36:THR:HG22	1.85	0.57
42:BG:114:ILE:CD1	42:BG:135:LEU:HD11	2.35	0.57
36:BA:271(J):C:H2'	36:BA:271(J):C:O2	2.03	0.57
27:D1:63:ALA:HB3	27:D1:66:HIS:CB	2.35	0.57
36:DA:811:U:O2	36:DA:1251:C:C6	2.58	0.57
53:DU:92:ARG:HD3	53:DU:94:ASN:HB3	1.85	0.57
54:DV:4:ILE:HB	54:DV:39:LEU:O	2.05	0.57
4:CD:11:LEU:N	4:CD:11:LEU:HD23	2.18	0.57
2:CB:8:LYS:HD3	2:CB:217:ARG:NH2	2.19	0.57
12:CL:17:LYS:HD3	12:CL:18:VAL:HG22	1.86	0.57
36:BA:1299:G:H4'	36:BA:1301:A:C4	2.40	0.57
52:BT:64:ARG:HA	52:BT:72:VAL:O	2.05	0.57
1:AA:1288:A:H2'	1:AA:1289:A:C8	2.39	0.57
1:AA:940:C:H2'	1:AA:941:G:H8	1.69	0.57
9:AI:118:LYS:O	9:AI:119:ALA:HB3	2.03	0.57
7:CG:118:VAL:HG23	7:CG:119:ARG:N	2.17	0.57
41:BF:9:ILE:HG12	41:BF:14:PRO:CA	2.26	0.57
3:CC:114:PRO:O	3:CC:118:GLN:HG3	2.04	0.57
27:B1:11:ARG:NH1	27:B1:11:ARG:CB	2.68	0.57
36:DA:1099:G:H8	36:DA:1099:G:O5'	1.86	0.57
36:BA:1199:U:H2'	36:BA:1200:C:C6	2.39	0.57
37:DB:17:C:H2'	37:DB:18:G:H8	1.69	0.57
58:DZ:19:ARG:NH1	58:DZ:84:GLU:C	2.58	0.57
36:BA:2305:A:N6	42:BG:43:LEU:HD13	2.20	0.57
42:BG:51:ARG:HD3	42:BG:53:LEU:HD21	1.84	0.57
30:D4:9:LEU:CG	42:DG:98:ARG:HH12	2.17	0.57
40:DE:97:LYS:O	40:DE:100:GLU:HG3	2.04	0.57
36:BA:2026:C:H42	36:BA:2037:G:H1	1.52	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2514:U:H2'	36:BA:2515:C:H6	1.69	0.57
38:DC:98:GLU:O	38:DC:98:GLU:HG3	2.03	0.57
20:CT:57:ARG:HH11	20:CT:103:GLY:N	2.03	0.57
4:CD:129:ASN:N	4:CD:129:ASN:HD22	1.91	0.57
36:DA:25:U:H5'	55:DW:79:GLY:HA2	1.86	0.57
1:AA:751:U:C4'	15:AO:24:SER:HB2	2.32	0.57
38:BC:6:ARG:O	38:BC:6:ARG:NH1	2.38	0.57
45:DK:72:UNK:O	45:DK:73:UNK:C	2.52	0.57
22:AW:38:A:H2'	22:AW:39:U:O4'	2.05	0.57
36:BA:979:G:H21	36:BA:985:C:H42	1.52	0.57
36:BA:1127:A:O2'	36:BA:2517:C:H4'	2.05	0.57
1:AA:536:C:O5'	1:AA:536:C:H6	1.87	0.57
46:DN:58:ASP:O	46:DN:60:ILE:HG13	2.05	0.57
20:AT:81:LYS:C	20:AT:83:ARG:H	2.07	0.57
1:AA:642:A:O2'	1:AA:643:C:H5'	2.04	0.57
25:AZ:263:ARG:CZ	25:AZ:263:ARG:HB2	2.33	0.57
25:AZ:263:ARG:NH1	25:AZ:263:ARG:HB2	2.20	0.57
8:CH:2:LEU:CD2	8:CH:3:THR:H	2.18	0.57
25:AZ:86:ALA:O	25:AZ:87:ASP:HB2	2.05	0.57
1:CA:1452:C:H4'	1:CA:1456:G:H5''	1.86	0.57
3:AC:116:VAL:O	3:AC:119:ARG:HB3	2.04	0.57
43:DH:74:ASN:OD1	43:DH:138:LYS:HD3	2.04	0.57
17:AQ:40:LYS:HD3	17:AQ:42:TYR:CZ	2.40	0.57
45:DK:117:UNK:O	45:DK:118:UNK:CB	2.52	0.57
36:BA:584:C:OP1	53:BU:6:THR:HB	2.04	0.57
50:DR:37:THR:HG23	50:DR:40:LYS:HE2	1.87	0.57
34:D8:18:ALA:HB2	36:DA:628:G:H5''	1.87	0.57
34:D8:22:VAL:CG2	34:D8:53:PRO:HB2	2.35	0.57
36:DA:2282:G:H5''	36:DA:2283:C:O4'	2.05	0.57
25:AZ:149:LEU:O	25:AZ:149:LEU:HD12	2.04	0.57
41:DF:203:GLN:C	41:DF:205:ARG:H	2.07	0.57
42:DG:85:GLY:O	42:DG:87:PRO:HD3	2.04	0.57
43:DH:61:HIS:C	43:DH:63:SER:N	2.58	0.57
36:BA:2881:C:H2'	36:BA:2882:A:H8	1.70	0.57
13:AM:49:THR:O	13:AM:53:VAL:HG23	2.04	0.57
42:BG:144:ILE:O	42:BG:144:ILE:HG23	2.04	0.57
1:AA:292:G:H1	1:AA:308:C:H42	1.51	0.57
1:AA:54:C:H2'	1:AA:352:C:N4	2.20	0.57
1:AA:52:G:O2'	1:AA:53:A:H5'	2.04	0.57
1:CA:1199:U:H4'	10:CJ:54:PHE:CE2	2.38	0.57
1:CA:427:U:OP1	4:CD:13:ARG:NH2	2.37	0.57
1:CA:963:G:H1	1:CA:972:C:H42	1.51	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:60:ASP:HB3	2:CB:64:ARG:HH21	1.69	0.57
5:AE:103:GLY:O	5:AE:107:ARG:HB3	2.05	0.57
25:CZ:140:MET:CG	62:CZ:501:GDP:HN21	2.18	0.57
52:BT:68:TYR:C	52:BT:70:VAL:H	2.07	0.57
58:BZ:163:LEU:CG	58:BZ:165:VAL:HG23	2.35	0.57
58:BZ:92:SER:O	58:BZ:130:PRO:HG2	2.05	0.57
1:AA:939:G:H2'	1:AA:940:C:C5	2.39	0.57
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.19	0.57
7:CG:42:ILE:CG2	7:CG:117:ALA:HA	2.30	0.57
7:CG:118:VAL:O	7:CG:119:ARG:C	2.43	0.57
1:CA:1372:U:OP1	9:CI:72:GLY:N	2.37	0.57
14:CN:22:THR:O	14:CN:23:ARG:CB	2.51	0.57
26:B0:47:PRO:O	26:B0:78:TYR:HD2	1.87	0.57
42:BG:163:ALA:CB	42:BG:169:ALA:HB2	2.27	0.57
42:BG:19:LEU:CD2	42:BG:175:LEU:HD12	2.35	0.57
42:BG:31:VAL:HG13	42:BG:31:VAL:O	2.02	0.57
36:DA:2138:C:O2'	36:DA:2139:C:H5'	2.05	0.57
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.39	0.57
1:AA:15:G:C4'	5:AE:24:ARG:HH21	2.16	0.57
1:CA:1039:C:H2'	1:CA:1040:U:C6	2.39	0.57
36:DA:1528(A):A:H8	36:DA:1529:G:C8	2.21	0.57
36:BA:553:G:H2'	36:BA:554:U:O4'	2.05	0.57
36:BA:18:C:O3'	53:BU:23:GLY:HA2	2.04	0.57
54:BV:52:VAL:HG22	54:BV:52:VAL:O	2.03	0.57
1:AA:1306:A:OP1	21:AU:6:ARG:NH2	2.37	0.57
40:DE:4:ILE:O	40:DE:5:LEU:HD23	2.05	0.57
51:BS:106:ARG:HD2	51:BS:106:ARG:C	2.25	0.57
43:BH:85:LYS:NZ	43:BH:133:VAL:H	1.97	0.57
42:DG:46:ALA:CB	42:DG:88:ILE:CG1	2.81	0.57
43:DH:103:LEU:HB2	43:DH:123:PHE:CD2	2.33	0.57
2:AB:182:ILE:O	2:AB:184:VAL:HG23	2.04	0.57
2:AB:60:ASP:HB3	2:AB:64:ARG:HH21	1.70	0.57
36:BA:1027:A:H2	36:BA:1028:A:N7	2.03	0.57
1:CA:1281:U:H3'	1:CA:1282:C:C6	2.40	0.57
26:D0:47:PRO:HB3	26:D0:51:VAL:O	2.04	0.57
55:DW:12:ILE:HD12	55:DW:42:ARG:HH12	1.68	0.57
16:AP:55:ARG:NH2	16:AP:58:TYR:CD2	2.72	0.57
27:D1:71:TYR:O	27:D1:74:VAL:HB	2.05	0.57
15:AO:39:LEU:HD22	15:AO:43:LEU:HG	1.85	0.57
36:BA:537:C:H42	36:BA:556:G:N2	2.02	0.57
36:DA:2885:C:H2'	36:DA:2886:G:O4'	2.04	0.57
33:D7:19:ARG:NH2	36:DA:124:G:C5	2.72	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BD:48:ARG:HH11	39:BD:48:ARG:HG3	1.69	0.57
4:CD:2:GLY:O	4:CD:4:TYR:N	2.38	0.57
12:CL:94:PRO:O	12:CL:96:VAL:N	2.38	0.57
14:CN:42:ILE:CG2	14:CN:43:CYS:N	2.67	0.57
36:DA:2853:C:H2'	36:DA:2854:G:C8	2.40	0.57
6:AF:7:ASN:OD1	6:AF:62:TRP:HD1	1.88	0.57
51:DS:56:LEU:C	51:DS:58:LEU:H	2.08	0.57
58:DZ:7:ALA:C	58:DZ:8:TYR:CD1	2.78	0.57
36:DA:304:G:H2'	36:DA:305:U:C6	2.39	0.57
36:DA:1574:C:H2'	36:DA:1575:C:C6	2.40	0.57
1:CA:568:G:O6	12:CL:5:PRO:HD3	2.05	0.57
39:BD:125:ILE:O	39:BD:125:ILE:HG22	2.03	0.57
37:BB:25:A:H2'	37:BB:25:A:N3	2.18	0.57
20:CT:8:ARG:HH11	20:CT:8:ARG:HG3	1.70	0.57
38:DC:7:TYR:CZ	38:DC:11:LEU:HD21	2.40	0.57
24:AY:77:THR:HG22	25:AZ:239:THR:CG2	2.35	0.57
36:BA:669:G:C2	36:BA:801:G:C6	2.93	0.57
36:BA:811:U:O2	36:BA:1251:C:C6	2.58	0.57
36:DA:747:U:C5	36:DA:2613:U:C5	2.92	0.57
39:DD:45:ASN:CG	39:DD:46:GLN:H	2.07	0.57
28:D2:21:LEU:HD21	28:D2:60:LEU:CD2	2.34	0.57
36:DA:607:U:H3	36:DA:621:A:H2	1.51	0.57
41:DF:20:LEU:H	41:DF:24:LEU:HD21	1.70	0.57
57:DY:50:ARG:CB	57:DY:53:PRO:HG3	2.18	0.57
36:BA:769:G:H2'	36:BA:770:G:H8	1.70	0.57
9:AI:89:ASN:O	9:AI:92:TYR:HB2	2.03	0.57
35:B9:1:MET:SD	36:BA:2478:A:OP2	2.62	0.57
36:BA:2467:C:O2'	36:BA:2468:G:H5'	2.04	0.57
28:B2:63:VAL:C	28:B2:65:ASN:N	2.56	0.57
36:DA:1131:G:OP2	36:DA:2515:C:H4'	2.05	0.57
53:DU:9:VAL:O	53:DU:13:LYS:HE2	2.05	0.57
1:CA:973:G:O4'	10:CJ:55:LYS:HE2	2.04	0.57
4:CD:17:VAL:HG11	4:CD:197:PRO:HB2	1.86	0.57
2:CB:47:THR:HG22	2:CB:51:LEU:HD11	1.87	0.57
48:BP:88:LEU:HD21	48:BP:95:VAL:HG21	1.86	0.57
36:DA:2807:G:H3'	36:DA:2808:U:C5'	2.24	0.57
36:DA:343:C:C2'	36:DA:344:G:O5'	2.52	0.57
9:AI:79:LEU:HD21	9:AI:102:LEU:O	2.04	0.57
1:AA:909:A:OP1	12:AL:21:LYS:HD3	2.04	0.57
36:DA:2376:A:N6	51:DS:92:TYR:CE2	2.73	0.57
36:BA:327:G:O2'	36:BA:328:U:H5'	2.04	0.57
1:AA:1418:A:N3	36:BA:1959:G:H1'	2.20	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BN:131:GLN:HE22	46:BN:133:GLN:CA	2.17	0.57
2:AB:17:PHE:HB3	2:AB:44:LEU:HD21	1.86	0.57
4:CD:76:ARG:O	4:CD:79:PHE:HB3	2.05	0.57
25:AZ:68:VAL:HG22	25:AZ:79:HIS:HB3	1.87	0.57
19:CS:62:ILE:CD1	19:CS:66:MET:HE2	2.33	0.57
3:AC:14:ILE:HG12	3:AC:15:THR:N	2.20	0.57
13:CM:68:GLY:O	13:CM:70:LEU:N	2.37	0.57
37:DB:101:G:H2'	37:DB:102:A:O4'	2.04	0.57
37:DB:15:A:H1'	37:DB:110:G:C5	2.39	0.57
58:DZ:28:MET:O	58:DZ:29:TYR:HB3	2.05	0.57
58:DZ:29:TYR:HA	58:DZ:33:LEU:O	2.05	0.57
31:B5:16:ARG:HD3	36:BA:1263:U:H5''	1.87	0.57
36:BA:20:C:O2'	36:BA:21:A:H5'	2.05	0.57
36:DA:271(P):C:H2'	36:DA:271(Q):G:C5'	2.29	0.57
1:CA:1327:C:H2'	1:CA:1328:C:C6	2.40	0.57
42:BG:52:ILE:H	42:BG:52:ILE:CD1	2.08	0.57
36:DA:464:U:H2'	36:DA:465:G:O4'	2.05	0.57
40:BE:120:TRP:NE1	40:BE:155:LYS:HB3	2.19	0.57
24:CY:9:A:H62	24:CY:23:A:H62	1.52	0.57
43:BH:86:GLU:OE1	43:BH:165:ALA:HB2	2.04	0.57
22:CV:18:G:H4'	22:CV:60:U:O2	2.04	0.57
53:BU:28:ARG:HD3	53:BU:38:THR:HG23	1.87	0.57
38:BC:41:VAL:N	38:BC:176:GLY:O	2.38	0.57
1:CA:1410:G:C2'	1:CA:1411:C:H5'	2.33	0.57
36:DA:2222:G:N3	36:DA:2223:G:C8	2.73	0.57
54:BV:19:LYS:HB3	54:BV:94:LEU:O	2.04	0.57
1:CA:198:G:HO2'	1:CA:199:G:H8	1.51	0.57
33:B7:13:ALA:O	33:B7:17:GLY:HA3	2.05	0.57
1:CA:390:C:H4'	16:CP:28:ARG:NH1	2.20	0.57
33:D7:19:ARG:NH2	36:DA:124:G:N7	2.53	0.57
22:CW:67:C:O2'	22:CW:68:C:H5'	2.05	0.57
57:BY:39:VAL:CG1	57:BY:40:GLU:H	2.11	0.57
40:DE:69:LYS:HE2	40:DE:69:LYS:N	2.19	0.57
48:DP:134:ALA:HB2	48:DP:137:LYS:HZ2	1.69	0.57
36:DA:1144:G:H2'	36:DA:1145:C:H6	1.70	0.57
51:BS:56:LEU:C	51:BS:58:LEU:N	2.57	0.57
42:DG:119:GLY:HA3	42:DG:181:ARG:HA	1.87	0.57
40:DE:142:GLY:C	40:DE:143:ASN:HD22	2.08	0.57
39:BD:209:ALA:C	39:BD:210:GLY:O	2.40	0.57
1:AA:1087:G:H2'	1:AA:1088:G:H8	1.69	0.57
26:D0:50:ASN:ND2	26:D0:63:VAL:HG21	2.20	0.57
36:BA:2410:G:H2'	36:BA:2411:A:H8	1.69	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2312:U:H5''	42:BG:74:LYS:NZ	2.19	0.57
36:DA:1907:G:O2'	36:DA:1908:C:H5'	2.05	0.57
34:D8:39:LYS:HZ2	36:DA:2364:C:H5	1.52	0.57
4:CD:49:ARG:O	4:CD:51:PRO:N	2.37	0.57
25:AZ:334:PHE:O	25:AZ:361:MET:HA	2.04	0.57
43:DH:30:LYS:HA	43:DH:30:LYS:HE2	1.86	0.57
36:DA:497:A:H2'	36:DA:498:G:C8	2.40	0.57
25:CZ:267:VAL:HG23	25:CZ:288:VAL:HG13	1.87	0.57
27:B1:3:LYS:HB3	27:B1:3:LYS:HZ3	1.69	0.57
36:BA:573:G:H5'	36:BA:575:A:N7	2.20	0.57
36:DA:749:C:H5'	36:DA:1271:G:H1'	1.87	0.57
36:DA:2873:A:N3	50:DR:6:SER:OG	2.38	0.57
36:DA:2283:C:H5	36:DA:2389:G:H2'	1.69	0.57
36:DA:2530:A:H2'	36:DA:2531:A:H5''	1.87	0.57
4:AD:10:ARG:HH11	4:AD:10:ARG:HG2	1.70	0.57
4:AD:65:ARG:HD2	4:AD:72:GLU:HA	1.86	0.57
40:BE:1:MET:N	40:BE:83:ASP:O	2.36	0.57
13:AM:63:THR:HG22	13:AM:64:TRP:N	2.16	0.57
36:DA:2647:U:O2'	36:DA:2648:C:H5'	2.04	0.57
36:DA:1005:C:H2'	36:DA:1006:C:H6	1.67	0.57
36:DA:537:C:H42	36:DA:556:G:N2	2.01	0.57
53:DU:92:ARG:HH22	54:DV:10:LYS:HB3	1.70	0.57
4:CD:65:ARG:HD2	4:CD:72:GLU:HA	1.86	0.57
2:CB:81:VAL:O	2:CB:82:ARG:C	2.42	0.57
13:CM:107:ALA:C	13:CM:109:THR:H	2.07	0.57
25:CZ:181:GLN:HG2	25:CZ:193:ASN:CB	2.34	0.57
1:AA:1346:A:N1	1:AA:1374:A:H5''	2.20	0.57
6:AF:2:ARG:CD	6:AF:69:GLU:HB3	2.34	0.57
1:CA:1288:A:H2'	1:CA:1289:A:H8	1.70	0.57
7:CG:16:LEU:HD13	9:CI:42:ARG:HA	1.85	0.57
9:CI:79:LEU:HD21	9:CI:102:LEU:O	2.05	0.57
47:BO:91:LEU:HD13	47:BO:111:PHE:HE1	1.70	0.57
57:BY:98:VAL:HG12	57:BY:98:VAL:O	2.05	0.57
42:BG:20:ILE:CG2	42:BG:25:TYR:HB2	2.35	0.57
1:AA:1424:C:H2'	1:AA:1425:U:C6	2.38	0.57
31:B5:51:TYR:HB3	31:B5:54:GLY:HA3	1.86	0.57
36:DA:1378:A:O2'	36:DA:1379:A:C5'	2.47	0.57
36:DA:744:G:H2'	36:DA:745:G:O4'	2.05	0.57
36:BA:1440:G:H2'	36:BA:1441:G:H8	1.70	0.57
36:BA:1551:C:C2'	36:BA:1552:G:H5'	2.35	0.57
38:BC:98:GLU:HG3	38:BC:98:GLU:O	2.04	0.57
7:AG:121:ALA:O	7:AG:124:LEU:N	2.37	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
55:DW:14:PRO:HG2	55:DW:78:GLU:HB2	1.87	0.57
36:DA:438:G:H2'	36:DA:440:G:H8	1.70	0.57
4:CD:25:ARG:C	4:CD:27:TYR:H	2.06	0.57
1:CA:226:G:C2'	1:CA:227:G:H5'	2.34	0.57
20:AT:33:ILE:HG23	20:AT:63:ILE:HG12	1.86	0.57
38:DC:214:VAL:CG2	38:DC:224:ILE:HD13	2.32	0.57
36:BA:1010:A:H1'	36:BA:1153:C:C1'	2.33	0.57
27:D1:37:ILE:HD11	36:DA:201:C:OP2	2.05	0.57
48:BP:134:ALA:HB2	48:BP:137:LYS:NZ	2.19	0.57
36:DA:116:C:O2'	36:DA:126:A:N3	2.36	0.57
1:AA:1271:G:H5'	1:AA:1314:C:H5''	1.85	0.57
18:AR:37:VAL:HG12	18:AR:78:LEU:HB3	1.87	0.57
36:BA:2656:U:H2'	36:BA:2657:A:H5''	1.87	0.57
36:BA:1511:C:H2'	36:BA:1512:U:H6	1.69	0.57
1:CA:1088:G:H2'	1:CA:1089:G:H8	1.69	0.57
36:DA:65:C:H5'	56:DX:71:GLY:HA3	1.86	0.57
36:DA:667:U:H2'	36:DA:668:G:O4'	2.05	0.57
36:BA:2480:C:OP1	36:BA:2537:U:H4'	2.05	0.57
11:AK:41:THR:HG21	11:AK:72:ALA:HA	1.87	0.57
36:DA:2584:U:O2	36:DA:2584:U:O5'	2.23	0.57
36:DA:2856:C:H2'	36:DA:2857:G:H5'	1.87	0.57
45:DK:95:UNK:O	45:DK:97:UNK:N	2.37	0.57
36:BA:2728:U:O2'	40:BE:22:PRO:HG3	2.05	0.57
13:AM:65:LYS:HD2	13:AM:69:GLU:O	2.05	0.57
1:AA:1215:G:N3	1:AA:1215:G:H2'	2.20	0.57
36:BA:2460:U:H2'	36:BA:2461:C:O4'	2.04	0.57
3:AC:157:ILE:CD1	3:AC:166:GLU:HB2	2.35	0.57
36:BA:2292:C:H42	36:BA:2340:G:H1	1.52	0.57
53:BU:20:LEU:N	53:BU:20:LEU:HD22	2.20	0.57
36:DA:2010:G:OP2	55:DW:41:LYS:NZ	2.36	0.57
25:AZ:197:ASP:HA	25:AZ:200:TRP:CD1	2.40	0.57
41:DF:32:LEU:HD22	41:DF:109:GLY:HA3	1.87	0.57
24:AY:76:A:H61	25:AZ:234:ARG:CZ	2.17	0.57
35:D9:1:MET:HG3	35:D9:31:LYS:O	2.04	0.57
35:D9:7:VAL:CG2	35:D9:36:GLN:HB2	2.35	0.57
38:DC:77:ILE:O	38:DC:78:ALA:O	2.23	0.57
36:BA:1427:A:H4'	36:BA:1428:C:O5'	2.05	0.57
40:BE:111:ARG:HA	50:BR:2:ARG:HG3	1.85	0.57
1:AA:291:C:O2'	1:AA:292:G:H5'	2.05	0.57
1:AA:310:G:H4'	16:AP:31:LYS:HD2	1.87	0.57
8:CH:6:ILE:HD12	8:CH:6:ILE:N	2.19	0.57
2:CB:184:VAL:O	2:CB:198:ASP:N	2.38	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:84:GLU:OE1	2:CB:216:SER:HA	2.05	0.57
40:BE:34:VAL:HG11	40:BE:78:LEU:HD22	1.87	0.57
38:DC:198:ALA:O	38:DC:200:LYS:N	2.38	0.57
38:DC:20:TYR:HB3	38:DC:24:GLU:HB2	1.87	0.57
32:B6:8:LYS:HD3	32:B6:27:LYS:HD3	1.87	0.57
25:CZ:146:LEU:O	25:CZ:150:VAL:HG23	2.04	0.57
25:CZ:38:GLU:OE1	25:CZ:200:TRP:HH2	1.88	0.57
52:BT:59:THR:OG1	52:BT:78:LEU:HD12	2.05	0.57
10:CJ:47:PHE:CE2	14:CN:37:PHE:HE2	2.22	0.57
36:BA:1403:C:H5''	36:BA:1471:A:C1'	2.34	0.57
1:CA:1221:G:P	19:CS:36:ARG:HD3	2.44	0.57
36:DA:1526:G:O2'	36:DA:1527:G:H5'	2.04	0.57
36:BA:442:G:H21	41:BF:48:THR:HB	1.69	0.57
36:BA:444:C:H4'	53:BU:2:PRO:HD3	1.86	0.57
39:BD:245:PRO:O	39:BD:246:PRO:C	2.42	0.57
58:DZ:75:ASN:O	58:DZ:84:GLU:HB2	2.05	0.57
21:CU:2:GLY:O	21:CU:4:GLY:N	2.37	0.57
1:CA:1442:G:H1	1:CA:1461:G:H21	1.51	0.57
36:BA:1528(A):A:H8	36:BA:1529:G:C8	2.23	0.57
36:BA:1440:G:N2	36:BA:1552:G:H1'	2.20	0.57
20:AT:22:ARG:O	20:AT:26:ASN:ND2	2.38	0.57
43:DH:92:ILE:C	43:DH:94:TYR:N	2.58	0.57
40:DE:76:ARG:O	40:DE:77:ILE:O	2.23	0.57
25:CZ:98:GLN:HA	25:CZ:241:ARG:NH2	2.20	0.57
27:B1:89:GLU:O	27:B1:93:GLU:HB2	2.05	0.57
53:BU:28:ARG:HD3	53:BU:38:THR:CG2	2.34	0.57
10:CJ:38:ILE:HD11	10:CJ:71:LEU:HD23	1.86	0.57
10:CJ:4:ILE:O	10:CJ:74:ILE:HG12	2.04	0.57
1:CA:438:G:H5'	4:CD:123:HIS:ND1	2.11	0.57
36:DA:792:G:H2'	36:DA:2440:C:O2	2.04	0.57
36:DA:1805:U:H4'	39:DD:250:TRP:CZ2	2.40	0.57
12:CL:41:ARG:HH12	12:CL:57:LYS:NZ	2.02	0.57
1:AA:194:C:C2'	1:AA:195:A:H5''	2.31	0.57
6:AF:3:ARG:NH1	6:AF:38:GLU:OE1	2.38	0.57
33:D7:18:PHE:H	33:D7:43:THR:HG21	1.70	0.57
36:DA:1308:A:N1	36:DA:1611:C:H1'	2.20	0.57
36:DA:2443:C:C2'	36:DA:2444:G:H5'	2.35	0.57
36:DA:1020:A:N1	36:DA:1141:U:H1'	2.20	0.57
36:BA:1326:U:O2'	36:BA:1327:C:H5'	2.05	0.57
12:AL:62:SER:O	12:AL:64:TYR:N	2.38	0.57
36:BA:988:A:C8	36:BA:988:A:O5'	2.57	0.57
1:CA:1529:G:H4'	1:CA:1530:G:OP2	2.04	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:19:HIS:CD2	25:AZ:115:GLN:HB2	2.40	0.57
46:BN:39:ARG:C	46:BN:41:ASP:H	2.08	0.57
36:BA:1121:C:H2'	36:BA:1122:G:C8	2.39	0.57
36:DA:302:C:O2'	36:DA:303:U:H5'	2.04	0.57
26:B0:30:VAL:HG12	26:B0:66:VAL:HG23	1.87	0.57
36:DA:1622:G:H2'	36:DA:1623:G:H8	1.69	0.57
39:DD:247:ALA:HB1	39:DD:252:TRP:O	2.05	0.57
40:DE:149:ARG:HH11	40:DE:149:ARG:HG3	1.70	0.57
36:BA:2558:C:H2'	36:BA:2559:C:H6	1.69	0.57
6:AF:33:TYR:CB	6:AF:75:LEU:HD13	2.35	0.57
34:B8:8:LYS:HG2	34:B8:11:LYS:HD3	1.86	0.56
48:BP:24:GLY:CA	48:BP:33:ARG:HH12	2.18	0.56
34:D8:61:LEU:CD1	34:D8:62:LEU:HG	2.35	0.56
34:D8:61:LEU:HD12	34:D8:62:LEU:N	2.20	0.56
26:D0:16:SER:HG	36:DA:2261:C:H3'	1.69	0.56
32:D6:5:VAL:HG21	36:DA:2283:C:C5'	2.35	0.56
25:AZ:38:GLU:OE1	25:AZ:200:TRP:HH2	1.88	0.56
28:D2:54:LYS:HG2	36:DA:73:A:OP1	2.04	0.56
41:DF:202:PHE:O	41:DF:206:ILE:HG12	2.04	0.56
41:DF:65:TRP:CZ3	41:DF:75:HIS:HD2	2.23	0.56
30:B4:7:PRO:HD3	42:BG:67:LYS:HE3	1.88	0.56
36:DA:531:C:C5	36:DA:2035:G:C2	2.93	0.56
54:DV:52:VAL:O	54:DV:52:VAL:HG22	2.04	0.56
2:AB:84:GLU:OE1	2:AB:216:SER:HA	2.04	0.56
10:CJ:54:PHE:C	10:CJ:55:LYS:CE	2.67	0.56
40:BE:81:ILE:CG2	40:BE:81:ILE:O	2.53	0.56
13:AM:107:ALA:C	13:AM:109:THR:H	2.07	0.56
5:AE:45:PHE:CE2	5:AE:47:LYS:HD2	2.40	0.56
25:CZ:134:PHE:CE2	25:CZ:136:ASN:HB2	2.40	0.56
25:CZ:150:VAL:O	25:CZ:154:VAL:HG23	2.05	0.56
36:BA:1274:A:N3	36:BA:1297:C:H1'	2.20	0.56
36:BA:2710:C:O2'	36:BA:2711:A:H5'	2.04	0.56
58:BZ:125:LEU:HG	58:BZ:164:ALA:HB3	1.87	0.56
57:DY:27:VAL:HG12	57:DY:29:GLU:H	1.70	0.56
7:CG:31:MET:HB2	7:CG:39:ALA:HB1	1.87	0.56
24:CY:56:C:H1'	36:DA:1067:A:H1'	1.87	0.56
36:BA:2101:G:H2'	36:BA:2102:U:C4'	2.35	0.56
4:CD:165:MET:HE3	4:CD:176:LEU:HD21	1.87	0.56
8:CH:30:ARG:CZ	8:CH:30:ARG:HB3	2.34	0.56
56:BX:65:ARG:O	56:BX:66:LEU:HB2	2.04	0.56
36:DA:661:C:H2'	36:DA:662:G:C8	2.40	0.56
36:DA:745:G:OP2	40:DE:133:LYS:HD2	2.05	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1577:C:H2'	36:BA:1578:U:C6	2.40	0.56
13:CM:57:ARG:HG2	13:CM:61:GLU:CB	2.34	0.56
36:DA:465:G:H2'	36:DA:466:A:C8	2.39	0.56
1:CA:977:A:N3	1:CA:977:A:C2'	2.68	0.56
25:CZ:254:GLU:HG3	25:CZ:307:PRO:HA	1.87	0.56
36:DA:1779:U:C5	36:DA:1784:A:N7	2.73	0.56
36:DA:597:U:H4'	48:DP:15:ARG:CZ	2.35	0.56
29:B3:52:HIS:CD2	29:B3:52:HIS:H	2.22	0.56
24:CY:64:C:O4'	25:CZ:391:GLY:HA2	2.05	0.56
1:AA:727:G:C2	1:AA:731:G:C6	2.93	0.56
36:BA:149:A:C2	36:BA:150:C:C2	2.93	0.56
36:DA:784:A:HO2'	36:DA:785:G:H8	1.53	0.56
25:CZ:362:VAL:HG11	25:CZ:368:VAL:CG2	2.35	0.56
10:AJ:4:ILE:O	10:AJ:74:ILE:HG12	2.05	0.56
11:AK:111:ASP:OD2	18:AR:84:LYS:HE3	2.05	0.56
1:CA:1523:G:H2'	1:CA:1524:C:H6	1.66	0.56
36:DA:2196:C:O2'	36:DA:2197:U:H5'	2.05	0.56
1:CA:137:C:H42	1:CA:226:G:H1	1.53	0.56
1:CA:1323:G:H2'	1:CA:1324:A:C8	2.40	0.56
15:AO:53:HIS:O	15:AO:56:LEU:N	2.38	0.56
36:BA:536:A:P	53:BU:53:ARG:HH11	2.28	0.56
36:DA:978:G:H1	36:DA:985:C:H42	1.53	0.56
1:AA:1317:C:C2'	1:AA:1318:A:H5'	2.35	0.56
36:DA:2520:C:C6	36:DA:2567:G:H1'	2.40	0.56
55:BW:69:LEU:HA	55:BW:108:GLY:O	2.05	0.56
55:BW:64:MET:HB3	55:BW:109:GLU:CG	2.35	0.56
14:CN:29:ARG:CG	14:CN:29:ARG:HH11	2.17	0.56
36:DA:2073:C:H2'	36:DA:2074:U:H6	1.69	0.56
1:CA:1505:G:H4'	1:CA:1506:U:H5'	1.86	0.56
1:AA:189(H):G:O2'	1:AA:189(I):G:H8	1.87	0.56
58:DZ:61:LEU:HD11	58:DZ:67:LEU:CD1	2.35	0.56
1:CA:200:G:H1	1:CA:217:C:N4	2.03	0.56
3:AC:173:VAL:O	3:AC:175:LEU:HD12	2.04	0.56
25:CZ:334:PHE:O	25:CZ:361:MET:HA	2.05	0.56
46:DN:96:GLU:OE2	46:DN:96:GLU:N	2.38	0.56
3:AC:191:THR:HG21	3:AC:193:TYR:CZ	2.40	0.56
36:BA:843:G:O2'	36:BA:844:C:H5'	2.05	0.56
1:AA:1405:G:O2'	1:AA:1406:U:H5'	2.05	0.56
36:BA:2737:G:H2'	36:BA:2738:A:C8	2.39	0.56
36:BA:2193:G:H8	36:BA:2193:G:H5'	1.70	0.56
32:B6:15:GLU:O	32:B6:16:CYS:C	2.43	0.56
34:B8:13:ARG:NH1	48:BP:59:LEU:HG	2.20	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:B8:62:LEU:CD1	36:BA:242:G:H3'	2.30	0.56
41:BF:84:VAL:O	41:BF:86:GLY:N	2.35	0.56
36:BA:572:A:H5'	54:BV:78:LYS:HZ1	1.70	0.56
50:DR:11:ASN:O	50:DR:12:ARG:HB2	2.05	0.56
19:AS:16:LEU:C	19:AS:18:LYS:H	2.08	0.56
28:D2:35:LEU:HD22	28:D2:35:LEU:O	2.05	0.56
36:DA:654(A):G:H5'	36:DA:654(B):C:OP2	2.05	0.56
35:D9:30:PRO:C	35:D9:32:HIS:H	2.08	0.56
36:BA:2761:G:H2'	36:BA:2762:G:C5'	2.11	0.56
13:AM:32:GLU:C	13:AM:34:LEU:N	2.58	0.56
30:B4:6:HIS:CA	42:BG:67:LYS:HE3	2.35	0.56
54:BV:40:LEU:HA	54:BV:45:THR:HB	1.87	0.56
37:BB:50:G:OP1	51:BS:63:THR:HG23	2.03	0.56
32:D6:6:ARG:HH12	32:D6:7:ILE:HG13	1.70	0.56
2:CB:51:LEU:O	2:CB:55:PHE:HD2	1.87	0.56
41:DF:132:VAL:HG13	41:DF:133:ASN:N	2.20	0.56
36:BA:1761:C:H2'	36:BA:1762:A:H8	1.71	0.56
36:DA:1682:G:H2'	36:DA:1683:C:C6	2.39	0.56
52:DT:28:VAL:O	52:DT:29:ARG:CD	2.49	0.56
37:BB:74:U:H2'	37:BB:75:G:C1'	2.35	0.56
1:AA:1060:C:H4'	10:AJ:52:GLY:N	2.19	0.56
9:AI:11:LYS:O	9:AI:13:ALA:N	2.39	0.56
7:CG:23:VAL:HG13	7:CG:43:PHE:CE2	2.40	0.56
36:BA:920:G:H2'	36:BA:921:G:H8	1.70	0.56
1:AA:1498:U:C4	23:AX:20:U:C5'	2.88	0.56
57:BY:27:VAL:HG12	57:BY:29:GLU:H	1.70	0.56
36:DA:2101:G:H2'	36:DA:2102:U:C4'	2.35	0.56
36:DA:2115:G:H22	36:DA:2119:A:P	2.27	0.56
19:CS:28:LYS:C	19:CS:29:ARG:HG3	2.26	0.56
16:CP:13:HIS:C	16:CP:15:PRO:HD3	2.26	0.56
36:BA:37:C:H2'	36:BA:38:A:C8	2.40	0.56
41:DF:7:TYR:OH	41:DF:10:PRO:HG3	2.05	0.56
53:BU:91:ASP:OD1	53:BU:96:ALA:HB2	2.06	0.56
36:BA:1336:A:H2'	36:BA:1337:G:H8	1.69	0.56
39:BD:95:LEU:H	39:BD:95:LEU:HD12	1.70	0.56
10:AJ:28:ARG:C	10:AJ:30:SER:H	2.08	0.56
36:DA:37:C:H2'	36:DA:38:A:C8	2.39	0.56
42:BG:47:LYS:HE3	42:BG:81:LYS:HG3	1.87	0.56
42:DG:18:GLU:OE2	42:DG:18:GLU:HA	2.05	0.56
36:BA:1525:G:H2'	36:BA:1526:G:H8	1.70	0.56
25:AZ:389:ARG:CA	25:AZ:395:VAL:HG13	2.34	0.56
1:CA:879:C:O2'	1:CA:880:C:H5'	2.04	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:77:ASP:OD2	58:BZ:79:ARG:O	2.23	0.56
2:AB:165:VAL:HG23	2:AB:166:ASP:N	2.19	0.56
29:D3:7:LYS:HB3	29:D3:55:ARG:HB2	1.87	0.56
21:AU:18:TYR:HB3	21:AU:22:ARG:HG2	1.87	0.56
36:BA:25:U:H5'	55:BW:79:GLY:HA2	1.87	0.56
10:CJ:8:LEU:CG	10:CJ:96:ILE:HG22	2.35	0.56
29:B3:15:TYR:CD2	29:B3:19:GLN:NE2	2.72	0.56
36:BA:2801(A):A:H5'	36:BA:2802:G:H8	1.70	0.56
1:CA:1503:A:C2'	23:CX:16:A:H62	2.12	0.56
36:DA:2277:G:C6	36:DA:2278:A:N7	2.73	0.56
2:AB:75:LYS:C	2:AB:77:ALA:H	2.07	0.56
2:CB:77:ALA:CA	2:CB:80:ILE:HD13	2.32	0.56
36:DA:2243:U:H2'	36:DA:2244:U:C5	2.40	0.56
36:BA:2246:G:H2'	36:BA:2247:A:H8	1.65	0.56
36:BA:31:C:H2'	36:BA:32:C:C4'	2.34	0.56
52:BT:6:LEU:HA	52:BT:9:LEU:HD12	1.87	0.56
11:AK:57:THR:HG22	11:AK:60:ALA:HB3	1.87	0.56
58:DZ:102:LEU:HD21	58:DZ:124:ILE:CG1	2.35	0.56
36:DA:6:A:H2'	36:DA:7:G:H8	1.70	0.56
2:AB:32:ILE:HG12	2:AB:33:TYR:H	1.70	0.56
42:DG:31:VAL:HG13	42:DG:31:VAL:O	2.05	0.56
24:CY:75:C:C6	25:CZ:231:ILE:HG23	2.36	0.56
1:AA:1041:A:H2'	1:AA:1042:G:H8	1.69	0.56
48:DP:130:PHE:N	48:DP:130:PHE:HD2	2.04	0.56
25:AZ:316:PHE:O	25:AZ:371:THR:HG23	2.05	0.56
49:DQ:109:VAL:CG1	49:DQ:110:THR:N	2.68	0.56
1:CA:619:U:C4	4:CD:135:LEU:HD11	2.39	0.56
36:BA:1011:G:O2'	36:BA:1013:C:C5'	2.54	0.56
36:BA:2422:A:H3'	36:BA:2422:A:C8	2.40	0.56
36:DA:988:A:O5'	36:DA:988:A:C8	2.58	0.56
1:CA:472:A:O2'	16:CP:81:ARG:HG3	2.05	0.56
58:DZ:24:LEU:CD1	58:DZ:41:LEU:HA	2.35	0.56
41:DF:88:VAL:HG22	41:DF:89:VAL:H	1.70	0.56
36:BA:953:A:OP2	49:BQ:16:ARG:CZ	2.53	0.56
36:DA:520:G:H2'	36:DA:521:G:H8	1.68	0.56
22:AV:76:A:N7	26:B0:2:ALA:HB2	2.20	0.56
1:CA:475:G:O2'	1:CA:476:G:H5'	2.05	0.56
43:BH:167:GLU:HG2	43:BH:168:PRO:HD2	1.87	0.56
3:AC:11:ARG:HG2	3:AC:11:ARG:HH11	1.70	0.56
2:AB:193:ASP:OD2	2:AB:193:ASP:O	2.23	0.56
36:BA:653:A:H2'	36:BA:653:A:N3	2.19	0.56
36:DA:697:C:O2'	36:DA:698:C:H5'	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:448:U:H1'	41:BF:84:VAL:CG1	2.34	0.56
36:BA:587:C:C5	48:BP:33:ARG:HG2	2.40	0.56
36:BA:2027:G:O2'	36:BA:2028:U:H5'	2.04	0.56
36:BA:2386:C:H2'	36:BA:2387:U:C6	2.40	0.56
50:DR:45:ARG:O	50:DR:46:GLY:C	2.43	0.56
36:DA:1278:A:O2'	36:DA:1279:G:H5'	2.05	0.56
50:DR:77:ARG:C	50:DR:79:LEU:H	2.09	0.56
36:DA:2882:A:H5''	50:DR:98:LEU:HD21	1.87	0.56
39:DD:145:VAL:HB	39:DD:155:LEU:HB2	1.87	0.56
39:DD:172:TYR:CD1	39:DD:186:HIS:HA	2.40	0.56
32:D6:5:VAL:HG21	36:DA:2283:C:H5'	1.87	0.56
36:DA:2282:G:H2'	36:DA:2425:A:H61	1.70	0.56
32:D6:15:GLU:O	32:D6:16:CYS:C	2.43	0.56
26:D0:55:ARG:NH1	36:DA:2384:G:OP2	2.39	0.56
36:DA:89:G:H3'	36:DA:90:U:C5'	2.32	0.56
39:BD:68:LYS:HB2	39:BD:70:TRP:CE2	2.41	0.56
36:DA:2233:U:H2'	36:DA:2234:G:H8	1.69	0.56
40:DE:54:GLN:O	40:DE:75:VAL:HG23	2.04	0.56
1:AA:1191:A:H5''	3:AC:4:LYS:NZ	2.20	0.56
41:BF:206:ILE:HG22	41:BF:207:GLY:N	2.13	0.56
41:BF:25:PRO:HB3	41:BF:119:ARG:CB	2.35	0.56
1:AA:1054:C:C4	24:AY:34:G:H1'	2.40	0.56
36:BA:2760:C:C3'	36:BA:2761:G:H5''	2.36	0.56
36:BA:321:G:H1'	41:BF:168:ARG:NH2	2.19	0.56
36:BA:320:A:C5	41:BF:136:THR:HG21	2.41	0.56
36:BA:1268:A:H2'	36:BA:1269:A:H8	1.70	0.56
50:BR:29:LEU:O	50:BR:30:THR:HB	2.05	0.56
36:BA:2837:G:H2'	36:BA:2838:G:C8	2.34	0.56
42:BG:111:LEU:HB2	42:BG:112:PRO:HD3	1.87	0.56
36:DA:2656:U:H2'	36:DA:2657:A:H5''	1.87	0.56
54:DV:3:ALA:CB	54:DV:14:VAL:HG23	2.34	0.56
1:AA:56:U:H2'	1:AA:57:G:H8	1.68	0.56
1:CA:1047:G:H5''	14:CN:4:LYS:CE	2.26	0.56
40:BE:3:GLY:O	40:BE:4:ILE:HB	2.05	0.56
48:BP:95:VAL:HG23	48:BP:125:VAL:HG23	1.87	0.56
36:DA:1470:G:H3'	36:DA:1519:G:O6	2.05	0.56
5:AE:105:VAL:H	5:AE:106:PRO:CD	2.17	0.56
5:AE:51:VAL:HB	5:AE:52:PRO:HD3	1.88	0.56
52:BT:85:LYS:HB3	52:BT:85:LYS:HZ2	1.66	0.56
29:D3:15:TYR:HB3	29:D3:19:GLN:NE2	2.20	0.56
58:DZ:168:GLU:CG	58:DZ:168:GLU:O	2.54	0.56
26:B0:47:PRO:HB3	26:B0:51:VAL:O	2.04	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AS:9:VAL:O	19:AS:11:VAL:N	2.39	0.56
36:BA:675:A:H4'	41:BF:67:GLN:OE1	2.05	0.56
42:BG:125:PHE:CZ	42:BG:173:LEU:HD12	2.39	0.56
57:BY:74:PRO:HG2	57:BY:81:LYS:O	2.04	0.56
36:DA:2189:U:H2'	36:DA:2190:G:O4'	2.04	0.56
36:DA:2189:U:H3'	36:DA:2190:G:H5''	1.87	0.56
35:B9:11:CYS:SG	35:B9:12:ASP:N	2.77	0.56
46:BN:134:ARG:N	46:BN:135:PRO:HD3	2.21	0.56
36:BA:2110:G:N2	36:BA:2178:C:H5	2.03	0.56
36:BA:2123:G:O2'	36:BA:2124:G:H5'	2.06	0.56
36:BA:2145:C:H2'	36:BA:2147:G:H22	1.70	0.56
36:BA:2188:C:H2'	36:BA:2189:U:N1	2.19	0.56
3:CC:113:ALA:HB3	3:CC:185:GLY:H	1.70	0.56
25:AZ:228:VAL:HG21	25:AZ:298:VAL:O	2.06	0.56
1:CA:1319:A:H5'	1:CA:1320:C:OP1	2.06	0.56
3:AC:118:GLN:O	3:AC:121:ALA:HB3	2.05	0.56
10:CJ:26:ALA:O	10:CJ:85:LEU:HD21	2.04	0.56
37:DB:69:G:H2'	37:DB:69:G:N3	2.21	0.56
58:DZ:81:ARG:HB2	58:DZ:81:ARG:CZ	2.34	0.56
43:BH:26:VAL:CG1	43:BH:76:VAL:HA	2.36	0.56
46:BN:36:GLY:H	46:BN:49:GLY:HA3	1.69	0.56
53:BU:92:ARG:O	53:BU:94:ASN:N	2.38	0.56
36:DA:36:G:H4'	36:DA:451:C:C2	2.41	0.56
54:DV:66:ARG:HG2	54:DV:88:ARG:HB3	1.86	0.56
36:BA:1574:C:H2'	36:BA:1575:C:C6	2.40	0.56
42:DG:34:LEU:HD12	42:DG:34:LEU:O	2.05	0.56
42:DG:7:LEU:HB3	42:DG:100:TRP:CE3	2.41	0.56
1:AA:165:C:O2'	1:AA:166:G:H5'	2.06	0.56
24:CY:9:A:H2	24:CY:45:G:C6	2.23	0.56
4:AD:119:GLN:O	4:AD:123:HIS:HD2	1.88	0.56
36:BA:958:U:O4	49:BQ:17:LEU:HD21	2.04	0.56
1:AA:581:G:O6	1:AA:758:G:N7	2.38	0.56
43:BH:87:LEU:CD2	43:BH:164:TYR:HA	2.35	0.56
36:DA:2206:G:N3	36:DA:2206:G:H5''	2.20	0.56
51:DS:24:LEU:CB	51:DS:85:VAL:HG12	2.35	0.56
36:DA:2312:U:H2'	36:DA:2313:C:H5'	1.87	0.56
49:BQ:70:PRO:CA	49:BQ:94:VAL:O	2.52	0.56
38:DC:139:ASN:OD1	38:DC:140:PRO:HD2	2.06	0.56
2:CB:130:ARG:NH1	2:CB:134:GLU:HG3	2.21	0.56
36:DA:135:G:O2'	36:DA:136:G:H5'	2.05	0.56
1:CA:1125:U:N3	10:CJ:5:ARG:NH2	2.52	0.56
2:AB:130:ARG:HE	2:AB:131:PRO:HD2	1.71	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:827:U:H5'	36:BA:828:U:O5'	2.06	0.56
2:AB:109:SER:O	2:AB:110:GLN:C	2.44	0.56
36:DA:1440:G:H2'	36:DA:1441:G:H8	1.70	0.56
36:DA:2068:U:C2	36:DA:2430:A:H2	2.23	0.56
1:AA:1151:A:H1'	10:AJ:39:PRO:HB2	1.86	0.56
10:AJ:97:GLU:HB3	10:AJ:99:LYS:HE2	1.86	0.56
1:AA:714:G:H2'	1:AA:715:A:C8	2.40	0.56
1:CA:404:U:C5'	4:CD:122:ARG:HD3	2.35	0.56
1:AA:404:U:C5'	4:AD:122:ARG:HD3	2.35	0.56
36:DA:7:G:H21	36:DA:8:A:H1'	1.70	0.56
53:BU:55:ARG:HG2	53:BU:58:ARG:CZ	2.35	0.56
53:BU:49:HIS:O	53:BU:53:ARG:N	2.30	0.56
47:DO:23:ARG:HG3	47:DO:24:VAL:H	1.68	0.56
36:DA:733:G:N7	36:DA:761:A:C6	2.73	0.56
12:CL:89:ARG:HD2	12:CL:91:LYS:HB2	1.87	0.56
22:CW:38:A:H2'	22:CW:39:U:O4'	2.06	0.56
25:AZ:381:GLU:O	25:AZ:382:GLU:O	2.23	0.56
58:BZ:146:ILE:HA	58:BZ:174:VAL:HG11	1.86	0.56
1:CA:1271:G:H5'	1:CA:1314:C:H5''	1.85	0.56
36:DA:2422:A:H3'	36:DA:2422:A:C8	2.40	0.56
1:AA:1442(A):G:H5''	52:BT:118:ARG:HH12	1.70	0.56
1:CA:522:C:N4	1:CA:528:C:H42	2.03	0.56
43:BH:127:GLU:OE1	43:BH:128:PRO:HD3	2.05	0.56
36:BA:733:G:N7	36:BA:761:A:C6	2.74	0.56
6:CF:7:ASN:OD1	6:CF:62:TRP:HD1	1.87	0.56
22:CW:58:A:H2'	22:CW:61:C:H41	1.69	0.56
41:DF:57:VAL:CG1	41:DF:58:ALA:N	2.67	0.56
12:AL:51:ALA:C	12:AL:52:LEU:HD23	2.24	0.56
1:CA:925:G:O5'	1:CA:925:G:H8	1.87	0.56
58:DZ:23:LYS:HD3	58:DZ:38:TYR:CE1	2.40	0.56
36:DA:817:C:H4'	36:DA:932:G:C6	2.40	0.56
17:CQ:56:VAL:HG21	17:CQ:81:ARG:HG3	1.87	0.56
1:CA:564:C:H2'	1:CA:565:U:O4'	2.05	0.56
11:CK:23:ALA:CB	11:CK:28:THR:HG23	2.35	0.56
36:DA:1127:A:O2'	36:DA:2517:C:H4'	2.05	0.56
36:BA:2496:C:O2'	36:BA:2497:A:H5'	2.05	0.56
1:CA:563:A:N7	1:CA:567:G:H1'	2.21	0.56
36:BA:302:C:O2'	36:BA:303:U:H5'	2.04	0.56
36:DA:1833:U:O2	36:DA:1969:A:H2	1.88	0.56
13:AM:118:ALA:HB3	22:AV:29:G:H5''	1.88	0.56
1:CA:1030(A):G:H1'	1:CA:1031:G:H1	1.71	0.56
1:AA:342:C:H2'	1:AA:343:U:O4'	2.05	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BH:12:PRO:HA	43:BH:48:GLY:HA2	1.86	0.56
35:B9:17:ILE:HG21	35:B9:19:ARG:HH21	1.70	0.56
33:B7:19:ARG:NH2	36:BA:124:G:C5	2.73	0.56
1:CA:286:G:O2'	1:CA:287:U:H5'	2.05	0.56
17:AQ:57:VAL:HG12	17:AQ:76:LEU:HA	1.87	0.56
18:AR:75:ILE:C	18:AR:77:GLY:H	2.08	0.56
29:D3:49:LYS:HG2	29:D3:49:LYS:O	2.05	0.56
1:AA:202:U:O2'	1:AA:203:U:P	2.63	0.56
5:AE:68:GLU:O	5:AE:68:GLU:HG3	2.05	0.56
33:D7:31:LEU:O	33:D7:33:ARG:N	2.39	0.56
56:BX:33:LYS:HD3	56:BX:33:LYS:N	2.20	0.56
42:DG:140:ILE:HD12	42:DG:140:ILE:C	2.26	0.56
58:DZ:18:LEU:CD1	58:DZ:18:LEU:N	2.68	0.56
20:CT:96:GLY:O	20:CT:97:ALA:HB3	2.04	0.56
53:BU:17:ILE:HA	53:BU:20:LEU:HD23	1.88	0.56
50:DR:10:LEU:HD22	50:DR:17:ARG:HE	1.70	0.56
36:DA:2840:C:C5'	50:DR:53:HIS:CD2	2.82	0.56
36:DA:2290:G:H22	36:DA:2343:C:H1'	1.69	0.56
28:D2:54:LYS:HZ1	36:DA:60:G:H5''	1.71	0.56
36:DA:620:G:H4'	36:DA:621:A:OP1	2.04	0.56
41:DF:31:HIS:CG	48:DP:13:ASN:HB2	2.40	0.56
5:CE:102:ALA:HB2	5:CE:120:THR:HG21	1.87	0.56
36:DA:797:C:OP2	41:DF:62:ARG:HG3	2.05	0.56
1:AA:1047:G:H5''	14:AN:4:LYS:CE	2.25	0.56
28:B2:57:ILE:O	28:B2:61:LEU:N	2.36	0.56
42:BG:106:LEU:HD12	42:BG:110:ALA:HB3	1.88	0.56
27:D1:64:ALA:O	27:D1:67:ILE:HG13	2.05	0.56
36:DA:811:U:O2	36:DA:1251:C:C5	2.58	0.56
1:AA:377:G:OP1	16:AP:5:ARG:HD3	2.05	0.56
1:AA:57:G:N1	1:AA:356:A:C6	2.74	0.56
37:BB:48:A:OP1	51:BS:93:LYS:HB3	2.05	0.56
1:AA:1238:A:OP1	1:AA:1335:C:H1'	2.05	0.56
13:AM:89:GLY:O	13:AM:90:LEU:O	2.21	0.56
52:BT:38:ASN:ND2	52:BT:40:THR:OG1	2.38	0.56
52:BT:78:LEU:O	52:BT:79:HIS:HD2	1.88	0.56
36:BA:2787:C:H1'	40:BE:61:ARG:HG3	1.87	0.56
36:DA:2680:C:O2'	36:DA:2681:C:H5'	2.05	0.56
38:BC:196:LEU:O	38:BC:197:GLU:C	2.44	0.56
49:BQ:140:ALA:O	49:BQ:141:GLN:HG2	2.05	0.56
14:AN:21:TYR:OH	14:AN:23:ARG:NH2	2.39	0.56
1:AA:1401:G:H2'	1:AA:1402:C:H5'	1.85	0.56
1:AA:1399:C:C2	1:AA:1502:A:N6	2.73	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1519:A:H3'	1:AA:1520:G:C5'	2.35	0.56
4:AD:91:SER:O	4:AD:92:VAL:C	2.43	0.56
35:B9:11:CYS:SG	35:B9:14:CYS:SG	3.03	0.56
3:CC:77:ILE:HG23	3:CC:84:ILE:CG2	2.35	0.56
25:AZ:226:GLU:CG	25:AZ:240:GLY:HA2	2.35	0.56
25:AZ:79:HIS:CD2	25:AZ:80:VAL:N	2.74	0.56
16:CP:41:PRO:O	16:CP:43:LYS:HG3	2.05	0.56
36:DA:1528(A):A:H62	36:DA:1541:G:N2	2.03	0.56
1:AA:769:G:C2'	1:AA:770:C:H5'	2.35	0.56
46:BN:2:LYS:HZ1	54:BV:12:TYR:HA	1.70	0.56
13:CM:14:ARG:N	13:CM:44:ARG:HH11	2.03	0.56
30:D4:8:LYS:O	30:D4:9:LEU:CB	2.48	0.56
43:DH:85:LYS:HZ3	43:DH:133:VAL:N	1.90	0.56
47:DO:47:ILE:CG2	47:DO:48:PRO:HD2	2.28	0.56
42:DG:88:ILE:CG2	42:DG:89:GLY:N	2.68	0.56
1:AA:960:U:O2	1:AA:960:U:H2'	2.05	0.56
2:AB:134:GLU:C	2:AB:136:VAL:N	2.59	0.56
38:DC:41:VAL:N	38:DC:176:GLY:O	2.38	0.56
36:BA:2243:U:H2'	36:BA:2244:U:C5	2.39	0.56
36:BA:197:A:N6	36:BA:2430:A:H2'	2.20	0.56
36:BA:2127:G:H2'	36:BA:2128:C:C6	2.41	0.56
52:DT:6:LEU:HA	52:DT:9:LEU:HD12	1.87	0.56
2:AB:77:ALA:CA	2:AB:80:ILE:HD13	2.32	0.56
36:DA:828:U:H2'	36:DA:829:A:C8	2.40	0.56
10:AJ:38:ILE:HD11	10:AJ:71:LEU:HD23	1.87	0.56
1:CA:1499:A:C2'	1:CA:1500:A:H5'	2.35	0.56
36:DA:177:G:H3'	36:DA:178:G:H8	1.70	0.56
1:CA:751:U:C4'	15:CO:24:SER:HB2	2.34	0.56
36:BA:116:C:O2'	36:BA:126:A:N3	2.39	0.56
1:CA:115:G:H4'	1:CA:116:A:O5'	2.05	0.56
33:D7:10:ARG:O	33:D7:11:LYS:C	2.43	0.56
33:D7:11:LYS:NZ	36:DA:686:G:H5''	2.20	0.56
53:BU:52:ARG:HA	53:BU:55:ARG:NH1	2.20	0.56
39:DD:77:ALA:CB	39:DD:97:TYR:HA	2.35	0.56
36:BA:1675:C:O2	40:BE:129:HIS:HA	2.06	0.56
36:BA:978:G:H1	36:BA:985:C:N4	2.03	0.56
51:BS:56:LEU:HD23	51:BS:56:LEU:O	2.05	0.56
36:BA:1049:C:O2	36:BA:1113:U:H4'	2.04	0.56
36:BA:1957:C:O2'	36:BA:1985:G:H1'	2.04	0.56
51:DS:56:LEU:C	51:DS:58:LEU:N	2.59	0.56
20:AT:86:ARG:O	20:AT:90:GLN:HG2	2.05	0.56
1:CA:184:G:H2'	1:CA:185:A:H8	1.71	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:512:U:O5'	4:AD:43:HIS:HE1	1.88	0.56
2:CB:11:LEU:O	2:CB:14:GLY:N	2.39	0.56
26:B0:50:ASN:ND2	26:B0:63:VAL:HG21	2.19	0.56
12:AL:47:LYS:HB3	12:AL:48:PRO:HD3	1.88	0.56
30:D4:20:ASN:C	30:D4:20:ASN:HD22	2.09	0.56
36:BA:1865:G:H5'	36:BA:1866:C:P	2.45	0.56
48:BP:71:VAL:HG13	48:BP:72:PRO:HD3	1.86	0.56
37:BB:101:G:H2'	37:BB:102:A:O4'	2.04	0.56
45:BK:95:UNK:O	45:BK:97:UNK:N	2.38	0.56
1:CA:71:C:H2'	1:CA:72:C:C6	2.39	0.56
36:DA:2880:C:H3'	36:DA:2880:C:C6	2.40	0.56
50:DR:28:LEU:HD23	50:DR:28:LEU:C	2.25	0.56
28:D2:47:ASN:O	28:D2:50:ILE:CD1	2.53	0.56
41:DF:117:ARG:HG2	41:DF:192:LEU:CD1	2.35	0.56
36:DA:2475:C:H42	36:DA:2529:G:N2	2.03	0.56
39:DD:261:LYS:HZ3	39:DD:263:ARG:HB2	1.68	0.56
14:AN:7:ILE:CG1	14:AN:8:GLU:H	2.19	0.56
36:BA:343:C:C2'	36:BA:344:G:O5'	2.54	0.56
36:BA:2820:A:H4'	50:BR:5:LYS:HE2	1.87	0.56
36:DA:1252:G:O2'	36:DA:1253:A:H5''	2.05	0.56
36:DA:2038:G:H2'	36:DA:2039:C:O4'	2.06	0.56
36:DA:584:C:C2'	36:DA:585:G:H5'	2.36	0.56
48:DP:36:LYS:HD2	48:DP:41:ARG:HB3	1.88	0.56
14:CN:7:ILE:CG1	14:CN:8:GLU:H	2.19	0.56
51:BS:96:GLY:O	51:BS:98:VAL:N	2.38	0.56
8:AH:109:ILE:CG1	8:AH:110:ALA:H	2.11	0.56
12:CL:17:LYS:CD	12:CL:18:VAL:HG22	2.35	0.56
1:AA:953:G:C2	1:AA:954:G:H1'	2.40	0.56
5:AE:28:PHE:O	5:AE:47:LYS:HA	2.05	0.56
36:BA:2685:G:HO2'	36:BA:2726:U:H5	1.54	0.56
40:BE:201:THR:HG23	40:BE:203:LYS:H	1.70	0.56
9:CI:112:LYS:HA	9:CI:119:ALA:HB2	1.87	0.56
42:BG:122:PRO:HD3	42:BG:181:ARG:HB3	1.88	0.56
36:BA:2138:C:O2'	36:BA:2139:C:H5'	2.06	0.56
1:CA:154:C:H2'	1:CA:155:C:C6	2.40	0.56
40:DE:135:HIS:O	40:DE:136:ARG:HG3	2.05	0.56
42:BG:44:GLY:O	42:BG:46:ALA:N	2.38	0.56
21:AU:5:ASP:O	21:AU:7:ARG:N	2.39	0.56
37:BB:8:U:H2'	37:BB:9:G:C8	2.40	0.56
36:BA:723:G:C2	36:BA:724:U:C2	2.94	0.56
49:BQ:37:LEU:HD21	49:BQ:129:THR:C	2.25	0.56
15:CO:17:ARG:HG3	15:CO:17:ARG:HH11	1.69	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:109:GLY:HA3	4:AD:165:MET:HE2	1.87	0.56
42:BG:117:PHE:CD2	42:BG:118:ARG:N	2.74	0.56
3:CC:20:SER:HB2	3:CC:40:ARG:NH2	2.20	0.56
1:CA:1151:A:H1'	10:CJ:39:PRO:HB2	1.87	0.56
20:AT:57:ARG:HH11	20:AT:103:GLY:N	2.02	0.56
8:AH:86:ILE:HG13	8:AH:133:LEU:HD23	1.88	0.56
11:AK:21:ILE:N	11:AK:21:ILE:HD12	2.21	0.56
36:DA:860:U:C2'	36:DA:861:A:H5'	2.34	0.56
25:CZ:322:VAL:HG11	25:CZ:364:PRO:HA	1.88	0.56
29:B3:4:LEU:HG	29:B3:39:ASP:HB2	1.87	0.56
47:DO:87:ILE:HD13	47:DO:93:PRO:HA	1.86	0.56
39:BD:28:GLU:OE2	39:BD:28:GLU:N	2.39	0.56
36:DA:1409:C:O5'	36:DA:1409:C:H6	1.89	0.56
25:CZ:311:THR:HG1	25:CZ:313:HIS:HE2	1.49	0.56
2:CB:89:GLY:O	2:CB:90:MET:HG2	2.06	0.56
36:BA:851:U:O2'	36:BA:852:G:H5'	2.05	0.56
1:CA:1109:C:C2'	1:CA:1110:A:H5'	2.34	0.56
36:BA:678:C:H2'	36:BA:679:C:C6	2.41	0.56
36:DA:1049:C:O2	36:DA:1113:U:H4'	2.05	0.56
12:AL:89:ARG:HD2	12:AL:91:LYS:HB2	1.88	0.56
47:BO:4:PRO:O	47:BO:5:GLN:CB	2.53	0.56
1:AA:472:A:O2'	16:AP:81:ARG:HG3	2.06	0.56
36:BA:733:G:C8	36:BA:733:G:O5'	2.57	0.56
36:BA:736:C:O2'	36:BA:737:C:H5'	2.06	0.56
22:AV:75:C:N4	36:BA:2251:G:O6	2.37	0.56
12:AL:55:VAL:HG23	12:AL:68:ALA:C	2.26	0.56
3:CC:66:VAL:O	3:CC:66:VAL:HG12	2.05	0.56
1:CA:189(H):G:O2'	1:CA:189(I):G:H8	1.87	0.56
26:B0:3:HIS:HB2	36:BA:2494:G:OP1	2.05	0.56
1:CA:1030:C:C2'	1:CA:1030(A):G:H5'	2.36	0.56
44:BJ:45:UNK:O	44:BJ:49:UNK:HA	2.06	0.56
2:CB:147:LYS:HG2	2:CB:147:LYS:O	2.05	0.56
40:BE:95:ILE:N	40:BE:95:ILE:HD13	2.20	0.56
32:B6:36:LEU:HD12	32:B6:50:ARG:HH22	1.65	0.56
36:BA:2393:A:H2'	36:BA:2394:C:H5'	1.88	0.56
5:CE:28:PHE:O	5:CE:47:LYS:HA	2.06	0.56
41:BF:24:LEU:CB	41:BF:25:PRO:CD	2.78	0.56
41:BF:42:ALA:C	41:BF:44:ARG:H	2.09	0.56
1:AA:1046:A:H3'	1:AA:1047:G:H8	1.70	0.56
28:B2:43:GLN:O	28:B2:44:LEU:CB	2.53	0.56
36:BA:298:G:H5'	36:BA:299:A:OP1	2.05	0.56
41:BF:170:LEU:O	41:BF:173:VAL:HB	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BE:199:ARG:HG2	40:BE:200:GLU:N	2.11	0.56
50:BR:54:LEU:HB3	50:BR:62:ALA:HB1	1.86	0.56
36:DA:584:C:H2'	36:DA:585:G:C5'	2.34	0.56
1:AA:53:A:N6	1:AA:54:C:C4	2.74	0.56
16:AP:8:ARG:HG2	16:AP:8:ARG:HH11	1.70	0.56
1:CA:506:G:H2'	1:CA:507:C:H6	1.70	0.56
1:CA:972:C:O3'	10:CJ:57:LYS:HG3	2.06	0.56
8:AH:34:GLU:O	8:AH:35:ILE:C	2.43	0.56
1:AA:955:U:O2'	1:AA:956:U:H5'	2.06	0.56
13:AM:120:LYS:HA	13:AM:120:LYS:CE	2.36	0.56
36:BA:2680:C:O2'	36:BA:2681:C:H5'	2.06	0.56
52:DT:77:PRO:O	52:DT:78:LEU:CB	2.54	0.56
57:DY:98:VAL:O	57:DY:99:CYS:HB2	2.05	0.56
36:DA:2110:G:O2'	36:DA:2111:C:OP1	2.23	0.56
1:AA:1477:C:H2'	1:AA:1478:C:H6	1.70	0.56
1:AA:1507:A:H61	1:AA:1528:U:H3	1.53	0.56
36:DA:1902:C:C1'	39:DD:244:ARG:HG3	2.36	0.56
3:AC:113:ALA:CB	3:AC:185:GLY:H	2.18	0.56
22:CW:50:U:O2'	22:CW:51:U:H5'	2.06	0.56
36:DA:711:G:H1	36:DA:720:C:N4	2.04	0.56
39:DD:39:LYS:HB2	39:DD:62:TYR:HB2	1.87	0.56
41:DF:51:THR:HG21	41:DF:91:GLY:CA	2.32	0.56
33:D7:40:TRP:CE3	36:DA:459:U:H4'	2.40	0.56
36:DA:464:U:C2'	36:DA:465:G:H5'	2.35	0.56
36:DA:2303:G:C5'	42:DG:126:ASP:HB2	2.35	0.56
36:BA:1440:G:H22	36:BA:1552:G:H1'	1.71	0.56
57:BY:86:ARG:HD2	57:BY:88:LYS:HE3	1.88	0.56
36:DA:2636:U:H4'	40:DE:80:GLU:OE1	2.06	0.56
51:BS:106:ARG:NH1	51:BS:107:GLU:N	2.40	0.56
42:DG:46:ALA:HB3	42:DG:88:ILE:HG12	1.88	0.56
2:AB:162:ILE:HG22	2:AB:183:PRO:O	2.05	0.56
36:BA:2513:G:C2	36:BA:2514:U:C2	2.94	0.56
10:AJ:90:LEU:N	10:AJ:91:PRO:HD3	2.21	0.56
20:AT:89:ARG:HH21	20:AT:104:LEU:HD21	1.70	0.56
39:DD:229:VAL:HG23	39:DD:230:ASP:N	2.20	0.56
1:AA:599:C:H4'	8:AH:130:GLY:HA3	1.87	0.56
27:D1:50:ARG:HG2	27:D1:59:THR:HG22	1.88	0.56
36:DA:611:C:H2'	36:DA:612:C:C6	2.36	0.56
1:AA:749:C:O2'	1:AA:750:G:H5'	2.06	0.56
24:AY:75:C:C6	25:AZ:231:ILE:HA	2.40	0.56
36:BA:612:C:H2'	36:BA:613:G:H5'	1.81	0.56
31:D5:52:TYR:O	31:D5:52:TYR:CD1	2.59	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BT:107:ASP:OD1	52:BT:109:GLU:HB2	2.05	0.56
39:BD:44:ASN:N	39:BD:44:ASN:OD1	2.38	0.56
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.41	0.56
1:CA:1249:C:H5''	9:CI:70:LYS:HZ3	1.69	0.56
4:CD:121:VAL:HG12	4:CD:134:ASP:C	2.25	0.56
36:BA:295:G:H5'	57:BY:3:VAL:HG22	1.88	0.56
18:CR:37:VAL:O	18:CR:41:LYS:N	2.30	0.56
49:BQ:86:GLY:O	49:BQ:87:LYS:HB2	2.05	0.56
36:DA:1390:U:C2'	36:DA:1391:U:H5'	2.36	0.56
36:BA:1536:C:H2'	36:BA:1537:G:C4'	2.35	0.56
1:AA:943:U:C2'	1:AA:944:G:H5'	2.36	0.56
1:CA:1044:A:H2'	1:CA:1045:C:O4'	2.05	0.56
1:AA:524:G:C6	1:AA:525:C:N4	2.74	0.56
20:AT:31:SER:HA	20:AT:34:LYS:HD2	1.87	0.56
36:DA:2558:C:H2'	36:DA:2559:C:H6	1.71	0.56
54:BV:71:LEU:HD21	54:BV:84:LYS:HE2	1.87	0.56
34:B8:50:LEU:CD1	34:B8:51:ALA:H	2.08	0.56
36:BA:1252:G:O2'	36:BA:1253:A:H5''	2.04	0.56
48:BP:23:PRO:HA	48:BP:29:LYS:O	2.06	0.56
31:D5:6:VAL:O	31:D5:6:VAL:HG13	2.06	0.56
34:D8:59:LYS:O	34:D8:60:LEU:HD23	2.05	0.56
36:DA:2386:C:H2'	36:DA:2387:U:C6	2.41	0.56
48:DP:88:LEU:HD21	48:DP:95:VAL:HG21	1.86	0.56
41:DF:185:ASP:HA	41:DF:188:ARG:HG2	1.87	0.56
36:DA:481:G:H4'	36:DA:481:G:OP1	2.04	0.56
1:AA:1054:C:O2	1:AA:1054:C:C3'	2.53	0.56
43:DH:66:GLY:HA2	43:DH:69:ARG:HB3	1.87	0.56
35:B9:30:PRO:C	35:B9:32:HIS:H	2.07	0.56
49:BQ:55:VAL:HG23	58:BZ:178:GLU:CG	2.36	0.56
36:BA:747:U:C5	36:BA:2613:U:C5	2.94	0.56
37:BB:44:G:O2'	37:BB:45:A:H5''	2.04	0.56
36:DA:372:G:O2'	36:DA:373:U:OP1	2.24	0.56
1:CA:1190:G:P	3:CC:5:ILE:HG23	2.46	0.56
53:DU:28:ARG:HD3	53:DU:38:THR:CG2	2.36	0.56
41:BF:60:SER:O	41:BF:77:ASP:HB2	2.06	0.56
1:CA:991:U:O2	1:CA:991:U:H2'	2.04	0.56
5:CE:20:GLN:HE22	5:CE:25:ARG:NH2	2.04	0.56
41:DF:168:ARG:HG2	41:DF:169:ASN:H	1.70	0.56
48:BP:91:PHE:N	48:BP:91:PHE:CD1	2.73	0.56
52:BT:28:VAL:HG11	52:BT:46:GLU:OE1	2.05	0.56
52:BT:32:TYR:N	52:BT:32:TYR:HD2	2.03	0.56
52:BT:58:ASN:O	52:BT:60:THR:HG23	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2639:A:H2'	36:DA:2640:G:O4'	2.06	0.56
52:DT:94:ALA:O	52:DT:96:ARG:N	2.39	0.56
58:BZ:153:SER:N	58:BZ:167:PRO:CB	2.65	0.56
7:AG:23:VAL:HG13	7:AG:43:PHE:CE2	2.40	0.56
29:D3:52:HIS:CD2	29:D3:52:HIS:H	2.24	0.56
7:CG:104:LEU:O	7:CG:107:ALA:HB3	2.06	0.56
7:CG:31:MET:CG	7:CG:32:ARG:N	2.68	0.56
47:BO:111:PHE:HB3	47:BO:114:ILE:CD1	2.30	0.56
4:AD:173:TRP:HB3	4:AD:187:ARG:HH22	1.68	0.56
51:DS:66:ALA:HB1	51:DS:99:LYS:HD3	1.88	0.56
51:DS:49:VAL:CG1	51:DS:50:SER:H	2.02	0.56
25:AZ:220:PRO:O	25:AZ:245:GLY:HA3	2.06	0.56
1:AA:1039:C:H2'	1:AA:1040:U:C6	2.40	0.56
1:CA:1440:C:C2'	1:CA:1441:G:H5'	2.35	0.56
53:BU:92:ARG:O	53:BU:93:LYS:C	2.44	0.56
10:AJ:26:ALA:O	10:AJ:85:LEU:HD21	2.06	0.56
42:DG:154:GLY:O	42:DG:155:MET:HB3	2.04	0.56
42:DG:7:LEU:HB3	42:DG:100:TRP:HE3	1.69	0.56
20:AT:74:LYS:HD3	20:AT:74:LYS:N	2.21	0.56
43:DH:83:TYR:HB2	43:DH:135:GLY:N	2.14	0.56
7:AG:42:ILE:CG2	7:AG:117:ALA:HA	2.31	0.56
42:DG:40:ASN:ND2	42:DG:90:LEU:O	2.38	0.56
2:AB:189:ASP:O	2:AB:191:ASP:N	2.39	0.56
1:AA:1281:U:H3'	1:AA:1282:C:C6	2.40	0.56
55:BW:42:ARG:HG2	55:BW:42:ARG:O	2.06	0.56
8:CH:20:TYR:HA	8:CH:65:TYR:HE2	1.71	0.56
27:B1:25:LYS:CD	36:BA:388:G:H4'	2.32	0.56
29:B3:7:LYS:HB3	29:B3:55:ARG:HB2	1.88	0.56
1:CA:811:C:H4'	1:CA:900:A:H62	1.68	0.56
36:DA:823:G:N2	36:DA:2358:G:C8	2.74	0.56
31:B5:12:SER:HB3	36:BA:2020:A:H5'	1.87	0.56
36:BA:1342:A:OP2	36:BA:1602:U:O4	2.24	0.56
36:BA:1020:A:C2	36:BA:1141:U:H1'	2.40	0.56
1:CA:1433:A:H2'	1:CA:1434:A:C8	2.41	0.56
1:CA:1269:A:H2'	1:CA:1270:C:H5'	1.87	0.56
25:AZ:367:ASN:ND2	25:AZ:367:ASN:N	2.50	0.56
5:CE:42:GLY:HA3	5:CE:66:MET:HG2	1.88	0.56
30:D4:42:PHE:O	30:D4:42:PHE:CD2	2.58	0.56
36:BA:2720:U:O2	36:BA:2720:U:H2'	2.04	0.56
9:CI:110:GLU:HG2	9:CI:113:LYS:HZ1	1.70	0.56
46:DN:39:ARG:C	46:DN:41:ASP:H	2.08	0.56
46:BN:6:PRO:O	46:BN:7:LYS:O	2.23	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:391:G:O5'	36:DA:391:G:H8	1.88	0.56
1:CA:512:U:O5'	4:CD:43:HIS:CE1	2.59	0.56
6:CF:33:TYR:CB	6:CF:75:LEU:HD13	2.36	0.56
26:B0:25:ARG:HH21	26:B0:35:ASN:HD22	1.52	0.56
36:BA:477:A:H2'	36:BA:478:A:C8	2.41	0.56
2:AB:154:LEU:O	2:AB:156:LYS:HG3	2.06	0.56
36:BA:2584:U:H2'	36:BA:2585:U:H5'	1.87	0.56
49:BQ:10:ARG:HH11	49:BQ:10:ARG:HB2	1.70	0.56
36:BA:880:G:H2'	36:BA:881:G:H8	1.71	0.56
3:AC:165:THR:O	3:AC:165:THR:HG23	2.05	0.56
1:CA:1447:A:H2'	1:CA:1447:A:N3	2.21	0.56
15:CO:3:ILE:HG23	15:CO:38:ARG:NH2	2.20	0.56
34:B8:61:LEU:CD1	34:B8:62:LEU:HG	2.34	0.56
36:BA:812:C:H2'	36:BA:813:U:H6	1.70	0.56
28:D2:53:LEU:O	28:D2:56:GLN:HB2	2.05	0.56
36:DA:225:A:C2'	36:DA:226:G:H5'	2.36	0.56
57:DY:47:LYS:HA	57:DY:60:PHE:CZ	2.41	0.56
36:BA:1798:U:C2	36:BA:1822:G:N2	2.73	0.56
8:CH:23:SER:HB2	8:CH:62:TYR:HA	1.88	0.56
41:BF:185:ASP:HA	41:BF:188:ARG:HG2	1.88	0.56
1:AA:1195:C:H5''	1:AA:1196:U:OP2	2.05	0.56
36:BA:2762:G:H8	36:BA:2762:G:C5'	2.15	0.56
41:BF:132:VAL:HG13	41:BF:133:ASN:N	2.20	0.56
41:BF:168:ARG:O	41:BF:169:ASN:C	2.44	0.56
10:AJ:17:ASP:HB2	10:AJ:70:ARG:NH2	2.21	0.56
36:DA:584:C:OP1	53:DU:6:THR:HB	2.06	0.56
36:DA:996:A:H1'	53:DU:92:ARG:HE	1.70	0.56
53:DU:27:LEU:O	53:DU:31:SER:HB3	2.06	0.56
53:DU:76:TYR:OH	53:DU:93:LYS:HE3	2.05	0.56
1:CA:973:G:C6	1:CA:974:A:N6	2.74	0.56
2:CB:17:PHE:HB3	2:CB:44:LEU:HD21	1.87	0.56
52:BT:26:ASP:H	52:BT:90:GLN:HA	1.71	0.56
57:DY:8:LYS:CD	57:DY:8:LYS:H	2.00	0.56
1:AA:668:G:H2'	1:AA:669:U:C6	2.41	0.56
1:CA:376:G:OP2	16:CP:67:THR:HG21	2.06	0.56
4:AD:100:ARG:HB3	4:AD:103:ASN:HB3	1.88	0.56
51:DS:13:ARG:HH11	51:DS:13:ARG:HG2	1.70	0.56
1:CA:920:U:O4'	1:CA:1080:A:N1	2.38	0.56
55:BW:5:ALA:HB3	55:BW:105:VAL:HB	1.88	0.56
47:DO:91:LEU:HD13	47:DO:111:PHE:CE1	2.40	0.56
4:CD:98:GLU:CG	4:CD:189:PRO:HG3	2.35	0.56
27:B1:5:CYS:SG	27:B1:62:VAL:HA	2.46	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:CT:26:ASN:ND2	20:CT:26:ASN:H	2.04	0.56
36:DA:1525:G:H2'	36:DA:1526:G:H8	1.70	0.56
36:BA:1840:G:H1	36:BA:1902:C:H42	1.54	0.56
37:DB:72:G:H21	37:DB:104:U:H5	1.52	0.56
58:DZ:10:ARG:HB3	58:DZ:36:LYS:C	2.25	0.56
58:DZ:27:VAL:HG12	58:DZ:85:HIS:HE2	1.71	0.56
58:DZ:27:VAL:HG22	58:DZ:28:MET:O	2.06	0.56
36:BA:1138:G:C2	36:BA:1139:G:H1'	2.41	0.56
53:BU:88:ILE:C	53:BU:90:VAL:N	2.58	0.56
53:BU:92:ARG:HH22	54:BV:10:LYS:HG2	1.71	0.56
54:BV:4:ILE:HB	54:BV:39:LEU:O	2.05	0.56
36:BA:1390:U:C2'	36:BA:1391:U:H5'	2.36	0.56
42:DG:104:GLU:OE1	42:DG:104:GLU:HA	2.05	0.56
1:CA:381:C:H2'	1:CA:382:A:O4'	2.04	0.56
1:AA:80:G:O2'	1:AA:81:U:H5'	2.05	0.56
36:BA:1057:A:O2'	36:BA:1058:G:H5'	2.06	0.56
36:BA:863:A:H2'	36:BA:864:G:H8	1.68	0.56
58:BZ:77:ASP:HA	58:BZ:84:GLU:OE1	2.06	0.56
36:DA:1493:C:H4'	36:DA:1494:A:OP2	2.06	0.56
25:CZ:290:LEU:O	25:CZ:293:VAL:HG22	2.06	0.56
1:AA:977:A:O2'	1:AA:978:A:H5'	2.05	0.56
5:AE:145:LYS:O	5:AE:148:VAL:HB	2.06	0.56
3:CC:18:TRP:HE3	3:CC:18:TRP:N	2.04	0.56
2:AB:121:LEU:O	2:AB:122:PHE:C	2.43	0.56
33:B7:15:THR:HG22	33:B7:16:HIS:CD2	2.40	0.56
25:CZ:271:GLU:HG2	25:CZ:276:THR:CA	2.35	0.56
18:AR:55:ARG:HG3	18:AR:55:ARG:HH11	1.71	0.56
25:CZ:320:VAL:HG12	25:CZ:321:TYR:N	2.20	0.56
25:CZ:367:ASN:ND2	25:CZ:367:ASN:N	2.51	0.56
36:BA:496:G:H1'	55:BW:61:ASN:ND2	2.20	0.56
36:BA:959:A:O2'	36:BA:960:A:H5'	2.05	0.56
49:DQ:5:ARG:O	49:DQ:6:ARG:HG2	2.04	0.56
36:BA:410:G:N2	36:BA:2407:G:C6	2.74	0.56
51:DS:83:LYS:C	51:DS:105:ALA:HB3	2.26	0.56
39:DD:76:PRO:O	39:DD:98:VAL:HG23	2.05	0.56
2:AB:16:HIS:HB3	2:AB:210:SER:OG	2.06	0.56
46:DN:17:ASP:OD2	46:DN:19:GLU:HB3	2.05	0.56
53:BU:102:GLU:HB2	53:BU:105:VAL:HB	1.86	0.56
35:B9:19:ARG:O	35:B9:21:GLY:N	2.37	0.56
1:CA:1082:G:C2'	1:CA:1083:U:H5'	2.35	0.56
46:BN:16:ILE:CD1	46:BN:139:GLU:N	2.69	0.56
18:AR:25:THR:HG22	18:AR:42:ARG:NH1	2.21	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:B2:17:SER:HB2	28:B2:20:GLU:HB3	1.88	0.56
36:DA:1396:U:H2'	36:DA:1396:U:O2	2.06	0.56
20:AT:96:GLY:O	20:AT:97:ALA:HB3	2.06	0.56
32:B6:16:CYS:O	32:B6:17:LYS:CG	2.52	0.56
36:BA:1216:G:N2	36:BA:1234:U:H1'	2.20	0.56
36:BA:2284:C:H42	36:BA:2384:G:H1	1.54	0.56
50:DR:13:HIS:CE1	50:DR:16:HIS:N	2.69	0.56
50:DR:61:HIS:HE1	50:DR:65:LEU:HD22	1.70	0.56
34:D8:8:LYS:HE2	34:D8:11:LYS:HE2	1.88	0.56
25:AZ:24:LYS:HA	25:AZ:105:VAL:HG21	1.87	0.56
36:DA:1242:A:N6	48:DP:8:PRO:HG3	2.21	0.56
36:BA:693:C:H42	36:BA:769:G:H1	1.52	0.56
10:CJ:14:LYS:O	10:CJ:16:LEU:N	2.37	0.56
28:B2:22:GLU:HA	28:B2:64:LEU:HD11	1.88	0.56
36:BA:320:A:C6	41:BF:136:THR:HG21	2.41	0.56
36:BA:2821:A:OP2	40:BE:110:GLY:HA3	2.05	0.56
1:CA:1191:A:H5''	3:CC:4:LYS:NZ	2.19	0.56
36:DA:1189:A:C2	36:DA:1190:G:H1'	2.40	0.56
16:AP:6:LEU:HD12	16:AP:6:LEU:N	2.21	0.56
9:CI:52:ALA:HB3	9:CI:95:LYS:CE	2.28	0.56
9:CI:18:PHE:HB2	9:CI:62:TYR:HB3	1.87	0.56
17:AQ:61:GLU:HA	17:AQ:71:PHE:CE1	2.40	0.56
1:CA:507:C:H3'	1:CA:508:C:H6	1.70	0.56
48:BP:88:LEU:HD13	48:BP:100:LEU:HD21	1.87	0.56
1:AA:951:G:C6	1:AA:1231:G:C6	2.93	0.56
25:CZ:106:VAL:O	25:CZ:136:ASN:N	2.38	0.56
36:BA:1665:A:H4'	47:BO:67:LYS:HB2	1.88	0.56
36:BA:1667:G:O2'	36:BA:1991:U:O4	2.24	0.56
36:BA:1758:G:N7	36:BA:2695:C:H4'	2.21	0.56
37:BB:76:G:H5''	58:BZ:15:PRO:HB2	1.88	0.56
1:AA:1286:A:O2'	1:AA:1287:A:H5''	2.06	0.56
1:AA:1363:C:H5'	1:AA:1363(A):A:O5'	2.06	0.56
36:DA:1708:C:H2'	36:DA:1709:U:H6	1.70	0.56
36:BA:306:U:C4	36:BA:307:G:C6	2.94	0.56
42:BG:11:TYR:OH	42:BG:16:ARG:NH2	2.39	0.56
1:AA:1481:U:C2	1:AA:1482:G:N7	2.74	0.56
3:CC:120:VAL:CG1	3:CC:121:ALA:N	2.69	0.56
3:AC:121:ALA:HA	3:AC:124:ILE:HD12	1.88	0.56
20:CT:19:SER:O	20:CT:21:LYS:N	2.39	0.56
36:BA:1771:C:C5	36:BA:1772:G:N7	2.74	0.56
36:BA:1775:U:O2'	36:BA:1776:G:H5'	2.06	0.56
37:DB:17:C:H2'	37:DB:18:G:O4'	2.06	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:B5:16:ARG:HH11	31:B5:20:ARG:HH11	1.54	0.56
36:DA:444:C:H4'	53:DU:2:PRO:HD3	1.87	0.56
42:DG:38:VAL:HG22	42:DG:93:THR:HA	1.87	0.56
43:DH:26:VAL:CG1	43:DH:76:VAL:HA	2.36	0.56
57:BY:95:LYS:HE3	57:BY:100:ALA:HB2	1.88	0.56
7:AG:41:ARG:O	7:AG:44:TYR:HB2	2.06	0.56
8:CH:118:VAL:C	8:CH:119:LEU:HD23	2.27	0.56
49:BQ:67:ARG:N	49:BQ:103:MET:O	2.38	0.56
25:CZ:348:ASP:O	25:CZ:348:ASP:OD1	2.24	0.56
2:AB:100:GLY:O	2:AB:102:LEU:N	2.38	0.56
36:BA:777:A:H2'	36:BA:778:G:H8	1.70	0.56
2:CB:204:ASN:ND2	2:CB:206:ASP:N	2.49	0.56
55:DW:11:ARG:HH21	55:DW:12:ILE:HA	1.70	0.56
36:DA:2127:G:H2'	36:DA:2128:C:C6	2.40	0.56
1:AA:489:C:H2'	1:AA:490:G:H8	1.70	0.56
54:BV:82:ARG:HD2	54:BV:82:ARG:N	2.21	0.56
20:CT:36:LEU:HD12	20:CT:59:ALA:HB2	1.88	0.56
4:AD:2:GLY:O	4:AD:4:TYR:N	2.38	0.56
36:DA:1064:C:N4	36:DA:1074:G:H22	2.03	0.56
18:CR:37:VAL:HG12	18:CR:78:LEU:HB3	1.88	0.56
29:B3:23:LEU:C	29:B3:25:ALA:N	2.60	0.56
1:CA:512:U:O5'	4:CD:43:HIS:HE1	1.89	0.56
36:BA:817:C:H4'	36:BA:932:G:C6	2.40	0.56
9:AI:128:ARG:HG2	9:AI:128:ARG:OXT	2.06	0.56
13:AM:116:THR:HG22	13:AM:117:VAL:N	2.21	0.56
17:CQ:10:VAL:CG2	17:CQ:55:ASP:HB2	2.36	0.56
17:CQ:37:LYS:O	17:CQ:38:ARG:HB2	2.05	0.56
1:AA:854:G:H3'	1:AA:871:U:O4	2.06	0.56
50:DR:56:LYS:O	50:DR:58:GLY:N	2.39	0.56
36:BA:282:A:H2'	36:BA:282:A:N3	2.19	0.56
1:AA:577:G:H1'	1:AA:816:A:C4	2.40	0.56
34:B8:60:LEU:O	34:B8:63:PRO:HG2	2.05	0.56
36:BA:1189:A:C2	36:BA:1190:G:H1'	2.41	0.56
36:BA:497:A:H2'	36:BA:498:G:C8	2.41	0.56
41:DF:20:LEU:H	41:DF:24:LEU:CD2	2.19	0.56
39:BD:247:ALA:HB1	39:BD:252:TRP:O	2.05	0.56
36:DA:2086:U:OP2	39:DD:263:ARG:NH2	2.36	0.56
41:BF:38:ARG:O	41:BF:42:ALA:HB2	2.06	0.56
43:BH:66:GLY:HA2	43:BH:69:ARG:HB3	1.88	0.56
28:B2:69:ARG:NH2	36:BA:111:A:O3'	2.39	0.56
31:B5:6:VAL:H	36:BA:2056:G:N2	2.04	0.56
36:BA:1453:U:H5'	50:BR:63:ARG:NE	2.21	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:45:VAL:O	13:AM:48:LEU:HG	2.06	0.56
1:AA:245:C:O2'	1:AA:246:A:O5'	2.23	0.56
1:CA:1054:C:C4	24:CY:34:G:H1'	2.39	0.56
8:AH:6:ILE:O	8:AH:9:MET:N	2.39	0.56
1:CA:665:A:H2'	1:CA:725:G:H22	1.69	0.56
25:CZ:136:ASN:C	25:CZ:138:VAL:N	2.59	0.56
25:CZ:171:ILE:CG1	25:CZ:201:GLU:HB3	2.34	0.56
36:BA:1639:U:C2'	36:BA:1640:C:H5''	2.36	0.56
52:BT:52:ILE:HG22	52:BT:52:ILE:O	2.06	0.56
52:DT:98:LYS:CG	52:DT:100:TYR:HE1	2.18	0.56
52:DT:96:ARG:CZ	52:DT:96:ARG:HB2	2.35	0.56
36:DA:325:G:H2'	36:DA:326:G:H8	1.71	0.56
7:AG:12:LEU:CD1	7:AG:25:ALA:HB2	2.25	0.56
1:AA:1367:C:H5'	10:AJ:60:ARG:NH2	2.21	0.56
1:CA:1286:A:O2'	1:CA:1287:A:H5''	2.05	0.56
36:BA:1061:U:H4'	36:BA:1070:A:C4'	2.35	0.56
1:AA:1499:A:H1'	1:AA:1520:G:C5'	2.36	0.56
36:BA:1471:A:H3'	36:BA:1472:A:H8	1.71	0.56
57:BY:8:LYS:HB2	57:BY:28:LYS:HZ3	1.68	0.56
1:CA:44:G:C6	1:CA:45:U:C2	2.94	0.56
10:CJ:24:VAL:O	10:CJ:27:ALA:N	2.39	0.56
55:BW:36:LEU:HD23	55:BW:36:LEU:N	2.08	0.56
16:CP:22:THR:HA	16:CP:33:ILE:HG12	1.87	0.56
53:BU:76:TYR:CE2	53:BU:80:ILE:HG13	2.41	0.56
36:DA:36:G:O2'	36:DA:37:C:H5'	2.06	0.56
36:DA:444:C:H2'	36:DA:445:C:O5'	2.06	0.56
36:DA:2508:G:C2	36:DA:2582:G:O6	2.59	0.56
13:CM:56:LEU:C	13:CM:56:LEU:HD13	2.26	0.56
22:AV:56:C:C2	42:BG:83:ARG:HD3	2.41	0.56
36:DA:471:A:C2'	36:DA:472:A:H5''	2.36	0.56
1:AA:80:G:H3'	1:AA:81:U:H5'	1.86	0.56
40:DE:29:GLY:HA2	40:DE:180:ASN:CG	2.26	0.56
27:B1:84:GLY:C	27:B1:86:SER:H	2.09	0.56
2:AB:121:LEU:CD2	2:AB:127:ILE:HD11	2.32	0.56
38:DC:70:LYS:HE3	38:DC:70:LYS:HA	1.86	0.56
36:BA:223:A:C5	36:BA:422:A:H1'	2.41	0.56
1:CA:1503:A:N9	23:CX:16:A:N6	2.54	0.56
1:CA:676:A:H1'	11:CK:115:PRO:HB3	1.87	0.56
1:AA:678:U:H2'	1:AA:679:C:O4'	2.06	0.56
36:DA:185:U:C2	36:DA:212:G:N2	2.74	0.56
1:AA:172:A:C8	1:AA:174:C:C4	2.94	0.56
1:CA:57:G:H2'	1:CA:58:C:C6	2.41	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:DN:128:HIS:HD2	46:DN:130:HIS:CE1	2.23	0.56
1:CA:628:G:O2'	1:CA:629:G:H5'	2.06	0.56
36:BA:1491:G:H5'	39:BD:99:ASP:OD1	2.06	0.56
12:CL:86:ARG:HB2	12:CL:101:VAL:HG22	1.88	0.56
25:AZ:320:VAL:HG12	25:AZ:321:TYR:N	2.21	0.56
1:CA:932:C:H2'	1:CA:933:G:C8	2.41	0.56
36:BA:452:G:OP1	41:BF:57:VAL:HG13	2.05	0.56
55:BW:72:LYS:HG3	55:BW:108:GLY:HA3	1.87	0.56
36:BA:1107:G:OP1	44:BJ:58:UNK:CB	2.54	0.56
36:BA:552:G:H1'	36:BA:1220:A:N1	2.21	0.56
12:AL:55:VAL:HG22	12:AL:56:ALA:N	2.20	0.56
49:DQ:39:PRO:HD3	49:DQ:99:PRO:HG2	1.88	0.56
13:CM:6:GLY:O	13:CM:8:GLU:N	2.39	0.56
18:AR:47:THR:HB	18:AR:49:LYS:HZ2	1.71	0.56
36:DA:315:G:H2'	36:DA:316:C:C6	2.41	0.56
30:B4:20:ASN:HD22	30:B4:20:ASN:C	2.08	0.56
36:BA:2677:G:H2'	36:BA:2678:C:C6	2.41	0.56
43:DH:12:PRO:HD2	43:DH:15:VAL:HG21	1.87	0.56
36:BA:1622:G:H2'	36:BA:1623:G:H8	1.70	0.56
1:AA:594:G:H2'	1:AA:595:G:H5'	1.88	0.56
29:B3:49:LYS:HG2	29:B3:49:LYS:O	2.06	0.56
34:B8:10:ALA:C	34:B8:12:LYS:N	2.58	0.55
32:B6:10:LEU:HD12	34:B8:34:TRP:HB2	1.87	0.55
36:BA:2358:G:H21	36:BA:2359:C:H1'	1.69	0.55
36:DA:2010:G:O2'	36:DA:2011:U:H5'	2.06	0.55
32:D6:19:ARG:CG	32:D6:20:ASN:H	1.99	0.55
25:AZ:134:PHE:CE2	25:AZ:136:ASN:HB2	2.41	0.55
25:AZ:24:LYS:HE3	25:AZ:84:GLY:HA3	1.88	0.55
36:BA:926:A:C8	36:BA:926:A:H5'	2.36	0.55
41:BF:117:ARG:NH2	48:BP:5:ASP:N	2.55	0.55
49:BQ:120:ILE:HG22	49:BQ:124:LYS:HE2	1.88	0.55
36:DA:1193:G:N3	36:DA:1194:A:H1'	2.21	0.55
36:DA:572:A:N1	36:DA:2033:A:C2	2.74	0.55
36:DA:973:A:H5'	36:DA:1188:U:C1'	2.36	0.55
36:DA:995:C:O2	53:DU:61:TRP:HZ2	1.88	0.55
1:AA:336:C:O2'	1:AA:337:C:H5'	2.05	0.55
36:BA:2376:A:N6	51:BS:92:TYR:CE2	2.74	0.55
36:DA:1205:U:C5	41:DF:171:PRO:HA	2.41	0.55
13:CM:89:GLY:O	13:CM:90:LEU:O	2.24	0.55
25:CZ:25:THR:HB	62:CZ:501:GDP:O2B	2.06	0.55
7:AG:101:LEU:O	7:AG:104:LEU:HB2	2.06	0.55
42:BG:133:LEU:C	42:BG:133:LEU:CD1	2.74	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BG:35:GLU:H	42:BG:161:THR:HA	1.72	0.55
41:BF:7:TYR:OH	41:BF:10:PRO:HG3	2.05	0.55
36:DA:693:C:H42	36:DA:769:G:H1	1.53	0.55
36:DA:1639:U:C2'	36:DA:1640:C:H5''	2.35	0.55
36:BA:2305:A:H1'	42:BG:136:ARG:HG2	1.87	0.55
1:AA:1305:G:H21	1:AA:1331:G:H2'	1.68	0.55
42:DG:15:VAL:HG12	42:DG:19:LEU:CD1	2.35	0.55
42:DG:173:LEU:HB3	42:DG:178:PHE:CG	2.41	0.55
36:BA:1446:C:H42	36:BA:1465:G:H1	1.54	0.55
36:BA:1658:C:C2	36:BA:1659:U:C5	2.94	0.55
40:BE:116:VAL:HG21	40:BE:122:PHE:CD2	2.41	0.55
13:AM:70:LEU:HD23	13:AM:70:LEU:C	2.26	0.55
40:DE:4:ILE:HD11	40:DE:28:ALA:O	2.06	0.55
8:CH:101:PRO:C	8:CH:102:ARG:HD3	2.26	0.55
12:CL:110:VAL:HG23	12:CL:120:TYR:O	2.06	0.55
49:BQ:22:LYS:O	49:BQ:22:LYS:HG3	2.06	0.55
24:AY:65:C:C5'	25:AZ:341:GLN:HG2	2.36	0.55
25:CZ:222:LEU:HD23	25:CZ:244:ARG:HH21	1.70	0.55
36:DA:1783:A:C2	36:DA:2587:A:C2	2.95	0.55
2:AB:165:VAL:O	2:AB:167:PRO:HD3	2.07	0.55
1:CA:859:A:H2	8:CH:19:VAL:HG11	1.70	0.55
36:BA:2277:G:C6	36:BA:2278:A:N7	2.74	0.55
1:AA:1439:C:N4	1:AA:1463:C:H42	2.04	0.55
1:AA:1463:C:C5'	52:BT:115:ARG:HH21	2.20	0.55
1:AA:851:G:O2'	1:AA:852:G:H5'	2.05	0.55
1:CA:484:G:H4'	1:CA:485:G:O5'	2.06	0.55
54:BV:18:LEU:HD22	54:BV:96:ILE:HG12	1.87	0.55
1:CA:336:C:O2'	1:CA:337:C:H5'	2.05	0.55
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.41	0.55
1:AA:1270:C:O2'	1:AA:1271:G:H5'	2.05	0.55
6:CF:28:ARG:HG3	6:CF:28:ARG:HH11	1.71	0.55
36:BA:1229:G:H3'	36:BA:1230:C:C6	2.41	0.55
12:CL:86:ARG:CG	12:CL:87:GLY:N	2.68	0.55
36:BA:1064:C:H2'	36:BA:1065:U:H5''	1.88	0.55
51:BS:34:HIS:NE2	51:BS:54:LEU:HB3	2.21	0.55
3:AC:60:ALA:H	3:AC:63:ASN:CG	2.10	0.55
9:CI:5:TYR:O	9:CI:84:ALA:HA	2.05	0.55
51:DS:77:ALA:O	51:DS:79:ALA:N	2.38	0.55
52:BT:111:ARG:NH1	52:BT:111:ARG:HG2	2.20	0.55
36:BA:1144:G:H2'	36:BA:1145:C:H6	1.71	0.55
26:B0:26:TYR:HB2	26:B0:29:GLN:OE1	2.06	0.55
36:BA:2313:C:H6	36:BA:2313:C:H5'	1.71	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:74:GLY:O	5:CE:116:THR:N	2.39	0.55
43:BH:12:PRO:HD2	43:BH:15:VAL:HG21	1.87	0.55
50:BR:56:LYS:C	50:BR:58:GLY:H	2.09	0.55
36:BA:2856:C:H2'	36:BA:2857:G:H5'	1.88	0.55
49:BQ:96:VAL:HG12	49:BQ:96:VAL:O	2.04	0.55
36:BA:990:A:H5'	36:BA:1157:G:H5''	1.87	0.55
36:BA:1356:G:H2'	36:BA:1357:U:O4'	2.05	0.55
34:B8:62:LEU:HD13	36:BA:242:G:C3'	2.33	0.55
36:BA:2282:G:H2'	36:BA:2425:A:H61	1.72	0.55
36:BA:584:C:C2'	36:BA:585:G:H5'	2.36	0.55
36:DA:1651:G:N2	36:DA:1652:A:H1'	2.21	0.55
32:D6:36:LEU:HD12	32:D6:50:ARG:HH22	1.70	0.55
25:AZ:193:ASN:O	25:AZ:195:TRP:N	2.39	0.55
28:D2:52:ASP:O	28:D2:56:GLN:CG	2.54	0.55
38:DC:74:VAL:HA	38:DC:112:ALA:CB	2.29	0.55
36:BA:2758:A:H62	43:BH:67:LEU:HD11	1.70	0.55
1:AA:542:G:OP1	4:AD:10:ARG:NH2	2.38	0.55
1:AA:973:G:H1'	10:AJ:55:LYS:HE2	1.88	0.55
43:DH:51:ARG:O	43:DH:52:VAL:HG23	2.05	0.55
28:B2:66:GLU:HG3	28:B2:67:LYS:N	2.20	0.55
36:BA:72:U:O4	36:BA:112:U:H4'	2.07	0.55
36:BA:1278:A:H2'	36:BA:1279:G:H8	1.71	0.55
36:BA:1655:A:H4'	40:BE:115:GLY:H	1.71	0.55
13:AM:57:ARG:CG	13:AM:61:GLU:HB2	2.36	0.55
27:D1:3:LYS:HB2	36:DA:1364:G:H5''	1.88	0.55
36:DA:2041:U:H2'	36:DA:2042:A:C8	2.41	0.55
36:DA:2627:G:O2'	36:DA:2781:A:N1	2.27	0.55
36:DA:572:A:H5'	54:DV:78:LYS:HZ1	1.69	0.55
36:DA:535:C:O3'	53:DU:53:ARG:HD3	2.06	0.55
8:CH:37:ARG:O	8:CH:37:ARG:HG2	2.05	0.55
2:CB:170:GLU:O	2:CB:173:ALA:N	2.39	0.55
36:BA:2636:U:H4'	40:BE:80:GLU:CD	2.27	0.55
38:DC:189:ILE:O	38:DC:192:PHE:HB3	2.06	0.55
13:CM:120:LYS:CE	13:CM:120:LYS:HA	2.36	0.55
1:AA:1226:C:C5	13:AM:104:ARG:HB2	2.41	0.55
47:BO:105:GLU:O	47:BO:109:LYS:HG2	2.06	0.55
52:BT:28:VAL:HG11	52:BT:46:GLU:HA	1.88	0.55
1:AA:1349:A:OP1	9:AI:121:ARG:N	2.39	0.55
9:AI:112:LYS:HE3	9:AI:116:LYS:O	2.06	0.55
14:AN:42:ILE:CG2	14:AN:43:CYS:N	2.69	0.55
58:DZ:150:LEU:O	58:DZ:151:HIS:HB3	2.07	0.55
7:CG:24:THR:HA	7:CG:27:ILE:CG1	2.36	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1348:U:O3'	9:CI:120:ARG:HB2	2.07	0.55
1:CA:1348:U:C4'	9:CI:120:ARG:HD2	2.33	0.55
22:CV:6:G:N2	22:CV:68:C:N3	2.54	0.55
1:AA:923:A:C6	1:AA:924:C:C4	2.95	0.55
51:DS:26:LEU:HD23	51:DS:27:SER:O	2.06	0.55
42:BG:22:ARG:HH11	42:BG:23:PHE:HE2	1.52	0.55
19:CS:29:ARG:O	19:CS:31:ILE:HG22	2.05	0.55
3:AC:77:ILE:HG23	3:AC:84:ILE:CG2	2.36	0.55
36:DA:1092:C:H2'	36:DA:1093:G:O4'	2.06	0.55
55:DW:35:ILE:HG22	55:DW:36:LEU:N	2.22	0.55
36:DA:719:C:O2'	36:DA:720:C:H5'	2.06	0.55
46:BN:26:LEU:CD1	46:BN:30:ILE:HD11	2.30	0.55
42:DG:54:GLU:OE1	42:DG:54:GLU:N	2.39	0.55
25:CZ:214:VAL:HG22	25:CZ:215:ARG:N	2.21	0.55
27:B1:87:PRO:HA	27:B1:90:ILE:HG13	1.85	0.55
54:BV:66:ARG:HG2	54:BV:88:ARG:HB3	1.88	0.55
10:CJ:90:LEU:N	10:CJ:91:PRO:HD3	2.20	0.55
2:AB:104:ASN:OD1	2:AB:107:THR:HB	2.07	0.55
36:DA:272(J):C:C3'	36:DA:274:G:H5''	2.37	0.55
36:DA:197:A:H8	36:DA:197:A:H5'	1.69	0.55
1:AA:1125:U:N3	10:AJ:5:ARG:NH2	2.51	0.55
36:DA:2249:U:H4'	36:DA:2275:C:H5	1.72	0.55
4:AD:122:ARG:HA	4:AD:122:ARG:HH11	1.71	0.55
54:BV:15:GLU:HB3	54:BV:16:PRO:CD	2.35	0.55
1:CA:197:A:H4'	1:CA:198:G:O5'	2.06	0.55
37:DB:6:C:H42	37:DB:115:G:H1	1.52	0.55
46:DN:130:HIS:O	46:DN:130:HIS:CG	2.58	0.55
38:DC:6:ARG:NH1	38:DC:6:ARG:HG2	2.21	0.55
33:B7:9:ARG:HG2	36:BA:1309:G:P	2.45	0.55
39:DD:131:LEU:HD13	39:DD:136:ILE:CD1	2.36	0.55
1:AA:1316:G:C3'	1:AA:1317:C:H5''	2.35	0.55
2:CB:36:ARG:C	2:CB:38:GLY:N	2.60	0.55
36:BA:1064:C:N4	36:BA:1074:G:H22	2.04	0.55
36:BA:201:C:H2'	36:BA:202:U:H5'	1.87	0.55
1:CA:1270:C:O2'	1:CA:1271:G:H5'	2.07	0.55
12:CL:51:ALA:C	12:CL:52:LEU:HD23	2.26	0.55
1:AA:512:U:O5'	4:AD:43:HIS:CE1	2.59	0.55
26:B0:50:ASN:HD22	26:B0:63:VAL:CG2	2.18	0.55
36:BA:2408:U:H2'	36:BA:2409:G:C8	2.42	0.55
45:DK:88:UNK:C	45:DK:90:UNK:N	2.68	0.55
26:B0:30:VAL:HA	26:B0:65:GLY:O	2.05	0.55
5:AE:74:GLY:O	5:AE:116:THR:N	2.37	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2097:C:O2'	36:BA:2098:U:H5'	2.05	0.55
1:AA:1030:C:C2'	1:AA:1030(A):G:H5'	2.36	0.55
35:D9:17:ILE:HG21	35:D9:19:ARG:HH21	1.69	0.55
12:CL:11:VAL:HG11	17:CQ:36:ILE:HG21	1.87	0.55
36:DA:2562:U:C2'	36:DA:2563:U:H5'	2.35	0.55
1:CA:285:G:O2'	1:CA:286:G:H5'	2.06	0.55
1:AA:1012:U:H2'	1:AA:1013:G:O4'	2.05	0.55
36:DA:2460:U:H2'	36:DA:2461:C:O4'	2.07	0.55
4:AD:177:ASP:O	4:AD:181:MET:N	2.39	0.55
3:CC:156:ARG:H	3:CC:163:ALA:HA	1.71	0.55
36:BA:757:U:H2'	36:BA:758:C:O4'	2.07	0.55
22:AW:50:U:O2'	22:AW:51:U:H5'	2.06	0.55
39:DD:218:ARG:HH11	39:DD:218:ARG:HG3	1.71	0.55
36:DA:950:G:H2'	36:DA:951:C:C6	2.41	0.55
1:AA:1260:C:H3'	1:AA:1260:C:H6	1.71	0.55
36:BA:1260:G:H2'	36:BA:1261:C:C6	2.41	0.55
36:BA:2341:G:C2	36:BA:2342:C:N3	2.75	0.55
36:DA:2007:C:C5'	36:DA:2824:C:H1'	2.36	0.55
39:DD:68:LYS:HB2	39:DD:70:TRP:CE2	2.41	0.55
32:D6:42:TRP:O	32:D6:44:ARG:N	2.33	0.55
36:DA:2394:C:OP1	48:DP:63:PRO:HD2	2.06	0.55
25:AZ:150:VAL:O	25:AZ:154:VAL:HG23	2.05	0.55
39:BD:261:LYS:HZ3	39:BD:263:ARG:HB2	1.70	0.55
35:D9:1:MET:SD	36:DA:2478:A:OP2	2.65	0.55
39:BD:267:SER:O	39:BD:269:PHE:N	2.37	0.55
36:DA:675:A:H4'	41:DF:67:GLN:OE1	2.06	0.55
17:CQ:61:GLU:HA	17:CQ:71:PHE:CE1	2.41	0.55
1:AA:502:G:N2	1:AA:544:G:C4	2.75	0.55
28:B2:13:ALA:CA	28:B2:16:LEU:HD12	2.27	0.55
36:DA:1260:G:H2'	36:DA:1261:C:C6	2.41	0.55
36:DA:2061:G:H5''	36:DA:2503:A:C2	2.41	0.55
53:DU:92:ARG:HH22	54:DV:10:LYS:HG2	1.71	0.55
54:DV:15:GLU:HB3	54:DV:16:PRO:CD	2.32	0.55
36:BA:1487:G:C2	36:BA:1488:G:H1'	2.41	0.55
2:CB:212:GLN:NE2	2:CB:216:SER:HB2	2.21	0.55
1:CA:727:G:C2	1:CA:731:G:C6	2.95	0.55
1:CA:837:G:O2'	1:CA:838:G:H5'	2.07	0.55
34:B8:21:LYS:HD3	34:B8:48:PHE:CE2	2.41	0.55
36:BA:1991:U:C2'	36:BA:1992:G:H5''	2.35	0.55
36:BA:2699:C:O2'	36:BA:2700:C:H5'	2.06	0.55
52:DT:11:GLU:C	52:DT:13:ARG:H	2.07	0.55
7:CG:106:GLN:O	7:CG:107:ALA:C	2.43	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1470:G:H3'	36:BA:1519:G:O6	2.06	0.55
19:AS:62:ILE:CD1	19:AS:66:MET:HE2	2.33	0.55
37:DB:48:A:OP1	51:DS:93:LYS:HB3	2.05	0.55
51:DS:97:ARG:O	51:DS:99:LYS:HG2	2.06	0.55
36:BA:310:A:H2	36:BA:330:A:HO2'	1.53	0.55
42:BG:174:GLU:HA	42:BG:180:PHE:CE1	2.41	0.55
42:BG:37:VAL:O	42:BG:94:LEU:HB2	2.06	0.55
36:DA:1392:A:H2'	36:DA:1393:A:O4'	2.05	0.55
25:AZ:300:ARG:O	25:AZ:302:GLN:N	2.39	0.55
36:DA:1541:G:O2'	36:DA:1542:A:H5''	2.06	0.55
1:CA:156:G:H1'	1:CA:166:G:N2	2.22	0.55
39:BD:112:GLN:HB2	39:BD:115:GLN:HE21	1.71	0.55
39:BD:142:VAL:HG23	39:BD:192:THR:O	2.05	0.55
42:BG:52:ILE:HB	42:BG:54:GLU:OE1	2.06	0.55
42:DG:109:VAL:HG21	42:DG:142:PRO:HB3	1.89	0.55
42:DG:112:PRO:CG	42:DG:113:ARG:H	2.17	0.55
1:CA:977:A:O2'	1:CA:978:A:H5'	2.06	0.55
30:D4:22:ILE:HD12	30:D4:22:ILE:N	2.11	0.55
40:DE:34:VAL:HG11	40:DE:78:LEU:HD22	1.87	0.55
36:BA:907:U:H4'	49:BQ:101:ARG:HH12	1.70	0.55
49:BQ:19:GLY:CA	58:BZ:79:ARG:HH22	2.15	0.55
25:CZ:221:PHE:CE1	25:CZ:247:VAL:HG13	2.41	0.55
1:CA:868:C:H2'	1:CA:869:G:O4'	2.07	0.55
1:CA:1150:U:O2'	10:CJ:41:PRO:HD3	2.06	0.55
1:AA:663:A:H61	1:AA:742:G:H1	1.54	0.55
39:BD:231:HIS:ND1	39:BD:232:PRO:N	2.54	0.55
36:DA:31:C:C3'	36:DA:32:C:H5''	2.36	0.55
5:CE:125:SER:O	5:CE:126:ARG:HG3	2.06	0.55
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.41	0.55
10:AJ:34:VAL:HG22	10:AJ:74:ILE:CG2	2.33	0.55
1:CA:113:G:O2'	1:CA:354:G:H5'	2.06	0.55
58:DZ:102:LEU:HD11	58:DZ:124:ILE:HG21	1.88	0.55
36:BA:2223:G:C2'	36:BA:2224:G:H5'	2.36	0.55
12:AL:28:LYS:O	12:AL:29:GLY:C	2.44	0.55
36:DA:2569:G:O2'	36:DA:2570:G:H5'	2.06	0.55
36:BA:271(B):C:H42	36:BA:271(W):G:H21	1.54	0.55
36:DA:898:C:C2'	36:DA:899:A:H5'	2.35	0.55
37:BB:70:C:O2'	37:BB:71:C:H5'	2.06	0.55
36:BA:464:U:O2'	36:BA:465:G:H5'	2.06	0.55
36:BA:2316:C:H2'	36:BA:2317:C:H6	1.70	0.55
36:DA:1536:C:H2'	36:DA:1537:G:C4'	2.36	0.55
46:BN:16:ILE:HD12	46:BN:139:GLU:N	2.20	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BP:71:VAL:CG1	48:BP:72:PRO:HD3	2.35	0.55
45:DK:98:UNK:HA	45:DK:135:UNK:CB	2.37	0.55
10:CJ:45:ARG:NE	14:CN:36:PHE:CE2	2.74	0.55
15:AO:4:THR:C	15:AO:6:GLU:H	2.08	0.55
25:CZ:86:ALA:O	25:CZ:87:ASP:HB2	2.05	0.55
39:DD:11:PRO:C	39:DD:13:ARG:H	2.08	0.55
39:BD:204:ILE:HG13	39:BD:204:ILE:O	2.05	0.55
16:AP:59:TRP:O	16:AP:64:ALA:HB2	2.06	0.55
1:CA:1394:A:N1	1:CA:1501:C:H5'	2.21	0.55
25:AZ:267:VAL:HG23	25:AZ:288:VAL:HG13	1.89	0.55
24:CY:28:A:H2'	24:CY:29:C:C6	2.42	0.55
36:BA:572:A:N6	36:BA:2029:G:H21	2.04	0.55
36:BA:631:A:H1'	36:BA:2415:G:HO2'	1.72	0.55
32:D6:16:CYS:O	32:D6:17:LYS:CG	2.54	0.55
48:DP:101:VAL:CG2	48:DP:102:ARG:N	2.69	0.55
36:DA:500:G:H2'	36:DA:502:A:OP2	2.06	0.55
36:BA:607:U:H3	36:BA:621:A:H2	1.54	0.55
4:AD:54:TYR:O	4:AD:55:ALA:C	2.44	0.55
28:B2:38:GLN:HB2	28:B2:44:LEU:HD22	1.87	0.55
50:BR:28:LEU:HA	50:BR:34:ILE:CG1	2.37	0.55
13:AM:35:GLU:HG3	13:AM:36:LYS:N	2.22	0.55
36:DA:223:A:C5	36:DA:422:A:H1'	2.41	0.55
46:DN:36:GLY:H	46:DN:49:GLY:HA3	1.70	0.55
48:DP:23:PRO:O	48:DP:30:THR:HA	2.05	0.55
1:CA:1050:G:C6	1:CA:1209:C:N3	2.74	0.55
1:CA:502:G:N2	1:CA:544:G:C4	2.75	0.55
41:DF:143:ALA:O	41:DF:148:LEU:HB2	2.06	0.55
40:BE:76:ARG:O	40:BE:77:ILE:O	2.24	0.55
5:AE:105:VAL:N	5:AE:106:PRO:CD	2.69	0.55
36:BA:2810:A:C8	36:BA:2811:G:H1'	2.41	0.55
36:DA:1992:G:C4	36:DA:1997:G:O6	2.60	0.55
52:DT:101:PHE:O	52:DT:102:ILE:C	2.44	0.55
52:DT:64:ARG:HH11	52:DT:102:ILE:HD11	1.72	0.55
36:DA:1504:C:O2'	36:DA:1505:C:C5'	2.55	0.55
58:BZ:127:LYS:O	58:BZ:128:VAL:HB	2.07	0.55
58:BZ:12:GLY:HA3	58:BZ:36:LYS:NZ	2.20	0.55
58:BZ:127:LYS:H	58:BZ:163:LEU:HA	1.71	0.55
58:BZ:5:LEU:C	58:BZ:6:LYS:HD3	2.27	0.55
1:AA:793:U:O2	1:AA:1516:G:H4'	2.07	0.55
1:AA:909:A:P	12:AL:21:LYS:HD3	2.47	0.55
31:D5:54:GLY:O	31:D5:56:LYS:HG2	2.06	0.55
46:BN:131:GLN:NE2	46:BN:133:GLN:HA	2.21	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:920:U:C1'	1:AA:1080:A:C2	2.88	0.55
55:DW:52:GLU:C	55:DW:54:ALA:N	2.60	0.55
20:CT:74:LYS:H	20:CT:74:LYS:HD3	1.71	0.55
25:AZ:272:MET:HB3	25:AZ:277:LEU:HD23	1.88	0.55
36:BA:1903:G:OP2	39:BD:241:PRO:HB2	2.06	0.55
49:DQ:37:LEU:HD21	49:DQ:129:THR:C	2.27	0.55
36:BA:1005:C:H2'	36:BA:1006:C:H6	1.69	0.55
53:BU:92:ARG:HH22	54:BV:10:LYS:HB3	1.72	0.55
54:BV:37:VAL:HG23	54:BV:37:VAL:O	2.07	0.55
39:BD:79:VAL:O	39:BD:113:VAL:HG13	2.07	0.55
36:DA:1229:G:H3'	36:DA:1230:C:C6	2.41	0.55
42:BG:44:GLY:H	42:BG:88:ILE:HG21	1.71	0.55
13:CM:2:ALA:C	13:CM:9:ILE:HG23	2.27	0.55
42:DG:131:TYR:HB3	42:DG:159:VAL:CG1	2.37	0.55
42:DG:37:VAL:CG2	42:DG:159:VAL:HG23	2.30	0.55
7:AG:118:VAL:O	7:AG:119:ARG:C	2.45	0.55
24:CY:24:G:O2'	24:CY:25:C:H5'	2.07	0.55
40:DE:100:GLU:O	40:DE:172:VAL:HG23	2.06	0.55
5:CE:72:GLN:NE2	5:CE:144:THR:HG22	2.20	0.55
24:AY:68:U:H2'	24:AY:69:C:C6	2.41	0.55
36:DA:1783:A:N1	36:DA:2587:A:C2	2.75	0.55
15:AO:82:ILE:CG2	15:AO:83:GLU:H	2.14	0.55
8:CH:20:TYR:HD1	8:CH:65:TYR:CD2	2.25	0.55
8:CH:74:PRO:O	8:CH:75:ARG:C	2.45	0.55
2:CB:134:GLU:C	2:CB:136:VAL:N	2.60	0.55
38:DC:99:ILE:HG23	38:DC:102:LYS:HZ2	1.68	0.55
27:B1:24:ALA:CA	27:B1:32:LYS:HE3	2.36	0.55
36:BA:2126:A:H5'	38:BC:37:PHE:CE2	2.42	0.55
38:BC:70:LYS:HE3	38:BC:70:LYS:HA	1.88	0.55
1:AA:1102:A:H2'	1:AA:1103:C:C6	2.41	0.55
39:DD:232:PRO:CD	39:DD:249:PRO:HA	2.30	0.55
36:BA:272(J):C:C3'	36:BA:274:G:H5''	2.37	0.55
48:DP:45:LEU:HD22	48:DP:46:LYS:H	1.70	0.55
11:CK:120:ARG:NH1	11:CK:126:ARG:HD2	2.19	0.55
1:AA:406:G:H2'	1:AA:407:G:H8	1.72	0.55
36:BA:237:C:N3	36:BA:261:G:C2	2.75	0.55
33:B7:10:ARG:O	33:B7:11:LYS:C	2.43	0.55
47:BO:87:ILE:HD13	47:BO:93:PRO:HA	1.88	0.55
25:CZ:230:THR:O	25:CZ:231:ILE:HD13	2.05	0.55
36:BA:2222:G:N3	36:BA:2223:G:C8	2.74	0.55
1:CA:928:G:H2'	1:CA:929:G:H5'	1.88	0.55
1:AA:1319:A:H5'	1:AA:1320:C:OP1	2.06	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BR:83:ILE:HG22	50:BR:87:TYR:HE2	1.70	0.55
18:AR:53:ARG:CZ	18:AR:60:ALA:N	2.69	0.55
16:CP:23:ASP:O	16:CP:25:ARG:N	2.40	0.55
51:BS:56:LEU:CD2	51:BS:58:LEU:HB2	2.36	0.55
55:BW:59:VAL:O	55:BW:63:ASP:N	2.28	0.55
12:AL:86:ARG:HB2	12:AL:101:VAL:HG22	1.87	0.55
36:BA:2364:C:H2'	36:BA:2365:G:O4'	2.06	0.55
49:DQ:39:PRO:CD	49:DQ:99:PRO:HG2	2.37	0.55
1:AA:892:A:HO2'	1:AA:1415:G:H4'	1.71	0.55
36:DA:2517:C:C2	36:DA:2542:A:N1	2.74	0.55
22:AW:26:A:H61	22:AW:44:G:H1	1.55	0.55
36:BA:2790:A:N3	36:BA:2791:C:H5''	2.22	0.55
36:DA:2790:A:N3	36:DA:2791:C:H5''	2.21	0.55
36:DA:1186:G:C2'	36:DA:1187:G:H5'	2.36	0.55
16:AP:44:THR:O	16:AP:45:THR:CB	2.55	0.55
36:DA:2677:G:H2'	36:DA:2678:C:C6	2.41	0.55
5:CE:7:GLU:HB3	5:CE:112:LEU:HD21	1.89	0.55
2:AB:155:LEU:HD11	2:AB:158:LEU:HA	1.88	0.55
6:AF:33:TYR:HB2	6:AF:75:LEU:HD13	1.87	0.55
37:BB:40:U:H3'	37:BB:41:U:H5''	1.88	0.55
36:DA:2013:A:N6	36:DA:2014:A:C6	2.75	0.55
46:DN:16:ILE:HG23	46:DN:16:ILE:O	2.05	0.55
36:BA:1056:G:O5'	36:BA:1056:G:H8	1.90	0.55
41:DF:17:ARG:HH11	41:DF:17:ARG:HG3	1.71	0.55
45:DK:113:UNK:O	45:DK:114:UNK:CB	2.55	0.55
42:DG:165:THR:OG1	42:DG:168:GLU:HG3	2.07	0.55
34:B8:50:LEU:O	34:B8:52:LYS:N	2.35	0.55
34:B8:22:VAL:CG2	34:B8:53:PRO:HB2	2.36	0.55
36:BA:1192:G:O6	48:BP:29:LYS:NZ	2.36	0.55
39:DD:147:LEU:HD21	39:DD:183:ARG:CZ	2.37	0.55
34:D8:62:LEU:HD13	36:DA:242:G:C3'	2.31	0.55
36:BA:379:G:C6	36:BA:396:G:O6	2.60	0.55
40:DE:56:PRO:O	40:DE:57:LYS:HD2	2.07	0.55
3:AC:5:ILE:HD13	3:AC:5:ILE:N	2.21	0.55
38:BC:77:ILE:O	38:BC:77:ILE:HG22	2.06	0.55
42:DG:76:SER:CB	42:DG:83:ARG:HB3	2.36	0.55
41:BF:135:LYS:HB3	41:BF:138:GLU:CB	2.33	0.55
36:BA:2880:C:C6	36:BA:2880:C:H3'	2.41	0.55
50:BR:14:SER:O	50:BR:17:ARG:N	2.37	0.55
27:D1:67:ILE:N	27:D1:68:PRO:CD	2.67	0.55
48:DP:40:SER:C	48:DP:41:ARG:HD2	2.27	0.55
53:DU:17:ILE:HA	53:DU:20:LEU:HD23	1.88	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CH:81:HIS:HB2	8:CH:138:TRP:CZ3	2.41	0.55
36:DA:319:C:H2'	36:DA:320:A:C8	2.42	0.55
1:AA:946:A:C6	1:AA:947:G:C6	2.95	0.55
13:AM:91:ARG:O	13:AM:95:GLY:N	2.40	0.55
5:AE:102:ALA:HB2	5:AE:120:THR:HG21	1.88	0.55
52:BT:13:ARG:NE	52:BT:13:ARG:CA	2.69	0.55
7:AG:106:GLN:O	7:AG:110:GLN:N	2.32	0.55
9:AI:11:LYS:HG3	9:AI:108:VAL:HG13	1.89	0.55
35:D9:10:ILE:N	35:D9:10:ILE:HD12	2.02	0.55
7:CG:41:ARG:O	7:CG:44:TYR:HB2	2.07	0.55
9:CI:65:VAL:HG22	9:CI:66:ARG:N	2.22	0.55
57:BY:98:VAL:O	57:BY:99:CYS:HB2	2.05	0.55
36:DA:1899:G:H21	36:DA:1902:C:N4	2.04	0.55
19:CS:40:ILE:CG2	19:CS:67:VAL:HA	2.37	0.55
49:DQ:67:ARG:N	49:DQ:103:MET:O	2.37	0.55
36:DA:594:U:H3	36:DA:663:G:H1	1.54	0.55
42:DG:44:GLY:O	42:DG:47:LYS:HD2	2.06	0.55
13:AM:66:LEU:O	13:AM:70:LEU:HB3	2.07	0.55
8:CH:97:VAL:HG13	8:CH:98:LYS:N	2.22	0.55
43:BH:135:GLY:HA3	43:BH:141:VAL:CG2	2.37	0.55
43:BH:148:ILE:O	43:BH:162:ILE:HG21	2.07	0.55
25:AZ:341:GLN:NE2	25:AZ:341:GLN:N	2.53	0.55
1:AA:827:U:H5'	1:AA:828:A:OP2	2.06	0.55
1:AA:321:A:H62	1:AA:328:C:H1'	1.72	0.55
36:BA:532:A:H5''	53:BU:28:ARG:HH12	1.71	0.55
49:DQ:70:PRO:CA	49:DQ:94:VAL:O	2.54	0.55
4:CD:128:VAL:O	4:CD:130:GLY:N	2.39	0.55
49:DQ:51:ARG:NH1	49:DQ:51:ARG:HG3	2.22	0.55
36:DA:2199:A:H3'	36:DA:2200:C:C6	2.41	0.55
39:BD:172:TYR:HD1	39:BD:186:HIS:HA	1.71	0.55
1:CA:310:G:H4'	16:CP:31:LYS:HD2	1.87	0.55
40:BE:69:LYS:O	40:BE:71:GLY:N	2.33	0.55
36:BA:635:C:H2'	36:BA:636:G:C8	2.41	0.55
36:BA:886:C:O2'	36:BA:887:A:C4'	2.54	0.55
36:BA:950:G:H2'	36:BA:951:C:C6	2.42	0.55
36:DA:1106:G:H2'	36:DA:1107:G:H5'	1.89	0.55
1:CA:987:G:O2'	1:CA:988:G:H5'	2.07	0.55
49:BQ:75:THR:HG21	49:BQ:87:LYS:NZ	2.22	0.55
39:DD:227:ASN:HB3	39:DD:228:PRO:HD2	1.88	0.55
36:DA:66:C:O4'	36:DA:456:C:N3	2.39	0.55
36:DA:1949:G:H1	36:DA:1957:C:N4	2.04	0.55
1:CA:630:G:N3	1:CA:630:G:H2'	2.21	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:CV:27:G:H2'	22:CV:28:G:C8	2.41	0.55
39:BD:3:VAL:HG12	39:BD:17:THR:HB	1.88	0.55
26:D0:39:ARG:NH2	36:DA:2354:G:H22	2.03	0.55
15:CO:4:THR:C	15:CO:6:GLU:H	2.09	0.55
6:CF:53:ALA:HB3	6:CF:86:ARG:NH1	2.20	0.55
36:BA:1845:G:O2'	36:BA:1846:G:H5'	2.06	0.55
1:AA:991:U:O2	1:AA:991:U:H2'	2.06	0.55
13:AM:79:LYS:O	13:AM:82:MET:HG2	2.06	0.55
25:AZ:356:PRO:N	25:AZ:359:VAL:CG2	2.68	0.55
48:BP:23:PRO:O	48:BP:30:THR:HA	2.06	0.55
48:BP:24:GLY:HA3	48:BP:33:ARG:HH12	1.71	0.55
36:DA:2333:A:H1'	36:DA:2335:A:C5	2.41	0.55
41:DF:101:LEU:HD12	41:DF:102:PRO:CD	2.33	0.55
36:BA:1350:C:H2'	36:BA:1351:C:C6	2.37	0.55
36:BA:1568:G:OP2	39:BD:63:ARG:NH2	2.33	0.55
39:BD:67:PHE:CE1	39:BD:157:ARG:NH2	2.74	0.55
1:AA:507:C:H3'	1:AA:508:C:H6	1.72	0.55
28:B2:33:MET:SD	56:BX:5:TYR:O	2.65	0.55
13:AM:54:VAL:O	13:AM:57:ARG:N	2.40	0.55
30:B4:6:HIS:HA	42:BG:67:LYS:HE3	1.88	0.55
1:AA:390:C:H2'	1:AA:391:G:H8	1.72	0.55
2:CB:212:GLN:HE22	2:CB:216:SER:HB2	1.70	0.55
2:CB:69:LEU:HD12	2:CB:71:VAL:CG2	2.35	0.55
40:BE:52:LEU:HD12	40:BE:53:PRO:HD2	1.88	0.55
36:DA:2550:G:O2'	36:DA:2551:C:H5'	2.07	0.55
36:DA:1487:G:C2	36:DA:1488:G:H1'	2.42	0.55
36:DA:298:G:H5'	36:DA:299:A:OP1	2.06	0.55
10:AJ:50:ILE:HA	10:AJ:60:ARG:CB	2.31	0.55
1:CA:1288:A:H2'	1:CA:1289:A:C8	2.41	0.55
22:AV:53:G:H1	22:AV:61:C:N4	1.93	0.55
37:BB:30:C:H1'	37:BB:57:A:N6	2.21	0.55
1:CA:866:C:H4'	1:CA:919:A:OP1	2.06	0.55
46:DN:131:GLN:NE2	46:DN:133:GLN:HA	2.22	0.55
36:DA:1775:U:H2'	36:DA:1776:G:C4'	2.36	0.55
31:B5:54:GLY:O	31:B5:56:LYS:HG2	2.07	0.55
1:CA:35:G:H2'	1:CA:36:C:H6	1.70	0.55
36:BA:440:G:N2	41:BF:46:ARG:NH2	2.53	0.55
36:DA:708:C:H5'	36:DA:709:U:OP2	2.06	0.55
1:CA:1012:U:H2'	1:CA:1013:G:O4'	2.06	0.55
36:DA:1221(A):C:H42	36:DA:1228:G:H1	1.54	0.55
42:BG:47:LYS:CE	42:BG:81:LYS:HG3	2.36	0.55
42:DG:64:THR:HA	42:DG:102:PHE:CD2	2.42	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:DH:83:TYR:CB	43:DH:135:GLY:H	2.14	0.55
36:DA:1057:A:O2'	36:DA:1058:G:H5'	2.07	0.55
40:DE:81:ILE:CG2	40:DE:81:ILE:O	2.54	0.55
49:BQ:67:ARG:HB2	49:BQ:102:VAL:O	2.07	0.55
15:CO:78:TYR:O	15:CO:82:ILE:HG22	2.06	0.55
38:DC:122:ALA:O	38:DC:126:LYS:HG2	2.07	0.55
43:BH:44:VAL:CG1	43:BH:45:VAL:H	2.11	0.55
36:DA:953:A:OP2	49:DQ:16:ARG:CZ	2.55	0.55
8:AH:100:ILE:HG23	8:AH:101:PRO:HD2	1.89	0.55
36:DA:856:C:H2'	36:DA:857:C:O4'	2.07	0.55
49:DQ:54:MET:HG2	49:DQ:64:ILE:HD13	1.88	0.55
1:CA:406:G:H2'	1:CA:407:G:H8	1.70	0.55
53:BU:55:ARG:HA	53:BU:58:ARG:CG	2.37	0.55
1:AA:1314:C:N4	19:AS:4:SER:HB2	2.20	0.55
39:BD:28:GLU:H	39:BD:29:PRO:CD	2.19	0.55
36:DA:968:G:H2'	36:DA:969:U:H6	1.68	0.55
52:BT:129:ARG:HD2	52:BT:131:ALA:H	1.72	0.55
46:DN:71:ILE:HG22	46:DN:72:TYR:N	2.21	0.55
36:DA:1042:G:H1	36:DA:1112:G:H22	1.54	0.55
36:BA:1361:G:N2	36:BA:1371:G:H1'	2.22	0.55
36:BA:1106:G:H2'	36:BA:1107:G:H5'	1.87	0.55
22:CW:18:G:H1	22:CW:55:U:H1'	1.71	0.55
1:AA:603:U:H2'	1:AA:604:G:H8	1.72	0.55
56:DX:8:ILE:N	56:DX:8:ILE:HD12	2.22	0.55
38:BC:103:ILE:HG23	38:BC:107:TRP:CB	2.37	0.55
58:DZ:61:LEU:HD11	58:DZ:67:LEU:HD11	1.89	0.55
17:AQ:56:VAL:HG21	17:AQ:81:ARG:HG3	1.87	0.55
36:BA:65:C:H5'	56:BX:71:GLY:HA3	1.89	0.55
1:CA:633:G:C5	1:CA:634:C:C5	2.95	0.55
36:BA:401:A:H2'	36:BA:402:A:C8	2.41	0.55
22:AV:27:G:H2'	22:AV:28:G:C8	2.41	0.55
36:DA:1431:U:H2'	36:DA:1432:C:C5'	2.37	0.55
13:CM:124:PRO:O	13:CM:126:LYS:N	2.40	0.55
2:AB:114:ARG:HD3	2:AB:114:ARG:O	2.05	0.55
2:CB:114:ARG:HD3	2:CB:114:ARG:O	2.07	0.55
55:BW:95:ILE:O	55:BW:95:ILE:HG13	2.05	0.55
32:B6:11:LEU:HD13	32:B6:11:LEU:C	2.26	0.55
34:B8:50:LEU:O	34:B8:53:PRO:HD2	2.06	0.55
36:BA:2290:G:H22	36:BA:2343:C:H1'	1.70	0.55
36:DA:1655:A:H4'	40:DE:114:ALA:HA	1.87	0.55
50:DR:28:LEU:HA	50:DR:34:ILE:HG13	1.87	0.55
36:DA:2820:A:H4'	50:DR:5:LYS:HE2	1.88	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:D8:47:LYS:HD3	34:D8:48:PHE:O	2.07	0.55
25:AZ:106:VAL:O	25:AZ:136:ASN:N	2.39	0.55
41:DF:25:PRO:HB3	41:DF:119:ARG:CB	2.36	0.55
41:DF:33:LEU:O	41:DF:37:VAL:HG23	2.06	0.55
36:DA:2762:G:C2'	36:DA:2763:G:H5'	2.36	0.55
36:BA:1798:U:H5''	39:BD:260:ARG:H	1.72	0.55
39:BD:35:LYS:HB3	39:BD:35:LYS:HZ2	1.72	0.55
41:BF:3:GLU:HA	41:BF:24:LEU:HB2	1.89	0.55
1:AA:1051:C:O2'	1:AA:1052:U:H5'	2.07	0.55
1:AA:1050:G:C6	1:AA:1209:C:N3	2.75	0.55
1:AA:509:A:H5'	4:AD:54:TYR:HD2	1.72	0.55
1:AA:540:G:H2'	1:AA:541:G:C8	2.42	0.55
14:AN:7:ILE:HG13	14:AN:8:GLU:N	2.20	0.55
28:B2:32:LEU:HD23	28:B2:32:LEU:O	2.07	0.55
36:BA:61:G:O5'	36:BA:61:G:H8	1.89	0.55
41:BF:195:ASP:HB3	41:BF:198:ALA:HB3	1.87	0.55
30:B4:25:TYR:N	30:B4:25:TYR:CD1	2.75	0.55
56:DX:10:ALA:HB1	56:DX:11:PRO:CD	2.37	0.55
36:DA:20:C:O2'	36:DA:21:A:H5'	2.06	0.55
36:DA:532:A:H2'	36:DA:532:A:N3	2.22	0.55
4:CD:13:ARG:O	4:CD:15:GLU:N	2.39	0.55
14:CN:4:LYS:O	14:CN:5:ALA:C	2.45	0.55
1:CA:1054:C:N4	24:CY:34:G:O2'	2.34	0.55
1:CA:726:C:H2'	1:CA:727:G:C8	2.41	0.55
6:CF:2:ARG:HG3	6:CF:69:GLU:OE1	2.07	0.55
1:CA:1231:G:H2'	1:CA:1232:U:H6	1.72	0.55
25:CZ:24:LYS:HA	25:CZ:105:VAL:HG21	1.87	0.55
52:BT:61:PHE:O	52:BT:75:ILE:HG23	2.07	0.55
52:BT:64:ARG:NH1	52:BT:102:ILE:HD11	2.21	0.55
52:DT:65:LYS:HA	52:DT:65:LYS:NZ	2.22	0.55
37:BB:72:G:H21	37:BB:104:U:H5	1.53	0.55
1:AA:1348:U:O2'	1:AA:1349:A:C8	2.57	0.55
7:AG:106:GLN:O	7:AG:107:ALA:C	2.45	0.55
1:CA:1349:A:OP1	9:CI:121:ARG:N	2.40	0.55
1:CA:1368:G:C2'	1:CA:1369:C:H5'	2.37	0.55
9:CI:11:LYS:O	9:CI:13:ALA:N	2.40	0.55
39:DD:79:VAL:O	39:DD:113:VAL:HG13	2.07	0.55
4:AD:101:LEU:O	4:AD:104:VAL:HB	2.06	0.55
36:BA:309:G:O3'	57:BY:18:GLY:CA	2.55	0.55
1:AA:15:G:H4'	5:AE:24:ARG:HH21	1.71	0.55
46:DN:131:GLN:HE22	46:DN:133:GLN:CA	2.19	0.55
47:DO:111:PHE:CB	47:DO:114:ILE:HD13	2.33	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2149:G:H2'	36:BA:2150:U:O4'	2.07	0.55
4:CD:91:SER:O	4:CD:92:VAL:C	2.44	0.55
4:CD:98:GLU:OE2	4:CD:107:ARG:NH2	2.39	0.55
36:DA:1090:U:O4	36:DA:1102:C:H1'	2.07	0.55
48:BP:16:ARG:CD	48:BP:18:ARG:H	2.18	0.55
58:DZ:10:ARG:HB3	58:DZ:36:LYS:CB	2.32	0.55
53:BU:66:ASN:CB	53:BU:76:TYR:HB2	2.36	0.55
36:DA:2305:A:H1'	42:DG:136:ARG:HG2	1.88	0.55
36:BA:1463:C:H2'	36:BA:1464:C:O4'	2.07	0.55
24:AY:11:C:C3'	24:AY:12:U:H5''	2.36	0.55
24:CY:11:C:C3'	24:CY:12:U:H5''	2.37	0.55
43:BH:83:TYR:HB2	43:BH:135:GLY:N	2.13	0.55
25:CZ:220:PRO:O	25:CZ:245:GLY:HA3	2.07	0.55
25:CZ:343:TYR:CE2	25:CZ:348:ASP:HB2	2.42	0.55
36:DA:1779:U:C2'	36:DA:1783:A:H62	2.19	0.55
5:AE:92:LYS:H	5:AE:118:ILE:HD11	1.72	0.55
1:CA:826:C:H2'	1:CA:827:U:C6	2.40	0.55
11:CK:21:ILE:HG13	11:CK:30:VAL:CG1	2.31	0.55
49:DQ:43:THR:CB	49:DQ:45:GLN:NE2	2.69	0.55
36:BA:2243:U:O2	36:BA:2434:A:C2	2.59	0.55
4:CD:132:ARG:HH11	4:CD:132:ARG:HG2	1.72	0.55
37:DB:30:C:H1'	37:DB:57:A:N6	2.20	0.55
2:CB:74:LYS:HZ2	2:CB:76:GLN:HB2	1.72	0.55
36:DA:2457:U:C2'	36:DA:2458:G:H5'	2.37	0.55
1:AA:719:C:O2	18:AR:50:ILE:HG12	2.05	0.55
1:AA:484:G:H4'	1:AA:485:G:O5'	2.07	0.55
52:BT:83:ILE:O	52:BT:84:GLN:O	2.23	0.55
1:CA:1465:C:O2'	1:CA:1466:C:H5'	2.06	0.55
36:BA:2062:A:O2'	36:BA:2063:C:H5'	2.06	0.55
12:CL:90:VAL:O	12:CL:92:ASP:N	2.40	0.55
36:DA:1011:G:O2'	36:DA:1013:C:C5'	2.55	0.55
1:AA:412:A:H4'	1:AA:413:G:C8	2.40	0.55
18:CR:73:ALA:HB3	18:CR:79:LEU:HD12	1.88	0.55
46:BN:6:PRO:CB	46:BN:41:ASP:OD1	2.55	0.55
36:DA:936:C:H2'	36:DA:937:U:C6	2.42	0.55
22:CW:26:A:H61	22:CW:44:G:H1	1.54	0.55
19:CS:24:ALA:O	19:CS:25:LYS:CB	2.55	0.55
5:CE:61:TYR:O	5:CE:62:ALA:C	2.44	0.55
42:DG:9:ARG:O	42:DG:13:GLU:HG2	2.07	0.55
36:DA:1056:G:O5'	36:DA:1056:G:H8	1.88	0.55
36:BA:2684:U:H6	36:BA:2684:U:O5'	1.90	0.55
36:BA:1215:G:H4'	53:BU:8:VAL:HG21	1.89	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2033:A:O2'	36:BA:2034:U:OP1	2.24	0.55
36:BA:2339:G:H2'	36:BA:2340:G:H8	1.72	0.55
36:DA:2837:G:H2'	36:DA:2838:G:C8	2.34	0.55
34:D8:3:LYS:HD2	36:DA:242:G:C8	2.41	0.55
40:DE:56:PRO:O	40:DE:57:LYS:HB2	2.06	0.55
1:AA:1047:G:C5'	14:AN:4:LYS:HE2	2.26	0.55
36:BA:2530:A:H2'	36:BA:2531:A:H5''	1.88	0.55
49:BQ:50:ALA:O	49:BQ:51:ARG:C	2.43	0.55
40:BE:199:ARG:HB2	40:BE:199:ARG:CZ	2.36	0.55
48:DP:24:GLY:HA3	48:DP:33:ARG:HH12	1.72	0.55
48:DP:24:GLY:CA	48:DP:33:ARG:HH12	2.20	0.55
53:DU:66:ASN:CG	53:DU:76:TYR:HB2	2.26	0.55
2:CB:200:ILE:CD1	2:CB:200:ILE:H	2.04	0.55
13:AM:119:GLY:O	13:AM:120:LYS:HB2	2.06	0.55
1:AA:8:A:C5'	5:AE:120:THR:O	2.55	0.55
25:CZ:143:ASP:OD1	25:CZ:146:LEU:HB2	2.07	0.55
52:BT:11:GLU:C	52:BT:13:ARG:H	2.09	0.55
52:DT:32:TYR:CG	52:DT:81:PRO:HB3	2.42	0.55
36:DA:329:G:OP1	57:DY:71:LYS:HD3	2.07	0.55
1:AA:1118:C:H1'	1:AA:1179:A:C4	2.42	0.55
1:AA:1250:A:H4'	9:AI:68:GLY:H	1.71	0.55
10:AJ:47:PHE:CE2	14:AN:37:PHE:HE2	2.24	0.55
1:CA:1363(A):A:H1'	1:CA:1365:G:C5	2.41	0.55
1:CA:1250:A:H4'	9:CI:68:GLY:H	1.70	0.55
31:D5:44:THR:HG22	31:D5:45:VAL:N	2.19	0.55
27:B1:62:VAL:HG11	27:B1:67:ILE:HA	1.89	0.55
30:D4:7:PRO:O	30:D4:8:LYS:HB3	2.07	0.55
42:DG:106:LEU:HG	42:DG:107:LEU:HD23	1.89	0.55
42:DG:125:PHE:C	42:DG:127:GLY:N	2.61	0.55
42:DG:129:GLY:HA3	42:DG:163:ALA:O	2.07	0.55
42:DG:12:TYR:O	42:DG:16:ARG:HB2	2.06	0.55
1:AA:1330:U:H4'	13:AM:23:TYR:CE2	2.42	0.55
13:AM:68:GLY:C	13:AM:70:LEU:N	2.60	0.55
7:AG:16:LEU:HD13	9:AI:42:ARG:HA	1.86	0.55
5:CE:148:VAL:C	5:CE:150:ARG:H	2.08	0.55
25:CZ:255:ILE:HG22	25:CZ:302:GLN:NE2	2.22	0.55
4:AD:131:ARG:H	4:AD:131:ARG:CD	2.11	0.55
1:AA:858:G:H22	1:AA:869:G:H3'	1.71	0.55
4:CD:100:ARG:HB3	4:CD:103:ASN:HB3	1.89	0.55
1:AA:1102:A:C4	1:AA:1103:C:C5	2.95	0.55
27:D1:7:ILE:HD12	27:D1:70:VAL:HG23	1.87	0.55
36:DA:48:G:N2	36:DA:177:G:N2	2.54	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BN:128:HIS:HD2	46:BN:130:HIS:CE1	2.25	0.55
1:AA:137:C:H42	1:AA:226:G:H1	1.52	0.55
33:B7:11:LYS:O	33:B7:14:LYS:N	2.39	0.55
36:BA:2223:G:H2'	36:BA:2224:G:H5'	1.89	0.55
36:DA:847:U:H2'	36:DA:848:G:H5''	1.89	0.55
36:DA:886:C:O2'	36:DA:887:A:C4'	2.54	0.55
47:DO:7:TYR:CE1	47:DO:20:MET:HE3	2.35	0.55
39:DD:161:THR:H	39:DD:196:VAL:HB	1.71	0.55
27:B1:71:TYR:O	27:B1:74:VAL:CB	2.55	0.55
36:DA:415:A:N1	36:DA:2409:G:C6	2.75	0.55
1:AA:987:G:O2'	1:AA:988:G:H5'	2.06	0.55
36:DA:391:G:O2'	36:DA:392:C:H5'	2.06	0.55
6:CF:33:TYR:HB2	6:CF:75:LEU:HD13	1.88	0.55
43:DH:156:ALA:C	43:DH:158:HIS:H	2.09	0.55
36:BA:380:U:H2'	36:BA:381:G:H8	1.69	0.55
33:B7:31:LEU:O	33:B7:33:ARG:N	2.40	0.55
36:DA:2316:C:H2'	36:DA:2317:C:H6	1.71	0.55
36:BA:1451:C:H4'	36:BA:1452:A:C8	2.42	0.55
18:CR:24:ALA:C	18:CR:26:LEU:H	2.09	0.55
38:BC:7:TYR:CZ	38:BC:11:LEU:HD21	2.41	0.55
1:AA:1011:G:C2	1:AA:1019:C:N3	2.75	0.55
22:AW:31:A:H2'	22:AW:32:U:H6	1.72	0.55
36:DA:2596:U:H3'	36:DA:2597:G:H8	1.71	0.55
53:BU:108:GLU:OE2	54:BV:44:LYS:HB3	2.06	0.55
41:DF:130:ALA:HB3	41:DF:142:TRP:CD1	2.41	0.55
2:AB:147:LYS:HG2	2:AB:147:LYS:O	2.06	0.55
29:B3:45:GLY:HA2	29:B3:48:GLU:HG2	1.87	0.55
54:BV:78:LYS:O	54:BV:79:VAL:HG23	2.07	0.55
36:DA:2051:A:OP1	40:DE:137:HIS:ND1	2.40	0.55
39:DD:149:PRO:CG	39:DD:186:HIS:HD2	2.20	0.55
39:DD:67:PHE:CE1	39:DD:157:ARG:NH2	2.74	0.55
34:D8:10:ALA:C	34:D8:12:LYS:N	2.58	0.55
28:D2:25:VAL:C	28:D2:27:GLU:N	2.60	0.55
36:DA:71:A:O2'	36:DA:72:U:OP2	2.19	0.55
36:BA:1853:A:H1'	36:BA:2233:U:O2'	2.06	0.55
36:BA:1798:U:H5'	39:BD:259:THR:HB	1.88	0.55
36:DA:378:C:H2'	36:DA:379:G:H8	1.71	0.55
1:AA:1207:G:H2'	1:AA:1208:C:H6	1.72	0.55
28:B2:30:ARG:HG3	56:BX:5:TYR:CE2	2.42	0.55
36:BA:108:U:H2'	36:BA:109:G:C8	2.42	0.55
41:BF:158:THR:HB	41:BF:195:ASP:CB	2.36	0.55
36:BA:2623:G:O5'	36:BA:2826:A:H1'	2.07	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:19:LEU:HD12	13:AM:25:ILE:CD1	2.37	0.55
13:AM:2:ALA:HB3	13:AM:9:ILE:CG2	2.37	0.55
30:B4:5:ILE:H	30:B4:5:ILE:HD13	1.71	0.55
42:BG:138:GLN:O	42:BG:140:ILE:N	2.40	0.55
46:DN:120:LEU:HD13	46:DN:122:VAL:HG23	1.88	0.55
4:CD:73:ARG:O	4:CD:77:ASN:HB2	2.07	0.55
8:AH:109:ILE:CG2	8:AH:137:VAL:HB	2.36	0.55
15:CO:39:LEU:CD1	15:CO:56:LEU:HB2	2.36	0.55
1:CA:951:G:C6	1:CA:1231:G:C6	2.95	0.55
52:BT:26:ASP:HB3	52:BT:89:VAL:O	2.07	0.55
52:DT:78:LEU:O	52:DT:79:HIS:HD2	1.89	0.55
36:BA:1437:C:O2	36:BA:1437:C:H2'	2.05	0.55
51:DS:37:ALA:HB2	51:DS:99:LYS:HZ1	1.71	0.55
36:BA:325:G:H2'	36:BA:326:G:H8	1.72	0.55
42:BG:10:LYS:HE2	42:BG:14:GLU:OE2	2.07	0.55
28:B2:3:LEU:HD23	28:B2:3:LEU:O	2.07	0.55
39:BD:164:GLN:OE1	39:BD:176:ARG:NH2	2.40	0.55
24:AY:24:G:O2'	24:AY:25:C:H5'	2.07	0.55
40:DE:48:GLN:NE2	40:DE:78:LEU:HD13	2.22	0.55
8:CH:100:ILE:HG23	8:CH:101:PRO:HD2	1.89	0.55
53:DU:108:GLU:OE2	54:DV:44:LYS:HB3	2.06	0.55
1:AA:1433:A:N6	1:AA:1434:A:C6	2.75	0.55
2:CB:130:ARG:NH2	2:CB:134:GLU:HG3	2.22	0.55
10:CJ:34:VAL:HG22	10:CJ:74:ILE:CG2	2.30	0.55
36:BA:133:C:N3	36:BA:146:G:O6	2.40	0.55
1:AA:666:G:C5	1:AA:741:G:C6	2.95	0.55
2:AB:179:LYS:HA	8:AH:72:PRO:CD	2.36	0.55
8:AH:97:VAL:HA	8:AH:100:ILE:HG13	1.89	0.55
36:DA:197:A:N6	36:DA:2430:A:H2'	2.21	0.55
1:AA:678:U:H2'	1:AA:679:C:C6	2.42	0.55
31:D5:48:GLU:O	31:D5:49:CYS:CB	2.55	0.55
1:CA:777:A:H2'	1:CA:778:G:C8	2.42	0.55
36:DA:177:G:H3'	36:DA:178:G:C8	2.42	0.55
7:AG:143:ARG:O	7:AG:144:MET:C	2.46	0.55
38:BC:6:ARG:HD2	38:BC:34:THR:HG22	1.88	0.55
54:BV:16:PRO:O	54:BV:96:ILE:HB	2.06	0.55
46:BN:130:HIS:O	46:BN:130:HIS:CG	2.60	0.55
7:AG:150:ALA:HB2	11:AK:50:TYR:CE2	2.42	0.55
48:BP:85:LEU:CD1	48:BP:120:ALA:HB2	2.37	0.55
36:DA:2133:G:O2'	36:DA:2134:A:H8	1.90	0.55
36:BA:774:A:H2	36:BA:787:U:O2'	1.89	0.55
33:D7:15:THR:O	33:D7:15:THR:CG2	2.55	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1269:A:H2'	1:AA:1270:C:H5'	1.87	0.55
58:BZ:141:VAL:O	58:BZ:141:VAL:HG12	2.05	0.55
36:BA:2065:C:H2'	36:BA:2066:C:C6	2.42	0.55
9:AI:110:GLU:HG2	9:AI:113:LYS:HZ1	1.68	0.55
55:BW:107:LEU:N	55:BW:107:LEU:HD12	2.22	0.55
13:AM:6:GLY:C	13:AM:8:GLU:N	2.60	0.55
1:AA:1166:G:H1'	1:AA:1171:G:H22	1.72	0.55
1:CA:1504:G:H4'	1:CA:1505:G:H5'	1.89	0.55
1:CA:815:A:C2	1:CA:1529:G:C4	2.95	0.55
27:B1:82:LEU:C	27:B1:83:GLU:HG3	2.27	0.55
27:B1:73:LEU:HD22	27:B1:94:LEU:HB3	1.89	0.55
1:AA:803:G:C6	1:AA:804:U:C4	2.94	0.55
1:AA:642:A:N7	8:AH:115:SER:HA	2.22	0.55
36:BA:463:G:C2	36:BA:467:G:C6	2.94	0.55
26:D0:3:HIS:HB2	36:DA:2494:G:OP1	2.07	0.55
37:DB:2:C:H2'	37:DB:3:C:C6	2.42	0.55
28:B2:11:GLU:O	28:B2:15:LYS:HE3	2.06	0.55
9:AI:65:VAL:HG11	9:AI:73:GLN:NE2	2.22	0.55
39:BD:11:PRO:C	39:BD:13:ARG:H	2.10	0.55
36:DA:1741:A:H3'	36:DA:1742:G:C8	2.42	0.55
39:DD:125:ILE:O	39:DD:125:ILE:HG22	2.07	0.55
36:BA:2746:U:H2'	36:BA:2747:G:H8	1.71	0.55
32:B6:42:TRP:O	32:B6:44:ARG:N	2.35	0.55
36:DA:90:U:H2'	36:DA:90:U:O2	2.06	0.55
35:D9:35:ARG:HD3	36:DA:2742:C:OP1	2.07	0.55
25:CZ:234:ARG:NE	25:CZ:289:LEU:HD22	2.22	0.55
17:CQ:59:ILE:CG2	17:CQ:71:PHE:HB3	2.37	0.55
43:DH:66:GLY:HA2	43:DH:69:ARG:NE	2.22	0.55
35:B9:35:ARG:HD3	36:BA:2742:C:OP1	2.07	0.55
35:B9:35:ARG:HG2	35:B9:35:ARG:O	2.07	0.55
36:DA:1012:U:O4	46:DN:28:THR:HG21	2.07	0.55
36:DA:19:C:O2'	36:DA:20:C:H5'	2.07	0.55
36:DA:2513:G:C2	36:DA:2514:U:C2	2.94	0.55
36:DA:535:C:O2'	36:DA:536:A:H5'	2.06	0.55
36:DA:1215:G:H4'	53:DU:8:VAL:HG21	1.89	0.55
4:CD:71:SER:O	4:CD:72:GLU:C	2.44	0.55
32:D6:8:LYS:HA	32:D6:27:LYS:CD	2.36	0.55
48:BP:105:LEU:HD12	48:BP:105:LEU:N	2.22	0.55
25:CZ:26:THR:HG22	62:CZ:501:GDP:O2A	2.07	0.55
58:BZ:102:LEU:CD2	58:BZ:137:ILE:HB	2.37	0.55
49:BQ:140:ALA:HA	58:BZ:99:TYR:CD1	2.41	0.55
58:BZ:9:TYR:HE2	58:BZ:61:LEU:HD13	1.71	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:DS:96:GLY:O	51:DS:98:VAL:N	2.37	0.55
36:BA:308:G:H2'	36:BA:309:G:C8	2.42	0.55
36:BA:329:G:OP1	57:BY:71:LYS:HD3	2.07	0.55
36:DA:2151:G:H2'	36:DA:2152:G:H8	1.70	0.55
1:CA:1477:C:H2'	1:CA:1478:C:H6	1.68	0.55
1:CA:946:A:C6	1:CA:947:G:C6	2.95	0.55
55:BW:76:VAL:HB	55:BW:103:ILE:HG23	1.89	0.55
36:DA:1775:U:H2'	36:DA:1776:G:O4'	2.07	0.55
36:DA:1903:G:OP2	39:DD:241:PRO:HB2	2.07	0.55
3:CC:118:GLN:O	3:CC:121:ALA:HB3	2.06	0.55
3:CC:121:ALA:HA	3:CC:124:ILE:HD12	1.89	0.55
25:AZ:244:ARG:HH11	25:AZ:244:ARG:CB	2.15	0.55
58:DZ:86:VAL:O	58:DZ:87:ASP:OD1	2.25	0.55
36:DA:718:A:C2'	36:DA:719:C:H5'	2.37	0.55
36:BA:1138:G:H1	36:BA:1143:A:H2	1.53	0.55
46:BN:120:LEU:HD13	46:BN:122:VAL:HG23	1.89	0.55
39:BD:73:VAL:O	39:BD:75:ILE:N	2.40	0.55
39:BD:75:ILE:HG22	39:BD:97:TYR:HD2	1.72	0.55
39:BD:77:ALA:HB2	39:BD:97:TYR:HA	1.88	0.55
57:DY:95:LYS:HE3	57:DY:100:ALA:HB2	1.89	0.55
36:DA:1248:G:OP1	41:DF:92:PRO:HG3	2.07	0.55
36:BA:1493:C:H4'	36:BA:1494:A:OP2	2.07	0.55
36:DA:2303:G:H4'	42:DG:124:SER:O	2.06	0.55
20:AT:19:SER:C	20:AT:21:LYS:N	2.59	0.55
2:AB:185:ILE:CG2	2:AB:199:TYR:HB2	2.35	0.55
5:AE:78:HIS:O	5:AE:78:HIS:ND1	2.40	0.55
36:BA:1131:G:OP2	36:BA:2515:C:H4'	2.07	0.55
15:CO:87:ILE:HG22	15:CO:88:ARG:N	2.16	0.55
36:DA:2441:C:H2'	36:DA:2442:C:C6	2.36	0.55
10:AJ:35:SER:OG	10:AJ:73:ASP:HB2	2.07	0.55
36:DA:613:G:H8	36:DA:613:G:H5'	1.71	0.55
15:AO:8:LYS:O	15:AO:9:GLN:C	2.45	0.55
7:CG:84:ASN:OD1	22:CW:33:U:C5'	2.54	0.55
48:DP:85:LEU:CD1	48:DP:120:ALA:HB2	2.36	0.55
36:DA:1064:C:H2'	36:DA:1065:U:H5''	1.88	0.55
39:DD:196:VAL:HG12	39:DD:196:VAL:O	2.06	0.55
4:CD:135:LEU:HD13	4:CD:135:LEU:N	2.21	0.55
47:DO:4:PRO:O	47:DO:5:GLN:CB	2.54	0.55
46:BN:93:THR:HG23	46:BN:93:THR:O	2.06	0.55
36:BA:2252:G:C2'	36:BA:2253:G:H5'	2.36	0.55
58:DZ:23:LYS:O	58:DZ:24:LEU:HB2	2.07	0.55
46:DN:6:PRO:CB	46:DN:41:ASP:OD1	2.55	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2687:U:C4	36:DA:2688:U:C5	2.95	0.55
1:CA:606:G:H21	1:CA:631:G:H2'	1.71	0.55
58:BZ:20:ARG:HG3	58:BZ:21:ALA:N	2.22	0.55
17:CQ:90:ILE:O	17:CQ:93:GLN:N	2.40	0.55
36:DA:1968:G:C2'	36:DA:1969:A:H5''	2.36	0.55
13:CM:116:THR:HG22	13:CM:117:VAL:N	2.22	0.55
45:BK:88:UNK:C	45:BK:90:UNK:N	2.69	0.55
1:AA:1030(A):G:H1'	1:AA:1031:G:H1	1.71	0.55
11:AK:105:VAL:HG23	11:AK:105:VAL:O	2.07	0.55
19:AS:24:ALA:O	19:AS:25:LYS:CB	2.55	0.55
22:AV:1:G:H2'	22:AV:2:C:H6	1.72	0.55
1:CA:1260:C:H3'	1:CA:1260:C:H6	1.72	0.55
6:AF:53:ALA:HB3	6:AF:86:ARG:NH1	2.22	0.55
32:B6:42:TRP:C	32:B6:44:ARG:N	2.61	0.54
36:BA:631:A:C5'	48:BP:65:ARG:HG2	2.37	0.54
36:BA:823:G:N2	36:BA:2358:G:C8	2.75	0.54
52:DT:1:MET:HG3	52:DT:1:MET:O	2.08	0.54
19:CS:18:LYS:HG3	19:CS:18:LYS:O	2.07	0.54
36:DA:2290:G:C2	36:DA:2343:C:O2	2.60	0.54
36:DA:242:G:N2	36:DA:254:G:H2'	2.21	0.54
28:D2:33:MET:HG3	28:D2:37:PHE:CE1	2.42	0.54
41:DF:118:ALA:O	41:DF:120:GLU:N	2.40	0.54
1:AA:367:U:H4'	25:AZ:291:ARG:HD2	1.88	0.54
36:BA:1568:G:H4'	39:BD:59:LYS:CG	2.37	0.54
43:BH:66:GLY:HA2	43:BH:69:ARG:NE	2.22	0.54
36:BA:320:A:C2	36:BA:323:G:N1	2.75	0.54
36:BA:1205:U:C5	41:BF:171:PRO:HA	2.41	0.54
36:BA:1278:A:H2'	36:BA:1279:G:C8	2.42	0.54
36:BA:2051:A:H5'	36:BA:2578:G:O4'	2.07	0.54
31:B5:2:ALA:N	36:BA:747:U:H3	2.04	0.54
36:DA:812:C:H2'	36:DA:813:U:H6	1.72	0.54
46:DN:46:VAL:HG13	46:DN:48:MET:H	1.72	0.54
36:DA:18:C:O3'	53:DU:23:GLY:HA2	2.07	0.54
1:AA:351:G:C4'	1:AA:352:C:OP2	2.54	0.54
4:CD:61:LYS:NZ	4:CD:72:GLU:OE2	2.39	0.54
12:CL:115:LYS:O	12:CL:117:ARG:N	2.40	0.54
14:CN:7:ILE:HG13	14:CN:8:GLU:N	2.22	0.54
51:BS:29:PHE:CE2	51:BS:31:SER:HB2	2.42	0.54
13:CM:91:ARG:O	13:CM:95:GLY:N	2.40	0.54
40:BE:165:VAL:HG11	40:BE:189:PRO:HB3	1.89	0.54
6:AF:2:ARG:HG3	6:AF:69:GLU:OE1	2.07	0.54
58:DZ:151:HIS:HA	58:DZ:171:ILE:HG12	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:CG:69:VAL:HG23	7:CG:135:VAL:HA	1.90	0.54
24:AY:56:C:C1'	36:BA:1067:A:H1'	2.38	0.54
36:DA:2154:G:H8	36:DA:2154:G:O5'	1.90	0.54
4:CD:186:LEU:O	4:CD:187:ARG:HB2	2.07	0.54
3:AC:113:ALA:HB3	3:AC:185:GLY:N	2.22	0.54
36:DA:1446:C:H42	36:DA:1465:G:H1	1.54	0.54
1:CA:1442(B):A:C2	52:DT:118:ARG:NH2	2.74	0.54
36:BA:1154:G:H5''	53:BU:59:ARG:NH2	2.22	0.54
54:BV:49:THR:O	54:BV:50:PRO:C	2.45	0.54
39:BD:80:ALA:HB3	39:BD:94:LEU:O	2.06	0.54
30:D4:25:TYR:N	30:D4:25:TYR:CD1	2.75	0.54
42:DG:122:PRO:HB3	42:DG:182:LYS:H	1.70	0.54
1:AA:156:G:H1'	1:AA:166:G:N2	2.23	0.54
15:AO:17:ARG:HH11	15:AO:17:ARG:HG3	1.72	0.54
27:B1:50:ARG:NH2	36:BA:2201:C:OP2	2.40	0.54
24:CY:68:U:H2'	24:CY:69:C:C6	2.41	0.54
36:DA:1087:G:C2'	36:DA:1088:A:H4'	2.31	0.54
36:DA:1551:C:C2'	36:DA:1552:G:H5'	2.37	0.54
10:AJ:40:LEU:HD23	10:AJ:40:LEU:H	1.70	0.54
36:BA:2245:U:H5'	36:BA:2246:G:C5'	2.32	0.54
49:DQ:120:ILE:HG22	49:DQ:124:LYS:HE2	1.88	0.54
26:B0:24:LYS:HD2	36:BA:2355:C:H4'	1.89	0.54
36:DA:1601:G:O2'	36:DA:1602:U:H5'	2.06	0.54
33:D7:11:LYS:O	33:D7:14:LYS:N	2.39	0.54
1:CA:612:C:H42	1:CA:628:G:H1	1.54	0.54
1:AA:1314:C:H2'	1:AA:1315:U:C5	2.41	0.54
50:DR:87:TYR:O	50:DR:89:ASP:N	2.39	0.54
2:AB:89:GLY:O	2:AB:90:MET:HG2	2.06	0.54
36:BA:185:U:C2	36:BA:212:G:N2	2.75	0.54
47:BO:43:VAL:HG23	47:BO:56:ASP:O	2.06	0.54
36:BA:955:C:H2'	36:BA:956:G:H5'	1.89	0.54
25:AZ:118:GLU:O	25:AZ:120:ILE:N	2.41	0.54
40:BE:147:PRO:HB2	40:BE:149:ARG:HG2	1.89	0.54
58:DZ:18:LEU:HD13	58:DZ:18:LEU:N	2.21	0.54
36:DA:333:G:N3	36:DA:333:G:H2'	2.22	0.54
36:BA:284:U:H6	36:BA:284:U:O5'	1.89	0.54
40:DE:119:ARG:NH1	40:DE:158:GLY:HA3	2.21	0.54
36:DA:272:G:H1	36:DA:404:C:H42	1.54	0.54
45:BK:117:UNK:O	45:BK:118:UNK:CB	2.54	0.54
4:AD:132:ARG:HG2	4:AD:132:ARG:HH11	1.70	0.54
43:DH:114:VAL:HG23	43:DH:114:VAL:O	2.07	0.54
36:BA:819:A:N6	36:BA:1189:A:H1'	2.22	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2282:G:H4'	36:DA:2283:C:O5'	2.06	0.54
25:AZ:38:GLU:HB2	25:AZ:189:ARG:NH1	2.22	0.54
36:DA:61:G:O5'	36:DA:61:G:H8	1.90	0.54
36:DA:85:G:O5'	57:DY:30:VAL:HB	2.08	0.54
36:BA:2084:C:H2'	36:BA:2085:C:C6	2.42	0.54
41:DF:206:ILE:HG22	41:DF:207:GLY:N	2.13	0.54
41:DF:3:GLU:HA	41:DF:24:LEU:HB2	1.87	0.54
5:CE:12:LEU:O	5:CE:12:LEU:HD13	2.06	0.54
25:CZ:249:VAL:HG13	25:CZ:268:THR:HA	1.89	0.54
36:DA:1853:A:H1'	36:DA:2233:U:O2'	2.08	0.54
38:BC:75:LEU:HD11	38:BC:113:VAL:HA	1.89	0.54
1:AA:973:G:C6	1:AA:974:A:N6	2.76	0.54
4:AD:73:ARG:O	4:AD:77:ASN:HB2	2.07	0.54
43:DH:40:GLU:HB2	43:DH:64:LEU:CD1	2.36	0.54
35:B9:25:VAL:O	35:B9:25:VAL:HG12	2.07	0.54
41:BF:167:ALA:C	41:BF:173:VAL:HG11	2.27	0.54
41:BF:168:ARG:CG	41:BF:169:ASN:H	2.19	0.54
42:BG:110:ALA:HB1	42:BG:140:ILE:HD13	1.88	0.54
36:DA:532:A:C5'	53:DU:28:ARG:HH12	2.21	0.54
36:DA:536:A:P	53:DU:53:ARG:HH11	2.29	0.54
36:DA:996:A:H4'	53:DU:92:ARG:CG	2.36	0.54
53:DU:96:ALA:C	53:DU:98:LEU:H	2.09	0.54
53:DU:91:ASP:OD1	53:DU:96:ALA:HB2	2.07	0.54
36:BA:1504:C:O2'	36:BA:1505:C:C5'	2.56	0.54
8:CH:36:LEU:O	8:CH:38:ILE:N	2.40	0.54
5:CE:20:GLN:NE2	5:CE:25:ARG:CZ	2.70	0.54
6:CF:2:ARG:CD	6:CF:69:GLU:HB3	2.37	0.54
25:CZ:72:THR:CG2	25:CZ:203:LEU:HD23	2.29	0.54
52:DT:80:SER:CB	52:DT:81:PRO:CD	2.85	0.54
57:DY:75:ILE:HG13	57:DY:76:CYS:H	1.73	0.54
1:AA:1348:U:H4'	9:AI:120:ARG:CD	2.36	0.54
58:DZ:151:HIS:HB3	58:DZ:170:THR:HA	1.89	0.54
1:CA:1118:C:H1'	1:CA:1179:A:C4	2.42	0.54
7:CG:44:TYR:HE1	9:CI:41:VAL:HG11	1.72	0.54
22:AV:7:A:N6	22:AV:49:C:N4	2.55	0.54
19:AS:42:PRO:O	19:AS:43:GLU:HB3	2.07	0.54
42:BG:9:ARG:O	42:BG:11:TYR:N	2.40	0.54
1:AA:863:U:H2'	1:AA:864:A:H5"	1.89	0.54
4:CD:138:TYR:C	4:CD:138:TYR:HD2	2.10	0.54
4:CD:96:LEU:HG	4:CD:139:ARG:NH2	2.22	0.54
36:DA:709:U:H3	36:DA:722:A:H61	1.55	0.54
39:BD:81:ALA:HA	39:BD:113:VAL:HG21	1.88	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:19:LEU:HD12	13:CM:25:ILE:CD1	2.37	0.54
43:DH:118:PRO:CG	43:DH:121:ILE:HB	2.35	0.54
36:DA:1170:G:OP2	36:DA:1170:G:H8	1.90	0.54
25:CZ:389:ARG:CA	25:CZ:395:VAL:HG13	2.35	0.54
36:DA:2631:G:H22	40:DE:61:ARG:NH1	2.02	0.54
49:BQ:35:VAL:HG22	49:BQ:36:ALA:N	2.22	0.54
2:CB:121:LEU:O	2:CB:122:PHE:C	2.44	0.54
20:CT:88:VAL:O	20:CT:91:LEU:HB2	2.06	0.54
8:AH:94:TYR:HD1	8:AH:94:TYR:N	2.04	0.54
1:CA:1499:A:H1'	1:CA:1520:G:H5'	1.88	0.54
1:CA:1524:C:H2'	1:CA:1525:G:O4'	2.07	0.54
2:CB:32:ILE:HG12	2:CB:33:TYR:H	1.72	0.54
36:DA:237:C:N3	36:DA:261:G:C2	2.74	0.54
26:D0:58:THR:HG22	26:D0:59:LEU:N	2.22	0.54
18:AR:32:ARG:O	18:AR:69:THR:HG21	2.07	0.54
36:BA:528:A:C2	36:BA:2043:C:H4'	2.42	0.54
36:DA:2547:U:O2	47:DO:23:ARG:NH1	2.40	0.54
48:DP:113:LYS:HA	48:DP:129:ALA:O	2.07	0.54
36:BA:1812:A:C1'	39:BD:46:GLN:HE22	2.20	0.54
46:BN:61:ARG:NH1	46:BN:61:ARG:HG3	2.22	0.54
52:DT:107:ASP:OD1	52:DT:109:GLU:HB2	2.06	0.54
36:BA:977:G:O2'	36:BA:978:G:H5'	2.07	0.54
19:CS:6:LYS:N	19:CS:6:LYS:HD2	2.16	0.54
36:DA:2450:A:O2'	36:DA:2451:A:H5'	2.08	0.54
36:BA:1150:C:O2'	36:BA:1151:G:H5'	2.07	0.54
43:BH:130:ARG:CZ	43:BH:130:ARG:HB3	2.37	0.54
36:BA:1288:U:C2	36:BA:1327:C:O2	2.60	0.54
36:DA:2252:G:O2'	36:DA:2253:G:H5'	2.06	0.54
12:AL:84:LEU:HD12	12:AL:104:VAL:HG11	1.89	0.54
12:AL:86:ARG:CG	12:AL:87:GLY:N	2.70	0.54
22:AW:18:G:H1	22:AW:55:U:H1'	1.72	0.54
37:BB:70:C:H2'	37:BB:71:C:H6	1.72	0.54
2:AB:14:GLY:C	2:AB:15:VAL:HG22	2.27	0.54
25:AZ:19:HIS:HA	25:AZ:115:GLN:CB	2.37	0.54
43:DH:127:GLU:HB2	43:DH:130:ARG:HB2	1.89	0.54
9:CI:82:ALA:HA	9:CI:85:LEU:HD11	1.89	0.54
1:CA:1316:G:H4'	14:CN:18:VAL:HG11	1.89	0.54
36:BA:479:A:O2'	36:BA:481:G:H8	1.90	0.54
36:BA:2316:C:H2'	36:BA:2317:C:C6	2.42	0.54
1:CA:790:A:H2'	1:CA:791:G:C8	2.42	0.54
37:BB:2:C:H2'	37:BB:3:C:C6	2.42	0.54
1:AA:1148:U:H2'	1:AA:1149:C:O4'	2.06	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2364:C:H2'	36:DA:2365:G:O4'	2.07	0.54
28:B2:17:SER:CB	28:B2:20:GLU:HB3	2.36	0.54
46:DN:16:ILE:HD12	46:DN:139:GLU:N	2.22	0.54
54:DV:71:LEU:HD21	54:DV:84:LYS:HE2	1.89	0.54
36:DA:843:G:O2'	36:DA:844:C:H5'	2.08	0.54
29:B3:31:LEU:HD23	29:B3:32:GLN:H	1.72	0.54
45:BK:98:UNK:HA	45:BK:135:UNK:CB	2.37	0.54
34:B8:32:LEU:HD12	36:BA:2391:G:OP1	2.07	0.54
34:B8:53:PRO:HA	34:B8:56:GLU:OE1	2.07	0.54
36:BA:2389:G:C5'	36:BA:2390:U:H5'	2.35	0.54
31:D5:6:VAL:HG22	36:DA:2016:U:H1'	1.89	0.54
40:DE:1:MET:H3	40:DE:84:PHE:HB2	1.72	0.54
55:DW:96:ILE:HG23	55:DW:96:ILE:O	2.07	0.54
32:D6:48:VAL:O	32:D6:49:HIS:CG	2.61	0.54
36:DA:2339:G:H2'	36:DA:2340:G:H8	1.72	0.54
36:DA:2760:C:C3'	36:DA:2761:G:H5''	2.37	0.54
39:BD:39:LYS:HB2	39:BD:62:TYR:HB2	1.88	0.54
41:BF:32:LEU:HD22	41:BF:109:GLY:HA3	1.90	0.54
41:BF:154:VAL:HG22	41:BF:191:ARG:HB3	1.89	0.54
28:B2:60:LEU:O	28:B2:63:VAL:HB	2.06	0.54
28:B2:37:PHE:CE2	56:BX:8:ILE:O	2.60	0.54
50:BR:97:VAL:HA	50:BR:113:LEU:O	2.07	0.54
42:BG:39:ILE:HA	42:BG:156:ASP:O	2.08	0.54
36:DA:1012:U:C4	46:DN:28:THR:HG21	2.42	0.54
36:DA:553:G:O2'	36:DA:554:U:H5'	2.07	0.54
46:DN:46:VAL:O	46:DN:47:ALA:HB3	2.06	0.54
36:DA:1252:G:O4'	53:DU:33:ARG:HD3	2.07	0.54
41:BF:62:ARG:HG2	41:BF:62:ARG:HH11	1.73	0.54
26:D0:10:THR:HG22	26:D0:12:ASN:H	1.71	0.54
8:CH:11:THR:HG23	8:CH:14:ARG:NH1	2.18	0.54
1:CA:1051:C:O2'	1:CA:1052:U:H5'	2.07	0.54
14:CN:8:GLU:C	14:CN:10:ALA:H	2.10	0.54
8:AH:11:THR:O	8:AH:15:ASN:ND2	2.40	0.54
40:BE:38:THR:HG23	40:BE:39:PRO:HD2	1.90	0.54
38:DC:196:LEU:O	38:DC:197:GLU:C	2.46	0.54
13:AM:77:ASN:O	13:AM:80:ARG:HB3	2.08	0.54
36:BA:1637:A:H2'	36:BA:1638:C:O4'	2.08	0.54
1:AA:1060:C:C5'	10:AJ:51:ARG:HB3	2.36	0.54
1:CA:939:G:H1	1:CA:1344:C:H42	1.55	0.54
4:AD:133:VAL:HG12	4:AD:135:LEU:H	1.73	0.54
51:DS:90:GLY:O	51:DS:92:TYR:HD1	1.90	0.54
42:BG:121:ASN:OD1	42:BG:123:ASN:C	2.46	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BG:13:GLU:O	42:BG:17:PRO:HG3	2.08	0.54
36:DA:2190:G:H2'	36:DA:2190:G:N3	2.22	0.54
36:DA:1901:A:C2'	36:DA:1902:C:H5'	2.38	0.54
19:CS:10:PHE:CE1	19:CS:70:LYS:HD2	2.43	0.54
36:BA:438:G:H2'	36:BA:440:G:H8	1.71	0.54
49:DQ:19:GLY:O	49:DQ:20:ALA:HB3	2.07	0.54
31:B5:16:ARG:HH11	31:B5:20:ARG:NH1	2.03	0.54
33:D7:22:MET:O	33:D7:28:ARG:NH1	2.41	0.54
42:DG:111:LEU:HB2	42:DG:112:PRO:HD3	1.89	0.54
42:DG:10:LYS:HG3	42:DG:14:GLU:OE2	2.06	0.54
5:CE:79:GLU:HA	5:CE:92:LYS:HA	1.89	0.54
43:BH:85:LYS:HE3	43:BH:87:LEU:HG	1.88	0.54
1:AA:868:C:H2'	1:AA:869:G:O4'	2.07	0.54
4:AD:108:LEU:HD12	4:AD:165:MET:HE1	1.89	0.54
1:CA:828:A:H4'	1:CA:828:A:OP1	2.07	0.54
8:CH:19:VAL:O	8:CH:20:TYR:C	2.45	0.54
27:B1:26:ARG:O	27:B1:27:GLU:O	2.24	0.54
36:BA:2068:U:C2	36:BA:2430:A:H2	2.24	0.54
1:CA:445:G:H2'	1:CA:446:G:H8	1.71	0.54
36:DA:2221:G:C6	36:DA:2222:G:C6	2.95	0.54
1:CA:52:G:O2'	1:CA:53:A:H5'	2.07	0.54
15:AO:9:GLN:O	15:AO:10:LYS:C	2.44	0.54
38:DC:6:ARG:NH1	38:DC:6:ARG:O	2.40	0.54
1:CA:292:G:H1	1:CA:308:C:H42	1.54	0.54
6:CF:24:GLU:HA	6:CF:27:GLN:HG2	1.88	0.54
36:BA:2063:C:O2	36:BA:2450:A:N1	2.41	0.54
36:BA:1370:C:H2'	36:BA:1371:G:O4'	2.08	0.54
11:AK:77:MET:O	11:AK:78:GLN:HG2	2.07	0.54
1:AA:780:A:H2	1:AA:802:A:N7	2.05	0.54
1:CA:1087:G:H2'	1:CA:1088:G:H8	1.72	0.54
38:DC:103:ILE:HG23	38:DC:107:TRP:CB	2.37	0.54
36:DA:2297:C:C2'	36:DA:2298:A:H5'	2.37	0.54
36:DA:2092:U:C4'	36:DA:2093:G:H5''	2.36	0.54
3:CC:175:LEU:HD21	3:CC:201:TYR:CE2	2.43	0.54
8:AH:40:ALA:HB2	8:AH:45:ILE:HG13	1.88	0.54
43:BH:137:ASP:OD1	43:BH:138:LYS:N	2.40	0.54
40:DE:147:PRO:HB2	40:DE:149:ARG:HG2	1.89	0.54
36:DA:738:G:C2'	36:DA:739:G:H5'	2.36	0.54
36:DA:2076:U:OP1	36:DA:2076:U:H6	1.90	0.54
22:CW:76:A:N6	36:DA:2421:G:H2'	2.22	0.54
26:B0:55:ARG:HH21	36:BA:2386:C:H5''	1.72	0.54
36:BA:2284:C:H1'	36:BA:2325:G:N2	2.23	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:D6:18:ARG:HE	32:D6:43:CYS:HB3	1.73	0.54
32:D6:42:TRP:C	32:D6:44:ARG:N	2.60	0.54
34:D8:53:PRO:HA	34:D8:56:GLU:OE1	2.07	0.54
36:DA:2389:G:H5'	36:DA:2390:U:C5'	2.34	0.54
36:DA:629:G:H2'	36:DA:630:G:O4'	2.08	0.54
48:DP:88:LEU:HD13	48:DP:100:LEU:HD21	1.90	0.54
36:DA:485:C:H2'	36:DA:486:C:C6	2.42	0.54
38:DC:81:GLU:C	38:DC:82:LYS:HE2	2.28	0.54
36:DA:1853:A:N6	36:DA:1889:A:C8	2.76	0.54
38:BC:74:VAL:HG11	38:BC:153:ILE:HG23	1.88	0.54
1:AA:972:C:C4'	10:AJ:57:LYS:HG3	2.34	0.54
36:BA:2880:C:H6	36:BA:2880:C:H3'	1.73	0.54
50:BR:13:HIS:CE1	50:BR:16:HIS:N	2.73	0.54
50:BR:28:LEU:CB	50:BR:34:ILE:HG13	2.38	0.54
27:D1:5:CYS:CB	27:D1:8:SER:HG	2.19	0.54
36:DA:2657:A:O2'	43:DH:160:LYS:NZ	2.38	0.54
36:DA:1190:G:C5'	48:DP:35:HIS:H	2.20	0.54
36:DA:573:G:H5'	36:DA:575:A:N7	2.22	0.54
53:DU:10:ARG:O	53:DU:13:LYS:N	2.40	0.54
53:DU:14:HIS:C	53:DU:16:LYS:N	2.61	0.54
1:AA:115:G:H4'	1:AA:116:A:O5'	2.08	0.54
1:CA:1054:C:O2	1:CA:1054:C:C3'	2.56	0.54
14:CN:7:ILE:CG1	14:CN:8:GLU:N	2.71	0.54
51:BS:37:ALA:HB2	51:BS:99:LYS:HZ3	1.71	0.54
32:D6:8:LYS:HD3	32:D6:27:LYS:HD3	1.89	0.54
1:CA:666:G:C5	1:CA:741:G:C6	2.94	0.54
1:CA:851:G:O2'	1:CA:852:G:H5'	2.08	0.54
13:CM:90:LEU:HA	13:CM:93:ARG:HB2	1.90	0.54
36:BA:2846:G:H2'	36:BA:2847:U:O4'	2.06	0.54
40:BE:167:VAL:O	40:BE:168:MET:O	2.25	0.54
47:BO:105:GLU:O	47:BO:109:LYS:CG	2.55	0.54
36:DA:1665:A:C3'	36:DA:1666:G:C5'	2.86	0.54
36:DA:2550:G:C2'	36:DA:2551:C:H5'	2.37	0.54
1:AA:1374:A:O2'	1:AA:1375:A:H5'	2.07	0.54
19:AS:27:GLU:O	19:AS:28:LYS:O	2.24	0.54
36:DA:1061:U:H4'	36:DA:1070:A:C4'	2.37	0.54
36:DA:2140:C:H2'	36:DA:2141:G:H8	1.72	0.54
1:AA:1485:U:C2'	1:AA:1485:U:O2	2.55	0.54
36:DA:1336:A:H2'	36:DA:1337:G:H8	1.71	0.54
1:CA:1079:G:H2'	1:CA:1080:A:C8	2.43	0.54
36:DA:1966:A:H2	36:DA:2592:G:N3	2.05	0.54
39:DD:14:ARG:HG3	39:DD:15:PHE:N	2.22	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2189:U:C2'	36:BA:2190:G:H4'	2.37	0.54
25:AZ:221:PHE:CE1	25:AZ:247:VAL:HG13	2.42	0.54
25:AZ:222:LEU:HD23	25:AZ:244:ARG:HH21	1.73	0.54
36:BA:1901:A:C2'	36:BA:1902:C:H5'	2.37	0.54
39:DD:39:LYS:HB3	39:DD:60:ARG:O	2.08	0.54
36:DA:1299:G:H4'	36:DA:1301:A:C4	2.41	0.54
36:DA:1758:G:N7	36:DA:2695:C:H4'	2.22	0.54
1:AA:1325:C:H5''	21:AU:15:ARG:NH2	2.23	0.54
42:DG:11:TYR:HD1	42:DG:15:VAL:HG21	1.71	0.54
42:DG:61:ALA:O	42:DG:65:GLY:N	2.36	0.54
43:DH:26:VAL:HG11	43:DH:75:ALA:O	2.07	0.54
36:BA:712:G:H1	36:BA:719:C:H42	1.56	0.54
8:CH:89:PRO:HA	8:CH:92:ARG:CD	2.38	0.54
51:BS:106:ARG:HB3	51:BS:106:ARG:HH11	1.72	0.54
43:BH:85:LYS:HE2	43:BH:86:GLU:N	2.23	0.54
13:CM:108:ARG:CG	13:CM:108:ARG:HH11	2.20	0.54
29:D3:7:LYS:N	29:D3:54:VAL:HG13	2.22	0.54
36:BA:1130:U:C2	36:BA:2025:C:H5''	2.43	0.54
36:BA:2041:U:H6	36:BA:2041:U:OP2	1.90	0.54
20:CT:48:LYS:HB3	20:CT:51:GLU:HG3	1.89	0.54
37:BB:69:G:H2'	37:BB:69:G:N3	2.22	0.54
8:AH:119:LEU:HD12	8:AH:124:ALA:HA	1.90	0.54
11:AK:92:GLU:OE2	11:AK:95:ILE:HD12	2.07	0.54
36:DA:2801(A):A:H5'	36:DA:2802:G:H8	1.71	0.54
2:AB:73:THR:O	2:AB:74:LYS:C	2.46	0.54
36:DA:1342:A:N1	36:DA:1345:C:C4	2.76	0.54
36:DA:1600:C:OP1	56:DX:58:HIS:NE2	2.41	0.54
1:CA:54:C:H2'	1:CA:352:C:H42	1.70	0.54
6:CF:10:LEU:HD13	6:CF:59:TYR:HD2	1.72	0.54
36:BA:2199:A:H3'	36:BA:2200:C:C6	2.43	0.54
36:BA:233:A:H2'	36:BA:234:C:O4'	2.08	0.54
36:DA:851:U:O2'	36:DA:852:G:H5'	2.06	0.54
4:AD:157:LEU:O	4:AD:161:ASN:ND2	2.41	0.54
36:DA:2721:A:H2'	36:DA:2722:G:O4'	2.08	0.54
1:CA:1255:G:O2'	1:CA:1258:G:H1'	2.08	0.54
24:CY:36:U:O2'	24:CY:37:YG:H5''	2.08	0.54
26:B0:32:ARG:HA	26:B0:64:ASP:HB3	1.89	0.54
30:B4:42:PHE:O	30:B4:43:TYR:O	2.25	0.54
2:CB:16:HIS:HB3	2:CB:210:SER:CA	2.37	0.54
36:BA:2317:C:O2'	36:BA:2318:G:H5'	2.08	0.54
36:BA:966:G:H1'	36:BA:2267:A:N6	2.23	0.54
35:D9:19:ARG:NH1	36:DA:2755:C:C4	2.75	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:633:G:C5	1:AA:634:C:C5	2.96	0.54
2:CB:155:LEU:HD11	2:CB:158:LEU:HA	1.88	0.54
1:CA:1260:C:C6	1:CA:1260:C:H3'	2.43	0.54
1:CA:1234:C:O2'	1:CA:1235:U:H5'	2.05	0.54
36:BA:566:U:O4	54:BV:78:LYS:HE2	2.08	0.54
36:DA:2015:A:O2'	36:DA:2016:U:H5'	2.08	0.54
36:DA:1453:U:H5'	50:DR:63:ARG:NE	2.22	0.54
36:BA:483:A:H1'	57:BY:60:PHE:HE1	1.66	0.54
36:DA:245:G:H22	36:DA:254:G:H1'	1.71	0.54
48:DP:106:LEU:HD11	48:DP:112:LEU:HD23	1.90	0.54
36:DA:1201:C:N3	36:DA:1245:G:C2	2.75	0.54
41:DF:110:LEU:CD1	41:DF:111:ALA:N	2.71	0.54
41:DF:40:GLN:HE22	41:DF:184:TYR:HB3	1.73	0.54
25:AZ:249:VAL:HG13	25:AZ:268:THR:HA	1.89	0.54
5:CE:105:VAL:N	5:CE:106:PRO:CD	2.70	0.54
35:D9:35:ARG:O	35:D9:35:ARG:HG2	2.07	0.54
38:DC:74:VAL:HG11	38:DC:153:ILE:HG23	1.89	0.54
38:BC:81:GLU:C	38:BC:82:LYS:HE2	2.28	0.54
1:AA:506:G:H2'	1:AA:507:C:H6	1.70	0.54
35:B9:36:GLN:HG2	36:BA:1124:C:O2'	2.07	0.54
28:B2:21:LEU:HB3	28:B2:64:LEU:HG	1.89	0.54
28:B2:21:LEU:O	28:B2:24:LEU:HB3	2.08	0.54
28:B2:10:LEU:HD11	36:BA:77:C:H5"	1.89	0.54
41:BF:157:VAL:HG22	41:BF:194:MET:HA	1.89	0.54
41:BF:158:THR:HB	41:BF:195:ASP:HB3	1.87	0.54
27:D1:5:CYS:HB3	27:D1:9:GLY:H	1.73	0.54
53:DU:92:ARG:O	53:DU:93:LYS:C	2.46	0.54
2:AB:219:VAL:O	2:AB:222:ILE:HG12	2.07	0.54
8:CH:36:LEU:C	8:CH:38:ILE:H	2.11	0.54
51:BS:67:ARG:HB2	51:BS:71:ARG:HH11	1.73	0.54
36:DA:1473:G:O6	36:DA:1519:G:N2	2.40	0.54
36:DA:1517:G:C6	36:DA:1518:U:C4	2.96	0.54
36:DA:2893:G:C5'	36:DA:2894:G:H5'	2.35	0.54
5:AE:31:LEU:HD23	5:AE:45:PHE:HB2	1.90	0.54
36:BA:1674:G:H1'	36:BA:1676:A:H62	1.72	0.54
52:BT:103:ARG:O	52:BT:105:LEU:N	2.40	0.54
57:DY:98:VAL:HG12	57:DY:98:VAL:O	2.06	0.54
22:CV:7:A:N6	22:CV:49:C:N4	2.56	0.54
36:DA:2149:G:H2'	36:DA:2150:U:O4'	2.08	0.54
35:B9:13:LYS:O	35:B9:27:CYS:HA	2.07	0.54
36:DA:1791:A:O3'	39:DD:206:LEU:HB2	2.07	0.54
31:B5:52:TYR:CD1	31:B5:52:TYR:O	2.60	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:87:ARG:HH21	2:AB:233:SER:CB	2.21	0.54
3:CC:11:ARG:HH11	3:CC:11:ARG:HG2	1.72	0.54
25:AZ:221:PHE:CE1	25:AZ:247:VAL:HG22	2.43	0.54
20:CT:12:ALA:O	20:CT:15:ARG:HB2	2.08	0.54
8:AH:30:ARG:CZ	8:AH:30:ARG:HB3	2.36	0.54
36:BA:594:U:H3	36:BA:663:G:H1	1.56	0.54
46:BN:4:TYR:CD1	46:BN:4:TYR:N	2.74	0.54
54:BV:52:VAL:HG13	54:BV:55:ALA:CB	2.31	0.54
39:BD:142:VAL:HG22	39:BD:143:HIS:N	2.22	0.54
33:D7:25:PRO:N	33:D7:28:ARG:HH21	2.05	0.54
42:DG:11:TYR:O	42:DG:15:VAL:HG23	2.08	0.54
40:DE:52:LEU:HD12	40:DE:53:PRO:HD2	1.89	0.54
36:DA:2787:C:H1'	40:DE:61:ARG:HG3	1.89	0.54
1:AA:335:C:O2'	1:AA:1433:A:N3	2.28	0.54
1:AA:328:C:H4'	1:AA:329:A:C5'	2.37	0.54
10:CJ:40:LEU:HG	10:CJ:69:ASN:HB3	1.89	0.54
1:AA:44:G:C6	1:AA:45:U:C2	2.96	0.54
36:BA:826:U:H2'	36:BA:828:U:O4'	2.08	0.54
4:AD:129:ASN:N	4:AD:129:ASN:HD22	1.90	0.54
47:BO:47:ILE:CG2	47:BO:48:PRO:HD2	2.33	0.54
36:DA:1103:A:H5'	36:DA:1104:C:OP2	2.07	0.54
2:CB:75:LYS:HA	2:CB:78:GLN:HG3	1.89	0.54
36:DA:826:U:H2'	36:DA:828:U:O4'	2.07	0.54
27:D1:86:SER:O	27:D1:90:ILE:HG12	2.08	0.54
36:BA:1355:G:O6	36:BA:1377:G:N2	2.40	0.54
2:AB:43:ASP:OD1	2:AB:45:GLN:HB3	2.08	0.54
49:BQ:109:VAL:CG1	49:BQ:110:THR:N	2.70	0.54
49:BQ:113:GLN:O	49:BQ:117:ALA:N	2.40	0.54
18:CR:55:ARG:HH11	18:CR:55:ARG:HG3	1.72	0.54
1:AA:198:G:HO2'	1:AA:199:G:H8	1.55	0.54
39:DD:75:ILE:HG22	39:DD:97:TYR:HD2	1.72	0.54
6:AF:28:ARG:HH11	6:AF:28:ARG:HG3	1.72	0.54
12:AL:28:LYS:O	12:AL:30:ALA:N	2.40	0.54
36:BA:1183:G:H2'	36:BA:1184:G:C8	2.42	0.54
1:AA:1442(B):A:C2	52:BT:118:ARG:CZ	2.90	0.54
36:BA:2569:G:O2'	36:BA:2570:G:H5'	2.07	0.54
12:AL:60:LEU:HD22	12:AL:60:LEU:N	2.22	0.54
36:BA:2721:A:H2'	36:BA:2722:G:O4'	2.08	0.54
1:AA:125:U:H2'	1:AA:126:G:H8	1.71	0.54
3:AC:90:GLU:O	3:AC:93:LYS:HB3	2.08	0.54
36:DA:873:G:O2'	36:DA:874:G:H5'	2.08	0.54
1:AA:503:C:H2'	1:AA:504:C:C6	2.43	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:DH:12:PRO:HA	43:DH:48:GLY:HA2	1.90	0.54
8:CH:49:GLU:O	8:CH:51:VAL:HG13	2.07	0.54
36:BA:753:C:O2'	36:BA:754:C:H5'	2.07	0.54
54:DV:26:ASP:O	54:DV:27:ALA:HB2	2.08	0.54
36:DA:41:C:H2'	36:DA:42:G:O4'	2.07	0.54
36:DA:746:A:O2'	36:DA:2611:U:O2'	2.24	0.54
42:DG:28:VAL:HG12	42:DG:28:VAL:O	2.07	0.54
8:AH:49:GLU:O	8:AH:51:VAL:HG13	2.07	0.54
57:BY:41:GLY:O	57:BY:42:VAL:O	2.24	0.54
47:BO:117:LEU:O	47:BO:118:ALA:C	2.46	0.54
1:AA:370:C:H2'	1:AA:371:G:H8	1.72	0.54
43:DH:167:GLU:HG2	43:DH:168:PRO:HD2	1.89	0.54
25:AZ:356:PRO:C	25:AZ:359:VAL:CG2	2.67	0.54
34:B8:57:ARG:C	34:B8:59:LYS:H	2.09	0.54
34:B8:61:LEU:HD12	34:B8:62:LEU:N	2.23	0.54
36:DA:2837:G:H8	36:DA:2837:G:O5'	1.91	0.54
39:DD:149:PRO:HG3	39:DD:186:HIS:HD2	1.72	0.54
25:AZ:143:ASP:OD1	25:AZ:146:LEU:HB2	2.07	0.54
28:D2:52:ASP:O	28:D2:56:GLN:HG2	2.08	0.54
36:DA:108:U:H2'	36:DA:109:G:H8	1.73	0.54
36:BA:1856:G:C2'	36:BA:1857:G:H5'	2.38	0.54
36:BA:378:C:H2'	36:BA:379:G:H8	1.71	0.54
35:B9:7:VAL:CG2	35:B9:36:GLN:HB2	2.38	0.54
28:B2:53:LEU:HD23	28:B2:57:ILE:HD11	1.90	0.54
30:B4:9:LEU:CD1	30:B4:10:VAL:H	2.19	0.54
27:D1:11:ARG:NH2	36:DA:1365:A:O2'	2.39	0.54
51:BS:61:ASN:O	51:BS:65:VAL:HG21	2.08	0.54
36:BA:2729:G:H21	40:BE:167:VAL:HG23	1.71	0.54
52:BT:13:ARG:HH22	52:BT:15:VAL:HG11	1.72	0.54
36:DA:1680:U:H2'	36:DA:1681:G:O4'	2.07	0.54
58:BZ:163:LEU:HD11	58:BZ:165:VAL:CG2	2.37	0.54
58:BZ:58:VAL:HG12	58:BZ:59:LEU:N	2.22	0.54
7:AG:69:VAL:HG23	7:AG:135:VAL:HA	1.89	0.54
19:AS:66:MET:O	19:AS:66:MET:HG3	2.06	0.54
4:AD:138:TYR:HD2	4:AD:138:TYR:C	2.10	0.54
1:AA:1015:A:H1'	1:AA:1218:C:HO2'	1.73	0.54
36:DA:1775:U:O2'	36:DA:1776:G:H5'	2.07	0.54
3:AC:95:THR:O	3:AC:97:LYS:N	2.40	0.54
16:CP:12:LYS:C	16:CP:14:ASN:H	2.10	0.54
36:DA:1467:C:H42	36:DA:1525:G:H1	1.56	0.54
58:DZ:52:SER:O	58:DZ:71:VAL:HG23	2.08	0.54
46:BN:33:LEU:O	46:BN:52:VAL:HG21	2.07	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:D4:9:LEU:CD1	30:D4:10:VAL:H	2.20	0.54
1:CA:960:U:O2'	1:CA:1223:C:H5'	2.08	0.54
43:DH:76:VAL:C	43:DH:78:GLY:H	2.10	0.54
36:BA:473:G:O2'	36:BA:474:G:H5'	2.07	0.54
36:BA:271(P):C:H2'	36:BA:271(Q):G:C5'	2.29	0.54
49:BQ:43:THR:CB	49:BQ:45:GLN:NE2	2.69	0.54
1:AA:859:A:H2	8:AH:19:VAL:HG11	1.72	0.54
1:AA:1434:A:H3'	1:AA:1435:G:H8	1.73	0.54
38:DC:96:GLY:CA	38:DC:99:ILE:HG12	2.32	0.54
27:B1:23:LYS:O	27:B1:32:LYS:HG3	2.08	0.54
27:B1:26:ARG:HG3	27:B1:27:GLU:N	2.22	0.54
1:AA:37:U:O2'	1:AA:500:G:H4'	2.08	0.54
20:CT:45:GLN:CB	20:CT:91:LEU:HD13	2.38	0.54
36:DA:782:A:H4'	36:DA:783:A:O5'	2.07	0.54
37:DB:91:C:C5'	49:DQ:17:LEU:O	2.52	0.54
36:BA:1087:G:C2'	36:BA:1088:A:H4'	2.32	0.54
24:AY:37:YG:O2'	24:AY:38:A:H5'	2.07	0.54
18:AR:69:THR:O	18:AR:70:ILE:C	2.46	0.54
22:AW:38:A:C3'	22:AW:39:U:H5''	2.34	0.54
1:CA:1469:G:N2	1:CA:1470:G:C4	2.75	0.54
40:BE:29:GLY:HA2	40:BE:180:ASN:CG	2.27	0.54
1:AA:773:G:H1	1:AA:806:C:H42	1.55	0.54
26:B0:39:ARG:NH1	26:B0:56:ASP:OD2	2.40	0.54
36:BA:416:C:H2'	36:BA:417:C:H5'	1.90	0.54
2:CB:14:GLY:C	2:CB:15:VAL:HG22	2.28	0.54
1:AA:1089:G:O2'	1:AA:1090:U:H5'	2.08	0.54
33:B7:24:THR:C	33:B7:26:GLY:H	2.11	0.54
36:DA:2533:A:H2'	36:DA:2534:A:H5'	1.90	0.54
37:DB:3:C:H42	37:DB:118:G:H1	1.54	0.54
1:CA:577:G:H1'	1:CA:816:A:N3	2.22	0.54
50:DR:21:TYR:HB3	50:DR:47:PHE:CD2	2.43	0.54
49:DQ:136:ALA:C	49:DQ:138:ASP:H	2.11	0.54
36:BA:1833:U:O2	36:BA:1969:A:H2	1.90	0.54
43:DH:137:ASP:OD1	43:DH:138:LYS:N	2.40	0.54
36:DA:2596:U:H3'	36:DA:2597:G:C8	2.42	0.54
36:DA:880:G:H2'	36:DA:881:G:H8	1.71	0.54
52:DT:134:GLU:O	52:DT:135:ALA:HB3	2.08	0.54
1:CA:722:A:O2'	1:CA:723:U:H3'	2.07	0.54
1:CA:202:U:O2'	1:CA:203:U:P	2.66	0.54
7:CG:51:GLN:HA	7:CG:51:GLN:OE1	2.08	0.54
43:BH:88:LEU:HD22	43:BH:88:LEU:N	2.22	0.54
1:CA:132:C:N3	1:CA:231:G:C2	2.75	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BO:52:VAL:C	47:BO:53:LYS:HD2	2.27	0.54
29:D3:31:LEU:HD23	29:D3:32:GLN:H	1.72	0.54
36:BA:1252:G:O4'	53:BU:33:ARG:HD3	2.08	0.54
36:DA:2504:U:H6	36:DA:2504:U:O5'	1.91	0.54
36:DA:2259:G:C2	36:DA:2282:G:N1	2.75	0.54
36:DA:484:C:H2'	36:DA:485:C:C6	2.43	0.54
36:DA:2089:U:H3	36:DA:2230:G:H1	1.56	0.54
1:AA:963:G:H1	1:AA:972:C:H42	1.56	0.54
4:AD:9:CYS:SG	4:AD:32:ALA:CB	2.96	0.54
28:B2:62:THR:O	28:B2:66:GLU:N	2.38	0.54
41:BF:131:GLY:HA3	41:BF:139:PHE:HA	1.89	0.54
31:B5:5:PRO:CA	36:BA:2056:G:H22	2.19	0.54
36:BA:2838:G:H4'	50:BR:45:ARG:HD3	1.90	0.54
50:BR:61:HIS:HE1	50:BR:65:LEU:HD22	1.72	0.54
42:BG:107:LEU:HD11	42:BG:178:PHE:CE1	2.43	0.54
36:DA:1130:U:C2	36:DA:2025:C:H5''	2.42	0.54
53:DU:55:ARG:HG2	53:DU:58:ARG:CZ	2.37	0.54
54:DV:15:GLU:O	54:DV:96:ILE:HB	2.07	0.54
2:CB:162:ILE:HG21	2:CB:184:VAL:HG22	1.89	0.54
2:CB:200:ILE:HG22	2:CB:201:ILE:N	2.22	0.54
41:DF:163:VAL:O	41:DF:166:ALA:HB3	2.08	0.54
48:BP:106:LEU:HD11	48:BP:112:LEU:HD23	1.89	0.54
13:CM:85:GLY:O	13:CM:86:CYS:C	2.46	0.54
13:AM:85:GLY:O	13:AM:86:CYS:C	2.46	0.54
47:BO:72:PRO:O	47:BO:74:GLY:N	2.41	0.54
52:BT:50:ILE:HA	52:BT:99:LEU:CD1	2.35	0.54
36:DA:2683:C:N4	36:DA:2727:G:H21	2.06	0.54
36:DA:327:G:C2	36:DA:336:C:N3	2.76	0.54
57:DY:7:VAL:CB	57:DY:8:LYS:HD2	2.30	0.54
7:AG:31:MET:HB2	7:AG:39:ALA:HB1	1.90	0.54
10:AJ:61:GLU:OE2	14:AN:45:ARG:HD2	2.08	0.54
1:CA:1374:A:O2'	1:CA:1375:A:H5'	2.07	0.54
1:AA:797:C:O2'	1:AA:798:G:H5'	2.08	0.54
51:DS:98:VAL:C	51:DS:100:ALA:N	2.60	0.54
57:BY:10:GLY:HA2	57:BY:27:VAL:HG13	1.88	0.54
36:DA:1902:C:O2'	39:DD:244:ARG:CB	2.56	0.54
24:AY:1:G:H1'	25:AZ:300:ARG:HH21	1.65	0.54
25:AZ:226:GLU:HG3	25:AZ:240:GLY:CA	2.37	0.54
20:CT:14:LYS:HA	20:CT:17:ARG:NH2	2.22	0.54
36:BA:1199:U:H1'	53:BU:4:ALA:HB2	1.88	0.54
1:CA:1217:C:H2'	1:CA:1218:C:H6	1.73	0.54
36:BA:426:C:O2'	36:BA:427:U:H5'	2.07	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DE:116:VAL:HG21	40:DE:122:PHE:CD2	2.42	0.54
36:DA:1657:C:OP1	40:DE:136:ARG:HB2	2.07	0.54
36:BA:724:U:O2'	36:BA:725:G:H5'	2.08	0.54
40:DE:93:VAL:HG12	40:DE:175:VAL:CG2	2.38	0.54
36:DA:2312:U:H2'	36:DA:2313:C:H5''	1.90	0.54
10:CJ:35:SER:OG	10:CJ:73:ASP:HB2	2.07	0.54
1:CA:192:U:O2'	20:CT:103:GLY:HA2	2.08	0.54
36:BA:48:G:N2	36:BA:177:G:H21	2.06	0.54
36:DA:1087:G:N2	36:DA:1103:A:H61	2.06	0.54
4:CD:128:VAL:HG12	4:CD:129:ASN:N	2.22	0.54
36:BA:784:A:C6	39:BD:229:VAL:HG11	2.42	0.54
36:DA:827:U:H5'	36:DA:828:U:O5'	2.07	0.54
26:D0:69:PHE:CD2	26:D0:79:VAL:HG22	2.42	0.54
48:BP:113:LYS:HA	48:BP:129:ALA:O	2.08	0.54
20:CT:33:ILE:CG2	20:CT:63:ILE:HG12	2.37	0.54
36:BA:2094:G:N2	36:BA:2196:C:H1'	2.22	0.54
36:DA:1010:A:H1'	36:DA:1153:C:C1'	2.34	0.54
1:AA:936:C:H2'	1:AA:937:A:C8	2.39	0.54
12:CL:84:LEU:O	12:CL:101:VAL:HG23	2.08	0.54
1:CA:1068:G:N7	1:CA:1108:G:N2	2.56	0.54
4:CD:157:LEU:O	4:CD:161:ASN:ND2	2.40	0.54
52:DT:129:ARG:HD2	52:DT:131:ALA:H	1.73	0.54
25:AZ:343:TYR:CE2	25:AZ:348:ASP:HB2	2.42	0.54
18:CR:38:GLU:OE2	18:CR:38:GLU:HA	2.07	0.54
36:DA:2253:G:O2'	36:DA:2254:C:H5'	2.08	0.54
9:CI:5:TYR:CG	9:CI:6:GLY:N	2.76	0.54
1:CA:774:G:O2'	1:CA:775:G:H5'	2.08	0.54
36:BA:464:U:C2'	36:BA:465:G:H5'	2.37	0.54
36:DA:1832:C:N4	36:DA:1833:U:C4	2.75	0.54
36:DA:360:G:H2'	36:DA:361:G:O4'	2.08	0.54
35:B9:19:ARG:NH1	36:BA:2755:C:C4	2.76	0.54
47:BO:50:GLY:C	47:BO:52:VAL:H	2.11	0.54
1:CA:176:C:H2'	1:CA:177:C:H6	1.73	0.54
36:DA:1720:U:H2'	36:DA:1721:G:H5''	1.89	0.54
36:DA:2488:A:H2'	36:DA:2489:G:H8	1.73	0.54
44:DJ:45:UNK:O	44:DJ:49:UNK:HA	2.07	0.54
1:CA:1215:G:N3	1:CA:1215:G:H2'	2.22	0.54
1:AA:176:C:H2'	1:AA:177:C:H6	1.73	0.54
1:AA:364:A:H2'	1:AA:365:U:C2	2.43	0.54
27:B1:40:ARG:NH2	36:BA:2232:U:OP2	2.41	0.54
48:BP:36:LYS:HD2	48:BP:41:ARG:HB3	1.89	0.54
48:BP:40:SER:C	48:BP:41:ARG:HD2	2.28	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:275:LYS:O	39:DD:276:LYS:HB2	2.08	0.54
36:DA:2283:C:C5	36:DA:2389:G:H2'	2.43	0.54
36:DA:2341:G:C2	36:DA:2342:C:N3	2.76	0.54
25:AZ:31:LEU:HB3	25:AZ:70:TYR:CE2	2.42	0.54
5:CE:12:LEU:C	5:CE:12:LEU:HD22	2.28	0.54
36:BA:1796:U:OP1	39:BD:276:LYS:HE3	2.08	0.54
42:DG:86:MET:HG2	42:DG:86:MET:O	2.06	0.54
41:BF:40:GLN:NE2	41:BF:182:ASN:HB2	2.22	0.54
12:AL:115:LYS:O	12:AL:117:ARG:N	2.40	0.54
36:BA:90:U:H2'	36:BA:90:U:O2	2.07	0.54
36:BA:2873:A:N3	50:BR:6:SER:OG	2.35	0.54
13:AM:56:LEU:HD13	13:AM:56:LEU:C	2.28	0.54
30:B4:35:VAL:HG12	42:BG:112:PRO:HG3	1.90	0.54
3:CC:5:ILE:HD13	3:CC:5:ILE:N	2.23	0.54
36:DA:21:A:H2'	36:DA:22:C:H6	1.73	0.54
53:DU:94:ASN:O	53:DU:96:ALA:N	2.38	0.54
1:AA:353:A:H5'	1:AA:353:A:H8	1.73	0.54
1:AA:376:G:H5''	16:AP:5:ARG:HB2	1.88	0.54
51:BS:61:ASN:OD1	51:BS:62:LYS:N	2.41	0.54
32:D6:27:LYS:HG3	32:D6:27:LYS:O	2.08	0.54
40:BE:48:GLN:NE2	40:BE:78:LEU:HD13	2.23	0.54
32:B6:29:ASN:O	32:B6:30:THR:C	2.46	0.54
52:BT:101:PHE:O	52:BT:103:ARG:N	2.41	0.54
36:DA:2846:G:H2'	36:DA:2847:U:O4'	2.06	0.54
36:DA:2864:G:OP1	52:DT:119:LYS:HD2	2.08	0.54
35:D9:12:ASP:O	35:D9:14:CYS:N	2.41	0.54
10:CJ:47:PHE:CZ	14:CN:37:PHE:HE2	2.26	0.54
57:BY:17:SER:HB2	57:BY:71:LYS:HD2	1.90	0.54
1:AA:571:U:O2	1:AA:918:A:H5'	2.07	0.54
2:AB:35:GLU:HA	2:AB:39:ILE:O	2.08	0.54
46:DN:134:ARG:N	46:DN:135:PRO:HD3	2.22	0.54
46:DN:15:LEU:O	46:DN:136:GLU:HA	2.07	0.54
36:DA:1777:U:O2'	36:DA:1778:U:H5'	2.08	0.54
36:BA:2154:G:H8	36:BA:2154:G:O5'	1.91	0.54
3:AC:70:VAL:CG1	3:AC:71:ALA:N	2.70	0.54
36:BA:1774:C:H4'	36:BA:1979:C:O2	2.08	0.54
36:BA:1902:C:C1'	39:BD:244:ARG:HG3	2.38	0.54
36:DA:862:G:H3'	36:DA:863:A:C8	2.43	0.54
36:DA:718:A:H2'	36:DA:719:C:C5'	2.38	0.54
4:CD:108:LEU:HD12	4:CD:165:MET:HE1	1.90	0.54
53:BU:94:ASN:O	53:BU:96:ALA:N	2.39	0.54
13:CM:35:GLU:HG3	13:CM:36:LYS:N	2.23	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:45:VAL:O	13:CM:48:LEU:HG	2.08	0.54
36:BA:1539:G:H2'	36:BA:1540:U:O4'	2.07	0.54
36:BA:744:G:H2'	36:BA:745:G:O4'	2.08	0.54
8:CH:86:ILE:HG13	8:CH:133:LEU:HD23	1.90	0.54
53:BU:99:ALA:HA	53:BU:106:PHE:CG	2.43	0.54
22:AV:40:C:H2'	22:AV:41:C:C6	2.43	0.54
36:DA:2243:U:O2	36:DA:2434:A:C2	2.61	0.54
1:CA:58:C:H1'	1:CA:388:G:N7	2.23	0.54
1:AA:1360:A:C2'	1:AA:1361:G:H5'	2.38	0.54
36:BA:1308:A:N1	36:BA:1611:C:H1'	2.23	0.54
47:BO:88:ASN:ND2	47:BO:92:GLU:HB3	2.23	0.54
46:BN:62:VAL:HG23	46:BN:66:LYS:HD2	1.88	0.54
52:DT:83:ILE:O	52:DT:84:GLN:O	2.25	0.54
26:B0:20:ARG:CD	26:B0:20:ARG:H	2.19	0.54
19:CS:6:LYS:CD	19:CS:6:LYS:H	2.20	0.54
36:DA:1820:U:C2	39:DD:202:LYS:HB3	2.42	0.54
4:CD:133:VAL:HG12	4:CD:135:LEU:H	1.71	0.54
36:BA:1323:U:H2'	36:BA:1324:G:H5'	1.90	0.54
36:DA:2252:G:C2'	36:DA:2253:G:H5'	2.38	0.54
29:B3:11:SER:HB3	36:BA:988:A:O5'	2.08	0.54
49:BQ:18:LYS:HB3	49:BQ:98:LYS:HZ1	1.73	0.54
1:AA:564:C:H2'	1:AA:565:U:O4'	2.08	0.54
11:AK:23:ALA:CB	11:AK:28:THR:HG23	2.37	0.54
25:CZ:118:GLU:O	25:CZ:120:ILE:N	2.41	0.54
25:CZ:116:THR:HG22	25:CZ:120:ILE:HD12	1.89	0.54
36:DA:1511:C:H2'	36:DA:1512:U:H6	1.73	0.54
36:BA:875:G:H2'	36:BA:876:C:O4'	2.08	0.54
58:BZ:150:LEU:HD23	58:BZ:150:LEU:O	2.07	0.54
36:BA:500:G:H2'	36:BA:502:A:OP2	2.08	0.54
39:DD:3:VAL:HG12	39:DD:17:THR:HB	1.90	0.54
51:DS:78:LEU:HD11	51:DS:103:GLU:CB	2.38	0.54
41:DF:42:ALA:C	41:DF:44:ARG:H	2.11	0.54
3:AC:175:LEU:HD21	3:AC:201:TYR:CE2	2.43	0.54
28:B2:4:SER:CB	28:B2:7:ARG:HD2	2.38	0.54
41:DF:130:ALA:HB3	41:DF:142:TRP:HD1	1.71	0.54
36:BA:1744:C:C2'	36:BA:1745:C:H5'	2.38	0.54
27:B1:16:ASN:ND2	27:B1:37:ILE:HG22	2.23	0.54
1:CA:370:C:H2'	1:CA:371:G:H8	1.73	0.54
43:DH:58:GLU:O	43:DH:62:LYS:HB2	2.08	0.54
36:BA:1255:U:C5	41:BF:73:ALA:HA	2.43	0.54
36:BA:13:A:H2	36:BA:14:A:H62	1.56	0.54
36:BA:674:G:H1'	41:BF:74:ARG:HD3	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:D8:59:LYS:NZ	48:DP:50:ARG:HB3	2.23	0.54
5:CE:31:LEU:HD23	5:CE:45:PHE:HB2	1.90	0.54
1:CA:254:G:H2'	1:CA:255:G:H8	1.72	0.54
41:BF:40:GLN:HE22	41:BF:184:TYR:HB3	1.72	0.54
36:BA:2469:A:H1'	36:BA:2482:G:C6	2.42	0.54
41:BF:159:GLY:N	41:BF:178:PRO:HD3	2.23	0.54
10:AJ:16:LEU:HD13	10:AJ:16:LEU:C	2.27	0.54
13:AM:52:GLU:CA	13:AM:55:ARG:HB3	2.35	0.54
11:CK:125:PHE:C	11:CK:127:LYS:H	2.10	0.54
36:DA:1192:G:H8	36:DA:1192:G:O5'	1.90	0.54
1:CA:1054:C:N4	24:CY:34:G:C1'	2.67	0.54
1:CA:972:C:C4'	10:CJ:57:LYS:HG3	2.37	0.54
1:CA:1047:G:C5'	14:CN:4:LYS:HE2	2.27	0.54
2:CB:8:LYS:HZ1	2:CB:217:ARG:NH1	2.05	0.54
41:DF:159:GLY:N	41:DF:178:PRO:HD3	2.23	0.54
1:CA:741:G:O2'	1:CA:742:G:H5'	2.07	0.54
1:AA:1226:C:H6	13:AM:103:THR:OG1	1.91	0.54
52:DT:58:ASN:O	52:DT:60:THR:HG23	2.08	0.54
58:BZ:51:ALA:O	58:BZ:53:ILE:N	2.41	0.54
9:CI:48:GLU:N	9:CI:49:PRO:HD2	2.23	0.54
10:CJ:61:GLU:HG3	14:CN:58:LYS:CE	2.34	0.54
36:BA:1473:G:N3	36:BA:1474:C:H1'	2.23	0.54
4:AD:173:TRP:O	4:AD:174:LEU:HD23	2.08	0.54
42:BG:16:ARG:C	42:BG:18:GLU:N	2.61	0.54
35:B9:12:ASP:OD2	35:B9:13:LYS:HG3	2.07	0.54
47:DO:91:LEU:HD13	47:DO:111:PHE:HE1	1.73	0.54
20:CT:23:ARG:HG2	20:CT:23:ARG:HH11	1.73	0.54
37:DB:70:C:H2'	37:DB:71:C:H6	1.72	0.54
53:BU:96:ALA:C	53:BU:98:LEU:H	2.10	0.54
40:DE:120:TRP:CB	40:DE:155:LYS:HE3	2.37	0.54
43:DH:85:LYS:HE2	43:DH:86:GLU:N	2.23	0.54
36:BA:718:A:H2'	36:BA:719:C:C5'	2.38	0.54
8:CH:127:LEU:HD12	8:CH:129:VAL:CG1	2.38	0.54
1:AA:879:C:O2'	1:AA:880:C:H5'	2.07	0.54
1:AA:1255:G:H2'	1:AA:1255:G:N3	2.22	0.54
2:CB:111:ARG:HE	2:CB:145:LEU:HD21	1.73	0.54
2:AB:167:PRO:HG2	2:AB:192:SER:CB	2.38	0.54
36:DA:133:C:N3	36:DA:146:G:O6	2.41	0.54
38:BC:96:GLY:CA	38:BC:99:ILE:HG12	2.32	0.54
36:DA:598:G:H2'	36:DA:599:G:O4'	2.08	0.54
36:BA:145:G:H3'	36:BA:146:G:H5''	1.89	0.54
37:BB:17:C:H2'	37:BB:18:G:O4'	2.07	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:784:A:HO2'	36:BA:785:G:H8	1.56	0.54
1:CA:781:A:C5	1:CA:802:A:C2	2.95	0.54
36:BA:1601:G:C2'	36:BA:1602:U:H5'	2.38	0.54
36:DA:654(N):G:O2'	36:DA:654(O):G:H5'	2.07	0.54
2:AB:36:ARG:O	2:AB:38:GLY:N	2.39	0.54
36:DA:1020:A:C2	36:DA:1141:U:H1'	2.43	0.54
1:CA:110:C:O2'	1:CA:111:G:H5'	2.08	0.54
36:DA:1498:C:H3'	36:DA:1499:C:H5''	1.88	0.54
36:DA:1288:U:C2	36:DA:1327:C:C2	2.96	0.54
1:CA:1170:A:C2'	1:CA:1171:G:H5'	2.38	0.54
1:CA:686:U:O4	1:CA:703:G:H1'	2.07	0.54
36:DA:271(B):C:H42	36:DA:271(W):G:H21	1.55	0.54
1:AA:734:G:C2	1:AA:735:C:C2	2.96	0.54
2:AB:11:LEU:O	2:AB:14:GLY:N	2.40	0.54
36:BA:381:G:C2	36:BA:394:A:C2	2.96	0.54
1:AA:606:G:H21	1:AA:631:G:H2'	1.72	0.54
36:BA:481:G:H4'	36:BA:481:G:OP1	2.07	0.54
36:BA:2312:U:H2'	36:BA:2313:C:H5'	1.88	0.54
36:BA:2297:C:C2'	36:BA:2298:A:H5'	2.38	0.54
36:BA:2677:G:O2'	36:BA:2678:C:H5'	2.07	0.54
36:DA:1431:U:H2'	36:DA:1432:C:H5'	1.90	0.54
32:D6:33:LYS:O	32:D6:34:LEU:CB	2.56	0.54
36:DA:1722:A:O2'	36:DA:1739:U:H5'	2.07	0.54
36:BA:1625:C:O2'	36:BA:1626:G:H5'	2.08	0.54
3:AC:165:THR:CG2	3:AC:165:THR:O	2.56	0.54
15:AO:4:THR:O	15:AO:6:GLU:N	2.34	0.54
1:CA:1235:U:O3'	21:CU:3:LYS:HB2	2.07	0.54
36:BA:2488:A:H2'	36:BA:2489:G:H8	1.73	0.54
43:DH:88:LEU:N	43:DH:88:LEU:HD22	2.22	0.54
36:BA:1265:A:OP1	36:BA:1265:A:H8	1.91	0.54
6:CF:30:LEU:O	6:CF:35:ALA:HB3	2.08	0.54
1:AA:635:G:O2'	1:AA:636:U:H5'	2.08	0.54
26:D0:72:ARG:O	26:D0:74:ARG:N	2.41	0.54
36:BA:2328:A:H2'	36:BA:2329:G:H8	1.73	0.54
36:BA:2283:C:C5	36:BA:2389:G:H2'	2.43	0.54
36:BA:2414:G:C2	36:BA:2415:G:C8	2.96	0.54
36:DA:2821:A:H2'	36:DA:2822:G:C8	2.43	0.54
40:DE:110:GLY:O	50:DR:2:ARG:HG2	2.08	0.54
50:DR:59:ASP:O	50:DR:61:HIS:N	2.41	0.54
19:AS:18:LYS:HG3	19:AS:18:LYS:O	2.08	0.54
39:DD:70:TRP:CZ3	39:DD:150:LYS:HA	2.42	0.54
36:DA:2329:G:O2'	36:DA:2330:G:H5'	2.08	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:607:U:OP1	41:DF:102:PRO:HA	2.09	0.54
5:CE:103:GLY:H	5:CE:106:PRO:HG3	1.73	0.54
38:BC:77:ILE:O	38:BC:78:ALA:O	2.24	0.54
36:BA:1201:C:N3	36:BA:1245:G:C2	2.76	0.54
36:BA:1245:G:H5'	41:BF:34:TRP:HZ2	1.71	0.54
43:BH:37:VAL:CG1	43:BH:38:SER:H	2.09	0.54
43:DH:64:LEU:O	43:DH:67:LEU:HB3	2.08	0.54
43:DH:68:THR:HA	43:DH:71:LEU:CB	2.37	0.54
54:DV:40:LEU:HD13	54:DV:46:VAL:H	1.72	0.54
13:AM:53:VAL:O	13:AM:56:LEU:HB3	2.08	0.54
42:BG:63:ILE:CG1	42:BG:64:THR:H	1.94	0.54
36:DA:1192:G:C6	48:DP:29:LYS:NZ	2.76	0.54
16:AP:13:HIS:O	16:AP:15:PRO:HD3	2.08	0.54
1:CA:1195:C:H5''	1:CA:1196:U:OP2	2.07	0.54
51:BS:68:GLN:HA	51:BS:71:ARG:HD3	1.89	0.54
51:BS:77:ALA:O	51:BS:79:ALA:N	2.37	0.54
51:BS:98:VAL:C	51:BS:100:ALA:N	2.61	0.54
8:AH:11:THR:CG2	8:AH:14:ARG:HH12	2.17	0.54
36:DA:320:A:C2	36:DA:323:G:N1	2.75	0.54
6:CF:37:VAL:CG1	6:CF:38:GLU:N	2.71	0.54
5:AE:48:ALA:C	5:AE:50:GLU:H	2.10	0.54
25:CZ:193:ASN:O	25:CZ:195:TRP:N	2.40	0.54
25:CZ:20:VAL:HA	25:CZ:24:LYS:NZ	2.21	0.54
25:CZ:137:LYS:HG2	62:CZ:501:GDP:C5	2.43	0.54
36:BA:1761:C:H3'	36:BA:1762:A:C8	2.43	0.54
36:BA:2550:G:C2'	36:BA:2551:C:H5'	2.38	0.54
52:BT:89:VAL:HG12	52:BT:91:ARG:CG	2.38	0.54
36:DA:1993:U:H5''	40:DE:128:SER:HB3	1.88	0.54
52:DT:10:VAL:C	52:DT:12:SER:H	2.10	0.54
52:DT:89:VAL:CB	52:DT:91:ARG:HE	2.21	0.54
58:BZ:51:ALA:HA	58:BZ:55:HIS:CD2	2.41	0.54
1:AA:1187:G:O2'	9:AI:111:ARG:NH1	2.41	0.54
1:CA:1187:G:O2'	9:CI:111:ARG:NH1	2.41	0.54
36:BA:856:C:H2'	36:BA:857:C:O4'	2.08	0.54
19:AS:28:LYS:C	19:AS:29:ARG:HG3	2.28	0.54
47:BO:111:PHE:CB	47:BO:114:ILE:HD13	2.34	0.54
37:BB:57:A:C5	42:BG:29:TRP:CD1	2.95	0.54
36:DA:2101:G:H22	36:DA:2189:U:H3	1.56	0.54
1:AA:1525:G:H2'	1:AA:1526:G:H8	1.72	0.54
46:DN:133:GLN:CG	46:DN:134:ARG:H	2.16	0.54
25:AZ:223:MET:O	25:AZ:223:MET:HG3	2.07	0.54
3:AC:113:ALA:O	3:AC:114:PRO:C	2.46	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:CW:52:G:N2	22:CW:53:G:H1'	2.23	0.54
36:BA:1826:G:O5'	36:BA:1826:G:H8	1.90	0.54
1:AA:899:C:H2'	1:AA:900:A:O4'	2.07	0.54
41:DF:10:PRO:HG2	41:DF:11:VAL:H	1.72	0.54
37:DB:8:U:H2'	37:DB:9:G:H8	1.72	0.54
36:DA:1637:A:H2'	36:DA:1638:C:O4'	2.08	0.54
25:CZ:259:ALA:CB	25:CZ:260:PRO:HD2	2.28	0.54
30:D4:14:ILE:HG13	30:D4:31:ILE:HB	1.90	0.54
42:DG:163:ALA:CB	42:DG:169:ALA:HB2	2.35	0.54
36:BA:1551:C:H2'	36:BA:1552:G:C5'	2.38	0.54
38:BC:122:ALA:O	38:BC:126:LYS:HG2	2.08	0.54
24:AY:9:A:H2	24:AY:45:G:C6	2.25	0.54
13:CM:108:ARG:H	13:CM:108:ARG:HD2	1.70	0.54
1:AA:977:A:N3	1:AA:977:A:C2'	2.70	0.54
8:AH:20:TYR:HD1	8:AH:65:TYR:CD2	2.26	0.54
8:CH:20:TYR:HA	8:CH:65:TYR:CE2	2.43	0.54
2:CB:130:ARG:HH21	2:CB:131:PRO:CD	2.21	0.54
2:AB:130:ARG:HH21	2:AB:131:PRO:CD	2.21	0.54
2:AB:130:ARG:NH1	2:AB:134:GLU:HG3	2.22	0.54
36:BA:828:U:H2'	36:BA:829:A:C8	2.43	0.54
38:BC:38:ASP:O	38:BC:177:LYS:HE3	2.07	0.54
1:AA:1155:G:H2'	1:AA:1156:G:C8	2.43	0.54
4:CD:129:ASN:HD21	4:CD:145:GLU:N	2.06	0.54
1:CA:781:A:C3'	1:CA:782:A:H5'	2.38	0.54
25:CZ:325:LYS:HB2	25:CZ:331:HIS:HA	1.89	0.54
36:BA:272(B):G:H1	36:BA:366:C:N4	2.06	0.54
1:AA:1324:A:C4'	1:AA:1362:C:H4'	2.35	0.54
18:CR:32:ARG:O	18:CR:69:THR:HG21	2.08	0.54
25:AZ:316:PHE:CE2	25:AZ:400:VAL:HG22	2.42	0.54
12:CL:86:ARG:CG	12:CL:87:GLY:H	2.13	0.54
16:CP:25:ARG:HG3	16:CP:25:ARG:HH11	1.73	0.54
36:BA:182:A:C6	36:BA:183:C:C4	2.96	0.54
1:CA:1380:U:O2	7:CG:3:ARG:NH2	2.40	0.54
36:DA:2063:C:O2	36:DA:2450:A:N1	2.41	0.54
12:AL:105:TYR:HD2	12:AL:105:TYR:N	2.05	0.54
36:DA:1690:A:H2'	36:DA:1691:C:C5'	2.36	0.54
1:CA:412:A:H4'	1:CA:413:G:C8	2.39	0.54
46:BN:60:ILE:CD1	46:BN:99:LEU:HD23	2.38	0.54
25:AZ:116:THR:HG22	25:AZ:120:ILE:HD12	1.89	0.54
1:CA:1255:G:H2'	1:CA:1255:G:N3	2.21	0.54
36:DA:777:A:H2'	36:DA:778:G:H8	1.71	0.54
36:BA:1431:U:H2'	36:BA:1432:C:C5'	2.38	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BN:65:LYS:O	46:BN:69:GLN:HB2	2.08	0.54
1:CA:1082:G:H2'	1:CA:1083:U:O4'	2.08	0.54
36:DA:497:A:H2'	36:DA:498:G:H8	1.73	0.54
46:DN:16:ILE:CD1	46:DN:139:GLU:N	2.71	0.54
36:DA:2728:U:O2'	40:DE:22:PRO:HG3	2.08	0.54
1:AA:486:U:O2'	1:AA:487:A:H5'	2.08	0.54
54:BV:26:ASP:O	54:BV:27:ALA:HB2	2.08	0.54
15:AO:3:ILE:HG23	15:AO:38:ARG:NH2	2.22	0.54
50:BR:43:GLU:OE2	50:BR:43:GLU:HA	2.06	0.54
12:CL:70:ILE:CD1	12:CL:77:LEU:HD12	2.38	0.54
25:AZ:17:ILE:HD13	25:AZ:102:ALA:HB1	1.89	0.54
34:B8:3:LYS:HD2	36:BA:242:G:C8	2.43	0.53
36:BA:251:A:H2'	36:BA:252:G:O4'	2.08	0.53
36:BA:814:C:H2'	36:BA:815:C:C6	2.43	0.53
50:DR:9:LYS:O	50:DR:10:LEU:HD23	2.08	0.53
36:BA:485:C:H2'	36:BA:486:C:C6	2.44	0.53
36:DA:2399:G:C2	36:DA:2400:G:H1'	2.43	0.53
5:CE:107:ARG:O	5:CE:111:GLU:HG3	2.09	0.53
41:BF:31:HIS:CG	48:BP:13:ASN:HB2	2.43	0.53
41:BF:42:ALA:O	41:BF:44:ARG:N	2.40	0.53
1:AA:1194:U:H2'	1:AA:1195:C:C6	2.43	0.53
50:BR:55:ALA:CB	50:BR:79:LEU:HD11	2.37	0.53
36:DA:1364:G:H5''	36:DA:1365:A:OP2	2.08	0.53
36:DA:1259:G:H2'	36:DA:1260:G:H8	1.73	0.53
36:DA:2061:G:H5''	36:DA:2503:A:C6	2.43	0.53
36:DA:814:C:H2'	36:DA:815:C:C6	2.43	0.53
8:CH:109:ILE:HG23	8:CH:137:VAL:HB	1.89	0.53
9:CI:89:ASN:O	9:CI:92:TYR:HB2	2.07	0.53
1:AA:276:G:O2'	1:AA:277:C:H5'	2.08	0.53
17:AQ:59:ILE:CG2	17:AQ:71:PHE:HB3	2.39	0.53
1:CA:1054:C:C6	1:CA:1196:U:C5	2.96	0.53
1:CA:509:A:H5'	4:CD:54:TYR:HD2	1.73	0.53
51:BS:88:ASP:CG	51:BS:89:ARG:H	2.11	0.53
8:AH:37:ARG:O	8:AH:41:ARG:HB2	2.07	0.53
47:BO:71:ARG:NE	47:BO:105:GLU:OE2	2.40	0.53
52:BT:51:ARG:NE	52:BT:100:TYR:OH	2.42	0.53
52:BT:32:TYR:CG	52:BT:81:PRO:HB3	2.43	0.53
58:BZ:126:VAL:HG12	58:BZ:163:LEU:HD12	1.89	0.53
58:BZ:4:ARG:HA	58:BZ:57:ILE:HG23	1.90	0.53
9:AI:10:ARG:HG3	9:AI:75:ASP:CB	2.36	0.53
26:B0:10:THR:HG22	26:B0:12:ASN:H	1.73	0.53
58:DZ:165:VAL:HG12	58:DZ:166:SER:H	1.71	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1367:C:H5'	10:CJ:60:ARG:NH2	2.23	0.53
1:AA:1521:G:H2'	1:AA:1522:U:C6	2.43	0.53
13:AM:125:ARG:NH1	36:BA:1913:A:C8	2.76	0.53
19:AS:40:ILE:CG2	19:AS:67:VAL:HA	2.37	0.53
3:CC:113:ALA:CB	3:CC:185:GLY:H	2.21	0.53
19:CS:27:GLU:O	19:CS:28:LYS:O	2.26	0.53
3:AC:13:GLY:O	3:AC:14:ILE:HG22	2.08	0.53
3:AC:18:TRP:HE3	3:AC:18:TRP:N	2.06	0.53
37:DB:74:U:H2'	37:DB:75:G:C1'	2.37	0.53
43:BH:26:VAL:HG11	43:BH:76:VAL:HA	1.90	0.53
21:CU:2:GLY:N	21:CU:5:ASP:HB2	2.24	0.53
21:CU:5:ASP:O	21:CU:7:ARG:N	2.41	0.53
39:BD:69:ARG:HD2	39:BD:119:ALA:HB2	1.89	0.53
13:CM:55:ARG:O	13:CM:58:GLU:HB2	2.07	0.53
30:D4:31:ILE:HG22	30:D4:33:VAL:HG23	1.90	0.53
42:DG:34:LEU:HD21	42:DG:100:TRP:CZ3	2.43	0.53
36:DA:2305:A:H61	42:DG:43:LEU:HA	1.72	0.53
7:AG:119:ARG:O	7:AG:120:ILE:C	2.45	0.53
36:DA:2785:C:H2'	36:DA:2786:U:H6	1.72	0.53
20:AT:45:GLN:HB2	20:AT:91:LEU:HD22	1.89	0.53
1:CA:1499:A:H1'	1:CA:1520:G:C5'	2.38	0.53
36:BA:1103:A:H5'	36:BA:1104:C:OP2	2.08	0.53
27:D1:72:GLU:O	27:D1:73:LEU:HD12	2.07	0.53
36:BA:1170:G:H1	36:BA:1179:C:H42	1.56	0.53
11:AK:120:ARG:NH1	11:AK:126:ARG:HD2	2.22	0.53
20:AT:36:LEU:HD12	20:AT:59:ALA:HB2	1.87	0.53
1:AA:444:C:H2'	1:AA:445:G:C8	2.43	0.53
39:DD:142:VAL:CG2	39:DD:143:HIS:N	2.71	0.53
36:DA:635:C:H2'	36:DA:636:G:C8	2.43	0.53
36:BA:847:U:H2'	36:BA:848:G:H5''	1.88	0.53
4:CD:134:ASP:C	4:CD:135:LEU:HD13	2.28	0.53
26:D0:4:LYS:HG3	49:DQ:82:ARG:HD2	1.90	0.53
46:DN:58:ASP:C	46:DN:60:ILE:N	2.59	0.53
25:AZ:263:ARG:HH21	25:AZ:297:GLU:CB	2.21	0.53
36:BA:500:G:N2	36:BA:502:A:H3'	2.23	0.53
26:D0:32:ARG:HA	26:D0:64:ASP:HB3	1.89	0.53
36:DA:949:C:O2'	36:DA:950:G:H5'	2.08	0.53
50:DR:107:ASP:O	50:DR:108:GLY:C	2.45	0.53
37:DB:40:U:H3'	37:DB:41:U:H5''	1.89	0.53
1:AA:647:C:O2'	1:AA:648:A:H5'	2.09	0.53
32:B6:42:TRP:CE3	32:B6:42:TRP:HA	2.43	0.53
36:BA:674:G:H5''	41:BF:76:GLY:N	2.23	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1613:G:H3'	36:DA:1614:A:H5''	1.90	0.53
50:DR:7:GLY:O	50:DR:8:ARG:HB2	2.08	0.53
32:D6:15:GLU:HA	32:D6:49:HIS:ND1	2.22	0.53
32:D6:18:ARG:NH1	32:D6:18:ARG:HG2	2.19	0.53
5:CE:45:PHE:CE2	5:CE:47:LYS:HD2	2.43	0.53
38:DC:77:ILE:HG22	38:DC:77:ILE:O	2.08	0.53
36:DA:1887:C:H2'	36:DA:1888:G:C5'	2.15	0.53
36:BA:620:G:H4'	36:BA:621:A:OP1	2.07	0.53
43:BH:61:HIS:C	43:BH:63:SER:N	2.58	0.53
4:AD:62:GLN:HE22	4:AD:65:ARG:HH21	1.57	0.53
4:AD:61:LYS:O	4:AD:64:LEU:N	2.41	0.53
36:BA:94:C:H3'	36:BA:94(A):G:C8	2.43	0.53
36:BA:1613:G:H3'	36:BA:1614:A:H5''	1.88	0.53
36:DA:1130:U:O2	36:DA:2025:C:H5''	2.07	0.53
36:DA:528:A:C2	36:DA:2043:C:H4'	2.43	0.53
36:DA:534:U:H5'	53:DU:42:ALA:CB	2.39	0.53
32:D6:29:ASN:O	32:D6:30:THR:C	2.46	0.53
41:DF:160:ASN:HD21	41:DF:162:LEU:HD13	1.70	0.53
40:BE:4:ILE:HD11	40:BE:28:ALA:O	2.08	0.53
32:B6:8:LYS:O	32:B6:27:LYS:HA	2.07	0.53
1:AA:954:G:H4'	13:AM:120:LYS:HD3	1.90	0.53
13:AM:106:ASN:O	13:AM:107:ALA:HB2	2.06	0.53
5:AE:61:TYR:O	5:AE:62:ALA:C	2.46	0.53
36:BA:1763:G:H2'	36:BA:1764:G:C5'	2.38	0.53
52:BT:80:SER:CB	52:BT:81:PRO:CD	2.85	0.53
52:DT:26:ASP:H	52:DT:90:GLN:HA	1.73	0.53
37:BB:66:A:H61	37:BB:108:U:H3'	1.72	0.53
58:BZ:47:VAL:HG11	58:BZ:57:ILE:HG12	1.90	0.53
57:DY:28:LYS:C	57:DY:38:ILE:HG22	2.29	0.53
14:AN:22:THR:O	14:AN:23:ARG:CB	2.56	0.53
10:CJ:51:ARG:NE	10:CJ:61:GLU:HB2	2.23	0.53
22:AV:6:G:N2	22:AV:68:C:N3	2.56	0.53
1:AA:790:A:H2'	1:AA:791:G:C8	2.42	0.53
19:AS:29:ARG:O	19:AS:31:ILE:HG22	2.08	0.53
51:DS:88:ASP:CG	51:DS:89:ARG:H	2.11	0.53
1:CA:1238:A:OP1	1:CA:1335:C:H1'	2.08	0.53
36:DA:1825:A:H4'	39:DD:233:HIS:CE1	2.42	0.53
55:DW:70:TYR:CE1	55:DW:72:LYS:HA	2.44	0.53
31:B5:40:LYS:HE2	31:B5:46:CYS:SG	2.47	0.53
3:CC:83:ARG:C	3:CC:85:ARG:H	2.10	0.53
2:CB:87:ARG:HH21	2:CB:233:SER:CB	2.21	0.53
3:AC:48:TYR:C	3:AC:50:ALA:H	2.11	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:AP:22:THR:HA	16:AP:33:ILE:HG12	1.89	0.53
36:BA:1825:A:H2'	36:BA:1826:G:C8	2.43	0.53
36:BA:1825:A:O3'	39:BD:233:HIS:CE1	2.62	0.53
43:BH:26:VAL:HG11	43:BH:75:ALA:O	2.08	0.53
53:BU:83:LEU:CD1	53:BU:83:LEU:H	2.21	0.53
13:CM:14:ARG:HG3	13:CM:44:ARG:CZ	2.37	0.53
43:DH:87:LEU:CD2	43:DH:164:TYR:HA	2.37	0.53
43:DH:85:LYS:HE3	43:DH:87:LEU:HG	1.88	0.53
43:DH:26:VAL:HG11	43:DH:76:VAL:HA	1.90	0.53
36:BA:716:A:C2'	36:BA:717:G:H5''	2.37	0.53
40:DE:4:ILE:HG12	40:DE:5:LEU:N	2.23	0.53
1:AA:1100:C:OP2	2:AB:96:ARG:HG2	2.08	0.53
1:AA:828:A:H2'	1:AA:829:G:O4'	2.09	0.53
36:BA:515:A:H2'	36:BA:516:C:O4'	2.09	0.53
1:CA:1155:G:H2'	1:CA:1156:G:H8	1.73	0.53
20:AT:57:ARG:HH11	20:AT:103:GLY:H	1.53	0.53
1:AA:383:A:OP1	1:AA:454:C:H2'	2.08	0.53
37:DB:91:C:OP1	49:DQ:17:LEU:N	2.41	0.53
1:AA:599:C:H2'	1:AA:600:C:C6	2.43	0.53
8:AH:86:ILE:HG21	8:AH:133:LEU:CD2	2.33	0.53
1:CA:1512:U:O2'	1:CA:1513:A:H5'	2.08	0.53
1:CA:778:G:H2'	1:CA:779:C:H6	1.73	0.53
36:DA:2223:G:C2'	36:DA:2224:G:H5'	2.38	0.53
7:AG:143:ARG:O	7:AG:145:ALA:O	2.27	0.53
36:DA:1600:C:H2'	36:DA:1601:G:C8	2.43	0.53
29:D3:4:LEU:HG	29:D3:39:ASP:HB2	1.91	0.53
42:DG:27:ASN:HD22	42:DG:29:TRP:HB2	1.72	0.53
19:AS:6:LYS:C	19:AS:7:LYS:HE3	2.28	0.53
36:BA:1779:U:C2'	36:BA:1783:A:H62	2.21	0.53
36:DA:807:U:H2'	36:DA:808:G:O4'	2.08	0.53
12:CL:104:VAL:HG12	12:CL:105:TYR:CD2	2.43	0.53
1:CA:328:C:H4'	1:CA:329:A:C5'	2.38	0.53
36:BA:364:C:C2'	36:BA:364:C:O2	2.56	0.53
27:D1:95:LEU:CG	27:D1:95:LEU:O	2.55	0.53
37:BB:14:U:H2'	37:BB:15:A:H2	1.73	0.53
36:DA:1027:A:H2	36:DA:1028:A:N7	2.06	0.53
2:AB:16:HIS:HB3	2:AB:210:SER:CA	2.39	0.53
22:CV:27:G:H2'	22:CV:28:G:H8	1.74	0.53
49:BQ:10:ARG:NH1	49:BQ:10:ARG:HB2	2.23	0.53
1:AA:1009:G:H2'	1:AA:1010:G:C8	2.43	0.53
56:DX:3:THR:N	56:DX:6:ASP:OD2	2.41	0.53
53:DU:97:ASP:O	53:DU:100:VAL:HB	2.08	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:B0:72:ARG:O	26:B0:74:ARG:N	2.41	0.53
43:DH:98:LEU:HB3	43:DH:125:VAL:HG21	1.90	0.53
36:BA:2028:U:O4	36:BA:2033:A:OP1	2.26	0.53
36:BA:669:G:N3	36:BA:669:G:C2'	2.72	0.53
48:BP:50:ARG:NH1	48:BP:51:PHE:CE2	2.75	0.53
36:DA:2284:C:H1'	36:DA:2325:G:N2	2.22	0.53
48:DP:147:LEU:HG	48:DP:148:LEU:H	1.71	0.53
39:BD:35:LYS:HG2	39:BD:63:ARG:CB	2.38	0.53
1:AA:542:G:H2'	1:AA:543:C:H6	1.74	0.53
1:AA:995:C:N3	1:AA:1047:G:H5'	2.24	0.53
28:B2:25:VAL:O	28:B2:27:GLU:N	2.41	0.53
28:B2:33:MET:HA	28:B2:36:ARG:NH1	2.23	0.53
2:AB:218:ALA:O	2:AB:222:ILE:HG12	2.08	0.53
2:AB:81:VAL:O	2:AB:82:ARG:C	2.46	0.53
1:AA:308:C:H2'	1:AA:309:G:H8	1.74	0.53
1:AA:58:C:H1'	1:AA:388:G:N7	2.24	0.53
1:CA:503:C:H2'	1:CA:504:C:C6	2.43	0.53
2:CB:55:PHE:HD1	2:CB:221:LEU:HG	1.73	0.53
52:BT:94:ALA:O	52:BT:96:ARG:N	2.41	0.53
36:DA:1666:G:H2'	36:DA:1667:G:O4'	2.08	0.53
57:DY:13:VAL:CG2	57:DY:73:ARG:O	2.56	0.53
1:AA:1363(A):A:H4'	1:AA:1364:U:C5'	2.31	0.53
1:CA:386:C:C2'	1:CA:387:U:C5'	2.81	0.53
58:DZ:162:GLU:O	58:DZ:163:LEU:HD23	2.09	0.53
1:CA:1371:G:OP1	9:CI:11:LYS:HE3	2.09	0.53
9:CI:112:LYS:HE3	9:CI:116:LYS:O	2.07	0.53
4:AD:171:GLY:O	4:AD:173:TRP:N	2.37	0.53
36:BA:329:G:H1	57:BY:19:LYS:CE	2.20	0.53
36:DA:2105:C:O2'	36:DA:2106:G:H5'	2.09	0.53
36:DA:2110:G:N2	36:DA:2178:C:C5	2.76	0.53
46:BN:15:LEU:O	46:BN:136:GLU:HA	2.07	0.53
36:DA:1775:U:C2'	36:DA:1776:G:C5'	2.86	0.53
36:DA:1971:A:C4	39:DD:241:PRO:HD3	2.43	0.53
55:DW:107:LEU:N	55:DW:107:LEU:HD12	2.24	0.53
2:AB:17:PHE:CD2	2:AB:17:PHE:O	2.58	0.53
3:CC:114:PRO:N	3:CC:185:GLY:HA3	2.23	0.53
1:CA:486:U:O2'	1:CA:487:A:H5'	2.08	0.53
37:DB:14:U:H2'	37:DB:15:A:H2	1.73	0.53
1:CA:1009:G:H2'	1:CA:1010:G:C8	2.44	0.53
42:DG:127:GLY:O	42:DG:166:ASP:OD1	2.26	0.53
1:CA:581:G:O6	1:CA:758:G:N7	2.41	0.53
53:DU:99:ALA:HA	53:DU:106:PHE:CG	2.44	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:118:ILE:HG13	5:AE:119:LEU:N	2.24	0.53
27:D1:25:LYS:CD	36:DA:388:G:H4'	2.30	0.53
20:CT:44:ALA:CB	20:CT:88:VAL:HG13	2.38	0.53
24:CY:48:C:H2'	24:CY:59:A:C1'	2.32	0.53
1:AA:666:G:H5'	1:AA:726:C:H1'	1.90	0.53
8:AH:127:LEU:HD12	8:AH:129:VAL:CG1	2.39	0.53
36:DA:80:G:H1'	36:DA:346:A:N1	2.23	0.53
25:CZ:363:MET:HB3	25:CZ:364:PRO:CD	2.39	0.53
1:CA:408:A:H4'	4:CD:112:VAL:CG1	2.36	0.53
1:CA:1481:U:H2'	1:CA:1482:G:C8	2.43	0.53
31:D5:16:ARG:HH11	31:D5:20:ARG:NH1	2.07	0.53
36:DA:1345:C:O2'	36:DA:1346:G:H5'	2.08	0.53
36:DA:2127:G:C6	36:DA:2128:C:N4	2.76	0.53
47:DO:88:ASN:ND2	47:DO:92:GLU:HB3	2.22	0.53
2:AB:36:ARG:C	2:AB:38:GLY:N	2.60	0.53
3:AC:152:ILE:HG22	3:AC:153:VAL:N	2.22	0.53
41:BF:81:PRO:C	41:BF:82:ILE:O	2.46	0.53
5:AE:42:GLY:HA3	5:AE:66:MET:HG2	1.89	0.53
3:AC:60:ALA:H	3:AC:63:ASN:ND2	2.06	0.53
51:DS:56:LEU:CD2	51:DS:58:LEU:HB2	2.38	0.53
46:DN:60:ILE:CD1	46:DN:99:LEU:HD23	2.38	0.53
36:BA:548:A:H2'	36:BA:549:G:H5'	1.89	0.53
49:BQ:32:TYR:HE2	49:BQ:111:GLU:HG3	1.72	0.53
36:DA:380:U:H2'	36:DA:381:G:H8	1.73	0.53
58:BZ:149:SER:HB2	58:BZ:173:ALA:HA	1.88	0.53
36:DA:2790:A:N3	36:DA:2790:A:H2'	2.23	0.53
46:BN:17:ASP:OD2	46:BN:19:GLU:HB3	2.09	0.53
4:AD:155:LEU:HB2	4:AD:158:ILE:HG12	1.90	0.53
36:BA:1973:G:H2'	36:BA:1974:C:C6	2.44	0.53
49:DQ:10:ARG:HB2	49:DQ:10:ARG:NH1	2.23	0.53
36:BA:754:C:H2'	36:BA:755:C:C6	2.43	0.53
36:BA:275:G:C2	36:BA:276:A:C2	2.97	0.53
6:AF:23:LYS:HA	6:AF:26:ILE:HD12	1.91	0.53
36:BA:1686:C:H5'	36:BA:1687:G:OP2	2.07	0.53
26:D0:62:LEU:HD23	26:D0:62:LEU:N	2.23	0.53
26:B0:5:LYS:HB3	26:B0:5:LYS:NZ	2.23	0.53
40:BE:119:ARG:NH1	40:BE:158:GLY:HA3	2.23	0.53
53:BU:97:ASP:O	53:BU:100:VAL:HB	2.08	0.53
45:DK:129:UNK:C	45:DK:131:UNK:N	2.70	0.53
1:CA:667:G:H4'	15:CO:51:HIS:ND1	2.23	0.53
48:BP:59:LEU:C	48:BP:61:ARG:N	2.59	0.53
36:DA:2840:C:C5'	50:DR:53:HIS:HD2	2.21	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:631:A:C5'	48:DP:65:ARG:HG2	2.39	0.53
36:DA:655:A:H1'	36:DA:656:G:O4'	2.08	0.53
38:DC:75:LEU:CD1	38:DC:113:VAL:HA	2.38	0.53
1:CA:276:G:O2'	1:CA:277:C:H5'	2.09	0.53
41:BF:118:ALA:O	41:BF:120:GLU:N	2.41	0.53
1:AA:541:G:O2'	1:AA:542:G:H5'	2.09	0.53
1:AA:964:A:OP1	1:AA:1199:U:OP1	2.26	0.53
4:AD:20:TYR:HA	4:AD:26:CYS:CB	2.37	0.53
14:AN:4:LYS:O	14:AN:5:ALA:C	2.46	0.53
49:BQ:48:GLU:HG2	49:BQ:52:VAL:CG2	2.37	0.53
28:B2:25:VAL:C	28:B2:27:GLU:N	2.55	0.53
28:B2:35:LEU:C	28:B2:35:LEU:HD22	2.28	0.53
53:DU:83:LEU:H	53:DU:83:LEU:CD1	2.22	0.53
53:DU:94:ASN:C	53:DU:96:ALA:H	2.12	0.53
54:DV:38:LEU:HD12	54:DV:57:VAL:HB	1.90	0.53
1:CA:1173:G:H2'	1:CA:1174:G:H8	1.74	0.53
1:CA:1194:U:H2'	1:CA:1195:C:C6	2.43	0.53
4:CD:54:TYR:O	4:CD:55:ALA:C	2.47	0.53
32:D6:27:LYS:CG	32:D6:30:THR:CB	2.78	0.53
1:CA:658:G:H2'	1:CA:659:U:C6	2.43	0.53
36:DA:1343:G:C2	36:DA:1405:U:N3	2.77	0.53
13:CM:106:ASN:O	13:CM:107:ALA:HB2	2.09	0.53
25:CZ:136:ASN:CG	25:CZ:137:LYS:H	2.11	0.53
36:DA:1761:C:H3'	36:DA:1762:A:C8	2.44	0.53
52:DT:32:TYR:CD1	52:DT:81:PRO:HB3	2.44	0.53
1:AA:1373:G:H5''	7:AG:36:LYS:HD2	1.90	0.53
1:CA:1363(A):A:C4'	1:CA:1364:U:OP2	2.57	0.53
1:CA:943:U:C2'	1:CA:944:G:H5'	2.38	0.53
10:CJ:53:PRO:C	14:CN:41:ARG:NH2	2.62	0.53
22:CV:49:C:H2'	22:CV:49:C:OP2	2.08	0.53
1:AA:1412:C:H42	1:AA:1488:G:H1	1.54	0.53
11:AK:125:PHE:C	11:AK:127:LYS:H	2.10	0.53
4:AD:98:GLU:OE2	4:AD:107:ARG:NH2	2.41	0.53
36:BA:2833:G:OP1	36:BA:2833:G:H8	1.92	0.53
57:BY:28:LYS:C	57:BY:38:ILE:HG22	2.28	0.53
42:BG:122:PRO:CD	42:BG:181:ARG:HB3	2.38	0.53
36:DA:1826:G:H4'	39:DD:242:ARG:NH2	2.22	0.53
3:CC:48:TYR:C	3:CC:50:ALA:H	2.11	0.53
3:AC:83:ARG:C	3:AC:85:ARG:N	2.62	0.53
27:B1:11:ARG:HB2	27:B1:11:ARG:CZ	2.38	0.53
39:BD:224:ALA:HB2	39:BD:233:HIS:CB	2.27	0.53
49:DQ:35:VAL:HG22	49:DQ:36:ALA:N	2.22	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:DZ:48:PHE:C	58:DZ:50:GLN:H	2.12	0.53
58:DZ:75:ASN:O	58:DZ:84:GLU:CB	2.57	0.53
36:DA:724:U:O2'	36:DA:725:G:H5'	2.08	0.53
31:B5:10:LYS:HG3	36:BA:1263:U:H1'	1.90	0.53
1:AA:770:C:C2'	1:AA:771:G:H5'	2.38	0.53
46:BN:24:GLY:C	46:BN:26:LEU:N	2.61	0.53
57:DY:86:ARG:CG	57:DY:87:LYS:H	2.17	0.53
36:DA:1427:A:H4'	36:DA:1428:C:O5'	2.08	0.53
13:CM:54:VAL:O	13:CM:57:ARG:N	2.41	0.53
42:DG:32:PRO:CB	42:DG:162:THR:HB	2.38	0.53
42:DG:95:ARG:O	42:DG:96:ARG:O	2.25	0.53
40:DE:38:THR:HG23	40:DE:39:PRO:HD2	1.90	0.53
1:CA:586:C:H1'	1:CA:878:G:O2'	2.08	0.53
5:CE:71:LEU:O	5:CE:72:GLN:CG	2.56	0.53
10:AJ:96:ILE:HD13	10:AJ:96:ILE:H	1.73	0.53
1:CA:446:G:H2'	1:CA:447:G:O4'	2.08	0.53
4:CD:25:ARG:C	4:CD:27:TYR:N	2.62	0.53
1:CA:419:C:H42	1:CA:424:G:N2	2.00	0.53
1:CA:223:U:O2'	1:CA:224:C:H5'	2.09	0.53
54:BV:21:ARG:HB3	54:BV:91:TYR:CG	2.44	0.53
36:DA:754:C:H2'	36:DA:755:C:C6	2.43	0.53
1:CA:308:C:H2'	1:CA:309:G:H8	1.72	0.53
36:BA:535:C:O2'	36:BA:536:A:H5'	2.08	0.53
41:DF:81:PRO:O	41:DF:82:ILE:O	2.25	0.53
39:DD:69:ARG:HD2	39:DD:119:ALA:HB2	1.89	0.53
36:BA:1498:C:H3'	36:BA:1499:C:H5''	1.90	0.53
36:DA:1410:G:H2'	36:DA:1411:C:H6	1.74	0.53
36:DA:979:G:N7	36:DA:981:A:OP1	2.41	0.53
39:DD:106:ILE:O	39:DD:108:PRO:HD3	2.08	0.53
50:BR:107:ASP:O	50:BR:108:GLY:C	2.46	0.53
36:BA:2422:A:H8	36:BA:2422:A:H3'	1.74	0.53
1:AA:686:U:O2'	1:AA:687:A:O5'	2.26	0.53
36:BA:2657:A:O2'	43:BH:160:LYS:NZ	2.40	0.53
1:CA:923:A:C6	1:CA:924:C:C4	2.96	0.53
2:AB:10:LEU:O	2:AB:13:ALA:HB3	2.08	0.53
51:BS:84:GLN:CA	51:BS:105:ALA:HB3	2.37	0.53
26:D0:50:ASN:HD22	26:D0:63:VAL:CG2	2.19	0.53
36:BA:315:G:H2'	36:BA:316:C:C6	2.44	0.53
12:CL:47:LYS:HB3	12:CL:48:PRO:HD3	1.89	0.53
4:CD:155:LEU:HB2	4:CD:158:ILE:HG12	1.90	0.53
32:B6:33:LYS:O	32:B6:34:LEU:CB	2.56	0.53
42:DG:145:THR:HG21	42:DG:147:ASP:OD1	2.09	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:225:A:C2'	36:BA:226:G:H5'	2.38	0.53
36:BA:2557:G:O2'	36:BA:2558:C:H5'	2.07	0.53
50:DR:56:LYS:C	50:DR:58:GLY:H	2.12	0.53
15:CO:4:THR:O	15:CO:6:GLU:N	2.33	0.53
39:BD:152:GLY:O	39:BD:153:ALA:O	2.26	0.53
36:BA:922:U:H2'	36:BA:923:C:C6	2.43	0.53
1:CA:1275:A:O2'	1:CA:1276:G:H5'	2.08	0.53
20:CT:31:SER:HA	20:CT:34:LYS:HD2	1.90	0.53
43:BH:98:LEU:HB3	43:BH:125:VAL:HG21	1.90	0.53
49:BQ:95:ALA:O	49:BQ:97:VAL:HG22	2.08	0.53
22:CV:1:G:H2'	22:CV:2:C:H6	1.73	0.53
36:DA:2521:C:H5'	36:DA:2522:U:OP2	2.09	0.53
36:BA:24:G:H1'	55:BW:77:ASP:OD1	2.08	0.53
36:BA:2282:G:H4'	36:BA:2283:C:O5'	2.06	0.53
53:BU:32:PHE:O	53:BU:36:ARG:HB2	2.09	0.53
39:DD:177:LEU:C	39:DD:179:SER:H	2.09	0.53
25:AZ:136:ASN:CG	25:AZ:137:LYS:H	2.12	0.53
36:DA:94:C:H3'	36:DA:94(A):G:C8	2.43	0.53
5:CE:105:VAL:H	5:CE:106:PRO:CD	2.18	0.53
36:DA:2764:A:C2	36:DA:2766:G:H1'	2.43	0.53
39:BD:24:ILE:CG1	39:BD:25:THR:N	2.67	0.53
36:DA:1217:C:H2'	36:DA:1218:C:C6	2.44	0.53
4:CD:72:GLU:O	4:CD:73:ARG:C	2.46	0.53
2:CB:219:VAL:HA	2:CB:222:ILE:HG12	1.90	0.53
36:BA:629:G:H2'	36:BA:630:G:O4'	2.07	0.53
25:CZ:145:GLU:O	25:CZ:149:LEU:N	2.39	0.53
36:BA:2893:G:C5'	36:BA:2894:G:H5'	2.36	0.53
58:BZ:6:LYS:N	58:BZ:6:LYS:HD3	2.24	0.53
1:AA:1354:C:O2'	1:AA:1355:G:H5'	2.09	0.53
1:AA:1363(A):A:C4'	1:AA:1364:U:OP2	2.55	0.53
1:AA:1363(A):A:H1'	1:AA:1365:G:C5	2.44	0.53
1:CA:1373:G:H5''	7:CG:36:LYS:HD2	1.89	0.53
14:CN:21:TYR:OH	14:CN:23:ARG:NH2	2.39	0.53
1:AA:1392:G:N2	1:AA:1502:A:C8	2.76	0.53
36:BA:676:A:C8	36:BA:2443:C:H1'	2.36	0.53
4:AD:138:TYR:CD2	4:AD:138:TYR:C	2.82	0.53
36:BA:324:A:O2'	36:BA:325:G:H5'	2.09	0.53
42:BG:33:ARG:C	42:BG:161:THR:HB	2.28	0.53
46:BN:134:ARG:H	46:BN:135:PRO:HD3	1.72	0.53
36:DA:1772:G:N2	36:DA:1774:C:H5''	2.24	0.53
36:DA:1971:A:C2	39:DD:240:ALA:HA	2.43	0.53
36:BA:2110:G:N2	36:BA:2178:C:C5	2.76	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CC:106:VAL:O	3:CC:107:GLN:C	2.47	0.53
4:CD:173:TRP:O	4:CD:174:LEU:HD23	2.08	0.53
19:CS:40:ILE:HG22	19:CS:67:VAL:HG13	1.89	0.53
3:AC:83:ARG:C	3:AC:85:ARG:H	2.12	0.53
1:CA:1330:U:H4'	13:CM:23:TYR:CE2	2.43	0.53
2:CB:39:ILE:HG22	2:CB:40:HIS:H	1.73	0.53
36:BA:1775:U:H2'	36:BA:1776:G:C4'	2.38	0.53
58:DZ:28:MET:SD	58:DZ:33:LEU:HG	2.48	0.53
36:BA:995:C:O2	53:BU:61:TRP:HZ2	1.91	0.53
1:CA:1203:C:H2'	1:CA:1204:A:C8	2.35	0.53
36:BA:1316:U:H2'	36:BA:1317:A:C8	2.43	0.53
39:DD:30:GLU:HB3	39:DD:35:LYS:HG3	1.90	0.53
36:DA:1199:U:H3	36:DA:1246:A:H61	1.56	0.53
33:D7:39:ARG:HD3	36:DA:458:G:O2'	2.08	0.53
7:AG:38:LEU:O	7:AG:42:ILE:HG13	2.09	0.53
36:BA:708:C:H5'	36:BA:709:U:OP2	2.09	0.53
2:CB:24:TRP:CZ3	2:CB:26:PRO:CA	2.87	0.53
20:AT:57:ARG:CZ	20:AT:102:GLY:HA3	2.38	0.53
29:B3:15:TYR:HD2	29:B3:19:GLN:NE2	1.99	0.53
20:CT:89:ARG:HH21	20:CT:104:LEU:HD21	1.74	0.53
12:AL:20:LYS:CD	12:AL:20:LYS:N	2.66	0.53
13:AM:108:ARG:HH11	13:AM:108:ARG:CG	2.22	0.53
1:CA:792:A:O2'	1:CA:793:U:OP2	2.27	0.53
36:DA:2223:G:H2'	36:DA:2224:G:H5'	1.91	0.53
1:AA:403:C:OP1	4:AD:136:PRO:HD2	2.09	0.53
20:AT:75:ASN:O	20:AT:79:ARG:HB2	2.09	0.53
1:AA:197:A:H4'	1:AA:198:G:O5'	2.08	0.53
1:AA:1245:A:O2'	1:AA:1246:C:H5'	2.08	0.53
36:BA:1042:G:H1	36:BA:1112:G:H22	1.54	0.53
36:BA:681:G:H2'	36:BA:682:G:C8	2.42	0.53
58:DZ:57:ILE:N	58:DZ:57:ILE:CD1	2.70	0.53
57:BY:2:ARG:C	57:BY:4:LYS:N	2.61	0.53
46:BN:71:ILE:HG22	46:BN:72:TYR:N	2.24	0.53
1:CA:218:C:H5'	1:CA:470:C:N4	2.23	0.53
36:BA:2547:U:O2	47:BO:23:ARG:NH1	2.41	0.53
25:CZ:19:HIS:CG	25:CZ:115:GLN:HB2	2.44	0.53
2:CB:16:HIS:HB3	2:CB:210:SER:OG	2.09	0.53
17:CQ:29:HIS:ND1	17:CQ:32:TYR:N	2.48	0.53
17:CQ:31:LEU:HG	17:CQ:32:TYR:CE2	2.43	0.53
36:DA:2543:G:H5'	36:DA:2543:G:H8	1.73	0.53
36:BA:615:G:H2'	36:BA:616:G:C8	2.44	0.53
22:AV:27:G:H2'	22:AV:28:G:H8	1.74	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DF:38:ARG:O	41:DF:42:ALA:HB2	2.08	0.53
36:BA:738:G:H2'	36:BA:739:G:H5'	1.90	0.53
39:BD:152:GLY:O	39:BD:153:ALA:C	2.47	0.53
6:CF:101:ALA:OXT	18:CR:28:GLU:HG2	2.08	0.53
4:CD:35:ARG:HB3	4:CD:36:ARG:HD2	1.90	0.53
32:B6:18:ARG:HE	32:B6:43:CYS:HB3	1.74	0.53
36:DA:2337:G:H2'	36:DA:2338:G:C8	2.42	0.53
25:AZ:26:THR:HG21	62:AZ:501:GDP:H8	1.73	0.53
36:BA:1856:G:O2'	36:BA:1857:G:H5'	2.08	0.53
41:DF:187:VAL:HG12	48:DP:7:ARG:HA	1.90	0.53
25:AZ:325:LYS:HB2	25:AZ:331:HIS:HA	1.90	0.53
36:DA:479:A:O2'	36:DA:481:G:H8	1.92	0.53
36:BA:2839:G:H5'	50:BR:46:GLY:HA2	1.90	0.53
36:DA:532:A:H5''	53:DU:28:ARG:NH1	2.23	0.53
48:DP:30:THR:CG2	48:DP:31:ALA:N	2.71	0.53
36:DA:996:A:C5'	53:DU:94:ASN:HB2	2.37	0.53
54:DV:49:THR:O	54:DV:50:PRO:C	2.46	0.53
8:CH:6:ILE:O	8:CH:9:MET:N	2.41	0.53
1:CA:542:G:H2'	1:CA:543:C:H6	1.74	0.53
51:BS:90:GLY:O	51:BS:92:TYR:HD1	1.90	0.53
8:AH:14:ARG:CB	8:AH:14:ARG:NH1	2.72	0.53
38:DC:65:PRO:HD2	38:DC:188:ASN:OD1	2.08	0.53
32:B6:6:ARG:HH12	32:B6:7:ILE:HG13	1.73	0.53
36:DA:1437:C:H2'	36:DA:1437:C:O2	2.07	0.53
13:AM:120:LYS:HA	13:AM:120:LYS:NZ	2.24	0.53
5:AE:12:LEU:HD13	5:AE:12:LEU:O	2.09	0.53
36:BA:1680:U:H2'	36:BA:1681:G:O4'	2.09	0.53
40:BE:23:VAL:CG1	40:BE:173:VAL:HG21	2.39	0.53
47:BO:80:ASP:OD2	52:BT:71:GLY:HA3	2.09	0.53
36:DA:1667:G:O2'	36:DA:1991:U:O4	2.25	0.53
52:DT:38:ASN:ND2	52:DT:38:ASN:O	2.41	0.53
52:DT:57:PHE:HE2	52:DT:79:HIS:HD1	1.55	0.53
58:BZ:60:GLU:HA	58:BZ:66:SER:CA	2.38	0.53
1:AA:737:A:OP1	6:AF:92:LYS:N	2.41	0.53
58:DZ:130:PRO:CA	58:DZ:133:ILE:HD11	2.32	0.53
22:AV:54:U:H2'	22:AV:55:U:H5'	1.90	0.53
1:AA:1396:A:O4'	1:AA:1398:A:H1'	2.09	0.53
1:AA:1495:U:H2'	1:AA:1496:C:C6	2.44	0.53
51:DS:61:ASN:OD1	51:DS:62:LYS:N	2.41	0.53
36:DA:2111:C:H2'	36:DA:2112:G:H5''	1.90	0.53
36:DA:1902:C:H4'	39:DD:244:ARG:CB	2.39	0.53
36:DA:2589:A:H2'	36:DA:2590:A:C8	2.43	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:210:GLY:O	39:DD:211:ARG:CB	2.54	0.53
36:BA:2190:G:H2'	36:BA:2190:G:N3	2.22	0.53
3:CC:83:ARG:C	3:CC:85:ARG:N	2.62	0.53
4:CD:79:PHE:HA	4:CD:93:PHE:HD2	1.71	0.53
25:AZ:254:GLU:HG3	25:AZ:307:PRO:HA	1.90	0.53
19:CS:42:PRO:O	19:CS:43:GLU:HB3	2.08	0.53
13:CM:57:ARG:CG	13:CM:61:GLU:HB2	2.36	0.53
42:DG:6:ALA:O	42:DG:10:LYS:N	2.41	0.53
36:BA:718:A:C2'	36:BA:719:C:H5'	2.37	0.53
40:DE:35:GLN:C	40:DE:36:ARG:HD2	2.29	0.53
25:CZ:258:LEU:HD23	25:CZ:376:LYS:CB	2.38	0.53
1:AA:829:G:O2'	1:AA:830:G:H5'	2.07	0.53
36:BA:2041:U:H2'	36:BA:2042:A:C8	2.42	0.53
1:CA:858:G:H22	1:CA:869:G:H3'	1.73	0.53
1:CA:876:G:H2'	1:CA:877:C:C6	2.44	0.53
22:AV:41:C:H2'	22:AV:42:C:H5'	1.91	0.53
1:AA:598:U:H4'	8:AH:94:TYR:CD2	2.44	0.53
2:CB:74:LYS:NZ	2:CB:76:GLN:HB2	2.22	0.53
36:BA:31:C:C3'	36:BA:32:C:H5''	2.37	0.53
1:CA:1517:G:H2'	1:CA:1518:A:O4'	2.09	0.53
1:CA:780:A:H2	1:CA:802:A:N7	2.07	0.53
1:CA:444:C:H2'	1:CA:445:G:C8	2.44	0.53
27:D1:82:LEU:C	27:D1:83:GLU:HG3	2.28	0.53
38:BC:214:VAL:CG2	38:BC:224:ILE:HG21	2.32	0.53
1:AA:658:G:H2'	1:AA:659:U:C6	2.43	0.53
54:BV:19:LYS:HZ3	54:BV:20:LEU:N	2.07	0.53
11:AK:57:THR:CG2	11:AK:60:ALA:H	2.22	0.53
1:AA:1360:A:O2'	1:AA:1361:G:H5'	2.09	0.53
36:DA:1361:G:N2	36:DA:1371:G:H1'	2.23	0.53
36:BA:1342:A:N1	36:BA:1345:C:C4	2.76	0.53
41:DF:81:PRO:C	41:DF:82:ILE:O	2.45	0.53
1:CA:1468:A:H3'	1:CA:1469:G:H8	1.74	0.53
55:BW:61:ASN:O	55:BW:62:HIS:ND1	2.41	0.53
1:AA:1170:A:H2'	1:AA:1171:G:C5'	2.38	0.53
1:AA:602:A:H2'	1:AA:603:U:C6	2.44	0.53
36:BA:956:G:OP2	49:BQ:87:LYS:HE2	2.09	0.53
55:DW:37:ARG:HH11	55:DW:37:ARG:CG	2.21	0.53
36:DA:416:C:H42	36:DA:2407:G:H1	1.55	0.53
36:BA:464:U:H2'	36:BA:465:G:O4'	2.08	0.53
36:BA:2790:A:H2'	36:BA:2790:A:N3	2.23	0.53
36:DA:181:A:C2	36:DA:182:A:C4	2.96	0.53
36:BA:1431:U:H2'	36:BA:1432:C:H5'	1.89	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1148:U:C2'	1:AA:1149:C:H5'	2.39	0.53
25:AZ:92:MET:SD	25:AZ:119:HIS:CD2	3.02	0.53
4:AD:35:ARG:HB3	4:AD:36:ARG:HD2	1.91	0.53
43:BH:155:SER:O	43:BH:157:TYR:N	2.40	0.53
26:B0:62:LEU:HD23	26:B0:62:LEU:N	2.22	0.53
20:AT:94:ALA:O	20:AT:95:ALA:CB	2.57	0.53
50:DR:38:VAL:HB	50:DR:39:PRO:CD	2.34	0.53
48:DP:98:GLU:O	48:DP:101:VAL:HG22	2.08	0.53
25:AZ:136:ASN:C	25:AZ:138:VAL:N	2.60	0.53
24:AY:28:A:H2'	24:AY:29:C:C6	2.44	0.53
39:BD:24:ILE:HG23	39:BD:25:THR:H	1.72	0.53
41:BF:107:LYS:O	41:BF:110:LEU:HB3	2.09	0.53
14:AN:7:ILE:CG1	14:AN:8:GLU:N	2.71	0.53
36:BA:1275:A:N7	50:BR:16:HIS:HB2	2.23	0.53
36:BA:2457:U:O2'	36:BA:2458:G:H5'	2.07	0.53
36:DA:809:G:O4'	36:DA:1254:A:H1'	2.09	0.53
53:DU:65:ILE:HG13	53:DU:96:ALA:HB1	1.91	0.53
8:CH:25:ASP:O	8:CH:26:VAL:CB	2.55	0.53
1:AA:264:U:H4'	17:AQ:63:ARG:HD3	1.89	0.53
17:AQ:61:GLU:HA	17:AQ:71:PHE:CD1	2.44	0.53
1:CA:539:A:H2'	1:CA:540:G:C8	2.43	0.53
10:CJ:55:LYS:O	10:CJ:56:HIS:CG	2.62	0.53
8:AH:77:GLU:HG3	8:AH:78:GLN:N	2.23	0.53
32:B6:27:LYS:CG	32:B6:30:THR:CB	2.80	0.53
13:AM:93:ARG:HG3	36:BA:888:C:OP2	2.09	0.53
36:BA:2711:A:OP1	36:BA:2712(A):A:P	2.67	0.53
52:BT:23:ARG:HG2	52:BT:120:ARG:NH1	2.24	0.53
52:BT:32:TYR:CD1	52:BT:81:PRO:HB3	2.44	0.53
1:AA:346:G:C5'	52:BT:41:ARG:HH21	2.17	0.53
36:DA:1761:C:H2'	36:DA:1762:A:H8	1.72	0.53
52:DT:61:PHE:H	52:DT:61:PHE:HD2	1.57	0.53
36:DA:329:G:H1	57:DY:19:LYS:CE	2.21	0.53
10:AJ:61:GLU:HG3	14:AN:58:LYS:CE	2.39	0.53
58:DZ:132:ASN:O	58:DZ:133:ILE:HD13	2.08	0.53
22:AV:58:A:O2'	22:AV:59:U:H2'	2.09	0.53
1:AA:1396:A:H4'	1:AA:1397:C:H5'	1.90	0.53
19:AS:44:MET:CA	19:AS:47:HIS:HD2	2.08	0.53
51:DS:66:ALA:CA	51:DS:99:LYS:HD3	2.38	0.53
1:CA:571:U:O2	1:CA:918:A:H5'	2.09	0.53
36:DA:1791:A:H3'	36:DA:1792:G:H8	1.74	0.53
36:BA:2140:C:H2'	36:BA:2141:G:H8	1.73	0.53
3:AC:102:ASN:O	3:AC:103:VAL:HG23	2.08	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:CJ:18:ALA:O	10:CJ:21:GLN:N	2.42	0.53
2:CB:35:GLU:HA	2:CB:39:ILE:O	2.08	0.53
43:BH:136:ILE:HD12	43:BH:136:ILE:H	1.72	0.53
53:BU:94:ASN:ND2	53:BU:95:LEU:HG	2.24	0.53
42:DG:172:LEU:O	42:DG:172:LEU:HD23	2.09	0.53
36:BA:1542:A:H3'	36:BA:1542:A:H8	1.74	0.53
36:BA:1090:U:O4	36:BA:1102:C:H1'	2.08	0.53
36:BA:1130:U:O2'	36:BA:1131:G:H2'	2.08	0.53
3:CC:95:THR:O	3:CC:97:LYS:N	2.42	0.53
36:BA:48:G:H22	36:BA:177:G:H21	1.54	0.53
36:BA:2073:C:H2'	36:BA:2074:U:C6	2.43	0.53
36:BA:272(J):C:H2'	36:BA:274:G:H5''	1.91	0.53
36:DA:233:A:H2'	36:DA:234:C:O4'	2.08	0.53
36:BA:1308:A:H2'	36:BA:1309:G:O4'	2.08	0.53
33:D7:11:LYS:HE2	36:DA:686:G:C2	2.43	0.53
25:CZ:310:ILE:HG21	25:CZ:379:ALA:HB1	1.89	0.53
36:BA:205:G:O2'	36:BA:206:U:OP2	2.24	0.53
1:AA:686:U:H2'	1:AA:687:A:C8	2.43	0.53
1:CA:1170:A:H2'	1:CA:1171:G:C5'	2.38	0.53
1:CA:686:U:H2'	1:CA:687:A:C8	2.43	0.53
36:BA:1328:G:O5'	36:BA:1328:G:H8	1.91	0.53
36:BA:107:C:H1'	36:BA:294:A:N3	2.23	0.53
36:BA:955:C:OP1	49:BQ:87:LYS:HE3	2.09	0.53
36:BA:416:C:H42	36:BA:2407:G:H1	1.56	0.53
36:BA:74:A:H5''	36:BA:75:G:C1'	2.38	0.53
39:BD:210:GLY:O	39:BD:211:ARG:CB	2.57	0.53
9:AI:82:ALA:HA	9:AI:85:LEU:HD11	1.89	0.53
36:BA:1458:C:C4'	36:BA:1459:G:O4'	2.56	0.53
36:DA:64:A:H2'	36:DA:65:C:O4'	2.08	0.53
1:CA:642:A:N7	8:CH:115:SER:HA	2.24	0.53
6:CF:19:LEU:HD23	6:CF:19:LEU:C	2.28	0.53
38:DC:25:ALA:O	38:DC:28:LEU:N	2.42	0.53
51:BS:42:ASP:C	51:BS:44:LYS:N	2.62	0.53
36:DA:1036:G:C2	36:DA:1120:G:C6	2.97	0.53
36:DA:1973:G:H2'	36:DA:1974:C:C6	2.44	0.53
36:BA:1186:G:C2'	36:BA:1187:G:H5'	2.38	0.53
36:BA:419:C:H2'	36:BA:420:C:H6	1.74	0.53
1:AA:1260:C:H3'	1:AA:1260:C:C6	2.43	0.53
36:BA:1221(A):C:H42	36:BA:1228:G:H1	1.55	0.53
16:CP:59:TRP:O	16:CP:64:ALA:HB2	2.08	0.53
7:AG:17:VAL:HG12	7:AG:18:TYR:N	2.24	0.53
38:DC:50:ASP:OD1	38:DC:51:PRO:HD2	2.09	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:DX:33:LYS:N	56:DX:33:LYS:HD3	2.23	0.53
9:CI:128:ARG:OXT	9:CI:128:ARG:HG2	2.08	0.53
36:BA:2329:G:O2'	36:BA:2330:G:H5'	2.09	0.53
36:BA:2290:G:C2	36:BA:2343:C:O2	2.62	0.53
36:DA:2880:C:H6	36:DA:2880:C:H3'	1.72	0.53
50:DR:28:LEU:HA	50:DR:34:ILE:CG1	2.39	0.53
55:DW:41:LYS:O	55:DW:43:GLY:N	2.42	0.53
28:D2:65:ASN:O	28:D2:68:ARG:N	2.41	0.53
5:CE:103:GLY:O	5:CE:107:ARG:HB3	2.09	0.53
56:BX:10:ALA:HB3	56:BX:29:TRP:CD1	2.44	0.53
36:BA:769:G:H2'	36:BA:770:G:C8	2.44	0.53
39:BD:30:GLU:OE1	39:BD:63:ARG:HD3	2.09	0.53
38:BC:131:LEU:HB3	38:BC:136:LEU:CB	2.37	0.53
58:DZ:141:VAL:HA	58:DZ:144:LEU:CD2	2.22	0.53
1:AA:972:C:O3'	10:AJ:57:LYS:HG2	2.09	0.53
40:BE:110:GLY:O	50:BR:2:ARG:HG2	2.09	0.53
13:AM:14:ARG:HB2	13:AM:17:VAL:HG23	1.91	0.53
36:DA:494:G:N3	36:DA:494:G:H2'	2.22	0.53
46:DN:28:THR:CG2	46:DN:29:LYS:N	2.61	0.53
53:DU:95:LEU:HD12	54:DV:11:GLN:NE2	2.20	0.53
53:DU:9:VAL:O	53:DU:12:ARG:HB2	2.08	0.53
17:AQ:60:ILE:O	17:AQ:71:PHE:HD1	1.92	0.53
1:CA:1054:C:O2'	1:CA:1055:A:H5''	2.09	0.53
2:CB:182:ILE:O	2:CB:184:VAL:HG23	2.09	0.53
2:CB:200:ILE:CG2	2:CB:202:PRO:HD3	2.39	0.53
2:CB:30:ARG:HG3	2:CB:31:TYR:CD2	2.44	0.53
2:CB:8:LYS:HZ3	2:CB:217:ARG:CZ	2.22	0.53
1:CA:838:G:C5	1:CA:840:C:H1'	2.44	0.53
15:CO:36:ILE:HG23	15:CO:56:LEU:CD1	2.32	0.53
25:CZ:191:GLY:HA2	25:CZ:196:VAL:CG1	2.37	0.53
52:BT:13:ARG:NH2	52:BT:15:VAL:HG11	2.24	0.53
52:BT:62:THR:HG22	52:BT:75:ILE:CG2	2.37	0.53
52:BT:57:PHE:HE2	52:BT:79:HIS:HD1	1.56	0.53
52:DT:64:ARG:HA	52:DT:72:VAL:O	2.08	0.53
38:BC:189:ILE:O	38:BC:192:PHE:HB3	2.09	0.53
58:BZ:151:HIS:CB	58:BZ:170:THR:HA	2.39	0.53
1:AA:1352:C:O2	1:AA:1371:G:C2	2.62	0.53
7:CG:105:VAL:HG12	7:CG:109:ASN:HD22	1.73	0.53
57:BY:37:VAL:CG2	57:BY:38:ILE:N	2.67	0.53
36:DA:1316:U:H2'	36:DA:1317:A:C8	2.43	0.53
14:AN:12:ARG:HB3	14:AN:14:PRO:CG	2.39	0.53
1:CA:866:C:N4	1:CA:873:A:H2	2.07	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CC:113:ALA:O	3:CC:115:LEU:N	2.42	0.53
4:CD:138:TYR:CD2	4:CD:138:TYR:C	2.82	0.53
19:CS:9:VAL:C	19:CS:11:VAL:H	2.12	0.53
3:AC:114:PRO:N	3:AC:185:GLY:HA3	2.23	0.53
36:DA:716:A:C2'	36:DA:717:G:H5'	2.39	0.53
36:BA:17:G:H21	36:BA:555:U:C5'	2.22	0.53
41:DF:8:GLN:O	41:DF:10:PRO:HD3	2.08	0.53
1:CA:1462:G:C6	1:CA:1463:C:C4	2.96	0.53
46:BN:3:THR:CG2	46:BN:4:TYR:H	2.14	0.53
53:DU:3:ARG:NH1	53:DU:5:LYS:HB3	2.23	0.53
36:DA:1171:G:N7	36:DA:1173:G:H1'	2.24	0.53
1:AA:495:A:N6	4:AD:119:GLN:HE22	2.07	0.53
1:AA:191:G:H2'	1:AA:192:U:C6	2.44	0.53
2:AB:130:ARG:CZ	2:AB:131:PRO:HD2	2.39	0.53
1:AA:838:G:C5	1:AA:840:C:H1'	2.43	0.53
2:AB:107:THR:HA	2:AB:110:GLN:NE2	2.23	0.53
8:AH:120:THR:C	8:AH:122:ARG:H	2.11	0.53
8:AH:97:VAL:HG13	8:AH:98:LYS:N	2.23	0.53
2:CB:204:ASN:HD21	2:CB:206:ASP:N	2.05	0.53
36:DA:2796:U:C2'	36:DA:2799:C:H5'	2.39	0.53
4:CD:24:GLU:H	4:CD:112:VAL:CG2	2.22	0.53
36:BA:7:G:H21	36:BA:8:A:H1'	1.72	0.53
11:AK:120:ARG:HH12	11:AK:126:ARG:CD	2.21	0.53
54:DV:82:ARG:HD2	54:DV:82:ARG:N	2.22	0.53
36:DA:2126:A:H5'	38:DC:37:PHE:CE2	2.44	0.53
18:AR:66:LEU:HG	18:AR:70:ILE:CD1	2.36	0.53
4:AD:5:ILE:O	4:AD:5:ILE:HG22	2.08	0.53
39:BD:91:ARG:NH1	39:BD:91:ARG:HG2	2.21	0.53
4:CD:5:ILE:O	4:CD:5:ILE:HG22	2.08	0.53
1:CA:321:A:H62	1:CA:328:C:H1'	1.73	0.53
1:CA:329:A:H2'	1:CA:332:G:O6	2.08	0.53
36:DA:1051:G:OP1	36:DA:2752:C:H1'	2.07	0.53
55:BW:59:VAL:O	55:BW:60:ASN:C	2.46	0.53
1:AA:686:U:O4	1:AA:703:G:H1'	2.09	0.53
36:BA:1949:G:C6	36:BA:1950:G:C6	2.97	0.53
36:BA:272(E):G:H2'	36:BA:272(F):C:H5'	1.91	0.53
9:AI:5:TYR:CG	9:AI:6:GLY:N	2.77	0.53
36:BA:936:C:H2'	36:BA:937:U:C6	2.42	0.53
36:BA:1036:G:C2	36:BA:1120:G:C6	2.97	0.53
36:DA:1957:C:O2'	36:DA:1985:G:H1'	2.09	0.53
36:DA:2097:C:O2'	36:DA:2098:U:H5'	2.08	0.53
36:DA:183:C:O2'	36:DA:184:C:H5'	2.09	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:CO:35:ARG:NH2	15:CO:59:MET:HE1	2.24	0.53
36:BA:1914:C:H2'	36:BA:1915:U:O4'	2.08	0.53
17:CQ:40:LYS:HD3	17:CQ:42:TYR:CZ	2.44	0.53
4:CD:99:SER:O	4:CD:140:VAL:HG23	2.09	0.53
36:DA:363:G:N1	36:DA:363(A):A:N7	2.56	0.53
57:BY:21:LYS:O	57:BY:21:LYS:HG2	2.08	0.53
20:AT:23:ARG:HG2	20:AT:23:ARG:HH11	1.73	0.53
15:AO:64:ARG:HG3	15:AO:64:ARG:HH11	1.72	0.53
1:AA:1272:G:C2	1:AA:1273:G:H1'	2.44	0.53
27:B1:40:ARG:HG3	27:B1:41:ARG:H	1.74	0.53
36:BA:2260:C:N4	36:BA:2280:G:H1	2.07	0.53
36:BA:814:C:H2'	36:BA:815:C:H6	1.73	0.53
36:DA:1268:A:H2'	36:DA:1269:A:H8	1.74	0.53
36:BA:484:C:H2'	36:BA:485:C:C6	2.44	0.53
34:D8:57:ARG:C	34:D8:59:LYS:H	2.12	0.53
48:DP:95:VAL:HG23	48:DP:125:VAL:HG23	1.91	0.53
25:AZ:199:ILE:HG22	25:AZ:203:LEU:HD12	1.90	0.53
36:DA:95:G:H2'	36:DA:96:G:O4'	2.08	0.53
41:DF:122:LYS:N	41:DF:122:LYS:HE3	2.24	0.53
41:DF:3:GLU:O	41:DF:24:LEU:HG	2.09	0.53
41:DF:31:HIS:CD2	48:DP:13:ASN:HB2	2.44	0.53
39:BD:145:VAL:HG12	39:BD:146:GLU:N	2.23	0.53
43:BH:37:VAL:HG11	43:BH:68:THR:HG21	1.91	0.53
31:B5:6:VAL:HG13	31:B5:6:VAL:O	2.08	0.53
27:D1:45:ASN:HB2	36:DA:397:G:H5''	1.89	0.53
36:DA:2628:C:H5'	36:DA:2781:A:C6	2.44	0.53
54:DV:58:VAL:HG12	54:DV:59:ALA:N	2.23	0.53
1:CA:1053:G:C3'	1:CA:1054:C:H5'	2.39	0.53
1:CA:973:G:H1'	10:CJ:55:LYS:HE2	1.90	0.53
51:BS:97:ARG:O	51:BS:99:LYS:HG2	2.09	0.53
8:AH:103:VAL:HG12	8:AH:108:GLY:HA3	1.90	0.53
8:AH:29:SER:CB	8:AH:32:LYS:HB2	2.38	0.53
2:CB:8:LYS:CD	2:CB:217:ARG:NH2	2.72	0.53
56:DX:7:VAL:O	56:DX:30:VAL:HA	2.09	0.53
52:BT:23:ARG:CG	52:BT:120:ARG:NH1	2.72	0.53
52:DT:47:GLY:HA3	52:DT:65:LYS:HB2	1.91	0.53
38:BC:22:ILE:HD12	38:BC:228:SER:C	2.29	0.53
57:DY:13:VAL:HG23	57:DY:74:PRO:HA	1.91	0.53
1:AA:1368:G:C2'	1:AA:1369:C:H5'	2.38	0.53
9:AI:9:ARG:CB	9:AI:104:ARG:HH12	2.17	0.53
35:D9:9:ARG:O	35:D9:11:CYS:N	2.42	0.53
22:AV:18:G:H4'	22:AV:60:U:O2	2.07	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BB:79:C:C2'	37:BB:80:U:H5'	2.38	0.53
36:BA:1343:G:C2	36:BA:1405:U:N3	2.77	0.53
19:AS:40:ILE:HG22	19:AS:67:VAL:HG13	1.91	0.53
1:AA:1420:C:N4	1:AA:1480:G:H1	1.99	0.53
41:BF:9:ILE:HA	41:BF:14:PRO:O	2.09	0.53
2:AB:51:LEU:O	2:AB:55:PHE:HD2	1.92	0.53
1:CA:90:U:H4'	1:CA:91:C:C6	2.44	0.53
36:BA:2593:U:H2'	36:BA:2594:C:H6	1.74	0.53
58:DZ:12:GLY:CA	58:DZ:36:LYS:HZ3	2.22	0.53
58:DZ:47:VAL:O	58:DZ:50:GLN:N	2.36	0.53
43:BH:76:VAL:C	43:BH:78:GLY:H	2.12	0.53
53:BU:86:ALA:O	53:BU:88:ILE:HG23	2.09	0.53
3:CC:26:LYS:CG	3:CC:27:LYS:H	2.22	0.53
1:CA:453:A:O2'	1:CA:454:C:O4'	2.27	0.53
15:CO:82:ILE:CG2	15:CO:83:GLU:H	2.13	0.53
1:AA:977:A:H8	1:AA:982:U:O4	1.91	0.53
38:DC:99:ILE:O	38:DC:99:ILE:HG22	2.09	0.53
36:BA:372:G:O2'	36:BA:373:U:OP1	2.27	0.53
39:BD:249:PRO:HG2	39:BD:250:TRP:N	2.24	0.53
36:DA:1551:C:H2'	36:DA:1552:G:C5'	2.38	0.53
10:AJ:7:LYS:C	10:AJ:8:LEU:HD12	2.29	0.53
38:BC:214:VAL:CG2	38:BC:224:ILE:HD13	2.37	0.53
34:D8:26:LYS:HB2	34:D8:44:LYS:HG3	1.90	0.53
39:BD:177:LEU:C	39:BD:179:SER:H	2.10	0.53
48:BP:130:PHE:HD2	48:BP:130:PHE:N	2.04	0.53
1:CA:607:A:H2'	1:CA:608:A:O4'	2.09	0.53
53:BU:52:ARG:NH2	53:BU:55:ARG:NH2	2.56	0.53
1:AA:1316:G:H4'	14:AN:18:VAL:HG11	1.91	0.53
36:DA:1141:U:H5	46:DN:64:GLY:HA3	1.74	0.53
1:CA:1465:C:C5	1:CA:1466:C:C4	2.97	0.53
58:BZ:105:VAL:HG13	58:BZ:105:VAL:O	2.08	0.53
36:DA:1491:G:H5'	39:DD:99:ASP:OD1	2.09	0.53
36:DA:2567:G:H2'	36:DA:2568:C:H6	1.74	0.53
36:BA:1358:G:O2'	36:BA:1359:A:H5''	2.09	0.53
1:CA:705:U:C5	1:CA:706:A:C5	2.97	0.53
22:CW:74:C:C5	22:CW:75:C:C4	2.97	0.53
1:CA:106:C:O2	1:CA:379:C:H4'	2.09	0.53
1:CA:602:A:H2'	1:CA:603:U:C6	2.44	0.53
49:DQ:87:LYS:O	49:DQ:88:GLY:O	2.26	0.53
36:DA:1458:C:C4'	36:DA:1459:G:O4'	2.57	0.53
36:BA:874:G:O2'	36:BA:875:G:H5'	2.09	0.53
1:AA:630:G:N3	1:AA:630:G:H2'	2.23	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2497:A:OP2	36:BA:2497:A:H8	1.91	0.53
42:BG:74:LYS:HD2	42:BG:74:LYS:N	2.23	0.53
10:AJ:29:ARG:O	10:AJ:29:ARG:HG2	2.09	0.53
36:BA:1722:A:O2'	36:BA:1739:U:H5'	2.08	0.53
5:AE:20:GLN:O	5:AE:22:GLY:N	2.42	0.53
36:DA:705:A:C2	36:DA:727:A:H1'	2.44	0.53
12:CL:34:ARG:HG2	12:CL:35:GLY:N	2.23	0.53
36:DA:2684:U:O5'	36:DA:2684:U:H6	1.91	0.53
37:BB:77:U:O2	37:BB:77:U:H2'	2.09	0.53
55:DW:39:THR:O	55:DW:44:ALA:HB2	2.09	0.53
3:CC:130:VAL:O	3:CC:134:ILE:HG13	2.09	0.53
36:BA:809:G:O2'	36:BA:810:U:H5'	2.08	0.53
48:BP:23:PRO:HG2	48:BP:33:ARG:HE	1.74	0.53
31:D5:5:PRO:CA	36:DA:2056:G:H22	2.21	0.53
36:DA:2620:C:C1'	40:DE:156:MET:HB2	2.39	0.53
55:DW:89:ALA:O	55:DW:92:ARG:HD2	2.08	0.53
57:BY:47:LYS:HA	57:BY:60:PHE:CZ	2.43	0.53
36:DA:657:U:C2	36:DA:658:C:C5	2.97	0.53
41:DF:118:ALA:CB	41:DF:123:LEU:HD22	2.39	0.53
24:AY:60:U:H5''	24:AY:61:C:H5	1.74	0.53
1:CA:260:G:O2'	1:CA:261:U:H5'	2.08	0.53
41:BF:182:ASN:OD1	41:BF:185:ASP:N	2.29	0.53
49:BQ:52:VAL:O	49:BQ:53:ALA:C	2.47	0.53
41:BF:160:ASN:HD21	41:BF:162:LEU:HD13	1.73	0.53
55:BW:89:ALA:O	55:BW:92:ARG:HD2	2.09	0.53
37:BB:42:C:O2'	37:BB:43:C:H6	1.91	0.53
37:BB:44:G:H4'	37:BB:45:A:N7	2.23	0.53
56:DX:22:ALA:HB1	56:DX:23:GLU:OE2	2.08	0.53
36:DA:1131:G:C8	36:DA:2025:C:H4'	2.44	0.53
46:DN:101:HIS:C	46:DN:103:VAL:N	2.61	0.53
46:DN:108:PRO:HG2	46:DN:113:GLY:CA	2.39	0.53
2:CB:31:TYR:HE1	2:CB:200:ILE:HG12	1.74	0.53
36:BA:1666:G:H2'	36:BA:1667:G:O4'	2.08	0.53
52:BT:74:ARG:C	52:BT:75:ILE:HD12	2.29	0.53
52:BT:96:ARG:CZ	52:BT:96:ARG:HB2	2.39	0.53
40:DE:166:THR:C	40:DE:168:MET:H	2.13	0.53
40:DE:11:MET:HB2	40:DE:23:VAL:O	2.09	0.53
52:DT:64:ARG:NH1	52:DT:102:ILE:HD11	2.24	0.53
58:BZ:69:THR:HG22	58:BZ:89:PHE:C	2.29	0.53
1:AA:976:G:H5'	1:AA:1358:U:O2'	2.09	0.53
1:AA:968:A:C4	1:AA:1062:U:H4'	2.44	0.53
36:BA:857:C:H5'	36:BA:858:U:OP2	2.08	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2303:G:O2'	42:BG:132:ASN:CB	2.56	0.53
2:AB:39:ILE:HG22	2:AB:40:HIS:H	1.74	0.53
46:DN:13:TRP:O	46:DN:135:PRO:HD2	2.09	0.53
3:AC:13:GLY:O	3:AC:14:ILE:CB	2.57	0.53
3:AC:48:TYR:O	3:AC:50:ALA:N	2.41	0.53
1:CA:1004:A:N6	1:CA:1035:A:C5	2.77	0.53
13:CM:70:LEU:HD23	13:CM:70:LEU:C	2.29	0.53
58:DZ:45:ASP:O	58:DZ:48:PHE:N	2.41	0.53
36:BA:2306:C:H4'	42:BG:136:ARG:CZ	2.39	0.53
42:DG:162:THR:O	42:DG:164:GLU:HG3	2.08	0.53
42:DG:39:ILE:HA	42:DG:156:ASP:O	2.08	0.53
36:DA:1170:G:H1	36:DA:1179:C:H42	1.56	0.53
7:AG:44:TYR:HE1	9:AI:41:VAL:HG11	1.74	0.53
36:BA:1092:C:H2'	36:BA:1093:G:O4'	2.08	0.53
43:BH:149:ARG:HA	43:BH:162:ILE:HG23	1.91	0.53
2:CB:105:PHE:O	2:CB:106:LYS:C	2.46	0.53
42:BG:177:GLY:O	42:BG:179:PRO:HD3	2.08	0.53
8:CH:77:GLU:HG3	8:CH:78:GLN:N	2.24	0.53
49:DQ:44:ALA:HA	49:DQ:47:ILE:CD1	2.36	0.53
36:BA:197:A:H5'	36:BA:197:A:H8	1.74	0.53
36:BA:45:C:OP2	36:BA:215:G:H2'	2.09	0.53
1:AA:453:A:O2'	1:AA:454:C:O4'	2.27	0.53
36:DA:25:U:H5''	55:DW:79:GLY:HA2	1.90	0.53
36:DA:440:G:H22	41:DF:46:ARG:HH21	1.54	0.53
27:D1:71:TYR:O	27:D1:74:VAL:N	2.41	0.53
1:AA:39:G:O2'	1:AA:40:C:H5'	2.09	0.53
39:DD:126:GLN:C	39:DD:193:VAL:HG11	2.30	0.53
4:AD:201:GLN:HA	4:AD:204:ILE:CD1	2.35	0.53
54:BV:58:VAL:HG12	54:BV:59:ALA:N	2.23	0.53
36:DA:904:C:H6	36:DA:904:C:OP2	1.91	0.53
33:B7:11:LYS:HE2	36:BA:686:G:C2	2.44	0.53
36:BA:2508:G:C2	36:BA:2582:G:O6	2.62	0.53
36:DA:2547:U:H1'	47:DO:28:SER:O	2.09	0.53
1:AA:1380:U:O2	7:AG:3:ARG:NH2	2.41	0.53
1:CA:110:C:C2'	1:CA:111:G:H5'	2.39	0.53
36:DA:1064:C:C2'	36:DA:1065:U:H5''	2.40	0.53
22:AV:74:C:H2'	22:AV:75:C:H5'	1.90	0.53
46:BN:58:ASP:C	46:BN:60:ILE:N	2.61	0.53
51:DS:84:GLN:CA	51:DS:105:ALA:HB3	2.38	0.53
4:AD:25:ARG:C	4:AD:27:TYR:N	2.60	0.53
27:B1:34:THR:HG22	27:B1:35:THR:H	1.73	0.53
1:AA:651:C:H2'	1:AA:652:U:O4'	2.09	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:642:A:H2'	1:CA:643:C:C6	2.43	0.53
30:B4:42:PHE:O	30:B4:42:PHE:CD2	2.62	0.53
27:D1:55:GLY:O	27:D1:57:GLU:N	2.41	0.53
25:CZ:226:GLU:HG3	25:CZ:240:GLY:CA	2.39	0.53
51:DS:42:ASP:C	51:DS:44:LYS:N	2.62	0.53
36:DA:614(A):U:H4'	36:DA:614(B):G:H5''	1.91	0.53
36:DA:2537:U:H2'	36:DA:2538:C:C6	2.44	0.53
1:AA:347:G:N2	1:AA:348:G:C4	2.77	0.53
35:D9:19:ARG:O	35:D9:21:GLY:N	2.38	0.53
25:AZ:152:MET:CE	25:AZ:156:ASP:HB2	2.39	0.53
1:CA:594:G:C2'	1:CA:595:G:H5'	2.38	0.53
8:AH:40:ALA:CA	8:AH:45:ILE:HG13	2.39	0.53
1:AA:202:U:O2'	1:AA:203:U:OP1	2.25	0.53
36:DA:1741:A:H3'	36:DA:1742:G:H8	1.74	0.53
45:BK:99:UNK:N	45:BK:135:UNK:CB	2.72	0.53
36:BA:363:G:N1	36:BA:363(A):A:N7	2.57	0.53
18:AR:31:LEU:HD21	18:AR:65:ILE:HD12	1.91	0.53
22:AV:44:G:O2'	22:AV:45:U:H5'	2.08	0.53
36:BA:494:G:H2'	36:BA:494:G:N3	2.24	0.53
45:BK:129:UNK:C	45:BK:131:UNK:N	2.71	0.53
36:BA:1192:G:H8	36:BA:1192:G:O5'	1.92	0.52
53:BU:14:HIS:CD2	53:BU:32:PHE:CB	2.89	0.52
31:D5:6:VAL:H	36:DA:2056:G:N2	2.06	0.52
57:BY:50:ARG:CB	57:BY:53:PRO:HG3	2.19	0.52
34:D8:21:LYS:HD3	34:D8:48:PHE:CE2	2.43	0.52
34:D8:41:ILE:HG23	34:D8:42:ARG:H	1.74	0.52
48:DP:105:LEU:HD12	48:DP:105:LEU:N	2.23	0.52
36:DA:2392:A:H8	48:DP:60:MET:HA	1.74	0.52
28:D2:69:ARG:NH1	36:DA:111:A:H4'	2.24	0.52
41:DF:40:GLN:NE2	41:DF:182:ASN:HB2	2.24	0.52
25:AZ:325:LYS:HG3	25:AZ:331:HIS:HB3	1.90	0.52
25:AZ:234:ARG:NE	25:AZ:289:LEU:HD22	2.24	0.52
39:BD:147:LEU:CD1	39:BD:183:ARG:NH1	2.45	0.52
1:AA:1189:C:O3'	3:AC:5:ILE:HD12	2.09	0.52
38:BC:75:LEU:CD1	38:BC:113:VAL:HA	2.40	0.52
36:BA:601:C:O2	36:BA:605:C:C5'	2.56	0.52
41:BF:122:LYS:N	41:BF:122:LYS:HE3	2.22	0.52
41:BF:187:VAL:HG12	48:BP:7:ARG:HA	1.90	0.52
36:DA:534:U:H5'	53:DU:42:ALA:HB1	1.91	0.52
36:DA:814:C:H2'	36:DA:815:C:H6	1.73	0.52
54:DV:39:LEU:HD13	54:DV:39:LEU:N	2.23	0.52
1:CA:1157:A:C4	1:CA:1181:G:N2	2.77	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:199:ILE:HG22	25:CZ:203:LEU:HD12	1.92	0.52
25:CZ:137:LYS:HG2	62:CZ:501:GDP:N1	2.23	0.52
47:BO:2:ILE:HD12	47:BO:6:THR:HG21	1.91	0.52
58:BZ:100:VAL:HB	58:BZ:124:ILE:HG13	1.90	0.52
57:DY:17:SER:HB2	57:DY:71:LYS:HD2	1.91	0.52
57:DY:17:SER:OG	57:DY:18:GLY:N	2.42	0.52
7:AG:105:VAL:HG12	7:AG:109:ASN:HD22	1.73	0.52
14:CN:47:LEU:O	14:CN:50:LYS:N	2.42	0.52
37:BB:79:C:H2'	37:BB:80:U:O4'	2.08	0.52
55:DW:5:ALA:HB3	55:DW:105:VAL:HB	1.91	0.52
7:CG:11:GLN:NE2	7:CG:12:LEU:H	2.07	0.52
41:BF:11:VAL:C	41:BF:13:SER:H	2.13	0.52
3:CC:111:LEU:HD21	3:CC:144:SER:O	2.08	0.52
3:CC:141:VAL:HG11	3:CC:202:ILE:HG23	1.91	0.52
58:DZ:86:VAL:CG1	58:DZ:87:ASP:H	2.09	0.52
53:BU:66:ASN:ND2	53:BU:70:ARG:HB2	2.24	0.52
54:BV:39:LEU:HD13	54:BV:39:LEU:N	2.24	0.52
36:DA:425:G:H2'	36:DA:426:C:H6	1.73	0.52
40:DE:132:HIS:HD2	40:DE:135:HIS:CE1	2.27	0.52
13:CM:14:ARG:HB2	13:CM:17:VAL:HG23	1.91	0.52
43:DH:148:ILE:O	43:DH:162:ILE:HG21	2.08	0.52
51:DS:106:ARG:HD2	51:DS:106:ARG:C	2.29	0.52
2:CB:109:SER:O	2:CB:110:GLN:C	2.47	0.52
1:AA:826:C:H2'	1:AA:827:U:C6	2.42	0.52
36:BA:2127:G:C6	36:BA:2128:C:N4	2.76	0.52
24:CY:52:A:C2	24:CY:63:G:N1	2.77	0.52
39:BD:232:PRO:HG2	39:BD:248:SER:O	2.09	0.52
8:AH:86:ILE:CG2	8:AH:133:LEU:HD23	2.34	0.52
6:CF:43:LEU:N	6:CF:43:LEU:HD22	2.17	0.52
1:AA:676:A:H5''	11:AK:113:PRO:HB2	1.89	0.52
2:CB:43:ASP:OD1	2:CB:45:GLN:HB3	2.09	0.52
36:DA:150:C:O2'	36:DA:151:C:H5'	2.09	0.52
54:BV:21:ARG:HG2	54:BV:91:TYR:CE2	2.44	0.52
25:CZ:325:LYS:HG3	25:CZ:331:HIS:HB3	1.91	0.52
1:AA:295:C:H2'	1:AA:296:U:C6	2.33	0.52
22:AW:66:U:H2'	22:AW:67:C:C6	2.44	0.52
36:DA:849:A:H2'	36:DA:850:C:O4'	2.09	0.52
14:AN:19:ARG:O	14:AN:20:ALA:O	2.26	0.52
36:DA:1491:G:C6	36:DA:1500:G:C2	2.97	0.52
36:BA:1327:C:N4	36:BA:1647:G:N2	2.50	0.52
36:BA:1053:C:O2'	36:BA:1054:A:H5'	2.09	0.52
46:BN:57:ALA:O	46:BN:58:ASP:O	2.27	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2496:C:O2'	36:DA:2497:A:H5'	2.08	0.52
29:D3:13:ILE:HD13	36:DA:989:G:C5	2.44	0.52
1:CA:1030:C:H2'	1:CA:1030(A):G:H5'	1.91	0.52
36:DA:920:G:H2'	36:DA:921:G:H8	1.73	0.52
13:AM:124:PRO:O	13:AM:126:LYS:N	2.41	0.52
53:BU:71:GLN:O	53:BU:71:GLN:HG2	2.09	0.52
25:CZ:278:GLN:OE1	25:CZ:278:GLN:HA	2.09	0.52
43:BH:114:VAL:O	43:BH:114:VAL:HG23	2.08	0.52
3:CC:165:THR:O	3:CC:165:THR:HG23	2.08	0.52
40:BE:67:PHE:HD2	40:BE:68:ALA:H	1.57	0.52
56:BX:3:THR:HA	56:BX:6:ASP:OD2	2.09	0.52
39:BD:121:PRO:HB3	39:BD:135:PHE:CE2	2.44	0.52
32:B6:15:GLU:HA	32:B6:49:HIS:ND1	2.24	0.52
36:BA:2029:G:O6	36:BA:2033:A:OP2	2.26	0.52
36:BA:2425:A:H5''	36:BA:2427:C:O4'	2.09	0.52
50:DR:98:LEU:O	50:DR:113:LEU:N	2.40	0.52
34:D8:37:SER:O	34:D8:41:ILE:HG22	2.09	0.52
36:DA:600:G:C6	36:DA:601:C:N4	2.77	0.52
36:DA:1245:G:H5'	41:DF:34:TRP:HZ2	1.74	0.52
41:BF:111:ALA:O	41:BF:115:ALA:N	2.42	0.52
28:B2:57:ILE:HG22	28:B2:61:LEU:HG	1.91	0.52
36:BA:2007:C:C5'	36:BA:2824:C:H1'	2.39	0.52
36:BA:2577:A:H5''	36:BA:2578:G:H5'	1.91	0.52
36:BA:2818:G:O2'	36:BA:2819:G:H5'	2.10	0.52
50:BR:14:SER:HA	50:BR:17:ARG:CZ	2.39	0.52
50:BR:63:ARG:O	50:BR:66:VAL:HB	2.09	0.52
36:DA:972:G:H3'	36:DA:973:A:H2'	1.91	0.52
36:DA:448:U:H1'	41:DF:84:VAL:CG1	2.39	0.52
53:DU:14:HIS:CD2	53:DU:32:PHE:CB	2.90	0.52
4:CD:28:SER:CB	4:CD:29:PRO:CD	2.85	0.52
51:BS:13:ARG:HG2	51:BS:13:ARG:HH11	1.74	0.52
2:CB:47:THR:HG23	2:CB:202:PRO:HG2	1.91	0.52
40:BE:31:CYS:HB3	40:BE:49:LEU:HD12	1.91	0.52
32:B6:26:ASN:O	32:B6:27:LYS:CB	2.58	0.52
13:CM:81:LEU:CD2	13:CM:81:LEU:N	2.73	0.52
25:CZ:24:LYS:HE3	25:CZ:84:GLY:HA3	1.92	0.52
52:BT:101:PHE:O	52:BT:102:ILE:C	2.48	0.52
47:BO:64:ARG:CZ	52:BT:70:VAL:HG21	2.39	0.52
47:BO:75:SER:OG	52:BT:74:ARG:NH1	2.41	0.52
52:DT:101:PHE:O	52:DT:103:ARG:N	2.42	0.52
36:DA:310:A:H2	36:DA:330:A:HO2'	1.56	0.52
36:BA:2673:G:H2'	36:BA:2674:G:C8	2.45	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:D3:15:TYR:CD2	29:D3:19:GLN:NE2	2.74	0.52
36:BA:1553:A:N6	36:BA:1555:G:H1'	2.23	0.52
51:DS:98:VAL:O	51:DS:100:ALA:N	2.43	0.52
36:BA:324:A:H61	36:BA:338:G:C2'	2.23	0.52
42:BG:7:LEU:O	42:BG:11:TYR:HB2	2.08	0.52
36:DA:2107:C:C2	36:DA:2108:C:C5	2.97	0.52
1:AA:1530:G:H2'	1:AA:1531:A:O4'	2.09	0.52
19:CS:49:ILE:O	19:CS:60:VAL:O	2.28	0.52
36:DA:1590:U:C3'	36:DA:1591:G:H5''	2.40	0.52
36:BA:1772:G:N2	36:BA:1774:C:H5''	2.24	0.52
39:BD:240:ALA:HB1	39:BD:241:PRO:HD2	1.91	0.52
58:DZ:26:GLY:HA2	58:DZ:86:VAL:H	1.74	0.52
46:DN:55:VAL:HG22	46:DN:56:ASN:N	2.24	0.52
53:BU:76:TYR:OH	53:BU:93:LYS:HE3	2.09	0.52
54:BV:38:LEU:HD12	54:BV:57:VAL:HB	1.90	0.52
36:BA:1657:C:C2'	36:BA:1658:C:H5'	2.39	0.52
1:CA:383:A:OP1	1:CA:454:C:H2'	2.09	0.52
36:BA:717:G:H2'	36:BA:718:A:C8	2.44	0.52
51:BS:106:ARG:NH2	51:BS:109:GLY:N	2.56	0.52
49:BQ:19:GLY:O	49:BQ:20:ALA:HB3	2.09	0.52
49:BQ:19:GLY:CA	58:BZ:79:ARG:NH2	2.72	0.52
51:DS:106:ARG:HH11	51:DS:106:ARG:HB3	1.73	0.52
8:AH:20:TYR:HA	8:AH:65:TYR:CE2	2.44	0.52
11:CK:21:ILE:HD12	11:CK:21:ILE:N	2.25	0.52
1:AA:192:U:O2'	20:AT:103:GLY:HA2	2.09	0.52
36:DA:272(J):C:H2'	36:DA:274:G:H5''	1.92	0.52
1:CA:1240:U:H5''	1:CA:1241:G:C8	2.43	0.52
8:AH:92:ARG:HB3	8:AH:94:TYR:HE1	1.74	0.52
1:CA:711:G:O2'	1:CA:712:A:H5'	2.08	0.52
1:CA:1510:U:H2'	1:CA:1511:G:C8	2.44	0.52
25:AZ:362:VAL:HG11	25:AZ:368:VAL:CG2	2.38	0.52
31:B5:48:GLU:O	31:B5:49:CYS:CB	2.57	0.52
36:DA:1861:G:H1	36:DA:1881:C:H42	1.57	0.52
15:AO:39:LEU:CD1	15:AO:56:LEU:HB2	2.39	0.52
1:AA:446:G:H2'	1:AA:447:G:O4'	2.09	0.52
36:BA:2626:C:H6	36:BA:2626:C:O5'	1.92	0.52
39:DD:136:ILE:N	39:DD:136:ILE:CD1	2.72	0.52
25:CZ:316:PHE:C	25:CZ:371:THR:HG23	2.29	0.52
36:DA:1328:G:H8	36:DA:1328:G:O5'	1.92	0.52
5:CE:41:VAL:O	5:CE:66:MET:HA	2.09	0.52
17:AQ:29:HIS:ND1	17:AQ:32:TYR:N	2.52	0.52
1:CA:1530:G:H2'	1:CA:1531:A:O4'	2.08	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:781:A:C3'	1:AA:782:A:H5'	2.39	0.52
49:DQ:86:GLY:O	49:DQ:87:LYS:HB2	2.10	0.52
1:CA:221:C:O2'	1:CA:222:U:H5'	2.09	0.52
51:BS:84:GLN:HA	51:BS:105:ALA:HB3	1.91	0.52
3:CC:60:ALA:H	3:CC:63:ASN:CG	2.12	0.52
36:DA:1747(A):G:C2'	36:DA:1748:G:H5''	2.39	0.52
22:CW:25:C:H2'	22:CW:26:A:H8	1.74	0.52
36:DA:983:A:H2'	36:DA:984:A:O4'	2.08	0.52
1:CA:1272:G:C2	1:CA:1273:G:H1'	2.43	0.52
44:DJ:30:UNK:O	44:DJ:31:UNK:CB	2.58	0.52
38:BC:1:PRO:C	38:BC:3:HIS:H	2.13	0.52
36:BA:2076:U:OP1	36:BA:2076:U:H6	1.90	0.52
27:B1:40:ARG:CG	27:B1:41:ARG:N	2.72	0.52
36:BA:1215:G:O2'	36:BA:1216:G:H5'	2.08	0.52
36:DA:2329:G:H2'	36:DA:2330:G:C8	2.44	0.52
48:DP:59:LEU:C	48:DP:61:ARG:N	2.62	0.52
36:BA:1853:A:N6	36:BA:1889:A:C8	2.78	0.52
36:BA:2235:G:H2'	36:BA:2236:C:H6	1.72	0.52
41:DF:122:LYS:HB3	41:DF:191:ARG:HG3	1.91	0.52
28:B2:35:LEU:HD21	28:B2:50:ILE:HG13	1.89	0.52
36:BA:2457:U:C2'	36:BA:2458:G:H5'	2.39	0.52
13:AM:32:GLU:C	13:AM:34:LEU:H	2.11	0.52
36:DA:1137:G:H2'	36:DA:1138:G:H8	1.73	0.52
41:DF:170:LEU:O	41:DF:173:VAL:HB	2.08	0.52
36:BA:2346:A:H5'	36:BA:2383:G:O4'	2.09	0.52
13:CM:77:ASN:O	13:CM:80:ARG:HB3	2.10	0.52
13:AM:90:LEU:HA	13:AM:93:ARG:HB2	1.91	0.52
25:CZ:155:ARG:HH12	25:CZ:168:VAL:H	1.58	0.52
40:BE:166:THR:C	40:BE:168:MET:H	2.11	0.52
52:BT:79:HIS:O	52:BT:80:SER:HB3	2.09	0.52
52:DT:28:VAL:HG11	52:DT:46:GLU:OE1	2.09	0.52
52:DT:50:ILE:HA	52:DT:99:LEU:CD1	2.39	0.52
36:DA:1485:G:H2'	36:DA:1486:A:O4'	2.10	0.52
7:AG:11:GLN:NE2	7:AG:12:LEU:H	2.08	0.52
7:AG:31:MET:CG	7:AG:32:ARG:N	2.69	0.52
1:AA:668:G:H5'	15:AO:49:ASP:HA	1.90	0.52
1:CA:386:C:O2'	1:CA:387:U:H5'	2.08	0.52
9:CI:10:ARG:HG3	9:CI:75:ASP:CB	2.38	0.52
9:CI:118:LYS:O	9:CI:119:ALA:HB3	2.09	0.52
36:DA:2833:G:H8	36:DA:2833:G:OP1	1.91	0.52
51:DS:14:VAL:C	51:DS:15:ARG:HG3	2.30	0.52
42:BG:168:GLU:C	42:BG:170:ARG:N	2.63	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2593:U:H2'	36:DA:2594:C:C6	2.44	0.52
2:AB:55:PHE:HD1	2:AB:221:LEU:HG	1.74	0.52
36:BA:2105:C:O2'	36:BA:2106:G:H5'	2.09	0.52
36:BA:2111:C:H2'	36:BA:2112:G:C5'	2.39	0.52
36:DA:1528:A:O2'	36:DA:1528(A):A:O5'	2.26	0.52
36:DA:1542:A:H3'	36:DA:1542:A:H8	1.75	0.52
36:BA:1792:G:OP2	39:BD:206:LEU:HD12	2.09	0.52
41:DF:6:VAL:HG12	41:DF:7:TYR:N	2.15	0.52
41:DF:9:ILE:HA	41:DF:14:PRO:O	2.10	0.52
14:CN:9:LYS:HG2	14:CN:9:LYS:O	2.10	0.52
1:CA:1440:C:C1'	1:CA:1462:G:H22	2.21	0.52
53:BU:92:ARG:HH22	54:BV:10:LYS:CG	2.22	0.52
36:BA:1335:U:OP1	56:BX:65:ARG:NH2	2.43	0.52
39:DD:23:GLU:HA	39:DD:23:GLU:OE1	2.08	0.52
39:DD:24:ILE:HG23	39:DD:25:THR:H	1.74	0.52
36:BA:1578:U:O2	36:BA:1578:U:H2'	2.09	0.52
1:CA:599:C:H2'	1:CA:600:C:C6	2.43	0.52
36:DA:1784:A:H4'	36:DA:1785:A:O5'	2.10	0.52
2:AB:170:GLU:O	2:AB:173:ALA:N	2.42	0.52
1:AA:1433:A:N6	1:AA:1434:A:N1	2.57	0.52
36:DA:145:G:H3'	36:DA:146:G:H5"	1.89	0.52
10:CJ:6:ILE:HA	10:CJ:97:GLU:O	2.08	0.52
20:AT:45:GLN:CB	20:AT:91:LEU:HD13	2.36	0.52
1:CA:191:G:H2'	1:CA:192:U:C6	2.44	0.52
29:B3:7:LYS:N	29:B3:54:VAL:HG13	2.24	0.52
1:CA:401:C:H1'	1:CA:622:A:H1'	1.90	0.52
39:DD:28:GLU:OE2	39:DD:28:GLU:N	2.42	0.52
27:D1:16:ASN:HD21	27:D1:37:ILE:CG2	2.22	0.52
36:DA:802:A:H2'	36:DA:803:U:H6	1.72	0.52
36:BA:1785:A:P	36:BA:1982:C:H5'	2.48	0.52
33:B7:1:MET:N	36:BA:1619:G:O2'	2.42	0.52
12:CL:62:SER:O	12:CL:64:TYR:N	2.42	0.52
36:BA:189:G:H2'	36:BA:205:G:H22	1.73	0.52
19:CS:6:LYS:C	19:CS:7:LYS:HE3	2.29	0.52
36:DA:1327:C:N4	36:DA:1647:G:N2	2.49	0.52
5:CE:41:VAL:HG11	5:CE:113:ALA:HA	1.91	0.52
12:CL:53:ARG:H	12:CL:53:ARG:HD2	1.74	0.52
1:AA:218:C:H5'	1:AA:470:C:N4	2.24	0.52
12:CL:28:LYS:O	12:CL:29:GLY:C	2.48	0.52
17:AQ:29:HIS:CE1	17:AQ:31:LEU:N	2.76	0.52
36:BA:1690:A:H2'	36:BA:1691:C:C5'	2.38	0.52
36:DA:2756:U:C1'	36:DA:2757:A:H5"	2.39	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BC:28:LEU:C	38:BC:28:LEU:HD23	2.30	0.52
40:DE:169:ASN:C	40:DE:169:ASN:HD22	2.05	0.52
1:AA:1327:C:H2'	1:AA:1328:C:C6	2.43	0.52
36:BA:360:G:H2'	36:BA:361:G:O4'	2.09	0.52
36:DA:360:G:O2'	36:DA:361:G:H5'	2.09	0.52
25:CZ:152:MET:CE	25:CZ:156:ASP:HB2	2.39	0.52
1:AA:1082:G:H2'	1:AA:1083:U:O4'	2.09	0.52
2:AB:155:LEU:HD21	2:AB:159:PRO:HG3	1.92	0.52
45:DK:100:UNK:C	45:DK:136:UNK:HA	2.39	0.52
7:AG:89:MET:O	7:AG:90:GLU:O	2.26	0.52
36:BA:1741:A:H3'	36:BA:1742:G:C8	2.45	0.52
1:AA:762:C:H2'	1:AA:763:G:H8	1.73	0.52
27:B1:53:VAL:O	27:B1:55:GLY:N	2.38	0.52
28:B2:39:ALA:CB	28:B2:45:SER:HA	2.39	0.52
36:DA:1834:U:O2	36:DA:1834:U:H2'	2.10	0.52
12:CL:7:ILE:HD12	12:CL:7:ILE:H	1.74	0.52
54:DV:13:ARG:HG3	54:DV:13:ARG:HH11	1.74	0.52
52:BT:134:GLU:O	52:BT:135:ALA:HB3	2.07	0.52
36:BA:2331:G:H2'	36:BA:2332:U:H6	1.75	0.52
48:BP:30:THR:CG2	48:BP:31:ALA:N	2.72	0.52
36:DA:2331:G:H2'	36:DA:2332:U:H6	1.74	0.52
36:DA:601:C:O2	36:DA:605:C:C5'	2.58	0.52
41:DF:33:LEU:CD1	41:DF:113:ALA:HB2	2.39	0.52
56:BX:12:VAL:CG1	56:BX:27:THR:H	2.22	0.52
39:BD:30:GLU:HB3	39:BD:35:LYS:HG3	1.90	0.52
10:CJ:16:LEU:C	10:CJ:16:LEU:HD13	2.29	0.52
42:DG:72:ARG:O	42:DG:73:ALA:O	2.28	0.52
36:BA:600:G:C6	36:BA:601:C:N4	2.77	0.52
36:BA:654(A):G:H5'	36:BA:654(B):C:OP2	2.08	0.52
36:BA:2464:C:O2'	36:BA:2465:C:H6	1.85	0.52
36:BA:319:C:H2'	36:BA:320:A:C8	2.44	0.52
50:BR:96:ARG:NH1	50:BR:96:ARG:HB2	2.24	0.52
27:D1:63:ALA:HB3	27:D1:66:HIS:HB2	1.91	0.52
46:DN:3:THR:CG2	46:DN:4:TYR:N	2.72	0.52
54:DV:23:GLU:O	54:DV:24:LYS:O	2.26	0.52
54:DV:78:LYS:O	54:DV:79:VAL:HG23	2.09	0.52
54:DV:21:ARG:HG2	54:DV:91:TYR:CE2	2.44	0.52
10:CJ:58:ASP:O	10:CJ:59:SER:C	2.47	0.52
36:BA:1665:A:C3'	36:BA:1666:G:C5'	2.85	0.52
36:BA:1668:A:C2	36:BA:1670:C:N3	2.77	0.52
37:BB:105:A:H4'	58:BZ:89:PHE:CD2	2.44	0.52
58:BZ:61:LEU:C	58:BZ:63:ASP:N	2.58	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:CN:21:TYR:N	14:CN:21:TYR:CD1	2.78	0.52
26:B0:51:VAL:HG21	26:B0:79:VAL:O	2.09	0.52
1:AA:1401:G:O5'	1:AA:1401:G:C8	2.62	0.52
1:AA:790:A:H5'	22:AV:38:A:O3'	2.10	0.52
19:AS:52:TYR:O	19:AS:53:ASN:CB	2.56	0.52
51:DS:67:ARG:HB2	51:DS:71:ARG:HH11	1.74	0.52
1:AA:1477:C:H2'	1:AA:1478:C:C6	2.44	0.52
36:BA:2111:C:H2'	36:BA:2112:G:H5''	1.90	0.52
3:AC:32:LEU:HD22	3:AC:59:ARG:CZ	2.39	0.52
16:AP:19:ILE:HB	16:AP:37:GLY:O	2.10	0.52
36:DA:1301:A:HO2'	36:DA:1302:A:H2'	1.72	0.52
22:AV:56:C:H1'	42:BG:76:SER:CB	2.39	0.52
42:BG:83:ARG:O	42:BG:85:GLY:N	2.43	0.52
37:DB:42:C:O2'	37:DB:43:C:H6	1.89	0.52
36:BA:716:A:C3'	36:BA:717:G:H5''	2.40	0.52
8:CH:97:VAL:HA	8:CH:100:ILE:HG13	1.92	0.52
22:CV:54:U:H2'	22:CV:55:U:H5'	1.92	0.52
1:AA:1255:G:O2'	1:AA:1258:G:H1'	2.09	0.52
25:CZ:223:MET:HB2	25:CZ:242:ILE:HA	1.91	0.52
2:AB:26:PRO:C	2:AB:28:PHE:H	2.12	0.52
2:AB:61:LEU:HD21	2:AB:161:ALA:HB3	1.90	0.52
36:BA:1027:A:O2'	36:BA:1028:A:H5'	2.10	0.52
49:BQ:44:ALA:HA	49:BQ:47:ILE:CD1	2.35	0.52
1:AA:329:A:H2'	1:AA:332:G:O6	2.08	0.52
46:BN:75:TYR:HB2	46:BN:82:LEU:HD13	1.91	0.52
3:CC:32:LEU:HD22	3:CC:59:ARG:CZ	2.40	0.52
1:AA:192:U:H1'	20:AT:103:GLY:O	2.10	0.52
20:AT:89:ARG:HD2	20:AT:104:LEU:HD11	1.92	0.52
20:CT:89:ARG:C	20:CT:91:LEU:H	2.12	0.52
1:CA:1415:G:H2'	1:CA:1416:G:O4'	2.08	0.52
1:AA:628:G:O2'	1:AA:629:G:H5'	2.08	0.52
1:AA:492:G:N2	1:AA:493:G:H1'	2.23	0.52
33:D7:1:MET:SD	36:DA:752:A:H5''	2.50	0.52
36:BA:1376:C:C2'	36:BA:1377:G:H5'	2.40	0.52
1:CA:390:C:H2'	1:CA:391:G:H8	1.74	0.52
18:CR:50:ILE:HD11	18:CR:74:ARG:CZ	2.39	0.52
36:BA:2628:C:H5'	36:BA:2781:A:C6	2.44	0.52
22:CW:38:A:C3'	22:CW:39:U:H5''	2.37	0.52
58:BZ:108:PRO:O	58:BZ:111:VAL:HG23	2.09	0.52
5:AE:41:VAL:O	5:AE:66:MET:HA	2.10	0.52
36:DA:1052:C:H2'	36:DA:1053:C:C5	2.44	0.52
1:CA:536:C:O5'	1:CA:536:C:H6	1.92	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B1:71:TYR:O	27:B1:74:VAL:N	2.42	0.52
22:AW:74:C:C5	22:AW:75:C:C4	2.97	0.52
8:AH:113:SER:O	8:AH:131:GLY:HA3	2.10	0.52
36:BA:415:A:N1	36:BA:2409:G:C6	2.77	0.52
36:BA:500:G:N1	36:BA:503:A:OP2	2.42	0.52
16:CP:44:THR:O	16:CP:45:THR:CB	2.57	0.52
26:D0:32:ARG:O	26:D0:35:ASN:OD1	2.27	0.52
36:BA:1416:G:H1'	36:BA:1417:C:C6	2.45	0.52
9:AI:65:VAL:HG22	9:AI:66:ARG:N	2.23	0.52
38:BC:51:PRO:HB2	38:BC:167:LYS:O	2.09	0.52
36:DA:1255:U:C5	41:DF:73:ALA:HA	2.43	0.52
36:DA:275:G:C2	36:DA:276:A:C2	2.97	0.52
36:DA:1567:A:OP2	39:DD:84:TYR:OH	2.26	0.52
27:D1:92:LYS:O	27:D1:92:LYS:HD2	2.10	0.52
20:CT:94:ALA:O	20:CT:95:ALA:CB	2.57	0.52
1:AA:889:A:H4'	1:AA:890:G:OP1	2.09	0.52
50:DR:96:ARG:HB2	50:DR:96:ARG:NH1	2.23	0.52
32:D6:42:TRP:HA	32:D6:42:TRP:CE3	2.45	0.52
1:CA:267:C:H2'	1:CA:268:C:C6	2.37	0.52
42:DG:85:GLY:CA	42:DG:87:PRO:HD3	2.39	0.52
41:BF:20:LEU:HD12	41:BF:199:TRP:CH2	2.40	0.52
41:BF:28:ILE:HD13	41:BF:28:ILE:N	2.23	0.52
50:BR:28:LEU:HB2	50:BR:34:ILE:HG13	1.91	0.52
36:BA:2011:U:OP2	55:BW:16:LYS:HE3	2.09	0.52
36:DA:1130:U:O2'	36:DA:1131:G:H2'	2.09	0.52
9:CI:95:LYS:C	9:CI:98:PRO:HD2	2.30	0.52
1:AA:261:U:O2	1:AA:263:A:C8	2.63	0.52
32:D6:30:THR:O	32:D6:31:PRO:C	2.47	0.52
5:AE:102:ALA:CB	5:AE:106:PRO:HG2	2.32	0.52
25:CZ:31:LEU:HB3	25:CZ:70:TYR:CE2	2.45	0.52
36:DA:1674:G:H1'	36:DA:1676:A:H62	1.75	0.52
40:DE:103:ASP:OD1	40:DE:201:THR:HA	2.09	0.52
47:DO:71:ARG:NH2	47:DO:77:ILE:HG21	2.24	0.52
38:BC:23:ASP:CB	38:BC:27:ARG:NH1	2.65	0.52
58:BZ:28:MET:HG3	58:BZ:37:VAL:HG11	1.91	0.52
58:BZ:51:ALA:HB3	58:BZ:57:ILE:HD11	1.90	0.52
36:DA:306:U:C4	36:DA:307:G:C6	2.97	0.52
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.44	0.52
57:BY:8:LYS:H	57:BY:8:LYS:CD	1.97	0.52
42:BG:16:ARG:CD	42:BG:31:VAL:HG21	2.39	0.52
1:AA:1423:G:C6	1:AA:1424:C:N4	2.78	0.52
16:AP:20:VAL:HG22	16:AP:21:VAL:H	1.75	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1539:G:H2'	36:DA:1540:U:O4'	2.10	0.52
39:BD:233:HIS:O	39:BD:234:GLY:O	2.27	0.52
36:BA:1826:G:H4'	39:BD:242:ARG:NH2	2.24	0.52
36:DA:864:G:N2	36:DA:913:U:C2	2.78	0.52
49:DQ:34:LEU:CD1	49:DQ:129:THR:HB	2.35	0.52
46:DN:126:PRO:O	46:DN:127:ASP:CB	2.58	0.52
1:CA:1018:C:H2'	1:CA:1019:C:C6	2.44	0.52
36:BA:996:A:H4'	53:BU:92:ARG:CG	2.39	0.52
36:BA:85:G:O5'	57:BY:30:VAL:HB	2.10	0.52
36:DA:1350:C:H2'	36:DA:1351:C:C6	2.39	0.52
1:CA:1327:C:OP2	21:CU:12:LYS:NZ	2.39	0.52
42:DG:112:PRO:C	42:DG:114:ILE:N	2.63	0.52
42:DG:129:GLY:O	42:DG:130:ASN:CB	2.58	0.52
36:BA:709:U:H3	36:BA:722:A:H61	1.57	0.52
4:AD:119:GLN:NE2	4:AD:123:HIS:NE2	2.54	0.52
12:CL:119:LYS:O	12:CL:120:TYR:HB2	2.09	0.52
49:BQ:27:VAL:O	49:BQ:28:ALA:HB3	2.09	0.52
39:BD:229:VAL:HG23	39:BD:230:ASP:H	1.74	0.52
10:AJ:8:LEU:CG	10:AJ:96:ILE:HG22	2.38	0.52
36:DA:2469:A:H1'	36:DA:2482:G:C6	2.45	0.52
1:CA:777:A:H2'	1:CA:778:G:H8	1.75	0.52
36:DA:2453:A:O2'	36:DA:2454:G:H5'	2.09	0.52
31:D5:16:ARG:HD3	36:DA:1263:U:H5"	1.90	0.52
29:B3:4:LEU:N	29:B3:37:LEU:O	2.30	0.52
20:AT:48:LYS:HB3	20:AT:51:GLU:HG3	1.91	0.52
36:DA:1370:C:H3'	36:DA:1371:G:C8	2.35	0.52
46:DN:62:VAL:HG23	46:DN:66:LYS:HD2	1.91	0.52
1:CA:1431:C:C2'	1:CA:1432:G:H5'	2.38	0.52
47:DO:7:TYR:HA	47:DO:19:ILE:O	2.10	0.52
36:BA:978:G:H1	36:BA:985:C:H42	1.56	0.52
36:DA:2623:G:O5'	36:DA:2826:A:H1'	2.09	0.52
1:CA:927:G:C8	1:CA:927:G:H5'	2.43	0.52
36:BA:1511:C:H2'	36:BA:1512:U:C6	2.44	0.52
1:CA:708:C:O2'	1:CA:709:G:H5'	2.09	0.52
47:DO:17:ARG:O	47:DO:18:LYS:CB	2.57	0.52
18:CR:73:ALA:HB1	18:CR:79:LEU:HD12	1.92	0.52
25:CZ:19:HIS:HA	25:CZ:115:GLN:CB	2.40	0.52
36:BA:664:C:H4'	36:BA:941:A:OP1	2.10	0.52
36:BA:64:A:H2'	36:BA:65:C:O4'	2.09	0.52
25:AZ:9:LYS:HB3	25:AZ:75:ARG:HA	1.91	0.52
33:B7:22:MET:O	33:B7:28:ARG:NH1	2.42	0.52
36:DA:1747(A):G:H3'	36:DA:1748:G:H5"	1.91	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:D4:18:CYS:SG	30:D4:19:GLY:N	2.83	0.52
25:CZ:226:GLU:CG	25:CZ:240:GLY:HA2	2.38	0.52
36:DA:2316:C:H2'	36:DA:2317:C:C6	2.44	0.52
36:BA:966:G:H1'	36:BA:2267:A:H62	1.74	0.52
45:BK:90:UNK:HA	58:BZ:112:ARG:NH2	2.24	0.52
36:DA:875:G:H2'	36:DA:876:C:O4'	2.10	0.52
33:B7:19:ARG:HB3	36:BA:125:G:H5''	1.92	0.52
41:BF:17:ARG:HG3	41:BF:17:ARG:NH1	2.24	0.52
18:CR:25:THR:O	18:CR:25:THR:HG22	2.10	0.52
13:AM:79:LYS:HA	13:AM:82:MET:HB3	1.91	0.52
1:CA:172:A:C8	1:CA:174:C:C4	2.97	0.52
47:DO:52:VAL:C	47:DO:53:LYS:HD2	2.29	0.52
17:CQ:57:VAL:HG12	17:CQ:76:LEU:HA	1.92	0.52
26:D0:5:LYS:HB3	26:D0:5:LYS:NZ	2.25	0.52
36:DA:1506:C:H2'	36:DA:1506:C:O2	2.09	0.52
25:AZ:273:HIS:O	25:AZ:275:LYS:N	2.41	0.52
17:AQ:21:VAL:O	17:AQ:41:LYS:HA	2.10	0.52
32:B6:48:VAL:O	32:B6:49:HIS:CG	2.62	0.52
36:BA:667:U:H3'	36:BA:668:G:H5''	1.91	0.52
40:DE:82:ARG:O	40:DE:83:ASP:C	2.46	0.52
36:DA:1798:U:C2	36:DA:1822:G:C2	2.98	0.52
39:DD:183:ARG:HG3	39:DD:269:PHE:O	2.10	0.52
36:BA:483:A:C4'	57:BY:49:VAL:HG22	2.37	0.52
36:BA:2086:U:OP2	39:BD:263:ARG:NH2	2.37	0.52
36:BA:2228:G:H2'	36:BA:2229:C:C6	2.45	0.52
36:DA:658:C:H2'	36:DA:659:C:C6	2.44	0.52
36:DA:2535:G:C2	36:DA:2536:G:C8	2.98	0.52
36:DA:499:U:H1'	57:DY:47:LYS:NZ	2.25	0.52
38:DC:86:ALA:HB3	38:DC:94:VAL:CG1	2.39	0.52
36:DA:1856:G:C2'	36:DA:1857:G:H5'	2.40	0.52
36:DA:208:C:H2'	36:DA:209:C:H6	1.74	0.52
1:CA:277:C:O2'	1:CA:278:G:H5'	2.10	0.52
36:BA:2758:A:O2'	36:BA:2759:G:H8	1.92	0.52
1:AA:505:G:H2'	1:AA:506:G:H8	1.73	0.52
1:AA:538:G:H5''	12:AL:114:LYS:HB2	1.92	0.52
50:BR:20:LEU:O	50:BR:24:GLN:HG3	2.10	0.52
13:AM:19:LEU:HD22	13:AM:19:LEU:H	1.75	0.52
46:DN:24:GLY:C	46:DN:26:LEU:N	2.62	0.52
53:DU:92:ARG:HH22	54:DV:10:LYS:CG	2.22	0.52
5:AE:136:MET:O	5:AE:139:LEU:N	2.42	0.52
2:CB:61:LEU:HD21	2:CB:161:ALA:HB3	1.92	0.52
2:CB:174:VAL:O	2:CB:177:ALA:HB3	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DF:157:VAL:HG22	41:DF:194:MET:HA	1.92	0.52
41:DF:157:VAL:HG22	41:DF:194:MET:HG2	1.91	0.52
38:DC:23:ASP:CB	38:DC:27:ARG:NH1	2.67	0.52
25:CZ:171:ILE:CG2	25:CZ:172:ARG:N	2.73	0.52
36:BA:141:A:H8	36:BA:1408:C:O2'	1.92	0.52
36:DA:1763:G:H2'	36:DA:1764:G:C5'	2.38	0.52
52:DT:65:LYS:HG3	52:DT:66:VAL:N	2.25	0.52
52:DT:89:VAL:HB	52:DT:91:ARG:NE	2.25	0.52
36:DA:1487:G:N2	36:DA:1488:G:H1'	2.25	0.52
58:BZ:102:LEU:HD11	58:BZ:124:ILE:CG2	2.39	0.52
58:BZ:166:SER:OG	58:BZ:168:GLU:N	2.42	0.52
58:BZ:15:PRO:HA	58:BZ:18:LEU:HD22	1.91	0.52
58:BZ:26:GLY:O	58:BZ:27:VAL:HB	2.09	0.52
1:AA:668:G:O2'	15:AO:46:HIS:HB3	2.10	0.52
1:AA:1495:U:H2'	1:AA:1496:C:H6	1.74	0.52
36:BA:324:A:H2'	36:BA:325:G:O4'	2.09	0.52
36:DA:2591:C:OP2	39:DD:239:ARG:HB3	2.09	0.52
55:DW:76:VAL:HB	55:DW:103:ILE:HG23	1.91	0.52
3:CC:13:GLY:O	3:CC:14:ILE:HG22	2.10	0.52
3:AC:113:ALA:O	3:AC:115:LEU:N	2.43	0.52
14:AN:57:ARG:CB	14:AN:57:ARG:NH1	2.61	0.52
36:DA:907:U:H4'	49:DQ:101:ARG:NH1	2.22	0.52
42:DG:112:PRO:HG2	42:DG:113:ARG:N	2.22	0.52
36:BA:1467:C:H42	36:BA:1525:G:H1	1.58	0.52
1:CA:756:C:O2'	1:CA:878:G:N2	2.43	0.52
5:CE:76:ILE:CG1	5:CE:77:PRO:HD2	2.40	0.52
36:DA:1576:U:H2'	36:DA:1577:C:H6	1.72	0.52
24:AY:48:C:H2'	24:AY:59:A:C1'	2.31	0.52
42:DG:54:GLU:C	42:DG:57:ALA:H	2.13	0.52
22:CV:40:C:H2'	22:CV:41:C:C6	2.43	0.52
2:CB:130:ARG:HE	2:CB:131:PRO:HD2	1.74	0.52
36:BA:2243:U:H2'	36:BA:2244:U:H6	1.70	0.52
38:BC:178:ALA:O	38:BC:180:PHE:N	2.42	0.52
1:AA:665:A:N3	1:AA:732:C:H2'	2.24	0.52
6:AF:43:LEU:HD22	6:AF:43:LEU:N	2.17	0.52
10:AJ:6:ILE:HA	10:AJ:97:GLU:O	2.08	0.52
36:DA:2094:G:N2	36:DA:2196:C:H1'	2.24	0.52
36:DA:2224:G:H4'	36:DA:2226:C:C2	2.44	0.52
4:CD:122:ARG:HA	4:CD:122:ARG:HH11	1.73	0.52
36:DA:201:C:C2'	36:DA:202:U:H5'	2.40	0.52
36:BA:2373:G:H2'	36:BA:2374:C:C6	2.45	0.52
38:DC:6:ARG:HD2	38:DC:34:THR:HG22	1.90	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:752:A:O2'	36:DA:753:C:OP2	2.26	0.52
36:BA:2199:A:C5'	36:BA:2200:C:OP2	2.58	0.52
48:DP:86:LYS:HB3	48:DP:86:LYS:HZ2	1.75	0.52
39:DD:138:VAL:O	39:DD:138:VAL:HG13	2.08	0.52
25:CZ:314:THR:HG22	25:CZ:377:PRO:HA	1.91	0.52
37:BB:5:C:H2'	37:BB:6:C:C6	2.45	0.52
36:DA:1184:G:H2'	36:DA:1185:C:H5'	1.90	0.52
36:DA:1053:C:O2'	36:DA:1054:A:H5'	2.10	0.52
1:CA:551:U:O2'	1:CA:552:U:H5'	2.09	0.52
12:AL:104:VAL:HG12	12:AL:105:TYR:CD2	2.45	0.52
20:CT:81:LYS:O	20:CT:83:ARG:N	2.43	0.52
39:BD:4:LYS:HB2	39:BD:18:VAL:HG12	1.92	0.52
25:CZ:97:ALA:HA	25:CZ:126:VAL:CG1	2.39	0.52
38:DC:166:ASP:OD2	38:DC:168:THR:HG23	2.09	0.52
57:DY:2:ARG:C	57:DY:4:LYS:N	2.63	0.52
22:AW:14:A:H2'	22:AW:15:G:O4'	2.10	0.52
6:AF:10:LEU:HD13	6:AF:59:TYR:CD2	2.45	0.52
36:BA:2532:G:H2'	36:BA:2533:A:C8	2.45	0.52
36:BA:2533:A:H2'	36:BA:2534:A:H5'	1.91	0.52
43:BH:156:ALA:C	43:BH:158:HIS:H	2.13	0.52
7:AG:95:ARG:O	7:AG:96:GLN:C	2.47	0.52
36:DA:1914:C:H2'	36:DA:1915:U:O4'	2.09	0.52
36:DA:922:U:H2'	36:DA:923:C:C6	2.45	0.52
36:BA:992:C:C2	36:BA:1163:G:N2	2.78	0.52
36:BA:448:U:H1'	41:BF:84:VAL:HG11	1.92	0.52
36:BA:565:C:H2'	36:BA:566:U:H6	1.74	0.52
36:BA:588:U:H1'	41:BF:90:PHE:CD2	2.45	0.52
36:DA:1275:A:C4	50:DR:16:HIS:ND1	2.77	0.52
40:DE:1:MET:O	40:DE:2:LYS:C	2.46	0.52
50:DR:45:ARG:CG	50:DR:46:GLY:H	2.08	0.52
36:BA:499:U:H1'	57:BY:47:LYS:NZ	2.25	0.52
32:D6:10:LEU:H	32:D6:10:LEU:CD2	2.22	0.52
34:D8:59:LYS:CE	48:DP:50:ARG:HB3	2.40	0.52
36:DA:2389:G:C5'	36:DA:2390:U:H5'	2.39	0.52
25:AZ:27:LEU:O	25:AZ:27:LEU:HD12	2.10	0.52
36:DA:72:U:O4	36:DA:112:U:H4'	2.09	0.52
36:DA:61:G:H1	36:DA:94:C:N4	2.07	0.52
36:BA:1202:C:H2'	36:BA:1203:G:C5'	2.34	0.52
1:AA:1054:C:C6	1:AA:1196:U:C5	2.98	0.52
14:AN:7:ILE:HG13	14:AN:8:GLU:H	1.73	0.52
49:BQ:48:GLU:HG3	49:BQ:51:ARG:HG2	1.92	0.52
36:BA:1278:A:O2'	36:BA:1279:G:H5'	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BE:8:LYS:HB2	40:BE:196:VAL:HG11	1.92	0.52
36:DA:2776:A:H4'	36:DA:2777:G:H5''	1.91	0.52
46:DN:33:LEU:O	46:DN:52:VAL:HG21	2.10	0.52
53:DU:10:ARG:O	53:DU:11:ARG:C	2.47	0.52
54:DV:58:VAL:CG1	54:DV:97:LYS:HB2	2.39	0.52
2:AB:8:LYS:HZ3	2:AB:217:ARG:CZ	2.21	0.52
9:CI:4:TYR:CD2	9:CI:88:TYR:HB2	2.45	0.52
51:BS:79:ALA:O	51:BS:80:LEU:HD23	2.10	0.52
48:BP:98:GLU:O	48:BP:101:VAL:HG22	2.09	0.52
13:AM:93:ARG:HG3	36:BA:888:C:OP1	2.10	0.52
36:BA:1682:G:H2'	36:BA:1683:C:C6	2.45	0.52
35:D9:12:ASP:CG	35:D9:13:LYS:H	2.13	0.52
1:CA:1363(A):A:H1'	1:CA:1365:G:N7	2.25	0.52
42:BG:13:GLU:HG3	42:BG:14:GLU:HG3	1.92	0.52
36:DA:2189:U:C2'	36:DA:2190:G:H4'	2.39	0.52
1:AA:1422:G:N3	1:AA:1423:G:C8	2.78	0.52
14:AN:12:ARG:HB3	14:AN:14:PRO:HD2	1.92	0.52
55:DW:61:ASN:O	55:DW:62:HIS:ND1	2.43	0.52
3:AC:111:LEU:HD21	3:AC:144:SER:O	2.10	0.52
1:CA:80:G:H3'	1:CA:81:U:H5'	1.91	0.52
36:BA:662:G:H5'	48:BP:18:ARG:C	2.30	0.52
37:DB:19:G:H3'	37:DB:20:C:C6	2.44	0.52
36:BA:19:C:O2'	36:BA:20:C:H5'	2.09	0.52
1:AA:1004:A:N6	1:AA:1035:A:C5	2.78	0.52
42:DG:59:GLU:C	42:DG:61:ALA:H	2.13	0.52
10:CJ:67:THR:O	10:CJ:67:THR:CG2	2.57	0.52
43:DH:86:GLU:HA	43:DH:132:ARG:CB	2.40	0.52
40:BE:154:LYS:O	40:BE:155:LYS:O	2.27	0.52
36:DA:2636:U:H4'	40:DE:80:GLU:CD	2.30	0.52
36:DA:2784:C:O2'	40:DE:37:ARG:NH1	2.43	0.52
1:AA:586:C:H1'	1:AA:878:G:O2'	2.10	0.52
2:AB:25:ASN:O	2:AB:27:LYS:N	2.43	0.52
36:BA:1131:G:C8	36:BA:2025:C:H4'	2.45	0.52
2:AB:111:ARG:HE	2:AB:145:LEU:HD21	1.75	0.52
39:DD:229:VAL:HG23	39:DD:230:ASP:H	1.74	0.52
37:DB:55:U:H2'	37:DB:56:G:H8	1.65	0.52
36:BA:1170:G:OP2	36:BA:1170:G:H8	1.93	0.52
1:AA:404:U:H2'	1:AA:405:U:C6	2.44	0.52
15:CO:9:GLN:O	15:CO:10:LYS:C	2.47	0.52
1:AA:1431:C:C2'	1:AA:1432:G:H5'	2.39	0.52
36:BA:2221:G:C6	36:BA:2222:G:C6	2.97	0.52
48:DP:114:ILE:HG23	48:DP:130:PHE:HA	1.92	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:77:ALA:HB2	39:DD:97:TYR:HA	1.91	0.52
12:CL:86:ARG:HG2	12:CL:87:GLY:N	2.22	0.52
1:AA:1456:G:H3'	1:AA:1456:G:N3	2.24	0.52
25:AZ:321:TYR:HD1	25:AZ:367:ASN:ND2	2.08	0.52
43:BH:127:GLU:HB2	43:BH:130:ARG:HB2	1.91	0.52
36:BA:1328:G:H4'	36:BA:1329:U:H5	1.75	0.52
36:BA:2491:U:H5'	36:BA:2570:G:H5''	1.91	0.52
6:CF:7:ASN:C	6:CF:8:ILE:HG13	2.29	0.52
12:AL:86:ARG:CG	12:AL:87:GLY:H	2.15	0.52
4:AD:114:ARG:HG3	4:AD:114:ARG:NH1	2.24	0.52
1:CA:734:G:C2	1:CA:735:C:C2	2.98	0.52
36:BA:2654:A:O2'	36:BA:2655:G:H4'	2.10	0.52
1:AA:620:C:H2'	1:AA:621:A:C8	2.45	0.52
1:AA:777:A:H2'	1:AA:778:G:C8	2.45	0.52
1:AA:781:A:C5	1:AA:802:A:C2	2.98	0.52
27:B1:17:SER:O	27:B1:18:ILE:HG13	2.09	0.52
1:CA:157:G:O2'	1:CA:158:G:H5'	2.10	0.52
36:BA:614(A):U:H4'	36:BA:614(B):G:H5''	1.92	0.52
26:D0:30:VAL:HA	26:D0:65:GLY:O	2.09	0.52
36:BA:303:U:H2'	36:BA:304:G:C8	2.44	0.52
36:DA:2317:C:H2'	36:DA:2318:G:H5'	1.92	0.52
5:CE:116:THR:O	5:CE:116:THR:HG22	2.08	0.52
51:DS:42:ASP:O	51:DS:43:GLU:HB3	2.09	0.52
1:CA:1354:C:O2'	1:CA:1355:G:H5'	2.10	0.52
1:CA:347:G:N2	1:CA:348:G:C4	2.78	0.52
5:CE:36:ASP:O	5:CE:37:ARG:C	2.47	0.52
36:BA:1451:C:OP2	36:BA:1451:C:H6	1.91	0.52
17:CQ:40:LYS:HD3	17:CQ:42:TYR:OH	2.10	0.52
36:BA:1720:U:H2'	36:BA:1721:G:H5''	1.92	0.52
55:BW:39:THR:O	55:BW:44:ALA:HB2	2.10	0.52
12:CL:126:LYS:HG3	12:CL:128:ALA:H	1.75	0.52
36:BA:972:G:H3'	36:BA:973:A:H2'	1.90	0.52
36:BA:497:A:H2'	36:BA:498:G:H8	1.75	0.52
34:D8:7:HIS:CE1	34:D8:9:GLY:HA3	2.44	0.52
28:D2:43:GLN:O	28:D2:44:LEU:CB	2.57	0.52
39:BD:261:LYS:HZ1	39:BD:263:ARG:HB2	1.68	0.52
36:DA:398:G:H5''	36:DA:2090:G:C4'	2.40	0.52
1:AA:511:C:H42	1:AA:540:G:H1	1.57	0.52
1:AA:517:G:H5'	1:AA:519:C:C2	2.43	0.52
10:AJ:55:LYS:O	10:AJ:56:HIS:CG	2.63	0.52
28:B2:31:GLU:O	28:B2:32:LEU:C	2.44	0.52
31:B5:2:ALA:CA	36:BA:2015:A:H1'	2.40	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2638:G:P	40:BE:82:ARG:HH21	2.32	0.52
50:BR:2:ARG:N	50:BR:2:ARG:HH11	2.07	0.52
27:D1:3:LYS:HE2	27:D1:4:VAL:CG1	2.40	0.52
46:DN:24:GLY:O	46:DN:28:THR:HG22	2.10	0.52
36:DA:587:C:C5	48:DP:33:ARG:HG2	2.45	0.52
54:DV:21:ARG:HB3	54:DV:91:TYR:CG	2.45	0.52
2:AB:84:GLU:CB	2:AB:219:VAL:HG21	2.23	0.52
1:AA:357:G:O2'	1:AA:358:U:H5'	2.10	0.52
1:CA:505:G:H2'	1:CA:506:G:H8	1.74	0.52
1:CA:540:G:H2'	1:CA:541:G:C8	2.44	0.52
4:CD:61:LYS:HG2	4:CD:62:GLN:N	2.25	0.52
2:CB:170:GLU:C	2:CB:172:ILE:HD12	2.30	0.52
36:DA:1348:G:O2'	36:DA:1349:A:H5''	2.10	0.52
36:BA:1273:U:H5''	36:BA:1646:C:H41	1.75	0.52
36:BA:1998:G:H4'	36:BA:2724:C:H4'	1.91	0.52
47:BO:119:PRO:HB2	52:BT:68:TYR:CE2	2.44	0.52
52:BT:78:LEU:C	52:BT:79:HIS:CD2	2.83	0.52
58:BZ:69:THR:HB	58:BZ:88:PHE:HB3	1.92	0.52
36:DA:324:A:H61	36:DA:338:G:C2'	2.23	0.52
35:D9:8:LYS:O	35:D9:10:ILE:HD12	2.10	0.52
7:CG:89:MET:O	7:CG:90:GLU:O	2.28	0.52
36:DA:2334:G:H21	51:DS:18:ILE:CG2	2.23	0.52
51:DS:98:VAL:CG1	51:DS:100:ALA:HB2	2.40	0.52
36:BA:307:G:H22	36:BA:310:A:P	2.33	0.52
42:BG:96:ARG:HA	42:BG:100:TRP:CD1	2.44	0.52
1:CA:37:U:O2'	1:CA:500:G:H4'	2.10	0.52
10:CJ:30:SER:OG	10:CJ:81:THR:HG22	2.10	0.52
55:BW:35:ILE:HG22	55:BW:36:LEU:N	2.23	0.52
36:BA:449:A:H4'	53:BU:3:ARG:HH21	1.73	0.52
36:BA:1773:A:N6	36:BA:1829:A:H1'	2.25	0.52
49:DQ:22:LYS:HG3	49:DQ:22:LYS:O	2.09	0.52
1:CA:1463:C:H5'	52:DT:115:ARG:HH21	1.74	0.52
36:DA:1246:A:OP2	48:DP:18:ARG:HG3	2.10	0.52
33:D7:25:PRO:N	33:D7:28:ARG:NH2	2.56	0.52
36:DA:471:A:H2'	36:DA:472:A:H5'	1.91	0.52
43:BH:20:ALA:HB1	43:BH:21:PRO:HD3	1.92	0.52
37:BB:8:U:H2'	37:BB:9:G:H8	1.75	0.52
43:DH:163:TYR:N	43:DH:163:TYR:CD1	2.78	0.52
36:BA:471:A:H2'	36:BA:472:A:H5'	1.91	0.52
43:BH:118:PRO:CG	43:BH:121:ILE:HD12	2.38	0.52
24:AY:69:C:H2'	24:AY:70:A:H8	1.75	0.52
42:DG:46:ALA:HB2	42:DG:88:ILE:HG13	1.88	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:244:ARG:HH11	25:CZ:244:ARG:CB	2.16	0.52
25:CZ:241:ARG:CA	25:CZ:285:ASN:ND2	2.72	0.52
2:CB:107:THR:HA	2:CB:110:GLN:NE2	2.25	0.52
4:AD:165:MET:O	4:AD:166:LYS:C	2.49	0.52
36:DA:145:G:H2'	36:DA:146:G:C5'	2.38	0.52
4:CD:102:ASP:O	4:CD:105:VAL:HB	2.08	0.52
36:BA:177:G:H3'	36:BA:178:G:H8	1.75	0.52
8:AH:101:PRO:HG2	8:AH:133:LEU:HD11	1.91	0.52
2:AB:74:LYS:NZ	2:AB:76:GLN:HB2	2.25	0.52
1:AA:1240:U:H5''	1:AA:1241:G:C8	2.45	0.52
1:CA:678:U:H2'	1:CA:679:C:C6	2.45	0.52
1:AA:419:C:H2'	1:AA:420:U:H5'	1.92	0.52
36:DA:2071:A:H2	36:DA:2441:C:N3	2.08	0.52
7:CG:143:ARG:O	7:CG:144:MET:C	2.46	0.52
1:CA:404:U:H2'	1:CA:405:U:C6	2.45	0.52
1:AA:445:G:C6	1:AA:490:G:N1	2.78	0.52
38:DC:6:ARG:O	38:DC:10:LEU:HD23	2.09	0.52
18:CR:66:LEU:CG	18:CR:70:ILE:HD11	2.35	0.52
49:BQ:109:VAL:HG12	49:BQ:110:THR:H	1.72	0.52
18:CR:59:SER:O	18:CR:60:ALA:C	2.47	0.52
1:CA:928:G:O2'	1:CA:929:G:H5'	2.08	0.52
11:AK:63:LEU:O	11:AK:66:LEU:HB2	2.09	0.52
36:BA:181:A:C2	36:BA:182:A:C4	2.98	0.52
1:CA:1092:A:O2'	1:CA:1093:A:H5'	2.10	0.52
25:CZ:321:TYR:HD1	25:CZ:367:ASN:ND2	2.08	0.52
25:AZ:347:THR:CG2	25:AZ:348:ASP:H	2.21	0.52
26:B0:4:LYS:HG3	49:BQ:82:ARG:HD2	1.91	0.52
10:CJ:92:THR:CG2	10:CJ:93:GLY:N	2.73	0.52
36:DA:67:U:O2'	36:DA:68:G:H5'	2.10	0.52
1:AA:22:G:H2'	1:AA:23:C:O4'	2.09	0.52
1:CA:1316:G:H4'	14:CN:18:VAL:CG1	2.40	0.52
36:DA:1511:C:H2'	36:DA:1512:U:C6	2.45	0.52
35:D9:18:ARG:O	35:D9:19:ARG:HB3	2.10	0.52
7:CG:95:ARG:O	7:CG:96:GLN:C	2.47	0.52
42:DG:117:PHE:O	42:DG:118:ARG:HG3	2.09	0.52
26:D0:39:ARG:NH1	26:D0:56:ASP:OD2	2.43	0.52
1:CA:525:C:C4	1:CA:526:C:N4	2.78	0.52
43:DH:137:ASP:HB2	43:DH:140:LYS:HE3	1.92	0.52
43:BH:125:VAL:HG12	43:BH:125:VAL:O	2.09	0.52
25:CZ:273:HIS:O	25:CZ:275:LYS:N	2.42	0.52
36:DA:1151:G:H2'	36:DA:1152:C:O4'	2.10	0.52
57:DY:41:GLY:O	57:DY:42:VAL:O	2.28	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:582:U:O2'	1:AA:583:A:H5'	2.09	0.52
36:BA:1939:U:O2'	36:BA:1940:U:H5'	2.09	0.52
25:CZ:92:MET:SD	25:CZ:119:HIS:CD2	3.03	0.52
36:DA:1686:C:H5'	36:DA:1687:G:OP2	2.09	0.52
48:BP:59:LEU:C	48:BP:61:ARG:H	2.14	0.52
36:DA:1278:A:H2'	36:DA:1279:G:H8	1.75	0.52
40:DE:195:LEU:HD11	40:DE:197:ILE:HG22	1.91	0.52
50:DR:73:VAL:CG1	50:DR:77:ARG:HH12	2.23	0.52
36:DA:1822:G:C4	36:DA:1823:G:C8	2.97	0.52
36:DA:500:G:N2	36:DA:502:A:H3'	2.25	0.52
36:DA:483:A:C4'	57:DY:49:VAL:HG22	2.39	0.52
38:DC:153:ILE:O	38:DC:157:LYS:HB2	2.09	0.52
49:BQ:48:GLU:O	49:BQ:52:VAL:HG23	2.09	0.52
36:BA:2880:C:C5	36:BA:2881:C:H5	2.28	0.52
50:BR:4:LEU:HG	50:BR:4:LEU:O	2.10	0.52
50:BR:52:ILE:HD12	50:BR:79:LEU:HD21	1.90	0.52
46:DN:31:ALA:HA	46:DN:34:LEU:HB2	1.91	0.52
53:DU:66:ASN:CB	53:DU:76:TYR:HB2	2.39	0.52
2:AB:88:ALA:HB2	2:AB:219:VAL:HG13	1.91	0.52
9:CI:52:ALA:CB	9:CI:95:LYS:HE2	2.29	0.52
51:BS:26:LEU:HD23	51:BS:27:SER:O	2.09	0.52
40:BE:51:PHE:HD1	40:BE:52:LEU:N	2.08	0.52
1:CA:836:G:C6	1:CA:851:G:C6	2.97	0.52
48:BP:143:GLY:C	48:BP:145:PRO:HD3	2.30	0.52
19:CS:79:THR:O	19:CS:80:TYR:HB3	2.10	0.52
13:AM:93:ARG:CG	36:BA:888:C:OP1	2.58	0.52
36:BA:2550:G:O2'	36:BA:2551:C:H5'	2.08	0.52
36:DA:1664:A:H61	36:DA:1996:C:H42	1.58	0.52
52:DT:65:LYS:O	52:DT:72:VAL:HG23	2.10	0.52
57:DY:7:VAL:HG21	57:DY:8:LYS:HZ2	1.75	0.52
1:AA:1359:C:OP2	14:AN:22:THR:CG2	2.57	0.52
16:CP:6:LEU:HD12	16:CP:6:LEU:N	2.24	0.52
58:DZ:128:VAL:HG22	58:DZ:129:SER:N	2.25	0.52
1:CA:1359:C:OP2	14:CN:22:THR:CG2	2.53	0.52
10:CJ:61:GLU:OE2	14:CN:45:ARG:HD2	2.10	0.52
22:AV:7:A:N1	22:AV:67:C:N3	2.58	0.52
26:B0:46:LYS:HE3	26:B0:78:TYR:OH	2.10	0.52
36:BA:856:C:H4'	36:BA:857:C:OP2	2.10	0.52
19:AS:62:ILE:HD12	19:AS:66:MET:CE	2.37	0.52
36:DA:1094:U:H2'	36:DA:1096:A:OP2	2.08	0.52
57:BY:13:VAL:CG2	57:BY:73:ARG:O	2.57	0.52
1:CA:14:U:O2'	1:CA:16:A:N7	2.40	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1840:G:H1	36:DA:1902:C:H42	1.58	0.52
41:BF:11:VAL:HG12	41:BF:12:LEU:N	2.21	0.52
41:BF:130:ALA:HB3	41:BF:142:TRP:CD1	2.45	0.52
2:AB:30:ARG:HG3	2:AB:31:TYR:CD2	2.45	0.52
2:AB:44:LEU:CD1	2:AB:44:LEU:H	2.09	0.52
19:CS:66:MET:O	19:CS:66:MET:HG3	2.09	0.52
3:AC:13:GLY:C	3:AC:14:ILE:HG22	2.30	0.52
27:B1:62:VAL:HG13	27:B1:67:ILE:HG12	1.92	0.52
27:B1:67:ILE:N	27:B1:68:PRO:CD	2.72	0.52
36:BA:2089:U:H3	36:BA:2230:G:H1	1.58	0.52
36:BA:1246:A:OP2	48:BP:18:ARG:HG3	2.10	0.52
58:DZ:76:LEU:O	58:DZ:84:GLU:HB2	2.10	0.52
46:BN:108:PRO:HG2	46:BN:113:GLY:CA	2.40	0.52
46:BN:34:LEU:CD2	46:BN:120:LEU:HD23	2.38	0.52
28:B2:2:LYS:HB3	36:BA:97:C:H5''	1.90	0.52
36:DA:1759:A:C8	36:DA:2696:U:O2	2.63	0.52
42:DG:111:LEU:HB2	42:DG:112:PRO:CD	2.40	0.52
43:DH:118:PRO:CG	43:DH:121:ILE:HD12	2.39	0.52
40:DE:36:ARG:HG2	40:DE:36:ARG:HH11	1.74	0.52
36:DA:1493:C:O2	36:DA:1493:C:H2'	2.10	0.52
46:BN:40:PRO:HD3	53:BU:68:ALA:HA	1.92	0.52
36:DA:2313:C:H5'	36:DA:2313:C:C6	2.45	0.52
25:CZ:246:LYS:HD3	25:CZ:281:ILE:CG2	2.39	0.52
53:BU:28:ARG:O	53:BU:35:ALA:HA	2.10	0.52
10:CJ:7:LYS:C	10:CJ:8:LEU:HD12	2.30	0.52
10:CJ:96:ILE:H	10:CJ:96:ILE:HD13	1.73	0.52
27:B1:25:LYS:HD2	36:BA:388:G:C4'	2.32	0.52
4:AD:128:VAL:HG12	4:AD:129:ASN:N	2.25	0.52
36:BA:272(I):U:C2'	36:BA:272(J):C:H5'	2.39	0.52
10:AJ:40:LEU:HG	10:AJ:69:ASN:HB3	1.90	0.52
36:BA:911:A:H5''	36:BA:912:C:H5''	1.92	0.52
36:BA:1170:G:H5''	36:BA:1173:G:N2	2.24	0.52
1:CA:620:C:H2'	1:CA:621:A:C8	2.45	0.52
38:BC:110:PHE:O	38:BC:111:ASP:HB2	2.08	0.52
1:AA:193:C:O4'	20:AT:60:GLU:CD	2.48	0.52
1:CA:719:C:O2	18:CR:50:ILE:HG12	2.09	0.52
40:BE:131:ALA:CB	40:BE:134:ILE:HD11	2.40	0.52
1:AA:1245:A:H61	1:AA:1292:U:H3	1.58	0.52
6:AF:1:MET:N	6:AF:68:PRO:HA	2.25	0.52
36:BA:1052:C:H2'	36:BA:1053:C:C5	2.45	0.52
36:BA:2253:G:O2'	36:BA:2254:C:H5'	2.10	0.52
1:CA:603:U:H2'	1:CA:604:G:H8	1.75	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2652:C:C4	36:BA:2653:U:C4	2.98	0.52
36:BA:956:G:OP1	49:BQ:87:LYS:HG3	2.10	0.52
36:BA:80:G:H1'	36:BA:346:A:N1	2.25	0.52
36:BA:807:U:H2'	36:BA:808:G:O4'	2.09	0.52
25:CZ:385:ARG:HD3	63:CZ:502:KIR:H452	1.91	0.52
36:DA:2688:U:O2	36:DA:2688:U:C3'	2.58	0.52
47:BO:14:THR:HG22	47:BO:14:THR:O	2.10	0.52
26:D0:30:VAL:O	26:D0:31:VAL:HG13	2.09	0.52
22:AW:24:G:H2'	22:AW:25:C:C6	2.45	0.52
40:BE:96:PHE:HA	40:BE:100:GLU:OE1	2.10	0.52
36:DA:2557:G:O2'	36:DA:2558:C:H5'	2.10	0.52
56:DX:3:THR:HA	56:DX:6:ASP:OD2	2.10	0.52
31:B5:18:ALA:O	31:B5:21:SER:HB3	2.10	0.52
36:DA:2369:A:H2'	36:DA:2370:G:H8	1.75	0.52
3:AC:134:ILE:CG2	3:AC:168:ALA:HB3	2.40	0.52
18:CR:31:LEU:HD21	18:CR:65:ILE:HD12	1.92	0.52
36:BA:1506:C:O2	36:BA:1506:C:H2'	2.09	0.52
1:CA:1230:C:H6	1:CA:1230:C:O5'	1.92	0.52
36:DA:2257:U:O2'	36:DA:2258:C:H5'	2.09	0.52
36:BA:973:A:O4'	36:BA:1188:U:C6	2.64	0.52
36:BA:2392:A:H8	48:BP:60:MET:HA	1.74	0.52
36:DA:1278:A:H2'	36:DA:1279:G:C8	2.44	0.52
50:DR:55:ALA:HB1	50:DR:79:LEU:HD11	1.92	0.52
50:DR:73:VAL:HG12	50:DR:77:ARG:HH12	1.74	0.52
36:DA:1798:U:H5''	39:DD:260:ARG:H	1.74	0.52
36:DA:2391:G:O6	36:DA:2425:A:H8	1.93	0.52
34:D8:25:MET:CG	48:DP:64:LYS:HB2	2.37	0.52
28:D2:57:ILE:O	28:D2:58:ALA:C	2.48	0.52
41:DF:117:ARG:NH2	48:DP:5:ASP:N	2.58	0.52
41:DF:25:PRO:HB3	41:DF:119:ARG:CA	2.40	0.52
41:DF:62:ARG:HG2	41:DF:62:ARG:HH11	1.75	0.52
1:AA:1173:G:H2'	1:AA:1174:G:H8	1.72	0.52
17:CQ:61:GLU:HA	17:CQ:71:PHE:CD1	2.45	0.52
1:AA:542:G:N2	1:AA:543:C:C2	2.78	0.52
36:BA:2469:A:C5	36:BA:2470:G:H1'	2.45	0.52
36:BA:76:C:O2'	36:BA:77:C:H5'	2.08	0.52
41:BF:143:ALA:O	41:BF:148:LEU:HB2	2.09	0.52
36:BA:2048:G:C2	36:BA:2621:A:C2	2.98	0.52
50:BR:3:HIS:O	50:BR:5:LYS:HD3	2.10	0.52
42:BG:63:ILE:C	42:BG:65:GLY:H	2.13	0.52
36:DA:2041:U:OP2	36:DA:2041:U:H6	1.93	0.52
46:DN:35:ARG:O	46:DN:36:GLY:C	2.48	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:DU:92:ARG:O	53:DU:94:ASN:N	2.43	0.52
51:BS:36:TYR:O	51:BS:37:ALA:HB2	2.09	0.52
41:DF:157:VAL:CG2	41:DF:194:MET:HG2	2.39	0.52
40:BE:56:PRO:O	40:BE:57:LYS:HD2	2.09	0.52
48:BP:144:GLU:N	48:BP:145:PRO:HD3	2.25	0.52
1:AA:1231:G:H2'	1:AA:1232:U:H6	1.75	0.52
13:AM:91:ARG:HB3	13:AM:98:VAL:CG2	2.37	0.52
5:AE:33:VAL:HG23	5:AE:43:LEU:HD13	1.92	0.52
25:CZ:154:VAL:HG12	25:CZ:158:LEU:HD11	1.92	0.52
36:BA:1299:G:H2'	36:BA:1639:U:O4	2.09	0.52
52:DT:26:ASP:HB3	52:DT:89:VAL:O	2.10	0.52
58:BZ:153:SER:H	58:BZ:167:PRO:HB3	1.69	0.52
58:BZ:70:LEU:CD2	58:BZ:91:LEU:HD11	2.40	0.52
36:DA:324:A:O2'	36:DA:325:G:H5'	2.10	0.52
7:AG:24:THR:HG22	7:AG:27:ILE:HD12	1.92	0.52
7:AG:36:LYS:O	7:AG:39:ALA:HB3	2.10	0.52
39:DD:79:VAL:CG1	39:DD:113:VAL:HA	2.39	0.52
37:BB:83:G:O2'	37:BB:84:C:H5'	2.10	0.52
1:AA:1494:G:OP1	59:AA:1601:PAR:N32	2.43	0.52
51:DS:52:SER:HB3	51:DS:55:ALA:HB3	1.91	0.52
55:DW:59:VAL:O	55:DW:60:ASN:C	2.46	0.52
3:CC:113:ALA:O	3:CC:114:PRO:C	2.48	0.52
3:CC:186:PHE:HD1	3:CC:198:VAL:O	1.93	0.52
3:AC:142:MET:C	3:AC:144:SER:N	2.63	0.52
36:DA:1463:C:H2'	36:DA:1464:C:O4'	2.09	0.52
36:DA:1540:U:H3'	36:DA:1541:G:H3'	1.92	0.52
36:DA:1542:A:C8	36:DA:1544:A:H5'	2.45	0.52
36:BA:553:G:O2'	36:BA:554:U:H5'	2.09	0.52
1:CA:1015:A:H2'	1:CA:1016:A:H8	1.75	0.52
10:AJ:18:ALA:O	10:AJ:21:GLN:N	2.43	0.52
36:DA:2711:A:OP1	36:DA:2712(A):A:P	2.68	0.52
9:AI:48:GLU:N	9:AI:49:PRO:HD2	2.25	0.52
36:BA:745:G:OP2	40:BE:133:LYS:HD2	2.10	0.52
1:CA:585:G:C4'	12:CL:8:ASN:HD21	2.14	0.52
25:CZ:347:THR:CG2	25:CZ:348:ASP:H	2.22	0.52
8:AH:64:LYS:CD	8:AH:79:VAL:HG21	2.38	0.52
38:DC:140:PRO:C	38:DC:142:ALA:N	2.64	0.52
1:AA:191:G:C4	20:AT:105:SER:HB3	2.45	0.52
36:DA:2125:G:OP1	38:DC:40:THR:HG21	2.09	0.52
55:DW:13:SER:O	55:DW:17:VAL:HG23	2.09	0.52
1:CA:1499:A:C1'	1:CA:1520:G:H5'	2.39	0.52
15:CO:7:GLU:O	15:CO:10:LYS:HB3	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BT:2:ASN:O	52:BT:3:ARG:HG2	2.10	0.52
1:CA:193:C:O4'	20:CT:60:GLU:CD	2.48	0.52
36:BA:1346:G:H2'	36:BA:1347:G:H8	1.75	0.52
25:CZ:316:PHE:CE2	25:CZ:400:VAL:HG22	2.45	0.52
36:DA:976:C:H2'	36:DA:977:G:H8	1.74	0.52
1:CA:1134:G:N2	1:CA:1141:C:C4	2.78	0.52
40:BE:93:VAL:HG12	40:BE:175:VAL:CG2	2.40	0.52
12:CL:55:VAL:HG23	12:CL:68:ALA:O	2.09	0.52
36:BA:2252:G:O2'	36:BA:2253:G:H5'	2.09	0.52
36:DA:2554:U:H2'	36:DA:2555:U:H6	1.75	0.52
22:AW:54:U:H4'	38:BC:54:SER:HB2	1.92	0.52
1:CA:925:G:O2'	1:CA:927:G:OP1	2.24	0.52
1:AA:189:G:H2'	1:AA:189(A):C:H6	1.74	0.52
38:BC:25:ALA:O	38:BC:28:LEU:N	2.43	0.52
36:BA:1119:C:H2'	36:BA:1120:G:H8	1.75	0.52
1:AA:1328:C:H2'	1:AA:1329:A:C8	2.41	0.52
2:AB:92:TYR:CE1	2:AB:151:GLY:N	2.78	0.52
36:DA:2518:A:O2'	36:DA:2519:U:H5'	2.10	0.52
22:AW:7:A:H5''	22:AW:8:U:OP2	2.10	0.52
10:AJ:45:ARG:NE	14:AN:36:PHE:CD2	2.78	0.52
1:AA:813:U:O2'	1:AA:814:A:H5'	2.09	0.52
30:B4:46:GLN:CG	30:B4:47:GLN:N	2.73	0.52
20:CT:75:ASN:O	20:CT:79:ARG:HB2	2.10	0.52
1:CA:697:U:O4'	1:CA:786:G:H4'	2.09	0.52
46:DN:65:LYS:O	46:DN:69:GLN:HB2	2.10	0.52
17:AQ:40:LYS:HD3	17:AQ:42:TYR:OH	2.09	0.52
36:DA:970:C:H2'	36:DA:971:C:H6	1.75	0.52
36:DA:1607:C:H4'	36:DA:1608:A:O5'	2.10	0.52
4:AD:182:LYS:O	4:AD:183:GLY:O	2.28	0.52
1:AA:1230:C:O5'	1:AA:1230:C:H6	1.91	0.52
22:CV:65:G:O2'	22:CV:66:U:H5'	2.10	0.52
34:B8:49:VAL:HG12	34:B8:50:LEU:H	1.75	0.51
36:DA:749:C:H4'	36:DA:1271:G:N3	2.25	0.51
40:DE:198:VAL:CG1	40:DE:199:ARG:H	2.11	0.51
36:DA:2259:G:N1	36:DA:2282:G:C6	2.78	0.51
34:D8:32:LEU:HD12	36:DA:2391:G:OP1	2.10	0.51
36:DA:251:A:H2'	36:DA:252:G:O4'	2.10	0.51
25:AZ:171:ILE:CG2	25:AZ:172:ARG:N	2.72	0.51
39:BD:261:LYS:HZ1	39:BD:263:ARG:NH1	2.08	0.51
36:DA:603:A:H1'	36:DA:604:G:OP1	2.10	0.51
24:AY:61:C:C3'	24:AY:62:U:H5''	2.40	0.51
36:DA:227:A:H5''	48:DP:76:LYS:CE	2.20	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:271(J):C:HO2'	36:DA:271(K):U:H6	1.56	0.51
1:AA:993:G:N2	1:AA:1046:A:H1'	2.17	0.51
1:AA:973:G:O4'	10:AJ:55:LYS:HE2	2.10	0.51
4:AD:61:LYS:HA	4:AD:203:VAL:HG13	1.92	0.51
43:DH:46:GLU:HB3	43:DH:50:VAL:HG13	1.92	0.51
28:B2:16:LEU:HD13	28:B2:24:LEU:CD1	2.40	0.51
41:BF:163:VAL:O	41:BF:166:ALA:HB3	2.10	0.51
36:BA:2504:U:H6	36:BA:2504:U:O5'	1.93	0.51
30:B4:31:ILE:HG22	30:B4:33:VAL:HG23	1.90	0.51
2:AB:8:LYS:CD	2:AB:217:ARG:NH2	2.73	0.51
8:AH:81:HIS:HB2	8:AH:138:TRP:CZ3	2.45	0.51
41:DF:158:THR:HB	41:DF:195:ASP:CB	2.39	0.51
40:BE:36:ARG:HG2	40:BE:36:ARG:HH11	1.75	0.51
40:BE:36:ARG:O	40:BE:37:ARG:HG2	2.10	0.51
1:AA:1487:G:C2'	1:AA:1488:G:H5'	2.40	0.51
4:AD:76:ARG:O	4:AD:79:PHE:HB3	2.10	0.51
57:BY:75:ILE:HG13	57:BY:76:CYS:H	1.73	0.51
42:BG:166:ASP:O	42:BG:168:GLU:N	2.43	0.51
36:DA:2107:C:H2'	36:DA:2108:C:H6	1.75	0.51
36:DA:2120:G:H2'	36:DA:2121:G:H8	1.75	0.51
39:DD:245:PRO:O	39:DD:246:PRO:C	2.48	0.51
36:BA:2120:G:H2'	36:BA:2121:G:H8	1.75	0.51
4:CD:79:PHE:CE2	4:CD:207:TYR:HD1	2.28	0.51
25:AZ:246:LYS:HD3	25:AZ:281:ILE:CG2	2.40	0.51
46:BN:126:PRO:O	46:BN:127:ASP:CB	2.57	0.51
37:DB:66:A:H61	37:DB:108:U:H3'	1.74	0.51
36:DA:717:G:H2'	36:DA:718:A:C8	2.44	0.51
1:CA:1306:A:OP1	21:CU:6:ARG:NH2	2.43	0.51
46:BN:48:MET:HE3	46:BN:49:GLY:H	1.74	0.51
57:DY:85:VAL:HG12	57:DY:86:ARG:H	1.73	0.51
37:DB:7:G:H3'	37:DB:8:U:C5'	2.31	0.51
36:DA:1376:C:C2'	36:DA:1377:G:H5'	2.40	0.51
13:CM:2:ALA:HB3	13:CM:9:ILE:CG2	2.39	0.51
25:CZ:223:MET:HG3	25:CZ:223:MET:O	2.09	0.51
1:CA:1102:A:H2'	1:CA:1103:C:C6	2.45	0.51
2:AB:162:ILE:HG21	2:AB:184:VAL:HG22	1.91	0.51
5:AE:69:VAL:O	5:AE:71:LEU:HG	2.09	0.51
2:CB:130:ARG:CZ	2:CB:131:PRO:HD2	2.40	0.51
2:CB:130:ARG:HH21	2:CB:131:PRO:HD2	1.74	0.51
36:BA:1094:U:H2'	36:BA:1096:A:OP2	2.09	0.51
49:DQ:41:TRP:HB3	49:DQ:94:VAL:HG11	1.91	0.51
1:CA:1155:G:H2'	1:CA:1156:G:C8	2.45	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:CT:57:ARG:CZ	20:CT:102:GLY:HA3	2.39	0.51
37:BB:19:G:H3'	37:BB:20:C:C6	2.45	0.51
1:AA:1072:G:H2'	1:AA:1073:U:H6	1.74	0.51
2:AB:105:PHE:O	2:AB:106:LYS:C	2.48	0.51
36:DA:856:C:H4'	36:DA:857:C:OP2	2.10	0.51
36:DA:2199:A:C5'	36:DA:2200:C:OP2	2.58	0.51
36:DA:2199:A:OP2	36:DA:2200:C:H5	1.92	0.51
36:DA:2457:U:O2'	36:DA:2458:G:H5'	2.10	0.51
36:DA:48:G:H22	36:DA:177:G:H21	1.58	0.51
36:BA:1174:A:OP2	36:BA:1175:U:H5''	2.10	0.51
38:DC:110:PHE:O	38:DC:111:ASP:HB2	2.11	0.51
15:AO:39:LEU:CD2	15:AO:43:LEU:HG	2.40	0.51
37:DB:5:C:H2'	37:DB:6:C:C6	2.44	0.51
18:AR:69:THR:O	18:AR:72:ARG:N	2.43	0.51
58:DZ:101:PRO:HG2	58:DZ:136:PHE:N	2.26	0.51
48:BP:86:LYS:HB2	48:BP:117:GLU:O	2.10	0.51
36:BA:1607:C:H4'	36:BA:1608:A:O5'	2.10	0.51
1:CA:117:G:O6	1:CA:289:G:C1'	2.57	0.51
1:AA:1134:G:N2	1:AA:1141:C:C4	2.78	0.51
40:BE:174:ASP:OD2	40:BE:175:VAL:N	2.43	0.51
36:BA:949:C:O2'	36:BA:950:G:H5'	2.10	0.51
36:BA:1949:G:H2'	36:BA:1950:G:C8	2.45	0.51
58:DZ:24:LEU:HD23	58:DZ:24:LEU:O	2.09	0.51
1:AA:1119:C:H2'	1:AA:1120:G:H8	1.71	0.51
36:DA:74:A:H5''	36:DA:75:G:C1'	2.39	0.51
55:DW:65:LEU:HB3	55:DW:68:ARG:HD2	1.91	0.51
12:AL:41:ARG:HH11	12:AL:41:ARG:CG	2.23	0.51
36:DA:1949:G:H2'	36:DA:1950:G:C8	2.44	0.51
56:BX:74:PRO:O	56:BX:76:ARG:HD2	2.09	0.51
36:BA:456:C:C2	56:BX:69:TYR:HE2	2.28	0.51
9:AI:57:GLY:O	9:AI:58:HIS:CB	2.58	0.51
36:BA:615:G:H2'	36:BA:616:G:H8	1.74	0.51
1:CA:1148:U:C2'	1:CA:1149:C:H5'	2.40	0.51
12:AL:119:LYS:O	12:AL:120:TYR:HB2	2.10	0.51
36:DA:966:G:H1'	36:DA:2267:A:H62	1.75	0.51
16:AP:25:ARG:HG3	16:AP:25:ARG:HH11	1.75	0.51
25:AZ:86:ALA:O	25:AZ:87:ASP:CB	2.58	0.51
36:DA:615:G:H2'	36:DA:616:G:C8	2.45	0.51
1:CA:47:C:O2'	1:CA:48:C:O5'	2.25	0.51
1:AA:236:G:C6	1:AA:237:C:C4	2.98	0.51
50:DR:43:GLU:OE2	50:DR:43:GLU:HA	2.10	0.51
49:DQ:76:LYS:HB2	49:DQ:91:GLU:HG3	1.92	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2818:G:O2'	36:DA:2819:G:H5'	2.10	0.51
50:DR:100:LEU:HD22	50:DR:112:ALA:HA	1.91	0.51
32:D6:35:GLU:CG	32:D6:51:GLU:HG3	2.39	0.51
34:D8:61:LEU:C	34:D8:63:PRO:HD2	2.29	0.51
34:D8:6:THR:HG1	36:DA:243:U:P	2.33	0.51
36:DA:419:C:H2'	36:DA:420:C:H6	1.74	0.51
35:D9:7:VAL:HG12	35:D9:25:VAL:HG21	1.92	0.51
36:DA:1854:A:H62	36:DA:1888:G:H8	1.56	0.51
36:BA:606:U:H2'	36:BA:607:U:C4'	2.40	0.51
36:BA:607:U:OP1	41:BF:102:PRO:HA	2.10	0.51
35:B9:2:LYS:HG3	36:BA:2526:G:H21	1.76	0.51
36:BA:1655:A:H1'	40:BE:113:PHE:HD2	1.75	0.51
13:AM:39:ILE:HG22	13:AM:40:ASN:N	2.26	0.51
27:D1:45:ASN:CB	27:D1:64:ALA:HB2	2.40	0.51
36:DA:401:A:H2'	36:DA:402:A:H8	1.75	0.51
1:CA:1189:C:O3'	3:CC:5:ILE:HD12	2.09	0.51
53:DU:66:ASN:ND2	53:DU:70:ARG:HB2	2.24	0.51
2:CB:219:VAL:CA	2:CB:222:ILE:HG12	2.41	0.51
41:DF:168:ARG:O	41:DF:169:ASN:C	2.47	0.51
34:B8:47:LYS:HD3	34:B8:48:PHE:O	2.10	0.51
36:DA:1520:G:C2'	36:DA:1523:U:H5'	2.40	0.51
13:AM:81:LEU:N	13:AM:81:LEU:CD2	2.74	0.51
25:CZ:146:LEU:N	25:CZ:149:LEU:HD23	2.25	0.51
36:DA:306:U:H2'	36:DA:307:G:C8	2.45	0.51
57:DY:74:PRO:HG2	57:DY:81:LYS:O	2.10	0.51
58:DZ:163:LEU:CG	58:DZ:165:VAL:HG23	2.40	0.51
7:CG:119:ARG:O	7:CG:120:ILE:C	2.48	0.51
22:AV:5:G:O2'	22:AV:6:G:H5'	2.10	0.51
4:AD:186:LEU:O	4:AD:187:ARG:HB2	2.09	0.51
22:CW:17:C:N4	36:DA:2180:U:H3	2.07	0.51
35:B9:9:ARG:O	35:B9:11:CYS:N	2.43	0.51
36:DA:729:G:H5'	36:DA:730:C:H5''	1.92	0.51
2:AB:17:PHE:HB3	2:AB:44:LEU:CD2	2.41	0.51
31:B5:43:HIS:CD2	31:B5:43:HIS:N	2.78	0.51
3:AC:106:VAL:O	3:AC:107:GLN:C	2.48	0.51
3:AC:70:VAL:CG1	3:AC:71:ALA:H	2.23	0.51
36:BA:21:A:H2'	36:BA:22:C:H6	1.74	0.51
1:CA:1462:G:O2'	1:CA:1463:C:H5'	2.09	0.51
46:BN:46:VAL:HG13	46:BN:48:MET:H	1.76	0.51
39:BD:137:PRO:HB2	39:BD:140:THR:HG23	1.92	0.51
36:DA:1199:U:H1'	53:DU:4:ALA:HB2	1.92	0.51
13:CM:14:ARG:H	13:CM:44:ARG:HH11	1.58	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:57:ARG:C	13:CM:59:TYR:N	2.64	0.51
24:CY:23:A:H2'	24:CY:24:G:C8	2.45	0.51
36:BA:723:G:H2'	36:BA:724:U:O4'	2.10	0.51
40:DE:31:CYS:HB2	40:DE:49:LEU:HD12	1.91	0.51
40:DE:51:PHE:HD1	40:DE:52:LEU:N	2.08	0.51
1:AA:581:G:O6	1:AA:758:G:C8	2.63	0.51
1:AA:858:G:N1	1:AA:869:G:C8	2.78	0.51
1:AA:1434:A:H2'	1:AA:1435:G:O4'	2.10	0.51
36:BA:1130:U:O2	36:BA:2025:C:H5''	2.10	0.51
2:CB:28:PHE:HD1	2:CB:28:PHE:O	1.94	0.51
3:CC:94:LEU:CD1	3:CC:94:LEU:O	2.57	0.51
1:AA:1441:G:H4'	1:AA:1442:G:N3	2.25	0.51
20:CT:89:ARG:HD2	20:CT:104:LEU:HD11	1.92	0.51
4:AD:129:ASN:HD21	4:AD:145:GLU:N	2.08	0.51
8:AH:119:LEU:HB3	8:AH:123:GLU:HB2	1.93	0.51
26:D0:46:LYS:HE3	26:D0:78:TYR:OH	2.10	0.51
58:DZ:105:VAL:O	58:DZ:105:VAL:HG13	2.10	0.51
1:CA:404:U:H5'	4:CD:122:ARG:HD3	1.93	0.51
1:AA:658:G:H2'	1:AA:659:U:H6	1.75	0.51
1:CA:750:G:H21	15:CO:24:SER:H	1.58	0.51
33:D7:11:LYS:NZ	36:DA:685:A:OP1	2.42	0.51
38:BC:120:MET:SD	38:BC:123:VAL:HG11	2.51	0.51
19:AS:10:PHE:CE1	19:AS:70:LYS:HD2	2.45	0.51
11:CK:57:THR:CG2	11:CK:60:ALA:H	2.23	0.51
25:AZ:314:THR:HG22	25:AZ:377:PRO:HA	1.92	0.51
1:CA:1432:G:OP2	52:DT:108:ARG:NE	2.43	0.51
5:AE:41:VAL:HG11	5:AE:113:ALA:HA	1.90	0.51
3:AC:66:VAL:O	3:AC:66:VAL:HG12	2.10	0.51
22:AW:52:G:N2	22:AW:53:G:H1'	2.25	0.51
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.45	0.51
1:AA:779:C:O3'	11:AK:122:LYS:HA	2.10	0.51
36:DA:391:G:C5	36:DA:392:C:C5	2.99	0.51
30:D4:20:ASN:C	30:D4:20:ASN:ND2	2.64	0.51
36:BA:371:A:N1	36:BA:401:A:H5''	2.24	0.51
29:D3:23:LEU:C	29:D3:25:ALA:N	2.63	0.51
52:DT:111:ARG:HG2	52:DT:111:ARG:NH1	2.23	0.51
36:DA:2480:C:OP1	36:DA:2537:U:H4'	2.09	0.51
13:CM:113:PRO:O	13:CM:115:LYS:HD3	2.10	0.51
8:CH:39:LEU:HB2	8:CH:45:ILE:HD11	1.91	0.51
51:BS:78:LEU:HD11	51:BS:103:GLU:CB	2.39	0.51
1:CA:577:G:C1'	1:CA:816:A:C4	2.94	0.51
36:DA:1623:G:O2'	36:DA:1624:G:H5'	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:DR:107:ASP:O	50:DR:109:ALA:N	2.43	0.51
36:DA:1835:G:H2'	36:DA:1835:G:N3	2.24	0.51
38:BC:117:PRO:HD3	38:BC:146:GLY:N	2.25	0.51
1:CA:364:A:H2'	1:CA:365:U:C2	2.46	0.51
1:CA:365:U:O2	1:CA:365:U:O5'	2.29	0.51
36:BA:49:A:N3	36:BA:49:A:H5'	2.25	0.51
42:BG:12:TYR:N	42:BG:12:TYR:CD1	2.78	0.51
3:AC:156:ARG:H	3:AC:163:ALA:HA	1.74	0.51
58:BZ:30:ASN:ND2	58:BZ:32:HIS:H	2.09	0.51
36:BA:713:G:H2'	36:BA:714:U:C6	2.46	0.51
53:DU:85:LYS:CD	53:DU:117:GLN:HE22	2.23	0.51
1:AA:556:C:O2'	1:AA:557:G:H5'	2.11	0.51
36:BA:1259:G:H2'	36:BA:1260:G:H8	1.74	0.51
36:BA:572:A:N1	36:BA:2033:A:C2	2.79	0.51
39:DD:70:TRP:HZ3	39:DD:146:GLU:CD	2.14	0.51
39:DD:145:VAL:HG12	39:DD:146:GLU:N	2.26	0.51
48:DP:96:THR:H	48:DP:99:LEU:HD22	1.75	0.51
25:AZ:171:ILE:HG22	25:AZ:172:ARG:N	2.25	0.51
24:CY:60:U:H5''	24:CY:61:C:H5	1.76	0.51
41:DF:107:LYS:O	41:DF:110:LEU:HB3	2.10	0.51
41:DF:28:ILE:N	41:DF:28:ILE:HD13	2.25	0.51
56:BX:10:ALA:HB1	56:BX:11:PRO:CD	2.40	0.51
35:D9:35:ARG:NH1	36:DA:2741:A:O3'	2.43	0.51
36:BA:657:U:C2	36:BA:658:C:C5	2.99	0.51
41:BF:185:ASP:HA	41:BF:188:ARG:CG	2.40	0.51
36:BA:2758:A:C2	36:BA:2759:G:H1'	2.44	0.51
43:BH:64:LEU:O	43:BH:67:LEU:HB3	2.10	0.51
43:BH:66:GLY:HA2	43:BH:69:ARG:CB	2.39	0.51
14:AN:8:GLU:C	14:AN:10:ALA:H	2.13	0.51
36:BA:2467:C:C2'	36:BA:2468:G:H5'	2.40	0.51
36:DA:926:A:C8	36:DA:926:A:H5'	2.36	0.51
31:B5:6:VAL:HG22	36:BA:2016:U:H1'	1.92	0.51
50:BR:2:ARG:HD2	50:BR:2:ARG:C	2.31	0.51
52:BT:1:MET:O	52:BT:1:MET:HG3	2.09	0.51
55:BW:41:LYS:C	55:BW:43:GLY:N	2.64	0.51
55:BW:96:ILE:O	55:BW:96:ILE:HG23	2.10	0.51
30:B4:14:ILE:HG13	30:B4:31:ILE:HB	1.91	0.51
1:CA:798:G:H2'	1:CA:799:G:O5'	2.11	0.51
54:DV:16:PRO:O	54:DV:96:ILE:HB	2.10	0.51
9:CI:87:GLN:C	9:CI:89:ASN:H	2.13	0.51
58:BZ:119:GLU:HG3	58:BZ:122:ARG:HH11	1.75	0.51
4:CD:9:CYS:SG	4:CD:32:ALA:CB	2.99	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BS:66:ALA:CA	51:BS:99:LYS:HD3	2.40	0.51
8:AH:4:ASP:OD1	8:AH:7:ALA:N	2.40	0.51
32:B6:28:ARG:O	32:B6:29:ASN:C	2.49	0.51
1:CA:951:G:C2	1:CA:952:U:C2	2.99	0.51
1:AA:1308:U:OP1	13:AM:98:VAL:N	2.40	0.51
1:AA:954:G:H2'	1:AA:955:U:C6	2.45	0.51
36:BA:2681:C:C5	36:BA:2725:A:N6	2.78	0.51
52:BT:28:VAL:O	52:BT:29:ARG:CD	2.48	0.51
52:BT:65:LYS:HA	52:BT:65:LYS:NZ	2.25	0.51
52:DT:92:GLY:C	52:DT:94:ALA:N	2.63	0.51
58:BZ:151:HIS:HB3	58:BZ:171:ILE:HG12	1.92	0.51
1:AA:1348:U:O3'	9:AI:120:ARG:HB2	2.09	0.51
10:AJ:47:PHE:CZ	14:AN:37:PHE:HE2	2.28	0.51
36:BA:1517:G:C6	36:BA:1518:U:C4	2.99	0.51
19:AS:28:LYS:HE2	19:AS:29:ARG:CZ	2.40	0.51
19:AS:49:ILE:O	19:AS:60:VAL:O	2.27	0.51
4:AD:85:LYS:HD3	4:AD:92:VAL:HG11	1.92	0.51
36:BA:309:G:O3'	57:BY:18:GLY:HA2	2.10	0.51
1:AA:1481:U:H2'	1:AA:1482:G:C8	2.45	0.51
36:DA:1825:A:H4'	39:DD:233:HIS:HE1	1.76	0.51
25:AZ:241:ARG:CA	25:AZ:285:ASN:ND2	2.73	0.51
1:AA:1512:U:O2	1:AA:1523:G:N2	2.42	0.51
53:BU:66:ASN:HA	53:BU:69:CYS:SG	2.51	0.51
13:CM:19:LEU:HD12	13:CM:25:ILE:HD13	1.93	0.51
22:AV:56:C:N3	42:BG:83:ARG:HD3	2.25	0.51
42:BG:71:THR:CB	42:BG:89:GLY:O	2.56	0.51
37:DB:44:G:H4'	37:DB:45:A:N7	2.24	0.51
25:AZ:389:ARG:O	25:AZ:390:GLU:HB2	2.09	0.51
57:BY:86:ARG:NH2	57:BY:95:LYS:NZ	2.58	0.51
36:DA:1059:G:H21	45:DK:126:UNK:HA	1.74	0.51
51:BS:106:ARG:HH21	51:BS:109:GLY:N	2.08	0.51
36:DA:2206:G:C2	36:DA:2207:G:H5'	2.46	0.51
49:DQ:95:ALA:O	49:DQ:97:VAL:HG22	2.10	0.51
38:BC:99:ILE:HG22	38:BC:99:ILE:O	2.09	0.51
1:AA:35:G:H2'	1:AA:36:C:H6	1.69	0.51
4:CD:119:GLN:O	4:CD:123:HIS:HD2	1.93	0.51
28:D2:14:ARG:NH2	36:DA:78:A:H5'	2.16	0.51
40:DE:107:THR:C	40:DE:190:GLY:HA2	2.31	0.51
31:D5:13:LYS:NZ	36:DA:516:C:P	2.83	0.51
36:BA:1193:G:N3	36:BA:1194:A:H1'	2.24	0.51
4:AD:24:GLU:H	4:AD:112:VAL:CG2	2.24	0.51
36:DA:1386:C:H2'	36:DA:1387:C:H6	1.74	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:BV:23:GLU:O	54:BV:24:LYS:O	2.28	0.51
36:DA:218:A:O2'	36:DA:219:G:H5'	2.10	0.51
18:CR:69:THR:O	18:CR:72:ARG:N	2.43	0.51
36:BA:534:U:H5'	53:BU:42:ALA:HB1	1.91	0.51
25:CZ:317:GLU:HG3	25:CZ:404:LEU:CD2	2.38	0.51
18:AR:55:ARG:HG3	18:AR:55:ARG:NH1	2.25	0.51
1:CA:1431:C:O2'	1:CA:1432:G:H5'	2.10	0.51
41:BF:81:PRO:O	41:BF:82:ILE:O	2.29	0.51
55:BW:71:VAL:C	55:BW:73:ALA:H	2.13	0.51
12:AL:70:ILE:CD1	12:AL:77:LEU:HD12	2.40	0.51
2:AB:7:VAL:O	2:AB:7:VAL:HG12	2.09	0.51
1:CA:1089:G:O2'	1:CA:1090:U:H5'	2.10	0.51
43:DH:127:GLU:OE1	43:DH:128:PRO:HD3	2.10	0.51
1:AA:157:G:O2'	1:AA:158:G:H5'	2.11	0.51
24:CY:37:YG:O2'	24:CY:38:A:H5'	2.10	0.51
45:DK:58:UNK:O	45:DK:65:UNK:HA	2.10	0.51
36:BA:2317:C:H2'	36:BA:2318:G:H5'	1.92	0.51
36:DA:1911:U:H2'	36:DA:1912:A:H5'	1.92	0.51
36:BA:1331:A:O2'	36:BA:1332:G:C8	2.63	0.51
1:AA:786:G:N2	1:AA:787:A:H1'	2.26	0.51
42:DG:165:THR:HG23	42:DG:168:GLU:OE2	2.08	0.51
1:AA:1018:C:H2'	1:AA:1019:C:C6	2.46	0.51
43:DH:125:VAL:O	43:DH:125:VAL:HG12	2.10	0.51
3:CC:134:ILE:CG2	3:CC:168:ALA:HB3	2.40	0.51
1:CA:647:C:O2'	1:CA:648:A:H5'	2.10	0.51
16:CP:82:GLN:O	16:CP:83:GLU:HB2	2.11	0.51
22:CV:44:G:O2'	22:CV:45:U:H5'	2.09	0.51
34:B8:37:SER:O	34:B8:41:ILE:HG22	2.11	0.51
48:BP:22:GLY:O	48:BP:29:LYS:HB2	2.11	0.51
36:DA:1451:C:H6	36:DA:1451:C:OP2	1.94	0.51
50:DR:42:LYS:O	50:DR:45:ARG:CG	2.58	0.51
55:DW:41:LYS:C	55:DW:43:GLY:N	2.61	0.51
32:D6:35:GLU:CB	32:D6:51:GLU:HG3	2.41	0.51
36:DA:2281:C:H2'	36:DA:2282:G:C8	2.45	0.51
36:DA:2292:C:H42	36:DA:2340:G:H1	1.58	0.51
39:BD:35:LYS:HB2	39:BD:104:TYR:CE1	2.46	0.51
38:BC:116:THR:HG22	38:BC:147:PHE:HA	1.93	0.51
42:DG:82:LEU:HD22	42:DG:87:PRO:CG	2.38	0.51
41:BF:28:ILE:H	41:BF:28:ILE:CD1	2.20	0.51
43:DH:37:VAL:HG11	43:DH:68:THR:HG21	1.92	0.51
31:B5:3:LYS:HA	31:B5:3:LYS:CE	2.35	0.51
50:BR:37:THR:HG23	50:BR:40:LYS:HE2	1.91	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:14:ARG:HG3	13:AM:44:ARG:CZ	2.40	0.51
56:DX:10:ALA:HB3	56:DX:29:TRP:CD1	2.44	0.51
36:DA:2654:A:O2'	36:DA:2655:G:H4'	2.10	0.51
1:CA:1191:A:P	3:CC:4:LYS:HZ3	2.34	0.51
54:DV:52:VAL:HG13	54:DV:55:ALA:CB	2.32	0.51
1:AA:607:A:H2'	1:AA:608:A:O4'	2.10	0.51
9:CI:18:PHE:O	9:CI:61:ALA:HA	2.11	0.51
1:AA:235:C:H1'	17:AQ:61:GLU:OE1	2.10	0.51
54:BV:46:VAL:HG13	54:BV:46:VAL:O	2.11	0.51
1:CA:972:C:O3'	10:CJ:57:LYS:HG2	2.10	0.51
36:DA:2286:A:C2	36:DA:2346:A:N6	2.79	0.51
1:CA:658:G:H2'	1:CA:659:U:H6	1.75	0.51
36:BA:1669:A:OP2	36:BA:1670:C:OP2	2.28	0.51
52:BT:89:VAL:CB	52:BT:91:ARG:HE	2.23	0.51
47:DO:77:ILE:HD13	52:DT:74:ARG:HG2	1.93	0.51
58:BZ:102:LEU:HD11	58:BZ:124:ILE:HG21	1.92	0.51
58:BZ:61:LEU:C	58:BZ:63:ASP:H	2.13	0.51
57:DY:13:VAL:HG22	57:DY:14:LEU:H	1.73	0.51
1:AA:1353:G:H2'	1:AA:1354:C:H6	1.74	0.51
58:DZ:165:VAL:CG1	58:DZ:166:SER:N	2.70	0.51
9:CI:65:VAL:HG11	9:CI:73:GLN:NE2	2.26	0.51
1:AA:1520:G:O2'	1:AA:1521:G:C5'	2.58	0.51
36:DA:2138:C:H2'	36:DA:2139:C:C6	2.45	0.51
36:DA:2188:C:H2'	36:DA:2189:U:N1	2.25	0.51
41:BF:7:TYR:HD2	41:BF:16:GLY:N	2.08	0.51
25:AZ:97:ALA:HA	25:AZ:126:VAL:CG1	2.39	0.51
19:CS:28:LYS:O	19:CS:29:ARG:HG3	2.10	0.51
19:CS:62:ILE:HD12	19:CS:66:MET:CE	2.38	0.51
3:AC:58:GLU:O	3:AC:59:ARG:HG3	2.10	0.51
36:BA:1248:G:OP1	41:BF:92:PRO:HG3	2.09	0.51
36:BA:2589:A:H2'	36:BA:2590:A:O4'	2.10	0.51
49:DQ:32:TYR:HE2	49:DQ:111:GLU:HG3	1.72	0.51
1:AA:811:C:H4'	1:AA:900:A:H62	1.72	0.51
21:CU:4:GLY:O	21:CU:6:ARG:N	2.42	0.51
46:BN:3:THR:C	46:BN:4:TYR:CG	2.83	0.51
53:BU:94:ASN:C	53:BU:96:ALA:H	2.12	0.51
54:BV:5:VAL:O	54:BV:11:GLN:HA	2.11	0.51
28:B2:6:VAL:HA	28:B2:9:GLN:OE1	2.10	0.51
28:B2:3:LEU:HD12	36:BA:98:G:H5''	1.93	0.51
1:CA:1329:A:P	13:CM:28:ALA:HB3	2.50	0.51
13:CM:40:ASN:ND2	13:CM:43:THR:HG23	2.25	0.51
36:BA:1542:A:C8	36:BA:1544:A:H5'	2.46	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BE:132:HIS:HD2	40:BE:135:HIS:NE2	2.07	0.51
24:AY:24:G:H2'	24:AY:25:C:H6	1.75	0.51
1:AA:90:U:H4'	1:AA:91:C:C6	2.44	0.51
36:BA:708:C:H42	36:BA:723:G:H1	1.58	0.51
1:AA:438:G:C4'	4:AD:123:HIS:HD1	2.22	0.51
8:CH:119:LEU:HB3	8:CH:123:GLU:HB2	1.91	0.51
43:DH:34:GLU:O	43:DH:36:PRO:HD3	2.11	0.51
43:BH:94:TYR:HE2	43:BH:152:ARG:HG2	1.75	0.51
22:CV:53:G:H1	22:CV:61:C:N4	1.91	0.51
36:BA:2038:G:H2'	36:BA:2039:C:O4'	2.10	0.51
36:DA:272(I):U:C2'	36:DA:272(J):C:H5'	2.40	0.51
39:BD:227:ASN:HB3	39:BD:228:PRO:HD2	1.92	0.51
15:AO:87:ILE:HG22	15:AO:88:ARG:N	2.15	0.51
1:CA:1487:G:H2'	1:CA:1488:G:H8	1.75	0.51
36:DA:515:A:H2'	36:DA:516:C:O4'	2.10	0.51
49:DQ:48:GLU:HG2	49:DQ:52:VAL:CG2	2.40	0.51
36:DA:2246:G:C8	36:DA:2426:A:C6	2.99	0.51
5:CE:143:ARG:HH11	5:CE:143:ARG:HG3	1.74	0.51
36:BA:1087:G:N2	36:BA:1103:A:H61	2.07	0.51
36:BA:613:G:H5'	36:BA:613:G:H8	1.76	0.51
36:DA:205:G:O2'	36:DA:206:U:OP2	2.27	0.51
26:D0:22:GLY:C	26:D0:38:VAL:HG13	2.30	0.51
33:D7:8:ASN:HB3	33:D7:11:LYS:HB3	1.92	0.51
36:BA:534:U:H5'	53:BU:42:ALA:CB	2.40	0.51
7:CG:22:LEU:HD23	7:CG:22:LEU:C	2.30	0.51
50:BR:87:TYR:O	50:BR:89:ASP:N	2.40	0.51
36:BA:1064:C:C2'	36:BA:1065:U:H5''	2.40	0.51
46:DN:93:THR:O	46:DN:93:THR:HG23	2.10	0.51
36:BA:2107:C:C2	36:BA:2108:C:C5	2.99	0.51
11:CK:77:MET:O	11:CK:78:GLN:HG2	2.11	0.51
1:CA:1399:C:H4'	1:CA:1400:C:O5'	2.10	0.51
1:CA:922:G:H2'	1:CA:923:A:C8	2.45	0.51
51:DS:84:GLN:HA	51:DS:105:ALA:HB3	1.93	0.51
36:BA:2690:C:H4'	36:BA:2872:G:H21	1.73	0.51
25:CZ:126:VAL:HA	63:CZ:502:KIR:H473	1.90	0.51
22:CW:24:G:H2'	22:CW:25:C:C6	2.45	0.51
38:BC:50:ASP:OD1	38:BC:51:PRO:HD2	2.11	0.51
36:DA:1932:A:H2'	36:DA:1933:G:O4'	2.10	0.51
58:BZ:54:HIS:CD2	58:BZ:101:PRO:HD3	2.46	0.51
1:CA:1429:C:O2'	36:DA:1704:G:H5'	2.10	0.51
36:DA:713:G:H2'	36:DA:714:U:C6	2.45	0.51
25:AZ:324:LYS:HA	25:AZ:365:GLY:N	2.25	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:DK:14:UNK:CB	45:DK:50:UNK:HA	2.41	0.51
58:DZ:103:ARG:O	58:DZ:103:ARG:HG2	2.10	0.51
36:DA:646:A:H3'	36:DA:647:G:H8	1.76	0.51
54:BV:13:ARG:HG3	54:BV:13:ARG:HH11	1.74	0.51
1:CA:64:G:H5''	1:CA:65:U:OP2	2.10	0.51
1:AA:706:A:O2'	11:AK:31:THR:HB	2.09	0.51
1:CA:854:G:H3'	1:CA:871:U:O4	2.10	0.51
36:DA:2838:G:H4'	50:DR:45:ARG:HD3	1.91	0.51
50:DR:4:LEU:HD12	50:DR:6:SER:O	2.09	0.51
50:DR:4:LEU:HG	50:DR:4:LEU:O	2.09	0.51
36:DA:2766:G:N3	36:DA:2766:G:H2'	2.25	0.51
57:DY:46:LYS:CB	57:DY:62:GLU:HG2	2.40	0.51
36:BA:1378:A:O2'	36:BA:1379:A:C5'	2.53	0.51
9:AI:87:GLN:C	9:AI:89:ASN:H	2.13	0.51
42:DG:76:SER:HA	42:DG:83:ARG:HA	1.92	0.51
41:BF:31:HIS:CD2	48:BP:13:ASN:HB2	2.45	0.51
1:AA:1208:C:N3	1:AA:1209:C:C4	2.79	0.51
1:AA:539:A:H2'	1:AA:540:G:C8	2.45	0.51
36:DA:2758:A:C2	36:DA:2759:G:H1'	2.43	0.51
36:BA:1277:G:C2	36:BA:1294:U:O2	2.63	0.51
10:AJ:12:ASP:O	10:AJ:14:LYS:N	2.43	0.51
36:DA:17:G:H21	36:DA:555:U:C5'	2.24	0.51
1:AA:117:G:O6	1:AA:289:G:C1'	2.53	0.51
1:AA:51:A:H4'	1:AA:52:G:C5'	2.40	0.51
4:CD:17:VAL:HG21	4:CD:63:LYS:HZ2	1.75	0.51
2:CB:168:THR:CG2	2:CB:192:SER:HA	2.40	0.51
36:DA:1403:C:H2'	36:DA:1404:C:O5'	2.11	0.51
36:DA:1471:A:H3'	36:DA:1472:A:H8	1.75	0.51
47:DO:105:GLU:HA	47:DO:108:GLU:OE1	2.09	0.51
52:DT:79:HIS:O	52:DT:80:SER:HB3	2.10	0.51
58:BZ:71:VAL:HA	58:BZ:87:ASP:O	2.11	0.51
1:CA:1344:C:H1'	1:CA:1349:A:H4'	1.93	0.51
1:CA:1352:C:O2	1:CA:1371:G:C2	2.63	0.51
4:AD:79:PHE:CE2	4:AD:207:TYR:HD1	2.29	0.51
57:BY:74:PRO:O	57:BY:75:ILE:HB	2.11	0.51
42:BG:174:GLU:HG2	42:BG:175:LEU:HD23	1.92	0.51
42:BG:93:THR:HG22	42:BG:94:LEU:N	2.24	0.51
1:AA:1423:G:C2'	1:AA:1424:C:H6	2.19	0.51
36:DA:1827:C:O2'	36:DA:1828:G:H5'	2.11	0.51
3:CC:48:TYR:O	3:CC:50:ALA:N	2.44	0.51
27:B1:62:VAL:HG11	27:B1:67:ILE:HG23	1.92	0.51
36:BA:440:G:H22	41:BF:46:ARG:HH21	1.57	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BF:46:ARG:NH1	41:BF:46:ARG:CG	2.71	0.51
36:DA:906:G:O2'	49:DQ:67:ARG:NH2	2.43	0.51
28:B2:3:LEU:CD2	28:B2:3:LEU:C	2.78	0.51
57:DY:95:LYS:CG	57:DY:100:ALA:HA	2.29	0.51
36:BA:598:G:H2'	36:BA:599:G:O4'	2.10	0.51
48:BP:14:LYS:O	48:BP:15:ARG:HB2	2.10	0.51
36:BA:425:G:H2'	36:BA:426:C:H6	1.75	0.51
36:DA:1196:C:O4'	36:DA:1226:A:C2	2.64	0.51
36:DA:425:G:H2'	36:DA:426:C:C6	2.45	0.51
36:BA:2306:C:N4	36:BA:2311:A:C8	2.79	0.51
36:BA:1528:A:O2'	36:BA:1528(A):A:O5'	2.24	0.51
43:DH:149:ARG:HD3	43:DH:164:TYR:HD1	1.75	0.51
40:BE:120:TRP:CB	40:BE:155:LYS:HE3	2.40	0.51
8:CH:92:ARG:HB3	8:CH:94:TYR:HE1	1.74	0.51
58:BZ:80:ARG:O	58:BZ:81:ARG:O	2.29	0.51
1:AA:1278:U:H5''	1:AA:1279:A:O4'	2.11	0.51
10:AJ:67:THR:CG2	10:AJ:67:THR:O	2.56	0.51
25:CZ:221:PHE:HA	25:CZ:244:ARG:O	2.10	0.51
8:AH:19:VAL:O	8:AH:20:TYR:C	2.48	0.51
38:DC:100:ILE:CG2	38:DC:126:LYS:HB3	2.36	0.51
38:BC:99:ILE:CG2	38:BC:102:LYS:HZ3	2.17	0.51
20:AT:57:ARG:NH1	20:AT:57:ARG:CB	2.72	0.51
36:BA:150:C:O2'	36:BA:151:C:H5'	2.10	0.51
2:AB:204:ASN:ND2	2:AB:206:ASP:N	2.53	0.51
10:AJ:40:LEU:HG	10:AJ:69:ASN:CB	2.41	0.51
16:AP:58:TYR:CD1	16:AP:58:TYR:C	2.84	0.51
27:D1:93:GLU:C	27:D1:94:LEU:HD12	2.31	0.51
31:D5:10:LYS:HG3	36:DA:1263:U:H1'	1.91	0.51
1:AA:614:A:C2	1:AA:627:G:C2	2.98	0.51
1:CA:351:G:C4'	1:CA:352:C:OP2	2.54	0.51
6:AF:37:VAL:CG1	6:AF:38:GLU:N	2.73	0.51
36:BA:272(B):G:H2'	36:BA:272(C):G:C8	2.43	0.51
54:DV:28:GLU:HB3	54:DV:29:PRO:HD2	1.92	0.51
1:CA:389:A:C2'	1:CA:390:C:H5'	2.35	0.51
36:DA:53:A:H62	36:DA:117:G:H21	1.58	0.51
36:BA:2776:A:H4'	36:BA:2777:G:H5''	1.92	0.51
36:BA:1601:G:O2'	36:BA:1602:U:H5'	2.09	0.51
22:CW:65:G:O2'	22:CW:66:U:H5'	2.10	0.51
22:CW:70:G:H5'	22:CW:70:G:H8	1.76	0.51
1:AA:1249:C:O4'	9:AI:70:LYS:HE2	2.11	0.51
1:AA:436:C:H4'	4:AD:157:LEU:CD1	2.41	0.51
1:AA:932:C:H2'	1:AA:933:G:C8	2.46	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:110:C:C2	1:CA:111:G:C8	2.99	0.51
24:CY:20:H2U:HN3	36:DA:1066:U:H3	1.57	0.51
36:DA:2422:A:H3'	36:DA:2422:A:H8	1.75	0.51
36:DA:2053:G:H2'	36:DA:2054:A:O4'	2.10	0.51
36:DA:2408:U:H2'	36:DA:2409:G:C8	2.44	0.51
1:CA:660:G:H2'	1:CA:661:G:C8	2.41	0.51
12:AL:11:VAL:HG11	17:AQ:36:ILE:HG21	1.91	0.51
35:B9:18:ARG:O	35:B9:19:ARG:HB3	2.11	0.51
49:DQ:90:VAL:HG12	49:DQ:91:GLU:H	1.75	0.51
1:CA:175:C:H4'	20:CT:25:ARG:NH1	2.26	0.51
43:BH:58:GLU:O	43:BH:62:LYS:HB2	2.10	0.51
25:CZ:399:VAL:O	25:CZ:399:VAL:HG13	2.10	0.51
52:DT:2:ASN:O	52:DT:3:ARG:HG2	2.11	0.51
43:DH:90:LYS:HB3	43:DH:159:GLU:OE2	2.10	0.51
38:DC:1:PRO:C	38:DC:3:HIS:H	2.13	0.51
25:CZ:12:VAL:HG13	25:CZ:100:ASP:OD2	2.10	0.51
36:BA:247:G:H1'	36:BA:251:A:H62	1.76	0.51
36:BA:1192:G:C6	48:BP:29:LYS:NZ	2.79	0.51
53:BU:33:ARG:O	53:BU:36:ARG:HB3	2.10	0.51
50:DR:75:LEU:HD13	50:DR:75:LEU:O	2.10	0.51
36:BA:483:A:H1'	57:BY:60:PHE:HZ	1.73	0.51
36:DA:833:U:O2	48:DP:55:ARG:NH1	2.43	0.51
25:AZ:146:LEU:N	25:AZ:149:LEU:HD23	2.25	0.51
25:AZ:171:ILE:HG23	25:AZ:201:GLU:OE1	2.10	0.51
28:D2:38:GLN:HB3	28:D2:44:LEU:HD22	1.93	0.51
41:DF:111:ALA:O	41:DF:115:ALA:N	2.44	0.51
36:DA:479:A:O2'	36:DA:481:G:C5'	2.58	0.51
38:DC:116:THR:HG22	38:DC:147:PHE:HA	1.93	0.51
38:DC:81:GLU:O	38:DC:85:GLU:HB3	2.11	0.51
39:BD:27:THR:CG2	39:BD:82:ILE:O	2.58	0.51
41:DF:60:SER:O	41:DF:77:ASP:HB2	2.11	0.51
1:AA:1160:G:O6	1:AA:1181:G:C6	2.63	0.51
41:BF:25:PRO:HB3	41:BF:119:ARG:CA	2.41	0.51
36:BA:95:G:H2'	36:BA:96:G:O4'	2.10	0.51
36:BA:1268:A:H2'	36:BA:1269:A:C8	2.45	0.51
50:BR:98:LEU:O	50:BR:113:LEU:N	2.44	0.51
42:BG:110:ALA:CB	42:BG:140:ILE:HD13	2.41	0.51
53:DU:52:ARG:HG2	53:DU:55:ARG:HH12	1.76	0.51
36:DA:1154:G:H5''	53:DU:59:ARG:NH2	2.26	0.51
1:AA:59:A:N1	1:AA:331:G:H1'	2.25	0.51
51:BS:29:PHE:CD2	51:BS:29:PHE:C	2.84	0.51
32:D6:6:ARG:C	32:D6:8:LYS:H	2.14	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DF:158:THR:HB	41:DF:195:ASP:HB3	1.91	0.51
36:DA:1344:G:H4'	36:DA:1384:A:N7	2.26	0.51
36:BA:2713:A:H3'	36:BA:2714:G:H5'	1.93	0.51
36:BA:2683:C:N4	36:BA:2727:G:H21	2.09	0.51
52:BT:27:THR:O	52:BT:28:VAL:CG2	2.52	0.51
52:BT:55:ASN:N	52:BT:59:THR:HG22	2.07	0.51
47:DO:71:ARG:NE	47:DO:105:GLU:OE2	2.41	0.51
52:DT:85:LYS:HZ2	52:DT:85:LYS:HB3	1.76	0.51
38:BC:196:LEU:O	38:BC:198:ALA:N	2.44	0.51
58:BZ:128:VAL:CG2	58:BZ:129:SER:H	2.20	0.51
58:BZ:86:VAL:O	58:BZ:87:ASP:OD1	2.29	0.51
9:AI:102:LEU:O	9:AI:102:LEU:HD23	2.10	0.51
10:AJ:51:ARG:NE	10:AJ:61:GLU:HB2	2.25	0.51
37:DB:83:G:O2'	37:DB:84:C:H5'	2.11	0.51
1:AA:1494:G:H4'	36:BA:1913:A:C8	2.46	0.51
36:BA:1473:G:O6	36:BA:1519:G:N2	2.41	0.51
4:AD:120:LEU:HB3	4:AD:126:ILE:HD13	1.92	0.51
57:BY:13:VAL:HG22	57:BY:73:ARG:O	2.11	0.51
57:BY:13:VAL:HG22	57:BY:14:LEU:H	1.74	0.51
35:B9:12:ASP:O	35:B9:14:CYS:N	2.43	0.51
46:BN:14:VAL:CG1	46:BN:137:LYS:HG3	2.41	0.51
14:AN:9:LYS:HA	14:AN:12:ARG:NH2	2.25	0.51
36:BA:2137:C:H2'	36:BA:2138:C:H6	1.75	0.51
3:AC:29:TYR:OH	14:AN:54:PRO:HB2	2.10	0.51
41:BF:51:THR:CG2	41:BF:92:PRO:HD2	2.40	0.51
36:BA:1825:A:H4'	39:BD:233:HIS:CE1	2.46	0.51
53:BU:65:ILE:HG13	53:BU:96:ALA:HB1	1.91	0.51
39:BD:132:PRO:O	39:BD:136:ILE:HD13	2.11	0.51
36:DA:662:G:H5'	48:DP:18:ARG:C	2.31	0.51
42:BG:43:LEU:HD11	42:BG:153:ARG:CB	2.41	0.51
30:D4:16:CYS:HA	30:D4:33:VAL:CG1	2.41	0.51
42:DG:162:THR:O	42:DG:164:GLU:OE2	2.28	0.51
24:AY:23:A:H2'	24:AY:24:G:C8	2.45	0.51
30:D4:22:ILE:H	30:D4:22:ILE:CD1	1.99	0.51
36:BA:719:C:O2'	36:BA:720:C:H5'	2.10	0.51
21:CU:10:ARG:O	21:CU:11:GLY:C	2.48	0.51
40:DE:174:ASP:OD2	40:DE:175:VAL:N	2.44	0.51
51:BS:24:LEU:CD1	51:BS:41:ASP:HB2	2.41	0.51
25:CZ:221:PHE:CD1	25:CZ:247:VAL:HG13	2.45	0.51
25:CZ:67:HIS:CE1	25:CZ:98:GLN:HE22	2.14	0.51
2:AB:166:ASP:HB2	2:AB:205:ASP:OD2	2.10	0.51
54:BV:70:ILE:HD12	54:BV:87:HIS:HD2	1.75	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:B3:50:VAL:HA	29:B3:52:HIS:CE1	2.46	0.51
1:CA:192:U:H1'	20:CT:103:GLY:O	2.11	0.51
24:CY:69:C:H2'	24:CY:70:A:H8	1.75	0.51
1:AA:665:A:C8	1:AA:725:G:C2	2.99	0.51
1:AA:746:A:O2'	1:AA:747:C:H5'	2.11	0.51
26:D0:77:ARG:C	26:D0:78:TYR:CD1	2.84	0.51
31:B5:38:ALA:HB1	31:B5:48:GLU:HB3	1.92	0.51
36:DA:2358:G:C2'	36:DA:2359:C:H5'	2.40	0.51
26:B0:22:GLY:C	26:B0:38:VAL:HG13	2.31	0.51
36:DA:1386:C:H2'	36:DA:1387:C:C6	2.46	0.51
33:D7:1:MET:N	36:DA:1619:G:O2'	2.43	0.51
36:BA:116:C:H2'	36:BA:117:G:H8	1.71	0.51
41:DF:82:ILE:O	41:DF:83:PHE:HB2	2.08	0.51
36:DA:977:G:O2'	36:DA:978:G:H5'	2.10	0.51
36:BA:185:U:H2'	36:BA:186:G:H8	1.75	0.51
46:DN:67:LEU:O	46:DN:68:GLU:CB	2.58	0.51
52:DT:129:ARG:NH1	52:DT:131:ALA:HB3	2.26	0.51
49:DQ:109:VAL:CG1	49:DQ:110:THR:H	2.23	0.51
18:AR:38:GLU:HA	18:AR:38:GLU:OE2	2.11	0.51
22:CW:56:C:P	38:DC:164:ARG:HH22	2.33	0.51
3:AC:90:GLU:CA	3:AC:93:LYS:HB3	2.38	0.51
36:BA:67:U:O2'	36:BA:68:G:H5'	2.11	0.51
36:BA:2688:U:C3'	36:BA:2688:U:O2	2.58	0.51
11:CK:25:TYR:CE1	11:CK:87:THR:HB	2.44	0.51
58:BZ:149:SER:HB3	58:BZ:172:ALA:O	2.10	0.51
36:BA:2316:C:C2	36:BA:2317:C:C5	2.99	0.51
6:AF:79:LEU:HD12	6:AF:88:VAL:HG11	1.93	0.51
7:CG:65:ALA:HA	7:CG:128:ALA:HA	1.93	0.51
10:CJ:29:ARG:HG2	10:CJ:29:ARG:O	2.11	0.51
2:AB:155:LEU:CD2	2:AB:159:PRO:HG3	2.41	0.51
46:DN:2:LYS:NZ	54:DV:12:TYR:HA	2.25	0.51
36:DA:1307:A:N3	36:DA:1307:A:H2'	2.25	0.51
22:CV:33:U:O2	22:CV:35:A:H3'	2.11	0.51
6:AF:89:MET:SD	18:AR:76:LEU:HD21	2.50	0.51
36:BA:2447:G:C6	36:BA:2501:C:C2	2.99	0.51
36:DA:2314:C:O5'	36:DA:2314:C:H6	1.94	0.51
36:BA:961:C:C5	36:BA:2031:A:C2	2.98	0.51
36:BA:2259:G:C2	36:BA:2282:G:N1	2.78	0.51
36:BA:564:C:O2'	36:BA:565:C:H5'	2.10	0.51
50:DR:100:LEU:CD2	50:DR:112:ALA:HA	2.41	0.51
34:D8:50:LEU:N	34:D8:53:PRO:HG3	2.25	0.51
36:DA:775:G:C5	36:DA:794:G:C8	2.99	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1190:G:OP1	3:AC:5:ILE:HD12	2.10	0.51
1:AA:505:G:C6	1:AA:535:A:C2	2.99	0.51
43:DH:66:GLY:HA2	43:DH:69:ARG:CB	2.40	0.51
36:BA:2529:G:OP2	36:BA:2530:A:H8	1.93	0.51
28:B2:35:LEU:HD21	28:B2:50:ILE:HD11	1.91	0.51
36:BA:1277:G:O2'	36:BA:1278:A:H5'	2.10	0.51
40:BE:82:ARG:O	40:BE:83:ASP:C	2.48	0.51
50:BR:59:ASP:O	50:BR:60:LEU:C	2.49	0.51
27:D1:4:VAL:CG2	27:D1:5:CYS:N	2.73	0.51
36:DA:588:U:H1'	41:DF:90:PHE:CD2	2.45	0.51
46:DN:29:LYS:O	46:DN:33:LEU:HD13	2.10	0.51
4:CD:200:GLU:HG2	4:CD:201:GLN:N	2.26	0.51
40:BE:56:PRO:O	40:BE:57:LYS:HB2	2.10	0.51
13:CM:102:ARG:HD3	13:CM:105:THR:OG1	2.11	0.51
25:CZ:21:ASP:N	62:CZ:501:GDP:O1B	2.41	0.51
47:BO:71:ARG:HB3	47:BO:72:PRO:HD2	1.92	0.51
40:BE:61:ARG:HG2	40:BE:62:PRO:HD3	1.91	0.51
47:DO:104:ARG:HH22	47:DO:107:ARG:NH2	2.09	0.51
52:DT:70:VAL:CG1	52:DT:71:GLY:N	2.73	0.51
37:BB:74:U:H2'	37:BB:75:G:H1'	1.92	0.51
58:BZ:39:VAL:O	58:BZ:40:ASP:O	2.29	0.51
57:DY:77:PRO:O	57:DY:78:ALA:HB2	2.10	0.51
7:CG:137:LYS:O	7:CG:138:LYS:C	2.47	0.51
57:BY:28:LYS:O	57:BY:38:ILE:HG22	2.10	0.51
36:DA:1902:C:C2'	36:DA:1903:G:O5'	2.59	0.51
31:B5:52:TYR:HE2	36:BA:2884:U:O2	1.94	0.51
36:BA:2103:C:H2'	36:BA:2104:G:C5'	2.40	0.51
25:AZ:219:LYS:HB3	25:AZ:220:PRO:CD	2.40	0.51
25:AZ:290:LEU:O	25:AZ:293:VAL:HG22	2.09	0.51
36:BA:1902:C:C2'	36:BA:1903:G:O5'	2.59	0.51
36:BA:1012:U:O4	46:BN:28:THR:HG21	2.11	0.51
46:BN:35:ARG:O	46:BN:36:GLY:C	2.48	0.51
36:DA:695:G:OP1	36:DA:1380:G:C4'	2.49	0.51
36:DA:1298:C:H1'	36:DA:1302:A:N3	2.25	0.51
36:BA:2306:C:H4'	42:BG:136:ARG:NH1	2.25	0.51
42:DG:143:GLU:O	42:DG:144:ILE:C	2.48	0.51
1:CA:1278:U:H5''	1:CA:1279:A:O4'	2.10	0.51
1:CA:1279:A:H2	10:CJ:43:ARG:HH12	1.58	0.51
20:AT:26:ASN:HB3	20:AT:71:THR:OG1	2.11	0.51
58:BZ:22:GLY:O	58:BZ:23:LYS:O	2.27	0.51
29:D3:7:LYS:O	29:D3:54:VAL:HG13	2.11	0.51
5:AE:79:GLU:HA	5:AE:92:LYS:HA	1.92	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:79:GLU:HB3	5:AE:92:LYS:HG3	1.93	0.51
38:DC:132:GLY:HA2	38:DC:137:LEU:HB2	1.93	0.51
55:BW:10:VAL:HB	55:BW:101:SER:O	2.11	0.51
10:CJ:40:LEU:HG	10:CJ:69:ASN:CB	2.40	0.51
1:AA:38:G:H22	1:AA:397:A:C5'	2.24	0.51
2:AB:130:ARG:NH2	2:AB:134:GLU:HG3	2.25	0.51
10:AJ:40:LEU:CB	10:AJ:41:PRO:HD2	2.32	0.51
36:DA:442:G:C4'	41:DF:46:ARG:HD3	2.41	0.51
36:DA:2158:A:H4'	36:DA:2159:G:OP1	2.11	0.51
53:BU:37:GLU:HA	53:BU:40:PHE:HD1	1.75	0.51
1:CA:391:G:C2'	1:CA:392:G:O5'	2.58	0.51
18:CR:44:LEU:O	18:CR:45:SER:C	2.48	0.51
36:DA:676:A:C8	36:DA:2443:C:H1'	2.36	0.51
36:BA:1410:G:H2'	36:BA:1411:C:H6	1.75	0.51
1:CA:34:C:H1'	12:CL:32:PHE:CE2	2.46	0.51
16:CP:23:ASP:OD1	16:CP:25:ARG:NH1	2.44	0.51
25:AZ:271:GLU:HG2	25:AZ:276:THR:CA	2.37	0.51
1:CA:436:C:H4'	4:CD:157:LEU:CD1	2.40	0.51
49:DQ:113:GLN:O	49:DQ:117:ALA:N	2.44	0.51
42:DG:119:GLY:HA3	42:DG:181:ARG:N	2.25	0.51
36:DA:896:A:C8	58:DZ:146:ILE:HG21	2.46	0.51
12:AL:7:ILE:HD12	12:AL:7:ILE:H	1.76	0.51
49:BQ:87:LYS:O	49:BQ:88:GLY:O	2.29	0.51
3:CC:152:ILE:HG22	3:CC:153:VAL:N	2.26	0.51
36:BA:2352:A:C5	36:BA:2366:A:N1	2.79	0.51
1:CA:1504:G:H4'	1:CA:1505:G:C5'	2.41	0.51
20:AT:81:LYS:O	20:AT:83:ARG:N	2.44	0.51
1:AA:777:A:H2'	1:AA:778:G:H8	1.76	0.51
1:CA:1253:G:O2'	1:CA:1254:C:H5'	2.10	0.51
36:DA:654(T):C:O2'	36:DA:654(U):A:H5'	2.10	0.51
12:CL:10:LEU:HB3	17:CQ:32:TYR:CE1	2.46	0.51
36:BA:877:U:O2'	36:BA:878:A:H5''	2.10	0.51
30:B4:20:ASN:C	30:B4:20:ASN:ND2	2.63	0.51
22:CV:11:C:O2'	36:DA:1909:C:H1'	2.10	0.51
8:AH:112:LEU:HA	8:AH:134:ILE:HG12	1.92	0.51
5:CE:44:GLY:O	5:CE:58:ALA:HB1	2.11	0.51
36:BA:230:U:O2'	36:BA:231:C:H5'	2.11	0.51
36:BA:1307:A:H2'	36:BA:1307:A:N3	2.25	0.51
40:DE:95:ILE:H	40:DE:95:ILE:HD13	1.74	0.51
5:AE:67:VAL:HG22	5:AE:68:GLU:N	2.25	0.51
12:AL:34:ARG:HG2	12:AL:35:GLY:N	2.25	0.51
36:DA:24:G:H1'	55:DW:77:ASP:OD1	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:591:C:H2'	36:BA:592:G:H8	1.76	0.51
6:CF:32:ASN:C	6:CF:34:GLY:H	2.14	0.51
1:AA:428:G:H4'	1:AA:429:U:O5'	2.10	0.51
25:AZ:356:PRO:O	25:AZ:357:PRO:C	2.50	0.51
48:BP:34:GLY:O	48:BP:35:HIS:HB2	2.10	0.51
36:DA:1271:G:C2	36:DA:1617:C:H4'	2.46	0.51
36:DA:1654:A:OP2	50:DR:3:HIS:CD2	2.63	0.51
36:DA:1801:G:O2'	36:DA:1802:A:H5''	2.10	0.51
28:D2:25:VAL:HA	28:D2:28:LYS:HB2	1.92	0.51
36:DA:601:C:H5'	41:DF:108:LYS:HE3	1.93	0.51
41:DF:122:LYS:CG	41:DF:191:ARG:HG3	2.41	0.51
36:DA:2523:G:C3'	36:DA:2524:G:H5''	2.39	0.51
5:CE:12:LEU:HD12	5:CE:31:LEU:HB3	1.93	0.51
36:DA:2540:C:O2	36:DA:2740:A:H2	1.94	0.51
36:BA:1816:G:H8	39:BD:62:TYR:OH	1.94	0.51
36:BA:655:A:H1'	36:BA:656:G:O4'	2.09	0.51
41:BF:33:LEU:CD1	41:BF:113:ALA:HB2	2.40	0.51
36:BA:61:G:H1	36:BA:94:C:N4	2.07	0.51
50:BR:45:ARG:CG	50:BR:46:GLY:H	2.06	0.51
27:D1:66:HIS:NE2	36:DA:372:G:H5'	2.26	0.51
36:DA:13:A:H2	36:DA:14:A:H62	1.54	0.51
1:AA:391:G:C2'	1:AA:392:G:O5'	2.59	0.51
1:CA:511:C:H42	1:CA:540:G:H1	1.59	0.51
2:CB:218:ALA:O	2:CB:222:ILE:HG12	2.11	0.51
1:CA:745:C:O2'	1:CA:746:A:H5'	2.11	0.51
32:B6:27:LYS:O	32:B6:27:LYS:HG3	2.10	0.51
36:DA:1523:U:H2'	36:DA:1524:G:O4'	2.10	0.51
13:CM:81:LEU:HB3	13:CM:89:GLY:HA2	1.92	0.51
52:DT:119:LYS:O	52:DT:123:GLN:HG2	2.11	0.51
58:BZ:28:MET:HG3	58:BZ:37:VAL:CG1	2.40	0.51
36:DA:335:C:H2'	36:DA:336:C:C6	2.46	0.51
10:AJ:51:ARG:H	10:AJ:60:ARG:HA	1.75	0.51
4:AD:79:PHE:CA	4:AD:93:PHE:CE2	2.94	0.51
42:BG:161:THR:C	42:BG:163:ALA:N	2.61	0.51
36:DA:2103:C:H2'	36:DA:2104:G:C5'	2.40	0.51
36:DA:2111:C:H2'	36:DA:2112:G:C5'	2.40	0.51
35:B9:8:LYS:O	35:B9:10:ILE:HD12	2.11	0.51
1:AA:916:G:C2	1:AA:917:G:C8	2.98	0.51
39:DD:244:ARG:HG2	39:DD:245:PRO:HB3	1.93	0.51
2:AB:87:ARG:HH21	2:AB:233:SER:H	1.58	0.51
3:CC:142:MET:C	3:CC:144:SER:N	2.64	0.51
36:BA:1775:U:H2'	36:BA:1776:G:O4'	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1970:A:H5''	36:BA:1971:A:OP1	2.11	0.51
16:CP:20:VAL:HG22	16:CP:21:VAL:H	1.75	0.51
36:BA:1493:C:H2'	36:BA:1493:C:O2	2.11	0.51
30:D4:35:VAL:HG12	42:DG:112:PRO:CG	2.41	0.51
43:DH:135:GLY:HA3	43:DH:141:VAL:CG2	2.41	0.51
40:DE:61:ARG:HG2	40:DE:62:PRO:HD3	1.93	0.51
46:DN:40:PRO:HD3	53:DU:68:ALA:HA	1.93	0.51
49:BQ:26:TYR:HA	49:BQ:137:TYR:CD1	2.46	0.51
24:AY:51:C:H2'	24:AY:52:A:H8	1.75	0.51
1:CA:1075:C:H4'	1:CA:1101:A:N6	2.26	0.51
36:BA:2485:G:O2'	49:BQ:126:PRO:HA	2.11	0.51
5:AE:75:THR:OG1	5:AE:76:ILE:N	2.43	0.51
11:CK:92:GLU:OE2	11:CK:95:ILE:HD12	2.11	0.51
4:CD:120:LEU:HB3	4:CD:126:ILE:HD13	1.92	0.51
1:AA:192:U:C1'	20:AT:103:GLY:HA2	2.41	0.51
29:B3:7:LYS:O	29:B3:54:VAL:HG13	2.11	0.51
25:AZ:363:MET:HB3	25:AZ:364:PRO:CD	2.41	0.51
5:CE:125:SER:OG	5:CE:126:ARG:N	2.42	0.51
22:CW:31:A:O2'	22:CW:32:U:H5'	2.11	0.51
49:DQ:55:VAL:HG23	58:DZ:178:GLU:HG3	1.93	0.51
36:BA:2875:C:C4'	52:BT:5:ALA:HB3	2.40	0.51
1:AA:63:C:N4	1:AA:104:G:H1	2.02	0.51
24:AY:36:U:O2'	24:AY:37:YG:H5''	2.11	0.51
1:AA:1431:C:H2'	1:AA:1432:G:H5'	1.93	0.51
36:DA:2715:C:O2'	36:DA:2716:U:H5'	2.10	0.51
25:AZ:316:PHE:HD2	25:AZ:400:VAL:HG13	1.74	0.51
36:BA:208:C:H2'	36:BA:209:C:H6	1.76	0.51
5:CE:42:GLY:CA	5:CE:66:MET:HG2	2.41	0.51
1:AA:734:G:H2'	1:AA:735:C:C6	2.46	0.51
51:DS:34:HIS:NE2	51:DS:54:LEU:HB3	2.25	0.51
30:D4:42:PHE:O	30:D4:43:TYR:O	2.29	0.51
26:B0:39:ARG:NH2	36:BA:2354:G:H22	2.09	0.51
1:AA:412:A:H5'	1:AA:413:G:OP2	2.11	0.51
36:BA:2369:A:H2'	36:BA:2370:G:H8	1.76	0.51
2:CB:154:LEU:O	2:CB:156:LYS:HG3	2.10	0.51
46:DN:2:LYS:HZ1	54:DV:12:TYR:CA	2.24	0.51
18:AR:24:ALA:O	18:AR:26:LEU:N	2.44	0.51
1:AA:1406:U:H2'	1:AA:1407:C:H6	1.76	0.51
36:BA:1632:A:N6	36:BA:1633:G:N1	2.58	0.51
11:CK:34:ASP:O	11:CK:36:ASP:N	2.38	0.51
6:AF:32:ASN:C	6:AF:34:GLY:H	2.13	0.51
1:AA:421:U:C6	3:AC:127:ARG:NH1	2.79	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:155:LEU:HD23	58:BZ:155:LEU:N	2.26	0.51
29:D3:45:GLY:HA2	29:D3:48:GLU:HG2	1.91	0.51
36:BA:576:U:OP1	36:BA:2503:A:OP1	2.29	0.51
36:BA:973:A:H5'	36:BA:1188:U:C1'	2.41	0.51
53:BU:14:HIS:C	53:BU:16:LYS:N	2.61	0.51
40:DE:192:ASN:HD22	40:DE:193:GLY:N	2.09	0.51
40:DE:1:MET:N	40:DE:83:ASP:O	2.38	0.51
50:DR:3:HIS:O	50:DR:5:LYS:HD3	2.11	0.51
32:D6:15:GLU:OE2	32:D6:41:PRO:HB3	2.11	0.51
34:D8:13:ARG:HA	48:DP:63:PRO:HA	1.91	0.51
36:DA:632:A:O2'	36:DA:633:A:H5'	2.11	0.51
48:DP:56:SER:O	48:DP:57:THR:O	2.29	0.51
28:D2:31:GLU:HA	28:D2:34:GLU:CB	2.41	0.51
28:D2:3:LEU:CD2	28:D2:3:LEU:C	2.79	0.51
41:DF:28:ILE:CD1	41:DF:28:ILE:H	2.22	0.51
5:CE:33:VAL:HG23	5:CE:43:LEU:HD13	1.93	0.51
5:CE:48:ALA:C	5:CE:50:GLU:H	2.12	0.51
56:BX:22:ALA:HB1	56:BX:23:GLU:OE2	2.11	0.51
27:D1:44:PRO:HA	36:DA:396:G:O3'	2.11	0.51
43:DH:68:THR:HA	43:DH:71:LEU:CG	2.41	0.51
56:BX:43:VAL:O	56:BX:47:PHE:HB2	2.11	0.51
50:BR:28:LEU:CA	50:BR:34:ILE:HG13	2.40	0.51
13:AM:19:LEU:HD12	13:AM:25:ILE:HD13	1.93	0.51
56:DX:12:VAL:CG1	56:DX:27:THR:H	2.24	0.51
46:DN:34:LEU:CD2	46:DN:120:LEU:HD23	2.41	0.51
46:DN:44:PRO:HG3	53:DU:60:LEU:HD21	1.93	0.51
14:CN:4:LYS:O	14:CN:7:ILE:N	2.42	0.51
1:CA:746:A:O2'	1:CA:747:C:H5'	2.11	0.51
5:AE:6:PHE:HB2	5:AE:34:VAL:CG2	2.40	0.51
25:CZ:146:LEU:O	25:CZ:150:VAL:N	2.39	0.51
47:BO:78:ARG:O	52:BT:73:GLU:N	2.44	0.51
40:DE:24:THR:HG21	40:DE:188:VAL:CG1	2.33	0.51
36:DA:336:C:H4'	57:DY:7:VAL:HG22	1.92	0.51
7:AG:104:LEU:O	7:AG:107:ALA:HB3	2.11	0.51
14:AN:27:CYS:SG	14:AN:29:ARG:HB2	2.50	0.51
36:BA:1069:A:H1'	36:BA:1070:A:OP1	2.11	0.51
26:B0:69:PHE:CE2	26:B0:79:VAL:HG22	2.45	0.51
36:BA:1344:G:H4'	36:BA:1384:A:N7	2.26	0.51
51:DS:61:ASN:O	51:DS:65:VAL:HG21	2.11	0.51
51:DS:98:VAL:HG12	51:DS:100:ALA:N	2.25	0.51
24:CY:56:C:O4'	36:DA:1067:A:H1'	2.11	0.51
42:BG:95:ARG:O	42:BG:96:ARG:O	2.29	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
55:DW:71:VAL:C	55:DW:73:ALA:H	2.13	0.51
2:AB:235:SER:O	2:AB:237:ALA:N	2.44	0.51
4:CD:76:ARG:O	4:CD:80:GLU:HG2	2.10	0.51
25:AZ:99:MET:N	25:AZ:241:ARG:HH21	2.09	0.51
19:CS:44:MET:CA	19:CS:47:HIS:HD2	2.12	0.51
37:DB:105:A:H3'	37:DB:106:G:H8	1.75	0.51
49:DQ:26:TYR:HA	49:DQ:137:TYR:CD1	2.46	0.51
49:DQ:21:THR:HG23	49:DQ:101:ARG:HB2	1.92	0.51
46:DN:55:VAL:CG2	46:DN:126:PRO:HA	2.29	0.51
36:BA:84:A:C5'	57:BY:9:LYS:HD2	2.35	0.51
36:BA:2206:G:H21	36:BA:2207:G:H4'	1.75	0.51
42:DG:161:THR:OG1	42:DG:163:ALA:HB2	2.10	0.51
3:CC:26:LYS:HG3	3:CC:27:LYS:CG	2.29	0.51
40:BE:132:HIS:HD2	40:BE:135:HIS:CE1	2.29	0.51
38:BC:132:GLY:HA2	38:BC:137:LEU:HB2	1.93	0.51
40:DE:179:GLU:HG3	40:DE:179:GLU:O	2.11	0.51
1:CA:881:G:P	12:CL:12:ARG:NH2	2.76	0.51
58:BZ:76:LEU:HD21	58:BZ:82:ARG:N	2.25	0.51
51:DS:106:ARG:NH2	51:DS:109:GLY:N	2.58	0.51
2:AB:184:VAL:O	2:AB:198:ASP:N	2.43	0.51
1:AA:825:G:O2'	1:AA:826:C:H5'	2.11	0.51
22:CV:41:C:H2'	22:CV:42:C:H5'	1.92	0.51
20:AT:37:SER:O	20:AT:40:ALA:HB3	2.11	0.51
38:DC:70:LYS:HD2	38:DC:177:LYS:HZ3	1.75	0.51
20:CT:45:GLN:HB2	20:CT:91:LEU:HD22	1.92	0.51
36:BA:177:G:H3'	36:BA:178:G:C8	2.46	0.51
39:DD:248:SER:CB	39:DD:249:PRO:HD2	2.40	0.51
6:CF:43:LEU:H	6:CF:43:LEU:CD2	2.18	0.51
10:AJ:6:ILE:HG22	10:AJ:97:GLU:O	2.11	0.51
31:D5:7:PRO:HA	36:DA:2615:U:N3	2.25	0.51
1:CA:59:A:N1	1:CA:331:G:H1'	2.26	0.51
1:CA:357:G:O2'	1:CA:358:U:H5'	2.10	0.51
1:AA:135:C:H2'	1:AA:136:C:H5'	1.93	0.51
20:AT:48:LYS:O	20:AT:49:ALA:C	2.49	0.51
58:DZ:102:LEU:HD21	58:DZ:124:ILE:HD13	1.90	0.51
29:D3:35:ARG:NH1	29:D3:35:ARG:HB2	2.21	0.51
1:CA:614:A:C2	1:CA:627:G:C2	2.99	0.51
53:BU:42:ALA:O	53:BU:43:GLY:C	2.49	0.51
52:BT:107:ASP:OD2	52:BT:108:ARG:HG2	2.11	0.51
36:BA:1779:U:O2	36:BA:1783:A:N6	2.44	0.51
25:CZ:314:THR:O	25:CZ:373:GLU:HA	2.11	0.51
36:BA:1022:G:N7	46:BN:66:LYS:HE3	2.25	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1316:G:H4'	14:AN:18:VAL:CG1	2.41	0.51
24:AY:20:H2U:OP2	24:AY:20:H2U:O4'	2.29	0.51
51:BS:54:LEU:C	51:BS:56:LEU:H	2.14	0.51
39:DD:196:VAL:CG1	39:DD:196:VAL:O	2.59	0.51
36:BA:2450:A:O2'	36:BA:2451:A:H5'	2.10	0.51
12:AL:32:PHE:HB3	12:AL:84:LEU:HD21	1.91	0.51
51:DS:56:LEU:HD22	51:DS:58:LEU:HB2	1.92	0.51
12:AL:53:ARG:HD2	12:AL:53:ARG:H	1.76	0.51
36:DA:2073:C:H2'	36:DA:2074:U:C6	2.45	0.51
36:BA:2689:U:H4'	36:BA:2690:C:OP2	2.11	0.51
25:CZ:162:GLU:OE1	63:CZ:502:KIR:H161	2.11	0.51
36:DA:410:G:N2	36:DA:2407:G:C6	2.79	0.51
36:BA:654(T):C:O2'	36:BA:654(U):A:H5'	2.11	0.51
1:CA:651:C:H2'	1:CA:652:U:O4'	2.10	0.51
1:AA:927:G:C8	1:AA:927:G:H5'	2.44	0.51
36:DA:877:U:O2'	36:DA:878:A:H5''	2.11	0.51
32:D6:32:ASN:O	32:D6:33:LYS:CB	2.59	0.51
8:CH:112:LEU:HA	8:CH:134:ILE:HG12	1.91	0.51
1:AA:110:C:O2'	1:AA:111:G:H5'	2.11	0.51
56:BX:3:THR:N	56:BX:6:ASP:OD2	2.44	0.51
36:BA:1476:C:H2'	36:BA:1477:A:H8	1.76	0.51
36:DA:1744:C:C2'	36:DA:1745:C:H5'	2.41	0.51
12:AL:126:LYS:HG3	12:AL:128:ALA:H	1.76	0.51
36:BA:1429:G:H2'	36:BA:1430:C:C6	2.46	0.51
36:BA:2283:C:O2'	36:BA:2284:C:H5'	2.10	0.51
36:DA:2880:C:C3'	36:DA:2880:C:C6	2.94	0.51
50:DR:24:GLN:C	50:DR:26:LYS:N	2.62	0.51
36:DA:2839:G:H5'	50:DR:46:GLY:HA2	1.91	0.51
28:D2:44:LEU:HD23	28:D2:44:LEU:O	2.11	0.51
36:DA:108:U:H2'	36:DA:109:G:C8	2.46	0.51
38:DC:83:ILE:HG12	38:DC:95:GLY:HA3	1.93	0.51
10:CJ:17:ASP:CB	10:CJ:70:ARG:HH21	2.24	0.51
1:AA:516:U:C4	1:AA:517:G:N1	2.79	0.51
35:B9:7:VAL:HG12	35:B9:25:VAL:HG21	1.93	0.51
49:BQ:54:MET:HG2	49:BQ:64:ILE:HD13	1.92	0.51
49:BQ:55:VAL:HG23	58:BZ:178:GLU:CB	2.41	0.51
49:BQ:55:VAL:CG2	58:BZ:178:GLU:HB2	2.41	0.51
28:B2:24:LEU:HD23	28:B2:24:LEU:C	2.32	0.51
53:DU:18:LEU:HD11	53:DU:30:LYS:O	2.11	0.51
54:DV:47:VAL:O	54:DV:47:VAL:HG23	2.11	0.51
1:CA:1208:C:N3	1:CA:1209:C:C4	2.79	0.51
4:CD:65:ARG:HD2	4:CD:72:GLU:N	2.26	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:963:G:N2	10:CJ:55:LYS:HD3	2.25	0.51
5:AE:143:ARG:HH11	5:AE:143:ARG:HG3	1.76	0.51
8:AH:33:GLU:O	8:AH:34:GLU:C	2.50	0.51
1:CA:666:G:H5'	1:CA:726:C:H1'	1.93	0.51
36:DA:2674:G:H2'	36:DA:2675:A:O4'	2.11	0.51
5:AE:50:GLU:HB3	5:AE:53:LEU:HB2	1.92	0.51
47:BO:77:ILE:HD13	52:BT:74:ARG:HG2	1.93	0.51
36:DA:2729:G:H21	40:DE:167:VAL:HG23	1.76	0.51
57:DY:13:VAL:HG22	57:DY:73:ARG:O	2.10	0.51
7:AG:71:PRO:HA	7:AG:142:GLU:OE1	2.11	0.51
1:CA:376:G:O3'	16:CP:5:ARG:HD3	2.10	0.51
7:CG:24:THR:HG22	7:CG:27:ILE:HD12	1.93	0.51
22:AV:65:G:O2'	22:AV:66:U:H5'	2.11	0.51
1:AA:1496:C:H2'	1:AA:1497:G:O4'	2.11	0.51
51:DS:15:ARG:O	51:DS:18:ILE:HG13	2.11	0.51
51:DS:52:SER:O	51:DS:69:VAL:HG21	2.10	0.51
57:BY:77:PRO:O	57:BY:78:ALA:HB2	2.11	0.51
42:BG:34:LEU:HD11	42:BG:100:TRP:CH2	2.44	0.51
42:BG:16:ARG:C	42:BG:18:GLU:H	2.13	0.51
1:AA:1478:C:H2'	1:AA:1479:C:H6	1.74	0.51
35:B9:10:ILE:N	35:B9:10:ILE:HD12	2.05	0.51
1:AA:1217:C:H2'	1:AA:1218:C:H6	1.74	0.51
55:BW:50:VAL:HG22	55:BW:105:VAL:CG2	2.40	0.51
36:BA:2117:A:H61	36:BA:2171:A:H61	1.57	0.51
3:CC:70:VAL:CG1	3:CC:71:ALA:N	2.70	0.51
4:CD:194:LEU:HB3	4:CD:196:LEU:CD1	2.36	0.51
16:AP:21:VAL:HG13	16:AP:34:GLU:H	1.77	0.51
24:AY:16:H2U:H52	24:AY:17:H2U:H52	1.92	0.51
49:DQ:21:THR:HG22	49:DQ:23:GLY:O	2.12	0.51
1:CA:1460:A:H2'	1:CA:1461:G:O4'	2.11	0.51
36:DA:664:C:H1'	36:DA:940:G:OP1	2.11	0.51
42:DG:104:GLU:C	42:DG:106:LEU:H	2.12	0.51
42:DG:114:ILE:HD11	42:DG:135:LEU:HD21	1.93	0.51
40:DE:36:ARG:O	40:DE:37:ARG:HG2	2.10	0.51
25:CZ:389:ARG:O	25:CZ:390:GLU:HB2	2.11	0.51
1:CA:881:G:H2'	1:CA:882:C:H6	1.76	0.51
5:CE:69:VAL:O	5:CE:71:LEU:HG	2.10	0.51
1:AA:880:C:O5'	12:AL:12:ARG:NH1	2.44	0.51
43:BH:85:LYS:HG3	43:BH:141:VAL:HG12	1.93	0.51
29:D3:7:LYS:HG3	29:D3:34:GLU:HB3	1.91	0.51
43:DH:44:VAL:CG1	43:DH:45:VAL:N	2.74	0.51
1:CA:825:G:O2'	1:CA:826:C:H5'	2.10	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:322:VAL:HG11	25:AZ:364:PRO:HA	1.90	0.51
55:DW:14:PRO:O	55:DW:17:VAL:N	2.44	0.51
1:CA:1514:C:O2'	1:CA:1515:C:H5'	2.10	0.51
36:DA:2456:C:H2'	36:DA:2457:U:O4'	2.11	0.51
1:AA:748:C:O2'	1:AA:749:C:O5'	2.29	0.51
36:DA:1601:G:C2'	36:DA:1602:U:H5'	2.41	0.51
1:CA:56:U:H2'	1:CA:57:G:H8	1.73	0.51
26:D0:23:VAL:HA	26:D0:38:VAL:HG13	1.92	0.51
58:DZ:100:VAL:CG1	58:DZ:101:PRO:HD2	2.41	0.51
18:CR:53:ARG:CZ	18:CR:59:SER:HA	2.41	0.51
22:CW:66:U:H2'	22:CW:67:C:C6	2.46	0.51
36:BA:2224:G:H4'	36:BA:2226:C:C2	2.46	0.51
36:DA:1022:G:N7	46:DN:66:LYS:HE3	2.25	0.51
36:DA:1040:C:C4	36:DA:1041:C:C5	2.98	0.51
36:BA:2649:U:O2'	36:BA:2650:U:H5'	2.10	0.51
2:CB:7:VAL:HG12	2:CB:7:VAL:O	2.10	0.51
36:BA:1458:C:H4'	36:BA:1459:G:O5'	2.11	0.51
58:DZ:61:LEU:HG	58:DZ:65:GLN:O	2.11	0.51
1:AA:885:G:O2'	1:AA:886:G:H5'	2.11	0.51
1:AA:1327:C:OP1	21:AU:20:LYS:HB3	2.10	0.51
36:BA:393:C:H2'	36:BA:394:A:C8	2.46	0.51
55:BW:37:ARG:HH11	55:BW:37:ARG:CG	2.24	0.51
36:BA:519:U:H2'	36:BA:520:G:H8	1.76	0.51
55:BW:82:LEU:HB3	55:BW:84:ARG:HH12	1.76	0.51
36:DA:874:G:O2'	36:DA:875:G:H5'	2.11	0.51
8:CH:40:ALA:CA	8:CH:45:ILE:HG13	2.40	0.51
33:B7:19:ARG:NH2	36:BA:124:G:C8	2.79	0.51
36:BA:2192:G:H2'	36:BA:2193:G:H5'	1.92	0.51
1:AA:1260:C:C3'	1:AA:1260:C:C6	2.94	0.51
1:CA:1260:C:C6	1:CA:1260:C:C3'	2.94	0.51
15:AO:35:ARG:O	15:AO:38:ARG:HB2	2.10	0.51
45:DK:125:UNK:O	45:DK:129:UNK:CB	2.59	0.51
36:DA:1150:C:O2'	36:DA:1151:G:H5'	2.11	0.51
1:CA:433:C:O2'	1:CA:434:U:H5'	2.11	0.51
5:AE:82:VAL:O	5:AE:82:VAL:HG12	2.10	0.51
50:BR:75:LEU:O	50:BR:75:LEU:HD13	2.10	0.51
36:DA:49:A:H5'	36:DA:49:A:N3	2.26	0.51
36:DA:2059:A:OP1	41:DF:71:GLY:HA3	2.11	0.51
16:AP:71:ARG:O	16:AP:74:LEU:HB2	2.11	0.51
34:B8:13:ARG:HA	48:BP:63:PRO:HA	1.92	0.50
36:BA:2282:G:N2	36:BA:2390:U:H3	2.07	0.50
36:DA:1451:C:H4'	36:DA:1452:A:C8	2.46	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DP:144:GLU:N	48:DP:145:PRO:HD3	2.26	0.50
28:D2:69:ARG:NH2	36:DA:111:A:C4'	2.66	0.50
35:D9:2:LYS:HG3	36:DA:2526:G:H21	1.75	0.50
38:BC:153:ILE:O	38:BC:157:LYS:HB2	2.11	0.50
36:BA:603:A:H1'	36:BA:604:G:OP1	2.11	0.50
36:BA:654(B):C:H2'	36:BA:654(C):G:H8	1.75	0.50
43:BH:42:ARG:CZ	43:BH:42:ARG:HB2	2.41	0.50
4:AD:9:CYS:SG	4:AD:32:ALA:HB3	2.51	0.50
43:DH:65:HIS:HE1	43:DH:69:ARG:CZ	2.24	0.50
36:BA:2535:G:C2	36:BA:2536:G:C8	2.99	0.50
31:B5:4:HIS:CB	31:B5:5:PRO:CD	2.81	0.50
36:BA:2456:C:H2'	36:BA:2457:U:O4'	2.11	0.50
13:AM:55:ARG:O	13:AM:58:GLU:HB2	2.11	0.50
13:AM:9:ILE:N	13:AM:9:ILE:HD12	2.26	0.50
30:B4:6:HIS:CB	42:BG:67:LYS:CE	2.88	0.50
36:DA:811:U:O2'	36:DA:812:C:H5''	2.10	0.50
1:AA:390:C:H2'	1:AA:391:G:C8	2.46	0.50
8:CH:38:ILE:HA	8:CH:41:ARG:HB3	1.93	0.50
51:BS:52:SER:HB3	51:BS:55:ALA:HB3	1.92	0.50
51:BS:52:SER:O	51:BS:69:VAL:HG21	2.11	0.50
8:AH:36:LEU:C	8:AH:38:ILE:H	2.14	0.50
32:D6:26:ASN:O	32:D6:27:LYS:CB	2.58	0.50
32:D6:7:ILE:O	32:D6:7:ILE:CG2	2.59	0.50
2:CB:165:VAL:O	2:CB:167:PRO:HD3	2.11	0.50
2:CB:17:PHE:O	2:CB:17:PHE:CD2	2.59	0.50
41:DF:168:ARG:CG	41:DF:169:ASN:H	2.23	0.50
40:BE:3:GLY:HA3	40:BE:81:ILE:HD12	1.92	0.50
1:CA:665:A:C8	1:CA:725:G:C2	2.99	0.50
1:CA:731:G:O2'	1:CA:732:C:H5'	2.11	0.50
47:DO:104:ARG:CB	47:DO:104:ARG:CZ	2.89	0.50
52:DT:96:ARG:HB2	52:DT:96:ARG:NH1	2.26	0.50
37:BB:105:A:H4'	58:BZ:89:PHE:CE2	2.46	0.50
22:CV:7:A:N1	22:CV:67:C:N3	2.59	0.50
1:AA:923:A:C5'	5:AE:21:ALA:HB2	2.40	0.50
51:DS:37:ALA:HB2	51:DS:99:LYS:HZ3	1.75	0.50
57:BY:13:VAL:HG23	57:BY:74:PRO:HA	1.92	0.50
36:DA:2121:G:H2'	36:DA:2122:U:H6	1.73	0.50
1:AA:570:G:C6	1:AA:873:A:C2	2.99	0.50
1:CA:864:A:H3'	1:CA:865:A:C8	2.45	0.50
36:BA:493:G:O2'	55:BW:7:ALA:HA	2.11	0.50
46:BN:55:VAL:HG22	46:BN:56:ASN:N	2.25	0.50
1:CA:500:G:O2'	1:CA:548:G:N2	2.44	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1966:A:H2	36:BA:2592:G:N3	2.09	0.50
58:DZ:19:ARG:HH12	58:DZ:85:HIS:HB2	1.75	0.50
46:BN:24:GLY:O	46:BN:28:THR:HG22	2.11	0.50
36:DA:1568:G:H4'	39:DD:59:LYS:CG	2.41	0.50
36:DA:444:C:C2'	36:DA:445:C:O5'	2.59	0.50
40:DE:132:HIS:HD2	40:DE:135:HIS:NE2	2.09	0.50
13:CM:10:PRO:CG	13:CM:18:ALA:HB1	2.41	0.50
13:CM:53:VAL:O	13:CM:56:LEU:HB3	2.11	0.50
11:CK:22:HIS:HB3	11:CK:29:ILE:CG2	2.30	0.50
13:AM:66:LEU:HD12	13:AM:66:LEU:N	2.25	0.50
43:BH:97:ARG:HE	43:BH:99:VAL:HG23	1.76	0.50
37:BB:78:A:C6	37:BB:100:A:C8	2.99	0.50
43:BH:86:GLU:HA	43:BH:132:ARG:CB	2.40	0.50
36:DA:1578:U:O2	36:DA:1578:U:H2'	2.10	0.50
51:DS:85:VAL:HG23	51:DS:86:ALA:N	2.26	0.50
36:DA:2312:U:O2'	42:DG:40:ASN:ND2	2.44	0.50
2:AB:130:ARG:HH21	2:AB:131:PRO:HD2	1.75	0.50
36:BA:197:A:C8	36:BA:2430:A:C2	2.99	0.50
2:AB:106:LYS:CG	2:AB:107:THR:N	2.75	0.50
1:CA:677:U:H2'	1:CA:678:U:C6	2.46	0.50
49:DQ:52:VAL:O	49:DQ:53:ALA:C	2.48	0.50
27:D1:83:GLU:OE1	27:D1:84:GLY:N	2.42	0.50
1:CA:407:G:H2'	1:CA:408:A:H8	1.74	0.50
15:CO:10:LYS:HA	15:CO:13:GLN:OE1	2.09	0.50
38:BC:6:ARG:NH1	38:BC:6:ARG:HG2	2.23	0.50
36:BA:261:G:O4'	36:BA:609:A:H2	1.94	0.50
1:CA:358:U:H2'	1:CA:359:U:O4'	2.11	0.50
48:BP:114:ILE:HG23	48:BP:130:PHE:HA	1.92	0.50
36:BA:1605:C:N4	36:BA:1606:G:C2	2.80	0.50
52:BT:106:SER:C	52:BT:107:ASP:OD1	2.49	0.50
1:CA:1245:A:H61	1:CA:1292:U:H3	1.59	0.50
25:AZ:316:PHE:C	25:AZ:371:THR:HG23	2.31	0.50
1:AA:458:C:H2'	1:AA:460:G:C8	2.46	0.50
1:AA:620:C:H2'	1:AA:621:A:O4'	2.10	0.50
1:CA:1502:A:H2	1:CA:1505:G:H1	1.59	0.50
36:DA:669:G:N3	36:DA:669:G:C2'	2.73	0.50
1:AA:709:G:H2'	1:AA:710:G:C8	2.46	0.50
55:DW:65:LEU:HD23	55:DW:68:ARG:CD	2.41	0.50
36:DA:1119:C:H2'	36:DA:1120:G:H8	1.76	0.50
22:AV:28:G:O2'	22:AV:29:G:H5'	2.11	0.50
36:BA:1432:C:H2'	36:BA:1433:U:C6	2.46	0.50
1:AA:1031:G:H2'	1:AA:1032:G:C8	2.45	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:9:LYS:HB3	25:CZ:75:ARG:HA	1.93	0.50
4:CD:34:GLU:O	4:CD:35:ARG:HB2	2.10	0.50
20:AT:23:ARG:C	20:AT:23:ARG:HD3	2.31	0.50
13:CM:79:LYS:HA	13:CM:82:MET:HB3	1.93	0.50
2:CB:193:ASP:O	2:CB:193:ASP:OD2	2.29	0.50
12:AL:79:GLU:HG2	12:AL:79:GLU:O	2.12	0.50
38:BC:19:VAL:HA	38:BC:223:ARG:O	2.12	0.50
32:B6:51:GLU:O	32:B6:52:VAL:HG23	2.12	0.50
36:BA:1217:C:H2'	36:BA:1218:C:C6	2.46	0.50
36:DA:1279:G:H1	36:DA:1291:C:N4	2.09	0.50
36:DA:1812:A:O2'	36:DA:1813:G:H5'	2.11	0.50
34:D8:28:GLY:C	34:D8:30:ARG:H	2.14	0.50
36:DA:2328:A:H2'	36:DA:2329:G:H8	1.75	0.50
34:D8:62:LEU:HD13	36:DA:242:G:C5'	2.41	0.50
25:AZ:107:SER:HB3	25:AZ:110:ASP:HB2	1.93	0.50
5:CE:11:ILE:CG2	5:CE:105:VAL:HG22	2.41	0.50
5:CE:90:VAL:O	5:CE:120:THR:HA	2.11	0.50
36:DA:2475:C:H5'	36:DA:2476:A:OP2	2.11	0.50
39:BD:270:ILE:C	39:BD:270:ILE:HD12	2.30	0.50
39:BD:273:ARG:C	39:BD:274:ARG:HG3	2.31	0.50
39:BD:27:THR:HG21	39:BD:82:ILE:O	2.11	0.50
1:AA:1190:G:P	3:AC:5:ILE:HD12	2.52	0.50
38:BC:74:VAL:HA	38:BC:112:ALA:CB	2.31	0.50
43:BH:68:THR:HA	43:BH:71:LEU:CG	2.41	0.50
43:BH:67:LEU:CG	43:BH:71:LEU:HD11	2.36	0.50
4:AD:71:SER:O	4:AD:72:GLU:C	2.50	0.50
43:DH:42:ARG:HB2	43:DH:42:ARG:CZ	2.41	0.50
36:BA:2462:U:H2'	36:BA:2463:C:C6	2.46	0.50
36:BA:2010:G:C5	36:BA:2011:U:C5	3.00	0.50
36:BA:2821:A:H2'	36:BA:2822:G:C8	2.46	0.50
53:DU:113:ALA:C	53:DU:115:ALA:H	2.13	0.50
36:BA:271(J):C:C3'	36:BA:271(K):U:H5''	2.41	0.50
36:DA:371:A:N1	36:DA:401:A:H5''	2.26	0.50
36:DA:1188:U:H5''	54:DV:79:VAL:HG11	1.93	0.50
36:DA:18:C:H2'	36:DA:19:C:H6	1.75	0.50
36:BA:1485:G:H1'	36:BA:1505:C:N4	2.26	0.50
36:BA:1485:G:H2'	36:BA:1486:A:O4'	2.11	0.50
1:AA:358:U:H2'	1:AA:359:U:O4'	2.11	0.50
16:AP:48:TRP:CD1	16:AP:48:TRP:N	2.79	0.50
2:CB:162:ILE:CG2	2:CB:184:VAL:HG22	2.41	0.50
38:DC:196:LEU:O	38:DC:198:ALA:N	2.45	0.50
1:AA:946:A:C2	1:AA:1236:A:C2	2.99	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:DT:78:LEU:C	52:DT:79:HIS:CD2	2.85	0.50
36:DA:1484:G:H3'	36:DA:1485:G:H5''	1.90	0.50
49:BQ:141:GLN:CD	58:BZ:72:ARG:HD3	2.31	0.50
1:AA:1344:C:H1'	1:AA:1349:A:H4'	1.94	0.50
10:AJ:63:PHE:HA	14:AN:59:ALA:HB2	1.94	0.50
29:D3:15:TYR:HB3	29:D3:16:PRO:HD2	1.93	0.50
1:CA:1345:U:C6	1:CA:1377:A:C2	2.99	0.50
57:BY:17:SER:CB	57:BY:71:LYS:HD2	2.41	0.50
42:BG:18:GLU:O	42:BG:20:ILE:N	2.42	0.50
36:DA:2100:G:H5'	36:DA:2101:G:OP2	2.11	0.50
36:DA:2123:G:O2'	36:DA:2124:G:H5'	2.12	0.50
41:BF:130:ALA:HB3	41:BF:142:TRP:HD1	1.75	0.50
36:BA:2111:C:H42	36:BA:2147:G:H1	1.58	0.50
3:AC:141:VAL:HG11	3:AC:202:ILE:HG23	1.92	0.50
27:B1:45:ASN:O	27:B1:64:ALA:HB2	2.10	0.50
20:CT:18:GLN:O	20:CT:22:ARG:HD2	2.12	0.50
41:DF:11:VAL:C	41:DF:13:SER:H	2.15	0.50
39:BD:117:VAL:CG2	39:BD:118:VAL:N	2.73	0.50
39:DD:37:LEU:O	39:DD:62:TYR:HB3	2.10	0.50
42:DG:111:LEU:O	42:DG:114:ILE:CG2	2.59	0.50
9:AI:93:ARG:HA	9:AI:96:LEU:HB3	1.94	0.50
43:DH:89:ILE:HG22	43:DH:162:ILE:HG13	1.92	0.50
1:AA:881:G:P	12:AL:12:ARG:NH2	2.78	0.50
51:DS:106:ARG:NH1	51:DS:107:GLU:N	2.41	0.50
51:DS:24:LEU:CD1	51:DS:41:ASP:HB2	2.41	0.50
24:AY:48:C:C2'	24:AY:59:A:H1'	2.33	0.50
2:AB:164:VAL:HG12	2:AB:165:VAL:H	1.74	0.50
49:BQ:45:GLN:HG2	49:BQ:46:GLN:H	1.76	0.50
1:AA:858:G:OP2	1:AA:858:G:C8	2.64	0.50
8:AH:20:TYR:HA	8:AH:65:TYR:HE2	1.74	0.50
55:BW:11:ARG:HH21	55:BW:12:ILE:HA	1.75	0.50
1:CA:858:G:N1	1:CA:869:G:C8	2.79	0.50
36:BA:145:G:H2'	36:BA:146:G:C5'	2.39	0.50
20:CT:53:LEU:O	20:CT:54:LYS:C	2.50	0.50
24:CY:65:C:H2'	24:CY:66:U:C6	2.46	0.50
1:AA:424:G:C2	1:AA:425:G:N7	2.79	0.50
1:AA:712:A:C2	1:AA:713:G:C4	2.99	0.50
1:CA:811:C:H4'	1:CA:900:A:H61	1.72	0.50
1:CA:620:C:H2'	1:CA:621:A:O4'	2.11	0.50
31:D5:12:SER:HB3	36:DA:2020:A:H5'	1.93	0.50
1:AA:223:U:O2'	1:AA:224:C:H5'	2.11	0.50
36:BA:2020:A:O2'	36:BA:2021:C:C5'	2.57	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:CW:35:A:N1	23:CX:17:U:O4	2.44	0.50
5:AE:42:GLY:CA	5:AE:66:MET:HG2	2.41	0.50
11:CK:63:LEU:O	11:CK:66:LEU:HB2	2.11	0.50
1:CA:619:U:C2	4:CD:135:LEU:CD2	2.94	0.50
1:CA:987:G:H2'	1:CA:988:G:C8	2.41	0.50
36:BA:2107:C:H2'	36:BA:2108:C:H6	1.75	0.50
1:CA:885:G:C6	1:CA:913:A:N6	2.79	0.50
14:CN:19:ARG:O	14:CN:20:ALA:O	2.28	0.50
12:AL:41:ARG:NH1	12:AL:57:LYS:NZ	2.59	0.50
25:AZ:8:THR:OG1	25:AZ:9:LYS:N	2.42	0.50
30:B4:18:CYS:SG	30:B4:19:GLY:N	2.84	0.50
39:DD:273:ARG:C	39:DD:274:ARG:HG3	2.32	0.50
36:BA:280:C:N4	36:BA:360:G:H1	2.09	0.50
36:DA:2410:G:H2'	36:DA:2411:A:C8	2.44	0.50
1:AA:577:G:H1'	1:AA:816:A:N3	2.26	0.50
25:CZ:86:ALA:O	25:CZ:87:ASP:CB	2.59	0.50
36:BA:1221:C:H2'	36:BA:1221(A):C:C6	2.47	0.50
13:CM:79:LYS:O	13:CM:82:MET:HG2	2.11	0.50
45:BK:17:UNK:O	45:BK:18:UNK:CB	2.59	0.50
6:CF:89:MET:SD	18:CR:76:LEU:HD21	2.51	0.50
1:AA:433:C:O2'	1:AA:434:U:H5'	2.11	0.50
1:CA:1395:C:H6	1:CA:1395:C:O5'	1.94	0.50
7:CG:17:VAL:HG12	7:CG:18:TYR:N	2.26	0.50
34:B8:5:LYS:HG2	36:BA:242:G:C8	2.46	0.50
36:BA:2390:U:O2'	36:BA:2391:G:H5'	2.11	0.50
32:D6:5:VAL:HG11	36:DA:2283:C:C4'	2.41	0.50
25:AZ:27:LEU:HD23	25:AZ:105:VAL:HG22	1.92	0.50
35:D9:1:MET:CE	36:DA:2477:C:H3'	2.41	0.50
36:DA:2762:G:H2'	36:DA:2763:G:C5'	2.40	0.50
35:B9:36:GLN:NE2	36:BA:1031:G:N2	2.48	0.50
36:BA:2577:A:C5'	36:BA:2578:G:H5'	2.41	0.50
36:BA:2880:C:C6	36:BA:2880:C:C3'	2.95	0.50
36:BA:2880:C:H1'	50:BR:92:GLY:O	2.12	0.50
50:BR:38:VAL:HB	50:BR:39:PRO:CD	2.34	0.50
42:BG:141:PHE:HB3	42:BG:142:PRO:HD2	1.93	0.50
46:DN:18:ALA:CB	46:DN:26:LEU:HD22	2.41	0.50
54:DV:18:LEU:HD22	54:DV:96:ILE:HG12	1.92	0.50
54:DV:37:VAL:HG23	54:DV:37:VAL:O	2.12	0.50
8:CH:6:ILE:H	8:CH:6:ILE:CD1	2.25	0.50
8:CH:14:ARG:HG3	8:CH:83:ILE:HG21	1.92	0.50
1:AA:246:A:C2	1:AA:282:A:C5	2.99	0.50
1:CA:541:G:H2'	1:CA:542:G:H8	1.77	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CD:67:ILE:O	4:CD:67:ILE:CG2	2.60	0.50
8:AH:109:ILE:HG23	8:AH:137:VAL:HB	1.92	0.50
2:CB:170:GLU:CA	2:CB:172:ILE:HD12	2.40	0.50
40:BE:4:ILE:HG12	40:BE:5:LEU:H	1.77	0.50
36:DA:1473:G:N3	36:DA:1474:C:H1'	2.25	0.50
13:CM:120:LYS:NZ	13:CM:120:LYS:HA	2.26	0.50
1:AA:950:U:H2'	1:AA:951:G:H8	1.76	0.50
1:AA:951:G:C2	1:AA:952:U:C2	2.99	0.50
5:AE:107:ARG:O	5:AE:111:GLU:HG3	2.11	0.50
5:AE:12:LEU:C	5:AE:13:ILE:HG13	2.31	0.50
36:BA:141:A:N6	36:BA:142:A:H62	2.09	0.50
36:BA:2811:G:H5'	40:BE:60:ASN:ND2	2.27	0.50
36:DA:1764:G:H2'	36:DA:1765:C:H6	1.77	0.50
52:DT:23:ARG:CG	52:DT:120:ARG:NH1	2.74	0.50
58:BZ:70:LEU:HD21	58:BZ:91:LEU:CD2	2.37	0.50
7:CG:36:LYS:O	7:CG:39:ALA:HB3	2.11	0.50
1:CA:1250:A:H5'	9:CI:67:GLY:HA2	1.94	0.50
36:BA:1523:U:H2'	36:BA:1524:G:O4'	2.10	0.50
51:DS:89:ARG:HG3	51:DS:92:TYR:HB3	1.93	0.50
36:BA:306:U:H2'	36:BA:307:G:C8	2.46	0.50
1:AA:1077:G:N2	1:AA:1079:G:H3'	2.26	0.50
1:AA:864:A:H3'	1:AA:865:A:C8	2.47	0.50
36:DA:1826:G:O5'	36:DA:1826:G:H8	1.94	0.50
55:DW:51:LEU:O	55:DW:54:ALA:HB3	2.11	0.50
25:AZ:221:PHE:CD1	25:AZ:247:VAL:HG13	2.46	0.50
25:AZ:257:GLY:HA3	25:AZ:302:GLN:HG2	1.93	0.50
19:CS:52:TYR:O	19:CS:53:ASN:CB	2.58	0.50
20:CT:72:LEU:CD2	20:CT:76:ALA:HB1	2.37	0.50
36:BA:2593:U:H2'	36:BA:2594:C:C6	2.46	0.50
36:BA:705:A:C2	36:BA:727:A:H1'	2.47	0.50
58:DZ:53:ILE:CG2	58:DZ:71:VAL:HB	2.40	0.50
1:AA:1003:G:N2	1:AA:1038:C:C2	2.79	0.50
46:BN:29:LYS:O	46:BN:33:LEU:HD13	2.10	0.50
46:BN:32:THR:HG22	46:BN:37:LYS:HB3	1.94	0.50
46:BN:2:LYS:NZ	54:BV:12:TYR:HA	2.26	0.50
36:BA:425:G:H2'	36:BA:426:C:C6	2.47	0.50
36:DA:2580:U:H3'	36:DA:2581:G:N2	2.25	0.50
13:CM:15:VAL:O	13:CM:19:LEU:HD23	2.11	0.50
24:CY:24:G:H2'	24:CY:25:C:H6	1.74	0.50
33:B7:37:LYS:HD2	36:BA:458:G:C8	2.46	0.50
36:BA:907:U:H4'	49:BQ:101:ARG:NH1	2.27	0.50
49:BQ:34:LEU:HD11	49:BQ:129:THR:CB	2.34	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BH:163:TYR:CD1	43:BH:163:TYR:N	2.79	0.50
1:AA:960:U:O2'	1:AA:1223:C:H5'	2.12	0.50
36:BA:1028:A:H61	36:BA:1125:G:H2'	1.76	0.50
1:AA:334:C:O2'	1:AA:335:C:H5'	2.11	0.50
36:BA:25:U:H5''	55:BW:79:GLY:HA2	1.91	0.50
1:CA:828:A:H2'	1:CA:829:G:O4'	2.10	0.50
36:BA:2125:G:OP1	38:BC:40:THR:HG21	2.11	0.50
8:AH:89:PRO:HA	8:AH:92:ARG:NH1	2.25	0.50
36:DA:2875:C:C4'	52:DT:5:ALA:HB3	2.40	0.50
1:AA:424:G:H2'	1:AA:425:G:H8	1.76	0.50
55:DW:12:ILE:CD1	55:DW:42:ARG:HH12	2.24	0.50
4:AD:200:GLU:HG2	4:AD:201:GLN:N	2.26	0.50
1:CA:356:A:H2'	1:CA:357:G:C8	2.47	0.50
36:BA:2588:G:C6	36:BA:2607:G:C2	2.99	0.50
36:BA:1993:U:H5''	40:BE:128:SER:HB3	1.93	0.50
51:BS:56:LEU:HD22	51:BS:58:LEU:HB2	1.92	0.50
36:BA:680:G:H2'	36:BA:681:G:C8	2.45	0.50
1:CA:936:C:H2'	1:CA:937:A:C8	2.39	0.50
1:CA:1249:C:O4'	9:CI:70:LYS:HE2	2.11	0.50
6:CF:1:MET:N	6:CF:68:PRO:HA	2.26	0.50
36:BA:2517:C:C2	36:BA:2542:A:N1	2.79	0.50
46:BN:58:ASP:O	46:BN:60:ILE:HG13	2.11	0.50
24:CY:37:YG:C1'	24:CY:37:YG:H31	2.42	0.50
36:BA:304:G:N3	36:BA:314:A:C2	2.79	0.50
36:DA:1416:G:H1'	36:DA:1417:C:C6	2.46	0.50
36:DA:2533:A:H2'	36:DA:2534:A:O4'	2.11	0.50
17:CQ:67:LYS:O	17:CQ:69:LYS:N	2.43	0.50
1:CA:1397:C:O2	23:CX:26:A:C8	2.64	0.50
36:DA:966:G:H1'	36:DA:2267:A:N6	2.26	0.50
1:CA:525:C:H2'	1:CA:526:C:C6	2.46	0.50
1:AA:229:U:O2'	16:AP:23:ASP:HB2	2.11	0.50
4:CD:50:ARG:O	4:CD:51:PRO:C	2.49	0.50
36:DA:2596:U:H2'	36:DA:2597:G:O4'	2.11	0.50
1:CA:202:U:O2'	1:CA:203:U:OP1	2.27	0.50
36:BA:2770:G:H5'	36:BA:2771:C:OP2	2.11	0.50
36:BA:654(H):G:C2'	36:BA:654(I):C:H5'	2.41	0.50
36:DA:263:C:O2'	36:DA:264:C:H5'	2.11	0.50
1:CA:1443:G:N3	1:CA:1443:G:H2'	2.26	0.50
7:AG:50:ILE:O	7:AG:54:THR:HG23	2.11	0.50
20:AT:12:ALA:O	20:AT:15:ARG:HB2	2.11	0.50
1:AA:1275:A:O2'	1:AA:1276:G:H5'	2.11	0.50
34:B8:26:LYS:HB2	34:B8:44:LYS:HG3	1.93	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2030:A:H5''	36:BA:2031:A:OP1	2.11	0.50
48:BP:58:THR:C	48:BP:61:ARG:HE	2.14	0.50
36:DA:2007:C:H5'	36:DA:2824:C:O4'	2.11	0.50
50:DR:97:VAL:HA	50:DR:113:LEU:O	2.11	0.50
27:D1:29:GLY:HA3	36:DA:2396:G:O2'	2.11	0.50
34:D8:8:LYS:HA	34:D8:11:LYS:CD	2.41	0.50
26:D0:43:THR:HG21	36:DA:2336:A:H61	1.76	0.50
36:BA:1856:G:H2'	36:BA:1857:G:H5'	1.93	0.50
41:DF:118:ALA:HB1	41:DF:123:LEU:HD22	1.92	0.50
36:DA:2524:G:C8	36:DA:2524:G:H5'	2.47	0.50
36:DA:2530:A:C3'	36:DA:2531:A:H5''	2.41	0.50
41:DF:70:THR:CG2	41:DF:72:ARG:HG2	2.42	0.50
17:CQ:21:VAL:O	17:CQ:41:LYS:HA	2.11	0.50
36:BA:2762:G:H2'	36:BA:2763:G:C5'	2.39	0.50
40:BE:192:ASN:HD22	40:BE:193:GLY:N	2.09	0.50
40:BE:1:MET:HB3	40:BE:200:GLU:OE2	2.12	0.50
48:DP:23:PRO:HB2	48:DP:33:ARG:HD2	1.92	0.50
53:DU:94:ASN:ND2	53:DU:95:LEU:HG	2.26	0.50
2:AB:219:VAL:HA	2:AB:222:ILE:HG12	1.93	0.50
36:BA:1503:U:N1	36:BA:1504:C:H5	2.10	0.50
36:BA:2334:G:H21	51:BS:18:ILE:CG2	2.25	0.50
2:CB:173:ALA:O	2:CB:174:VAL:C	2.50	0.50
2:CB:185:ILE:O	2:CB:186:ALA:HB2	2.12	0.50
2:CB:44:LEU:HD12	2:CB:44:LEU:N	2.23	0.50
2:CB:54:THR:HG22	2:CB:58:ILE:CD1	2.38	0.50
40:BE:36:ARG:C	40:BE:37:ARG:HG2	2.31	0.50
38:DC:22:ILE:HD12	38:DC:228:SER:C	2.32	0.50
36:DA:1404:C:O2	36:DA:1404:C:H2'	2.09	0.50
1:CA:954:G:H4'	13:CM:120:LYS:HD3	1.92	0.50
36:BA:1668:A:N7	36:BA:1674:G:C6	2.79	0.50
52:BT:38:ASN:ND2	52:BT:38:ASN:O	2.44	0.50
52:BT:64:ARG:CB	52:BT:73:GLU:HG2	2.40	0.50
52:BT:77:PRO:O	52:BT:78:LEU:CB	2.58	0.50
36:DA:2681:C:C5	36:DA:2725:A:N6	2.79	0.50
38:BC:23:ASP:O	38:BC:24:GLU:C	2.49	0.50
38:BC:46:LYS:C	38:BC:47:LEU:HD12	2.31	0.50
7:AG:137:LYS:O	7:AG:138:LYS:C	2.49	0.50
10:AJ:53:PRO:C	14:AN:41:ARG:NH2	2.65	0.50
37:DB:79:C:C2'	37:DB:80:U:H5'	2.41	0.50
10:CJ:63:PHE:HA	14:CN:59:ALA:HB2	1.92	0.50
4:AD:98:GLU:CG	4:AD:189:PRO:HG3	2.37	0.50
51:DS:89:ARG:CG	51:DS:92:TYR:HA	2.41	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BY:19:LYS:HB2	57:BY:20:TYR:CD1	2.46	0.50
42:BG:121:ASN:C	42:BG:121:ASN:OD1	2.48	0.50
42:BG:16:ARG:N	42:BG:17:PRO:HD2	2.26	0.50
36:DA:2137:C:H2'	36:DA:2138:C:H6	1.77	0.50
46:DN:134:ARG:H	46:DN:135:PRO:HD3	1.76	0.50
36:BA:2153:G:N2	36:BA:2154:G:H1'	2.26	0.50
3:CC:180:ALA:O	3:CC:203:PHE:HE1	1.95	0.50
2:CB:235:SER:O	2:CB:237:ALA:N	2.45	0.50
25:AZ:99:MET:H	25:AZ:241:ARG:NH2	2.09	0.50
19:CS:31:ILE:CG2	19:CS:49:ILE:HA	2.42	0.50
3:AC:13:GLY:O	3:AC:14:ILE:HB	2.11	0.50
36:BA:445:C:C2'	36:BA:446:G:O4'	2.60	0.50
36:DA:863:A:H2'	36:DA:864:G:H8	1.74	0.50
1:CA:1463:C:C5'	52:DT:115:ARG:HH21	2.24	0.50
36:DA:1299:G:H2'	36:DA:1639:U:O4	2.11	0.50
36:DA:664:C:H4'	36:DA:941:A:OP1	2.10	0.50
36:DA:455:C:N3	36:DA:472:A:H2'	2.27	0.50
42:DG:174:GLU:HA	42:DG:180:PHE:HE1	1.75	0.50
43:DH:31:GLY:O	43:DH:79:VAL:HG12	2.12	0.50
36:BA:471:A:C2'	36:BA:472:A:C5'	2.89	0.50
25:CZ:221:PHE:CE1	25:CZ:247:VAL:HG22	2.47	0.50
1:AA:824:C:O2'	1:AA:825:G:H5'	2.12	0.50
58:DZ:70:LEU:HD23	58:DZ:70:LEU:N	2.26	0.50
16:CP:58:TYR:CD1	16:CP:58:TYR:C	2.85	0.50
36:DA:1087:G:C8	36:DA:1088:A:H4'	2.47	0.50
38:DC:151:GLU:HA	38:DC:154:ARG:CD	2.41	0.50
36:BA:778:G:C6	36:BA:779:U:C4	3.00	0.50
36:DA:31:C:H5''	36:DA:1239:G:OP1	2.10	0.50
2:AB:77:ALA:HA	2:AB:80:ILE:CD1	2.36	0.50
28:D2:10:LEU:HD22	28:D2:14:ARG:HD2	1.94	0.50
36:DA:2469:A:C5	36:DA:2470:G:H1'	2.46	0.50
1:CA:779:C:O3'	11:CK:122:LYS:HA	2.10	0.50
27:D1:7:ILE:CD1	27:D1:70:VAL:HG23	2.41	0.50
36:BA:1173:G:H5'	36:BA:1174:A:O5'	2.11	0.50
1:CA:424:G:H2'	1:CA:425:G:H8	1.76	0.50
1:AA:928:G:H2'	1:AA:929:G:H5'	1.93	0.50
56:BX:57:LEU:N	56:BX:57:LEU:CD1	2.75	0.50
22:CW:64:A:H2'	22:CW:65:G:H8	1.77	0.50
36:BA:1982:C:O5'	36:BA:1982:C:H6	1.95	0.50
18:AR:59:SER:O	18:AR:60:ALA:C	2.50	0.50
40:BE:144:ARG:C	40:BE:146:THR:H	2.14	0.50
1:CA:1381:U:H5	1:CA:1382:C:C4	2.30	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:105:G:C6	1:CA:106:C:N4	2.80	0.50
43:DH:130:ARG:HB3	43:DH:130:ARG:CZ	2.40	0.50
36:BA:2687:U:C4	36:BA:2688:U:C5	2.99	0.50
30:B4:19:GLY:O	30:B4:20:ASN:C	2.49	0.50
22:CV:28:G:O2'	22:CV:29:G:H5'	2.11	0.50
1:AA:92:C:H2'	1:AA:93:G:C8	2.46	0.50
43:BH:12:PRO:N	43:BH:48:GLY:HA2	2.26	0.50
43:BH:137:ASP:HB2	43:BH:140:LYS:HE3	1.93	0.50
45:DK:99:UNK:N	45:DK:135:UNK:CB	2.75	0.50
53:BU:108:GLU:HG3	54:BV:44:LYS:HG2	1.92	0.50
36:DA:738:G:H2'	36:DA:739:G:H5'	1.93	0.50
36:DA:1720:U:H2'	36:DA:1721:G:C5'	2.40	0.50
3:CC:165:THR:CG2	3:CC:165:THR:O	2.59	0.50
7:CG:50:ILE:O	7:CG:54:THR:HG23	2.11	0.50
16:CP:71:ARG:O	16:CP:74:LEU:HB2	2.11	0.50
45:DK:17:UNK:O	45:DK:18:UNK:CB	2.59	0.50
36:DA:1632:A:N6	36:DA:1633:G:N1	2.60	0.50
11:CK:48:ILE:HG22	11:CK:49:GLY:N	2.27	0.50
15:AO:27:VAL:O	15:AO:28:GLN:C	2.50	0.50
36:BA:517:C:H6	36:BA:517:C:O5'	1.95	0.50
25:CZ:112:PRO:HG3	25:CZ:153:GLU:OE1	2.11	0.50
36:BA:584:C:H2'	36:BA:585:G:C5'	2.38	0.50
36:BA:1567:A:OP2	39:BD:84:TYR:OH	2.25	0.50
39:BD:147:LEU:HD21	39:BD:183:ARG:CZ	2.41	0.50
41:BF:118:ALA:CB	41:BF:123:LEU:HD22	2.42	0.50
41:BF:188:ARG:HB3	48:BP:7:ARG:HD3	1.93	0.50
36:BA:2758:A:HO2'	36:BA:2759:G:H8	1.59	0.50
43:BH:68:THR:HA	43:BH:71:LEU:CB	2.40	0.50
28:B2:57:ILE:HG22	28:B2:61:LEU:CG	2.42	0.50
36:DA:961:C:C5	36:DA:2031:A:C2	3.00	0.50
2:AB:224:GLN:O	2:AB:227:GLY:N	2.44	0.50
2:AB:229:VAL:O	2:AB:230:VAL:HG13	2.10	0.50
5:CE:20:GLN:O	5:CE:22:GLY:N	2.45	0.50
51:BS:37:ALA:HB2	51:BS:99:LYS:HZ1	1.73	0.50
8:AH:6:ILE:CD1	8:AH:6:ILE:H	2.25	0.50
36:BA:632:A:O2'	36:BA:633:A:H5'	2.11	0.50
5:AE:11:ILE:HD12	5:AE:31:LEU:HD11	1.92	0.50
25:CZ:27:LEU:O	25:CZ:27:LEU:HD12	2.11	0.50
40:BE:11:MET:HB2	40:BE:23:VAL:O	2.12	0.50
40:BE:11:MET:HB3	40:BE:24:THR:HA	1.93	0.50
52:DT:121:ILE:O	52:DT:124:ASP:N	2.41	0.50
58:BZ:41:LEU:HD23	58:BZ:42:VAL:N	2.25	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:50:GLN:O	58:BZ:51:ALA:C	2.50	0.50
36:DA:107:C:H1'	36:DA:294:A:N3	2.26	0.50
11:AK:125:PHE:C	11:AK:127:LYS:N	2.65	0.50
19:AS:9:VAL:HG12	19:AS:39:THR:HB	1.93	0.50
36:BA:327:G:C2	36:BA:336:C:N3	2.80	0.50
36:DA:1827:C:C2'	36:DA:1828:G:H5'	2.41	0.50
55:DW:4:LYS:HA	55:DW:106:ILE:HG22	1.93	0.50
41:BF:9:ILE:HG23	41:BF:13:SER:O	2.10	0.50
31:B5:40:LYS:HZ2	31:B5:45:VAL:CA	2.23	0.50
36:BA:2138:C:H2'	36:BA:2139:C:C6	2.46	0.50
36:BA:2148:G:O2'	36:BA:2149:G:H5'	2.11	0.50
25:AZ:221:PHE:HA	25:AZ:244:ARG:O	2.12	0.50
27:B1:8:SER:HB2	27:B1:10:LYS:HG3	1.94	0.50
36:BA:1697:G:H5''	36:BA:1979:C:OP1	2.12	0.50
36:BA:1902:C:H4'	39:BD:244:ARG:CB	2.42	0.50
39:BD:241:PRO:C	39:BD:242:ARG:HD2	2.32	0.50
41:DF:127:GLU:HB2	41:DF:196:LEU:CD1	2.41	0.50
52:DT:115:ARG:HH11	52:DT:115:ARG:HG3	1.76	0.50
36:BA:83:G:O2'	36:BA:84:A:H8	1.90	0.50
36:DA:1351:C:N3	36:DA:1381:G:C2	2.79	0.50
36:DA:664:C:O4'	36:DA:940:G:H5''	2.12	0.50
33:D7:24:THR:C	33:D7:26:GLY:H	2.12	0.50
36:BA:1540:U:H3'	36:BA:1541:G:H3'	1.93	0.50
43:DH:85:LYS:HG3	43:DH:141:VAL:HG12	1.94	0.50
57:BY:86:ARG:O	57:BY:92:ASN:HA	2.12	0.50
33:B7:39:ARG:HD3	36:BA:458:G:O2'	2.11	0.50
49:BQ:27:VAL:HG12	49:BQ:29:PHE:N	2.17	0.50
36:DA:2312:U:C2'	36:DA:2313:C:C5'	2.88	0.50
25:CZ:99:MET:N	25:CZ:241:ARG:HH21	2.09	0.50
2:AB:165:VAL:O	2:AB:167:PRO:CD	2.59	0.50
2:AB:185:ILE:O	2:AB:186:ALA:HB2	2.11	0.50
15:AO:81:LEU:O	15:AO:82:ILE:C	2.49	0.50
31:B5:13:LYS:NZ	36:BA:516:C:P	2.85	0.50
8:CH:64:LYS:CD	8:CH:79:VAL:HG21	2.37	0.50
2:CB:127:ILE:C	2:CB:129:GLU:H	2.14	0.50
4:CD:105:VAL:HG21	4:CD:126:ILE:HG12	1.92	0.50
1:AA:187:C:O2	20:AT:104:LEU:HD23	2.11	0.50
1:AA:500:G:O2'	1:AA:548:G:N2	2.45	0.50
24:CY:48:C:H4'	24:CY:49:G:H5''	1.93	0.50
1:AA:663:A:H5'	1:AA:836:G:OP1	2.12	0.50
39:DD:226:MET:HB3	39:DD:230:ASP:CB	2.38	0.50
39:DD:232:PRO:HG2	39:DD:248:SER:O	2.12	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:195:A:N6	36:DA:198:C:OP2	2.44	0.50
10:AJ:98:ILE:O	10:AJ:99:LYS:HD3	2.11	0.50
36:BA:2247:A:H2'	36:BA:2248:C:O4'	2.11	0.50
36:BA:904:C:H6	36:BA:904:C:OP2	1.94	0.50
1:CA:403:C:O2'	1:CA:404:U:H5'	2.12	0.50
11:AK:54:ARG:O	11:AK:57:THR:HG22	2.11	0.50
31:D5:31:VAL:HG11	36:DA:2886:G:N2	2.22	0.50
25:CZ:316:PHE:HA	25:CZ:404:LEU:HD23	1.93	0.50
36:BA:1019:U:HO2'	36:BA:1021:A:H2	1.57	0.50
25:AZ:310:ILE:HG21	25:AZ:379:ALA:HB1	1.93	0.50
36:BA:216:A:C2'	36:BA:217:G:H5'	2.41	0.50
36:BA:183:C:C5'	36:BA:433:C:H4'	2.41	0.50
36:BA:1040:C:C4	36:BA:1041:C:C5	2.99	0.50
1:AA:1170:A:C2'	1:AA:1171:G:H5'	2.40	0.50
22:AW:55:U:O2	22:AW:55:U:H3'	2.11	0.50
1:CA:1504:G:H1'	1:CA:1505:G:OP2	2.12	0.50
36:BA:1747(A):G:H3'	36:BA:1748:G:H5''	1.93	0.50
36:DA:1509(B):A:O2'	36:DA:1510:G:H5'	2.11	0.50
36:BA:2312:U:H5''	42:BG:74:LYS:HZ2	1.76	0.50
1:CA:1298:C:OP2	7:CG:114:ARG:NH2	2.45	0.50
1:CA:361:G:O2'	1:CA:362:G:H5'	2.11	0.50
17:AQ:90:ILE:O	17:AQ:91:ARG:C	2.47	0.50
1:CA:1353:G:H2'	1:CA:1354:C:H6	1.73	0.50
4:AD:159:ARG:HH11	4:AD:159:ARG:HG3	1.77	0.50
4:AD:34:GLU:O	4:AD:35:ARG:HB2	2.12	0.50
36:BA:654(H):G:H2'	36:BA:654(I):C:H5'	1.94	0.50
1:CA:428:G:H4'	1:CA:429:U:O5'	2.11	0.50
36:DA:1425:G:H2'	36:DA:1426:G:O4'	2.11	0.50
25:CZ:17:ILE:HD13	25:CZ:102:ALA:HB1	1.92	0.50
36:BA:2601:C:H2'	36:BA:2603:G:H8	1.76	0.50
1:CA:762:C:H2'	1:CA:763:G:H8	1.75	0.50
1:AA:1447:A:N3	1:AA:1447:A:H2'	2.27	0.50
50:DR:14:SER:HA	50:DR:17:ARG:CZ	2.42	0.50
39:DD:177:LEU:HD12	39:DD:181:GLU:OE2	2.11	0.50
32:D6:38:LYS:HA	32:D6:48:VAL:HA	1.93	0.50
34:D8:49:VAL:HG12	34:D8:50:LEU:H	1.76	0.50
32:D6:19:ARG:NH1	36:DA:2400:G:O2'	2.44	0.50
36:DA:2419:U:H2'	36:DA:2420:C:H6	1.76	0.50
25:AZ:145:GLU:O	25:AZ:149:LEU:N	2.42	0.50
36:BA:1861:G:O2'	36:BA:1862:G:H5'	2.11	0.50
36:DA:379:G:C6	36:DA:396:G:O6	2.65	0.50
36:BA:1202:C:H6	36:BA:1202:C:O5'	1.95	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1054:C:O2'	1:AA:1055:A:H5''	2.11	0.50
1:AA:508:C:O2'	1:AA:509:A:P	2.69	0.50
28:B2:41:ILE:HG13	28:B2:43:GLN:H	1.77	0.50
36:BA:1652:A:C6	36:BA:1653:G:C2	3.00	0.50
36:DA:2030:A:H5''	36:DA:2031:A:OP1	2.12	0.50
53:DU:55:ARG:HA	53:DU:58:ARG:CG	2.41	0.50
4:CD:65:ARG:HD2	4:CD:72:GLU:CA	2.42	0.50
14:CN:7:ILE:HG13	14:CN:8:GLU:H	1.75	0.50
51:BS:98:VAL:CG1	51:BS:100:ALA:HB2	2.41	0.50
8:AH:17:THR:HB	8:AH:78:GLN:CD	2.31	0.50
2:CB:164:VAL:HG12	2:CB:165:VAL:H	1.75	0.50
2:CB:60:ASP:CB	2:CB:64:ARG:HH21	2.25	0.50
41:DF:170:LEU:HB3	41:DF:173:VAL:CG2	2.42	0.50
25:CZ:27:LEU:HD23	25:CZ:105:VAL:HG22	1.94	0.50
52:BT:70:VAL:CG1	52:BT:71:GLY:N	2.75	0.50
52:BT:22:PHE:HA	52:BT:90:GLN:OE1	2.12	0.50
52:BT:89:VAL:HB	52:BT:91:ARG:NE	2.27	0.50
47:DO:79:PHE:CD2	52:DT:72:VAL:HG13	2.47	0.50
52:DT:89:VAL:HG12	52:DT:91:ARG:CG	2.40	0.50
36:DA:1503:U:N1	36:DA:1504:C:H5	2.10	0.50
58:BZ:69:THR:CG2	58:BZ:90:VAL:HA	2.40	0.50
36:DA:324:A:H2'	36:DA:325:G:O4'	2.12	0.50
10:CJ:51:ARG:H	10:CJ:60:ARG:HA	1.77	0.50
24:AY:56:C:H1'	36:BA:1067:A:H1'	1.94	0.50
1:AA:966:G:O2'	1:AA:967:C:O5'	2.30	0.50
1:AA:797:C:OP1	11:AK:124:LYS:CE	2.57	0.50
4:AD:100:ARG:NH1	4:AD:100:ARG:HG3	2.26	0.50
4:AD:92:VAL:HG12	4:AD:96:LEU:HD13	1.93	0.50
51:DS:29:PHE:CD2	51:DS:29:PHE:C	2.84	0.50
57:BY:76:CYS:O	57:BY:77:PRO:C	2.50	0.50
31:D5:56:LYS:O	31:D5:57:VAL:C	2.49	0.50
46:BN:133:GLN:CG	46:BN:134:ARG:H	2.18	0.50
1:AA:1217:C:OP1	14:AN:9:LYS:HE3	2.12	0.50
39:DD:209:ALA:C	39:DD:210:GLY:O	2.46	0.50
36:BA:2152:G:C2	36:BA:2153:G:C8	2.99	0.50
3:AC:18:TRP:HE1	14:AN:55:GLY:H	1.60	0.50
1:CA:38:G:H22	1:CA:397:A:C5'	2.25	0.50
1:CA:1003:G:N2	1:CA:1038:C:C2	2.80	0.50
13:CM:66:LEU:O	13:CM:70:LEU:HB3	2.12	0.50
36:BA:37:C:O2	36:BA:444:C:C2	2.64	0.50
37:DB:74:U:H2'	37:DB:75:G:H1'	1.94	0.50
49:DQ:67:ARG:O	49:DQ:101:ARG:NH2	2.45	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:DZ:98:MET:O	58:DZ:126:VAL:HG22	2.11	0.50
41:DF:7:TYR:HD2	41:DF:16:GLY:N	2.10	0.50
46:BN:31:ALA:HA	46:BN:34:LEU:HB2	1.92	0.50
54:BV:49:THR:CB	54:BV:50:PRO:CD	2.88	0.50
28:B2:3:LEU:HD23	28:B2:3:LEU:C	2.32	0.50
42:DG:56:ALA:HB1	42:DG:153:ARG:NH2	2.27	0.50
40:BE:116:VAL:HG21	40:BE:122:PHE:CE2	2.46	0.50
1:AA:438:G:H5'	4:AD:123:HIS:ND1	2.13	0.50
2:CB:28:PHE:CD1	2:CB:28:PHE:O	2.65	0.50
4:CD:114:ARG:HG3	4:CD:114:ARG:NH1	2.23	0.50
10:CJ:4:ILE:O	10:CJ:74:ILE:CG1	2.60	0.50
2:AB:127:ILE:HG23	2:AB:135:GLN:NE2	2.27	0.50
38:BC:70:LYS:HD2	38:BC:177:LYS:HZ3	1.76	0.50
16:CP:58:TYR:O	16:CP:62:VAL:HG22	2.12	0.50
8:AH:89:PRO:HA	8:AH:92:ARG:CD	2.41	0.50
2:AB:204:ASN:HD21	2:AB:206:ASP:N	2.10	0.50
36:DA:860:U:O2	36:DA:860:U:O4'	2.28	0.50
27:D1:70:VAL:O	27:D1:71:TYR:C	2.49	0.50
36:BA:1171:G:N7	36:BA:1173:G:H1'	2.27	0.50
46:BN:83:LYS:CG	46:BN:84:LYS:N	2.72	0.50
39:BD:172:TYR:CD1	39:BD:186:HIS:HA	2.46	0.50
11:AK:123:LYS:HA	11:AK:126:ARG:HB3	1.92	0.50
20:AT:53:LEU:O	20:AT:54:LYS:C	2.50	0.50
33:B7:11:LYS:NZ	36:BA:685:A:OP1	2.41	0.50
36:BA:635:C:H1'	36:BA:639:U:H5''	1.93	0.50
36:BA:2199:A:OP2	36:BA:2200:C:H5	1.94	0.50
48:DP:86:LYS:HB2	48:DP:117:GLU:O	2.12	0.50
1:AA:1221:G:P	19:AS:36:ARG:HD3	2.51	0.50
36:BA:852:G:HO2'	36:BA:853:G:H5'	1.77	0.50
25:AZ:305:ALA:HB1	25:AZ:309:SER:HB3	1.93	0.50
1:CA:1041:A:H2'	1:CA:1042:G:H8	1.71	0.50
1:CA:1433:A:H2'	1:CA:1434:A:H8	1.76	0.50
1:AA:106:C:O2	1:AA:379:C:H4'	2.10	0.50
1:AA:734:G:O2'	1:AA:735:C:C5'	2.60	0.50
36:BA:2036:C:C6	36:BA:2036:C:H5'	2.39	0.50
12:AL:86:ARG:HG2	12:AL:87:GLY:N	2.26	0.50
22:AW:53:G:N2	22:AW:54:U:H3	2.10	0.50
3:CC:60:ALA:H	3:CC:63:ASN:ND2	2.09	0.50
45:DK:87:UNK:O	45:DK:88:UNK:CB	2.59	0.50
36:BA:391:G:H2'	36:BA:392:C:H5'	1.91	0.50
36:DA:2317:C:H3'	36:DA:2318:G:H21	1.76	0.50
13:AM:118:ALA:HB3	22:AV:29:G:C5'	2.42	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:966:G:H2'	36:BA:967:C:H6	1.75	0.50
18:CR:75:ILE:C	18:CR:77:GLY:N	2.65	0.50
2:CB:114:ARG:NH1	2:CB:118:LEU:HD21	2.26	0.50
6:AF:97:PHE:HD2	18:AR:31:LEU:HD21	1.77	0.50
36:BA:1741:A:H3'	36:BA:1742:G:H8	1.77	0.50
36:BA:272:G:H1	36:BA:404:C:H42	1.57	0.50
57:DY:90:LEU:HD23	57:DY:90:LEU:N	2.27	0.50
36:DA:1781:C:O2	36:DA:1781:C:O4'	2.30	0.50
36:BA:2599:G:H5''	36:BA:2599:G:H8	1.76	0.50
29:D3:42:ALA:O	29:D3:44:ARG:N	2.45	0.50
1:AA:175:C:H4'	20:AT:25:ARG:NH1	2.27	0.50
36:BA:251:A:H2'	36:BA:252:G:C4'	2.41	0.50
50:DR:52:ILE:HD12	50:DR:79:LEU:HD21	1.92	0.50
36:DA:1810:A:H2'	36:DA:1811:G:O4'	2.12	0.50
25:AZ:191:GLY:HA3	25:AZ:197:ASP:CB	2.28	0.50
5:CE:30:ALA:O	5:CE:45:PHE:HA	2.12	0.50
39:BD:30:GLU:CB	39:BD:35:LYS:HE3	2.39	0.50
38:BC:81:GLU:O	38:BC:85:GLU:HB3	2.12	0.50
1:CA:235:C:OP1	17:CQ:70:ARG:HD3	2.12	0.50
1:AA:427:U:OP1	4:AD:13:ARG:NH2	2.44	0.50
4:AD:21:LEU:HD11	4:AD:66:ARG:O	2.12	0.50
50:BR:10:LEU:HD22	50:BR:17:ARG:HE	1.77	0.50
36:DA:2037:G:H2'	36:DA:2038:G:H8	1.75	0.50
46:DN:116:LEU:O	46:DN:119:ARG:HB2	2.11	0.50
53:DU:33:ARG:O	53:DU:36:ARG:HB3	2.12	0.50
1:AA:276:G:O2'	17:AQ:68:ARG:NH1	2.45	0.50
4:CD:14:ARG:HG3	4:CD:15:GLU:OE1	2.12	0.50
2:CB:58:ILE:O	2:CB:59:GLU:C	2.50	0.50
1:AA:946:A:C6	1:AA:947:G:O6	2.64	0.50
19:AS:79:THR:O	19:AS:80:TYR:HB3	2.10	0.50
5:AE:32:VAL:O	5:AE:43:LEU:CD1	2.60	0.50
36:BA:1298:C:H1'	36:BA:1302:A:N3	2.27	0.50
52:DT:61:PHE:CZ	52:DT:76:PHE:HD1	2.30	0.50
52:DT:85:LYS:HZ3	52:DT:85:LYS:HB3	1.75	0.50
49:BQ:141:GLN:HE22	58:BZ:72:ARG:HA	1.77	0.50
1:AA:1117:G:O2'	9:AI:104:ARG:HD3	2.10	0.50
7:AG:31:MET:C	7:AG:32:ARG:HG3	2.32	0.50
26:B0:67:VAL:HG13	26:B0:81:VAL:HG22	1.93	0.50
36:BA:1404:C:O2	36:BA:1404:C:H2'	2.12	0.50
36:BA:1520:G:C2'	36:BA:1523:U:H5'	2.41	0.50
42:BG:120:LEU:O	42:BG:121:ASN:C	2.50	0.50
36:BA:2303:G:O2'	42:BG:132:ASN:HB3	2.12	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AN:9:LYS:O	14:AN:9:LYS:HG2	2.11	0.50
3:CC:103:VAL:HG12	3:CC:104:GLN:N	2.27	0.50
1:CA:1003:G:O2'	1:CA:1004:A:H4'	2.11	0.50
36:DA:864:G:N2	36:DA:913:U:O2	2.45	0.50
36:DA:712:G:H1	36:DA:719:C:H42	1.59	0.50
28:B2:5:GLU:O	28:B2:9:GLN:NE2	2.45	0.50
36:BA:1337:G:H2'	36:BA:1338:G:H8	1.77	0.50
13:CM:39:ILE:HG22	13:CM:40:ASN:N	2.27	0.50
42:BG:52:ILE:HG12	42:BG:53:LEU:N	2.27	0.50
36:DA:471:A:C2'	36:DA:472:A:C5'	2.90	0.50
42:DG:130:ASN:OD1	42:DG:160:VAL:HG13	2.12	0.50
30:D4:22:ILE:HG12	42:DG:108:ASN:HD22	1.75	0.50
36:BA:1091:G:H2'	36:BA:1092:C:C6	2.46	0.50
1:CA:598:U:H2'	1:CA:599:C:C6	2.47	0.50
36:BA:862:G:N3	36:BA:863:A:C1'	2.74	0.50
51:DS:22:GLY:O	51:DS:23:ARG:O	2.30	0.50
22:CV:58:A:O2'	22:CV:59:U:H2'	2.12	0.50
24:AY:52:A:C2	24:AY:63:G:N1	2.80	0.50
24:AY:65:C:H2'	24:AY:66:U:C6	2.46	0.50
8:AH:21:LYS:O	8:AH:22:GLU:C	2.50	0.50
8:AH:20:TYR:HE2	8:AH:75:ARG:CD	2.24	0.50
5:AE:71:LEU:O	5:AE:72:GLN:CG	2.59	0.50
1:AA:1126:U:OP2	1:AA:1281:U:O2	2.29	0.50
2:CB:121:LEU:HA	2:CB:124:SER:CB	2.39	0.50
48:DP:14:LYS:O	48:DP:15:ARG:HB2	2.11	0.50
27:B1:26:ARG:HG3	27:B1:27:GLU:OE1	2.12	0.50
20:CT:48:LYS:O	20:CT:49:ALA:C	2.49	0.50
36:DA:953:A:OP2	49:DQ:16:ARG:NH2	2.44	0.50
36:DA:1087:G:H8	36:DA:1088:A:H4'	1.76	0.50
7:CG:144:MET:CE	22:CW:31:A:H1'	2.42	0.50
49:DQ:64:ILE:HG22	49:DQ:65:PHE:N	2.27	0.50
36:BA:1087:G:C8	36:BA:1088:A:H4'	2.47	0.50
36:DA:2222:G:C2	36:DA:2223:G:C8	2.99	0.50
36:DA:1400:G:C6	36:DA:1401:G:C6	3.00	0.50
1:CA:198:G:O2'	1:CA:199:G:H8	1.95	0.50
36:DA:204:A:OP1	36:DA:204:A:H8	1.95	0.50
36:DA:2443:C:HO2'	36:DA:2444:G:H5'	1.74	0.50
18:CR:55:ARG:NH1	18:CR:55:ARG:HG3	2.27	0.50
36:BA:1810:A:H2'	36:BA:1811:G:O4'	2.11	0.50
1:CA:1314:C:H2'	1:CA:1315:U:C5	2.47	0.50
36:BA:1151:G:H2'	36:BA:1152:C:O4'	2.11	0.50
6:CF:62:TRP:NE1	18:CR:35:ARG:CZ	2.75	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:553:A:H2'	1:CA:554:C:H6	1.76	0.50
36:DA:452:G:OP1	41:DF:57:VAL:HG13	2.12	0.50
36:DA:955:C:O2'	36:DA:956:G:H5'	2.11	0.50
28:D2:7:ARG:HG2	28:D2:7:ARG:NH1	2.26	0.50
25:AZ:19:HIS:CG	25:AZ:115:GLN:HB2	2.46	0.50
36:DA:393:C:H2'	36:DA:394:A:C8	2.46	0.50
36:DA:303:U:H2'	36:DA:304:G:C8	2.46	0.50
1:CA:530:G:O2'	24:CY:35:G:C4'	2.59	0.50
36:BA:1747(A):G:C2'	36:BA:1748:G:H5''	2.41	0.50
36:DA:2601:C:H2'	36:DA:2603:G:H8	1.77	0.50
13:AM:113:PRO:O	13:AM:115:LYS:HD3	2.12	0.50
22:CW:7:A:H5''	22:CW:8:U:OP2	2.11	0.50
36:DA:1924:C:O2'	36:DA:1925:C:H5'	2.11	0.50
36:BA:2563:U:H2'	36:BA:2565:A:OP2	2.11	0.50
36:DA:2563:U:H2'	36:DA:2565:A:OP2	2.11	0.50
11:AK:80:VAL:HG22	11:AK:104:GLN:O	2.12	0.50
36:BA:1968:G:H2'	36:BA:1969:A:H5''	1.94	0.50
36:DA:2460:U:H2'	36:DA:2461:C:H6	1.76	0.50
8:AH:50:ARG:HH11	8:AH:50:ARG:HG3	1.77	0.50
3:AC:130:VAL:O	3:AC:134:ILE:HG13	2.11	0.50
16:AP:74:LEU:HD22	16:AP:79:VAL:HG21	1.93	0.50
1:AA:47:C:O2'	1:AA:48:C:O5'	2.26	0.50
9:CI:20:ARG:O	9:CI:60:ASP:HB2	2.11	0.50
1:CA:681:C:O2'	1:CA:682:G:H5'	2.11	0.50
36:BA:983:A:H2'	36:BA:984:A:O4'	2.12	0.50
1:CA:1057:G:H3'	1:CA:1058:G:H8	1.77	0.50
36:BA:263:C:O2'	36:BA:264:C:H5'	2.11	0.50
36:BA:2281:C:H2'	36:BA:2282:G:C8	2.47	0.50
36:BA:2329:G:H2'	36:BA:2330:G:C8	2.46	0.50
36:BA:811:U:O2'	36:BA:812:C:H5''	2.12	0.50
36:DA:1277:G:C2	36:DA:1294:U:O2	2.65	0.50
31:D5:2:ALA:N	36:DA:747:U:H3	2.10	0.50
57:BY:46:LYS:H	57:BY:62:GLU:CG	2.02	0.50
25:AZ:20:VAL:HA	25:AZ:24:LYS:NZ	2.21	0.50
38:DC:113:VAL:CG2	38:DC:136:LEU:HD22	2.42	0.50
36:BA:2523:G:C3'	36:BA:2524:G:H5''	2.41	0.50
36:BA:1352:U:O2'	36:BA:1353:A:H5'	2.12	0.50
36:BA:1567:A:OP1	39:BD:60:ARG:NH2	2.43	0.50
36:DA:672:C:C2'	36:DA:673:C:C5'	2.89	0.50
17:CQ:60:ILE:O	17:CQ:71:PHE:HD1	1.94	0.50
1:AA:507:C:P	1:AA:508:C:H3'	2.52	0.50
4:AD:58:LEU:O	4:AD:62:GLN:HG2	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BQ:52:VAL:O	49:BQ:54:MET:N	2.45	0.50
40:BE:197:ILE:HD11	40:BE:199:ARG:HH22	1.76	0.50
50:BR:3:HIS:O	50:BR:5:LYS:N	2.45	0.50
53:DU:112:ARG:O	53:DU:115:ALA:HB3	2.12	0.50
36:DA:809:G:O2'	36:DA:810:U:H5'	2.10	0.50
46:DN:32:THR:HG22	46:DN:37:LYS:HB3	1.94	0.50
1:AA:386:C:O2'	1:AA:387:U:H5'	2.11	0.50
8:CH:14:ARG:NH1	8:CH:14:ARG:CB	2.71	0.50
1:AA:267:C:H2'	1:AA:268:C:C6	2.39	0.50
1:CA:508:C:O2'	1:CA:509:A:P	2.69	0.50
4:CD:61:LYS:O	4:CD:64:LEU:N	2.44	0.50
4:CD:62:GLN:HE22	4:CD:65:ARG:HH21	1.58	0.50
1:CA:544:G:OP2	4:CD:66:ARG:NH2	2.44	0.50
51:BS:88:ASP:O	51:BS:89:ARG:HB3	2.12	0.50
2:CB:224:GLN:O	2:CB:227:GLY:N	2.45	0.50
2:CB:229:VAL:O	2:CB:230:VAL:HG13	2.12	0.50
41:DF:157:VAL:O	41:DF:158:THR:HB	2.12	0.50
41:DF:162:LEU:CD1	41:DF:162:LEU:H	2.25	0.50
40:BE:57:LYS:HE2	40:BE:59:VAL:CG1	2.41	0.50
38:DC:20:TYR:N	38:DC:20:TYR:CD1	2.80	0.50
56:BX:36:LYS:NZ	56:BX:55:ASN:HA	2.27	0.50
36:BA:1639:U:O2'	36:BA:1640:C:H5''	2.12	0.50
36:BA:1668:A:N3	36:BA:1670:C:N3	2.59	0.50
40:BE:167:VAL:HG13	40:BE:170:LEU:CD1	2.28	0.50
40:DE:128:SER:OG	40:DE:129:HIS:N	2.45	0.50
36:DA:1485:G:H1'	36:DA:1505:C:N4	2.27	0.50
49:BQ:136:ALA:C	49:BQ:138:ASP:H	2.14	0.50
58:BZ:63:ASP:OD1	58:BZ:65:GLN:NE2	2.45	0.50
1:AA:1186:G:N2	1:AA:1187:G:H1'	2.27	0.50
1:AA:1345:U:C6	1:AA:1377:A:C2	3.00	0.50
36:BA:2674:G:H2'	36:BA:2675:A:O4'	2.12	0.50
1:CA:1348:U:O2'	1:CA:1349:A:C8	2.57	0.50
36:BA:860:U:O4'	36:BA:860:U:O2	2.28	0.50
4:AD:170:VAL:CG1	4:AD:171:GLY:N	2.74	0.50
42:BG:32:PRO:HA	42:BG:162:THR:HB	1.94	0.50
31:D5:41:PRO:CG	31:D5:44:THR:OG1	2.48	0.50
36:DA:1899:G:N2	36:DA:1903:G:C2	2.79	0.50
55:DW:59:VAL:HA	55:DW:63:ASP:HA	1.93	0.50
41:BF:7:TYR:HE1	41:BF:196:LEU:HD11	1.76	0.50
4:CD:85:LYS:HD3	4:CD:92:VAL:HG11	1.92	0.50
3:AC:142:MET:SD	3:AC:148:GLY:CA	3.00	0.50
53:BU:3:ARG:NH1	53:BU:5:LYS:HB3	2.27	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1772:G:N2	36:BA:1774:C:C5'	2.75	0.50
36:BA:1827:C:H5''	36:BA:1971:A:O3'	2.12	0.50
11:AK:22:HIS:HB3	11:AK:29:ILE:CG2	2.27	0.50
1:CA:1442(A):G:H2'	52:DT:122:ASP:OD2	2.11	0.50
36:BA:1012:U:C4	46:BN:28:THR:HG21	2.47	0.50
13:CM:32:GLU:C	13:CM:34:LEU:N	2.62	0.50
42:BG:83:ARG:C	42:BG:85:GLY:H	2.15	0.50
42:DG:80:PHE:O	42:DG:81:LYS:HB2	2.11	0.50
7:AG:64:GLN:HE21	7:AG:68:ASN:HD22	1.58	0.50
51:BS:24:LEU:HD13	51:BS:41:ASP:HB2	1.93	0.50
1:AA:584:G:OP2	17:AQ:87:LYS:NZ	2.45	0.50
43:BH:149:ARG:HD3	43:BH:164:TYR:HD1	1.76	0.50
25:CZ:347:THR:CG2	25:CZ:348:ASP:N	2.74	0.50
36:BA:1132:A:C8	36:BA:1133:U:H5	2.30	0.50
1:CA:827:U:H5'	1:CA:828:A:OP2	2.12	0.50
36:DA:953:A:H2'	36:DA:954:G:C8	2.44	0.50
2:AB:19:HIS:NE2	2:AB:206:ASP:HB2	2.26	0.50
2:CB:77:ALA:HA	2:CB:80:ILE:CD1	2.36	0.50
1:CA:792:A:O2'	1:CA:793:U:P	2.70	0.50
25:AZ:368:VAL:HG12	25:AZ:369:THR:N	2.20	0.50
36:DA:270:A:H2'	36:DA:271:A:O4'	2.12	0.50
39:BD:177:LEU:HD12	39:BD:181:GLU:OE2	2.12	0.50
20:CT:32:ALA:O	20:CT:36:LEU:HB2	2.12	0.50
42:DG:27:ASN:O	42:DG:29:TRP:N	2.39	0.50
18:CR:53:ARG:CZ	18:CR:60:ALA:H	2.24	0.50
39:DD:136:ILE:CG2	39:DD:140:THR:OG1	2.59	0.50
36:BA:1491:G:C6	36:BA:1500:G:C2	3.00	0.50
25:AZ:306:LYS:O	25:AZ:308:GLY:N	2.45	0.50
1:CA:319:G:H4'	1:CA:1468:A:H4'	1.93	0.50
36:BA:2554:U:C2	36:BA:2555:U:H5	2.30	0.50
5:CE:64:ARG:HH11	5:CE:64:ARG:HG3	1.75	0.50
12:AL:71:PRO:O	12:AL:102:ARG:NH1	2.45	0.50
27:D1:18:ILE:CG2	27:D1:19:GLN:N	2.73	0.50
36:DA:34:C:H41	36:DA:447:A:H61	1.55	0.50
51:DS:77:ALA:C	51:DS:79:ALA:N	2.65	0.50
22:CW:34:G:H22	23:CX:18:G:N2	2.10	0.50
1:CA:632:A:C8	1:CA:633:G:C8	3.00	0.50
36:BA:953:A:OP2	49:BQ:16:ARG:NH2	2.44	0.50
36:BA:1722:A:H2	36:BA:1740:G:H2'	1.77	0.50
45:DK:99:UNK:O	45:DK:100:UNK:O	2.30	0.50
12:CL:70:ILE:HD13	12:CL:77:LEU:HD12	1.93	0.50
22:AV:46:G:H5'	22:AV:47:U:OP2	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:AV:9:A:C4	22:AV:46:G:N2	2.79	0.50
36:DA:1477:A:H5'	36:DA:1478:G:OP2	2.11	0.50
29:B3:42:ALA:O	29:B3:44:ARG:N	2.45	0.50
1:CA:896:C:O2'	1:CA:897:C:H5'	2.12	0.50
25:CZ:356:PRO:O	25:CZ:357:PRO:O	2.30	0.50
36:BA:2282:G:C4'	36:BA:2283:C:O5'	2.60	0.50
36:DA:1654:A:O2'	40:DE:113:PHE:O	2.20	0.50
50:DR:28:LEU:CB	50:DR:34:ILE:HG13	2.41	0.50
32:D6:35:GLU:HB3	32:D6:51:GLU:HG3	1.94	0.50
34:D8:13:ARG:CB	48:DP:63:PRO:HA	2.42	0.50
36:DA:251:A:H2'	36:DA:252:G:C4'	2.42	0.50
36:DA:2415:G:H4'	48:DP:66:GLY:O	2.12	0.50
36:DA:1202:C:H2'	36:DA:1203:G:C5'	2.34	0.50
5:CE:103:GLY:H	5:CE:106:PRO:CG	2.24	0.50
35:D9:31:LYS:C	35:D9:32:HIS:HD2	2.16	0.50
36:DA:483:A:H1'	57:DY:60:PHE:HZ	1.75	0.50
38:BC:83:ILE:HG12	38:BC:95:GLY:HA3	1.93	0.50
38:BC:83:ILE:HG23	38:BC:95:GLY:HA3	1.94	0.50
41:BF:3:GLU:O	41:BF:24:LEU:HG	2.12	0.50
4:AD:67:ILE:O	4:AD:67:ILE:CG2	2.60	0.50
28:B2:33:MET:O	28:B2:34:GLU:C	2.49	0.50
41:BF:170:LEU:HB3	41:BF:173:VAL:CG2	2.42	0.50
36:DA:926:A:H8	36:DA:926:A:C5'	2.23	0.50
36:BA:1271:G:C2	36:BA:1617:C:H4'	2.46	0.50
36:BA:1277:G:N1	36:BA:1294:U:C2	2.79	0.50
13:AM:14:ARG:H	13:AM:44:ARG:HH11	1.60	0.50
13:AM:14:ARG:HG2	13:AM:42:ALA:O	2.12	0.50
42:BG:113:ARG:O	42:BG:140:ILE:HG22	2.11	0.50
46:DN:4:TYR:N	46:DN:4:TYR:CD1	2.77	0.50
1:AA:113:G:O2'	1:AA:354:G:H5'	2.12	0.50
1:AA:54:C:H2'	1:AA:352:C:H42	1.77	0.50
1:AA:254:G:H2'	1:AA:255:G:H8	1.77	0.50
1:CA:538:G:H5''	12:CL:114:LYS:HB2	1.94	0.50
51:BS:77:ALA:C	51:BS:79:ALA:N	2.64	0.50
8:AH:85:ARG:NH1	8:AH:85:ARG:HG3	2.27	0.50
1:CA:669:U:H2'	1:CA:670:G:C8	2.47	0.50
34:B8:18:ALA:HB2	36:BA:628:G:H5''	1.93	0.50
48:BP:96:THR:H	48:BP:99:LEU:HD22	1.77	0.50
40:BE:24:THR:OG1	40:BE:186:GLY:HA2	2.12	0.50
52:DT:50:ILE:HG22	52:DT:51:ARG:N	2.27	0.50
47:DO:77:ILE:HD11	52:DT:72:VAL:HG12	1.94	0.50
57:DY:76:CYS:O	57:DY:77:PRO:C	2.50	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1350:A:O2'	1:AA:1351:U:H5'	2.11	0.50
1:CA:377:G:P	16:CP:5:ARG:HD3	2.51	0.50
36:BA:1060:U:H1'	36:BA:1061:U:H5''	1.94	0.50
1:AA:1486:G:H2'	1:AA:1487:G:C8	2.46	0.50
51:DS:13:ARG:CG	51:DS:14:VAL:H	2.05	0.50
36:BA:336:C:H4'	57:BY:7:VAL:HG22	1.94	0.50
36:BA:336:C:H5''	57:BY:7:VAL:HG11	1.94	0.50
1:AA:815:A:N7	1:AA:1509:C:O2'	2.33	0.50
36:BA:1590:U:C3'	36:BA:1591:G:H5''	2.41	0.50
55:DW:64:MET:O	55:DW:109:GLU:HG2	2.12	0.50
36:BA:2174:C:O2'	38:BC:219:GLY:O	2.26	0.50
3:CC:113:ALA:HB3	3:CC:185:GLY:N	2.26	0.50
19:CS:63:THR:HG23	19:CS:64:GLU:N	2.26	0.50
3:AC:48:TYR:C	3:AC:50:ALA:N	2.65	0.50
3:AC:96:GLY:C	3:AC:97:LYS:HG2	2.32	0.50
1:CA:36:C:H2'	1:CA:37:U:C6	2.47	0.50
36:BA:1829:A:O2'	39:BD:15:PHE:CE1	2.53	0.50
16:CP:19:ILE:HB	16:CP:37:GLY:O	2.12	0.50
46:BN:101:HIS:C	46:BN:103:VAL:N	2.61	0.50
42:BG:85:GLY:C	42:BG:87:PRO:CD	2.80	0.50
36:DA:2305:A:N1	42:DG:43:LEU:HD13	2.27	0.50
43:BH:18:GLU:HB2	43:BH:25:LYS:HB2	1.94	0.50
36:DA:1170:G:H5''	36:DA:1173:G:N2	2.26	0.50
38:BC:140:PRO:C	38:BC:142:ALA:N	2.64	0.50
36:BA:862:G:H3'	36:BA:863:A:C8	2.47	0.50
51:DS:24:LEU:HD13	51:DS:41:ASP:HB2	1.93	0.50
2:CB:106:LYS:CG	2:CB:107:THR:N	2.73	0.50
2:AB:54:THR:HG22	2:AB:58:ILE:CD1	2.38	0.50
2:AB:61:LEU:HA	2:AB:64:ARG:CZ	2.40	0.50
49:BQ:43:THR:HA	49:BQ:93:TYR:O	2.12	0.50
5:AE:72:GLN:O	5:AE:75:THR:HG22	2.12	0.50
49:DQ:125:LEU:HD23	49:DQ:125:LEU:N	2.27	0.50
47:DO:11:ALA:HB1	47:DO:98:VAL:CG2	2.34	0.50
1:CA:1413:A:C2	1:CA:1488:G:C2	3.00	0.50
1:CA:1403:C:H1'	1:CA:1500:A:N1	2.27	0.50
11:CK:123:LYS:HA	11:CK:126:ARG:HB3	1.93	0.50
10:AJ:75:ILE:HG13	10:AJ:76:ASN:N	2.27	0.50
1:CA:406:G:H2'	1:CA:407:G:C8	2.47	0.50
54:BV:58:VAL:CG1	54:BV:97:LYS:HB2	2.42	0.50
1:AA:194:C:H2'	1:AA:195:A:C5'	2.38	0.50
36:BA:2374:C:H2'	36:BA:2375:G:O4'	2.12	0.50
1:AA:445:G:H2'	1:AA:446:G:C8	2.47	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:904:C:C6	36:DA:904:C:OP2	2.65	0.50
36:DA:1843:C:H2'	36:DA:1844:C:C6	2.47	0.50
36:DA:1605:C:N4	36:DA:1606:G:C2	2.80	0.50
46:DN:61:ARG:NH1	46:DN:61:ARG:HG3	2.26	0.50
39:DD:130:ALA:O	39:DD:131:LEU:HG	2.12	0.50
36:DA:2374:C:H2'	36:DA:2375:G:O4'	2.11	0.50
25:AZ:354:GLN:HE21	25:AZ:371:THR:CB	2.24	0.50
25:AZ:316:PHE:HA	25:AZ:404:LEU:HD23	1.93	0.50
36:DA:807:U:H2'	36:DA:808:G:C8	2.47	0.50
1:CA:1466:C:O2'	1:CA:1467:G:H5'	2.12	0.50
16:CP:23:ASP:OD1	16:CP:23:ASP:O	2.30	0.50
36:BA:2752:C:C2'	36:BA:2752:C:O2	2.58	0.50
6:AF:7:ASN:C	6:AF:8:ILE:HG13	2.32	0.50
36:BA:806:C:H2'	36:BA:807:U:H6	1.77	0.50
38:BC:182:PRO:HD2	38:BC:183:GLU:OE2	2.11	0.50
26:D0:19:LYS:NZ	26:D0:21:LEU:HD21	2.27	0.50
30:D4:19:GLY:O	30:D4:20:ASN:C	2.49	0.50
36:BA:521:G:H2'	36:BA:522:G:C8	2.46	0.50
36:BA:1924:C:O2'	36:BA:1925:C:H5'	2.11	0.50
15:AO:54:ARG:HD3	15:AO:54:ARG:O	2.11	0.50
17:AQ:48:GLU:OE1	17:AQ:50:LYS:HD3	2.12	0.50
8:AH:39:LEU:HB2	8:AH:45:ILE:HD11	1.93	0.50
28:B2:4:SER:CA	28:B2:7:ARG:HD2	2.42	0.50
1:AA:1407:C:O2	1:AA:1407:C:H2'	2.11	0.50
36:DA:2558:C:H2'	36:DA:2559:C:C6	2.47	0.50
36:BA:590:A:H2'	36:BA:591:C:C6	2.47	0.50
1:AA:1129:C:H4'	1:AA:1130:A:C8	2.47	0.50
36:DA:830:G:C4	36:DA:2448:A:C6	3.00	0.50
1:AA:417:C:O5'	1:AA:417:C:H6	1.94	0.50
8:AH:54:ASP:O	8:AH:56:LYS:HG3	2.12	0.50
32:B6:15:GLU:CD	32:B6:18:ARG:NH2	2.65	0.49
36:BA:2358:G:C2'	36:BA:2359:C:H5'	2.42	0.49
36:BA:251:A:H5''	48:BP:51:PHE:CZ	2.47	0.49
36:DA:2819:G:C6	36:DA:2821:A:N3	2.80	0.49
36:DA:2839:G:H2'	36:DA:2840:C:H6	1.77	0.49
36:DA:2260:C:N4	36:DA:2280:G:H1	2.07	0.49
48:DP:143:GLY:C	48:DP:145:PRO:HD3	2.33	0.49
25:AZ:176:LEU:HB2	62:AZ:501:GDP:C6	2.46	0.49
28:D2:31:GLU:HA	28:D2:34:GLU:HB3	1.94	0.49
28:D2:48:HIS:ND1	36:DA:95:G:O2'	2.43	0.49
41:DF:185:ASP:HA	41:DF:188:ARG:CG	2.42	0.49
36:BA:693:C:O2'	36:BA:694:U:H5'	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AI:95:LYS:C	9:AI:98:PRO:HD2	2.32	0.49
38:BC:86:ALA:HB3	38:BC:94:VAL:CG1	2.39	0.49
41:BF:33:LEU:O	41:BF:37:VAL:HG23	2.11	0.49
1:AA:532:A:H3'	1:AA:533:A:C5'	2.42	0.49
4:AD:65:ARG:HD2	4:AD:72:GLU:CA	2.42	0.49
36:BA:2620:C:C1'	40:BE:156:MET:HB2	2.42	0.49
40:BE:82:ARG:HG3	40:BE:83:ASP:H	1.77	0.49
36:BA:2850:A:C2	50:BR:61:HIS:CD2	2.99	0.49
36:DA:2023:G:C5'	36:DA:2617:C:H4'	2.40	0.49
8:CH:6:ILE:H	8:CH:6:ILE:HD12	1.76	0.49
1:CA:507:C:H3'	1:CA:508:C:C6	2.46	0.49
4:CD:14:ARG:HD2	4:CD:59:ARG:NH1	2.27	0.49
4:CD:74:GLN:O	4:CD:77:ASN:HB3	2.12	0.49
40:BE:4:ILE:HG12	40:BE:5:LEU:N	2.27	0.49
13:AM:120:LYS:HE3	13:AM:120:LYS:HA	1.94	0.49
25:CZ:32:THR:HA	25:CZ:70:TYR:HB3	1.94	0.49
52:BT:47:GLY:HA3	52:BT:65:LYS:HB2	1.94	0.49
36:DA:2681:C:H2'	36:DA:2681:C:O2	2.12	0.49
52:DT:13:ARG:NH2	52:DT:15:VAL:CG1	2.75	0.49
58:BZ:151:HIS:HB3	58:BZ:170:THR:HA	1.94	0.49
36:DA:325:G:O2'	36:DA:326:G:H5'	2.12	0.49
1:AA:1286:A:O2'	1:AA:1287:A:C5'	2.60	0.49
14:AN:29:ARG:CG	14:AN:29:ARG:NH1	2.75	0.49
37:DB:79:C:H2'	37:DB:80:U:O4'	2.11	0.49
22:CW:16:U:H3'	22:CW:17:C:H5'	1.94	0.49
39:DD:4:LYS:HB2	39:DD:18:VAL:HG12	1.94	0.49
3:CC:13:GLY:C	3:CC:14:ILE:HG22	2.32	0.49
25:AZ:223:MET:HB2	25:AZ:242:ILE:HA	1.94	0.49
3:AC:147:LYS:O	3:AC:203:PHE:HD2	1.93	0.49
3:AC:18:TRP:HB3	3:AC:20:SER:H	1.77	0.49
36:BA:1827:C:C2'	36:BA:1828:G:H5'	2.42	0.49
39:BD:244:ARG:HG2	39:BD:245:PRO:HB3	1.93	0.49
58:DZ:10:ARG:CG	58:DZ:12:GLY:H	2.25	0.49
58:DZ:50:GLN:C	58:DZ:52:SER:N	2.64	0.49
16:CP:21:VAL:HG13	16:CP:34:GLU:H	1.77	0.49
41:DF:11:VAL:HG12	41:DF:12:LEU:N	2.20	0.49
4:CD:165:MET:O	4:CD:166:LYS:C	2.49	0.49
3:AC:26:LYS:CG	3:AC:27:LYS:H	2.20	0.49
36:DA:1221:C:H2'	36:DA:1221(A):C:C6	2.47	0.49
42:DG:141:PHE:HB2	42:DG:144:ILE:CG2	2.42	0.49
43:DH:93:GLY:C	43:DH:94:TYR:HD1	2.15	0.49
13:AM:70:LEU:CD2	13:AM:70:LEU:C	2.80	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BY:85:VAL:HG12	57:BY:86:ARG:H	1.75	0.49
33:B7:36:GLN:C	33:B7:38:GLY:N	2.65	0.49
53:DU:108:GLU:HG3	54:DV:44:LYS:HG2	1.92	0.49
25:CZ:219:LYS:HB3	25:CZ:220:PRO:CD	2.41	0.49
25:CZ:246:LYS:HB3	25:CZ:281:ILE:CG2	2.33	0.49
1:AA:321:A:H4'	1:AA:1436:U:H5'	1.94	0.49
1:AA:109:A:C8	1:AA:326:G:H2'	2.46	0.49
55:BW:14:PRO:O	55:BW:17:VAL:N	2.45	0.49
1:CA:858:G:C8	1:CA:858:G:OP2	2.65	0.49
52:BT:115:ARG:HH11	52:BT:115:ARG:HG3	1.76	0.49
2:AB:121:LEU:C	2:AB:121:LEU:HD23	2.32	0.49
36:BA:783:A:H2'	36:BA:784:A:O5'	2.12	0.49
1:CA:492:G:N2	1:CA:493:G:H1'	2.26	0.49
36:BA:1173:G:H2'	36:BA:1175:U:C5	2.47	0.49
1:CA:39:G:O2'	1:CA:40:C:H5'	2.12	0.49
1:CA:424:G:C2	1:CA:425:G:N7	2.80	0.49
1:CA:224:C:H2'	1:CA:225:C:C6	2.46	0.49
36:BA:2219:G:HO2'	36:BA:2220:G:H5'	1.77	0.49
1:CA:390:C:H2'	1:CA:391:G:C8	2.48	0.49
46:DN:21:LYS:HE3	46:DN:25:ARG:HB2	1.94	0.49
36:DA:892:G:H2'	36:DA:893:C:C5	2.47	0.49
36:DA:1410:G:O2'	36:DA:1411:C:H5'	2.12	0.49
25:CZ:305:ALA:HB1	25:CZ:309:SER:HB3	1.94	0.49
38:BC:120:MET:O	38:BC:121:GLY:C	2.49	0.49
40:BE:145:LYS:O	40:BE:146:THR:HG23	2.11	0.49
24:CY:20:H2U:O4'	24:CY:20:H2U:OP2	2.31	0.49
36:DA:1112:G:O2'	36:DA:1113:U:H5'	2.12	0.49
36:BA:1288:U:C2	36:BA:1327:C:C2	3.00	0.49
36:BA:1328:G:N1	36:BA:1647:G:N2	2.60	0.49
36:DA:271(C):C:O2'	36:DA:271(D):G:H5'	2.11	0.49
22:CW:55:U:O2	22:CW:55:U:H3'	2.12	0.49
12:AL:83:VAL:CG1	12:AL:84:LEU:N	2.74	0.49
1:CA:635:G:O2'	1:CA:636:U:H5'	2.12	0.49
46:DN:57:ALA:O	46:DN:58:ASP:O	2.29	0.49
20:AT:82:SER:O	20:AT:86:ARG:HB2	2.12	0.49
39:BD:18:VAL:HG23	39:BD:211:ARG:NH2	2.27	0.49
36:DA:1458:C:H4'	36:DA:1459:G:O5'	2.12	0.49
25:CZ:93:ILE:HD13	63:CZ:502:KIR:H381	1.94	0.49
36:DA:304:G:N3	36:DA:314:A:C2	2.80	0.49
1:CA:563:A:C2'	1:CA:563:A:N3	2.74	0.49
13:CM:112:GLY:O	13:CM:113:PRO:C	2.51	0.49
36:DA:1923:U:O2'	36:DA:1924:C:H5'	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:766:A:C8	1:AA:814:A:C6	3.00	0.49
17:CQ:27:PHE:CE1	17:CQ:36:ILE:HD11	2.47	0.49
43:BH:169:VAL:O	43:BH:169:VAL:HG13	2.12	0.49
36:BA:1832:C:N4	36:BA:1833:U:C4	2.80	0.49
5:CE:6:PHE:HB2	5:CE:34:VAL:CG2	2.41	0.49
2:AB:114:ARG:NH1	2:AB:118:LEU:HD21	2.27	0.49
47:DO:50:GLY:C	47:DO:52:VAL:H	2.15	0.49
36:BA:1720:U:H2'	36:BA:1721:G:C5'	2.42	0.49
1:AA:896:C:O2'	1:AA:897:C:H5'	2.11	0.49
36:BA:830:G:C4	36:BA:2448:A:C6	3.00	0.49
36:BA:2058:A:H8	36:BA:2058:A:O5'	1.95	0.49
36:DA:654(P):C:H2'	36:DA:654(Q):C:O4'	2.12	0.49
36:DA:389:G:C6	48:DP:70:GLN:HG3	2.46	0.49
15:CO:15:PHE:O	15:CO:27:VAL:HG22	2.12	0.49
36:DA:589:C:H2'	36:DA:590:A:C8	2.48	0.49
24:AY:73:A:H2'	24:AY:74:C:O4'	2.12	0.49
26:B0:43:THR:HG21	36:BA:2336:A:H61	1.78	0.49
48:BP:23:PRO:HG2	48:BP:33:ARG:HG3	1.94	0.49
53:BU:9:VAL:O	53:BU:12:ARG:HB2	2.12	0.49
36:DA:2010:G:C5	36:DA:2011:U:C5	3.00	0.49
40:DE:199:ARG:CB	40:DE:199:ARG:NH1	2.75	0.49
32:D6:15:GLU:OE2	32:D6:41:PRO:HB2	2.12	0.49
25:AZ:155:ARG:HH12	25:AZ:168:VAL:H	1.59	0.49
42:DG:72:ARG:HB3	42:DG:86:MET:HA	1.92	0.49
41:BF:34:TRP:CD1	48:BP:10:PRO:HB2	2.48	0.49
4:AD:31:CYS:O	4:AD:32:ALA:HB3	2.11	0.49
4:AD:55:ALA:O	4:AD:58:LEU:N	2.45	0.49
36:BA:109:G:H2'	36:BA:110:G:H8	1.77	0.49
36:BA:2015:A:O2'	36:BA:2016:U:H5'	2.11	0.49
40:BE:199:ARG:NH1	40:BE:199:ARG:HB2	2.27	0.49
50:BR:17:ARG:NH1	50:BR:17:ARG:HB3	2.27	0.49
10:AJ:14:LYS:C	10:AJ:16:LEU:N	2.64	0.49
37:BB:42:C:H1'	42:BG:66:GLN:NE2	2.27	0.49
36:DA:819:A:N6	36:DA:1189:A:H1'	2.27	0.49
36:DA:1215:G:O2'	36:DA:1216:G:H5'	2.12	0.49
36:DA:942:G:H5'	48:DP:35:HIS:C	2.33	0.49
53:DU:17:ILE:HG23	53:DU:39:LEU:HD12	1.95	0.49
5:AE:135:THR:O	5:AE:136:MET:C	2.50	0.49
2:CB:17:PHE:HB3	2:CB:44:LEU:CD2	2.42	0.49
5:AE:30:ALA:O	5:AE:45:PHE:HA	2.12	0.49
5:AE:53:LEU:O	5:AE:54:ALA:C	2.51	0.49
52:BT:92:GLY:C	52:BT:94:ALA:N	2.62	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DE:12:THR:OG1	40:DE:13:ARG:N	2.44	0.49
58:BZ:28:MET:O	58:BZ:29:TYR:CB	2.59	0.49
1:AA:1285:A:H1'	1:AA:1286:A:C8	2.47	0.49
22:CV:5:G:O2'	22:CV:6:G:H5'	2.12	0.49
36:DA:2831:G:OP1	36:DA:2834:G:H4'	2.11	0.49
1:AA:1410:G:C6	1:AA:1491:G:C6	3.00	0.49
1:AA:798:G:H2'	1:AA:799:G:O5'	2.12	0.49
19:AS:28:LYS:O	19:AS:29:ARG:HG3	2.12	0.49
37:BB:56:G:O2'	37:BB:57:A:OP2	2.27	0.49
42:BG:162:THR:O	42:BG:164:GLU:OE2	2.31	0.49
35:B9:12:ASP:CG	35:B9:13:LYS:H	2.15	0.49
36:DA:2590:A:C2'	36:DA:2591:C:H5'	2.42	0.49
36:DA:763:G:H2'	36:DA:764:A:O5'	2.12	0.49
3:CC:13:GLY:O	3:CC:14:ILE:CB	2.60	0.49
1:CA:35:G:C6	1:CA:36:C:N4	2.80	0.49
36:BA:1773:A:H62	36:BA:1829:A:H1'	1.77	0.49
36:BA:1899:G:N2	36:BA:1903:G:C2	2.81	0.49
37:DB:77:U:O2	37:DB:77:U:H2'	2.12	0.49
58:DZ:50:GLN:O	58:DZ:51:ALA:C	2.50	0.49
36:BA:996:A:O2'	36:BA:997:G:C5'	2.58	0.49
36:BA:2206:G:C2	36:BA:2207:G:H5'	2.47	0.49
33:D7:37:LYS:HD2	36:DA:458:G:C8	2.47	0.49
13:CM:9:ILE:N	13:CM:9:ILE:HD12	2.27	0.49
36:DA:2305:A:C1'	42:DG:135:LEU:O	2.59	0.49
10:CJ:43:ARG:HB2	10:CJ:67:THR:HG21	1.90	0.49
36:BA:472:A:H2'	36:BA:473:G:H5'	1.94	0.49
36:DA:2635:C:H5''	40:DE:78:LEU:O	2.12	0.49
36:BA:864:G:N2	36:BA:913:U:O2	2.45	0.49
2:AB:189:ASP:OD1	2:AB:205:ASP:HB3	2.11	0.49
29:D3:7:LYS:O	29:D3:54:VAL:CA	2.59	0.49
8:AH:64:LYS:C	8:AH:65:TYR:CD1	2.86	0.49
42:BG:117:PHE:O	42:BG:118:ARG:CG	2.51	0.49
3:CC:29:TYR:OH	14:CN:54:PRO:HB2	2.11	0.49
11:CK:65:ALA:HB1	11:CK:98:LEU:HD21	1.94	0.49
1:CA:1126:U:OP2	1:CA:1281:U:O2	2.30	0.49
10:CJ:40:LEU:HD23	10:CJ:40:LEU:H	1.75	0.49
36:DA:597:U:H5''	48:DP:15:ARG:NH2	2.27	0.49
29:B3:15:TYR:HB3	29:B3:16:PRO:HD2	1.94	0.49
29:B3:19:GLN:C	29:B3:21:ALA:H	2.16	0.49
2:AB:121:LEU:HA	2:AB:124:SER:CB	2.40	0.49
36:DA:953:A:C2	36:DA:965:C:O2	2.64	0.49
11:AK:21:ILE:HG13	11:AK:30:VAL:CG1	2.36	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:899:C:H2'	1:CA:900:A:O4'	2.11	0.49
1:CA:803:G:C6	1:CA:804:U:C4	3.00	0.49
36:DA:2222:G:H1'	39:DD:148:GLU:OE2	2.11	0.49
36:BA:270:A:H2'	36:BA:271:A:O4'	2.12	0.49
1:CA:194:C:H2'	1:CA:195:A:C5'	2.38	0.49
18:AR:45:SER:H	18:AR:51:LEU:HG	1.77	0.49
42:DG:29:TRP:C	42:DG:31:VAL:N	2.65	0.49
36:BA:849:A:H2'	36:BA:850:C:O4'	2.12	0.49
52:DT:106:SER:C	52:DT:107:ASP:OD1	2.51	0.49
1:CA:1432:G:OP2	52:DT:108:ARG:CZ	2.60	0.49
1:CA:1379:G:H2'	1:CA:1380:U:H6	1.76	0.49
1:CA:1166:G:H1'	1:CA:1171:G:N2	2.26	0.49
1:CA:706:A:O2'	11:CK:31:THR:HB	2.12	0.49
36:BA:271(U):G:C4	36:BA:271(V):G:C8	3.00	0.49
36:DA:987:G:H2'	36:DA:988:A:O4'	2.12	0.49
1:AA:34:C:H1'	12:AL:32:PHE:CE2	2.47	0.49
22:AW:55:U:H2'	22:AW:57:G:OP2	2.13	0.49
27:D1:20:ARG:HB3	27:D1:34:THR:HA	1.93	0.49
4:AD:43:HIS:O	4:AD:45:GLN:N	2.45	0.49
2:CB:10:LEU:O	2:CB:13:ALA:HB3	2.12	0.49
58:DZ:24:LEU:CD2	58:DZ:24:LEU:O	2.60	0.49
36:DA:551:G:O2'	36:DA:1220:A:N3	2.39	0.49
25:CZ:121:LEU:O	25:CZ:125:GLN:HG2	2.12	0.49
17:CQ:90:ILE:O	17:CQ:91:ARG:C	2.50	0.49
36:DA:1907:G:C6	36:DA:1924:C:N3	2.80	0.49
17:AQ:90:ILE:O	17:AQ:93:GLN:N	2.46	0.49
36:DA:2192:G:H2'	36:DA:2193:G:H5'	1.94	0.49
40:DE:95:ILE:CD1	40:DE:95:ILE:H	2.25	0.49
45:BK:100:UNK:C	45:BK:136:UNK:HA	2.42	0.49
38:BC:117:PRO:HD3	38:BC:146:GLY:H	1.76	0.49
36:BA:1478:G:C2	36:BA:1479:G:C5	3.01	0.49
36:DA:1429:G:H2'	36:DA:1430:C:C6	2.46	0.49
47:BO:60:ALA:HB1	47:BO:85:VAL:O	2.13	0.49
38:DC:19:VAL:HA	38:DC:223:ARG:O	2.12	0.49
25:CZ:129:PRO:O	25:CZ:130:TYR:HB2	2.12	0.49
36:BA:1781:C:O2	36:BA:1781:C:O4'	2.30	0.49
22:CV:9:A:C4	22:CV:46:G:N2	2.80	0.49
36:DA:1897:G:O5'	36:DA:1897:G:H8	1.96	0.49
36:BA:2314:C:H6	36:BA:2314:C:O5'	1.95	0.49
36:BA:699:A:C2'	36:BA:700:G:H5'	2.41	0.49
34:B8:59:LYS:NZ	48:BP:50:ARG:HB3	2.27	0.49
36:BA:571:A:H5'	36:BA:2030:A:N7	2.26	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2415:G:H4'	48:BP:66:GLY:O	2.12	0.49
53:BU:17:ILE:HG23	53:BU:39:LEU:HD12	1.94	0.49
36:DA:2577:A:C5'	36:DA:2578:G:H5'	2.42	0.49
50:DR:38:VAL:O	50:DR:41:ALA:HB3	2.12	0.49
28:D2:50:ILE:H	28:D2:50:ILE:HD12	1.78	0.49
36:BA:1854:A:H62	36:BA:1888:G:H8	1.58	0.49
36:BA:769:G:C4'	36:BA:1379:A:N6	2.74	0.49
40:DE:55:ASN:ND2	40:DE:75:VAL:CG2	2.74	0.49
41:BF:123:LEU:HD12	41:BF:124:LEU:N	2.27	0.49
41:BF:31:HIS:CE1	41:BF:34:TRP:CE3	3.00	0.49
43:BH:42:ARG:CB	43:BH:42:ARG:NH1	2.75	0.49
43:DH:41:MET:O	43:DH:42:ARG:CB	2.60	0.49
43:DH:42:ARG:CB	43:DH:42:ARG:NH1	2.74	0.49
36:DA:2776:A:H4'	36:DA:2778:A:H5''	1.93	0.49
46:DN:103:VAL:O	46:DN:104:LYS:C	2.50	0.49
46:DN:18:ALA:HB1	46:DN:26:LEU:HD22	1.94	0.49
53:DU:42:ALA:O	53:DU:43:GLY:C	2.50	0.49
2:AB:8:LYS:HZ1	2:AB:217:ARG:NH1	2.09	0.49
8:CH:34:GLU:O	8:CH:35:ILE:C	2.49	0.49
8:CH:4:ASP:OD1	8:CH:7:ALA:N	2.44	0.49
1:CA:532:A:H3'	1:CA:533:A:C5'	2.41	0.49
4:CD:31:CYS:O	4:CD:32:ALA:HB3	2.11	0.49
1:CA:546:G:OP1	4:CD:73:ARG:HB2	2.13	0.49
4:CD:70:ILE:CG2	4:CD:74:GLN:HB2	2.41	0.49
40:BE:53:PRO:O	40:BE:74:PRO:HA	2.12	0.49
1:CA:833:U:H2'	1:CA:834:C:C6	2.48	0.49
36:BA:2286:A:C2	36:BA:2346:A:N6	2.80	0.49
36:DA:1344:G:H22	36:DA:1404:C:H1'	1.77	0.49
1:AA:956:U:H2'	1:AA:957:U:O4'	2.12	0.49
56:DX:39:ILE:CG2	56:DX:54:VAL:HG11	2.41	0.49
5:AE:57:LYS:O	5:AE:58:ALA:C	2.50	0.49
25:CZ:136:ASN:CG	25:CZ:137:LYS:N	2.66	0.49
52:BT:121:ILE:O	52:BT:124:ASP:N	2.42	0.49
36:BA:2867:G:C5	52:BT:23:ARG:NH1	2.80	0.49
47:DO:64:ARG:CZ	52:DT:70:VAL:HG21	2.42	0.49
58:BZ:153:SER:N	58:BZ:167:PRO:HB3	2.28	0.49
36:DA:296:C:N4	36:DA:343:C:H42	2.10	0.49
6:AF:2:ARG:NE	6:AF:69:GLU:HG3	2.27	0.49
58:DZ:163:LEU:HD11	58:DZ:165:VAL:HG23	1.94	0.49
7:CG:118:VAL:O	7:CG:121:ALA:HB3	2.12	0.49
23:AX:19:U:H2'	23:AX:20:U:C6	2.48	0.49
51:DS:29:PHE:CE2	51:DS:31:SER:HB2	2.47	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BG:34:LEU:HD13	42:BG:99:MET:HE3	1.95	0.49
42:BG:9:ARG:C	42:BG:11:TYR:N	2.65	0.49
36:DA:2111:C:H42	36:DA:2147:G:H1	1.61	0.49
36:DA:2186:G:C2	36:DA:2187:G:C6	3.00	0.49
1:AA:1015:A:H2'	1:AA:1016:A:H8	1.77	0.49
1:CA:570:G:H1'	1:CA:820:U:C4	2.47	0.49
36:BA:2189:U:H3'	36:BA:2190:G:C5'	2.42	0.49
4:CD:170:VAL:CG1	4:CD:171:GLY:N	2.75	0.49
25:AZ:223:MET:HB3	25:AZ:242:ILE:HA	1.93	0.49
27:B1:45:ASN:CA	36:BA:2230:G:H1'	2.42	0.49
10:CJ:18:ALA:O	10:CJ:22:LYS:N	2.45	0.49
20:CT:19:SER:C	20:CT:21:LYS:N	2.62	0.49
53:BU:4:ALA:O	53:BU:5:LYS:O	2.29	0.49
36:DA:723:G:H2'	36:DA:724:U:H6	1.73	0.49
36:BA:18:C:H2'	36:BA:19:C:H6	1.78	0.49
28:B2:6:VAL:HG22	28:B2:9:GLN:OE1	2.12	0.49
57:DY:86:ARG:NH2	57:DY:95:LYS:NZ	2.60	0.49
36:DA:1274:A:N6	36:DA:1646:C:O2	2.43	0.49
54:DV:70:ILE:HD12	54:DV:87:HIS:HD2	1.77	0.49
42:BG:52:ILE:HG12	42:BG:53:LEU:H	1.77	0.49
42:DG:161:THR:C	42:DG:163:ALA:H	2.16	0.49
1:AA:1203:C:H2'	1:AA:1204:A:C8	2.37	0.49
8:CH:86:ILE:CG2	8:CH:133:LEU:HD23	2.35	0.49
36:DA:2811:G:H5'	40:DE:60:ASN:ND2	2.27	0.49
51:BS:85:VAL:HG23	51:BS:86:ALA:N	2.27	0.49
25:CZ:99:MET:H	25:CZ:241:ARG:NH2	2.10	0.49
2:AB:166:ASP:O	2:AB:167:PRO:C	2.50	0.49
49:BQ:41:TRP:HB3	49:BQ:94:VAL:HG11	1.94	0.49
1:AA:876:G:H2'	1:AA:877:C:C6	2.48	0.49
36:BA:25:U:H2'	36:BA:26:G:O4'	2.11	0.49
2:CB:26:PRO:C	2:CB:28:PHE:H	2.15	0.49
3:CC:18:TRP:HE1	14:CN:55:GLY:H	1.61	0.49
1:CA:1129:C:H4'	1:CA:1130:A:C8	2.47	0.49
1:CA:191:G:C4	20:CT:105:SER:HB3	2.47	0.49
36:DA:784:A:C8	36:DA:792:G:C5	3.00	0.49
36:BA:2071:A:H2	36:BA:2441:C:N3	2.10	0.49
1:CA:1508:G:C6	1:CA:1509:C:C4	3.01	0.49
15:CO:11:VAL:O	15:CO:14:GLU:HB3	2.13	0.49
20:AT:33:ILE:CG2	20:AT:63:ILE:HG12	2.42	0.49
18:AR:50:ILE:HD11	18:AR:74:ARG:CZ	2.42	0.49
44:DJ:116:UNK:O	44:DJ:123:UNK:N	2.45	0.49
36:DA:635:C:H1'	36:DA:639:U:H5''	1.95	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:979:G:H21	36:DA:985:C:N4	2.10	0.49
11:AK:64:ALA:O	11:AK:68:ALA:N	2.42	0.49
52:BT:129:ARG:NH1	52:BT:131:ALA:HB3	2.26	0.49
36:DA:1328:G:H2'	36:DA:1330:C:C5	2.47	0.49
50:BR:103:ARG:HH11	50:BR:110:PRO:CD	2.24	0.49
10:CJ:80:LYS:HB3	10:CJ:80:LYS:HZ3	1.77	0.49
22:AW:53:G:C2	22:AW:54:U:N3	2.80	0.49
1:AA:189:G:C6	1:AA:189(A):C:N4	2.81	0.49
58:DZ:40:ASP:OD1	58:DZ:41:LEU:N	2.45	0.49
36:DA:391:G:H2'	36:DA:392:C:H5'	1.94	0.49
55:DW:68:ARG:O	55:DW:110:LYS:CB	2.60	0.49
1:CA:189:G:H2'	1:CA:189(A):C:H6	1.75	0.49
1:AA:1088:G:H2'	1:AA:1089:G:C8	2.46	0.49
26:B0:30:VAL:HA	26:B0:66:VAL:CA	2.40	0.49
55:BW:65:LEU:HB3	55:BW:68:ARG:HD2	1.95	0.49
36:DA:2317:C:O2'	36:DA:2318:G:H5'	2.11	0.49
58:BZ:20:ARG:CZ	58:BZ:20:ARG:HB2	2.41	0.49
45:BK:87:UNK:O	45:BK:88:UNK:CB	2.59	0.49
41:DF:42:ALA:O	41:DF:44:ARG:N	2.43	0.49
36:DA:1722:A:O2'	36:DA:1739:U:H5''	2.12	0.49
1:CA:1483:A:H2	36:DA:1960:A:H1'	1.78	0.49
49:DQ:10:ARG:NH1	49:DQ:10:ARG:CB	2.75	0.49
25:CZ:267:VAL:CG2	25:CZ:288:VAL:HG13	2.42	0.49
36:BA:2558:C:H2'	36:BA:2559:C:C6	2.47	0.49
45:DK:99:UNK:O	45:DK:135:UNK:O	2.30	0.49
18:CR:24:ALA:O	18:CR:26:LEU:N	2.45	0.49
1:CA:1360:A:C2'	1:CA:1361:G:H5'	2.42	0.49
4:CD:182:LYS:O	4:CD:183:GLY:O	2.31	0.49
1:AA:722:A:O2'	1:AA:723:U:H3'	2.12	0.49
25:AZ:12:VAL:HG13	25:AZ:100:ASP:OD2	2.11	0.49
25:CZ:355:LEU:C	25:CZ:359:VAL:HG21	2.31	0.49
34:B8:8:LYS:HE2	34:B8:11:LYS:HE2	1.93	0.49
32:B6:5:VAL:HG11	36:BA:2283:C:C4'	2.43	0.49
32:B6:19:ARG:NH1	36:BA:2400:G:O2'	2.43	0.49
36:BA:29:U:O2'	53:BU:8:VAL:HG23	2.13	0.49
36:BA:810:U:OP1	36:BA:1253:A:N7	2.45	0.49
36:DA:1279:G:N2	36:DA:1292:U:C2	2.81	0.49
36:DA:1798:U:C5'	39:DD:259:THR:HB	2.42	0.49
36:DA:1814:G:H2'	36:DA:1815:A:N7	2.28	0.49
39:DD:270:ILE:C	39:DD:270:ILE:HD12	2.32	0.49
32:D6:15:GLU:CD	32:D6:18:ARG:NH2	2.65	0.49
36:DA:2348:U:O2'	36:DA:2349:G:H5'	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2414:G:H21	48:DP:67:MET:HE1	1.77	0.49
34:D8:13:ARG:HB3	48:DP:63:PRO:HA	1.95	0.49
36:DA:85:G:OP1	57:DY:9:LYS:HB2	2.12	0.49
36:DA:654(B):C:H2'	36:DA:654(C):G:H8	1.76	0.49
36:DA:2524:G:H8	36:DA:2524:G:H5'	1.77	0.49
35:D9:25:VAL:HB	35:D9:34:GLN:HB3	1.94	0.49
1:AA:1157:A:C4	1:AA:1181:G:N2	2.80	0.49
41:BF:118:ALA:HB1	41:BF:123:LEU:HD22	1.95	0.49
43:BH:41:MET:O	43:BH:42:ARG:CB	2.60	0.49
4:AD:74:GLN:O	4:AD:77:ASN:HB3	2.13	0.49
40:BE:102:VAL:HG12	40:BE:199:ARG:O	2.12	0.49
42:BG:58:GLN:NE2	42:BG:62:LEU:HD11	2.27	0.49
36:DA:572:A:H61	36:DA:2029:G:N2	2.06	0.49
46:DN:75:TYR:HB2	46:DN:82:LEU:HD13	1.94	0.49
53:DU:90:VAL:HG21	54:DV:47:VAL:CG2	2.43	0.49
2:AB:219:VAL:CA	2:AB:222:ILE:HG12	2.42	0.49
1:CA:968:A:C4	1:CA:1062:U:H4'	2.47	0.49
1:CA:841:U:H3'	1:CA:848:C:O4'	2.13	0.49
5:AE:12:LEU:HD22	5:AE:12:LEU:C	2.32	0.49
25:CZ:155:ARG:HA	25:CZ:158:LEU:HD12	1.94	0.49
56:BX:7:VAL:O	56:BX:30:VAL:HA	2.12	0.49
36:BA:1661:G:C6	36:BA:2000:G:C2	3.00	0.49
36:BA:2639:A:H3'	36:BA:2640:G:C8	2.47	0.49
57:DY:81:LYS:HG3	57:DY:97:ARG:HG3	1.95	0.49
36:BA:860:U:C4	36:BA:2268:A:C8	3.00	0.49
1:AA:1520:G:O2'	1:AA:1521:G:H5'	2.11	0.49
4:AD:186:LEU:O	4:AD:187:ARG:CB	2.61	0.49
51:DS:88:ASP:O	51:DS:89:ARG:HB3	2.12	0.49
51:DS:89:ARG:HG3	51:DS:92:TYR:N	2.27	0.49
57:BY:8:LYS:HD2	57:BY:8:LYS:N	2.06	0.49
42:BG:34:LEU:HA	42:BG:161:THR:CB	2.42	0.49
36:DA:1970:A:H5''	36:DA:1971:A:OP1	2.12	0.49
36:DA:1826:G:OP2	39:DD:222:ARG:HB3	2.12	0.49
31:B5:55:ARG:HD3	31:B5:56:LYS:H	1.76	0.49
31:B5:56:LYS:O	31:B5:57:VAL:C	2.50	0.49
22:AW:17:C:H42	36:BA:2180:U:H3	1.59	0.49
25:AZ:255:ILE:HG12	25:AZ:304:LEU:CD2	2.42	0.49
25:AZ:246:LYS:CB	25:AZ:281:ILE:HG22	2.33	0.49
31:B5:16:ARG:HG2	31:B5:16:ARG:HH11	1.77	0.49
1:AA:902:G:H2'	1:AA:903:G:C8	2.31	0.49
14:CN:12:ARG:HB3	14:CN:14:PRO:HD2	1.93	0.49
57:DY:86:ARG:O	57:DY:92:ASN:HA	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1639:U:O2'	36:DA:1640:C:H5''	2.12	0.49
42:DG:154:GLY:O	42:DG:155:MET:CB	2.61	0.49
43:DH:20:ALA:HB1	43:DH:21:PRO:HD3	1.94	0.49
2:AB:173:ALA:O	2:AB:174:VAL:C	2.50	0.49
4:AD:108:LEU:O	4:AD:108:LEU:HG	2.12	0.49
15:AO:81:LEU:CD1	15:AO:85:LEU:HD12	2.42	0.49
2:CB:25:ASN:O	2:CB:27:LYS:N	2.45	0.49
3:CC:94:LEU:O	3:CC:95:THR:OG1	2.21	0.49
10:CJ:6:ILE:HG22	10:CJ:97:GLU:O	2.12	0.49
1:AA:1439:C:H5'	20:AT:38:LYS:NZ	2.27	0.49
36:DA:2247:A:H2'	36:DA:2248:C:O4'	2.12	0.49
1:CA:1497:G:O2'	1:CA:1498:U:H5'	2.11	0.49
20:AT:32:ALA:O	20:AT:36:LEU:HB2	2.12	0.49
1:CA:51:A:H4'	1:CA:52:G:C5'	2.43	0.49
27:D1:17:SER:CB	27:D1:38:SER:HB2	2.41	0.49
36:DA:116:C:O2	36:DA:126:A:H2	1.94	0.49
1:CA:66:G:O5'	1:CA:66:G:H8	1.96	0.49
39:DD:69:ARG:NH2	39:DD:192:THR:CB	2.75	0.49
36:DA:806:C:O2'	36:DA:2445:G:C4'	2.59	0.49
36:BA:976:C:H2'	36:BA:977:G:H8	1.77	0.49
36:BA:218:A:O2'	36:BA:219:G:H5'	2.12	0.49
36:DA:272(E):G:H2'	36:DA:272(F):C:H5'	1.93	0.49
1:CA:686:U:O2'	1:CA:687:A:O5'	2.31	0.49
11:CK:77:MET:HG3	11:CK:78:GLN:N	2.26	0.49
36:DA:2052:G:O4'	40:DE:142:GLY:HA3	2.12	0.49
36:BA:391:G:O2'	36:BA:392:C:H5'	2.12	0.49
17:CQ:29:HIS:CE1	17:CQ:31:LEU:N	2.81	0.49
17:AQ:88:TYR:O	17:AQ:89:LEU:C	2.50	0.49
22:AW:25:C:H2'	22:AW:26:A:H8	1.76	0.49
43:DH:59:ARG:HA	43:DH:62:LYS:HB2	1.94	0.49
36:BA:2488:A:H2'	36:BA:2489:G:C8	2.48	0.49
25:CZ:89:ILE:O	25:CZ:92:MET:N	2.39	0.49
36:BA:1429:G:H2'	36:BA:1430:C:H6	1.78	0.49
36:DA:1478:G:C2	36:DA:1479:G:C5	3.01	0.49
6:CF:5:GLU:HA	6:CF:63:TYR:O	2.12	0.49
20:CT:27:LYS:O	20:CT:27:LYS:HD3	2.12	0.49
7:AG:51:GLN:HA	7:AG:51:GLN:OE1	2.11	0.49
39:BD:218:ARG:HG3	39:BD:218:ARG:HH11	1.77	0.49
32:B6:53:LYS:HD3	32:B6:54:ILE:N	2.20	0.49
34:B8:31:HIS:O	34:B8:32:LEU:C	2.51	0.49
36:DA:1275:A:N7	50:DR:16:HIS:HB2	2.27	0.49
34:D8:52:LYS:N	34:D8:53:PRO:CD	2.73	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2390:U:O2'	36:DA:2391:G:H5'	2.12	0.49
48:DP:101:VAL:C	48:DP:103:ALA:N	2.66	0.49
34:D8:13:ARG:HB2	48:DP:62:LEU:O	2.13	0.49
25:AZ:138:VAL:HG23	25:AZ:174:SER:N	2.27	0.49
25:AZ:72:THR:CG2	25:AZ:203:LEU:HD23	2.31	0.49
36:DA:1203:G:C6	36:DA:1204:A:N6	2.81	0.49
36:DA:1245:G:C5'	41:DF:34:TRP:HZ2	2.26	0.49
35:D9:36:GLN:HG2	36:DA:1124:C:O2'	2.12	0.49
36:BA:2524:G:C8	36:BA:2524:G:H5'	2.47	0.49
39:BD:252:TRP:CD1	39:BD:252:TRP:N	2.80	0.49
38:BC:78:ALA:HB1	38:BC:82:LYS:HB2	1.95	0.49
58:DZ:108:PRO:HA	58:DZ:141:VAL:CG1	2.42	0.49
36:BA:601:C:O2	36:BA:605:C:H4'	2.13	0.49
1:AA:1057:G:H2'	1:AA:1058:G:C8	2.48	0.49
49:BQ:64:ILE:HG22	49:BQ:65:PHE:N	2.28	0.49
28:B2:51:ARG:O	28:B2:54:LYS:HB3	2.13	0.49
40:BE:195:LEU:HD11	40:BE:197:ILE:CG2	2.42	0.49
10:AJ:17:ASP:CB	10:AJ:70:ARG:HH21	2.25	0.49
13:AM:15:VAL:O	13:AM:19:LEU:HD23	2.13	0.49
56:DX:26:TYR:O	56:DX:80:ILE:HA	2.13	0.49
53:DU:86:ALA:O	53:DU:88:ILE:N	2.45	0.49
36:BA:1487:G:N2	36:BA:1488:G:H1'	2.27	0.49
1:AA:607:A:C2	16:AP:31:LYS:HG3	2.48	0.49
1:CA:544:G:C6	1:CA:545:C:N3	2.81	0.49
1:AA:945:G:O2'	1:AA:946:A:H5'	2.13	0.49
13:AM:102:ARG:HD3	13:AM:105:THR:OG1	2.12	0.49
36:BA:2681:C:O2	36:BA:2681:C:H2'	2.11	0.49
36:BA:2787:C:C2'	40:BE:61:ARG:HD3	2.42	0.49
36:DA:1672:C:N3	36:DA:1673:U:C5	2.81	0.49
58:BZ:69:THR:C	58:BZ:70:LEU:HD23	2.32	0.49
58:BZ:72:ARG:HG3	58:BZ:89:PHE:HB2	1.95	0.49
57:DY:15:VAL:HB	57:DY:20:TYR:O	2.13	0.49
9:AI:10:ARG:HD2	9:AI:75:ASP:OD1	2.13	0.49
1:AA:669:U:H2'	1:AA:670:G:C8	2.47	0.49
1:AA:967:C:H4'	9:AI:125:TYR:HE2	1.77	0.49
19:AS:9:VAL:C	19:AS:11:VAL:H	2.16	0.49
51:DS:12:PHE:O	51:DS:14:VAL:N	2.46	0.49
46:BN:137:LYS:O	46:BN:138:LEU:HG	2.12	0.49
55:DW:73:ALA:HB3	55:DW:106:ILE:HD11	1.94	0.49
24:CY:16:H2U:H52	24:CY:17:H2U:H52	1.95	0.49
2:AB:47:THR:HG22	2:AB:51:LEU:HD11	1.94	0.49
4:CD:186:LEU:O	4:CD:187:ARG:CB	2.60	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:281:ILE:O	25:AZ:284:ASP:OD2	2.30	0.49
19:CS:9:VAL:HG12	19:CS:39:THR:HB	1.93	0.49
39:BD:142:VAL:CG2	39:BD:143:HIS:N	2.74	0.49
36:DA:449:A:H4'	53:DU:3:ARG:HH21	1.76	0.49
36:DA:268:C:N4	36:DA:425:G:C6	2.81	0.49
36:DA:2582:G:N2	36:DA:2583:G:C1'	2.75	0.49
42:BG:44:GLY:C	42:BG:46:ALA:H	2.14	0.49
20:AT:74:LYS:HD3	20:AT:74:LYS:H	1.77	0.49
43:DH:148:ILE:HG22	43:DH:162:ILE:HD13	1.94	0.49
40:DE:96:PHE:CD2	40:DE:182:LEU:HD21	2.47	0.49
8:CH:101:PRO:HG2	8:CH:133:LEU:HD11	1.94	0.49
22:CV:17:C:H3'	22:CV:18:G:H5''	1.95	0.49
3:CC:58:GLU:O	3:CC:59:ARG:HG3	2.12	0.49
1:AA:841:U:H3'	1:AA:848:C:O4'	2.13	0.49
10:CJ:75:ILE:HG13	10:CJ:76:ASN:N	2.25	0.49
1:AA:1104:G:H4'	2:AB:111:ARG:HH12	1.76	0.49
36:BA:1805:U:H5''	39:BD:250:TRP:CD2	2.47	0.49
1:AA:677:U:H3	1:AA:713:G:H1	1.60	0.49
1:CA:1510:U:O2	1:CA:1526:G:C2	2.66	0.49
1:CA:55:A:H2'	25:CZ:232:THR:CG2	2.39	0.49
36:DA:6:A:O2'	46:DN:130:HIS:CB	2.57	0.49
53:BU:40:PHE:HB3	54:BV:75:PHE:CE1	2.47	0.49
36:DA:1314:C:C6	36:DA:1314:C:H5'	2.33	0.49
36:BA:2579:C:C4'	40:BE:134:ILE:HG12	2.42	0.49
1:AA:1387:G:C5	1:AA:1388:C:C5	3.01	0.49
18:CR:53:ARG:C	18:CR:55:ARG:N	2.66	0.49
33:D7:19:ARG:HB3	36:DA:125:G:H5''	1.93	0.49
1:AA:1092:A:O2'	1:AA:1093:A:H5'	2.12	0.49
1:AA:1320:C:H5'	1:AA:1320:C:H6	1.77	0.49
1:CA:1469:G:N1	1:CA:1470:G:C6	2.80	0.49
36:DA:1183:G:H2'	36:DA:1184:G:C8	2.44	0.49
36:DA:2491:U:H5'	36:DA:2570:G:H5''	1.94	0.49
12:CL:69:TYR:CB	12:CL:90:VAL:HG21	2.42	0.49
55:BW:70:TYR:CE1	55:BW:72:LYS:HA	2.47	0.49
36:BA:2517:C:HO2'	36:BA:2519:U:H5	1.58	0.49
51:DS:54:LEU:C	51:DS:56:LEU:H	2.15	0.49
36:BA:2053:G:H2'	36:BA:2054:A:O4'	2.12	0.49
1:AA:564:C:C2	17:AQ:31:LEU:HD11	2.47	0.49
1:CA:927:G:H8	1:CA:927:G:C5'	2.25	0.49
36:BA:1511:C:C5	36:BA:1512:U:H5	2.30	0.49
36:BA:2690:C:C5'	36:BA:2872:G:H21	2.26	0.49
11:AK:89:ALA:C	11:AK:91:ARG:N	2.65	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BC:58:VAL:HG22	38:BC:201:PRO:HG2	1.94	0.49
36:DA:280:C:N4	36:DA:360:G:H1	2.10	0.49
1:AA:1030:C:H2'	1:AA:1030(A):G:H5'	1.93	0.49
8:AH:112:LEU:N	8:AH:112:LEU:HD23	2.27	0.49
36:BA:2537:U:H2'	36:BA:2538:C:C6	2.48	0.49
53:DU:102:GLU:HB3	53:DU:105:VAL:HB	1.94	0.49
36:BA:1833:U:O2'	36:BA:1969:A:N1	2.35	0.49
1:CA:823:G:N3	8:CH:1:MET:HE1	2.28	0.49
36:BA:753:C:H2'	36:BA:754:C:C6	2.47	0.49
36:DA:1720:U:H2'	36:DA:1721:G:C4'	2.42	0.49
36:DA:615:G:H2'	36:DA:616:G:H8	1.77	0.49
3:CC:145:GLY:O	3:CC:146:ALA:O	2.30	0.49
38:BC:59:ARG:NE	38:BC:164:ARG:HD2	2.28	0.49
36:DA:701:G:H2'	36:DA:701:G:N3	2.27	0.49
36:BA:1425:G:H2'	36:BA:1426:G:O4'	2.13	0.49
4:AD:99:SER:O	4:AD:140:VAL:HG23	2.12	0.49
49:BQ:33:GLY:O	49:BQ:131:ILE:HA	2.11	0.49
32:B6:15:GLU:OE2	32:B6:41:PRO:HB2	2.11	0.49
36:BA:2259:G:N1	36:BA:2282:G:C6	2.80	0.49
36:BA:252:G:H2'	36:BA:253:C:H6	1.75	0.49
53:BU:9:VAL:C	53:BU:13:LYS:HE2	2.33	0.49
36:DA:2839:G:H2'	36:DA:2840:C:C6	2.47	0.49
50:DR:3:HIS:O	50:DR:5:LYS:N	2.46	0.49
39:DD:44:ASN:CB	39:DD:48:ARG:O	2.60	0.49
48:DP:100:LEU:CB	48:DP:106:LEU:HD13	2.41	0.49
36:BA:2083:G:C5	36:BA:2084:C:C4	3.01	0.49
5:CE:102:ALA:HA	5:CE:120:THR:CG2	2.43	0.49
1:CA:254:G:H2'	1:CA:255:G:C8	2.47	0.49
42:DG:83:ARG:HG3	42:DG:83:ARG:HH11	1.78	0.49
1:AA:1054:C:P	1:AA:1198:G:OP2	2.70	0.49
36:BA:2475:C:N4	36:BA:2529:G:H22	2.09	0.49
28:B2:10:LEU:HD13	36:BA:78:A:OP1	2.13	0.49
13:AM:22:ILE:N	13:AM:22:ILE:HD12	2.27	0.49
36:DA:973:A:O4'	36:DA:1188:U:C6	2.65	0.49
36:BA:1484:G:H3'	36:BA:1485:G:H5''	1.93	0.49
8:CH:103:VAL:HG12	8:CH:108:GLY:HA3	1.94	0.49
17:AQ:64:PRO:HG3	17:AQ:70:ARG:HG2	1.94	0.49
36:DA:2346:A:H5'	36:DA:2383:G:O4'	2.12	0.49
2:CB:92:TYR:CE1	2:CB:151:GLY:N	2.81	0.49
2:CB:166:ASP:HB2	2:CB:205:ASP:OD2	2.12	0.49
1:CA:663:A:H61	1:CA:742:G:H1	1.59	0.49
48:BP:97:PRO:O	48:BP:99:LEU:N	2.43	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:171:ILE:HG22	25:CZ:172:ARG:N	2.26	0.49
56:BX:54:VAL:O	56:BX:55:ASN:ND2	2.39	0.49
36:BA:1683:C:H2'	36:BA:1684:C:C6	2.48	0.49
36:BA:1636:C:O2	36:BA:1760:A:H2	1.95	0.49
47:DO:103:ALA:O	47:DO:106:LEU:HG	2.13	0.49
37:BB:105:A:H3'	37:BB:106:G:H8	1.77	0.49
58:BZ:128:VAL:CG2	58:BZ:129:SER:N	2.75	0.49
37:BB:81:G:C6	37:BB:97:G:C2	3.01	0.49
1:AA:792:A:O2'	1:AA:794:A:N7	2.37	0.49
24:CY:57:G:H3'	24:CY:57:G:OP2	2.13	0.49
57:BY:27:VAL:HG12	57:BY:29:GLU:OE1	2.13	0.49
31:D5:55:ARG:HD3	31:D5:56:LYS:H	1.78	0.49
36:DA:2120:G:N2	36:DA:2178:C:C2	2.81	0.49
36:DA:2149:G:C2'	36:DA:2150:U:H5'	2.43	0.49
1:AA:1526:G:H2'	1:AA:1527:C:H6	1.77	0.49
36:DA:729:G:O6	36:DA:1774:C:N4	2.46	0.49
3:CC:70:VAL:CG1	3:CC:71:ALA:H	2.23	0.49
25:AZ:14:VAL:O	25:AZ:79:HIS:HA	2.11	0.49
16:AP:20:VAL:HA	16:AP:36:ILE:HG13	1.94	0.49
36:BA:1827:C:O2'	36:BA:1828:G:H5'	2.12	0.49
58:DZ:17:ALA:HA	58:DZ:20:ARG:CD	2.39	0.49
58:DZ:29:TYR:N	58:DZ:88:PHE:O	2.46	0.49
16:CP:19:ILE:HG22	16:CP:36:ILE:HG13	1.95	0.49
54:BV:47:VAL:O	54:BV:47:VAL:HG23	2.12	0.49
39:DD:63:ARG:CG	39:DD:63:ARG:NH1	2.69	0.49
39:DD:92:ILE:HD13	39:DD:92:ILE:H	1.77	0.49
38:BC:104:LEU:O	38:BC:105:ASP:CB	2.60	0.49
36:BA:864:G:N2	36:BA:913:U:C2	2.80	0.49
25:CZ:223:MET:HB3	25:CZ:242:ILE:HA	1.94	0.49
15:CO:17:ARG:HG3	15:CO:17:ARG:NH1	2.27	0.49
3:CC:96:GLY:C	3:CC:97:LYS:HG2	2.32	0.49
36:DA:2485:G:O2'	49:DQ:126:PRO:HA	2.12	0.49
20:AT:88:VAL:O	20:AT:91:LEU:HB2	2.12	0.49
1:AA:1338:G:C6	1:AA:1339:A:C6	3.01	0.49
1:CA:445:G:C6	1:CA:490:G:N1	2.80	0.49
36:DA:2197:U:O4	36:DA:2224:G:H2'	2.13	0.49
1:CA:1419:G:O6	1:CA:1482:G:C4	2.66	0.49
36:DA:1346:G:H2'	36:DA:1347:G:H8	1.77	0.49
36:BA:2133:G:O2'	36:BA:2134:A:H8	1.94	0.49
36:DA:1861:G:O2'	36:DA:1862:G:H5'	2.12	0.49
15:AO:10:LYS:HA	15:AO:13:GLN:OE1	2.13	0.49
36:BA:2580:U:H3'	36:BA:2581:G:N2	2.27	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:CK:54:ARG:O	11:CK:57:THR:HG22	2.12	0.49
36:BA:2885:C:C2	36:BA:2886:G:H1'	2.48	0.49
36:BA:185:U:N3	36:BA:212:G:N2	2.61	0.49
1:CA:1109:C:H2'	1:CA:1110:A:H5'	1.94	0.49
1:AA:564:C:C4	17:AQ:31:LEU:HD11	2.47	0.49
12:AL:69:TYR:CB	12:AL:90:VAL:HG21	2.42	0.49
27:B1:73:LEU:O	27:B1:77:ALA:HB2	2.13	0.49
27:B1:18:ILE:HG22	27:B1:19:GLN:N	2.28	0.49
38:DC:161:ILE:CD1	38:DC:161:ILE:C	2.81	0.49
38:BC:181:PRO:HB2	38:BC:183:GLU:OE2	2.12	0.49
36:DA:1713:U:O2'	36:DA:1714:G:H5'	2.13	0.49
1:CA:1031:G:H2'	1:CA:1032:G:C8	2.48	0.49
25:AZ:124:ARG:HG2	63:AZ:502:KIR:H191	1.95	0.49
1:CA:1006:C:H2'	1:CA:1007:C:C5	2.47	0.49
3:AC:72:LYS:C	3:AC:74:GLY:H	2.16	0.49
36:BA:1892:C:H2'	36:BA:1893:C:H6	1.76	0.49
42:DG:145:THR:CG2	42:DG:147:ASP:OD1	2.61	0.49
36:DA:2460:U:O2'	36:DA:2461:C:H5'	2.12	0.49
1:CA:1360:A:O2'	1:CA:1361:G:H5'	2.12	0.49
45:BK:14:UNK:CB	45:BK:50:UNK:HA	2.41	0.49
36:BA:1911:U:H2'	36:BA:1912:A:H5'	1.95	0.49
57:DY:101:LYS:HG2	57:DY:102:CYS:N	2.28	0.49
43:BH:90:LYS:HB3	43:BH:159:GLU:OE2	2.13	0.49
1:CA:417:C:O5'	1:CA:417:C:H6	1.96	0.49
1:AA:431:A:O2'	1:AA:432:A:H5'	2.13	0.49
32:B6:19:ARG:NH2	36:BA:2401:U:OP1	2.46	0.49
36:BA:942:G:H5'	48:BP:35:HIS:C	2.31	0.49
50:DR:2:ARG:HD2	50:DR:2:ARG:C	2.32	0.49
50:DR:36:THR:HB	50:DR:40:LYS:HD2	1.95	0.49
36:DA:247:G:H1'	36:DA:251:A:H62	1.78	0.49
48:DP:61:ARG:C	48:DP:62:LEU:HD23	2.33	0.49
36:DA:109:G:H2'	36:DA:110:G:H8	1.78	0.49
41:DF:111:ALA:HA	41:DF:114:VAL:HB	1.93	0.49
41:DF:192:LEU:C	41:DF:192:LEU:HD23	2.33	0.49
25:CZ:234:ARG:HE	25:CZ:289:LEU:HD22	1.77	0.49
36:BA:695:G:C5	36:BA:768:G:C6	3.01	0.49
36:DA:1856:G:O2'	36:DA:1857:G:H5'	2.12	0.49
36:DA:1884:A:H2'	36:DA:1885:A:O4'	2.13	0.49
17:CQ:5:VAL:HG22	17:CQ:60:ILE:HA	1.94	0.49
58:DZ:108:PRO:HG2	58:DZ:111:VAL:CG2	2.42	0.49
41:BF:3:GLU:O	41:BF:19:GLU:CB	2.59	0.49
4:AD:31:CYS:HG	60:AD:301:ZN:ZN	1.26	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:59:ARG:HA	4:AD:59:ARG:HE	1.78	0.49
4:AD:61:LYS:NZ	4:AD:72:GLU:OE2	2.45	0.49
43:DH:65:HIS:CE1	43:DH:69:ARG:CZ	2.96	0.49
36:BA:2475:C:H5'	36:BA:2476:A:OP2	2.13	0.49
49:BQ:61:GLY:O	58:BZ:177:PRO:HB3	2.12	0.49
36:BA:344:G:P	36:BA:344:G:H3'	2.52	0.49
36:BA:1655:A:C2	36:BA:2049:G:H4'	2.48	0.49
36:DA:575:A:HO2'	36:DA:576:U:H5'	1.77	0.49
53:DU:80:ILE:HG22	53:DU:80:ILE:O	2.12	0.49
1:CA:1048:G:OP1	14:CN:4:LYS:HB2	2.13	0.49
1:CA:963:G:H21	10:CJ:55:LYS:CD	2.25	0.49
4:CD:20:TYR:CA	4:CD:26:CYS:HB3	2.42	0.49
8:AH:17:THR:HB	8:AH:78:GLN:HE22	1.78	0.49
8:AH:38:ILE:O	8:AH:42:GLU:HG2	2.12	0.49
8:AH:6:ILE:HD12	8:AH:6:ILE:H	1.76	0.49
32:D6:6:ARG:CZ	32:D6:6:ARG:HB3	2.43	0.49
40:BE:77:ILE:CG2	40:BE:78:LEU:H	2.03	0.49
32:B6:6:ARG:C	32:B6:8:LYS:H	2.16	0.49
5:AE:103:GLY:H	5:AE:106:PRO:HG3	1.77	0.49
5:AE:10:MET:HG3	5:AE:13:ILE:HD11	1.95	0.49
36:DA:1988:C:C2'	36:DA:1989:G:H5'	2.42	0.49
40:DE:167:VAL:O	40:DE:168:MET:O	2.30	0.49
52:DT:8:LYS:HA	52:DT:11:GLU:OE1	2.12	0.49
58:BZ:10:ARG:HG2	58:BZ:11:GLU:N	2.28	0.49
58:BZ:123:ASP:O	58:BZ:124:ILE:HG23	2.12	0.49
58:BZ:127:LYS:HZ3	58:BZ:164:ALA:HB2	1.76	0.49
10:AJ:63:PHE:N	10:AJ:63:PHE:CD2	2.81	0.49
22:AV:53:G:H2'	22:AV:54:U:C6	2.47	0.49
19:AS:63:THR:HG22	19:AS:66:MET:SD	2.53	0.49
36:DA:1069:A:H1'	36:DA:1070:A:OP1	2.12	0.49
36:BA:325:G:O2'	36:BA:326:G:H5'	2.13	0.49
36:BA:329:G:H22	57:BY:19:LYS:CE	2.18	0.49
57:BY:29:GLU:CD	57:BY:38:ILE:HG21	2.33	0.49
36:DA:2117:A:H61	36:DA:2171:A:H61	1.60	0.49
22:AW:16:U:H3'	22:AW:17:C:H5'	1.94	0.49
4:CD:171:GLY:O	4:CD:173:TRP:N	2.38	0.49
25:AZ:255:ILE:HG22	25:AZ:302:GLN:NE2	2.27	0.49
36:BA:444:C:H2'	36:BA:445:C:O5'	2.13	0.49
36:BA:1794:U:O4'	36:BA:1900:A:C2	2.66	0.49
37:DB:105:A:H2'	37:DB:106:G:O4'	2.13	0.49
49:DQ:67:ARG:NH1	49:DQ:67:ARG:HB3	2.27	0.49
49:DQ:141:GLN:H	58:DZ:53:ILE:HD12	1.77	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1325:C:H5'	21:CU:15:ARG:NE	2.27	0.49
4:CD:108:LEU:HG	4:CD:108:LEU:O	2.13	0.49
36:DA:1636:C:O2	36:DA:1760:A:H2	1.96	0.49
36:DA:445:C:C2'	36:DA:446:G:O4'	2.61	0.49
13:CM:19:LEU:HD22	13:CM:19:LEU:H	1.77	0.49
42:BG:47:LYS:NZ	42:BG:81:LYS:CB	2.76	0.49
36:DA:2306:C:N4	36:DA:2311:A:C8	2.81	0.49
42:DG:18:GLU:OE2	42:DG:21:ARG:CZ	2.60	0.49
43:BH:34:GLU:O	43:BH:36:PRO:HD3	2.11	0.49
20:AT:26:ASN:ND2	20:AT:26:ASN:H	2.10	0.49
4:AD:119:GLN:HG3	4:AD:123:HIS:NE2	2.28	0.49
1:CA:758:G:H8	1:CA:758:G:O5'	1.95	0.49
2:AB:170:GLU:C	2:AB:172:ILE:HD12	2.33	0.49
36:DA:146:G:H2'	36:DA:147:U:H5'	1.95	0.49
20:AT:38:LYS:C	20:AT:40:ALA:H	2.16	0.49
20:AT:37:SER:O	20:AT:41:ILE:HG12	2.12	0.49
1:CA:187:C:O2	20:CT:104:LEU:HD23	2.12	0.49
4:CD:119:GLN:NE2	4:CD:123:HIS:NE2	2.58	0.49
39:DD:249:PRO:HG2	39:DD:250:TRP:N	2.27	0.49
10:AJ:37:PRO:HA	10:AJ:72:VAL:HG22	1.94	0.49
10:AJ:3:LYS:N	10:AJ:74:ILE:O	2.46	0.49
36:DA:2246:G:H2'	36:DA:2247:A:H8	1.71	0.49
36:DA:237:C:H2'	36:DA:238:C:H6	1.78	0.49
7:AG:145:ALA:HA	7:AG:148:ASN:HD22	1.78	0.49
36:BA:1376:C:H2'	36:BA:1377:G:H5'	1.95	0.49
1:AA:929:G:O2'	1:AA:930:C:H5'	2.12	0.49
33:D7:19:ARG:NH2	36:DA:124:G:C8	2.80	0.49
36:BA:1386:C:H2'	36:BA:1387:C:H6	1.77	0.49
38:DC:120:MET:O	38:DC:121:GLY:C	2.51	0.49
36:BA:2222:G:H1'	39:BD:148:GLU:OE2	2.13	0.49
29:B3:35:ARG:NH1	29:B3:35:ARG:HB2	2.21	0.49
1:AA:1320:C:H5'	1:AA:1320:C:C6	2.48	0.49
25:AZ:313:HIS:HB3	25:AZ:403:ILE:CG2	2.42	0.49
11:CK:64:ALA:O	11:CK:68:ALA:N	2.44	0.49
12:CL:83:VAL:CG1	12:CL:84:LEU:N	2.75	0.49
14:CN:24:CYS:N	14:CN:29:ARG:O	2.46	0.49
36:DA:986:C:O2'	36:DA:987:G:H5'	2.13	0.49
18:CR:37:VAL:CG2	18:CR:38:GLU:N	2.76	0.49
22:CV:75:C:OP1	36:DA:2602:A:OP1	2.30	0.49
12:AL:10:LEU:HB3	17:AQ:32:TYR:CE1	2.47	0.49
28:D2:4:SER:O	28:D2:7:ARG:CD	2.61	0.49
36:DA:67:U:H2'	36:DA:68:G:H8	1.78	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1119:C:H2'	1:CA:1120:G:H8	1.72	0.49
25:CZ:19:HIS:HB2	25:CZ:116:THR:OG1	2.13	0.49
12:AL:41:ARG:HD2	12:AL:42:THR:O	2.12	0.49
38:DC:28:LEU:C	38:DC:28:LEU:HD23	2.33	0.49
11:CK:23:ALA:HB3	11:CK:91:ARG:HG2	1.95	0.49
47:BO:12:ASP:C	47:BO:14:THR:H	2.16	0.49
39:DD:273:ARG:CG	39:DD:273:ARG:HH11	2.25	0.49
1:AA:341:C:O2'	1:AA:342:C:H5'	2.12	0.49
8:CH:40:ALA:HB2	8:CH:45:ILE:HG13	1.93	0.49
1:AA:526:C:H2'	1:AA:527:G:C4'	2.43	0.49
1:AA:786:G:C2	1:AA:787:A:H1'	2.48	0.49
1:CA:1006:C:N4	1:CA:1024:G:H21	2.09	0.49
43:DH:30:LYS:CA	43:DH:30:LYS:HE2	2.43	0.49
36:BA:1221:C:C2'	36:BA:1221(A):C:H6	2.26	0.49
25:CZ:324:LYS:HA	25:CZ:365:GLY:N	2.27	0.49
36:BA:389:G:C6	48:BP:70:GLN:HG3	2.48	0.49
11:AK:48:ILE:HG22	11:AK:49:GLY:N	2.27	0.49
36:DA:1265:A:OP1	36:DA:1265:A:H8	1.95	0.49
9:CI:56:LEU:HD23	9:CI:56:LEU:O	2.13	0.49
17:AQ:37:LYS:O	17:AQ:38:ARG:HB2	2.12	0.49
40:BE:123:ALA:O	40:BE:125:GLY:N	2.44	0.49
34:B8:13:ARG:CB	48:BP:63:PRO:HA	2.43	0.49
34:B8:41:ILE:HG23	34:B8:42:ARG:H	1.77	0.49
36:BA:2402:C:O2'	36:BA:2403:C:H5'	2.12	0.49
36:BA:245:G:H22	36:BA:254:G:H1'	1.77	0.49
50:DR:28:LEU:CA	50:DR:34:ILE:HG13	2.43	0.49
39:DD:145:VAL:HG12	39:DD:146:GLU:O	2.12	0.49
28:D2:58:ALA:O	28:D2:59:ARG:C	2.51	0.49
28:D2:2:LYS:NZ	28:D2:59:ARG:HH22	2.11	0.49
36:BA:1884:A:H2'	36:BA:1885:A:O4'	2.12	0.49
36:BA:2228:G:C5	36:BA:2229:C:C4	3.01	0.49
41:DF:31:HIS:CE1	41:DF:34:TRP:CE3	3.01	0.49
1:AA:368:U:P	25:AZ:291:ARG:HH11	2.36	0.49
35:D9:30:PRO:C	35:D9:32:HIS:N	2.66	0.49
39:BD:275:LYS:O	39:BD:276:LYS:HB2	2.12	0.49
36:DA:1890:A:H2	36:DA:2235:G:O4'	1.94	0.49
41:DF:65:TRP:HB3	41:DF:66:PRO:CD	2.43	0.49
38:BC:75:LEU:HD11	38:BC:113:VAL:HG13	1.95	0.49
4:AD:72:GLU:O	4:AD:73:ARG:C	2.51	0.49
49:BQ:51:ARG:CG	49:BQ:52:VAL:N	2.75	0.49
49:BQ:62:GLY:O	58:BZ:177:PRO:HA	2.13	0.49
36:BA:345:A:N3	36:BA:347:A:N6	2.61	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1275:A:C4	50:BR:16:HIS:ND1	2.81	0.49
36:BA:2048:G:H5'	36:BA:2823:A:C2	2.48	0.49
30:B4:5:ILE:O	30:B4:5:ILE:CG1	2.59	0.49
11:CK:127:LYS:C	11:CK:129:SER:H	2.16	0.49
36:DA:372:G:HO2'	36:DA:373:U:P	2.36	0.49
36:DA:568:U:O2'	36:DA:569:U:C5	2.65	0.49
54:DV:19:LYS:HZ3	54:DV:20:LEU:N	2.09	0.49
26:D0:10:THR:HG22	26:D0:12:ASN:N	2.27	0.49
51:BS:68:GLN:C	51:BS:70:GLY:N	2.66	0.49
51:BS:89:ARG:CG	51:BS:92:TYR:HA	2.42	0.49
8:AH:17:THR:HB	8:AH:78:GLN:NE2	2.27	0.49
40:BE:35:GLN:C	40:BE:36:ARG:HD2	2.33	0.49
40:BE:3:GLY:O	40:BE:4:ILE:CB	2.61	0.49
40:BE:77:ILE:CG2	40:BE:78:LEU:N	2.70	0.49
13:AM:81:LEU:HB3	13:AM:89:GLY:HA2	1.94	0.49
5:AE:12:LEU:HD12	5:AE:31:LEU:HB3	1.95	0.49
25:CZ:32:THR:OG1	25:CZ:33:TYR:N	2.46	0.49
36:BA:1992:G:C4	36:BA:1997:G:O6	2.66	0.49
57:DY:37:VAL:CG2	57:DY:38:ILE:H	2.07	0.49
57:DY:74:PRO:O	57:DY:75:ILE:HB	2.12	0.49
7:AG:102:ARG:CG	7:AG:106:GLN:HE21	2.24	0.49
36:BA:1710:C:O5'	36:BA:1710:C:H6	1.95	0.49
58:DZ:153:SER:HB2	58:DZ:167:PRO:HB3	1.93	0.49
7:CG:113:GLU:CG	7:CG:119:ARG:HG2	2.43	0.49
39:DD:80:ALA:HB3	39:DD:94:LEU:O	2.12	0.49
22:AV:17:C:H3'	22:AV:18:G:H5''	1.94	0.49
1:AA:792:A:O2'	1:AA:793:U:OP2	2.31	0.49
51:DS:36:TYR:O	51:DS:37:ALA:HB2	2.12	0.49
42:BG:15:VAL:HG12	42:BG:19:LEU:HD12	1.95	0.49
46:DN:14:VAL:CG1	46:DN:137:LYS:HG3	2.42	0.49
3:AC:94:LEU:O	3:AC:94:LEU:CD1	2.60	0.49
58:DZ:33:LEU:HD11	58:DZ:35:ARG:CG	2.43	0.49
36:DA:708:C:H42	36:DA:723:G:H1	1.60	0.49
1:AA:1003:G:O2'	1:AA:1004:A:H4'	2.11	0.49
53:BU:57:PHE:C	53:BU:59:ARG:N	2.66	0.49
53:BU:90:VAL:HG21	54:BV:47:VAL:CG2	2.43	0.49
39:DD:92:ILE:HG13	39:DD:104:TYR:CD2	2.47	0.49
36:BA:598:G:H5'	48:BP:15:ARG:CB	2.42	0.49
42:DG:41:GLN:HB3	42:DG:43:LEU:HD23	1.91	0.49
37:DB:42:C:H4'	42:DG:67:LYS:HG2	1.95	0.49
36:DA:1168:G:O2'	36:DA:1169:G:H5'	2.12	0.49
13:AM:66:LEU:O	13:AM:67:GLU:O	2.30	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2377:A:O2'	36:BA:2378:A:H5'	2.13	0.49
6:AF:48:LEU:HD12	6:AF:57:GLN:N	2.28	0.49
20:CT:100:ILE:O	20:CT:102:GLY:N	2.37	0.49
1:CA:192:U:C1'	20:CT:103:GLY:HA2	2.41	0.49
39:BD:248:SER:HB2	39:BD:249:PRO:CD	2.42	0.49
8:AH:123:GLU:O	8:AH:127:LEU:HB2	2.12	0.49
12:CL:41:ARG:CD	12:CL:42:THR:H	2.26	0.49
12:CL:41:ARG:HD2	12:CL:42:THR:O	2.12	0.49
1:CA:1516:G:C6	1:CA:1520:G:N1	2.81	0.49
27:D1:50:ARG:HD2	36:DA:2200:C:OP1	2.13	0.49
1:CA:58:C:O2'	1:CA:388:G:N7	2.42	0.49
14:AN:47:LEU:HB3	14:AN:53:LEU:HG	1.95	0.49
1:AA:136:C:H2'	1:AA:137:C:C6	2.48	0.49
36:BA:53:A:H62	36:BA:117:G:H21	1.59	0.49
36:BA:2507:C:H2'	36:BA:2508:G:O4'	2.13	0.49
36:DA:968:G:C6	36:DA:969:U:C4	3.01	0.49
1:CA:229:U:O2'	16:CP:23:ASP:HB2	2.13	0.49
1:CA:1142:G:H2'	1:CA:1143:G:C5'	2.39	0.49
1:CA:1269:A:C2'	1:CA:1270:C:H5'	2.42	0.49
36:DA:2422:A:C3'	36:DA:2422:A:C8	2.96	0.49
26:D0:20:ARG:CD	26:D0:20:ARG:H	2.20	0.49
57:BY:2:ARG:O	57:BY:4:LYS:N	2.45	0.49
11:AK:77:MET:HG3	11:AK:78:GLN:N	2.28	0.49
1:AA:189(J):G:O2'	1:AA:189(K):U:H5'	2.12	0.49
9:AI:80:GLY:C	9:AI:82:ALA:H	2.16	0.49
36:DA:2497:A:OP2	36:DA:2497:A:H8	1.95	0.49
10:CJ:92:THR:CG2	10:CJ:93:GLY:H	2.23	0.49
17:AQ:56:VAL:HG23	17:AQ:81:ARG:HG3	1.92	0.49
45:BK:58:UNK:O	45:BK:65:UNK:HA	2.13	0.49
43:BH:105:LEU:CD2	43:BH:105:LEU:H	2.25	0.49
36:DA:1423:G:H2'	36:DA:1424:G:H8	1.74	0.49
26:D0:26:TYR:HB2	26:D0:29:GLN:OE1	2.10	0.49
36:DA:2298:A:H2'	36:DA:2299:G:O4'	2.13	0.49
43:DH:105:LEU:O	43:DH:105:LEU:HG	2.13	0.49
36:DA:2532:G:H2'	36:DA:2533:A:C8	2.47	0.49
36:DA:521:G:H2'	36:DA:522:G:C8	2.48	0.49
16:AP:44:THR:O	16:AP:45:THR:HB	2.13	0.49
5:CE:67:VAL:HG22	5:CE:68:GLU:N	2.28	0.49
1:AA:594:G:C2'	1:AA:595:G:H5'	2.42	0.49
47:BO:53:LYS:N	47:BO:53:LYS:HD2	2.28	0.49
9:CI:28:VAL:O	9:CI:29:ASN:C	2.51	0.49
16:AP:82:GLN:O	16:AP:83:GLU:HB2	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CC:140:ARG:HG3	3:CC:140:ARG:HH11	1.77	0.49
5:CE:82:VAL:O	5:CE:82:VAL:HG12	2.11	0.49
36:DA:773:U:H5'	39:DD:47:GLY:HA2	1.93	0.49
1:CA:236:G:C6	1:CA:237:C:C4	3.01	0.49
40:DE:195:LEU:HD11	40:DE:197:ILE:CG2	2.42	0.49
28:D2:30:ARG:O	28:D2:34:GLU:HB2	2.12	0.49
36:DA:230:U:O2'	36:DA:231:C:H5'	2.13	0.49
39:BD:25:THR:O	39:BD:27:THR:HG22	2.13	0.49
1:AA:532:A:HO2'	1:AA:533:A:P	2.36	0.49
36:BA:2745:C:O3'	43:BH:142:GLY:HA3	2.12	0.49
28:B2:51:ARG:HG3	28:B2:52:ASP:N	2.28	0.49
13:AM:10:PRO:CG	13:AM:18:ALA:HB1	2.41	0.49
13:AM:32:GLU:O	13:AM:34:LEU:N	2.46	0.49
36:DA:1217:C:C2	36:DA:1218:C:C5	3.01	0.49
53:DU:57:PHE:C	53:DU:59:ARG:N	2.64	0.49
1:AA:260:G:O2'	1:AA:261:U:H5'	2.12	0.49
2:CB:71:VAL:O	2:CB:164:VAL:HA	2.12	0.49
1:CA:668:G:H2'	1:CA:669:U:C6	2.48	0.49
56:DX:54:VAL:O	56:DX:55:ASN:ND2	2.40	0.49
1:AA:1069:C:H2'	1:AA:1070:U:O5'	2.12	0.49
36:BA:2713:A:H3'	36:BA:2714:G:C5'	2.43	0.49
36:BA:2845:G:O2'	36:BA:2846:G:H5'	2.13	0.49
36:DA:1666:G:O3'	47:DO:6:THR:HG23	2.13	0.49
36:DA:1669:A:OP2	36:DA:1670:C:OP2	2.30	0.49
58:BZ:24:LEU:C	58:BZ:24:LEU:CD2	2.81	0.49
57:DY:17:SER:CB	57:DY:71:LYS:HD2	2.42	0.49
57:DY:28:LYS:O	57:DY:38:ILE:HG22	2.13	0.49
57:DY:29:GLU:CD	57:DY:38:ILE:HG21	2.33	0.49
1:CA:1285:A:H1'	1:CA:1286:A:C8	2.47	0.49
1:CA:1286:A:O2'	1:CA:1287:A:C5'	2.61	0.49
7:CG:31:MET:C	7:CG:32:ARG:HG3	2.33	0.49
9:CI:93:ARG:HA	9:CI:96:LEU:HB3	1.94	0.49
36:DA:1060:U:H1'	36:DA:1061:U:H5''	1.94	0.49
42:BG:121:ASN:CG	42:BG:124:SER:HB2	2.33	0.49
1:AA:1508:G:O5'	1:AA:1508:G:H8	1.96	0.49
1:CA:1077:G:N2	1:CA:1079:G:H3'	2.28	0.49
1:CA:862:C:O2'	1:CA:863:U:H5'	2.12	0.49
36:BA:1247:A:OP1	41:BF:95:ARG:NH2	2.46	0.49
37:DB:105:A:H4'	58:DZ:89:PHE:CD2	2.47	0.49
36:DA:716:A:C3'	36:DA:717:G:H5''	2.42	0.49
1:CA:1217:C:O2'	1:CA:1218:C:H5'	2.12	0.49
14:CN:12:ARG:HB3	14:CN:14:PRO:CG	2.43	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BN:30:ILE:O	46:BN:34:LEU:HB2	2.13	0.49
54:BV:47:VAL:O	54:BV:49:THR:O	2.31	0.49
39:BD:101:GLU:CG	39:BD:102:LYS:N	2.75	0.49
39:BD:128:GLY:H	39:BD:193:VAL:HG13	1.77	0.49
36:DA:2713:A:H3'	36:DA:2714:G:H5'	1.93	0.49
36:DA:1222:C:C3'	36:DA:1223:G:H5''	2.43	0.49
41:DF:51:THR:CG2	41:DF:92:PRO:HD2	2.43	0.49
36:BA:1423:G:H2'	36:BA:1424:G:H8	1.76	0.49
42:DG:138:GLN:HA	42:DG:155:MET:CE	2.42	0.49
36:BA:1542:A:H3'	36:BA:1542:A:C8	2.47	0.49
57:BY:95:LYS:HE3	57:BY:100:ALA:CB	2.43	0.49
54:DV:43:GLU:O	54:DV:44:LYS:HB2	2.12	0.49
1:AA:585:G:C4'	12:AL:8:ASN:HD21	2.15	0.49
2:AB:60:ASP:CB	2:AB:64:ARG:HH21	2.25	0.49
5:AE:76:ILE:CG1	5:AE:77:PRO:HD2	2.41	0.49
1:CA:874:G:C6	1:CA:875:C:C4	3.01	0.49
10:CJ:8:LEU:CD2	10:CJ:96:ILE:HG22	2.43	0.49
36:DA:910:A:N6	49:DQ:11:LYS:O	2.46	0.49
36:DA:784:A:C6	39:DD:229:VAL:HG11	2.46	0.49
36:BA:2441:C:H2'	36:BA:2442:C:C6	2.39	0.49
36:DA:25:U:H2'	36:DA:26:G:O4'	2.12	0.49
7:AG:145:ALA:O	7:AG:146:GLU:C	2.51	0.49
36:DA:218:A:C2'	36:DA:219:G:H5'	2.43	0.49
1:CA:356:A:H2'	1:CA:357:G:H8	1.77	0.49
18:CR:50:ILE:CD1	18:CR:70:ILE:HG21	2.39	0.49
44:BJ:116:UNK:O	44:BJ:123:UNK:N	2.46	0.49
39:BD:196:VAL:O	39:BD:196:VAL:CG1	2.60	0.49
1:CA:1245:A:O2'	1:CA:1246:C:H5'	2.13	0.49
36:DA:2373:G:H2'	36:DA:2374:C:C6	2.48	0.49
29:D3:14:GLY:O	36:DA:969:U:H4'	2.13	0.49
25:AZ:317:GLU:HG3	25:AZ:404:LEU:CD2	2.40	0.49
1:CA:1464:G:O2'	1:CA:1465:C:H5'	2.13	0.49
36:BA:185:U:H2'	36:BA:186:G:C8	2.48	0.49
36:DA:1328:G:H4'	36:DA:1329:U:H5	1.78	0.49
12:CL:55:VAL:HG23	12:CL:68:ALA:C	2.33	0.49
36:DA:216:A:C2'	36:DA:217:G:H5'	2.43	0.49
36:BA:1322:A:H2'	36:BA:1323:U:C6	2.47	0.49
22:CW:55:U:HO2'	22:CW:56:C:H6	1.55	0.49
56:DX:74:PRO:O	56:DX:76:ARG:HD2	2.13	0.49
56:DX:43:VAL:O	56:DX:47:PHE:HB2	2.13	0.49
1:AA:778:G:H2'	1:AA:779:C:H6	1.78	0.49
58:DZ:8:TYR:O	58:DZ:9:TYR:C	2.50	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:642:A:H1'	8:CH:113:SER:HG	1.76	0.49
36:DA:2689:U:H4'	36:DA:2690:C:OP2	2.12	0.49
36:DA:2690:C:H4'	36:DA:2872:G:H21	1.78	0.49
53:DU:47:TYR:HA	53:DU:50:ARG:HB2	1.95	0.49
38:DC:181:PRO:HB2	38:DC:183:GLU:OE2	2.12	0.49
6:AF:14:LEU:HD13	6:AF:15:ASP:N	2.28	0.49
36:BA:479:A:H4'	36:BA:480:A:H5'	1.95	0.49
36:DA:1799:G:H5'	36:DA:1819:A:N6	2.28	0.49
3:CC:157:ILE:HD13	3:CC:166:GLU:HB2	1.94	0.49
20:CT:37:SER:O	20:CT:41:ILE:HG12	2.12	0.49
36:DA:2792:G:O2'	36:DA:2793:G:H5'	2.12	0.49
36:DA:1416:G:O2'	36:DA:1417:C:H5	1.95	0.49
36:DA:182:A:C6	36:DA:183:C:C4	3.01	0.49
25:CZ:263:ARG:HH21	25:CZ:297:GLU:CB	2.26	0.49
1:AA:110:C:C2'	1:AA:111:G:H5'	2.43	0.49
36:BA:589:C:H2'	36:BA:590:A:C8	2.48	0.49
36:DA:1429:G:H2'	36:DA:1430:C:H6	1.78	0.49
36:BA:648:G:H2'	36:BA:649:G:C8	2.48	0.49
33:D7:29:LYS:HE3	36:DA:210:C:OP2	2.13	0.49
1:CA:1085:U:H5'	1:CA:1094:G:N2	2.28	0.49
1:AA:682:G:C6	1:AA:683:G:N7	2.80	0.49
36:DA:2770:G:H5'	36:DA:2771:C:OP2	2.13	0.49
6:AF:101:ALA:OXT	18:AR:28:GLU:HG2	2.13	0.49
38:DC:66:HIS:CG	38:DC:184:LYS:HD2	2.47	0.49
53:BU:10:ARG:O	53:BU:11:ARG:C	2.50	0.49
36:DA:2822:G:OP2	40:DE:110:GLY:C	2.51	0.49
50:DR:17:ARG:NH1	50:DR:17:ARG:HB3	2.28	0.49
50:DR:59:ASP:O	50:DR:60:LEU:C	2.50	0.49
36:DA:2261:C:H1'	36:DA:2388:A:H1'	1.95	0.49
36:DA:2284:C:H42	36:DA:2384:G:H1	1.59	0.49
48:DP:59:LEU:C	48:DP:61:ARG:H	2.16	0.49
25:AZ:25:THR:OG1	62:AZ:501:GDP:O2B	2.30	0.49
36:BA:2236:C:H2'	36:BA:2237:G:O4'	2.13	0.49
24:CY:61:C:C3'	24:CY:62:U:H5''	2.40	0.49
41:DF:25:PRO:HB3	41:DF:119:ARG:HA	1.95	0.49
38:DC:83:ILE:HG23	38:DC:95:GLY:HA3	1.95	0.49
1:CA:234:C:O2'	1:CA:235:C:H5'	2.13	0.49
4:AD:65:ARG:HD2	4:AD:72:GLU:N	2.27	0.49
4:AD:70:ILE:CG2	4:AD:74:GLN:HB2	2.42	0.49
28:B2:24:LEU:HD22	28:B2:25:VAL:HG23	1.94	0.49
41:BF:170:LEU:HB3	41:BF:173:VAL:HG23	1.95	0.49
36:BA:1651:G:N2	36:BA:1652:A:H1'	2.27	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BR:67:LEU:CD2	50:BR:76:VAL:HG21	2.42	0.49
50:BR:4:LEU:HD12	50:BR:6:SER:O	2.13	0.49
50:BR:76:VAL:CG1	50:BR:77:ARG:N	2.75	0.49
13:AM:29:ARG:HA	13:AM:32:GLU:OE2	2.13	0.49
1:CA:1188:A:H2'	1:CA:1189:C:O4'	2.13	0.49
36:DA:2023:G:O2'	36:DA:2024:G:H5'	2.13	0.49
36:DA:533:G:H5'	53:DU:24:TYR:CE2	2.48	0.49
36:DA:580:C:O2'	36:DA:581:C:H5'	2.12	0.49
53:DU:28:ARG:O	53:DU:35:ALA:HA	2.12	0.49
36:BA:1503:U:H2'	36:BA:1504:C:C5	2.48	0.49
1:AA:356:A:H2'	1:AA:357:G:C8	2.48	0.49
1:AA:59:A:C2	1:AA:331:G:N3	2.81	0.49
1:CA:507:C:C6	1:CA:508:C:C5	3.01	0.49
1:CA:517:G:N2	1:CA:533:A:OP2	2.44	0.49
4:CD:58:LEU:O	4:CD:62:GLN:HG2	2.13	0.49
2:CB:200:ILE:HG22	2:CB:202:PRO:CD	2.43	0.49
36:BA:629:G:H5'	36:BA:629:G:H8	1.78	0.49
36:DA:1763:G:H2'	36:DA:1764:G:H5'	1.94	0.49
36:DA:1764:G:C6	36:DA:1989:G:C2	3.01	0.49
47:DO:72:PRO:O	47:DO:74:GLY:N	2.45	0.49
52:DT:61:PHE:N	52:DT:61:PHE:CD2	2.80	0.49
38:BC:189:ILE:HG22	38:BC:190:ARG:N	2.28	0.49
57:DY:96:ILE:CD1	57:DY:99:CYS:SG	3.01	0.49
1:AA:1363(A):A:H1'	1:AA:1365:G:N7	2.27	0.49
1:AA:1367:C:H5'	10:AJ:60:ARG:CZ	2.42	0.49
14:AN:59:ALA:O	14:AN:60:SER:CB	2.61	0.49
29:D3:15:TYR:OH	37:DB:84:C:OP1	2.26	0.49
22:CV:50:U:C2'	22:CV:51:U:H5'	2.42	0.49
22:CV:5:G:H2'	22:CV:6:G:H8	1.78	0.49
22:AV:50:U:C2'	22:AV:51:U:H5'	2.43	0.49
1:AA:1497:G:O2'	1:AA:1518:A:N1	2.45	0.49
1:AA:1519:A:H5''	1:AA:1520:G:C8	2.48	0.49
57:BY:15:VAL:HB	57:BY:20:TYR:O	2.13	0.49
36:DA:2122:U:O2	38:DC:172:HIS:NE2	2.45	0.49
1:CA:945:G:O2'	1:CA:946:A:H5'	2.12	0.49
41:BF:8:GLN:HB3	41:BF:126:VAL:HA	1.95	0.49
36:BA:2186:G:C2	36:BA:2187:G:C6	3.01	0.49
3:AC:35:GLU:O	3:AC:37:GLN:N	2.46	0.49
36:DA:1091:G:H2'	36:DA:1092:C:C6	2.48	0.49
36:BA:437:G:O2'	36:BA:438:G:H5'	2.13	0.49
36:BA:1770:G:O2'	36:BA:1771:C:H5'	2.12	0.49
39:BD:79:VAL:CG1	39:BD:113:VAL:HA	2.43	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BD:136:ILE:CG2	39:BD:140:THR:OG1	2.61	0.49
13:CM:14:ARG:HB2	13:CM:17:VAL:CG2	2.43	0.49
30:D4:16:CYS:HA	30:D4:33:VAL:HG12	1.93	0.49
36:BA:1525:G:O2'	36:BA:1526:G:H5'	2.13	0.49
1:AA:1203:C:O2'	1:AA:1204:A:H5'	2.13	0.49
36:BA:1657:C:OP1	40:BE:136:ARG:HB2	2.13	0.49
7:AG:118:VAL:O	7:AG:121:ALA:HB3	2.13	0.49
1:AA:495:A:H1'	1:AA:496:A:C8	2.47	0.49
40:DE:3:GLY:O	40:DE:4:ILE:CB	2.61	0.49
49:BQ:67:ARG:HB3	49:BQ:67:ARG:NH1	2.28	0.49
25:CZ:257:GLY:HA3	25:CZ:302:GLN:HG2	1.95	0.49
2:CB:179:LYS:CA	8:CH:72:PRO:HD3	2.41	0.49
27:B1:87:PRO:CA	27:B1:90:ILE:HG12	2.32	0.49
36:BA:1131:G:C2	46:BN:75:TYR:CB	2.96	0.49
21:AU:10:ARG:O	21:AU:11:GLY:C	2.49	0.49
36:BA:26:G:H1'	36:BA:515:A:H61	1.78	0.49
8:CH:17:THR:C	8:CH:78:GLN:HE22	2.15	0.49
20:CT:57:ARG:NH1	20:CT:57:ARG:CB	2.73	0.49
24:CY:51:C:H2'	24:CY:52:A:H8	1.78	0.49
1:AA:837:G:C2'	1:AA:838:G:H5'	2.42	0.49
25:CZ:368:VAL:HG12	25:CZ:369:THR:N	2.18	0.49
36:DA:197:A:H4'	36:DA:2069:G:OP1	2.12	0.49
26:D0:51:VAL:HG21	26:D0:79:VAL:O	2.12	0.49
11:AK:114:VAL:HG23	11:AK:115:PRO:HD2	1.95	0.49
1:CA:1508:G:C5	1:CA:1509:C:C5	3.01	0.49
1:AA:750:G:H21	15:AO:24:SER:H	1.59	0.49
39:BD:170:GLY:C	39:BD:172:TYR:H	2.16	0.49
36:DA:1627:G:H2'	36:DA:1628:G:H8	1.78	0.49
1:CA:748:C:HO2'	1:CA:749:C:P	2.35	0.49
1:AA:1493:A:C2	24:AY:37:YG:O4'	2.65	0.49
1:AA:10:A:N7	5:AE:126:ARG:NH1	2.61	0.49
36:BA:116:C:O2	36:BA:126:A:H2	1.96	0.49
40:DE:69:LYS:HD3	40:DE:89:ASP:HA	1.95	0.49
36:DA:892:G:H2'	36:DA:893:C:C6	2.47	0.49
29:D3:17:LYS:HG2	36:DA:969:U:OP1	2.12	0.49
36:BA:201:C:C2'	36:BA:202:U:H5'	2.42	0.49
36:BA:1328:G:H2'	36:BA:1330:C:C5	2.48	0.49
9:AI:6:GLY:CA	9:AI:84:ALA:HB2	2.42	0.49
1:AA:660:G:H2'	1:AA:661:G:C8	2.43	0.49
10:AJ:92:THR:CG2	10:AJ:93:GLY:H	2.25	0.49
27:B1:88:LYS:NZ	27:B1:92:LYS:HE3	2.28	0.49
36:BA:391:G:O5'	36:BA:391:G:C8	2.65	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:DC:58:VAL:HG22	38:DC:201:PRO:HG2	1.94	0.49
36:BA:2271:G:O2'	36:BA:2272:U:H5'	2.13	0.49
22:AV:12:U:H5''	36:BA:1908:C:O2'	2.13	0.49
1:AA:1298:C:OP2	7:AG:114:ARG:NH2	2.46	0.49
32:B6:32:ASN:O	32:B6:33:LYS:CB	2.60	0.49
40:BE:95:ILE:CD1	40:BE:95:ILE:H	2.25	0.49
25:AZ:267:VAL:CG2	25:AZ:288:VAL:HG13	2.43	0.49
2:CB:114:ARG:HH11	2:CB:118:LEU:HD21	1.77	0.49
1:AA:1010:G:H2'	1:AA:1011:G:H8	1.77	0.49
36:BA:755:C:H2'	36:BA:756:C:H6	1.77	0.49
36:BA:2488:A:O2'	36:BA:2489:G:H5'	2.12	0.49
3:AC:134:ILE:HG21	3:AC:168:ALA:HB3	1.94	0.49
1:AA:64:G:H5''	1:AA:65:U:OP2	2.13	0.49
36:BA:654(P):C:H2'	36:BA:654(Q):C:O4'	2.12	0.49
8:CH:125:ARG:HH11	8:CH:125:ARG:HG3	1.77	0.49
36:BA:153:C:H2'	36:BA:154:G:H8	1.78	0.49
34:B8:3:LYS:NZ	36:BA:242:G:OP2	2.42	0.48
50:DR:17:ARG:O	50:DR:20:LEU:HB3	2.13	0.48
32:D6:39:TYR:O	32:D6:47:THR:O	2.31	0.48
25:AZ:29:ALA:HB3	25:AZ:179:LEU:HD22	1.95	0.48
41:DF:203:GLN:C	41:DF:205:ARG:N	2.66	0.48
48:DP:9:ASN:O	48:DP:10:PRO:C	2.49	0.48
35:D9:1:MET:HA	35:D9:4:ARG:CZ	2.43	0.48
10:CJ:14:LYS:C	10:CJ:16:LEU:N	2.65	0.48
43:BH:41:MET:HA	43:BH:55:PRO:HD3	1.96	0.48
43:BH:46:GLU:HB3	43:BH:50:VAL:HG13	1.94	0.48
4:AD:16:GLY:HA2	4:AD:33:MET:HE1	1.95	0.48
1:AA:544:G:OP2	4:AD:66:ARG:NH2	2.46	0.48
36:BA:2530:A:C3'	36:BA:2531:A:H5''	2.42	0.48
40:BE:195:LEU:HD11	40:BE:197:ILE:HG22	1.94	0.48
27:D1:12:PRO:HB3	27:D1:43:TYR:HA	1.95	0.48
36:DA:2649:U:H2'	36:DA:2650:U:C6	2.48	0.48
1:CA:1190:G:OP2	3:CC:5:ILE:HG23	2.13	0.48
46:DN:3:THR:C	46:DN:4:TYR:CG	2.87	0.48
53:DU:92:ARG:NH2	54:DV:10:LYS:CB	2.76	0.48
36:BA:797:C:OP2	41:BF:62:ARG:HG3	2.13	0.48
2:CB:189:ASP:OD1	2:CB:205:ASP:HB3	2.13	0.48
2:CB:88:ALA:HB2	2:CB:219:VAL:CG1	2.43	0.48
41:DF:133:ASN:HB2	41:DF:138:GLU:OE2	2.13	0.48
36:DA:1469:A:H2'	36:DA:1470:G:O4'	2.13	0.48
47:BO:77:ILE:HD11	52:BT:72:VAL:HG12	1.95	0.48
47:DO:119:PRO:HB2	52:DT:68:TYR:CE2	2.47	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:DT:29:ARG:CB	52:DT:85:LYS:HA	2.43	0.48
36:DA:345:A:N3	36:DA:347:A:N6	2.61	0.48
57:DY:36:ALA:HA	57:DY:67:LEU:O	2.13	0.48
14:AN:24:CYS:N	14:AN:29:ARG:O	2.46	0.48
16:CP:5:ARG:NH2	16:CP:24:ALA:O	2.46	0.48
36:DA:1710:C:O5'	36:DA:1710:C:H6	1.96	0.48
1:CA:940:C:H2'	1:CA:941:G:C8	2.47	0.48
7:CG:71:PRO:HA	7:CG:142:GLU:OE1	2.13	0.48
36:BA:1060:U:O2'	36:BA:1061:U:OP2	2.31	0.48
36:BA:307:G:H8	36:BA:307:G:O5'	1.95	0.48
57:BY:7:VAL:CB	57:BY:8:LYS:HD2	2.29	0.48
42:BG:9:ARG:HH11	42:BG:9:ARG:HB3	1.76	0.48
46:BN:131:GLN:NE2	46:BN:133:GLN:CA	2.76	0.48
19:CS:28:LYS:HE2	19:CS:29:ARG:CZ	2.42	0.48
19:CS:67:VAL:C	19:CS:69:HIS:H	2.17	0.48
16:CP:14:ASN:HA	16:CP:42:ARG:CZ	2.43	0.48
13:CM:66:LEU:O	13:CM:67:GLU:O	2.31	0.48
1:AA:148:G:H2'	1:AA:149:A:C8	2.48	0.48
58:DZ:50:GLN:O	58:DZ:52:SER:N	2.46	0.48
36:DA:1645:G:H5''	36:DA:1646:C:H5'	1.93	0.48
13:CM:32:GLU:C	13:CM:34:LEU:H	2.15	0.48
13:CM:14:ARG:HG2	13:CM:42:ALA:O	2.13	0.48
25:CZ:259:ALA:O	25:CZ:260:PRO:C	2.52	0.48
43:DH:149:ARG:HA	43:DH:162:ILE:HG23	1.94	0.48
38:BC:100:ILE:CG2	38:BC:126:LYS:HB3	2.33	0.48
40:DE:3:GLY:HA3	40:DE:81:ILE:HD12	1.96	0.48
43:BH:89:ILE:HG22	43:BH:162:ILE:HG13	1.95	0.48
5:AE:72:GLN:OE1	5:AE:77:PRO:HA	2.12	0.48
55:BW:12:ILE:CG1	55:BW:42:ARG:NH1	2.76	0.48
8:CH:64:LYS:C	8:CH:65:TYR:CD1	2.86	0.48
2:CB:178:ARG:HH12	8:CH:74:PRO:HD3	1.78	0.48
20:AT:89:ARG:C	20:AT:91:LEU:H	2.16	0.48
1:AA:745:C:O2'	1:AA:746:A:H5'	2.13	0.48
2:CB:19:HIS:NE2	2:CB:206:ASP:HB2	2.28	0.48
12:CL:41:ARG:NH1	12:CL:57:LYS:NZ	2.61	0.48
1:AA:1152:A:C4	1:AA:1153:C:C5	3.01	0.48
1:AA:407:G:OP1	4:AD:115:ARG:CZ	2.61	0.48
36:BA:2131:G:H5''	36:BA:2132:U:O5'	2.12	0.48
15:CO:23:GLY:O	15:CO:24:SER:HB3	2.11	0.48
36:BA:6:A:O2'	46:BN:130:HIS:CB	2.56	0.48
11:AK:123:LYS:O	11:AK:126:ARG:HB3	2.13	0.48
1:AA:66:G:H8	1:AA:66:G:O5'	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AN:51:GLY:O	14:AN:53:LEU:N	2.46	0.48
1:AA:530:G:O2'	24:AY:35:G:C4'	2.59	0.48
36:BA:684:G:H2'	36:BA:774:A:H61	1.78	0.48
39:BD:161:THR:H	39:BD:196:VAL:HB	1.78	0.48
1:AA:1245:A:H2'	1:AA:1246:C:H6	1.78	0.48
46:BN:21:LYS:HE3	46:BN:25:ARG:HB2	1.95	0.48
25:CZ:318:ALA:HB2	25:CZ:400:VAL:HA	1.94	0.48
18:CR:47:THR:HB	18:CR:49:LYS:HZ2	1.76	0.48
1:AA:1220:G:H2'	1:AA:1221:G:C8	2.42	0.48
1:CA:1096:C:N4	1:CA:1097:C:N4	2.60	0.48
36:BA:2554:U:H2'	36:BA:2555:U:H6	1.78	0.48
36:DA:269:U:C2'	36:DA:269:U:O2	2.57	0.48
36:BA:2422:A:C3'	36:BA:2422:A:C8	2.96	0.48
36:BA:2518:A:O2'	36:BA:2519:U:H5'	2.12	0.48
36:BA:1054:A:H2'	36:BA:1054:A:N3	2.28	0.48
36:DA:1028:A:H61	36:DA:1125:G:H2'	1.77	0.48
36:DA:456:C:C2	56:DX:69:TYR:HE2	2.31	0.48
46:BN:38:HIS:O	53:BU:67:ALA:HB1	2.13	0.48
46:BN:39:ARG:HE	46:BN:41:ASP:HB3	1.76	0.48
1:AA:1329:A:P	13:AM:28:ALA:HB3	2.53	0.48
55:DW:68:ARG:O	55:DW:110:LYS:N	2.46	0.48
36:BA:391:G:C5	36:BA:392:C:C5	3.01	0.48
17:CQ:88:TYR:O	17:CQ:89:LEU:C	2.50	0.48
36:BA:2312:U:C2'	36:BA:2313:C:C5'	2.90	0.48
1:CA:341:C:O2'	1:CA:342:C:H5'	2.13	0.48
11:CK:80:VAL:HG22	11:CK:104:GLN:O	2.12	0.48
6:CF:97:PHE:HD2	18:CR:31:LEU:HD21	1.78	0.48
53:DU:85:LYS:HD2	53:DU:117:GLN:HE22	1.78	0.48
1:AA:1383:C:O2'	1:AA:1384:C:H5'	2.12	0.48
49:DQ:33:GLY:O	49:DQ:131:ILE:HA	2.12	0.48
16:AP:9:PHE:HE2	16:AP:18:ARG:HD2	1.78	0.48
36:DA:1558:A:C5	36:DA:1560:G:C8	3.01	0.48
3:AC:140:ARG:HH11	3:AC:140:ARG:HG3	1.78	0.48
46:DN:1:MET:C	46:DN:1:MET:SD	2.91	0.48
1:CA:521:G:OP1	12:CL:73:GLU:HA	2.13	0.48
38:DC:108:MET:O	38:DC:109:ASP:O	2.31	0.48
36:BA:2261:C:H1'	36:BA:2388:A:H1'	1.95	0.48
34:B8:59:LYS:CE	48:BP:50:ARG:HB3	2.42	0.48
50:DR:6:SER:OG	50:DR:8:ARG:NH2	2.47	0.48
39:DD:147:LEU:HD21	39:DD:183:ARG:NH1	2.27	0.48
32:D6:12:GLU:CD	32:D6:54:ILE:CG2	2.79	0.48
32:D6:5:VAL:CG2	36:DA:2283:C:H5'	2.43	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:27:LEU:HD23	25:AZ:105:VAL:CG2	2.42	0.48
28:D2:2:LYS:HB2	36:DA:97:C:OP1	2.14	0.48
41:DF:111:ALA:O	41:DF:114:VAL:HB	2.13	0.48
41:DF:188:ARG:HB3	48:DP:7:ARG:HD3	1.96	0.48
24:AY:55:PSU:H5''	24:AY:55:PSU:O4	2.13	0.48
24:AY:76:A:N6	25:AZ:234:ARG:HG3	2.28	0.48
56:BX:12:VAL:HA	56:BX:27:THR:O	2.13	0.48
35:D9:1:MET:SD	36:DA:2477:C:C3'	3.01	0.48
36:DA:2761:G:H2'	36:DA:2762:G:C5'	2.13	0.48
36:DA:1856:G:H2'	36:DA:1857:G:H5'	1.96	0.48
1:AA:1158:C:C2'	1:AA:1158:C:O2	2.60	0.48
38:BC:147:PHE:O	38:BC:149:ILE:N	2.46	0.48
1:AA:542:G:H2'	1:AA:543:C:C6	2.48	0.48
28:B2:59:ARG:HB3	36:BA:76:C:O3'	2.13	0.48
40:BE:192:ASN:HD22	40:BE:192:ASN:C	2.16	0.48
50:BR:38:VAL:O	50:BR:41:ALA:HB3	2.13	0.48
13:AM:63:THR:CG2	13:AM:64:TRP:H	2.12	0.48
36:DA:2514:U:H2'	36:DA:2515:C:H6	1.76	0.48
46:DN:103:VAL:O	46:DN:106:MET:N	2.46	0.48
1:AA:112:G:H4'	1:AA:389:A:H4'	1.95	0.48
1:CA:1055:A:N7	1:CA:1206:G:C2	2.81	0.48
1:CA:973:G:C1'	10:CJ:55:LYS:CE	2.90	0.48
2:CB:149:LEU:O	2:CB:150:SER:C	2.51	0.48
1:CA:662:G:H2'	1:CA:663:A:C8	2.44	0.48
36:DA:1516:C:H2'	36:DA:1517:G:C5'	2.25	0.48
36:DA:1518:U:C2	36:DA:1519:G:H1'	2.48	0.48
1:CA:954:G:H21	1:CA:1227:A:N6	2.12	0.48
25:CZ:27:LEU:HD23	25:CZ:105:VAL:CG2	2.43	0.48
47:BO:2:ILE:CD1	47:BO:6:THR:HG21	2.43	0.48
47:DO:120:GLU:OE1	47:DO:122:LEU:HD11	2.13	0.48
52:DT:78:LEU:H	52:DT:82:LEU:HD21	1.78	0.48
57:DY:7:VAL:HG21	57:DY:8:LYS:HZ1	1.78	0.48
1:AA:1371:G:OP1	9:AI:11:LYS:HE3	2.13	0.48
10:CJ:63:PHE:HB3	14:CN:58:LYS:CA	2.35	0.48
14:CN:47:LEU:HB3	14:CN:53:LEU:HG	1.94	0.48
14:CN:51:GLY:O	14:CN:53:LEU:N	2.46	0.48
59:AA:1601:PAR:O43	59:AA:1601:PAR:H11	2.13	0.48
41:BF:70:THR:CG2	41:BF:72:ARG:HG2	2.43	0.48
36:BA:2832:U:H4'	36:BA:2833:G:H5''	1.94	0.48
51:DS:12:PHE:CD2	51:DS:12:PHE:N	2.81	0.48
57:BY:36:ALA:HA	57:BY:67:LEU:O	2.13	0.48
36:DA:2115:G:N3	36:DA:2117:A:N7	2.61	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1079:G:H2'	1:AA:1080:A:C8	2.47	0.48
41:BF:8:GLN:O	41:BF:10:PRO:HD3	2.13	0.48
3:CC:68:VAL:O	3:CC:103:VAL:HA	2.13	0.48
19:CS:51:VAL:HG23	19:CS:60:VAL:CG1	2.37	0.48
3:AC:120:VAL:HG12	3:AC:198:VAL:HG21	1.95	0.48
37:DB:75:G:N2	58:DZ:87:ASP:OD2	2.46	0.48
46:DN:55:VAL:O	46:DN:56:ASN:C	2.51	0.48
31:B5:17:ASP:HB2	36:BA:16:G:H5'	1.94	0.48
39:BD:131:LEU:HA	39:BD:190:TYR:CE2	2.49	0.48
36:DA:2710:C:C2'	36:DA:2711:A:H5'	2.43	0.48
48:DP:16:ARG:O	48:DP:16:ARG:NH1	2.43	0.48
36:DA:1657:C:C2'	36:DA:1658:C:H5'	2.43	0.48
1:AA:154:C:H2'	1:AA:155:C:H6	1.78	0.48
33:B7:36:GLN:O	33:B7:38:GLY:N	2.46	0.48
36:BA:1059:G:H21	45:BK:126:UNK:HA	1.77	0.48
36:DA:2377:A:O2'	36:DA:2378:A:H5'	2.13	0.48
25:CZ:241:ARG:HB2	25:CZ:285:ASN:ND2	2.22	0.48
2:AB:170:GLU:CA	2:AB:172:ILE:HD12	2.42	0.48
2:AB:69:LEU:HD12	2:AB:71:VAL:CG2	2.39	0.48
2:CB:24:TRP:HZ3	2:CB:26:PRO:HA	1.72	0.48
3:CC:35:GLU:O	3:CC:36:ASP:C	2.52	0.48
49:DQ:45:GLN:HG2	49:DQ:46:GLN:H	1.78	0.48
1:AA:36:C:H2'	1:AA:37:U:C6	2.48	0.48
4:AD:127:THR:CG2	4:AD:130:GLY:O	2.61	0.48
1:CA:714:G:H2'	1:CA:715:A:C8	2.48	0.48
31:D5:16:ARG:HG2	31:D5:16:ARG:HH11	1.77	0.48
45:BK:73:UNK:O	45:BK:76:UNK:N	2.46	0.48
45:DK:73:UNK:O	45:DK:74:UNK:C	2.61	0.48
31:D5:43:HIS:CD2	31:D5:43:HIS:N	2.80	0.48
36:DA:736:C:O2'	36:DA:737:C:H5'	2.12	0.48
36:DA:733:G:C6	36:DA:761:A:C5	3.02	0.48
25:CZ:306:LYS:O	25:CZ:308:GLY:N	2.46	0.48
25:CZ:371:THR:HG22	25:CZ:372:VAL:N	2.28	0.48
18:AR:53:ARG:CZ	18:AR:59:SER:HA	2.43	0.48
36:BA:1184:G:H2'	36:BA:1185:C:H5'	1.95	0.48
36:BA:1370:C:C2	36:BA:1371:G:C8	3.01	0.48
1:CA:709:G:H2'	1:CA:710:G:C8	2.46	0.48
11:CK:89:ALA:C	11:CK:91:ARG:N	2.66	0.48
27:D1:53:VAL:O	27:D1:55:GLY:N	2.34	0.48
7:AG:65:ALA:HA	7:AG:128:ALA:HA	1.95	0.48
47:BO:17:ARG:O	47:BO:18:LYS:CB	2.61	0.48
43:DH:105:LEU:CD2	43:DH:105:LEU:H	2.26	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:908:A:O2'	1:CA:909:A:H5'	2.14	0.48
1:AA:1006:C:N4	1:AA:1024:G:H21	2.11	0.48
40:BE:149:ARG:NH1	40:BE:149:ARG:HG3	2.27	0.48
36:BA:752:A:O2'	36:BA:753:C:OP2	2.27	0.48
43:BH:59:ARG:HA	43:BH:62:LYS:HB2	1.96	0.48
58:DZ:158:PRO:HB2	58:DZ:161:VAL:HG23	1.95	0.48
1:CA:1490:C:N3	1:CA:1491:G:N7	2.61	0.48
40:BE:109:LYS:O	40:BE:161:GLY:HA3	2.13	0.48
53:BU:85:LYS:CD	53:BU:117:GLN:HE22	2.25	0.48
39:DD:101:GLU:CG	39:DD:102:LYS:N	2.76	0.48
36:BA:2283:C:H2'	36:BA:2284:C:O4'	2.13	0.48
39:DD:70:TRP:CD1	39:DD:70:TRP:C	2.87	0.48
48:DP:123:LEU:H	48:DP:123:LEU:HD23	1.78	0.48
36:BA:1884:A:C3'	36:BA:1885:A:H5''	2.43	0.48
36:DA:601:C:O2	36:DA:605:C:H4'	2.13	0.48
41:DF:34:TRP:CD1	48:DP:10:PRO:HB2	2.48	0.48
1:CA:8:A:H3'	1:CA:8:A:OP1	2.13	0.48
4:CD:206:PHE:CG	4:CD:206:PHE:O	2.66	0.48
5:CE:10:MET:N	5:CE:10:MET:SD	2.83	0.48
35:D9:35:ARG:O	35:D9:36:GLN:O	2.31	0.48
39:BD:39:LYS:HB3	39:BD:60:ARG:O	2.12	0.48
36:DA:2088:G:C6	36:DA:2089:U:C4	3.01	0.48
1:AA:1173:G:H2'	1:AA:1174:G:C8	2.48	0.48
1:AA:1190:G:OP2	3:AC:5:ILE:HG23	2.13	0.48
58:DZ:144:LEU:HD22	58:DZ:144:LEU:N	2.28	0.48
41:BF:205:ARG:HG2	41:BF:206:ILE:HD13	1.94	0.48
1:AA:1053:G:C3'	1:AA:1054:C:H5'	2.43	0.48
36:BA:2527:C:C5	36:BA:2528:U:C5	3.01	0.48
36:BA:1279:G:H1	36:BA:1291:C:N4	2.07	0.48
36:BA:2882:A:H5''	50:BR:98:LEU:HD21	1.95	0.48
13:AM:10:PRO:O	13:AM:11:ARG:CB	2.50	0.48
37:BB:44:G:H4'	37:BB:45:A:H8	1.72	0.48
42:BG:60:LEU:HD12	42:BG:60:LEU:O	2.13	0.48
48:DP:34:GLY:O	48:DP:35:HIS:CB	2.61	0.48
1:AA:375:U:H4'	16:AP:17:TYR:HE2	1.78	0.48
1:CA:1208:C:O2'	1:CA:1209:C:H5'	2.13	0.48
4:CD:67:ILE:O	4:CD:67:ILE:HG23	2.13	0.48
2:CB:168:THR:HG23	2:CB:192:SER:CA	2.43	0.48
2:CB:84:GLU:CB	2:CB:219:VAL:HG21	2.25	0.48
2:CB:219:VAL:O	2:CB:222:ILE:HG12	2.13	0.48
6:CF:37:VAL:CG1	6:CF:38:GLU:H	2.26	0.48
6:CF:2:ARG:NE	6:CF:69:GLU:HG3	2.28	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1226:C:H6	13:AM:103:THR:HG1	1.59	0.48
25:CZ:194:GLU:O	25:CZ:198:LYS:HG3	2.14	0.48
36:BA:1274:A:N6	36:BA:1646:C:O2	2.42	0.48
52:DT:61:PHE:N	52:DT:61:PHE:HD2	2.10	0.48
52:DT:89:VAL:O	52:DT:91:ARG:HG3	2.13	0.48
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.48	0.48
7:AG:36:LYS:C	7:AG:39:ALA:HB3	2.34	0.48
7:CG:116:ALA:O	7:CG:117:ALA:C	2.50	0.48
22:AV:61:C:HO2'	22:AV:62:C:P	2.37	0.48
36:DA:2832:U:H4'	36:DA:2833:G:H5''	1.95	0.48
1:AA:792:A:O2'	1:AA:793:U:P	2.71	0.48
42:BG:14:GLU:O	42:BG:17:PRO:HG2	2.13	0.48
42:BG:95:ARG:HH11	42:BG:95:ARG:HG2	1.78	0.48
41:BF:127:GLU:HB2	41:BF:196:LEU:CD1	2.42	0.48
27:B1:5:CYS:SG	27:B1:63:ALA:N	2.84	0.48
1:CA:398:C:H6	1:CA:398:C:H3'	1.78	0.48
36:BA:442:G:C4'	41:BF:46:ARG:HD3	2.42	0.48
39:BD:69:ARG:NH2	39:BD:192:THR:CB	2.76	0.48
36:DA:1199:U:H1'	53:DU:4:ALA:CB	2.44	0.48
36:DA:220:G:H2'	36:DA:427:U:O4	2.14	0.48
40:DE:116:VAL:HG21	40:DE:122:PHE:CE2	2.48	0.48
43:DH:94:TYR:HE2	43:DH:152:ARG:HG2	1.76	0.48
7:AG:118:VAL:HG23	7:AG:119:ARG:N	2.17	0.48
7:AG:22:LEU:HD23	7:AG:22:LEU:C	2.34	0.48
42:DG:57:ALA:CB	42:DG:90:LEU:HD21	2.42	0.48
25:CZ:14:VAL:O	25:CZ:79:HIS:HA	2.12	0.48
1:CA:1073:U:H3	1:CA:1102:A:N6	2.11	0.48
2:AB:58:ILE:O	2:AB:59:GLU:C	2.50	0.48
27:B1:29:GLY:O	27:B1:30:VAL:C	2.51	0.48
2:CB:209:ARG:HH11	2:CB:239:VAL:CG1	2.17	0.48
26:D0:81:VAL:HG12	26:D0:81:VAL:O	2.12	0.48
7:CG:145:ALA:O	7:CG:146:GLU:C	2.51	0.48
2:CB:33:TYR:CB	2:CB:43:ASP:HB2	2.40	0.48
36:DA:47:C:C5	36:DA:48:G:N7	2.81	0.48
36:BA:1168:G:O2'	36:BA:1169:G:H5'	2.13	0.48
26:B0:24:LYS:HG3	36:BA:2355:C:H4'	1.95	0.48
36:BA:884:C:H2'	36:BA:885:C:H5'	1.94	0.48
36:BA:892:G:H2'	36:BA:893:C:C5	2.48	0.48
18:AR:71:LYS:O	18:AR:74:ARG:HB2	2.13	0.48
33:D7:44:PRO:O	33:D7:45:ALA:O	2.32	0.48
36:BA:183:C:O2'	36:BA:184:C:H5'	2.12	0.48
58:BZ:143:GLY:H	58:BZ:144:LEU:HD22	1.78	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2422:A:HO2'	36:DA:2423:U:C5'	2.26	0.48
49:DQ:110:THR:HG23	49:DQ:113:GLN:HB2	1.94	0.48
36:BA:1370:C:H3'	36:BA:1371:G:C8	2.38	0.48
55:BW:72:LYS:O	55:BW:73:ALA:CB	2.61	0.48
1:AA:692:U:O4	11:AK:53:SER:HA	2.13	0.48
1:CA:687:A:H2	1:CA:700:G:N3	2.11	0.48
36:BA:1054:A:C6	36:BA:1106:G:O6	2.66	0.48
1:CA:734:G:H2'	1:CA:735:C:C6	2.48	0.48
12:AL:94:PRO:O	12:AL:96:VAL:HG23	2.13	0.48
1:CA:923:A:N6	1:CA:924:C:N4	2.61	0.48
36:BA:1945:G:C6	36:BA:1946:U:C4	3.00	0.48
6:AF:19:LEU:HD23	6:AF:19:LEU:C	2.33	0.48
16:CP:45:THR:O	16:CP:47:ASP:N	2.44	0.48
26:D0:30:VAL:HA	26:D0:66:VAL:CA	2.44	0.48
36:DA:2316:C:C2	36:DA:2317:C:C5	3.01	0.48
36:BA:1416:G:O2'	36:BA:1417:C:H5	1.96	0.48
40:BE:96:PHE:CD2	40:BE:182:LEU:HD21	2.48	0.48
40:BE:108:SER:O	40:BE:162:ALA:N	2.45	0.48
4:AD:162:LEU:HD11	4:AD:178:VAL:O	2.14	0.48
43:BH:12:PRO:CA	43:BH:48:GLY:HA2	2.42	0.48
1:AA:786:G:H2'	1:AA:787:A:O4'	2.14	0.48
43:DH:12:PRO:N	43:DH:48:GLY:HA2	2.29	0.48
26:D0:56:ASP:OD2	36:DA:2364:C:H4'	2.13	0.48
7:AG:91:VAL:HG22	7:AG:95:ARG:HD3	1.94	0.48
18:AR:75:ILE:C	18:AR:77:GLY:N	2.67	0.48
33:D7:31:LEU:C	33:D7:33:ARG:N	2.67	0.48
29:B3:45:GLY:HA2	29:B3:48:GLU:CG	2.44	0.48
43:DH:98:LEU:CB	43:DH:125:VAL:HG21	2.44	0.48
1:AA:578:C:H2'	1:AA:579:G:H8	1.78	0.48
38:BC:66:HIS:CG	38:BC:184:LYS:HD2	2.49	0.48
22:CW:14:A:H2'	22:CW:15:G:O4'	2.13	0.48
1:AA:1395:C:O5'	1:AA:1395:C:H6	1.96	0.48
36:BA:1497:U:H2'	36:BA:1497:U:O2	2.13	0.48
30:B4:28:LYS:HE3	30:B4:28:LYS:HA	1.94	0.48
32:B6:15:GLU:OE2	32:B6:41:PRO:HB3	2.12	0.48
36:BA:2320:A:C4	36:BA:2333:A:C6	3.01	0.48
36:BA:2289:G:H1	36:BA:2343:C:H42	1.59	0.48
36:BA:972:G:H2'	36:BA:973:A:H8	1.78	0.48
36:DA:1269:A:N6	36:DA:2011:U:H3	2.10	0.48
32:D6:51:GLU:O	32:D6:52:VAL:HG23	2.13	0.48
36:DA:2320:A:C4	36:DA:2333:A:C6	3.01	0.48
36:DA:2289:G:H1	36:DA:2343:C:H42	1.59	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:21:ASP:O	62:AZ:501:GDP:H5'	2.13	0.48
25:AZ:38:GLU:OE1	25:AZ:200:TRP:CH2	2.67	0.48
28:D2:32:LEU:HA	28:D2:53:LEU:CD1	2.43	0.48
36:DA:2529:G:OP2	36:DA:2530:A:H8	1.95	0.48
42:DG:82:LEU:HD13	42:DG:87:PRO:CB	2.43	0.48
1:AA:507:C:H3'	1:AA:508:C:C6	2.48	0.48
40:BE:27:LEU:HD22	52:BT:1:MET:HB2	1.96	0.48
36:DA:1131:G:N2	46:DN:75:TYR:HB2	2.29	0.48
48:DP:23:PRO:HG2	48:DP:33:ARG:NE	2.28	0.48
48:DP:23:PRO:HB2	48:DP:33:ARG:CD	2.43	0.48
54:DV:5:VAL:O	54:DV:11:GLN:HA	2.13	0.48
53:BU:113:ALA:C	53:BU:115:ALA:H	2.16	0.48
1:CA:505:G:C6	1:CA:535:A:C2	3.00	0.48
51:BS:64:GLU:HA	51:BS:67:ARG:HG3	1.94	0.48
36:DA:318:C:C2'	36:DA:319:C:H5'	2.43	0.48
1:CA:663:A:H5'	1:CA:836:G:OP1	2.14	0.48
32:B6:7:ILE:CG2	32:B6:7:ILE:O	2.58	0.48
1:CA:956:U:H2'	1:CA:957:U:O4'	2.13	0.48
25:CZ:200:TRP:C	25:CZ:202:LEU:N	2.67	0.48
25:CZ:70:TYR:C	25:CZ:70:TYR:CD1	2.87	0.48
36:DA:1664:A:H3'	36:DA:1665:A:C8	2.49	0.48
58:BZ:102:LEU:HD21	58:BZ:124:ILE:HD11	1.96	0.48
58:BZ:10:ARG:NH2	58:BZ:36:LYS:CB	2.76	0.48
58:BZ:44:PHE:C	58:BZ:44:PHE:CD1	2.86	0.48
36:DA:336:C:H5''	57:DY:7:VAL:HG11	1.96	0.48
1:AA:1349:A:H2'	1:AA:1350:A:H8	1.78	0.48
1:CA:1186:G:N2	1:CA:1187:G:H1'	2.29	0.48
1:CA:1288:A:N1	1:CA:1371:G:H1'	2.28	0.48
39:DD:80:ALA:O	39:DD:113:VAL:HG11	2.14	0.48
1:AA:909:A:N3	1:AA:1413:A:O2'	2.40	0.48
1:AA:922:G:H2'	1:AA:923:A:C8	2.48	0.48
4:AD:91:SER:O	4:AD:94:LEU:N	2.46	0.48
36:DA:2137:C:O2'	36:DA:2138:C:H5'	2.13	0.48
36:DA:2123:G:N2	38:DC:42:GLU:OE2	2.46	0.48
46:BN:13:TRP:O	46:BN:135:PRO:HD2	2.13	0.48
1:AA:1509:C:H2'	1:AA:1510:U:O4'	2.13	0.48
46:DN:134:ARG:HH21	46:DN:136:GLU:HB2	1.79	0.48
55:DW:72:LYS:HG3	55:DW:108:GLY:HA3	1.94	0.48
4:CD:79:PHE:CD2	4:CD:207:TYR:CD1	3.01	0.48
46:BN:55:VAL:O	46:BN:56:ASN:C	2.51	0.48
3:AC:16:ARG:HH21	3:AC:183:ASP:CA	2.25	0.48
16:CP:48:TRP:CD1	16:CP:48:TRP:N	2.81	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1538:G:H2'	36:DA:1539:G:C8	2.48	0.48
36:BA:1199:U:H1'	53:BU:4:ALA:CB	2.43	0.48
36:BA:1775:U:C2'	36:BA:1776:G:C5'	2.88	0.48
1:CA:1010:G:H2'	1:CA:1011:G:H8	1.78	0.48
53:BU:59:ARG:O	53:BU:60:LEU:C	2.52	0.48
57:DY:95:LYS:HE3	57:DY:100:ALA:CB	2.43	0.48
53:DU:4:ALA:O	53:DU:5:LYS:O	2.31	0.48
21:AU:2:GLY:N	21:AU:5:ASP:HB2	2.27	0.48
33:D7:36:GLN:C	33:D7:38:GLY:N	2.66	0.48
30:D4:8:LYS:HG2	30:D4:9:LEU:H	1.70	0.48
36:DA:1173:G:H5'	36:DA:1174:A:O5'	2.13	0.48
38:BC:104:LEU:O	38:BC:105:ASP:HB2	2.14	0.48
40:DE:36:ARG:C	40:DE:37:ARG:HG2	2.33	0.48
36:BA:958:U:OP2	49:BQ:14:ARG:NH1	2.46	0.48
36:BA:862:G:H21	37:BB:100:A:H2	1.62	0.48
15:CO:81:LEU:O	15:CO:82:ILE:C	2.51	0.48
8:AH:20:TYR:CE2	8:AH:75:ARG:HD2	2.44	0.48
1:AA:327:A:O2'	1:AA:328:C:O4'	2.31	0.48
36:BA:1132:A:C8	36:BA:1133:U:C5	3.01	0.48
2:CB:28:PHE:CD1	2:CB:190:THR:HG22	2.49	0.48
8:CH:17:THR:HB	8:CH:78:GLN:CD	2.33	0.48
2:CB:127:ILE:C	2:CB:129:GLU:N	2.67	0.48
10:CJ:98:ILE:O	10:CJ:99:LYS:HD3	2.14	0.48
1:AA:833:U:H2'	1:AA:834:C:C6	2.49	0.48
2:AB:106:LYS:HG2	2:AB:107:THR:H	1.78	0.48
36:DA:860:U:C4	36:DA:2268:A:C8	3.02	0.48
16:AP:49:LEU:HD12	16:AP:50:LYS:H	1.77	0.48
15:AO:23:GLY:O	15:AO:24:SER:HB3	2.13	0.48
1:CA:315:A:H5'	1:CA:317:G:OP2	2.14	0.48
45:DK:73:UNK:O	45:DK:76:UNK:N	2.47	0.48
18:AR:44:LEU:O	18:AR:45:SER:C	2.52	0.48
36:DA:753:C:H2'	36:DA:754:C:C6	2.48	0.48
36:DA:1370:C:H2'	36:DA:1371:G:O4'	2.13	0.48
33:B7:11:LYS:O	33:B7:12:ARG:C	2.51	0.48
49:BQ:113:GLN:O	49:BQ:116:GLU:N	2.39	0.48
36:BA:556:G:H2'	36:BA:557:U:C6	2.48	0.48
53:BU:55:ARG:HA	53:BU:58:ARG:HG3	1.94	0.48
36:DA:884:C:H2'	36:DA:885:C:H5'	1.95	0.48
39:DD:73:VAL:O	39:DD:75:ILE:N	2.44	0.48
1:AA:1244:C:O2'	1:AA:1245:A:H5'	2.12	0.48
36:DA:933:A:H2'	36:DA:934:G:O4'	2.13	0.48
36:BA:848:G:H8	36:BA:848:G:H5'	1.78	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DE:145:LYS:O	40:DE:146:THR:HG23	2.14	0.48
58:DZ:60:GLU:HA	58:DZ:66:SER:HA	1.96	0.48
46:DN:67:LEU:O	46:DN:68:GLU:HB2	2.12	0.48
5:AE:64:ARG:HG3	5:AE:64:ARG:HH11	1.78	0.48
29:D3:11:SER:HB3	36:DA:988:A:O5'	2.12	0.48
6:CF:62:TRP:CE2	18:CR:35:ARG:CZ	2.97	0.48
36:DA:2853:C:O2'	36:DA:2854:G:H5'	2.13	0.48
38:DC:59:ARG:NE	38:DC:164:ARG:HD2	2.28	0.48
40:BE:142:GLY:C	40:BE:143:ASN:ND2	2.67	0.48
17:AQ:31:LEU:HG	17:AQ:32:TYR:CE2	2.47	0.48
22:AW:56:C:C2	38:BC:133:PRO:HB3	2.48	0.48
1:CA:1396:A:O4'	1:CA:1398:A:H1'	2.12	0.48
36:DA:955:C:OP1	49:DQ:87:LYS:HE3	2.13	0.48
4:CD:43:HIS:O	4:CD:45:GLN:N	2.47	0.48
6:AF:15:ASP:C	6:AF:17:SER:H	2.16	0.48
1:CA:564:C:C2	17:CQ:31:LEU:HD11	2.49	0.48
58:BZ:149:SER:CB	58:BZ:172:ALA:O	2.61	0.48
36:BA:2493:U:H2'	36:BA:2494:G:O4'	2.13	0.48
20:CT:37:SER:O	20:CT:40:ALA:HB3	2.13	0.48
36:DA:614(A):U:C4'	36:DA:614(B):G:H5''	2.43	0.48
5:AE:116:THR:HG22	5:AE:116:THR:O	2.14	0.48
5:AE:36:ASP:O	5:AE:37:ARG:C	2.50	0.48
22:AW:49:C:HO2'	22:AW:50:U:H6	1.58	0.48
38:DC:51:PRO:HB2	38:DC:167:LYS:O	2.14	0.48
36:DA:1567:A:H5'	39:DD:58:HIS:HD2	1.78	0.48
15:CO:37:ASN:N	15:CO:37:ASN:HD22	2.10	0.48
7:CG:13:GLN:NE2	7:CG:14:PRO:HD2	2.28	0.48
32:B6:39:TYR:O	32:B6:47:THR:O	2.31	0.48
34:B8:28:GLY:C	34:B8:30:ARG:H	2.17	0.48
36:BA:1217:C:OP2	53:BU:15:LYS:NZ	2.42	0.48
48:BP:56:SER:O	48:BP:57:THR:O	2.32	0.48
31:D5:2:ALA:CA	36:DA:2015:A:H1'	2.42	0.48
40:DE:102:VAL:HG12	40:DE:199:ARG:O	2.12	0.48
50:DR:63:ARG:O	50:DR:66:VAL:HB	2.14	0.48
19:AS:13:ASP:C	19:AS:15:LEU:H	2.16	0.48
32:D6:15:GLU:HG2	32:D6:18:ARG:NH1	2.28	0.48
32:D6:35:GLU:HB3	32:D6:51:GLU:CG	2.44	0.48
25:AZ:136:ASN:CG	25:AZ:137:LYS:N	2.66	0.48
28:D2:61:LEU:O	28:D2:64:LEU:N	2.46	0.48
28:D2:68:ARG:CZ	28:D2:72:ALA:HB1	2.43	0.48
36:DA:603:A:C2	36:DA:655:A:N1	2.82	0.48
41:DF:205:ARG:HG2	41:DF:206:ILE:HD13	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:271(J):C:C3'	36:DA:271(K):U:H5''	2.44	0.48
38:DC:134:ARG:O	38:DC:135:GLY:C	2.51	0.48
39:BD:145:VAL:HG12	39:BD:146:GLU:O	2.13	0.48
39:BD:259:THR:O	39:BD:260:ARG:C	2.50	0.48
41:DF:61:GLY:O	41:DF:63:LYS:N	2.47	0.48
43:DH:65:HIS:C	43:DH:67:LEU:N	2.66	0.48
36:BA:2620:C:H2'	36:BA:2621:A:O4'	2.14	0.48
40:BE:199:ARG:NH1	40:BE:199:ARG:CB	2.77	0.48
50:BR:24:GLN:C	50:BR:26:LYS:N	2.64	0.48
50:BR:25:ALA:O	50:BR:29:LEU:HB2	2.14	0.48
42:BG:107:LEU:HD11	42:BG:178:PHE:HE1	1.78	0.48
36:DA:2732:G:H3'	36:DA:2733:A:C5'	2.43	0.48
36:DA:1216:G:N2	36:DA:1217:C:H1'	2.28	0.48
46:DN:35:ARG:CG	46:DN:35:ARG:O	2.60	0.48
36:DA:28:A:C2	53:DU:11:ARG:NH2	2.81	0.48
8:CH:85:ARG:HG3	8:CH:85:ARG:NH1	2.28	0.48
1:CA:1158:C:O2	1:CA:1158:C:C2'	2.61	0.48
1:CA:1160:G:O6	1:CA:1181:G:C6	2.66	0.48
37:BB:37:C:N4	37:BB:49:C:H1'	2.27	0.48
8:AH:36:LEU:O	8:AH:38:ILE:N	2.46	0.48
41:DF:170:LEU:HB3	41:DF:173:VAL:HG23	1.95	0.48
36:BA:2784:C:O2'	40:BE:37:ARG:NH1	2.46	0.48
48:BP:126:VAL:HG12	48:BP:148:LEU:HD11	1.96	0.48
25:CZ:145:GLU:O	25:CZ:146:LEU:C	2.52	0.48
56:BX:54:VAL:HG12	56:BX:55:ASN:N	2.28	0.48
36:BA:1764:G:C6	36:BA:1989:G:C2	3.00	0.48
52:BT:33:LYS:HE2	52:BT:43:GLN:HE21	1.79	0.48
52:BT:19:LEU:CD1	52:BT:78:LEU:HD22	2.43	0.48
36:DA:2679:A:O2'	36:DA:2680:C:H5'	2.14	0.48
58:BZ:166:SER:OG	58:BZ:167:PRO:HA	2.13	0.48
58:BZ:15:PRO:HA	58:BZ:18:LEU:CD2	2.44	0.48
58:BZ:57:ILE:O	58:BZ:69:THR:N	2.43	0.48
36:DA:344:G:HO2'	36:DA:345:A:H8	1.59	0.48
57:DY:75:ILE:HA	57:DY:79:CYS:O	2.14	0.48
1:AA:1202:G:N3	14:AN:42:ILE:HG21	2.29	0.48
35:D9:13:LYS:O	35:D9:27:CYS:HA	2.12	0.48
51:DS:13:ARG:NH1	51:DS:13:ARG:HG2	2.28	0.48
1:AA:1480:G:H2'	1:AA:1481:U:O4'	2.14	0.48
27:B1:63:ALA:O	27:B1:64:ALA:C	2.51	0.48
10:CJ:24:VAL:C	10:CJ:26:ALA:N	2.67	0.48
20:CT:26:ASN:HB3	20:CT:71:THR:OG1	2.13	0.48
36:DA:141:A:H8	36:DA:1408:C:O2'	1.89	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:DZ:28:MET:CA	58:DZ:88:PHE:HB2	2.41	0.48
36:BA:996:A:C5'	53:BU:94:ASN:HB2	2.40	0.48
39:DD:25:THR:O	39:DD:27:THR:HG22	2.13	0.48
42:BG:69:ALA:O	42:BG:90:LEU:HD12	2.13	0.48
30:D4:8:LYS:HG2	30:D4:9:LEU:O	2.14	0.48
42:DG:17:PRO:O	42:DG:21:ARG:CB	2.61	0.48
42:DG:5:VAL:O	42:DG:8:LYS:HB3	2.14	0.48
36:DA:1173:G:H2'	36:DA:1175:U:C5	2.49	0.48
38:BC:130:ILE:C	38:BC:132:GLY:H	2.16	0.48
1:AA:80:G:H3'	1:AA:81:U:C5'	2.42	0.48
40:DE:53:PRO:O	40:DE:74:PRO:HA	2.13	0.48
1:CA:881:G:H2'	1:CA:882:C:C6	2.48	0.48
5:CE:72:GLN:OE1	5:CE:77:PRO:HA	2.13	0.48
43:DH:97:ARG:HE	43:DH:99:VAL:HG23	1.79	0.48
2:AB:162:ILE:CG2	2:AB:184:VAL:HG22	2.43	0.48
29:D3:8:LEU:HA	29:D3:54:VAL:HG22	1.96	0.48
36:BA:1222:C:C3'	36:BA:1223:G:H5''	2.43	0.48
38:DC:104:LEU:O	38:DC:105:ASP:CB	2.61	0.48
4:CD:100:ARG:HG3	4:CD:100:ARG:NH1	2.27	0.48
10:CJ:40:LEU:CD2	10:CJ:40:LEU:N	2.76	0.48
16:AP:12:LYS:O	16:AP:14:ASN:N	2.47	0.48
45:BK:73:UNK:O	45:BK:74:UNK:C	2.61	0.48
4:AD:200:GLU:HG2	4:AD:201:GLN:H	1.78	0.48
54:BV:59:ALA:HA	54:BV:95:LEU:O	2.12	0.48
36:BA:115:C:O2'	36:BA:116:C:H5'	2.14	0.48
1:CA:311:C:HO2'	1:CA:312:C:H5'	1.79	0.48
36:BA:1398:C:H2'	36:BA:1399:C:C6	2.48	0.48
19:AS:6:LYS:H	19:AS:6:LYS:CD	2.20	0.48
39:BD:44:ASN:CB	39:BD:48:ARG:O	2.61	0.48
3:CC:92:ALA:HB2	3:CC:99:VAL:CG2	2.43	0.48
36:BA:269:U:C2'	36:BA:269:U:O2	2.55	0.48
25:AZ:316:PHE:HA	25:AZ:404:LEU:H	1.78	0.48
58:BZ:145:GLU:O	58:BZ:174:VAL:HG21	2.13	0.48
36:DA:1323:U:H2'	36:DA:1324:G:H5'	1.95	0.48
46:BN:68:GLU:HA	46:BN:86:PRO:HB2	1.94	0.48
18:AR:35:ARG:O	18:AR:37:VAL:N	2.45	0.48
18:AR:37:VAL:CG1	18:AR:78:LEU:HB3	2.42	0.48
1:CA:1088:G:H2'	1:CA:1089:G:C8	2.49	0.48
46:BN:6:PRO:HB3	46:BN:41:ASP:OD1	2.14	0.48
2:AB:92:TYR:CD1	2:AB:92:TYR:C	2.87	0.48
38:DC:46:LYS:NZ	38:DC:168:THR:O	2.47	0.48
1:AA:697:U:O4'	1:AA:786:G:H4'	2.13	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CR:40:LEU:O	18:CR:42:ARG:N	2.47	0.48
36:DA:1961:C:H2'	36:DA:1962:C:O4'	2.14	0.48
1:CA:1452:C:H5''	1:CA:1456:G:OP1	2.12	0.48
43:BH:98:LEU:CB	43:BH:125:VAL:HG21	2.43	0.48
36:DA:970:C:H2'	36:DA:971:C:C6	2.49	0.48
38:DC:53:ARG:CZ	38:DC:53:ARG:HB3	2.43	0.48
36:BA:1877:A:H3'	36:BA:1878:G:O4'	2.13	0.48
6:AF:5:GLU:HA	6:AF:63:TYR:O	2.13	0.48
34:B8:2:PRO:N	36:BA:667:U:O2	2.47	0.48
36:BA:242:G:H22	36:BA:255:A:P	2.36	0.48
36:BA:631:A:H2	36:BA:2415:G:N3	2.10	0.48
36:DA:1614:A:N6	55:DW:92:ARG:O	2.47	0.48
50:DR:28:LEU:HB2	50:DR:34:ILE:HG13	1.95	0.48
36:DA:242:G:H22	36:DA:255:A:P	2.36	0.48
36:DA:1202:C:H6	36:DA:1202:C:O5'	1.95	0.48
36:DA:225:A:C2	36:DA:231:C:C2	3.02	0.48
27:D1:46:LEU:O	27:D1:47:GLN:NE2	2.47	0.48
1:AA:1160:G:H1	1:AA:1177:G:H22	1.62	0.48
36:BA:604:G:C6	36:BA:625:G:C2	3.01	0.48
1:AA:995:C:H42	1:AA:1046:A:H2'	1.78	0.48
14:AN:4:LYS:O	14:AN:7:ILE:CG1	2.55	0.48
35:B9:1:MET:SD	36:BA:2477:C:C3'	3.01	0.48
49:BQ:58:PHE:CD1	49:BQ:58:PHE:N	2.80	0.48
36:BA:71:A:O2'	36:BA:72:U:OP2	2.27	0.48
36:BA:318:C:C2'	36:BA:319:C:H5'	2.43	0.48
31:B5:2:ALA:HA	36:BA:2015:A:H1'	1.94	0.48
36:BA:2050:C:H2'	36:BA:2051:A:O4'	2.13	0.48
36:BA:2837:G:O5'	36:BA:2837:G:H8	1.97	0.48
30:B4:9:LEU:O	30:B4:10:VAL:HG12	2.13	0.48
36:DA:2646:C:H2'	36:DA:2647:U:O4'	2.14	0.48
36:DA:1217:C:OP2	53:DU:15:LYS:NZ	2.45	0.48
48:DP:23:PRO:HG2	48:DP:33:ARG:HG3	1.96	0.48
16:AP:5:ARG:NH2	16:AP:24:ALA:O	2.46	0.48
1:AA:130:A:N3	1:AA:263:A:O2'	2.44	0.48
1:CA:542:G:N2	1:CA:543:C:C2	2.82	0.48
32:D6:28:ARG:O	32:D6:29:ASN:C	2.52	0.48
2:CB:61:LEU:HA	2:CB:64:ARG:CZ	2.43	0.48
2:CB:61:LEU:HA	2:CB:64:ARG:HE	1.77	0.48
40:BE:55:ASN:ND2	40:BE:75:VAL:CG2	2.74	0.48
36:DA:1553:A:N6	36:DA:1555:G:H1'	2.28	0.48
13:CM:120:LYS:HE3	13:CM:120:LYS:HA	1.94	0.48
13:CM:91:ARG:HD3	13:CM:96:LEU:HB2	1.96	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:138:VAL:HG23	25:CZ:174:SER:N	2.28	0.48
25:CZ:208:GLU:O	25:CZ:209:TYR:HB3	2.14	0.48
36:BA:1664:A:H61	36:BA:1996:C:N4	2.10	0.48
36:DA:1666:G:H8	36:DA:1666:G:H5'	1.78	0.48
36:DA:1668:A:C2	36:DA:1670:C:N3	2.82	0.48
40:DE:11:MET:HB3	40:DE:24:THR:HA	1.96	0.48
47:DO:2:ILE:HD12	47:DO:6:THR:HG21	1.95	0.48
52:DT:23:ARG:O	52:DT:24:PRO:C	2.52	0.48
36:DA:1503:U:H2'	36:DA:1504:C:C5	2.48	0.48
58:BZ:163:LEU:CD1	58:BZ:165:VAL:HG23	2.42	0.48
7:AG:105:VAL:HG12	7:AG:109:ASN:ND2	2.28	0.48
29:D3:50:VAL:HA	29:D3:52:HIS:CE1	2.48	0.48
1:CA:1117:G:O2'	9:CI:104:ARG:HD3	2.14	0.48
24:AY:57:G:OP2	24:AY:57:G:H3'	2.12	0.48
1:AA:1392:G:N2	1:AA:1502:A:H8	2.10	0.48
51:DS:98:VAL:HG12	51:DS:100:ALA:HB2	1.96	0.48
51:DS:68:GLN:C	51:DS:70:GLY:N	2.67	0.48
51:DS:89:ARG:HG3	51:DS:92:TYR:CB	2.42	0.48
57:BY:81:LYS:HZ2	57:BY:99:CYS:HB2	1.75	0.48
1:AA:15:G:H2'	1:AA:16:A:C8	2.48	0.48
41:BF:128:ALA:O	41:BF:129:PHE:CG	2.67	0.48
3:CC:182:ILE:HA	3:CC:202:ILE:O	2.13	0.48
25:AZ:219:LYS:HB2	25:AZ:244:ARG:HB2	1.94	0.48
3:AC:186:PHE:HD1	3:AC:198:VAL:O	1.95	0.48
27:B1:7:ILE:CG2	27:B1:66:HIS:HB3	2.39	0.48
1:CA:1034:G:N2	1:CA:1035:A:C6	2.81	0.48
20:CT:12:ALA:O	20:CT:15:ARG:N	2.46	0.48
36:DA:1542:A:C8	36:DA:1542:A:H3'	2.48	0.48
36:DA:141:A:N6	36:DA:142:A:H62	2.12	0.48
36:BA:1826:G:H4'	39:BD:242:ARG:NE	2.27	0.48
37:DB:105:A:H3'	37:DB:106:G:C8	2.49	0.48
15:CO:64:ARG:NH2	36:DA:715:G:OP1	2.46	0.48
46:BN:24:GLY:H	46:BN:27:ALA:N	1.98	0.48
1:CA:1204:A:H2'	1:CA:1205:U:O4'	2.12	0.48
39:BD:166:GLN:NE2	39:BD:166:GLN:CA	2.70	0.48
36:BA:1603:A:C8	36:BA:1603:A:H5'	2.39	0.48
10:AJ:30:SER:OG	10:AJ:81:THR:HG22	2.13	0.48
36:DA:1427:A:N6	36:DA:1571:A:OP2	2.47	0.48
36:DA:1221:C:C2'	36:DA:1221(A):C:H6	2.26	0.48
36:DA:993:G:H4'	54:DV:70:ILE:HD12	1.95	0.48
40:DE:131:ALA:CB	40:DE:134:ILE:HD11	2.44	0.48
42:BG:51:ARG:NH1	42:BG:53:LEU:HD21	2.29	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DG:39:ILE:CG2	42:DG:157:ILE:HG23	2.44	0.48
42:DG:77:ILE:HG22	42:DG:80:PHE:N	2.29	0.48
1:AA:581:G:C6	1:AA:758:G:N7	2.82	0.48
1:CA:1072:G:H2'	1:CA:1073:U:H6	1.75	0.48
2:AB:187:LEU:HD13	2:AB:205:ASP:HA	1.95	0.48
55:BW:12:ILE:CD1	55:BW:42:ARG:HH12	2.23	0.48
1:CA:1152:A:O2'	1:CA:1153:C:C5'	2.59	0.48
28:D2:10:LEU:O	28:D2:10:LEU:HD23	2.13	0.48
6:AF:43:LEU:CD2	6:AF:43:LEU:H	2.18	0.48
49:DQ:52:VAL:O	49:DQ:54:MET:N	2.46	0.48
23:CX:19:U:H2'	23:CX:20:U:C6	2.48	0.48
36:BA:1087:G:H8	36:BA:1088:A:H4'	1.77	0.48
27:D1:69:LYS:O	27:D1:72:GLU:N	2.47	0.48
27:D1:82:LEU:C	27:D1:83:GLU:CG	2.81	0.48
36:DA:48:G:N2	36:DA:177:G:H21	2.12	0.48
1:AA:407:G:H2'	1:AA:408:A:H8	1.74	0.48
36:BA:2158:A:H4'	36:BA:2159:G:OP1	2.12	0.48
54:BV:96:ILE:HD13	54:BV:96:ILE:N	2.28	0.48
36:DA:185:U:H2'	36:DA:186:G:H8	1.78	0.48
36:DA:272(B):G:H1	36:DA:366:C:N4	2.10	0.48
31:D5:52:TYR:HE2	36:DA:2884:U:O2	1.96	0.48
33:D7:11:LYS:CE	36:DA:686:G:H5''	2.44	0.48
36:DA:684:G:H2'	36:DA:774:A:H61	1.78	0.48
36:DA:2885:C:C2	36:DA:2886:G:H1'	2.48	0.48
36:BA:2587:A:O2'	36:BA:2588:G:H5'	2.13	0.48
25:CZ:383:GLY:H	25:CZ:400:VAL:HB	1.79	0.48
36:BA:1019:U:H3	36:BA:1142(A):A:N6	2.09	0.48
1:AA:1109:C:H2'	1:AA:1110:A:H5'	1.95	0.48
40:BE:128:SER:OG	40:BE:129:HIS:N	2.44	0.48
12:CL:32:PHE:CD1	12:CL:86:ARG:HA	2.48	0.48
12:CL:32:PHE:HD1	12:CL:86:ARG:HA	1.79	0.48
1:AA:84:U:O2'	1:AA:88:A:H5'	2.14	0.48
40:BE:179:GLU:O	40:BE:179:GLU:HG3	2.13	0.48
36:DA:2567:G:H2'	36:DA:2568:C:C6	2.49	0.48
36:BA:271(C):C:O2'	36:BA:271(D):G:H5'	2.13	0.48
1:AA:564:C:N3	17:AQ:31:LEU:HD11	2.29	0.48
27:B1:80:LEU:HD23	27:B1:81:LYS:N	2.27	0.48
27:B1:81:LYS:O	27:B1:82:LEU:HD12	2.14	0.48
25:AZ:19:HIS:HB2	25:AZ:116:THR:OG1	2.13	0.48
1:CA:642:A:O2'	1:CA:643:C:H5'	2.13	0.48
8:CH:113:SER:O	8:CH:131:GLY:HA3	2.13	0.48
58:DZ:58:VAL:HG13	58:DZ:67:LEU:C	2.34	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:B7:31:LEU:C	33:B7:33:ARG:N	2.67	0.48
29:D3:10:LYS:HB3	29:D3:53:LEU:HD22	1.95	0.48
49:BQ:78:PRO:O	49:BQ:79:LEU:C	2.52	0.48
1:CA:1147:C:C2'	9:CI:16:ARG:HD3	2.43	0.48
36:DA:1701:A:H8	36:DA:1701:A:H5''	1.79	0.48
15:CO:18:PHE:O	15:CO:19:PRO:C	2.50	0.48
1:CA:526:C:H2'	1:CA:527:G:C4'	2.44	0.48
54:BV:43:GLU:O	54:BV:44:LYS:HB2	2.12	0.48
3:AC:34:LEU:HD21	3:AC:38:ARG:HE	1.78	0.48
25:AZ:129:PRO:O	25:AZ:130:TYR:HB2	2.14	0.48
39:DD:121:PRO:HB3	39:DD:135:PHE:CE2	2.48	0.48
5:CE:73:ASN:HA	5:CE:73:ASN:HD22	1.53	0.48
36:BA:642:G:H8	36:BA:642:G:O5'	1.97	0.48
34:B8:61:LEU:C	34:B8:63:PRO:HD2	2.34	0.48
36:BA:2259:G:C2	36:BA:2282:G:C6	3.02	0.48
36:BA:2391:G:O6	36:BA:2425:A:H8	1.97	0.48
36:BA:1190:G:C5'	48:BP:35:HIS:H	2.27	0.48
40:DE:82:ARG:HG3	40:DE:83:ASP:H	1.77	0.48
48:DP:78:PRO:HB3	48:DP:111:ARG:NH2	2.29	0.48
28:D2:46:GLN:O	28:D2:50:ILE:CD1	2.62	0.48
36:DA:2170:A:H5''	38:DC:134:ARG:NE	2.27	0.48
1:CA:367:U:H4'	25:CZ:291:ARG:HD2	1.95	0.48
36:BA:605:C:OP1	41:BF:104:LYS:NZ	2.46	0.48
41:BF:111:ALA:HA	41:BF:114:VAL:HB	1.94	0.48
36:DA:2758:A:O2'	36:DA:2759:G:H8	1.97	0.48
43:DH:46:GLU:HB3	43:DH:50:VAL:CG1	2.44	0.48
56:BX:8:ILE:HD11	56:BX:43:VAL:CG2	2.42	0.48
36:BA:2498:C:O2'	36:BA:2499:C:C5'	2.57	0.48
42:BG:60:LEU:CD1	42:BG:92:VAL:HG11	2.43	0.48
56:DX:12:VAL:HA	56:DX:27:THR:O	2.13	0.48
16:AP:7:ALA:O	16:AP:17:TYR:HA	2.13	0.48
4:CD:9:CYS:SG	4:CD:32:ALA:HB3	2.53	0.48
51:BS:15:ARG:O	51:BS:18:ILE:HG13	2.14	0.48
51:BS:98:VAL:HG12	51:BS:100:ALA:N	2.25	0.48
2:CB:219:VAL:O	2:CB:223:ILE:HG13	2.13	0.48
36:DA:321:G:C1'	41:DF:168:ARG:HH21	2.27	0.48
1:CA:303:A:OP1	12:CL:17:LYS:HE3	2.14	0.48
25:CZ:140:MET:HG3	62:CZ:501:GDP:HN21	1.77	0.48
36:BA:2700:C:O2'	36:BA:2701:C:H5'	2.13	0.48
1:AA:1115:C:H2'	1:AA:1116:C:H6	1.78	0.48
1:AA:1285:A:O2'	1:AA:1286:A:P	2.71	0.48
58:DZ:153:SER:HB3	58:DZ:167:PRO:HB3	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1251:A:H2'	1:CA:1252:A:C8	2.49	0.48
1:CA:1288:A:O2'	1:CA:1289:A:H5'	2.14	0.48
1:CA:1367:C:H5'	10:CJ:60:ARG:CZ	2.44	0.48
1:CA:1118:C:OP1	9:CI:104:ARG:NH1	2.46	0.48
22:AV:5:G:H2'	22:AV:6:G:H8	1.75	0.48
36:BA:1344:G:H22	36:BA:1404:C:H1'	1.77	0.48
57:BY:81:LYS:HG3	57:BY:97:ARG:HG3	1.96	0.48
36:DA:2107:C:H2'	36:DA:2108:C:C6	2.49	0.48
1:AA:1483:A:H3'	1:AA:1484:C:H6	1.79	0.48
1:CA:18:C:C5'	5:CE:127:ASN:ND2	2.71	0.48
41:BF:126:VAL:HG21	41:BF:129:PHE:CZ	2.48	0.48
31:B5:44:THR:CG2	50:BR:101:ALA:HB2	2.40	0.48
22:AW:19:G:H4'	22:AW:20:U:OP2	2.14	0.48
3:CC:48:TYR:C	3:CC:50:ALA:N	2.66	0.48
20:CT:19:SER:O	20:CT:20:LEU:C	2.51	0.48
36:BA:1200:C:C2	36:BA:1246:A:C2	3.00	0.48
58:DZ:17:ALA:C	58:DZ:20:ARG:HG2	2.34	0.48
30:D4:33:VAL:CG1	30:D4:34:GLU:N	2.77	0.48
4:AD:119:GLN:O	4:AD:123:HIS:CD2	2.67	0.48
5:CE:72:GLN:O	5:CE:75:THR:HG22	2.13	0.48
43:BH:83:TYR:O	43:BH:84:SER:C	2.52	0.48
42:DG:91:ARG:CG	42:DG:92:VAL:N	2.77	0.48
1:CA:1102:A:C4	1:CA:1103:C:C5	3.02	0.48
36:DA:2485:G:C5'	49:DQ:46:GLN:HE21	2.27	0.48
11:AK:65:ALA:HB1	11:AK:98:LEU:HD21	1.94	0.48
1:AA:711:G:O2'	1:AA:712:A:H5'	2.14	0.48
38:BC:151:GLU:HA	38:BC:154:ARG:CD	2.44	0.48
31:B5:36:CYS:C	31:B5:38:ALA:H	2.17	0.48
36:DA:121:G:H4'	36:DA:149:A:H5'	1.95	0.48
1:CA:135:C:H2'	1:CA:136:C:H5'	1.96	0.48
36:DA:222:A:H2	36:DA:233:A:O3'	1.96	0.48
1:AA:624:C:H2'	1:AA:625:G:C8	2.43	0.48
36:DA:2128:C:O2'	36:DA:2129:C:H6	1.97	0.48
26:D0:24:LYS:N	26:D0:37:LEU:O	2.43	0.48
48:BP:84:ASN:ND2	48:BP:116:GLY:HA3	2.29	0.48
36:DA:2208:A:N3	36:DA:2219:G:C6	2.82	0.48
33:B7:8:ASN:HB3	33:B7:11:LYS:HB3	1.94	0.48
33:B7:11:LYS:HG2	36:BA:686:G:C4	2.49	0.48
33:B7:44:PRO:O	33:B7:45:ALA:O	2.32	0.48
36:BA:689:A:H2'	36:BA:690:G:H8	1.79	0.48
25:CZ:286:VAL:HG23	25:CZ:287:GLY:N	2.27	0.48
48:DP:85:LEU:O	48:DP:89:ALA:HB2	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1809:A:C6	36:BA:1810:A:C6	3.02	0.48
39:DD:131:LEU:HA	39:DD:190:TYR:CE2	2.48	0.48
39:DD:137:PRO:HB2	39:DD:140:THR:HG23	1.95	0.48
46:BN:25:ARG:HG2	46:BN:25:ARG:HH11	1.79	0.48
25:AZ:314:THR:O	25:AZ:373:GLU:HA	2.13	0.48
1:AA:1381:U:H5	1:AA:1382:C:C4	2.31	0.48
51:BS:53:SER:O	51:BS:56:LEU:HB3	2.13	0.48
46:DN:89:LYS:C	46:DN:93:THR:HG22	2.34	0.48
1:AA:1442(B):A:C2	52:BT:118:ARG:NH2	2.81	0.48
1:AA:692:U:H3	11:AK:53:SER:HB3	1.78	0.48
46:BN:67:LEU:O	46:BN:68:GLU:CB	2.61	0.48
36:BA:987:G:H2'	36:BA:988:A:O4'	2.13	0.48
1:CA:472:A:O2'	16:CP:81:ARG:HA	2.13	0.48
36:DA:2074:U:H2'	36:DA:2075:U:C5	2.48	0.48
39:BD:4:LYS:HZ2	39:BD:20:ASP:HA	1.79	0.48
38:DC:68:LEU:HD11	38:DC:161:ILE:HG22	1.95	0.48
6:CF:15:ASP:C	6:CF:17:SER:H	2.17	0.48
6:CF:79:LEU:O	6:CF:81:ILE:N	2.47	0.48
33:B7:25:PRO:N	33:B7:28:ARG:NH2	2.62	0.48
36:BA:519:U:H2'	36:BA:520:G:C8	2.48	0.48
26:B0:19:LYS:NZ	26:B0:21:LEU:HD21	2.28	0.48
36:DA:1120:G:H2'	36:DA:1121:C:H6	1.77	0.48
36:DA:1714:G:H2'	36:DA:1717:G:C8	2.49	0.48
58:BZ:17:ALA:HA	58:BZ:20:ARG:CG	2.44	0.48
1:CA:9:G:H1	1:CA:25:C:N4	2.12	0.48
53:BU:102:GLU:HB3	53:BU:105:VAL:HB	1.93	0.48
48:BP:52:GLU:CG	48:BP:53:GLY:H	2.27	0.48
39:BD:11:PRO:O	39:BD:13:ARG:N	2.47	0.48
36:DA:1720:U:C3'	36:DA:1721:G:H5''	2.44	0.48
36:DA:2488:A:O2'	36:DA:2489:G:H5'	2.14	0.48
1:AA:365:U:O2	1:AA:365:U:O5'	2.31	0.48
15:AO:32:LEU:O	15:AO:35:ARG:HB2	2.13	0.48
1:AA:646:U:H2'	1:AA:647:C:C6	2.48	0.48
20:CT:93:GLU:C	20:CT:95:ALA:H	2.16	0.48
20:AT:12:ALA:O	20:AT:15:ARG:N	2.47	0.48
15:CO:27:VAL:O	15:CO:28:GLN:C	2.52	0.48
36:BA:2704:C:H2'	36:BA:2705:A:O4'	2.14	0.48
53:DU:71:GLN:O	53:DU:71:GLN:HG2	2.14	0.48
9:AI:28:VAL:O	9:AI:29:ASN:C	2.49	0.48
36:BA:2520:C:C6	36:BA:2567:G:H1'	2.49	0.48
24:AY:64:C:C4'	25:AZ:391:GLY:HA2	2.44	0.48
32:B6:15:GLU:HG2	32:B6:18:ARG:NH1	2.29	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:38:LYS:HA	32:B6:48:VAL:HA	1.94	0.48
36:BA:568:U:H2'	36:BA:570:G:OP2	2.14	0.48
36:DA:2638:G:P	40:DE:82:ARG:HH21	2.36	0.48
36:DA:629:G:H5'	36:DA:629:G:H8	1.78	0.48
48:DP:126:VAL:CA	48:DP:145:PRO:HB2	2.40	0.48
25:AZ:32:THR:HA	25:AZ:70:TYR:HB3	1.95	0.48
27:B1:44:PRO:HA	36:BA:396:G:O3'	2.14	0.48
56:BX:26:TYR:O	56:BX:80:ILE:HA	2.14	0.48
4:AD:12:CYS:SG	4:AD:31:CYS:SG	3.12	0.48
35:B9:30:PRO:C	35:B9:32:HIS:N	2.65	0.48
41:BF:132:VAL:CG2	41:BF:133:ASN:H	2.13	0.48
42:BG:62:LEU:H	42:BG:62:LEU:CD1	2.23	0.48
11:CK:125:PHE:C	11:CK:127:LYS:N	2.66	0.48
27:D1:62:VAL:HG22	27:D1:63:ALA:N	2.28	0.48
36:DA:2651:C:O2'	36:DA:2652:C:H5'	2.14	0.48
36:DA:2061:G:H5''	36:DA:2503:A:N1	2.29	0.48
36:DA:820:A:H1'	36:DA:943:U:O2'	2.14	0.48
1:CA:1047:G:C2'	1:CA:1048:G:H5'	2.44	0.48
1:CA:1054:C:P	1:CA:1198:G:OP2	2.72	0.48
8:AH:38:ILE:HA	8:AH:41:ARG:HB3	1.96	0.48
8:AH:17:THR:C	8:AH:78:GLN:HE22	2.17	0.48
2:CB:185:ILE:HG22	2:CB:199:TYR:CB	2.42	0.48
2:CB:47:THR:HG22	2:CB:51:LEU:CD1	2.44	0.48
40:BE:37:ARG:O	40:BE:45:THR:HA	2.14	0.48
25:CZ:155:ARG:HH11	25:CZ:155:ARG:HG2	1.77	0.48
25:CZ:195:TRP:HA	25:CZ:198:LYS:HB2	1.94	0.48
52:BT:28:VAL:O	52:BT:29:ARG:CB	2.62	0.48
52:BT:48:ILE:O	52:BT:63:VAL:HG13	2.13	0.48
47:DO:105:GLU:O	47:DO:109:LYS:HG2	2.13	0.48
47:DO:107:ARG:NH1	52:DT:35:LYS:HB2	2.29	0.48
36:DA:1502:C:H5'	36:DA:1503:U:OP2	2.14	0.48
58:DZ:129:SER:HB2	58:DZ:131:ARG:HD3	1.95	0.48
7:CG:102:ARG:CG	7:CG:106:GLN:HE21	2.27	0.48
7:CG:15:ASP:OD2	7:CG:16:LEU:N	2.47	0.48
7:CG:38:LEU:O	7:CG:42:ILE:HG13	2.13	0.48
4:AD:135:LEU:HD13	4:AD:135:LEU:N	2.28	0.48
36:BA:2831:G:OP1	36:BA:2834:G:H4'	2.13	0.48
36:DA:2334:G:H21	51:DS:18:ILE:HG21	1.78	0.48
51:DS:28:VAL:HG12	51:DS:29:PHE:N	2.18	0.48
42:BG:169:ALA:O	42:BG:173:LEU:HG	2.14	0.48
36:DA:1317:A:C2	36:DA:1336:A:C2	3.02	0.48
1:AA:1526:G:C4	1:AA:1527:C:C5	3.02	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1236:A:H4'	1:CA:1304:G:H4'	1.94	0.48
36:DA:1826:G:H4'	39:DD:242:ARG:NE	2.28	0.48
22:CW:53:G:N2	22:CW:54:U:H3	2.11	0.48
58:DZ:77:ASP:OD2	58:DZ:79:ARG:O	2.31	0.48
9:AI:4:TYR:CD2	9:AI:88:TYR:HB2	2.48	0.48
39:DD:35:LYS:HB2	39:DD:104:TYR:CE1	2.49	0.48
39:DD:35:LYS:HZ2	39:DD:36:PRO:CD	2.24	0.48
42:DG:7:LEU:O	42:DG:11:TYR:HB2	2.13	0.48
20:AT:71:THR:HG22	20:AT:72:LEU:H	1.79	0.48
36:DA:1174:A:OP2	36:DA:1175:U:H5''	2.14	0.48
38:BC:140:PRO:HG2	38:BC:141:LYS:H	1.79	0.48
1:CA:756:C:O2'	1:CA:757:U:H5'	2.14	0.48
5:CE:79:GLU:HB3	5:CE:92:LYS:HG3	1.94	0.48
43:BH:123:PHE:CD1	43:BH:123:PHE:N	2.82	0.48
1:CA:148:G:H2'	1:CA:149:A:C8	2.49	0.48
36:BA:2022:U:O2'	36:BA:2617:C:C5'	2.60	0.48
1:AA:1439:C:N3	1:AA:1463:C:N3	2.62	0.48
36:BA:792:G:O2'	36:BA:2440:C:N3	2.36	0.48
26:D0:27:GLU:CG	26:D0:68:GLU:HA	2.43	0.48
27:D1:49:VAL:HG22	27:D1:50:ARG:N	2.28	0.48
36:BA:2796:U:C2'	36:BA:2799:C:H5'	2.42	0.48
36:DA:176:G:C5	36:DA:177:G:C6	3.02	0.48
26:B0:23:VAL:HA	26:B0:38:VAL:HG13	1.95	0.48
1:AA:182:U:N3	1:AA:183:G:H1'	2.28	0.48
36:BA:1047:G:H21	36:BA:1110:G:H2'	1.75	0.48
40:BE:69:LYS:HD3	40:BE:89:ASP:HA	1.96	0.48
49:BQ:109:VAL:CG1	49:BQ:110:THR:H	2.26	0.48
36:BA:1400:G:H2'	36:BA:1401:G:C8	2.49	0.48
47:BO:88:ASN:HD21	47:BO:92:GLU:CB	2.25	0.48
25:CZ:316:PHE:HD2	25:CZ:400:VAL:HG13	1.78	0.48
36:BA:979:G:C2	36:BA:982:C:C5	3.01	0.48
1:CA:1070:U:H2'	1:CA:1071:C:C6	2.39	0.48
1:CA:1069:C:H2'	1:CA:1070:U:O5'	2.13	0.48
36:DA:1328:G:N1	36:DA:1647:G:N2	2.62	0.48
3:AC:47:LEU:HB3	3:AC:52:LEU:HD22	1.96	0.48
55:BW:59:VAL:HA	55:BW:63:ASP:HA	1.96	0.48
1:CA:692:U:O4	11:CK:53:SER:HA	2.14	0.48
36:BA:2107:C:H2'	36:BA:2108:C:C6	2.49	0.48
36:BA:733:G:C6	36:BA:761:A:C5	3.01	0.48
6:CF:41:GLU:HB2	6:CF:62:TRP:HB3	1.96	0.48
22:CW:55:U:H2'	22:CW:57:G:OP2	2.13	0.48
36:BA:2241:A:H2'	36:BA:2242:G:C8	2.48	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:7:ILE:O	12:AL:10:LEU:N	2.41	0.48
25:AZ:118:GLU:C	25:AZ:120:ILE:N	2.67	0.48
1:CA:269:C:H2'	1:CA:270:A:H8	1.74	0.48
33:B7:25:PRO:N	33:B7:28:ARG:HH21	2.12	0.48
36:BA:2312:U:H2'	36:BA:2313:C:H5''	1.95	0.48
26:D0:30:VAL:CG1	26:D0:66:VAL:HG23	2.44	0.48
1:AA:1147:C:C2'	9:AI:16:ARG:HD3	2.42	0.48
36:DA:183:C:C5'	36:DA:433:C:H4'	2.44	0.48
43:BH:30:LYS:HE2	43:BH:30:LYS:CA	2.42	0.48
36:BA:1930:G:H22	36:BA:1969:A:C5'	2.27	0.48
45:DK:95:UNK:C	45:DK:97:UNK:N	2.77	0.48
1:CA:763:G:H2'	1:CA:764:C:H6	1.78	0.48
44:BJ:30:UNK:O	44:BJ:31:UNK:CB	2.62	0.48
40:DE:67:PHE:HD2	40:DE:68:ALA:H	1.61	0.48
1:CA:27:G:H2'	1:CA:28:G:C8	2.49	0.48
36:BA:2596:U:H3'	36:BA:2597:G:H8	1.78	0.48
36:DA:1358:G:O2'	36:DA:1359:A:H5''	2.13	0.48
36:BA:1769:G:H1'	36:BA:1958:C:H5''	1.96	0.48
36:DA:654(H):G:C2'	36:DA:654(I):C:H5'	2.44	0.48
7:AG:112:PRO:HG2	7:AG:112:PRO:O	2.13	0.48
36:BA:927:G:H2'	36:BA:927:G:N3	2.29	0.48
36:BA:1044:G:C3'	36:BA:1045:A:H5''	2.43	0.48
2:AB:175:ARG:O	2:AB:176:GLU:C	2.52	0.48
48:BP:66:GLY:O	48:BP:67:MET:HB2	2.14	0.48
36:BA:1188:U:H5''	54:BV:79:VAL:HG11	1.96	0.48
31:D5:2:ALA:HA	36:DA:2015:A:H1'	1.95	0.48
36:DA:1453:U:OP1	50:DR:77:ARG:HD3	2.14	0.48
28:D2:64:LEU:O	28:D2:68:ARG:HB2	2.14	0.48
41:DF:154:VAL:HG22	41:DF:191:ARG:HB3	1.94	0.48
36:BA:1567:A:H5'	39:BD:58:HIS:HD2	1.79	0.48
39:BD:68:LYS:HB2	39:BD:70:TRP:CZ2	2.49	0.48
39:BD:92:ILE:HD13	39:BD:92:ILE:H	1.79	0.48
1:CA:130:A:C8	17:CQ:63:ARG:HG3	2.48	0.48
41:BF:192:LEU:HD23	41:BF:192:LEU:C	2.34	0.48
43:BH:65:HIS:HE1	43:BH:69:ARG:CZ	2.26	0.48
1:AA:973:G:C1'	10:AJ:55:LYS:CE	2.92	0.48
14:AN:4:LYS:O	14:AN:7:ILE:N	2.42	0.48
35:B9:35:ARG:NH1	36:BA:2741:A:O3'	2.45	0.48
50:BR:7:GLY:O	50:BR:8:ARG:HB2	2.13	0.48
13:AM:57:ARG:C	13:AM:59:TYR:N	2.66	0.48
30:B4:16:CYS:HA	30:B4:33:VAL:CG1	2.44	0.48
36:DA:1216:G:N2	36:DA:1234:U:H1'	2.29	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1216:G:C2'	36:DA:1217:C:H5'	2.44	0.48
46:DN:54:VAL:O	46:DN:122:VAL:HG13	2.14	0.48
40:BE:55:ASN:O	40:BE:56:PRO:C	2.52	0.48
1:CA:1226:C:N4	13:CM:104:ARG:HB2	2.28	0.48
56:BX:35:THR:CG2	56:BX:37:THR:HB	2.44	0.48
36:BA:1668:A:H61	36:BA:1676:A:H61	1.62	0.48
52:DT:32:TYR:O	52:DT:41:ARG:O	2.31	0.48
49:BQ:141:GLN:NE2	58:BZ:72:ARG:HA	2.29	0.48
57:DY:13:VAL:CG1	57:DY:14:LEU:H	2.07	0.48
57:DY:68:HIS:ND1	57:DY:70:SER:HB3	2.29	0.48
7:AG:26:PHE:O	7:AG:27:ILE:C	2.52	0.48
36:BA:2646:C:H2'	36:BA:2647:U:O4'	2.14	0.48
36:BA:1069:A:C1'	36:BA:1070:A:P	3.02	0.48
26:B0:48:GLY:N	26:B0:51:VAL:HB	2.29	0.48
1:AA:1410:G:C6	1:AA:1491:G:O6	2.67	0.48
1:AA:908:A:O2'	1:AA:909:A:H5'	2.13	0.48
36:BA:1344:G:C2	36:BA:1404:C:C2	3.02	0.48
19:AS:31:ILE:O	19:AS:31:ILE:HG23	2.14	0.48
4:AD:188:LEU:O	4:AD:189:PRO:O	2.32	0.48
4:AD:92:VAL:O	4:AD:93:PHE:C	2.52	0.48
36:DA:1697:G:H3'	36:DA:1698:A:H5''	1.96	0.48
3:CC:120:VAL:HG12	3:CC:198:VAL:HG21	1.95	0.48
4:CD:188:LEU:O	4:CD:189:PRO:O	2.31	0.48
4:CD:88:VAL:HG12	4:CD:90:GLY:N	2.27	0.48
13:CM:66:LEU:HD12	13:CM:66:LEU:N	2.29	0.48
49:DQ:27:VAL:O	49:DQ:28:ALA:HB3	2.14	0.48
46:BN:116:LEU:O	46:BN:119:ARG:HB2	2.14	0.48
46:BN:18:ALA:CB	46:BN:26:LEU:HD22	2.43	0.48
10:AJ:24:VAL:C	10:AJ:26:ALA:N	2.65	0.48
13:CM:59:TYR:O	13:CM:63:THR:N	2.47	0.48
42:DG:17:PRO:O	42:DG:21:ARG:HB3	2.13	0.48
36:BA:1627:G:H2'	36:BA:1628:G:H8	1.78	0.48
20:AT:72:LEU:CD2	20:AT:76:ALA:HB1	2.35	0.48
1:CA:977:A:H8	1:CA:982:U:O4	1.97	0.48
43:DH:136:ILE:CD1	43:DH:136:ILE:H	2.26	0.48
40:DE:176:ILE:HG22	40:DE:178:GLU:HB3	1.95	0.48
40:DE:178:GLU:HG3	40:DE:179:GLU:H	1.79	0.48
40:DE:52:LEU:HB3	40:DE:76:ARG:HB2	1.96	0.48
40:DE:96:PHE:HA	40:DE:100:GLU:OE1	2.13	0.48
51:DS:106:ARG:HH21	51:DS:109:GLY:N	2.11	0.48
2:AB:72:GLY:HA2	2:AB:165:VAL:CG2	2.43	0.48
1:AA:1124:G:H2'	1:AA:1145:C:N4	2.29	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:127:ILE:HG23	2:CB:135:GLN:NE2	2.29	0.48
3:CC:18:TRP:HB3	3:CC:20:SER:H	1.78	0.48
1:CA:1139:G:H4'	1:CA:1140:C:H6	1.79	0.48
36:BA:2262:U:C2	36:BA:2263:C:C5	3.01	0.48
2:CB:209:ARG:HH11	2:CB:239:VAL:HG21	1.79	0.48
36:DA:2691:C:H2'	36:DA:2692:C:C6	2.31	0.48
1:CA:1499:A:C1'	1:CA:1520:G:C5'	2.92	0.48
1:AA:404:U:H5'	4:AD:122:ARG:HD3	1.95	0.48
1:AA:625:G:H2'	1:AA:626:U:C6	2.49	0.48
36:DA:272(B):G:H2'	36:DA:272(C):G:C8	2.45	0.48
33:B7:11:LYS:HE3	33:B7:15:THR:HG21	1.95	0.48
33:D7:19:ARG:HD3	36:DA:125:G:OP2	2.14	0.48
36:BA:1811:G:H2'	36:BA:1812:A:H8	1.79	0.48
22:AW:64:A:H2'	22:AW:65:G:H8	1.75	0.48
36:DA:1410:G:H2'	36:DA:1411:C:C6	2.49	0.48
25:AZ:309:SER:O	25:AZ:310:ILE:HB	2.13	0.48
58:DZ:59:LEU:O	58:DZ:66:SER:HA	2.14	0.48
36:BA:1112:G:O2'	36:BA:1113:U:H5'	2.13	0.48
46:DN:71:ILE:HA	46:DN:86:PRO:HA	1.95	0.48
36:BA:204:A:OP1	36:BA:206:U:H1'	2.14	0.48
25:AZ:348:ASP:OD1	25:AZ:348:ASP:O	2.32	0.48
4:AD:88:VAL:HG12	4:AD:90:GLY:N	2.24	0.48
6:AF:41:GLU:HB2	6:AF:62:TRP:HB3	1.96	0.48
42:DG:119:GLY:HA3	42:DG:181:ARG:CB	2.44	0.48
1:AA:1166:G:H1'	1:AA:1171:G:N2	2.29	0.48
12:AL:39:VAL:O	12:AL:56:ALA:HB1	2.14	0.48
28:D2:4:SER:CA	28:D2:7:ARG:HD2	2.40	0.48
25:AZ:121:LEU:O	25:AZ:125:GLN:HG2	2.14	0.48
14:CN:18:VAL:O	14:CN:19:ARG:O	2.32	0.48
1:AA:142:G:H1	1:AA:221:C:N4	2.10	0.48
51:BS:42:ASP:O	51:BS:43:GLU:HB3	2.13	0.48
57:DY:2:ARG:CD	57:DY:3:VAL:HG23	2.42	0.48
36:BA:316:C:H2'	36:BA:317:G:O5'	2.14	0.48
27:D1:27:GLU:O	27:D1:28:GLY:C	2.51	0.48
36:BA:1701:A:H2'	36:BA:1702:G:H5'	1.96	0.48
53:DU:102:GLU:HB3	53:DU:105:VAL:CG2	2.44	0.48
1:AA:1298:C:H2'	7:AG:114:ARG:HH12	1.79	0.48
36:DA:2677:G:O2'	36:DA:2678:C:H5'	2.13	0.48
8:CH:112:LEU:HD23	8:CH:112:LEU:N	2.29	0.48
5:AE:20:GLN:NE2	5:AE:25:ARG:NH2	2.61	0.48
15:CO:34:LEU:O	15:CO:34:LEU:HD12	2.14	0.48
13:AM:79:LYS:O	13:AM:82:MET:CG	2.61	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2488:A:H2'	36:DA:2489:G:C8	2.48	0.48
1:AA:364:A:H2'	1:AA:365:U:O2	2.13	0.48
30:D4:4:GLY:N	30:D4:6:HIS:CE1	2.82	0.48
7:AG:13:GLN:NE2	7:AG:14:PRO:HD2	2.29	0.48
12:CL:76:ASN:O	12:CL:76:ASN:CG	2.52	0.48
17:AQ:53:LEU:C	17:AQ:53:LEU:HD23	2.34	0.48
36:DA:1769:G:H1'	36:DA:1958:C:H5''	1.95	0.48
32:B6:12:GLU:CD	32:B6:54:ILE:CG2	2.83	0.48
34:B8:13:ARG:HB3	48:BP:63:PRO:HA	1.96	0.48
36:BA:972:G:O5'	36:BA:972:G:H8	1.96	0.48
34:B8:25:MET:CG	48:BP:64:LYS:HB2	2.34	0.48
53:BU:10:ARG:O	53:BU:13:LYS:N	2.45	0.48
36:DA:2850:A:C6	36:DA:2869:G:H5'	2.49	0.48
40:DE:2:LYS:O	40:DE:199:ARG:HA	2.14	0.48
40:DE:8:LYS:HB2	40:DE:196:VAL:HG11	1.96	0.48
36:DA:1813:G:H4'	39:DD:44:ASN:O	2.13	0.48
39:DD:70:TRP:HZ3	39:DD:146:GLU:OE2	1.97	0.48
48:DP:78:PRO:HB2	48:DP:111:ARG:NH2	2.29	0.48
25:AZ:136:ASN:O	25:AZ:137:LYS:HB2	2.13	0.48
36:DA:606:U:H2'	36:DA:607:U:C4'	2.44	0.48
38:DC:117:PRO:HD3	38:DC:146:GLY:N	2.28	0.48
39:BD:70:TRP:CD1	39:BD:70:TRP:C	2.87	0.48
38:BC:134:ARG:O	38:BC:135:GLY:C	2.52	0.48
38:BC:113:VAL:CG2	38:BC:136:LEU:HD22	2.44	0.48
1:CA:276:G:O2'	17:CQ:68:ARG:NH1	2.47	0.48
41:BF:168:ARG:HA	41:BF:175:THR:HG21	1.94	0.48
36:BA:2880:C:O2	50:BR:91:GLN:O	2.32	0.48
50:BR:67:LEU:HD13	50:BR:70:LEU:O	2.14	0.48
42:BG:67:LYS:H	42:BG:67:LYS:HD3	1.69	0.48
36:DA:29:U:O2'	53:DU:8:VAL:HG23	2.13	0.48
36:DA:525:U:O2'	36:DA:526:A:H5'	2.13	0.48
46:DN:114:ARG:O	46:DN:117:PHE:HB3	2.14	0.48
53:DU:32:PHE:O	53:DU:36:ARG:HB2	2.14	0.48
54:DV:59:ALA:HA	54:DV:95:LEU:O	2.14	0.48
1:CA:967:C:H2'	1:CA:968:A:H8	1.76	0.48
51:BS:12:PHE:CD2	51:BS:12:PHE:N	2.82	0.48
2:CB:220:ASP:O	2:CB:223:ILE:N	2.47	0.48
41:DF:132:VAL:CG2	41:DF:133:ASN:H	2.12	0.48
48:BP:147:LEU:HG	48:BP:148:LEU:H	1.77	0.48
56:DX:36:LYS:NZ	56:DX:55:ASN:HA	2.29	0.48
52:DT:23:ARG:HG2	52:DT:120:ARG:NH1	2.29	0.48
37:BB:73:A:C2	37:BB:74:U:H1'	2.49	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:309:G:O3'	57:DY:18:GLY:CA	2.61	0.48
57:DY:27:VAL:HG12	57:DY:28:LYS:N	2.29	0.48
1:CA:1115:C:H2'	1:CA:1116:C:H6	1.79	0.48
7:CG:36:LYS:C	7:CG:39:ALA:HB3	2.34	0.48
9:CI:11:LYS:HG3	9:CI:108:VAL:HG13	1.95	0.48
36:BA:2443:C:C2'	36:BA:2444:G:H5'	2.43	0.48
4:AD:134:ASP:C	4:AD:135:LEU:HD13	2.34	0.48
36:BA:335:C:H2'	36:BA:336:C:C6	2.49	0.48
42:BG:97:ASP:N	42:BG:100:TRP:HD1	2.06	0.48
42:BG:18:GLU:OE1	42:BG:22:ARG:HG3	2.14	0.48
36:DA:1335:U:OP1	56:DX:65:ARG:NH2	2.46	0.48
36:DA:1337:G:H2'	36:DA:1338:G:H8	1.78	0.48
55:BW:76:VAL:CB	55:BW:103:ILE:HG23	2.44	0.48
46:DN:131:GLN:NE2	46:DN:133:GLN:CA	2.76	0.48
36:DA:764:A:C3'	36:DA:765:G:H5'	2.41	0.48
3:AC:32:LEU:HD22	3:AC:59:ARG:NH2	2.29	0.48
1:CA:44:G:C2	1:CA:45:U:H1'	2.48	0.48
16:CP:12:LYS:HG2	16:CP:13:HIS:CD2	2.48	0.48
36:DA:866:A:C2	36:DA:914:C:C6	3.02	0.48
46:BN:2:LYS:HZ1	54:BV:12:TYR:CA	2.26	0.48
36:DA:1355:G:O6	36:DA:1377:G:N2	2.47	0.48
36:DA:2713:A:H3'	36:DA:2714:G:C5'	2.44	0.48
42:DG:59:GLU:O	42:DG:63:ILE:HG12	2.14	0.48
1:CA:581:G:O6	1:CA:758:G:C8	2.67	0.48
53:DU:68:ALA:HB1	53:DU:106:PHE:HE2	1.78	0.48
58:BZ:82:ARG:NH1	58:BZ:83:PRO:O	2.46	0.48
1:AA:878:G:OP1	8:AH:90:GLY:HA3	2.14	0.48
24:AY:48:C:H4'	24:AY:49:G:H5''	1.95	0.48
31:D5:27:PRO:HG3	55:DW:23:LEU:CD1	2.34	0.48
1:CA:859:A:C4	1:CA:860:A:C8	3.02	0.48
1:CA:1128:C:H1'	1:CA:1146:A:H61	1.79	0.48
1:CA:1152:A:C4	1:CA:1153:C:C5	3.02	0.48
22:AV:40:C:H4'	22:AW:36:A:H5''	1.95	0.48
38:BC:177:LYS:O	38:BC:180:PHE:HD1	1.97	0.48
1:AA:1075:C:H4'	1:AA:1101:A:N6	2.29	0.48
36:BA:784:A:C8	36:BA:792:G:C5	3.02	0.48
8:AH:129:VAL:HG23	8:AH:130:GLY:N	2.28	0.48
46:DN:83:LYS:CG	46:DN:84:LYS:H	2.20	0.48
1:CA:712:A:C2	1:CA:713:G:C4	3.02	0.48
1:CA:294:U:H2'	1:CA:295:C:C6	2.49	0.48
55:DW:10:VAL:HB	55:DW:101:SER:O	2.14	0.48
46:BN:83:LYS:CG	46:BN:84:LYS:H	2.20	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:403:C:OP1	4:CD:136:PRO:HD2	2.13	0.48
36:BA:892:G:H2'	36:BA:893:C:C6	2.48	0.48
48:BP:83:VAL:O	48:BP:115:LEU:HD23	2.14	0.48
36:BA:1605:C:H2'	36:BA:1606:G:C5'	2.43	0.48
18:CR:70:ILE:O	18:CR:71:LYS:C	2.52	0.48
1:AA:928:G:O2'	1:AA:929:G:H5'	2.13	0.48
39:DD:142:VAL:HG23	39:DD:192:THR:C	2.35	0.48
36:DA:848:G:H1'	36:DA:933:A:O2'	2.13	0.48
18:AR:52:PRO:O	18:AR:53:ARG:C	2.52	0.48
39:DD:158:ALA:O	39:DD:196:VAL:HG11	2.14	0.48
25:CZ:320:VAL:HG12	25:CZ:321:TYR:H	1.78	0.48
1:CA:68:G:H5'	1:CA:171:A:H1'	1.96	0.48
12:CL:28:LYS:O	12:CL:30:ALA:N	2.47	0.48
1:CA:142:G:H1	1:CA:221:C:N4	2.09	0.48
38:BC:103:ILE:CG2	38:BC:103:ILE:O	2.60	0.48
6:CF:14:LEU:HD13	6:CF:15:ASP:N	2.29	0.48
36:BA:817:C:H4'	36:BA:932:G:N1	2.29	0.48
36:BA:1023:U:H1'	36:BA:1122:G:H5''	1.96	0.48
26:B0:32:ARG:O	26:B0:35:ASN:OD1	2.32	0.48
36:BA:1714:G:H2'	36:BA:1717:G:C8	2.49	0.48
52:DT:111:ARG:HG3	52:DT:111:ARG:O	2.13	0.48
36:BA:953:A:H2'	36:BA:954:G:C8	2.46	0.48
36:DA:519:U:H2'	36:DA:520:G:H8	1.79	0.48
18:AR:73:ALA:HB3	18:AR:79:LEU:HD12	1.96	0.48
1:CA:284:G:H2'	1:CA:285:G:H8	1.79	0.48
1:CA:246:A:C2	1:CA:282:A:C5	3.02	0.48
36:BA:1625:C:H2'	36:BA:1626:G:O4'	2.14	0.48
40:BE:95:ILE:HD13	40:BE:95:ILE:H	1.78	0.48
15:CO:35:ARG:O	15:CO:38:ARG:HB2	2.14	0.48
39:DD:11:PRO:O	39:DD:13:ARG:N	2.46	0.48
41:DF:17:ARG:NH1	41:DF:17:ARG:HG3	2.28	0.48
47:DO:53:LYS:N	47:DO:53:LYS:HD2	2.29	0.48
49:DQ:90:VAL:HG12	49:DQ:91:GLU:N	2.29	0.48
1:AA:1056:U:H5'	3:AC:163:ALA:HB2	1.96	0.48
1:CA:646:U:H2'	1:CA:647:C:C6	2.49	0.48
1:CA:28:G:H1	1:CA:555:C:H42	1.61	0.48
2:AB:142:LEU:O	2:AB:143:GLU:C	2.52	0.48
1:CA:1084:G:OP1	1:CA:1086:U:C4	2.67	0.48
36:DA:517:C:H6	36:DA:517:C:O5'	1.97	0.48
57:BY:90:LEU:N	57:BY:90:LEU:HD23	2.29	0.48
3:AC:145:GLY:O	3:AC:146:ALA:O	2.31	0.48
36:BA:1365:A:C6	36:BA:1366:A:C5	3.02	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:53:LYS:HE2	32:B6:54:ILE:HA	1.96	0.47
34:B8:52:LYS:N	34:B8:53:PRO:CD	2.77	0.47
36:BA:2283:C:C2'	36:BA:2284:C:H5'	2.44	0.47
34:B8:28:GLY:N	36:BA:2393:A:OP1	2.47	0.47
36:DA:2009:G:O2'	36:DA:2010:G:H5'	2.13	0.47
36:DA:2620:C:H2'	36:DA:2621:A:O4'	2.14	0.47
39:DD:147:LEU:CG	39:DD:183:ARG:HH12	2.24	0.47
48:DP:146:VAL:CG2	48:DP:147:LEU:H	1.96	0.47
25:AZ:132:VAL:HG23	25:AZ:210:ILE:HD11	1.94	0.47
36:DA:83:G:O2'	36:DA:84:A:H8	1.92	0.47
36:BA:1862:G:N2	36:BA:1881:C:C2	2.82	0.47
35:D9:31:LYS:C	35:D9:32:HIS:CD2	2.87	0.47
1:AA:1472:U:H2'	1:AA:1473:A:O4'	2.14	0.47
36:BA:601:C:H5'	41:BF:108:LYS:HE3	1.96	0.47
1:AA:541:G:H2'	1:AA:542:G:H8	1.79	0.47
35:B9:25:VAL:HB	35:B9:34:GLN:HB3	1.94	0.47
36:BA:88:G:N3	36:BA:88:G:H2'	2.28	0.47
36:BA:2822:G:O6	50:BR:4:LEU:HB3	2.14	0.47
46:DN:108:PRO:HG2	46:DN:113:GLY:HA3	1.95	0.47
53:DU:59:ARG:O	53:DU:60:LEU:C	2.52	0.47
1:AA:353:A:H2'	1:AA:354:G:OP2	2.14	0.47
2:CB:102:LEU:HD23	2:CB:182:ILE:HD13	1.96	0.47
41:DF:156:LEU:HD23	41:DF:167:ALA:HB2	1.96	0.47
48:BP:105:LEU:O	48:BP:106:LEU:CB	2.56	0.47
36:BA:1988:C:C2'	36:BA:1989:G:H5'	2.44	0.47
47:BO:104:ARG:CZ	47:BO:104:ARG:CB	2.91	0.47
47:BO:79:PHE:CD2	52:BT:72:VAL:HG13	2.48	0.47
36:BA:2807:G:C3'	36:BA:2808:U:C5'	2.88	0.47
47:DO:1:MET:HG3	47:DO:67:LYS:HG2	1.96	0.47
52:DT:51:ARG:NE	52:DT:100:TYR:OH	2.47	0.47
52:DT:70:VAL:HG12	52:DT:71:GLY:O	2.14	0.47
58:BZ:100:VAL:HG11	58:BZ:137:ILE:HG12	1.95	0.47
1:AA:940:C:H2'	1:AA:941:G:C8	2.48	0.47
7:AG:23:VAL:CG1	7:AG:43:PHE:CE2	2.96	0.47
10:AJ:49:VAL:CG1	10:AJ:49:VAL:O	2.61	0.47
58:DZ:127:LYS:O	58:DZ:128:VAL:CB	2.62	0.47
26:B0:27:GLU:CG	26:B0:68:GLU:HA	2.44	0.47
1:AA:1403:C:H1'	1:AA:1500:A:N1	2.29	0.47
36:BA:1516:C:H2'	36:BA:1517:G:C5'	2.27	0.47
11:AK:127:LYS:C	11:AK:129:SER:H	2.17	0.47
51:DS:27:SER:O	51:DS:28:VAL:HG22	2.14	0.47
36:DA:2123:G:H1'	38:DC:172:HIS:CB	2.44	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:18:C:C5'	5:AE:127:ASN:ND2	2.71	0.47
39:DD:209:ALA:O	39:DD:212:SER:HB2	2.14	0.47
55:DW:62:HIS:O	55:DW:63:ASP:C	2.52	0.47
38:BC:42:GLU:HB3	38:BC:44:HIS:NE2	2.28	0.47
3:CC:47:LEU:HB3	3:CC:52:LEU:HD22	1.95	0.47
2:CB:87:ARG:HH21	2:CB:233:SER:H	1.60	0.47
37:DB:71:C:H2'	37:DB:71:C:O2	2.13	0.47
16:CP:20:VAL:HA	16:CP:36:ILE:HG13	1.95	0.47
54:BV:38:LEU:O	54:BV:51:VAL:CG1	2.62	0.47
25:AZ:259:ALA:CB	25:AZ:260:PRO:HD2	2.28	0.47
39:BD:96:HIS:CE1	39:BD:102:LYS:NZ	2.82	0.47
39:DD:34:VAL:CG2	39:DD:35:LYS:H	2.22	0.47
36:DA:428:A:H5'	36:DA:429:A:OP2	2.14	0.47
36:BA:1494:A:O2'	36:BA:1496:A:H2	1.97	0.47
42:DG:59:GLU:CD	42:DG:153:ARG:HH21	2.15	0.47
2:CB:103:THR:OG1	2:CB:104:ASN:N	2.47	0.47
49:BQ:125:LEU:N	49:BQ:125:LEU:HD23	2.28	0.47
1:AA:828:A:OP1	1:AA:828:A:H4'	2.14	0.47
15:AO:82:ILE:HD13	15:AO:82:ILE:C	2.35	0.47
39:DD:248:SER:HB2	39:DD:249:PRO:CD	2.42	0.47
11:AK:94:ALA:O	11:AK:95:ILE:C	2.53	0.47
2:CB:73:THR:O	2:CB:74:LYS:C	2.50	0.47
26:D0:69:PHE:CE2	26:D0:79:VAL:HG22	2.49	0.47
1:CA:1414:U:O2'	1:CA:1415:G:H5'	2.14	0.47
1:AA:713:G:O2'	1:AA:714:G:H5'	2.14	0.47
36:DA:2481:G:HO2'	36:DA:2482:G:P	2.37	0.47
49:DQ:58:PHE:CD1	49:DQ:58:PHE:N	2.78	0.47
1:AA:403:C:O2'	1:AA:404:U:H5'	2.14	0.47
18:AR:45:SER:N	18:AR:51:LEU:HG	2.29	0.47
5:AE:125:SER:OG	5:AE:126:ARG:N	2.46	0.47
36:DA:2133:G:H8	36:DA:2133:G:H3'	1.79	0.47
38:DC:6:ARG:CG	38:DC:6:ARG:HH11	2.25	0.47
33:D7:11:LYS:O	33:D7:12:ARG:C	2.51	0.47
36:BA:2776:A:H4'	36:BA:2778:A:H5''	1.95	0.47
1:AA:1269:A:C2'	1:AA:1270:C:H5'	2.44	0.47
36:BA:2222:G:C2	36:BA:2223:G:C8	3.02	0.47
36:BA:1980:G:O2'	36:BA:1982:C:OP2	2.32	0.47
36:BA:206:U:H2'	36:BA:207:A:C8	2.49	0.47
55:BW:64:MET:O	55:BW:109:GLU:HG2	2.14	0.47
36:BA:2649:U:H2'	36:BA:2650:U:C6	2.49	0.47
36:BA:2654:A:N3	36:BA:2656:U:C4	2.81	0.47
29:B3:13:ILE:HD13	36:BA:989:G:C5	2.49	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:D1:18:ILE:CG2	27:D1:19:GLN:H	2.26	0.47
46:DN:39:ARG:HE	46:DN:41:ASP:HB3	1.79	0.47
25:CZ:126:VAL:HG13	63:CZ:502:KIR:C47	2.44	0.47
36:BA:1119:C:H2'	36:BA:1120:G:C8	2.49	0.47
36:DA:1563:G:H2'	36:DA:1564:C:H6	1.79	0.47
33:B7:20:ALA:O	33:B7:23:ARG:N	2.45	0.47
33:B7:31:LEU:C	33:B7:33:ARG:H	2.18	0.47
36:BA:479:A:O2'	36:BA:481:G:C5'	2.61	0.47
17:AQ:67:LYS:O	17:AQ:69:LYS:N	2.46	0.47
36:DA:1705:G:C2'	36:DA:1706:U:H5'	2.44	0.47
22:CV:28:G:H2'	22:CV:29:G:H8	1.79	0.47
1:CA:92:C:H2'	1:CA:93:G:C8	2.47	0.47
25:CZ:8:THR:OG1	25:CZ:9:LYS:N	2.46	0.47
1:AA:285:G:O2'	1:AA:286:G:H5'	2.13	0.47
11:CK:105:VAL:HG23	11:CK:105:VAL:O	2.14	0.47
1:CA:1418:A:N3	36:DA:1959:G:H1'	2.29	0.47
45:BK:99:UNK:O	45:BK:100:UNK:O	2.30	0.47
3:CC:130:VAL:O	3:CC:131:ARG:C	2.52	0.47
36:DA:590:A:H2'	36:DA:591:C:C6	2.48	0.47
36:DA:1863:G:C2	36:DA:1880:C:O2	2.67	0.47
39:DD:117:VAL:CG2	39:DD:118:VAL:N	2.77	0.47
52:BT:133:GLU:HG2	52:BT:133:GLU:O	2.13	0.47
48:BP:108:LYS:N	48:BP:108:LYS:HD2	2.29	0.47
8:AH:125:ARG:HG3	8:AH:125:ARG:HH11	1.78	0.47
2:CB:142:LEU:O	2:CB:143:GLU:C	2.51	0.47
36:BA:2419:U:H2'	36:BA:2420:C:H6	1.78	0.47
48:BP:23:PRO:HB2	48:BP:33:ARG:CD	2.45	0.47
50:DR:76:VAL:CG1	50:DR:77:ARG:N	2.76	0.47
19:CS:16:LEU:C	19:CS:18:LYS:N	2.67	0.47
32:D6:41:PRO:HG2	32:D6:47:THR:OG1	2.14	0.47
34:D8:22:VAL:O	34:D8:49:VAL:HG23	2.14	0.47
34:D8:31:HIS:O	34:D8:32:LEU:C	2.52	0.47
34:D8:45:GLY:O	34:D8:46:ARG:O	2.32	0.47
25:AZ:163:PHE:O	25:AZ:165:GLY:N	2.43	0.47
36:DA:83:G:C2'	36:DA:102:G:H22	2.27	0.47
39:BD:261:LYS:HZ2	39:BD:263:ARG:HB2	1.76	0.47
5:CE:12:LEU:C	5:CE:12:LEU:HD13	2.34	0.47
36:DA:500:G:N1	36:DA:503:A:OP2	2.46	0.47
38:DC:78:ALA:HB1	38:DC:82:LYS:HB2	1.95	0.47
39:BD:52:ARG:HB2	39:BD:53:PHE:CD2	2.49	0.47
36:DA:674:G:H5''	41:DF:76:GLY:N	2.29	0.47
36:BA:2170:A:H5''	38:BC:134:ARG:NE	2.26	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BF:203:GLN:C	41:BF:205:ARG:N	2.66	0.47
41:BF:39:TRP:HZ2	41:BF:43:LYS:HZ3	1.62	0.47
1:AA:1048:G:OP1	14:AN:4:LYS:HB2	2.14	0.47
43:DH:42:ARG:CB	43:DH:42:ARG:HH11	2.27	0.47
36:BA:2850:A:C6	36:BA:2869:G:H5'	2.48	0.47
42:BG:111:LEU:CB	42:BG:112:PRO:CD	2.92	0.47
1:CA:1190:G:H5''	3:CC:3:ASN:HD22	1.79	0.47
36:DA:1131:G:C2	46:DN:75:TYR:CB	2.96	0.47
36:DA:569:U:C4	36:DA:570:G:C6	3.02	0.47
1:CA:967:C:H4'	9:CI:125:TYR:HE2	1.77	0.47
8:AH:41:ARG:C	8:AH:43:GLY:H	2.18	0.47
2:CB:166:ASP:O	2:CB:167:PRO:C	2.50	0.47
48:BP:109:GLY:O	48:BP:110:TYR:C	2.53	0.47
36:DA:1344:G:C2	36:DA:1404:C:C2	3.02	0.47
25:CZ:132:VAL:HG23	25:CZ:210:ILE:HD11	1.94	0.47
25:CZ:194:GLU:HB3	25:CZ:198:LYS:HZ3	1.80	0.47
52:BT:61:PHE:CZ	52:BT:76:PHE:HD1	2.31	0.47
47:DO:80:ASP:OD2	52:DT:71:GLY:HA3	2.13	0.47
52:DT:28:VAL:HG13	52:DT:45:PHE:C	2.34	0.47
57:DY:38:ILE:HD13	57:DY:66:PRO:HG3	1.96	0.47
7:AG:27:ILE:O	7:AG:28:ASN:C	2.52	0.47
1:AA:670:G:C2	1:AA:671:G:C4	3.03	0.47
1:CA:1287:A:H2'	1:CA:1288:A:H8	1.80	0.47
42:BG:16:ARG:HH11	42:BG:16:ARG:HG3	1.79	0.47
42:BG:93:THR:C	42:BG:94:LEU:HG	2.33	0.47
42:BG:96:ARG:O	42:BG:97:ASP:HB2	2.14	0.47
36:DA:2100:G:C4	36:DA:2190:G:C6	3.02	0.47
1:AA:866:C:N4	1:AA:873:A:H2	2.11	0.47
1:CA:1422:G:C2	1:CA:1423:G:C5	3.02	0.47
1:CA:947:G:H2'	1:CA:948:C:H6	1.80	0.47
1:CA:946:A:C6	1:CA:947:G:O6	2.68	0.47
36:DA:1777:U:N3	36:DA:1778:U:C5	2.82	0.47
36:DA:2589:A:H2'	36:DA:2590:A:O4'	2.14	0.47
50:BR:101:ALA:O	50:BR:102:GLU:HB2	2.14	0.47
25:AZ:242:ILE:HB	25:AZ:282:ALA:HA	1.95	0.47
13:CM:70:LEU:CD2	13:CM:70:LEU:C	2.82	0.47
37:DB:107:G:O2'	37:DB:108:U:H5'	2.14	0.47
39:BD:130:ALA:O	39:BD:131:LEU:HG	2.14	0.47
36:BA:2306:C:H4'	42:BG:136:ARG:HH12	1.78	0.47
43:DH:148:ILE:HG22	43:DH:162:ILE:CD1	2.44	0.47
2:CB:106:LYS:HG2	2:CB:107:THR:H	1.76	0.47
36:DA:2588:G:C6	36:DA:2607:G:C2	3.02	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:977:A:O2'	1:AA:978:A:C5'	2.62	0.47
36:BA:1222:C:H2'	36:BA:1223:G:C5'	2.35	0.47
36:BA:532:A:H2'	36:BA:532:A:N3	2.28	0.47
36:DA:596:G:N1	36:DA:597:U:C2	2.83	0.47
24:CY:5:A:C2	24:CY:69:C:N3	2.82	0.47
24:CY:5:A:H2'	24:CY:6:U:C6	2.49	0.47
36:BA:2074:U:H2'	36:BA:2075:U:C5	2.49	0.47
36:BA:1170:G:H5'	36:BA:1173:G:H22	1.79	0.47
36:BA:237:C:H2'	36:BA:238:C:H6	1.79	0.47
1:CA:52:G:C6	1:CA:53:A:C5	3.01	0.47
1:AA:136:C:H2'	1:AA:137:C:H6	1.80	0.47
36:DA:2128:C:O2'	36:DA:2129:C:C6	2.67	0.47
41:DF:53:THR:CG2	41:DF:56:GLU:HG3	2.36	0.47
36:BA:1360:A:C6	36:BA:1372:U:C4	3.02	0.47
53:BU:29:SER:O	53:BU:30:LYS:HD3	2.14	0.47
53:BU:52:ARG:NH2	53:BU:55:ARG:HH22	2.10	0.47
36:BA:1387:C:C4	36:BA:1401:G:N2	2.82	0.47
38:DC:120:MET:SD	38:DC:123:VAL:HG11	2.55	0.47
52:DT:83:ILE:CD1	52:DT:84:GLN:HG2	2.44	0.47
36:DA:1019:U:H3	36:DA:1142(A):A:N6	2.08	0.47
36:BA:848:G:C4	36:BA:933:A:H1'	2.49	0.47
1:AA:684:A:C2	11:AK:39:PRO:HG2	2.49	0.47
40:DE:144:ARG:C	40:DE:146:THR:H	2.17	0.47
12:CL:32:PHE:O	12:CL:33:ARG:HB2	2.14	0.47
1:CA:1433:A:C6	1:CA:1468:A:C4	3.02	0.47
36:BA:979:G:H21	36:BA:985:C:N4	2.12	0.47
25:AZ:320:VAL:HG12	25:AZ:321:TYR:H	1.79	0.47
39:DD:158:ALA:O	39:DD:159:ALA:C	2.52	0.47
1:CA:84:U:O2'	1:CA:88:A:H5'	2.14	0.47
5:CE:63:ARG:HA	5:CE:66:MET:SD	2.54	0.47
36:BA:1435:G:H1	36:BA:1557:C:N4	2.09	0.47
1:AA:522:C:C2'	1:AA:523:A:H8	2.27	0.47
13:CM:6:GLY:C	13:CM:8:GLU:N	2.62	0.47
36:BA:80:G:H1'	36:BA:346:A:C6	2.49	0.47
36:DA:2720:U:H3'	36:DA:2721:A:H8	1.79	0.47
36:DA:2721:A:C2'	36:DA:2722:G:H8	2.27	0.47
2:AB:7:VAL:HA	2:AB:11:LEU:CG	2.42	0.47
1:CA:189:G:C6	1:CA:189(A):C:N4	2.83	0.47
55:BW:68:ARG:O	55:BW:110:LYS:CB	2.62	0.47
1:CA:1406:U:O2'	1:CA:1407:C:H5'	2.14	0.47
15:AO:18:PHE:O	15:AO:19:PRO:C	2.49	0.47
1:CA:784:C:H2'	1:CA:785:G:H8	1.79	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:786:G:N2	1:CA:787:A:H1'	2.29	0.47
50:DR:21:TYR:CD1	50:DR:21:TYR:N	2.82	0.47
36:DA:1307:A:C4	36:DA:1622:G:N2	2.82	0.47
40:DE:149:ARG:NH1	40:DE:149:ARG:HG3	2.29	0.47
36:BA:284:U:O2'	36:BA:285:C:H5'	2.13	0.47
36:BA:1221:C:H2'	36:BA:1221(A):C:H6	1.79	0.47
36:DA:648:G:H2'	36:DA:649:G:C8	2.50	0.47
36:DA:1476:C:H2'	36:DA:1477:A:H8	1.79	0.47
36:BA:2059:A:OP1	41:BF:71:GLY:HA3	2.14	0.47
22:AV:34:G:O2'	22:AV:35:A:H5'	2.14	0.47
1:AA:138:G:H2'	1:AA:139:G:C8	2.49	0.47
36:DA:2618:G:H21	40:DE:150:VAL:HG21	1.80	0.47
36:DA:2447:G:C6	36:DA:2501:C:C2	3.02	0.47
49:DQ:89:ASN:OD1	49:DQ:89:ASN:N	2.45	0.47
38:BC:227:HIS:ND1	38:BC:227:HIS:N	2.62	0.47
36:DA:1044:G:C3'	36:DA:1045:A:H5''	2.44	0.47
4:CD:106:TYR:CE1	4:CD:113:SER:HA	2.49	0.47
36:BA:2830:G:H5'	40:BE:58:ARG:NH1	2.29	0.47
32:B6:17:LYS:O	32:B6:18:ARG:CB	2.62	0.47
34:B8:62:LEU:HD13	36:BA:242:G:C5'	2.44	0.47
36:BA:2284:C:O2'	36:BA:2288:A:N6	2.48	0.47
36:BA:2335:A:C8	36:BA:2337:G:C6	3.02	0.47
36:BA:2399:G:C2	36:BA:2400:G:H1'	2.49	0.47
36:BA:251:A:H2'	36:BA:252:G:C5'	2.45	0.47
48:BP:23:PRO:HB2	48:BP:33:ARG:HD2	1.95	0.47
36:DA:2839:G:C5'	50:DR:46:GLY:HA2	2.44	0.47
36:DA:2850:A:C2	50:DR:61:HIS:CD2	3.00	0.47
19:AS:13:ASP:O	19:AS:15:LEU:N	2.46	0.47
28:D2:32:LEU:CB	28:D2:53:LEU:HD22	2.44	0.47
28:D2:5:GLU:HB2	28:D2:9:GLN:OE1	2.14	0.47
36:BA:2524:G:H8	36:BA:2524:G:H5'	1.79	0.47
39:BD:65:ILE:HG22	39:BD:104:TYR:HB3	1.97	0.47
41:BF:110:LEU:CD1	41:BF:111:ALA:N	2.76	0.47
43:BH:65:HIS:CE1	43:BH:69:ARG:CZ	2.97	0.47
1:AA:1055:A:N3	1:AA:1055:A:H2'	2.30	0.47
1:AA:1055:A:N7	1:AA:1206:G:C2	2.83	0.47
1:AA:540:G:C4	1:AA:541:G:C8	3.03	0.47
28:B2:59:ARG:HB3	36:BA:76:C:O2'	2.14	0.47
50:BR:77:ARG:O	50:BR:79:LEU:N	2.46	0.47
10:AJ:12:ASP:C	10:AJ:12:ASP:OD2	2.52	0.47
42:BG:60:LEU:HD11	42:BG:92:VAL:HG11	1.96	0.47
36:DA:565:C:H2'	36:DA:566:U:C6	2.48	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:584:C:O5'	36:DA:584:C:H6	1.98	0.47
46:DN:30:ILE:O	46:DN:34:LEU:HB2	2.14	0.47
1:AA:356:A:H2'	1:AA:357:G:H8	1.80	0.47
1:CA:1055:A:C8	1:CA:1206:G:N2	2.82	0.47
51:BS:12:PHE:O	51:BS:14:VAL:N	2.47	0.47
2:CB:48:MET:N	2:CB:51:LEU:HD12	2.29	0.47
36:DA:2673:G:H2'	36:DA:2674:G:C8	2.48	0.47
5:AE:31:LEU:CD2	5:AE:43:LEU:HD11	2.44	0.47
36:DA:2641:G:OP1	46:DN:74:ARG:HG2	2.14	0.47
36:DA:296:C:C2'	36:DA:297:C:H5'	2.44	0.47
1:AA:1353:G:C4	1:AA:1354:C:C5	3.02	0.47
1:AA:1353:G:C6	1:AA:1354:C:N4	2.82	0.47
7:AG:69:VAL:O	7:AG:69:VAL:CG1	2.60	0.47
1:AA:1348:U:C4'	9:AI:120:ARG:HD2	2.42	0.47
35:D9:12:ASP:CG	35:D9:13:LYS:N	2.67	0.47
1:CA:1349:A:H2'	1:CA:1350:A:C8	2.49	0.47
1:CA:1365:G:O2'	1:CA:1366:C:H5'	2.13	0.47
7:CG:105:VAL:HG12	7:CG:109:ASN:ND2	2.29	0.47
7:CG:34:GLY:C	7:CG:36:LYS:H	2.17	0.47
14:CN:47:LEU:O	14:CN:49:HIS:N	2.47	0.47
36:BA:329:G:N1	57:BY:19:LYS:HE3	2.27	0.47
36:DA:2114:A:C2'	36:DA:2115:G:H5'	2.44	0.47
1:AA:1421:G:C6	1:AA:1422:G:N7	2.82	0.47
36:DA:1334:G:H2'	36:DA:1335:U:H6	1.78	0.47
55:BW:52:GLU:C	55:BW:54:ALA:N	2.62	0.47
36:DA:1902:C:H5''	39:DD:246:PRO:HD2	1.95	0.47
55:DW:6:ILE:CG2	55:DW:7:ALA:N	2.77	0.47
55:DW:6:ILE:HA	55:DW:103:ILE:O	2.13	0.47
47:DO:117:LEU:O	47:DO:118:ALA:C	2.51	0.47
36:BA:2123:G:N2	38:BC:42:GLU:OE2	2.48	0.47
2:CB:238:LEU:HG	2:CB:238:LEU:O	2.14	0.47
1:CA:1220:G:H2'	1:CA:1221:G:C8	2.45	0.47
36:DA:1591:G:H2'	36:DA:1592:C:H5'	1.96	0.47
1:CA:1012:U:O2'	1:CA:1013:G:H5'	2.14	0.47
36:DA:449:A:C4	36:DA:450:G:C8	3.02	0.47
36:DA:265:A:H1'	36:DA:266:G:C1'	2.44	0.47
42:BG:44:GLY:N	42:BG:88:ILE:HG21	2.29	0.47
37:DB:44:G:H4'	37:DB:45:A:H8	1.73	0.47
42:DG:34:LEU:HA	42:DG:161:THR:CG2	2.43	0.47
42:DG:167:GLU:CD	42:DG:167:GLU:H	2.17	0.47
20:AT:17:ARG:C	20:AT:19:SER:N	2.66	0.47
43:DH:83:TYR:CD1	43:DH:84:SER:N	2.82	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BH:152:ARG:HG3	43:BH:152:ARG:NH1	2.29	0.47
43:DH:123:PHE:HD1	43:DH:123:PHE:N	2.13	0.47
2:AB:28:PHE:O	2:AB:28:PHE:HD1	1.98	0.47
1:AA:1460:A:N1	1:AA:1461:G:N3	2.62	0.47
2:AB:103:THR:OG1	2:AB:104:ASN:N	2.47	0.47
10:AJ:5:ARG:O	10:AJ:99:LYS:HG2	2.15	0.47
31:D5:33:CYS:HG	31:D5:49:CYS:HG	1.62	0.47
36:DA:440:G:H21	41:DF:46:ARG:NH2	2.13	0.47
1:CA:622:A:C8	1:CA:623:C:C6	3.03	0.47
36:DA:1342:A:C2	36:DA:1345:C:C4	3.03	0.47
36:BA:2841:C:H2'	36:BA:2842:G:H8	1.76	0.47
9:CI:22:GLY:O	9:CI:58:HIS:C	2.52	0.47
27:D1:16:ASN:OD1	27:D1:38:SER:O	2.31	0.47
36:DA:189:G:H2'	36:DA:205:G:H22	1.78	0.47
36:DA:2815:C:H2'	36:DA:2816:C:C6	2.49	0.47
36:BA:1375:C:C2'	36:BA:1376:C:H5'	2.44	0.47
18:CR:45:SER:N	18:CR:51:LEU:HG	2.29	0.47
1:AA:928:G:C2	1:AA:1390:U:O2	2.68	0.47
1:CA:628:G:H2'	1:CA:629:G:H8	1.78	0.47
36:BA:558:G:H2'	36:BA:559:G:H8	1.79	0.47
25:CZ:313:HIS:CB	25:CZ:403:ILE:HG21	2.43	0.47
36:BA:1021:A:C8	36:BA:1022:G:H4'	2.44	0.47
1:AA:1096:C:O2'	1:AA:1097:C:H5'	2.15	0.47
36:BA:979:G:N7	36:BA:981:A:OP1	2.47	0.47
25:AZ:286:VAL:HG23	25:AZ:287:GLY:N	2.28	0.47
29:B3:17:LYS:HG2	36:BA:969:U:OP1	2.13	0.47
51:BS:39:ILE:O	51:BS:40:ILE:HG23	2.15	0.47
55:BW:4:LYS:HA	55:BW:106:ILE:HG22	1.95	0.47
16:CP:49:LEU:HD12	16:CP:50:LYS:H	1.79	0.47
12:AL:32:PHE:CD1	12:AL:86:ARG:HA	2.49	0.47
28:D2:7:ARG:HG2	28:D2:7:ARG:HH11	1.79	0.47
2:CB:7:VAL:HA	2:CB:11:LEU:CG	2.42	0.47
43:BH:105:LEU:O	43:BH:105:LEU:HG	2.13	0.47
58:BZ:149:SER:O	58:BZ:150:LEU:O	2.33	0.47
36:BA:614(A):U:C4'	36:BA:614(B):G:H5''	2.44	0.47
36:DA:1939:U:O2'	36:DA:1940:U:H5'	2.15	0.47
36:DA:1963:U:O2	36:DA:1963:U:H2'	2.14	0.47
4:AD:150:GLU:CG	4:AD:151:LYS:N	2.77	0.47
34:D8:2:PRO:N	36:DA:667:U:O2	2.47	0.47
36:BA:360:G:O2'	36:BA:361:G:H5'	2.15	0.47
36:DA:2791:C:H4'	36:DA:2792:G:O5'	2.14	0.47
13:AM:112:GLY:O	13:AM:113:PRO:C	2.51	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CD:150:GLU:CG	4:CD:151:LYS:N	2.77	0.47
1:CA:790:A:H5'	22:CV:38:A:O3'	2.13	0.47
4:CD:158:ILE:O	4:CD:162:LEU:HB2	2.14	0.47
1:AA:525:C:N4	1:AA:526:C:N4	2.62	0.47
4:CD:180:GLY:O	4:CD:181:MET:C	2.53	0.47
1:AA:363:A:C2	12:AL:31:PRO:HG2	2.48	0.47
36:DA:248:G:H5''	36:DA:386:G:N2	2.28	0.47
1:AA:1503:A:H2'	23:AX:16:A:H62	1.79	0.47
58:BZ:103:ARG:O	58:BZ:103:ARG:HG2	2.14	0.47
39:DD:221:VAL:O	39:DD:221:VAL:CG2	2.62	0.47
34:B8:50:LEU:N	34:B8:53:PRO:HG3	2.29	0.47
36:BA:2033:A:HO2'	36:BA:2034:U:P	2.37	0.47
36:BA:252:G:P	48:BP:50:ARG:NH1	2.87	0.47
34:B8:13:ARG:CA	48:BP:63:PRO:HA	2.45	0.47
36:DA:1268:A:H2'	36:DA:1269:A:C8	2.49	0.47
34:D8:13:ARG:CA	48:DP:63:PRO:HA	2.44	0.47
36:DA:2335:A:C8	36:DA:2337:G:C6	3.02	0.47
48:DP:106:LEU:HD11	48:DP:112:LEU:CD2	2.44	0.47
28:D2:32:LEU:O	28:D2:32:LEU:HD23	2.13	0.47
41:DF:122:LYS:CB	41:DF:191:ARG:HG3	2.43	0.47
36:DA:225:A:O2'	36:DA:226:G:H5'	2.14	0.47
36:DA:226:G:H5''	36:DA:257:A:O2'	2.15	0.47
1:AA:1471:G:O2'	1:AA:1472:U:H5'	2.14	0.47
36:BA:1816:G:H5'	39:BD:62:TYR:CE2	2.49	0.47
36:DA:2083:G:H2'	36:DA:2084:C:C6	2.49	0.47
42:DG:86:MET:N	42:DG:87:PRO:CD	2.75	0.47
41:BF:25:PRO:HB3	41:BF:119:ARG:HA	1.97	0.47
1:AA:974:A:C8	14:AN:31:ARG:HD2	2.50	0.47
43:DH:41:MET:HA	43:DH:55:PRO:HD3	1.96	0.47
49:BQ:62:GLY:CA	58:BZ:116:VAL:HG11	2.45	0.47
28:B2:35:LEU:HD11	28:B2:50:ILE:CG1	2.29	0.47
28:B2:35:LEU:HA	28:B2:38:GLN:HG3	1.97	0.47
36:BA:1270:C:H5''	36:BA:1271:G:O5'	2.14	0.47
50:BR:41:ALA:O	50:BR:42:LYS:C	2.53	0.47
50:BR:42:LYS:O	50:BR:45:ARG:CG	2.62	0.47
50:BR:73:VAL:HG12	50:BR:77:ARG:HH12	1.77	0.47
13:AM:14:ARG:HB2	13:AM:17:VAL:CG2	2.44	0.47
30:B4:33:VAL:CG1	30:B4:34:GLU:N	2.77	0.47
30:B4:6:HIS:HA	42:BG:67:LYS:CE	2.44	0.47
36:DA:2512:C:H2'	36:DA:2513:G:O4'	2.14	0.47
36:DA:2627:G:N2	36:DA:2777:G:OP2	2.42	0.47
36:DA:556:G:H2'	36:DA:557:U:C6	2.49	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:576:U:OP1	36:DA:2503:A:OP1	2.32	0.47
46:DN:120:LEU:CD1	46:DN:122:VAL:HG23	2.45	0.47
2:AB:223:ILE:O	2:AB:226:ARG:HB3	2.14	0.47
1:AA:59:A:H5''	1:AA:60:A:H5''	1.97	0.47
8:CH:7:ALA:HB2	8:CH:85:ARG:CD	2.38	0.47
1:AA:130:A:C8	17:AQ:63:ARG:HG3	2.49	0.47
1:CA:992:U:O2'	1:CA:993:G:P	2.72	0.47
51:BS:98:VAL:O	51:BS:100:ALA:N	2.46	0.47
51:BS:18:ILE:H	51:BS:18:ILE:HG13	1.49	0.47
51:BS:74:ALA:O	51:BS:76:LYS:N	2.48	0.47
8:AH:26:VAL:HG23	8:AH:27:PRO:HD2	1.96	0.47
2:CB:187:LEU:HD13	2:CB:205:ASP:HA	1.95	0.47
2:CB:223:ILE:O	2:CB:226:ARG:N	2.47	0.47
36:DA:1517:G:C5	36:DA:1518:U:C4	3.02	0.47
13:CM:107:ALA:C	13:CM:109:THR:N	2.67	0.47
56:DX:54:VAL:HG12	56:DX:55:ASN:N	2.29	0.47
5:AE:13:ILE:HA	5:AE:29:GLY:O	2.13	0.47
5:AE:47:LYS:CD	5:AE:47:LYS:N	2.71	0.47
52:BT:119:LYS:O	52:BT:123:GLN:HG2	2.15	0.47
52:BT:78:LEU:H	52:BT:82:LEU:HD21	1.80	0.47
36:DA:1668:A:N6	36:DA:1676:A:H61	2.12	0.47
36:DA:1661:G:C6	36:DA:2000:G:C2	3.02	0.47
36:DA:2773:C:H5''	40:DE:164:ARG:CD	2.44	0.47
36:DA:2845:G:O2'	36:DA:2846:G:H5'	2.13	0.47
40:DE:23:VAL:CG1	40:DE:173:VAL:HG21	2.44	0.47
52:DT:94:ALA:C	52:DT:96:ARG:N	2.68	0.47
1:CA:1351:U:O4	9:CI:118:LYS:NZ	2.47	0.47
9:CI:121:ARG:NH1	9:CI:122:ALA:O	2.47	0.47
1:AA:1399:C:O2	1:AA:1401:G:C6	2.68	0.47
38:DC:42:GLU:HB3	38:DC:44:HIS:NE2	2.29	0.47
46:DN:137:LYS:O	46:DN:138:LEU:HG	2.14	0.47
36:BA:2101:G:C2'	36:BA:2102:U:H5''	2.44	0.47
36:BA:2121:G:C2	36:BA:2122:U:C4	3.02	0.47
36:BA:2139:C:H2'	36:BA:2140:C:C6	2.48	0.47
3:CC:50:ALA:HB2	3:CC:75:VAL:HB	1.96	0.47
3:AC:35:GLU:O	3:AC:36:ASP:C	2.51	0.47
3:AC:68:VAL:O	3:AC:103:VAL:HA	2.14	0.47
36:BA:1902:C:H2'	36:BA:1903:G:O5'	2.15	0.47
46:BN:24:GLY:C	46:BN:26:LEU:H	2.11	0.47
53:BU:92:ARG:NH2	54:BV:10:LYS:CB	2.77	0.47
36:BA:83:G:C2'	36:BA:102:G:H22	2.26	0.47
42:DG:110:ALA:O	42:DG:111:LEU:HD23	2.13	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AG:113:GLU:CG	7:AG:119:ARG:HG2	2.44	0.47
40:DE:4:ILE:HG12	40:DE:5:LEU:H	1.78	0.47
8:CH:123:GLU:O	8:CH:127:LEU:HB2	2.14	0.47
8:CH:89:PRO:HA	8:CH:92:ARG:NH1	2.26	0.47
5:CE:77:PRO:O	5:CE:78:HIS:HB3	2.14	0.47
53:DU:68:ALA:HB1	53:DU:106:PHE:CE2	2.49	0.47
36:DA:1494:A:O2'	36:DA:1496:A:H2	1.97	0.47
24:AY:51:C:H2'	24:AY:52:A:C8	2.49	0.47
21:AU:9:ARG:O	21:AU:10:ARG:C	2.53	0.47
8:CH:20:TYR:HD1	8:CH:65:TYR:CE2	2.32	0.47
1:CA:1124:G:H2'	1:CA:1145:C:N4	2.30	0.47
49:DQ:43:THR:HA	49:DQ:93:TYR:O	2.13	0.47
36:BA:783:A:H2'	36:BA:784:A:H4'	1.96	0.47
1:CA:10:A:C2	1:CA:11:G:N7	2.82	0.47
1:CA:904:C:H2'	1:CA:905:U:O4'	2.14	0.47
5:CE:136:MET:O	5:CE:139:LEU:N	2.47	0.47
16:AP:53:VAL:CG2	16:AP:54:GLU:H	2.19	0.47
4:CD:24:GLU:H	4:CD:112:VAL:HG21	1.78	0.47
36:DA:2359:C:C2	36:DA:2360:A:C8	3.02	0.47
26:B0:24:LYS:N	26:B0:37:LEU:O	2.44	0.47
36:DA:185:U:H2'	36:DA:186:G:C8	2.50	0.47
1:AA:194:C:O2'	20:AT:68:LYS:HD3	2.15	0.47
3:AC:7:PRO:HG2	3:AC:184:TYR:CG	2.50	0.47
36:BA:536:A:C2	36:BA:558:G:C6	3.02	0.47
33:D7:19:ARG:HD3	36:DA:125:G:C5'	2.44	0.47
1:CA:808:C:O2'	1:CA:809:G:H5'	2.14	0.47
36:BA:222:A:H2	36:BA:233:A:O3'	1.98	0.47
1:CA:109:A:C8	1:CA:326:G:H2'	2.50	0.47
36:BA:980:A:C6	36:BA:981:A:C2	3.03	0.47
41:BF:82:ILE:O	41:BF:83:PHE:HB2	2.11	0.47
40:BE:176:ILE:HG22	40:BE:178:GLU:HB3	1.95	0.47
36:DA:1322:A:H2'	36:DA:1323:U:C6	2.50	0.47
1:AA:808:C:O2'	1:AA:809:G:H5'	2.14	0.47
1:CA:1242:C:H2'	1:CA:1243:C:H6	1.70	0.47
49:DQ:113:GLN:O	49:DQ:116:GLU:N	2.38	0.47
36:DA:271(U):G:C4	36:DA:271(V):G:C8	3.01	0.47
51:DS:53:SER:O	51:DS:56:LEU:HB3	2.14	0.47
1:CA:926:G:C6	1:CA:1505:G:N7	2.83	0.47
36:DA:1949:G:C6	36:DA:1950:G:C6	3.02	0.47
36:DA:1509(B):A:C2'	36:DA:1510:G:H5'	2.44	0.47
36:DA:1511:C:C5	36:DA:1512:U:H5	2.32	0.47
36:BA:478:A:N1	36:BA:500:G:H4'	2.29	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2317:C:H3'	36:BA:2318:G:H21	1.79	0.47
26:D0:25:ARG:HG3	26:D0:31:VAL:HG11	1.95	0.47
36:BA:280:C:H2'	36:BA:281:G:H5'	1.96	0.47
46:BN:96:GLU:H	46:BN:96:GLU:CD	2.17	0.47
1:AA:1006:C:H2'	1:AA:1007:C:C5	2.48	0.47
1:AA:525:C:H2'	1:AA:526:C:C6	2.49	0.47
1:CA:1492:A:C2	1:CA:1493:A:C2	3.03	0.47
36:BA:1973:G:C6	36:BA:1974:C:N4	2.83	0.47
3:CC:72:LYS:C	3:CC:74:GLY:H	2.17	0.47
39:DD:96:HIS:CE1	39:DD:102:LYS:NZ	2.82	0.47
36:BA:704:G:N3	36:BA:726:G:C2	2.82	0.47
36:BA:1545:A:H2'	36:BA:1546:C:O4'	2.15	0.47
1:CA:29:G:O2'	1:CA:30:U:H5'	2.15	0.47
2:AB:83:MET:O	2:AB:85:ALA:N	2.47	0.47
36:BA:759:G:H8	36:BA:759:G:O5'	1.98	0.47
15:AO:37:ASN:HD22	15:AO:37:ASN:N	2.11	0.47
1:CA:334:C:O2'	1:CA:335:C:H5'	2.15	0.47
56:DX:31:HIS:O	56:DX:32:PRO:C	2.53	0.47
51:BS:22:GLY:O	51:BS:23:ARG:O	2.33	0.47
48:BP:59:LEU:CA	48:BP:61:ARG:NE	2.62	0.47
36:DA:1277:G:O2'	36:DA:1278:A:H5'	2.15	0.47
57:BY:46:LYS:CB	57:BY:62:GLU:HG2	2.40	0.47
34:D8:17:THR:O	34:D8:20:GLY:N	2.46	0.47
34:D8:23:VAL:HG13	34:D8:47:LYS:N	2.29	0.47
25:AZ:38:GLU:HB3	25:AZ:189:ARG:HH11	1.77	0.47
36:DA:89:G:H8	36:DA:89:G:O5'	1.98	0.47
36:BA:2233:U:H2'	36:BA:2234:G:H8	1.75	0.47
38:DC:82:LYS:HA	38:DC:85:GLU:HB3	1.97	0.47
36:DA:1884:A:C3'	36:DA:1885:A:H5''	2.44	0.47
39:DD:261:LYS:HZ2	39:DD:263:ARG:HB2	1.75	0.47
4:AD:14:ARG:HD2	4:AD:59:ARG:NH1	2.29	0.47
36:BA:2539:C:H2'	36:BA:2540:C:H6	1.79	0.47
36:BA:2540:C:O2	36:BA:2740:A:H2	1.97	0.47
36:BA:1205:U:C6	41:BF:171:PRO:HA	2.50	0.47
40:BE:1:MET:H3	40:BE:84:PHE:HB2	1.79	0.47
27:D1:41:ARG:O	27:D1:43:TYR:CD2	2.67	0.47
36:DA:2650:U:H2'	36:DA:2651:C:C6	2.50	0.47
31:D5:17:ASP:HB2	36:DA:16:G:H5''	1.96	0.47
36:DA:972:G:H8	36:DA:972:G:O5'	1.97	0.47
54:DV:19:LYS:NZ	54:DV:21:ARG:O	2.48	0.47
4:CD:60:GLU:HG2	4:CD:202:LEU:HB2	1.95	0.47
51:BS:89:ARG:HG3	51:BS:92:TYR:HB3	1.95	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BS:97:ARG:C	51:BS:97:ARG:NE	2.68	0.47
2:CB:44:LEU:O	2:CB:47:THR:CB	2.62	0.47
36:DA:1205:U:C6	41:DF:171:PRO:HA	2.49	0.47
15:CO:39:LEU:CD2	15:CO:43:LEU:HG	2.44	0.47
25:CZ:179:LEU:O	25:CZ:179:LEU:HG	2.15	0.47
36:DA:1668:A:N7	36:DA:1674:G:C6	2.83	0.47
36:DA:2847:U:OP1	52:DT:98:LYS:HD3	2.14	0.47
58:BZ:42:VAL:HG22	58:BZ:43:GLU:N	2.29	0.47
1:AA:1288:A:O2'	1:AA:1289:A:H5'	2.14	0.47
7:AG:135:VAL:O	7:AG:136:LYS:C	2.52	0.47
7:AG:34:GLY:C	7:AG:36:LYS:H	2.17	0.47
9:AI:79:LEU:HD21	9:AI:102:LEU:C	2.34	0.47
1:AA:979:C:C3'	1:AA:980:C:C5'	2.77	0.47
7:CG:105:VAL:O	7:CG:107:ALA:N	2.46	0.47
9:CI:48:GLU:O	9:CI:49:PRO:C	2.52	0.47
1:AA:788:U:H2'	1:AA:789:U:C6	2.49	0.47
1:AA:923:A:N6	1:AA:924:C:N4	2.62	0.47
36:BA:326:G:H2'	36:BA:327:G:O4'	2.15	0.47
57:BY:68:HIS:ND1	57:BY:70:SER:HB3	2.29	0.47
57:BY:75:ILE:HA	57:BY:79:CYS:O	2.13	0.47
36:DA:2139:C:H2'	36:DA:2140:C:C6	2.50	0.47
36:DA:2189:U:H3'	36:DA:2190:G:C5'	2.45	0.47
55:BW:5:ALA:C	55:BW:6:ILE:HG13	2.35	0.47
36:DA:2590:A:O2'	36:DA:2591:C:H5'	2.13	0.47
36:DA:1792:G:OP2	39:DD:206:LEU:HD12	2.14	0.47
36:BA:2122:U:O2	38:BC:172:HIS:NE2	2.47	0.47
3:CC:16:ARG:HH21	3:CC:183:ASP:CA	2.24	0.47
3:AC:113:ALA:HB3	3:AC:114:PRO:HD3	1.97	0.47
1:CA:398:C:H2'	1:CA:399:G:H8	1.79	0.47
36:DA:1543:C:C3'	36:DA:1544:A:C5'	2.87	0.47
22:CW:53:G:C2	22:CW:54:U:N3	2.81	0.47
1:AA:1034:G:N2	1:AA:1035:A:C6	2.82	0.47
36:BA:1137:G:H2'	36:BA:1138:G:H8	1.76	0.47
46:BN:101:HIS:O	46:BN:103:VAL:N	2.48	0.47
39:BD:118:VAL:HG22	39:BD:119:ALA:N	2.29	0.47
36:BA:220:G:H2'	36:BA:427:U:O4	2.14	0.47
36:BA:2305:A:O2'	42:BG:136:ARG:NE	2.48	0.47
42:DG:60:LEU:HA	42:DG:63:ILE:HD11	1.97	0.47
7:AG:15:ASP:OD2	7:AG:16:LEU:N	2.48	0.47
5:CE:110:LEU:O	5:CE:115:VAL:HG23	2.13	0.47
43:BH:101:ARG:HG2	43:BH:117:PRO:CG	2.35	0.47
49:BQ:22:LYS:H	58:BZ:78:LYS:CE	2.19	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BU:68:ALA:HB1	53:BU:106:PHE:CE2	2.49	0.47
25:CZ:219:LYS:HB2	25:CZ:244:ARG:HB2	1.95	0.47
43:DH:101:ARG:HG2	43:DH:117:PRO:CG	2.35	0.47
8:AH:64:LYS:HG2	8:AH:65:TYR:H	1.78	0.47
10:CJ:9:ARG:HA	10:CJ:68:HIS:O	2.14	0.47
20:AT:100:ILE:O	20:AT:102:GLY:N	2.38	0.47
20:CT:45:GLN:NE2	20:CT:46:GLU:N	2.63	0.47
24:CY:50:G:N2	24:CY:65:C:H1'	2.29	0.47
36:BA:793:A:N7	36:BA:2072:G:H5''	2.30	0.47
36:DA:80:G:H1'	36:DA:346:A:C6	2.49	0.47
36:DA:26:G:H1'	36:DA:515:A:H61	1.79	0.47
1:CA:901:A:C5	1:CA:902:G:H1'	2.49	0.47
1:CA:446:G:C2'	1:CA:447:G:H5'	2.45	0.47
36:DA:2203:U:H2'	36:DA:2203:U:O2	2.14	0.47
36:DA:118:A:H5'	36:DA:119:A:C8	2.49	0.47
36:DA:270:A:C2'	36:DA:271:A:H5'	2.45	0.47
36:DA:204:A:OP1	36:DA:206:U:H1'	2.15	0.47
33:B7:11:LYS:CE	36:BA:686:G:H5''	2.44	0.47
39:BD:148:GLU:HB2	39:BD:151:LYS:HD2	1.96	0.47
39:BD:91:ARG:NH1	39:BD:91:ARG:CG	2.75	0.47
36:BA:1410:G:O2'	36:BA:1411:C:H5'	2.14	0.47
36:BA:848:G:H1'	36:BA:933:A:O2'	2.14	0.47
29:B3:14:GLY:O	36:BA:969:U:H4'	2.14	0.47
36:BA:751:A:H5'	55:BW:90:ARG:CA	2.42	0.47
1:CA:1506:U:O2'	1:CA:1507:A:O5'	2.25	0.47
36:BA:1509(B):A:O2'	36:BA:1510:G:H5'	2.13	0.47
25:AZ:104:LEU:HD13	25:AZ:120:ILE:HD11	1.95	0.47
58:DZ:42:VAL:HG13	58:DZ:43:GLU:H	1.79	0.47
36:DA:2496:C:P	49:DQ:83:MET:HG2	2.54	0.47
36:BA:2432:A:C6	36:BA:2433:A:C6	3.03	0.47
3:CC:206:GLU:O	3:CC:207:VAL:C	2.52	0.47
29:B3:10:LYS:HB3	29:B3:53:LEU:HD22	1.95	0.47
30:D4:5:ILE:CG1	30:D4:5:ILE:O	2.60	0.47
36:DA:2493:U:H2'	36:DA:2494:G:O4'	2.14	0.47
54:BV:36:PRO:HA	54:BV:56:SER:HB3	1.97	0.47
4:CD:159:ARG:HG3	4:CD:159:ARG:HH11	1.78	0.47
53:BU:102:GLU:HB3	53:BU:105:VAL:CG2	2.44	0.47
33:B7:19:ARG:HD3	36:BA:125:G:C5'	2.44	0.47
36:BA:1722:A:O2'	36:BA:1739:U:H5''	2.13	0.47
43:DH:12:PRO:CA	43:DH:48:GLY:HA2	2.45	0.47
36:DA:1722:A:H2	36:DA:1740:G:H2'	1.78	0.47
2:CB:155:LEU:CD2	2:CB:159:PRO:HG3	2.43	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1274:G:N2	1:CA:1275:A:N6	2.63	0.47
3:CC:131:ARG:NH2	3:CC:167:TRP:O	2.48	0.47
36:BA:2596:U:H3'	36:BA:2597:G:C8	2.49	0.47
36:BA:701:G:N3	36:BA:701:G:H2'	2.30	0.47
3:CC:132:ARG:HB2	3:CC:132:ARG:HE	1.44	0.47
39:DD:204:ILE:O	39:DD:204:ILE:HG13	2.13	0.47
38:DC:227:HIS:ND1	38:DC:227:HIS:N	2.63	0.47
27:B1:51:VAL:O	27:B1:51:VAL:HG23	2.15	0.47
9:AI:20:ARG:O	9:AI:60:ASP:HB2	2.15	0.47
54:DV:2:PHE:HB3	54:DV:41:GLY:O	2.14	0.47
36:DA:2578:G:H4'	36:DA:2578:G:OP2	2.14	0.47
40:DE:27:LEU:HD22	52:DT:1:MET:HB2	1.95	0.47
39:DD:170:GLY:C	39:DD:172:TYR:H	2.17	0.47
32:D6:15:GLU:HG3	32:D6:47:THR:OG1	2.13	0.47
36:DA:2259:G:C2	36:DA:2282:G:C6	3.02	0.47
34:D8:5:LYS:HB3	36:DA:254:G:O6	2.15	0.47
25:AZ:155:ARG:HH11	25:AZ:155:ARG:HG2	1.79	0.47
56:BX:10:ALA:O	56:BX:28:PHE:HB2	2.15	0.47
57:DY:59:GLY:O	57:DY:60:PHE:CD1	2.68	0.47
36:BA:621:A:C2'	36:BA:622:G:H5'	2.45	0.47
43:BH:42:ARG:CB	43:BH:42:ARG:HH11	2.27	0.47
4:AD:67:ILE:O	4:AD:67:ILE:HG23	2.14	0.47
49:BQ:63:LYS:HE3	49:BQ:65:PHE:HE1	1.79	0.47
36:BA:296:C:N4	36:BA:343:C:H42	2.13	0.47
36:BA:2009:G:H4'	55:BW:40:ASN:HD21	1.75	0.47
36:BA:2822:G:H2'	36:BA:2823:A:C5'	2.33	0.47
50:BR:55:ALA:HB1	50:BR:79:LEU:HD11	1.96	0.47
36:DA:373:U:H2'	36:DA:374:A:H8	1.79	0.47
36:DA:536:A:C2	36:DA:558:G:C6	3.02	0.47
46:DN:101:HIS:O	46:DN:103:VAL:N	2.47	0.47
1:CA:994:A:N7	1:CA:1216:G:H4'	2.29	0.47
2:CB:83:MET:C	2:CB:85:ALA:H	2.18	0.47
41:DF:132:VAL:HG13	41:DF:133:ASN:H	1.79	0.47
41:DF:168:ARG:HA	41:DF:175:THR:HG21	1.96	0.47
1:CA:738:C:H2'	1:CA:739:C:C6	2.50	0.47
48:BP:78:PRO:HB2	48:BP:111:ARG:NH2	2.27	0.47
13:AM:107:ALA:C	13:AM:109:THR:N	2.67	0.47
5:AE:90:VAL:O	5:AE:120:THR:HA	2.13	0.47
36:BA:1668:A:N6	36:BA:1676:A:H61	2.12	0.47
52:BT:65:LYS:HG3	52:BT:66:VAL:N	2.28	0.47
36:DA:1668:A:C5	36:DA:1674:G:C5	3.03	0.47
40:DE:24:THR:OG1	40:DE:186:GLY:HA2	2.14	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BC:64:LEU:HD13	38:BC:188:ASN:ND2	2.29	0.47
58:BZ:162:GLU:O	58:BZ:163:LEU:O	2.33	0.47
14:AN:21:TYR:N	14:AN:21:TYR:CD1	2.83	0.47
26:B0:10:THR:HG22	26:B0:12:ASN:N	2.28	0.47
9:CI:116:LYS:HA	9:CI:123:PRO:HD3	1.96	0.47
26:B0:77:ARG:C	26:B0:78:TYR:CD1	2.88	0.47
36:BA:856:C:H2'	36:BA:857:C:H6	1.78	0.47
1:AA:1401:G:H2'	1:AA:1402:C:C5'	2.44	0.47
19:AS:40:ILE:HD13	19:AS:66:MET:O	2.14	0.47
4:AD:187:ARG:HG2	4:AD:188:LEU:N	2.30	0.47
4:AD:96:LEU:HG	4:AD:139:ARG:NH2	2.29	0.47
51:DS:28:VAL:CG1	51:DS:29:PHE:H	2.16	0.47
31:D5:44:THR:CG2	50:DR:101:ALA:HB2	2.39	0.47
36:DA:2148:G:O2'	36:DA:2149:G:H5'	2.15	0.47
1:AA:1477:C:O2'	1:AA:1478:C:H5'	2.14	0.47
1:AA:865:A:C2'	1:AA:866:C:H5'	2.44	0.47
36:DA:1772:G:N2	36:DA:1774:C:C5'	2.78	0.47
39:DD:240:ALA:HB1	39:DD:241:PRO:HD2	1.97	0.47
36:BA:2815:C:O2	36:BA:2815:C:H2'	2.13	0.47
27:B1:67:ILE:O	27:B1:68:PRO:C	2.50	0.47
20:CT:26:ASN:HB2	20:CT:71:THR:CG2	2.43	0.47
2:CB:22:LYS:CE	2:CB:40:HIS:CE1	2.98	0.47
58:DZ:19:ARG:HH11	58:DZ:84:GLU:C	2.18	0.47
41:DF:9:ILE:HA	41:DF:13:SER:O	2.15	0.47
41:DF:7:TYR:HE1	41:DF:196:LEU:HD11	1.78	0.47
39:BD:94:LEU:HD23	39:BD:103:ARG:O	2.14	0.47
39:BD:112:GLN:O	39:BD:115:GLN:HB2	2.15	0.47
39:BD:142:VAL:HG21	39:BD:191:ALA:HB1	1.97	0.47
36:DA:2708:G:C4	36:DA:2709:G:N7	2.83	0.47
13:CM:29:ARG:HA	13:CM:32:GLU:OE2	2.14	0.47
36:DA:463:G:C2	36:DA:467:G:C6	3.02	0.47
20:AT:26:ASN:HB2	20:AT:71:THR:CG2	2.45	0.47
43:BH:83:TYR:CD1	43:BH:84:SER:N	2.82	0.47
24:AY:69:C:H2'	24:AY:70:A:C8	2.50	0.47
2:CB:111:ARG:O	2:CB:115:LEU:N	2.46	0.47
36:BA:1027:A:C2'	36:BA:1027:A:N3	2.75	0.47
15:AO:17:ARG:NH1	15:AO:17:ARG:HG3	2.30	0.47
15:AO:74:ASP:OD1	15:AO:77:ARG:HG2	2.15	0.47
1:AA:1139:G:H4'	1:AA:1140:C:H6	1.79	0.47
2:CB:132:LYS:O	2:CB:136:VAL:HG23	2.15	0.47
11:CK:65:ALA:HB1	11:CK:98:LEU:CD2	2.45	0.47
36:DA:135:G:C2	36:DA:145:G:C2	3.02	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:44:G:H1'	1:AA:399:G:N2	2.30	0.47
24:CY:64:C:H4'	25:CZ:391:GLY:HA2	1.97	0.47
4:CD:119:GLN:HG3	4:CD:123:HIS:NE2	2.29	0.47
26:D0:47:PRO:O	26:D0:78:TYR:CD2	2.66	0.47
10:AJ:9:ARG:HA	10:AJ:68:HIS:O	2.15	0.47
49:DQ:48:GLU:O	49:DQ:52:VAL:HG23	2.15	0.47
27:D1:50:ARG:NH1	36:DA:2200:C:C5'	2.78	0.47
36:DA:2200:C:H5'	36:DA:2201:C:OP2	2.14	0.47
1:CA:419:C:H2'	1:CA:420:U:H5'	1.96	0.47
15:CO:11:VAL:HG12	15:CO:12:ILE:N	2.29	0.47
7:AG:140:ASP:HA	7:AG:143:ARG:HB2	1.97	0.47
54:BV:91:TYR:HE1	54:BV:93:GLU:HG3	1.79	0.47
38:DC:63:SER:HA	38:DC:160:ARG:CA	2.37	0.47
53:DU:40:PHE:HB3	54:DV:75:PHE:CE1	2.48	0.47
24:CY:55:PSU:O4	24:CY:55:PSU:H5''	2.14	0.47
1:AA:224:C:H2'	1:AA:225:C:C6	2.50	0.47
27:D1:17:SER:HG	27:D1:38:SER:HB2	1.79	0.47
36:DA:2159:G:H2'	36:DA:2160:G:C5'	2.45	0.47
53:BU:52:ARG:CZ	53:BU:55:ARG:NH2	2.72	0.47
48:DP:84:ASN:ND2	48:DP:116:GLY:HA3	2.30	0.47
36:BA:204:A:OP1	36:BA:204:A:H8	1.96	0.47
36:DA:1326:U:O2'	36:DA:1327:C:H5'	2.14	0.47
36:DA:1054:A:C6	36:DA:1106:G:O6	2.67	0.47
1:CA:1164:G:C2	1:CA:1165:C:C4	3.02	0.47
17:AQ:99:SER:O	17:AQ:100:LYS:CG	2.63	0.47
46:BN:71:ILE:HA	46:BN:86:PRO:HA	1.97	0.47
36:BA:986:C:O2'	36:BA:987:G:H5'	2.14	0.47
1:AA:307:C:O2	1:AA:307:C:C2'	2.63	0.47
25:AZ:339:ARG:CZ	25:AZ:352:VAL:HG22	2.45	0.47
1:CA:660:G:C4	1:CA:661:G:C8	3.03	0.47
18:AR:47:THR:CB	18:AR:49:LYS:HZ2	2.27	0.47
36:DA:58:G:H2'	36:DA:59:U:H6	1.78	0.47
38:BC:199:HIS:O	38:BC:201:PRO:N	2.48	0.47
1:CA:1006:C:H2'	1:CA:1007:C:C6	2.50	0.47
1:CA:245:C:O2'	1:CA:246:A:P	2.73	0.47
28:B2:4:SER:HA	28:B2:7:ARG:HD2	1.97	0.47
1:CA:1452:C:H5'	1:CA:1456:G:C4	2.49	0.47
36:DA:1624:G:C4	36:DA:1625:C:C5	3.02	0.47
36:DA:332:A:O2'	36:DA:333:G:O5'	2.33	0.47
12:CL:75:HIS:HD2	12:CL:77:LEU:HB2	1.79	0.47
20:AT:94:ALA:O	20:AT:95:ALA:HB3	2.15	0.47
36:BA:646:A:H3'	36:BA:647:G:H8	1.79	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:340:A:C2	36:DA:341:G:H1'	2.50	0.47
55:DW:80:PRO:O	55:DW:100:THR:HG22	2.15	0.47
11:CK:32:ILE:HG22	11:CK:33:THR:N	2.29	0.47
25:AZ:278:GLN:OE1	25:AZ:278:GLN:HA	2.14	0.47
36:BA:2359:C:C2	36:BA:2360:A:C8	3.02	0.47
34:B8:3:LYS:HD3	36:BA:242:G:H5''	1.96	0.47
36:BA:28:A:H1'	36:BA:513:A:C2	2.50	0.47
40:DE:199:ARG:NH1	40:DE:199:ARG:HB2	2.30	0.47
36:DA:1275:A:N3	36:DA:1276:A:H1'	2.30	0.47
50:DR:2:ARG:HD3	50:DR:5:LYS:NZ	2.30	0.47
50:DR:2:ARG:HH11	50:DR:2:ARG:N	2.13	0.47
36:DA:2870:C:H5''	50:DR:65:LEU:HD21	1.97	0.47
36:DA:630:G:H2'	36:DA:632:A:OP2	2.15	0.47
36:DA:251:A:H5''	48:DP:51:PHE:CZ	2.49	0.47
32:D6:11:LEU:HG	32:D6:51:GLU:HG2	1.97	0.47
36:DA:2283:C:H2'	36:DA:2284:C:O4'	2.14	0.47
36:DA:2392:A:C2	36:DA:2429:G:C4	3.03	0.47
48:DP:52:GLU:CG	48:DP:53:GLY:H	2.28	0.47
25:AZ:196:VAL:O	25:AZ:200:TRP:CD1	2.67	0.47
36:DA:606:U:H4'	36:DA:658:C:O2'	2.15	0.47
41:DF:118:ALA:O	41:DF:119:ARG:C	2.53	0.47
41:DF:31:HIS:O	41:DF:32:LEU:C	2.53	0.47
5:CE:50:GLU:HB3	5:CE:53:LEU:HB2	1.96	0.47
5:CE:53:LEU:O	5:CE:54:ALA:C	2.53	0.47
35:D9:1:MET:HE1	36:DA:2477:C:H3'	1.95	0.47
36:DA:2745:C:O3'	43:DH:142:GLY:HA3	2.15	0.47
36:DA:477:A:H2'	36:DA:478:A:H8	1.80	0.47
39:BD:23:GLU:HA	39:BD:23:GLU:OE1	2.14	0.47
39:BD:267:SER:HA	39:BD:270:ILE:CG1	2.45	0.47
27:D1:44:PRO:O	27:D1:46:LEU:N	2.47	0.47
36:DA:2236:C:H2'	36:DA:2237:G:O4'	2.15	0.47
9:AI:52:ALA:HB3	9:AI:95:LYS:CE	2.29	0.47
9:AI:97:LYS:O	9:AI:98:PRO:C	2.53	0.47
10:CJ:12:ASP:O	10:CJ:14:LYS:N	2.48	0.47
1:CA:261:U:O2	1:CA:263:A:H8	1.98	0.47
41:BF:31:HIS:O	41:BF:32:LEU:C	2.52	0.47
1:AA:1049:U:O2	1:AA:1201:A:C4	2.67	0.47
1:AA:507:C:OP2	1:AA:508:C:H3'	2.15	0.47
1:AA:972:C:H4'	10:AJ:57:LYS:CG	2.38	0.47
49:BQ:53:ALA:CB	49:BQ:124:LYS:HE3	2.45	0.47
36:BA:321:G:C1'	41:BF:168:ARG:HH21	2.27	0.47
36:BA:343:C:O2	36:BA:343:C:H2'	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2578:G:H4'	36:BA:2578:G:OP2	2.15	0.47
13:AM:35:GLU:CG	13:AM:36:LYS:N	2.78	0.47
13:AM:40:ASN:ND2	13:AM:43:THR:HG23	2.28	0.47
27:D1:3:LYS:HA	36:DA:1365:A:OP2	2.15	0.47
36:DA:2651:C:O5'	36:DA:2651:C:H6	1.97	0.47
36:DA:2652:C:C4	36:DA:2653:U:C4	3.02	0.47
36:DA:1138:G:N2	36:DA:1143:A:N1	2.62	0.47
36:DA:996:A:C1'	53:DU:92:ARG:HE	2.28	0.47
53:DU:52:ARG:NH2	53:DU:55:ARG:NH2	2.62	0.47
36:DA:1132:A:C8	36:DA:1133:U:H5	2.33	0.47
36:DA:2041:U:H2'	36:DA:2042:A:H8	1.79	0.47
36:DA:587:C:H4'	36:DA:588:U:OP2	2.14	0.47
48:DP:23:PRO:HD2	48:DP:33:ARG:CZ	2.44	0.47
8:CH:38:ILE:O	8:CH:42:GLU:HG2	2.14	0.47
9:CI:97:LYS:N	9:CI:98:PRO:CD	2.78	0.47
53:BU:112:ARG:O	53:BU:115:ALA:HB3	2.15	0.47
1:CA:963:G:H1	1:CA:972:C:N4	2.11	0.47
4:CD:200:GLU:HG2	4:CD:201:GLN:H	1.79	0.47
51:BS:89:ARG:HG3	51:BS:92:TYR:N	2.29	0.47
41:DF:159:GLY:C	41:DF:164:ARG:HH21	2.18	0.47
38:DC:20:TYR:HD1	38:DC:20:TYR:H	1.60	0.47
1:CA:665:A:N3	1:CA:732:C:H2'	2.30	0.47
32:B6:30:THR:O	32:B6:31:PRO:C	2.53	0.47
34:B8:23:VAL:HG13	34:B8:47:LYS:N	2.29	0.47
48:BP:111:ARG:HH11	48:BP:149:GLU:CG	2.19	0.47
1:CA:955:U:O2	1:CA:1225:A:N1	2.47	0.47
36:DA:2808:U:H5'	36:DA:2891:G:O6	2.14	0.47
5:AE:34:VAL:HG12	5:AE:62:ALA:HB1	1.97	0.47
36:BA:1680:U:O2	36:BA:1763:G:H3'	2.15	0.47
36:BA:1645:G:H5''	36:BA:1646:C:H5'	1.97	0.47
36:BA:2641:G:OP2	46:BN:74:ARG:CZ	2.63	0.47
52:DT:33:LYS:HG3	52:DT:43:GLN:HB2	1.96	0.47
52:DT:22:PHE:HA	52:DT:90:GLN:OE1	2.15	0.47
58:BZ:90:VAL:HG12	58:BZ:91:LEU:N	2.29	0.47
57:DY:73:ARG:NE	57:DY:73:ARG:HA	2.27	0.47
58:BZ:126:VAL:HA	58:BZ:163:LEU:HB2	1.97	0.47
36:DA:297:C:H2'	36:DA:298:G:O4'	2.14	0.47
1:AA:1349:A:H2'	1:AA:1350:A:C8	2.50	0.47
7:AG:19:GLY:O	7:AG:20:ASP:C	2.53	0.47
16:CP:67:THR:HG22	16:CP:68:ASP:N	2.25	0.47
9:CI:79:LEU:HD21	9:CI:102:LEU:C	2.35	0.47
9:CI:36:TYR:O	9:CI:37:PHE:CD2	2.67	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:AV:52:G:H1	22:AV:62:C:H42	1.63	0.47
1:AA:1521:G:H2'	1:AA:1522:U:H6	1.80	0.47
41:BF:63:LYS:O	41:BF:64:ILE:C	2.53	0.47
4:AD:135:LEU:C	4:AD:137:SER:N	2.67	0.47
36:DA:1060:U:O2'	36:DA:1061:U:OP2	2.33	0.47
57:BY:17:SER:OG	57:BY:18:GLY:N	2.43	0.47
57:BY:26:LYS:HG2	57:BY:27:VAL:H	1.79	0.47
57:BY:76:CYS:HB3	57:BY:96:ILE:HD11	1.97	0.47
42:BG:100:TRP:O	42:BG:102:PHE:N	2.47	0.47
42:BG:6:ALA:HB3	42:BG:104:GLU:CD	2.35	0.47
22:CW:19:G:H4'	22:CW:20:U:OP2	2.14	0.47
35:B9:10:ILE:O	35:B9:11:CYS:CB	2.63	0.47
1:AA:1418:A:H3'	1:AA:1419:G:O4'	2.14	0.47
1:AA:1479:C:O2'	1:AA:1480:G:H5'	2.15	0.47
1:AA:1526:G:C2	1:AA:1527:C:C5	3.03	0.47
1:CA:946:A:C2	1:CA:1236:A:C2	3.03	0.47
36:DA:1902:C:H2'	36:DA:1903:G:O5'	2.13	0.47
36:DA:493:G:O2'	55:DW:7:ALA:HA	2.15	0.47
55:DW:72:LYS:O	55:DW:73:ALA:CB	2.62	0.47
2:AB:17:PHE:C	2:AB:17:PHE:CD2	2.88	0.47
36:BA:2149:G:C2'	36:BA:2150:U:H5'	2.45	0.47
4:CD:91:SER:O	4:CD:94:LEU:N	2.48	0.47
25:AZ:258:LEU:HD23	25:AZ:376:LYS:CB	2.40	0.47
25:AZ:226:GLU:CD	25:AZ:240:GLY:HA2	2.35	0.47
36:DA:1592:C:H2'	36:DA:1593:G:C8	2.47	0.47
1:CA:37:U:O2'	1:CA:38:G:H5'	2.14	0.47
10:CJ:30:SER:O	10:CJ:81:THR:HG22	2.15	0.47
36:DA:1525:G:H2'	36:DA:1526:G:C8	2.50	0.47
1:AA:590:C:OP1	8:AH:30:ARG:N	2.40	0.47
36:BA:661:C:H2'	36:BA:662:G:H8	1.79	0.47
36:BA:444:C:O3'	53:BU:2:PRO:N	2.48	0.47
36:BA:728:G:C2	36:BA:730:C:C2	3.03	0.47
37:DB:73:A:C2	37:DB:74:U:H1'	2.49	0.47
1:AA:1512:U:O2'	1:AA:1513:A:H5'	2.14	0.47
41:DF:128:ALA:O	41:DF:129:PHE:CG	2.67	0.47
1:CA:1460:A:C2	1:CA:1461:G:H1'	2.50	0.47
46:BN:18:ALA:HB1	46:BN:26:LEU:HD22	1.96	0.47
36:BA:996:A:C1'	53:BU:92:ARG:HE	2.27	0.47
36:BA:85:G:OP1	57:BY:9:LYS:HB2	2.14	0.47
39:BD:80:ALA:O	39:BD:113:VAL:HG11	2.15	0.47
39:BD:117:VAL:HG22	39:BD:118:VAL:N	2.28	0.47
36:DA:1375:C:C2'	36:DA:1376:C:H5'	2.45	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1352:U:O2'	36:DA:1353:A:H5'	2.15	0.47
36:DA:1298:C:H1'	36:DA:1302:A:C2	2.49	0.47
36:DA:1222:C:OP2	54:DV:88:ARG:NH2	2.48	0.47
36:DA:445:C:H5''	53:DU:3:ARG:HB2	1.97	0.47
1:CA:1328:C:H2'	1:CA:1329:A:C8	2.44	0.47
42:BG:76:SER:HB3	42:BG:83:ARG:HB3	1.95	0.47
42:DG:103:LEU:CD2	42:DG:106:LEU:HD23	2.45	0.47
42:DG:180:PHE:HB2	42:DG:182:LYS:HZ2	1.79	0.47
1:AA:166:G:H2'	1:AA:167:G:C8	2.50	0.47
1:CA:982:U:H4'	1:CA:983:A:C5'	2.43	0.47
43:DH:144:VAL:HA	43:DH:147:ASN:HB2	1.97	0.47
43:DH:152:ARG:O	43:DH:162:ILE:HG22	2.14	0.47
7:AG:118:VAL:O	7:AG:121:ALA:N	2.48	0.47
21:CU:18:TYR:CD2	21:CU:22:ARG:NE	2.82	0.47
1:CA:581:G:C6	1:CA:758:G:N7	2.83	0.47
8:CH:127:LEU:HD13	8:CH:127:LEU:O	2.15	0.47
43:BH:123:PHE:N	43:BH:123:PHE:HD1	2.13	0.47
5:CE:76:ILE:HD12	5:CE:91:LEU:HB3	1.96	0.47
36:DA:1493:C:C4	36:DA:2206:G:O2'	2.68	0.47
24:AY:5:A:C2	24:AY:69:C:N3	2.82	0.47
15:CO:67:LEU:HB3	15:CO:78:TYR:HE1	1.79	0.47
36:DA:1782:C:O2'	36:DA:1783:A:H5'	2.15	0.47
2:AB:168:THR:CG2	2:AB:192:SER:HA	2.44	0.47
8:AH:20:TYR:HD1	8:AH:65:TYR:CE2	2.33	0.47
1:AA:1433:A:N6	1:AA:1468:A:C8	2.82	0.47
36:BA:993:G:H4'	54:BV:70:ILE:HD12	1.97	0.47
5:AE:76:ILE:HG12	5:AE:78:HIS:N	2.22	0.47
36:BA:2513:G:N1	36:BA:2514:U:C2	2.83	0.47
36:BA:2023:G:C5'	36:BA:2617:C:H4'	2.43	0.47
15:AO:74:ASP:OD2	15:AO:76:GLU:N	2.45	0.47
36:BA:25:U:H5'	55:BW:78:GLU:O	2.15	0.47
49:DQ:43:THR:OG1	49:DQ:46:GLN:CG	2.63	0.47
1:AA:397:A:N3	1:AA:397:A:H3'	2.30	0.47
2:AB:127:ILE:C	2:AB:129:GLU:H	2.17	0.47
27:B1:23:LYS:HD3	27:B1:28:GLY:HA3	1.97	0.47
1:AA:398:C:H3'	1:AA:398:C:H6	1.80	0.47
36:BA:2128:C:O2'	36:BA:2129:C:C6	2.68	0.47
36:BA:2128:C:O2'	36:BA:2129:C:H6	1.97	0.47
1:AA:452:A:HO2'	1:AA:453:A:H5''	1.78	0.47
38:DC:150:GLY:O	38:DC:154:ARG:HG2	2.15	0.47
1:CA:1239:A:H4'	1:CA:1240:U:C5'	2.45	0.47
26:D0:67:VAL:HG13	26:D0:81:VAL:HG22	1.95	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1499:A:O5'	1:CA:1499:A:H8	1.97	0.47
31:D5:38:ALA:HB2	31:D5:48:GLU:HB3	1.93	0.47
36:BA:910:A:N6	49:BQ:11:LYS:O	2.47	0.47
36:BA:904:C:C6	36:BA:904:C:OP2	2.67	0.47
27:D1:82:LEU:HD12	27:D1:82:LEU:HA	1.70	0.47
1:AA:408:A:H4'	4:AD:112:VAL:CG1	2.37	0.47
1:CA:409:G:OP1	4:CD:22:LYS:HB3	2.15	0.47
26:B0:23:VAL:HG13	26:B0:38:VAL:HG22	1.97	0.47
1:AA:628:G:H2'	1:AA:629:G:H8	1.80	0.47
1:CA:59:A:H5''	1:CA:60:A:H5''	1.97	0.47
53:DU:37:GLU:HA	53:DU:40:PHE:HE1	1.77	0.47
29:D3:4:LEU:N	29:D3:37:LEU:O	2.33	0.47
24:AY:37:YG:H31	24:AY:37:YG:C1'	2.42	0.47
1:AA:445:G:C6	1:AA:490:G:C6	3.03	0.47
36:BA:1309:G:O2'	36:BA:1310:G:H5'	2.14	0.47
36:DA:687:C:C5	36:DA:688:U:C4	3.02	0.47
53:BU:52:ARG:HG2	53:BU:55:ARG:HH12	1.80	0.47
54:BV:28:GLU:HB3	54:BV:29:PRO:HD2	1.95	0.47
36:DA:1257:C:H4'	41:DF:83:PHE:CD2	2.50	0.47
39:BD:45:ASN:CG	39:BD:46:GLN:N	2.67	0.47
1:AA:1249:C:C6	1:AA:1249:C:H5'	2.39	0.47
1:AA:1095:U:H2'	1:AA:1096:C:O4'	2.15	0.47
7:AG:79:ARG:NH2	22:AW:33:U:H4'	2.30	0.47
36:BA:933:A:H2'	36:BA:934:G:O4'	2.14	0.47
25:AZ:313:HIS:CG	25:AZ:403:ILE:HG21	2.50	0.47
12:CL:32:PHE:CB	12:CL:84:LEU:HD21	2.45	0.47
46:DN:68:GLU:HA	46:DN:86:PRO:HB2	1.96	0.47
1:CA:692:U:H3	11:CK:53:SER:HB3	1.79	0.47
16:CP:49:LEU:HD22	16:CP:73:LEU:HD22	1.96	0.47
47:BO:7:TYR:CE1	47:BO:20:MET:HB2	2.50	0.47
18:CR:37:VAL:CG1	18:CR:78:LEU:HB3	2.45	0.47
12:AL:32:PHE:HD1	12:AL:86:ARG:HA	1.78	0.47
1:AA:913:A:H1'	1:AA:914:A:O4'	2.14	0.47
1:AA:68:G:H5'	1:AA:171:A:H1'	1.95	0.47
16:CP:3:LYS:HB3	16:CP:65:GLN:O	2.15	0.47
27:D1:33:LYS:CD	27:D1:33:LYS:H	2.27	0.47
36:DA:2352:A:C5	36:DA:2366:A:N1	2.83	0.47
36:BA:807:U:H2'	36:BA:808:G:C8	2.49	0.47
1:AA:782:A:H2'	1:AA:783:C:H5'	1.96	0.47
36:DA:2250:G:N7	49:DQ:83:MET:HG3	2.29	0.47
11:AK:25:TYR:CE1	11:AK:87:THR:HB	2.43	0.47
25:CZ:162:GLU:HG3	63:CZ:502:KIR:H151	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:93:ILE:HG23	25:CZ:126:VAL:HG21	1.97	0.47
1:CA:1318:A:C1'	19:CS:37:ARG:HH21	2.28	0.47
36:BA:940:G:H2'	36:BA:941:A:O4'	2.15	0.47
2:AB:92:TYR:CD1	2:AB:151:GLY:HA3	2.49	0.47
53:BU:47:TYR:HA	53:BU:50:ARG:HB2	1.96	0.47
36:BA:2313:C:H5'	36:BA:2313:C:C6	2.48	0.47
36:BA:1799:G:H5'	36:BA:1819:A:N6	2.27	0.47
3:AC:206:GLU:O	3:AC:207:VAL:C	2.52	0.47
37:BB:87:G:C3'	37:BB:88:C:H5''	2.45	0.47
36:DA:1877:A:H3'	36:DA:1878:G:O4'	2.14	0.47
1:CA:1353:G:H2'	1:CA:1354:C:C5	2.50	0.47
33:B7:19:ARG:NE	36:BA:124:G:H2'	2.29	0.47
36:DA:1331:A:O2'	36:DA:1332:G:C8	2.66	0.47
36:BA:1624:G:C4	36:BA:1625:C:C5	3.03	0.47
38:DC:7:TYR:CE2	38:DC:11:LEU:HD21	2.49	0.47
36:DA:2557:G:C2'	36:DA:2558:C:H5'	2.45	0.47
25:AZ:267:VAL:HG13	25:AZ:267:VAL:O	2.13	0.47
10:CJ:45:ARG:NE	14:CN:36:PHE:CD2	2.83	0.47
2:AB:114:ARG:HH11	2:AB:118:LEU:HD21	1.79	0.47
22:AV:2:C:O2	22:AV:2:C:H2'	2.13	0.47
27:B1:37:ILE:HD12	27:B1:37:ILE:H	1.80	0.47
26:B0:5:LYS:HZ2	26:B0:5:LYS:HB3	1.80	0.47
22:CV:2:C:O2	22:CV:2:C:H2'	2.15	0.47
3:CC:134:ILE:HG21	3:CC:168:ALA:HB3	1.96	0.47
36:BA:1720:U:H2'	36:BA:1721:G:C4'	2.44	0.47
22:CV:34:G:C2'	22:CV:35:A:H5'	2.45	0.47
1:AA:1274:G:N2	1:AA:1275:A:N6	2.61	0.47
1:CA:682:G:C6	1:CA:683:G:N7	2.83	0.47
1:AA:722:A:H2'	1:AA:722:A:N3	2.29	0.47
39:DD:96:HIS:HE1	39:DD:102:LYS:NZ	2.13	0.47
24:AY:64:C:O4'	25:AZ:391:GLY:HA2	2.14	0.47
36:BA:1545:A:N7	36:BA:1546:C:C2	2.82	0.47
36:DA:1497:U:H2'	36:DA:1497:U:O2	2.15	0.47
20:AT:27:LYS:HD3	20:AT:27:LYS:O	2.14	0.47
19:AS:32:LYS:HA	19:AS:50:ALA:HB3	1.97	0.47
28:B2:26:ARG:O	28:B2:26:ARG:HG2	2.14	0.47
25:AZ:112:PRO:HG3	25:AZ:153:GLU:OE1	2.14	0.47
20:CT:58:LYS:O	20:CT:61:SER:HB3	2.14	0.47
25:AZ:399:VAL:HG13	25:AZ:399:VAL:O	2.13	0.47
47:DO:99:PHE:N	47:DO:99:PHE:CD1	2.81	0.47
6:CF:23:LYS:HA	6:CF:26:ILE:HD12	1.96	0.47
36:DA:2057:A:H2'	36:DA:2058:A:C8	2.49	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:12:GLU:CB	32:B6:23:THR:HG22	2.45	0.47
26:B0:43:THR:CG2	36:BA:2332:U:H5'	2.45	0.47
31:D5:3:LYS:CE	31:D5:3:LYS:HA	2.34	0.47
36:DA:747:U:H4'	55:DW:89:ALA:HB3	1.97	0.47
19:AS:16:LEU:C	19:AS:18:LYS:N	2.67	0.47
19:CS:13:ASP:C	19:CS:15:LEU:H	2.18	0.47
36:DA:1800:C:H42	36:DA:1817:G:N2	2.13	0.47
32:D6:19:ARG:NH2	36:DA:2401:U:OP1	2.47	0.47
36:DA:2388:A:H5'	36:DA:2389:G:OP2	2.14	0.47
36:DA:2402:C:O2'	36:DA:2403:C:H5'	2.14	0.47
25:AZ:21:ASP:HA	62:AZ:501:GDP:H5'	1.96	0.47
41:DF:107:LYS:O	41:DF:110:LEU:N	2.47	0.47
56:BX:17:ALA:O	56:BX:18:TYR:C	2.53	0.47
56:BX:20:GLY:O	56:BX:22:ALA:N	2.47	0.47
1:AA:1050:G:N2	1:AA:1051:C:C2	2.83	0.47
1:AA:993:G:H4'	1:AA:994:A:OP2	2.15	0.47
35:B9:1:MET:HA	35:B9:4:ARG:CZ	2.44	0.47
36:BA:2481:G:HO2'	36:BA:2482:G:P	2.37	0.47
49:BQ:62:GLY:HA2	58:BZ:116:VAL:HG11	1.96	0.47
36:BA:344:G:HO2'	36:BA:345:A:H8	1.62	0.47
36:BA:347:A:H2'	36:BA:348:G:H8	1.80	0.47
41:BF:156:LEU:HD23	41:BF:167:ALA:HB2	1.97	0.47
36:BA:2818:G:OP2	50:BR:42:LYS:NZ	2.46	0.47
36:BA:2839:G:H2'	36:BA:2840:C:C6	2.49	0.47
50:BR:36:THR:HB	50:BR:40:LYS:HD2	1.97	0.47
55:BW:41:LYS:O	55:BW:43:GLY:N	2.47	0.47
42:BG:62:LEU:HD12	42:BG:62:LEU:N	2.29	0.47
36:BA:271(J):C:HO2'	36:BA:271(K):U:H6	1.59	0.47
36:DA:1132:A:C8	36:DA:1133:U:C5	3.02	0.47
36:DA:572:A:C5'	54:DV:78:LYS:NZ	2.78	0.47
16:AP:41:PRO:C	16:AP:43:LYS:H	2.18	0.47
1:CA:532:A:HO2'	1:CA:533:A:P	2.38	0.47
1:CA:964:A:OP1	1:CA:1199:U:OP1	2.33	0.47
2:CB:92:TYR:C	2:CB:92:TYR:CD1	2.88	0.47
40:BE:55:ASN:HD22	40:BE:55:ASN:HA	1.57	0.47
48:BP:101:VAL:C	48:BP:103:ALA:N	2.68	0.47
48:BP:107:LYS:O	48:BP:109:GLY:N	2.48	0.47
25:CZ:171:ILE:HD12	25:CZ:171:ILE:N	2.30	0.47
36:BA:1662:C:H2'	36:BA:1663:C:C6	2.50	0.47
52:BT:117:ASP:OD1	52:BT:119:LYS:HB3	2.15	0.47
52:BT:8:LYS:HA	52:BT:11:GLU:OE1	2.15	0.47
36:DA:2639:A:H3'	36:DA:2640:G:C8	2.49	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:DO:105:GLU:O	47:DO:109:LYS:CG	2.63	0.47
36:DA:307:G:H8	36:DA:307:G:O5'	1.98	0.47
57:DY:28:LYS:HA	57:DY:38:ILE:HG22	1.97	0.47
7:CG:27:ILE:HG23	7:CG:40:ALA:HA	1.96	0.47
9:CI:102:LEU:O	9:CI:102:LEU:HD23	2.14	0.47
9:CI:10:ARG:HD2	9:CI:75:ASP:OD1	2.14	0.47
9:CI:78:LYS:HE3	9:CI:101:PHE:CE2	2.50	0.47
19:AS:51:VAL:CG1	19:AS:52:TYR:H	2.24	0.47
22:CW:17:C:N4	36:DA:2110:G:N2	2.59	0.47
36:DA:2140:C:H2'	36:DA:2141:G:C8	2.49	0.47
1:AA:1424:C:C2	1:AA:1425:U:C5	3.02	0.47
35:B9:12:ASP:CG	35:B9:13:LYS:N	2.68	0.47
1:CA:1425:U:O5'	1:CA:1425:U:H6	1.98	0.47
36:BA:2136:C:O2'	36:BA:2137:C:H5'	2.15	0.47
1:CA:1014:A:H2	1:CA:1219:U:H1'	1.80	0.47
36:BA:449:A:C4	36:BA:450:G:C8	3.02	0.47
48:BP:16:ARG:O	48:BP:16:ARG:NH1	2.47	0.47
39:BD:73:VAL:C	39:BD:75:ILE:H	2.18	0.47
39:DD:24:ILE:CD1	39:DD:25:THR:N	2.77	0.47
36:BA:265:A:H1'	36:BA:266:G:C1'	2.44	0.47
36:DA:664:C:H4'	36:DA:941:A:P	2.55	0.47
22:AV:19:G:N1	42:BG:83:ARG:NH2	2.62	0.47
42:DG:170:ARG:NE	42:DG:180:PHE:CE1	2.83	0.47
36:BA:1538:G:H2'	36:BA:1539:G:C8	2.50	0.47
8:CH:86:ILE:HG21	8:CH:133:LEU:CD2	2.35	0.47
1:AA:1128:C:N4	1:AA:1139:G:H2'	2.29	0.47
20:AT:42:GLN:HB2	20:AT:42:GLN:HE21	1.54	0.47
20:CT:56:MET:SD	20:CT:85:MET:HB3	2.55	0.47
1:AA:836:G:C5	1:AA:851:G:C6	3.02	0.47
37:BB:17:C:H42	37:BB:68:C:N4	2.00	0.47
4:CD:129:ASN:N	4:CD:129:ASN:ND2	2.63	0.47
36:DA:2069:G:N2	36:DA:2070:G:C4	2.83	0.47
1:AA:1152:A:H5''	10:AJ:13:HIS:CB	2.44	0.47
1:CA:445:G:H2'	1:CA:446:G:C8	2.48	0.47
36:DA:261:G:O4'	36:DA:609:A:H2	1.97	0.47
36:DA:2359:C:C4	36:DA:2360:A:C5	3.03	0.47
15:CO:8:LYS:O	15:CO:9:GLN:C	2.52	0.47
38:BC:63:SER:HA	38:BC:160:ARG:CA	2.38	0.47
54:DV:75:PHE:HB2	54:DV:82:ARG:HG3	1.95	0.47
29:D3:2:PRO:O	29:D3:3:ARG:O	2.33	0.47
23:AX:22:A:N6	24:AY:36:U:H3	2.12	0.47
42:DG:26:GLN:HG2	42:DG:27:ASN:H	1.78	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:123:G:C6	36:DA:124:G:C5	3.03	0.47
36:BA:1400:G:C6	36:BA:1401:G:C6	3.03	0.47
40:BE:129:HIS:O	40:BE:130:GLY:O	2.33	0.47
52:DT:107:ASP:OD2	52:DT:108:ARG:HG2	2.14	0.47
47:DO:8:LEU:HD22	47:DO:19:ILE:HG13	1.97	0.47
55:BW:28:SER:HA	55:BW:70:TYR:HB2	1.97	0.47
36:DA:431:U:H6	36:DA:431:U:O5'	1.98	0.47
36:BA:271(V):G:C6	36:BA:271(W):G:C2	3.03	0.47
22:AW:54:U:C4'	38:BC:54:SER:HB2	2.44	0.47
27:D1:18:ILE:CD1	27:D1:20:ARG:NH2	2.78	0.47
1:AA:987:G:H2'	1:AA:988:G:C8	2.44	0.47
36:DA:2754:U:H2'	36:DA:2756:U:OP1	2.14	0.47
9:AI:6:GLY:HA3	9:AI:84:ALA:CB	2.44	0.47
27:B1:18:ILE:CG2	27:B1:19:GLN:N	2.78	0.47
36:BA:664:C:H1'	36:BA:940:G:OP1	2.14	0.47
1:AA:1087:G:H22	1:AA:1099:G:H1'	1.79	0.47
56:DX:49:VAL:CB	56:DX:87:GLN:NE2	2.78	0.47
58:BZ:117:LEU:CD1	58:BZ:172:ALA:HB1	2.45	0.47
1:AA:1081:G:O2'	1:AA:1082:G:H5'	2.15	0.47
32:D6:32:ASN:ND2	32:D6:33:LYS:H	2.13	0.47
1:CA:786:G:H2'	1:CA:787:A:O4'	2.15	0.47
36:BA:2533:A:H2'	36:BA:2534:A:O4'	2.15	0.47
11:AK:34:ASP:C	11:AK:36:ASP:H	2.18	0.47
4:AD:50:ARG:O	4:AD:51:PRO:C	2.52	0.47
2:CB:155:LEU:HD21	2:CB:159:PRO:HG3	1.96	0.47
16:AP:23:ASP:OD1	16:AP:25:ARG:NH1	2.48	0.47
24:AY:77:THR:HG22	25:AZ:239:THR:HB	1.96	0.47
22:AW:31:A:O2'	22:AW:32:U:H5'	2.14	0.47
36:DA:1720:U:H3'	36:DA:1721:G:H5''	1.96	0.47
1:CA:1262:C:H42	1:CA:1273:G:H1	1.63	0.47
20:CT:94:ALA:O	20:CT:95:ALA:HB3	2.15	0.47
25:CZ:92:MET:O	25:CZ:95:GLY:N	2.46	0.47
2:AB:83:MET:C	2:AB:85:ALA:H	2.17	0.47
36:DA:992:C:C2	36:DA:1163:G:N2	2.83	0.47
4:AD:106:TYR:CE1	4:AD:113:SER:HA	2.49	0.47
38:BC:108:MET:O	38:BC:109:ASP:O	2.32	0.47
1:AA:163:C:O2'	1:AA:164:U:H5'	2.15	0.47
1:CA:894:G:H2'	1:CA:895:G:O4'	2.15	0.47
32:B6:15:GLU:HG3	32:B6:47:THR:OG1	2.13	0.47
34:B8:49:VAL:HB	34:B8:53:PRO:HG3	1.97	0.47
48:BP:61:ARG:C	48:BP:62:LEU:HD23	2.35	0.47
50:DR:76:VAL:O	50:DR:79:LEU:HB3	2.15	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:267:SER:O	39:DD:269:PHE:N	2.38	0.47
32:D6:53:LYS:HE2	32:D6:54:ILE:HA	1.97	0.47
25:AZ:200:TRP:C	25:AZ:202:LEU:N	2.66	0.47
25:AZ:208:GLU:O	25:AZ:209:TYR:HB3	2.14	0.47
28:D2:30:ARG:O	28:D2:33:MET:HB3	2.15	0.47
5:CE:11:ILE:HD12	5:CE:31:LEU:HD11	1.94	0.47
40:DE:57:LYS:HE2	40:DE:59:VAL:CG1	2.43	0.47
48:BP:9:ASN:N	48:BP:10:PRO:CD	2.72	0.47
36:BA:2754:U:H2'	36:BA:2756:U:OP1	2.15	0.47
1:AA:1209:C:O2'	1:AA:1210:C:H5'	2.14	0.47
1:AA:540:G:O2'	1:AA:541:G:H5'	2.15	0.47
4:AD:70:ILE:HD12	4:AD:97:LEU:HD21	1.97	0.47
49:BQ:55:VAL:HA	49:BQ:58:PHE:HE1	1.80	0.47
28:B2:32:LEU:CB	28:B2:53:LEU:HD22	2.44	0.47
28:B2:57:ILE:HG22	28:B2:61:LEU:HD11	1.97	0.47
36:BA:2007:C:H5'	36:BA:2824:C:O4'	2.14	0.47
50:BR:17:ARG:HH11	50:BR:17:ARG:HB3	1.80	0.47
50:BR:73:VAL:CG1	50:BR:77:ARG:HH12	2.28	0.47
54:DV:46:VAL:O	54:DV:46:VAL:HG13	2.13	0.47
36:DA:558:G:H2'	36:DA:559:G:H8	1.80	0.47
46:DN:24:GLY:H	46:DN:27:ALA:N	2.02	0.47
41:BF:62:ARG:HG2	41:BF:62:ARG:NH1	2.30	0.47
8:CH:26:VAL:HG23	8:CH:27:PRO:HD2	1.97	0.47
51:BS:89:ARG:HG3	51:BS:92:TYR:CB	2.44	0.47
40:BE:52:LEU:O	40:BE:74:PRO:CB	2.63	0.47
48:BP:106:LEU:HD11	48:BP:112:LEU:CD2	2.44	0.47
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.96	0.47
25:CZ:136:ASN:O	25:CZ:137:LYS:HB2	2.15	0.47
25:CZ:196:VAL:O	25:CZ:200:TRP:CD1	2.68	0.47
25:CZ:38:GLU:OE1	25:CZ:200:TRP:CH2	2.67	0.47
25:CZ:137:LYS:HD3	62:CZ:501:GDP:C2	2.50	0.47
52:BT:23:ARG:O	52:BT:24:PRO:C	2.53	0.47
52:DT:28:VAL:O	52:DT:29:ARG:CB	2.62	0.47
52:DT:35:LYS:NZ	52:DT:41:ARG:HD2	2.30	0.47
36:DA:310:A:O2'	36:DA:311:A:O5'	2.32	0.47
10:AJ:62:HIS:O	14:AN:59:ALA:HB3	2.15	0.47
14:AN:21:TYR:CE2	14:AN:23:ARG:NH2	2.83	0.47
36:BA:2675:A:H5'	47:BO:31:LYS:HZ1	1.80	0.47
37:DB:81:G:C6	37:DB:97:G:C2	3.03	0.47
1:CA:1349:A:H2'	1:CA:1350:A:H8	1.78	0.47
36:BA:1515:G:H2'	36:BA:1516:C:C6	2.49	0.47
4:AD:79:PHE:CD2	4:AD:207:TYR:CD1	3.02	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BY:14:LEU:HD12	57:BY:15:VAL:H	1.79	0.47
22:CW:16:U:C4	22:CW:19:G:OP1	2.68	0.47
1:AA:15:G:H2'	1:AA:16:A:H8	1.80	0.47
3:AC:18:TRP:HB2	3:AC:21:ARG:HB3	1.96	0.47
41:BF:49:ALA:HB1	41:BF:92:PRO:HB3	1.97	0.47
58:DZ:10:ARG:HB2	58:DZ:37:VAL:CA	2.45	0.47
9:AI:18:PHE:O	9:AI:19:LEU:HD23	2.15	0.47
1:CA:1305:G:OP2	1:CA:1305:G:C8	2.68	0.47
46:BN:103:VAL:O	46:BN:104:LYS:C	2.52	0.47
10:AJ:30:SER:O	10:AJ:81:THR:HG22	2.15	0.47
36:DA:769:G:C4'	36:DA:1379:A:N6	2.77	0.47
36:DA:1298:C:C1'	36:DA:1302:A:C2	2.98	0.47
36:DA:37:C:O2	36:DA:444:C:C2	2.68	0.47
36:DA:593:G:C2'	36:DA:594:U:H5'	2.45	0.47
21:AU:2:GLY:C	21:AU:4:GLY:N	2.67	0.47
42:DG:60:LEU:HA	42:DG:63:ILE:CD1	2.45	0.47
25:CZ:342:PHE:CD1	25:CZ:342:PHE:N	2.83	0.47
36:DA:2787:C:C2'	40:DE:61:ARG:HD3	2.45	0.47
43:DH:18:GLU:HB2	43:DH:25:LYS:HB2	1.96	0.47
43:BH:148:ILE:HG22	43:BH:162:ILE:HD13	1.97	0.47
1:AA:1279:A:H2	10:AJ:43:ARG:HH12	1.62	0.47
36:BA:2485:G:C5'	49:BQ:46:GLN:HE21	2.27	0.47
1:AA:1466:C:O2'	1:AA:1467:G:H5'	2.15	0.47
8:CH:20:TYR:HE2	8:CH:75:ARG:CD	2.27	0.47
1:AA:45:U:H2'	1:AA:46:G:H8	1.79	0.47
38:DC:178:ALA:O	38:DC:180:PHE:N	2.48	0.47
24:CY:48:C:C2'	24:CY:59:A:H1'	2.33	0.47
1:AA:851:G:C4	1:AA:852:G:C8	3.03	0.47
36:BA:121:G:H4'	36:BA:149:A:H5'	1.96	0.47
4:CD:145:GLU:CG	4:CD:184:LYS:HG2	2.45	0.47
2:CB:74:LYS:O	2:CB:74:LYS:HG3	2.15	0.47
1:CA:674:G:H2'	1:CA:675:A:C8	2.50	0.47
26:D0:51:VAL:HG22	26:D0:81:VAL:HG23	1.97	0.47
1:CA:1412:C:N4	1:CA:1488:G:H1	1.96	0.47
12:CL:41:ARG:HH11	12:CL:41:ARG:CG	2.23	0.47
1:AA:1150:U:O4	1:AA:1151:A:N6	2.48	0.47
55:DW:12:ILE:CG1	55:DW:42:ARG:NH1	2.77	0.47
41:DF:46:ARG:HG2	41:DF:48:THR:HG23	1.97	0.47
34:D8:43:GLN:C	34:D8:44:LYS:HD2	2.34	0.47
39:DD:127:VAL:HA	39:DD:193:VAL:HG13	1.95	0.47
1:CA:750:G:C2	15:CO:23:GLY:HA3	2.49	0.47
36:BA:2208:A:N3	36:BA:2219:G:C6	2.83	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2815:C:O2	36:DA:2815:C:H2'	2.14	0.47
36:BA:1360:A:N6	36:BA:1372:U:C4	2.82	0.47
36:DA:115:C:O2'	36:DA:116:C:H5'	2.15	0.47
1:CA:1245:A:H2'	1:CA:1246:C:H6	1.80	0.47
22:AW:66:U:H2'	22:AW:67:C:H6	1.80	0.47
25:CZ:316:PHE:HA	25:CZ:404:LEU:H	1.78	0.47
19:AS:35:SER:O	19:AS:37:ARG:N	2.48	0.47
31:B5:31:VAL:HG11	36:BA:2886:G:N2	2.25	0.47
1:CA:1430:C:O2'	1:CA:1431:C:H5'	2.14	0.47
11:CK:69:ALA:O	11:CK:70:LYS:C	2.51	0.47
36:BA:1323:U:C2'	36:BA:1324:G:H5'	2.45	0.47
36:BA:1053:C:C5	36:BA:1054:A:N7	2.83	0.47
56:DX:68:ARG:HG3	56:DX:69:TYR:CE1	2.50	0.47
1:AA:1242:C:H2'	1:AA:1243:C:H6	1.78	0.47
26:B0:30:VAL:CG1	26:B0:66:VAL:HG23	2.45	0.47
2:AB:149:LEU:O	2:AB:150:SER:C	2.53	0.47
36:BA:466:A:C2'	36:BA:467:G:H5'	2.45	0.47
36:BA:2497:A:C8	36:BA:2497:A:OP2	2.67	0.47
40:DE:108:SER:O	40:DE:162:ALA:N	2.48	0.47
49:BQ:10:ARG:NH1	49:BQ:10:ARG:CB	2.77	0.47
38:BC:7:TYR:CE2	38:BC:11:LEU:HD21	2.50	0.47
36:DA:363:G:C2	36:DA:363(A):A:C8	3.03	0.47
15:AO:28:GLN:O	15:AO:31:LEU:HB3	2.14	0.47
36:DA:591:C:H2'	36:DA:592:G:H8	1.80	0.47
1:AA:681:C:O2'	1:AA:682:G:H5'	2.15	0.47
15:CO:37:ASN:N	15:CO:37:ASN:ND2	2.63	0.47
36:BA:2851:A:C2'	36:BA:2852:G:H5'	2.44	0.47
30:D4:28:LYS:HE3	30:D4:28:LYS:HA	1.95	0.47
1:AA:123:C:O5'	1:AA:123:C:H6	1.98	0.47
1:CA:889:A:H4'	1:CA:890:G:OP1	2.13	0.47
32:B6:35:GLU:CB	32:B6:51:GLU:HG3	2.45	0.47
36:BA:942:G:H2'	36:BA:943:U:O4'	2.15	0.47
36:BA:251:A:H5''	48:BP:51:PHE:HZ	1.79	0.47
36:DA:2009:G:H4'	55:DW:40:ASN:HD21	1.76	0.47
36:DA:1655:A:C2	36:DA:2049:G:H4'	2.50	0.47
50:DR:25:ALA:O	50:DR:29:LEU:HB2	2.15	0.47
57:BY:63:LYS:HG2	57:BY:64:GLU:H	1.80	0.47
36:DA:2259:G:O2'	36:DA:2260:C:H5'	2.15	0.47
36:DA:628:G:O2'	36:DA:629:G:H5''	2.15	0.47
36:DA:631:A:H5''	48:DP:65:ARG:HG2	1.97	0.47
25:AZ:145:GLU:O	25:AZ:146:LEU:C	2.52	0.47
28:D2:32:LEU:HB2	28:D2:53:LEU:HD22	1.97	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D2:50:ILE:HG21	36:DA:61:G:H5'	1.96	0.47
36:DA:1244:G:H5'	36:DA:1244:G:H8	1.80	0.47
5:CE:101:ILE:O	5:CE:120:THR:CG2	2.61	0.47
36:DA:2475:C:N4	36:DA:2529:G:H22	2.10	0.47
57:DY:46:LYS:H	57:DY:62:GLU:CG	2.03	0.47
57:DY:49:VAL:O	57:DY:50:ARG:HB2	2.15	0.47
39:BD:24:ILE:CD1	39:BD:25:THR:N	2.77	0.47
1:AA:1191:A:OP2	3:AC:4:LYS:HG2	2.15	0.47
1:AA:963:G:H1	1:AA:972:C:N4	2.13	0.47
35:B9:35:ARG:O	35:B9:36:GLN:O	2.33	0.47
28:B2:59:ARG:HB2	36:BA:77:C:H5'	1.97	0.47
28:B2:63:VAL:C	28:B2:65:ASN:H	2.17	0.47
56:BX:46:ALA:O	56:BX:47:PHE:CD1	2.68	0.47
56:BX:46:ALA:C	56:BX:47:PHE:HD1	2.18	0.47
13:AM:59:TYR:O	13:AM:63:THR:N	2.48	0.47
42:BG:146:TYR:C	42:BG:148:MET:N	2.62	0.47
36:DA:2654:A:N3	36:DA:2656:U:C4	2.83	0.47
36:DA:2026:C:N4	36:DA:2037:G:H1	2.11	0.47
16:AP:67:THR:HG22	16:AP:68:ASP:N	2.24	0.47
58:BZ:119:GLU:HG3	58:BZ:122:ARG:NH1	2.30	0.47
1:CA:1195:C:H2'	1:CA:1197:G:O4'	2.14	0.47
51:BS:99:LYS:O	51:BS:101:LEU:N	2.48	0.47
51:BS:28:VAL:O	51:BS:29:PHE:HB2	2.15	0.47
2:CB:8:LYS:HZ1	2:CB:217:ARG:HH12	1.62	0.47
40:BE:4:ILE:HD12	40:BE:92:THR:O	2.16	0.47
36:DA:1471:A:OP2	36:DA:1519:G:N1	2.48	0.47
52:BT:29:ARG:CB	52:BT:85:LYS:HA	2.45	0.47
52:BT:89:VAL:O	52:BT:90:GLN:C	2.53	0.47
52:BT:94:ALA:C	52:BT:96:ARG:N	2.67	0.47
52:BT:96:ARG:HB2	52:BT:96:ARG:NH1	2.29	0.47
52:DT:27:THR:O	52:DT:28:VAL:CG2	2.52	0.47
52:DT:61:PHE:O	52:DT:75:ILE:HG23	2.15	0.47
57:DY:67:LEU:HD23	57:DY:68:HIS:H	1.79	0.47
1:AA:1376:U:H2'	1:AA:1377:A:H8	1.80	0.47
35:D9:11:CYS:HG	60:D9:101:ZN:ZN	1.29	0.47
58:DZ:133:ILE:N	58:DZ:134:PRO:HD3	2.30	0.47
7:CG:118:VAL:O	7:CG:121:ALA:N	2.47	0.47
9:CI:11:LYS:C	9:CI:13:ALA:N	2.68	0.47
14:CN:47:LEU:C	14:CN:49:HIS:N	2.67	0.47
39:DD:112:GLN:HB2	39:DD:115:GLN:NE2	2.29	0.47
37:BB:81:G:C2	37:BB:82:G:N7	2.83	0.47
4:AD:105:VAL:HG21	4:AD:126:ILE:HG12	1.95	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:138:TYR:CE2	4:AD:139:ARG:O	2.68	0.47
51:DS:12:PHE:C	51:DS:12:PHE:CD2	2.86	0.47
57:BY:67:LEU:HD23	57:BY:68:HIS:H	1.80	0.47
42:BG:130:ASN:O	42:BG:131:TYR:O	2.33	0.47
1:AA:862:C:O2'	1:AA:863:U:H5'	2.15	0.47
2:AB:21:ARG:CZ	2:AB:39:ILE:CG1	2.89	0.47
36:BA:2121:G:H2'	36:BA:2122:U:H6	1.78	0.47
19:CS:31:ILE:O	19:CS:31:ILE:HG23	2.15	0.47
27:B1:45:ASN:HA	36:BA:2230:G:C1'	2.44	0.47
36:DA:1538:G:H2'	36:DA:1539:G:H8	1.79	0.47
2:CB:22:LYS:HE3	2:CB:40:HIS:CE1	2.50	0.47
49:DQ:133:ARG:HB3	49:DQ:134:ARG:H	1.44	0.47
15:CO:64:ARG:O	15:CO:66:LEU:N	2.48	0.47
36:BA:20:C:C2	36:BA:21:A:C8	3.03	0.47
1:AA:900:A:H2'	1:AA:901:A:C8	2.51	0.47
30:B4:22:ILE:CD1	30:B4:22:ILE:H	2.00	0.47
39:DD:85:ASP:HB2	39:DD:92:ILE:HG23	1.97	0.47
36:DA:2580:U:C5	36:DA:2581:G:C5	3.03	0.47
42:DG:179:PRO:O	42:DG:180:PHE:CD2	2.68	0.47
42:DG:58:GLN:O	42:DG:61:ALA:CB	2.63	0.47
37:BB:112:U:H2'	37:BB:113:G:H8	1.78	0.47
1:AA:1204:A:H2'	1:AA:1205:U:O4'	2.13	0.47
1:CA:580:U:H3	1:CA:761:G:H1	1.63	0.47
49:BQ:21:THR:HG23	49:BQ:101:ARG:HB2	1.95	0.47
15:CO:82:ILE:O	15:CO:86:GLY:N	2.47	0.47
2:AB:24:TRP:CZ3	2:AB:26:PRO:CA	2.90	0.47
1:AA:1426:C:C2	1:AA:1427:U:C5	3.02	0.47
8:CH:19:VAL:O	8:CH:21:LYS:N	2.48	0.47
4:CD:100:ARG:O	4:CD:101:LEU:C	2.53	0.47
1:AA:548:G:O2'	1:AA:549:C:H5'	2.15	0.47
58:DZ:69:THR:CG2	58:DZ:90:VAL:HA	2.43	0.47
36:DA:783:A:H2'	36:DA:784:A:H4'	1.97	0.47
36:DA:793:A:OP2	36:DA:2072:G:H5'	2.15	0.47
1:AA:1152:A:O2'	1:AA:1153:C:C5'	2.60	0.47
10:AJ:4:ILE:O	10:AJ:74:ILE:CG1	2.63	0.47
10:AJ:8:LEU:CD2	10:AJ:96:ILE:HG22	2.45	0.47
1:CA:1500:A:OP1	1:CA:1508:G:OP1	2.33	0.47
36:DA:441:U:O2'	36:DA:442:G:H5'	2.15	0.47
36:BA:406:G:C6	36:BA:407:G:C6	3.03	0.47
51:DS:46:VAL:HG12	51:DS:47:THR:N	2.24	0.47
1:AA:294:U:H2'	1:AA:295:C:C6	2.50	0.47
42:DG:26:GLN:OE1	42:DG:26:GLN:N	2.48	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CR:63:GLN:OE1	18:CR:63:GLN:HA	2.15	0.47
36:DA:733:G:C5	36:DA:761:A:C6	3.02	0.47
25:CZ:313:HIS:HB3	25:CZ:403:ILE:CG2	2.43	0.47
36:DA:979:G:C2	36:DA:982:C:C5	3.03	0.47
1:AA:1092:A:C6	1:AA:1093:A:C6	3.02	0.47
49:BQ:77:LYS:HD3	49:BQ:81:VAL:CG1	2.45	0.47
11:AK:66:LEU:O	11:AK:69:ALA:CB	2.60	0.47
40:BE:144:ARG:O	40:BE:146:THR:N	2.47	0.47
50:BR:107:ASP:O	50:BR:109:ALA:N	2.48	0.47
52:BT:118:ARG:O	52:BT:122:ASP:N	2.38	0.47
36:BA:271(E):U:H2'	36:BA:271(F):C:C5	2.49	0.47
1:AA:472:A:O2'	16:AP:81:ARG:HA	2.15	0.47
36:BA:733:G:C5	36:BA:761:A:C6	3.03	0.47
25:CZ:339:ARG:CZ	25:CZ:352:VAL:HG22	2.45	0.47
6:AF:62:TRP:NE1	18:AR:35:ARG:CZ	2.78	0.47
18:AR:37:VAL:CG2	18:AR:38:GLU:N	2.78	0.47
12:AL:84:LEU:O	12:AL:101:VAL:HG23	2.15	0.47
12:AL:10:LEU:O	12:AL:14:GLY:N	2.43	0.47
20:CT:82:SER:O	20:CT:86:ARG:HB2	2.14	0.47
36:DA:960:A:N6	36:DA:962:G:C2	2.83	0.47
2:AB:14:GLY:O	2:AB:15:VAL:HG22	2.15	0.47
38:BC:106:GLY:O	38:BC:107:TRP:HB2	2.15	0.47
58:DZ:67:LEU:CD1	58:DZ:67:LEU:N	2.78	0.47
6:CF:79:LEU:HD12	6:CF:88:VAL:HG11	1.96	0.47
25:CZ:126:VAL:O	25:CZ:126:VAL:HG12	2.15	0.47
12:AL:41:ARG:CD	12:AL:42:THR:H	2.28	0.47
38:DC:183:GLU:CD	38:DC:183:GLU:N	2.66	0.47
38:BC:183:GLU:N	38:BC:183:GLU:CD	2.66	0.47
2:AB:92:TYR:OH	2:AB:150:SER:HB3	2.15	0.47
9:AI:22:GLY:O	9:AI:58:HIS:C	2.53	0.47
57:DY:2:ARG:O	57:DY:4:LYS:N	2.48	0.47
58:BZ:20:ARG:HG3	58:BZ:21:ALA:H	1.80	0.47
1:AA:563:A:N3	1:AA:563:A:C2'	2.77	0.47
5:AE:98:THR:HG22	5:AE:99:GLY:O	2.14	0.47
36:DA:2533:A:H2'	36:DA:2534:A:C5'	2.45	0.47
1:CA:1353:G:C4	1:CA:1354:C:C5	3.03	0.47
36:DA:1432:C:H2'	36:DA:1433:U:C6	2.50	0.47
36:DA:1892:C:H2'	36:DA:1893:C:H6	1.80	0.47
36:DA:1625:C:O2'	36:DA:1626:G:H5'	2.15	0.47
15:CO:35:ARG:NH2	15:CO:59:MET:CE	2.78	0.47
28:B2:20:GLU:OE1	28:B2:20:GLU:O	2.33	0.47
36:BA:1744:C:O2'	36:BA:1745:C:H5'	2.15	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:273:HIS:C	25:CZ:275:LYS:H	2.18	0.47
1:CA:47:C:O2'	1:CA:48:C:P	2.73	0.47
36:DA:654(H):G:H2'	36:DA:654(I):C:H5'	1.96	0.47
15:CO:75:PRO:O	15:CO:79:ARG:HG3	2.15	0.47
1:AA:169:C:O2	1:AA:169:C:H2'	2.15	0.47
12:CL:79:GLU:O	12:CL:79:GLU:HG2	2.15	0.47
9:AI:56:LEU:O	9:AI:56:LEU:HD23	2.15	0.47
2:CB:138:LEU:C	2:CB:140:HIS:H	2.18	0.47
36:BA:245:G:H2'	36:BA:246:C:C6	2.50	0.46
36:BA:631:A:H5''	48:BP:65:ARG:HG2	1.97	0.46
36:DA:1654:A:OP1	50:DR:3:HIS:N	2.49	0.46
36:DA:1655:A:H1'	40:DE:113:PHE:HD2	1.80	0.46
50:DR:97:VAL:O	50:DR:98:LEU:HD23	2.15	0.46
36:BA:499:U:H1'	57:BY:47:LYS:HZ1	1.80	0.46
36:DA:2414:G:C2	36:DA:2415:G:C8	3.03	0.46
25:AZ:189:ARG:CG	25:AZ:190:ARG:N	2.48	0.46
36:BA:1887:C:H2'	36:BA:1888:G:C5'	2.16	0.46
41:DF:39:TRP:CZ3	41:DF:106:ARG:HD2	2.49	0.46
39:BD:273:ARG:HH11	39:BD:273:ARG:CG	2.28	0.46
42:DG:73:ALA:H	42:DG:87:PRO:HD2	1.79	0.46
4:AD:14:ARG:HG3	4:AD:15:GLU:OE1	2.15	0.46
4:AD:9:CYS:SG	4:AD:32:ALA:HB2	2.55	0.46
56:BX:46:ALA:C	56:BX:47:PHE:CD1	2.88	0.46
30:B4:14:ILE:H	30:B4:14:ILE:HD12	1.80	0.46
42:BG:139:LEU:HA	42:BG:144:ILE:HG23	1.97	0.46
36:DA:1005:C:H6	36:DA:1005:C:O5'	1.98	0.46
46:DN:27:ALA:O	46:DN:28:THR:C	2.54	0.46
36:BA:1502:C:H5'	36:BA:1503:U:OP2	2.13	0.46
1:CA:507:C:P	1:CA:508:C:H3'	2.56	0.46
1:CA:837:G:C2'	1:CA:838:G:H5'	2.45	0.46
5:AE:48:ALA:C	5:AE:50:GLU:N	2.68	0.46
25:CZ:29:ALA:HB3	25:CZ:179:LEU:HD22	1.97	0.46
56:BX:35:THR:HG21	56:BX:37:THR:HB	1.97	0.46
36:BA:1298:C:H1'	36:BA:1302:A:C2	2.50	0.46
36:BA:1764:G:H2'	36:BA:1765:C:H6	1.80	0.46
36:BA:2681:C:C5	36:BA:2727:G:N2	2.84	0.46
36:BA:2708:G:C4	36:BA:2709:G:N7	2.83	0.46
40:BE:171:GLU:O	40:BE:173:VAL:N	2.48	0.46
40:BE:24:THR:HG21	40:BE:188:VAL:CG1	2.33	0.46
47:BO:104:ARG:HH11	47:BO:104:ARG:HB2	1.80	0.46
52:BT:50:ILE:HG22	52:BT:51:ARG:N	2.30	0.46
36:DA:1668:A:N3	36:DA:1670:C:N3	2.63	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2864:G:H2'	36:DA:2865:U:O4'	2.15	0.46
57:DY:76:CYS:HB3	57:DY:96:ILE:HD11	1.97	0.46
26:B0:10:THR:HG23	26:B0:12:ASN:OD1	2.15	0.46
36:DA:917:A:C2	37:DB:79:C:O2	2.68	0.46
1:CA:940:C:O5'	1:CA:940:C:H6	1.98	0.46
1:AA:1520:G:O2'	1:AA:1521:G:O5'	2.32	0.46
36:BA:1469:A:H2'	36:BA:1470:G:O4'	2.15	0.46
19:AS:67:VAL:C	19:AS:69:HIS:H	2.18	0.46
51:DS:36:TYR:N	51:DS:36:TYR:CD1	2.83	0.46
51:DS:99:LYS:O	51:DS:101:LEU:N	2.48	0.46
42:BG:173:LEU:O	42:BG:176:LEU:HB2	2.15	0.46
42:BG:36:LYS:CG	42:BG:37:VAL:N	2.78	0.46
22:CV:20:U:C5'	22:CV:21:A:OP2	2.63	0.46
55:BW:6:ILE:HG12	55:BW:104:THR:HA	1.97	0.46
55:DW:70:TYR:HE1	55:DW:72:LYS:HA	1.79	0.46
4:CD:92:VAL:HG12	4:CD:96:LEU:HD13	1.96	0.46
4:CD:92:VAL:O	4:CD:93:PHE:C	2.52	0.46
25:AZ:67:HIS:CD2	25:AZ:80:VAL:HG13	2.50	0.46
19:CS:51:VAL:CG1	19:CS:52:TYR:H	2.26	0.46
27:B1:7:ILE:HB	27:B1:62:VAL:HG23	1.96	0.46
16:CP:41:PRO:C	16:CP:43:LYS:H	2.18	0.46
20:CT:17:ARG:C	20:CT:19:SER:N	2.68	0.46
1:CA:1307:U:H6	1:CA:1307:U:O5'	1.98	0.46
58:DZ:29:TYR:O	58:DZ:89:PHE:HA	2.15	0.46
58:DZ:48:PHE:O	58:DZ:50:GLN:N	2.48	0.46
36:DA:723:G:H2'	36:DA:724:U:O4'	2.14	0.46
43:BH:31:GLY:O	43:BH:79:VAL:HG12	2.15	0.46
28:B2:5:GLU:CG	28:B2:9:GLN:HE22	2.28	0.46
39:BD:112:GLN:H	39:BD:115:GLN:HE22	1.56	0.46
36:DA:1637:A:H4'	36:DA:2711:A:O2'	2.15	0.46
36:DA:2695:C:H2'	36:DA:2696:U:C6	2.50	0.46
36:BA:267:C:H2'	36:BA:268:C:H6	1.80	0.46
36:DA:2507:C:H2'	36:DA:2508:G:O4'	2.15	0.46
13:CM:49:THR:C	13:CM:51:ALA:N	2.67	0.46
42:DG:67:LYS:H	42:DG:67:LYS:HD3	1.77	0.46
42:DG:77:ILE:C	42:DG:79:ASN:N	2.68	0.46
36:DA:2811:G:H1	36:DA:2889:C:H42	1.63	0.46
1:AA:585:G:H1	1:AA:756:C:N4	2.11	0.46
43:BH:148:ILE:HG22	43:BH:162:ILE:CD1	2.45	0.46
51:DS:24:LEU:HD22	51:DS:24:LEU:N	2.29	0.46
15:CO:74:ASP:OD1	15:CO:77:ARG:HG2	2.14	0.46
49:BQ:126:PRO:HG2	49:BQ:127:ILE:HG23	1.97	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BQ:92:GLY:C	49:BQ:93:TYR:CD1	2.88	0.46
29:D3:56:VAL:CG1	29:D3:57:GLU:H	2.23	0.46
5:AE:76:ILE:CG2	5:AE:93:PRO:HA	2.44	0.46
1:CA:858:G:C6	1:CA:869:G:C8	3.04	0.46
3:CC:18:TRP:N	3:CC:18:TRP:CE3	2.83	0.46
1:AA:1463:C:H5'	52:BT:115:ARG:NH2	2.29	0.46
29:B3:19:GLN:C	29:B3:21:ALA:N	2.69	0.46
36:DA:827:U:H4'	36:DA:828:U:O2	2.15	0.46
27:D1:81:LYS:O	27:D1:82:LEU:HD12	2.14	0.46
26:B0:58:THR:CG2	26:B0:59:LEU:N	2.78	0.46
1:CA:136:C:H2'	1:CA:137:C:C6	2.50	0.46
36:DA:2020:A:O2'	36:DA:2021:C:C5'	2.57	0.46
36:BA:7:G:O2'	36:BA:8:A:H5'	2.16	0.46
36:DA:185:U:N3	36:DA:212:G:N2	2.63	0.46
25:CZ:331:HIS:CD2	25:CZ:332:THR:HG23	2.51	0.46
37:DB:115:G:C4'	51:DS:47:THR:HB	2.45	0.46
18:CR:45:SER:H	18:CR:51:LEU:HG	1.79	0.46
36:BA:2582:G:N2	36:BA:2583:G:C1'	2.78	0.46
36:BA:1386:C:H2'	36:BA:1387:C:C6	2.50	0.46
39:DD:73:VAL:C	39:DD:75:ILE:H	2.19	0.46
25:CZ:402:LYS:HG2	25:CZ:403:ILE:N	2.29	0.46
36:DA:635:C:O2'	36:DA:639:U:OP1	2.33	0.46
36:BA:1410:G:H2'	36:BA:1411:C:C6	2.49	0.46
36:DA:980:A:C6	36:DA:981:A:C2	3.02	0.46
11:AK:18:ARG:O	11:AK:32:ILE:HG23	2.16	0.46
25:AZ:313:HIS:CB	25:AZ:403:ILE:HG21	2.44	0.46
36:DA:806:C:H2'	36:DA:807:U:H6	1.79	0.46
51:BS:56:LEU:O	51:BS:58:LEU:N	2.48	0.46
36:BA:188:G:H2'	36:BA:189:G:O4'	2.15	0.46
36:DA:271(E):U:H2'	36:DA:271(F):C:C5	2.51	0.46
12:AL:60:LEU:C	12:AL:62:SER:N	2.69	0.46
1:AA:189(K):U:H2'	1:AA:189(L):G:C8	2.50	0.46
26:D0:7:LEU:HD21	49:DQ:81:VAL:CG2	2.45	0.46
58:DZ:67:LEU:H	58:DZ:67:LEU:CD1	2.28	0.46
46:BN:39:ARG:O	46:BN:41:ASP:N	2.44	0.46
36:DA:2001:A:H4'	36:DA:2689:U:C2'	2.44	0.46
36:BA:1563:G:H2'	36:BA:1564:C:H6	1.80	0.46
9:CI:6:GLY:CA	9:CI:84:ALA:HB2	2.44	0.46
36:BA:664:C:O4'	36:BA:940:G:H5''	2.14	0.46
17:CQ:30:PRO:HG2	17:CQ:31:LEU:H	1.80	0.46
36:BA:873:G:H2'	36:BA:874:G:H8	1.79	0.46
2:CB:154:LEU:HD23	2:CB:156:LYS:HZ2	1.79	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2792:G:O2'	36:BA:2793:G:H5'	2.15	0.46
27:D1:23:LYS:HD3	27:D1:28:GLY:HA3	1.96	0.46
36:DA:2563:U:N3	36:DA:2566:A:OP2	2.40	0.46
8:AH:2:LEU:CD2	8:AH:3:THR:N	2.77	0.46
1:AA:69:G:O2'	1:AA:70:G:H5'	2.15	0.46
33:D7:31:LEU:C	33:D7:33:ARG:H	2.17	0.46
45:BK:99:UNK:O	45:BK:135:UNK:O	2.33	0.46
1:CA:370:C:H2'	1:CA:371:G:C8	2.50	0.46
1:CA:258:G:O2'	1:CA:259:G:H5'	2.15	0.46
36:DA:153:C:H2'	36:DA:154:G:H8	1.80	0.46
36:BA:2618:G:H21	40:BE:150:VAL:HG21	1.79	0.46
1:CA:123:C:O5'	1:CA:123:C:H6	1.98	0.46
36:DA:2577:A:H5''	36:DA:2578:G:H5'	1.97	0.46
40:DE:1:MET:HB3	40:DE:200:GLU:OE2	2.16	0.46
48:DP:95:VAL:HA	48:DP:99:LEU:CD2	2.46	0.46
28:D2:68:ARG:CZ	28:D2:72:ALA:CB	2.93	0.46
36:DA:604:G:C6	36:DA:625:G:C2	3.02	0.46
36:DA:2466:C:C2'	36:DA:2467:C:H5'	2.46	0.46
36:BA:1798:U:C2	36:BA:1822:G:C2	3.03	0.46
39:BD:70:TRP:HZ3	39:BD:146:GLU:CD	2.18	0.46
39:BD:85:ASP:HB2	39:BD:92:ILE:HG23	1.97	0.46
41:DF:63:LYS:HA	41:DF:76:GLY:O	2.14	0.46
1:AA:1191:A:P	3:AC:4:LYS:HZ3	2.38	0.46
41:BF:118:ALA:O	41:BF:119:ARG:C	2.53	0.46
4:AD:18:LYS:HE2	4:AD:20:TYR:CE2	2.51	0.46
41:BF:133:ASN:HB2	41:BF:138:GLU:OE2	2.14	0.46
36:BA:2051:A:OP1	40:BE:137:HIS:ND1	2.48	0.46
40:BE:194:GLY:O	40:BE:196:VAL:HG13	2.14	0.46
1:CA:798:G:C2'	1:CA:799:G:O5'	2.63	0.46
36:DA:2626:C:H2'	36:DA:2627:G:H8	1.79	0.46
2:AB:8:LYS:O	2:AB:12:GLU:HG3	2.15	0.46
1:AA:51:A:H4'	1:AA:52:G:O5'	2.15	0.46
1:AA:254:G:H2'	1:AA:255:G:C8	2.51	0.46
8:AH:14:ARG:HG3	8:AH:83:ILE:HG21	1.97	0.46
8:AH:33:GLU:O	8:AH:36:LEU:N	2.48	0.46
41:DF:157:VAL:O	41:DF:158:THR:CB	2.63	0.46
15:CO:39:LEU:O	15:CO:42:HIS:N	2.48	0.46
48:BP:107:LYS:C	48:BP:109:GLY:H	2.18	0.46
36:BA:2864:G:H2'	36:BA:2865:U:O4'	2.15	0.46
52:BT:61:PHE:H	52:BT:61:PHE:HD2	1.63	0.46
36:DA:1668:A:H61	36:DA:1676:A:H61	1.62	0.46
52:DT:64:ARG:CB	52:DT:73:GLU:HG2	2.42	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:99:TYR:CE2	58:BZ:125:LEU:HD13	2.50	0.46
36:DA:299:A:N7	36:DA:322:A:C2	2.83	0.46
36:DA:325:G:H2'	36:DA:326:G:C8	2.50	0.46
1:AA:1118:C:OP1	9:AI:104:ARG:NH1	2.48	0.46
9:AI:11:LYS:C	9:AI:13:ALA:N	2.68	0.46
26:B0:12:ASN:O	26:B0:14:ARG:N	2.44	0.46
1:CA:61:G:O2'	1:CA:386:C:H1'	2.15	0.46
1:CA:1186:G:H21	14:CN:61:TRP:C	2.18	0.46
3:CC:7:PRO:HG2	3:CC:184:TYR:CG	2.50	0.46
7:CG:69:VAL:O	7:CG:71:PRO:HD3	2.14	0.46
42:BG:133:LEU:HD12	42:BG:133:LEU:O	2.14	0.46
36:DA:2124:G:H4'	38:DC:174:PRO:HB3	1.97	0.46
1:CA:1422:G:O2'	1:CA:1423:G:H5'	2.15	0.46
39:DD:239:ARG:HG2	39:DD:239:ARG:NH2	2.29	0.46
2:AB:238:LEU:O	2:AB:238:LEU:HG	2.14	0.46
36:BA:2120:G:N2	36:BA:2178:C:C2	2.83	0.46
1:CA:43:C:H2'	1:CA:44:G:O5'	2.14	0.46
1:CA:1001:A:O2'	1:CA:1001(A):G:C2	2.68	0.46
36:BA:1899:G:O2'	36:BA:1900:A:H5''	2.15	0.46
1:AA:1513:A:H2'	1:AA:1514:C:H6	1.81	0.46
25:AZ:259:ALA:O	25:AZ:260:PRO:C	2.53	0.46
36:DA:1816:G:H5'	39:DD:62:TYR:CE2	2.50	0.46
40:DE:154:LYS:O	40:DE:155:LYS:O	2.33	0.46
36:BA:2305:A:O2'	42:BG:136:ARG:HG3	2.15	0.46
42:BG:47:LYS:HZ2	42:BG:81:LYS:CG	2.28	0.46
33:D7:24:THR:C	33:D7:28:ARG:NH2	2.68	0.46
42:DG:122:PRO:HG2	42:DG:123:ASN:HD21	1.76	0.46
1:AA:80:G:C3'	1:AA:81:U:C5'	2.90	0.46
6:CF:48:LEU:HD23	6:CF:48:LEU:HA	1.74	0.46
24:AY:7:A:HO2'	24:AY:49:G:H8	1.61	0.46
25:CZ:281:ILE:O	25:CZ:284:ASP:OD2	2.34	0.46
2:CB:104:ASN:OD1	2:CB:104:ASN:O	2.33	0.46
43:DH:123:PHE:CD1	43:DH:123:PHE:N	2.82	0.46
2:AB:62:ALA:C	2:AB:64:ARG:H	2.18	0.46
49:BQ:42:ILE:HA	49:BQ:42:ILE:HD12	1.79	0.46
5:AE:79:GLU:N	5:AE:93:PRO:HD3	2.30	0.46
1:CA:1150:U:H1'	1:CA:1280:A:N6	2.31	0.46
1:CA:1150:U:O4	1:CA:1151:A:N6	2.48	0.46
36:BA:146:G:H2'	36:BA:147:U:H5'	1.97	0.46
36:BA:778:G:C5	36:BA:779:U:C4	3.04	0.46
36:DA:2442:C:O2	36:DA:2442:C:C2'	2.64	0.46
10:AJ:40:LEU:N	10:AJ:40:LEU:CD2	2.73	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2246:G:C8	36:BA:2426:A:C6	3.03	0.46
49:DQ:51:ARG:CG	49:DQ:52:VAL:N	2.79	0.46
1:CA:782:A:H2'	1:CA:783:C:O4'	2.15	0.46
1:CA:447:G:C2'	1:CA:485:G:H22	2.26	0.46
36:BA:2134:A:N3	36:BA:2134:A:H2'	2.29	0.46
4:AD:200:GLU:O	4:AD:202:LEU:N	2.49	0.46
6:CF:10:LEU:HD13	6:CF:59:TYR:CD2	2.49	0.46
48:BP:120:ALA:HB3	48:BP:137:LYS:O	2.15	0.46
1:CA:112:G:H4'	1:CA:389:A:H4'	1.96	0.46
49:BQ:110:THR:HG23	49:BQ:113:GLN:HB2	1.98	0.46
39:DD:73:VAL:HA	39:DD:119:ALA:O	2.15	0.46
1:CA:1244:C:O2'	1:CA:1245:A:H5'	2.15	0.46
29:D3:18:ASP:HB2	36:DA:850:C:C4'	2.41	0.46
36:BA:1754:C:N3	36:BA:2716:U:O2'	2.40	0.46
36:DA:1021:A:C8	36:DA:1022:G:H4'	2.43	0.46
36:DA:1141:U:H5''	36:DA:1142(A):A:O4'	2.15	0.46
1:CA:1249:C:C6	1:CA:1249:C:H5'	2.41	0.46
55:BW:59:VAL:HG12	55:BW:60:ASN:N	2.30	0.46
36:DA:271(B):C:O2'	36:DA:271(C):C:H5'	2.16	0.46
18:AR:37:VAL:O	18:AR:41:LYS:HB2	2.15	0.46
36:DA:2435:A:C6	36:DA:2436:G:C5	3.02	0.46
27:D1:18:ILE:HG21	27:D1:20:ARG:CZ	2.46	0.46
27:D1:18:ILE:HD13	27:D1:20:ARG:NH2	2.30	0.46
47:DO:86:ILE:CG2	47:DO:94:ARG:HB2	2.43	0.46
36:DA:817:C:H4'	36:DA:932:G:N1	2.30	0.46
47:DO:12:ASP:C	47:DO:14:THR:H	2.18	0.46
56:BX:70:LEU:HD23	56:BX:71:GLY:N	2.30	0.46
36:DA:778:G:C6	36:DA:779:U:C4	3.03	0.46
51:BS:42:ASP:O	51:BS:44:LYS:N	2.40	0.46
5:CE:98:THR:HG22	5:CE:99:GLY:O	2.15	0.46
36:DA:1930:G:H22	36:DA:1969:A:C5'	2.29	0.46
5:AE:7:GLU:HB3	5:AE:112:LEU:HD21	1.97	0.46
15:CO:3:ILE:HD12	15:CO:34:LEU:HD21	1.97	0.46
1:CA:1056:U:H5'	3:CC:163:ALA:HB2	1.97	0.46
1:AA:370:C:H2'	1:AA:371:G:C8	2.49	0.46
36:DA:275:G:C2	36:DA:276:A:H2	2.33	0.46
22:AV:33:U:O2	22:AV:35:A:H3'	2.15	0.46
40:DE:109:LYS:O	40:DE:161:GLY:HA3	2.15	0.46
40:DE:123:ALA:O	40:DE:125:GLY:N	2.46	0.46
24:CY:73:A:H2'	24:CY:74:C:O4'	2.15	0.46
49:BQ:90:VAL:HG12	49:BQ:91:GLU:H	1.80	0.46
36:DA:643:A:H2'	36:DA:644:A:O4'	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1953:A:H2	36:BA:2549:G:N3	2.12	0.46
36:DA:2483:C:O2	36:DA:2483:C:H2'	2.15	0.46
32:B6:35:GLU:HB3	32:B6:51:GLU:HG3	1.97	0.46
32:B6:41:PRO:HG3	32:B6:49:HIS:CE1	2.50	0.46
36:BA:1218:C:H2'	36:BA:1219:G:H5'	1.96	0.46
36:BA:2358:G:H2'	36:BA:2359:C:O4'	2.16	0.46
40:DE:198:VAL:O	40:DE:199:ARG:HB2	2.15	0.46
50:DR:17:ARG:HB3	50:DR:17:ARG:HH11	1.81	0.46
36:DA:1802:A:C5	36:DA:1817:G:N2	2.83	0.46
36:DA:1802:A:N1	36:DA:1822:G:H1'	2.30	0.46
36:DA:631:A:H2	36:DA:2415:G:N3	2.13	0.46
48:DP:107:LYS:C	48:DP:109:GLY:N	2.68	0.46
57:DY:9:LYS:HG2	57:DY:11:ASP:OD2	2.15	0.46
5:CE:102:ALA:HA	5:CE:120:THR:HG22	1.96	0.46
36:DA:2539:C:H2'	36:DA:2540:C:H6	1.80	0.46
1:AA:1470:G:C4	1:AA:1471:G:C8	3.04	0.46
39:BD:26:LYS:C	39:BD:27:THR:HG22	2.36	0.46
3:AC:5:ILE:CD1	3:AC:5:ILE:N	2.78	0.46
1:AA:1206:G:H4'	3:AC:192:THR:O	2.15	0.46
4:AD:20:TYR:CA	4:AD:26:CYS:HB3	2.45	0.46
36:BA:299:A:N7	36:BA:322:A:C2	2.83	0.46
41:BF:171:PRO:C	41:BF:173:VAL:N	2.69	0.46
36:BA:1655:A:H1'	40:BE:113:PHE:CD2	2.49	0.46
36:BA:2010:G:OP2	55:BW:41:LYS:NZ	2.43	0.46
30:B4:25:TYR:O	30:B4:26:SER:HB3	2.15	0.46
36:DA:1161:C:O2'	36:DA:1162:G:H5'	2.16	0.46
36:DA:563:G:C4	36:DA:2018:G:C2	3.03	0.46
46:DN:18:ALA:O	46:DN:20:GLY:N	2.48	0.46
53:DU:90:VAL:O	53:DU:91:ASP:C	2.54	0.46
1:AA:377:G:P	16:AP:5:ARG:HD3	2.55	0.46
16:AP:27:LYS:O	16:AP:28:ARG:C	2.53	0.46
51:BS:73:LEU:HD23	51:BS:73:LEU:C	2.36	0.46
51:BS:74:ALA:C	51:BS:76:LYS:N	2.67	0.46
36:BA:2635:C:H2'	36:BA:2636:U:O5'	2.16	0.46
5:AE:102:ALA:HA	5:AE:120:THR:HG22	1.96	0.46
5:AE:10:MET:N	5:AE:10:MET:SD	2.85	0.46
5:AE:12:LEU:HD13	5:AE:12:LEU:C	2.36	0.46
25:CZ:143:ASP:OD2	25:CZ:144:PRO:HD2	2.15	0.46
36:BA:1676:A:H2'	36:BA:1677:A:O4'	2.15	0.46
52:BT:32:TYR:CG	52:BT:33:LYS:N	2.83	0.46
52:BT:35:LYS:NZ	52:BT:41:ARG:HD2	2.31	0.46
36:BA:2811:G:H1	36:BA:2889:C:H42	1.63	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DE:103:ASP:OD2	40:DE:202:LYS:HE3	2.15	0.46
37:BB:74:U:H2'	37:BB:75:G:O4'	2.15	0.46
58:BZ:10:ARG:NH2	58:BZ:36:LYS:HB3	2.30	0.46
36:DA:326:G:H2'	36:DA:327:G:O4'	2.15	0.46
57:DY:19:LYS:HB2	57:DY:20:TYR:CD1	2.49	0.46
1:AA:1060:C:HO2'	1:AA:1061:G:H5'	1.77	0.46
1:AA:670:G:N2	1:AA:671:G:C4	2.84	0.46
26:B0:10:THR:HG22	26:B0:11:ARG:N	2.29	0.46
16:CP:7:ALA:O	16:CP:17:TYR:HA	2.14	0.46
14:CN:50:LYS:C	14:CN:52:GLN:H	2.18	0.46
1:AA:1497:G:H1'	1:AA:1518:A:H2	1.81	0.46
42:BG:5:VAL:N	42:BG:8:LYS:HB2	2.19	0.46
36:DA:2153:G:N2	36:DA:2154:G:H1'	2.30	0.46
1:AA:1531:A:C8	1:AA:1531:A:O5'	2.61	0.46
1:CA:865:A:C2'	1:CA:866:C:H5'	2.45	0.46
36:DA:1776:G:C2	36:DA:1777:U:C6	3.04	0.46
36:DA:730:C:O2'	36:DA:731:C:H5'	2.16	0.46
55:DW:28:SER:HA	55:DW:70:TYR:HB2	1.98	0.46
36:BA:2124:G:H4'	38:BC:174:PRO:HB3	1.97	0.46
19:CS:41:VAL:O	19:CS:44:MET:HB2	2.15	0.46
20:CT:23:ARG:HD3	20:CT:23:ARG:C	2.36	0.46
56:DX:35:THR:CG2	56:DX:37:THR:HB	2.45	0.46
41:DF:8:GLN:HB3	41:DF:126:VAL:HA	1.98	0.46
46:BN:108:PRO:HG2	46:BN:113:GLY:HA3	1.97	0.46
53:BU:91:ASP:O	53:BU:92:ARG:HB3	2.16	0.46
36:BA:1339:G:N2	36:BA:1603:A:N3	2.64	0.46
36:BA:598:G:C4'	48:BP:15:ARG:HB3	2.45	0.46
36:DA:444:C:O3'	53:DU:2:PRO:N	2.48	0.46
36:DA:455:C:N3	36:DA:473:G:H5'	2.30	0.46
42:DG:161:THR:HG21	42:DG:172:LEU:HD13	1.98	0.46
7:AG:116:ALA:O	7:AG:117:ALA:C	2.52	0.46
9:AI:37:PHE:CD2	9:AI:74:ILE:HD11	2.50	0.46
36:BA:455:C:N3	36:BA:472:A:H2'	2.30	0.46
1:CA:880:C:O5'	12:CL:12:ARG:NH1	2.48	0.46
36:DA:2206:G:H21	36:DA:2207:G:H4'	1.76	0.46
36:DA:1982:C:H2'	36:DA:1983:C:C6	2.50	0.46
38:DC:104:LEU:O	38:DC:105:ASP:HB2	2.15	0.46
10:CJ:37:PRO:HA	10:CJ:72:VAL:HG22	1.97	0.46
10:CJ:40:LEU:HB2	10:CJ:41:PRO:CD	2.42	0.46
10:CJ:32:ALA:CB	10:CJ:75:ILE:HG13	2.36	0.46
1:AA:1074:G:C1'	2:AB:104:ASN:HD22	2.29	0.46
39:BD:249:PRO:CG	39:BD:250:TRP:N	2.77	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2768:C:H5''	46:DN:83:LYS:HE3	1.97	0.46
1:AA:1150:U:O2'	10:AJ:41:PRO:HD3	2.15	0.46
1:CA:409:G:H8	1:CA:409:G:OP2	1.98	0.46
36:DA:1398:C:H2'	36:DA:1399:C:C6	2.51	0.46
36:DA:202:U:H2'	36:DA:203:C:O4'	2.15	0.46
54:BV:81:TYR:O	54:BV:81:TYR:CD1	2.69	0.46
1:AA:198:G:O2'	1:AA:199:G:H8	1.98	0.46
40:DE:87:GLU:HG3	40:DE:87:GLU:O	2.14	0.46
48:DP:120:ALA:HB3	48:DP:137:LYS:O	2.16	0.46
39:BD:28:GLU:N	39:BD:29:PRO:HD2	2.23	0.46
25:CZ:313:HIS:CG	25:CZ:403:ILE:HG21	2.49	0.46
12:CL:84:LEU:CD2	12:CL:85:ILE:N	2.78	0.46
2:CB:41:ILE:HD12	2:CB:41:ILE:N	2.30	0.46
11:AK:108:ILE:HD12	11:AK:108:ILE:N	2.29	0.46
1:CA:932:C:H2'	1:CA:933:G:H8	1.79	0.46
11:CK:108:ILE:HD12	11:CK:108:ILE:N	2.31	0.46
36:DA:1054:A:N3	36:DA:1054:A:H2'	2.30	0.46
36:DA:2752:C:C2'	36:DA:2752:C:O2	2.56	0.46
43:BH:130:ARG:CB	43:BH:130:ARG:CZ	2.94	0.46
11:CK:15:ALA:HA	11:CK:77:MET:HA	1.97	0.46
36:BA:2650:U:H2'	36:BA:2651:C:C6	2.50	0.46
36:BA:2651:C:H6	36:BA:2651:C:O5'	1.98	0.46
36:BA:2651:C:O2'	36:BA:2652:C:H5'	2.15	0.46
9:AI:5:TYR:CD1	9:AI:6:GLY:N	2.84	0.46
1:CA:1087:G:H8	1:CA:1087:G:O5'	1.99	0.46
27:B1:19:GLN:O	27:B1:35:THR:HG22	2.15	0.46
11:AK:26:ASN:O	11:AK:27:ASN:HB2	2.16	0.46
38:DC:103:ILE:CG2	38:DC:103:ILE:O	2.62	0.46
36:BA:937:U:H2'	36:BA:938:G:C8	2.50	0.46
36:BA:937:U:H2'	36:BA:938:G:H8	1.79	0.46
25:AZ:263:ARG:HE	25:AZ:297:GLU:HB3	1.81	0.46
33:B7:24:THR:HG23	33:B7:27:GLY:HA3	1.96	0.46
36:DA:1747(A):G:H2'	36:DA:1748:G:C4'	2.45	0.46
36:BA:479:A:N3	36:BA:481:G:O4'	2.49	0.46
36:DA:667:U:H3'	36:DA:668:G:H5''	1.96	0.46
36:DA:2533:A:O2'	36:DA:2534:A:H5'	2.15	0.46
27:D1:6:GLU:CD	27:D1:60:PHE:CD1	2.88	0.46
9:CI:16:ARG:O	9:CI:63:ILE:HG23	2.15	0.46
1:AA:785:G:C6	1:AA:786:G:N7	2.84	0.46
5:CE:7:GLU:OE1	5:CE:37:ARG:NE	2.41	0.46
36:BA:2766:G:N3	36:BA:2766:G:H2'	2.30	0.46
1:CA:823:G:H21	8:CH:1:MET:HE3	1.80	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1483:A:C2	36:DA:1960:A:H1'	2.50	0.46
46:DN:96:GLU:HG2	46:DN:100:GLU:OE2	2.15	0.46
1:CA:64:G:N2	1:CA:67:C:N4	2.63	0.46
43:BH:56:SER:HB2	43:BH:58:GLU:HG3	1.98	0.46
36:BA:153:C:H2'	36:BA:154:G:C8	2.51	0.46
56:BX:31:HIS:O	56:BX:32:PRO:C	2.53	0.46
39:BD:138:VAL:O	39:BD:138:VAL:HG13	2.14	0.46
27:D1:88:LYS:HD3	27:D1:88:LYS:O	2.15	0.46
11:CK:102:GLY:O	11:CK:103:LEU:HD22	2.14	0.46
1:AA:904:C:H2'	1:AA:905:U:O4'	2.14	0.46
32:B6:41:PRO:HG2	32:B6:47:THR:OG1	2.16	0.46
36:BA:584:C:O5'	36:BA:584:C:H6	1.97	0.46
36:DA:2056:G:C4	36:DA:2577:A:C2	3.03	0.46
39:DD:68:LYS:HB2	39:DD:70:TRP:CZ2	2.49	0.46
36:BA:1857:G:O2'	36:BA:1885:A:N6	2.48	0.46
36:DA:606:U:H2'	36:DA:607:U:H4'	1.98	0.46
36:BA:1243:G:C3'	36:BA:1244:G:H5''	2.45	0.46
36:BA:660:G:H5'	41:BF:99:TYR:CE2	2.49	0.46
41:BF:40:GLN:NE2	41:BF:184:TYR:HB3	2.30	0.46
41:BF:99:TYR:O	41:BF:100:THR:C	2.52	0.46
1:AA:1195:C:H2'	1:AA:1197:G:O4'	2.15	0.46
1:AA:517:G:N2	1:AA:533:A:OP2	2.48	0.46
36:BA:2839:G:C5'	50:BR:46:GLY:HA2	2.46	0.46
36:BA:2839:G:H2'	36:BA:2840:C:H6	1.80	0.46
36:BA:2850:A:OP2	36:BA:2866:U:O4	2.34	0.46
50:BR:100:LEU:HD22	50:BR:112:ALA:HA	1.96	0.46
13:AM:34:LEU:HD11	13:AM:41:PRO:HG3	1.97	0.46
1:CA:1064:G:H21	1:CA:1190:G:C2'	2.28	0.46
36:DA:571:A:H5'	36:DA:2030:A:N7	2.30	0.46
36:DA:28:A:H2'	36:DA:28:A:N3	2.29	0.46
46:DN:108:PRO:C	46:DN:109:LYS:HG3	2.36	0.46
54:DV:49:THR:CB	54:DV:50:PRO:CD	2.90	0.46
8:CH:14:ARG:HB3	8:CH:14:ARG:HH11	1.79	0.46
1:CA:540:G:O2'	1:CA:541:G:H5'	2.15	0.46
51:BS:12:PHE:CD2	51:BS:12:PHE:C	2.86	0.46
51:BS:27:SER:O	51:BS:28:VAL:HG22	2.15	0.46
1:CA:766:A:C8	1:CA:814:A:C6	3.03	0.46
13:AM:91:ARG:HD3	13:AM:96:LEU:HB2	1.96	0.46
52:BT:100:TYR:HD2	52:BT:103:ARG:NH2	2.13	0.46
52:BT:32:TYR:O	52:BT:41:ARG:O	2.34	0.46
52:BT:51:ARG:HG2	52:BT:62:THR:HG23	1.98	0.46
58:BZ:153:SER:HB2	58:BZ:167:PRO:HB3	1.96	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:DY:81:LYS:HG3	57:DY:97:ARG:CG	2.45	0.46
1:AA:934:C:C5	1:AA:1344:C:C4	3.03	0.46
10:CJ:62:HIS:H	10:CJ:62:HIS:CD2	2.34	0.46
1:AA:967:C:H2'	1:AA:968:A:H8	1.78	0.46
19:AS:26:GLY:O	19:AS:27:GLU:O	2.34	0.46
19:AS:63:THR:HG23	19:AS:64:GLU:N	2.30	0.46
36:DA:1069:A:C1'	36:DA:1070:A:P	3.02	0.46
57:BY:96:ILE:CD1	57:BY:99:CYS:SG	3.04	0.46
42:BG:125:PHE:CD1	42:BG:125:PHE:N	2.83	0.46
36:DA:2121:G:C2	36:DA:2122:U:C4	3.03	0.46
1:AA:1217:C:P	14:AN:9:LYS:HZ1	2.38	0.46
46:DN:14:VAL:HG12	46:DN:15:LEU:N	2.30	0.46
39:DD:214:TRP:C	39:DD:216:GLY:N	2.63	0.46
36:DA:1825:A:O3'	39:DD:233:HIS:CE1	2.68	0.46
39:DD:238:GLY:O	39:DD:239:ARG:HB3	2.14	0.46
2:AB:42:ILE:HD11	2:AB:202:PRO:CB	2.39	0.46
2:AB:233:SER:O	2:AB:234:PRO:C	2.54	0.46
1:CA:1014:A:H5''	19:CS:14:HIS:HB2	1.97	0.46
19:CS:63:THR:HG22	19:CS:66:MET:SD	2.56	0.46
10:CJ:30:SER:C	10:CJ:81:THR:HG22	2.35	0.46
36:BA:729:G:O6	36:BA:1774:C:N4	2.48	0.46
10:AJ:30:SER:C	10:AJ:81:THR:HG22	2.36	0.46
36:BA:596:G:N1	36:BA:597:U:C2	2.84	0.46
36:DA:1196:C:H2'	36:DA:1197:G:H8	1.80	0.46
36:DA:1221:C:H2'	36:DA:1221(A):C:H6	1.79	0.46
36:DA:940:G:H2'	36:DA:941:A:O4'	2.15	0.46
36:DA:449:A:H1'	53:DU:3:ARG:HE	1.80	0.46
40:DE:132:HIS:CD2	40:DE:135:HIS:CE1	3.03	0.46
33:D7:30:VAL:HG13	36:DA:466:A:H4'	1.96	0.46
13:CM:3:ARG:HH21	13:CM:7:VAL:HG13	1.81	0.46
42:DG:34:LEU:HA	42:DG:161:THR:CB	2.45	0.46
42:DG:171:ALA:O	42:DG:175:LEU:HG	2.15	0.46
49:BQ:21:THR:HG22	49:BQ:23:GLY:O	2.15	0.46
1:AA:580:U:H3	1:AA:761:G:H1	1.63	0.46
43:BH:152:ARG:O	43:BH:162:ILE:HG22	2.15	0.46
25:CZ:242:ILE:HB	25:CZ:282:ALA:HA	1.96	0.46
15:CO:81:LEU:CD1	15:CO:85:LEU:HD12	2.44	0.46
1:AA:828:A:N6	1:AA:858:G:O2'	2.49	0.46
5:AE:145:LYS:HE2	5:AE:149:GLU:OE2	2.15	0.46
1:AA:1126:U:H2'	1:AA:1127:G:O4'	2.15	0.46
10:AJ:90:LEU:H	10:AJ:91:PRO:CD	2.27	0.46
1:AA:1439:C:H5'	20:AT:38:LYS:HZ1	1.80	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:43:C:H2'	1:AA:44:G:O5'	2.15	0.46
8:AH:89:PRO:CA	8:AH:92:ARG:HH11	2.28	0.46
36:BA:2691:C:H2'	36:BA:2692:C:C6	2.31	0.46
1:CA:10:A:N7	5:CE:126:ARG:NH1	2.63	0.46
5:CE:140:ARG:HB2	5:CE:140:ARG:HE	1.48	0.46
1:CA:405:U:C3'	1:CA:406:G:H5'	2.38	0.46
1:CA:407:G:OP1	4:CD:115:ARG:CZ	2.63	0.46
36:BA:270:A:C2'	36:BA:271:A:H5'	2.45	0.46
18:AR:32:ARG:HA	18:AR:69:THR:HG21	1.97	0.46
6:CF:10:LEU:N	6:CF:10:LEU:CD1	2.78	0.46
48:BP:114:ILE:CG2	48:BP:130:PHE:HA	2.46	0.46
36:BA:1386:C:H3'	36:BA:1386:C:C6	2.48	0.46
36:BA:1387:C:H42	36:BA:1400:G:H1	1.62	0.46
41:BF:53:THR:HG22	41:BF:56:GLU:CG	2.40	0.46
14:AN:19:ARG:O	14:AN:20:ALA:C	2.54	0.46
19:AS:36:ARG:HH22	19:AS:75:ALA:HB3	1.80	0.46
1:CA:327:A:O2'	1:CA:328:C:O4'	2.33	0.46
36:DA:2064:C:H2'	36:DA:2065:C:H6	1.78	0.46
12:AL:89:ARG:CD	12:AL:91:LYS:HB2	2.45	0.46
4:CD:135:LEU:C	4:CD:137:SER:N	2.69	0.46
1:CA:686:U:H1'	11:CK:42:TRP:HE1	1.81	0.46
36:DA:2053:G:C2	36:DA:2054:A:C1'	2.98	0.46
28:D2:4:SER:O	28:D2:7:ARG:HD2	2.16	0.46
58:DZ:63:ASP:CG	58:DZ:65:GLN:HE21	2.18	0.46
1:CA:564:C:C4	17:CQ:31:LEU:HD11	2.50	0.46
38:DC:46:LYS:C	38:DC:47:LEU:HD12	2.35	0.46
36:BA:2298:A:H2'	36:BA:2299:G:O4'	2.15	0.46
36:DA:1718:G:C8	36:DA:1718:G:H5'	2.46	0.46
48:BP:140:ALA:O	48:BP:141:ALA:HB3	2.16	0.46
25:CZ:188:THR:HG23	25:CZ:192:GLU:CD	2.35	0.46
36:BA:1921:G:O2'	36:BA:1922:G:H5'	2.14	0.46
43:DH:169:VAL:HG13	43:DH:169:VAL:O	2.15	0.46
4:CD:162:LEU:HD11	4:CD:178:VAL:O	2.16	0.46
5:CE:57:LYS:O	5:CE:58:ALA:C	2.54	0.46
7:AG:94:ARG:O	7:AG:95:ARG:C	2.54	0.46
2:AB:114:ARG:HD2	2:AB:118:LEU:HD11	1.97	0.46
22:CV:34:G:O2'	22:CV:35:A:H5'	2.15	0.46
2:AB:138:LEU:C	2:AB:140:HIS:H	2.19	0.46
27:B1:15:ALA:CB	27:B1:42:GLN:HG3	2.46	0.46
1:AA:62:U:H6	1:AA:62:U:O5'	1.98	0.46
8:CH:50:ARG:HH11	8:CH:50:ARG:HG3	1.80	0.46
47:BO:99:PHE:N	47:BO:99:PHE:CD1	2.82	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:40:VAL:HG12	12:AL:40:VAL:O	2.15	0.46
48:DP:108:LYS:HD2	48:DP:108:LYS:N	2.29	0.46
36:BA:340:A:C2	36:BA:341:G:H1'	2.50	0.46
36:BA:28:A:N3	36:BA:28:A:H2'	2.29	0.46
36:BA:531:C:H5	36:BA:2035:G:C4	2.33	0.46
36:DA:2880:C:C5	36:DA:2881:C:H5	2.33	0.46
40:DE:197:ILE:HD11	40:DE:199:ARG:HH22	1.81	0.46
36:DA:1823:G:C2	36:DA:1824:G:C8	3.03	0.46
36:DA:2413:G:H2'	36:DA:2414:G:C8	2.47	0.46
25:AZ:155:ARG:HA	25:AZ:158:LEU:HD12	1.96	0.46
25:AZ:32:THR:OG1	25:AZ:33:TYR:N	2.48	0.46
28:D2:29:LYS:O	28:D2:33:MET:CB	2.63	0.46
36:DA:88:G:H2'	36:DA:88:G:N3	2.30	0.46
12:AL:17:LYS:NZ	12:AL:18:VAL:CG2	2.78	0.46
41:DF:99:TYR:O	41:DF:100:THR:C	2.54	0.46
5:CE:107:ARG:HG3	5:CE:111:GLU:CD	2.34	0.46
36:BA:1802:A:C5	36:BA:1817:G:N2	2.84	0.46
1:AA:1190:G:H5''	3:AC:3:ASN:HD22	1.81	0.46
38:BC:79:LYS:HB3	38:BC:147:PHE:HE1	1.81	0.46
41:BF:31:HIS:HE1	41:BF:34:TRP:CZ3	2.34	0.46
43:DH:65:HIS:O	43:DH:67:LEU:N	2.48	0.46
28:B2:38:GLN:O	28:B2:43:GLN:O	2.33	0.46
36:BA:94:C:H3'	36:BA:94(A):G:H8	1.81	0.46
36:BA:271(K):U:H2'	36:BA:271(M):G:N2	2.30	0.46
1:CA:1191:A:OP2	3:CC:4:LYS:HG2	2.15	0.46
36:DA:972:G:H2'	36:DA:973:A:H8	1.80	0.46
8:CH:138:TRP:HE3	8:CH:138:TRP:OXT	1.98	0.46
1:CA:990:C:C6	1:CA:1216:G:N2	2.83	0.46
1:CA:542:G:H2'	1:CA:543:C:C6	2.50	0.46
1:CA:967:C:H2'	1:CA:968:A:N7	2.31	0.46
5:CE:20:GLN:NE2	5:CE:25:ARG:NH2	2.63	0.46
2:CB:17:PHE:O	2:CB:18:GLY:O	2.33	0.46
36:BA:1763:G:H2'	36:BA:1764:G:H5'	1.97	0.46
36:DA:1683:C:H2'	36:DA:1684:C:C6	2.50	0.46
52:DT:50:ILE:N	52:DT:50:ILE:HD12	2.30	0.46
52:DT:27:THR:HA	52:DT:88:ILE:H	1.81	0.46
58:BZ:3:TYR:O	58:BZ:57:ILE:HA	2.15	0.46
35:D9:10:ILE:O	35:D9:11:CYS:CB	2.63	0.46
1:CA:975:A:H61	10:CJ:48:THR:HB	1.80	0.46
46:BN:11:PRO:O	46:BN:13:TRP:HD1	1.99	0.46
36:DA:1337:G:H2'	36:DA:1338:G:O4'	2.16	0.46
2:AB:237:ALA:O	2:AB:238:LEU:CB	2.62	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:AW:19:G:C5	36:BA:2169:A:C2	3.03	0.46
36:BA:2115:G:N3	36:BA:2117:A:N7	2.63	0.46
36:BA:2140:C:O2'	36:BA:2141:G:H5'	2.16	0.46
36:DA:140:G:H1'	36:DA:141:A:C2	2.50	0.46
36:BA:729:G:H5'	36:BA:730:C:H5''	1.97	0.46
53:BU:83:LEU:HD12	53:BU:83:LEU:N	2.30	0.46
36:BA:1337:G:H2'	36:BA:1338:G:O4'	2.16	0.46
39:BD:126:GLN:HG3	39:BD:129:ASN:HD21	1.80	0.46
36:DA:695:G:C5	36:DA:768:G:C6	3.04	0.46
39:DD:35:LYS:HG2	39:DD:63:ARG:CB	2.45	0.46
36:DA:1759:A:C4'	36:DA:2714:G:H21	2.29	0.46
36:BA:428:A:H5'	36:BA:429:A:OP2	2.15	0.46
1:AA:1305:G:C8	1:AA:1305:G:OP2	2.68	0.46
30:D4:25:TYR:O	30:D4:26:SER:HB3	2.15	0.46
36:DA:2307:G:N3	36:DA:2307:G:H3'	2.30	0.46
36:DA:2305:A:C6	42:DG:43:LEU:HD13	2.50	0.46
5:CE:79:GLU:N	5:CE:93:PRO:HD3	2.30	0.46
49:BQ:67:ARG:O	49:BQ:101:ARG:NH2	2.49	0.46
1:AA:756:C:O2'	1:AA:757:U:H5'	2.15	0.46
1:AA:1253:G:O2'	1:AA:1254:C:H5'	2.15	0.46
1:CA:1075:C:H4'	1:CA:1101:A:C6	2.51	0.46
36:DA:1779:U:H2'	36:DA:1783:A:H62	1.79	0.46
2:AB:180:LEU:HB2	2:AB:182:ILE:HG13	1.97	0.46
31:B5:15:ARG:NH2	36:BA:2022:U:OP2	2.49	0.46
3:CC:39:ILE:HG22	3:CC:40:ARG:N	2.31	0.46
10:CJ:65:LEU:HD13	14:CN:56:VAL:CA	2.44	0.46
50:DR:99:LYS:H	50:DR:99:LYS:CD	2.05	0.46
4:AD:129:ASN:N	4:AD:129:ASN:ND2	2.62	0.46
27:D1:79:GLY:HA2	36:DA:271(H):G:N2	2.31	0.46
25:CZ:358:GLY:O	25:CZ:360:GLU:HG3	2.15	0.46
4:CD:127:THR:CG2	4:CD:130:GLY:O	2.63	0.46
1:CA:484:G:H4'	1:CA:485:G:H4'	1.97	0.46
15:AO:23:GLY:O	15:AO:24:SER:CB	2.62	0.46
39:BD:186:HIS:CD2	39:BD:188:GLU:HB2	2.48	0.46
45:BK:73:UNK:C	45:BK:75:UNK:N	2.77	0.46
1:CA:53:A:N6	1:CA:54:C:C4	2.83	0.46
18:AR:68:LYS:O	18:AR:72:ARG:HG3	2.16	0.46
36:DA:7:G:O2'	36:DA:8:A:H5'	2.15	0.46
1:CA:308:C:H2'	1:CA:309:G:C8	2.50	0.46
16:CP:27:LYS:O	16:CP:28:ARG:C	2.53	0.46
36:BA:1342:A:C2	36:BA:1345:C:C4	3.04	0.46
36:BA:775:G:C5	36:BA:794:G:C8	3.03	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:318:ALA:HB2	25:AZ:400:VAL:HA	1.98	0.46
52:DT:109:GLU:HA	52:DT:112:ARG:HD3	1.96	0.46
1:CA:1067:A:H4'	1:CA:1068:G:O5'	2.15	0.46
59:CA:1601:PAR:H51	59:CA:1601:PAR:H322	1.80	0.46
55:BW:70:TYR:O	55:BW:108:GLY:N	2.48	0.46
11:CK:26:ASN:O	11:CK:27:ASN:HB2	2.15	0.46
38:BC:53:ARG:HB3	38:BC:53:ARG:CZ	2.46	0.46
39:BD:214:TRP:O	39:BD:215:LEU:C	2.54	0.46
36:BA:2001:A:H4'	36:BA:2689:U:C2'	2.43	0.46
36:DA:779:U:H2'	36:DA:780:G:C8	2.50	0.46
27:D1:53:VAL:C	27:D1:55:GLY:N	2.68	0.46
16:CP:44:THR:O	16:CP:45:THR:HB	2.14	0.46
55:BW:65:LEU:HD23	55:BW:68:ARG:CD	2.45	0.46
36:DA:1907:G:H2'	36:DA:1908:C:H6	1.81	0.46
36:DA:519:U:H2'	36:DA:520:G:C8	2.51	0.46
1:AA:697:U:C2'	1:AA:698:G:H5'	2.46	0.46
1:CA:1081:G:O2'	1:CA:1082:G:H5'	2.16	0.46
1:AA:577:G:C1'	1:AA:816:A:C4	2.98	0.46
36:DA:689:A:H2'	36:DA:690:G:H8	1.81	0.46
3:AC:34:LEU:CD2	3:AC:38:ARG:HE	2.28	0.46
36:BA:643:A:H2'	36:BA:644:A:O4'	2.15	0.46
36:BA:1932:A:C2'	36:BA:1933:G:H5'	2.46	0.46
25:AZ:94:THR:HG23	25:AZ:346:THR:HG22	1.97	0.46
37:DB:37:C:N4	37:DB:49:C:H1'	2.31	0.46
1:AA:521:G:OP1	12:AL:73:GLU:HA	2.14	0.46
15:AO:69:TYR:O	15:AO:69:TYR:CG	2.68	0.46
17:AQ:43:LEU:HD23	17:AQ:43:LEU:HA	1.77	0.46
1:AA:189(G):G:OP1	1:AA:189(G):G:H8	1.98	0.46
12:AL:76:ASN:O	12:AL:76:ASN:CG	2.54	0.46
25:CZ:94:THR:HG23	25:CZ:346:THR:HG22	1.97	0.46
8:AH:104:ARG:O	8:AH:105:ARG:C	2.54	0.46
36:BA:2333:A:C1'	36:BA:2335:A:C5	2.99	0.46
48:BP:47:ASP:HB3	48:BP:48:PRO:CA	2.46	0.46
40:DE:192:ASN:C	40:DE:192:ASN:HD22	2.19	0.46
39:DD:186:HIS:CD2	39:DD:188:GLU:HB2	2.48	0.46
34:D8:10:ALA:C	34:D8:12:LYS:H	2.19	0.46
28:D2:60:LEU:O	28:D2:63:VAL:HB	2.16	0.46
36:DA:605:C:OP1	41:DF:104:LYS:NZ	2.48	0.46
36:DA:660:G:H5'	41:DF:99:TYR:CE2	2.50	0.46
56:BX:29:TRP:HZ3	56:BX:78:LYS:HD2	1.80	0.46
36:DA:2527:C:N4	36:DA:2536:G:O6	2.48	0.46
38:DC:147:PHE:O	38:DC:149:ILE:N	2.48	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:DC:75:LEU:HD11	38:DC:113:VAL:HG13	1.98	0.46
39:BD:270:ILE:C	39:BD:271:ILE:HG13	2.32	0.46
36:DA:2086:U:H2'	36:DA:2087:G:C8	2.51	0.46
41:DF:63:LYS:O	41:DF:64:ILE:C	2.51	0.46
41:DF:65:TRP:CZ3	41:DF:72:ARG:HB3	2.51	0.46
1:AA:1157:A:H1'	1:AA:1181:G:H21	1.81	0.46
1:CA:235:C:H1'	17:CQ:61:GLU:OE1	2.15	0.46
41:BF:39:TRP:CZ3	41:BF:106:ARG:HD2	2.49	0.46
41:BF:122:LYS:CG	41:BF:191:ARG:HG3	2.45	0.46
1:AA:994:A:N7	1:AA:1216:G:H4'	2.29	0.46
1:AA:517:G:C5'	1:AA:519:C:O2	2.63	0.46
41:BF:174:VAL:HG21	41:BF:189:THR:CG2	2.45	0.46
36:BA:1613:G:C3'	36:BA:1614:A:H5''	2.46	0.46
36:BA:2056:G:C4	36:BA:2577:A:C2	3.04	0.46
2:AB:219:VAL:C	2:AB:222:ILE:HG12	2.36	0.46
4:CD:70:ILE:HD12	4:CD:97:LEU:HD21	1.96	0.46
37:BB:37:C:O2	51:BS:95:HIS:CE1	2.69	0.46
2:CB:188:ALA:O	2:CB:202:PRO:HA	2.15	0.46
41:DF:169:ASN:O	41:DF:170:LEU:C	2.53	0.46
32:B6:27:LYS:O	32:B6:28:ARG:C	2.54	0.46
34:B8:18:ALA:C	34:B8:20:GLY:H	2.19	0.46
25:CZ:171:ILE:HG23	25:CZ:201:GLU:OE1	2.15	0.46
47:DO:75:SER:OG	52:DT:74:ARG:NH1	2.46	0.46
58:BZ:127:LYS:O	58:BZ:127:LYS:HG3	2.16	0.46
36:DA:343:C:O2	36:DA:343:C:H2'	2.14	0.46
57:DY:13:VAL:O	57:DY:24:VAL:HG13	2.15	0.46
7:CG:44:TYR:O	7:CG:47:CYS:N	2.48	0.46
36:BA:1517:G:C5	36:BA:1518:U:C4	3.02	0.46
36:BA:1518:U:O5'	36:BA:1518:U:H6	1.99	0.46
57:BY:81:LYS:HG3	57:BY:97:ARG:CG	2.45	0.46
42:BG:125:PHE:O	42:BG:127:GLY:N	2.48	0.46
1:AA:920:U:O4'	1:AA:1080:A:N1	2.49	0.46
1:AA:864:A:N7	1:AA:865:A:C6	2.84	0.46
1:AA:865:A:H2	1:AA:918:A:H4'	1.80	0.46
55:BW:51:LEU:O	55:BW:54:ALA:HB3	2.15	0.46
36:BA:1593:G:C2	36:BA:1594:G:C8	3.04	0.46
55:DW:6:ILE:HG12	55:DW:104:THR:HA	1.96	0.46
25:AZ:246:LYS:HD3	25:AZ:281:ILE:HG22	1.98	0.46
3:AC:50:ALA:HB2	3:AC:75:VAL:HB	1.97	0.46
36:DA:1525:G:O2'	36:DA:1526:G:H5'	2.15	0.46
36:BA:593:G:C2'	36:BA:594:U:H5'	2.46	0.46
48:BP:16:ARG:CB	48:BP:16:ARG:NH1	2.78	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1825:A:H4'	39:BD:233:HIS:HE1	1.81	0.46
39:BD:239:ARG:O	39:BD:240:ALA:HB2	2.16	0.46
36:BA:1902:C:H5''	39:BD:246:PRO:HD2	1.98	0.46
53:BU:86:ALA:O	53:BU:88:ILE:N	2.48	0.46
54:BV:47:VAL:O	54:BV:48:GLY:C	2.54	0.46
39:BD:96:HIS:HE1	39:BD:102:LYS:NZ	2.14	0.46
36:BA:426:C:H2'	36:BA:426:C:O2	2.15	0.46
36:BA:2306:C:H41	36:BA:2311:A:H8	1.64	0.46
42:BG:47:LYS:HZ1	42:BG:81:LYS:CB	2.24	0.46
42:BG:47:LYS:HB3	42:BG:48:GLU:H	1.41	0.46
42:DG:104:GLU:O	42:DG:106:LEU:N	2.49	0.46
36:BA:1448:G:N2	36:BA:1464:C:H1'	2.30	0.46
36:BA:1538:G:H2'	36:BA:1539:G:H8	1.81	0.46
9:AI:48:GLU:O	9:AI:49:PRO:C	2.51	0.46
5:CE:78:HIS:O	5:CE:78:HIS:ND1	2.48	0.46
10:AJ:43:ARG:O	10:AJ:67:THR:HG22	2.15	0.46
42:DG:42:GLY:HA2	42:DG:90:LEU:N	2.30	0.46
42:DG:91:ARG:HG2	42:DG:92:VAL:H	1.80	0.46
25:CZ:255:ILE:HG12	25:CZ:304:LEU:CD2	2.43	0.46
36:DA:1982:C:O5'	36:DA:1982:C:H6	1.99	0.46
36:BA:2512:C:H2'	36:BA:2513:G:O4'	2.15	0.46
4:AD:165:MET:HE3	4:AD:176:LEU:CD2	2.46	0.46
15:AO:67:LEU:HB3	15:AO:78:TYR:HE1	1.80	0.46
49:DQ:12:GLN:HE21	49:DQ:73:PRO:CD	2.23	0.46
36:DA:783:A:H2'	36:DA:784:A:O5'	2.15	0.46
2:AB:209:ARG:HH11	2:AB:239:VAL:HG21	1.81	0.46
1:CA:802:A:H2'	1:CA:803:G:O4'	2.15	0.46
11:CK:123:LYS:O	11:CK:126:ARG:HB3	2.15	0.46
25:AZ:360:GLU:O	25:AZ:362:VAL:N	2.48	0.46
10:AJ:32:ALA:HB2	10:AJ:76:ASN:HB2	1.98	0.46
36:DA:1264:G:O3'	36:DA:2615:U:H5'	2.15	0.46
1:CA:314:C:N4	1:CA:315:A:N6	2.64	0.46
36:BA:2579:C:O2'	40:BE:134:ILE:HD11	2.16	0.46
36:BA:1141:U:H5''	36:BA:1142(A):A:O4'	2.15	0.46
36:DA:978:G:N2	36:DA:979:G:H1'	2.30	0.46
1:AA:1141:C:H2'	1:AA:1142:G:C8	2.50	0.46
25:AZ:402:LYS:HG2	25:AZ:403:ILE:N	2.30	0.46
47:DO:25:LEU:HD11	47:DO:40:VAL:HG22	1.97	0.46
47:BO:8:LEU:O	47:BO:9:GLU:O	2.34	0.46
39:DD:91:ARG:CG	39:DD:91:ARG:HH11	2.25	0.46
48:DP:75:ILE:N	48:DP:75:ILE:CD1	2.75	0.46
1:CA:412:A:H5'	1:CA:413:G:OP2	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:B0:56:ASP:OD2	36:BA:2364:C:H4'	2.15	0.46
1:CA:1527:C:C4	1:CA:1528:U:O4	2.69	0.46
39:DD:173:VAL:HG12	39:DD:185:VAL:O	2.16	0.46
1:AA:782:A:N6	1:AA:801:U:C6	2.84	0.46
25:AZ:104:LEU:CD1	25:AZ:120:ILE:HD11	2.46	0.46
22:CW:59:U:H5'	22:CW:60:U:C5	2.51	0.46
36:DA:384:U:H2'	36:DA:385:C:C6	2.49	0.46
11:AK:23:ALA:HB3	11:AK:91:ARG:HG2	1.98	0.46
1:AA:660:G:C4	1:AA:661:G:C8	3.04	0.46
36:DA:316:C:H2'	36:DA:317:G:O5'	2.15	0.46
38:DC:43:VAL:CG2	38:DC:175:VAL:HG21	2.43	0.46
2:AB:92:TYR:HE1	2:AB:150:SER:HB2	1.79	0.46
48:DP:122:PRO:HB3	48:DP:141:ALA:CB	2.44	0.46
36:BA:2791:C:H4'	36:BA:2792:G:O5'	2.15	0.46
36:DA:654(L):G:H2'	36:DA:654(M):C:C4'	2.46	0.46
36:DA:1362:C:H2'	36:DA:1363:C:H5'	1.96	0.46
1:AA:632:A:C8	1:AA:633:G:C8	3.03	0.46
25:AZ:361:MET:O	25:AZ:361:MET:HG3	2.15	0.46
45:BK:95:UNK:C	45:BK:97:UNK:N	2.79	0.46
1:AA:371:G:H1'	1:AA:482:A:H1'	1.98	0.46
15:AO:3:ILE:H	15:AO:3:ILE:HG12	1.49	0.46
36:BA:275:G:C2	36:BA:276:A:H2	2.32	0.46
45:BK:125:UNK:O	45:BK:129:UNK:CB	2.64	0.46
38:BC:49:ILE:HD12	38:BC:50:ASP:N	2.29	0.46
1:AA:582:U:C2	1:AA:760:G:C6	3.04	0.46
36:BA:2596:U:H2'	36:BA:2597:G:O4'	2.16	0.46
34:D8:54:GLU:O	34:D8:58:ILE:HG12	2.15	0.46
25:CZ:114:PRO:HG2	36:DA:2660:A:H4'	1.98	0.46
36:DA:704:G:N3	36:DA:726:G:C2	2.84	0.46
19:CS:50:ALA:HA	19:CS:58:VAL:O	2.16	0.46
54:DV:7:THR:O	54:DV:7:THR:HG23	2.15	0.46
53:DU:22:LYS:HA	53:DU:22:LYS:HD3	1.74	0.46
44:DJ:79:UNK:O	44:DJ:80:UNK:CB	2.64	0.46
34:B8:8:LYS:HA	34:B8:11:LYS:CD	2.45	0.46
36:BA:510:C:OP1	36:BA:511:U:OP2	2.34	0.46
36:DA:1292:U:O2'	36:DA:1293:C:H5'	2.15	0.46
31:D5:4:HIS:O	36:DA:2056:G:N1	2.49	0.46
50:DR:41:ALA:O	50:DR:42:LYS:C	2.53	0.46
50:DR:75:LEU:HA	50:DR:75:LEU:HD22	1.79	0.46
36:DA:1801:G:N3	36:DA:1801:G:O5'	2.49	0.46
39:DD:52:ARG:HB2	39:DD:53:PHE:CD2	2.51	0.46
28:D2:30:ARG:C	28:D2:33:MET:HB3	2.36	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:17:LYS:HZ2	12:AL:18:VAL:HG22	1.80	0.46
36:DA:2661:G:H2'	36:DA:2662:A:O4'	2.15	0.46
38:DC:115:ALA:O	38:DC:149:ILE:HD13	2.15	0.46
1:CA:367:U:H4'	25:CZ:291:ARG:HH11	1.81	0.46
36:BA:1817:G:OP1	39:BD:88:ARG:NH2	2.48	0.46
39:BD:70:TRP:HZ3	39:BD:146:GLU:OE2	1.99	0.46
36:DA:2241:A:H2'	36:DA:2242:G:C8	2.51	0.46
1:CA:255:G:O6	1:CA:266:G:O6	2.34	0.46
36:BA:1203:G:C6	36:BA:1204:A:N6	2.84	0.46
36:BA:603:A:C2	36:BA:655:A:N1	2.84	0.46
43:BH:65:HIS:C	43:BH:67:LEU:N	2.68	0.46
1:AA:1047:G:C2'	1:AA:1048:G:H5'	2.46	0.46
35:B9:7:VAL:HG13	35:B9:34:GLN:CB	2.45	0.46
41:BF:132:VAL:HG13	41:BF:133:ASN:H	1.80	0.46
41:BF:198:ALA:HA	41:BF:201:VAL:HG12	1.98	0.46
36:BA:1290:C:H6	36:BA:1290:C:O5'	1.98	0.46
36:BA:1292:U:H2'	36:BA:1293:C:C5	2.51	0.46
36:BA:2049:G:O2'	36:BA:2050:C:H5'	2.16	0.46
40:BE:2:LYS:O	40:BE:199:ARG:HA	2.16	0.46
50:BR:17:ARG:O	50:BR:20:LEU:HB3	2.16	0.46
10:AJ:12:ASP:OD1	10:AJ:15:THR:HG23	2.15	0.46
13:AM:36:LYS:C	13:AM:38:GLY:H	2.19	0.46
30:B4:8:LYS:HG2	30:B4:9:LEU:O	2.16	0.46
42:BG:139:LEU:HA	42:BG:144:ILE:CG2	2.46	0.46
36:DA:2626:C:O5'	36:DA:2626:C:H6	1.98	0.46
36:DA:813:U:H2'	36:DA:814:C:C5	2.50	0.46
53:DU:95:LEU:HD13	54:DV:4:ILE:HG23	1.97	0.46
8:CH:36:LEU:C	8:CH:38:ILE:N	2.68	0.46
8:CH:83:ILE:O	8:CH:83:ILE:HG23	2.15	0.46
37:BB:48:A:H4'	51:BS:95:HIS:HD2	1.80	0.46
32:D6:30:THR:HG21	36:DA:2286:A:OP2	2.16	0.46
2:CB:180:LEU:HB2	2:CB:182:ILE:HG13	1.97	0.46
41:DF:167:ALA:HB1	41:DF:173:VAL:CG1	2.45	0.46
1:CA:730:G:H2'	1:CA:731:G:O4'	2.16	0.46
48:BP:126:VAL:CA	48:BP:145:PRO:HB2	2.39	0.46
48:BP:95:VAL:HA	48:BP:99:LEU:CD2	2.46	0.46
36:DA:1555:G:C2	36:DA:1556:C:C5	3.03	0.46
1:AA:1226:C:N4	13:AM:104:ARG:HB2	2.31	0.46
25:CZ:134:PHE:CD2	25:CZ:136:ASN:HB2	2.51	0.46
25:CZ:202:LEU:C	25:CZ:204:ASP:H	2.19	0.46
25:CZ:23:GLY:HA2	62:CZ:501:GDP:O2A	2.16	0.46
36:DA:2682:U:C1'	40:DE:12:THR:HA	2.46	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:DT:92:GLY:HA3	52:DT:120:ARG:NH2	2.31	0.46
38:BC:46:LYS:NZ	38:BC:168:THR:O	2.48	0.46
58:BZ:24:LEU:HB3	58:BZ:39:VAL:O	2.16	0.46
58:BZ:96:VAL:HG13	58:BZ:97:GLU:N	2.30	0.46
36:DA:309:G:O3'	57:DY:18:GLY:HA2	2.16	0.46
1:AA:670:G:N2	1:AA:671:G:N3	2.64	0.46
10:CJ:62:HIS:O	14:CN:59:ALA:HB3	2.15	0.46
1:AA:1498:U:C5	23:AX:20:U:C5'	2.94	0.46
36:BA:1403:C:H2'	36:BA:1404:C:O5'	2.15	0.46
19:AS:31:ILE:CG2	19:AS:49:ILE:HA	2.44	0.46
42:BG:96:ARG:HA	42:BG:100:TRP:HD1	1.79	0.46
42:BG:18:GLU:O	42:BG:21:ARG:N	2.49	0.46
31:D5:40:LYS:HZ3	31:D5:45:VAL:CA	2.26	0.46
36:DA:2138:C:H2'	36:DA:2139:C:H6	1.80	0.46
36:DA:2110:G:N1	36:DA:2178:C:N4	2.59	0.46
46:BN:133:GLN:CG	46:BN:135:PRO:HD3	2.29	0.46
55:BW:6:ILE:HA	55:BW:103:ILE:O	2.16	0.46
2:AB:48:MET:O	2:AB:51:LEU:N	2.48	0.46
36:BA:2100:G:C4	36:BA:2190:G:C6	3.04	0.46
3:CC:13:GLY:O	3:CC:14:ILE:HB	2.16	0.46
36:BA:440:G:H8	36:BA:440:G:O5'	1.99	0.46
36:BA:449:A:H1'	53:BU:3:ARG:HE	1.81	0.46
41:DF:127:GLU:OE1	41:DF:196:LEU:HD12	2.14	0.46
53:BU:92:ARG:C	53:BU:94:ASN:N	2.68	0.46
53:BU:95:LEU:HD12	54:BV:11:GLN:NE2	2.28	0.46
54:DV:88:ARG:O	54:DV:90:PRO:CD	2.63	0.46
36:DA:2580:U:C6	36:DA:2581:G:C6	3.04	0.46
22:AV:56:C:C1'	42:BG:76:SER:CB	2.93	0.46
36:BA:2307:G:H3'	36:BA:2307:G:N3	2.31	0.46
33:D7:39:ARG:HA	36:DA:459:U:OP1	2.16	0.46
36:DA:2307:G:H21	36:DA:2308:G:C5'	2.29	0.46
42:DG:97:ASP:O	42:DG:100:TRP:HB2	2.16	0.46
20:AT:19:SER:O	20:AT:20:LEU:C	2.54	0.46
20:AT:18:GLN:O	20:AT:22:ARG:HD2	2.15	0.46
40:DE:31:CYS:HB3	40:DE:49:LEU:HD12	1.96	0.46
8:CH:120:THR:C	8:CH:122:ARG:N	2.69	0.46
1:AA:756:C:H2'	1:AA:757:U:O4'	2.16	0.46
43:BH:144:VAL:HA	43:BH:147:ASN:HB2	1.97	0.46
25:CZ:300:ARG:H	25:CZ:300:ARG:HG3	1.52	0.46
2:CB:179:LYS:C	2:CB:181:PHE:H	2.19	0.46
2:AB:167:PRO:HG3	2:AB:188:ALA:HB2	1.97	0.46
2:AB:57:PHE:CZ	2:AB:199:TYR:HE1	2.33	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CH:21:LYS:O	8:CH:22:GLU:C	2.53	0.46
8:CH:17:THR:HB	8:CH:78:GLN:NE2	2.29	0.46
1:CA:1152:A:H5''	10:CJ:13:HIS:CB	2.45	0.46
2:AB:104:ASN:OD1	2:AB:104:ASN:O	2.34	0.46
36:BA:784:A:C5	39:BD:229:VAL:HG11	2.50	0.46
52:DT:6:LEU:HA	52:DT:9:LEU:CD1	2.45	0.46
1:CA:779:C:O2'	1:CA:780:A:H5'	2.16	0.46
1:CA:445:G:C6	1:CA:490:G:C6	3.04	0.46
1:CA:493:G:O5'	1:CA:493:G:H8	1.99	0.46
1:CA:409:G:H3'	1:CA:410:G:H8	1.80	0.46
1:AA:750:G:C2	15:AO:23:GLY:HA3	2.51	0.46
15:CO:23:GLY:O	15:CO:24:SER:CB	2.62	0.46
36:BA:610:G:H2'	36:BA:611:C:C6	2.51	0.46
14:AN:50:LYS:C	14:AN:52:GLN:H	2.19	0.46
26:D0:23:VAL:HG13	26:D0:38:VAL:HG22	1.98	0.46
36:BA:884:C:N3	36:BA:893:C:N3	2.64	0.46
18:AR:43:PHE:CD1	18:AR:66:LEU:HD11	2.51	0.46
36:BA:2205:C:C2	36:BA:2220:G:N1	2.84	0.46
36:DA:2133:G:N1	36:DA:2157:G:O6	2.49	0.46
33:B7:18:PHE:CG	36:BA:126:A:C8	3.03	0.46
36:BA:771:G:C5	36:BA:772:C:C5	3.03	0.46
1:CA:312:C:H2'	1:CA:313:A:H8	1.80	0.46
20:CT:36:LEU:HD13	20:CT:36:LEU:C	2.36	0.46
36:BA:1345:C:H2'	36:BA:1346:G:C5'	2.44	0.46
4:AD:4:TYR:O	4:AD:5:ILE:CB	2.58	0.46
46:BN:25:ARG:CG	46:BN:25:ARG:HH11	2.28	0.46
46:BN:62:VAL:HG21	46:BN:66:LYS:HB2	1.98	0.46
36:BA:1917:U:O2'	36:BA:1918:A:H5'	2.16	0.46
36:DA:848:G:H8	36:DA:848:G:H5'	1.81	0.46
36:DA:850:C:C4	36:DA:851:U:C5	3.04	0.46
19:AS:35:SER:C	19:AS:37:ARG:N	2.69	0.46
40:DE:144:ARG:HB3	40:DE:145:LYS:H	1.46	0.46
36:BA:896:A:C5'	58:BZ:146:ILE:HD12	2.46	0.46
36:BA:2422:A:HO2'	36:BA:2423:U:C5'	2.28	0.46
1:CA:522:C:C2'	1:CA:523:A:H8	2.28	0.46
1:AA:691:G:H2'	1:AA:692:U:H6	1.81	0.46
1:AA:1171:G:O2'	1:AA:1172:C:H5'	2.16	0.46
36:BA:2350:C:O2'	36:BA:2351:G:H5'	2.16	0.46
1:CA:922:G:C6	1:CA:923:A:C6	3.04	0.46
36:BA:1509(B):A:C2'	36:BA:1510:G:H5'	2.45	0.46
1:CA:1089:G:H2'	1:CA:1090:U:H6	1.80	0.46
39:DD:74:GLY:O	39:DD:76:PRO:HD3	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BN:38:HIS:O	53:BU:67:ALA:O	2.32	0.46
37:DB:64:C:H2'	37:DB:65:C:O4'	2.15	0.46
10:AJ:92:THR:CG2	10:AJ:93:GLY:N	2.76	0.46
25:CZ:118:GLU:C	25:CZ:120:ILE:N	2.67	0.46
22:CW:10:G:C2'	22:CW:11:C:H5'	2.46	0.46
50:DR:18:LEU:HD13	50:DR:18:LEU:C	2.36	0.46
42:BG:74:LYS:O	42:BG:75:LYS:C	2.53	0.46
20:CT:42:GLN:HB2	20:CT:42:GLN:HE21	1.55	0.46
22:AV:28:G:H2'	22:AV:29:G:H8	1.81	0.46
53:DU:101:ARG:O	53:DU:102:GLU:C	2.54	0.46
25:CZ:267:VAL:O	25:CZ:267:VAL:HG13	2.16	0.46
12:CL:75:HIS:CD2	12:CL:77:LEU:HB2	2.51	0.46
31:B5:19:ARG:O	31:B5:21:SER:N	2.49	0.46
36:DA:1932:A:C2'	36:DA:1933:G:H5'	2.46	0.46
22:CV:46:G:H5'	22:CV:47:U:OP2	2.15	0.46
36:DA:158:U:H2'	36:DA:171:G:O4'	2.16	0.46
15:CO:69:TYR:O	15:CO:69:TYR:CG	2.69	0.46
6:AF:39:LYS:HB2	6:AF:64:GLN:HB3	1.98	0.46
1:AA:28:G:H1	1:AA:555:C:H42	1.64	0.46
36:BA:2061:G:H5''	36:BA:2503:A:C6	2.51	0.46
36:BA:666:G:H2'	36:BA:667:U:C5	2.51	0.46
36:BA:820:A:H1'	36:BA:943:U:O2'	2.14	0.46
36:BA:833:U:O2	48:BP:55:ARG:NH1	2.46	0.46
36:BA:942:G:H5''	48:BP:36:LYS:HA	1.98	0.46
36:DA:1652:A:C6	36:DA:1653:G:C2	3.04	0.46
34:D8:52:LYS:O	34:D8:55:ALA:HB3	2.15	0.46
48:DP:105:LEU:H	48:DP:105:LEU:CD1	2.28	0.46
48:DP:109:GLY:O	48:DP:110:TYR:C	2.54	0.46
25:AZ:35:ALA:HB3	25:AZ:70:TYR:HB2	1.98	0.46
27:B1:46:LEU:HD13	27:B1:46:LEU:HA	1.78	0.46
36:BA:398:G:H5''	36:BA:2090:G:C4'	2.46	0.46
41:DF:32:LEU:C	41:DF:32:LEU:HD23	2.35	0.46
5:CE:48:ALA:C	5:CE:50:GLU:N	2.69	0.46
36:DA:2744:G:C2	36:DA:2761:G:C4	3.04	0.46
48:BP:9:ASN:O	48:BP:10:PRO:C	2.52	0.46
4:AD:17:VAL:HG21	4:AD:63:LYS:HZ2	1.81	0.46
35:B9:1:MET:CE	36:BA:2477:C:H3'	2.45	0.46
36:BA:2526:G:H8	36:BA:2526:G:O5'	1.98	0.46
41:BF:162:LEU:H	41:BF:162:LEU:CD1	2.27	0.46
30:B4:16:CYS:HA	30:B4:33:VAL:HG12	1.97	0.46
36:DA:568:U:H2'	36:DA:570:G:OP2	2.15	0.46
36:DA:996:A:O2'	36:DA:997:G:C5'	2.54	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:59:A:C6	1:AA:331:G:H1'	2.50	0.46
1:AA:386:C:C2'	1:AA:387:U:C5'	2.82	0.46
1:AA:61:G:O2'	1:AA:386:C:H1'	2.16	0.46
8:CH:137:VAL:HG12	8:CH:138:TRP:N	2.30	0.46
8:CH:11:THR:HA	8:CH:14:ARG:NH1	2.31	0.46
1:AA:255:G:O6	1:AA:266:G:O6	2.34	0.46
51:BS:14:VAL:O	51:BS:15:ARG:C	2.53	0.46
8:AH:13:ILE:O	8:AH:14:ARG:C	2.54	0.46
32:D6:27:LYS:O	32:D6:28:ARG:C	2.54	0.46
36:DA:2346:A:H5'	36:DA:2383:G:C1'	2.46	0.46
2:CB:83:MET:O	2:CB:85:ALA:N	2.49	0.46
41:DF:169:ASN:O	41:DF:170:LEU:O	2.34	0.46
40:BE:34:VAL:O	40:BE:35:GLN:CB	2.53	0.46
36:DA:1519:G:H5'	36:DA:1520:G:P	2.55	0.46
13:CM:74:VAL:HA	13:CM:77:ASN:ND2	2.31	0.46
1:AA:1070:U:O2'	1:AA:1071:C:H5'	2.15	0.46
36:BA:1298:C:C1'	36:BA:1302:A:C2	2.98	0.46
52:BT:33:LYS:HG3	52:BT:43:GLN:HB2	1.97	0.46
40:DE:24:THR:O	40:DE:183:LEU:HA	2.16	0.46
52:DT:100:TYR:HD2	52:DT:103:ARG:NH2	2.14	0.46
36:DA:2867:G:C5	52:DT:23:ARG:NH1	2.84	0.46
58:BZ:10:ARG:CG	58:BZ:11:GLU:N	2.79	0.46
49:BQ:141:GLN:HE22	58:BZ:72:ARG:CA	2.28	0.46
57:DY:73:ARG:CA	57:DY:73:ARG:HE	2.27	0.46
1:AA:1353:G:H2'	1:AA:1354:C:C5	2.50	0.46
35:D9:12:ASP:C	35:D9:14:CYS:N	2.69	0.46
29:D3:19:GLN:C	29:D3:21:ALA:H	2.18	0.46
7:CG:105:VAL:O	7:CG:108:ALA:N	2.49	0.46
9:CI:96:LEU:O	9:CI:99:LEU:O	2.33	0.46
10:CJ:63:PHE:CD2	10:CJ:63:PHE:N	2.83	0.46
51:DS:15:ARG:NH1	51:DS:18:ILE:HD11	2.30	0.46
42:BG:125:PHE:CZ	42:BG:131:TYR:CD1	3.02	0.46
42:BG:32:PRO:O	42:BG:33:ARG:HG3	2.16	0.46
42:BG:4:ASP:O	42:BG:4:ASP:OD1	2.34	0.46
36:DA:2152:G:C2	36:DA:2153:G:C8	3.03	0.46
1:CA:16:A:N1	1:CA:919:A:H2	2.14	0.46
5:CE:24:ARG:HG2	5:CE:24:ARG:HH11	1.80	0.46
46:DN:11:PRO:O	46:DN:13:TRP:HD1	1.99	0.46
39:DD:244:ARG:HA	39:DD:245:PRO:HA	1.65	0.46
2:AB:48:MET:N	2:AB:51:LEU:HD12	2.31	0.46
36:BA:2140:C:H2'	36:BA:2141:G:C8	2.50	0.46
19:CS:51:VAL:HG21	19:CS:71:LEU:HB3	1.98	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:122:GLU:O	3:AC:124:ILE:N	2.48	0.46
27:B1:45:ASN:HA	36:BA:2230:G:H1'	1.97	0.46
1:CA:36:C:H5''	12:CL:123:LYS:HA	1.98	0.46
56:DX:35:THR:HG21	56:DX:37:THR:HB	1.98	0.46
53:BU:62:ILE:HG23	53:BU:76:TYR:CZ	2.51	0.46
42:BG:43:LEU:HD11	42:BG:153:ARG:HB2	1.98	0.46
42:BG:87:PRO:CG	42:BG:88:ILE:H	2.24	0.46
36:DA:472:A:H2'	36:DA:473:G:H5'	1.98	0.46
42:DG:137:GLU:OE1	42:DG:139:LEU:HD11	2.16	0.46
25:CZ:279:GLU:O	25:CZ:280:GLY:C	2.54	0.46
36:BA:1389:G:C5'	36:BA:1526:G:OP1	2.64	0.46
43:DH:83:TYR:O	43:DH:84:SER:C	2.54	0.46
40:BE:154:LYS:O	40:BE:155:LYS:C	2.54	0.46
21:CU:18:TYR:HB3	21:CU:22:ARG:O	2.16	0.46
51:BS:24:LEU:N	51:BS:24:LEU:HD22	2.31	0.46
43:BH:144:VAL:O	43:BH:144:VAL:HG12	2.16	0.46
22:CV:53:G:H2'	22:CV:54:U:C6	2.51	0.46
1:AA:1254:C:H2'	1:AA:1255:G:C8	2.51	0.46
2:AB:162:ILE:HG12	2:AB:163:PHE:N	2.31	0.46
2:CB:121:LEU:HD23	2:CB:121:LEU:C	2.35	0.46
1:AA:1463:C:C5'	52:BT:115:ARG:NH2	2.79	0.46
24:CY:51:C:H2'	24:CY:52:A:C8	2.51	0.46
36:BA:178:G:O2'	36:BA:179:G:H5'	2.15	0.46
36:DA:856:C:H2'	36:DA:857:C:H6	1.79	0.46
27:D1:50:ARG:NH1	36:DA:2200:C:OP2	2.48	0.46
27:D1:81:LYS:O	27:D1:82:LEU:CD1	2.64	0.46
27:D1:90:ILE:O	27:D1:94:LEU:HD13	2.15	0.46
36:DA:178:G:C2	36:DA:179:G:C8	3.04	0.46
36:BA:2355:C:C5	36:BA:2356:C:C4	3.04	0.46
52:BT:6:LEU:HA	52:BT:9:LEU:CD1	2.46	0.46
1:CA:59:A:C6	1:CA:331:G:H1'	2.50	0.46
1:CA:182:U:N3	1:CA:183:G:H1'	2.31	0.46
33:B7:15:THR:O	33:B7:15:THR:CG2	2.63	0.46
20:CT:59:ALA:O	20:CT:60:GLU:C	2.55	0.46
41:DF:59:TYR:CD2	41:DF:59:TYR:N	2.81	0.46
46:DN:22:THR:N	46:DN:61:ARG:HB2	2.31	0.46
36:DA:883:G:N2	36:DA:893:C:C2	2.84	0.46
1:AA:1249:C:C5'	1:AA:1249:C:H6	2.24	0.46
36:BA:1022:G:H22	36:BA:1142(A):A:H2	1.64	0.46
49:BQ:77:LYS:HD3	49:BQ:81:VAL:HG11	1.98	0.46
36:BA:1672:C:C4	36:BA:1673:U:C5	3.04	0.46
12:CL:60:LEU:HD22	12:CL:60:LEU:N	2.31	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:60:ALA:N	3:AC:63:ASN:HD21	2.14	0.46
29:B3:2:PRO:O	29:B3:3:ARG:O	2.34	0.46
1:CA:1171:G:O2'	1:CA:1172:C:H5'	2.15	0.46
40:BE:143:ASN:N	40:BE:143:ASN:ND2	2.64	0.46
1:AA:1165:C:H42	1:AA:1172:C:N4	2.14	0.46
36:DA:2435:A:C6	36:DA:2436:G:N7	2.84	0.46
36:BA:1510:G:H2'	36:BA:1511:C:C6	2.50	0.46
39:BD:213:ARG:HD2	39:BD:213:ARG:HA	1.67	0.46
36:BA:2371:G:C2	36:BA:2372:G:C4	3.04	0.46
47:DO:14:THR:O	47:DO:14:THR:HG22	2.15	0.46
36:BA:67:U:H2'	36:BA:68:G:H8	1.81	0.46
36:DA:1510:G:H2'	36:DA:1511:C:C6	2.50	0.46
36:DA:1967:C:H2'	36:DA:1968:G:O4'	2.16	0.46
36:DA:280:C:H2'	36:DA:281:G:H5'	1.97	0.46
8:AH:134:ILE:O	8:AH:135:CYS:HB3	2.16	0.46
36:BA:225:A:C2	36:BA:231:C:C2	3.03	0.46
4:AD:180:GLY:O	4:AD:181:MET:C	2.53	0.46
25:AZ:92:MET:O	25:AZ:95:GLY:N	2.49	0.46
25:AZ:273:HIS:C	25:AZ:275:LYS:H	2.18	0.46
1:AA:431:A:C2'	1:AA:432:A:H5'	2.45	0.46
36:BA:2661:G:H2'	36:BA:2662:A:O4'	2.15	0.46
24:CY:77:THR:HG22	25:CZ:239:THR:CG2	2.46	0.46
36:BA:579:G:H4'	36:BA:2017:U:H2'	1.98	0.46
44:BJ:79:UNK:O	44:BJ:80:UNK:CB	2.63	0.46
1:CA:578:C:H2'	1:CA:579:G:H8	1.80	0.46
36:BA:2521:C:H5'	36:BA:2522:U:OP2	2.15	0.46
57:BY:33:LYS:C	57:BY:35:TYR:H	2.19	0.46
36:BA:247:G:H1'	36:BA:251:A:N6	2.29	0.46
36:BA:672:C:C2'	36:BA:673:C:C5'	2.89	0.46
36:DA:2880:C:H1'	50:DR:92:GLY:O	2.16	0.46
50:DR:14:SER:O	50:DR:17:ARG:N	2.42	0.46
36:DA:1814:G:C4'	39:DD:51:VAL:HG21	2.46	0.46
32:D6:19:ARG:CZ	36:DA:2400:G:O3'	2.64	0.46
32:D6:22:ALA:HB2	32:D6:39:TYR:CZ	2.51	0.46
25:AZ:24:LYS:CE	25:AZ:84:GLY:HA3	2.46	0.46
41:DF:115:ALA:O	41:DF:118:ALA:N	2.48	0.46
35:D9:7:VAL:HG13	35:D9:34:GLN:CB	2.46	0.46
36:DA:2527:C:C5	36:DA:2528:U:C5	3.04	0.46
36:DA:2530:A:C2'	36:DA:2531:A:H5''	2.46	0.46
36:DA:479:A:H4'	36:DA:480:A:H5'	1.98	0.46
36:DA:478:A:N1	36:DA:500:G:H4'	2.30	0.46
39:BD:266:SER:C	39:BD:267:SER:O	2.54	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BD:37:LEU:O	39:BD:38:LYS:C	2.54	0.46
40:DE:55:ASN:O	40:DE:56:PRO:C	2.52	0.46
1:CA:266:G:H1'	1:CA:268:C:OP2	2.15	0.46
1:AA:507:C:C6	1:AA:508:C:C5	3.03	0.46
1:AA:542:G:O2'	1:AA:543:C:H5'	2.15	0.46
36:BA:93:G:H2'	36:BA:94:C:C6	2.51	0.46
41:BF:168:ARG:CG	41:BF:169:ASN:N	2.79	0.46
41:BF:169:ASN:O	41:BF:170:LEU:C	2.54	0.46
41:BF:175:THR:C	41:BF:176:LEU:HD12	2.37	0.46
36:BA:1275:A:N3	36:BA:1276:A:H1'	2.31	0.46
56:DX:10:ALA:O	56:DX:28:PHE:HB2	2.16	0.46
56:DX:26:TYR:CD1	56:DX:26:TYR:N	2.84	0.46
36:DA:28:A:H1'	36:DA:513:A:C2	2.51	0.46
36:DA:29:U:OP1	36:DA:583:G:H4'	2.16	0.46
54:DV:91:TYR:HE1	54:DV:93:GLU:HG3	1.80	0.46
1:AA:60:A:H8	1:AA:60:A:P	2.39	0.46
16:AP:40:ASP:HA	16:AP:41:PRO:HD2	1.79	0.46
1:CA:1206:G:C2'	1:CA:1207:G:H5'	2.46	0.46
1:CA:505:G:C5	1:CA:506:G:N7	2.84	0.46
51:BS:96:GLY:C	51:BS:98:VAL:N	2.69	0.46
40:BE:34:VAL:CG2	40:BE:34:VAL:O	2.64	0.46
1:CA:836:G:H2'	1:CA:837:G:H8	1.81	0.46
6:CF:93:SER:C	6:CF:94:GLN:HG3	2.36	0.46
25:CZ:107:SER:HB3	25:CZ:110:ASP:HB2	1.98	0.46
52:DT:89:VAL:O	52:DT:90:GLN:C	2.54	0.46
57:DY:12:THR:CG2	57:DY:13:VAL:N	2.79	0.46
36:BA:2675:A:N3	36:BA:2675:A:H2'	2.29	0.46
1:CA:1179:A:H5'	9:CI:102:LEU:HD22	1.98	0.46
1:AA:966:G:O2'	1:AA:967:C:P	2.73	0.46
22:AV:49:C:HO2'	22:AV:50:U:P	2.38	0.46
26:B0:51:VAL:HG22	26:B0:81:VAL:HG23	1.98	0.46
37:BB:81:G:N3	37:BB:81:G:H5'	2.31	0.46
51:DS:27:SER:C	51:DS:28:VAL:CG2	2.84	0.46
57:BY:73:ARG:NE	57:BY:73:ARG:HA	2.28	0.46
19:CS:40:ILE:HD13	19:CS:66:MET:O	2.15	0.46
3:AC:187:ALA:O	3:AC:188:LEU:CD2	2.63	0.46
1:CA:449:C:O2	16:CP:42:ARG:HG2	2.15	0.46
1:CA:80:G:H3'	1:CA:81:U:C5'	2.45	0.46
55:DW:36:LEU:N	55:DW:36:LEU:HD23	2.08	0.46
53:BU:65:ILE:HD11	53:BU:96:ALA:CB	2.45	0.46
39:BD:131:LEU:HD13	39:BD:136:ILE:CD1	2.43	0.46
39:DD:26:LYS:C	39:DD:27:THR:HG22	2.36	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:85:ASP:CG	39:DD:88:ARG:HH11	2.18	0.46
36:DA:1273:U:H5''	36:DA:1646:C:H41	1.81	0.46
22:AV:19:G:N1	42:BG:83:ARG:CZ	2.79	0.46
42:DG:129:GLY:O	42:DG:130:ASN:ND2	2.49	0.46
42:DG:125:PHE:CE2	42:DG:131:TYR:HD1	2.34	0.46
42:DG:137:GLU:HG2	42:DG:138:GLN:H	1.81	0.46
36:BA:1525:G:H2'	36:BA:1526:G:C8	2.50	0.46
1:CA:977:A:H62	1:CA:1223:C:H2'	1.79	0.46
5:CE:76:ILE:HG12	5:CE:78:HIS:N	2.23	0.46
1:AA:581:G:C6	1:AA:758:G:C5	3.03	0.46
42:DG:57:ALA:HA	42:DG:90:LEU:HD21	1.98	0.46
25:CZ:257:GLY:C	25:CZ:258:LEU:HD12	2.36	0.46
25:CZ:246:LYS:CB	25:CZ:281:ILE:HG22	2.33	0.46
15:AO:82:ILE:CG2	15:AO:83:GLU:N	2.77	0.46
38:BC:207:THR:HB	38:BC:210:ARG:NH1	2.31	0.46
10:CJ:5:ARG:O	10:CJ:99:LYS:HG2	2.15	0.46
1:AA:1441:G:H1'	1:AA:1460:A:H61	1.81	0.46
1:AA:190:U:H2'	1:AA:191:G:H8	1.81	0.46
1:AA:35:G:C6	1:AA:36:C:N4	2.84	0.46
1:AA:399:G:H2'	1:AA:400:C:C6	2.51	0.46
29:B3:7:LYS:HG3	29:B3:34:GLU:HB3	1.97	0.46
47:BO:47:ILE:HG23	47:BO:48:PRO:CD	2.35	0.46
10:AJ:38:ILE:O	10:AJ:40:LEU:HD22	2.16	0.46
55:DW:17:VAL:C	55:DW:19:LEU:H	2.19	0.46
36:DA:25:U:H5'	55:DW:78:GLU:O	2.16	0.46
7:CG:145:ALA:HA	7:CG:148:ASN:HD22	1.81	0.46
31:D5:38:ALA:HB1	31:D5:48:GLU:HB3	1.95	0.46
1:CA:811:C:C4'	1:CA:900:A:N6	2.74	0.46
49:DQ:55:VAL:HA	49:DQ:58:PHE:HE1	1.80	0.46
36:BA:909:A:O2'	36:BA:910:A:C5'	2.64	0.46
1:CA:443:C:H2'	1:CA:444:C:H6	1.81	0.46
36:DA:2222:G:C4	36:DA:2223:G:C8	3.04	0.46
58:DZ:105:VAL:CG1	58:DZ:139:VAL:O	2.63	0.46
39:BD:173:VAL:HG12	39:BD:185:VAL:O	2.16	0.46
36:BA:609:A:H2'	36:BA:610:G:O4'	2.16	0.46
36:DA:2355:C:C5	36:DA:2356:C:C4	3.04	0.46
1:AA:484:G:H4'	1:AA:485:G:H4'	1.98	0.46
36:DA:2130:U:OP1	38:DC:5:LYS:HG2	2.15	0.46
16:CP:27:LYS:CG	16:CP:30:GLY:HA3	2.40	0.46
36:DA:55:G:H2'	36:DA:55:G:N3	2.31	0.46
31:D5:34:PRO:HG3	36:DA:2885:C:O2'	2.16	0.46
47:DO:88:ASN:HD21	47:DO:92:GLU:CB	2.27	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:AW:65:G:O2'	22:AW:66:U:H5'	2.15	0.46
1:AA:1095:U:H2'	1:AA:1096:C:H6	1.71	0.46
36:BA:850:C:C4	36:BA:851:U:C5	3.03	0.46
2:CB:36:ARG:NE	2:CB:36:ARG:HA	2.31	0.46
1:CA:1095:U:H2'	1:CA:1096:C:O4'	2.16	0.46
36:DA:272(E):G:H22	36:DA:364:C:H1'	1.81	0.46
6:CF:62:TRP:CZ2	18:CR:35:ARG:NH2	2.84	0.46
12:AL:60:LEU:C	12:AL:62:SER:H	2.17	0.46
1:AA:522:C:N4	1:AA:528:C:H42	2.14	0.46
51:BS:84:GLN:N	51:BS:105:ALA:HB3	2.31	0.46
36:DA:821:A:C5'	36:DA:822:U:C6	2.98	0.46
36:BA:381:G:O2'	36:BA:382:G:H5'	2.16	0.46
37:BB:98:G:C4	37:BB:99:G:C8	3.04	0.46
36:BA:876:C:H2'	36:BA:877:U:O4'	2.16	0.46
38:BC:43:VAL:CG2	38:BC:175:VAL:HG21	2.44	0.46
1:CA:1406:U:H2'	1:CA:1407:C:C6	2.49	0.46
32:B6:32:ASN:ND2	32:B6:33:LYS:H	2.13	0.46
37:DB:87:G:C3'	37:DB:88:C:H5''	2.45	0.46
38:DC:49:ILE:HD12	38:DC:50:ASP:N	2.31	0.46
36:DA:2257:U:H2'	36:DA:2258:C:C6	2.51	0.46
7:CG:13:GLN:CD	7:CG:14:PRO:HD2	2.35	0.46
53:DU:78:THR:O	53:DU:81:HIS:HB3	2.16	0.46
1:CA:1445:C:H2'	1:CA:1446:U:H6	1.81	0.46
17:AQ:17:LYS:HA	17:AQ:46:ASP:O	2.16	0.46
1:CA:169:C:O2	1:CA:169:C:H2'	2.15	0.46
31:D5:18:ALA:O	31:D5:21:SER:HB3	2.16	0.46
36:BA:2061:G:H5''	36:BA:2503:A:C2	2.50	0.46
36:BA:2259:G:O2'	36:BA:2260:C:H5'	2.16	0.46
36:BA:587:C:N4	48:BP:33:ARG:HB2	2.30	0.46
36:DA:1270:C:H5''	36:DA:1271:G:O5'	2.16	0.46
36:DA:1277:G:N1	36:DA:1294:U:C2	2.84	0.46
36:DA:2821:A:OP2	36:DA:2822:G:OP2	2.34	0.46
50:DR:100:LEU:N	50:DR:100:LEU:CD2	2.77	0.46
50:DR:34:ILE:HB	50:DR:114:VAL:CG2	2.45	0.46
32:D6:17:LYS:O	32:D6:18:ARG:CB	2.64	0.46
25:AZ:146:LEU:O	25:AZ:150:VAL:N	2.42	0.46
56:BX:20:GLY:C	56:BX:22:ALA:H	2.19	0.46
36:DA:2083:G:C5	36:DA:2084:C:C4	3.03	0.46
1:CA:264:U:O2'	17:CQ:64:PRO:HB2	2.16	0.46
42:DG:76:SER:OG	42:DG:83:ARG:HB3	2.16	0.46
1:AA:963:G:H21	10:AJ:55:LYS:CD	2.28	0.46
4:AD:28:SER:CB	4:AD:29:PRO:CD	2.84	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:89:G:O5'	36:BA:89:G:H8	1.98	0.46
36:BA:2819:G:C6	36:BA:2821:A:N3	2.84	0.46
40:BE:198:VAL:CG1	40:BE:199:ARG:H	2.14	0.46
36:DA:942:G:H5'	48:DP:36:LYS:HA	1.98	0.46
53:DU:86:ALA:HB2	53:DU:116:ALA:HB2	1.97	0.46
1:CA:1174:G:O2'	1:CA:1175:G:H5'	2.16	0.46
1:CA:1160:G:H1	1:CA:1177:G:H22	1.64	0.46
36:BA:2635:C:C2'	36:BA:2636:U:O5'	2.64	0.46
36:DA:1520:G:H2'	36:DA:1523:U:H5'	1.98	0.46
13:CM:91:ARG:O	13:CM:92:HIS:C	2.54	0.46
1:AA:8:A:OP1	1:AA:8:A:H3'	2.15	0.46
25:CZ:169:PRO:HG2	25:CZ:209:TYR:CD2	2.51	0.46
36:BA:1301:A:HO2'	36:BA:1302:A:P	2.37	0.46
36:BA:1670:C:C2'	36:BA:1671:U:H5'	2.46	0.46
36:DA:1670:C:H2'	36:DA:1671:U:O4'	2.17	0.46
52:DT:29:ARG:HB3	52:DT:85:LYS:HA	1.97	0.46
58:BZ:11:GLU:HB2	58:BZ:13:GLU:HG3	1.98	0.46
57:DY:26:LYS:HG2	57:DY:27:VAL:H	1.82	0.46
57:DY:27:VAL:HG12	57:DY:29:GLU:OE1	2.15	0.46
1:CA:1377:A:H2'	7:CG:7:ALA:CB	2.47	0.46
9:CI:9:ARG:CB	9:CI:104:ARG:HH12	2.20	0.46
10:CJ:49:VAL:CG1	10:CJ:49:VAL:O	2.64	0.46
26:B0:47:PRO:O	26:B0:78:TYR:CD2	2.69	0.46
36:BA:920:G:O2'	36:BA:921:G:H5'	2.15	0.46
36:BA:1518:U:C2	36:BA:1519:G:H1'	2.51	0.46
1:AA:799:G:C6	1:AA:800:G:C4	3.04	0.46
51:DS:64:GLU:HA	51:DS:67:ARG:HG3	1.97	0.46
51:DS:17:ARG:HH21	51:DS:90:GLY:H	1.64	0.46
42:BG:120:LEU:HD22	42:BG:133:LEU:HD22	1.98	0.46
42:BG:162:THR:HG22	42:BG:164:GLU:OE2	2.16	0.46
42:BG:168:GLU:C	42:BG:170:ARG:H	2.19	0.46
42:BG:16:ARG:O	42:BG:18:GLU:N	2.49	0.46
1:CA:1426:C:C4	1:CA:1475:G:O6	2.69	0.46
36:DA:1794:U:H2'	36:DA:1795:C:C6	2.51	0.46
25:AZ:93:ILE:HG23	25:AZ:126:VAL:HG21	1.98	0.46
48:BP:16:ARG:HH11	48:BP:16:ARG:CA	2.29	0.46
36:BA:1827:C:OP2	39:BD:222:ARG:NH1	2.49	0.46
46:BN:18:ALA:O	46:BN:20:GLY:N	2.49	0.46
36:BA:83:G:N2	36:BA:102:G:C2'	2.79	0.46
13:CM:7:VAL:HG22	42:DG:115:ARG:HA	1.95	0.46
42:DG:56:ALA:CB	42:DG:153:ARG:NH2	2.79	0.46
42:DG:35:GLU:OE2	42:DG:36:LYS:HE3	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DG:66:GLN:HB2	42:DG:94:LEU:HD21	1.97	0.46
1:AA:1205:U:H4'	3:AC:195:VAL:CG2	2.33	0.46
25:AZ:342:PHE:CD1	25:AZ:342:PHE:N	2.84	0.46
20:AT:13:LEU:O	20:AT:16:HIS:N	2.39	0.46
25:CZ:257:GLY:HA3	25:CZ:302:GLN:HA	1.98	0.46
25:CZ:348:ASP:O	25:CZ:348:ASP:CG	2.54	0.46
1:CA:1103:C:H2'	1:CA:1104:G:O4'	2.16	0.46
11:CK:94:ALA:O	11:CK:95:ILE:C	2.54	0.46
1:AA:191:G:N3	20:AT:105:SER:HB3	2.31	0.46
20:AT:84:LEU:O	20:AT:88:VAL:HG23	2.16	0.46
16:AP:14:ASN:CA	16:AP:42:ARG:HH12	2.16	0.46
36:BA:47:C:C5	36:BA:48:G:N7	2.84	0.46
25:CZ:360:GLU:O	25:CZ:362:VAL:N	2.48	0.46
2:AB:74:LYS:HG3	2:AB:74:LYS:O	2.15	0.46
10:AJ:7:LYS:H	10:AJ:97:GLU:HB2	1.81	0.46
31:D5:36:CYS:C	31:D5:38:ALA:H	2.19	0.46
5:CE:139:LEU:HA	5:CE:142:LEU:CD1	2.46	0.46
36:DA:1862:G:N2	36:DA:1881:C:C2	2.84	0.46
26:D0:23:VAL:N	26:D0:38:VAL:HG13	2.31	0.46
36:DA:2134:A:H2'	36:DA:2134:A:N3	2.30	0.46
1:CA:309:G:H1'	1:CA:608:A:C2	2.51	0.46
40:BE:131:ALA:HB3	40:BE:134:ILE:HD11	1.96	0.46
40:BE:87:GLU:O	40:BE:87:GLU:HG3	2.15	0.46
1:AA:1271:G:H5'	1:AA:1314:C:C5'	2.46	0.46
46:DN:25:ARG:HG2	46:DN:25:ARG:HH11	1.81	0.46
39:BD:106:ILE:HD11	39:BD:196:VAL:HG22	1.97	0.46
1:AA:1381:U:C5	1:AA:1382:C:C4	3.04	0.46
39:DD:89:SER:HB2	39:DD:159:ALA:HB2	1.97	0.46
37:BB:33:G:H2'	37:BB:34:U:O4'	2.16	0.46
12:AL:60:LEU:CD2	12:AL:60:LEU:N	2.78	0.46
17:AQ:30:PRO:HG2	17:AQ:31:LEU:H	1.81	0.46
36:DA:1028:A:H8	36:DA:1028:A:O5'	1.99	0.46
45:DK:31:UNK:C	45:DK:63:UNK:HA	2.46	0.46
58:DZ:40:ASP:HB3	58:DZ:43:GLU:HG2	1.98	0.46
46:DN:6:PRO:HB3	46:DN:41:ASP:OD1	2.15	0.46
38:BC:68:LEU:HD11	38:BC:161:ILE:HG22	1.97	0.46
1:CA:695:A:H2'	1:CA:696:A:O4'	2.16	0.46
51:DS:74:ALA:C	51:DS:76:LYS:N	2.69	0.46
51:DS:79:ALA:O	51:DS:80:LEU:HD23	2.16	0.46
19:CS:35:SER:C	19:CS:37:ARG:N	2.69	0.46
38:DC:124:GLY:CA	38:DC:128:GLY:HA3	2.44	0.46
26:B0:25:ARG:HG3	26:B0:31:VAL:HG11	1.98	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2250:G:N7	49:BQ:83:MET:HG3	2.30	0.46
36:BA:2298:A:H62	36:BA:2318:G:H8	1.60	0.46
36:BA:2299:G:O2'	36:BA:2300:G:H5'	2.16	0.46
20:CT:38:LYS:C	20:CT:40:ALA:H	2.19	0.46
27:D1:24:ALA:HB3	27:D1:27:GLU:HB2	1.98	0.46
4:AD:159:ARG:O	4:AD:162:LEU:N	2.48	0.46
36:DA:1332:G:H5'	36:DA:1333:C:H5	1.81	0.46
36:BA:1967:C:H2'	36:BA:1968:G:O4'	2.15	0.46
7:AG:95:ARG:O	7:AG:97:GLN:N	2.48	0.46
7:AG:8:GLU:OE2	7:AG:9:VAL:C	2.54	0.46
36:DA:497:A:C6	36:DA:498:G:C6	3.03	0.46
1:CA:371:G:H1'	1:CA:482:A:H1'	1.97	0.46
36:BA:1227:G:C2'	36:BA:1228:G:H5'	2.46	0.46
36:DA:363:G:C2	36:DA:363(A):A:N7	2.83	0.46
16:CP:66:PRO:HD2	16:CP:71:ARG:NH1	2.31	0.46
3:CC:34:LEU:HD21	3:CC:38:ARG:HE	1.81	0.46
36:DA:1450(A):C:O2	36:DA:1450(A):C:H2'	2.15	0.46
53:BU:78:THR:O	53:BU:81:HIS:HB3	2.16	0.46
36:BA:2274:A:C5	36:BA:2276:G:C8	3.04	0.46
1:AA:1192:C:H2'	1:AA:1193:G:O5'	2.16	0.46
27:B1:41:ARG:NH2	36:BA:1365:A:OP1	2.49	0.45
36:BA:563:G:C4	36:BA:2018:G:C2	3.04	0.45
36:BA:573:G:C5'	36:BA:575:A:N7	2.79	0.45
36:DA:2015:A:C2'	36:DA:2016:U:H5'	2.47	0.45
50:DR:67:LEU:CD2	50:DR:76:VAL:HG21	2.46	0.45
57:BY:50:ARG:O	57:BY:53:PRO:HD3	2.15	0.45
36:DA:247:G:H1'	36:DA:251:A:N6	2.31	0.45
36:DA:251:A:H5''	48:DP:51:PHE:HZ	1.81	0.45
25:AZ:27:LEU:HD11	25:AZ:31:LEU:HD21	1.98	0.45
28:D2:32:LEU:HD22	28:D2:36:ARG:NH1	2.30	0.45
38:DC:79:LYS:HB3	38:DC:147:PHE:HE1	1.80	0.45
38:DC:91:ALA:HB3	38:DC:94:VAL:CG2	2.46	0.45
36:BA:693:C:H2'	36:BA:694:U:C6	2.51	0.45
39:BD:147:LEU:HD12	39:BD:147:LEU:HA	1.66	0.45
36:BA:1800:C:P	39:BD:266:SER:HG	2.39	0.45
39:BD:183:ARG:HG3	39:BD:269:PHE:O	2.15	0.45
1:AA:1188:A:H2'	1:AA:1189:C:O4'	2.16	0.45
41:BF:185:ASP:HA	41:BF:188:ARG:CD	2.46	0.45
41:BF:122:LYS:HB3	41:BF:191:ARG:HG3	1.98	0.45
41:BF:32:LEU:C	41:BF:32:LEU:HD23	2.36	0.45
36:BA:2758:A:C2	36:BA:2759:G:N9	2.84	0.45
4:AD:11:LEU:O	4:AD:13:ARG:O	2.34	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BQ:55:VAL:HA	58:BZ:178:GLU:OE2	2.16	0.45
36:BA:2009:G:O2'	36:BA:2010:G:H5'	2.16	0.45
36:BA:2826:A:C2'	36:BA:2827:C:H5'	2.46	0.45
40:BE:197:ILE:CD1	40:BE:199:ARG:HH22	2.29	0.45
36:BA:1614:A:N6	55:BW:92:ARG:O	2.49	0.45
36:DA:494:G:OP1	55:DW:8:ARG:NH1	2.50	0.45
36:DA:1365:A:C6	36:DA:1366:A:C5	3.04	0.45
36:DA:372:G:O2'	36:DA:373:U:P	2.74	0.45
36:DA:2026:C:O2	36:DA:2026:C:H2'	2.15	0.45
36:DA:2776:A:H4'	36:DA:2778:A:C5'	2.46	0.45
54:DV:96:ILE:N	54:DV:96:ILE:HD13	2.30	0.45
1:AA:308:C:H2'	1:AA:309:G:C8	2.51	0.45
1:AA:359:U:H2'	1:AA:360:A:C8	2.50	0.45
4:CD:26:CYS:HA	4:CD:31:CYS:HA	1.97	0.45
51:BS:14:VAL:C	51:BS:15:ARG:HG3	2.35	0.45
51:BS:17:ARG:HH21	51:BS:90:GLY:H	1.63	0.45
38:DC:23:ASP:O	38:DC:24:GLU:C	2.53	0.45
1:CA:738:C:H5''	6:CF:69:GLU:HB2	1.98	0.45
15:CO:50:HIS:O	15:CO:53:HIS:CB	2.64	0.45
48:BP:101:VAL:HG22	48:BP:102:ARG:N	2.31	0.45
13:CM:107:ALA:O	13:CM:109:THR:N	2.49	0.45
25:CZ:177:LEU:N	25:CZ:177:LEU:HD12	2.31	0.45
36:DA:1680:U:O2	36:DA:1763:G:H3'	2.16	0.45
52:DT:101:PHE:C	52:DT:103:ARG:N	2.69	0.45
36:DA:2682:U:O2'	52:DT:58:ASN:OD1	2.34	0.45
37:BB:105:A:H3'	37:BB:106:G:C8	2.50	0.45
36:DA:344:G:P	36:DA:344:G:H3'	2.56	0.45
1:AA:1370:G:C2	1:AA:1371:G:N7	2.84	0.45
16:CP:67:THR:H	16:CP:70:ALA:CB	2.16	0.45
7:CG:23:VAL:CG1	7:CG:43:PHE:CE2	2.99	0.45
26:B0:81:VAL:HG12	26:B0:81:VAL:O	2.14	0.45
1:AA:922:G:C6	1:AA:923:A:C6	3.04	0.45
36:BA:1555:G:C2	36:BA:1556:C:C5	3.04	0.45
36:BA:325:G:H2'	36:BA:326:G:C8	2.50	0.45
36:BA:336:C:H4'	57:BY:7:VAL:HG21	1.97	0.45
25:AZ:257:GLY:HA3	25:AZ:302:GLN:HA	1.98	0.45
1:AA:152:A:N6	1:AA:170:U:C2	2.84	0.45
36:BA:1787:A:H2'	36:BA:1788:C:C6	2.50	0.45
36:BA:1788:C:H2'	36:BA:1789:A:O4'	2.16	0.45
36:BA:1007:C:O2'	46:BN:108:PRO:HA	2.16	0.45
53:BU:70:ARG:C	53:BU:72:HIS:H	2.18	0.45
10:AJ:21:GLN:C	10:AJ:23:ILE:H	2.19	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:AJ:18:ALA:O	10:AJ:22:LYS:N	2.49	0.45
36:BA:268:C:N4	36:BA:425:G:C6	2.84	0.45
13:CM:35:GLU:CG	13:CM:36:LYS:N	2.79	0.45
42:BG:46:ALA:HB3	42:BG:88:ILE:CG1	2.46	0.45
30:D4:26:SER:HB2	42:DG:105:LYS:HE3	1.97	0.45
42:DG:6:ALA:O	42:DG:7:LEU:C	2.55	0.45
43:DH:152:ARG:NH1	43:DH:152:ARG:HG3	2.30	0.45
36:BA:1657:C:H2'	36:BA:1658:C:O4'	2.16	0.45
36:BA:1658:C:OP1	40:BE:132:HIS:CE1	2.69	0.45
40:DE:98:PRO:HG3	40:DE:175:VAL:HG12	1.98	0.45
49:BQ:34:LEU:HD12	49:BQ:130:LYS:C	2.37	0.45
1:AA:584:G:H2'	1:AA:585:G:H8	1.77	0.45
3:CC:35:GLU:O	3:CC:37:GLN:N	2.50	0.45
1:CA:495:A:H1'	1:CA:496:A:C8	2.50	0.45
39:DD:249:PRO:CD	39:DD:250:TRP:H	2.30	0.45
25:CZ:368:VAL:CG1	25:CZ:369:THR:H	2.12	0.45
39:BD:223:GLY:HA3	39:BD:231:HIS:CD2	2.51	0.45
1:AA:1240:U:H3'	1:AA:1241:G:C5'	2.46	0.45
36:DA:2243:U:H2'	36:DA:2244:U:H6	1.73	0.45
36:DA:2071:A:C2	36:DA:2441:C:N3	2.83	0.45
49:DQ:48:GLU:O	49:DQ:50:ALA:N	2.49	0.45
25:CZ:363:MET:O	25:CZ:366:ASP:HB2	2.16	0.45
36:DA:2454:G:O2'	36:DA:2455:G:C5'	2.64	0.45
36:DA:2358:G:H2'	36:DA:2359:C:O4'	2.15	0.45
36:BA:2133:G:N1	36:BA:2157:G:O6	2.49	0.45
36:DA:2020:A:HO2'	36:DA:2021:C:H5'	1.80	0.45
20:AT:63:ILE:O	20:AT:66:ALA:HB3	2.16	0.45
36:BA:2373:G:O2'	36:BA:2374:C:H5'	2.16	0.45
58:DZ:101:PRO:C	58:DZ:102:LEU:HD23	2.36	0.45
36:DA:1313:U:H3'	36:DA:1314:C:H5'	1.99	0.45
1:CA:719:C:C5	1:CA:720:C:C4	3.04	0.45
48:DP:114:ILE:CG2	48:DP:130:PHE:HA	2.47	0.45
36:DA:978:G:C2	36:DA:979:G:H1'	2.51	0.45
7:AG:79:ARG:HG3	7:AG:84:ASN:N	2.31	0.45
36:BA:848:G:H2'	36:BA:849:A:C8	2.51	0.45
1:CA:1095:U:C5'	1:CA:1109:C:O2	2.64	0.45
12:CL:93:LEU:O	12:CL:94:PRO:O	2.35	0.45
57:BY:2:ARG:CD	57:BY:3:VAL:HG23	2.45	0.45
1:CA:458:C:H2'	1:CA:460:G:C8	2.50	0.45
36:BA:2720:U:H3'	36:BA:2721:A:H8	1.80	0.45
36:DA:2720:U:C2	36:DA:2721:A:C8	3.05	0.45
1:AA:9:G:H1	1:AA:25:C:N4	2.14	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:189(J):G:O2'	1:CA:189(K):U:H5'	2.15	0.45
1:CA:189(K):U:H2'	1:CA:189(L):G:C8	2.51	0.45
22:AW:59:U:O2	22:AW:59:U:H2'	2.16	0.45
38:DC:47:LEU:HD11	38:DC:171:ILE:CG2	2.46	0.45
58:BZ:14:LYS:HB2	58:BZ:17:ALA:CB	2.47	0.45
58:BZ:17:ALA:CA	58:BZ:20:ARG:HG2	2.45	0.45
1:AA:1114:C:O2	1:AA:1114:C:H2'	2.16	0.45
36:DA:873:G:H2'	36:DA:874:G:H8	1.80	0.45
36:DA:876:C:H2'	36:DA:877:U:O4'	2.16	0.45
1:AA:1006:C:H2'	1:AA:1007:C:C6	2.50	0.45
36:DA:1865:G:H5'	36:DA:1866:C:OP2	2.15	0.45
36:BA:332:A:O2'	36:BA:333:G:O5'	2.34	0.45
36:BA:1196:C:O4'	36:BA:1226:A:C2	2.68	0.45
22:CV:32:U:H5'	22:CV:33:U:OP2	2.16	0.45
1:AA:175:C:H4'	20:AT:25:ARG:CZ	2.46	0.45
1:CA:1057:G:H2'	1:CA:1058:G:C8	2.51	0.45
58:DZ:158:PRO:HD2	58:DZ:161:VAL:HB	1.97	0.45
49:BQ:76:LYS:HB2	49:BQ:91:GLU:HG3	1.98	0.45
19:CS:32:LYS:HA	19:CS:50:ALA:HB3	1.97	0.45
1:AA:27:G:H2'	1:AA:28:G:C8	2.51	0.45
36:BA:2439:A:C8	36:BA:2586:C:H4'	2.50	0.45
32:B6:10:LEU:CD2	32:B6:10:LEU:H	2.27	0.45
34:B8:43:GLN:C	34:B8:44:LYS:HD2	2.36	0.45
26:B0:43:THR:HG21	36:BA:2332:U:H5'	1.99	0.45
39:DD:270:ILE:C	39:DD:271:ILE:HG13	2.36	0.45
36:BA:497:A:C6	36:BA:498:G:C6	3.05	0.45
34:D8:62:LEU:N	34:D8:63:PRO:HD2	2.31	0.45
25:AZ:177:LEU:N	25:AZ:177:LEU:HD12	2.31	0.45
25:AZ:26:THR:O	25:AZ:29:ALA:N	2.49	0.45
28:D2:34:GLU:O	28:D2:37:PHE:HD1	1.99	0.45
41:DF:40:GLN:NE2	41:DF:184:TYR:HB3	2.30	0.45
25:AZ:234:ARG:HE	25:AZ:289:LEU:HD22	1.79	0.45
41:DF:62:ARG:HG2	41:DF:62:ARG:NH1	2.31	0.45
41:BF:182:ASN:ND2	41:BF:185:ASP:OD2	2.49	0.45
41:BF:31:HIS:O	41:BF:34:TRP:N	2.49	0.45
4:AD:20:TYR:CD1	4:AD:20:TYR:N	2.84	0.45
28:B2:32:LEU:HA	28:B2:53:LEU:CD1	2.42	0.45
36:BA:319:C:H2'	36:BA:320:A:O4'	2.16	0.45
36:BA:1652:A:O2'	36:BA:1653:G:H5'	2.16	0.45
31:B5:4:HIS:O	36:BA:2056:G:N1	2.48	0.45
40:BE:198:VAL:O	40:BE:199:ARG:HB2	2.15	0.45
50:BR:2:ARG:HG3	50:BR:2:ARG:NH1	2.30	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BR:6:SER:OG	50:BR:8:ARG:NH2	2.50	0.45
37:BB:44:G:H1'	37:BB:47:C:N4	2.31	0.45
36:DA:372:G:H1'	36:DA:373:U:H5	1.81	0.45
36:DA:2028:U:O4	36:DA:2033:A:OP1	2.33	0.45
54:DV:18:LEU:O	54:DV:19:LYS:HB3	2.17	0.45
54:DV:39:LEU:N	54:DV:39:LEU:CD2	2.75	0.45
1:AA:113:G:C2	1:AA:315:A:C2	3.03	0.45
16:AP:6:LEU:HB3	16:AP:17:TYR:HB3	1.98	0.45
1:CA:1055:A:H2'	1:CA:1055:A:N3	2.30	0.45
1:CA:994:A:C2	1:CA:995:C:C5	3.05	0.45
4:CD:52:SER:C	4:CD:54:TYR:N	2.67	0.45
8:AH:138:TRP:OXT	8:AH:138:TRP:HE3	1.99	0.45
8:AH:36:LEU:C	8:AH:38:ILE:N	2.70	0.45
2:CB:165:VAL:O	2:CB:167:PRO:CD	2.65	0.45
48:BP:107:LYS:C	48:BP:109:GLY:N	2.68	0.45
13:AM:86:CYS:O	13:AM:87:TYR:C	2.50	0.45
1:AA:1287:A:H2'	1:AA:1288:A:H8	1.81	0.45
1:CA:375:U:H4'	16:CP:17:TYR:HE2	1.81	0.45
29:D3:15:TYR:HD2	29:D3:19:GLN:NE2	2.01	0.45
1:AA:967:C:H4'	9:AI:125:TYR:CE2	2.51	0.45
1:AA:1398:A:H61	5:AE:21:ALA:HA	1.81	0.45
36:BA:1344:G:N2	36:BA:1404:C:H1'	2.30	0.45
36:DA:2105:C:H2'	36:DA:2106:G:H8	1.81	0.45
35:B9:26:ILE:CG2	35:B9:27:CYS:N	2.80	0.45
46:BN:134:ARG:HH21	46:BN:136:GLU:HB2	1.80	0.45
46:BN:134:ARG:O	46:BN:136:GLU:N	2.48	0.45
1:CA:864:A:N7	1:CA:865:A:C6	2.83	0.45
36:BA:1591:G:H2'	36:BA:1592:C:H5'	1.98	0.45
36:DA:2592:G:N7	36:DA:2593:U:C5	2.84	0.45
41:BF:9:ILE:HA	41:BF:13:SER:O	2.16	0.45
2:AB:201:ILE:O	2:AB:201:ILE:HG22	2.16	0.45
19:CS:51:VAL:CG2	19:CS:71:LEU:HB3	2.47	0.45
36:DA:139:G:H3'	36:DA:139(A):G:H5''	1.98	0.45
49:DQ:27:VAL:N	49:DQ:137:TYR:HD1	2.14	0.45
58:DZ:52:SER:O	58:DZ:53:ILE:CG2	2.59	0.45
31:B5:16:ARG:HG2	31:B5:16:ARG:NH1	2.31	0.45
36:BA:539:G:H2'	36:BA:540:C:H6	1.81	0.45
1:AA:1523:G:C6	1:AA:1524:C:N4	2.85	0.45
1:CA:1463:C:H5'	52:DT:115:ARG:NH2	2.31	0.45
36:BA:1572:A:O2'	36:BA:1573:G:H5'	2.16	0.45
13:CM:49:THR:HG22	13:CM:51:ALA:N	2.22	0.45
36:BA:2307:G:H21	36:BA:2308:G:C5'	2.28	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BG:41:GLN:HB3	42:BG:43:LEU:CD2	2.46	0.45
21:AU:5:ASP:HB3	21:AU:8:THR:HG23	1.97	0.45
36:DA:466:A:C2'	36:DA:467:G:H5'	2.47	0.45
42:DG:170:ARG:NH2	42:DG:180:PHE:CD1	2.85	0.45
13:AM:66:LEU:O	13:AM:70:LEU:CB	2.65	0.45
40:DE:4:ILE:HD12	40:DE:92:THR:O	2.15	0.45
25:CZ:390:GLU:HB3	25:CZ:395:VAL:HG11	1.98	0.45
49:BQ:27:VAL:N	49:BQ:137:TYR:HD1	2.14	0.45
36:BA:1222:C:OP2	54:BV:88:ARG:NH2	2.50	0.45
1:AA:1145:C:O2'	1:AA:1146:A:O5'	2.34	0.45
8:CH:17:THR:HB	8:CH:78:GLN:HE22	1.81	0.45
10:CJ:65:LEU:CD1	14:CN:56:VAL:N	2.69	0.45
49:DQ:44:ALA:N	49:DQ:45:GLN:HE21	2.14	0.45
24:CY:69:C:H2'	24:CY:70:A:C8	2.50	0.45
36:BA:372:G:H1'	36:BA:373:U:H5	1.81	0.45
4:AD:145:GLU:CG	4:AD:184:LYS:HG2	2.45	0.45
1:CA:495:A:H61	4:CD:119:GLN:NE2	2.13	0.45
2:AB:111:ARG:O	2:AB:115:LEU:N	2.47	0.45
36:DA:782:A:N1	39:DD:226:MET:HE2	2.31	0.45
25:CZ:362:VAL:HG11	25:CZ:368:VAL:HG21	1.98	0.45
39:BD:232:PRO:CD	39:BD:249:PRO:HA	2.35	0.45
39:BD:249:PRO:CD	39:BD:250:TRP:H	2.29	0.45
36:DA:2842:G:H1	36:DA:2875:C:H42	1.64	0.45
1:AA:677:U:H2'	1:AA:678:U:C6	2.51	0.45
1:CA:226:G:HO2'	1:CA:227:G:H5'	1.77	0.45
1:AA:181:G:H4'	1:AA:182:U:O5'	2.16	0.45
36:BA:1600:C:OP1	56:BX:58:HIS:NE2	2.49	0.45
23:CX:22:A:C5	23:CX:23:C:C5	3.04	0.45
1:AA:1431:C:H2'	1:AA:1432:G:C5'	2.46	0.45
48:DP:83:VAL:O	48:DP:115:LEU:HD23	2.16	0.45
36:BA:1491:G:O2'	36:BA:1492:G:H5'	2.15	0.45
1:AA:695:A:H2'	1:AA:696:A:O4'	2.16	0.45
2:AB:36:ARG:N	2:AB:41:ILE:HD13	2.23	0.45
12:CL:60:LEU:C	12:CL:62:SER:H	2.18	0.45
1:CA:1269:A:H2'	1:CA:1270:C:C5'	2.47	0.45
36:BA:2450:A:C2	36:BA:2451:A:C4	3.03	0.45
14:CN:42:ILE:HG22	14:CN:43:CYS:H	1.80	0.45
1:AA:734:G:H8	1:AA:734:G:O5'	1.99	0.45
36:BA:761:A:H8	36:BA:761:A:P	2.38	0.45
18:CR:35:ARG:O	18:CR:37:VAL:N	2.48	0.45
17:CQ:99:SER:O	17:CQ:100:LYS:CG	2.63	0.45
39:BD:214:TRP:C	39:BD:216:GLY:N	2.64	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:DC:106:GLY:O	38:DC:107:TRP:HB2	2.15	0.45
1:CA:1254:C:H2'	1:CA:1255:G:C8	2.51	0.45
1:AA:1327:C:OP1	21:AU:20:LYS:N	2.39	0.45
36:BA:940:G:H3'	36:BA:941:A:H5''	1.99	0.45
36:BA:384:U:H2'	36:BA:385:C:C6	2.49	0.45
36:BA:2688:U:O2	36:BA:2719:G:C2	2.69	0.45
36:BA:1713:U:O2'	36:BA:1714:G:H5'	2.16	0.45
5:AE:98:THR:HG22	5:AE:99:GLY:N	2.31	0.45
36:BA:1186:G:O2'	36:BA:1187:G:H5'	2.17	0.45
36:DA:654(L):G:H2'	36:DA:654(M):C:H4'	1.98	0.45
4:AD:158:ILE:O	4:AD:162:LEU:HB2	2.16	0.45
36:BA:1705:G:C2'	36:BA:1706:U:H5'	2.46	0.45
25:CZ:361:MET:HG3	25:CZ:361:MET:O	2.17	0.45
20:AT:23:ARG:NH1	20:AT:23:ARG:HG2	2.31	0.45
36:DA:1567:A:H2'	39:DD:84:TYR:HE2	1.81	0.45
3:AC:131:ARG:NH2	3:AC:167:TRP:O	2.48	0.45
36:BA:2601:C:H2'	36:BA:2603:G:C8	2.50	0.45
25:AZ:114:PRO:HG2	36:BA:2660:A:H4'	1.98	0.45
36:BA:1961:C:H2'	36:BA:1962:C:O4'	2.16	0.45
30:D4:13:ARG:O	30:D4:13:ARG:HG3	2.16	0.45
15:AO:75:PRO:O	15:AO:79:ARG:HG3	2.17	0.45
26:B0:41:ARG:HA	26:B0:41:ARG:HD2	1.77	0.45
34:B8:8:LYS:HA	34:B8:11:LYS:CB	2.45	0.45
36:BA:673:C:HO2'	36:BA:674:G:H5'	1.80	0.45
53:BU:12:ARG:O	53:BU:16:LYS:HD2	2.16	0.45
36:DA:2870:C:O2'	36:DA:2871:C:H5'	2.15	0.45
50:DR:13:HIS:CE1	50:DR:16:HIS:HB3	2.52	0.45
48:DP:79:ARG:HH22	48:DP:81:GLN:HE21	1.63	0.45
25:AZ:163:PHE:CD1	25:AZ:164:PRO:HD2	2.51	0.45
25:AZ:195:TRP:HA	25:AZ:198:LYS:HB2	1.98	0.45
36:BA:377:C:O2	36:BA:398:G:C2	2.69	0.45
1:AA:367:U:H4'	25:AZ:291:ARG:HH11	1.81	0.45
38:DC:117:PRO:HD3	38:DC:146:GLY:H	1.80	0.45
36:BA:1569:A:H4'	39:BD:61:LEU:HD21	1.98	0.45
36:BA:1798:U:C5'	39:BD:259:THR:HB	2.46	0.45
39:BD:266:SER:O	39:BD:267:SER:O	2.34	0.45
36:BA:1567:A:H2'	39:BD:84:TYR:HE2	1.82	0.45
36:DA:1889:A:N1	36:DA:2234:G:H1'	2.31	0.45
1:AA:1175:G:C6	1:AA:1176:A:C6	3.04	0.45
1:AA:1054:C:OP1	1:AA:1198:G:OP2	2.35	0.45
1:AA:963:G:N2	10:AJ:55:LYS:HD3	2.27	0.45
36:BA:2761:G:C3'	36:BA:2762:G:H5''	2.44	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BQ:51:ARG:HG3	49:BQ:51:ARG:HH11	1.82	0.45
28:B2:33:MET:HG3	28:B2:37:PHE:CE1	2.51	0.45
28:B2:38:GLN:OE1	28:B2:44:LEU:HD21	2.17	0.45
36:BA:297:C:H2'	36:BA:298:G:O4'	2.15	0.45
41:BF:155:LEU:HG	41:BF:155:LEU:O	2.16	0.45
13:AM:14:ARG:H	13:AM:44:ARG:NH1	2.14	0.45
53:DU:14:HIS:C	53:DU:16:LYS:H	2.20	0.45
54:DV:4:ILE:O	54:DV:39:LEU:HD22	2.16	0.45
54:DV:47:VAL:O	54:DV:49:THR:O	2.34	0.45
54:DV:49:THR:CB	54:DV:50:PRO:HD2	2.45	0.45
1:AA:352:C:H2'	1:AA:352:C:O2	2.17	0.45
1:CA:1157:A:H1'	1:CA:1181:G:H21	1.80	0.45
1:AA:262:A:N1	1:AA:263:A:C2	2.84	0.45
2:CB:8:LYS:NZ	2:CB:217:ARG:CZ	2.78	0.45
41:DF:174:VAL:HG21	41:DF:189:THR:CG2	2.47	0.45
1:CA:813:U:O2'	1:CA:814:A:H5'	2.16	0.45
48:BP:105:LEU:H	48:BP:105:LEU:CD1	2.27	0.45
36:DA:1403:C:C2'	36:DA:1404:C:O5'	2.63	0.45
36:DA:2808:U:O4	36:DA:2892:A:C8	2.70	0.45
5:AE:107:ARG:HG3	5:AE:111:GLU:CD	2.37	0.45
25:CZ:35:ALA:HB3	25:CZ:70:TYR:HB2	1.99	0.45
52:BT:28:VAL:HG13	52:BT:45:PHE:C	2.36	0.45
58:BZ:10:ARG:CG	58:BZ:12:GLY:H	2.29	0.45
58:BZ:39:VAL:O	58:BZ:39:VAL:HG23	2.16	0.45
36:DA:347:A:H2'	36:DA:348:G:H8	1.81	0.45
7:AG:106:GLN:O	7:AG:109:ASN:N	2.49	0.45
7:AG:25:ALA:HA	7:AG:28:ASN:ND2	2.31	0.45
7:AG:31:MET:SD	7:AG:36:LYS:N	2.89	0.45
9:AI:118:LYS:C	9:AI:120:ARG:H	2.20	0.45
10:AJ:62:HIS:H	10:AJ:62:HIS:CD2	2.35	0.45
36:BA:2672:G:C3'	36:BA:2673:G:H5''	2.47	0.45
37:DB:81:G:C2	37:DB:82:G:N7	2.84	0.45
58:DZ:150:LEU:HD23	58:DZ:150:LEU:N	2.31	0.45
1:CA:1368:G:OP2	9:CI:112:LYS:HD2	2.16	0.45
19:AS:51:VAL:CG2	19:AS:71:LEU:HB3	2.47	0.45
4:AD:104:VAL:O	4:AD:105:VAL:C	2.55	0.45
51:DS:29:PHE:C	51:DS:29:PHE:HD2	2.20	0.45
36:DA:2123:G:O4'	38:DC:172:HIS:HB2	2.16	0.45
1:AA:1419:G:H2'	1:AA:1419:G:N3	2.31	0.45
1:AA:865:A:C2	1:AA:918:A:H4'	2.51	0.45
55:BW:6:ILE:CG2	55:BW:7:ALA:N	2.79	0.45
36:BA:1591:G:C2'	36:BA:1592:C:H5'	2.46	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1773:A:C2'	36:DA:1774:C:H5'	2.47	0.45
55:DW:50:VAL:HG22	55:DW:105:VAL:CG2	2.46	0.45
55:DW:2:GLU:N	55:DW:64:MET:HE3	2.31	0.45
2:AB:51:LEU:O	2:AB:52:GLU:C	2.55	0.45
19:CS:36:ARG:HH22	19:CS:75:ALA:HB3	1.80	0.45
3:AC:125:GLU:OE2	3:AC:190:ARG:N	2.49	0.45
16:CP:13:HIS:O	16:CP:15:PRO:HD3	2.15	0.45
1:CA:80:G:N2	1:CA:90:U:H5'	2.30	0.45
36:BA:1264:G:O3'	36:BA:2615:U:H5'	2.16	0.45
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.98	0.45
1:AA:811:C:H4'	1:AA:900:A:H61	1.75	0.45
36:BA:1154:G:H5''	53:BU:59:ARG:HH22	1.81	0.45
46:BN:111:PRO:HA	46:BN:114:ARG:CZ	2.46	0.45
36:BA:1392:A:N7	36:BA:1393:A:C5	2.84	0.45
39:BD:131:LEU:CB	39:BD:132:PRO:CD	2.94	0.45
36:DA:1376:C:H2'	36:DA:1377:G:C5'	2.47	0.45
39:DD:37:LEU:O	39:DD:38:LYS:C	2.55	0.45
48:DP:16:ARG:HG3	48:DP:17:LYS:H	1.81	0.45
36:BA:1579:A:H2'	36:BA:1580:A:C8	2.51	0.45
42:BG:54:GLU:O	42:BG:57:ALA:N	2.48	0.45
42:DG:59:GLU:HG3	42:DG:60:LEU:N	2.31	0.45
43:DH:89:ILE:O	43:DH:129:THR:HB	2.16	0.45
36:BA:722:A:N3	36:BA:722:A:H2'	2.32	0.45
1:CA:584:G:OP2	17:CQ:87:LYS:NZ	2.48	0.45
5:CE:75:THR:OG1	5:CE:76:ILE:N	2.49	0.45
43:BH:117:PRO:HB3	43:BH:123:PHE:CE1	2.51	0.45
24:AY:50:G:N2	24:AY:65:C:H1'	2.31	0.45
24:AY:5:A:H2'	24:AY:6:U:C6	2.50	0.45
53:BU:68:ALA:HB1	53:BU:106:PHE:HE2	1.80	0.45
42:DG:42:GLY:CA	42:DG:90:LEU:H	2.28	0.45
25:CZ:99:MET:HG3	25:CZ:128:VAL:HG22	1.97	0.45
25:CZ:246:LYS:HD3	25:CZ:281:ILE:HG22	1.96	0.45
1:AA:319:G:C2'	1:AA:320:C:H5'	2.46	0.45
15:AO:82:ILE:O	15:AO:86:GLY:N	2.46	0.45
14:CN:55:GLY:O	14:CN:56:VAL:C	2.55	0.45
49:DQ:45:GLN:HE21	49:DQ:45:GLN:N	2.12	0.45
36:DA:598:G:H5'	48:DP:15:ARG:CB	2.45	0.45
41:BF:150:GLY:HA2	41:BF:172:TRP:CE2	2.51	0.45
1:AA:662:G:H2'	1:AA:663:A:C8	2.44	0.45
26:D0:78:TYR:CD1	26:D0:78:TYR:N	2.85	0.45
36:BA:2275:C:H2'	36:BA:2275:C:OP1	2.15	0.45
41:DF:46:ARG:NH1	41:DF:46:ARG:CG	2.73	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:AP:58:TYR:O	16:AP:62:VAL:HG22	2.15	0.45
27:D1:71:TYR:O	27:D1:73:LEU:N	2.49	0.45
54:BV:91:TYR:CD1	54:BV:92:THR:N	2.84	0.45
54:BV:91:TYR:HD1	54:BV:92:THR:N	2.14	0.45
1:CA:182:U:OP2	1:CA:183:G:OP2	2.33	0.45
36:DA:742:G:H2'	36:DA:743:G:C8	2.52	0.45
18:CR:52:PRO:O	18:CR:53:ARG:C	2.52	0.45
18:CR:53:ARG:N	18:CR:63:GLN:NE2	2.64	0.45
1:AA:1313:U:P	19:AS:6:LYS:HB2	2.56	0.45
25:CZ:309:SER:O	25:CZ:310:ILE:HB	2.16	0.45
1:CA:1434:A:H2'	1:CA:1435:G:O4'	2.16	0.45
47:DO:8:LEU:HD13	47:DO:8:LEU:N	2.31	0.45
36:BA:978:G:N2	36:BA:979:G:H1'	2.30	0.45
1:CA:1132:C:O2'	1:CA:1133:G:H5'	2.16	0.45
1:CA:1093:A:N3	1:CA:1095:U:H5'	2.31	0.45
1:CA:1096:C:O2'	1:CA:1097:C:H5'	2.17	0.45
36:BA:732:C:H2'	36:BA:733:G:C8	2.52	0.45
1:CA:602:A:H2'	1:CA:603:U:H6	1.81	0.45
1:AA:622:A:C8	1:AA:623:C:C6	3.04	0.45
1:AA:782:A:C2'	1:AA:783:C:H5'	2.46	0.45
46:DN:7:LYS:O	46:DN:9:VAL:N	2.50	0.45
51:DS:77:ALA:O	51:DS:80:LEU:N	2.47	0.45
1:CA:630:G:C2'	1:CA:631:G:H5'	2.46	0.45
48:DP:71:VAL:HG13	48:DP:72:PRO:CD	2.46	0.45
16:AP:45:THR:O	16:AP:47:ASP:N	2.48	0.45
4:CD:159:ARG:O	4:CD:162:LEU:N	2.49	0.45
1:CA:784:C:H2'	1:CA:785:G:C8	2.51	0.45
5:CE:7:GLU:CB	5:CE:112:LEU:HD21	2.46	0.45
2:CB:157:ARG:CZ	2:CB:157:ARG:HB3	2.47	0.45
36:DA:363(A):A:N3	36:DA:363(A):A:H2'	2.32	0.45
1:AA:429:U:H1'	1:AA:430:A:H5''	1.98	0.45
36:BA:2851:A:H2'	36:BA:2852:G:H5'	1.99	0.45
36:BA:1450(A):C:H2'	36:BA:1450(A):C:O2	2.17	0.45
8:CH:54:ASP:O	8:CH:56:LYS:HG3	2.16	0.45
36:BA:70:G:H2'	36:BA:113:G:O2'	2.16	0.45
3:CC:139:GLN:HA	3:CC:139:GLN:OE1	2.16	0.45
1:CA:534:U:H5'	1:CA:534:U:H6	1.82	0.45
17:AQ:24:GLU:HA	17:AQ:39:SER:HA	1.98	0.45
54:DV:32:THR:HG22	54:DV:33:VAL:N	2.31	0.45
36:BA:1216:G:N2	36:BA:1217:C:H1'	2.32	0.45
36:BA:2414:G:H21	48:BP:67:MET:HE1	1.82	0.45
36:DA:1613:G:C3'	36:DA:1614:A:H5''	2.46	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2400:G:H2'	36:DA:2401:U:H5'	1.99	0.45
36:DA:251:A:H2'	36:DA:252:G:C5'	2.46	0.45
48:DP:121:LYS:O	48:DP:123:LEU:N	2.38	0.45
25:AZ:189:ARG:NE	25:AZ:190:ARG:HG2	2.31	0.45
25:AZ:200:TRP:O	25:AZ:204:ASP:N	2.50	0.45
25:AZ:202:LEU:C	25:AZ:204:ASP:H	2.19	0.45
36:DA:84:A:C5'	57:DY:9:LYS:HD2	2.35	0.45
39:BD:261:LYS:NZ	39:BD:263:ARG:NH1	2.65	0.45
24:CY:60:U:C5'	24:CY:61:C:H5	2.30	0.45
5:CE:51:VAL:HB	5:CE:52:PRO:CD	2.47	0.45
36:DA:2761:G:C3'	36:DA:2762:G:H5''	2.45	0.45
38:DC:75:LEU:HD12	38:DC:75:LEU:C	2.37	0.45
36:BA:1380:G:C4	36:BA:1381:G:N7	2.84	0.45
36:DA:1857:G:O2'	36:DA:1885:A:N6	2.50	0.45
9:AI:97:LYS:N	9:AI:98:PRO:CD	2.79	0.45
41:BF:115:ALA:O	41:BF:118:ALA:N	2.48	0.45
36:BA:2756:U:C1'	36:BA:2757:A:H5''	2.44	0.45
43:BH:46:GLU:HB3	43:BH:50:VAL:CG1	2.47	0.45
43:BH:65:HIS:O	43:BH:67:LEU:N	2.49	0.45
43:BH:68:THR:C	43:BH:70:THR:N	2.69	0.45
43:DH:67:LEU:CG	43:DH:71:LEU:HD11	2.37	0.45
28:B2:38:GLN:HB3	28:B2:44:LEU:CG	2.45	0.45
28:B2:35:LEU:HD21	28:B2:50:ILE:CD1	2.46	0.45
28:B2:59:ARG:CB	36:BA:76:C:O2'	2.65	0.45
36:BA:71:A:C5	36:BA:73:A:N1	2.85	0.45
37:BB:42:C:N4	42:BG:91:ARG:NH2	2.65	0.45
36:DA:2028:U:C2'	36:DA:2029:G:O4'	2.63	0.45
46:DN:24:GLY:C	46:DN:26:LEU:H	2.15	0.45
53:DU:52:ARG:CZ	53:DU:55:ARG:NH2	2.75	0.45
2:AB:223:ILE:O	2:AB:226:ARG:N	2.49	0.45
1:CA:1173:G:H2'	1:CA:1174:G:C8	2.51	0.45
1:CA:511:C:N4	1:CA:541:G:C2	2.85	0.45
1:CA:517:G:H5'	1:CA:519:C:C2	2.51	0.45
2:CB:170:GLU:O	2:CB:173:ALA:HB3	2.17	0.45
36:DA:319:C:H2'	36:DA:320:A:O4'	2.16	0.45
36:DA:1520:G:H2'	36:DA:1523:U:C5'	2.46	0.45
5:AE:102:ALA:HA	5:AE:120:THR:CG2	2.46	0.45
56:BX:49:VAL:CB	56:BX:87:GLN:NE2	2.79	0.45
52:BT:92:GLY:HA3	52:BT:120:ARG:NH2	2.31	0.45
36:BA:2786:U:C4	36:BA:2787:C:C5	3.04	0.45
40:BE:62:PRO:C	40:BE:64:LYS:N	2.68	0.45
58:BZ:127:LYS:HD2	58:BZ:162:GLU:OE2	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:934:C:C5	1:CA:1344:C:C4	3.05	0.45
7:CG:116:ALA:HA	7:CG:119:ARG:NH1	2.32	0.45
24:AY:56:C:O4'	36:BA:1067:A:H1'	2.17	0.45
57:BY:27:VAL:HG12	57:BY:28:LYS:N	2.32	0.45
57:BY:77:PRO:HB2	57:BY:99:CYS:HG	1.75	0.45
42:BG:121:ASN:OD1	42:BG:123:ASN:N	2.50	0.45
36:DA:2115:G:C2	36:DA:2117:A:C8	3.04	0.45
46:BN:14:VAL:HG12	46:BN:15:LEU:N	2.32	0.45
1:AA:1015:A:H2'	1:AA:1016:A:O4'	2.16	0.45
1:CA:863:U:H2'	1:CA:864:A:C5'	2.47	0.45
2:AB:22:LYS:HE3	2:AB:40:HIS:CE1	2.52	0.45
36:DA:491:G:H2'	36:DA:492:A:O4'	2.17	0.45
10:CJ:21:GLN:C	10:CJ:23:ILE:H	2.19	0.45
13:CM:68:GLY:C	13:CM:70:LEU:N	2.61	0.45
36:BA:445:C:H5''	53:BU:3:ARG:HB2	1.98	0.45
36:BA:727:A:H2'	36:BA:728:G:C8	2.51	0.45
36:BA:729:G:C8	39:BD:208:LYS:HD2	2.52	0.45
37:DB:106:G:H5''	58:DZ:31:ARG:HB3	1.99	0.45
58:DZ:44:PHE:CE1	58:DZ:48:PHE:CG	3.05	0.45
14:CN:9:LYS:HA	14:CN:12:ARG:NH2	2.32	0.45
46:BN:114:ARG:O	46:BN:117:PHE:HB3	2.16	0.45
36:BA:1334:G:H2'	36:BA:1335:U:H6	1.82	0.45
42:BG:44:GLY:C	42:BG:46:ALA:N	2.70	0.45
1:AA:1325:C:H5'	21:AU:15:ARG:NE	2.31	0.45
42:DG:104:GLU:C	42:DG:106:LEU:N	2.69	0.45
36:BA:1541:G:C1'	36:BA:1542:A:C4	2.94	0.45
36:BA:1548:C:H2'	36:BA:1549:C:C6	2.51	0.45
1:CA:600:C:OP2	8:CH:97:VAL:HG12	2.15	0.45
43:BH:92:ILE:C	43:BH:94:TYR:N	2.59	0.45
2:AB:28:PHE:O	2:AB:28:PHE:CD1	2.69	0.45
1:AA:1435:G:C6	1:AA:1436:U:O4	2.70	0.45
38:DC:100:ILE:HG21	38:DC:126:LYS:HB2	1.97	0.45
38:DC:130:ILE:C	38:DC:132:GLY:H	2.17	0.45
1:CA:828:A:N6	1:CA:858:G:O2'	2.49	0.45
2:CB:178:ARG:NH1	8:CH:74:PRO:HD3	2.32	0.45
3:CC:29:TYR:HE1	10:CJ:65:LEU:HD21	1.82	0.45
3:CC:32:LEU:HD22	3:CC:59:ARG:NH2	2.32	0.45
36:DA:598:G:C5'	48:DP:15:ARG:HD3	2.35	0.45
24:CY:70:A:C2	24:CY:71:G:C8	3.05	0.45
27:D1:79:GLY:HA2	36:DA:271(H):G:H21	1.81	0.45
36:BA:882:G:N2	36:BA:895:U:C2	2.84	0.45
36:DA:45:C:OP2	36:DA:215:G:H2'	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BE:107:THR:C	40:BE:190:GLY:HA2	2.35	0.45
56:DX:57:LEU:CD1	56:DX:57:LEU:N	2.79	0.45
36:DA:1628:G:O2'	36:DA:1629:U:H5'	2.17	0.45
36:BA:2133:G:H3'	36:BA:2133:G:H8	1.81	0.45
1:CA:657:G:H1	1:CA:749:C:N4	2.14	0.45
1:AA:493:G:H8	1:AA:493:G:O5'	1.98	0.45
48:BP:83:VAL:HG12	48:BP:113:LYS:O	2.17	0.45
54:BV:75:PHE:HB2	54:BV:82:ARG:HG3	1.98	0.45
18:CR:32:ARG:HA	18:CR:69:THR:HG21	1.98	0.45
33:D7:11:LYS:HE3	33:D7:15:THR:HG21	1.98	0.45
36:DA:685:A:N1	36:DA:787:U:H1'	2.31	0.45
36:DA:976:C:H2'	36:DA:977:G:C8	2.51	0.45
50:BR:85:PRO:O	50:BR:87:TYR:N	2.50	0.45
47:DO:25:LEU:HD11	47:DO:40:VAL:CG2	2.47	0.45
1:CA:1313:U:P	19:CS:6:LYS:HB2	2.57	0.45
39:DD:161:THR:N	39:DD:196:VAL:HB	2.31	0.45
40:BE:98:PRO:HG3	40:BE:175:VAL:HG12	1.97	0.45
1:CA:1381:U:C5	1:CA:1382:C:C4	3.04	0.45
36:BA:968:G:C6	36:BA:969:U:C4	3.04	0.45
36:DA:1053:C:C5	36:DA:1054:A:N7	2.84	0.45
55:BW:2:GLU:N	55:BW:64:MET:HE3	2.31	0.45
55:BW:62:HIS:O	55:BW:63:ASP:C	2.54	0.45
12:CL:27:LEU:O	12:CL:29:GLY:N	2.49	0.45
36:DA:2853:C:H2'	36:DA:2854:G:H8	1.80	0.45
38:BC:103:ILE:HG23	38:BC:107:TRP:CG	2.52	0.45
49:DQ:77:LYS:HD3	49:DQ:81:VAL:HG11	1.98	0.45
22:CW:59:U:O2	22:CW:59:U:H2'	2.16	0.45
46:BN:7:LYS:O	46:BN:9:VAL:N	2.50	0.45
9:CI:5:TYR:CD1	9:CI:6:GLY:N	2.83	0.45
51:DS:42:ASP:O	51:DS:44:LYS:N	2.39	0.45
46:BN:96:GLU:HG2	46:BN:100:GLU:OE2	2.16	0.45
25:CZ:263:ARG:HE	25:CZ:297:GLU:HB3	1.81	0.45
36:BA:123:G:C6	36:BA:124:G:C5	3.04	0.45
40:DE:108:SER:O	40:DE:162:ALA:CA	2.65	0.45
36:BA:1362:C:H2'	36:BA:1363:C:H5'	1.97	0.45
1:AA:823:G:N3	8:AH:1:MET:HE1	2.32	0.45
7:CG:91:VAL:HG22	7:CG:95:ARG:HD3	1.99	0.45
7:CG:94:ARG:O	7:CG:95:ARG:C	2.54	0.45
26:D0:39:ARG:HH21	36:DA:2354:G:H22	1.64	0.45
46:DN:96:GLU:H	46:DN:96:GLU:CD	2.19	0.45
20:AT:93:GLU:C	20:AT:95:ALA:H	2.18	0.45
36:BA:363:G:C2	36:BA:363(A):A:C8	3.04	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BR:75:LEU:HA	50:BR:75:LEU:HD22	1.79	0.45
22:CV:9:A:O2'	22:CV:10:G:N7	2.49	0.45
49:BQ:90:VAL:HG12	49:BQ:91:GLU:N	2.32	0.45
36:BA:2661:G:O2'	36:BA:2662:A:H5'	2.17	0.45
1:CA:1445:C:O2'	1:CA:1446:U:H5'	2.16	0.45
34:B8:54:GLU:O	34:B8:58:ILE:HG12	2.16	0.45
13:AM:84:ILE:HB	19:AS:74:PHE:HD1	1.81	0.45
46:BN:12:ARG:HG2	46:BN:50:ASP:OD2	2.16	0.45
1:AA:414:A:C2	1:AA:415:A:H1'	2.52	0.45
17:CQ:53:LEU:C	17:CQ:53:LEU:HD23	2.36	0.45
36:DA:642:G:H8	36:DA:642:G:O5'	1.98	0.45
22:AW:45:U:H3'	22:AW:45:U:H6	1.82	0.45
25:AZ:356:PRO:C	25:AZ:359:VAL:HG23	2.31	0.45
32:B6:19:ARG:CZ	36:BA:2400:G:O3'	2.64	0.45
36:BA:671:C:H2'	36:BA:672:C:C6	2.52	0.45
36:BA:811:U:C6	48:BP:24:GLY:HA3	2.51	0.45
36:DA:1811:G:H2'	36:DA:1812:A:H8	1.80	0.45
36:DA:2282:G:C4'	36:DA:2283:C:O5'	2.64	0.45
25:AZ:154:VAL:HG12	25:AZ:158:LEU:CD1	2.46	0.45
36:DA:71:A:OP2	36:DA:71:A:H3'	2.17	0.45
36:BA:1856:G:H2'	36:BA:1857:G:C5'	2.46	0.45
41:DF:31:HIS:HE1	41:DF:34:TRP:CZ3	2.35	0.45
5:CE:13:ILE:HA	5:CE:29:GLY:O	2.16	0.45
56:BX:23:GLU:N	56:BX:23:GLU:CD	2.70	0.45
57:DY:46:LYS:HB2	57:DY:62:GLU:HG3	1.95	0.45
36:BA:1351:C:N3	36:BA:1381:G:C2	2.84	0.45
39:BD:267:SER:C	39:BD:269:PHE:H	2.18	0.45
39:DD:261:LYS:HZ1	39:DD:263:ARG:NH1	2.13	0.45
36:DA:673:C:OP1	41:DF:54:ARG:HD2	2.16	0.45
1:AA:1176:A:H2'	1:AA:1177:G:C8	2.51	0.45
1:CA:273:A:H2'	1:CA:274:A:O4'	2.17	0.45
1:AA:1053:G:O6	1:AA:1199:U:H2'	2.16	0.45
1:AA:995:C:N4	1:AA:1046:A:H2'	2.31	0.45
43:DH:68:THR:C	43:DH:70:THR:N	2.70	0.45
36:DA:1131:G:N7	36:DA:2025:C:H4'	2.32	0.45
36:DA:27:G:H22	36:DA:512:G:H2'	1.74	0.45
36:DA:566:U:H4'	36:DA:809:G:OP2	2.17	0.45
1:AA:59:A:N6	1:AA:331:G:H1'	2.32	0.45
16:AP:30:GLY:O	16:AP:31:LYS:C	2.54	0.45
51:BS:98:VAL:HG12	51:BS:100:ALA:HB2	1.98	0.45
8:AH:6:ILE:N	8:AH:6:ILE:CD1	2.80	0.45
2:CB:17:PHE:C	2:CB:17:PHE:CD2	2.88	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:CF:69:GLU:CD	6:CF:69:GLU:N	2.66	0.45
36:BA:1666:G:H5'	36:BA:1666:G:H8	1.81	0.45
36:BA:2710:C:HO2'	36:BA:2711:A:H5'	1.80	0.45
52:BT:27:THR:HG23	52:BT:28:VAL:N	2.31	0.45
52:BT:61:PHE:N	52:BT:61:PHE:CD2	2.84	0.45
36:BA:2808:U:O4	36:BA:2892:A:C8	2.69	0.45
52:DT:49:VAL:C	52:DT:50:ILE:HD12	2.37	0.45
58:BZ:40:ASP:HB3	58:BZ:43:GLU:HB3	1.97	0.45
9:AI:10:ARG:HE	9:AI:10:ARG:CA	2.29	0.45
22:AV:49:C:O2'	22:AV:50:U:P	2.74	0.45
3:AC:196:LEU:HB3	3:AC:197:GLY:H	1.63	0.45
36:BA:1471:A:OP2	36:BA:1519:G:N1	2.50	0.45
41:BF:65:TRP:HB3	41:BF:66:PRO:CD	2.46	0.45
36:DA:2137:C:H42	36:DA:2154:G:H22	1.62	0.45
1:AA:1418:A:C8	1:AA:1419:G:H1'	2.52	0.45
36:DA:1770:G:C2'	36:DA:1771:C:H5'	2.47	0.45
36:DA:1770:G:O2'	36:DA:1771:C:H5'	2.17	0.45
3:CC:186:PHE:CD1	3:CC:198:VAL:O	2.70	0.45
3:CC:83:ARG:O	3:CC:85:ARG:N	2.49	0.45
4:CD:187:ARG:HG2	4:CD:188:LEU:N	2.31	0.45
4:CD:79:PHE:CA	4:CD:93:PHE:CE2	2.97	0.45
3:AC:36:ASP:O	3:AC:40:ARG:NH1	2.50	0.45
36:DA:1591:G:C2'	36:DA:1592:C:H5'	2.46	0.45
20:CT:23:ARG:HG2	20:CT:23:ARG:NH1	2.32	0.45
36:BA:17:G:H21	36:BA:555:U:H5''	1.81	0.45
41:DF:9:ILE:HG23	41:DF:13:SER:O	2.15	0.45
9:AI:18:PHE:O	9:AI:61:ALA:HA	2.16	0.45
46:BN:120:LEU:CD1	46:BN:122:VAL:HG23	2.45	0.45
46:BN:44:PRO:HG3	53:BU:60:LEU:HD21	1.98	0.45
46:BN:48:MET:SD	46:BN:49:GLY:N	2.89	0.45
54:BV:35:LEU:O	54:BV:37:VAL:N	2.50	0.45
36:BA:597:U:C5'	48:BP:15:ARG:NH2	2.79	0.45
42:BG:47:LYS:HG3	42:BG:81:LYS:HE2	1.98	0.45
42:DG:112:PRO:C	42:DG:114:ILE:H	2.19	0.45
43:BH:23:ARG:O	43:BH:24:VAL:CG2	2.58	0.45
1:CA:1256:A:N1	1:CA:1277:C:H2'	2.31	0.45
36:DA:2635:C:H2'	36:DA:2636:U:O5'	2.17	0.45
36:DA:2810:A:O2'	40:DE:61:ARG:NE	2.50	0.45
5:CE:145:LYS:HE2	5:CE:149:GLU:OE2	2.17	0.45
42:DG:68:PRO:HA	42:DG:92:VAL:HB	1.99	0.45
15:CO:77:ARG:HA	15:CO:80:ALA:HB3	1.98	0.45
1:AA:1436:U:H3	1:AA:1465:C:N4	2.10	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AO:74:ASP:OD2	15:AO:74:ASP:C	2.53	0.45
10:CJ:38:ILE:HD11	10:CJ:71:LEU:HG	1.99	0.45
10:CJ:6:ILE:O	10:CJ:6:ILE:HG13	2.16	0.45
10:AJ:38:ILE:HD11	10:AJ:71:LEU:HG	1.97	0.45
10:AJ:40:LEU:HB2	10:AJ:41:PRO:CD	2.40	0.45
1:CA:1522:U:H2'	1:CA:1523:G:H8	1.82	0.45
4:AD:24:GLU:H	4:AD:112:VAL:HG21	1.80	0.45
36:DA:2361:A:C4	36:DA:2362:G:C8	3.05	0.45
3:AC:7:PRO:HG3	3:AC:184:TYR:CD1	2.52	0.45
36:BA:883:G:N2	36:BA:893:C:C2	2.84	0.45
6:CF:10:LEU:HA	6:CF:84:ASN:O	2.16	0.45
1:AA:443:C:H2'	1:AA:444:C:H6	1.80	0.45
1:AA:1360:A:H2'	1:AA:1361:G:O4'	2.16	0.45
36:BA:1376:C:H2'	36:BA:1377:G:C5'	2.46	0.45
39:DD:73:VAL:HG13	39:DD:120:GLY:CA	2.46	0.45
1:AA:1246:C:O2'	1:AA:1247:U:H5'	2.17	0.45
36:BA:1141:U:H5	46:BN:64:GLY:HA3	1.79	0.45
1:CA:1401:G:H2'	1:CA:1402:C:O4'	2.17	0.45
1:CA:319:G:C2'	1:CA:320:C:H5'	2.46	0.45
36:BA:978:G:C2	36:BA:979:G:H1'	2.51	0.45
36:BA:218:A:C2'	36:BA:219:G:H5'	2.46	0.45
36:BA:431:U:H6	36:BA:431:U:O5'	2.00	0.45
40:BE:93:VAL:HG23	40:BE:180:ASN:OD1	2.17	0.45
1:AA:774:G:O2'	1:AA:775:G:H5'	2.17	0.45
36:BA:1051:G:H2'	36:BA:1052:C:C2	2.51	0.45
36:DA:2826:A:C2'	36:DA:2827:C:H5'	2.47	0.45
22:AW:56:C:H1'	38:BC:133:PRO:HD3	1.98	0.45
3:CC:90:GLU:C	3:CC:93:LYS:HB3	2.37	0.45
1:CA:921:U:H2'	1:CA:922:G:O4'	2.17	0.45
36:BA:806:C:H2'	36:BA:807:U:C6	2.52	0.45
36:DA:1945:G:C6	36:DA:1946:U:C4	3.04	0.45
47:BO:23:ARG:HG3	47:BO:24:VAL:H	1.79	0.45
36:DA:552:G:H1'	36:DA:1220:A:C6	2.50	0.45
1:CA:1258:G:O5'	1:CA:1258:G:H8	2.00	0.45
12:CL:10:LEU:O	12:CL:14:GLY:N	2.46	0.45
4:AD:150:GLU:CD	4:AD:151:LYS:N	2.68	0.45
36:DA:1974:C:C4	36:DA:1975:G:N7	2.85	0.45
5:AE:7:GLU:OE1	5:AE:37:ARG:NE	2.41	0.45
13:CM:115:LYS:O	13:CM:116:THR:O	2.35	0.45
40:BE:108:SER:O	40:BE:162:ALA:CA	2.63	0.45
17:AQ:27:PHE:CE1	17:AQ:36:ILE:HD11	2.51	0.45
1:AA:998:G:C2	1:AA:1044:A:N1	2.85	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BU:101:ARG:O	53:BU:102:GLU:C	2.55	0.45
2:AB:155:LEU:HD22	2:AB:157:ARG:O	2.16	0.45
36:BA:1706:U:O2	36:BA:1757:U:H5'	2.17	0.45
15:AO:34:LEU:HD12	15:AO:34:LEU:O	2.16	0.45
36:BA:363:G:C6	36:BA:363(A):A:N7	2.84	0.45
29:D3:45:GLY:HA2	29:D3:48:GLU:CG	2.47	0.45
36:DA:1953:A:H2	36:DA:2549:G:N3	2.13	0.45
36:DA:1545:A:N7	36:DA:1546:C:C2	2.84	0.45
1:CA:1383:C:O2'	1:CA:1384:C:H5'	2.17	0.45
49:DQ:30:GLY:HA2	49:DQ:107:ALA:HB2	1.98	0.45
33:B7:29:LYS:HE3	36:BA:210:C:OP2	2.15	0.45
1:AA:132:C:N3	1:AA:231:G:C2	2.85	0.45
36:DA:173:G:N3	36:DA:173:G:H2'	2.31	0.45
49:BQ:89:ASN:N	49:BQ:89:ASN:OD1	2.49	0.45
36:BA:1558:A:C5	36:BA:1560:G:C8	3.05	0.45
32:B6:20:ASN:C	32:B6:21:TYR:CG	2.89	0.45
32:B6:35:GLU:HB3	32:B6:51:GLU:CG	2.46	0.45
36:BA:1216:G:C2'	36:BA:1217:C:H5'	2.46	0.45
36:BA:2282:G:H5''	36:BA:2283:C:O5'	2.17	0.45
36:BA:28:A:C2	53:BU:11:ARG:NH2	2.84	0.45
36:DA:2880:C:O2	50:DR:91:GLN:O	2.35	0.45
32:D6:36:LEU:O	32:D6:37:ARG:HB2	2.16	0.45
32:D6:41:PRO:HG3	32:D6:49:HIS:CE1	2.51	0.45
36:DA:2392:A:H2'	36:DA:2393:A:O4'	2.17	0.45
36:DA:251:A:C2'	36:DA:252:G:H5'	2.47	0.45
25:AZ:134:PHE:CD2	25:AZ:136:ASN:HB2	2.52	0.45
25:AZ:140:MET:HE2	25:AZ:140:MET:HA	1.99	0.45
25:AZ:32:THR:O	25:AZ:35:ALA:N	2.46	0.45
28:D2:47:ASN:ND2	36:DA:94(A):G:N2	2.54	0.45
28:D2:48:HIS:O	28:D2:52:ASP:OD2	2.35	0.45
41:DF:181:LEU:HD11	41:DF:186:ILE:CD1	2.34	0.45
36:BA:1567:A:C5'	39:BD:58:HIS:HD2	2.29	0.45
36:DA:2239:G:H2'	36:DA:2240:C:C6	2.52	0.45
39:DD:261:LYS:NZ	39:DD:263:ARG:NH1	2.65	0.45
1:CA:264:U:H2'	1:CA:265:G:C8	2.52	0.45
1:AA:961:U:O2'	1:AA:962:C:C6	2.69	0.45
28:B2:48:HIS:O	28:B2:50:ILE:N	2.50	0.45
36:BA:1268:A:C8	36:BA:1269:A:C8	3.05	0.45
36:BA:1654:A:OP1	50:BR:3:HIS:N	2.50	0.45
50:BR:100:LEU:CD2	50:BR:112:ALA:HA	2.47	0.45
13:AM:15:VAL:C	13:AM:17:VAL:N	2.67	0.45
36:DA:1006:C:H2'	36:DA:1007:C:H6	1.81	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1131:G:C2	46:DN:75:TYR:HB2	2.52	0.45
31:D5:15:ARG:NH2	36:DA:2022:U:OP2	2.50	0.45
53:DU:70:ARG:C	53:DU:72:HIS:H	2.18	0.45
26:D0:12:ASN:O	26:D0:14:ARG:N	2.46	0.45
1:AA:314:C:N4	1:AA:315:A:N6	2.64	0.45
8:CH:5:PRO:HB2	8:CH:6:ILE:HD12	1.98	0.45
1:AA:266:G:H1'	1:AA:268:C:OP2	2.17	0.45
1:AA:266:G:H5'	1:AA:267:C:C5	2.51	0.45
4:CD:20:TYR:N	4:CD:20:TYR:CD1	2.85	0.45
8:AH:137:VAL:HG12	8:AH:138:TRP:N	2.31	0.45
41:DF:158:THR:HG23	41:DF:160:ASN:H	1.82	0.45
25:CZ:38:GLU:OE2	25:CZ:39:ASN:ND2	2.50	0.45
36:BA:2710:C:C2'	36:BA:2711:A:H5'	2.47	0.45
47:BO:104:ARG:HH22	47:BO:107:ARG:NH2	2.15	0.45
47:BO:2:ILE:CG2	47:BO:3:GLN:N	2.79	0.45
52:BT:31:SER:O	52:BT:32:TYR:O	2.35	0.45
36:BA:2808:U:H5'	36:BA:2891:G:O6	2.16	0.45
40:DE:188:VAL:O	40:DE:189:PRO:O	2.34	0.45
47:DO:106:LEU:O	47:DO:107:ARG:C	2.54	0.45
37:BB:104:U:H2'	37:BB:105:A:H8	1.82	0.45
37:BB:105:A:C2	37:BB:106:G:H1'	2.52	0.45
58:BZ:6:LYS:O	58:BZ:7:ALA:O	2.34	0.45
36:DA:329:G:N1	57:DY:19:LYS:HE3	2.28	0.45
35:D9:13:LYS:HD2	35:D9:28:GLU:CB	2.46	0.45
37:DB:81:G:H5'	37:DB:81:G:N3	2.32	0.45
1:CA:1285:A:O2'	1:CA:1286:A:P	2.74	0.45
7:CG:26:PHE:O	7:CG:27:ILE:C	2.55	0.45
9:CI:99:LEU:O	9:CI:101:PHE:N	2.50	0.45
1:CA:1348:U:H4'	9:CI:120:ARG:HG3	1.98	0.45
1:AA:1520:G:C2'	1:AA:1521:G:O5'	2.64	0.45
1:AA:798:G:C2'	1:AA:799:G:O5'	2.64	0.45
51:DS:73:LEU:C	51:DS:73:LEU:HD23	2.37	0.45
31:D5:40:LYS:NZ	31:D5:46:CYS:N	2.65	0.45
36:DA:2111:C:C4	36:DA:2145:C:H2'	2.51	0.45
1:AA:1527:C:O2'	1:AA:1528:U:H5'	2.17	0.45
1:AA:819:A:N6	1:AA:1529:G:C5	2.85	0.45
1:CA:1303:C:C2	1:CA:1304:G:C8	3.05	0.45
1:CA:916:G:C2	1:CA:917:G:C8	3.04	0.45
46:DN:133:GLN:CG	46:DN:135:PRO:HD3	2.31	0.45
36:DA:1773:A:N6	36:DA:1829:A:H1'	2.31	0.45
55:DW:70:TYR:OH	55:DW:72:LYS:HG2	2.16	0.45
22:AW:16:U:C4	22:AW:19:G:OP1	2.69	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2138:C:H2'	36:BA:2139:C:H6	1.82	0.45
36:BA:2187:G:N7	36:BA:2188:C:C5	2.85	0.45
3:CC:101:LEU:HD23	3:CC:101:LEU:C	2.37	0.45
3:CC:105:GLU:CG	3:CC:106:VAL:H	2.30	0.45
4:CD:196:LEU:C	4:CD:198:VAL:H	2.19	0.45
22:AV:20:U:C5'	22:AV:21:A:OP2	2.65	0.45
3:AC:103:VAL:HG12	3:AC:104:GLN:N	2.31	0.45
3:AC:29:TYR:HE1	10:AJ:65:LEU:HD21	1.82	0.45
1:CA:397:A:H3'	1:CA:397:A:N3	2.32	0.45
36:DA:1464:C:N3	36:DA:1465:G:N7	2.64	0.45
22:CW:49:C:HO2'	22:CW:50:U:H6	1.63	0.45
37:DB:72:G:H1'	37:DB:106:G:N2	2.32	0.45
21:CU:5:ASP:HB3	21:CU:8:THR:HG23	1.97	0.45
53:BU:90:VAL:O	53:BU:91:ASP:C	2.55	0.45
28:B2:5:GLU:O	28:B2:9:GLN:CD	2.55	0.45
36:BA:1334:G:O2'	36:BA:1335:U:H5'	2.17	0.45
36:DA:2709:G:H2'	36:DA:2710:C:C6	2.52	0.45
36:BA:597:U:H5''	48:BP:15:ARG:NH2	2.31	0.45
42:BG:54:GLU:N	42:BG:54:GLU:OE1	2.50	0.45
42:DG:66:GLN:NE2	42:DG:93:THR:O	2.50	0.45
40:DE:93:VAL:HG12	40:DE:175:VAL:HG21	1.98	0.45
2:AB:25:ASN:HB2	2:AB:191:ASP:O	2.17	0.45
1:AA:858:G:C6	1:AA:869:G:C8	3.04	0.45
53:BU:28:ARG:HH11	53:BU:38:THR:HG23	1.80	0.45
15:AO:77:ARG:HA	15:AO:80:ALA:HB3	1.98	0.45
1:AA:1438:G:N1	1:AA:1439:C:C4	2.83	0.45
1:AA:397:A:N7	1:AA:547:A:H2'	2.32	0.45
1:AA:1339:A:O4'	22:AV:41:C:H1'	2.17	0.45
49:DQ:63:LYS:HE3	49:DQ:65:PHE:HE1	1.81	0.45
27:D1:69:LYS:O	27:D1:70:VAL:C	2.55	0.45
25:CZ:364:PRO:C	25:CZ:366:ASP:N	2.70	0.45
1:AA:657:G:H1	1:AA:749:C:N4	2.15	0.45
31:D5:16:ARG:HG2	31:D5:16:ARG:NH1	2.32	0.45
1:CA:657:G:C2	1:CA:750:G:C5	3.05	0.45
36:DA:871:U:H2'	36:DA:871:U:O2	2.17	0.45
26:D0:24:LYS:HG3	36:DA:2355:C:H4'	1.98	0.45
18:AR:50:ILE:CD1	18:AR:70:ILE:HG21	2.44	0.45
15:AO:11:VAL:HG12	15:AO:12:ILE:N	2.30	0.45
1:CA:929:G:O2'	1:CA:930:C:H5'	2.16	0.45
3:AC:92:ALA:HB2	3:AC:99:VAL:CG2	2.47	0.45
1:AA:1094:G:H3'	1:AA:1108:G:H22	1.82	0.45
58:DZ:5:LEU:C	58:DZ:6:LYS:HD3	2.37	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
55:DW:20:VAL:CG2	55:DW:47:VAL:HG21	2.42	0.45
37:BB:35:U:H2'	37:BB:36:C:C6	2.52	0.45
36:BA:2720:U:C2	36:BA:2721:A:C8	3.05	0.45
29:B3:12:PRO:HG2	29:B3:13:ILE:N	2.28	0.45
36:DA:2756:U:O2'	36:DA:2757:A:H5''	2.16	0.45
38:BC:161:ILE:CD1	38:BC:161:ILE:C	2.82	0.45
36:DA:391:G:C4	36:DA:392:C:C6	3.05	0.45
1:CA:161:A:O2'	1:CA:162:A:H5'	2.17	0.45
6:AF:79:LEU:O	6:AF:81:ILE:N	2.49	0.45
4:AD:156:GLU:O	4:AD:159:ARG:HB2	2.16	0.45
1:AA:1148:U:O2'	1:AA:1149:C:H5'	2.16	0.45
11:AK:101:SER:OG	11:AK:103:LEU:HD23	2.17	0.45
8:CH:134:ILE:O	8:CH:135:CYS:HB3	2.17	0.45
4:AD:49:ARG:O	4:AD:51:PRO:CD	2.65	0.45
2:CB:157:ARG:CB	2:CB:157:ARG:CZ	2.95	0.45
1:AA:110:C:O2'	16:AP:25:ARG:O	2.35	0.45
17:AQ:7:THR:HA	17:AQ:57:VAL:O	2.16	0.45
1:CA:70:G:H2'	1:CA:71:C:H5'	1.98	0.45
1:CA:363:A:C2	12:CL:31:PRO:HG2	2.51	0.45
36:BA:591:C:H2'	36:BA:592:G:C8	2.50	0.45
36:BA:1477:A:H5'	36:BA:1478:G:OP2	2.17	0.45
22:AV:9:A:O2'	22:AV:10:G:N7	2.49	0.45
7:AG:13:GLN:CD	7:AG:14:PRO:HD2	2.36	0.45
36:BA:1932:A:H2'	36:BA:1933:G:O4'	2.16	0.45
34:B8:58:ILE:O	34:B8:58:ILE:HG22	2.17	0.45
58:BZ:8:TYR:HB3	58:BZ:38:TYR:CZ	2.52	0.45
36:BA:970:C:H2'	36:BA:971:C:H6	1.81	0.45
17:CQ:43:LEU:HD23	17:CQ:43:LEU:HA	1.79	0.45
17:CQ:17:LYS:HA	17:CQ:46:ASP:O	2.17	0.45
25:CZ:13:ASN:HA	25:CZ:78:SER:HB2	1.97	0.45
32:B6:17:LYS:HD3	32:B6:17:LYS:HA	1.43	0.45
32:B6:12:GLU:HG3	32:B6:23:THR:HG22	1.98	0.45
32:B6:42:TRP:HA	32:B6:42:TRP:HE3	1.82	0.45
36:BA:251:A:C2'	36:BA:252:G:H5'	2.47	0.45
36:DA:2049:G:O2'	36:DA:2050:C:H5'	2.16	0.45
36:DA:2055:C:H5'	36:DA:2056:G:O5'	2.16	0.45
36:DA:2823:A:OP2	40:DE:112:GLY:HA3	2.17	0.45
40:DE:8:LYS:O	40:DE:193:GLY:N	2.49	0.45
25:AZ:191:GLY:HA2	25:AZ:196:VAL:CG1	2.39	0.45
36:BA:1853:A:N6	36:BA:1888:G:H2'	2.32	0.45
36:BA:2090:G:H2'	36:BA:2091:U:O4'	2.16	0.45
25:AZ:331:HIS:CD2	25:AZ:331:HIS:H	2.35	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:D9:4:ARG:O	35:D9:36:GLN:HA	2.16	0.45
36:DA:2661:G:O2'	36:DA:2662:A:H5'	2.16	0.45
10:CJ:17:ASP:CB	10:CJ:70:ARG:NH2	2.79	0.45
36:BA:1244:G:H8	36:BA:1244:G:H5'	1.81	0.45
36:BA:1245:G:C5'	41:BF:34:TRP:HZ2	2.28	0.45
43:BH:37:VAL:CG2	43:BH:72:ILE:HD11	2.47	0.45
1:AA:962:C:O2	1:AA:1201:A:C2	2.70	0.45
4:AD:19:LEU:HD23	4:AD:67:ILE:HG13	1.98	0.45
35:B9:31:LYS:C	35:B9:32:HIS:HD2	2.20	0.45
36:BA:2465:C:O2'	36:BA:2466:C:H5'	2.16	0.45
28:B2:68:ARG:NH2	28:B2:72:ALA:CB	2.79	0.45
36:BA:2838:G:H2'	36:BA:2839:G:H8	1.82	0.45
36:BA:2839:G:O2'	50:BR:92:GLY:HA2	2.17	0.45
50:BR:42:LYS:O	50:BR:44:LEU:N	2.50	0.45
42:BG:60:LEU:O	42:BG:60:LEU:CD1	2.64	0.45
54:DV:35:LEU:O	54:DV:37:VAL:N	2.50	0.45
54:DV:95:LEU:C	54:DV:95:LEU:CD2	2.85	0.45
26:D0:10:THR:HG23	26:D0:12:ASN:OD1	2.16	0.45
9:CI:97:LYS:O	9:CI:98:PRO:C	2.54	0.45
1:CA:1206:G:H4'	3:CC:192:THR:O	2.17	0.45
4:CD:19:LEU:HD12	4:CD:19:LEU:N	2.31	0.45
4:CD:59:ARG:HA	4:CD:59:ARG:HE	1.82	0.45
4:CD:73:ARG:HA	4:CD:73:ARG:HD3	1.81	0.45
51:BS:101:LEU:C	51:BS:101:LEU:HD12	2.37	0.45
2:CB:100:GLY:O	2:CB:102:LEU:N	2.50	0.45
2:CB:167:PRO:HG3	2:CB:188:ALA:HB2	1.99	0.45
2:CB:223:ILE:O	2:CB:226:ARG:HB3	2.16	0.45
2:CB:224:GLN:HA	2:CB:229:VAL:HG22	1.98	0.45
1:AA:954:G:H21	1:AA:1227:A:N6	2.15	0.45
13:AM:74:VAL:HA	13:AM:77:ASN:ND2	2.31	0.45
1:AA:1069:C:C2'	1:AA:1070:U:O5'	2.65	0.45
40:BE:103:ASP:OD2	40:BE:202:LYS:HE3	2.16	0.45
52:BT:89:VAL:O	52:BT:91:ARG:HG3	2.17	0.45
36:DA:2773:C:O2'	36:DA:2774:C:H5'	2.17	0.45
40:DE:126:PRO:O	40:DE:127:ASP:C	2.55	0.45
36:DA:2641:G:OP2	46:DN:74:ARG:CZ	2.64	0.45
47:DO:2:ILE:CG2	47:DO:3:GLN:N	2.80	0.45
52:DT:25:GLY:O	52:DT:48:ILE:HG22	2.17	0.45
1:AA:1364:U:H6	1:AA:1364:U:OP2	1.99	0.45
1:AA:1202:G:C4	14:AN:42:ILE:HG21	2.52	0.45
14:AN:42:ILE:HG22	14:AN:43:CYS:H	1.82	0.45
29:D3:50:VAL:O	29:D3:52:HIS:N	2.50	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:CG:31:MET:HB2	7:CG:39:ALA:CB	2.45	0.45
36:BA:675:A:O2'	36:BA:676:A:H5'	2.17	0.45
4:AD:94:LEU:O	4:AD:95:GLY:C	2.54	0.45
51:DS:96:GLY:C	51:DS:98:VAL:N	2.70	0.45
51:DS:97:ARG:C	51:DS:97:ARG:NE	2.70	0.45
1:AA:17:U:O4'	1:AA:1080:A:H1'	2.16	0.45
39:DD:214:TRP:O	39:DD:215:LEU:C	2.55	0.45
41:BF:7:TYR:HD2	41:BF:16:GLY:CA	2.30	0.45
2:AB:17:PHE:O	2:AB:18:GLY:O	2.34	0.45
36:BA:2115:G:C2	36:BA:2117:A:C8	3.04	0.45
3:CC:142:MET:SD	3:CC:148:GLY:CA	3.04	0.45
19:CS:45:VAL:C	19:CS:47:HIS:H	2.20	0.45
3:AC:39:ILE:HG22	3:AC:40:ARG:N	2.32	0.45
36:DA:1090:U:H3	36:DA:1102:C:HO2'	1.65	0.45
1:AA:901:A:C5	1:AA:902:G:H1'	2.51	0.45
36:BA:1423:G:H1	36:BA:1575:C:H42	1.63	0.45
42:BG:44:GLY:HA2	42:BG:88:ILE:HB	1.98	0.45
30:D4:9:LEU:O	30:D4:10:VAL:HG12	2.17	0.45
42:DG:63:ILE:HA	42:DG:143:GLU:OE2	2.17	0.45
25:AZ:389:ARG:C	25:AZ:395:VAL:HG13	2.36	0.45
36:DA:1170:G:H5''	36:DA:1173:G:H22	1.81	0.45
24:AY:12:U:H3	24:AY:23:A:H2	1.65	0.45
43:DH:136:ILE:CD1	43:DH:136:ILE:N	2.80	0.45
1:AA:80:G:N2	1:AA:90:U:H5'	2.30	0.45
1:CA:585:G:H1	1:CA:756:C:N4	2.13	0.45
1:CA:878:G:OP1	8:CH:90:GLY:HA3	2.17	0.45
53:DU:99:ALA:HB2	53:DU:106:PHE:CZ	2.52	0.45
1:CA:152:A:N6	1:CA:170:U:C2	2.85	0.45
2:AB:68:ILE:HG12	2:AB:161:ALA:HB3	1.99	0.45
36:BA:1028:A:O5'	36:BA:1028:A:H8	1.99	0.45
55:BW:17:VAL:C	55:BW:19:LEU:H	2.19	0.45
16:AP:12:LYS:C	16:AP:14:ASN:N	2.69	0.45
36:DA:909:A:O2'	36:DA:910:A:C5'	2.65	0.45
39:DD:223:GLY:HA3	39:DD:231:HIS:CD2	2.51	0.45
39:DD:231:HIS:ND1	39:DD:232:PRO:N	2.65	0.45
2:AB:209:ARG:HH11	2:AB:239:VAL:CG1	2.19	0.45
4:CD:129:ASN:HD21	4:CD:145:GLU:H	1.65	0.45
1:AA:1239:A:H4'	1:AA:1240:U:C5'	2.46	0.45
47:BO:11:ALA:O	47:BO:98:VAL:HA	2.17	0.45
10:AJ:40:LEU:CD1	10:AJ:69:ASN:HB3	2.47	0.45
1:CA:1509:C:H42	1:CA:1526:G:H1	1.63	0.45
1:CA:1525:G:OP2	11:CK:126:ARG:NH2	2.45	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:D1:80:LEU:HD23	27:D1:81:LYS:N	2.26	0.45
27:D1:91:LYS:O	27:D1:93:GLU:N	2.46	0.45
36:DA:149:A:C2	36:DA:150:C:N3	2.84	0.45
52:BT:6:LEU:HD23	52:BT:9:LEU:HD12	1.99	0.45
20:AT:77:ALA:C	20:AT:79:ARG:N	2.70	0.45
36:DA:1845:G:OP1	39:DD:258:LYS:NZ	2.41	0.45
7:CG:61:VAL:O	7:CG:63:LYS:N	2.50	0.45
36:BA:2197:U:O4	36:BA:2224:G:H2'	2.17	0.45
36:DA:853:G:H2'	36:DA:854:G:O4'	2.17	0.45
1:CA:1466:C:H2'	1:CA:1467:G:O4'	2.17	0.45
25:AZ:238:ALA:O	25:AZ:287:GLY:HA2	2.17	0.45
36:DA:364:C:C2'	36:DA:364:C:O2	2.60	0.45
1:CA:1321:C:HO2'	19:CS:78:ARG:HH12	1.64	0.45
36:DA:271(V):G:C6	36:DA:271(W):G:C2	3.05	0.45
46:BN:67:LEU:O	46:BN:68:GLU:HB2	2.16	0.45
18:AR:34:TYR:CD1	18:AR:35:ARG:HG3	2.51	0.45
12:AL:101:VAL:O	12:AL:104:VAL:HG23	2.16	0.45
22:AW:55:U:O2'	22:AW:56:C:C6	2.69	0.45
1:AA:409:G:OP1	4:AD:22:LYS:O	2.34	0.45
38:DC:103:ILE:HG23	38:DC:107:TRP:CG	2.51	0.45
25:CZ:104:LEU:HD13	25:CZ:120:ILE:HD11	1.97	0.45
36:BA:401:A:H2'	36:BA:402:A:H8	1.81	0.45
36:BA:2562:U:H2'	36:BA:2563:U:C5'	2.45	0.45
17:CQ:52:LYS:O	17:CQ:55:ASP:OD1	2.34	0.45
36:BA:1332:G:H5'	36:BA:1333:C:H5	1.81	0.45
39:BD:3:VAL:CG1	39:BD:17:THR:HB	2.47	0.45
1:CA:282:A:H2'	1:CA:282:A:N3	2.32	0.45
17:CQ:48:GLU:OE1	17:CQ:50:LYS:HD3	2.17	0.45
27:B1:37:ILE:CD1	27:B1:37:ILE:H	2.29	0.45
1:CA:364:A:H2'	1:CA:365:U:O2	2.17	0.45
54:BV:2:PHE:HB3	54:BV:41:GLY:O	2.17	0.45
1:CA:763:G:H2'	1:CA:764:C:C6	2.52	0.45
19:AS:50:ALA:HA	19:AS:58:VAL:O	2.17	0.45
17:CQ:24:GLU:HA	17:CQ:39:SER:HA	1.98	0.45
12:AL:23:LYS:C	12:AL:24:VAL:HG23	2.37	0.45
36:DA:2633:G:C5'	36:DA:2812:G:H5'	2.46	0.45
57:DY:63:LYS:HG2	57:DY:64:GLU:H	1.81	0.45
36:BA:1897:G:O5'	36:BA:1897:G:H8	2.00	0.45
49:BQ:30:GLY:HA2	49:BQ:107:ALA:HB2	1.97	0.45
36:DA:1319:G:C6	36:DA:1320:C:N4	2.85	0.45
34:B8:10:ALA:O	34:B8:13:ARG:N	2.50	0.45
36:BA:568:U:O2'	36:BA:569:U:C5	2.68	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BP:23:PRO:HD2	48:BP:33:ARG:CZ	2.46	0.45
50:DR:67:LEU:O	50:DR:70:LEU:O	2.35	0.45
26:D0:43:THR:CG2	36:DA:2332:U:H5'	2.47	0.45
25:AZ:163:PHE:C	25:AZ:165:GLY:H	2.20	0.45
25:AZ:179:LEU:O	25:AZ:179:LEU:HG	2.17	0.45
25:AZ:70:TYR:CD1	25:AZ:70:TYR:C	2.90	0.45
36:DA:102:G:H4'	36:DA:102:G:OP1	2.17	0.45
36:DA:83:G:N2	36:DA:102:G:C2'	2.80	0.45
36:DA:90:U:O2	36:DA:90:U:C2'	2.65	0.45
36:DA:1243:G:C3'	36:DA:1244:G:H5''	2.46	0.45
39:BD:57:GLY:O	39:BD:58:HIS:C	2.52	0.45
36:DA:1856:G:H2'	36:DA:1857:G:C5'	2.47	0.45
1:AA:1058:G:H2'	1:AA:1059:C:C6	2.52	0.45
1:AA:1208:C:O2'	1:AA:1209:C:H5'	2.16	0.45
4:AD:13:ARG:NH1	4:AD:38:TYR:O	2.49	0.45
36:BA:2464:C:O2'	36:BA:2465:C:O5'	2.35	0.45
28:B2:14:ARG:O	28:B2:67:LYS:CE	2.64	0.45
50:BR:13:HIS:CE1	50:BR:16:HIS:HB3	2.52	0.45
50:BR:63:ARG:HG3	50:BR:63:ARG:HH11	1.81	0.45
13:AM:10:PRO:CB	13:AM:18:ALA:HB1	2.47	0.45
42:BG:63:ILE:C	42:BG:65:GLY:N	2.70	0.45
46:DN:4:TYR:OH	53:DU:61:TRP:NE1	2.49	0.45
53:DU:9:VAL:C	53:DU:13:LYS:HE2	2.37	0.45
53:DU:10:ARG:CA	53:DU:13:LYS:HG2	2.45	0.45
36:DA:1188:U:H5''	54:DV:79:VAL:CG1	2.47	0.45
36:BA:1504:C:O2'	36:BA:1505:C:H5'	2.17	0.45
48:BP:78:PRO:HB3	48:BP:111:ARG:NH2	2.31	0.45
1:AA:952:U:H2'	1:AA:953:G:H8	1.81	0.45
5:AE:103:GLY:H	5:AE:106:PRO:CG	2.29	0.45
36:BA:141:A:N6	36:BA:142:A:N6	2.65	0.45
36:BA:1301:A:HO2'	36:BA:1302:A:H2'	1.80	0.45
47:BO:78:ARG:HH21	52:BT:73:GLU:CD	2.20	0.45
52:BT:92:GLY:HA3	52:BT:120:ARG:HH21	1.82	0.45
36:DA:1675:C:C2'	36:DA:1676:A:H5'	2.47	0.45
52:DT:89:VAL:HB	52:DT:91:ARG:HE	1.81	0.45
58:BZ:58:VAL:C	58:BZ:59:LEU:HD23	2.37	0.45
36:DA:336:C:H4'	57:DY:7:VAL:HG21	1.98	0.45
7:AG:107:ALA:O	7:AG:108:ALA:C	2.55	0.45
7:AG:69:VAL:O	7:AG:71:PRO:HD3	2.17	0.45
10:AJ:46:ARG:O	10:AJ:47:PHE:CD1	2.70	0.45
1:AA:739:C:C4	1:AA:740:U:C5	3.05	0.45
1:AA:965:A:HI'	1:AA:969:A:C8	2.51	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:791:G:O6	1:AA:792:A:N6	2.47	0.45
36:BA:1519:G:H5'	36:BA:1520:G:P	2.57	0.45
19:AS:67:VAL:C	19:AS:69:HIS:N	2.70	0.45
36:DA:2101:G:C2'	36:DA:2102:U:H5''	2.43	0.45
36:DA:2164:C:H2'	36:DA:2165:G:H5'	1.99	0.45
1:AA:865:A:C6	1:AA:866:C:N3	2.85	0.45
55:BW:50:VAL:HG22	55:BW:50:VAL:O	2.16	0.45
36:DA:1827:C:H5''	36:DA:1971:A:O3'	2.17	0.45
55:DW:50:VAL:O	55:DW:50:VAL:HG22	2.17	0.45
36:BA:2123:G:H1'	38:BC:172:HIS:CB	2.47	0.45
19:CS:28:LYS:C	19:CS:29:ARG:CG	2.85	0.45
3:AC:105:GLU:CG	3:AC:106:VAL:H	2.28	0.45
27:B1:4:VAL:HG23	27:B1:11:ARG:CG	2.32	0.45
36:DA:862:G:N3	36:DA:863:A:C1'	2.74	0.45
37:DB:72:G:O2'	37:DB:105:A:N6	2.50	0.45
43:BH:136:ILE:H	43:BH:136:ILE:CD1	2.30	0.45
54:BV:38:LEU:HD11	54:BV:57:VAL:HB	1.98	0.45
36:DA:1376:C:H2'	36:DA:1377:G:H5'	1.98	0.45
36:DA:693:C:C4	36:DA:694:U:C4	3.05	0.45
36:DA:1645:G:OP1	36:DA:1646:C:H5'	2.17	0.45
36:DA:1222:C:H2'	36:DA:1223:G:C5'	2.35	0.45
40:DE:154:LYS:O	40:DE:155:LYS:C	2.56	0.45
13:CM:10:PRO:CB	13:CM:18:ALA:HB1	2.47	0.45
13:CM:34:LEU:HD11	13:CM:41:PRO:HG3	1.99	0.45
36:BA:2306:C:H5''	36:BA:2307:G:O4'	2.17	0.45
42:DG:59:GLU:OE1	42:DG:153:ARG:NH2	2.40	0.45
42:DG:47:LYS:CG	42:DG:81:LYS:HE2	2.47	0.45
42:DG:34:LEU:HD13	42:DG:99:MET:CE	2.46	0.45
36:BA:1528:A:O2'	36:BA:1528(A):A:P	2.75	0.45
6:CF:48:LEU:HD12	6:CF:57:GLN:N	2.31	0.45
36:BA:271(Q):G:H1'	36:BA:271(R):G:C8	2.52	0.45
36:DA:1494:A:N3	36:DA:1494:A:H5'	2.32	0.45
51:DS:104:GLY:O	51:DS:106:ARG:N	2.50	0.45
2:AB:162:ILE:O	2:AB:185:ILE:HG12	2.17	0.45
2:AB:97:TRP:CZ3	2:AB:173:ALA:HA	2.51	0.45
2:AB:168:THR:HG23	2:AB:192:SER:CA	2.46	0.45
1:CA:1151:A:H5'	10:CJ:40:LEU:O	2.16	0.45
10:AJ:89:ASP:O	10:AJ:90:LEU:CB	2.61	0.45
12:CL:80:HIS:CD2	24:CY:68:U:H4'	2.52	0.45
1:AA:1339:A:H2	22:AV:31:A:O4'	2.00	0.45
10:CJ:32:ALA:HB2	10:CJ:76:ASN:HB2	1.98	0.45
36:DA:954:G:H5''	49:DQ:13:GLN:CG	2.46	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BD:231:HIS:CD2	39:BD:249:PRO:HB3	2.52	0.45
11:AK:90:GLY:O	11:AK:94:ALA:N	2.35	0.45
1:CA:779:C:H2'	1:CA:780:A:O4'	2.16	0.45
36:DA:437:G:O2'	36:DA:438:G:H5'	2.16	0.45
2:CB:29:ALA:HA	2:CB:32:ILE:HG22	1.99	0.45
31:D5:12:SER:C	31:D5:14:ALA:N	2.70	0.45
56:DX:24:GLY:O	56:DX:82:GLN:NE2	2.50	0.45
20:AT:58:LYS:O	20:AT:61:SER:HB3	2.16	0.45
18:CR:68:LYS:O	18:CR:72:ARG:HG3	2.16	0.45
36:DA:116:C:H2'	36:DA:117:G:H8	1.75	0.45
36:DA:1309:G:O2'	36:DA:1310:G:H5'	2.17	0.45
36:BA:533:G:H5'	53:BU:24:TYR:CE2	2.52	0.45
25:CZ:230:THR:HA	25:CZ:235:GLY:O	2.17	0.45
25:CZ:317:GLU:O	25:CZ:318:ALA:HB2	2.16	0.45
1:AA:1096:C:N4	1:AA:1097:C:N4	2.64	0.45
36:BA:853:G:H2'	36:BA:854:G:O4'	2.16	0.45
4:CD:2:GLY:O	4:CD:3:ARG:C	2.55	0.45
36:BA:211:A:H2'	36:BA:212:G:C8	2.51	0.45
58:BZ:145:GLU:OE1	58:BZ:145:GLU:HA	2.17	0.45
36:BA:680:G:H2'	36:BA:681:G:H8	1.80	0.45
40:BE:93:VAL:HG12	40:BE:175:VAL:HG21	1.99	0.45
12:CL:45:PRO:HG3	12:CL:53:ARG:CD	2.44	0.45
14:CN:29:ARG:CG	14:CN:29:ARG:NH1	2.78	0.45
12:AL:70:ILE:HD13	12:AL:77:LEU:HD12	1.98	0.45
9:AI:80:GLY:O	9:AI:84:ALA:CB	2.65	0.45
1:AA:126:G:C6	1:AA:127:G:C5	3.05	0.45
19:CS:35:SER:C	19:CS:37:ARG:H	2.19	0.45
7:AG:58:PRO:O	7:AG:59:LEU:C	2.56	0.45
33:B7:20:ALA:C	33:B7:22:MET:N	2.70	0.45
36:DA:1023:U:H1'	36:DA:1122:G:H5''	1.99	0.45
36:DA:1119:C:H2'	36:DA:1120:G:C8	2.51	0.45
1:CA:1228:C:H6	1:CA:1228:C:H3'	1.82	0.45
36:DA:1924:C:H2'	36:DA:1925:C:C6	2.49	0.45
17:AQ:52:LYS:O	17:AQ:55:ASP:OD1	2.35	0.45
1:CA:786:G:C2	1:CA:787:A:H1'	2.51	0.45
15:CO:54:ARG:O	15:CO:54:ARG:HD3	2.16	0.45
36:BA:2460:U:H2'	36:BA:2461:C:H6	1.82	0.45
1:CA:69:G:O2'	1:CA:70:G:H5'	2.15	0.45
1:CA:723:U:C2'	1:CA:723:U:O2	2.64	0.45
36:DA:1720:U:C2'	36:DA:1721:G:H5''	2.47	0.45
17:CQ:6:LEU:O	17:CQ:7:THR:HG23	2.17	0.45
18:CR:31:LEU:CD2	18:CR:65:ILE:HD12	2.47	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:DX:31:HIS:ND1	56:DX:32:PRO:HD2	2.31	0.45
1:CA:456:C:H2'	1:CA:457:C:C6	2.52	0.45
36:DA:579:G:H4'	36:DA:2017:U:H2'	1.99	0.45
39:DD:152:GLY:O	39:DD:153:ALA:C	2.54	0.45
52:DT:133:GLU:O	52:DT:133:GLU:HG2	2.16	0.45
36:BA:2203:U:H2'	36:BA:2203:U:O2	2.17	0.45
1:CA:138:G:H2'	1:CA:139:G:C8	2.52	0.45
36:BA:158:U:H2'	36:BA:171:G:O4'	2.16	0.45
1:AA:456:C:H2'	1:AA:457:C:C6	2.52	0.45
32:B6:12:GLU:HA	32:B6:23:THR:HA	1.99	0.45
31:D5:8:LYS:NZ	36:DA:2055:C:OP1	2.50	0.45
36:DA:2849:U:H4'	36:DA:2868:A:C2	2.52	0.45
40:DE:195:LEU:CD1	40:DE:196:VAL:N	2.75	0.45
50:DR:24:GLN:O	50:DR:26:LYS:N	2.50	0.45
19:CS:16:LEU:C	19:CS:19:VAL:H	2.21	0.45
36:DA:1809:A:C6	36:DA:1810:A:C6	3.05	0.45
39:DD:259:THR:O	39:DD:260:ARG:C	2.55	0.45
39:DD:184:LYS:N	39:DD:269:PHE:O	2.47	0.45
48:DP:107:LYS:C	48:DP:109:GLY:H	2.19	0.45
48:DP:66:GLY:O	48:DP:67:MET:HB2	2.17	0.45
25:AZ:171:ILE:HD12	25:AZ:171:ILE:N	2.32	0.45
36:BA:1884:A:H3'	36:BA:1885:A:H5''	1.99	0.45
36:DA:654(V):A:P	36:DA:655:A:H3'	2.57	0.45
41:DF:185:ASP:HA	41:DF:188:ARG:CD	2.46	0.45
24:AY:60:U:C5'	24:AY:61:C:H5	2.29	0.45
36:DA:420:C:H2'	36:DA:421:U:C6	2.52	0.45
38:DC:134:ARG:O	38:DC:136:LEU:HG	2.16	0.45
36:BA:1822:G:C4	36:BA:1823:G:N7	2.85	0.45
1:AA:1162:C:C2	1:AA:1175:G:C2	3.05	0.45
1:AA:1181:G:HO2'	1:AA:1182:G:H5'	1.81	0.45
36:BA:926:A:H8	36:BA:926:A:C5'	2.22	0.45
1:AA:1206:G:C4	1:AA:1207:G:C8	3.05	0.45
36:BA:2466:C:C2'	36:BA:2467:C:H5'	2.46	0.45
36:BA:2826:A:H2'	36:BA:2827:C:H5'	1.98	0.45
10:AJ:12:ASP:HB3	10:AJ:15:THR:HG1	1.80	0.45
56:DX:20:GLY:O	56:DX:22:ALA:N	2.49	0.45
56:DX:23:GLU:N	56:DX:23:GLU:CD	2.70	0.45
36:DA:2732:G:C2'	36:DA:2733:A:H5'	2.47	0.45
36:DA:944:G:H5'	36:DA:945:A:C5'	2.46	0.45
54:DV:91:TYR:CD1	54:DV:92:THR:N	2.85	0.45
1:AA:376:G:O3'	16:AP:5:ARG:HD3	2.16	0.45
1:AA:53:A:N1	1:AA:359:U:O2	2.50	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:277:C:O2'	1:AA:278:G:H5'	2.17	0.45
1:CA:515:G:H2'	1:CA:516:U:O4'	2.17	0.45
4:CD:21:LEU:HD11	4:CD:66:ARG:O	2.17	0.45
2:CB:102:LEU:HD12	2:CB:102:LEU:N	2.32	0.45
38:DC:189:ILE:HG22	38:DC:190:ARG:N	2.31	0.45
36:DA:1344:G:N2	36:DA:1404:C:H1'	2.31	0.45
25:CZ:32:THR:O	25:CZ:35:ALA:N	2.47	0.45
40:BE:188:VAL:O	40:BE:189:PRO:O	2.35	0.45
52:BT:100:TYR:CD2	52:BT:103:ARG:NH2	2.85	0.45
36:BA:2787:C:O2	36:BA:2787:C:C2'	2.64	0.45
36:BA:2810:A:O2'	40:BE:61:ARG:NE	2.50	0.45
36:DA:2729:G:H2'	36:DA:2730:C:H6	1.82	0.45
47:DO:2:ILE:CD1	47:DO:6:THR:HG21	2.47	0.45
29:D3:50:VAL:C	29:D3:52:HIS:H	2.20	0.45
1:CA:1358:U:H5''	14:CN:33:VAL:O	2.16	0.45
1:CA:975:A:H5'	1:CA:975:A:H8	1.82	0.45
7:CG:106:GLN:O	7:CG:109:ASN:N	2.49	0.45
9:CI:111:ARG:HG2	9:CI:112:LYS:N	2.31	0.45
7:CG:16:LEU:HD12	9:CI:41:VAL:O	2.16	0.45
14:CN:59:ALA:O	14:CN:60:SER:CB	2.63	0.45
1:AA:968:A:HO2'	1:AA:969:A:P	2.37	0.45
1:AA:1494:G:N2	1:AA:1495:U:C2	2.85	0.45
1:AA:795:C:C1'	1:AA:1506:U:C5	3.00	0.45
51:DS:12:PHE:HD2	51:DS:12:PHE:N	2.14	0.45
51:DS:97:ARG:HG3	51:DS:97:ARG:H	1.55	0.45
1:AA:1423:G:C2	1:AA:1478:C:C2	3.05	0.45
1:AA:1482:G:HO2'	1:AA:1483:A:H8	1.59	0.45
36:DA:1336:A:H2'	36:DA:1337:G:C8	2.51	0.45
1:CA:1475:G:H4'	36:DA:1689:A:H4'	1.98	0.45
39:DD:241:PRO:C	39:DD:242:ARG:HD2	2.37	0.45
55:DW:5:ALA:C	55:DW:6:ILE:HG13	2.37	0.45
47:DO:114:ILE:O	47:DO:117:LEU:N	2.49	0.45
25:AZ:222:LEU:HA	25:AZ:304:LEU:O	2.17	0.45
1:CA:1320:C:C6	1:CA:1320:C:H5'	2.52	0.45
27:B1:45:ASN:ND2	27:B1:45:ASN:C	2.69	0.45
1:CA:1460:A:N6	1:CA:1461:G:C2	2.85	0.45
36:BA:1005:C:H6	36:BA:1005:C:O5'	1.99	0.45
46:BN:108:PRO:C	46:BN:109:LYS:HG3	2.37	0.45
53:BU:83:LEU:HD12	53:BU:83:LEU:H	1.82	0.45
57:BY:9:LYS:HG2	57:BY:11:ASP:OD2	2.15	0.45
37:DB:112:U:H2'	37:DB:113:G:H8	1.79	0.45
36:DA:2700:C:O2'	36:DA:2701:C:H5'	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:940:G:H3'	36:DA:941:A:H5''	1.98	0.45
1:AA:1305:G:OP2	1:AA:1305:G:H8	2.00	0.45
33:D7:20:ALA:O	33:D7:23:ARG:N	2.49	0.45
30:D4:14:ILE:H	30:D4:14:ILE:HD12	1.82	0.45
42:DG:47:LYS:HB3	42:DG:81:LYS:HE2	1.99	0.45
36:DA:1169:G:H2'	36:DA:1170:G:O4'	2.17	0.45
1:AA:78:G:H1	1:AA:91:C:N4	2.15	0.45
36:BA:723:G:H2'	36:BA:724:U:H6	1.75	0.45
43:DH:23:ARG:O	43:DH:24:VAL:CG2	2.57	0.45
5:CE:118:ILE:CG1	5:CE:119:LEU:N	2.79	0.45
43:BH:135:GLY:HA3	43:BH:141:VAL:HG22	1.99	0.45
36:DA:1579:A:H2'	36:DA:1580:A:C8	2.51	0.45
51:DS:104:GLY:C	51:DS:106:ARG:H	2.20	0.45
36:DA:1779:U:O2	36:DA:1783:A:N6	2.50	0.45
1:AA:1428:A:H2'	1:AA:1429:C:C6	2.52	0.45
36:BA:2026:C:H2'	36:BA:2026:C:O2	2.16	0.45
1:AA:1128:C:H1'	1:AA:1146:A:H61	1.81	0.45
8:CH:64:LYS:HG2	8:CH:65:TYR:H	1.79	0.45
10:CJ:40:LEU:CD1	10:CJ:69:ASN:HB3	2.46	0.45
1:AA:1463:C:H5''	52:BT:115:ARG:HH21	1.82	0.45
20:AT:56:MET:SD	20:AT:85:MET:HB3	2.57	0.45
1:CA:120:A:H2'	1:CA:122:G:N7	2.31	0.45
36:BA:150:C:O5'	36:BA:150:C:H6	2.00	0.45
36:BA:2071:A:C2	36:BA:2441:C:N3	2.85	0.45
36:DA:2275:C:H2'	36:DA:2275:C:OP1	2.17	0.45
54:BV:15:GLU:O	54:BV:16:PRO:O	2.35	0.45
1:CA:353:A:H2'	1:CA:354:G:OP2	2.17	0.45
36:DA:270:A:HO2'	36:DA:271:A:H5'	1.82	0.45
14:AN:48:ALA:N	14:AN:53:LEU:CD1	2.79	0.45
1:AA:443:C:O2'	1:AA:444:C:H5'	2.16	0.45
33:D7:10:ARG:O	33:D7:13:ALA:N	2.49	0.45
1:AA:1387:G:C6	1:AA:1388:C:C4	3.05	0.45
1:AA:302:G:H2'	1:AA:303:A:H8	1.82	0.45
18:CR:63:GLN:HG3	18:CR:63:GLN:O	2.17	0.45
33:D7:19:ARG:HD3	36:DA:125:G:P	2.57	0.45
24:CY:75:C:C6	25:CZ:230:THR:O	2.70	0.45
1:CA:928:G:H2'	1:CA:929:G:C5'	2.46	0.45
50:BR:85:PRO:O	50:BR:86:ARG:C	2.56	0.45
1:AA:1142:G:H2'	1:AA:1143:G:C5'	2.40	0.45
36:BA:886:C:HO2'	36:BA:887:A:H4'	1.78	0.45
55:BW:1:MET:HG3	55:BW:64:MET:HE3	1.98	0.45
1:AA:688:G:O3'	11:AK:46:GLY:HA3	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:272(E):G:H22	36:BA:364:C:H1'	1.81	0.45
12:AL:33:ARG:O	12:AL:85:ILE:HB	2.17	0.45
37:BB:52:A:O2'	37:BB:53:A:C8	2.64	0.45
36:BA:58:G:H2'	36:BA:59:U:H6	1.81	0.45
51:DS:84:GLN:N	51:DS:105:ALA:HB3	2.32	0.45
36:BA:1747(A):G:H2'	36:BA:1748:G:C4'	2.46	0.45
55:BW:82:LEU:HD12	55:BW:82:LEU:N	2.31	0.45
1:CA:1408:A:H5'	36:DA:1912:A:N6	2.32	0.45
36:DA:1934:C:O2'	36:DA:1974:C:H5''	2.17	0.45
42:DG:2:PRO:O	42:DG:3:LEU:CB	2.65	0.45
36:BA:654(L):G:H2'	36:BA:654(M):C:C4'	2.46	0.45
1:CA:279:A:OP2	17:CQ:95:TYR:OH	2.31	0.45
36:DA:284:U:O2'	36:DA:285:C:H5'	2.17	0.45
36:BA:880:G:H2'	36:BA:881:G:C8	2.52	0.45
15:AO:5:LYS:C	15:AO:6:GLU:HG3	2.38	0.45
25:CZ:86:ALA:C	25:CZ:87:ASP:OD1	2.55	0.45
57:BY:16:ALA:O	57:BY:21:LYS:HG3	2.17	0.45
18:AR:31:LEU:CD2	18:AR:65:ILE:HD12	2.46	0.45
22:AV:34:G:C2'	22:AV:35:A:H5'	2.47	0.45
1:AA:304:U:O2'	1:AA:305:G:H5'	2.17	0.45
3:AC:138:VAL:CG1	3:AC:139:GLN:N	2.80	0.45
1:CA:654:G:H2'	1:CA:655:A:C8	2.52	0.45
54:BV:7:THR:O	54:BV:7:THR:HG23	2.17	0.45
28:D2:24:LEU:HD23	28:D2:24:LEU:O	2.17	0.45
26:B0:84:LEU:H	26:B0:84:LEU:HD12	1.81	0.45
36:BA:173:G:H2'	36:BA:173:G:N3	2.32	0.45
15:CO:33:THR:HG23	15:CO:63:ARG:NH1	2.31	0.45
25:CZ:253:VAL:HG22	25:CZ:265:THR:O	2.16	0.45
24:CY:30:C:O2	24:CY:30:C:C2'	2.59	0.45
36:BA:2413:G:C4	36:BA:2414:G:C8	3.05	0.45
36:BA:832:G:P	48:BP:40:SER:HB2	2.56	0.45
53:BU:14:HIS:C	53:BU:16:LYS:H	2.19	0.45
50:DR:79:LEU:O	50:DR:79:LEU:HD22	2.17	0.45
57:BY:49:VAL:O	57:BY:50:ARG:HB2	2.16	0.45
34:D8:18:ALA:C	34:D8:20:GLY:H	2.19	0.45
34:D8:45:GLY:O	34:D8:46:ARG:C	2.56	0.45
34:D8:52:LYS:O	34:D8:56:GLU:OE1	2.35	0.45
48:DP:107:LYS:O	48:DP:109:GLY:N	2.49	0.45
36:DA:2414:G:H21	48:DP:67:MET:CE	2.29	0.45
25:AZ:146:LEU:H	25:AZ:149:LEU:HD23	1.82	0.45
36:DA:621:A:C2'	36:DA:622:G:H5'	2.46	0.45
36:DA:240:G:C6	36:DA:241:A:N6	2.85	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:51:VAL:CB	5:CE:52:PRO:HD3	2.44	0.45
36:DA:2531:A:H61	36:DA:2662:A:H61	1.65	0.45
36:DA:209:C:C4'	36:DA:681:G:H4'	2.47	0.45
1:AA:1174:G:O2'	1:AA:1175:G:H5'	2.17	0.45
36:BA:606:U:H2'	36:BA:607:U:H4'	1.98	0.45
1:AA:544:G:C6	1:AA:545:C:N3	2.84	0.45
43:DH:50:VAL:HG12	43:DH:51:ARG:N	2.32	0.45
49:BQ:51:ARG:HG3	49:BQ:51:ARG:NH1	2.31	0.45
36:BA:296:C:C2'	36:BA:297:C:H5'	2.47	0.45
36:BA:1654:A:OP2	50:BR:3:HIS:CD2	2.69	0.45
36:BA:2455:G:N1	36:BA:2498:C:N4	2.66	0.45
36:BA:2638:G:OP1	40:BE:82:ARG:NH2	2.50	0.45
50:BR:24:GLN:O	50:BR:25:ALA:C	2.56	0.45
50:BR:97:VAL:O	50:BR:98:LEU:HD23	2.17	0.45
55:BW:87:PRO:O	55:BW:88:ARG:HD2	2.17	0.45
13:AM:29:ARG:HB3	13:AM:64:TRP:CZ2	2.52	0.45
37:BB:43:C:H2'	37:BB:44:G:H5''	1.99	0.45
36:DA:18:C:H2'	36:DA:19:C:C6	2.51	0.45
36:DA:530:G:H1'	36:DA:532:A:N7	2.32	0.45
53:DU:65:ILE:HD11	53:DU:96:ALA:CB	2.47	0.45
54:DV:64:HIS:HA	54:DV:92:THR:HA	1.99	0.45
1:AA:312:C:H2'	1:AA:313:A:H8	1.82	0.45
8:CH:11:THR:CG2	8:CH:14:ARG:HH12	2.20	0.45
8:CH:82:HIS:O	8:CH:137:VAL:HG13	2.17	0.45
1:CA:964:A:H5''	1:CA:965:A:OP2	2.17	0.45
1:CA:992:U:O2'	1:CA:993:G:OP2	2.31	0.45
4:CD:10:ARG:NH1	4:CD:40:PRO:HG3	2.31	0.45
4:CD:52:SER:O	4:CD:53:ASP:C	2.56	0.45
36:BA:2334:G:H21	51:BS:18:ILE:HG21	1.81	0.45
8:AH:103:VAL:CG1	8:AH:108:GLY:HA3	2.47	0.45
36:DA:2807:G:C3'	36:DA:2808:U:C5'	2.90	0.45
13:AM:98:VAL:O	13:AM:98:VAL:HG12	2.17	0.45
36:DA:2672:G:C3'	36:DA:2673:G:H5''	2.46	0.45
25:CZ:191:GLY:HA3	25:CZ:197:ASP:CB	2.29	0.45
36:BA:139(A):G:H3'	36:BA:140:G:H8	1.82	0.45
36:BA:1761:C:C2'	36:BA:1762:A:H8	2.29	0.45
40:BE:165:VAL:CG1	40:BE:166:THR:N	2.80	0.45
36:DA:1661:G:C6	36:DA:2000:G:N1	2.85	0.45
36:DA:2681:C:C5	36:DA:2727:G:N2	2.85	0.45
36:DA:2683:C:H42	36:DA:2727:G:N2	2.14	0.45
52:DT:27:THR:HG23	52:DT:28:VAL:N	2.31	0.45
58:BZ:151:HIS:O	58:BZ:152:ALA:O	2.34	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1186:G:H21	14:AN:61:TRP:C	2.20	0.45
1:AA:934:C:H5	1:AA:1344:C:C4	2.35	0.45
7:CG:135:VAL:O	7:CG:136:LYS:C	2.55	0.45
10:CJ:61:GLU:CG	14:CN:58:LYS:HE2	2.41	0.45
36:BA:1060:U:H6	36:BA:1060:U:OP1	2.00	0.45
22:CV:52:G:H1	22:CV:62:C:H42	1.65	0.45
36:BA:919:G:H22	36:BA:2268:A:H3'	1.82	0.45
19:AS:51:VAL:CG1	19:AS:52:TYR:N	2.79	0.45
19:AS:40:ILE:HD11	19:AS:66:MET:HE3	1.99	0.45
4:AD:100:ARG:HH11	4:AD:100:ARG:HG3	1.81	0.45
51:DS:12:PHE:CE1	51:DS:91:PRO:HB3	2.52	0.45
51:DS:18:ILE:HG13	51:DS:18:ILE:H	1.47	0.45
36:BA:309:G:O3'	57:BY:18:GLY:HA3	2.17	0.45
42:BG:18:GLU:O	42:BG:19:LEU:C	2.55	0.45
36:DA:2104:G:O6	36:DA:2185:C:N3	2.50	0.45
36:DA:2174:C:O2'	38:DC:219:GLY:O	2.30	0.45
1:AA:1217:C:O2'	1:AA:1218:C:H5'	2.16	0.45
36:BA:2814:C:C6	36:BA:2815:C:H5	2.35	0.45
19:CS:26:GLY:O	19:CS:27:GLU:O	2.35	0.45
19:CS:39:THR:HG22	19:CS:40:ILE:N	2.32	0.45
3:AC:122:GLU:C	3:AC:124:ILE:N	2.69	0.45
1:CA:449:C:H3'	1:CA:450:G:C8	2.49	0.45
1:CA:80:G:C3'	1:CA:81:U:C5'	2.93	0.45
36:BA:1777:U:N3	36:BA:1778:U:C5	2.85	0.45
37:DB:73:A:H2'	37:DB:74:U:H5'	1.99	0.45
37:DB:74:U:H2'	37:DB:75:G:O4'	2.17	0.45
25:AZ:259:ALA:O	25:AZ:260:PRO:O	2.34	0.45
36:BA:1336:A:O2'	36:BA:1337:G:H5'	2.17	0.45
36:DA:2510:C:O2'	36:DA:2511:U:H5'	2.17	0.45
57:DY:87:LYS:O	57:DY:91:GLU:N	2.50	0.45
36:DA:1759:A:O2'	36:DA:1760:A:H5'	2.16	0.45
42:BG:88:ILE:CG2	42:BG:89:GLY:N	2.80	0.45
36:DA:467:G:OP2	36:DA:467:G:H8	1.99	0.45
10:CJ:43:ARG:O	10:CJ:67:THR:HG22	2.17	0.45
36:BA:1466:G:C3'	36:BA:1547:C:H41	2.29	0.45
25:AZ:390:GLU:HB3	25:AZ:395:VAL:HG11	1.98	0.45
36:DA:1168:G:N1	36:DA:1182:A:C6	2.85	0.45
1:AA:1307:U:H3	1:AA:1330:U:H3	1.64	0.45
8:CH:129:VAL:HG23	8:CH:130:GLY:N	2.30	0.45
43:DH:19:VAL:O	43:DH:20:ALA:HB2	2.17	0.45
43:BH:83:TYR:CB	43:BH:135:GLY:H	2.15	0.45
25:CZ:242:ILE:HD12	25:CZ:281:ILE:O	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:CO:82:ILE:C	15:CO:82:ILE:HD13	2.38	0.45
2:AB:170:GLU:C	2:AB:172:ILE:N	2.69	0.45
49:BQ:125:LEU:HB3	49:BQ:126:PRO:HD2	1.97	0.45
36:DA:597:U:C5'	48:DP:15:ARG:NH2	2.80	0.45
1:AA:42:G:C6	1:AA:43:C:C4	3.05	0.45
1:CA:119:A:H5''	1:CA:120:A:H5'	1.97	0.45
36:BA:373:U:H2'	36:BA:374:A:H8	1.81	0.45
11:CK:114:VAL:HG23	11:CK:115:PRO:HD2	1.99	0.45
13:AM:108:ARG:H	13:AM:108:ARG:HD2	1.76	0.45
38:BC:148:ASN:O	38:BC:151:GLU:N	2.50	0.45
55:DW:12:ILE:O	55:DW:13:SER:C	2.55	0.45
49:DQ:53:ALA:CB	49:DQ:124:LYS:HE3	2.47	0.45
27:D1:94:LEU:N	27:D1:94:LEU:HD12	2.31	0.45
38:BC:10:LEU:HD12	38:BC:32:LEU:CD2	2.39	0.45
15:AO:11:VAL:O	15:AO:14:GLU:HB3	2.17	0.45
22:CW:35:A:N6	22:CW:36:A:N1	2.65	0.45
33:D7:12:ARG:NH2	33:D7:44:PRO:HB3	2.27	0.45
36:DA:1604:C:O2'	36:DA:1605:C:H5'	2.17	0.45
36:BA:526:A:N6	36:BA:2626:C:H4'	2.32	0.45
53:BU:18:LEU:HD11	53:BU:30:LYS:O	2.17	0.45
36:DA:760:G:H8	36:DA:760:G:O5'	2.00	0.45
7:CG:63:LYS:HZ3	7:CG:67:GLU:HB2	1.79	0.45
36:BA:2199:A:H5'	36:BA:2200:C:OP2	2.17	0.45
39:BD:43:ARG:NH1	39:BD:49:ILE:CG2	2.80	0.45
39:DD:131:LEU:CB	39:DD:132:PRO:CD	2.95	0.45
6:AF:27:GLN:O	6:AF:28:ARG:C	2.55	0.45
1:AA:1093:A:N3	1:AA:1095:U:H5'	2.32	0.45
36:DA:848:G:C4	36:DA:933:A:H1'	2.52	0.45
1:AA:1320:C:H41	19:AS:37:ARG:HB3	1.82	0.45
36:DA:1022:G:H22	36:DA:1142(A):A:H2	1.65	0.45
46:DN:62:VAL:O	46:DN:62:VAL:HG13	2.17	0.45
25:AZ:317:GLU:O	25:AZ:318:ALA:HB2	2.16	0.45
25:AZ:316:PHE:CD2	25:AZ:400:VAL:HG13	2.52	0.45
1:AA:933:G:N2	1:AA:935:A:O4'	2.50	0.45
58:BZ:107:THR:HG22	58:BZ:111:VAL:HG21	1.99	0.45
1:CA:1379:G:C4	1:CA:1380:U:C5	3.05	0.45
1:AA:773:G:N1	1:AA:774:G:C5	2.85	0.45
49:DQ:116:GLU:O	49:DQ:117:ALA:C	2.55	0.45
1:CA:619:U:N3	4:CD:135:LEU:HD21	2.31	0.45
12:AL:84:LEU:CD2	12:AL:85:ILE:N	2.78	0.45
1:AA:602:A:H2'	1:AA:603:U:H6	1.82	0.45
36:DA:2554:U:O2'	36:DA:2555:U:H5'	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:522:C:C2	1:AA:523:A:C8	3.05	0.45
1:CA:926:G:C5	1:CA:1505:G:C5	3.05	0.45
1:CA:1507:A:H4'	1:CA:1507:A:OP2	2.17	0.45
4:AD:43:HIS:O	4:AD:45:GLN:HG2	2.17	0.45
1:AA:189(H):G:O2'	1:AA:189(I):G:O5'	2.34	0.45
1:AA:409:G:H8	1:AA:409:G:OP2	1.99	0.45
11:AK:89:ALA:C	11:AK:91:ARG:H	2.19	0.45
25:CZ:19:HIS:HD2	25:CZ:115:GLN:N	2.14	0.45
17:CQ:56:VAL:HG23	17:CQ:81:ARG:HG3	1.95	0.45
39:DD:17:THR:HG23	39:DD:205:VAL:HB	1.99	0.45
36:DA:1909:C:N4	36:DA:1921:G:H1	2.11	0.45
25:AZ:86:ALA:C	25:AZ:87:ASP:OD1	2.54	0.45
22:AV:2:C:H2'	22:AV:3:C:C6	2.51	0.45
1:CA:722:A:N3	1:CA:722:A:H2'	2.32	0.45
36:BA:363(A):A:H2'	36:BA:363(A):A:N3	2.30	0.45
36:BA:1720:U:H3'	36:BA:1721:G:H5''	1.98	0.45
3:AC:130:VAL:O	3:AC:131:ARG:C	2.55	0.45
36:BA:830:G:H1'	36:BA:2448:A:N1	2.31	0.45
36:DA:1434:A:H61	36:DA:1558:A:N6	2.15	0.45
15:CO:70:LEU:HD12	15:CO:70:LEU:HA	1.63	0.45
36:BA:1830:C:H6	36:BA:1830:C:O5'	2.00	0.45
8:AH:67:PRO:O	8:AH:76:PRO:HB3	2.17	0.45
36:BA:2400:G:H2'	36:BA:2401:U:H5'	1.98	0.44
36:BA:244:A:H3'	36:BA:245:G:H5''	1.99	0.44
31:D5:4:HIS:CB	31:D5:5:PRO:CD	2.83	0.44
36:DA:2838:G:H2'	36:DA:2839:G:H8	1.82	0.44
39:DD:147:LEU:CD2	39:DD:183:ARG:HH12	2.30	0.44
34:D8:50:LEU:CD1	34:D8:51:ALA:N	2.73	0.44
57:DY:50:ARG:O	57:DY:53:PRO:HD3	2.17	0.44
39:BD:30:GLU:HB2	39:BD:35:LYS:CE	2.43	0.44
39:BD:52:ARG:HG3	39:BD:52:ARG:H	1.36	0.44
1:AA:1157:A:O2'	1:AA:1158:C:P	2.76	0.44
1:AA:1200:C:O2'	1:AA:1201:A:OP2	2.28	0.44
1:AA:992:U:O2'	1:AA:993:G:P	2.76	0.44
50:BR:52:ILE:O	50:BR:55:ALA:N	2.49	0.44
53:DU:112:ARG:CZ	54:DV:46:VAL:HG11	2.45	0.44
10:AJ:17:ASP:CB	10:AJ:70:ARG:NH2	2.80	0.44
46:DN:118:LYS:C	46:DN:120:LEU:H	2.21	0.44
53:DU:90:VAL:HG21	54:DV:47:VAL:HG23	1.98	0.44
54:DV:38:LEU:O	54:DV:51:VAL:CG1	2.65	0.44
2:AB:220:ASP:O	2:AB:223:ILE:N	2.50	0.44
8:CH:6:ILE:N	8:CH:6:ILE:CD1	2.80	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1054:C:OP1	1:CA:1198:G:OP2	2.35	0.44
51:BS:66:ALA:CB	51:BS:99:LYS:HD3	2.47	0.44
5:AE:136:MET:C	5:AE:138:ALA:N	2.69	0.44
8:AH:9:MET:O	8:AH:10:LEU:C	2.55	0.44
2:CB:48:MET:O	2:CB:51:LEU:N	2.50	0.44
13:AM:90:LEU:O	13:AM:92:HIS:N	2.49	0.44
25:CZ:137:LYS:HA	62:CZ:501:GDP:O6	2.17	0.44
36:BA:1668:A:C5	36:BA:1674:G:C5	3.05	0.44
58:DZ:127:LYS:HZ1	58:DZ:164:ALA:HB2	1.72	0.44
7:CG:19:GLY:O	7:CG:20:ASP:C	2.55	0.44
10:CJ:44:VAL:CG1	10:CJ:46:ARG:HG2	2.36	0.44
4:AD:135:LEU:O	4:AD:137:SER:N	2.50	0.44
57:BY:8:LYS:HB2	57:BY:28:LYS:CE	2.47	0.44
55:BW:5:ALA:CB	55:BW:105:VAL:HB	2.46	0.44
2:AB:31:TYR:HE1	2:AB:200:ILE:HG12	1.82	0.44
2:AB:44:LEU:HD12	2:AB:44:LEU:N	2.24	0.44
3:CC:122:GLU:O	3:CC:124:ILE:N	2.50	0.44
25:AZ:219:LYS:HB3	25:AZ:220:PRO:HD2	2.00	0.44
1:CA:35:G:C5	1:CA:36:C:N4	2.85	0.44
36:DA:1446:C:N4	36:DA:1465:G:H1	2.14	0.44
36:BA:441:U:O2'	36:BA:442:G:H5'	2.16	0.44
37:DB:16:G:HO2'	37:DB:17:C:P	2.40	0.44
58:DZ:47:VAL:O	58:DZ:48:PHE:C	2.54	0.44
36:DA:722:A:H2'	36:DA:722:A:N3	2.31	0.44
1:AA:901:A:C6	1:AA:902:G:H1'	2.52	0.44
1:CA:1015:A:H4'	14:CN:15:LYS:NZ	2.33	0.44
1:CA:1460:A:N1	1:CA:1461:G:N3	2.65	0.44
46:BN:118:LYS:C	46:BN:120:LEU:H	2.20	0.44
39:DD:24:ILE:HG12	39:DD:25:THR:N	2.32	0.44
36:BA:1494:A:O2'	36:BA:1495:A:H5''	2.13	0.44
13:CM:63:THR:CG2	13:CM:64:TRP:N	2.77	0.44
42:BG:69:ALA:O	42:BG:90:LEU:CD1	2.65	0.44
40:BE:132:HIS:CD2	40:BE:135:HIS:CE1	3.05	0.44
1:CA:452:A:C6	1:CA:453:A:C6	3.05	0.44
7:AG:61:VAL:O	7:AG:63:LYS:N	2.50	0.44
6:CF:56:PRO:HG2	6:CF:57:GLN:NE2	2.14	0.44
25:CZ:254:GLU:O	25:CZ:304:LEU:HA	2.18	0.44
1:AA:322:C:C5	1:AA:323:U:C5	3.05	0.44
36:BA:2041:U:H2'	36:BA:2042:A:H8	1.80	0.44
36:BA:532:A:H5''	53:BU:28:ARG:NH1	2.30	0.44
36:BA:532:A:C5'	53:BU:28:ARG:HH12	2.30	0.44
4:AD:175:SER:O	4:AD:176:LEU:HB2	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AU:18:TYR:CD2	21:AU:22:ARG:NE	2.85	0.44
1:AA:397:A:H5'	1:AA:398:C:OP1	2.18	0.44
2:AB:127:ILE:C	2:AB:129:GLU:N	2.69	0.44
29:B3:8:LEU:HA	29:B3:54:VAL:HG22	2.00	0.44
36:BA:120:U:H1'	36:BA:149:A:C8	2.52	0.44
1:CA:1240:U:H3'	1:CA:1241:G:C5'	2.48	0.44
31:D5:33:CYS:SG	31:D5:49:CYS:SG	3.11	0.44
1:AA:406:G:H2'	1:AA:407:G:C8	2.50	0.44
39:DD:126:GLN:HG3	39:DD:129:ASN:HD21	1.80	0.44
36:DA:1386:C:C6	36:DA:1386:C:C3'	3.01	0.44
36:BA:685:A:O2'	36:BA:773:U:O4	2.26	0.44
36:DA:1605:C:H2'	36:DA:1606:G:C5'	2.46	0.44
4:AD:2:GLY:O	4:AD:3:ARG:C	2.56	0.44
1:AA:694:A:H2'	1:AA:695:A:O4'	2.16	0.44
14:AN:18:VAL:O	14:AN:19:ARG:O	2.35	0.44
1:AA:935:A:C2	1:AA:936:C:N3	2.86	0.44
12:AL:28:LYS:C	12:AL:30:ALA:N	2.71	0.44
47:DO:7:TYR:CE1	47:DO:20:MET:HB2	2.52	0.44
36:DA:2450:A:C2	36:DA:2451:A:C4	3.05	0.44
1:CA:704:A:O2'	1:CA:705:U:H5'	2.17	0.44
6:CF:62:TRP:CD1	18:CR:35:ARG:NH1	2.85	0.44
46:BN:89:LYS:C	46:BN:93:THR:HG22	2.37	0.44
12:AL:32:PHE:CB	12:AL:84:LEU:HD21	2.47	0.44
11:AK:15:ALA:HA	11:AK:77:MET:HA	1.99	0.44
1:CA:1339:A:C2	22:CV:31:A:H4'	2.52	0.44
56:DX:41:ASN:O	56:DX:45:THR:HG23	2.16	0.44
1:AA:779:C:H2'	1:AA:780:A:O4'	2.17	0.44
36:DA:65:C:O2'	36:DA:66:C:H5'	2.16	0.44
19:CS:35:SER:O	19:CS:37:ARG:N	2.50	0.44
1:AA:161:A:O2'	1:AA:162:A:H5'	2.16	0.44
27:D1:56:GLN:O	27:D1:57:GLU:C	2.55	0.44
36:DA:1747(A):G:H2'	36:DA:1748:G:C5'	2.46	0.44
55:BW:68:ARG:O	55:BW:110:LYS:N	2.50	0.44
48:BP:122:PRO:HB3	48:BP:141:ALA:CB	2.45	0.44
1:AA:563:A:C6	1:AA:567:G:N3	2.85	0.44
2:CB:158:LEU:HA	2:CB:159:PRO:HD3	1.78	0.44
7:AG:95:ARG:O	7:AG:98:SER:N	2.49	0.44
36:BA:2460:U:O2'	36:BA:2461:C:H5'	2.17	0.44
1:AA:1012:U:O2'	1:AA:1013:G:H5'	2.17	0.44
29:D3:31:LEU:O	36:DA:1158:C:H4'	2.17	0.44
36:DA:363:G:C6	36:DA:363(A):A:N7	2.85	0.44
15:AO:64:ARG:O	15:AO:66:LEU:N	2.50	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1720:U:C3'	36:BA:1721:G:H5''	2.47	0.44
45:BK:18:UNK:O	45:BK:19:UNK:C	2.65	0.44
36:BA:699:A:H2'	36:BA:700:G:O4'	2.17	0.44
22:AV:32:U:H5'	22:AV:33:U:OP2	2.17	0.44
36:DA:153:C:H2'	36:DA:154:G:C8	2.52	0.44
36:DA:2830:G:H5'	40:DE:58:ARG:NH1	2.32	0.44
1:AA:1132:C:O2'	1:AA:1133:G:H5'	2.17	0.44
8:AH:91:ARG:HG2	8:AH:91:ARG:HH11	1.82	0.44
36:BA:2633:G:H5'	36:BA:2812:G:H5'	1.99	0.44
56:BX:41:ASN:O	56:BX:45:THR:HG23	2.17	0.44
1:CA:414:A:C2	1:CA:415:A:H1'	2.52	0.44
3:CC:80:GLY:O	3:CC:82:GLU:OE2	2.34	0.44
24:CY:30:C:H42	24:CY:40:G:H1	1.64	0.44
36:BA:1188:U:H5''	54:BV:79:VAL:CG1	2.47	0.44
48:BP:23:PRO:HG2	48:BP:33:ARG:NE	2.32	0.44
36:DA:1292:U:H2'	36:DA:1293:C:C5	2.52	0.44
57:BY:59:GLY:O	57:BY:60:PHE:CD1	2.70	0.44
32:D6:42:TRP:CD2	36:DA:2348:U:O2'	2.69	0.44
48:DP:97:PRO:O	48:DP:99:LEU:N	2.42	0.44
25:AZ:38:GLU:CG	25:AZ:189:ARG:HH12	2.17	0.44
41:DF:182:ASN:ND2	41:DF:185:ASP:OD2	2.50	0.44
8:AH:63:LEU:N	8:AH:63:LEU:CD2	2.77	0.44
56:BX:12:VAL:HG12	56:BX:27:THR:CA	2.46	0.44
36:BA:1798:U:OP2	39:BD:274:ARG:NH2	2.37	0.44
36:DA:1856:G:H1	36:DA:1886:C:H42	1.64	0.44
38:BC:134:ARG:O	38:BC:136:LEU:HG	2.16	0.44
36:BA:601:C:H6	36:BA:601:C:O5'	2.00	0.44
1:AA:1054:C:OP2	1:AA:1198:G:OP2	2.35	0.44
1:AA:1055:A:C8	1:AA:1206:G:N2	2.85	0.44
4:AD:52:SER:O	4:AD:53:ASP:C	2.56	0.44
1:AA:546:G:OP1	4:AD:73:ARG:HB2	2.18	0.44
50:BR:2:ARG:HD3	50:BR:5:LYS:NZ	2.31	0.44
36:DA:2649:U:O2'	36:DA:2650:U:H5'	2.17	0.44
36:DA:1218:C:H2'	36:DA:1219:G:H5'	1.99	0.44
36:DA:2023:G:H8	36:DA:2023:G:P	2.40	0.44
36:DA:448:U:H1'	41:DF:84:VAL:HG11	2.00	0.44
48:DP:23:PRO:CG	48:DP:33:ARG:NE	2.80	0.44
53:DU:10:ARG:HA	53:DU:13:LYS:CG	2.46	0.44
53:DU:55:ARG:HA	53:DU:58:ARG:HG3	1.99	0.44
53:DU:66:ASN:HA	53:DU:69:CYS:SG	2.57	0.44
53:DU:83:LEU:HD12	53:DU:83:LEU:N	2.31	0.44
36:DA:572:A:C5'	54:DV:78:LYS:HZ2	2.31	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:8:LYS:HZ1	2:AB:217:ARG:HH12	1.65	0.44
8:CH:13:ILE:O	8:CH:16:ALA:N	2.51	0.44
8:AH:82:HIS:O	8:AH:137:VAL:HG13	2.16	0.44
8:AH:85:ARG:CZ	8:AH:87:SER:O	2.65	0.44
2:CB:92:TYR:C	2:CB:92:TYR:HD1	2.21	0.44
34:B8:17:THR:O	34:B8:20:GLY:N	2.45	0.44
48:BP:123:LEU:H	48:BP:123:LEU:HD23	1.81	0.44
1:CA:1308:U:OP1	13:CM:98:VAL:N	2.42	0.44
1:AA:954:G:H4'	13:AM:120:LYS:HD2	1.99	0.44
13:AM:106:ASN:O	13:AM:107:ALA:CB	2.64	0.44
36:DA:2675:A:N3	36:DA:2675:A:H2'	2.32	0.44
36:BA:140:G:H1'	36:BA:141:A:C2	2.52	0.44
36:BA:2729:G:H2'	36:BA:2730:C:H6	1.82	0.44
47:BO:107:ARG:NH1	52:BT:35:LYS:HB2	2.33	0.44
37:BB:105:A:H2'	37:BB:106:G:O4'	2.16	0.44
37:BB:73:A:H2'	37:BB:74:U:H5'	1.99	0.44
58:BZ:95:PRO:HA	58:BZ:128:VAL:O	2.17	0.44
58:BZ:18:LEU:HD23	58:BZ:25:PRO:HB3	2.00	0.44
36:BA:2732:G:H3'	36:BA:2733:A:C5'	2.46	0.44
58:DZ:151:HIS:HA	58:DZ:171:ILE:CG1	2.46	0.44
55:BW:5:ALA:O	55:BW:6:ILE:HB	2.16	0.44
36:DA:1771:C:C5	36:DA:1772:G:N7	2.86	0.44
55:DW:6:ILE:HG22	55:DW:7:ALA:H	1.80	0.44
31:B5:40:LYS:NZ	31:B5:46:CYS:N	2.66	0.44
3:CC:102:ASN:O	3:CC:103:VAL:HG23	2.17	0.44
4:CD:88:VAL:O	4:CD:92:VAL:HG23	2.17	0.44
19:CS:60:VAL:HG22	19:CS:61:TYR:O	2.16	0.44
3:AC:83:ARG:O	3:AC:85:ARG:N	2.50	0.44
36:BA:1789:A:H2'	36:BA:1790:C:H6	1.82	0.44
58:DZ:84:GLU:HB3	58:DZ:85:HIS:H	1.57	0.44
1:AA:1512:U:C2	1:AA:1513:A:N7	2.84	0.44
9:AI:4:TYR:HB2	9:AI:19:LEU:CB	2.31	0.44
36:DA:271(Q):G:H1'	36:DA:271(R):G:C8	2.52	0.44
1:CA:1203:C:O2'	1:CA:1204:A:H5'	2.16	0.44
36:BA:1392:A:N6	36:BA:1393:A:N1	2.65	0.44
39:BD:101:GLU:HG2	39:BD:102:LYS:N	2.32	0.44
39:DD:83:GLU:O	39:DD:92:ILE:HD13	2.17	0.44
22:AV:56:C:H1'	42:BG:76:SER:HB2	1.98	0.44
33:D7:36:GLN:O	33:D7:38:GLY:N	2.50	0.44
37:DB:44:G:H3'	42:DG:96:ARG:NH2	2.32	0.44
42:DG:107:LEU:N	42:DG:107:LEU:HD23	2.32	0.44
42:DG:127:GLY:O	42:DG:128:ARG:C	2.55	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DG:161:THR:HG21	42:DG:172:LEU:CD1	2.47	0.44
25:CZ:248:LYS:HA	25:CZ:270:VAL:HG21	1.99	0.44
20:AT:64:ASP:O	20:AT:67:ALA:N	2.51	0.44
57:BY:87:LYS:O	57:BY:91:GLU:N	2.50	0.44
7:AG:44:TYR:O	7:AG:47:CYS:N	2.50	0.44
36:BA:1090:U:H2'	36:BA:1091:G:O4'	2.17	0.44
36:DA:2786:U:C4	36:DA:2787:C:C5	3.05	0.44
49:BQ:27:VAL:H	49:BQ:137:TYR:HD1	1.65	0.44
58:BZ:76:LEU:O	58:BZ:84:GLU:HG3	2.18	0.44
22:CV:53:G:O2'	22:CV:54:U:H5'	2.17	0.44
25:CZ:98:GLN:O	25:CZ:98:GLN:CG	2.63	0.44
31:B5:13:LYS:HZ1	36:BA:516:C:P	2.41	0.44
55:BW:17:VAL:O	55:BW:19:LEU:N	2.50	0.44
10:CJ:38:ILE:O	10:CJ:40:LEU:HD22	2.17	0.44
49:DQ:92:GLY:C	49:DQ:93:TYR:CD1	2.90	0.44
2:AB:132:LYS:O	2:AB:136:VAL:HG23	2.17	0.44
10:CJ:90:LEU:H	10:CJ:91:PRO:CD	2.26	0.44
20:CT:57:ARG:HH11	20:CT:103:GLY:H	1.55	0.44
1:CA:191:G:N3	20:CT:105:SER:HB3	2.32	0.44
29:B3:26:LEU:CB	29:B3:28:LEU:HD21	2.45	0.44
29:B3:56:VAL:CG1	29:B3:57:GLU:H	2.23	0.44
37:DB:56:G:HO2'	37:DB:57:A:P	2.39	0.44
37:DB:56:G:O2'	37:DB:57:A:P	2.75	0.44
55:DW:11:ARG:NE	55:DW:11:ARG:O	2.49	0.44
27:D1:50:ARG:NH1	36:DA:2200:C:H5''	2.31	0.44
1:AA:406:G:C2	1:AA:407:G:C5	3.05	0.44
38:BC:10:LEU:HD12	38:BC:32:LEU:HA	1.99	0.44
54:BV:19:LYS:NZ	54:BV:21:ARG:O	2.50	0.44
54:DV:31:ALA:O	54:DV:61:VAL:HG13	2.17	0.44
46:DN:128:HIS:CD2	46:DN:130:HIS:CE1	3.05	0.44
36:DA:1370:C:C2	36:DA:1371:G:C8	3.05	0.44
33:B7:10:ARG:O	33:B7:13:ALA:N	2.51	0.44
18:CR:44:LEU:N	18:CR:44:LEU:HD12	2.33	0.44
1:AA:1245:A:H2'	1:AA:1246:C:C6	2.53	0.44
12:CL:89:ARG:CD	12:CL:91:LYS:HB2	2.47	0.44
12:CL:89:ARG:CD	12:CL:91:LYS:HE2	2.46	0.44
36:BA:1413:G:H2'	36:BA:1414:G:H8	1.82	0.44
1:AA:1134:G:N2	1:AA:1142:G:C6	2.86	0.44
12:CL:33:ARG:HG2	12:CL:60:LEU:HD12	1.99	0.44
58:BZ:115:GLY:HA2	58:BZ:174:VAL:HG13	1.98	0.44
1:CA:1106:G:C2	1:CA:1107:C:C6	3.05	0.44
36:DA:1328:G:N2	36:DA:1647:G:H1	2.16	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1052:C:O2'	36:DA:1053:C:P	2.75	0.44
1:AA:1164:G:C2	1:AA:1165:C:C4	3.05	0.44
36:BA:2853:C:H2'	36:BA:2854:G:H8	1.79	0.44
12:AL:50:SER:O	12:AL:51:ALA:HB2	2.16	0.44
36:DA:2435:A:C2'	36:DA:2436:G:O5'	2.65	0.44
1:AA:782:A:H2'	1:AA:783:C:O4'	2.18	0.44
36:BA:1120:G:H2'	36:BA:1121:C:H6	1.76	0.44
36:BA:944:G:H5'	36:BA:945:A:C5'	2.46	0.44
36:BA:280:C:H42	36:BA:360:G:H1	1.65	0.44
25:AZ:188:THR:HG23	25:AZ:192:GLU:CD	2.36	0.44
27:D1:27:GLU:HB3	27:D1:28:GLY:H	1.48	0.44
36:BA:226:G:H5''	36:BA:257:A:O2'	2.17	0.44
3:AC:164:ARG:HE	3:AC:164:ARG:HB3	1.18	0.44
36:BA:363:G:C2	36:BA:363(A):A:N7	2.85	0.44
40:BE:68:ALA:O	40:BE:70:ALA:N	2.51	0.44
36:BA:970:C:H2'	36:BA:971:C:C6	2.53	0.44
1:AA:894:G:H2'	1:AA:895:G:O4'	2.17	0.44
36:DA:2851:A:C2'	36:DA:2852:G:H5'	2.47	0.44
36:BA:1834:U:H2'	36:BA:1834:U:O2	2.18	0.44
36:DA:927:G:N3	36:DA:927:G:H2'	2.31	0.44
34:B8:22:VAL:CB	34:B8:53:PRO:HB2	2.48	0.44
36:BA:27:G:N2	36:BA:512:G:C2'	2.68	0.44
36:BA:531:C:OP1	36:BA:561:G:N1	2.50	0.44
36:DA:2050:C:H2'	36:DA:2051:A:O4'	2.18	0.44
50:DR:44:LEU:HD13	50:DR:44:LEU:O	2.18	0.44
48:DP:126:VAL:HG13	48:DP:145:PRO:CB	2.46	0.44
28:D2:33:MET:HG3	28:D2:37:PHE:HE1	1.79	0.44
28:D2:46:GLN:HB3	28:D2:48:HIS:HE1	1.81	0.44
36:DA:88:G:N2	36:DA:89:G:H1'	2.32	0.44
5:CE:12:LEU:C	5:CE:13:ILE:HG13	2.37	0.44
5:CE:32:VAL:O	5:CE:43:LEU:CD1	2.64	0.44
5:CE:52:PRO:O	5:CE:56:GLN:HB2	2.17	0.44
10:CJ:12:ASP:C	10:CJ:12:ASP:OD2	2.55	0.44
1:CA:277:C:OP1	17:CQ:41:LYS:HE2	2.17	0.44
4:AD:10:ARG:C	4:AD:11:LEU:HD23	2.38	0.44
43:DH:68:THR:HG22	43:DH:72:ILE:CG1	2.46	0.44
36:BA:1292:U:O2'	36:BA:1293:C:H5'	2.17	0.44
13:AM:15:VAL:CG2	13:AM:16:ASP:N	2.81	0.44
36:DA:2513:G:N1	36:DA:2514:U:C2	2.86	0.44
36:DA:525:U:C2'	36:DA:526:A:H5'	2.47	0.44
36:DA:529:A:C5	36:DA:2042:A:C2	3.05	0.44
36:DA:1007:C:O2'	46:DN:108:PRO:HA	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DP:22:GLY:HA2	48:DP:23:PRO:HD3	1.80	0.44
53:DU:12:ARG:O	53:DU:16:LYS:HD2	2.17	0.44
53:DU:29:SER:O	53:DU:30:LYS:HD3	2.17	0.44
26:D0:10:THR:HG22	26:D0:11:ARG:N	2.32	0.44
1:AA:59:A:C5'	1:AA:60:A:H5''	2.46	0.44
1:AA:245:C:O2'	1:AA:246:A:P	2.75	0.44
1:CA:516:U:C4	1:CA:517:G:N1	2.85	0.44
37:BB:49:C:OP1	51:BS:96:GLY:HA3	2.17	0.44
32:D6:8:LYS:HE3	32:D6:25:LYS:HD2	1.99	0.44
2:CB:162:ILE:HG12	2:CB:163:PHE:N	2.30	0.44
2:CB:167:PRO:O	2:CB:170:GLU:N	2.50	0.44
1:CA:766:A:H2'	1:CA:767:A:O4'	2.17	0.44
13:CM:86:CYS:O	13:CM:87:TYR:C	2.53	0.44
1:AA:948:C:OP1	13:AM:107:ALA:HA	2.17	0.44
36:BA:1678:G:O5'	36:BA:1678:G:C8	2.70	0.44
40:BE:13:ARG:O	52:BT:57:PHE:CE1	2.69	0.44
36:BA:2682:U:O2'	52:BT:58:ASN:OD1	2.36	0.44
52:BT:61:PHE:N	52:BT:61:PHE:HD2	2.14	0.44
52:BT:85:LYS:O	52:BT:86:ILE:C	2.56	0.44
52:DT:62:THR:HG22	52:DT:75:ILE:CG2	2.42	0.44
52:DT:16:ARG:NH2	52:DT:80:SER:O	2.44	0.44
38:BC:47:LEU:HD11	38:BC:171:ILE:CG2	2.46	0.44
58:BZ:86:VAL:HG12	58:BZ:87:ASP:H	1.82	0.44
1:CA:375:U:C4	1:CA:376:G:N7	2.84	0.44
58:DZ:150:LEU:CD2	58:DZ:150:LEU:H	2.30	0.44
19:AS:60:VAL:HG22	19:AS:61:TYR:O	2.17	0.44
42:BG:97:ASP:O	42:BG:101:ILE:N	2.51	0.44
36:DA:2150:U:H2'	36:DA:2151:G:H8	1.81	0.44
55:BW:5:ALA:O	55:BW:6:ILE:CB	2.66	0.44
46:DN:10:GLU:OE2	46:DN:11:PRO:HD2	2.18	0.44
36:BA:2105:C:H2'	36:BA:2106:G:H8	1.82	0.44
4:CD:170:VAL:CG1	4:CD:171:GLY:H	2.30	0.44
19:CS:40:ILE:HD11	19:CS:66:MET:HE3	1.97	0.44
27:B1:4:VAL:CG2	27:B1:5:CYS:H	2.18	0.44
16:AP:35:LYS:HE2	16:AP:37:GLY:N	2.33	0.44
20:CT:71:THR:HG22	20:CT:72:LEU:H	1.83	0.44
1:AA:148:G:H2'	1:AA:149:A:H8	1.82	0.44
36:BA:1697:G:H3'	36:BA:1698:A:H5''	1.99	0.44
36:BA:2590:A:C2'	36:BA:2591:C:H5'	2.47	0.44
1:CA:1305:G:OP2	1:CA:1305:G:H8	2.00	0.44
46:BN:48:MET:H	46:BN:48:MET:HE3	1.83	0.44
53:BU:95:LEU:HD13	54:BV:4:ILE:HG23	1.99	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BU:90:VAL:HG21	54:BV:47:VAL:HG23	1.99	0.44
54:BV:49:THR:CB	54:BV:50:PRO:HD2	2.43	0.44
36:DA:695:G:N2	36:DA:696:G:H1'	2.32	0.44
39:DD:62:TYR:HE1	39:DD:64:ILE:HA	1.81	0.44
13:CM:14:ARG:H	13:CM:44:ARG:NH1	2.14	0.44
36:BA:2308:G:C2	36:BA:2309:A:C6	3.06	0.44
42:BG:87:PRO:CG	42:BG:88:ILE:N	2.81	0.44
30:D4:31:ILE:HG22	30:D4:31:ILE:O	2.18	0.44
36:BA:715:G:C6	36:BA:716:A:C6	3.06	0.44
1:AA:439:A:C8	1:AA:496:A:N1	2.86	0.44
36:DA:2635:C:H5''	40:DE:78:LEU:HD12	1.98	0.44
1:CA:1104:G:H4'	2:CB:111:ARG:HH12	1.81	0.44
1:AA:977:A:H62	1:AA:1223:C:H2'	1.82	0.44
2:AB:71:VAL:O	2:AB:164:VAL:HA	2.17	0.44
2:AB:57:PHE:CE2	2:AB:199:TYR:HE1	2.36	0.44
1:AA:830:G:C6	1:AA:831:U:C4	3.06	0.44
8:AH:65:TYR:CD1	8:AH:65:TYR:N	2.85	0.44
36:BA:2037:G:H2'	36:BA:2038:G:H8	1.77	0.44
1:CA:1151:A:H2'	1:CA:1152:A:C8	2.51	0.44
24:CY:50:G:C6	24:CY:51:C:N4	2.86	0.44
1:AA:834:C:N3	1:AA:852:G:N2	2.53	0.44
1:AA:1103:C:H2'	1:AA:1104:G:O4'	2.17	0.44
2:AB:179:LYS:C	2:AB:181:PHE:H	2.20	0.44
37:DB:91:C:OP1	49:DQ:16:ARG:HG3	2.18	0.44
36:DA:1086:A:O4'	36:DA:1104:C:O2	2.35	0.44
11:AK:30:VAL:O	11:AK:30:VAL:HG23	2.18	0.44
1:CA:716:A:H1'	11:CK:118:GLY:O	2.17	0.44
1:CA:1413:A:H2	1:CA:1487:G:H22	1.63	0.44
7:CG:140:ASP:HA	7:CG:143:ARG:HB2	1.99	0.44
1:CA:1516:G:C6	1:CA:1520:G:C6	3.05	0.44
1:CA:778:G:C5	1:CA:779:C:C5	3.05	0.44
5:CE:139:LEU:HA	5:CE:142:LEU:HG	2.00	0.44
27:D1:50:ARG:HH12	36:DA:2200:C:H5''	1.81	0.44
36:BA:1174:A:OP2	36:BA:1174:A:H3'	2.18	0.44
36:DA:2357:U:O2'	36:DA:2359:C:OP2	2.30	0.44
36:DA:1400:G:H2'	36:DA:1401:G:C8	2.52	0.44
36:BA:2159:G:H2'	36:BA:2160:G:C5'	2.46	0.44
38:BC:6:ARG:CG	38:BC:6:ARG:HH11	2.25	0.44
54:BV:95:LEU:CD2	54:BV:95:LEU:C	2.86	0.44
6:AF:37:VAL:CG1	6:AF:38:GLU:H	2.29	0.44
1:CA:194:C:O2'	20:CT:68:LYS:HD3	2.16	0.44
11:AK:57:THR:OG1	11:AK:58:PRO:CD	2.60	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2131:G:H5''	36:DA:2132:U:O5'	2.17	0.44
38:DC:10:LEU:HD12	38:DC:32:LEU:HA	1.99	0.44
1:CA:624:C:H2'	1:CA:625:G:C8	2.45	0.44
36:BA:800:A:C5	36:BA:802:A:O4'	2.69	0.44
36:DA:848:G:H2'	36:DA:849:A:C8	2.52	0.44
19:AS:35:SER:C	19:AS:37:ARG:H	2.19	0.44
11:AK:32:ILE:HG22	11:AK:33:THR:N	2.31	0.44
1:CA:34:C:C1'	12:CL:32:PHE:CE2	3.01	0.44
1:CA:1111:A:H2'	1:CA:1112:C:C6	2.52	0.44
37:BB:34:U:C4'	37:BB:35:U:H5	2.26	0.44
36:BA:1053:C:H42	36:BA:1108:U:H3	1.66	0.44
36:DA:1209:G:O3'	36:DA:1212:G:H5'	2.17	0.44
1:CA:458:C:C4	1:CA:474:G:N2	2.85	0.44
48:BP:75:ILE:CD1	48:BP:75:ILE:H	2.27	0.44
36:BA:74:A:C5'	36:BA:75:G:H1'	2.46	0.44
1:CA:694:A:H2'	1:CA:695:A:O4'	2.17	0.44
36:BA:64:A:H2'	36:BA:65:C:C6	2.52	0.44
1:AA:927:G:H8	1:AA:927:G:C5'	2.29	0.44
58:BZ:14:LYS:C	58:BZ:16:SER:H	2.21	0.44
1:AA:1030:C:N4	1:AA:1032:G:N2	2.66	0.44
1:CA:788:U:H2'	1:CA:789:U:C6	2.53	0.44
1:AA:766:A:H2'	1:AA:767:A:O4'	2.17	0.44
36:BA:654(L):G:H2'	36:BA:654(M):C:H4'	1.98	0.44
8:CH:40:ALA:N	8:CH:45:ILE:HG13	2.32	0.44
36:DA:1836:C:H6	36:DA:1836:C:O5'	2.00	0.44
7:CG:94:ARG:O	7:CG:97:GLN:HB3	2.18	0.44
7:CG:95:ARG:O	7:CG:98:SER:N	2.50	0.44
28:B2:4:SER:HA	28:B2:7:ARG:HG3	1.98	0.44
1:CA:1452:C:OP2	1:CA:1456:G:C6	2.70	0.44
7:AG:50:ILE:O	7:AG:54:THR:O	2.36	0.44
1:CA:1058:G:H2'	1:CA:1059:C:C6	2.51	0.44
15:AO:37:ASN:ND2	15:AO:37:ASN:N	2.66	0.44
20:AT:24:LEU:O	20:AT:27:LYS:N	2.50	0.44
32:B6:20:ASN:HD21	32:B6:42:TRP:H	1.66	0.44
34:B8:13:ARG:HB2	48:BP:62:LEU:O	2.17	0.44
34:B8:4:MET:HE3	34:B8:61:LEU:CD2	2.45	0.44
36:DA:2055:C:H2'	36:DA:2504:U:C4'	2.48	0.44
50:DR:20:LEU:O	50:DR:24:GLN:HG3	2.18	0.44
50:DR:79:LEU:HD13	50:DR:80:PHE:N	2.32	0.44
39:DD:264:LYS:O	39:DD:267:SER:OG	2.35	0.44
36:DA:2333:A:C1'	36:DA:2335:A:C5	3.00	0.44
5:CE:30:ALA:O	5:CE:46:GLY:N	2.41	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:31:LEU:CD2	5:CE:43:LEU:HD11	2.47	0.44
36:DA:2466:C:HO2'	36:DA:2467:C:H5'	1.81	0.44
36:DA:481:G:H2'	36:DA:482:A:OP2	2.18	0.44
36:BA:1427:A:H1'	36:BA:1428:C:C5	2.52	0.44
36:DA:2228:G:H2'	36:DA:2229:C:C6	2.53	0.44
1:AA:1177:G:P	9:AI:97:LYS:HZ3	2.39	0.44
36:BA:605:C:O2'	36:BA:606:U:H5'	2.18	0.44
28:B2:27:GLU:O	28:B2:30:ARG:CB	2.65	0.44
28:B2:47:ASN:O	28:B2:50:ILE:HD13	2.17	0.44
28:B2:53:LEU:CA	28:B2:56:GLN:HB2	2.46	0.44
36:BA:88:G:N2	36:BA:89:G:H1'	2.32	0.44
41:BF:157:VAL:O	41:BF:158:THR:HB	2.16	0.44
36:BA:323:G:C8	41:BF:171:PRO:HG3	2.53	0.44
41:BF:194:MET:HB3	41:BF:195:ASP:H	1.51	0.44
36:BA:2048:G:H5'	36:BA:2823:A:N1	2.31	0.44
40:BE:199:ARG:CG	40:BE:200:GLU:N	2.75	0.44
13:AM:3:ARG:HH21	13:AM:7:VAL:HG13	1.82	0.44
36:DA:1251:C:P	53:DU:10:ARG:HE	2.40	0.44
53:DU:83:LEU:O	53:DU:88:ILE:HG12	2.17	0.44
54:DV:95:LEU:HD23	54:DV:96:ILE:N	2.32	0.44
1:AA:331:G:H8	1:AA:331:G:O5'	2.00	0.44
9:CI:4:TYR:CE2	9:CI:88:TYR:CB	2.97	0.44
4:CD:200:GLU:O	4:CD:202:LEU:N	2.49	0.44
51:BS:12:PHE:CE1	51:BS:91:PRO:HB3	2.53	0.44
2:CB:51:LEU:O	2:CB:52:GLU:C	2.55	0.44
2:CB:68:ILE:HG12	2:CB:161:ALA:HB3	1.99	0.44
41:DF:175:THR:C	41:DF:176:LEU:HD12	2.37	0.44
1:CA:665:A:N7	1:CA:725:G:N1	2.66	0.44
36:DA:1468:C:H2'	36:DA:1469:A:C8	2.52	0.44
25:CZ:27:LEU:HD11	25:CZ:31:LEU:HD21	1.98	0.44
25:CZ:35:ALA:O	25:CZ:39:ASN:HB2	2.17	0.44
36:BA:1645:G:OP1	36:BA:1646:C:H5'	2.18	0.44
47:BO:71:ARG:NE	47:BO:105:GLU:OE1	2.50	0.44
47:BO:71:ARG:NH2	47:BO:77:ILE:HG21	2.32	0.44
52:BT:16:ARG:NH2	52:BT:80:SER:O	2.47	0.44
36:DA:1761:C:C2'	36:DA:1762:A:H8	2.31	0.44
36:DA:1993:U:C5'	40:DE:128:SER:HB3	2.47	0.44
47:DO:71:ARG:NE	47:DO:105:GLU:OE1	2.50	0.44
52:DT:32:TYR:CG	52:DT:33:LYS:N	2.85	0.44
58:BZ:4:ARG:HB3	58:BZ:58:VAL:O	2.17	0.44
57:DY:37:VAL:CG2	57:DY:38:ILE:N	2.66	0.44
1:AA:941:G:N2	1:AA:942:G:H1'	2.32	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1372:U:H2'	1:CA:1373:G:O5'	2.18	0.44
3:CC:7:PRO:HG3	3:CC:184:TYR:CD1	2.52	0.44
7:CG:103:TRP:O	7:CG:104:LEU:C	2.56	0.44
39:DD:112:GLN:O	39:DD:115:GLN:HB2	2.17	0.44
36:BA:1520:G:H2'	36:BA:1523:U:C5'	2.47	0.44
19:AS:28:LYS:C	19:AS:29:ARG:CG	2.85	0.44
19:AS:41:VAL:O	19:AS:44:MET:HB2	2.18	0.44
4:AD:121:VAL:O	4:AD:134:ASP:CA	2.65	0.44
57:BY:29:GLU:OE2	57:BY:38:ILE:HG21	2.18	0.44
42:BG:21:ARG:HH22	42:BG:22:ARG:HG2	1.78	0.44
36:DA:1788:C:H2'	36:DA:1789:A:O4'	2.17	0.44
31:B5:56:LYS:HE2	31:B5:59:GLU:CD	2.38	0.44
36:BA:2815:C:H2'	36:BA:2816:C:C6	2.52	0.44
3:CC:187:ALA:O	3:CC:188:LEU:CD2	2.62	0.44
25:AZ:241:ARG:HB2	25:AZ:285:ASN:ND2	2.21	0.44
19:CS:46:GLY:H	19:CS:62:ILE:HG23	1.81	0.44
3:AC:113:ALA:C	3:AC:115:LEU:N	2.70	0.44
3:AC:77:ILE:HG23	3:AC:84:ILE:HG22	2.00	0.44
20:CT:13:LEU:O	20:CT:16:HIS:N	2.40	0.44
37:DB:104:U:H2'	37:DB:105:A:H8	1.81	0.44
37:DB:106:G:C5'	58:DZ:31:ARG:HB3	2.48	0.44
36:BA:19:C:H5'	36:BA:554:U:OP1	2.18	0.44
53:BU:80:ILE:HG22	53:BU:80:ILE:O	2.18	0.44
53:BU:83:LEU:O	53:BU:88:ILE:HG12	2.17	0.44
39:BD:126:GLN:C	39:BD:193:VAL:HG11	2.35	0.44
39:DD:30:GLU:OE1	39:DD:63:ARG:HD3	2.17	0.44
36:DA:661:C:H2'	36:DA:662:G:H8	1.80	0.44
36:DA:662:G:H4'	48:DP:19:VAL:O	2.17	0.44
21:AU:5:ASP:C	21:AU:7:ARG:H	2.20	0.44
36:DA:2307:G:H21	36:DA:2308:G:H5'	1.82	0.44
43:DH:121:ILE:HG23	43:DH:133:VAL:CG1	2.48	0.44
43:DH:163:TYR:O	43:DH:164:TYR:O	2.35	0.44
48:DP:39:LYS:HE2	48:DP:42:SER:CB	2.34	0.44
24:CY:12:U:H3	24:CY:23:A:H2	1.66	0.44
51:BS:104:GLY:C	51:BS:106:ARG:H	2.21	0.44
36:BA:906:G:O2'	49:BQ:67:ARG:NH2	2.51	0.44
43:BH:152:ARG:HH11	43:BH:152:ARG:HG3	1.83	0.44
43:BH:84:SER:O	43:BH:85:LYS:HB3	2.18	0.44
25:CZ:222:LEU:CD2	25:CZ:244:ARG:HH21	2.31	0.44
2:AB:54:THR:O	2:AB:57:PHE:HB3	2.18	0.44
49:BQ:42:ILE:O	49:BQ:42:ILE:CG2	2.66	0.44
36:BA:1131:G:C2	46:BN:75:TYR:HB2	2.53	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:AT:57:ARG:CB	20:AT:57:ARG:CZ	2.95	0.44
20:CT:45:GLN:NE2	20:CT:46:GLU:HB2	2.32	0.44
1:CA:119:A:H5''	1:CA:120:A:C5'	2.48	0.44
25:AZ:363:MET:O	25:AZ:366:ASP:HB2	2.17	0.44
10:AJ:8:LEU:C	10:AJ:9:ARG:HG3	2.38	0.44
1:CA:903:G:H2'	1:CA:904:C:C6	2.53	0.44
36:DA:2247:A:H2'	36:DA:2248:C:C6	2.53	0.44
31:B5:33:CYS:SG	31:B5:49:CYS:SG	3.13	0.44
31:B5:38:ALA:HB2	31:B5:48:GLU:HB3	1.94	0.44
38:DC:62:VAL:O	38:DC:160:ARG:HA	2.18	0.44
1:CA:59:A:C5'	1:CA:60:A:H5''	2.48	0.44
36:DA:800:A:C5	36:DA:802:A:O4'	2.71	0.44
15:AO:12:ILE:O	15:AO:13:GLN:C	2.55	0.44
36:BA:1372:U:O2'	36:BA:1373:A:H5'	2.17	0.44
39:BD:158:ALA:O	39:BD:161:THR:HG23	2.17	0.44
2:AB:36:ARG:NE	2:AB:36:ARG:HA	2.32	0.44
29:D3:18:ASP:HB2	36:DA:850:C:C5'	2.47	0.44
49:BQ:77:LYS:HB3	49:BQ:81:VAL:HG11	1.98	0.44
36:BA:206:U:H2'	36:BA:207:A:H8	1.82	0.44
50:DR:103:ARG:HH11	50:DR:110:PRO:CD	2.25	0.44
1:AA:105:G:C6	1:AA:106:C:N4	2.84	0.44
1:CA:520:A:OP2	12:CL:51:ALA:HB1	2.17	0.44
36:BA:271(B):C:O2'	36:BA:271(C):C:H5'	2.17	0.44
1:CA:218:C:C5'	1:CA:470:C:H42	2.31	0.44
1:CA:1338:G:C6	1:CA:1339:A:C6	3.05	0.44
1:CA:1505:G:C4'	1:CA:1506:U:H5'	2.47	0.44
36:DA:956:G:OP1	49:DQ:87:LYS:HG3	2.18	0.44
25:AZ:19:HIS:HD2	25:AZ:115:GLN:N	2.15	0.44
46:DN:38:HIS:O	53:DU:67:ALA:HB1	2.17	0.44
1:CA:1087:G:H22	1:CA:1099:G:H1'	1.78	0.44
40:DE:9:VAL:O	40:DE:9:VAL:CG2	2.65	0.44
36:BA:412:A:H3'	36:BA:413:C:H6	1.82	0.44
36:BA:1416:G:N2	36:BA:1582:C:N3	2.54	0.44
18:CR:85:LEU:HD12	18:CR:86:VAL:H	1.83	0.44
13:AM:115:LYS:O	13:AM:117:VAL:HG23	2.17	0.44
4:AD:159:ARG:O	4:AD:160:GLN:C	2.55	0.44
36:BA:2585:U:O4'	36:BA:2585:U:O2	2.35	0.44
36:BA:2557:G:C2'	36:BA:2558:C:H5'	2.47	0.44
17:AQ:6:LEU:O	17:AQ:7:THR:HG23	2.17	0.44
15:CO:5:LYS:C	15:CO:6:GLU:HG3	2.37	0.44
1:AA:1409:C:H4'	36:BA:1915:U:O4	2.17	0.44
18:AR:31:LEU:HG	18:AR:65:ILE:HD12	1.98	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:763:G:H2'	1:AA:764:C:H6	1.82	0.44
18:CR:64:ARG:O	18:CR:65:ILE:C	2.55	0.44
1:CA:175:C:H4'	20:CT:25:ARG:CZ	2.46	0.44
53:BU:85:LYS:HD2	53:BU:117:GLN:HE22	1.81	0.44
55:DW:80:PRO:O	55:DW:100:THR:CG2	2.66	0.44
36:BA:2600:A:OP2	39:BD:237:GLU:HG3	2.16	0.44
22:AV:11:C:H42	22:AV:24:G:H1	1.65	0.44
57:DY:33:LYS:C	57:DY:35:TYR:H	2.19	0.44
46:DN:12:ARG:HG2	46:DN:50:ASP:OD2	2.16	0.44
1:CA:754:C:H3'	1:CA:754:C:O2	2.17	0.44
28:B2:49:LYS:NZ	28:B2:49:LYS:HB3	2.31	0.44
36:DA:1415:U:H3	36:DA:1587:A:H61	1.65	0.44
34:B8:42:ARG:O	34:B8:44:LYS:N	2.49	0.44
36:BA:2348:U:O2'	36:BA:2349:G:H5'	2.16	0.44
36:BA:2392:A:H2'	36:BA:2393:A:O4'	2.18	0.44
41:BF:89:VAL:HG12	41:BF:90:PHE:N	2.32	0.44
48:BP:36:LYS:CB	48:BP:41:ARG:CB	2.96	0.44
36:DA:2821:A:H2'	36:DA:2822:G:O4'	2.17	0.44
19:CS:15:LEU:HA	19:CS:15:LEU:HD22	1.89	0.44
36:DA:1796:U:OP1	39:DD:276:LYS:HE3	2.17	0.44
36:BA:1887:C:C3'	36:BA:1888:G:C5'	2.95	0.44
36:BA:1890:A:H2	36:BA:2235:G:O4'	2.00	0.44
41:DF:31:HIS:HB2	48:DP:13:ASN:OD1	2.18	0.44
36:DA:2464:C:O2'	36:DA:2465:C:H6	1.86	0.44
36:DA:271(K):U:H2'	36:DA:271(M):G:N2	2.32	0.44
36:BA:696:G:N3	36:BA:696:G:C2'	2.79	0.44
39:BD:85:ASP:CG	39:BD:88:ARG:HH11	2.21	0.44
36:DA:2078:C:C4	36:DA:2079:U:C4	3.06	0.44
36:DA:680:G:C2	36:DA:798:G:N3	2.86	0.44
40:DE:56:PRO:O	40:DE:57:LYS:CB	2.66	0.44
1:CA:232:G:H2'	1:CA:233:C:O4'	2.17	0.44
50:BR:44:LEU:O	50:BR:44:LEU:HD13	2.17	0.44
36:BA:1453:U:OP1	50:BR:77:ARG:HD3	2.17	0.44
36:DA:2043:C:H2'	36:DA:2044:C:C6	2.52	0.44
54:DV:47:VAL:O	54:DV:48:GLY:C	2.55	0.44
1:AA:266:G:C5'	1:AA:267:C:C5	3.01	0.44
53:BU:109:LEU:O	53:BU:113:ALA:N	2.50	0.44
1:CA:545:C:O2'	1:CA:546:G:H5'	2.18	0.44
51:BS:12:PHE:N	51:BS:12:PHE:HD2	2.16	0.44
32:B6:6:ARG:CZ	32:B6:6:ARG:HB3	2.45	0.44
1:AA:955:U:O2	1:AA:1225:A:N1	2.50	0.44
1:AA:954:G:O2'	13:AM:120:LYS:HD2	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1069:C:H42	1:AA:1106:G:H1	1.64	0.44
36:BA:1678:G:N2	36:BA:1989:G:H1	2.15	0.44
40:BE:12:THR:OG1	40:BE:13:ARG:N	2.50	0.44
47:BO:105:GLU:HA	47:BO:108:GLU:OE1	2.18	0.44
52:DT:11:GLU:O	52:DT:14:TYR:CE1	2.71	0.44
52:DT:48:ILE:HD12	52:DT:48:ILE:H	1.83	0.44
52:DT:66:VAL:HG12	52:DT:71:GLY:HA2	1.99	0.44
37:BB:76:G:H5''	58:BZ:15:PRO:CB	2.47	0.44
58:BZ:168:GLU:HA	58:BZ:168:GLU:OE2	2.18	0.44
9:AI:76:ALA:O	9:AI:77:ILE:C	2.56	0.44
10:AJ:44:VAL:HG12	10:AJ:44:VAL:O	2.16	0.44
16:CP:6:LEU:HB3	16:CP:17:TYR:HB3	2.00	0.44
58:DZ:151:HIS:ND1	58:DZ:152:ALA:N	2.66	0.44
9:CI:10:ARG:HE	9:CI:10:ARG:CA	2.30	0.44
51:DS:14:VAL:O	51:DS:15:ARG:C	2.54	0.44
57:BY:28:LYS:HA	57:BY:38:ILE:HG22	1.99	0.44
57:BY:81:LYS:CD	57:BY:97:ARG:O	2.57	0.44
42:BG:100:TRP:O	42:BG:101:ILE:C	2.55	0.44
42:BG:172:LEU:O	42:BG:176:LEU:HD12	2.17	0.44
14:AN:12:ARG:HB3	14:AN:14:PRO:CD	2.47	0.44
36:DA:1697:G:H5''	36:DA:1979:C:OP1	2.16	0.44
55:DW:59:VAL:HG12	55:DW:60:ASN:N	2.33	0.44
25:AZ:300:ARG:NH1	25:AZ:300:ARG:HG2	2.32	0.44
1:CA:1320:C:H6	1:CA:1320:C:H5'	1.82	0.44
36:DA:1593:G:C2	36:DA:1594:G:C8	3.05	0.44
16:CP:12:LYS:O	16:CP:14:ASN:N	2.51	0.44
36:DA:1090:U:H2'	36:DA:1091:G:O4'	2.18	0.44
10:CJ:23:ILE:HG23	10:CJ:85:LEU:HD22	2.00	0.44
36:BA:1899:G:H21	36:BA:1902:C:N4	2.08	0.44
36:BA:1902:C:O2'	39:BD:244:ARG:CB	2.64	0.44
58:DZ:12:GLY:O	58:DZ:13:GLU:HG2	2.18	0.44
36:BA:1006:C:H2'	36:BA:1007:C:H6	1.82	0.44
46:BN:103:VAL:O	46:BN:106:MET:N	2.50	0.44
28:B2:3:LEU:O	28:B2:6:VAL:HB	2.18	0.44
36:DA:1354:A:H3'	36:DA:1355:G:H8	1.83	0.44
36:DA:1658:C:OP1	40:DE:132:HIS:CE1	2.71	0.44
36:DA:2582:G:N2	36:DA:2583:G:H1'	2.33	0.44
13:CM:13:LYS:HA	13:CM:44:ARG:HD2	1.99	0.44
42:DG:112:PRO:CG	42:DG:113:ARG:N	2.81	0.44
42:DG:121:ASN:HA	42:DG:122:PRO:HD2	1.89	0.44
36:BA:1542:A:H5'	36:BA:1543:C:OP2	2.18	0.44
9:AI:99:LEU:O	9:AI:101:PHE:N	2.49	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AI:96:LEU:O	9:AI:99:LEU:O	2.36	0.44
36:DA:1174:A:OP2	36:DA:1174:A:H3'	2.17	0.44
40:DE:52:LEU:O	40:DE:74:PRO:CB	2.66	0.44
49:BQ:45:GLN:N	49:BQ:45:GLN:HE21	2.12	0.44
1:AA:858:G:C5'	1:AA:858:G:H8	2.31	0.44
1:AA:859:A:C4	1:AA:860:A:C8	3.05	0.44
36:BA:1131:G:N7	36:BA:2025:C:H4'	2.32	0.44
55:BW:11:ARG:HH12	55:BW:98:LYS:HB3	1.75	0.44
11:CK:90:GLY:O	11:CK:93:GLN:N	2.51	0.44
27:B1:30:VAL:O	27:B1:31:GLY:O	2.36	0.44
27:B1:25:LYS:HB2	36:BA:388:G:H5'	2.00	0.44
2:AB:104:ASN:O	2:AB:105:PHE:C	2.55	0.44
2:AB:19:HIS:O	2:AB:20:GLU:C	2.56	0.44
36:DA:2070:G:N2	36:DA:2442:C:H1'	2.33	0.44
1:AA:1151:A:H2'	1:AA:1152:A:C8	2.52	0.44
31:D5:36:CYS:HB3	31:D5:49:CYS:CB	2.38	0.44
49:DQ:48:GLU:HG3	49:DQ:51:ARG:HG2	1.99	0.44
1:CA:1508:G:C2'	1:CA:1509:C:H5'	2.48	0.44
5:CE:136:MET:C	5:CE:138:ALA:N	2.67	0.44
5:CE:136:MET:O	5:CE:137:GLU:C	2.56	0.44
15:CO:12:ILE:O	15:CO:13:GLN:C	2.55	0.44
1:CA:136:C:H2'	1:CA:137:C:H6	1.82	0.44
1:CA:51:A:C6	1:CA:353:A:C2	3.05	0.44
1:AA:518:C:H2'	1:AA:530:G:N3	2.33	0.44
36:BA:537:C:N4	36:BA:556:G:N1	2.57	0.44
53:BU:55:ARG:HG2	53:BU:58:ARG:HD2	1.99	0.44
36:BA:635:C:O2'	36:BA:639:U:OP1	2.36	0.44
40:DE:69:LYS:C	40:DE:71:GLY:H	2.19	0.44
11:AK:33:THR:HA	11:AK:38:ASN:O	2.18	0.44
47:BO:25:LEU:HD11	47:BO:40:VAL:HG22	2.00	0.44
1:AA:1452:C:H5'	1:AA:1456:G:N3	2.32	0.44
49:DQ:113:GLN:O	49:DQ:116:GLU:HB3	2.17	0.44
1:AA:687:A:H2	1:AA:700:G:N3	2.15	0.44
1:CA:1202:G:H4'	14:CN:29:ARG:CD	2.43	0.44
1:AA:471:G:O2'	1:AA:472:A:H5'	2.18	0.44
22:CW:1:G:N3	22:CW:1:G:C2'	2.78	0.44
1:AA:409:G:OP1	4:AD:22:LYS:HB3	2.17	0.44
49:DQ:77:LYS:HD3	49:DQ:81:VAL:CG1	2.48	0.44
38:DC:106:GLY:O	38:DC:107:TRP:HB3	2.18	0.44
9:CI:80:GLY:C	9:CI:82:ALA:H	2.20	0.44
36:DA:841:A:C6	36:DA:938:G:N1	2.85	0.44
51:DS:74:ALA:O	51:DS:76:LYS:N	2.50	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:141:A:H2'	1:AA:142:G:O4'	2.18	0.44
1:CA:805:C:C2	1:CA:806:C:C5	3.05	0.44
2:AB:92:TYR:HD1	2:AB:92:TYR:C	2.20	0.44
11:CK:89:ALA:C	11:CK:91:ARG:H	2.21	0.44
25:CZ:226:GLU:CD	25:CZ:240:GLY:HA2	2.38	0.44
1:CA:1298:C:H2'	7:CG:114:ARG:HH12	1.82	0.44
13:AM:118:ALA:CB	22:AV:29:G:H5''	2.45	0.44
36:BA:821:A:C5'	36:BA:822:U:C6	3.01	0.44
13:CM:118:ALA:HB3	22:CV:29:G:H5''	2.00	0.44
36:DA:2271:G:O2'	36:DA:2272:U:H5'	2.17	0.44
7:CG:95:ARG:O	7:CG:97:GLN:N	2.51	0.44
7:CG:50:ILE:O	7:CG:54:THR:O	2.35	0.44
28:D2:24:LEU:HD23	28:D2:24:LEU:C	2.37	0.44
36:BA:2633:G:C5'	36:BA:2812:G:H5'	2.48	0.44
26:D0:84:LEU:HD12	26:D0:84:LEU:H	1.83	0.44
36:DA:2748:A:N3	36:DA:2748:A:H2'	2.33	0.44
42:BG:152:LEU:HD23	42:BG:152:LEU:N	2.32	0.44
36:BA:1814:G:C4'	39:BD:51:VAL:HG21	2.47	0.44
36:BA:1188:U:C2'	36:BA:1189:A:H5'	2.47	0.44
36:BA:587:C:N3	36:BA:671:C:C6	2.86	0.44
36:DA:2836:U:H2'	36:DA:2837:G:C8	2.53	0.44
39:DD:155:LEU:HD23	39:DD:177:LEU:HD22	2.00	0.44
32:D6:12:GLU:CB	32:D6:23:THR:HG22	2.48	0.44
34:D8:10:ALA:O	34:D8:13:ARG:N	2.50	0.44
36:DA:251:A:H2'	36:DA:252:G:H5'	2.00	0.44
48:DP:58:THR:C	48:DP:61:ARG:HE	2.16	0.44
25:AZ:38:GLU:OE2	25:AZ:39:ASN:ND2	2.51	0.44
28:D2:28:LYS:HD3	28:D2:28:LYS:HA	1.76	0.44
28:D2:38:GLN:HB3	28:D2:44:LEU:CD2	2.47	0.44
36:DA:93:G:H2'	36:DA:94:C:C6	2.53	0.44
24:AY:29:C:H2'	24:AY:30:C:O4'	2.18	0.44
41:BF:181:LEU:HD11	41:BF:186:ILE:CD1	2.37	0.44
36:BA:2527:C:N4	36:BA:2536:G:O6	2.50	0.44
36:BA:2760:C:H2'	36:BA:2761:G:C5'	2.41	0.44
36:BA:90:U:O2	36:BA:90:U:C2'	2.65	0.44
41:BF:169:ASN:O	41:BF:170:LEU:O	2.35	0.44
41:BF:155:LEU:CD1	41:BF:176:LEU:HD22	2.45	0.44
36:BA:1277:G:H2'	36:BA:1278:A:O4'	2.16	0.44
36:BA:1651:G:C2'	36:BA:1652:A:H5'	2.48	0.44
50:BR:12:ARG:HD3	50:BR:16:HIS:NE2	2.32	0.44
30:B4:14:ILE:H	30:B4:14:ILE:CD1	2.31	0.44
54:DV:20:LEU:CD1	54:DV:20:LEU:H	2.26	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:DV:91:TYR:HD1	54:DV:92:THR:N	2.15	0.44
2:AB:215:LEU:O	2:AB:218:ALA:HB3	2.17	0.44
8:CH:41:ARG:C	8:CH:43:GLY:H	2.21	0.44
1:CA:1162:C:C2	1:CA:1175:G:C2	3.06	0.44
1:AA:282:A:N3	1:AA:282:A:H2'	2.33	0.44
1:CA:1048:G:C2	1:CA:1050:G:N7	2.85	0.44
1:CA:990:C:H2'	1:CA:991:U:C6	2.53	0.44
4:CD:55:ALA:O	4:CD:58:LEU:N	2.48	0.44
1:CA:1194:U:H4'	5:CE:22:GLY:HA2	1.99	0.44
1:CA:967:C:H4'	9:CI:125:TYR:CE2	2.53	0.44
2:CB:92:TYR:OH	2:CB:150:SER:HB3	2.16	0.44
2:CB:8:LYS:CE	2:CB:217:ARG:NH2	2.81	0.44
2:CB:62:ALA:C	2:CB:64:ARG:H	2.20	0.44
36:BA:2636:U:H1'	36:BA:2783:G:H22	1.82	0.44
40:BE:44:TYR:O	40:BE:45:THR:CB	2.60	0.44
36:DA:1475:G:C2	36:DA:1517:G:N3	2.85	0.44
13:CM:74:VAL:HG12	13:CM:75:ALA:N	2.32	0.44
13:CM:90:LEU:O	13:CM:92:HIS:N	2.49	0.44
13:CM:98:VAL:HG12	13:CM:98:VAL:O	2.18	0.44
47:BO:120:GLU:HB2	52:BT:68:TYR:HE2	1.83	0.44
52:DT:121:ILE:C	52:DT:123:GLN:N	2.71	0.44
58:BZ:132:ASN:C	58:BZ:134:PRO:HD3	2.38	0.44
1:AA:1288:A:N1	1:AA:1371:G:H1'	2.32	0.44
1:AA:975:A:H61	10:AJ:48:THR:HB	1.81	0.44
1:CA:1366:C:OP1	9:CI:117:HIS:HE1	2.01	0.44
37:BB:96:U:H2'	37:BB:97:G:C8	2.52	0.44
1:AA:794:A:H2'	1:AA:795:C:C6	2.53	0.44
36:BA:1520:G:H2'	36:BA:1523:U:H5'	2.00	0.44
19:AS:22:LEU:HD13	19:AS:27:GLU:HB2	1.99	0.44
19:AS:51:VAL:HG21	19:AS:71:LEU:HB3	2.00	0.44
57:BY:73:ARG:HE	57:BY:73:ARG:CA	2.28	0.44
1:AA:570:G:H1'	1:AA:820:U:C4	2.52	0.44
36:DA:2593:U:C2	36:DA:2594:C:C5	3.06	0.44
2:AB:221:LEU:O	2:AB:221:LEU:HD13	2.18	0.44
36:BA:2104:G:O6	36:BA:2185:C:N3	2.50	0.44
3:CC:101:LEU:HD23	3:CC:102:ASN:O	2.18	0.44
3:AC:182:ILE:O	3:AC:183:ASP:C	2.55	0.44
1:CA:397:A:N7	1:CA:547:A:H2'	2.32	0.44
1:CA:44:G:H1'	1:CA:399:G:N2	2.33	0.44
20:CT:73:HIS:O	20:CT:74:LYS:C	2.56	0.44
13:CM:23:TYR:HB3	13:CM:67:GLU:CB	2.47	0.44
22:CW:54:U:C5'	38:DC:54:SER:HB2	2.48	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:22:LYS:CE	2:CB:40:HIS:HE1	2.30	0.44
41:DF:7:TYR:HD2	41:DF:16:GLY:CA	2.30	0.44
9:AI:26:VAL:HG12	9:AI:27:THR:N	2.33	0.44
54:BV:4:ILE:O	54:BV:39:LEU:HD22	2.17	0.44
39:BD:118:VAL:CG2	39:BD:119:ALA:N	2.81	0.44
36:DA:693:C:O2'	36:DA:694:U:H5'	2.17	0.44
42:DG:170:ARG:HE	42:DG:174:GLU:HB2	1.82	0.44
1:CA:982:U:C5	1:CA:983:A:N6	2.86	0.44
43:DH:152:ARG:HH11	43:DH:152:ARG:HG3	1.83	0.44
36:DA:1339:G:N2	36:DA:1603:A:N3	2.65	0.44
40:DE:62:PRO:C	40:DE:64:LYS:N	2.68	0.44
49:BQ:35:VAL:HG23	49:BQ:101:ARG:O	2.18	0.44
36:BA:908:C:OP2	49:BQ:22:LYS:HG2	2.17	0.44
43:BH:89:ILE:O	43:BH:129:THR:HB	2.17	0.44
36:DA:1494:A:O2'	36:DA:1495:A:H5''	2.17	0.44
22:CV:18:G:H4'	22:CV:60:U:C2	2.53	0.44
1:AA:982:U:C5	1:AA:983:A:N6	2.86	0.44
5:AE:110:LEU:O	5:AE:115:VAL:HG23	2.17	0.44
36:BA:530:G:H2'	36:BA:530:G:OP2	2.18	0.44
15:AO:25:THR:O	15:AO:26:GLU:C	2.55	0.44
55:BW:12:ILE:O	55:BW:13:SER:C	2.54	0.44
20:CT:84:LEU:O	20:CT:88:VAL:HG23	2.18	0.44
24:CY:7:A:HO2'	24:CY:49:G:H8	1.64	0.44
36:BA:45:C:O2'	36:BA:47:C:H5'	2.18	0.44
36:DA:272(J):C:C2'	36:DA:274:G:H5''	2.47	0.44
11:AK:65:ALA:HB1	11:AK:98:LEU:CD2	2.47	0.44
38:DC:207:THR:H	38:DC:210:ARG:HH12	1.66	0.44
36:DA:1238:G:N2	36:DA:1239:G:H1'	2.32	0.44
2:AB:207:ALA:O	2:AB:208:ILE:C	2.56	0.44
36:BA:272(J):C:C2'	36:BA:274:G:H5''	2.46	0.44
36:DA:858:U:H1'	36:DA:2268:A:O2'	2.17	0.44
22:CW:30:G:O2'	22:CW:31:A:H5'	2.17	0.44
1:CA:1499:A:H2'	1:CA:1500:A:O4'	2.18	0.44
36:DA:2455:G:N1	36:DA:2498:C:N4	2.65	0.44
38:BC:62:VAL:O	38:BC:160:ARG:HA	2.18	0.44
1:CA:113:G:C2	1:CA:315:A:C2	3.05	0.44
36:DA:206:U:H2'	36:DA:207:A:C8	2.52	0.44
26:D0:37:LEU:HG	26:D0:59:LEU:C	2.38	0.44
18:AR:66:LEU:CG	18:AR:70:ILE:HD11	2.39	0.44
1:AA:490:G:N1	1:AA:491:G:C5	2.85	0.44
1:AA:29:G:O2'	1:AA:30:U:H5'	2.17	0.44
1:AA:1431:C:O2	1:AA:1432:G:O4'	2.36	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:884:C:N3	36:DA:893:C:N3	2.65	0.44
39:BD:158:ALA:O	39:BD:159:ALA:C	2.55	0.44
36:BA:2197:U:O2'	36:BA:2198:A:H2'	2.18	0.44
25:CZ:382:GLU:HA	25:CZ:400:VAL:CG1	2.48	0.44
1:AA:1067:A:H4'	1:AA:1068:G:O5'	2.18	0.44
40:BE:126:PRO:C	40:BE:128:SER:N	2.71	0.44
1:AA:673:G:N2	1:AA:674:G:C2	2.85	0.44
12:CL:60:LEU:C	12:CL:62:SER:N	2.71	0.44
12:AL:89:ARG:CD	12:AL:91:LYS:HE2	2.44	0.44
36:BA:1328:G:N2	36:BA:1647:G:H1	2.15	0.44
36:BA:760:G:H2'	36:BA:761:A:O4'	2.17	0.44
36:BA:955:C:O2'	36:BA:956:G:H5'	2.16	0.44
37:BB:64:C:H2'	37:BB:65:C:O4'	2.17	0.44
36:BA:552:G:H1'	36:BA:1220:A:C6	2.53	0.44
1:AA:189:G:N1	1:AA:189(L):G:C6	2.86	0.44
1:AA:128:G:O2'	17:AQ:3:LYS:HE2	2.17	0.44
46:DN:39:ARG:O	46:DN:41:ASP:N	2.47	0.44
36:DA:548:A:C2'	36:DA:549:G:H5'	2.47	0.44
36:DA:391:G:O5'	36:DA:391:G:C8	2.70	0.44
14:CN:19:ARG:O	14:CN:20:ALA:C	2.56	0.44
19:CS:37:ARG:HD3	19:CS:37:ARG:O	2.18	0.44
36:BA:64:A:H2'	36:BA:65:C:H6	1.82	0.44
36:BA:414:C:H5''	36:BA:1879:C:O2'	2.16	0.44
36:DA:2603:G:C5	36:DA:2604:U:C5	3.06	0.44
36:BA:1367:A:C2'	36:BA:1368:G:H5'	2.45	0.44
36:BA:1368:G:O2'	36:BA:1369:G:H5'	2.18	0.44
1:CA:1353:G:C6	1:CA:1354:C:N4	2.86	0.44
4:AD:159:ARG:HG3	4:AD:159:ARG:NH1	2.32	0.44
1:CA:342:C:O2'	1:CA:343:U:H5'	2.18	0.44
42:DG:145:THR:HG22	42:DG:147:ASP:N	2.32	0.44
36:BA:239:U:H2'	36:BA:240:G:O4'	2.17	0.44
1:CA:1452:C:OP2	1:CA:1456:G:C5	2.71	0.44
36:DA:948:G:C6	36:DA:949:C:C4	3.05	0.44
2:CB:114:ARG:HD2	2:CB:118:LEU:HD11	2.00	0.44
4:CD:34:GLU:O	4:CD:35:ARG:CB	2.66	0.44
36:BA:1196:C:H2'	36:BA:1197:G:H8	1.83	0.44
1:AA:1262:C:H42	1:AA:1273:G:H1	1.66	0.44
36:BA:1477:A:H2'	36:BA:1478:G:O4'	2.18	0.44
1:CA:428:G:O4'	1:CA:430:A:C8	2.70	0.44
1:AA:681:C:O5'	1:AA:681:C:H6	2.00	0.44
1:AA:682:G:N1	1:AA:683:G:C5	2.86	0.44
36:DA:1769:G:C1'	36:DA:1958:C:H5''	2.48	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:142:LEU:O	2:CB:146:GLN:N	2.49	0.44
13:CM:84:ILE:HB	19:CS:74:PHE:HD1	1.82	0.44
36:BA:834:C:H2'	36:BA:835:A:H8	1.83	0.44
36:BA:746:A:O2'	36:BA:2611:U:O2'	2.25	0.44
58:BZ:74:VAL:O	58:BZ:75:ASN:C	2.55	0.44
1:CA:1192:C:H2'	1:CA:1193:G:O5'	2.17	0.44
31:B5:37:LYS:HE3	31:B5:37:LYS:HB2	1.84	0.44
39:BD:221:VAL:CG2	39:BD:221:VAL:O	2.65	0.44
25:AZ:253:VAL:HG22	25:AZ:265:THR:O	2.18	0.44
36:DA:2704:C:H2'	36:DA:2705:A:O4'	2.16	0.44
36:BA:569:U:C4	36:BA:570:G:C6	3.06	0.44
36:BA:575:A:C2'	36:BA:576:U:H5'	2.48	0.44
40:DE:82:ARG:CG	40:DE:82:ARG:NH1	2.79	0.44
26:D0:41:ARG:HD2	26:D0:41:ARG:HA	1.76	0.44
32:D6:35:GLU:HB3	32:D6:51:GLU:OE1	2.18	0.44
32:D6:23:THR:HG21	36:DA:2419:U:H4'	2.00	0.44
25:AZ:176:LEU:CB	62:AZ:501:GDP:C6	3.00	0.44
36:BA:1862:G:N2	36:BA:1881:C:O2	2.50	0.44
25:AZ:331:HIS:CD2	25:AZ:332:THR:HG23	2.53	0.44
1:AA:1430:C:O2	1:AA:1471:G:C2	2.71	0.44
36:BA:1822:G:C5	36:BA:1823:G:N7	2.86	0.44
36:BA:694:U:HO2'	36:BA:695:G:P	2.41	0.44
38:BC:91:ALA:HB3	38:BC:94:VAL:CG2	2.48	0.44
41:BF:43:LYS:CB	41:BF:98:SER:HB3	2.46	0.44
43:BH:50:VAL:HG12	43:BH:51:ARG:N	2.32	0.44
1:AA:1057:G:H3'	1:AA:1058:G:H8	1.83	0.44
36:BA:2540:C:H2'	36:BA:2541:A:O4'	2.18	0.44
36:BA:2744:G:C2	36:BA:2761:G:C4	3.05	0.44
41:BF:158:THR:HG23	41:BF:160:ASN:H	1.82	0.44
36:BA:1652:A:N6	36:BA:1653:G:N2	2.65	0.44
36:BA:1269:A:N6	36:BA:2011:U:H3	2.14	0.44
36:BA:2870:C:O2'	36:BA:2871:C:H5'	2.18	0.44
50:BR:22:ARG:O	50:BR:26:LYS:HB2	2.18	0.44
1:CA:797:C:OP1	11:CK:124:LYS:CE	2.62	0.44
27:D1:63:ALA:O	27:D1:64:ALA:C	2.55	0.44
36:DA:1006:C:H42	36:DA:1137:G:H1	1.66	0.44
36:DA:1192:G:C5	48:DP:29:LYS:NZ	2.85	0.44
36:DA:2778:A:O2'	36:DA:2780:G:O2'	2.35	0.44
36:DA:572:A:H3'	36:DA:573:G:O4'	2.18	0.44
36:DA:832:G:P	48:DP:40:SER:HB2	2.57	0.44
46:DN:120:LEU:HD13	46:DN:120:LEU:C	2.38	0.44
36:DA:1131:G:H21	46:DN:73:THR:HG22	1.83	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:310:G:H2'	1:AA:311:C:C6	2.53	0.44
1:AA:360:A:O2'	1:AA:361:G:H5'	2.18	0.44
1:CA:1175:G:C6	1:CA:1176:A:C6	3.06	0.44
1:CA:1176:A:H2'	1:CA:1177:G:C8	2.53	0.44
1:CA:1062:U:H2'	1:CA:1063:C:C6	2.53	0.44
1:CA:961:U:H5'	1:CA:984:C:H1'	1.99	0.44
1:CA:995:C:O2'	1:CA:996:A:O5'	2.33	0.44
51:BS:29:PHE:HD2	51:BS:29:PHE:C	2.20	0.44
8:AH:29:SER:O	8:AH:32:LYS:N	2.50	0.44
8:AH:7:ALA:HB2	8:AH:85:ARG:CD	2.37	0.44
13:CM:106:ASN:O	13:CM:107:ALA:CB	2.65	0.44
25:CZ:163:PHE:O	25:CZ:165:GLY:N	2.44	0.44
56:BX:39:ILE:CG2	56:BX:54:VAL:HG11	2.41	0.44
36:BA:1297:C:O2'	36:BA:1298:C:H5'	2.18	0.44
36:DA:1678:G:N2	36:DA:1989:G:H1	2.15	0.44
36:DA:1678:G:N2	36:DA:1989:G:H22	2.15	0.44
36:DA:2683:C:H42	36:DA:2727:G:H21	1.64	0.44
57:DY:8:LYS:CE	57:DY:72:VAL:HG23	2.47	0.44
1:AA:1377:A:H2'	7:AG:7:ALA:CB	2.47	0.44
9:AI:116:LYS:HA	9:AI:123:PRO:HD3	1.99	0.44
10:CJ:50:ILE:HG23	10:CJ:60:ARG:HD3	2.00	0.44
1:AA:1494:G:O3'	13:AM:125:ARG:NH1	2.51	0.44
51:DS:15:ARG:HH11	51:DS:18:ILE:HD11	1.83	0.44
42:BG:32:PRO:HG3	42:BG:168:GLU:OE1	2.18	0.44
46:BN:131:GLN:NE2	46:BN:133:GLN:N	2.65	0.44
55:DW:76:VAL:CB	55:DW:103:ILE:HG23	2.48	0.44
36:BA:2164:C:H2'	36:BA:2165:G:H5'	1.99	0.44
25:AZ:126:VAL:O	25:AZ:126:VAL:HG12	2.17	0.44
3:AC:182:ILE:HA	3:AC:202:ILE:O	2.17	0.44
1:CA:45:U:H2'	1:CA:46:G:H8	1.82	0.44
39:BD:239:ARG:NH2	39:BD:239:ARG:HG2	2.28	0.44
49:DQ:20:ALA:N	58:DZ:79:ARG:NH2	2.55	0.44
16:CP:21:VAL:C	16:CP:22:THR:HG22	2.38	0.44
1:AA:1523:G:H2'	1:AA:1524:C:H6	1.83	0.44
41:DF:10:PRO:HD2	41:DF:13:SER:O	2.18	0.44
41:DF:126:VAL:HG21	41:DF:129:PHE:CZ	2.53	0.44
46:BN:24:GLY:HA2	46:BN:27:ALA:HB3	1.99	0.44
46:BN:35:ARG:O	46:BN:35:ARG:CG	2.60	0.44
53:BU:59:ARG:O	53:BU:61:TRP:N	2.51	0.44
39:BD:127:VAL:HA	39:BD:193:VAL:HG13	2.00	0.44
57:DY:88:LYS:HD2	57:DY:88:LYS:N	2.32	0.44
36:DA:1427:A:H1'	36:DA:1428:C:C5	2.51	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:939:G:C4	36:DA:940:G:C8	3.06	0.44
36:BA:2305:A:H1'	42:BG:136:ARG:HG3	1.98	0.44
42:BG:87:PRO:HG2	42:BG:88:ILE:N	2.27	0.44
42:BG:82:LEU:HD22	42:BG:87:PRO:HG3	1.99	0.44
42:DG:138:GLN:OE1	42:DG:153:ARG:N	2.47	0.44
42:DG:11:TYR:CD1	42:DG:15:VAL:HG21	2.51	0.44
42:DG:161:THR:C	42:DG:163:ALA:N	2.71	0.44
42:DG:33:ARG:C	42:DG:161:THR:HB	2.38	0.44
42:DG:32:PRO:C	42:DG:33:ARG:HG3	2.38	0.44
36:BA:718:A:H8	36:BA:718:A:O5'	2.01	0.44
40:DE:4:ILE:CG1	40:DE:5:LEU:N	2.80	0.44
43:BH:107:VAL:O	43:BH:109:PHE:N	2.51	0.44
24:AY:48:C:H5'	24:AY:50:G:OP2	2.18	0.44
1:AA:1254:C:H2'	1:AA:1255:G:H8	1.83	0.44
15:CO:74:ASP:OD2	15:CO:76:GLU:N	2.47	0.44
15:CO:76:GLU:C	15:CO:78:TYR:H	2.21	0.44
2:CB:111:ARG:HG2	2:CB:111:ARG:HH11	1.82	0.44
2:AB:97:TRP:HZ2	2:AB:102:LEU:HD13	1.81	0.44
36:BA:2026:C:N4	36:BA:2037:G:H1	2.15	0.44
36:BA:529:A:H4'	36:BA:530:G:O5'	2.17	0.44
1:CA:1126:U:H2'	1:CA:1127:G:O4'	2.17	0.44
10:CJ:35:SER:O	10:CJ:36:GLY:C	2.56	0.44
10:CJ:7:LYS:H	10:CJ:97:GLU:HB2	1.82	0.44
1:AA:836:G:H2'	1:AA:837:G:H8	1.83	0.44
29:B3:8:LEU:O	29:B3:8:LEU:CD2	2.66	0.44
1:AA:1073:U:H3	1:AA:1102:A:N6	2.15	0.44
36:BA:793:A:OP2	36:BA:2072:G:H5'	2.18	0.44
37:DB:56:G:O2'	37:DB:57:A:OP2	2.25	0.44
38:DC:207:THR:HB	38:DC:210:ARG:NH1	2.32	0.44
25:AZ:364:PRO:C	25:AZ:366:ASP:N	2.71	0.44
1:CA:901:A:C6	1:CA:902:G:H1'	2.53	0.44
36:BA:1168:G:N1	36:BA:1182:A:C6	2.86	0.44
36:BA:406:G:H2'	36:BA:407:G:H8	1.82	0.44
54:BV:62:LEU:CD2	54:BV:95:LEU:HB2	2.46	0.44
36:DA:211:A:H2'	36:DA:212:G:C8	2.53	0.44
1:AA:10:A:C2	1:AA:11:G:N7	2.86	0.44
36:DA:743:G:N2	36:DA:754:C:O2	2.41	0.44
36:DA:2205:C:C2	36:DA:2220:G:N1	2.85	0.44
36:BA:2580:U:H3'	36:BA:2581:G:N3	2.33	0.44
39:DD:138:VAL:HA	39:DD:165:ILE:HG21	2.00	0.44
36:BA:1412:A:O2'	36:BA:1413:G:H5'	2.17	0.44
36:DA:2572:A:P	40:DE:144:ARG:HB2	2.58	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1430:C:H2'	1:CA:1431:C:C6	2.53	0.44
1:CA:1141:C:H2'	1:CA:1142:G:C8	2.52	0.44
11:AK:108:ILE:HB	18:AR:87:ARG:HA	1.98	0.44
58:DZ:56:VAL:C	58:DZ:57:ILE:HD12	2.36	0.44
1:AA:552:U:C2	1:AA:553:A:C8	3.06	0.44
36:BA:1435:G:H2'	36:BA:1436:G:C8	2.53	0.44
55:BW:73:ALA:HB3	55:BW:106:ILE:HD11	2.00	0.44
1:CA:686:U:C2'	1:CA:687:A:H8	2.29	0.44
1:CA:691:G:H2'	1:CA:692:U:H6	1.83	0.44
47:BO:8:LEU:HD22	47:BO:19:ILE:HG13	2.00	0.44
46:DN:57:ALA:CB	46:DN:124:ALA:HA	2.45	0.44
36:BA:2721:A:C2'	36:BA:2722:G:H8	2.27	0.44
27:B1:82:LEU:C	27:B1:83:GLU:CG	2.85	0.44
36:DA:1027:A:N3	36:DA:1027:A:C2'	2.77	0.44
1:CA:141:A:H2'	1:CA:142:G:O4'	2.18	0.44
26:B0:63:VAL:O	26:B0:63:VAL:HG23	2.18	0.44
26:D0:63:VAL:O	26:D0:63:VAL:HG23	2.18	0.44
36:BA:945:A:H4'	36:BA:945:A:OP2	2.17	0.44
17:CQ:88:TYR:OH	17:CQ:92:ARG:CZ	2.66	0.44
2:AB:92:TYR:HD1	2:AB:93:VAL:N	2.15	0.44
9:AI:58:HIS:O	9:AI:58:HIS:CG	2.71	0.44
39:DD:2:ALA:N	39:DD:200:ASP:OD2	2.51	0.44
16:CP:45:THR:C	16:CP:47:ASP:N	2.68	0.44
49:DQ:78:PRO:O	49:DQ:79:LEU:C	2.55	0.44
4:CD:150:GLU:CD	4:CD:151:LYS:N	2.70	0.44
36:DA:2562:U:H2'	36:DA:2563:U:C5'	2.47	0.44
4:CD:156:GLU:O	4:CD:159:ARG:HB2	2.18	0.44
18:AR:73:ALA:HB1	18:AR:79:LEU:HD12	1.99	0.44
39:BD:17:THR:OG1	39:BD:205:VAL:N	2.41	0.44
7:CG:91:VAL:O	7:CG:92:SER:C	2.56	0.44
2:AB:157:ARG:CB	2:AB:157:ARG:CZ	2.95	0.44
18:CR:25:THR:CG2	18:CR:42:ARG:HH11	2.31	0.44
36:BA:420:C:H2'	36:BA:421:U:C6	2.52	0.44
22:CV:2:C:H2'	22:CV:3:C:C6	2.53	0.44
36:DA:2521:C:O2	36:DA:2521:C:H2'	2.17	0.44
36:BA:1476:C:H2'	36:BA:1477:A:C8	2.53	0.44
36:DA:591:C:H2'	36:DA:592:G:C8	2.53	0.44
57:DY:63:LYS:HG2	57:DY:64:GLU:N	2.33	0.44
8:AH:70:GLN:O	8:AH:71:GLY:O	2.36	0.44
45:BK:20:UNK:HA	45:BK:24:UNK:CB	2.48	0.44
42:DG:152:LEU:O	42:DG:152:LEU:HG	2.18	0.44
19:AS:20:LEU:HD23	19:AS:20:LEU:HA	1.65	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:CS:20:LEU:HA	19:CS:20:LEU:HD23	1.67	0.44
6:CF:39:LYS:HB2	6:CF:64:GLN:HB3	2.00	0.44
6:CF:39:LYS:HB2	6:CF:64:GLN:CB	2.48	0.44
18:AR:36:ASN:OD1	18:AR:39:VAL:HB	2.18	0.44
44:DJ:23:UNK:CB	44:DJ:92:UNK:CB	2.96	0.44
32:B6:22:ALA:HB2	32:B6:39:TYR:CZ	2.53	0.44
36:BA:1217:C:C2	36:BA:1218:C:C5	3.05	0.44
36:BA:531:C:O2'	36:BA:563:G:H5''	2.18	0.44
36:BA:563:G:O2'	36:BA:564:C:H5'	2.18	0.44
48:BP:48:PRO:O	48:BP:49:ARG:O	2.35	0.44
50:DR:24:GLN:O	50:DR:25:ALA:C	2.54	0.44
50:DR:67:LEU:HD13	50:DR:70:LEU:O	2.17	0.44
19:AS:15:LEU:O	19:AS:19:VAL:HG23	2.17	0.44
34:D8:3:LYS:HD3	36:DA:242:G:H5''	1.99	0.44
34:D8:6:THR:HG21	34:D8:11:LYS:NZ	2.33	0.44
36:DA:2425:A:H5''	36:DA:2427:C:O4'	2.18	0.44
25:AZ:169:PRO:HG2	25:AZ:209:TYR:CD2	2.53	0.44
28:D2:25:VAL:O	28:D2:27:GLU:N	2.51	0.44
41:DF:39:TRP:CE2	41:DF:43:LYS:HE2	2.52	0.44
36:BA:1800:C:H42	36:BA:1817:G:N2	2.16	0.44
39:BD:26:LYS:O	39:BD:27:THR:HG22	2.18	0.44
39:BD:92:ILE:HG13	39:BD:104:TYR:CD2	2.52	0.44
36:BA:1203:G:O2'	36:BA:1242:A:N6	2.50	0.44
36:BA:606:U:H6	36:BA:606:U:H3'	1.82	0.44
36:BA:654:A:C8	36:BA:654(V):A:H4'	2.52	0.44
41:BF:107:LYS:O	41:BF:110:LEU:N	2.45	0.44
41:BF:110:LEU:HD12	41:BF:206:ILE:CD1	2.48	0.44
1:AA:544:G:OP1	4:AD:59:ARG:NH2	2.49	0.44
4:AD:61:LYS:O	4:AD:62:GLN:C	2.56	0.44
36:BA:2740:A:H2'	36:BA:2741:A:C8	2.52	0.44
28:B2:59:ARG:CA	36:BA:76:C:O2'	2.65	0.44
36:BA:2015:A:C2'	36:BA:2016:U:H5'	2.47	0.44
36:BA:2612:C:C5	36:BA:2613:U:H5	2.36	0.44
36:BA:747:U:H4'	55:BW:89:ALA:HB3	2.00	0.44
50:BR:44:LEU:HD13	50:BR:48:VAL:HB	1.99	0.44
42:BG:138:GLN:C	42:BG:140:ILE:H	2.20	0.44
36:DA:13:A:H2	36:DA:14:A:N6	2.15	0.44
36:DA:573:G:C5'	36:DA:575:A:N7	2.81	0.44
46:DN:26:LEU:CD1	46:DN:30:ILE:HD11	2.33	0.44
48:DP:36:LYS:CB	48:DP:41:ARG:CB	2.94	0.44
53:DU:91:ASP:O	53:DU:92:ARG:HB3	2.17	0.44
2:AB:86:GLU:C	2:AB:88:ALA:H	2.21	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1177:G:P	9:CI:97:LYS:HZ1	2.38	0.44
1:CA:966:G:O2'	1:CA:967:C:O5'	2.36	0.44
51:BS:13:ARG:NH1	51:BS:13:ARG:HG2	2.32	0.44
51:BS:15:ARG:NH1	51:BS:18:ILE:HD11	2.32	0.44
48:BP:95:VAL:HG13	48:BP:123:LEU:HD12	1.99	0.44
36:DA:1515:G:H2'	36:DA:1516:C:C6	2.53	0.44
1:AA:1071:C:N3	1:AA:1105:A:C2	2.86	0.44
25:CZ:137:LYS:O	25:CZ:138:VAL:C	2.55	0.44
25:CZ:163:PHE:C	25:CZ:165:GLY:H	2.20	0.44
36:BA:1666:G:N2	36:BA:1995:U:C2	2.86	0.44
36:DA:1662:C:H2'	36:DA:1663:C:C6	2.53	0.44
40:DE:171:GLU:O	40:DE:173:VAL:N	2.51	0.44
52:DT:85:LYS:O	52:DT:86:ILE:C	2.56	0.44
36:DA:1487:G:C4	36:DA:1488:G:C8	3.05	0.44
58:BZ:151:HIS:HA	58:BZ:171:ILE:HG12	1.99	0.44
58:BZ:86:VAL:C	58:BZ:87:ASP:OD1	2.56	0.44
57:DY:8:LYS:HB2	57:DY:28:LYS:CE	2.47	0.44
1:AA:1250:A:H5'	9:AI:67:GLY:HA2	2.00	0.44
58:DZ:129:SER:HA	58:DZ:130:PRO:HD3	1.62	0.44
7:CG:27:ILE:O	7:CG:28:ASN:C	2.56	0.44
39:DD:79:VAL:HB	39:DD:114:GLY:H	1.83	0.44
1:AA:1487:G:H2'	1:AA:1488:G:O5'	2.18	0.44
36:DA:1060:U:H6	36:DA:1060:U:OP1	2.01	0.44
36:BA:310:A:O2'	36:BA:311:A:O5'	2.36	0.44
57:BY:38:ILE:HD13	57:BY:66:PRO:HG3	1.99	0.44
1:AA:16:A:H2	1:AA:1080:A:N3	2.15	0.44
39:DD:213:ARG:HA	39:DD:213:ARG:HD2	1.67	0.44
2:AB:200:ILE:CG2	2:AB:202:PRO:HD3	2.47	0.44
38:BC:42:GLU:OE1	38:BC:216:THR:O	2.36	0.44
3:CC:113:ALA:HB3	3:CC:114:PRO:HD3	1.99	0.44
3:CC:147:LYS:O	3:CC:203:PHE:CD2	2.66	0.44
25:AZ:223:MET:HE3	25:AZ:224:PRO:O	2.18	0.44
25:AZ:223:MET:O	25:AZ:223:MET:CE	2.64	0.44
19:CS:10:PHE:HE1	19:CS:70:LYS:HD2	1.82	0.44
3:AC:18:TRP:CE3	3:AC:18:TRP:N	2.85	0.44
1:CA:499:A:C2	1:CA:547:A:C4	3.06	0.44
36:BA:1826:G:O2'	36:BA:1827:C:H5'	2.18	0.44
36:BA:1902:C:C2'	39:BD:244:ARG:HB2	2.48	0.44
37:DB:13:A:C2	37:DB:70:C:O4'	2.70	0.44
58:DZ:19:ARG:HB2	58:DZ:82:ARG:NH2	2.33	0.44
31:B5:7:PRO:HA	36:BA:2615:U:N3	2.33	0.44
39:BD:193:VAL:HG13	39:BD:193:VAL:O	2.18	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DF:49:ALA:HB1	41:DF:92:PRO:HB3	2.00	0.44
36:DA:2582:G:H21	36:DA:2583:G:C1'	2.31	0.44
30:D4:16:CYS:SG	30:D4:36:CYS:SG	3.15	0.44
7:AG:16:LEU:HD12	9:AI:41:VAL:O	2.17	0.44
58:BZ:79:ARG:O	58:BZ:81:ARG:N	2.50	0.44
29:D3:7:LYS:C	29:D3:54:VAL:HG13	2.37	0.44
36:BA:1224:C:N4	36:BA:1225:G:C6	2.86	0.44
1:CA:1128:C:N4	1:CA:1139:G:H2'	2.33	0.44
36:DA:596:G:C6	36:DA:597:U:C4	3.05	0.44
16:AP:14:ASN:HA	16:AP:42:ARG:CZ	2.46	0.44
36:BA:176:G:C5	36:BA:177:G:C6	3.05	0.44
1:AA:119:A:H5''	1:AA:120:A:H5'	1.99	0.44
36:DA:958:U:OP2	49:DQ:14:ARG:NH1	2.50	0.44
25:CZ:362:VAL:HG11	25:CZ:368:VAL:HG22	1.99	0.44
1:AA:1239:A:C4	1:AA:1241:G:C2	3.06	0.44
1:CA:1412:C:OP1	12:CL:57:LYS:HE2	2.18	0.44
12:CL:41:ARG:HH12	12:CL:57:LYS:HZ1	1.66	0.44
36:BA:2247:A:H2'	36:BA:2248:C:C6	2.53	0.44
31:D5:13:LYS:HZ1	36:DA:516:C:P	2.41	0.44
5:CE:135:THR:O	5:CE:136:MET:C	2.56	0.44
27:D1:94:LEU:C	27:D1:96:LYS:N	2.71	0.44
36:DA:609:A:H2'	36:DA:610:G:O4'	2.18	0.44
1:AA:405:U:C3'	1:AA:406:G:H5'	2.37	0.44
36:BA:2156:G:N2	36:BA:2157:G:H21	2.15	0.44
4:AD:200:GLU:O	4:AD:204:ILE:HG13	2.17	0.44
36:BA:2843:G:C2	36:BA:2875:C:N4	2.86	0.44
36:DA:2133:G:C8	36:DA:2133:G:H3'	2.53	0.44
36:DA:753:C:H2'	36:DA:754:C:H6	1.83	0.44
36:BA:687:C:O2	36:BA:788:A:H5'	2.18	0.44
36:BA:2222:G:C4	36:BA:2223:G:C8	3.05	0.44
1:AA:1111:A:H2'	1:AA:1112:C:C6	2.53	0.44
1:AA:1221:G:N2	1:AA:1222:G:H1'	2.32	0.44
6:CF:28:ARG:O	6:CF:31:GLU:HB2	2.17	0.44
25:AZ:371:THR:HG22	25:AZ:372:VAL:N	2.32	0.44
1:CA:1430:C:C2	1:CA:1471:G:N2	2.86	0.44
36:DA:1113:U:H2'	36:DA:1114:G:C8	2.53	0.44
1:CA:1269:A:C2	1:CA:1313:U:H1'	2.53	0.44
39:DD:158:ALA:C	39:DD:196:VAL:HG11	2.38	0.44
36:BA:2064:C:H2'	36:BA:2065:C:H6	1.79	0.44
12:CL:50:SER:O	12:CL:51:ALA:HB2	2.17	0.44
1:AA:686:U:H1'	11:AK:42:TRP:HE1	1.82	0.44
29:B3:2:PRO:O	29:B3:3:ARG:C	2.56	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:637:G:O2'	1:CA:638:G:H5'	2.18	0.44
1:CA:471:G:H3'	1:CA:471:G:OP1	2.18	0.44
27:D1:20:ARG:HB2	27:D1:33:LYS:O	2.17	0.44
36:DA:1027:A:O2'	36:DA:1028:A:H5'	2.16	0.44
36:DA:2690:C:C5'	36:DA:2872:G:H21	2.31	0.44
36:DA:74:A:C5'	36:DA:75:G:H1'	2.46	0.44
25:CZ:104:LEU:CD1	25:CZ:120:ILE:HD11	2.48	0.44
14:CN:17:LYS:HG3	14:CN:18:VAL:N	2.33	0.44
47:BO:86:ILE:CG2	47:BO:94:ARG:HB2	2.46	0.44
4:AD:150:GLU:O	4:AD:152:SER:N	2.51	0.44
1:AA:1228:C:H6	1:AA:1228:C:H3'	1.83	0.44
5:AE:38:GLN:OE1	5:AE:38:GLN:HA	2.17	0.44
36:DA:1186:G:O5'	36:DA:1186:G:H8	2.01	0.44
36:DA:1878:G:O2'	36:DA:1879:C:H5'	2.18	0.44
36:BA:1923:U:O2'	36:BA:1924:C:H5'	2.18	0.44
36:BA:1865:G:H5'	36:BA:1866:C:OP2	2.17	0.44
17:CQ:27:PHE:C	17:CQ:27:PHE:CD1	2.91	0.44
24:AY:77:THR:HG22	25:AZ:239:THR:HG22	2.00	0.44
36:BA:757:U:H3'	36:BA:757:U:H6	1.83	0.44
13:AM:79:LYS:HB3	13:AM:82:MET:SD	2.58	0.44
40:BE:68:ALA:C	40:BE:70:ALA:H	2.21	0.44
1:AA:428:G:O4'	1:AA:430:A:C8	2.71	0.44
33:B7:46:VAL:HG12	33:B7:48:LYS:NZ	2.32	0.44
1:CA:304:U:O2'	1:CA:305:G:H5'	2.17	0.44
9:AI:86:VAL:O	9:AI:90:PRO:HA	2.18	0.44
46:BN:1:MET:C	46:BN:1:MET:SD	2.96	0.44
36:BA:54:G:O5'	36:BA:54:G:H8	2.01	0.44
1:AA:258:G:O2'	1:AA:259:G:H5'	2.17	0.44
32:B6:11:LEU:HD22	32:B6:12:GLU:N	2.30	0.44
48:BP:35:HIS:HB3	48:BP:36:LYS:H	1.38	0.44
48:BP:47:ASP:OD1	48:BP:50:ARG:HG2	2.17	0.44
31:D5:3:LYS:CA	31:D5:3:LYS:HE3	2.37	0.44
36:DA:1268:A:C8	36:DA:1269:A:C8	3.06	0.44
36:DA:1268:A:N3	36:DA:1269:A:H1'	2.33	0.44
50:DR:25:ALA:HB1	50:DR:51:LEU:CD2	2.47	0.44
36:DA:250:G:H2'	36:DA:251:A:O4'	2.18	0.44
36:DA:252:G:H2'	36:DA:253:C:H6	1.78	0.44
25:AZ:176:LEU:HB2	62:AZ:501:GDP:N7	2.32	0.44
28:D2:3:LEU:HD23	28:D2:3:LEU:C	2.38	0.44
36:DA:94:C:H3'	36:DA:94(A):G:H8	1.79	0.44
36:DA:239:U:H2'	36:DA:240:G:O4'	2.18	0.44
35:D9:7:VAL:HG13	35:D9:34:GLN:HB3	2.00	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:673:C:C2'	36:DA:674:G:H5'	2.47	0.44
38:BC:87:GLU:HG2	38:BC:94:VAL:HG21	2.00	0.44
41:BF:33:LEU:HD21	41:BF:112:MET:SD	2.57	0.44
27:D1:67:ILE:H	27:D1:68:PRO:HD2	1.74	0.44
53:DU:14:HIS:HA	53:DU:17:ILE:HD13	1.99	0.44
1:CA:993:G:N1	1:CA:1046:A:C4	2.86	0.44
1:CA:963:G:O2'	1:CA:1199:U:H5"	2.18	0.44
51:BS:32:LEU:O	51:BS:62:LYS:HE3	2.18	0.44
51:BS:77:ALA:O	51:BS:80:LEU:N	2.47	0.44
51:BS:87:PHE:CG	51:BS:88:ASP:N	2.86	0.44
8:AH:11:THR:HA	8:AH:14:ARG:NH1	2.32	0.44
2:CB:223:ILE:O	2:CB:224:GLN:C	2.56	0.44
41:DF:198:ALA:HA	41:DF:201:VAL:HG12	2.00	0.44
1:CA:739:C:C4	1:CA:740:U:C5	3.06	0.44
1:AA:1303:C:C2	1:AA:1304:G:C8	3.06	0.44
13:AM:77:ASN:O	13:AM:81:LEU:HD23	2.18	0.44
25:CZ:26:THR:O	25:CZ:29:ALA:N	2.47	0.44
52:BT:70:VAL:HG12	52:BT:71:GLY:O	2.18	0.44
52:DT:33:LYS:HE2	52:DT:43:GLN:HE21	1.83	0.44
38:BC:23:ASP:OD1	38:BC:190:ARG:NH2	2.51	0.44
1:AA:668:G:C2	1:AA:739:C:C2	3.06	0.44
1:AA:738:C:H2'	1:AA:739:C:C6	2.53	0.44
58:DZ:127:LYS:HG3	58:DZ:127:LYS:O	2.17	0.44
1:CA:1377:A:H2'	7:CG:7:ALA:HB2	1.99	0.44
1:CA:1376:U:H2'	1:CA:1377:A:H8	1.78	0.44
3:CC:6:HIS:HD2	3:CC:7:PRO:CD	2.31	0.44
7:CG:35:LYS:O	7:CG:37:ASN:N	2.51	0.44
1:AA:1505:G:H2'	23:AX:18:G:OP2	2.18	0.44
36:BA:1517:G:H8	36:BA:1517:G:H5'	1.82	0.44
31:D5:41:PRO:O	31:D5:44:THR:OG1	2.24	0.44
36:DA:2140:C:O2'	36:DA:2141:G:H5'	2.17	0.44
36:DA:1392:A:N7	36:DA:1393:A:C5	2.86	0.44
5:AE:24:ARG:HH11	5:AE:24:ARG:HG2	1.82	0.44
1:CA:919:A:O2'	1:CA:1080:A:N6	2.49	0.44
36:DA:1902:C:C2'	39:DD:244:ARG:HB2	2.47	0.44
36:BA:2114:A:C2'	36:BA:2115:G:H5'	2.44	0.44
4:CD:79:PHE:CE2	4:CD:207:TYR:CD1	3.06	0.44
3:AC:101:LEU:C	3:AC:101:LEU:HD23	2.38	0.44
25:AZ:279:GLU:O	25:AZ:280:GLY:C	2.56	0.44
36:BA:2590:A:O2'	36:BA:2591:C:H5'	2.18	0.44
43:BH:33:LEU:HD12	43:BH:75:ALA:CB	2.48	0.44
53:BU:88:ILE:CB	53:BU:90:VAL:HG23	2.48	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:BV:52:VAL:O	54:BV:54:GLY:N	2.51	0.44
28:B2:6:VAL:CA	28:B2:9:GLN:HB2	2.31	0.44
39:BD:73:VAL:HG13	39:BD:120:GLY:CA	2.46	0.44
39:DD:85:ASP:CG	39:DD:88:ARG:NH1	2.71	0.44
36:DA:2710:C:HO2'	36:DA:2711:A:H5'	1.83	0.44
42:DG:34:LEU:HD11	42:DG:100:TRP:CH2	2.51	0.44
30:D4:9:LEU:CB	42:DG:98:ARG:HH12	2.30	0.44
38:BC:100:ILE:HG21	38:BC:126:LYS:HB2	1.95	0.44
7:AG:121:ALA:O	7:AG:122:HIS:C	2.56	0.44
9:AI:36:TYR:O	9:AI:37:PHE:CD2	2.71	0.44
33:B7:39:ARG:HA	36:BA:459:U:OP1	2.17	0.44
1:CA:585:G:O2'	1:CA:879:C:H5''	2.17	0.44
53:DU:99:ALA:HB2	53:DU:106:PHE:CE1	2.53	0.44
49:BQ:132:VAL:HG11	58:BZ:81:ARG:CD	2.47	0.44
1:AA:977:A:H61	1:AA:1224:G:P	2.40	0.44
36:BA:2023:G:O2'	36:BA:2024:G:H5'	2.18	0.44
36:BA:2512:C:O5'	36:BA:2512:C:H6	2.01	0.44
1:AA:1281:U:H3'	1:AA:1282:C:H6	1.83	0.44
38:BC:207:THR:H	38:BC:210:ARG:HH12	1.65	0.44
1:AA:1439:C:H2'	1:AA:1440:C:O4'	2.17	0.44
36:DA:598:G:C4'	48:DP:15:ARG:HB3	2.48	0.44
20:CT:53:LEU:O	20:CT:56:MET:N	2.51	0.44
2:AB:19:HIS:O	2:AB:20:GLU:O	2.36	0.44
2:CB:207:ALA:O	2:CB:208:ILE:C	2.57	0.44
10:AJ:8:LEU:N	10:AJ:8:LEU:HD12	2.33	0.44
11:AK:116:HIS:O	11:AK:117:ASN:HB2	2.18	0.44
11:AK:111:ASP:HA	18:AR:84:LYS:CD	2.48	0.44
49:DQ:50:ALA:C	49:DQ:52:VAL:N	2.69	0.44
36:BA:1169:G:H2'	36:BA:1170:G:O4'	2.17	0.44
1:AA:719:C:C5	1:AA:720:C:C4	3.05	0.44
36:BA:1355:G:C6	36:BA:1377:G:N2	2.86	0.44
16:CP:30:GLY:O	16:CP:31:LYS:C	2.56	0.44
36:DA:126:A:C6	36:DA:127:A:C2	3.06	0.44
1:CA:625:G:H2'	1:CA:626:U:C6	2.53	0.44
49:BQ:113:GLN:O	49:BQ:116:GLU:HB3	2.18	0.44
36:DA:979:G:N2	36:DA:985:C:H42	2.16	0.44
2:AB:41:ILE:HD12	2:AB:41:ILE:N	2.33	0.44
1:AA:1318:A:C1'	19:AS:37:ARG:HH21	2.30	0.44
1:CA:1069:C:C2'	1:CA:1070:U:O5'	2.66	0.44
1:CA:913:A:H1'	1:CA:914:A:O4'	2.17	0.44
12:AL:33:ARG:HG2	12:AL:60:LEU:HD12	1.99	0.44
1:CA:458:C:N3	1:CA:474:G:N2	2.66	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D2:7:ARG:CG	28:D2:7:ARG:HH11	2.30	0.44
29:D3:12:PRO:CG	29:D3:13:ILE:H	2.28	0.44
1:AA:157:G:H2'	1:AA:158:G:C8	2.45	0.44
1:AA:1087:G:H8	1:AA:1087:G:O5'	2.01	0.44
36:DA:778:G:C5	36:DA:779:U:C4	3.05	0.44
36:BA:2410:G:H2'	36:BA:2411:A:C8	2.49	0.44
38:DC:58:VAL:HG22	38:DC:201:PRO:HD3	2.00	0.44
36:DA:2601:C:H2'	36:DA:2603:G:C8	2.53	0.44
37:BB:60:C:H2'	37:BB:61:G:C8	2.50	0.44
36:DA:1908:C:H42	36:DA:1922:G:H1	1.66	0.44
36:DA:413:C:H2'	36:DA:414:C:C6	2.52	0.44
36:BA:1909:C:N4	36:BA:1921:G:H1	2.13	0.44
17:AQ:13:ASP:C	17:AQ:15:MET:N	2.70	0.44
36:BA:2764:A:H2'	36:BA:2766:G:C8	2.53	0.44
18:AR:40:LEU:O	18:AR:42:ARG:N	2.51	0.44
36:DA:2460:U:C5	36:DA:2461:C:C5	3.06	0.44
22:AV:1:G:H2'	22:AV:2:C:C6	2.53	0.44
29:B3:31:LEU:O	36:BA:1158:C:H4'	2.17	0.44
15:AO:35:ARG:NH2	15:AO:59:MET:HE1	2.33	0.44
1:AA:764:C:H2'	1:AA:765:G:C8	2.52	0.44
1:CA:1409:C:H4'	36:DA:1915:U:O4	2.17	0.44
1:CA:32:A:H1'	1:CA:48:C:N4	2.33	0.44
45:DK:18:UNK:O	45:DK:19:UNK:C	2.64	0.44
1:CA:429:U:H1'	1:CA:430:A:H5''	1.99	0.44
1:CA:1057:G:H3'	1:CA:1058:G:C8	2.53	0.44
39:DD:117:VAL:HG22	39:DD:118:VAL:N	2.33	0.44
36:BA:2851:A:H2'	36:BA:2852:G:C5'	2.48	0.44
53:BU:22:LYS:HA	53:BU:22:LYS:HD3	1.72	0.44
58:BZ:154:ASP:OD2	58:BZ:154:ASP:N	2.51	0.44
32:B6:35:GLU:CG	32:B6:51:GLU:HG3	2.47	0.43
36:BA:29:U:OP1	36:BA:583:G:H4'	2.18	0.43
48:BP:63:PRO:O	48:BP:65:ARG:N	2.51	0.43
53:BU:10:ARG:CA	53:BU:13:LYS:HG2	2.47	0.43
50:DR:42:LYS:O	50:DR:45:ARG:CB	2.66	0.43
57:BY:64:GLU:O	57:BY:65:ALA:HB2	2.18	0.43
36:DA:2283:C:O2'	36:DA:2284:C:H5'	2.17	0.43
48:DP:48:PRO:O	48:DP:49:ARG:O	2.35	0.43
28:D2:51:ARG:HG3	28:D2:52:ASP:N	2.33	0.43
36:BA:1884:A:H2'	36:BA:1885:A:H5''	2.00	0.43
36:DA:601:C:O5'	36:DA:601:C:H6	2.00	0.43
36:DA:654:A:H4'	36:DA:654(A):G:O5'	2.18	0.43
48:DP:7:ARG:CB	48:DP:8:PRO:CD	2.93	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:10:MET:HG2	5:CE:10:MET:O	2.18	0.43
36:DA:1853:A:N6	36:DA:1888:G:H2'	2.33	0.43
36:DA:681:G:H1	36:DA:796:C:H42	1.66	0.43
1:AA:1157:A:HO2'	1:AA:1158:C:P	2.41	0.43
1:CA:262:A:N1	1:CA:263:A:C2	2.86	0.43
17:CQ:64:PRO:HG3	17:CQ:70:ARG:HG2	2.00	0.43
49:BQ:60:ARG:HA	58:BZ:178:GLU:H	1.82	0.43
28:B2:34:GLU:O	28:B2:37:PHE:HB2	2.18	0.43
28:B2:57:ILE:HG22	28:B2:61:LEU:CD1	2.48	0.43
56:BX:43:VAL:O	56:BX:43:VAL:HG12	2.18	0.43
36:BA:1279:G:N2	36:BA:1292:U:C2	2.86	0.43
36:BA:2849:U:H4'	36:BA:2868:A:C2	2.53	0.43
13:AM:19:LEU:HD22	13:AM:19:LEU:N	2.33	0.43
56:DX:12:VAL:HG12	56:DX:27:THR:CA	2.47	0.43
27:D1:41:ARG:NH2	36:DA:1365:A:OP1	2.49	0.43
36:DA:2776:A:C4'	36:DA:2778:A:H5''	2.48	0.43
46:DN:103:VAL:O	46:DN:105:GLY:N	2.51	0.43
46:DN:48:MET:HE3	46:DN:49:GLY:H	1.83	0.43
54:DV:58:VAL:HB	54:DV:97:LYS:HB2	2.00	0.43
1:AA:250:A:O4'	1:AA:252:U:C6	2.71	0.43
1:CA:1206:G:C6	1:CA:1207:G:C5	3.06	0.43
51:BS:30:ARG:NH1	51:BS:35:ILE:HB	2.33	0.43
8:AH:82:HIS:O	8:AH:83:ILE:HB	2.18	0.43
38:DC:23:ASP:OD1	38:DC:190:ARG:NH2	2.51	0.43
6:CF:37:VAL:O	6:CF:38:GLU:CG	2.66	0.43
13:AM:74:VAL:O	13:AM:77:ASN:ND2	2.51	0.43
25:CZ:163:PHE:CD1	25:CZ:164:PRO:HD2	2.53	0.43
36:BA:1678:G:N2	36:BA:1989:G:H22	2.16	0.43
52:DT:100:TYR:CD2	52:DT:103:ARG:NH2	2.85	0.43
38:BC:198:ALA:C	38:BC:200:LYS:H	2.20	0.43
49:BQ:141:GLN:OE1	58:BZ:72:ARG:NE	2.51	0.43
1:AA:939:G:H1	1:AA:1344:C:N4	2.14	0.43
14:AN:25:VAL:CG2	14:AN:38:GLY:O	2.66	0.43
1:AA:738:C:H5''	6:AF:69:GLU:HB2	2.00	0.43
7:CG:99:LEU:HD22	7:CG:103:TRP:CZ2	2.53	0.43
7:CG:107:ALA:O	7:CG:110:GLN:N	2.51	0.43
9:CI:99:LEU:C	9:CI:101:PHE:N	2.72	0.43
10:CJ:53:PRO:C	14:CN:41:ARG:HH22	2.20	0.43
22:CV:49:C:O2'	22:CV:50:U:P	2.76	0.43
22:AV:54:U:C2'	22:AV:55:U:H5'	2.48	0.43
36:DA:2187:G:N7	36:DA:2188:C:C5	2.86	0.43
22:CV:20:U:C3'	22:CV:21:A:C5'	2.89	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1300:G:O2'	1:CA:1301:U:OP2	2.31	0.43
2:AB:22:LYS:CE	2:AB:40:HIS:CE1	3.00	0.43
39:DD:211:ARG:HA	39:DD:214:TRP:CD2	2.53	0.43
2:AB:17:PHE:C	2:AB:17:PHE:HD2	2.21	0.43
3:CC:48:TYR:OH	3:CC:122:GLU:HG3	2.17	0.43
25:AZ:300:ARG:O	25:AZ:302:GLN:HG3	2.18	0.43
3:AC:95:THR:HG22	3:AC:95:THR:O	2.18	0.43
1:CA:78:G:H1	1:CA:91:C:N4	2.15	0.43
49:DQ:24:GLY:O	49:DQ:26:TYR:O	2.36	0.43
1:AA:1004:A:O5'	1:AA:1025:U:C5	2.70	0.43
1:CA:1015:A:H2'	1:CA:1016:A:O4'	2.18	0.43
39:BD:128:GLY:N	39:BD:193:VAL:HG13	2.33	0.43
36:BA:598:G:C5'	48:BP:15:ARG:HD3	2.32	0.43
48:DP:16:ARG:CA	48:DP:16:ARG:HH11	2.31	0.43
13:CM:10:PRO:O	13:CM:11:ARG:CB	2.51	0.43
13:CM:15:VAL:C	13:CM:17:VAL:N	2.70	0.43
13:CM:36:LYS:C	13:CM:38:GLY:H	2.21	0.43
42:BG:57:ALA:CB	42:BG:90:LEU:HD21	2.46	0.43
37:DB:44:G:H1'	37:DB:47:C:N4	2.33	0.43
42:DG:121:ASN:ND2	42:DG:124:SER:CB	2.81	0.43
42:DG:138:GLN:HA	42:DG:155:MET:HE3	1.99	0.43
36:BA:1466:G:H5'	36:BA:1467:C:OP1	2.18	0.43
1:AA:1307:U:H6	1:AA:1307:U:O5'	2.01	0.43
21:CU:9:ARG:O	21:CU:10:ARG:C	2.55	0.43
40:DE:37:ARG:O	40:DE:45:THR:HA	2.17	0.43
8:CH:97:VAL:CG1	8:CH:98:LYS:N	2.81	0.43
40:DE:65:GLY:O	40:DE:66:HIS:C	2.56	0.43
1:AA:1277:C:O2'	1:AA:1279:A:H8	1.92	0.43
25:CZ:241:ARG:HG2	25:CZ:242:ILE:N	2.31	0.43
36:BA:1131:G:C6	46:BN:75:TYR:CD2	3.06	0.43
1:CA:876:G:H2'	1:CA:877:C:H6	1.81	0.43
1:CA:830:G:H5''	2:CB:24:TRP:HE1	1.83	0.43
8:CH:65:TYR:N	8:CH:65:TYR:CD1	2.86	0.43
29:B3:50:VAL:O	29:B3:52:HIS:N	2.50	0.43
24:CY:48:C:H5'	24:CY:50:G:OP2	2.18	0.43
36:BA:223:A:H61	36:BA:374:A:H4'	1.82	0.43
16:AP:53:VAL:O	16:AP:54:GLU:C	2.56	0.43
25:CZ:363:MET:HB3	25:CZ:364:PRO:HD2	1.99	0.43
36:DA:150:C:O5'	36:DA:150:C:H6	2.00	0.43
36:DA:178:G:O2'	36:DA:179:G:H5'	2.18	0.43
1:CA:53:A:N1	1:CA:359:U:O2	2.51	0.43
25:CZ:331:HIS:H	25:CZ:331:HIS:CD2	2.36	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1492:A:H2	23:AX:23:C:O2	2.00	0.43
11:AK:55:LYS:HE3	11:AK:55:LYS:HB2	1.83	0.43
48:BP:84:ASN:O	48:BP:86:LYS:N	2.50	0.43
36:DA:2814:C:C6	36:DA:2815:C:H5	2.36	0.43
1:AA:928:G:N1	1:AA:1390:U:C2	2.86	0.43
36:BA:1386:C:C6	36:BA:1386:C:C3'	3.01	0.43
36:BA:1600:C:H2'	36:BA:1601:G:H8	1.82	0.43
39:BD:159:ALA:HB1	39:BD:201:HIS:HB3	2.00	0.43
1:CA:1246:C:O2'	1:CA:1247:U:H5'	2.17	0.43
36:DA:1412:A:O2'	36:DA:1413:G:H5'	2.18	0.43
46:DN:62:VAL:HG21	46:DN:66:LYS:HB2	2.00	0.43
11:AK:33:THR:HG21	11:AK:37:GLY:O	2.18	0.43
36:BA:1050:A:C2	36:BA:2751:G:C5	3.06	0.43
1:AA:687:A:H4'	1:AA:688:G:O5'	2.18	0.43
1:CA:1202:G:N3	14:CN:42:ILE:HG21	2.33	0.43
36:BA:1053:C:H2'	36:BA:1054:A:C8	2.53	0.43
26:D0:2:ALA:HB3	36:DA:2602:A:N1	2.33	0.43
49:BQ:6:ARG:C	49:BQ:7:MET:HG3	2.37	0.43
22:AW:54:U:H4'	38:BC:54:SER:CB	2.48	0.43
37:BB:13:A:C2	37:BB:70:C:O4'	2.71	0.43
36:BA:936:C:C2	36:BA:937:U:C5	3.06	0.43
25:AZ:186:PRO:O	25:AZ:187:LYS:CG	2.65	0.43
52:BT:111:ARG:HG3	52:BT:111:ARG:O	2.17	0.43
36:BA:877:U:O2'	36:BA:878:A:C5'	2.66	0.43
37:DB:60:C:H2'	37:DB:61:G:C8	2.49	0.43
36:BA:2173:A:N3	36:BA:2173:A:C3'	2.79	0.43
36:BA:1431:U:C4	36:BA:1432:C:C4	3.06	0.43
1:AA:102:G:C5	1:AA:103:C:C5	3.06	0.43
36:DA:2565:A:H2'	36:DA:2566:A:O4'	2.18	0.43
57:DY:16:ALA:O	57:DY:21:LYS:HG3	2.18	0.43
36:BA:2533:A:H2'	36:BA:2534:A:C5'	2.48	0.43
1:AA:991:U:OP2	1:AA:991:U:H6	2.01	0.43
47:BO:50:GLY:O	47:BO:53:LYS:NZ	2.42	0.43
16:CP:59:TRP:O	16:CP:64:ALA:CB	2.66	0.43
38:DC:1:PRO:O	38:DC:3:HIS:N	2.51	0.43
1:CA:428:G:O2'	1:CA:429:U:P	2.76	0.43
36:DA:1478:G:N2	36:DA:1479:G:C4	2.86	0.43
36:DA:699:A:C2'	36:DA:700:G:H5'	2.48	0.43
6:CF:6:VAL:HG22	6:CF:90:VAL:HG23	1.99	0.43
11:AK:12:ARG:HH21	11:AK:14:VAL:CG1	2.31	0.43
25:AZ:355:LEU:HB3	25:AZ:359:VAL:CB	2.46	0.43
36:BA:2414:G:H21	48:BP:67:MET:CE	2.32	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:833:U:O5'	36:BA:833:U:H6	2.01	0.43
36:DA:2612:C:C5	36:DA:2613:U:H5	2.36	0.43
40:DE:194:GLY:O	40:DE:196:VAL:HG13	2.18	0.43
36:DA:2331:G:O2'	36:DA:2332:U:H5'	2.18	0.43
36:DA:244:A:H3'	36:DA:245:G:C5'	2.49	0.43
34:D8:7:HIS:CD2	48:DP:50:ARG:HD3	2.52	0.43
36:BA:1856:G:H1	36:BA:1886:C:H42	1.67	0.43
41:DF:3:GLU:O	41:DF:19:GLU:CB	2.62	0.43
38:DC:113:VAL:HG11	38:DC:131:LEU:CD1	2.48	0.43
38:DC:146:GLY:O	38:DC:149:ILE:HB	2.18	0.43
39:BD:147:LEU:HD21	39:BD:183:ARG:NH1	2.33	0.43
39:BD:34:VAL:CG2	39:BD:35:LYS:H	2.23	0.43
1:CA:131:C:O2	1:CA:262:A:H2	2.01	0.43
36:BA:654:A:H4'	36:BA:654(A):G:C4'	2.48	0.43
41:BF:111:ALA:O	41:BF:114:VAL:HB	2.19	0.43
48:BP:7:ARG:O	48:BP:10:PRO:HD2	2.18	0.43
43:BH:61:HIS:O	43:BH:64:LEU:N	2.50	0.43
1:AA:1206:G:C2'	1:AA:1207:G:H5'	2.47	0.43
1:AA:993:G:N3	1:AA:993:G:C2'	2.78	0.43
14:AN:4:LYS:O	14:AN:6:LEU:N	2.51	0.43
36:DA:2758:A:C2	36:DA:2759:G:C1'	3.01	0.43
35:B9:4:ARG:O	35:B9:36:GLN:HA	2.18	0.43
28:B2:38:GLN:OE1	28:B2:44:LEU:CD2	2.65	0.43
36:BA:2458:G:C4	36:BA:2490:G:C2	3.06	0.43
36:BA:2838:G:H2'	36:BA:2839:G:C8	2.53	0.43
53:DU:109:LEU:O	53:DU:113:ALA:N	2.52	0.43
13:AM:52:GLU:HA	13:AM:55:ARG:CB	2.38	0.43
36:DA:811:U:C6	48:DP:24:GLY:HA3	2.53	0.43
1:AA:353:A:C2'	1:AA:354:G:OP2	2.66	0.43
8:CH:4:ASP:OD2	8:CH:85:ARG:HD3	2.18	0.43
17:AQ:5:VAL:HG22	17:AQ:60:ILE:HA	2.00	0.43
1:AA:264:U:O2'	17:AQ:64:PRO:HB2	2.18	0.43
1:CA:972:C:H4'	10:CJ:57:LYS:CG	2.40	0.43
4:CD:60:GLU:HB3	4:CD:203:VAL:HG22	2.00	0.43
51:BS:16:ASN:O	51:BS:18:ILE:N	2.51	0.43
51:BS:36:TYR:N	51:BS:36:TYR:CD1	2.84	0.43
8:AH:103:VAL:HG21	8:AH:109:ILE:O	2.17	0.43
2:CB:97:TRP:HZ2	2:CB:102:LEU:HD13	1.83	0.43
36:DA:1206:G:C2	36:DA:1207:C:C6	3.07	0.43
36:DA:321:G:C4	41:DF:165:ARG:HD3	2.53	0.43
1:CA:745:C:H5''	1:CA:851:G:H1'	1.99	0.43
36:BA:1664:A:H3'	36:BA:1665:A:C8	2.54	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2698:U:H2'	36:BA:2699:C:C6	2.53	0.43
40:BE:167:VAL:HG22	40:BE:167:VAL:O	2.18	0.43
47:BO:1:MET:HG3	47:BO:67:LYS:HG2	1.99	0.43
52:BT:91:ARG:HA	52:BT:117:ASP:H	1.83	0.43
52:BT:27:THR:HA	52:BT:88:ILE:H	1.83	0.43
58:BZ:50:GLN:O	58:BZ:52:SER:N	2.51	0.43
58:BZ:72:ARG:O	58:BZ:73:GLN:HB2	2.18	0.43
1:AA:1348:U:O2'	1:AA:1349:A:O5'	2.36	0.43
35:D9:26:ILE:CG2	35:D9:27:CYS:N	2.81	0.43
29:D3:19:GLN:C	29:D3:21:ALA:N	2.71	0.43
1:CA:941:G:N2	1:CA:942:G:H1'	2.33	0.43
36:BA:859:G:C2	36:BA:2268:A:C2	3.07	0.43
36:BA:307:G:H21	36:BA:330:A:H62	1.66	0.43
36:BA:329:G:P	57:BY:71:LYS:NZ	2.91	0.43
42:BG:21:ARG:NE	42:BG:22:ARG:HA	2.33	0.43
31:D5:59:GLU:O	31:D5:59:GLU:HG3	2.18	0.43
1:AA:1421:G:C6	1:AA:1422:G:C5	3.06	0.43
36:DA:1773:A:O2'	36:DA:1774:C:H5'	2.18	0.43
55:DW:28:SER:OG	55:DW:31:GLU:HG3	2.19	0.43
4:CD:79:PHE:CD2	4:CD:207:TYR:HD1	2.36	0.43
3:AC:180:ALA:O	3:AC:181:ASN:HB3	2.18	0.43
36:BA:440:G:H21	41:BF:46:ARG:NH2	2.16	0.43
48:BP:16:ARG:HG3	48:BP:17:LYS:H	1.83	0.43
36:BA:662:G:H4'	48:BP:19:VAL:O	2.18	0.43
36:BA:1789:A:C5	36:BA:1790:C:C5	3.07	0.43
49:DQ:35:VAL:HG23	49:DQ:101:ARG:O	2.18	0.43
49:DQ:140:ALA:HB1	58:DZ:99:TYR:CG	2.53	0.43
49:DQ:141:GLN:HB2	58:DZ:99:TYR:CD2	2.53	0.43
46:DN:55:VAL:HG21	46:DN:127:ASP:H	1.83	0.43
4:CD:175:SER:O	4:CD:176:LEU:HB2	2.18	0.43
39:DD:26:LYS:O	39:DD:27:THR:HG22	2.17	0.43
36:BA:425:G:C4	36:BA:426:C:C5	3.06	0.43
36:DA:1657:C:H2'	36:DA:1658:C:O4'	2.18	0.43
36:BA:1494:A:N3	36:BA:1494:A:H5'	2.33	0.43
13:CM:22:ILE:HD12	13:CM:22:ILE:N	2.33	0.43
13:CM:45:VAL:HA	13:CM:48:LEU:CD1	2.38	0.43
21:AU:7:ARG:O	21:AU:21:TYR:CD2	2.71	0.43
43:DH:144:VAL:O	43:DH:148:ILE:HG12	2.18	0.43
38:BC:100:ILE:HD13	38:BC:126:LYS:HB2	1.99	0.43
1:CA:581:G:C6	1:CA:758:G:C5	3.06	0.43
12:CL:8:ASN:O	12:CL:12:ARG:HD3	2.17	0.43
1:AA:756:C:O2'	1:AA:878:G:N2	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:DH:117:PRO:HB3	43:DH:123:PHE:CE1	2.53	0.43
36:BA:2023:G:H8	36:BA:2023:G:P	2.40	0.43
8:CH:20:TYR:CE2	8:CH:75:ARG:HD2	2.48	0.43
36:BA:2071:A:H8	36:BA:2071:A:OP2	2.01	0.43
11:AK:93:GLN:NE2	11:AK:96:ARG:NH2	2.66	0.43
16:AP:50:LYS:O	16:AP:51:VAL:CG2	2.66	0.43
4:CD:23:GLY:O	4:CD:27:TYR:HB2	2.18	0.43
20:AT:36:LEU:HD13	20:AT:36:LEU:C	2.39	0.43
39:DD:28:GLU:N	39:DD:29:PRO:HD2	2.21	0.43
48:DP:83:VAL:HG12	48:DP:113:LYS:O	2.18	0.43
36:BA:1492:G:N3	36:BA:1499:C:O2	2.51	0.43
25:CZ:310:ILE:HD11	25:CZ:381:GLU:CB	2.47	0.43
29:B3:18:ASP:HB2	36:BA:850:C:C5'	2.48	0.43
4:CD:3:ARG:HD3	4:CD:5:ILE:HG13	2.00	0.43
36:BA:896:A:H5'	58:BZ:146:ILE:HD12	1.99	0.43
36:BA:1257:C:H4'	41:BF:83:PHE:CD2	2.52	0.43
1:CA:1096:C:H2'	1:CA:1097:C:H6	1.82	0.43
1:CA:1313:U:C4	1:CA:1314:C:C4	3.06	0.43
11:CK:66:LEU:O	11:CK:69:ALA:CB	2.60	0.43
36:BA:1166:C:H1'	36:BA:1184:G:N2	2.34	0.43
11:CK:27:ASN:HA	11:CK:56:GLY:CA	2.43	0.43
36:BA:2052:G:N1	36:BA:2053:G:N7	2.66	0.43
36:BA:1750:G:N3	36:BA:2860:A:H2	2.16	0.43
1:AA:100:C:H2'	1:AA:101:A:H8	1.78	0.43
36:BA:551:G:O2'	36:BA:1220:A:N3	2.41	0.43
1:CA:1507:A:C5	1:CA:1530:G:C2	3.06	0.43
2:CB:14:GLY:O	2:CB:15:VAL:HG22	2.18	0.43
40:BE:9:VAL:CG2	40:BE:9:VAL:O	2.65	0.43
36:DA:64:A:H2'	36:DA:65:C:H6	1.83	0.43
38:DC:43:VAL:HG12	38:DC:43:VAL:O	2.17	0.43
36:DA:2667:C:H2'	36:DA:2668:G:H8	1.83	0.43
36:DA:1423:G:H1	36:DA:1575:C:H42	1.65	0.43
12:AL:98:TYR:HD1	12:AL:98:TYR:N	2.16	0.43
55:BW:37:ARG:NH1	55:BW:37:ARG:CG	2.81	0.43
36:DA:292:C:C2'	36:DA:293:U:H5'	2.49	0.43
51:DS:11:LYS:N	51:DS:11:LYS:CD	2.80	0.43
36:DA:1717:G:H2'	36:DA:1718:G:H5''	2.00	0.43
36:DA:2298:A:H62	36:DA:2318:G:H8	1.66	0.43
36:BA:1718:G:C8	36:BA:1718:G:H5'	2.47	0.43
36:BA:360:G:C4	36:BA:361:G:C8	3.06	0.43
22:CW:9:A:C2	22:CW:44:G:N1	2.87	0.43
1:CA:790:A:C6	1:CA:791:G:C6	3.06	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1186:G:H2'	36:DA:1187:G:H5'	2.00	0.43
36:DA:1432:C:N3	36:DA:1561:G:O6	2.51	0.43
36:DA:2557:G:C2	36:DA:2558:C:C2	3.06	0.43
15:CO:34:LEU:HG	15:CO:35:ARG:N	2.32	0.43
16:AP:59:TRP:O	16:AP:64:ALA:CB	2.66	0.43
1:AA:1010:G:H2'	1:AA:1011:G:C8	2.52	0.43
1:AA:1056:U:OP1	3:AC:163:ALA:HB2	2.18	0.43
16:AP:66:PRO:HD2	16:AP:71:ARG:NH1	2.33	0.43
1:CA:258:G:H2'	1:CA:259:G:H8	1.82	0.43
36:DA:1755:A:O2'	36:DA:1756:G:H5'	2.18	0.43
51:DS:39:ILE:O	51:DS:40:ILE:HG23	2.17	0.43
1:AA:232:G:H2'	1:AA:233:C:O4'	2.18	0.43
36:DA:759:G:O5'	36:DA:759:G:H8	2.01	0.43
32:B6:36:LEU:O	32:B6:37:ARG:HB2	2.17	0.43
34:B8:57:ARG:C	34:B8:59:LYS:N	2.71	0.43
36:BA:2388:A:H5'	36:BA:2389:G:OP2	2.18	0.43
48:BP:34:GLY:O	48:BP:35:HIS:CB	2.66	0.43
36:DA:1277:G:H2'	36:DA:1278:A:O4'	2.17	0.43
50:DR:22:ARG:O	50:DR:26:LYS:HB2	2.17	0.43
36:DA:1614:A:N6	55:DW:87:PRO:HA	2.33	0.43
32:D6:42:TRP:HA	32:D6:42:TRP:HE3	1.83	0.43
34:D8:55:ALA:O	34:D8:56:GLU:C	2.56	0.43
48:DP:96:THR:H	48:DP:99:LEU:CD2	2.30	0.43
25:AZ:138:VAL:CG2	25:AZ:174:SER:N	2.81	0.43
25:AZ:35:ALA:O	25:AZ:39:ASN:HB2	2.18	0.43
28:D2:43:GLN:O	28:D2:44:LEU:HB2	2.18	0.43
28:D2:51:ARG:C	28:D2:53:LEU:N	2.71	0.43
36:DA:2540:C:C2'	36:DA:2541:A:H5'	2.48	0.43
1:AA:1430:C:C2	1:AA:1471:G:C2	3.05	0.43
39:BD:65:ILE:HG22	39:BD:104:TYR:CB	2.48	0.43
36:DA:2228:G:C5	36:DA:2229:C:C4	3.06	0.43
3:AC:3:ASN:O	3:AC:4:LYS:HB2	2.19	0.43
1:CA:250:A:O4'	1:CA:252:U:C6	2.71	0.43
1:CA:266:G:C5'	1:CA:267:C:C5	3.01	0.43
1:AA:1057:G:H2'	1:AA:1058:G:H8	1.82	0.43
43:DH:40:GLU:O	43:DH:41:MET:CB	2.67	0.43
43:DH:37:VAL:HG11	43:DH:68:THR:CG2	2.48	0.43
35:B9:31:LYS:C	35:B9:32:HIS:CD2	2.92	0.43
36:BA:2483:C:H2'	36:BA:2483:C:O2	2.17	0.43
28:B2:10:LEU:O	28:B2:14:ARG:HB2	2.19	0.43
36:BA:322:A:OP1	41:BF:168:ARG:HG2	2.18	0.43
36:BA:2822:G:OP2	40:BE:110:GLY:C	2.56	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AM:49:THR:C	13:AM:51:ALA:N	2.70	0.43
27:D1:45:ASN:HB3	27:D1:64:ALA:CB	2.45	0.43
27:D1:45:ASN:CB	36:DA:397:G:H5'	2.49	0.43
1:CA:1065:U:O5'	1:CA:1190:G:N2	2.50	0.43
36:DA:530:G:OP2	36:DA:530:G:H2'	2.19	0.43
36:DA:942:G:H2'	36:DA:943:U:O4'	2.19	0.43
46:DN:111:PRO:HA	46:DN:114:ARG:CZ	2.48	0.43
53:DU:57:PHE:O	53:DU:59:ARG:N	2.52	0.43
8:CH:110:ALA:HB3	8:CH:121:ASP:HB3	2.01	0.43
8:CH:13:ILE:O	8:CH:14:ARG:C	2.56	0.43
8:CH:9:MET:O	8:CH:10:LEU:C	2.56	0.43
1:CA:1161:C:O2'	1:CA:1162:C:H5'	2.18	0.43
2:CB:219:VAL:C	2:CB:222:ILE:HG12	2.38	0.43
2:CB:8:LYS:O	2:CB:12:GLU:HG3	2.18	0.43
2:CB:92:TYR:CD1	2:CB:151:GLY:HA3	2.52	0.43
36:DA:321:G:OP2	41:DF:135:LYS:HA	2.18	0.43
41:DF:160:ASN:HB3	41:DF:163:VAL:CB	2.40	0.43
48:BP:125:VAL:O	48:BP:125:VAL:HG13	2.18	0.43
36:DA:1518:U:O5'	36:DA:1518:U:H6	2.01	0.43
1:CA:950:U:H2'	1:CA:951:G:H8	1.83	0.43
25:CZ:155:ARG:HB3	25:CZ:165:GLY:O	2.18	0.43
40:BE:104:VAL:O	40:BE:166:THR:HA	2.19	0.43
52:BT:99:LEU:O	52:BT:101:PHE:N	2.51	0.43
52:BT:15:VAL:CG2	52:BT:16:ARG:N	2.82	0.43
36:DA:2640:G:N1	36:DA:2775:A:C2	2.86	0.43
38:BC:166:ASP:CG	38:BC:168:THR:H	2.22	0.43
57:DY:12:THR:OG1	57:DY:26:LYS:HA	2.18	0.43
57:DY:29:GLU:OE2	57:DY:38:ILE:HG21	2.19	0.43
57:DY:81:LYS:CG	57:DY:96:ILE:HB	2.48	0.43
7:CG:113:GLU:HG3	7:CG:119:ARG:HG2	2.00	0.43
22:CV:5:G:H2'	22:CV:6:G:O4'	2.18	0.43
26:B0:78:TYR:N	26:B0:78:TYR:CD1	2.86	0.43
4:AD:135:LEU:C	4:AD:137:SER:H	2.22	0.43
4:AD:170:VAL:CG1	4:AD:171:GLY:H	2.28	0.43
51:DS:32:LEU:O	51:DS:62:LYS:HE3	2.19	0.43
42:BG:130:ASN:OD1	42:BG:161:THR:O	2.36	0.43
42:BG:23:PHE:CE1	42:BG:168:GLU:HG2	2.54	0.43
42:BG:21:ARG:O	42:BG:24:GLY:N	2.46	0.43
55:DW:62:HIS:O	55:DW:63:ASP:O	2.37	0.43
36:BA:2175:C:N3	36:BA:2176:A:N1	2.66	0.43
25:AZ:257:GLY:C	25:AZ:258:LEU:HD12	2.39	0.43
36:DA:1466:G:H5'	36:DA:1467:C:OP1	2.18	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1407:C:H3'	36:DA:1408:C:C6	2.53	0.43
36:BA:728:G:C6	36:BA:730:C:C4	3.06	0.43
39:BD:245:PRO:O	39:BD:246:PRO:O	2.37	0.43
49:DQ:34:LEU:HD11	49:DQ:129:THR:CB	2.38	0.43
49:DQ:35:VAL:CG2	49:DQ:36:ALA:N	2.82	0.43
58:DZ:14:LYS:C	58:DZ:16:SER:H	2.21	0.43
1:CA:1016:A:C2'	1:CA:1017:G:H5'	2.48	0.43
28:B2:5:GLU:C	28:B2:9:GLN:NE2	2.72	0.43
36:BA:102:G:OP1	36:BA:102:G:H4'	2.19	0.43
10:AJ:28:ARG:C	10:AJ:30:SER:N	2.72	0.43
36:DA:1375:C:H2'	36:DA:1376:C:O4'	2.19	0.43
39:DD:65:ILE:HG22	39:DD:104:TYR:HB3	2.00	0.43
21:CU:16:GLY:O	21:CU:17:THR:CG2	2.57	0.43
42:DG:93:THR:HG22	42:DG:94:LEU:H	1.84	0.43
36:BA:1628:G:O2'	36:BA:1629:U:H5'	2.19	0.43
47:BO:103:ALA:O	47:BO:106:LEU:HG	2.18	0.43
7:AG:113:GLU:HG3	7:AG:119:ARG:HG2	2.01	0.43
40:DE:93:VAL:CG1	40:DE:175:VAL:HG23	2.49	0.43
25:CZ:389:ARG:C	25:CZ:395:VAL:HG13	2.39	0.43
42:DG:51:ARG:HD3	42:DG:53:LEU:CD2	2.48	0.43
25:CZ:298:VAL:HA	25:CZ:302:GLN:OE1	2.17	0.43
36:BA:1028:A:N3	36:BA:2486:G:O2'	2.38	0.43
1:AA:1468:A:N3	1:AA:1469:G:H1'	2.34	0.43
15:AO:82:ILE:O	15:AO:83:GLU:C	2.56	0.43
38:DC:140:PRO:HG2	38:DC:141:LYS:H	1.83	0.43
36:DA:146:G:C2'	36:DA:147:U:H5'	2.48	0.43
29:B3:15:TYR:HB3	29:B3:16:PRO:CD	2.49	0.43
1:AA:44:G:C2	1:AA:45:U:H1'	2.53	0.43
36:BA:827:U:C2'	36:BA:2068:U:C2	2.97	0.43
1:AA:1155:G:C4	1:AA:1156:G:C8	3.06	0.43
36:BA:178:G:C2	36:BA:179:G:C8	3.06	0.43
36:DA:1548:C:H2'	36:DA:1549:C:C6	2.53	0.43
47:BO:11:ALA:HB1	47:BO:98:VAL:CG2	2.37	0.43
56:BX:24:GLY:O	56:BX:82:GLN:NE2	2.51	0.43
1:CA:490:G:N1	1:CA:491:G:C5	2.86	0.43
36:DA:1386:C:C6	36:DA:1386:C:H3'	2.50	0.43
1:AA:183:G:O6	1:AA:194:C:N4	2.47	0.43
38:DC:61:THR:O	38:DC:163:PHE:HE2	2.01	0.43
1:CA:355:C:N4	1:CA:356:A:H62	2.16	0.43
15:AO:50:HIS:O	15:AO:53:HIS:CB	2.66	0.43
18:AR:44:LEU:N	18:AR:44:LEU:HD12	2.32	0.43
48:BP:114:ILE:N	48:BP:129:ALA:O	2.51	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2156:G:N2	36:DA:2157:G:H21	2.16	0.43
36:BA:773:U:H5'	39:BD:47:GLY:HA2	2.00	0.43
36:BA:2579:C:H4'	40:BE:134:ILE:HG12	1.99	0.43
36:BA:803:U:H2'	36:BA:804:A:C5'	2.45	0.43
1:AA:1311:G:C6	1:AA:1312:G:C5	3.06	0.43
1:CA:1387:G:C5	1:CA:1388:C:C5	3.06	0.43
22:AW:35:A:N1	23:AX:17:U:O4	2.51	0.43
1:AA:1014:A:H2	1:AA:1219:U:H1'	1.83	0.43
36:BA:976:C:H2'	36:BA:977:G:C8	2.53	0.43
24:AY:20:H2U:HN3	36:BA:1066:U:H3	1.66	0.43
11:AK:82:VAL:CG1	11:AK:108:ILE:HA	2.45	0.43
6:CF:1:MET:H1	6:CF:68:PRO:HA	1.84	0.43
22:CW:75:C:OP1	27:D1:30:VAL:HG21	2.17	0.43
1:AA:471:G:H3'	1:AA:471:G:OP1	2.18	0.43
18:CR:37:VAL:O	18:CR:41:LYS:HB2	2.18	0.43
22:CV:74:C:N3	36:DA:2252:G:N2	2.64	0.43
6:AF:62:TRP:CE2	18:AR:35:ARG:CZ	3.01	0.43
36:DA:370:G:H2'	36:DA:423:A:C8	2.52	0.43
27:B1:80:LEU:CD2	27:B1:81:LYS:N	2.81	0.43
46:DN:38:HIS:O	53:DU:67:ALA:O	2.36	0.43
36:DA:937:U:H2'	36:DA:938:G:C8	2.53	0.43
36:BA:664:C:H4'	36:BA:941:A:P	2.58	0.43
36:BA:1717:G:H2'	36:BA:1718:G:C5'	2.48	0.43
36:BA:954:G:H5''	49:BQ:13:GLN:CG	2.48	0.43
49:DQ:59:ARG:O	49:DQ:59:ARG:HD2	2.18	0.43
1:AA:72:C:O2'	1:AA:73:G:H5'	2.18	0.43
36:DA:1621:U:H5''	36:DA:1622:G:OP1	2.18	0.43
26:B0:2:ALA:HB3	36:BA:2602:A:N1	2.32	0.43
5:AE:67:VAL:CG2	5:AE:68:GLU:N	2.81	0.43
22:AW:30:G:O2'	22:AW:31:A:H5'	2.18	0.43
36:DA:614(C):A:H4'	36:DA:615:G:OP1	2.18	0.43
36:BA:2599:G:H5''	36:BA:2599:G:C8	2.53	0.43
8:AH:56:LYS:H	8:AH:56:LYS:HG3	1.52	0.43
1:AA:723:U:C2'	1:AA:723:U:O2	2.66	0.43
40:DE:68:ALA:O	40:DE:70:ALA:N	2.51	0.43
2:CB:142:LEU:HD23	2:CB:142:LEU:C	2.38	0.43
26:B0:82:ARG:HA	26:B0:83:PRO:HD3	1.86	0.43
49:DQ:1:MET:HB3	49:DQ:2:LEU:H	1.60	0.43
30:B4:12:ALA:CB	30:B4:29:PRO:HA	2.47	0.43
1:CA:529:G:O6	12:CL:49:ASN:CB	2.66	0.43
22:AW:70:G:H8	22:AW:70:G:H5'	1.82	0.43
48:BP:80:TYR:N	48:BP:80:TYR:CD2	2.87	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:55:VAL:HG12	3:AC:55:VAL:O	2.18	0.43
30:D4:12:ALA:CB	30:D4:29:PRO:HA	2.48	0.43
3:AC:80:GLY:O	3:AC:82:GLU:OE2	2.35	0.43
32:B6:20:ASN:C	32:B6:21:TYR:CD1	2.91	0.43
36:BA:2033:A:O2'	36:BA:2034:U:P	2.76	0.43
36:BA:250:G:OP1	36:BA:2394:C:H4'	2.18	0.43
36:BA:587:C:O2'	36:BA:588:U:P	2.76	0.43
40:DE:7:VAL:HG23	40:DE:193:GLY:O	2.18	0.43
40:DE:199:ARG:CG	40:DE:200:GLU:N	2.75	0.43
36:DA:1653:G:O3'	50:DR:3:HIS:HB2	2.18	0.43
39:DD:51:VAL:O	39:DD:52:ARG:O	2.37	0.43
32:D6:17:LYS:HD3	32:D6:17:LYS:HA	1.44	0.43
48:DP:126:VAL:HG12	48:DP:148:LEU:HD11	1.99	0.43
48:DP:147:LEU:O	48:DP:148:LEU:HB2	2.19	0.43
25:AZ:143:ASP:OD2	25:AZ:144:PRO:HD2	2.18	0.43
25:AZ:194:GLU:O	25:AZ:198:LYS:HG3	2.17	0.43
28:D2:25:VAL:C	28:D2:27:GLU:H	2.22	0.43
28:D2:61:LEU:O	28:D2:62:THR:C	2.57	0.43
41:DF:20:LEU:HD12	41:DF:199:TRP:CH2	2.44	0.43
36:DA:2740:A:H2'	36:DA:2741:A:O4'	2.19	0.43
1:AA:1470:G:C4	1:AA:1471:G:N7	2.87	0.43
1:CA:367:U:C4	1:CA:394:G:N1	2.85	0.43
43:BH:37:VAL:HG11	43:BH:68:THR:CG2	2.48	0.43
43:BH:68:THR:C	43:BH:70:THR:H	2.22	0.43
50:BR:13:HIS:C	50:BR:13:HIS:ND1	2.71	0.43
42:BG:63:ILE:O	42:BG:65:GLY:N	2.51	0.43
56:DX:20:GLY:C	56:DX:22:ALA:H	2.20	0.43
36:DA:2645:G:C3'	36:DA:2646:C:H5'	2.24	0.43
1:CA:1190:G:P	3:CC:5:ILE:HD12	2.59	0.43
36:DA:2029:G:O6	36:DA:2033:A:OP2	2.36	0.43
36:DA:573:G:N1	36:DA:2031:A:OP2	2.40	0.43
36:DA:532:A:OP1	53:DU:45:TYR:OH	2.27	0.43
36:DA:563:G:O2'	36:DA:564:C:H5'	2.18	0.43
2:AB:8:LYS:NZ	2:AB:217:ARG:CZ	2.81	0.43
16:AP:16:HIS:O	16:AP:17:TYR:O	2.36	0.43
8:CH:82:HIS:C	8:CH:83:ILE:HG22	2.38	0.43
4:CD:10:ARG:C	4:CD:11:LEU:HD23	2.37	0.43
4:CD:18:LYS:HE2	4:CD:20:TYR:CE2	2.53	0.43
36:BA:628:G:O2'	36:BA:629:G:H5''	2.18	0.43
25:CZ:146:LEU:H	25:CZ:149:LEU:HD23	1.82	0.43
36:BA:1670:C:H2'	36:BA:1671:U:O4'	2.18	0.43
36:BA:2641:G:OP1	46:BN:74:ARG:HG2	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2679:A:C6	36:BA:2729:G:O6	2.72	0.43
52:BT:101:PHE:C	52:BT:103:ARG:N	2.68	0.43
40:DE:11:MET:SD	40:DE:24:THR:OG1	2.77	0.43
52:DT:48:ILE:O	52:DT:63:VAL:HG13	2.19	0.43
58:BZ:165:VAL:HG12	58:BZ:167:PRO:HA	1.99	0.43
58:BZ:44:PHE:O	58:BZ:45:ASP:O	2.36	0.43
36:BA:1708:C:H2'	36:BA:1709:U:C5	2.53	0.43
1:CA:1351:U:O2'	1:CA:1352:C:C5'	2.65	0.43
7:CG:107:ALA:O	7:CG:110:GLN:HB2	2.18	0.43
9:CI:118:LYS:C	9:CI:120:ARG:H	2.22	0.43
14:CN:21:TYR:CE2	14:CN:23:ARG:NH2	2.87	0.43
14:CN:47:LEU:C	14:CN:49:HIS:H	2.21	0.43
22:CV:68:C:H2'	22:CV:69:G:C4'	2.48	0.43
4:AD:104:VAL:HA	4:AD:107:ARG:HB2	2.01	0.43
1:CA:15:G:H4'	5:CE:24:ARG:NH2	2.33	0.43
55:BW:75:TYR:CD1	55:BW:104:THR:OG1	2.69	0.43
36:DA:1903:G:O2'	36:DA:1904:G:H5'	2.18	0.43
36:DA:2590:A:H2'	36:DA:2591:C:H5'	2.00	0.43
55:DW:52:GLU:O	55:DW:54:ALA:N	2.51	0.43
4:CD:171:GLY:HA2	4:CD:172:PRO:HD3	1.87	0.43
2:CB:233:SER:O	2:CB:234:PRO:C	2.55	0.43
25:AZ:298:VAL:HA	25:AZ:302:GLN:OE1	2.17	0.43
1:CA:1221:G:N2	1:CA:1222:G:H1'	2.33	0.43
1:CA:1004:A:N6	1:CA:1035:A:C6	2.86	0.43
36:DA:1542:A:H5'	36:DA:1543:C:OP2	2.18	0.43
58:DZ:20:ARG:NH1	58:DZ:20:ARG:HB2	2.34	0.43
36:DA:1221:C:OP2	36:DA:1221:C:H6	2.00	0.43
13:CM:29:ARG:HB3	13:CM:64:TRP:CZ2	2.52	0.43
36:BA:2307:G:N2	36:BA:2308:G:H5''	2.33	0.43
42:BG:51:ARG:HD3	42:BG:53:LEU:CD2	2.48	0.43
36:DA:470:A:H2'	36:DA:471:A:O4'	2.18	0.43
42:DG:15:VAL:O	42:DG:18:GLU:HB3	2.18	0.43
42:DG:62:LEU:CD1	42:DG:62:LEU:H	2.28	0.43
13:AM:66:LEU:O	13:AM:67:GLU:C	2.57	0.43
40:DE:4:ILE:CG1	40:DE:5:LEU:H	2.31	0.43
5:CE:76:ILE:CG2	5:CE:93:PRO:HA	2.49	0.43
49:BQ:35:VAL:CG2	49:BQ:36:ALA:N	2.82	0.43
15:CO:81:LEU:HD11	15:CO:85:LEU:HD12	2.01	0.43
1:CA:149:A:H2'	1:CA:150:C:C6	2.54	0.43
36:DA:2587:A:O2'	36:DA:2588:G:H5'	2.19	0.43
2:AB:54:THR:O	2:AB:57:PHE:N	2.51	0.43
2:AB:61:LEU:HA	2:AB:64:ARG:HE	1.76	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BQ:92:GLY:O	49:BQ:93:TYR:CD1	2.72	0.43
8:AH:19:VAL:O	8:AH:21:LYS:N	2.52	0.43
20:AT:38:LYS:C	20:AT:40:ALA:N	2.72	0.43
27:B1:58:ILE:HD13	27:B1:60:PHE:HE2	1.82	0.43
1:CA:191:G:O2'	20:CT:102:GLY:O	2.35	0.43
1:CA:438:G:H4'	4:CD:123:HIS:ND1	2.34	0.43
39:DD:249:PRO:CG	39:DD:250:TRP:N	2.80	0.43
39:BD:226:MET:O	39:BD:227:ASN:OD1	2.37	0.43
55:DW:17:VAL:O	55:DW:19:LEU:N	2.50	0.43
39:DD:148:GLU:HB2	39:DD:151:LYS:HD2	1.97	0.43
1:AA:404:U:H2'	1:AA:405:U:H6	1.83	0.43
1:CA:418:C:C2'	1:CA:419:C:O5'	2.67	0.43
26:B0:23:VAL:N	26:B0:38:VAL:HG13	2.33	0.43
36:DA:1386:C:C6	36:DA:1387:C:H5	2.36	0.43
36:BA:2130:U:OP1	38:BC:5:LYS:HG2	2.18	0.43
54:BV:21:ARG:HB3	54:BV:91:TYR:CD1	2.53	0.43
36:DA:221:A:O2'	36:DA:222:A:OP2	2.33	0.43
36:BA:260:G:C6	36:BA:261:G:N7	2.87	0.43
20:AT:61:SER:OG	20:AT:65:LYS:HE3	2.18	0.43
24:AY:37:YG:H142	24:AY:38:A:C2	2.54	0.43
36:DA:188:G:H2'	36:DA:189:G:O4'	2.17	0.43
33:B7:4:THR:HB	36:BA:788:A:H1'	2.00	0.43
36:BA:1313:U:H3'	36:BA:1314:C:H5'	1.99	0.43
1:CA:311:C:O2'	1:CA:312:C:H5'	2.18	0.43
18:CR:69:THR:O	18:CR:72:ARG:HB2	2.18	0.43
36:DA:676:A:C2	36:DA:677:A:H1'	2.54	0.43
36:DA:128:C:C4	36:DA:129:C:C5	3.05	0.43
41:DF:78:ILE:HA	41:DF:83:PHE:CE1	2.54	0.43
38:BC:120:MET:HA	38:BC:123:VAL:CG1	2.49	0.43
3:CC:92:ALA:CA	3:CC:99:VAL:HG11	2.47	0.43
52:BT:83:ILE:CD1	52:BT:84:GLN:HG2	2.49	0.43
31:B5:34:PRO:O	31:B5:35:GLU:CG	2.62	0.43
40:BE:126:PRO:O	40:BE:127:ASP:C	2.55	0.43
1:CA:34:C:C1'	12:CL:32:PHE:HE2	2.32	0.43
2:CB:36:ARG:HA	2:CB:36:ARG:CZ	2.48	0.43
36:BA:1041:C:C2'	36:BA:1042:G:H5'	2.49	0.43
36:DA:1323:U:C2'	36:DA:1324:G:H5'	2.48	0.43
36:BA:2063:C:C2'	36:BA:2064:C:H5'	2.49	0.43
12:AL:62:SER:O	12:AL:64:TYR:CD1	2.72	0.43
37:BB:14:U:OP2	37:BB:70:C:O2'	2.37	0.43
56:DX:46:ALA:C	56:DX:47:PHE:CD1	2.92	0.43
56:DX:46:ALA:O	56:DX:47:PHE:CD1	2.71	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D2:4:SER:O	28:D2:7:ARG:HG3	2.19	0.43
36:DA:2250:G:N3	36:DA:2250:G:O4'	2.51	0.43
36:BA:2547:U:H1'	47:BO:28:SER:O	2.18	0.43
36:DA:64:A:O2'	36:DA:65:C:H5'	2.19	0.43
11:AK:87:THR:HG22	11:AK:88:GLY:N	2.33	0.43
55:DW:68:ARG:O	55:DW:110:LYS:HB2	2.18	0.43
36:BA:944:G:H22	48:BP:38:GLN:HE22	1.65	0.43
22:AW:10:G:C2'	22:AW:11:C:H5'	2.49	0.43
17:AQ:88:TYR:OH	17:AQ:92:ARG:CZ	2.67	0.43
36:DA:1367:A:C2'	36:DA:1368:G:H5'	2.47	0.43
50:BR:21:TYR:N	50:BR:21:TYR:CD1	2.87	0.43
36:DA:412:A:H3'	36:DA:413:C:H6	1.84	0.43
1:AA:284:G:H2'	1:AA:285:G:H8	1.82	0.43
1:CA:697:U:C2'	1:CA:698:G:H5'	2.47	0.43
36:DA:2363:C:O2'	36:DA:2364:C:H5'	2.18	0.43
1:AA:70:G:H2'	1:AA:71:C:H5'	2.01	0.43
36:DA:880:G:H2'	36:DA:881:G:C8	2.52	0.43
36:DA:920:G:O2'	36:DA:921:G:H5'	2.18	0.43
36:DA:615:G:C6	36:DA:616:G:C6	3.06	0.43
1:CA:1490:C:O2'	1:CA:1491:G:H5'	2.18	0.43
2:AB:142:LEU:O	2:AB:146:GLN:N	2.47	0.43
6:AF:39:LYS:HB2	6:AF:64:GLN:CB	2.48	0.43
36:DA:1545:A:H2'	36:DA:1546:C:O4'	2.17	0.43
36:DA:699:A:H2'	36:DA:700:G:O4'	2.17	0.43
1:CA:163:C:O2'	1:CA:164:U:H5'	2.18	0.43
47:DO:60:ALA:HB1	47:DO:85:VAL:O	2.18	0.43
33:D7:46:VAL:HG12	33:D7:48:LYS:NZ	2.33	0.43
25:CZ:85:HIS:HD2	25:CZ:88:TYR:CE2	2.36	0.43
36:DA:834:C:H2'	36:DA:835:A:H8	1.82	0.43
7:CG:153:HIS:N	7:CG:153:HIS:ND1	2.67	0.43
30:B4:13:ARG:O	30:B4:13:ARG:HG3	2.19	0.43
40:BE:183:LEU:N	40:BE:183:LEU:HD12	2.32	0.43
1:AA:637:G:O2'	1:AA:638:G:H5'	2.18	0.43
43:DH:150:ALA:O	43:DH:151:ILE:C	2.56	0.43
36:DA:2255:G:H2'	36:DA:2256:G:O4'	2.17	0.43
1:AA:279:A:H4'	1:AA:281:G:C8	2.54	0.43
57:BY:101:LYS:HG2	57:BY:102:CYS:N	2.32	0.43
27:B1:3:LYS:NZ	27:B1:3:LYS:CB	2.81	0.43
36:BA:1365:A:N6	36:BA:1366:A:C6	2.86	0.43
36:BA:244:A:H3'	36:BA:245:G:C5'	2.48	0.43
53:BU:9:VAL:O	53:BU:13:LYS:HG2	2.19	0.43
39:DD:267:SER:C	39:DD:269:PHE:H	2.22	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:482:A:H1'	36:BA:498:G:N2	2.32	0.43
57:BY:46:LYS:HB2	57:BY:62:GLU:HG3	1.94	0.43
48:DP:111:ARG:HH11	48:DP:149:GLU:CG	2.19	0.43
38:DC:71:GLN:NE2	38:DC:157:LYS:HD3	2.33	0.43
36:BA:1801:G:O5'	36:BA:1801:G:N3	2.51	0.43
36:DA:1887:C:C3'	36:DA:1888:G:C5'	2.96	0.43
36:BA:1203:G:N1	36:BA:1241:A:OP2	2.40	0.43
36:BA:2758:A:C2	36:BA:2759:G:C1'	3.00	0.43
1:AA:1054:C:N4	24:AY:34:G:C1'	2.73	0.43
4:AD:11:LEU:C	4:AD:13:ARG:N	2.69	0.43
4:AD:64:LEU:O	4:AD:67:ILE:N	2.32	0.43
14:AN:7:ILE:HG13	14:AN:8:GLU:HG2	2.00	0.43
35:B9:2:LYS:C	35:B9:34:GLN:HE22	2.22	0.43
36:BA:1649:G:C2	36:BA:2009:G:N3	2.87	0.43
36:DA:223:A:H61	36:DA:374:A:H4'	1.83	0.43
36:DA:402:A:H2'	36:DA:403:U:H5'	2.01	0.43
36:DA:583:G:C6	36:DA:584:C:N4	2.86	0.43
36:DA:587:C:O2'	36:DA:588:U:P	2.77	0.43
46:DN:47:ALA:HB1	46:DN:119:ARG:NH1	2.34	0.43
54:DV:4:ILE:O	54:DV:38:LEU:HD23	2.19	0.43
54:DV:4:ILE:CG2	54:DV:39:LEU:HD23	2.28	0.43
54:DV:52:VAL:O	54:DV:54:GLY:N	2.51	0.43
1:AA:51:A:C2	1:AA:353:A:N1	2.86	0.43
14:CN:8:GLU:C	14:CN:10:ALA:N	2.71	0.43
2:CB:101:MET:HA	2:CB:108:ILE:HG13	1.99	0.43
48:BP:79:ARG:HH22	48:BP:81:GLN:HE21	1.66	0.43
48:BP:98:GLU:CA	48:BP:101:VAL:HG13	2.49	0.43
36:DA:1518:U:H2'	36:DA:1519:G:C4'	2.48	0.43
13:CM:75:ALA:O	13:CM:78:ILE:HB	2.17	0.43
5:AE:51:VAL:CB	5:AE:52:PRO:HD3	2.49	0.43
25:CZ:197:ASP:HA	25:CZ:200:TRP:HD1	1.80	0.43
25:CZ:200:TRP:O	25:CZ:204:ASP:N	2.52	0.43
36:BA:1992:G:N2	36:BA:1996:C:O2	2.30	0.43
36:BA:2643:G:N2	36:BA:2772:C:C2	2.86	0.43
52:BT:98:LYS:HG2	52:BT:100:TYR:HE1	1.82	0.43
52:BT:91:ARG:O	52:BT:117:ASP:HB3	2.18	0.43
1:AA:1351:U:O2'	1:AA:1352:C:C5'	2.65	0.43
9:AI:121:ARG:NH1	9:AI:122:ALA:O	2.51	0.43
14:AN:25:VAL:O	14:AN:26:ARG:O	2.37	0.43
1:CA:1114:C:O2	1:CA:1114:C:H2'	2.18	0.43
51:DS:13:ARG:O	51:DS:14:VAL:HB	2.19	0.43
51:DS:93:LYS:HA	51:DS:93:LYS:HD2	1.79	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BY:12:THR:CG2	57:BY:13:VAL:N	2.81	0.43
31:D5:56:LYS:HE2	31:D5:59:GLU:CD	2.38	0.43
1:AA:1016:A:C2'	1:AA:1017:G:H5'	2.49	0.43
14:AN:9:LYS:O	14:AN:9:LYS:CG	2.67	0.43
1:AA:1525:G:O2'	1:AA:1526:G:C5'	2.61	0.43
1:CA:15:G:H2'	1:CA:16:A:C8	2.53	0.43
36:DA:1829:A:N3	39:DD:15:PHE:HZ	2.16	0.43
55:DW:104:THR:O	55:DW:105:VAL:HG22	2.19	0.43
4:CD:138:TYR:CD2	4:CD:139:ARG:N	2.84	0.43
3:AC:101:LEU:HD23	3:AC:102:ASN:O	2.18	0.43
16:AP:19:ILE:HG22	16:AP:36:ILE:HG13	1.99	0.43
36:BA:765:G:C6	36:BA:766:C:C4	3.07	0.43
58:DZ:71:VAL:CG1	58:DZ:74:VAL:CG2	2.91	0.43
9:AI:4:TYR:CE2	9:AI:88:TYR:CB	3.00	0.43
1:AA:1001:A:O2'	1:AA:1001(A):G:C2	2.69	0.43
14:CN:9:LYS:CG	14:CN:9:LYS:O	2.67	0.43
1:CA:590:C:OP1	8:CH:30:ARG:N	2.38	0.43
36:DA:1227:G:C2'	36:DA:1228:G:H5'	2.48	0.43
36:DA:428:A:C2	36:DA:429:A:C4	3.06	0.43
13:CM:32:GLU:O	13:CM:34:LEU:N	2.52	0.43
42:BG:47:LYS:NZ	42:BG:81:LYS:CG	2.81	0.43
43:BH:19:VAL:O	43:BH:20:ALA:HB2	2.18	0.43
43:DH:94:TYR:CE1	43:DH:108:GLY:N	2.86	0.43
7:AG:116:ALA:HA	7:AG:119:ARG:NH1	2.32	0.43
9:AI:37:PHE:CE2	9:AI:74:ILE:HD11	2.53	0.43
36:BA:470:A:H2'	36:BA:471:A:O4'	2.18	0.43
51:BS:104:GLY:O	51:BS:106:ARG:N	2.51	0.43
43:BH:93:GLY:C	43:BH:94:TYR:HD1	2.21	0.43
1:AA:1256:A:N1	1:AA:1277:C:H2'	2.34	0.43
42:DG:91:ARG:C	42:DG:91:ARG:HD2	2.38	0.43
2:CB:104:ASN:OD1	2:CB:107:THR:CB	2.66	0.43
1:AA:982:U:H4'	1:AA:983:A:C5'	2.45	0.43
2:AB:166:ASP:O	2:AB:169:LYS:N	2.51	0.43
3:CC:58:GLU:O	3:CC:65:ALA:HB2	2.18	0.43
36:DA:909:A:O2'	36:DA:910:A:H5'	2.18	0.43
16:CP:53:VAL:CG2	16:CP:54:GLU:H	2.19	0.43
37:BB:67:G:O2'	37:BB:68:C:O5'	2.35	0.43
2:AB:111:ARG:O	2:AB:112:VAL:C	2.56	0.43
36:BA:1804:C:H2'	36:BA:1805:U:H6	1.84	0.43
31:B5:24:ALA:O	31:B5:25:LEU:HG	2.19	0.43
36:DA:197:A:C8	36:DA:2430:A:C2	3.06	0.43
26:D0:48:GLY:N	26:D0:51:VAL:HB	2.31	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:DQ:51:ARG:HG2	49:DQ:52:VAL:N	2.33	0.43
1:CA:1497:G:H1'	1:CA:1518:A:H2	1.83	0.43
16:AP:52:ASP:O	16:AP:53:VAL:C	2.56	0.43
36:BA:1086:A:O4'	36:BA:1104:C:O2	2.35	0.43
36:DA:2498:C:O2'	36:DA:2499:C:C5'	2.57	0.43
38:BC:6:ARG:CG	38:BC:6:ARG:NH1	2.81	0.43
54:BV:21:ARG:HH11	54:BV:21:ARG:HG2	1.83	0.43
15:AO:36:ILE:HG23	15:AO:56:LEU:CD1	2.41	0.43
18:AR:69:THR:O	18:AR:72:ARG:HB2	2.19	0.43
1:CA:310:G:H2'	1:CA:311:C:C6	2.53	0.43
7:CG:79:ARG:HG3	7:CG:84:ASN:N	2.33	0.43
33:D7:11:LYS:HG2	36:DA:686:G:C4	2.52	0.43
36:DA:687:C:O2	36:DA:788:A:H5'	2.18	0.43
1:AA:302:G:H2'	1:AA:303:A:C8	2.54	0.43
46:BN:62:VAL:HG13	46:BN:62:VAL:O	2.19	0.43
36:DA:1019:U:C2	36:DA:1144:G:N2	2.87	0.43
25:AZ:311:THR:OG1	25:AZ:313:HIS:NE2	2.45	0.43
1:CA:109:A:C4	1:CA:327:A:C2	3.07	0.43
1:CA:1091:U:O2	1:CA:1093:A:C8	2.72	0.43
1:CA:935:A:C2	1:CA:936:C:N3	2.87	0.43
50:BR:109:ALA:O	50:BR:111:LEU:HD12	2.19	0.43
55:BW:70:TYR:HE1	55:BW:72:LYS:HA	1.83	0.43
6:CF:68:PRO:HB2	6:CF:70:ASP:OD1	2.18	0.43
47:BO:8:LEU:O	47:BO:9:GLU:C	2.56	0.43
36:BA:2239:G:C6	36:BA:2240:C:C4	3.07	0.43
1:AA:184:G:H2'	1:AA:185:A:C8	2.51	0.43
46:BN:57:ALA:CB	46:BN:124:ALA:HA	2.44	0.43
9:AI:6:GLY:HA3	9:AI:84:ALA:CA	2.47	0.43
36:DA:2497:A:C8	36:DA:2497:A:OP2	2.71	0.43
25:CZ:97:ALA:CA	25:CZ:126:VAL:CG1	2.97	0.43
25:AZ:263:ARG:NH2	25:AZ:297:GLU:HB3	2.31	0.43
1:AA:630:G:C2'	1:AA:631:G:H5'	2.46	0.43
38:DC:199:HIS:N	38:DC:199:HIS:ND1	2.66	0.43
36:BA:1717:G:H2'	36:BA:1718:G:H5''	1.99	0.43
1:CA:998:G:C2	1:CA:1044:A:N1	2.85	0.43
36:BA:360:G:H2'	36:BA:361:G:H8	1.84	0.43
36:DA:1968:G:H2'	36:DA:1969:A:H5''	1.99	0.43
22:CV:12:U:H5''	36:DA:1908:C:O2'	2.19	0.43
1:AA:1045:C:O2	1:AA:1045:C:C2'	2.67	0.43
1:CA:102:G:C5	1:CA:103:C:C5	3.06	0.43
7:AG:93:PRO:O	7:AG:94:ARG:C	2.57	0.43
1:AA:110:C:C2	1:AA:111:G:C8	3.06	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:CO:32:LEU:O	15:CO:35:ARG:HB2	2.19	0.43
37:BB:40:U:C3'	37:BB:41:U:H5''	2.48	0.43
1:AA:990:C:H2'	1:AA:991:U:C6	2.54	0.43
1:AA:705:U:C5	1:AA:706:A:C5	3.06	0.43
36:DA:1425:G:O5'	36:DA:1425:G:H8	2.01	0.43
1:AA:47:C:O2'	1:AA:48:C:P	2.76	0.43
1:AA:722:A:O3'	1:AA:723:U:H2'	2.18	0.43
20:CT:24:LEU:O	20:CT:27:LYS:N	2.49	0.43
36:BA:1769:G:C1'	36:BA:1958:C:H5''	2.47	0.43
36:BA:248:G:H5''	36:BA:386:G:N2	2.33	0.43
54:BV:32:THR:HG22	54:BV:33:VAL:N	2.34	0.43
12:CL:58:VAL:O	12:CL:65:GLU:HA	2.19	0.43
36:BA:1249:U:H2'	36:BA:1250:G:C8	2.53	0.43
34:B8:10:ALA:C	34:B8:12:LYS:H	2.20	0.43
48:BP:47:ASP:HB3	48:BP:48:PRO:C	2.37	0.43
53:BU:17:ILE:CA	53:BU:20:LEU:HD23	2.48	0.43
50:DR:32:GLY:O	50:DR:115:GLU:HA	2.19	0.43
50:DR:13:HIS:ND1	50:DR:13:HIS:C	2.72	0.43
19:CS:13:ASP:O	19:CS:15:LEU:N	2.52	0.43
32:D6:22:ALA:CB	32:D6:39:TYR:CZ	3.02	0.43
34:D8:17:THR:OG1	34:D8:21:LYS:HB2	2.19	0.43
36:DA:2292:C:C2	36:DA:2341:G:N2	2.87	0.43
48:DP:51:PHE:HB3	48:DP:52:GLU:H	1.41	0.43
48:DP:61:ARG:H	48:DP:61:ARG:HG3	1.30	0.43
36:DA:83:G:HO2'	36:DA:102:G:N2	2.16	0.43
5:CE:28:PHE:CD2	5:CE:51:VAL:HG22	2.53	0.43
36:DA:2762:G:C8	36:DA:2762:G:C5'	2.98	0.43
36:DA:671:C:H2'	36:DA:672:C:C6	2.54	0.43
1:CA:130:A:H1'	1:CA:264:U:H5'	2.01	0.43
1:AA:961:U:O2'	1:AA:962:C:O5'	2.36	0.43
24:AY:33:U:H3'	24:AY:34:G:H5''	2.01	0.43
41:BF:157:VAL:O	41:BF:158:THR:CB	2.66	0.43
36:BA:749:C:H6	36:BA:749:C:O5'	2.01	0.43
1:CA:1190:G:H5''	3:CC:3:ASN:ND2	2.34	0.43
36:DA:17:G:H21	36:DA:555:U:H5''	1.84	0.43
46:DN:117:PHE:O	46:DN:118:LYS:C	2.57	0.43
2:AB:224:GLN:HA	2:AB:229:VAL:HG22	2.00	0.43
1:AA:235:C:OP1	17:AQ:70:ARG:HD3	2.18	0.43
51:BS:63:THR:O	51:BS:64:GLU:C	2.57	0.43
51:BS:67:ARG:HB2	51:BS:71:ARG:NH1	2.33	0.43
8:AH:14:ARG:HH11	8:AH:14:ARG:HB3	1.82	0.43
2:CB:166:ASP:O	2:CB:169:LYS:N	2.52	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2635:C:H5''	40:BE:78:LEU:O	2.19	0.43
1:CA:833:U:H3	1:CA:853:G:H1	1.65	0.43
1:CA:833:U:H2'	1:CA:834:C:H6	1.82	0.43
36:BA:2346:A:H5'	36:BA:2383:G:C1'	2.49	0.43
36:DA:2643:G:N2	36:DA:2772:C:C2	2.87	0.43
36:DA:2726:U:H6	47:DO:67:LYS:HZ3	1.67	0.43
52:DT:99:LEU:O	52:DT:101:PHE:N	2.52	0.43
52:DT:31:SER:HG	52:DT:32:TYR:HD2	1.62	0.43
58:BZ:167:PRO:O	58:BZ:168:GLU:HB2	2.18	0.43
1:AA:1413:A:C6	1:AA:1414:U:C4	3.06	0.43
4:AD:92:VAL:CG1	4:AD:96:LEU:HD13	2.48	0.43
51:DS:63:THR:O	51:DS:64:GLU:C	2.56	0.43
51:DS:90:GLY:C	51:DS:92:TYR:H	2.21	0.43
42:BG:128:ARG:O	42:BG:129:GLY:O	2.35	0.43
42:BG:161:THR:OG1	42:BG:163:ALA:HB2	2.18	0.43
42:BG:93:THR:CG2	42:BG:94:LEU:N	2.80	0.43
50:DR:101:ALA:O	50:DR:102:GLU:HB2	2.18	0.43
36:DA:2165:G:C6	36:DA:2166:G:C6	3.07	0.43
1:AA:1483:A:H3'	1:AA:1484:C:C6	2.54	0.43
35:B9:12:ASP:C	35:B9:14:CYS:N	2.71	0.43
51:DS:49:VAL:CG1	51:DS:50:SER:N	2.72	0.43
46:DN:131:GLN:NE2	46:DN:133:GLN:N	2.67	0.43
19:CS:51:VAL:CG1	19:CS:52:TYR:N	2.82	0.43
19:CS:46:GLY:N	19:CS:62:ILE:HG23	2.34	0.43
19:CS:67:VAL:C	19:CS:69:HIS:N	2.69	0.43
3:AC:56:ASP:O	3:AC:57:ILE:HG13	2.18	0.43
20:CT:19:SER:O	20:CT:23:ARG:HB3	2.19	0.43
25:AZ:248:LYS:HA	25:AZ:270:VAL:HG21	2.01	0.43
2:CB:21:ARG:CZ	2:CB:39:ILE:CG1	2.89	0.43
36:DA:139(A):G:H3'	36:DA:140:G:H8	1.83	0.43
49:DQ:34:LEU:HD12	49:DQ:130:LYS:C	2.38	0.43
58:DZ:10:ARG:HG3	58:DZ:12:GLY:H	1.84	0.43
41:DF:7:TYR:HD2	41:DF:16:GLY:HA3	1.83	0.43
36:BA:2311:A:H2	42:BG:77:ILE:HG21	1.84	0.43
42:BG:87:PRO:C	42:BG:88:ILE:HD13	2.39	0.43
25:CZ:259:ALA:O	25:CZ:260:PRO:O	2.35	0.43
33:D7:20:ALA:C	33:D7:22:MET:N	2.70	0.43
36:DA:2306:C:H41	36:DA:2311:A:H8	1.66	0.43
42:DG:63:ILE:HD13	42:DG:141:PHE:CE2	2.53	0.43
20:AT:64:ASP:O	20:AT:67:ALA:CB	2.66	0.43
20:AT:73:HIS:O	20:AT:74:LYS:C	2.56	0.43
43:DH:135:GLY:HA3	43:DH:141:VAL:HG22	1.99	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2635:C:C5'	40:DE:78:LEU:HD12	2.48	0.43
43:DH:19:VAL:CG1	43:DH:20:ALA:N	2.78	0.43
1:AA:882:C:OP2	12:AL:13:LYS:NZ	2.50	0.43
25:CZ:67:HIS:CD2	25:CZ:80:VAL:HG13	2.53	0.43
15:CO:82:ILE:O	15:CO:83:GLU:C	2.57	0.43
29:D3:6:VAL:HG12	29:D3:56:VAL:HG13	2.00	0.43
1:AA:876:G:H2'	1:AA:877:C:H6	1.84	0.43
1:AA:1145:C:H1'	1:AA:1146:A:N7	2.34	0.43
36:BA:25:U:H2'	36:BA:26:G:C8	2.53	0.43
4:CD:102:ASP:O	4:CD:117:ALA:HB1	2.19	0.43
36:DA:597:U:H4'	48:DP:15:ARG:NE	2.33	0.43
29:B3:50:VAL:C	29:B3:52:HIS:H	2.21	0.43
20:CT:57:ARG:CZ	20:CT:57:ARG:CB	2.96	0.43
36:DA:1805:U:H5''	39:DD:250:TRP:CD2	2.53	0.43
10:AJ:6:ILE:HG13	10:AJ:6:ILE:O	2.18	0.43
1:AA:716:A:H1'	11:AK:118:GLY:O	2.19	0.43
36:BA:2246:G:O2'	36:BA:2247:A:H5'	2.19	0.43
1:CA:811:C:C4'	1:CA:900:A:H61	2.32	0.43
5:CE:137:GLU:O	5:CE:140:ARG:HB3	2.18	0.43
27:D1:84:GLY:C	27:D1:86:SER:N	2.70	0.43
1:CA:316:G:OP2	1:CA:351:G:H2'	2.18	0.43
6:CF:10:LEU:O	6:CF:12:PRO:N	2.51	0.43
38:DC:6:ARG:CZ	38:DC:34:THR:HB	2.49	0.43
36:BA:685:A:N1	36:BA:787:U:H1'	2.34	0.43
36:DA:1314:C:H6	36:DA:1314:C:C5'	2.22	0.43
36:BA:2580:U:C6	36:BA:2581:G:C6	3.06	0.43
36:BA:1843:C:H2'	36:BA:1844:C:C6	2.54	0.43
12:CL:82:VAL:CG1	12:CL:105:TYR:HD1	2.27	0.43
58:BZ:141:VAL:CA	58:BZ:144:LEU:HD23	2.43	0.43
1:CA:1271:G:H5'	1:CA:1314:C:C5'	2.47	0.43
37:DB:33:G:H2'	37:DB:34:U:O4'	2.19	0.43
36:DA:2252:G:H2'	36:DA:2253:G:O4'	2.19	0.43
36:DA:2554:U:C2	36:DA:2555:U:H5	2.36	0.43
36:BA:2239:G:H2'	36:BA:2240:C:C6	2.53	0.43
17:AQ:29:HIS:CE1	17:AQ:32:TYR:H	2.35	0.43
37:BB:52:A:H8	37:BB:52:A:P	2.41	0.43
39:BD:209:ALA:O	39:BD:212:SER:HB2	2.18	0.43
1:CA:157:G:H2'	1:CA:158:G:C8	2.45	0.43
1:CA:518:C:H2'	1:CA:530:G:N3	2.33	0.43
38:DC:182:PRO:HD2	38:DC:183:GLU:OE2	2.19	0.43
1:AA:1084:G:OP1	1:AA:1086:U:C4	2.72	0.43
4:AD:125:HIS:ND1	4:AD:152:SER:OG	2.51	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2319:G:O6	51:BS:11:LYS:HD3	2.18	0.43
1:CA:1030:C:N4	1:CA:1032:G:N2	2.66	0.43
56:BX:63:LYS:HB2	56:BX:63:LYS:HE3	1.82	0.43
16:AP:45:THR:C	16:AP:47:ASP:N	2.71	0.43
4:CD:159:ARG:HG3	4:CD:159:ARG:NH1	2.33	0.43
41:DF:45:ARG:NH1	41:DF:97:TYR:CE1	2.87	0.43
1:CA:1006:C:H42	1:CA:1024:G:H21	1.66	0.43
2:CB:155:LEU:HD22	2:CB:157:ARG:O	2.18	0.43
2:CB:155:LEU:CD2	2:CB:157:ARG:O	2.66	0.43
1:CA:1483:A:H3'	1:CA:1484:C:H6	1.83	0.43
36:BA:225:A:O2'	36:BA:226:G:H5'	2.18	0.43
28:B2:39:ALA:HB1	28:B2:45:SER:HA	2.00	0.43
36:DA:2370:G:H2'	36:DA:2371:G:C8	2.53	0.43
36:DA:2371:G:C2	36:DA:2372:G:C4	3.06	0.43
11:CK:34:ASP:C	11:CK:36:ASP:H	2.21	0.43
36:DA:1631(A):A:O2'	36:DA:1632:A:H5'	2.18	0.43
39:DD:101:GLU:HG2	39:DD:102:LYS:N	2.32	0.43
9:CI:26:VAL:HG12	9:CI:27:THR:N	2.34	0.43
21:AU:25:LYS:HG2	21:AU:26:LYS:N	2.33	0.43
5:CE:40:ARG:HH11	5:CE:40:ARG:HG2	1.84	0.43
22:CW:45:U:H3'	22:CW:45:U:H6	1.83	0.43
47:DO:112:MET:HA	47:DO:112:MET:CE	2.48	0.43
36:DA:70:G:H2'	36:DA:113:G:O2'	2.19	0.43
25:AZ:356:PRO:CB	25:AZ:357:PRO:HD2	2.48	0.43
26:B0:42:GLY:O	26:B0:43:THR:HB	2.19	0.43
36:DA:2050:C:C4	36:DA:2051:A:C6	3.06	0.43
19:AS:15:LEU:HD21	19:AS:33:THR:OG1	2.18	0.43
19:CS:15:LEU:O	19:CS:19:VAL:N	2.52	0.43
36:DA:1803:A:H4'	39:DD:259:THR:CG2	2.49	0.43
26:D0:42:GLY:O	26:D0:43:THR:HB	2.19	0.43
32:D6:20:ASN:C	32:D6:21:TYR:CG	2.92	0.43
34:D8:41:ILE:HD12	36:DA:2419:U:OP1	2.19	0.43
28:D2:69:ARG:C	28:D2:70:GLN:HG2	2.38	0.43
36:DA:654:A:C8	36:DA:654(V):A:H4'	2.53	0.43
36:DA:483:A:OP2	36:DA:484:C:N4	2.52	0.43
36:DA:486:C:O2'	55:DW:56:ALA:HB1	2.19	0.43
24:CY:76:A:H61	25:CZ:234:ARG:CZ	2.32	0.43
39:BD:155:LEU:HD12	39:BD:155:LEU:N	2.33	0.43
39:BD:83:GLU:CB	39:BD:92:ILE:HD11	2.45	0.43
36:DA:2078:C:O2'	36:DA:2079:U:H5'	2.19	0.43
17:CQ:63:ARG:HG2	17:CQ:64:PRO:HD2	2.01	0.43
42:DG:83:ARG:C	42:DG:85:GLY:N	2.72	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:654:A:H4'	36:BA:654(A):G:O5'	2.18	0.43
36:BA:654(V):A:P	36:BA:655:A:H3'	2.58	0.43
35:B9:1:MET:HE1	36:BA:2477:C:H3'	2.00	0.43
36:BA:2878:U:O5'	36:BA:2878:U:H6	2.02	0.43
13:AM:52:GLU:HA	13:AM:55:ARG:HD3	2.00	0.43
3:CC:3:ASN:O	3:CC:4:LYS:HB2	2.18	0.43
36:DA:531:C:H5	36:DA:2035:G:C4	2.37	0.43
36:DA:510:C:OP1	36:DA:511:U:OP2	2.36	0.43
36:DA:531:C:OP1	36:DA:561:G:N1	2.50	0.43
36:DA:587:C:N4	48:DP:33:ARG:HB2	2.34	0.43
48:DP:23:PRO:CG	48:DP:33:ARG:HE	2.32	0.43
53:DU:83:LEU:H	53:DU:83:LEU:HD12	1.84	0.43
54:DV:64:HIS:ND1	54:DV:92:THR:CG2	2.81	0.43
2:AB:223:ILE:O	2:AB:224:GLN:C	2.57	0.43
9:CI:18:PHE:O	9:CI:19:LEU:HD23	2.18	0.43
1:CA:1053:G:O6	1:CA:1199:U:H2'	2.19	0.43
1:CA:1209:C:O2'	1:CA:1210:C:H5'	2.19	0.43
1:CA:542:G:O2'	1:CA:543:C:H5'	2.18	0.43
4:CD:12:CYS:HA	4:CD:19:LEU:HD13	2.01	0.43
4:CD:9:CYS:SG	4:CD:32:ALA:HB2	2.58	0.43
51:BS:69:VAL:HG22	51:BS:69:VAL:O	2.19	0.43
2:CB:170:GLU:C	2:CB:172:ILE:N	2.70	0.43
1:CA:658:G:N2	1:CA:747:C:O2	2.44	0.43
1:CA:851:G:C4	1:CA:852:G:C8	3.06	0.43
1:AA:8:A:P	1:AA:8:A:H2'	2.58	0.43
5:AE:47:LYS:H	5:AE:57:LYS:NZ	2.16	0.43
5:AE:6:PHE:CB	5:AE:34:VAL:HG22	2.49	0.43
25:CZ:140:MET:HA	25:CZ:140:MET:HE2	2.00	0.43
36:BA:1665:A:C2'	36:BA:1666:G:C5'	2.79	0.43
36:BA:2709:G:H2'	36:BA:2710:C:C6	2.53	0.43
36:BA:2729:G:H2'	36:BA:2730:C:C6	2.54	0.43
40:BE:101:ARG:HG3	40:BE:101:ARG:HH11	1.84	0.43
36:DA:1678:G:H22	36:DA:1989:G:H1	1.66	0.43
58:BZ:102:LEU:HD22	58:BZ:137:ILE:HB	1.99	0.43
58:BZ:45:ASP:O	58:BZ:48:PHE:N	2.51	0.43
9:AI:111:ARG:HG2	9:AI:112:LYS:N	2.33	0.43
10:AJ:49:VAL:CG2	14:AN:41:ARG:CB	2.95	0.43
29:D3:15:TYR:CE2	29:D3:52:HIS:ND1	2.87	0.43
7:CG:104:LEU:H	7:CG:104:LEU:CD2	2.32	0.43
7:CG:69:VAL:N	7:CG:138:LYS:HZ2	2.17	0.43
22:AV:17:C:H3'	22:AV:18:G:C5'	2.48	0.43
19:AS:22:LEU:HD13	19:AS:22:LEU:O	2.17	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AS:39:THR:HG22	19:AS:40:ILE:N	2.34	0.43
51:DS:87:PHE:CG	51:DS:88:ASP:N	2.86	0.43
36:DA:2115:G:H5'	36:DA:2167:U:O2'	2.19	0.43
1:AA:1423:G:N2	1:AA:1478:C:C2	2.87	0.43
36:DA:1392:A:N6	36:DA:1393:A:N1	2.67	0.43
41:BF:13:SER:HA	41:BF:14:PRO:HD3	1.82	0.43
36:BA:2177:C:H2'	36:BA:2178:C:O2	2.19	0.43
36:BA:2189:U:C3'	36:BA:2190:G:H4'	2.48	0.43
3:AC:203:PHE:CE1	3:AC:205:GLY:O	2.71	0.43
36:DA:1528:A:N6	36:DA:1544:A:C2	2.87	0.43
36:BA:1791:A:H3'	36:BA:1792:G:H8	1.83	0.43
36:BA:1827:C:H1'	36:BA:1970:A:C2	2.53	0.43
36:DA:864:G:OP2	49:DQ:22:LYS:HG3	2.19	0.43
1:AA:1001(A):G:O2'	1:AA:1002:G:H5'	2.18	0.43
21:CU:6:ARG:HD3	21:CU:15:ARG:HH11	1.82	0.43
36:BA:1006:C:H42	36:BA:1137:G:H1	1.66	0.43
46:BN:117:PHE:O	46:BN:118:LYS:C	2.57	0.43
1:CA:1327:C:OP1	21:CU:20:LYS:HB3	2.18	0.43
36:BA:1441:G:H4'	36:BA:1627:G:O3'	2.18	0.43
36:BA:716:A:H3'	36:BA:717:G:H5''	1.99	0.43
43:DH:24:VAL:CG1	43:DH:25:LYS:N	2.81	0.43
58:BZ:81:ARG:CZ	58:BZ:81:ARG:CB	2.84	0.43
31:D5:24:ALA:O	31:D5:25:LEU:HG	2.18	0.43
36:DA:1982:C:H2'	36:DA:1983:C:H6	1.83	0.43
2:AB:58:ILE:O	2:AB:61:LEU:N	2.52	0.43
2:AB:61:LEU:O	2:AB:64:ARG:HG2	2.18	0.43
5:AE:76:ILE:HD12	5:AE:91:LEU:HB3	2.01	0.43
5:AE:79:GLU:HB3	5:AE:93:PRO:HD3	2.00	0.43
15:AO:81:LEU:HD11	15:AO:85:LEU:HD12	1.99	0.43
3:CC:18:TRP:HB2	3:CC:21:ARG:HB3	1.99	0.43
10:CJ:3:LYS:N	10:CJ:74:ILE:O	2.52	0.43
27:B1:24:ALA:HB2	27:B1:32:LYS:CE	2.48	0.43
36:BA:805:G:N2	36:BA:829:A:P	2.92	0.43
20:CT:43:LEU:HB3	20:CT:48:LYS:CG	2.48	0.43
36:DA:911:A:H5''	36:DA:912:C:H5''	2.00	0.43
4:CD:119:GLN:O	4:CD:123:HIS:CD2	2.71	0.43
2:AB:107:THR:CG2	2:AB:110:GLN:NE2	2.71	0.43
36:BA:2435:A:C2'	36:BA:2436:G:O5'	2.66	0.43
11:AK:93:GLN:O	11:AK:94:ALA:C	2.56	0.43
22:CV:37:A:C2	23:CX:19:U:N3	2.87	0.43
25:CZ:322:VAL:HB	25:CZ:366:ASP:O	2.19	0.43
36:DA:2457:U:H2'	36:DA:2458:G:H5'	1.99	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:AJ:32:ALA:CB	10:AJ:75:ILE:HG13	2.38	0.43
1:AA:657:G:H2'	1:AA:658:G:H8	1.82	0.43
36:BA:2133:G:C1'	36:BA:2157:G:H22	2.32	0.43
1:CA:657:G:N2	1:CA:749:C:N3	2.61	0.43
54:BV:95:LEU:HD23	54:BV:96:ILE:N	2.33	0.43
15:AO:39:LEU:O	15:AO:42:HIS:N	2.52	0.43
18:AR:70:ILE:O	18:AR:71:LYS:C	2.57	0.43
36:BA:1375:C:H2'	36:BA:1376:C:O4'	2.18	0.43
1:CA:116:A:O2'	1:CA:117:G:H5'	2.19	0.43
22:CW:35:A:C6	22:CW:36:A:N1	2.87	0.43
1:CA:628:G:H2'	1:CA:629:G:C8	2.54	0.43
47:DO:90:GLN:O	47:DO:92:GLU:N	2.51	0.43
1:CA:930:C:H2'	1:CA:931:C:H6	1.83	0.43
1:AA:1085:U:H5'	1:AA:1094:G:N2	2.34	0.43
6:CF:27:GLN:O	6:CF:28:ARG:C	2.56	0.43
25:AZ:315:LYS:HA	25:AZ:372:VAL:O	2.18	0.43
12:CL:82:VAL:HG12	12:CL:105:TYR:CD1	2.44	0.43
1:CA:1467:G:H8	1:CA:1467:G:O5'	2.02	0.43
58:BZ:110:GLY:N	58:BZ:145:GLU:OE1	2.51	0.43
1:CA:1107:C:N4	1:CA:1108:G:C5	2.87	0.43
12:CL:94:PRO:O	12:CL:96:VAL:HG23	2.19	0.43
57:BY:4:LYS:HG3	57:BY:5:MET:N	2.34	0.43
47:BO:8:LEU:N	47:BO:8:LEU:HD13	2.33	0.43
36:BA:733:G:O6	36:BA:761:A:C5	2.72	0.43
22:CW:55:U:C5	22:CW:58:A:OP1	2.68	0.43
12:AL:102:ARG:HA	12:AL:102:ARG:HD2	1.64	0.43
12:AL:75:HIS:HD2	12:AL:77:LEU:HB2	1.84	0.43
36:BA:2352:A:C2	36:BA:2366:A:C2	3.07	0.43
49:DQ:6:ARG:C	49:DQ:7:MET:HG3	2.37	0.43
25:AZ:19:HIS:CD2	25:AZ:115:GLN:H	2.32	0.43
45:BK:31:UNK:C	45:BK:63:UNK:HA	2.48	0.43
22:CW:34:G:N2	23:CX:18:G:H22	2.11	0.43
1:CA:564:C:N3	17:CQ:31:LEU:HD11	2.33	0.43
48:DP:140:ALA:O	48:DP:141:ALA:HB3	2.18	0.43
36:DA:2603:G:C6	36:DA:2604:U:C4	3.06	0.43
36:DA:1969:A:O2'	36:DA:1972:A:H1'	2.18	0.43
4:CD:150:GLU:O	4:CD:152:SER:N	2.52	0.43
36:BA:953:A:C2	36:BA:965:C:O2	2.72	0.43
54:DV:36:PRO:HA	54:DV:56:SER:HB3	1.99	0.43
27:D1:6:GLU:CD	27:D1:60:PHE:HD1	2.22	0.43
1:AA:1031:G:O2'	1:AA:1032:G:H5'	2.19	0.43
47:DO:41:ALA:O	47:DO:58:VAL:N	2.51	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2267:A:N3	36:DA:2267:A:H3'	2.34	0.43
36:DA:966:G:H5'	36:DA:2272:U:H1'	2.01	0.43
2:AB:157:ARG:HB3	2:AB:157:ARG:CZ	2.47	0.43
18:AR:25:THR:CG2	18:AR:42:ARG:HH11	2.32	0.43
1:CA:568:G:C6	1:CA:569:C:N4	2.87	0.43
4:CD:49:ARG:O	4:CD:51:PRO:CD	2.66	0.43
28:B2:17:SER:OG	28:B2:20:GLU:HG2	2.18	0.43
36:BA:654(H):G:H2'	36:BA:654(I):C:C5'	2.49	0.43
36:DA:830:G:H1'	36:DA:2448:A:N1	2.34	0.43
36:BA:340:A:H2'	36:BA:341:G:O4'	2.19	0.43
36:BA:1755:A:O2'	36:BA:1756:G:H5'	2.18	0.43
36:BA:1863:G:C2	36:BA:1880:C:O2	2.72	0.43
36:DA:2598:A:H5''	39:DD:235:GLY:HA3	2.01	0.43
36:BA:2255:G:H2'	36:BA:2256:G:O4'	2.18	0.43
1:AA:1342:C:H6	1:AA:1342:C:O5'	2.01	0.43
1:CA:62:U:H6	1:CA:62:U:O5'	2.01	0.43
48:BP:24:GLY:HA2	48:BP:33:ARG:NH1	2.33	0.43
39:DD:266:SER:C	39:DD:267:SER:O	2.57	0.43
32:D6:41:PRO:O	32:D6:45:LYS:HB3	2.19	0.43
28:D2:35:LEU:HA	28:D2:38:GLN:HG3	2.00	0.43
41:DF:116:ASP:O	41:DF:120:GLU:OE2	2.36	0.43
41:DF:123:LEU:HD12	41:DF:124:LEU:N	2.28	0.43
35:D9:2:LYS:C	35:D9:34:GLN:HE22	2.22	0.43
36:DA:478:A:C6	36:DA:480:A:C6	3.07	0.43
36:DA:479:A:N3	36:DA:481:G:O4'	2.51	0.43
36:DA:481:G:H1'	36:DA:506:G:H22	1.83	0.43
36:BA:1816:G:H3'	39:BD:62:TYR:CE2	2.54	0.43
36:BA:1802:A:N1	36:BA:1822:G:H1'	2.33	0.43
39:BD:85:ASP:CG	39:BD:88:ARG:NH1	2.73	0.43
38:BC:82:LYS:HA	38:BC:85:GLU:HB3	2.00	0.43
48:BP:7:ARG:CB	48:BP:8:PRO:CD	2.94	0.43
1:AA:1206:G:C6	1:AA:1207:G:C5	3.07	0.43
1:AA:539:A:N6	1:AA:540:G:O6	2.52	0.43
1:AA:973:G:P	10:AJ:57:LYS:NZ	2.92	0.43
43:DH:38:SER:HA	43:DH:39:PRO:HD3	1.78	0.43
43:DH:52:VAL:HG12	43:DH:65:HIS:ND1	2.34	0.43
35:B9:1:MET:HA	35:B9:4:ARG:NH2	2.34	0.43
49:BQ:56:ARG:O	49:BQ:57:HIS:C	2.55	0.43
36:BA:2870:C:H5''	50:BR:65:LEU:HD21	1.99	0.43
36:DA:2037:G:O5'	36:DA:2037:G:H8	2.02	0.43
36:DA:819:A:O2'	36:DA:820:A:H5'	2.18	0.43
36:DA:996:A:C2'	36:DA:997:G:O5'	2.67	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DP:31:ALA:C	48:DP:33:ARG:H	2.22	0.43
53:DU:17:ILE:CA	53:DU:20:LEU:HD23	2.48	0.43
1:AA:310:G:H2'	1:AA:311:C:H6	1.84	0.43
1:AA:374:A:N1	1:AA:390:C:O2'	2.51	0.43
17:AQ:59:ILE:HG23	17:AQ:71:PHE:HB3	2.01	0.43
1:CA:540:G:C4	1:CA:541:G:C8	3.06	0.43
36:BA:2334:G:C5'	51:BS:13:ARG:HD3	2.48	0.43
51:BS:76:LYS:O	51:BS:79:ALA:N	2.52	0.43
2:CB:42:ILE:HD13	2:CB:203:GLY:HA2	2.00	0.43
2:CB:79:ASP:C	2:CB:81:VAL:N	2.71	0.43
1:CA:670:G:C2	1:CA:671:G:C4	3.07	0.43
13:AM:87:TYR:N	19:AS:73:GLU:O	2.52	0.43
25:CZ:169:PRO:O	25:CZ:171:ILE:CD1	2.67	0.43
1:AA:346:G:N3	1:AA:346:G:C2'	2.81	0.43
40:BE:101:ARG:NH1	40:BE:101:ARG:HG3	2.34	0.43
52:BT:11:GLU:O	52:BT:14:TYR:CE1	2.72	0.43
52:BT:50:ILE:HD12	52:BT:50:ILE:N	2.34	0.43
47:DO:63:VAL:HG22	47:DO:83:ALA:O	2.19	0.43
58:BZ:126:VAL:O	58:BZ:126:VAL:HG23	2.18	0.43
58:BZ:71:VAL:HG12	58:BZ:72:ARG:N	2.34	0.43
36:DA:310:A:C4	36:DA:312:G:C8	3.07	0.43
1:AA:1378:C:OP2	7:AG:7:ALA:HB2	2.19	0.43
1:AA:668:G:H2'	1:AA:669:U:H6	1.83	0.43
37:DB:96:U:H2'	37:DB:97:G:C8	2.53	0.43
1:CA:1372:U:H2'	1:CA:1373:G:C5'	2.49	0.43
1:CA:976:G:OP1	14:CN:32:SER:N	2.50	0.43
1:CA:976:G:P	14:CN:32:SER:H	2.41	0.43
7:CG:118:VAL:CG2	7:CG:119:ARG:H	2.19	0.43
7:CG:121:ALA:O	7:CG:122:HIS:C	2.57	0.43
1:CA:1348:U:H4'	9:CI:120:ARG:CG	2.49	0.43
36:BA:1343:G:N2	36:BA:1405:U:N3	2.67	0.43
4:AD:196:LEU:C	4:AD:198:VAL:H	2.22	0.43
57:BY:17:SER:HB3	57:BY:71:LYS:HB3	2.01	0.43
37:BB:56:G:O2'	37:BB:57:A:P	2.77	0.43
55:BW:50:VAL:HG22	55:BW:105:VAL:HG23	1.99	0.43
55:DW:28:SER:HA	55:DW:70:TYR:CB	2.49	0.43
31:B5:59:GLU:HG3	31:B5:59:GLU:O	2.19	0.43
36:BA:2101:G:C6	36:BA:2102:U:C5	3.07	0.43
19:CS:45:VAL:O	19:CS:47:HIS:N	2.45	0.43
3:AC:77:ILE:CA	3:AC:83:ARG:HB3	2.49	0.43
27:B1:45:ASN:HA	36:BA:2230:G:O4'	2.19	0.43
1:CA:35:G:C5	1:CA:36:C:C4	3.07	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:396:G:O2'	1:CA:398:C:OP1	2.23	0.43
1:CA:1010:G:H2'	1:CA:1011:G:C8	2.53	0.43
21:CU:7:ARG:O	21:CU:21:TYR:CD2	2.71	0.43
21:CU:5:ASP:C	21:CU:7:ARG:H	2.21	0.43
1:CA:1442:G:C2'	1:CA:1442(B):A:C2	2.99	0.43
36:BA:997:G:C2	36:BA:998:C:C4	3.06	0.43
54:BV:38:LEU:O	54:BV:51:VAL:HG12	2.18	0.43
36:BA:1335:U:H2'	36:BA:1336:A:H8	1.79	0.43
39:BD:132:PRO:HG3	39:BD:190:TYR:CE1	2.54	0.43
36:DA:1380:G:C4	36:DA:1381:G:N7	2.87	0.43
36:DA:1299:G:H5'	36:DA:1301:A:H1'	2.01	0.43
36:BA:597:U:H4'	48:BP:15:ARG:NE	2.34	0.43
36:DA:1247:A:OP1	41:DF:95:ARG:NH2	2.52	0.43
42:BG:47:LYS:NZ	42:BG:81:LYS:HG3	2.32	0.43
30:D4:14:ILE:CD1	30:D4:14:ILE:N	2.82	0.43
42:DG:106:LEU:HD12	42:DG:110:ALA:HB1	1.99	0.43
42:DG:129:GLY:O	42:DG:130:ASN:HB2	2.18	0.43
42:DG:178:PHE:O	42:DG:180:PHE:CE1	2.72	0.43
13:AM:70:LEU:CD2	13:AM:71:ARG:N	2.82	0.43
7:AG:61:VAL:O	7:AG:64:GLN:N	2.52	0.43
1:CA:584:G:H2'	1:CA:585:G:H8	1.78	0.43
8:CH:120:THR:H	8:CH:123:GLU:HB2	1.84	0.43
5:CE:119:LEU:HA	5:CE:119:LEU:HD23	1.87	0.43
5:CE:76:ILE:HG12	5:CE:77:PRO:N	2.34	0.43
53:BU:99:ALA:HB2	53:BU:106:PHE:CZ	2.53	0.43
53:BU:99:ALA:HB2	53:BU:106:PHE:CE1	2.53	0.43
15:CO:17:ARG:CD	15:CO:26:GLU:HG3	2.44	0.43
1:CA:1074:G:C1'	2:CB:104:ASN:HD22	2.30	0.43
1:CA:148:G:H2'	1:CA:149:A:H8	1.83	0.43
36:BA:993:G:C5	36:BA:994:C:H5	2.36	0.43
1:AA:325:A:N6	1:AA:326:G:N1	2.66	0.43
36:BA:1131:G:H21	46:BN:73:THR:HG22	1.83	0.43
36:BA:1131:G:N2	46:BN:75:TYR:HB2	2.34	0.43
27:B1:23:LYS:O	27:B1:29:GLY:O	2.37	0.43
24:CY:63:G:O2'	24:CY:64:C:H5'	2.19	0.43
1:AA:1075:C:H4'	1:AA:1101:A:C6	2.53	0.43
1:AA:1075:C:OP1	2:AB:179:LYS:HE2	2.19	0.43
39:DD:248:SER:CB	39:DD:249:PRO:CD	2.97	0.43
8:AH:127:LEU:O	8:AH:127:LEU:HD13	2.18	0.43
36:DA:2841:C:H2'	36:DA:2842:G:H8	1.76	0.43
55:DW:14:PRO:O	55:DW:15:ARG:C	2.57	0.43
1:CA:1521:G:H2'	1:CA:1522:U:C6	2.54	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:610:G:H2'	36:DA:611:C:C6	2.54	0.43
1:CA:404:U:H5'	4:CD:122:ARG:CD	2.49	0.43
1:CA:406:G:C2	1:CA:407:G:C5	3.07	0.43
54:BV:18:LEU:O	54:BV:19:LYS:HB3	2.19	0.43
46:BN:128:HIS:O	46:BN:128:HIS:CG	2.72	0.43
36:BA:2842:G:H1	36:BA:2875:C:H42	1.67	0.43
36:BA:259:G:H2'	36:BA:260:G:H8	1.84	0.43
46:DN:128:HIS:O	46:DN:128:HIS:CG	2.72	0.43
36:BA:1155:A:P	53:BU:55:ARG:HD2	2.58	0.43
53:BU:55:ARG:CZ	53:BU:55:ARG:HB2	2.49	0.43
22:CW:69:G:H2'	22:CW:70:G:H5'	2.01	0.43
36:DA:732:C:H2'	36:DA:733:G:C8	2.54	0.43
36:BA:1813:G:H4'	39:BD:44:ASN:O	2.18	0.43
1:CA:1245:A:N1	1:CA:1293:G:C6	2.87	0.43
25:CZ:382:GLU:OE2	25:CZ:402:LYS:HA	2.19	0.43
1:AA:694:A:HO2'	22:AW:38:A:HO2'	1.66	0.43
19:AS:68:GLY:O	19:AS:70:LYS:HE3	2.19	0.43
11:CK:57:THR:CG2	11:CK:60:ALA:HB3	2.49	0.43
18:AR:53:ARG:CZ	18:AR:60:ALA:H	2.32	0.43
13:CM:125:ARG:NH1	36:DA:1913:A:C8	2.87	0.43
36:DA:1324:G:N1	36:DA:1328:G:N1	2.67	0.43
1:AA:1442(A):G:H5''	52:BT:118:ARG:NH1	2.31	0.43
22:AW:55:U:C5	22:AW:58:A:OP1	2.67	0.43
37:DB:52:A:P	37:DB:52:A:H8	2.41	0.43
36:DA:64:A:H2'	36:DA:65:C:C6	2.54	0.43
58:DZ:67:LEU:HD12	58:DZ:67:LEU:N	2.33	0.43
3:CC:64:VAL:CG1	3:CC:66:VAL:CG2	2.97	0.43
3:CC:63:ASN:C	3:CC:64:VAL:HG23	2.39	0.43
36:BA:1564:C:H2'	36:BA:1565:C:C6	2.53	0.43
51:DS:76:LYS:O	51:DS:79:ALA:N	2.51	0.43
36:BA:64:A:O2'	36:BA:65:C:H5'	2.19	0.43
5:CE:98:THR:HG22	5:CE:99:GLY:N	2.33	0.43
10:CJ:25:GLU:H	10:CJ:25:GLU:HG2	1.45	0.43
6:AF:10:LEU:CD1	6:AF:10:LEU:N	2.80	0.43
36:BA:1908:C:H42	36:BA:1922:G:H1	1.67	0.43
18:AR:85:LEU:HD12	18:AR:86:VAL:H	1.83	0.43
4:AD:160:GLN:H	4:AD:160:GLN:HG3	1.47	0.43
1:AA:784:C:H2'	1:AA:785:G:H8	1.84	0.43
1:CA:342:C:C4	1:CA:343:U:N3	2.87	0.43
36:DA:2856:C:O2'	36:DA:2857:G:H5'	2.18	0.43
3:AC:164:ARG:NH2	3:AC:166:GLU:OE2	2.52	0.43
36:BA:1356:G:O2'	36:BA:1357:U:H5'	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:CO:4:THR:C	15:CO:6:GLU:N	2.71	0.43
54:DV:71:LEU:HD21	54:DV:84:LYS:HG2	1.99	0.43
22:CV:1:G:H2'	22:CV:2:C:C6	2.53	0.43
1:AA:1229:A:H2'	1:AA:1230:C:C6	2.54	0.43
36:BA:2661:G:H2'	36:BA:2662:A:C8	2.53	0.43
39:DD:111:LEU:HD13	39:DD:111:LEU:C	2.39	0.43
1:CA:1211:U:H5'	1:CA:1212:U:OP1	2.19	0.43
36:BA:1017:G:N3	36:BA:1017:G:H2'	2.34	0.43
36:DA:387:U:H6	36:DA:387:U:O5'	2.02	0.43
42:BG:2:PRO:O	42:BG:3:LEU:HB2	2.17	0.43
27:B1:3:LYS:CD	36:BA:1364:G:N7	2.82	0.43
32:B6:5:VAL:HG21	36:BA:2283:C:C5'	2.48	0.43
40:DE:82:ARG:HA	40:DE:82:ARG:HD2	1.74	0.43
50:DR:10:LEU:O	50:DR:11:ASN:CB	2.65	0.43
36:DA:1244:G:H5'	36:DA:1244:G:C8	2.54	0.43
56:BX:26:TYR:N	56:BX:26:TYR:CD1	2.86	0.43
1:AA:1470:G:C2'	1:AA:1471:G:C8	2.87	0.43
36:BA:695:G:N2	36:BA:696:G:H1'	2.34	0.43
39:BD:62:TYR:HE1	39:BD:64:ILE:HA	1.83	0.43
39:BD:83:GLU:O	39:BD:92:ILE:HD13	2.19	0.43
1:CA:255:G:H1'	17:CQ:16:GLN:HE22	1.82	0.43
49:BQ:63:LYS:CE	49:BQ:65:PHE:HE1	2.31	0.43
50:BR:3:HIS:O	50:BR:4:LEU:C	2.58	0.43
36:DA:2022:U:O2'	36:DA:2617:C:C5'	2.60	0.43
36:DA:943:U:OP2	48:DP:38:GLN:CG	2.67	0.43
53:DU:59:ARG:O	53:DU:61:TRP:N	2.52	0.43
2:AB:79:ASP:C	2:AB:81:VAL:N	2.72	0.43
1:AA:375:U:C4	1:AA:376:G:N7	2.87	0.43
1:CA:961:U:O2'	1:CA:962:C:O5'	2.36	0.43
1:CA:995:C:O2'	1:CA:996:A:P	2.77	0.43
51:BS:68:GLN:C	51:BS:70:GLY:H	2.22	0.43
2:CB:86:GLU:C	2:CB:88:ALA:H	2.22	0.43
2:CB:92:TYR:HE1	2:CB:150:SER:HB2	1.83	0.43
36:DA:1343:G:N2	36:DA:1405:U:N3	2.66	0.43
36:BA:1666:G:O3'	47:BO:6:THR:HG23	2.18	0.43
52:BT:29:ARG:HB3	52:BT:85:LYS:HA	2.00	0.43
40:DE:167:VAL:O	40:DE:167:VAL:HG22	2.19	0.43
52:DT:88:ILE:HG22	52:DT:89:VAL:CG2	2.40	0.43
37:BB:107:G:O2'	37:BB:108:U:H5'	2.18	0.43
1:CA:1350:A:O2'	1:CA:1351:U:H5'	2.19	0.43
7:CG:31:MET:SD	7:CG:36:LYS:N	2.92	0.43
9:CI:79:LEU:HD22	9:CI:101:PHE:O	2.19	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:CN:48:ALA:N	14:CN:53:LEU:CD1	2.80	0.43
22:AV:53:G:O2'	22:AV:54:U:H5'	2.18	0.43
19:AS:51:VAL:HG22	19:AS:71:LEU:HD13	2.00	0.43
4:AD:79:PHE:CA	4:AD:93:PHE:HE2	2.31	0.43
36:BA:310:A:C4	36:BA:312:G:C8	3.07	0.43
42:BG:166:ASP:C	42:BG:168:GLU:N	2.72	0.43
36:DA:2112:G:C2	36:DA:2113:U:O4'	2.72	0.43
36:DA:2110:G:O2'	36:DA:2120:G:OP2	2.30	0.43
46:DN:132:ALA:O	46:DN:133:GLN:CB	2.65	0.43
36:DA:729:G:C8	39:DD:208:LYS:HD2	2.53	0.43
55:DW:64:MET:CB	55:DW:69:LEU:HD21	2.49	0.43
36:BA:2112:G:C2	36:BA:2113:U:O4'	2.72	0.43
25:AZ:97:ALA:CA	25:AZ:126:VAL:CG1	2.97	0.43
25:AZ:99:MET:HG3	25:AZ:128:VAL:HG22	2.01	0.43
19:CS:22:LEU:HD13	19:CS:22:LEU:O	2.18	0.43
14:AN:55:GLY:O	14:AN:56:VAL:C	2.56	0.43
16:CP:12:LYS:C	16:CP:14:ASN:N	2.72	0.43
16:AP:21:VAL:C	16:AP:22:THR:HG22	2.39	0.43
10:CJ:28:ARG:C	10:CJ:30:SER:N	2.70	0.43
48:BP:18:ARG:O	48:BP:20:GLY:N	2.52	0.43
36:BA:1829:A:N6	36:BA:1977:A:N6	2.66	0.43
37:DB:14:U:OP2	37:DB:70:C:O2'	2.36	0.43
41:DF:7:TYR:CD2	41:DF:16:GLY:HA3	2.54	0.43
39:BD:96:HIS:CE1	39:BD:102:LYS:CE	3.02	0.43
36:DA:1200:C:C2	36:DA:1246:A:C2	3.07	0.43
36:BA:1493:C:C4	36:BA:2206:G:O2'	2.70	0.43
13:CM:15:VAL:CG2	13:CM:16:ASP:N	2.82	0.43
42:DG:34:LEU:HA	42:DG:161:THR:HA	2.01	0.43
42:DG:79:ASN:O	42:DG:80:PHE:HB2	2.18	0.43
7:AG:63:LYS:HZ3	7:AG:67:GLU:HB2	1.79	0.43
21:CU:19:GLY:H	21:CU:22:ARG:HB3	1.84	0.43
36:DA:2635:C:C2'	36:DA:2636:U:O5'	2.67	0.43
1:AA:1258:G:H8	1:AA:1258:G:O5'	2.01	0.43
2:CB:111:ARG:O	2:CB:112:VAL:C	2.57	0.43
29:D3:8:LEU:O	29:D3:8:LEU:CD2	2.67	0.43
3:CC:56:ASP:O	3:CC:57:ILE:HG13	2.19	0.43
4:CD:100:ARG:HH11	4:CD:100:ARG:HG3	1.82	0.43
1:CA:1145:C:O2'	1:CA:1146:A:O5'	2.37	0.43
1:CA:1282:C:C2	1:CA:1283:G:N7	2.87	0.43
1:CA:1150:U:O2'	10:CJ:41:PRO:CD	2.66	0.43
36:DA:598:G:H2'	36:DA:599:G:C1'	2.49	0.43
20:AT:100:ILE:HD12	20:AT:100:ILE:N	2.34	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B1:32:LYS:HB2	36:BA:387:U:O3'	2.18	0.43
36:BA:2126:A:O2'	36:BA:2127:G:OP2	2.37	0.43
1:AA:730:G:H2'	1:AA:731:G:O4'	2.19	0.43
16:CP:53:VAL:O	16:CP:54:GLU:C	2.57	0.43
49:DQ:56:ARG:O	49:DQ:57:HIS:C	2.57	0.43
27:D1:50:ARG:CZ	36:DA:2200:C:C5'	2.97	0.43
26:B0:24:LYS:NZ	36:BA:2355:C:O2'	2.46	0.43
36:DA:1345:C:H2'	36:DA:1346:G:C5'	2.46	0.43
36:BA:2842:G:H1	36:BA:2875:C:N4	2.17	0.43
36:DA:212:G:C2'	36:DA:213:A:H5'	2.49	0.43
53:DU:37:GLU:HA	53:DU:40:PHE:HD1	1.74	0.43
20:AT:43:LEU:HB3	20:AT:48:LYS:CG	2.48	0.43
48:BP:85:LEU:O	48:BP:89:ALA:HB2	2.19	0.43
36:DA:755:C:H2'	36:DA:756:C:H6	1.82	0.43
33:D7:43:THR:O	33:D7:44:PRO:C	2.57	0.43
52:BT:109:GLU:HA	52:BT:112:ARG:HD3	1.99	0.43
36:BA:1982:C:H2'	36:BA:1983:C:C6	2.54	0.43
25:CZ:315:LYS:HG2	25:CZ:373:GLU:HG3	2.01	0.43
1:CA:110:C:O2'	16:CP:25:ARG:O	2.37	0.43
1:CA:1069:C:H42	1:CA:1106:G:H1	1.67	0.43
39:DD:106:ILE:HD11	39:DD:196:VAL:HG22	2.00	0.43
1:CA:937:A:C2	1:CA:1379:G:C6	3.06	0.43
1:AA:553:A:H2'	1:AA:554:C:H6	1.82	0.43
1:CA:1249:C:C5'	1:CA:1249:C:H6	2.26	0.43
1:AA:689:C:C2'	1:AA:690:G:H5'	2.49	0.43
6:AF:62:TRP:CD1	18:AR:35:ARG:NH1	2.87	0.43
49:BQ:39:PRO:HA	49:BQ:99:PRO:HD3	2.01	0.43
48:DP:75:ILE:H	48:DP:75:ILE:CD1	2.29	0.43
36:BA:956:G:P	49:BQ:87:LYS:HG3	2.58	0.43
1:CA:1507:A:C8	1:CA:1507:A:C5'	3.01	0.43
36:BA:1747:G:H2'	36:BA:1747(A):G:C8	2.54	0.43
36:BA:2092:U:H4'	36:BA:2093:G:C5'	2.47	0.43
25:CZ:224:PRO:O	25:CZ:240:GLY:HA3	2.18	0.43
39:DD:273:ARG:CG	39:DD:273:ARG:NH1	2.82	0.43
1:AA:1228:C:OP2	13:AM:111:LYS:HE2	2.19	0.43
9:AI:16:ARG:O	9:AI:63:ILE:HG23	2.18	0.43
36:DA:360:G:C4	36:DA:361:G:C8	3.07	0.43
1:CA:9:G:C5'	5:CE:122:GLU:OE1	2.67	0.43
8:CH:39:LEU:HD13	8:CH:39:LEU:HA	1.80	0.43
55:DW:82:LEU:HB3	55:DW:84:ARG:HH12	1.82	0.43
7:CG:9:VAL:HG22	7:CG:94:ARG:HH11	1.83	0.43
2:AB:155:LEU:CD2	2:AB:157:ARG:O	2.66	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CH:1:MET:HE2	8:CH:1:MET:N	2.32	0.43
40:BE:95:ILE:N	40:BE:95:ILE:CD1	2.81	0.43
15:AO:4:THR:C	15:AO:6:GLU:N	2.71	0.43
1:AA:363:A:N6	1:AA:364:A:N1	2.67	0.43
37:DB:40:U:C3'	37:DB:41:U:H5''	2.48	0.43
36:DA:1567:A:C5'	39:DD:58:HIS:HD2	2.31	0.43
54:BV:1:MET:O	54:BV:2:PHE:HB2	2.19	0.43
13:CM:79:LYS:O	13:CM:82:MET:CG	2.67	0.43
1:AA:64:G:H4'	1:AA:65:U:C5'	2.49	0.43
2:AB:83:MET:C	2:AB:85:ALA:N	2.72	0.43
28:B2:26:ARG:NH2	36:BA:137:C:O2'	2.52	0.43
36:DA:643:A:O2'	36:DA:644:A:H5'	2.19	0.43
3:CC:34:LEU:CD2	3:CC:38:ARG:HE	2.31	0.43
2:CB:175:ARG:O	2:CB:176:GLU:C	2.57	0.43
7:AG:87:VAL:HG21	7:AG:154:TYR:HB2	2.01	0.43
7:AG:152:ALA:O	7:AG:155:ARG:HG3	2.19	0.43
1:AA:534:U:H5'	1:AA:534:U:H6	1.84	0.43
22:CV:70:G:C2'	22:CV:71:G:H5'	2.49	0.43
48:BP:33:ARG:O	48:BP:34:GLY:C	2.56	0.43
48:BP:61:ARG:H	48:BP:61:ARG:HG3	1.28	0.43
53:BU:14:HIS:HA	53:BU:17:ILE:HD13	2.01	0.43
50:DR:77:ARG:O	50:DR:79:LEU:N	2.52	0.43
19:CS:15:LEU:O	19:CS:19:VAL:HG23	2.19	0.43
36:DA:2261:C:C1'	36:DA:2388:A:H1'	2.49	0.43
34:D8:28:GLY:N	36:DA:2393:A:OP1	2.51	0.43
36:DA:85:G:H1	36:DA:97:C:H42	1.67	0.43
36:DA:2464:C:O2'	36:DA:2465:C:O5'	2.37	0.43
38:DC:75:LEU:HB2	38:DC:93:TYR:HB2	2.00	0.43
38:DC:91:ALA:HB3	38:DC:94:VAL:HG22	2.01	0.43
38:BC:75:LEU:C	38:BC:75:LEU:HD12	2.38	0.43
41:BF:39:TRP:CE2	41:BF:43:LYS:HE2	2.53	0.43
35:B9:30:PRO:O	35:B9:32:HIS:N	2.52	0.43
50:BR:2:ARG:HG3	50:BR:2:ARG:HH11	1.83	0.43
42:BG:114:ILE:HG13	42:BG:135:LEU:CD2	2.36	0.43
42:BG:62:LEU:O	42:BG:143:GLU:OE2	2.37	0.43
36:DA:1259:G:H2'	36:DA:1260:G:C8	2.53	0.43
36:DA:20:C:C2	36:DA:21:A:C8	3.07	0.43
2:AB:88:ALA:HB2	2:AB:219:VAL:CG1	2.48	0.43
1:AA:264:U:H2'	1:AA:265:G:C8	2.53	0.43
1:CA:1050:G:C2	1:CA:1209:C:O2	2.71	0.43
2:CB:167:PRO:O	2:CB:168:THR:C	2.56	0.43
2:CB:17:PHE:HD1	2:CB:44:LEU:HD21	1.84	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:201:ILE:O	2:CB:201:ILE:HG22	2.19	0.43
36:DA:321:G:C1'	41:DF:168:ARG:NH2	2.82	0.43
1:CA:949:A:N7	1:CA:950:U:C5	2.87	0.43
36:BA:1348:G:C2'	36:BA:1349:A:H5''	2.49	0.43
36:BA:1661:G:C6	36:BA:2000:G:N1	2.86	0.43
36:BA:2726:U:HO2'	36:BA:2727:G:C5'	2.32	0.43
40:BE:23:VAL:CA	40:BE:184:VAL:O	2.65	0.43
52:BT:29:ARG:HA	52:BT:29:ARG:HD2	1.77	0.43
36:DA:1669:A:OP2	36:DA:2550:G:OP1	2.37	0.43
36:DA:2864:G:O2'	36:DA:2865:U:H5'	2.18	0.43
47:DO:34:THR:O	47:DO:35:VAL:C	2.57	0.43
52:DT:31:SER:O	52:DT:32:TYR:O	2.36	0.43
58:BZ:96:VAL:CG2	58:BZ:97:GLU:H	1.95	0.43
1:AA:1372:U:H2'	1:AA:1373:G:O5'	2.18	0.43
7:AG:27:ILE:HG23	7:AG:40:ALA:HA	2.01	0.43
14:AN:21:TYR:HE2	14:AN:23:ARG:NH2	2.16	0.43
14:AN:25:VAL:HG23	14:AN:38:GLY:O	2.18	0.43
1:AA:1359:C:OP2	14:AN:35:ARG:NH1	2.52	0.43
35:D9:8:LYS:NZ	36:DA:1032:A:OP1	2.42	0.43
1:CA:1343:G:C4'	9:CI:121:ARG:HH12	2.32	0.43
1:AA:966:G:HO2'	1:AA:967:C:H6	1.65	0.43
36:DA:2334:G:N3	51:DS:18:ILE:HD13	2.34	0.43
36:DA:1790:C:H5''	36:DA:1791:A:OP1	2.19	0.43
36:DA:1899:G:O2'	36:DA:1900:A:H5''	2.19	0.43
36:BA:2185:C:H6	36:BA:2185:C:OP2	2.02	0.43
25:AZ:67:HIS:CE1	25:AZ:80:VAL:HG22	2.54	0.43
3:AC:13:GLY:O	3:AC:14:ILE:CG2	2.67	0.43
16:AP:20:VAL:CG2	16:AP:35:LYS:HA	2.31	0.43
20:CT:70:SER:HA	20:CT:73:HIS:NE2	2.33	0.43
36:BA:440:G:O5'	36:BA:440:G:C8	2.72	0.43
36:BA:1263:U:C4	36:BA:1264:G:C6	3.07	0.43
16:CP:20:VAL:CG2	16:CP:35:LYS:HA	2.33	0.43
53:BU:86:ALA:HB2	53:BU:116:ALA:HB2	2.01	0.43
36:BA:83:G:N1	36:BA:102:G:H2'	2.34	0.43
48:DP:16:ARG:CB	48:DP:16:ARG:NH1	2.81	0.43
36:DA:2580:U:H3'	36:DA:2581:G:N3	2.34	0.43
36:BA:2308:G:N2	42:BG:79:ASN:CB	2.82	0.43
42:DG:138:GLN:OE1	42:DG:153:ARG:CG	2.66	0.43
36:BA:1541:G:O4'	36:BA:1541:G:N3	2.52	0.43
9:AI:78:LYS:HE3	9:AI:101:PHE:CE2	2.54	0.43
38:BC:140:PRO:O	38:BC:142:ALA:N	2.51	0.43
9:AI:42:ARG:O	9:AI:45:ALA:HB3	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BH:163:TYR:O	43:BH:164:TYR:O	2.37	0.43
43:DH:97:ARG:NH2	43:DH:99:VAL:HG21	2.34	0.43
36:DA:2587:A:O5'	36:DA:2587:A:H8	2.01	0.43
49:BQ:44:ALA:N	49:BQ:45:GLN:HE21	2.16	0.43
4:AD:110:PHE:N	4:AD:110:PHE:CD1	2.87	0.43
15:AO:67:LEU:HD23	15:AO:67:LEU:N	2.33	0.43
38:DC:100:ILE:H	38:DC:100:ILE:HG13	1.60	0.43
38:DC:140:PRO:O	38:DC:142:ALA:N	2.52	0.43
11:CK:90:GLY:O	11:CK:94:ALA:N	2.34	0.43
20:AT:38:LYS:O	20:AT:40:ALA:N	2.52	0.43
27:B1:23:LYS:HB3	27:B1:29:GLY:O	2.19	0.43
38:DC:39:GLU:O	38:DC:177:LYS:HA	2.18	0.43
36:BA:195:A:N6	36:BA:198:C:OP2	2.52	0.43
1:CA:190:U:H2'	1:CA:191:G:H8	1.84	0.43
36:BA:45:C:H2'	36:BA:47:C:C6	2.53	0.43
1:AA:382:A:C2	1:AA:383:A:C4	3.07	0.43
36:DA:2262:U:O4	36:DA:2279:G:C6	2.72	0.43
11:CK:116:HIS:O	11:CK:117:ASN:HB2	2.17	0.43
36:DA:793:A:N7	36:DA:2072:G:H5''	2.34	0.43
1:AA:676:A:O2'	1:AA:677:U:H5'	2.18	0.43
38:BC:150:GLY:O	38:BC:154:ARG:HG2	2.17	0.43
36:DA:2201:C:C4	36:DA:2202:C:N4	2.87	0.43
36:DA:1388:G:O6	36:DA:1399:C:N4	2.52	0.43
36:BA:2843:G:N2	36:BA:2875:C:C4	2.87	0.43
14:AN:47:LEU:C	14:AN:49:HIS:N	2.71	0.43
36:DA:1370:C:C3'	36:DA:1371:G:H8	2.24	0.43
36:BA:1604:C:O2'	36:BA:1605:C:H5'	2.19	0.43
2:AB:33:TYR:CB	2:AB:43:ASP:HB2	2.45	0.43
49:BQ:110:THR:OG1	49:BQ:112:GLU:HB3	2.18	0.43
7:CG:22:LEU:CD2	7:CG:62:PHE:CE2	3.02	0.43
7:CG:61:VAL:O	7:CG:64:GLN:N	2.52	0.43
1:AA:1269:A:H2'	1:AA:1270:C:C5'	2.48	0.43
36:BA:1413:G:H2'	36:BA:1414:G:C8	2.54	0.43
6:AF:28:ARG:O	6:AF:31:GLU:HB2	2.19	0.43
1:AA:1095:U:C5'	1:AA:1109:C:O2	2.67	0.43
26:B0:20:ARG:HH11	26:B0:20:ARG:CG	2.32	0.43
1:CA:1430:C:C2	1:CA:1471:G:C2	3.06	0.43
36:BA:212:G:C2'	36:BA:213:A:H5'	2.48	0.43
58:BZ:108:PRO:C	58:BZ:110:GLY:H	2.22	0.43
25:AZ:286:VAL:HG23	25:AZ:287:GLY:H	1.84	0.43
36:DA:2861:G:C2'	36:DA:2862:G:H5'	2.48	0.43
26:D0:20:ARG:HG2	26:D0:20:ARG:HH11	1.84	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:704:A:C2'	1:CA:705:U:H5'	2.48	0.43
36:BA:1328:G:H4'	36:BA:1329:U:C5	2.53	0.43
51:DS:56:LEU:O	51:DS:58:LEU:N	2.51	0.43
36:BA:2052:G:C6	36:BA:2053:G:N7	2.87	0.43
36:BA:2351:G:N1	36:BA:2365:G:C6	2.87	0.43
56:DX:46:ALA:C	56:DX:47:PHE:HD1	2.23	0.43
58:DZ:11:GLU:N	58:DZ:11:GLU:CD	2.68	0.43
9:CI:7:THR:HG22	9:CI:8:GLY:N	2.29	0.43
1:CA:1254:C:H2'	1:CA:1255:G:H8	1.84	0.43
51:DS:76:LYS:O	51:DS:77:ALA:C	2.57	0.43
22:AW:59:U:H5'	22:AW:60:U:C5	2.54	0.43
36:DA:1750:G:N3	36:DA:2860:A:H2	2.17	0.43
36:BA:478:A:C6	36:BA:480:A:C6	3.07	0.43
36:BA:481:G:H1'	36:BA:506:G:H22	1.83	0.43
1:CA:1148:U:H4'	9:CI:14:VAL:CG1	2.47	0.43
38:BC:199:HIS:ND1	38:BC:199:HIS:N	2.66	0.43
1:CA:1031:G:O2'	1:CA:1032:G:H5'	2.19	0.43
36:DA:877:U:O2'	36:DA:878:A:C5'	2.66	0.43
17:AQ:27:PHE:C	17:AQ:27:PHE:CD1	2.91	0.43
36:BA:1909:C:C2'	36:BA:1910:G:H5'	2.49	0.43
36:DA:966:G:H2'	36:DA:967:C:H6	1.79	0.43
1:CA:279:A:H4'	1:CA:281:G:C8	2.54	0.43
1:CA:1483:A:H1'	36:DA:1948:G:H1'	2.00	0.43
48:BP:71:VAL:H	48:BP:72:PRO:CD	2.31	0.43
3:CC:162:GLN:O	3:CC:163:ALA:C	2.57	0.43
22:AW:49:C:O2'	22:AW:50:U:H6	2.02	0.43
45:DK:135:UNK:O	45:DK:136:UNK:CB	2.67	0.43
4:AD:132:ARG:HG2	4:AD:132:ARG:NH1	2.32	0.43
43:BH:98:LEU:HB2	43:BH:125:VAL:CG2	2.49	0.43
1:CA:174:C:H6	1:CA:174:C:O5'	2.02	0.43
1:AA:704:A:O2'	1:AA:705:U:H5'	2.19	0.43
36:DA:1476:C:H2'	36:DA:1477:A:C8	2.54	0.43
54:DV:1:MET:O	54:DV:2:PHE:HB2	2.18	0.43
1:AA:163:C:H2'	1:AA:164:U:O4'	2.18	0.43
3:AC:139:GLN:HA	3:AC:139:GLN:OE1	2.19	0.43
39:DD:110:GLY:O	39:DD:111:LEU:C	2.57	0.43
50:DR:94:TYR:N	50:DR:94:TYR:CD2	2.83	0.43
58:BZ:175:VAL:HB	58:BZ:176:PRO:CD	2.49	0.43
36:BA:1786:A:O2'	36:BA:1938:A:N6	2.52	0.43
38:BC:203:GLY:O	38:BC:204:ALA:C	2.57	0.43
32:B6:54:ILE:OXT	32:B6:54:ILE:HG23	2.19	0.42
36:BA:2028:U:C2'	36:BA:2029:G:O4'	2.63	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2414:G:H2'	36:BA:2414:G:N3	2.34	0.42
36:BA:251:A:H2'	36:BA:252:G:H5'	2.01	0.42
57:BY:46:LYS:O	57:BY:47:LYS:HG3	2.17	0.42
32:D6:12:GLU:HG3	32:D6:23:THR:HG22	2.01	0.42
36:DA:2413:G:C4	36:DA:2414:G:C8	3.07	0.42
34:D8:34:TRP:CA	36:DA:2420:C:OP1	2.66	0.42
36:BA:1860:G:H2'	36:BA:1861:G:C8	2.54	0.42
5:CE:10:MET:HG3	5:CE:13:ILE:HD11	2.01	0.42
36:DA:476:G:H2'	36:DA:478:A:OP2	2.19	0.42
36:BA:2524:G:H8	36:BA:2524:G:C5'	2.32	0.42
36:BA:1427:A:N6	36:BA:1571:A:OP2	2.50	0.42
39:BD:35:LYS:HD2	39:BD:36:PRO:CA	2.49	0.42
36:BA:605:C:N4	36:BA:623:G:O6	2.52	0.42
36:BA:656:G:C6	36:BA:657:U:C4	3.07	0.42
43:BH:68:THR:HA	43:BH:71:LEU:HG	2.01	0.42
1:AA:1057:G:H2'	1:AA:1058:G:O4'	2.18	0.42
49:BQ:50:ALA:C	49:BQ:52:VAL:N	2.71	0.42
36:BA:348:G:C2	36:BA:349:G:C4	3.07	0.42
31:B5:3:LYS:HE3	31:B5:3:LYS:CA	2.39	0.42
13:AM:3:ARG:HH22	42:BG:140:ILE:HA	1.84	0.42
56:DX:29:TRP:HZ3	56:DX:78:LYS:HD2	1.84	0.42
36:DA:371:A:C6	36:DA:401:A:C8	3.07	0.42
36:DA:2648:C:H2'	36:DA:2649:U:C6	2.54	0.42
36:DA:526:A:N6	36:DA:2626:C:H4'	2.34	0.42
36:DA:1012:U:H5	46:DN:28:THR:HG21	1.80	0.42
54:DV:58:VAL:O	54:DV:59:ALA:HB2	2.18	0.42
1:AA:51:A:C6	1:AA:353:A:C2	3.07	0.42
8:CH:4:ASP:C	8:CH:4:ASP:OD1	2.57	0.42
1:CA:508:C:HO2'	1:CA:509:A:P	2.42	0.42
1:CA:511:C:C4	1:CA:541:G:N2	2.87	0.42
1:CA:532:A:H3'	1:CA:533:A:H5'	2.00	0.42
1:CA:533:A:O2'	1:CA:535:A:OP2	2.37	0.42
1:CA:539:A:H2'	1:CA:540:G:H8	1.84	0.42
51:BS:63:THR:O	51:BS:65:VAL:N	2.52	0.42
51:BS:76:LYS:O	51:BS:77:ALA:C	2.57	0.42
8:AH:14:ARG:O	8:AH:17:THR:OG1	2.33	0.42
2:CB:83:MET:C	2:CB:85:ALA:N	2.72	0.42
36:DA:1205:U:H4'	36:DA:1206:G:OP2	2.19	0.42
1:CA:663:A:C2	1:CA:664:G:C4	3.07	0.42
1:CA:670:G:N2	1:CA:671:G:C4	2.86	0.42
36:DA:1406:U:N3	36:DA:1597:A:C2	2.87	0.42
1:AA:955:U:H3	1:AA:1225:A:H61	1.65	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1759:A:O2'	36:BA:1760:A:H5'	2.19	0.42
36:BA:2864:G:O2'	36:BA:2865:U:H5'	2.18	0.42
52:BT:27:THR:O	52:BT:47:GLY:O	2.37	0.42
40:DE:183:LEU:N	40:DE:183:LEU:HD12	2.33	0.42
52:DT:57:PHE:O	52:DT:79:HIS:CE1	2.72	0.42
38:BC:188:ASN:O	38:BC:189:ILE:C	2.57	0.42
38:BC:20:TYR:N	38:BC:20:TYR:CD1	2.82	0.42
36:DA:1487:G:C5	36:DA:1488:G:C8	3.07	0.42
58:BZ:151:HIS:HA	58:BZ:171:ILE:CG1	2.48	0.42
36:DA:298:G:OP2	36:DA:298:G:H8	2.02	0.42
1:AA:975:A:H5'	1:AA:975:A:H8	1.84	0.42
1:AA:1377:A:H2'	7:AG:7:ALA:HB2	2.00	0.42
10:AJ:47:PHE:CZ	14:AN:37:PHE:CE2	3.07	0.42
58:DZ:150:LEU:O	58:DZ:151:HIS:CB	2.65	0.42
3:CC:7:PRO:HG2	3:CC:184:TYR:CD2	2.54	0.42
14:CN:48:ALA:H	14:CN:53:LEU:HD12	1.81	0.42
22:AV:58:A:N6	22:AV:61:C:C4	2.87	0.42
1:AA:1504:G:H1'	1:AA:1505:G:OP2	2.19	0.42
1:AA:790:A:O2'	1:AA:791:G:H5'	2.19	0.42
36:BA:1474:C:H5'	36:BA:1475:G:P	2.59	0.42
36:BA:1475:G:C2	36:BA:1517:G:N3	2.86	0.42
19:AS:66:MET:CG	19:AS:66:MET:O	2.67	0.42
36:BA:2444:G:OP2	41:BF:68:LYS:NZ	2.48	0.42
4:AD:79:PHE:CE2	4:AD:207:TYR:CD1	3.06	0.42
4:AD:79:PHE:O	4:AD:82:ALA:HB3	2.19	0.42
37:DB:50:G:OP1	51:DS:63:THR:HG23	2.18	0.42
42:BG:130:ASN:CG	42:BG:160:VAL:HG13	2.39	0.42
31:D5:40:LYS:NZ	31:D5:46:CYS:H	2.17	0.42
22:CW:17:C:N3	36:DA:2179:C:H5'	2.33	0.42
36:DA:2104:G:N1	36:DA:2105:C:N4	2.67	0.42
1:AA:865:A:H2'	1:AA:866:C:C5'	2.49	0.42
3:CC:113:ALA:C	3:CC:115:LEU:N	2.70	0.42
3:CC:77:ILE:HG23	3:CC:84:ILE:HG22	2.00	0.42
25:AZ:242:ILE:HD12	25:AZ:281:ILE:O	2.19	0.42
19:CS:22:LEU:HD13	19:CS:27:GLU:HB2	2.00	0.42
3:AC:69:HIS:CE1	3:AC:104:GLN:OE1	2.72	0.42
3:AC:121:ALA:HB2	3:AC:187:ALA:CB	2.49	0.42
3:AC:180:ALA:O	3:AC:203:PHE:HE1	2.02	0.42
3:AC:57:ILE:HG22	3:AC:57:ILE:O	2.19	0.42
36:BA:1776:G:C2	36:BA:1777:U:C6	3.07	0.42
1:AA:1004:A:H5''	1:AA:1025:U:C5	2.54	0.42
1:AA:1004:A:N6	1:AA:1035:A:C6	2.86	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:56:LEU:HD13	13:CM:57:ARG:N	2.34	0.42
42:DG:19:LEU:HD23	42:DG:175:LEU:HD12	2.01	0.42
43:BH:19:VAL:CG1	43:BH:20:ALA:N	2.80	0.42
43:DH:107:VAL:O	43:DH:109:PHE:N	2.52	0.42
47:BO:34:THR:O	47:BO:35:VAL:C	2.57	0.42
13:AM:70:LEU:HD22	13:AM:71:ARG:N	2.34	0.42
57:BY:88:LYS:N	57:BY:88:LYS:HD2	2.33	0.42
36:BA:455:C:N3	36:BA:473:G:H5'	2.34	0.42
36:BA:723:G:C6	36:BA:724:U:C4	3.07	0.42
36:BA:1098:A:H2'	36:BA:1099:G:O4'	2.19	0.42
36:DA:1493:C:O2	36:DA:1493:C:C2'	2.67	0.42
24:AY:70:A:C2	24:AY:71:G:C8	3.07	0.42
10:AJ:43:ARG:HH11	10:AJ:43:ARG:HG3	1.84	0.42
36:BA:530:G:H1'	36:BA:532:A:N7	2.34	0.42
1:CA:824:C:O2'	1:CA:825:G:H5'	2.19	0.42
29:B3:50:VAL:C	29:B3:52:HIS:N	2.72	0.42
24:CY:70:A:C2	24:CY:71:G:N7	2.87	0.42
36:DA:2262:U:C2	36:DA:2263:C:C5	3.06	0.42
41:DF:150:GLY:HA2	41:DF:172:TRP:CE2	2.54	0.42
36:BA:2442:C:O2	36:BA:2442:C:C2'	2.66	0.42
11:AK:30:VAL:HG21	11:AK:65:ALA:HA	2.01	0.42
1:CA:676:A:H5''	11:CK:113:PRO:CB	2.49	0.42
11:CK:111:ASP:HA	18:CR:84:LYS:CD	2.49	0.42
36:DA:2071:A:OP2	36:DA:2071:A:H8	2.02	0.42
1:CA:900:A:H2'	1:CA:901:A:C8	2.54	0.42
49:DQ:63:LYS:CE	49:DQ:65:PHE:HE1	2.32	0.42
1:CA:40:C:H42	1:CA:403:C:N4	2.17	0.42
54:BV:63:GLY:O	54:BV:64:HIS:O	2.36	0.42
20:AT:29:LYS:O	20:AT:33:ILE:HG13	2.18	0.42
1:CA:60:A:H8	1:CA:60:A:P	2.42	0.42
33:D7:15:THR:HG22	33:D7:15:THR:O	2.18	0.42
36:BA:2776:A:H4'	36:BA:2778:A:C5'	2.49	0.42
58:DZ:96:VAL:CG2	58:DZ:97:GLU:H	2.25	0.42
48:DP:114:ILE:N	48:DP:129:ALA:O	2.51	0.42
36:DA:978:G:H2'	36:DA:979:G:O4'	2.19	0.42
3:AC:99:VAL:HG23	3:AC:99:VAL:O	2.19	0.42
26:B0:20:ARG:HG2	26:B0:20:ARG:HH11	1.83	0.42
1:CA:1469:G:N1	1:CA:1470:G:C5	2.87	0.42
36:BA:1113:U:H2'	36:BA:1114:G:C8	2.53	0.42
36:BA:207:A:H2'	36:BA:208:C:C6	2.54	0.42
36:DA:1041:C:C2'	36:DA:1042:G:H5'	2.48	0.42
1:CA:522:C:H1'	1:CA:536:C:H5'	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:690:G:O2'	1:AA:691:G:H5'	2.19	0.42
11:CK:31:THR:HA	11:CK:42:TRP:CB	2.50	0.42
36:DA:271(U):G:C2'	36:DA:271(V):G:H5'	2.48	0.42
16:AP:81:ARG:HE	16:AP:81:ARG:HB2	1.73	0.42
1:AA:34:C:C1'	12:AL:32:PHE:CE2	3.02	0.42
36:BA:960:A:N6	36:BA:962:G:C2	2.87	0.42
56:DX:8:ILE:O	56:DX:9:LEU:C	2.56	0.42
36:BA:410:G:H1	36:BA:417:C:N4	2.12	0.42
1:AA:802:A:H2'	1:AA:803:G:O4'	2.19	0.42
56:DX:69:TYR:CD1	56:DX:69:TYR:N	2.87	0.42
36:DA:381:G:O2'	36:DA:382:G:H5'	2.18	0.42
4:CD:43:HIS:O	4:CD:45:GLN:HG2	2.19	0.42
9:CI:6:GLY:HA3	9:CI:84:ALA:CB	2.46	0.42
9:CI:80:GLY:O	9:CI:84:ALA:CB	2.67	0.42
36:BA:816:C:H2'	36:BA:817:C:H6	1.83	0.42
36:DA:410:G:H1	36:DA:417:C:N4	2.14	0.42
36:BA:463:G:C6	36:BA:467:G:O6	2.72	0.42
36:BA:2250:G:O4'	36:BA:2250:G:N3	2.52	0.42
36:BA:1186:G:H2'	36:BA:1187:G:H5'	2.01	0.42
22:CW:24:G:C5	22:CW:25:C:C4	3.07	0.42
36:DA:280:C:H42	36:DA:360:G:H1	1.67	0.42
50:BR:18:LEU:C	50:BR:18:LEU:HD13	2.39	0.42
36:DA:414:C:H5''	36:DA:1879:C:O2'	2.19	0.42
36:BA:654(D):G:H2'	36:BA:654(E):G:C8	2.54	0.42
1:AA:1148:U:H2'	1:AA:1149:C:H5'	2.00	0.42
33:B7:19:ARG:HD3	36:BA:125:G:P	2.59	0.42
2:AB:158:LEU:HA	2:AB:159:PRO:HD3	1.78	0.42
42:DG:165:THR:CG2	42:DG:168:GLU:OE2	2.67	0.42
25:AZ:16:THR:O	25:AZ:17:ILE:HG23	2.19	0.42
1:CA:363:A:C6	1:CA:364:A:C6	3.07	0.42
36:BA:1631(A):A:O2'	36:BA:1632:A:H5'	2.19	0.42
36:DA:1744:C:O2'	36:DA:1745:C:H5'	2.18	0.42
12:AL:126:LYS:C	12:AL:128:ALA:H	2.23	0.42
36:BA:2255:G:C4	36:BA:2256:G:C8	3.07	0.42
36:DA:2269:A:O2'	36:DA:2270:G:H5'	2.19	0.42
55:DW:112:GLY:O	55:DW:113:LYS:O	2.37	0.42
36:DA:1830:C:H6	36:DA:1830:C:O5'	2.02	0.42
3:CC:55:VAL:HG12	3:CC:55:VAL:O	2.19	0.42
12:CL:54:LYS:N	12:CL:54:LYS:HD2	2.34	0.42
31:D5:37:LYS:HB2	31:D5:37:LYS:HE3	1.86	0.42
50:BR:69:ASP:N	50:BR:69:ASP:OD2	2.52	0.42
34:B8:41:ILE:HD12	36:BA:2419:U:OP1	2.18	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:B8:50:LEU:CD1	34:B8:51:ALA:N	2.74	0.42
36:BA:448:U:H1'	41:BF:84:VAL:HG13	2.01	0.42
36:BA:583:G:OP2	53:BU:10:ARG:HD2	2.19	0.42
36:DA:1655:A:H1'	40:DE:113:PHE:CD2	2.54	0.42
50:DR:2:ARG:HG3	50:DR:2:ARG:NH1	2.34	0.42
39:DD:147:LEU:HB2	39:DD:155:LEU:HD11	2.01	0.42
39:DD:187:GLY:O	39:DD:189:CYS:N	2.51	0.42
25:AZ:137:LYS:O	25:AZ:138:VAL:C	2.57	0.42
48:DP:7:ARG:O	48:DP:10:PRO:HD2	2.19	0.42
57:DY:46:LYS:O	57:DY:47:LYS:HG3	2.19	0.42
36:DA:499:U:H1'	57:DY:47:LYS:HZ1	1.83	0.42
57:DY:50:ARG:HB3	57:DY:53:PRO:CG	2.20	0.42
38:BC:76:ALA:HA	38:BC:114:VAL:CG2	2.49	0.42
1:CA:264:U:O2'	17:CQ:64:PRO:O	2.37	0.42
36:BA:1244:G:C8	36:BA:1244:G:H5'	2.55	0.42
41:BF:182:ASN:OD1	41:BF:185:ASP:HB2	2.19	0.42
41:BF:28:ILE:HG12	41:BF:28:ILE:O	2.19	0.42
41:BF:31:HIS:O	41:BF:33:LEU:N	2.52	0.42
41:BF:37:VAL:HG22	41:BF:183:VAL:CG2	2.41	0.42
48:BP:5:ASP:OD2	48:BP:6:LEU:HD23	2.20	0.42
1:AA:505:G:C5	1:AA:506:G:N7	2.87	0.42
1:AA:515:G:O2'	1:AA:516:U:H5'	2.19	0.42
4:AD:64:LEU:O	4:AD:65:ARG:C	2.57	0.42
43:DH:41:MET:SD	43:DH:53:GLU:O	2.77	0.42
41:BF:160:ASN:ND2	41:BF:162:LEU:HB2	2.33	0.42
40:BE:7:VAL:O	40:BE:7:VAL:HG13	2.19	0.42
10:AJ:12:ASP:C	10:AJ:14:LYS:N	2.71	0.42
13:AM:13:LYS:HA	13:AM:44:ARG:HD2	2.01	0.42
13:AM:44:ARG:O	13:AM:47:ASP:N	2.51	0.42
13:AM:59:TYR:CD1	13:AM:63:THR:OG1	2.67	0.42
30:B4:10:VAL:CG2	30:B4:11:PRO:N	2.82	0.42
30:B4:35:VAL:HG12	42:BG:112:PRO:CG	2.49	0.42
42:BG:39:ILE:CG1	42:BG:92:VAL:HG12	2.49	0.42
56:DX:13:LEU:O	56:DX:14:SER:HB3	2.19	0.42
27:D1:45:ASN:N	36:DA:397:G:OP1	2.51	0.42
3:CC:5:ILE:CD1	3:CC:5:ILE:N	2.81	0.42
36:DA:17:G:H22	36:DA:524:U:C1'	2.13	0.42
46:DN:35:ARG:O	46:DN:37:LYS:N	2.51	0.42
53:DU:55:ARG:HB2	53:DU:55:ARG:CZ	2.49	0.42
53:DU:90:VAL:CG1	53:DU:91:ASP:N	2.78	0.42
49:BQ:134:ARG:NH1	58:BZ:122:ARG:CZ	2.82	0.42
1:CA:545:C:OP1	4:CD:61:LYS:NZ	2.52	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:965:A:H1'	1:CA:969:A:C8	2.54	0.42
14:CN:4:LYS:O	14:CN:6:LEU:N	2.52	0.42
51:BS:93:LYS:HA	51:BS:93:LYS:HD2	1.79	0.42
36:DA:2285:C:H42	36:DA:2383:G:H1	1.67	0.42
2:CB:54:THR:O	2:CB:57:PHE:HB3	2.19	0.42
38:DC:64:LEU:HD13	38:DC:188:ASN:ND2	2.34	0.42
1:CA:730:G:O2'	1:CA:766:A:H5'	2.19	0.42
12:CL:18:VAL:CG2	12:CL:19:ARG:N	2.63	0.42
36:BA:629:G:O2'	36:BA:630:G:H5'	2.20	0.42
36:BA:630:G:H2'	36:BA:632:A:OP2	2.19	0.42
1:CA:955:U:H3	1:CA:1225:A:H61	1.66	0.42
5:AE:30:ALA:O	5:AE:46:GLY:N	2.44	0.42
5:AE:32:VAL:O	5:AE:43:LEU:HD12	2.19	0.42
5:AE:28:PHE:HE1	5:AE:49:PRO:O	2.02	0.42
25:CZ:168:VAL:HA	25:CZ:169:PRO:HD3	1.83	0.42
36:BA:2679:A:O2'	36:BA:2680:C:H5'	2.19	0.42
47:BO:71:ARG:HE	47:BO:105:GLU:CD	2.23	0.42
52:BT:48:ILE:O	52:BT:63:VAL:HA	2.19	0.42
36:DA:2726:U:HO2'	36:DA:2727:G:C5'	2.32	0.42
37:BB:72:G:O2'	37:BB:105:A:N6	2.52	0.42
1:AA:1368:G:OP2	9:AI:112:LYS:HD2	2.19	0.42
36:DA:918:A:H2	37:DB:80:U:O3'	2.02	0.42
58:DZ:163:LEU:HG	58:DZ:165:VAL:HG23	2.01	0.42
7:CG:36:LYS:O	7:CG:37:ASN:O	2.36	0.42
19:AS:45:VAL:O	19:AS:47:HIS:N	2.47	0.42
51:DS:16:ASN:O	51:DS:18:ILE:N	2.52	0.42
51:DS:66:ALA:CB	51:DS:99:LYS:HD3	2.49	0.42
42:BG:166:ASP:O	42:BG:169:ALA:N	2.53	0.42
1:CA:570:G:C6	1:CA:873:A:C2	3.06	0.42
39:DD:18:VAL:HG23	39:DD:211:ARG:HH22	1.81	0.42
55:DW:5:ALA:O	55:DW:6:ILE:HB	2.19	0.42
36:BA:2165:G:C6	36:BA:2166:G:C6	3.07	0.42
3:CC:121:ALA:HB2	3:CC:187:ALA:CB	2.49	0.42
25:AZ:224:PRO:O	25:AZ:240:GLY:HA3	2.19	0.42
1:CA:1330:U:H2'	1:CA:1330:U:O2	2.19	0.42
36:DA:1528(A):A:H8	36:DA:1529:G:N9	2.17	0.42
41:BF:46:ARG:HG2	41:BF:48:THR:HG23	2.00	0.42
37:DB:19:G:H3'	37:DB:20:C:H6	1.85	0.42
58:DZ:51:ALA:O	58:DZ:54:HIS:N	2.50	0.42
9:AI:26:VAL:HG13	9:AI:61:ALA:HB3	2.00	0.42
54:BV:4:ILE:O	54:BV:38:LEU:HD23	2.18	0.42
36:BA:1336:A:H2'	36:BA:1337:G:C8	2.50	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DD:62:TYR:CD1	39:DD:63:ARG:N	2.87	0.42
36:DA:1637:A:O2'	36:DA:1638:C:H5'	2.19	0.42
36:BA:2307:G:H21	36:BA:2308:G:H5'	1.83	0.42
30:D4:10:VAL:CG2	30:D4:11:PRO:N	2.82	0.42
36:DA:2306:C:H5''	36:DA:2307:G:O4'	2.19	0.42
36:DA:2311:A:C2	42:DG:77:ILE:HG21	2.45	0.42
24:AY:9:A:H62	24:AY:23:A:N6	2.14	0.42
7:AG:22:LEU:CD2	7:AG:62:PHE:CE2	3.02	0.42
8:CH:127:LEU:HD12	8:CH:129:VAL:HG13	2.00	0.42
25:CZ:258:LEU:HD12	25:CZ:258:LEU:N	2.33	0.42
15:CO:67:LEU:HD23	15:CO:67:LEU:N	2.33	0.42
1:CA:1075:C:OP1	2:CB:179:LYS:HE2	2.19	0.42
49:BQ:43:THR:OG1	49:BQ:46:GLN:CG	2.64	0.42
21:AU:19:GLY:H	21:AU:22:ARG:HB3	1.85	0.42
1:CA:827:U:H2'	1:CA:859:A:N1	2.34	0.42
3:CC:36:ASP:O	3:CC:40:ARG:NH1	2.52	0.42
3:CC:56:ASP:C	3:CC:57:ILE:HG13	2.40	0.42
1:CA:1152:A:H2'	1:CA:1153:C:C6	2.50	0.42
10:CJ:38:ILE:HD11	10:CJ:71:LEU:CG	2.49	0.42
49:DQ:125:LEU:HB3	49:DQ:126:PRO:HD2	2.01	0.42
38:DC:30:LYS:CE	38:DC:180:PHE:O	2.55	0.42
36:BA:2429:G:OP2	36:BA:2430:A:OP2	2.36	0.42
1:AA:663:A:C2	1:AA:664:G:C4	3.07	0.42
29:B3:7:LYS:C	29:B3:54:VAL:HG13	2.39	0.42
36:BA:784:A:O2'	36:BA:785:G:H8	2.02	0.42
1:CA:675:A:H1'	11:CK:116:HIS:CD2	2.53	0.42
48:DP:45:LEU:HA	48:DP:45:LEU:HD23	1.80	0.42
1:CA:794:A:H2'	1:CA:795:C:C6	2.54	0.42
25:AZ:362:VAL:HG11	25:AZ:368:VAL:HG21	2.01	0.42
5:CE:132:ALA:O	5:CE:135:THR:HB	2.19	0.42
1:CA:447:G:C2'	1:CA:485:G:N2	2.74	0.42
36:DA:2200:C:N4	36:DA:2223:G:H1	2.04	0.42
4:AD:56:VAL:HG12	4:AD:202:LEU:HD13	2.01	0.42
38:BC:63:SER:OG	38:BC:160:ARG:HG3	2.20	0.42
38:BC:156:ILE:CD1	38:BC:160:ARG:NH2	2.83	0.42
1:CA:59:A:N6	1:CA:331:G:H1'	2.33	0.42
36:BA:271(Z):C:H1'	36:BA:272(C):G:H1'	2.01	0.42
36:DA:203:C:N4	36:DA:204:A:C6	2.87	0.42
1:CA:181:G:H4'	1:CA:182:U:O5'	2.19	0.42
7:AG:123:GLU:O	7:AG:126:ASP:N	2.52	0.42
1:CA:607:A:C2	16:CP:31:LYS:HG3	2.55	0.42
20:CT:63:ILE:O	20:CT:66:ALA:HB3	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:525:U:O2'	36:BA:526:A:H5'	2.19	0.42
1:CA:1437:C:H2'	1:CA:1438:G:C8	2.54	0.42
25:CZ:286:VAL:HG23	25:CZ:287:GLY:H	1.84	0.42
1:AA:1247:U:O2	1:AA:1291:G:C2	2.72	0.42
36:DA:1145:C:H2'	36:DA:1146:C:C6	2.54	0.42
1:AA:1321:C:HO2'	19:AS:78:ARG:HH12	1.65	0.42
25:AZ:310:ILE:HD11	25:AZ:381:GLU:CB	2.47	0.42
1:CA:1468:A:H3'	1:CA:1469:G:C8	2.52	0.42
47:DO:8:LEU:HD22	47:DO:8:LEU:O	2.19	0.42
36:BA:979:G:N2	36:BA:985:C:H42	2.16	0.42
36:BA:217:G:O6	36:BA:431:U:O2	2.37	0.42
36:BA:202:U:H2'	36:BA:203:C:O4'	2.20	0.42
36:BA:209:C:C4'	36:BA:681:G:H4'	2.50	0.42
40:BE:93:VAL:HG21	40:BE:180:ASN:HA	2.01	0.42
18:CR:34:TYR:CD1	18:CR:35:ARG:HG3	2.54	0.42
36:BA:2252:G:H2'	36:BA:2253:G:O4'	2.19	0.42
1:CA:472:A:H2'	1:CA:473:G:O4'	2.19	0.42
27:B1:70:VAL:CA	27:B1:73:LEU:HD12	2.47	0.42
36:BA:841:A:N1	36:BA:938:G:C6	2.87	0.42
1:AA:1089:G:H2'	1:AA:1090:U:H6	1.84	0.42
49:DQ:18:LYS:HE2	49:DQ:18:LYS:HB2	1.78	0.42
33:B7:30:VAL:HG13	36:BA:466:A:H4'	1.97	0.42
2:CB:194:PRO:O	2:CB:195:ASP:C	2.57	0.42
36:BA:2791:C:H2'	36:BA:2791:C:O2	2.19	0.42
36:DA:1186:G:O2'	36:DA:1187:G:H5'	2.19	0.42
27:D1:26:ARG:HG3	27:D1:27:GLU:N	2.33	0.42
8:CH:39:LEU:O	8:CH:40:ALA:C	2.57	0.42
7:CG:97:GLN:O	7:CG:98:SER:C	2.56	0.42
26:D0:56:ASP:OD2	36:DA:2364:C:C4'	2.67	0.42
36:DA:1891:G:C2	36:DA:1892:C:C2	3.07	0.42
36:BA:843:G:H2'	36:BA:844:C:H6	1.83	0.42
58:DZ:18:LEU:HD13	58:DZ:18:LEU:H	1.83	0.42
45:BK:135:UNK:O	45:BK:136:UNK:CB	2.66	0.42
4:AD:34:GLU:O	4:AD:35:ARG:CB	2.67	0.42
36:DA:1151:G:H2'	36:DA:1152:C:C6	2.54	0.42
36:DA:647:G:H3'	36:DA:648:G:H8	1.84	0.42
1:AA:428:G:HO2'	1:AA:429:U:P	2.41	0.42
1:AA:429:U:H4'	1:AA:430:A:O5'	2.18	0.42
1:CA:1057:G:C3'	1:CA:1058:G:H8	2.32	0.42
36:DA:1477:A:H2'	36:DA:1478:G:O4'	2.19	0.42
36:BA:1911:U:O2'	36:BA:1912:A:H5''	2.19	0.42
48:BP:69:GLY:O	48:BP:70:GLN:C	2.56	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1490:C:C2	1:CA:1491:G:C8	3.07	0.42
36:DA:2633:G:H5'	36:DA:2812:G:H5'	2.01	0.42
1:AA:588:G:C6	1:AA:589:C:C4	3.08	0.42
36:BA:2748:A:N3	36:BA:2748:A:H2'	2.33	0.42
15:CO:72:ARG:HH11	15:CO:72:ARG:HG2	1.84	0.42
36:BA:1835:G:N3	36:BA:1835:G:H2'	2.35	0.42
36:BA:839:U:H6	36:BA:839:U:O5'	2.02	0.42
36:DA:2599:G:H5''	36:DA:2599:G:H8	1.85	0.42
34:B8:30:ARG:O	34:B8:31:HIS:CB	2.67	0.42
34:B8:52:LYS:O	34:B8:55:ALA:HB3	2.18	0.42
36:BA:2348:U:C2	36:BA:2349:G:C8	3.07	0.42
36:BA:565:C:H4'	36:BA:1253:A:C2	2.54	0.42
36:BA:1251:C:P	53:BU:10:ARG:HE	2.39	0.42
36:DA:1271:G:N2	36:DA:1617:C:O4'	2.52	0.42
36:DA:1651:G:C2'	36:DA:1652:A:H5'	2.50	0.42
19:AS:15:LEU:HA	19:AS:15:LEU:HD22	1.91	0.42
36:BA:483:A:C1'	57:BY:60:PHE:CZ	2.97	0.42
34:D8:53:PRO:C	34:D8:55:ALA:N	2.72	0.42
34:D8:22:VAL:CB	34:D8:53:PRO:HB2	2.49	0.42
36:DA:2282:G:N2	36:DA:2390:U:H3	2.11	0.42
48:DP:47:ASP:HB3	48:DP:48:PRO:CA	2.49	0.42
28:D2:3:LEU:O	28:D2:6:VAL:HB	2.18	0.42
28:D2:46:GLN:O	28:D2:50:ILE:HD13	2.19	0.42
41:DF:116:ASP:OD2	48:DP:5:ASP:N	2.53	0.42
36:BA:691:C:O5'	36:BA:691:C:H6	2.02	0.42
36:DA:1884:A:H3'	36:DA:1885:A:H5''	2.02	0.42
58:DZ:108:PRO:O	58:DZ:111:VAL:HG23	2.18	0.42
36:BA:654(V):A:H8	36:BA:655:A:C2'	2.30	0.42
41:BF:31:HIS:C	41:BF:33:LEU:N	2.71	0.42
43:BH:37:VAL:HG21	43:BH:72:ILE:HD11	2.02	0.42
36:DA:2758:A:C2	36:DA:2759:G:N9	2.88	0.42
35:B9:7:VAL:HG13	35:B9:34:GLN:HB3	2.01	0.42
28:B2:21:LEU:HD13	28:B2:64:LEU:HB2	2.02	0.42
36:BA:71:A:H3'	36:BA:71:A:OP2	2.18	0.42
36:BA:1275:A:C5	50:BR:16:HIS:HB2	2.54	0.42
36:BA:2821:A:H2'	36:BA:2822:G:O4'	2.20	0.42
36:BA:2850:A:N6	36:BA:2869:G:H5'	2.34	0.42
50:BR:28:LEU:CD2	50:BR:29:LEU:N	2.82	0.42
50:BR:45:ARG:O	50:BR:48:VAL:N	2.52	0.42
42:BG:61:ALA:O	42:BG:62:LEU:C	2.58	0.42
3:CC:5:ILE:HG12	3:CC:10:PHE:HB2	2.01	0.42
53:DU:52:ARG:NH2	53:DU:55:ARG:HH22	2.17	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:377:G:H5'	16:AP:5:ARG:NH1	2.35	0.42
1:CA:1054:C:OP2	1:CA:1198:G:OP2	2.37	0.42
14:CN:4:LYS:O	14:CN:7:ILE:CG1	2.54	0.42
36:BA:2334:G:N3	51:BS:18:ILE:HD13	2.35	0.42
51:BS:27:SER:C	51:BS:28:VAL:CG2	2.86	0.42
36:DA:321:G:OP2	41:DF:135:LYS:HD2	2.19	0.42
1:CA:670:G:N2	1:CA:671:G:N3	2.67	0.42
1:CA:834:C:N3	1:CA:852:G:N2	2.57	0.42
34:B8:45:GLY:O	34:B8:46:ARG:O	2.36	0.42
36:DA:1474:C:H5'	36:DA:1475:G:OP1	2.19	0.42
36:BA:1637:A:O2'	36:BA:1638:C:H5'	2.20	0.42
52:BT:13:ARG:NH2	52:BT:15:VAL:CG1	2.82	0.42
36:DA:2729:G:H2'	36:DA:2730:C:C6	2.53	0.42
52:DT:29:ARG:HA	52:DT:29:ARG:HD2	1.79	0.42
58:BZ:12:GLY:CA	58:BZ:36:LYS:NZ	2.83	0.42
58:BZ:125:LEU:HD23	58:BZ:164:ALA:O	2.19	0.42
36:DA:327:G:C2	36:DA:328:U:C2	3.07	0.42
57:DY:81:LYS:CD	57:DY:97:ARG:O	2.60	0.42
7:AG:31:MET:HB2	7:AG:39:ALA:CB	2.48	0.42
9:CI:37:PHE:CD2	9:CI:74:ILE:HD11	2.54	0.42
1:AA:1486:G:C2'	1:AA:1487:G:O4'	2.67	0.42
42:BG:162:THR:O	42:BG:164:GLU:CG	2.64	0.42
42:BG:27:ASN:C	42:BG:29:TRP:N	2.73	0.42
36:DA:2110:G:O2'	36:DA:2111:C:H5'	2.19	0.42
36:DA:2121:G:C2	36:DA:2177:C:O2	2.73	0.42
1:CA:863:U:C3'	1:CA:864:A:H5''	2.47	0.42
19:CS:51:VAL:HG22	19:CS:71:LEU:HD13	2.01	0.42
19:CS:68:GLY:O	19:CS:70:LYS:HE3	2.19	0.42
16:CP:12:LYS:HE3	16:CP:12:LYS:HB2	1.87	0.42
20:CT:26:ASN:ND2	20:CT:26:ASN:N	2.67	0.42
36:DA:1528:A:O2'	36:DA:1528(A):A:P	2.76	0.42
36:DA:1541:G:C8	36:DA:1542:A:C6	3.08	0.42
22:CW:51:U:H2'	22:CW:52:G:H8	1.84	0.42
36:DA:862:G:H3'	36:DA:863:A:H8	1.83	0.42
49:DQ:27:VAL:H	49:DQ:137:TYR:HD1	1.68	0.42
15:CO:64:ARG:O	15:CO:68:ARG:N	2.51	0.42
36:BA:85:G:H1	36:BA:97:C:H42	1.66	0.42
36:BA:1338:G:C2	36:BA:1339:G:C4	3.07	0.42
36:BA:426:C:O2	36:BA:427:U:C6	2.72	0.42
36:DA:994:C:O2	36:DA:994:C:H2'	2.20	0.42
54:DV:69:LYS:HB2	54:DV:88:ARG:CD	2.40	0.42
42:BG:45:GLU:C	42:BG:47:LYS:N	2.71	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:D4:14:ILE:CD1	30:D4:14:ILE:H	2.32	0.42
20:AT:71:THR:HG22	20:AT:72:LEU:N	2.34	0.42
43:DH:84:SER:O	43:DH:85:LYS:HB3	2.19	0.42
8:CH:119:LEU:HD12	8:CH:124:ALA:CA	2.48	0.42
8:CH:89:PRO:CA	8:CH:92:ARG:HH11	2.27	0.42
5:CE:144:THR:O	5:CE:145:LYS:C	2.58	0.42
49:BQ:132:VAL:HG11	58:BZ:81:ARG:NE	2.34	0.42
13:CM:108:ARG:CG	13:CM:108:ARG:NH1	2.81	0.42
51:DS:85:VAL:CG2	51:DS:106:ARG:HB2	2.49	0.42
22:CV:18:G:C4	22:CV:58:A:C2	3.08	0.42
25:CZ:219:LYS:HB3	25:CZ:220:PRO:HD2	2.01	0.42
25:CZ:222:LEU:HD23	25:CZ:244:ARG:CZ	2.48	0.42
5:AE:76:ILE:HG12	5:AE:77:PRO:N	2.33	0.42
38:BC:206:GLY:CA	38:BC:210:ARG:HH22	2.17	0.42
1:CA:1129:C:H4'	1:CA:1130:A:H8	1.84	0.42
10:CJ:4:ILE:HB	10:CJ:74:ILE:HD11	2.01	0.42
49:DQ:126:PRO:HG2	49:DQ:127:ILE:HG23	2.01	0.42
20:AT:45:GLN:NE2	20:AT:46:GLU:N	2.66	0.42
27:B1:24:ALA:O	27:B1:29:GLY:HA2	2.18	0.42
1:AA:449:C:O2	16:AP:42:ARG:HG2	2.19	0.42
36:BA:135:G:C2	36:BA:145:G:C2	3.07	0.42
38:BC:39:GLU:O	38:BC:177:LYS:HA	2.19	0.42
36:BA:372:G:O2'	36:BA:373:U:P	2.78	0.42
36:DA:2842:G:H1	36:DA:2875:C:N4	2.17	0.42
36:BA:882:G:N2	36:BA:894:C:H42	2.17	0.42
7:CG:144:MET:HE3	22:CW:31:A:H1'	2.01	0.42
1:CA:782:A:N1	1:CA:801:U:H1'	2.33	0.42
16:AP:49:LEU:HD22	16:AP:73:LEU:HD22	2.01	0.42
1:CA:443:C:O2'	1:CA:444:C:H5'	2.18	0.42
36:DA:120:U:H1'	36:DA:149:A:C8	2.55	0.42
36:DA:176:G:H3'	36:DA:177:G:N2	2.35	0.42
36:BA:1173:G:H3'	36:BA:1174:A:C5'	2.50	0.42
36:DA:1387:C:H42	36:DA:1400:G:H1	1.67	0.42
1:CA:359:U:H2'	1:CA:360:A:C8	2.48	0.42
23:AX:22:A:C2	24:AY:37:YG:H1'	2.55	0.42
6:CF:11:ASN:HA	6:CF:12:PRO:HD2	1.87	0.42
36:BA:871:U:O2	36:BA:871:U:H2'	2.18	0.42
33:D7:7:PRO:HA	36:DA:686:G:C8	2.54	0.42
36:DA:2444:G:OP2	41:DF:68:LYS:NZ	2.51	0.42
36:DA:760:G:H2'	36:DA:761:A:O4'	2.20	0.42
1:CA:1245:A:H2'	1:CA:1246:C:C6	2.54	0.42
46:BN:22:THR:N	46:BN:61:ARG:HB2	2.33	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2379:G:H2'	36:DA:2380:C:H6	1.79	0.42
46:BN:63:THR:HB	46:BN:64:GLY:H	1.53	0.42
1:AA:1096:C:H2'	1:AA:1097:C:H6	1.83	0.42
19:AS:10:PHE:HE1	19:AS:70:LYS:HD2	1.83	0.42
12:AL:27:LEU:O	12:AL:29:GLY:N	2.51	0.42
36:DA:1065:U:HO2'	36:DA:1066:U:H5''	1.83	0.42
3:AC:63:ASN:C	3:AC:64:VAL:HG23	2.40	0.42
36:DA:1106:G:C6	36:DA:1107:G:N3	2.87	0.42
55:BW:28:SER:HA	55:BW:70:TYR:CB	2.49	0.42
1:AA:218:C:C4	1:AA:219:C:N4	2.88	0.42
1:CA:734:G:O2'	1:CA:735:C:C5'	2.62	0.42
36:BA:2853:C:O2'	36:BA:2854:G:H5'	2.18	0.42
36:BA:2241:A:H2'	36:BA:2242:G:H8	1.84	0.42
56:DX:43:VAL:HG12	56:DX:43:VAL:O	2.19	0.42
1:AA:782:A:N1	1:AA:801:U:H1'	2.35	0.42
55:DW:37:ARG:CG	55:DW:37:ARG:NH1	2.80	0.42
9:CI:82:ALA:O	9:CI:85:LEU:CD1	2.67	0.42
9:CI:6:GLY:HA3	9:CI:84:ALA:CA	2.49	0.42
11:AK:89:ALA:O	11:AK:91:ARG:N	2.52	0.42
53:DU:47:TYR:O	53:DU:50:ARG:HB2	2.19	0.42
24:CY:35:G:O2'	24:CY:36:U:H5'	2.19	0.42
36:DA:2517:C:N3	36:DA:2542:A:N1	2.67	0.42
36:DA:1747:G:H2'	36:DA:1747(A):G:C8	2.54	0.42
37:BB:94:C:H2'	37:BB:95:C:H6	1.83	0.42
36:DA:2173:A:N3	36:DA:2173:A:C3'	2.80	0.42
1:AA:784:C:H2'	1:AA:785:G:C8	2.54	0.42
1:CA:1081:G:H2'	1:CA:1082:G:C8	2.51	0.42
36:BA:418:G:C2	36:BA:419:C:C6	3.08	0.42
9:AI:65:VAL:HG22	9:AI:66:ARG:H	1.84	0.42
15:CO:28:GLN:O	15:CO:31:LEU:HB3	2.20	0.42
1:CA:27:G:H2'	1:CA:28:G:H8	1.83	0.42
11:CK:32:ILE:CG2	11:CK:33:THR:N	2.83	0.42
36:DA:1830:C:H2'	36:DA:1831:G:H8	1.85	0.42
25:AZ:85:HIS:HD2	25:AZ:88:TYR:CE2	2.37	0.42
40:DE:181:LEU:CD1	40:DE:181:LEU:N	2.83	0.42
36:BA:1287:A:H2'	36:BA:1287:A:N3	2.34	0.42
5:AE:40:ARG:HG2	5:AE:40:ARG:HH11	1.84	0.42
16:CP:9:PHE:HE2	16:CP:18:ARG:HD2	1.85	0.42
1:CA:421:U:C6	3:CC:127:ARG:NH1	2.88	0.42
36:BA:1620:G:O2'	36:BA:1621:U:H5'	2.19	0.42
25:CZ:355:LEU:CD2	25:CZ:359:VAL:HB	2.34	0.42
36:BA:2330:G:O2'	36:BA:2331:G:H5'	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:42:TRP:CD2	36:BA:2348:U:O2'	2.73	0.42
50:DR:24:GLN:HE22	50:DR:40:LYS:CD	2.31	0.42
36:DA:2839:G:O2'	50:DR:92:GLY:HA2	2.20	0.42
34:D8:4:MET:HE3	34:D8:61:LEU:CD2	2.48	0.42
36:DA:2283:C:C2'	36:DA:2284:C:H5'	2.50	0.42
36:DA:253:C:H2'	36:DA:254:G:O4'	2.19	0.42
25:AZ:21:ASP:N	62:AZ:501:GDP:O1B	2.47	0.42
28:D2:29:LYS:O	28:D2:33:MET:N	2.39	0.42
36:BA:1858:G:O2'	36:BA:1859:A:H8	2.02	0.42
36:DA:1203:G:N1	36:DA:1241:A:OP2	2.40	0.42
25:AZ:234:ARG:HD2	25:AZ:289:LEU:HD21	2.00	0.42
5:CE:107:ARG:C	5:CE:109:ILE:H	2.22	0.42
36:DA:483:A:C1'	57:DY:60:PHE:CZ	2.97	0.42
36:BA:769:G:O4'	36:BA:1379:A:C6	2.72	0.42
39:BD:34:VAL:CG2	39:BD:35:LYS:N	2.81	0.42
36:DA:794:G:C6	36:DA:795:C:C4	3.08	0.42
1:AA:1161:C:O2'	1:AA:1162:C:H5'	2.19	0.42
41:BF:97:TYR:N	41:BF:97:TYR:CD2	2.87	0.42
4:AD:59:ARG:HA	4:AD:59:ARG:NE	2.35	0.42
28:B2:27:GLU:O	28:B2:30:ARG:HB3	2.20	0.42
28:B2:63:VAL:O	28:B2:64:LEU:C	2.57	0.42
36:BA:2880:C:O2'	50:BR:90:ARG:NH1	2.46	0.42
40:BE:83:ASP:O	40:BE:84:PHE:CB	2.66	0.42
42:BG:138:GLN:HG3	42:BG:139:LEU:H	1.83	0.42
27:D1:3:LYS:HE2	27:D1:4:VAL:HG12	2.00	0.42
36:DA:1233:C:C4	36:DA:1234:U:C5	3.07	0.42
46:DN:33:LEU:N	46:DN:33:LEU:CD1	2.83	0.42
54:DV:38:LEU:HD11	54:DV:57:VAL:HB	2.00	0.42
1:CA:507:C:OP2	1:CA:508:C:H3'	2.19	0.42
14:CN:4:LYS:HB3	14:CN:5:ALA:H	1.68	0.42
2:CB:58:ILE:O	2:CB:61:LEU:N	2.52	0.42
41:DF:155:LEU:HG	41:DF:155:LEU:O	2.18	0.42
41:DF:160:ASN:ND2	41:DF:162:LEU:HB2	2.34	0.42
41:DF:194:MET:HB3	41:DF:195:ASP:H	1.52	0.42
1:CA:1308:U:OP2	13:CM:99:ARG:HD2	2.19	0.42
1:CA:949:A:C6	1:CA:950:U:N3	2.87	0.42
1:CA:954:G:H4'	13:CM:120:LYS:HD2	1.98	0.42
36:BA:1667:G:C8	36:BA:1667:G:OP2	2.62	0.42
36:BA:1759:A:O5'	36:BA:1759:A:H8	2.01	0.42
52:BT:89:VAL:CG1	52:BT:91:ARG:HG3	2.46	0.42
52:DT:50:ILE:HG13	52:DT:99:LEU:CD1	2.49	0.42
52:DT:92:GLY:HA3	52:DT:120:ARG:HH21	1.84	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:27:VAL:CG1	58:BZ:27:VAL:O	2.66	0.42
36:BA:2645:G:C3'	36:BA:2646:C:C5'	2.85	0.42
1:CA:375:U:H2'	1:CA:376:G:H8	1.85	0.42
58:DZ:167:PRO:O	58:DZ:168:GLU:HB2	2.19	0.42
19:AS:51:VAL:HG23	19:AS:60:VAL:CG1	2.35	0.42
36:BA:1210:A:H4'	36:BA:1211:U:O5'	2.19	0.42
42:BG:120:LEU:O	42:BG:122:PRO:N	2.53	0.42
42:BG:36:LYS:HG2	42:BG:94:LEU:O	2.20	0.42
1:AA:1422:G:C2	1:AA:1423:G:N7	2.88	0.42
36:DA:1336:A:O2'	36:DA:1337:G:H5'	2.19	0.42
46:DN:134:ARG:O	46:DN:136:GLU:N	2.51	0.42
39:DD:244:ARG:HG2	39:DD:245:PRO:N	2.34	0.42
55:DW:5:ALA:CB	55:DW:105:VAL:HB	2.50	0.42
31:B5:44:THR:HG22	31:B5:45:VAL:N	2.24	0.42
36:BA:2152:G:H2'	36:BA:2153:G:H8	1.84	0.42
36:BA:2175:C:C5'	38:BC:219:GLY:O	2.62	0.42
3:CC:77:ILE:CA	3:CC:83:ARG:HB3	2.49	0.42
4:CD:189:PRO:CB	4:CD:194:LEU:HD21	2.37	0.42
1:CA:166:G:H2'	1:CA:167:G:C8	2.55	0.42
36:BA:444:C:C2'	36:BA:445:C:O5'	2.67	0.42
58:DZ:48:PHE:C	58:DZ:50:GLN:N	2.72	0.42
1:CA:1010:G:N2	1:CA:1020:U:H1'	2.35	0.42
39:BD:142:VAL:HG23	39:BD:192:THR:C	2.39	0.42
36:DA:1381:G:O2'	36:DA:1382:G:H5'	2.20	0.42
39:DD:35:LYS:HD2	39:DD:36:PRO:CA	2.48	0.42
37:DB:43:C:H2'	37:DB:44:G:H5''	2.01	0.42
36:BA:1464:C:N3	36:BA:1465:G:N7	2.67	0.42
36:BA:1446:C:N4	36:BA:1465:G:H1	2.16	0.42
36:BA:1541:G:C8	36:BA:1542:A:C6	3.07	0.42
1:CA:977:A:H61	1:CA:1224:G:P	2.43	0.42
1:CA:452:A:HO2'	1:CA:453:A:H5''	1.78	0.42
57:BY:86:ARG:HB3	57:BY:88:LYS:HZ2	1.80	0.42
57:BY:86:ARG:NH2	57:BY:95:LYS:HZ2	2.16	0.42
1:CA:597:G:C8	1:CA:598:U:C5	3.08	0.42
43:DH:24:VAL:HG12	43:DH:25:LYS:N	2.33	0.42
58:BZ:76:LEU:O	58:BZ:77:ASP:HB2	2.18	0.42
2:CB:104:ASN:O	2:CB:105:PHE:C	2.57	0.42
2:AB:97:TRP:O	2:AB:98:LEU:O	2.38	0.42
29:D3:28:LEU:N	29:D3:28:LEU:CD2	2.68	0.42
1:AA:874:G:C6	1:AA:875:C:C4	3.07	0.42
15:AO:81:LEU:HB3	15:AO:82:ILE:H	1.67	0.42
1:CA:858:G:H8	1:CA:858:G:C5'	2.31	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:127:ILE:O	2:CB:129:GLU:O	2.37	0.42
1:AA:119:A:C4	1:AA:240:C:N4	2.88	0.42
11:AK:90:GLY:O	11:AK:93:GLN:N	2.52	0.42
1:AA:680:C:N3	1:AA:711:G:C2	2.87	0.42
1:AA:675:A:H1'	11:AK:116:HIS:CD2	2.54	0.42
36:DA:440:G:H8	36:DA:440:G:O5'	2.02	0.42
16:AP:52:ASP:HB3	16:AP:55:ARG:HB2	2.00	0.42
39:DD:193:VAL:HG13	39:DD:193:VAL:O	2.20	0.42
26:B0:23:VAL:HG22	26:B0:38:VAL:CG2	2.49	0.42
1:CA:750:G:N2	15:CO:23:GLY:HA3	2.35	0.42
54:BV:22:VAL:O	54:BV:23:GLU:HB2	2.19	0.42
36:DA:1860:G:H2'	36:DA:1861:G:C8	2.54	0.42
3:AC:7:PRO:HG2	3:AC:184:TYR:CD2	2.54	0.42
1:AA:719:C:C6	1:AA:720:C:C5	3.07	0.42
1:AA:488:C:O2'	1:AA:489:C:H5'	2.18	0.42
15:AO:9:GLN:O	15:AO:12:ILE:N	2.53	0.42
36:DA:2133:G:C3'	36:DA:2133:G:C8	3.03	0.42
36:BA:1360:A:C6	36:BA:1372:U:N3	2.86	0.42
40:BE:69:LYS:C	40:BE:71:GLY:N	2.73	0.42
49:BQ:116:GLU:O	49:BQ:119:ARG:N	2.52	0.42
39:DD:69:ARG:NH1	39:DD:128:GLY:O	2.43	0.42
1:AA:1095:U:P	1:AA:1108:G:H1	2.42	0.42
36:DA:852:G:HO2'	36:DA:853:G:H5'	1.81	0.42
41:BF:59:TYR:N	41:BF:59:TYR:CD2	2.82	0.42
1:CA:1311:G:C6	1:CA:1312:G:C5	3.08	0.42
1:CA:1379:G:H2'	1:CA:1380:U:C6	2.53	0.42
36:DA:2065:C:H2'	36:DA:2066:C:H6	1.82	0.42
36:DA:1106:G:C2	36:DA:1107:G:H1'	2.55	0.42
36:BA:806:C:O2'	36:BA:807:U:H5'	2.19	0.42
2:AB:11:LEU:C	2:AB:13:ALA:N	2.72	0.42
1:AA:9:G:C5'	5:AE:122:GLU:OE1	2.67	0.42
46:BN:39:ARG:N	53:BU:67:ALA:HB1	2.35	0.42
39:BD:74:GLY:O	39:BD:76:PRO:HD3	2.20	0.42
36:DA:2036:C:C6	36:DA:2036:C:H5'	2.45	0.42
36:BA:1747:G:H2'	36:BA:1747(A):G:H8	1.85	0.42
36:BA:467:G:H8	36:BA:467:G:OP2	2.02	0.42
36:BA:412:A:H3'	36:BA:413:C:C6	2.55	0.42
1:AA:630:G:C3'	1:AA:631:G:H5'	2.49	0.42
48:BP:136:GLU:OE1	48:BP:136:GLU:HA	2.19	0.42
36:BA:500:G:H22	36:BA:503:A:P	2.41	0.42
48:DP:122:PRO:HG3	48:DP:141:ALA:HB3	2.01	0.42
48:BP:122:PRO:HG3	48:BP:141:ALA:HB3	2.01	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1833:U:O2	36:DA:1969:A:C2	2.71	0.42
13:CM:116:THR:C	13:CM:117:VAL:HG23	2.40	0.42
13:CM:115:LYS:O	13:CM:117:VAL:HG23	2.19	0.42
1:AA:342:C:O2'	1:AA:343:U:H5'	2.18	0.42
17:AQ:90:ILE:HG22	17:AQ:94:ASN:HD21	1.85	0.42
12:CL:102:ARG:HD2	12:CL:102:ARG:HA	1.71	0.42
4:AD:49:ARG:O	4:AD:50:ARG:C	2.57	0.42
25:CZ:334:PHE:N	25:CZ:334:PHE:CD1	2.87	0.42
22:CW:76:A:H1'	36:DA:2421:G:N2	2.35	0.42
36:BA:1478:G:N2	36:BA:1479:G:C4	2.87	0.42
7:CG:50:ILE:C	7:CG:52:GLU:H	2.23	0.42
39:DD:96:HIS:CE1	39:DD:102:LYS:CE	3.02	0.42
57:DY:64:GLU:O	57:DY:65:ALA:HB2	2.19	0.42
11:AK:12:ARG:HE	11:AK:14:VAL:HG13	1.85	0.42
12:CL:23:LYS:C	12:CL:24:VAL:HG23	2.40	0.42
1:AA:667:G:H4'	15:AO:51:HIS:ND1	2.34	0.42
3:CC:44:GLU:O	3:CC:45:LYS:C	2.56	0.42
38:DC:57:ASN:HD22	38:DC:57:ASN:N	2.18	0.42
1:CA:146:G:N3	1:CA:146:G:H2'	2.33	0.42
52:DT:93:ARG:HA	52:DT:93:ARG:HD2	1.91	0.42
6:CF:71:ARG:HG3	6:CF:71:ARG:HH11	1.84	0.42
26:B0:75:LEU:HA	26:B0:75:LEU:HD23	1.77	0.42
25:CZ:243:GLU:HG2	25:CZ:345:ARG:HH21	1.84	0.42
25:AZ:355:LEU:CD2	25:AZ:370:PHE:HB3	2.26	0.42
32:B6:11:LEU:O	32:B6:24:GLU:O	2.37	0.42
32:B6:15:GLU:HB2	32:B6:20:ASN:HB2	2.01	0.42
32:B6:41:PRO:O	32:B6:45:LYS:HB3	2.19	0.42
34:B8:6:THR:HG21	34:B8:63:PRO:HD3	2.01	0.42
34:B8:7:HIS:O	34:B8:9:GLY:N	2.51	0.42
36:BA:2361:A:H2'	36:BA:2362:G:C8	2.48	0.42
36:BA:511:U:O5'	36:BA:511:U:H6	2.03	0.42
36:BA:813:U:H2'	36:BA:814:C:C5	2.53	0.42
36:BA:942:G:H5'	48:BP:35:HIS:O	2.19	0.42
53:BU:17:ILE:N	53:BU:17:ILE:HD12	2.33	0.42
36:BA:1253:A:N6	54:BV:80:GLN:HE22	2.18	0.42
36:DA:1648:C:N3	36:DA:2009:G:N2	2.64	0.42
36:DA:1653:G:O2'	50:DR:3:HIS:CB	2.67	0.42
36:DA:1801:G:C3'	36:DA:1802:A:H5'	2.49	0.42
39:DD:187:GLY:C	39:DD:189:CYS:H	2.22	0.42
32:D6:20:ASN:HD21	32:D6:42:TRP:H	1.67	0.42
36:DA:242:G:O2'	36:DA:254:G:O6	2.36	0.42
36:DA:252:G:P	48:DP:50:ARG:NH1	2.92	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:197:ASP:HA	25:AZ:200:TRP:HD1	1.82	0.42
36:DA:659:C:H6	36:DA:659:C:O5'	2.02	0.42
41:DF:118:ALA:CA	41:DF:123:LEU:HB2	2.44	0.42
4:CD:57:ARG:NH2	4:CD:205:GLU:OE2	2.52	0.42
56:BX:12:VAL:HG12	56:BX:27:THR:H	1.83	0.42
35:D9:29:ASN:C	35:D9:29:ASN:HD22	2.19	0.42
36:DA:2526:G:O5'	36:DA:2526:G:H8	2.01	0.42
36:DA:479:A:H1'	36:DA:481:G:H5''	2.01	0.42
36:DA:487:C:O4'	55:DW:56:ALA:HB3	2.19	0.42
1:CA:368:U:P	25:CZ:291:ARG:HH11	2.43	0.42
9:AI:94:ALA:O	9:AI:95:LYS:CB	2.68	0.42
1:CA:260:G:C2'	1:CA:261:U:H5'	2.49	0.42
1:CA:265:G:H5'	17:CQ:64:PRO:O	2.19	0.42
41:BF:103:LYS:HG2	41:BF:106:ARG:NH2	2.34	0.42
36:BA:2756:U:O2'	36:BA:2757:A:H5''	2.19	0.42
36:BA:2482:G:C8	36:BA:2483:C:C5	3.08	0.42
49:BQ:51:ARG:HG2	49:BQ:52:VAL:N	2.34	0.42
28:B2:35:LEU:CG	28:B2:50:ILE:HG13	2.49	0.42
36:BA:2819:G:N2	36:BA:2828:C:C2	2.87	0.42
36:DA:2732:G:O2'	36:DA:2733:A:H5'	2.20	0.42
36:DA:15:G:C6	36:DA:16:G:C5	3.08	0.42
36:DA:16:G:O2'	36:DA:17:G:H5'	2.19	0.42
36:DA:2781:A:H5'	36:DA:2782:G:O4'	2.20	0.42
36:DA:2628:C:O2'	36:DA:2782:G:OP1	2.31	0.42
36:DA:575:A:C2'	36:DA:576:U:H5'	2.49	0.42
26:D0:12:ASN:HA	26:D0:14:ARG:NH1	2.34	0.42
2:AB:230:VAL:HB	2:AB:231:GLU:H	1.66	0.42
1:AA:390:C:H4'	16:AP:28:ARG:NH1	2.26	0.42
8:CH:103:VAL:HG21	8:CH:109:ILE:O	2.19	0.42
8:CH:33:GLU:O	8:CH:36:LEU:N	2.52	0.42
9:CI:4:TYR:HB2	9:CI:19:LEU:CB	2.32	0.42
4:CD:13:ARG:HH22	4:CD:40:PRO:HA	1.85	0.42
51:BS:66:ALA:O	51:BS:67:ARG:C	2.57	0.42
2:CB:172:ILE:CD1	2:CB:172:ILE:H	2.21	0.42
2:CB:162:ILE:HG23	2:CB:184:VAL:HG13	2.02	0.42
1:CA:302:G:H2'	1:CA:303:A:H8	1.85	0.42
32:B6:30:THR:HG21	36:BA:2286:A:OP2	2.19	0.42
48:BP:112:LEU:C	48:BP:112:LEU:HD13	2.40	0.42
48:BP:97:PRO:HD3	48:BP:126:VAL:O	2.20	0.42
36:DA:1596:A:O2'	36:DA:1597:A:H5'	2.20	0.42
25:CZ:138:VAL:CG2	25:CZ:174:SER:N	2.83	0.42
52:BT:50:ILE:HG13	52:BT:99:LEU:CD1	2.50	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DE:129:HIS:O	40:DE:130:GLY:O	2.38	0.42
40:DE:13:ARG:O	52:DT:57:PHE:CE1	2.71	0.42
49:BQ:141:GLN:CD	58:BZ:72:ARG:CD	2.88	0.42
37:BB:104:U:O3'	58:BZ:72:ARG:NH1	2.52	0.42
57:DY:17:SER:HB3	57:DY:71:LYS:HB3	2.01	0.42
57:DY:81:LYS:HE3	57:DY:81:LYS:HB2	1.82	0.42
1:AA:1345:U:C4	1:AA:1377:A:N3	2.87	0.42
6:AF:69:GLU:CD	6:AF:69:GLU:N	2.63	0.42
26:B0:14:ARG:HH11	26:B0:14:ARG:HG3	1.84	0.42
58:DZ:127:LYS:H	58:DZ:163:LEU:HA	1.83	0.42
1:CA:1345:U:C4	1:CA:1377:A:N3	2.87	0.42
7:CG:37:ASN:O	7:CG:38:LEU:C	2.58	0.42
1:AA:1399:C:H4'	1:AA:1400:C:O5'	2.20	0.42
36:BA:1406:U:N3	36:BA:1597:A:C2	2.87	0.42
19:AS:31:ILE:O	19:AS:31:ILE:HG12	2.20	0.42
51:DS:68:GLN:C	51:DS:70:GLY:H	2.23	0.42
24:CY:56:C:O2'	24:CY:57:G:H5'	2.17	0.42
42:BG:102:PHE:O	42:BG:104:GLU:N	2.53	0.42
42:BG:34:LEU:O	42:BG:34:LEU:CD1	2.65	0.42
1:AA:919:A:HO2'	1:AA:1080:A:N6	2.17	0.42
36:DA:1827:C:H2'	36:DA:1828:G:C4'	2.49	0.42
41:BF:7:TYR:HD2	41:BF:16:GLY:HA3	1.83	0.42
36:BA:2137:C:O2'	36:BA:2138:C:H5'	2.19	0.42
36:BA:2166:G:H2'	36:BA:2167:U:C6	2.54	0.42
3:CC:113:ALA:H	3:CC:202:ILE:HD12	1.84	0.42
3:AC:28:GLN:O	3:AC:29:TYR:C	2.58	0.42
36:DA:1466:G:C3'	36:DA:1547:C:H41	2.29	0.42
1:CA:154:C:H2'	1:CA:155:C:H6	1.81	0.42
36:DA:141:A:N6	36:DA:142:A:N6	2.68	0.42
36:BA:1790:C:H5''	36:BA:1791:A:OP1	2.19	0.42
36:BA:1971:A:N3	39:BD:241:PRO:HD3	2.34	0.42
37:DB:67:G:O2'	37:DB:68:C:O5'	2.34	0.42
41:DF:6:VAL:CG1	41:DF:7:TYR:H	2.17	0.42
46:BN:28:THR:CG2	46:BN:29:LYS:N	2.56	0.42
43:BH:19:VAL:CG1	43:BH:20:ALA:H	2.32	0.42
40:DE:93:VAL:HG23	40:DE:180:ASN:OD1	2.19	0.42
8:CH:127:LEU:HD22	8:CH:127:LEU:HA	1.91	0.42
43:BH:97:ARG:O	43:BH:103:LEU:HD12	2.19	0.42
24:CY:1:G:OP1	25:CZ:348:ASP:OD1	2.38	0.42
2:AB:101:MET:HA	2:AB:108:ILE:HG13	2.02	0.42
49:BQ:45:GLN:H	49:BQ:45:GLN:CD	2.13	0.42
8:CH:17:THR:O	8:CH:20:TYR:N	2.51	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CC:58:GLU:O	3:CC:65:ALA:CB	2.68	0.42
1:CA:1150:U:H1'	1:CA:1280:A:C6	2.54	0.42
4:AD:129:ASN:HD21	4:AD:145:GLU:H	1.67	0.42
2:AB:111:ARG:HG2	2:AB:111:ARG:HH11	1.85	0.42
36:DA:919:G:H22	36:DA:2268:A:H3'	1.84	0.42
36:DA:2199:A:H5'	36:DA:2200:C:OP2	2.19	0.42
36:DA:882:G:N2	36:DA:895:U:C2	2.87	0.42
1:CA:748:C:O2'	1:CA:749:C:P	2.77	0.42
46:BN:128:HIS:CD2	46:BN:130:HIS:CE1	3.06	0.42
3:AC:6:HIS:HD2	3:AC:7:PRO:CD	2.32	0.42
1:AA:530:G:O6	23:AX:24:C:H1'	2.20	0.42
26:D0:24:LYS:CD	36:DA:2355:C:H4'	2.49	0.42
26:D0:24:LYS:NZ	36:DA:2355:C:O2'	2.47	0.42
36:DA:2134:A:H2	36:DA:2159:G:H4'	1.84	0.42
36:BA:1373:A:C2'	36:BA:1374:G:H5'	2.49	0.42
1:CA:607:A:H2'	1:CA:608:A:C8	2.55	0.42
36:BA:2043:C:H2'	36:BA:2044:C:C6	2.54	0.42
36:BA:2625:G:H2'	36:BA:2626:C:O4'	2.19	0.42
1:CA:1439:C:O2	1:CA:1439:C:H2'	2.19	0.42
39:DD:69:ARG:NH2	39:DD:130:ALA:HB2	2.34	0.42
36:BA:1492:G:C2	36:BA:1499:C:O2	2.72	0.42
36:DA:1142(A):A:H8	36:DA:1142(A):A:H5'	1.84	0.42
6:AF:67:MET:HB2	6:AF:68:PRO:CD	2.44	0.42
36:BA:1993:U:C5'	40:BE:128:SER:HB3	2.50	0.42
36:DA:1051:G:H2'	36:DA:1052:C:C2	2.54	0.42
36:BA:2861:G:C2'	36:BA:2862:G:H5'	2.49	0.42
1:AA:686:U:C2'	1:AA:687:A:H8	2.32	0.42
6:CF:62:TRP:CE2	18:CR:35:ARG:NH2	2.87	0.42
18:AR:37:VAL:O	18:AR:41:LYS:N	2.32	0.42
1:CA:220:G:H2'	1:CA:220:G:N3	2.34	0.42
39:DD:167:GLY:O	39:DD:173:VAL:HG23	2.20	0.42
36:BA:416:C:O2'	36:BA:417:C:H5'	2.19	0.42
9:AI:80:GLY:C	9:AI:82:ALA:N	2.73	0.42
26:B0:30:VAL:HA	26:B0:66:VAL:N	2.34	0.42
36:BA:654(S):G:H2'	36:BA:654(T):C:O4'	2.20	0.42
17:CQ:83:ASP:O	17:CQ:86:GLU:HB2	2.20	0.42
36:DA:1975:G:C2	36:DA:1976:U:C2	3.08	0.42
54:BV:36:PRO:HA	54:BV:56:SER:HB2	1.99	0.42
36:BA:1907:G:H2'	36:BA:1908:C:H6	1.83	0.42
7:AG:94:ARG:O	7:AG:97:GLN:HB3	2.19	0.42
36:DA:1625:C:H2'	36:DA:1626:G:O4'	2.19	0.42
43:DH:56:SER:HB2	43:DH:58:GLU:HG3	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1150:C:H2'	36:DA:1151:G:O4'	2.19	0.42
11:CK:33:THR:HG21	11:CK:37:GLY:O	2.19	0.42
36:DA:2851:A:H2'	36:DA:2852:G:H5'	2.00	0.42
45:DK:20:UNK:HA	45:DK:24:UNK:CB	2.49	0.42
36:DA:1017:G:H2'	36:DA:1017:G:N3	2.35	0.42
8:AH:136:GLU:HG3	8:AH:136:GLU:O	2.18	0.42
55:BW:112:GLY:O	55:BW:113:LYS:O	2.37	0.42
32:B6:11:LEU:HG	32:B6:51:GLU:HG2	2.00	0.42
36:BA:2359:C:C4	36:BA:2360:A:C5	3.07	0.42
36:BA:2331:G:C2	36:BA:2385:C:C4	3.07	0.42
36:BA:564:C:C4	36:BA:565:C:C4	3.07	0.42
40:DE:83:ASP:O	40:DE:84:PHE:CB	2.66	0.42
50:DR:3:HIS:O	50:DR:4:LEU:C	2.58	0.42
50:DR:52:ILE:O	50:DR:55:ALA:N	2.52	0.42
32:D6:11:LEU:HD22	32:D6:12:GLU:N	2.31	0.42
34:D8:6:THR:CG2	34:D8:63:PRO:HD3	2.49	0.42
28:D2:21:LEU:HD23	28:D2:21:LEU:O	2.18	0.42
36:DA:71:A:C5	36:DA:73:A:N1	2.88	0.42
24:AY:30:C:H42	24:AY:40:G:H1	1.67	0.42
41:DF:182:ASN:OD1	41:DF:185:ASP:HB2	2.19	0.42
41:DF:110:LEU:HD12	41:DF:206:ILE:CD1	2.49	0.42
41:DF:28:ILE:HG12	41:DF:28:ILE:O	2.19	0.42
41:DF:37:VAL:HG22	41:DF:183:VAL:CG2	2.46	0.42
38:DC:76:ALA:HA	38:DC:114:VAL:CG2	2.49	0.42
1:AA:533:A:O2'	1:AA:535:A:OP2	2.34	0.42
1:AA:961:U:O2'	1:AA:962:C:C5'	2.68	0.42
1:AA:993:G:N1	1:AA:1046:A:C4	2.87	0.42
4:AD:59:ARG:CA	4:AD:59:ARG:HE	2.33	0.42
28:B2:21:LEU:HD13	28:B2:64:LEU:CB	2.49	0.42
41:BF:159:GLY:C	41:BF:164:ARG:HH21	2.22	0.42
40:BE:82:ARG:HA	40:BE:82:ARG:HD2	1.76	0.42
42:BG:61:ALA:O	42:BG:65:GLY:N	2.52	0.42
36:DA:2732:G:C3'	36:DA:2733:A:H5'	2.49	0.42
36:DA:813:U:H3	36:DA:1194:A:H61	1.68	0.42
2:AB:219:VAL:O	2:AB:223:ILE:HG13	2.20	0.42
8:CH:33:GLU:O	8:CH:34:GLU:C	2.57	0.42
1:AA:266:G:O2'	1:AA:267:C:OP2	2.34	0.42
1:CA:544:G:H5''	4:CD:62:GLN:OE1	2.20	0.42
4:CD:16:GLY:HA2	4:CD:33:MET:HE1	2.01	0.42
5:AE:132:ALA:O	5:AE:135:THR:HB	2.18	0.42
2:CB:59:GLU:HB2	2:CB:221:LEU:HD11	2.00	0.42
36:DA:321:G:N3	41:DF:165:ARG:HD3	2.34	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:739:C:HO2'	1:CA:740:U:H5'	1.84	0.42
48:BP:78:PRO:CB	48:BP:111:ARG:HH21	2.30	0.42
48:BP:121:LYS:O	48:BP:123:LEU:N	2.40	0.42
48:BP:124:LYS:HD3	48:BP:143:GLY:HA3	2.01	0.42
48:BP:147:LEU:O	48:BP:148:LEU:HB2	2.20	0.42
36:DA:1474:C:H5'	36:DA:1475:G:P	2.60	0.42
13:CM:77:ASN:O	13:CM:81:LEU:HD23	2.20	0.42
13:AM:107:ALA:O	13:AM:109:THR:N	2.52	0.42
25:CZ:24:LYS:CE	25:CZ:84:GLY:HA3	2.49	0.42
36:DA:1676:A:H2'	36:DA:1677:A:O4'	2.20	0.42
36:DA:1680:U:H2'	36:DA:1681:G:C8	2.55	0.42
47:DO:104:ARG:HH11	47:DO:104:ARG:HB2	1.82	0.42
36:DA:1484:G:C3'	36:DA:1485:G:C5'	2.94	0.42
36:DA:1504:C:O2'	36:DA:1505:C:H5'	2.18	0.42
57:DY:67:LEU:HD23	57:DY:68:HIS:N	2.35	0.42
57:DY:76:CYS:O	57:DY:78:ALA:N	2.52	0.42
29:D3:15:TYR:HB3	29:D3:16:PRO:CD	2.49	0.42
7:CG:71:PRO:HB3	7:CG:138:LYS:HG3	2.01	0.42
7:CG:31:MET:SD	7:CG:34:GLY:HA2	2.59	0.42
22:AV:18:G:C4	22:AV:58:A:C2	3.08	0.42
1:AA:1398:A:N6	5:AE:21:ALA:HA	2.34	0.42
4:AD:121:VAL:O	4:AD:134:ASP:CB	2.68	0.42
51:DS:63:THR:O	51:DS:65:VAL:N	2.52	0.42
57:BY:15:VAL:CG1	57:BY:20:TYR:O	2.68	0.42
42:BG:129:GLY:HA3	42:BG:163:ALA:O	2.20	0.42
46:BN:132:ALA:O	46:BN:133:GLN:CB	2.65	0.42
1:CA:1237:C:O4'	1:CA:1334:G:N2	2.52	0.42
36:BA:491:G:H2'	36:BA:492:A:C8	2.54	0.42
36:DA:1829:A:N6	36:DA:1977:A:N6	2.68	0.42
31:B5:43:HIS:HA	36:BA:2884:U:C5	2.54	0.42
36:BA:2123:G:O4'	38:BC:172:HIS:HB2	2.19	0.42
3:CC:141:VAL:O	3:CC:144:SER:N	2.52	0.42
25:AZ:215:ARG:O	25:AZ:216:ASP:C	2.57	0.42
25:AZ:300:ARG:HH11	25:AZ:300:ARG:HG2	1.85	0.42
36:BA:730:C:O2'	36:BA:731:C:H5'	2.19	0.42
46:BN:120:LEU:C	46:BN:120:LEU:HD13	2.40	0.42
36:BA:83:G:O2'	36:BA:102:G:N2	2.51	0.42
36:DA:267:C:H2'	36:DA:268:C:H6	1.83	0.42
36:BA:1494:A:HO2'	36:BA:1496:A:H2	1.68	0.42
36:DA:460:A:H1'	36:DA:470:A:N6	2.34	0.42
36:DA:2308:G:C2	36:DA:2309:A:C6	3.07	0.42
42:DG:61:ALA:O	42:DG:62:LEU:C	2.57	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BB:7:G:H3'	37:BB:8:U:C5'	2.32	0.42
20:AT:14:LYS:HA	20:AT:17:ARG:HH21	1.84	0.42
1:CA:977:A:O2'	1:CA:978:A:C5'	2.67	0.42
47:BO:35:VAL:CG1	47:BO:103:ALA:HB3	2.34	0.42
7:AG:42:ILE:C	7:AG:44:TYR:N	2.72	0.42
49:BQ:34:LEU:HA	49:BQ:130:LYS:O	2.20	0.42
1:AA:880:C:P	12:AL:12:ARG:HH11	2.42	0.42
2:CB:111:ARG:HG2	2:CB:111:ARG:NH1	2.35	0.42
1:AA:325:A:N6	1:AA:326:G:C2	2.88	0.42
1:CA:1145:C:H1'	1:CA:1146:A:N7	2.33	0.42
27:B1:24:ALA:C	27:B1:26:ARG:N	2.72	0.42
36:BA:2072:G:N2	36:BA:2073:C:C2	2.88	0.42
1:CA:673:G:N2	1:CA:674:G:C2	2.88	0.42
1:CA:713:G:O2'	1:CA:714:G:H5'	2.20	0.42
10:AJ:38:ILE:HD11	10:AJ:71:LEU:CG	2.49	0.42
36:DA:118:A:H5'	36:DA:119:A:H8	1.85	0.42
36:DA:406:G:C6	36:DA:407:G:C6	3.07	0.42
4:AD:60:GLU:HG2	4:AD:202:LEU:HB2	1.99	0.42
36:BA:237:C:O2'	36:BA:238:C:H5'	2.20	0.42
1:AA:182:U:OP2	1:AA:183:G:OP2	2.37	0.42
15:AO:55:GLY:O	15:AO:56:LEU:C	2.58	0.42
54:DV:29:PRO:CA	54:DV:61:VAL:CG2	2.90	0.42
36:DA:2133:G:C1'	36:DA:2157:G:H22	2.33	0.42
1:CA:607:A:H2'	1:CA:608:A:H8	1.85	0.42
36:BA:2778:A:O2'	36:BA:2780:G:O2'	2.36	0.42
54:BV:31:ALA:O	54:BV:61:VAL:HG13	2.19	0.42
36:BA:1346:G:H2'	36:BA:1347:G:C8	2.54	0.42
36:DA:761:A:H8	36:DA:761:A:P	2.43	0.42
36:BA:635:C:H2'	36:BA:636:G:H8	1.83	0.42
24:CY:75:C:H5	25:CZ:231:ILE:HA	1.75	0.42
39:DD:72:LYS:HB3	39:DD:75:ILE:HB	2.02	0.42
3:AC:92:ALA:CA	3:AC:99:VAL:HG11	2.50	0.42
36:BA:55:G:H2'	36:BA:55:G:N3	2.33	0.42
18:AR:53:ARG:CG	18:AR:63:GLN:HB2	2.50	0.42
5:CE:64:ARG:N	5:CE:66:MET:CE	2.83	0.42
4:CD:135:LEU:O	4:CD:137:SER:N	2.52	0.42
13:AM:94:ARG:HD2	13:AM:94:ARG:N	2.34	0.42
12:AL:62:SER:C	12:AL:64:TYR:N	2.73	0.42
36:BA:2053:G:C2	36:BA:2054:A:C1'	3.00	0.42
12:AL:93:LEU:O	12:AL:94:PRO:O	2.38	0.42
36:BA:2669:G:C2	36:BA:2670:A:C5	3.08	0.42
49:BQ:111:GLU:OE1	49:BQ:133:ARG:NH2	2.53	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BD:215:LEU:HB2	39:BD:217:ARG:HG3	2.02	0.42
1:AA:127:G:H2'	1:AA:128:G:H8	1.84	0.42
36:DA:548:A:H2'	36:DA:549:G:C5'	2.49	0.42
6:CF:14:LEU:HD13	6:CF:15:ASP:OD1	2.20	0.42
1:AA:707:C:O2'	1:AA:708:C:C5'	2.67	0.42
36:DA:816:C:H2'	36:DA:817:C:H6	1.84	0.42
36:BA:1145:C:H2'	36:BA:1146:C:C6	2.54	0.42
37:DB:98:G:C4	37:DB:99:G:C8	3.07	0.42
36:DA:2543:G:H2'	36:DA:2544:G:C8	2.55	0.42
36:BA:402:A:H2'	36:BA:403:U:H5'	2.02	0.42
49:DQ:79:LEU:HD23	49:DQ:80:GLU:HG3	2.01	0.42
36:DA:2319:G:O6	51:DS:11:LYS:HD3	2.20	0.42
13:AM:115:LYS:O	13:AM:116:THR:O	2.38	0.42
36:BA:2565:A:H2'	36:BA:2566:A:O4'	2.19	0.42
11:CK:41:THR:HG21	11:CK:72:ALA:CA	2.47	0.42
46:BN:65:LYS:HB3	46:BN:65:LYS:HZ3	1.83	0.42
49:DQ:135:ASP:HB3	58:DZ:49:ARG:HH11	1.85	0.42
36:BA:240:G:O2'	36:BA:257:A:N6	2.53	0.42
7:AG:9:VAL:HG22	7:AG:94:ARG:HH11	1.84	0.42
7:AG:97:GLN:O	7:AG:98:SER:C	2.58	0.42
29:D3:9:VAL:HG12	29:D3:32:GLN:NE2	2.34	0.42
20:AT:93:GLU:CD	20:AT:93:GLU:C	2.79	0.42
36:DA:1834:U:H5''	36:DA:1835:G:O5'	2.19	0.42
1:AA:428:G:O2'	1:AA:429:U:P	2.77	0.42
1:CA:429:U:H4'	1:CA:430:A:O5'	2.18	0.42
7:CG:150:ALA:O	7:CG:153:HIS:HE1	2.01	0.42
25:CZ:350:THR:O	25:CZ:375:ILE:HG12	2.19	0.42
44:BJ:23:UNK:CB	44:BJ:92:UNK:CB	2.98	0.42
8:CH:70:GLN:O	8:CH:71:GLY:O	2.37	0.42
25:AZ:13:ASN:HA	25:AZ:78:SER:HB2	2.00	0.42
9:CI:86:VAL:O	9:CI:90:PRO:HA	2.20	0.42
7:CG:87:VAL:HA	7:CG:88:PRO:HD3	1.90	0.42
36:BA:27:G:H22	36:BA:512:G:H2'	1.77	0.42
48:BP:46:LYS:HB3	48:BP:47:ASP:H	1.72	0.42
36:DA:1266:G:N2	36:DA:2012:G:H2'	2.35	0.42
31:D5:4:HIS:O	36:DA:2056:G:C2	2.72	0.42
39:DD:147:LEU:HD12	39:DD:147:LEU:HA	1.68	0.42
57:BY:63:LYS:HG2	57:BY:64:GLU:N	2.33	0.42
32:D6:20:ASN:C	32:D6:21:TYR:CD1	2.92	0.42
32:D6:42:TRP:CE2	36:DA:2348:U:O2'	2.72	0.42
36:DA:2332:U:H4'	36:DA:2336:A:H62	1.85	0.42
36:DA:250:G:OP1	36:DA:2394:C:H4'	2.19	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DP:98:GLU:CA	48:DP:101:VAL:HG13	2.50	0.42
48:DP:105:LEU:O	48:DP:106:LEU:CB	2.58	0.42
48:DP:146:VAL:CG2	48:DP:147:LEU:N	2.67	0.42
36:BA:1851:U:O2'	36:BA:1852:C:H5'	2.19	0.42
36:BA:1889:A:N1	36:BA:2234:G:H1'	2.35	0.42
12:AL:17:LYS:CE	12:AL:18:VAL:HG22	2.49	0.42
36:DA:654:A:H4'	36:DA:654(A):G:C4'	2.50	0.42
56:BX:13:LEU:O	56:BX:14:SER:HB3	2.20	0.42
36:DA:2468:G:H2'	36:DA:2476:A:N7	2.34	0.42
36:DA:2540:C:H2'	36:DA:2541:A:O4'	2.19	0.42
36:DA:2661:G:H2'	36:DA:2662:A:C8	2.54	0.42
22:CV:56:C:N3	42:DG:83:ARG:HD3	2.34	0.42
1:AA:961:U:H5'	1:AA:984:C:H1'	2.02	0.42
35:B9:22:ARG:NH1	36:BA:2741:A:OP1	2.53	0.42
28:B2:48:HIS:C	28:B2:50:ILE:H	2.23	0.42
28:B2:50:ILE:HG21	36:BA:61:G:H5'	2.02	0.42
36:BA:321:G:N3	41:BF:165:ARG:HD3	2.34	0.42
36:BA:2454:G:O2'	36:BA:2455:G:C5'	2.66	0.42
50:BR:66:VAL:C	50:BR:68:ARG:N	2.71	0.42
13:AM:19:LEU:H	13:AM:19:LEU:CD2	2.32	0.42
30:B4:30:GLU:C	30:B4:31:ILE:HD12	2.40	0.42
42:BG:58:GLN:HE22	42:BG:62:LEU:CD1	2.29	0.42
36:DA:531:C:O2'	36:DA:563:G:H5''	2.19	0.42
53:DU:17:ILE:O	53:DU:18:LEU:C	2.58	0.42
54:DV:22:VAL:O	54:DV:23:GLU:HB2	2.20	0.42
54:DV:58:VAL:HG21	54:DV:98:GLU:HG2	2.02	0.42
1:AA:59:A:H3'	1:AA:331:G:H22	1.83	0.42
53:BU:109:LEU:HA	53:BU:112:ARG:HB2	2.01	0.42
1:CA:1054:C:OP2	1:CA:1197:G:OP2	2.37	0.42
1:CA:532:A:H2	1:CA:1206:G:N2	2.15	0.42
1:CA:974:A:C8	14:CN:31:ARG:HD2	2.54	0.42
51:BS:32:LEU:HG	51:BS:32:LEU:H	1.60	0.42
5:AE:139:LEU:HA	5:AE:142:LEU:HG	2.02	0.42
8:AH:6:ILE:HG22	8:AH:7:ALA:N	2.35	0.42
2:CB:219:VAL:HA	2:CB:222:ILE:CG1	2.50	0.42
1:CA:836:G:C5	1:CA:851:G:C6	3.08	0.42
1:CA:1231:G:C5	1:CA:1232:U:C5	3.08	0.42
1:AA:1300:G:O2'	1:AA:1301:U:OP2	2.35	0.42
5:AE:101:ILE:O	5:AE:120:THR:CG2	2.66	0.42
5:AE:34:VAL:CG1	5:AE:62:ALA:HB1	2.50	0.42
25:CZ:155:ARG:HG2	25:CZ:155:ARG:NH1	2.35	0.42
36:BA:1759:A:C8	36:BA:2696:U:O2	2.72	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2724:C:H2'	36:BA:2725:A:H8	1.81	0.42
52:BT:28:VAL:O	52:BT:29:ARG:HB2	2.19	0.42
52:DT:91:ARG:HA	52:DT:117:ASP:H	1.85	0.42
52:DT:57:PHE:C	52:DT:57:PHE:CD2	2.90	0.42
49:BQ:140:ALA:CA	58:BZ:99:TYR:CD1	3.02	0.42
7:AG:36:LYS:HA	7:AG:39:ALA:CB	2.46	0.42
26:B0:12:ASN:HA	26:B0:14:ARG:NH1	2.34	0.42
1:AA:967:C:H2'	1:AA:968:A:N7	2.34	0.42
57:BY:76:CYS:O	57:BY:78:ALA:N	2.53	0.42
42:BG:16:ARG:HD2	42:BG:31:VAL:HG21	2.01	0.42
42:BG:171:ALA:O	42:BG:172:LEU:C	2.58	0.42
31:D5:40:LYS:HZ1	31:D5:46:CYS:N	2.18	0.42
36:DA:2100:G:N3	36:DA:2100:G:H2'	2.35	0.42
36:DA:2189:U:C3'	36:DA:2190:G:H4'	2.50	0.42
1:AA:1531:A:H8	1:AA:1531:A:C5'	2.32	0.42
1:AA:917:G:C2	1:AA:918:A:C4	3.07	0.42
1:AA:864:A:C2	1:AA:917:G:N3	2.85	0.42
36:DA:2589:A:C2	36:DA:2606:C:N3	2.88	0.42
4:CD:170:VAL:CG1	4:CD:174:LEU:HB2	2.50	0.42
1:CA:1014:A:C2	1:CA:1219:U:H1'	2.54	0.42
3:AC:112:SER:HA	3:AC:183:ASP:OD1	2.19	0.42
3:AC:141:VAL:O	3:AC:144:SER:N	2.53	0.42
3:AC:186:PHE:CD1	3:AC:198:VAL:O	2.73	0.42
3:AC:70:VAL:O	3:AC:106:VAL:CG2	2.63	0.42
37:DB:15:A:H3'	37:DB:16:G:C5'	2.50	0.42
58:DZ:45:ASP:O	58:DZ:46:LYS:C	2.57	0.42
36:BA:18:C:H2'	36:BA:19:C:C6	2.55	0.42
1:AA:1003:G:N2	1:AA:1038:C:N3	2.68	0.42
54:BV:51:VAL:HG12	54:BV:52:VAL:N	2.33	0.42
36:BA:1394:U:C4	36:BA:1395:A:C5	3.08	0.42
36:DA:1227:G:O2'	36:DA:1228:G:H5'	2.19	0.42
36:BA:2207:G:H5''	36:BA:2207:G:N3	2.35	0.42
42:BG:150:ASP:OD2	42:BG:153:ARG:NH1	2.48	0.42
42:BG:44:GLY:O	42:BG:47:LYS:HD2	2.18	0.42
42:DG:44:GLY:O	42:DG:47:LYS:CE	2.68	0.42
3:CC:25:GLY:O	3:CC:26:LYS:C	2.57	0.42
10:CJ:43:ARG:HH11	10:CJ:43:ARG:HG3	1.85	0.42
7:AG:62:PHE:HD1	7:AG:124:LEU:HD11	1.85	0.42
40:DE:178:GLU:CG	40:DE:179:GLU:H	2.33	0.42
40:DE:78:LEU:HD12	40:DE:78:LEU:C	2.39	0.42
36:BA:1092:C:N4	36:BA:1093:G:C2	2.87	0.42
51:BS:106:ARG:O	51:BS:107:GLU:HB3	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:79:GLU:H	5:CE:93:PRO:HD3	1.84	0.42
22:CV:17:C:H3'	22:CV:18:G:C5'	2.49	0.42
2:AB:25:ASN:HA	2:AB:26:PRO:HD2	1.90	0.42
1:AA:328:C:O2	1:AA:328:C:C2'	2.67	0.42
36:BA:530:G:C6	36:BA:2022:U:H5''	2.54	0.42
15:AO:76:GLU:C	15:AO:78:TYR:H	2.22	0.42
1:CA:1281:U:H3'	1:CA:1282:C:H6	1.82	0.42
49:DQ:42:ILE:O	49:DQ:94:VAL:HG12	2.19	0.42
16:CP:52:ASP:O	16:CP:53:VAL:C	2.58	0.42
1:CA:438:G:O2'	1:CA:494:U:O4	2.35	0.42
1:CA:1503:A:C4	23:CX:16:A:C6	3.08	0.42
4:CD:145:GLU:HG3	4:CD:184:LYS:HG2	2.02	0.42
2:CB:76:GLN:O	2:CB:77:ALA:CB	2.67	0.42
36:DA:25:U:H2'	36:DA:26:G:C8	2.55	0.42
49:DQ:52:VAL:C	49:DQ:54:MET:N	2.71	0.42
1:CA:54:C:O2'	1:CA:55:A:O5'	2.34	0.42
36:DA:270:A:N1	36:DA:366:C:O2'	2.47	0.42
29:D3:2:PRO:O	29:D3:3:ARG:C	2.57	0.42
37:DB:6:C:O2	37:DB:6:C:H2'	2.20	0.42
37:DB:115:G:H4'	51:DS:47:THR:HB	2.02	0.42
14:AN:47:LEU:O	14:AN:50:LYS:N	2.52	0.42
1:AA:447:G:C2'	1:AA:485:G:H22	2.28	0.42
31:D5:43:HIS:HA	36:DA:2884:U:C5	2.54	0.42
22:CW:66:U:H2'	22:CW:67:C:H6	1.83	0.42
22:CW:68:C:H6	22:CW:68:C:O5'	2.03	0.42
12:CL:89:ARG:HH11	12:CL:91:LYS:HD3	1.81	0.42
47:BO:25:LEU:HD11	47:BO:40:VAL:CG2	2.50	0.42
1:CA:1134:G:N2	1:CA:1142:G:C6	2.87	0.42
11:CK:108:ILE:HB	18:CR:87:ARG:HA	2.01	0.42
4:CD:121:VAL:O	4:CD:134:ASP:CB	2.68	0.42
1:AA:734:G:H2'	1:AA:735:C:H6	1.82	0.42
1:AA:522:C:H1'	1:AA:536:C:H5'	2.01	0.42
20:AT:81:LYS:C	20:AT:83:ARG:N	2.73	0.42
36:BA:2370:G:H2'	36:BA:2371:G:C8	2.55	0.42
1:CA:773:G:N1	1:CA:774:G:C5	2.88	0.42
36:DA:1383:C:P	36:DA:1573:G:H21	2.42	0.42
42:BG:40:ASN:OD1	42:BG:40:ASN:C	2.56	0.42
1:CA:1148:U:H2'	1:CA:1149:C:H5'	2.01	0.42
36:DA:2791:C:H2'	36:DA:2791:C:O2	2.20	0.42
36:BA:2267:A:H3'	36:BA:2267:A:N3	2.34	0.42
36:DA:757:U:H3'	36:DA:757:U:H6	1.85	0.42
50:BR:56:LYS:C	50:BR:58:GLY:N	2.73	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AK:41:THR:HG21	11:AK:72:ALA:CA	2.50	0.42
1:AA:524:G:H8	1:AA:524:G:OP1	2.02	0.42
1:CA:785:G:C6	1:CA:786:G:N7	2.88	0.42
2:CB:157:ARG:NH1	2:CB:157:ARG:HB2	2.34	0.42
25:AZ:334:PHE:CD1	25:AZ:334:PHE:N	2.87	0.42
3:AC:157:ILE:HD13	3:AC:166:GLU:HB2	2.00	0.42
36:BA:880:G:C2	36:BA:881:G:N7	2.87	0.42
39:BD:11:PRO:C	39:BD:13:ARG:N	2.73	0.42
25:AZ:89:ILE:O	25:AZ:92:MET:N	2.42	0.42
38:BC:1:PRO:O	38:BC:3:HIS:N	2.52	0.42
1:AA:889:A:H1'	1:AA:891:U:C5	2.54	0.42
1:AA:236:G:H2'	1:AA:237:C:O4'	2.19	0.42
12:AL:126:LYS:C	12:AL:128:ALA:N	2.73	0.42
16:CP:74:LEU:HD22	16:CP:79:VAL:HG21	2.02	0.42
36:DA:2770:G:C5'	36:DA:2771:C:OP2	2.67	0.42
36:BA:2439:A:OP1	36:BA:2439:A:H2'	2.20	0.42
36:BA:1786:A:C5	36:BA:1938:A:C2	3.07	0.42
1:CA:1121:U:H2'	1:CA:1122:U:H6	1.84	0.42
8:CH:104:ARG:O	8:CH:105:ARG:C	2.58	0.42
36:DA:2685:G:H5'	47:DO:68:GLU:OE1	2.20	0.42
36:DA:1838:C:C6	36:DA:1898:U:C5	3.07	0.42
36:DA:846:C:H6	36:DA:846:C:O5'	2.03	0.42
1:CA:596:C:O2	1:CA:596:C:H2'	2.19	0.42
1:AA:204:U:O4'	1:AA:204:U:O2	2.37	0.42
36:BA:846:C:H6	36:BA:846:C:O5'	2.01	0.42
36:BA:2320:A:C2'	36:BA:2320:A:N3	2.83	0.42
19:AS:16:LEU:C	19:AS:19:VAL:H	2.23	0.42
19:AS:15:LEU:O	19:AS:19:VAL:N	2.52	0.42
34:D8:41:ILE:HG23	34:D8:42:ARG:N	2.33	0.42
34:D8:6:THR:HG21	34:D8:63:PRO:HD3	2.02	0.42
36:DA:2419:U:H2'	36:DA:2420:C:C6	2.53	0.42
36:DA:833:U:O5'	36:DA:833:U:H6	2.02	0.42
48:DP:95:VAL:HG13	48:DP:123:LEU:HD12	2.01	0.42
25:AZ:140:MET:O	25:AZ:141:VAL:O	2.38	0.42
25:AZ:199:ILE:O	25:AZ:199:ILE:HG22	2.20	0.42
35:D9:31:LYS:O	35:D9:32:HIS:HD2	2.02	0.42
36:BA:769:G:HO2'	36:BA:770:G:H5'	1.83	0.42
36:DA:2082:A:N1	36:DA:2239:G:C4	2.88	0.42
36:DA:209:C:H4'	36:DA:681:G:H4'	2.02	0.42
38:BC:91:ALA:HB3	38:BC:94:VAL:HG22	2.00	0.42
41:BF:116:ASP:O	41:BF:120:GLU:OE2	2.38	0.42
41:BF:122:LYS:CB	41:BF:191:ARG:HG3	2.50	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1055:A:N6	1:AA:1206:G:C6	2.88	0.42
1:AA:532:A:H3'	1:AA:533:A:H5'	2.01	0.42
1:AA:511:C:N4	1:AA:541:G:C2	2.87	0.42
4:AD:52:SER:C	4:AD:54:TYR:N	2.71	0.42
35:B9:7:VAL:HG13	35:B9:34:GLN:HG2	1.99	0.42
36:BA:1654:A:H2	40:BE:113:PHE:CE2	2.37	0.42
36:BA:2839:G:C4	36:BA:2840:C:C5	3.08	0.42
42:BG:109:VAL:C	42:BG:111:LEU:H	2.22	0.42
36:DA:2018:G:H21	53:DU:34:LYS:NZ	2.18	0.42
36:DA:448:U:H1'	41:DF:84:VAL:HG13	2.02	0.42
36:DA:28:A:C8	36:DA:513:A:C5	3.08	0.42
46:DN:101:HIS:O	46:DN:102:ALA:C	2.57	0.42
53:DU:66:ASN:C	53:DU:66:ASN:HD22	2.23	0.42
53:DU:92:ARG:C	53:DU:94:ASN:N	2.71	0.42
54:DV:22:VAL:HG21	54:DV:94:LEU:HG	2.02	0.42
1:AA:316:G:N1	1:AA:338:A:C6	2.88	0.42
1:AA:392:G:C4	1:AA:393:A:C8	3.07	0.42
16:AP:28:ARG:C	16:AP:30:GLY:H	2.22	0.42
1:CA:503:C:C6	1:CA:504:C:H5	2.37	0.42
2:CB:224:GLN:C	2:CB:226:ARG:N	2.73	0.42
38:DC:192:PHE:O	38:DC:195:ALA:N	2.52	0.42
15:CO:58:MET:O	15:CO:62:GLN:HB2	2.19	0.42
36:BA:628:G:C2'	36:BA:629:G:C5'	2.95	0.42
1:CA:1231:G:H2'	1:CA:1232:U:C6	2.54	0.42
1:CA:952:U:H2'	1:CA:953:G:H8	1.85	0.42
1:CA:956:U:C2'	1:CA:957:U:H5'	2.50	0.42
13:CM:109:THR:HG22	13:CM:110:ARG:N	2.34	0.42
1:AA:1106:G:C2'	1:AA:1107:C:H5'	2.50	0.42
36:BA:2682:U:C1'	40:BE:12:THR:HA	2.50	0.42
52:BT:12:SER:O	52:BT:13:ARG:NH2	2.53	0.42
52:BT:91:ARG:O	52:BT:117:ASP:CB	2.67	0.42
40:BE:65:GLY:O	40:BE:66:HIS:C	2.58	0.42
36:DA:1663:C:O2'	36:DA:1664:A:H8	2.02	0.42
36:DA:1670:C:C2'	36:DA:1671:U:H5'	2.50	0.42
52:DT:64:ARG:HH11	52:DT:64:ARG:HG2	1.85	0.42
58:BZ:94:GLU:O	58:BZ:96:VAL:N	2.52	0.42
36:DA:337:C:C3'	36:DA:338:G:H5''	2.49	0.42
7:AG:69:VAL:N	7:AG:138:LYS:HZ2	2.18	0.42
7:AG:31:MET:SD	7:AG:34:GLY:HA2	2.60	0.42
6:AF:93:SER:C	6:AF:94:GLN:HG3	2.39	0.42
58:DZ:127:LYS:HG3	58:DZ:162:GLU:HG3	2.02	0.42
1:CA:1370:G:C2	1:CA:1371:G:N7	2.88	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:CJ:49:VAL:CG2	14:CN:41:ARG:CB	2.92	0.42
10:CJ:50:ILE:CD1	14:CN:41:ARG:HD2	2.50	0.42
22:AV:68:C:H2'	22:AV:69:G:C4'	2.50	0.42
1:AA:1519:A:H3'	1:AA:1520:G:H5'	2.02	0.42
36:BA:1474:C:H5'	36:BA:1475:G:OP1	2.20	0.42
4:AD:103:ASN:O	4:AD:104:VAL:C	2.58	0.42
42:BG:32:PRO:CB	42:BG:162:THR:HB	2.50	0.42
1:CA:1423:G:C5	1:CA:1424:C:C5	3.08	0.42
36:BA:491:G:H2'	36:BA:492:A:H8	1.84	0.42
36:DA:729:G:HO2'	36:DA:763:G:H4'	1.82	0.42
55:DW:71:VAL:C	55:DW:73:ALA:N	2.73	0.42
36:BA:2110:G:O2'	36:BA:2111:C:H5'	2.20	0.42
3:CC:103:VAL:CG1	3:CC:104:GLN:N	2.83	0.42
3:CC:122:GLU:C	3:CC:124:ILE:N	2.72	0.42
46:BN:125:GLY:HA3	46:BN:126:PRO:C	2.40	0.42
36:DA:1464:C:H2'	36:DA:1465:G:H8	1.85	0.42
37:DB:78:A:C5	37:DB:100:A:N7	2.88	0.42
58:DZ:28:MET:O	58:DZ:29:TYR:CB	2.66	0.42
1:CA:1460:A:C6	1:CA:1461:G:C4	3.07	0.42
53:BU:74:LEU:HD12	53:BU:74:LEU:C	2.40	0.42
36:BA:1316:U:H5'	36:BA:1392:A:H1'	2.01	0.42
39:BD:102:LYS:C	39:BD:103:ARG:HG2	2.39	0.42
36:BA:596:G:C6	36:BA:597:U:C4	3.08	0.42
36:DA:425:G:C4	36:DA:426:C:C5	3.08	0.42
13:CM:57:ARG:C	13:CM:59:TYR:H	2.23	0.42
33:D7:24:THR:HG23	33:D7:27:GLY:HA3	2.02	0.42
42:DG:128:ARG:O	42:DG:129:GLY:O	2.38	0.42
36:DA:2305:A:H1'	42:DG:135:LEU:O	2.20	0.42
42:DG:16:ARG:HA	42:DG:16:ARG:HD3	1.78	0.42
1:CA:1278:U:H5'	1:CA:1279:A:C8	2.55	0.42
36:BA:1543:C:C3'	36:BA:1544:A:C5'	2.86	0.42
43:BH:121:ILE:HG23	43:BH:133:VAL:CG1	2.49	0.42
1:AA:1255:G:N2	1:AA:1258:G:H21	2.15	0.42
5:AE:119:LEU:HD23	5:AE:119:LEU:HA	1.84	0.42
21:AU:18:TYR:HB3	21:AU:22:ARG:O	2.19	0.42
55:BW:11:ARG:NE	55:BW:11:ARG:O	2.51	0.42
1:CA:1281:U:H3'	1:CA:1282:C:C5	2.55	0.42
49:DQ:121:ALA:O	49:DQ:125:LEU:HD23	2.20	0.42
1:AA:191:G:O2'	20:AT:102:GLY:O	2.33	0.42
36:BA:2126:A:N6	36:BA:2163:C:H4'	2.35	0.42
1:AA:663:A:C2'	1:AA:664:G:H5'	2.49	0.42
1:CA:438:G:C4'	4:CD:123:HIS:ND1	2.83	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:784:A:O2'	36:DA:785:G:H8	2.03	0.42
36:BA:783:A:C2'	36:BA:784:A:O5'	2.68	0.42
8:AH:120:THR:C	8:AH:122:ARG:N	2.72	0.42
2:AB:74:LYS:HZ2	2:AB:76:GLN:HB2	1.85	0.42
36:DA:2481:G:O2'	36:DA:2482:G:P	2.77	0.42
1:CA:782:A:O3'	1:CA:1515:C:H4'	2.20	0.42
1:CA:1523:G:H2'	1:CA:1524:C:C5	2.55	0.42
1:CA:959:A:H4'	1:CA:985:C:H5'	2.02	0.42
36:DA:882:G:N2	36:DA:894:C:H42	2.17	0.42
1:AA:40:C:H42	1:AA:403:C:N4	2.16	0.42
38:DC:156:ILE:CD1	38:DC:160:ARG:NH2	2.83	0.42
1:CA:55:A:H3'	1:CA:56:U:C6	2.55	0.42
24:CY:54:5MU:H2'	24:CY:55:PSU:C5'	2.40	0.42
54:DV:29:PRO:O	54:DV:61:VAL:HG22	2.20	0.42
36:DA:2131:G:C1'	36:DA:2133:G:H21	2.33	0.42
36:DA:2130:U:O2	36:DA:2159:G:C2	2.73	0.42
33:D7:4:THR:HB	36:DA:788:A:H1'	2.01	0.42
36:BA:2777:G:C8	36:BA:2777:G:H3'	2.55	0.42
36:BA:525:U:O5'	36:BA:556:G:C5'	2.66	0.42
33:D7:19:ARG:NE	36:DA:124:G:H2'	2.35	0.42
36:BA:1388:G:O6	36:BA:1399:C:N4	2.53	0.42
24:CY:75:C:C6	25:CZ:231:ILE:HA	2.53	0.42
39:DD:130:ALA:C	39:DD:131:LEU:HG	2.40	0.42
36:DA:2373:G:O2'	36:DA:2374:C:H5'	2.19	0.42
18:AR:59:SER:O	18:AR:62:GLU:HB2	2.19	0.42
18:AR:63:GLN:OE1	18:AR:63:GLN:HA	2.20	0.42
1:AA:773:G:C2	1:AA:774:G:C8	3.08	0.42
36:DA:1053:C:H2'	36:DA:1054:A:C8	2.54	0.42
36:BA:1128:A:C5	36:BA:2518:A:N6	2.87	0.42
1:CA:100:C:H2'	1:CA:101:A:H8	1.76	0.42
36:DA:898:C:H2'	36:DA:899:A:C5'	2.45	0.42
36:DA:1011:G:OP1	53:DU:75:ASN:HB2	2.19	0.42
12:AL:85:ILE:HA	12:AL:85:ILE:HD12	1.77	0.42
36:BA:2052:G:O4'	40:BE:142:GLY:HA3	2.19	0.42
39:DD:91:ARG:CG	39:DD:91:ARG:NH1	2.83	0.42
36:DA:2826:A:H2'	36:DA:2827:C:H5'	2.00	0.42
37:BB:71:C:O2	37:BB:71:C:H2'	2.18	0.42
29:B3:12:PRO:CG	29:B3:13:ILE:H	2.27	0.42
36:DA:955:C:H2'	36:DA:956:G:C5'	2.48	0.42
56:DX:70:LEU:HD23	56:DX:71:GLY:N	2.35	0.42
37:DB:64:C:O2'	37:DB:65:C:H5'	2.20	0.42
56:BX:74:PRO:O	56:BX:76:ARG:CD	2.68	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:CK:87:THR:HG22	11:CK:88:GLY:N	2.35	0.42
27:D1:52:ARG:O	27:D1:53:VAL:HB	2.20	0.42
36:BA:2405:G:H2'	36:BA:2411:A:H62	1.81	0.42
58:BZ:118:GLN:CD	58:BZ:120:ILE:HD11	2.39	0.42
57:DY:4:LYS:HG3	57:DY:5:MET:N	2.35	0.42
22:AW:9:A:C2	22:AW:44:G:N1	2.87	0.42
36:DA:1939:U:OP1	36:DA:2604:U:O2'	2.37	0.42
38:BC:43:VAL:O	38:BC:43:VAL:HG12	2.20	0.42
36:DA:1911:U:O2'	36:DA:1912:A:H5''	2.19	0.42
18:CR:85:LEU:HD12	18:CR:86:VAL:N	2.35	0.42
36:DA:2404:C:H2'	36:DA:2405:G:H8	1.84	0.42
1:AA:634:C:H2'	1:AA:634:C:O2	2.19	0.42
1:AA:503:C:C6	1:AA:504:C:H5	2.38	0.42
17:AQ:6:LEU:HB3	17:AQ:23:VAL:HG11	2.02	0.42
36:DA:880:G:C2	36:DA:881:G:N7	2.88	0.42
18:AR:64:ARG:O	18:AR:65:ILE:C	2.55	0.42
18:AR:31:LEU:CG	18:AR:65:ILE:HD12	2.49	0.42
17:CQ:7:THR:HA	17:CQ:57:VAL:O	2.20	0.42
1:AA:1130:A:N6	1:AA:1131:G:O6	2.53	0.42
11:CK:102:GLY:C	11:CK:103:LEU:HD22	2.40	0.42
36:DA:2851:A:H2'	36:DA:2852:G:C5'	2.49	0.42
1:CA:431:A:C2'	1:CA:432:A:H5'	2.50	0.42
36:BA:742:G:H2'	36:BA:743:G:C8	2.54	0.42
36:BA:2598:A:H5''	39:BD:235:GLY:HA3	2.02	0.42
36:DA:541:C:H2'	36:DA:542:C:C6	2.55	0.42
6:AF:6:VAL:HG22	6:AF:90:VAL:HG23	2.01	0.42
1:CA:587:G:O2'	1:CA:588:G:H5'	2.20	0.42
27:B1:33:LYS:HG2	27:B1:33:LYS:H	1.53	0.42
35:D9:16:VAL:O	35:D9:16:VAL:HG12	2.20	0.42
32:B6:15:GLU:OE2	32:B6:18:ARG:NH2	2.53	0.42
36:BA:2280:G:C2	36:BA:2281:C:C6	3.08	0.42
32:B6:23:THR:HG21	36:BA:2419:U:H4'	2.02	0.42
36:DA:2850:A:OP2	36:DA:2866:U:O4	2.38	0.42
36:DA:1654:A:P	50:DR:3:HIS:HB2	2.59	0.42
39:DD:267:SER:O	39:DD:268:ARG:HB2	2.19	0.42
36:BA:487:C:O4'	55:BW:56:ALA:HB3	2.19	0.42
34:D8:7:HIS:O	34:D8:9:GLY:N	2.51	0.42
36:BA:2083:G:H2'	36:BA:2084:C:C6	2.55	0.42
24:AY:29:C:N4	24:AY:41:G:H1	2.13	0.42
36:DA:606:U:H5'	36:DA:658:C:H1'	2.02	0.42
24:AY:53:G:N1	24:AY:62:U:C4	2.88	0.42
35:D9:7:VAL:HG13	35:D9:34:GLN:HG2	2.00	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:483:A:H8	36:DA:483:A:O5'	2.03	0.42
39:BD:268:ARG:NH1	39:BD:269:PHE:CE1	2.83	0.42
39:BD:63:ARG:HG2	39:BD:63:ARG:HH11	1.82	0.42
9:AI:94:ALA:O	9:AI:95:LYS:HB3	2.20	0.42
36:BA:604:G:O2'	36:BA:605:C:H5'	2.19	0.42
1:AA:963:G:O2'	1:AA:1199:U:H5''	2.19	0.42
14:AN:8:GLU:C	14:AN:10:ALA:N	2.72	0.42
43:DH:37:VAL:CG2	43:DH:72:ILE:HD11	2.50	0.42
28:B2:50:ILE:N	28:B2:50:ILE:CD1	2.82	0.42
36:BA:320:A:O2'	36:BA:321:G:H3'	2.20	0.42
50:BR:32:GLY:O	50:BR:115:GLU:HA	2.20	0.42
50:BR:63:ARG:NH1	50:BR:80:PHE:CD2	2.88	0.42
55:BW:88:ARG:HD2	55:BW:88:ARG:HA	1.88	0.42
13:AM:51:ALA:O	13:AM:55:ARG:N	2.40	0.42
36:DA:530:G:C6	36:DA:2022:U:H5''	2.55	0.42
36:DA:529:A:H4'	36:DA:530:G:O5'	2.20	0.42
36:DA:539:G:H2'	36:DA:540:C:H6	1.83	0.42
53:DU:17:ILE:N	53:DU:17:ILE:HD12	2.35	0.42
2:AB:223:ILE:O	2:AB:226:ARG:CB	2.67	0.42
1:AA:355:C:N4	1:AA:356:A:H62	2.18	0.42
8:CH:103:VAL:CG1	8:CH:108:GLY:HA3	2.50	0.42
8:CH:85:ARG:CZ	8:CH:87:SER:O	2.68	0.42
4:CD:13:ARG:HB3	4:CD:38:TYR:O	2.20	0.42
4:CD:56:VAL:HG12	4:CD:202:LEU:HD13	2.02	0.42
8:AH:4:ASP:C	8:AH:4:ASP:OD1	2.58	0.42
41:DF:155:LEU:CD1	41:DF:176:LEU:HD22	2.47	0.42
48:BP:96:THR:H	48:BP:99:LEU:CD2	2.32	0.42
36:DA:1403:C:H5''	36:DA:1471:A:O4'	2.20	0.42
36:DA:1517:G:H8	36:DA:1517:G:H5'	1.84	0.42
5:AE:11:ILE:CG2	5:AE:105:VAL:HG22	2.50	0.42
36:BA:1670:C:O2'	36:BA:1671:U:H5'	2.20	0.42
52:BT:121:ILE:C	52:BT:123:GLN:N	2.73	0.42
52:BT:8:LYS:C	52:BT:10:VAL:H	2.24	0.42
36:BA:2847:U:OP1	52:BT:98:LYS:HD3	2.19	0.42
1:CA:346:G:N3	1:CA:346:G:C2'	2.83	0.42
36:DA:1672:C:C4	36:DA:1673:U:C5	3.07	0.42
36:DA:2640:G:O5'	36:DA:2640:G:H8	2.03	0.42
40:DE:167:VAL:CG1	40:DE:170:LEU:HD11	2.29	0.42
40:DE:24:THR:HB	40:DE:184:VAL:HG23	2.02	0.42
52:DT:28:VAL:O	52:DT:29:ARG:HB2	2.19	0.42
52:DT:19:LEU:CD1	52:DT:78:LEU:HD22	2.46	0.42
36:DA:338:G:O2'	36:DA:339:U:H5'	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1368:G:OP1	10:AJ:62:HIS:HE1	2.03	0.42
7:AG:105:VAL:O	7:AG:107:ALA:N	2.53	0.42
7:AG:24:THR:O	7:AG:28:ASN:ND2	2.53	0.42
1:AA:1179:A:H5'	9:AI:102:LEU:HD22	2.01	0.42
58:DZ:165:VAL:CG1	58:DZ:166:SER:H	2.26	0.42
10:CJ:47:PHE:CZ	14:CN:37:PHE:CE2	3.05	0.42
57:BY:67:LEU:HD23	57:BY:68:HIS:N	2.34	0.42
36:DA:2101:G:C6	36:DA:2102:U:C5	3.08	0.42
35:B9:9:ARG:NH2	35:B9:12:ASP:O	2.53	0.42
36:DA:1316:U:H5'	36:DA:1392:A:H1'	2.02	0.42
2:AB:22:LYS:CE	2:AB:40:HIS:HE1	2.33	0.42
31:B5:41:PRO:C	31:B5:44:THR:HG1	2.15	0.42
36:BA:2152:G:C4	36:BA:2153:G:C8	3.08	0.42
3:CC:83:ARG:HG3	3:CC:87:LEU:HD11	2.02	0.42
25:AZ:99:MET:H	25:AZ:241:ARG:HH22	1.67	0.42
19:CS:61:TYR:HD2	19:CS:62:ILE:H	1.67	0.42
1:CA:1001:A:N3	1:CA:1001(A):G:O6	2.52	0.42
20:CT:64:ASP:O	20:CT:67:ALA:N	2.53	0.42
36:DA:1528:A:HO2'	36:DA:1528(A):A:P	2.42	0.42
36:DA:1541:G:C1'	36:DA:1542:A:C4	2.94	0.42
36:DA:1407:C:H3'	36:DA:1408:C:C5	2.54	0.42
36:BA:1772:G:H21	36:BA:1774:C:H5''	1.85	0.42
15:CO:64:ARG:NH1	15:CO:64:ARG:HG3	2.32	0.42
36:DA:723:G:C6	36:DA:724:U:C4	3.08	0.42
16:CP:35:LYS:HE2	16:CP:37:GLY:N	2.35	0.42
1:CA:1217:C:OP1	14:CN:9:LYS:HE3	2.20	0.42
46:BN:27:ALA:O	46:BN:28:THR:C	2.57	0.42
46:BN:33:LEU:CD1	46:BN:33:LEU:N	2.81	0.42
53:BU:57:PHE:O	53:BU:59:ARG:N	2.53	0.42
39:BD:142:VAL:HA	39:BD:194:GLY:N	2.35	0.42
36:DA:1638:C:H5''	36:DA:2710:C:H1'	2.02	0.42
36:BA:265:A:C1'	36:BA:266:G:O4'	2.66	0.42
36:BA:428:A:C2	36:BA:429:A:C4	3.08	0.42
36:DA:1249:U:H2'	36:DA:1250:G:C8	2.55	0.42
42:BG:51:ARG:HH11	42:BG:53:LEU:HD21	1.85	0.42
42:DG:16:ARG:HH21	42:DG:33:ARG:HB3	1.84	0.42
9:AI:99:LEU:CD2	9:AI:99:LEU:N	2.82	0.42
1:AA:166:G:H2'	1:AA:167:G:H8	1.84	0.42
13:AM:66:LEU:C	13:AM:70:LEU:HB3	2.40	0.42
1:CA:586:C:O3'	8:CH:89:PRO:HB2	2.19	0.42
36:DA:2787:C:O2	36:DA:2787:C:C2'	2.67	0.42
1:AA:585:G:O2'	1:AA:879:C:H5''	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1258:G:O2'	1:AA:1259:C:C5'	2.65	0.42
2:AB:171:ALA:HA	2:AB:174:VAL:HB	2.02	0.42
36:BA:1030:G:C6	36:BA:1125:G:N2	2.88	0.42
5:AE:150:ARG:CB	5:AE:150:ARG:NH1	2.72	0.42
1:CA:1139:G:H5'	1:CA:1140:C:OP1	2.20	0.42
1:AA:452:A:C6	1:AA:453:A:C6	3.07	0.42
38:DC:148:ASN:O	38:DC:151:GLU:N	2.51	0.42
8:AH:100:ILE:HG23	8:AH:101:PRO:CD	2.49	0.42
8:AH:97:VAL:CG1	8:AH:98:LYS:N	2.83	0.42
25:AZ:363:MET:HB3	25:AZ:364:PRO:HD2	2.01	0.42
49:DQ:54:MET:O	49:DQ:55:VAL:C	2.58	0.42
36:DA:2197:U:O2'	36:DA:2198:A:H2'	2.19	0.42
36:BA:2133:G:H3'	36:BA:2133:G:C8	2.54	0.42
1:AA:66:G:C2	1:AA:104:G:H1'	2.55	0.42
1:CA:355:C:C4'	1:CA:388:G:HO2'	2.33	0.42
38:DC:6:ARG:NH1	38:DC:34:THR:HG21	2.34	0.42
16:CP:27:LYS:O	16:CP:30:GLY:N	2.43	0.42
20:CT:29:LYS:O	20:CT:33:ILE:HG13	2.20	0.42
36:BA:1601:G:H2'	36:BA:1602:U:H5'	2.01	0.42
1:AA:1311:G:C6	1:AA:1312:G:N7	2.87	0.42
36:DA:1047:G:H21	36:DA:1110:G:H2'	1.78	0.42
36:DA:1754:C:N3	36:DA:2716:U:O2'	2.43	0.42
1:AA:1379:G:H2'	1:AA:1380:U:H6	1.84	0.42
1:AA:932:C:H2'	1:AA:933:G:H8	1.85	0.42
1:CA:1433:A:C5	1:CA:1434:A:C5	3.08	0.42
39:DD:158:ALA:O	39:DD:161:THR:HG23	2.20	0.42
50:DR:110:PRO:C	50:DR:111:LEU:HD12	2.40	0.42
16:CP:50:LYS:O	16:CP:51:VAL:CG2	2.68	0.42
47:BO:8:LEU:O	47:BO:8:LEU:HD22	2.19	0.42
18:AR:78:LEU:HD23	18:AR:78:LEU:HA	1.72	0.42
1:CA:22:G:O2'	1:CA:913:A:N1	2.39	0.42
4:AD:114:ARG:NH1	4:AD:114:ARG:CG	2.83	0.42
2:CB:10:LEU:HD23	2:CB:10:LEU:HA	1.88	0.42
38:BC:106:GLY:O	38:BC:107:TRP:HB3	2.18	0.42
43:DH:130:ARG:CZ	43:DH:130:ARG:CB	2.97	0.42
1:AA:642:A:H2'	1:AA:643:C:H6	1.80	0.42
25:CZ:126:VAL:HG22	63:CZ:502:KIR:H471	2.02	0.42
38:DC:183:GLU:O	38:DC:187:ASP:HB2	2.19	0.42
25:AZ:71:GLU:HB2	25:AZ:75:ARG:O	2.20	0.42
36:BA:476:G:H2'	36:BA:478:A:OP2	2.20	0.42
36:DA:1940:U:C4	36:DA:1964:G:H4'	2.55	0.42
58:BZ:14:LYS:HB2	58:BZ:17:ALA:HB3	2.02	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:194:PRO:O	2:AB:195:ASP:C	2.57	0.42
20:CT:38:LYS:C	20:CT:40:ALA:N	2.73	0.42
36:BA:954:G:O3'	49:BQ:13:GLN:HG2	2.20	0.42
1:AA:1356:G:O2'	1:AA:1357:A:C5'	2.67	0.42
1:AA:242:C:C2'	1:AA:243:A:H5'	2.48	0.42
32:D6:32:ASN:CG	32:D6:33:LYS:N	2.73	0.42
32:D6:33:LYS:HA	32:D6:33:LYS:HE2	2.01	0.42
36:DA:952:G:C4	36:DA:966:G:N2	2.87	0.42
1:AA:582:U:H2'	1:AA:583:A:H8	1.85	0.42
3:AC:167:TRP:O	3:AC:168:ALA:HB2	2.19	0.42
36:DA:2257:U:C4	36:DA:2258:C:N4	2.88	0.42
58:BZ:30:ASN:ND2	58:BZ:32:HIS:HB2	2.35	0.42
36:BA:2770:G:C5'	36:BA:2771:C:OP2	2.67	0.42
7:CG:150:ALA:HB2	11:CK:50:TYR:CE2	2.54	0.42
7:CG:87:VAL:HG21	7:CG:154:TYR:HB2	2.02	0.42
11:CK:12:ARG:HE	11:CK:14:VAL:HG13	1.84	0.42
1:AA:1211:U:H5'	1:AA:1212:U:OP1	2.20	0.42
7:CG:112:PRO:O	7:CG:112:PRO:HG2	2.20	0.42
58:DZ:3:TYR:N	58:DZ:3:TYR:CD1	2.88	0.42
36:DA:1033:U:H5''	36:DA:1034:G:OP1	2.19	0.42
32:B6:19:ARG:CG	32:B6:20:ASN:N	2.69	0.42
34:B8:4:MET:CE	34:B8:61:LEU:CD2	2.97	0.42
36:BA:1253:A:O2'	36:BA:1254:A:H5'	2.20	0.42
36:BA:2292:C:N4	36:BA:2340:G:H1	2.17	0.42
36:BA:2414:G:C2	36:BA:2415:G:N7	2.87	0.42
36:BA:669:G:H5''	36:BA:670:A:OP2	2.19	0.42
48:BP:50:ARG:HG3	48:BP:51:PHE:CD1	2.55	0.42
53:BU:10:ARG:HA	53:BU:13:LYS:CG	2.48	0.42
26:D0:43:THR:HG21	36:DA:2332:U:H5'	2.01	0.42
32:D6:53:LYS:O	32:D6:54:ILE:HG22	2.20	0.42
34:D8:57:ARG:C	34:D8:59:LYS:N	2.73	0.42
36:DA:2414:G:H2'	36:DA:2414:G:N3	2.34	0.42
48:DP:124:LYS:HD3	48:DP:143:GLY:HA3	2.01	0.42
36:DA:226:G:O2'	36:DA:227:A:C8	2.66	0.42
36:DA:2465:C:O2'	36:DA:2466:C:H5'	2.20	0.42
36:DA:271(J):C:C2'	36:DA:271(J):C:O2	2.68	0.42
10:CJ:12:ASP:OD1	10:CJ:15:THR:HG23	2.20	0.42
38:BC:115:ALA:O	38:BC:149:ILE:HD13	2.20	0.42
38:BC:115:ALA:O	38:BC:116:THR:HG23	2.19	0.42
58:DZ:108:PRO:HG2	58:DZ:111:VAL:HG23	2.02	0.42
41:BF:40:GLN:NE2	41:BF:184:TYR:CB	2.83	0.42
28:B2:54:LYS:NZ	36:BA:60:G:H5''	2.35	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:B2:22:GLU:HG2	28:B2:64:LEU:HD21	2.02	0.42
28:B2:68:ARG:HH22	28:B2:72:ALA:CB	2.31	0.42
41:BF:139:PHE:CZ	41:BF:143:ALA:HB2	2.55	0.42
36:BA:2055:C:H2'	36:BA:2504:U:C4'	2.50	0.42
31:B5:6:VAL:H	36:BA:2056:G:H21	1.66	0.42
36:BA:2453:A:C2	36:BA:2504:U:O2	2.73	0.42
53:DU:109:LEU:HA	53:DU:112:ARG:HB2	2.02	0.42
13:AM:56:LEU:HD13	13:AM:57:ARG:N	2.35	0.42
30:B4:31:ILE:O	30:B4:31:ILE:HG22	2.20	0.42
42:BG:91:ARG:O	42:BG:91:ARG:HD2	2.18	0.42
56:DX:11:PRO:HG2	56:DX:13:LEU:HD21	2.01	0.42
27:D1:3:LYS:HD3	36:DA:1364:G:C8	2.55	0.42
1:CA:1065:U:O4	1:CA:1189:C:H2'	2.20	0.42
36:DA:2628:C:H1'	36:DA:2781:A:H2'	2.02	0.42
36:DA:996:A:O4'	53:DU:92:ARG:NE	2.53	0.42
54:DV:21:ARG:HB3	54:DV:91:TYR:CD1	2.55	0.42
1:AA:116:A:O2'	1:AA:117:G:H5'	2.20	0.42
17:AQ:64:PRO:HA	17:AQ:70:ARG:HG3	2.01	0.42
1:CA:1054:C:C2'	1:CA:1055:A:H5''	2.49	0.42
4:CD:19:LEU:HD23	4:CD:67:ILE:HG13	2.02	0.42
2:CB:165:VAL:O	2:CB:187:LEU:O	2.37	0.42
2:CB:57:PHE:CZ	2:CB:199:TYR:HE1	2.38	0.42
2:CB:217:ARG:HA	2:CB:220:ASP:OD2	2.19	0.42
41:DF:168:ARG:CG	41:DF:169:ASN:N	2.83	0.42
1:AA:1237:C:O4'	1:AA:1334:G:N2	2.53	0.42
56:BX:49:VAL:HB	56:BX:50:LYS:H	1.63	0.42
36:BA:2640:G:H8	36:BA:2640:G:O5'	2.03	0.42
40:BE:167:VAL:HG12	40:BE:189:PRO:HD2	2.00	0.42
40:BE:201:THR:OG1	40:BE:202:LYS:N	2.53	0.42
47:BO:104:ARG:HH21	52:BT:33:LYS:HE3	1.84	0.42
52:BT:88:ILE:HG22	52:BT:89:VAL:CG2	2.43	0.42
40:DE:126:PRO:C	40:DE:128:SER:N	2.73	0.42
40:DE:11:MET:CB	40:DE:23:VAL:O	2.67	0.42
52:DT:117:ASP:OD1	52:DT:119:LYS:HB3	2.20	0.42
58:BZ:163:LEU:HG	58:BZ:164:ALA:N	2.35	0.42
58:BZ:3:TYR:CD1	58:BZ:3:TYR:N	2.87	0.42
58:BZ:65:GLN:H	58:BZ:65:GLN:HG3	1.73	0.42
36:DA:329:G:H22	57:DY:19:LYS:CE	2.21	0.42
7:AG:104:LEU:CD2	7:AG:104:LEU:H	2.33	0.42
14:AN:22:THR:HB	14:AN:33:VAL:CG2	2.34	0.42
35:D9:9:ARG:NH2	35:D9:12:ASP:O	2.53	0.42
26:B0:10:THR:CG2	26:B0:11:ARG:N	2.83	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:DZ:150:LEU:CD2	58:DZ:150:LEU:N	2.83	0.42
1:AA:921:U:H2'	1:AA:922:G:O4'	2.19	0.42
36:BA:327:G:C2	36:BA:328:U:C2	3.08	0.42
57:BY:8:LYS:CE	57:BY:72:VAL:HG23	2.50	0.42
46:DN:10:GLU:HG3	46:DN:11:PRO:CD	2.40	0.42
36:DA:1790:C:H2'	36:DA:1791:A:C8	2.55	0.42
41:BF:10:PRO:HD2	41:BF:13:SER:O	2.19	0.42
2:AB:17:PHE:HD1	2:AB:44:LEU:HD21	1.84	0.42
31:B5:57:VAL:O	31:B5:58:LEU:HD12	2.20	0.42
4:CD:138:TYR:CE2	4:CD:139:ARG:O	2.72	0.42
19:CS:43:GLU:O	19:CS:45:VAL:N	2.52	0.42
16:CP:11:SER:HB2	16:CP:14:ASN:HB3	2.02	0.42
36:DA:1098:A:H2'	36:DA:1099:G:O4'	2.20	0.42
36:DA:1389:G:C5'	36:DA:1526:G:OP1	2.68	0.42
36:BA:445:C:O2'	36:BA:446:G:O4'	2.36	0.42
36:BA:705:A:H1'	39:BD:9:TYR:CE1	2.55	0.42
39:BD:242:ARG:HD2	39:BD:242:ARG:N	2.34	0.42
37:DB:102:A:H2'	37:DB:103:G:O4'	2.20	0.42
37:DB:14:U:O2'	37:DB:15:A:OP1	2.35	0.42
37:DB:73:A:C6	37:DB:74:U:C2	3.08	0.42
49:DQ:141:GLN:O	58:DZ:53:ILE:CB	2.67	0.42
58:DZ:27:VAL:O	58:DZ:88:PHE:N	2.51	0.42
36:BA:16:G:O2'	36:BA:17:G:H5'	2.20	0.42
36:BA:539:G:O2'	36:BA:540:C:H5'	2.20	0.42
46:BN:54:VAL:O	46:BN:122:VAL:HG13	2.20	0.42
36:DA:1372:U:O2'	36:DA:1373:A:H5'	2.19	0.42
13:CM:55:ARG:HA	13:CM:58:GLU:CG	2.49	0.42
36:DA:460:A:H3'	36:DA:461:C:C6	2.55	0.42
1:CA:1223:C:H3'	1:CA:1224:G:C5'	2.50	0.42
40:DE:52:LEU:HB3	40:DE:76:ARG:N	2.34	0.42
49:BQ:24:GLY:O	49:BQ:26:TYR:O	2.38	0.42
43:BH:149:ARG:HG2	43:BH:149:ARG:O	2.19	0.42
43:BH:164:TYR:HB3	43:BH:165:ALA:H	1.54	0.42
36:DA:1579:A:H2'	36:DA:1580:A:N9	2.35	0.42
1:CA:1073:U:O2'	2:CB:104:ASN:ND2	2.53	0.42
2:AB:166:ASP:HB3	2:AB:169:LYS:CB	2.44	0.42
2:AB:168:THR:HG23	2:AB:192:SER:HA	2.01	0.42
1:AA:1465:C:H2'	1:AA:1466:C:O4'	2.19	0.42
4:AD:163:GLU:C	4:AD:165:MET:H	2.23	0.42
10:CJ:71:LEU:C	10:CJ:71:LEU:HD12	2.39	0.42
36:BA:805:G:H21	36:BA:829:A:P	2.43	0.42
20:CT:50:GLU:CG	20:CT:100:ILE:HG12	2.42	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:CT:100:ILE:N	20:CT:100:ILE:HD12	2.35	0.42
36:DA:910:A:H2'	36:DA:911:A:C8	2.53	0.42
37:BB:17:C:O2'	37:BB:18:G:H5'	2.19	0.42
39:BD:227:ASN:O	39:BD:228:PRO:C	2.58	0.42
36:DA:2842:G:C6	36:DA:2876:G:N1	2.88	0.42
10:AJ:35:SER:O	10:AJ:36:GLY:C	2.56	0.42
10:AJ:38:ILE:HG13	10:AJ:38:ILE:O	2.19	0.42
49:DQ:52:VAL:HG12	49:DQ:53:ALA:N	2.35	0.42
36:BA:909:A:O2'	36:BA:910:A:H5'	2.19	0.42
36:BA:2768:C:H5''	46:BN:83:LYS:HE3	2.02	0.42
1:CA:137:C:O2	1:CA:137:C:C2'	2.66	0.42
56:BX:60:ARG:HG3	56:BX:75:ASP:CG	2.37	0.42
14:AN:47:LEU:HA	14:AN:47:LEU:HD23	1.80	0.42
1:CA:614:A:O2'	1:CA:615:C:C5'	2.63	0.42
50:DR:83:ILE:CG2	50:DR:87:TYR:HE2	2.32	0.42
7:AG:35:LYS:O	7:AG:37:ASN:N	2.53	0.42
25:AZ:354:GLN:CG	25:AZ:354:GLN:O	2.68	0.42
40:DE:144:ARG:O	40:DE:146:THR:N	2.53	0.42
18:AR:53:ARG:HG3	18:AR:63:GLN:CG	2.50	0.42
18:AR:53:ARG:N	18:AR:63:GLN:NE2	2.68	0.42
36:BA:217:G:H2'	36:BA:218:A:C8	2.54	0.42
36:BA:1065:U:OP2	36:BA:1065:U:H4'	2.20	0.42
36:DA:1492:G:N3	36:DA:1499:C:O2	2.52	0.42
1:CA:933:G:C6	1:CA:1385:G:N1	2.88	0.42
36:BA:2065:C:O2	36:BA:2449:U:N3	2.49	0.42
9:AI:110:GLU:OE2	9:AI:113:LYS:NZ	2.43	0.42
49:DQ:110:THR:OG1	49:DQ:112:GLU:HB3	2.20	0.42
22:AW:76:A:C2	36:BA:2422:A:C6	3.07	0.42
1:CA:1165:C:H42	1:CA:1172:C:N4	2.18	0.42
1:CA:689:C:C2'	1:CA:690:G:H5'	2.49	0.42
36:DA:271(S):G:C2	36:DA:271(T):C:C2	3.07	0.42
36:BA:106:C:O4'	57:BY:2:ARG:HG3	2.20	0.42
36:BA:1750:G:HO2'	36:BA:1751:C:H5'	1.83	0.42
40:DE:142:GLY:C	40:DE:143:ASN:ND2	2.72	0.42
1:AA:520:A:OP2	12:AL:51:ALA:HB1	2.20	0.42
39:DD:227:ASN:O	39:DD:228:PRO:C	2.58	0.42
56:DX:8:ILE:HD11	56:DX:43:VAL:CG2	2.47	0.42
49:DQ:5:ARG:HB2	49:DQ:5:ARG:HE	1.61	0.42
20:CT:81:LYS:C	20:CT:83:ARG:N	2.72	0.42
1:AA:127:G:H2'	1:AA:128:G:C8	2.55	0.42
3:CC:63:ASN:O	3:CC:64:VAL:CG2	2.68	0.42
1:AA:885:G:C2	1:AA:886:G:C8	3.07	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:AZ:185:ASN:HA	25:AZ:186:PRO:HD2	1.93	0.42
26:B0:25:ARG:C	26:B0:26:TYR:CD1	2.93	0.42
43:BH:105:LEU:HD23	43:BH:105:LEU:N	2.32	0.42
9:AI:55:ALA:C	9:AI:57:GLY:N	2.74	0.42
6:AF:10:LEU:O	6:AF:12:PRO:N	2.53	0.42
13:CM:115:LYS:O	13:CM:116:THR:C	2.58	0.42
50:BR:18:LEU:HD22	50:BR:18:LEU:O	2.20	0.42
30:B4:46:GLN:CG	30:B4:47:GLN:H	2.32	0.42
4:CD:159:ARG:O	4:CD:160:GLN:C	2.58	0.42
5:CE:38:GLN:HA	5:CE:38:GLN:OE1	2.20	0.42
36:DA:2585:U:O2	36:DA:2585:U:O4'	2.36	0.42
2:AB:157:ARG:NH1	2:AB:157:ARG:HB2	2.35	0.42
48:BP:71:VAL:HG13	48:BP:72:PRO:CD	2.50	0.42
1:CA:72:C:O2'	1:CA:73:G:H5'	2.20	0.42
1:AA:1260:C:OP1	1:AA:1284:C:H4'	2.20	0.42
36:BA:754:C:H2'	36:BA:755:C:C5	2.54	0.42
1:CA:1360:A:H2'	1:CA:1361:G:O4'	2.20	0.42
36:BA:2567:G:H2'	36:BA:2568:C:H6	1.84	0.42
40:DE:68:ALA:C	40:DE:70:ALA:H	2.22	0.42
34:B8:55:ALA:O	34:B8:56:GLU:C	2.58	0.41
36:BA:1259:G:H2'	36:BA:1260:G:C8	2.53	0.41
36:BA:572:A:H3'	36:BA:573:G:O4'	2.20	0.41
36:BA:672:C:O2'	36:BA:673:C:H5''	2.20	0.41
48:BP:23:PRO:C	48:BP:33:ARG:CZ	2.88	0.41
39:DD:266:SER:O	39:DD:267:SER:O	2.37	0.41
36:BA:486:C:O2'	55:BW:56:ALA:HB1	2.20	0.41
57:BY:56:PRO:O	57:BY:57:GLN:O	2.38	0.41
32:D6:14:THR:O	32:D6:49:HIS:CG	2.73	0.41
36:DA:2259:G:N2	36:DA:2282:G:C2	2.88	0.41
48:DP:101:VAL:HG22	48:DP:102:ARG:N	2.35	0.41
48:DP:59:LEU:CA	48:DP:61:ARG:NE	2.65	0.41
39:BD:264:LYS:O	39:BD:267:SER:OG	2.36	0.41
39:BD:270:ILE:HG13	39:BD:270:ILE:H	1.74	0.41
1:AA:1064:G:H21	1:AA:1190:G:C2'	2.33	0.41
1:AA:1065:U:O5'	1:AA:1190:G:N2	2.52	0.41
58:DZ:109:ALA:CB	58:DZ:144:LEU:O	2.67	0.41
43:BH:40:GLU:O	43:BH:41:MET:CB	2.67	0.41
4:AD:26:CYS:HA	4:AD:31:CYS:HA	2.01	0.41
43:DH:61:HIS:O	43:DH:64:LEU:N	2.49	0.41
36:BA:2530:A:C2'	36:BA:2531:A:H5''	2.49	0.41
28:B2:35:LEU:HD13	28:B2:35:LEU:C	2.40	0.41
36:BA:321:G:OP2	41:BF:135:LYS:HA	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1271:G:N2	36:BA:1617:C:O4'	2.52	0.41
36:BA:1653:G:O2'	50:BR:3:HIS:CB	2.68	0.41
50:BR:3:HIS:HB3	50:BR:4:LEU:H	1.56	0.41
30:B4:14:ILE:N	30:B4:14:ILE:CD1	2.81	0.41
30:B4:33:VAL:HG13	30:B4:34:GLU:N	2.36	0.41
36:DA:2512:C:H6	36:DA:2512:C:O5'	2.02	0.41
46:DN:107:LEU:HB3	46:DN:108:PRO:CD	2.48	0.41
46:DN:47:ALA:C	46:DN:49:GLY:N	2.73	0.41
36:BA:1487:G:C4	36:BA:1488:G:C8	3.08	0.41
1:AA:314:C:H42	1:AA:315:A:N6	2.18	0.41
1:AA:247:G:C6	1:AA:278:G:C2	3.08	0.41
8:AH:4:ASP:OD2	8:AH:85:ARG:HD3	2.19	0.41
38:DC:18:LYS:HE3	38:DC:20:TYR:CD2	2.55	0.41
34:B8:45:GLY:O	34:B8:46:ARG:C	2.59	0.41
36:DA:1475:G:H22	36:DA:1517:G:H1'	1.84	0.41
1:AA:949:A:N7	1:AA:950:U:C5	2.88	0.41
36:BA:2683:C:H42	36:BA:2727:G:H21	1.67	0.41
36:BA:2695:C:H2'	36:BA:2696:U:C6	2.55	0.41
36:BA:2683:C:H42	36:BA:2727:G:N2	2.18	0.41
36:BA:2773:C:H5''	40:BE:164:ARG:CD	2.49	0.41
36:DA:2682:U:H1'	40:DE:12:THR:HA	2.02	0.41
38:BC:21:THR:N	38:BC:24:GLU:HB2	2.35	0.41
58:BZ:39:VAL:HG23	58:BZ:44:PHE:HB2	2.02	0.41
36:DA:296:C:N4	36:DA:343:C:N4	2.67	0.41
57:DY:15:VAL:CG1	57:DY:20:TYR:O	2.68	0.41
1:AA:1285:A:O2'	1:AA:1286:A:OP2	2.35	0.41
1:CA:1285:A:O2'	1:CA:1286:A:OP2	2.36	0.41
9:CI:42:ARG:O	9:CI:45:ALA:HB3	2.19	0.41
9:CI:99:LEU:CD2	9:CI:99:LEU:N	2.83	0.41
22:AV:5:G:H2'	22:AV:6:G:O4'	2.19	0.41
36:BA:861:A:H2	37:BB:79:C:H1'	1.85	0.41
1:AA:922:G:H3'	1:AA:923:A:C8	2.55	0.41
4:AD:138:TYR:CD2	4:AD:139:ARG:N	2.85	0.41
51:DS:89:ARG:CG	51:DS:92:TYR:HB3	2.50	0.41
36:BA:1210:A:N3	36:BA:1212:G:N2	2.68	0.41
5:CE:127:ASN:HA	5:CE:128:PRO:HD3	1.79	0.41
36:BA:491:G:H2'	36:BA:492:A:O4'	2.20	0.41
55:DW:70:TYR:CZ	55:DW:72:LYS:HG2	2.55	0.41
41:BF:11:VAL:C	41:BF:13:SER:N	2.72	0.41
51:BS:49:VAL:CG1	51:BS:50:SER:H	2.02	0.41
3:CC:110:ASN:O	3:CC:141:VAL:HG22	2.19	0.41
3:AC:181:ASN:HD21	3:AC:204:LEU:CD1	2.30	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1093:G:H4'	43:DH:170:ARG:NH1	2.34	0.41
39:BD:244:ARG:HG2	39:BD:245:PRO:CB	2.50	0.41
36:DA:426:C:O2	36:DA:426:C:H2'	2.19	0.41
40:DE:132:HIS:CD2	40:DE:135:HIS:NE2	2.88	0.41
36:BA:1528:A:HO2'	36:BA:1528(A):A:C5'	2.33	0.41
7:AG:22:LEU:HD22	7:AG:62:PHE:HE2	1.85	0.41
8:CH:92:ARG:CB	8:CH:94:TYR:HE1	2.33	0.41
43:DH:35:VAL:HA	43:DH:36:PRO:HD2	1.97	0.41
51:DS:23:ARG:HB3	51:DS:24:LEU:HD22	2.02	0.41
1:CA:830:G:H2'	1:CA:831:U:O4'	2.20	0.41
1:CA:859:A:O2'	1:CA:860:A:H5'	2.20	0.41
1:CA:1280:A:O2'	1:CA:1281:U:P	2.78	0.41
1:AA:398:C:H2'	1:AA:399:G:H8	1.85	0.41
36:BA:2161:C:O2'	36:BA:2162:G:H5'	2.20	0.41
1:AA:1338:G:C6	1:AA:1339:A:N6	2.88	0.41
15:AO:58:MET:O	15:AO:62:GLN:HB2	2.20	0.41
36:BA:2071:A:H2	36:BA:2441:C:C2	2.38	0.41
39:BD:227:ASN:O	39:BD:230:ASP:N	2.53	0.41
36:BA:1805:U:H5"	39:BD:250:TRP:CE2	2.54	0.41
2:AB:75:LYS:C	2:AB:77:ALA:N	2.73	0.41
1:CA:782:A:C2'	1:CA:783:C:H5'	2.50	0.41
36:DA:1263:U:C4	36:DA:1264:G:C6	3.08	0.41
56:DX:57:LEU:O	56:DX:57:LEU:HD13	2.20	0.41
20:AT:59:ALA:O	20:AT:60:GLU:C	2.57	0.41
1:CA:316:G:N1	1:CA:338:A:C6	2.88	0.41
36:DA:1062:G:N1	36:DA:1063:G:H1'	2.34	0.41
7:AG:153:HIS:CE1	11:AK:58:PRO:HD2	2.54	0.41
11:AK:54:ARG:O	11:AK:55:LYS:C	2.58	0.41
36:DA:2134:A:C2	36:DA:2135:A:N7	2.88	0.41
18:CR:43:PHE:CD1	18:CR:66:LEU:HD11	2.55	0.41
33:D7:12:ARG:HH21	33:D7:44:PRO:CB	2.29	0.41
36:BA:1346:G:C2	36:BA:1601:G:C2	3.08	0.41
47:BO:90:GLN:O	47:BO:92:GLU:N	2.52	0.41
39:BD:89:SER:HB2	39:BD:159:ALA:HB2	2.01	0.41
36:BA:1813:G:H1'	39:BD:50:THR:OG1	2.20	0.41
4:AD:206:PHE:O	4:AD:206:PHE:CG	2.72	0.41
18:CR:47:THR:CB	18:CR:49:LYS:HZ2	2.32	0.41
28:D2:12:GLU:O	28:D2:16:LEU:HG	2.19	0.41
18:AR:53:ARG:C	18:AR:55:ARG:N	2.64	0.41
47:DO:8:LEU:O	47:DO:9:GLU:O	2.38	0.41
58:BZ:109:ALA:C	58:BZ:145:GLU:OE1	2.58	0.41
46:DN:90:MET:O	46:DN:93:THR:O	2.38	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1314:C:H41	19:CS:4:SER:HB2	1.85	0.41
40:BE:175:VAL:O	40:BE:175:VAL:HG13	2.20	0.41
40:BE:93:VAL:CG1	40:BE:175:VAL:HG23	2.49	0.41
1:CA:684:A:H2'	1:CA:685:G:C8	2.54	0.41
1:AA:220:G:N3	1:AA:220:G:H2'	2.35	0.41
1:CA:690:G:O2'	1:CA:691:G:H5'	2.20	0.41
22:CW:55:U:O2'	22:CW:56:C:C6	2.70	0.41
12:AL:62:SER:C	12:AL:64:TYR:H	2.23	0.41
1:CA:1392:G:N2	1:CA:1502:A:C8	2.88	0.41
1:CA:922:G:H3'	1:CA:923:A:C8	2.55	0.41
25:AZ:115:GLN:HE21	25:AZ:115:GLN:HA	1.85	0.41
27:B1:34:THR:CG2	27:B1:35:THR:N	2.82	0.41
36:BA:1747(A):G:H2'	36:BA:1748:G:C5'	2.48	0.41
17:CQ:29:HIS:CE1	17:CQ:32:TYR:N	2.88	0.41
36:DA:2693:A:HO2'	36:DA:2694:G:H5'	1.85	0.41
36:DA:1717:G:H2'	36:DA:1718:G:C5'	2.50	0.41
1:AA:849:C:O2'	1:AA:850:U:H5'	2.20	0.41
36:DA:2546:U:O4'	36:DA:2565:A:C2	2.72	0.41
36:DA:999:U:O2	36:DA:1157:G:N2	2.53	0.41
1:CA:556:C:C2'	1:CA:557:G:H5'	2.49	0.41
1:CA:1484:C:O2'	36:DA:1961:C:H5'	2.20	0.41
54:BV:71:LEU:CD2	54:BV:84:LYS:HE2	2.50	0.41
36:BA:753:C:H2'	36:BA:754:C:H6	1.84	0.41
15:AO:34:LEU:HG	15:AO:35:ARG:N	2.35	0.41
43:DH:98:LEU:HB2	43:DH:125:VAL:CG2	2.49	0.41
54:DV:13:ARG:CG	54:DV:13:ARG:HH11	2.33	0.41
1:CA:682:G:N1	1:CA:683:G:C5	2.88	0.41
36:BA:1560:G:N3	36:BA:1560:G:H2'	2.35	0.41
1:CA:163:C:H2'	1:CA:164:U:O4'	2.19	0.41
36:DA:2598:A:O5'	36:DA:2598:A:H8	2.03	0.41
22:CW:2:C:H42	22:CW:72:C:H42	1.66	0.41
37:BB:85:G:C4	37:BB:93:G:C2	3.08	0.41
36:BA:1815:A:H8	36:BA:1815:A:OP1	2.02	0.41
41:DF:105:VAL:HG12	41:DF:105:VAL:O	2.20	0.41
1:CA:189(G):G:H8	1:CA:189(G):G:OP1	2.02	0.41
40:BE:181:LEU:CD1	40:BE:181:LEU:N	2.82	0.41
50:BR:94:TYR:CD2	50:BR:94:TYR:N	2.85	0.41
34:B8:62:LEU:N	34:B8:63:PRO:HD2	2.35	0.41
36:BA:2413:G:H2'	36:BA:2414:G:C8	2.50	0.41
36:DA:1290:C:O5'	36:DA:1290:C:H6	2.02	0.41
36:DA:2819:G:C5	36:DA:2821:A:C2	3.09	0.41
36:DA:2839:G:C4	36:DA:2840:C:C5	3.08	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:DR:79:LEU:HD13	50:DR:79:LEU:C	2.40	0.41
39:DD:43:ARG:NH1	39:DD:49:ILE:CG2	2.83	0.41
36:BA:483:A:N7	36:BA:484:C:C2	2.88	0.41
32:D6:48:VAL:CG2	32:D6:49:HIS:H	2.17	0.41
32:D6:5:VAL:O	32:D6:5:VAL:HG12	2.20	0.41
36:DA:2284:C:O2'	36:DA:2288:A:N6	2.50	0.41
25:AZ:168:VAL:HA	25:AZ:169:PRO:HD3	1.84	0.41
28:D2:33:MET:O	28:D2:36:ARG:HG2	2.19	0.41
28:D2:55:ARG:O	28:D2:56:GLN:C	2.58	0.41
28:D2:67:LYS:C	28:D2:69:ARG:N	2.73	0.41
36:BA:2234:G:O2'	36:BA:2235:G:H5'	2.19	0.41
48:DP:5:ASP:OD2	48:DP:6:LEU:HD23	2.20	0.41
24:AY:55:PSU:N1	24:AY:58:A:OP2	2.53	0.41
36:DA:2462:U:H2'	36:DA:2463:C:C6	2.55	0.41
39:BD:24:ILE:HG12	39:BD:25:THR:N	2.35	0.41
36:DA:398:G:H5''	36:DA:2090:G:O4'	2.20	0.41
38:BC:75:LEU:HB2	38:BC:93:TYR:HB2	2.02	0.41
1:CA:233:C:C4	1:CA:234:C:C5	3.08	0.41
41:BF:182:ASN:OD1	41:BF:185:ASP:CB	2.68	0.41
43:BH:38:SER:HA	43:BH:39:PRO:HD3	1.78	0.41
1:AA:994:A:C2	1:AA:995:C:C5	3.08	0.41
35:B9:25:VAL:HB	35:B9:34:GLN:CB	2.49	0.41
35:B9:6:SER:HB2	36:BA:2466:C:H5''	2.02	0.41
36:BA:2478:A:O2'	36:BA:2536:G:N2	2.52	0.41
36:BA:2740:A:H2'	36:BA:2741:A:O4'	2.20	0.41
36:BA:1205:U:H4'	36:BA:1206:G:OP2	2.20	0.41
41:BF:137:LYS:HB2	41:BF:137:LYS:HE3	1.85	0.41
40:BE:82:ARG:NH1	40:BE:82:ARG:CG	2.76	0.41
13:AM:35:GLU:CG	13:AM:36:LYS:H	2.33	0.41
42:BG:114:ILE:O	42:BG:115:ARG:HB2	2.20	0.41
36:DA:2033:A:HO2'	36:DA:2034:U:P	2.41	0.41
36:DA:27:G:N2	36:DA:512:G:C2'	2.67	0.41
36:DA:511:U:H6	36:DA:511:U:O5'	2.02	0.41
36:DA:942:G:H5'	48:DP:35:HIS:O	2.20	0.41
53:DU:35:ALA:O	53:DU:36:ARG:C	2.59	0.41
54:DV:51:VAL:HG12	54:DV:52:VAL:N	2.34	0.41
2:AB:219:VAL:HA	2:AB:222:ILE:CG1	2.50	0.41
17:AQ:63:ARG:HG2	17:AQ:64:PRO:HD2	2.02	0.41
1:CA:989:C:O2'	1:CA:990:C:H5'	2.20	0.41
14:CN:7:ILE:HG13	14:CN:8:GLU:HG2	2.02	0.41
24:CY:33:U:H3'	24:CY:34:G:H5''	2.01	0.41
51:BS:76:LYS:O	51:BS:79:ALA:HB3	2.20	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BS:90:GLY:C	51:BS:92:TYR:H	2.24	0.41
2:CB:223:ILE:O	2:CB:226:ARG:CB	2.68	0.41
2:CB:93:VAL:HG11	2:CB:97:TRP:HD1	1.85	0.41
41:DF:171:PRO:C	41:DF:173:VAL:N	2.69	0.41
40:BE:52:LEU:HD23	40:BE:75:VAL:HB	2.01	0.41
36:BA:2285:C:H42	36:BA:2383:G:H1	1.68	0.41
25:CZ:39:ASN:HA	25:CZ:40:PRO:HD2	1.94	0.41
36:BA:1669:A:OP2	36:BA:2550:G:OP1	2.38	0.41
52:BT:124:ASP:CB	52:BT:125:ARG:NH1	2.83	0.41
40:DE:165:VAL:CG1	40:DE:166:THR:H	2.30	0.41
47:DO:120:GLU:HB2	52:DT:68:TYR:HE2	1.84	0.41
49:BQ:141:GLN:OE1	58:BZ:72:ARG:CD	2.67	0.41
1:AA:976:G:OP1	14:AN:32:SER:N	2.54	0.41
37:DB:81:G:C2'	37:DB:82:G:H5'	2.47	0.41
7:CG:107:ALA:O	7:CG:108:ALA:C	2.59	0.41
9:CI:65:VAL:HG22	9:CI:66:ARG:H	1.84	0.41
9:CI:73:GLN:O	9:CI:76:ALA:HB3	2.20	0.41
1:AA:1487:G:C2'	1:AA:1488:G:C5'	2.98	0.41
1:AA:792:A:O2'	1:AA:794:A:C8	2.61	0.41
4:AD:189:PRO:CB	4:AD:194:LEU:HD21	2.38	0.41
1:AA:815:A:C2	1:AA:1529:G:C4	3.08	0.41
36:DA:765:G:C6	36:DA:766:C:C4	3.08	0.41
36:DA:2590:A:P	39:DD:238:GLY:HA2	2.60	0.41
41:BF:7:TYR:CD2	41:BF:16:GLY:HA3	2.54	0.41
41:BF:8:GLN:HE21	41:BF:9:ILE:HB	1.85	0.41
25:AZ:258:LEU:HD12	25:AZ:258:LEU:N	2.35	0.41
46:BN:55:VAL:HG21	46:BN:127:ASP:H	1.83	0.41
3:AC:113:ALA:N	3:AC:114:PRO:CD	2.83	0.41
1:CA:397:A:H5'	1:CA:398:C:OP1	2.19	0.41
36:BA:1790:C:H2'	36:BA:1791:A:C8	2.55	0.41
39:BD:8:PRO:HB3	39:BD:14:ARG:HB3	1.98	0.41
1:CA:1011:G:O2'	1:CA:1012:U:H5'	2.20	0.41
1:CA:1012:U:O2	1:CA:1017:G:N2	2.52	0.41
21:CU:2:GLY:C	21:CU:4:GLY:N	2.67	0.41
36:BA:1138:G:N2	36:BA:1143:A:N1	2.68	0.41
53:BU:66:ASN:C	53:BU:66:ASN:HD22	2.22	0.41
39:BD:112:GLN:N	39:BD:115:GLN:NE2	2.46	0.41
39:BD:164:GLN:HG2	39:BD:165:ILE:O	2.20	0.41
39:BD:73:VAL:HA	39:BD:119:ALA:O	2.20	0.41
40:DE:131:ALA:HB3	40:DE:134:ILE:HD11	2.01	0.41
36:BA:1579:A:H2'	36:BA:1580:A:N9	2.34	0.41
30:D4:30:GLU:C	30:D4:31:ILE:HD12	2.40	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1548:C:H2'	36:BA:1549:C:H6	1.86	0.41
40:DE:38:THR:CG2	40:DE:40:GLU:HB2	2.50	0.41
1:CA:756:C:H2'	1:CA:757:U:O4'	2.20	0.41
51:BS:85:VAL:CG2	51:BS:106:ARG:HB2	2.50	0.41
12:AL:8:ASN:O	12:AL:12:ARG:HD3	2.20	0.41
51:DS:85:VAL:HG23	51:DS:106:ARG:HB2	2.02	0.41
22:CV:58:A:N6	22:CV:61:C:C4	2.88	0.41
1:AA:319:G:H4'	1:AA:1468:A:C5'	2.49	0.41
5:AE:77:PRO:O	5:AE:78:HIS:HB3	2.20	0.41
3:CC:18:TRP:HE3	3:CC:18:TRP:H	1.67	0.41
10:AJ:90:LEU:N	10:AJ:91:PRO:CD	2.83	0.41
27:B1:24:ALA:O	27:B1:25:LYS:C	2.58	0.41
1:CA:677:U:H3	1:CA:713:G:H1	1.66	0.41
1:CA:792:A:O2'	1:CA:794:A:N7	2.38	0.41
36:DA:51:G:N3	36:DA:119:A:C2	2.88	0.41
1:AA:657:G:N2	1:AA:749:C:N3	2.63	0.41
26:B0:37:LEU:HG	26:B0:59:LEU:C	2.41	0.41
52:BT:3:ARG:HD2	52:BT:6:LEU:HD13	2.02	0.41
20:AT:65:LYS:O	20:AT:68:LYS:HB2	2.20	0.41
39:DD:28:GLU:N	39:DD:29:PRO:CD	2.80	0.41
15:AO:33:THR:HG23	15:AO:63:ARG:NH1	2.35	0.41
1:CA:183:G:O6	1:CA:194:C:N4	2.48	0.41
41:DF:52:LYS:HA	41:DF:56:GLU:OE2	2.20	0.41
1:CA:390:C:C4'	16:CP:28:ARG:HH11	2.25	0.41
18:CR:53:ARG:CG	18:CR:63:GLN:HB2	2.50	0.41
38:DC:120:MET:HA	38:DC:123:VAL:CG1	2.50	0.41
39:BD:46:GLN:N	39:BD:46:GLN:OE1	2.53	0.41
36:BA:1783:A:C6	36:BA:2587:A:C2	3.08	0.41
1:AA:1291:G:OP1	7:AG:37:ASN:HB3	2.20	0.41
25:CZ:315:LYS:HA	25:CZ:372:VAL:O	2.20	0.41
26:B0:7:LEU:HD21	49:BQ:81:VAL:CG2	2.50	0.41
1:CA:109:A:O2'	1:CA:110:C:OP1	2.35	0.41
36:BA:128:C:C4	36:BA:129:C:C5	3.07	0.41
5:AE:64:ARG:N	5:AE:66:MET:CE	2.83	0.41
39:DD:159:ALA:HB1	39:DD:201:HIS:HB3	2.02	0.41
25:CZ:321:TYR:HE2	25:CZ:323:LEU:HD12	1.81	0.41
3:AC:63:ASN:O	3:AC:64:VAL:CG2	2.68	0.41
36:DA:217:G:O6	36:DA:431:U:O2	2.38	0.41
1:AA:458:C:C4	1:AA:474:G:N2	2.88	0.41
1:CA:815:A:C6	1:CA:1529:G:C8	3.07	0.41
36:DA:2690:C:H6	36:DA:2690:C:OP2	2.03	0.41
36:DA:840:C:H2'	36:DA:841:A:C8	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:189:G:N1	1:CA:189(L):G:C6	2.88	0.41
36:DA:654(S):G:H2'	36:DA:654(T):C:O4'	2.19	0.41
50:DR:18:LEU:O	50:DR:18:LEU:HD22	2.20	0.41
56:BX:70:LEU:C	56:BX:70:LEU:HD23	2.41	0.41
9:AI:55:ALA:C	9:AI:57:GLY:H	2.23	0.41
26:D0:65:GLY:HA3	26:D0:82:ARG:O	2.20	0.41
1:AA:1030(A):G:C1'	1:AA:1031:G:H22	2.33	0.41
25:AZ:385:ARG:HD3	63:AZ:502:KIR:H451	2.02	0.41
1:AA:1005:A:O5'	1:AA:1005:A:H8	2.03	0.41
48:DP:71:VAL:O	48:DP:72:PRO:C	2.58	0.41
1:AA:1148:U:H2'	1:AA:1149:C:C5'	2.51	0.41
1:CA:241:C:O2'	1:CA:242:C:H5'	2.20	0.41
26:D0:60:PHE:CE2	36:DA:2365:G:H4'	2.55	0.41
36:BA:1967:C:C4	36:BA:1968:G:C5	3.09	0.41
56:DX:3:THR:CA	56:DX:6:ASP:OD2	2.69	0.41
1:CA:411:A:C5	1:CA:429:U:C5	3.08	0.41
3:AC:140:ARG:HG3	3:AC:140:ARG:NH1	2.35	0.41
4:CD:106:TYR:CD2	4:CD:106:TYR:C	2.94	0.41
8:CH:54:ASP:OD1	8:CH:54:ASP:N	2.54	0.41
13:AM:83:ASP:OD1	19:AS:74:PHE:HE1	2.02	0.41
12:AL:23:LYS:O	12:AL:24:VAL:CG2	2.68	0.41
40:DE:121:ASN:HA	40:DE:121:ASN:HD22	1.66	0.41
36:BA:1445:A:OP1	36:BA:1445(A):C:H5	2.03	0.41
32:B6:35:GLU:HB3	32:B6:51:GLU:OE1	2.20	0.41
36:BA:1259:G:O2'	36:BA:1260:G:C5'	2.62	0.41
36:BA:2292:C:C2	36:BA:2341:G:N2	2.89	0.41
36:BA:564:C:OP1	54:BV:77:ALA:HB2	2.20	0.41
36:BA:972:G:H2'	36:BA:973:A:C8	2.56	0.41
36:DA:1614:A:H61	55:DW:87:PRO:HA	1.85	0.41
50:DR:12:ARG:HD3	50:DR:16:HIS:NE2	2.35	0.41
19:CS:15:LEU:HD21	19:CS:33:THR:OG1	2.20	0.41
39:DD:149:PRO:O	39:DD:150:LYS:HB2	2.20	0.41
36:BA:483:A:H8	36:BA:483:A:O5'	2.02	0.41
32:D6:11:LEU:HD21	32:D6:52:VAL:N	2.29	0.41
32:D6:12:GLU:HA	32:D6:23:THR:HA	2.02	0.41
34:D8:23:VAL:HG22	34:D8:47:LYS:O	2.20	0.41
48:DP:47:ASP:HB3	48:DP:48:PRO:C	2.40	0.41
36:DA:83:G:N1	36:DA:102:G:H2'	2.35	0.41
36:DA:1203:G:O2'	36:DA:1242:A:N6	2.53	0.41
36:DA:2524:G:C5'	36:DA:2524:G:H8	2.32	0.41
5:CE:32:VAL:HG12	5:CE:33:VAL:N	2.34	0.41
36:DA:2760:C:H2'	36:DA:2761:G:C5'	2.42	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:DC:74:VAL:HG21	38:DC:157:LYS:HG2	2.03	0.41
36:BA:1823:G:C2	36:BA:1824:G:C8	3.08	0.41
36:DA:1884:A:H2'	36:DA:1885:A:H5''	2.02	0.41
36:DA:680:G:H2'	36:DA:681:G:C8	2.55	0.41
1:CA:266:G:H5'	1:CA:267:C:C5	2.55	0.41
17:CQ:59:ILE:HG23	17:CQ:71:PHE:HB3	2.00	0.41
43:BH:41:MET:SD	43:BH:53:GLU:O	2.78	0.41
24:AY:33:U:C3'	24:AY:34:G:H5''	2.50	0.41
28:B2:41:ILE:CG1	28:B2:42:GLY:H	1.97	0.41
36:BA:321:G:C1'	41:BF:168:ARG:NH2	2.83	0.41
41:BF:157:VAL:HG21	41:BF:194:MET:HG2	2.01	0.41
50:BR:29:LEU:O	50:BR:30:THR:CB	2.68	0.41
36:DA:2777:G:C8	36:DA:2777:G:H3'	2.55	0.41
46:DN:24:GLY:HA2	46:DN:27:ALA:HB3	2.01	0.41
48:DP:36:LYS:HB2	48:DP:41:ARG:CB	2.49	0.41
48:DP:35:HIS:HB3	48:DP:36:LYS:H	1.41	0.41
2:AB:79:ASP:O	2:AB:82:ARG:HB2	2.20	0.41
1:AA:375:U:H2'	1:AA:376:G:H8	1.86	0.41
1:AA:607:A:C2'	1:AA:608:A:H5'	2.49	0.41
8:CH:26:VAL:HG22	8:CH:27:PRO:O	2.20	0.41
8:CH:6:ILE:C	8:CH:8:ASP:N	2.73	0.41
8:CH:6:ILE:HG22	8:CH:7:ALA:N	2.35	0.41
8:CH:82:HIS:HB2	8:CH:138:TRP:CD2	2.55	0.41
1:CA:993:G:N3	1:CA:993:G:C2'	2.77	0.41
2:CB:82:ARG:O	2:CB:85:ALA:HB3	2.19	0.41
38:DC:15:ASP:HA	38:DC:16:PRO:HD2	1.91	0.41
38:DC:188:ASN:O	38:DC:189:ILE:C	2.58	0.41
38:DC:198:ALA:C	38:DC:200:LYS:H	2.23	0.41
1:CA:954:G:H2'	1:CA:955:U:O4'	2.20	0.41
36:BA:141:A:C8	36:BA:1408:C:O2'	2.71	0.41
40:BE:203:LYS:O	40:BE:203:LYS:HD2	2.21	0.41
36:DA:1678:G:O5'	36:DA:1678:G:C8	2.67	0.41
36:DA:2724:C:H2'	36:DA:2725:A:H8	1.83	0.41
47:DO:2:ILE:HG22	47:DO:3:GLN:N	2.36	0.41
52:DT:36:GLU:O	52:DT:38:ASN:N	2.54	0.41
52:DT:51:ARG:HG2	52:DT:62:THR:HG23	2.02	0.41
52:DT:47:GLY:CA	52:DT:65:LYS:HB2	2.49	0.41
52:DT:76:PHE:HB3	52:DT:82:LEU:HD21	2.02	0.41
1:AA:1344:C:H2'	1:AA:1345:U:H5'	2.03	0.41
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.56	0.41
1:AA:976:G:P	14:AN:32:SER:H	2.44	0.41
7:AG:107:ALA:O	7:AG:110:GLN:N	2.53	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1366:C:C6	1:CA:1367:C:H5	2.38	0.41
19:AS:48:THR:HG23	19:AS:61:TYR:HA	2.02	0.41
36:BA:329:G:P	57:BY:71:LYS:HZ1	2.43	0.41
1:AA:919:A:HO2'	1:AA:1080:A:H61	1.68	0.41
36:DA:1829:A:N3	39:DD:15:PHE:CZ	2.88	0.41
55:DW:70:TYR:O	55:DW:108:GLY:N	2.51	0.41
2:AB:233:SER:O	2:AB:235:SER:N	2.54	0.41
36:BA:2137:C:H42	36:BA:2154:G:H22	1.65	0.41
36:BA:2101:G:N2	36:BA:2189:U:H3	2.16	0.41
3:CC:178:LEU:C	3:CC:180:ALA:N	2.73	0.41
3:CC:180:ALA:O	3:CC:203:PHE:CE1	2.74	0.41
3:CC:11:ARG:HE	3:CC:181:ASN:H	1.68	0.41
25:AZ:97:ALA:O	25:AZ:241:ARG:NH2	2.53	0.41
1:CA:1307:U:H3	1:CA:1330:U:H3	1.66	0.41
36:BA:1788:C:C2	36:BA:1789:A:C8	3.08	0.41
36:BA:2592:G:N7	36:BA:2593:U:C5	2.87	0.41
36:DA:862:G:H21	37:DB:100:A:H2	1.69	0.41
1:AA:1511:G:O5'	1:AA:1511:G:H8	2.03	0.41
1:AA:1511:G:O2'	1:AA:1512:U:H5'	2.20	0.41
21:CU:5:ASP:C	21:CU:7:ARG:N	2.74	0.41
48:DP:16:ARG:CG	48:DP:17:LYS:N	2.82	0.41
36:DA:2307:G:N2	36:DA:2308:G:H5''	2.35	0.41
43:DH:162:ILE:O	43:DH:162:ILE:HG23	2.21	0.41
51:BS:106:ARG:HH11	51:BS:106:ARG:CB	2.33	0.41
5:CE:110:LEU:HD23	5:CE:110:LEU:HA	1.85	0.41
36:BA:907:U:O2'	36:BA:908:C:H5'	2.20	0.41
17:AQ:87:LYS:HA	17:AQ:87:LYS:HE2	2.02	0.41
1:AA:1253:G:C2'	1:AA:1254:C:H5'	2.50	0.41
42:DG:51:ARG:NE	42:DG:51:ARG:CA	2.64	0.41
25:CZ:99:MET:H	25:CZ:241:ARG:HH22	1.67	0.41
5:AE:150:ARG:HG2	5:AE:151:LEU:HD23	2.02	0.41
1:AA:548:G:H2'	1:AA:549:C:O4'	2.21	0.41
26:D0:67:VAL:HG12	26:D0:68:GLU:H	1.85	0.41
1:CA:1413:A:C6	1:CA:1414:U:C4	3.08	0.41
10:AJ:7:LYS:HG2	10:AJ:71:LEU:HB2	2.01	0.41
49:DQ:48:GLU:C	49:DQ:50:ALA:N	2.74	0.41
1:CA:1508:G:O2'	1:CA:1509:C:H5'	2.19	0.41
36:BA:9:U:O2'	36:BA:10:G:H8	2.03	0.41
36:BA:2842:G:C6	36:BA:2876:G:N1	2.88	0.41
1:CA:59:A:H3'	1:CA:60:A:H5''	2.01	0.41
43:DH:153:LYS:H	43:DH:153:LYS:CD	2.25	0.41
1:CA:310:G:H2'	1:CA:311:C:H6	1.85	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:CP:28:ARG:C	16:CP:30:GLY:H	2.24	0.41
33:D7:18:PHE:CG	36:DA:126:A:C8	3.08	0.41
36:BA:2582:G:N2	36:BA:2583:G:H1'	2.34	0.41
41:DF:59:TYR:CD1	41:DF:78:ILE:HB	2.55	0.41
36:BA:794:G:C6	36:BA:795:C:C4	3.08	0.41
25:CZ:261:GLU:O	25:CZ:262:THR:C	2.58	0.41
39:BD:43:ARG:HB3	39:BD:54:ARG:HB3	2.02	0.41
39:DD:95:LEU:N	39:DD:95:LEU:HD12	2.33	0.41
1:CA:933:G:N2	1:CA:935:A:O4'	2.53	0.41
36:BA:948:G:C6	36:BA:949:C:C4	3.08	0.41
5:CE:60:TYR:O	5:CE:63:ARG:N	2.53	0.41
36:DA:2568:C:C4	36:DA:2569:G:N7	2.88	0.41
55:BW:71:VAL:C	55:BW:73:ALA:N	2.73	0.41
36:DA:271(F):C:C2'	36:DA:271(G):C:H5'	2.50	0.41
17:AQ:99:SER:C	17:AQ:100:LYS:CG	2.86	0.41
1:CA:126:G:C6	1:CA:127:G:C5	3.08	0.41
1:CA:460:G:N2	1:CA:473:G:O6	2.53	0.41
1:AA:409:G:H3'	1:AA:410:G:H8	1.84	0.41
36:DA:66:C:H2'	36:DA:67:U:O4'	2.20	0.41
9:AI:126:SER:C	9:AI:128:ARG:H	2.23	0.41
36:DA:1572:A:O2'	36:DA:1573:G:H5'	2.20	0.41
36:BA:518:G:C6	36:BA:519:U:C4	3.09	0.41
58:BZ:14:LYS:O	58:BZ:16:SER:N	2.53	0.41
37:BB:94:C:H2'	37:BB:95:C:C6	2.55	0.41
36:BA:1186:G:H8	36:BA:1186:G:O5'	2.03	0.41
7:CG:8:GLU:OE2	7:CG:9:VAL:C	2.59	0.41
20:AT:8:ARG:HG3	20:AT:8:ARG:NH1	2.33	0.41
49:DQ:59:ARG:HG3	49:DQ:59:ARG:NH1	2.35	0.41
42:DG:116:ASP:O	42:DG:117:PHE:HB3	2.20	0.41
1:CA:1457:G:H2'	1:CA:1458:G:C8	2.53	0.41
36:DA:1624:G:H2'	36:DA:1625:C:H6	1.85	0.41
1:AA:1407:C:O2	1:AA:1407:C:C2'	2.68	0.41
15:CO:3:ILE:CG2	15:CO:38:ARG:NH2	2.83	0.41
36:DA:705:A:H2'	36:DA:706:A:C8	2.55	0.41
36:BA:654(Q):C:O2'	36:BA:654(R):C:H5'	2.21	0.41
36:DA:654(H):G:H2'	36:DA:654(I):C:C5'	2.51	0.41
2:AB:142:LEU:HD23	2:AB:142:LEU:C	2.40	0.41
27:B1:15:ALA:HB2	27:B1:42:GLN:HG3	2.01	0.41
13:CM:83:ASP:OD1	19:CS:74:PHE:HE1	2.02	0.41
1:AA:258:G:H2'	1:AA:259:G:H8	1.84	0.41
1:AA:279:A:OP2	17:AQ:95:TYR:OH	2.35	0.41
18:CR:36:ASN:OD1	18:CR:39:VAL:HB	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BK:34:UNK:O	45:BK:38:UNK:CB	2.68	0.41
36:BA:1561:G:O2'	36:BA:1562:A:H5'	2.20	0.41
56:DX:61:GLY:O	56:DX:62:LYS:O	2.37	0.41
1:AA:1121:U:H2'	1:AA:1122:U:H6	1.84	0.41
25:AZ:243:GLU:HG2	25:AZ:345:ARG:HH21	1.84	0.41
36:DA:54:G:O5'	36:DA:54:G:H8	2.03	0.41
1:AA:146:G:H2'	1:AA:146:G:N3	2.34	0.41
58:DZ:119:GLU:HG2	58:DZ:119:GLU:O	2.20	0.41
57:BY:54:LYS:O	57:BY:55:TYR:C	2.58	0.41
36:BA:355:G:H2'	36:BA:356:G:C8	2.56	0.41
34:B8:53:PRO:C	34:B8:55:ALA:N	2.74	0.41
36:BA:2361:A:C4	36:BA:2362:G:C8	3.09	0.41
36:BA:246:C:O5'	36:BA:246:C:H6	2.03	0.41
36:BA:671:C:OP1	48:BP:43:GLY:HA2	2.20	0.41
53:BU:20:LEU:CD2	53:BU:20:LEU:N	2.79	0.41
36:DA:1806:C:N4	36:DA:1811:G:N1	2.68	0.41
39:DD:45:ASN:CG	39:DD:46:GLN:N	2.72	0.41
32:D6:20:ASN:HD21	32:D6:41:PRO:HB3	1.81	0.41
36:DA:245:G:H2'	36:DA:246:C:C6	2.55	0.41
36:DA:628:G:C2'	36:DA:629:G:C5'	2.91	0.41
25:AZ:169:PRO:O	25:AZ:171:ILE:CD1	2.68	0.41
28:D2:38:GLN:OE1	28:D2:44:LEU:HD21	2.21	0.41
28:D2:46:GLN:HB3	28:D2:48:HIS:CE1	2.55	0.41
27:B1:13:ILE:H	27:B1:13:ILE:CD1	2.12	0.41
36:DA:605:C:N4	36:DA:623:G:O6	2.54	0.41
41:DF:116:ASP:O	41:DF:120:GLU:HG2	2.19	0.41
41:DF:40:GLN:NE2	41:DF:184:TYR:CB	2.83	0.41
36:DA:418:G:C2	36:DA:419:C:C6	3.08	0.41
5:CE:107:ARG:C	5:CE:109:ILE:N	2.73	0.41
56:BX:11:PRO:HG2	56:BX:13:LEU:HD21	2.03	0.41
57:DY:56:PRO:O	57:DY:57:GLN:O	2.38	0.41
36:BA:769:G:C2'	36:BA:770:G:H5'	2.49	0.41
36:DA:681:G:H2'	36:DA:682:G:H8	1.83	0.41
9:AI:52:ALA:CB	9:AI:95:LYS:HE2	2.29	0.41
41:BF:99:TYR:O	41:BF:101:LEU:N	2.53	0.41
41:BF:45:ARG:NH1	41:BF:97:TYR:CE1	2.88	0.41
41:BF:31:HIS:HB2	48:BP:13:ASN:OD1	2.19	0.41
43:DH:65:HIS:CE1	43:DH:69:ARG:NH2	2.88	0.41
41:BF:163:VAL:O	41:BF:164:ARG:C	2.59	0.41
40:BE:199:ARG:HG2	40:BE:200:GLU:OE2	2.20	0.41
50:BR:54:LEU:N	50:BR:54:LEU:HD12	2.36	0.41
37:BB:42:C:H42	42:BG:91:ARG:CZ	2.32	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BG:98:ARG:HA	42:BG:98:ARG:HD3	1.83	0.41
36:DA:21:A:HO2'	36:DA:22:C:H5'	1.85	0.41
48:DP:22:GLY:O	48:DP:29:LYS:HB2	2.20	0.41
48:DP:24:GLY:HA2	48:DP:33:ARG:NH1	2.34	0.41
36:DA:532:A:C5'	53:DU:28:ARG:NH1	2.83	0.41
1:AA:273:A:H2'	1:AA:274:A:O4'	2.20	0.41
1:AA:265:G:H5'	17:AQ:64:PRO:O	2.21	0.41
8:AH:34:GLU:O	8:AH:35:ILE:O	2.39	0.41
8:AH:9:MET:HE3	8:AH:36:LEU:HD21	2.02	0.41
2:CB:164:VAL:CG1	2:CB:165:VAL:N	2.82	0.41
6:CF:37:VAL:O	6:CF:38:GLU:HG3	2.20	0.41
48:BP:126:VAL:HG13	48:BP:145:PRO:CB	2.49	0.41
13:AM:93:ARG:N	13:AM:93:ARG:HD2	2.36	0.41
1:AA:1071:C:H5''	5:AE:49:PRO:HG2	2.02	0.41
25:CZ:140:MET:O	25:CZ:141:VAL:O	2.37	0.41
36:BA:1636:C:H4'	36:BA:1761:C:O4'	2.20	0.41
36:BA:2641:G:OP2	46:BN:74:ARG:NH2	2.54	0.41
1:CA:344:A:H3'	1:CA:346:G:O6	2.20	0.41
36:DA:1666:G:H3'	36:DA:1667:G:C8	2.55	0.41
52:DT:78:LEU:HA	52:DT:82:LEU:HD22	2.03	0.41
52:DT:89:VAL:CG1	52:DT:91:ARG:HG3	2.48	0.41
3:CC:6:HIS:HD2	3:CC:7:PRO:HD2	1.86	0.41
22:AV:18:G:H4'	22:AV:60:U:C2	2.55	0.41
26:B0:48:GLY:CA	26:B0:51:VAL:HB	2.50	0.41
19:AS:61:TYR:HD2	19:AS:62:ILE:H	1.67	0.41
41:BF:68:LYS:HB3	41:BF:69:HIS:CD2	2.55	0.41
4:AD:133:VAL:HG21	4:AD:138:TYR:CD1	2.56	0.41
51:DS:12:PHE:H	51:DS:12:PHE:HD2	1.69	0.41
1:AA:1419:G:N7	1:AA:1482:G:N2	2.68	0.41
36:DA:1789:A:C5	36:DA:1790:C:C5	3.08	0.41
36:DA:1791:A:H5'	36:DA:1792:G:OP2	2.20	0.41
55:DW:6:ILE:CG2	55:DW:7:ALA:H	2.33	0.41
2:AB:200:ILE:HG22	2:AB:202:PRO:CD	2.49	0.41
25:AZ:223:MET:O	25:AZ:223:MET:CG	2.68	0.41
25:AZ:67:HIS:CE1	25:AZ:98:GLN:HE22	2.17	0.41
3:AC:120:VAL:HG12	3:AC:121:ALA:H	1.85	0.41
1:CA:1039:C:C6	1:CA:1040:U:H5	2.39	0.41
36:BA:662:G:O2'	36:BA:663:G:H5'	2.19	0.41
36:BA:1902:C:H1'	39:BD:244:ARG:CD	2.50	0.41
36:BA:1792:G:P	39:BD:206:LEU:HB2	2.60	0.41
39:BD:244:ARG:HG2	39:BD:245:PRO:N	2.35	0.41
46:DN:125:GLY:HA3	46:DN:126:PRO:C	2.41	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1012:U:H5	46:BN:28:THR:HG21	1.83	0.41
39:BD:66:ASP:OD1	39:BD:66:ASP:C	2.58	0.41
36:DA:1273:U:C4	36:DA:2003:G:O4'	2.74	0.41
36:DA:2712:U:C2'	36:DA:2713:A:H5'	2.50	0.41
36:BA:220:G:H1	36:BA:427:U:H3'	1.84	0.41
36:DA:662:G:O2'	36:DA:663:G:H5'	2.20	0.41
13:CM:35:GLU:CG	13:CM:36:LYS:H	2.33	0.41
42:DG:45:GLU:OE2	42:DG:45:GLU:CA	2.69	0.41
1:AA:1330:U:H2'	1:AA:1330:U:O2	2.19	0.41
9:AI:47:LEU:N	9:AI:47:LEU:HD12	2.35	0.41
1:AA:81:U:N3	1:AA:83:U:H5	2.18	0.41
40:DE:96:PHE:O	40:DE:175:VAL:HG11	2.21	0.41
40:DE:28:ALA:O	40:DE:29:GLY:O	2.38	0.41
1:AA:830:G:C5	1:AA:831:U:C5	3.07	0.41
36:BA:1223:G:C5	36:BA:1225:G:OP2	2.73	0.41
53:BU:28:ARG:HB3	53:BU:38:THR:OG1	2.21	0.41
49:DQ:42:ILE:HB	49:DQ:97:VAL:HG21	2.02	0.41
27:B1:24:ALA:HB2	27:B1:32:LYS:HZ1	1.84	0.41
10:CJ:90:LEU:N	10:CJ:91:PRO:CD	2.83	0.41
29:B3:6:VAL:HG12	29:B3:56:VAL:HG13	2.02	0.41
36:BA:118:A:H5'	36:BA:119:A:C8	2.55	0.41
36:DA:272(J):C:H3'	36:DA:274:G:H5''	2.02	0.41
36:BA:2070:G:N2	36:BA:2442:C:H1'	2.35	0.41
1:AA:600:C:OP2	8:AH:97:VAL:HG12	2.20	0.41
1:AA:677:U:H3	1:AA:713:G:H22	1.68	0.41
49:DQ:50:ALA:O	49:DQ:54:MET:HB2	2.20	0.41
25:CZ:364:PRO:C	25:CZ:366:ASP:H	2.24	0.41
26:B0:23:VAL:CA	26:B0:38:VAL:HG22	2.45	0.41
1:CA:331:G:O5'	1:CA:331:G:H8	2.03	0.41
1:AA:446:G:C2'	1:AA:447:G:H5'	2.49	0.41
36:BA:2579:C:O4'	40:BE:134:ILE:HG12	2.20	0.41
1:AA:1387:G:C4	1:AA:1388:C:C5	3.08	0.41
36:BA:2627:G:N2	36:BA:2777:G:OP2	2.45	0.41
1:CA:66:G:C2	1:CA:104:G:H1'	2.55	0.41
1:AA:1431:C:C4	1:AA:1432:G:C4	3.09	0.41
1:AA:1316:G:N1	1:AA:1319:A:OP2	2.50	0.41
25:AZ:315:LYS:HG2	25:AZ:373:GLU:HG3	2.02	0.41
25:AZ:401:THR:HG22	25:AZ:402:LYS:N	2.35	0.41
1:CA:325:A:C2'	1:CA:326:G:H5'	2.51	0.41
1:CA:1095:U:P	1:CA:1108:G:H1	2.43	0.41
46:DN:90:MET:O	46:DN:95:PRO:HA	2.21	0.41
25:AZ:271:GLU:C	25:AZ:286:VAL:HG23	2.41	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1820:U:C2	39:DD:159:ALA:O	2.73	0.41
36:DA:272(D):G:C2	36:DA:272(E):G:C5	3.08	0.41
36:BA:1150:C:H2'	36:BA:1151:G:O4'	2.19	0.41
12:CL:39:VAL:O	12:CL:56:ALA:HB1	2.20	0.41
43:BH:130:ARG:HH11	43:BH:130:ARG:HB3	1.83	0.41
10:CJ:80:LYS:O	10:CJ:83:GLU:HB3	2.20	0.41
40:BE:143:ASN:HD22	40:BE:143:ASN:N	2.18	0.41
36:DA:2352:A:C2	36:DA:2366:A:C2	3.09	0.41
36:BA:1458:C:H5'	36:BA:1459:G:O4'	2.20	0.41
38:BC:28:LEU:CD2	38:BC:28:LEU:C	2.89	0.41
36:BA:841:A:C6	36:BA:938:G:N1	2.88	0.41
6:CF:75:LEU:O	6:CF:78:GLU:HB3	2.21	0.41
6:CF:81:ILE:HG13	6:CF:81:ILE:H	1.66	0.41
3:AC:90:GLU:C	3:AC:93:LYS:HB3	2.41	0.41
36:BA:66:C:H2'	36:BA:67:U:O4'	2.19	0.41
11:CK:89:ALA:O	11:CK:91:ARG:N	2.53	0.41
1:AA:943:U:H2'	1:AA:944:G:C5'	2.49	0.41
36:BA:519:U:H5''	55:BW:25:ARG:CZ	2.49	0.41
3:CC:164:ARG:HB3	3:CC:164:ARG:HE	1.22	0.41
52:DT:110:ILE:HG22	52:DT:111:ARG:N	2.35	0.41
36:BA:966:G:H5'	36:BA:2272:U:H1'	2.03	0.41
41:DF:97:TYR:N	41:DF:97:TYR:CD2	2.88	0.41
1:AA:786:G:C2	1:AA:787:A:C4	3.08	0.41
17:CQ:13:ASP:C	17:CQ:15:MET:N	2.73	0.41
36:BA:2856:C:O2'	36:BA:2857:G:H5'	2.20	0.41
29:D3:49:LYS:O	29:D3:49:LYS:CG	2.68	0.41
54:DV:71:LEU:CD2	54:DV:84:LYS:HE2	2.51	0.41
8:AH:50:ARG:NH1	8:AH:50:ARG:HG3	2.35	0.41
1:AA:363:A:C6	1:AA:364:A:C6	3.08	0.41
15:AO:35:ARG:NH2	15:AO:59:MET:CE	2.83	0.41
58:DZ:103:ARG:HD3	58:DZ:138:GLU:HG2	2.03	0.41
54:BV:2:PHE:CE1	54:BV:13:ARG:NH1	2.89	0.41
1:AA:411:A:C5	1:AA:429:U:C5	3.08	0.41
36:BA:2603:G:C5	36:BA:2604:U:C5	3.08	0.41
1:CA:764:C:H2'	1:CA:765:G:C8	2.55	0.41
1:CA:681:C:H6	1:CA:681:C:O5'	2.03	0.41
36:BA:647:G:H3'	36:BA:648:G:H8	1.84	0.41
39:DD:134:ARG:NE	39:DD:135:PHE:HE1	2.18	0.41
1:AA:138:G:H2'	1:AA:139:G:O4'	2.21	0.41
17:CQ:46:ASP:CG	17:CQ:49:GLU:HA	2.41	0.41
1:CA:529:G:O6	12:CL:49:ASN:HB3	2.19	0.41
42:BG:2:PRO:O	42:BG:3:LEU:CB	2.67	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:CK:12:ARG:HH21	11:CK:14:VAL:CG1	2.33	0.41
21:CU:25:LYS:HG2	21:CU:26:LYS:N	2.35	0.41
1:CA:1342:C:H6	1:CA:1342:C:O5'	2.03	0.41
55:DW:88:ARG:HD2	55:DW:88:ARG:HA	1.86	0.41
33:D7:3:ARG:HA	33:D7:3:ARG:HD3	1.89	0.41
26:B0:55:ARG:C	26:B0:57:PHE:N	2.71	0.41
32:B6:36:LEU:C	32:B6:36:LEU:CD2	2.89	0.41
36:BA:832:G:H2'	36:BA:833:U:C6	2.56	0.41
48:BP:23:PRO:CG	48:BP:33:ARG:NE	2.83	0.41
50:DR:44:LEU:HD13	50:DR:48:VAL:HB	2.01	0.41
36:DA:1809:A:H2'	36:DA:1810:A:H8	1.83	0.41
26:D0:55:ARG:C	26:D0:57:PHE:N	2.71	0.41
34:D8:10:ALA:CB	34:D8:13:ARG:HG2	2.49	0.41
36:DA:247:G:OP2	36:DA:249:C:H5	2.04	0.41
28:D2:35:LEU:C	28:D2:35:LEU:CD1	2.77	0.41
28:D2:50:ILE:CD1	28:D2:50:ILE:N	2.84	0.41
36:DA:603:A:C4'	36:DA:604:G:O5'	2.68	0.41
36:DA:656:G:C6	36:DA:657:U:C4	3.08	0.41
35:D9:25:VAL:HB	35:D9:34:GLN:CB	2.51	0.41
35:D9:29:ASN:ND2	35:D9:29:ASN:C	2.73	0.41
36:DA:2743:C:N3	36:DA:2762:G:C2	2.88	0.41
38:BC:71:GLN:NE2	38:BC:157:LYS:HD3	2.33	0.41
42:DG:83:ARG:HG3	42:DG:83:ARG:NH1	2.35	0.41
41:BF:114:VAL:HG21	41:BF:181:LEU:HD21	2.02	0.41
4:AD:38:TYR:HD1	4:AD:38:TYR:O	2.04	0.41
28:B2:25:VAL:HA	28:B2:28:LYS:HB2	2.01	0.41
28:B2:33:MET:O	28:B2:35:LEU:N	2.53	0.41
36:BA:2577:A:O5'	36:BA:2577:A:H8	2.04	0.41
36:BA:2836:U:H2'	36:BA:2837:G:C8	2.55	0.41
53:DU:113:ALA:C	53:DU:115:ALA:N	2.74	0.41
36:DA:1365:A:N6	36:DA:1366:A:C6	2.89	0.41
46:DN:48:MET:H	46:DN:48:MET:HE3	1.79	0.41
16:AP:8:ARG:HB2	16:AP:28:ARG:HH21	1.85	0.41
1:CA:993:G:H4'	1:CA:994:A:OP2	2.20	0.41
32:D6:6:ARG:C	32:D6:8:LYS:N	2.73	0.41
36:BA:2635:C:H5''	40:BE:78:LEU:HD12	2.02	0.41
34:B8:17:THR:OG1	34:B8:21:LYS:HB2	2.20	0.41
48:BP:100:LEU:CB	48:BP:106:LEU:HD13	2.44	0.41
1:CA:1226:C:H4'	1:CA:1227:A:OP1	2.20	0.41
1:CA:949:A:N7	1:CA:950:U:C4	2.89	0.41
1:AA:950:U:H2'	1:AA:951:G:C8	2.53	0.41
5:AE:28:PHE:CD2	5:AE:51:VAL:HG22	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2682:U:H1'	40:BE:12:THR:HA	2.03	0.41
52:BT:46:GLU:O	52:BT:65:LYS:HG2	2.20	0.41
52:BT:76:PHE:HB3	52:BT:82:LEU:HD21	2.03	0.41
36:BA:2809:A:N6	36:BA:2891:G:H2'	2.36	0.41
52:DT:78:LEU:O	52:DT:79:HIS:CD2	2.72	0.41
57:DY:14:LEU:HD12	57:DY:15:VAL:H	1.84	0.41
57:DY:38:ILE:HA	57:DY:38:ILE:HD12	1.86	0.41
57:DY:84:ARG:HH21	57:DY:97:ARG:HB2	1.85	0.41
1:CA:1346:A:C6	1:CA:1374:A:H5''	2.56	0.41
1:AA:1518:A:H2'	1:AA:1519:A:C8	2.56	0.41
36:BA:336:C:H5''	57:BY:7:VAL:CG1	2.51	0.41
57:BY:13:VAL:O	57:BY:24:VAL:HG13	2.20	0.41
57:BY:67:LEU:CG	57:BY:68:HIS:H	2.33	0.41
42:BG:29:TRP:C	42:BG:31:VAL:N	2.71	0.41
42:BG:4:ASP:OD2	42:BG:9:ARG:NH2	2.54	0.41
38:DC:42:GLU:OE1	38:DC:216:THR:O	2.38	0.41
1:CA:920:U:H1'	1:CA:1080:A:N3	2.35	0.41
41:BF:127:GLU:OE1	41:BF:196:LEU:HD12	2.21	0.41
36:BA:2106:G:C6	36:BA:2184:G:C6	3.08	0.41
36:BA:2111:C:C4	36:BA:2145:C:H2'	2.54	0.41
3:CC:177:THR:HG22	3:CC:180:ALA:H	1.85	0.41
3:CC:125:GLU:OE2	3:CC:190:ARG:N	2.52	0.41
4:CD:94:LEU:O	4:CD:95:GLY:C	2.59	0.41
25:AZ:214:VAL:CG2	25:AZ:215:ARG:N	2.83	0.41
3:AC:48:TYR:OH	3:AC:122:GLU:HG3	2.20	0.41
1:CA:448:A:C8	1:CA:487:A:C6	3.08	0.41
10:CJ:78:ASN:ND2	10:CJ:81:THR:HG21	2.10	0.41
36:DA:1541:G:N3	36:DA:1541:G:O4'	2.53	0.41
41:BF:49:ALA:HB1	41:BF:92:PRO:CB	2.50	0.41
36:DA:139:G:C5	36:DA:140:G:H2'	2.55	0.41
36:BA:1827:C:H2'	36:BA:1828:G:C4'	2.50	0.41
36:BA:763:G:H2'	36:BA:764:A:O5'	2.19	0.41
37:DB:104:U:H3'	37:DB:104:U:H6	1.86	0.41
37:DB:21:G:C8	37:DB:63:G:C2	3.08	0.41
36:DA:1641:A:H2'	36:DA:1642:G:O4'	2.19	0.41
22:AV:56:C:H1'	42:BG:76:SER:HB3	2.03	0.41
36:DA:464:U:H2'	36:DA:465:G:C5'	2.51	0.41
42:DG:128:ARG:O	42:DG:129:GLY:C	2.59	0.41
20:AT:70:SER:HA	20:AT:73:HIS:NE2	2.35	0.41
7:AG:118:VAL:CG2	7:AG:119:ARG:H	2.19	0.41
1:AA:81:U:H1'	1:AA:82:U:C5	2.56	0.41
40:DE:176:ILE:CG2	40:DE:178:GLU:HB3	2.50	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1093:G:O3'	43:BH:170:ARG:NH2	2.53	0.41
5:CE:150:ARG:HG2	5:CE:151:LEU:HD23	2.01	0.41
36:DA:1578:U:H2'	36:DA:1579:A:C5'	2.35	0.41
46:BN:40:PRO:HA	53:BU:64:ARG:HA	2.02	0.41
42:DG:68:PRO:HB3	42:DG:90:LEU:HG	2.02	0.41
1:AA:830:G:H2'	1:AA:831:U:O4'	2.21	0.41
15:AO:17:ARG:NH1	15:AO:77:ARG:CZ	2.84	0.41
55:BW:12:ILE:HG23	55:BW:17:VAL:CG2	2.50	0.41
1:CA:1128:C:O2'	1:CA:1130:A:N7	2.51	0.41
2:AB:179:LYS:CA	8:AH:72:PRO:HD3	2.47	0.41
1:AA:716:A:H8	1:AA:716:A:O5'	2.03	0.41
1:CA:1511:G:H8	1:CA:1511:G:O5'	2.04	0.41
25:AZ:362:VAL:HG11	25:AZ:368:VAL:HG22	2.02	0.41
36:DA:2452:C:C4	36:DA:2453:A:C6	3.08	0.41
36:DA:45:C:H2'	36:DA:47:C:C6	2.55	0.41
58:DZ:105:VAL:HG12	58:DZ:139:VAL:O	2.20	0.41
36:DA:2359:C:O2'	36:DA:2360:A:H5'	2.21	0.41
1:CA:1481:U:H2'	1:CA:1482:G:H8	1.84	0.41
1:CA:1419:G:O6	1:CA:1482:G:C5	2.74	0.41
54:BV:58:VAL:HG21	54:BV:98:GLU:HG2	2.02	0.41
1:CA:355:C:N4	1:CA:356:A:N6	2.68	0.41
36:DA:271(Z):C:H1'	36:DA:272(C):G:H1'	2.03	0.41
24:CY:55:PSU:N1	24:CY:58:A:OP2	2.53	0.41
15:AO:36:ILE:HD12	15:AO:63:ARG:NH1	2.36	0.41
36:DA:188:G:C6	36:DA:189:G:C4	3.08	0.41
36:DA:206:U:H2'	36:DA:207:A:H8	1.84	0.41
36:BA:802:A:H2'	36:BA:803:U:H6	1.76	0.41
40:DE:69:LYS:C	40:DE:71:GLY:N	2.73	0.41
48:DP:85:LEU:HD11	48:DP:137:LYS:HD3	2.02	0.41
1:CA:928:G:C2	1:CA:1390:U:O2	2.73	0.41
1:AA:1091:U:O2	1:AA:1093:A:C8	2.74	0.41
36:DA:1142:U:H3'	36:DA:1142(A):A:C5'	2.51	0.41
11:AK:38:ASN:O	11:AK:39:PRO:O	2.38	0.41
40:DE:145:LYS:O	40:DE:145:LYS:HD3	2.20	0.41
1:CA:110:C:C4	1:CA:111:G:N7	2.88	0.41
1:CA:1432:G:N2	1:CA:1469:G:O6	2.54	0.41
5:AE:60:TYR:O	5:AE:63:ARG:N	2.51	0.41
1:CA:684:A:C2	11:CK:39:PRO:HG2	2.55	0.41
36:DA:2568:C:N4	36:DA:2569:G:N7	2.69	0.41
1:CA:619:U:N3	4:CD:135:LEU:HD11	2.35	0.41
36:BA:1011:G:C6	36:BA:1151:G:C6	3.08	0.41
36:DA:271(T):C:H2'	36:DA:271(U):G:C8	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2078:C:C4	36:BA:2079:U:C4	3.08	0.41
36:BA:547:A:O2'	36:BA:548:A:H5'	2.20	0.41
36:DA:2754:U:H2'	36:DA:2756:U:P	2.61	0.41
28:D2:7:ARG:HG3	28:D2:7:ARG:H	1.47	0.41
3:CC:60:ALA:N	3:CC:63:ASN:HD21	2.19	0.41
25:CZ:115:GLN:HA	25:CZ:115:GLN:HE21	1.84	0.41
36:DA:937:U:H2'	36:DA:938:G:H8	1.86	0.41
24:CY:37:YG:H142	24:CY:38:A:C2	2.55	0.41
36:DA:1573:G:C8	36:DA:1574:C:C5	3.08	0.41
36:BA:477:A:H2'	36:BA:478:A:H8	1.85	0.41
36:BA:2312:U:O2'	42:BG:40:ASN:ND2	2.52	0.41
36:DA:1706:U:O2	36:DA:1757:U:H5'	2.21	0.41
36:BA:952:G:C4	36:BA:966:G:N2	2.89	0.41
8:CH:2:LEU:CD2	8:CH:3:THR:N	2.80	0.41
8:AH:40:ALA:N	8:AH:45:ILE:HG13	2.35	0.41
36:BA:1930:G:N2	36:BA:1969:A:C5'	2.83	0.41
1:CA:1418:A:C6	1:CA:1483:A:C5	3.08	0.41
5:CE:6:PHE:CB	5:CE:34:VAL:HG22	2.50	0.41
36:BA:1226:A:N7	36:BA:1227:G:H1'	2.36	0.41
36:DA:654(Q):C:O2'	36:DA:654(R):C:H5'	2.20	0.41
17:AQ:46:ASP:CG	17:AQ:49:GLU:HA	2.40	0.41
36:BA:1935:G:C5	36:BA:1962:C:C5	3.09	0.41
1:AA:654:G:H2'	1:AA:655:A:C8	2.55	0.41
38:DC:84:LYS:O	38:DC:88:GLU:HG3	2.19	0.41
22:AV:73:A:N3	22:AV:73:A:H3'	2.35	0.41
53:BU:84:LYS:HD3	53:BU:84:LYS:HA	1.92	0.41
36:BA:627:A:H8	36:BA:627:A:OP1	2.03	0.41
12:AL:15:ARG:HA	12:AL:15:ARG:HD3	1.88	0.41
36:DA:2663:G:H8	36:DA:2663:G:OP2	2.03	0.41
38:DC:191:ALA:HA	38:DC:194:ARG:CZ	2.51	0.41
55:BW:80:PRO:O	55:BW:100:THR:HG22	2.19	0.41
36:DA:2600:A:OP2	39:DD:237:GLU:HG3	2.20	0.41
36:BA:11:G:O2'	36:BA:12:U:H5'	2.20	0.41
36:DA:2439:A:C8	36:DA:2586:C:H4'	2.56	0.41
34:B8:41:ILE:HG23	34:B8:42:ARG:N	2.35	0.41
34:B8:22:VAL:O	34:B8:49:VAL:HG23	2.21	0.41
36:BA:2416:C:H5''	48:BP:64:LYS:NZ	2.36	0.41
36:BA:668:G:H2'	36:BA:670:A:H62	1.85	0.41
31:D5:6:VAL:H	36:DA:2056:G:H21	1.67	0.41
36:DA:1652:A:N6	36:DA:1653:G:N2	2.69	0.41
50:DR:77:ARG:C	50:DR:79:LEU:N	2.74	0.41
36:BA:483:A:OP2	36:BA:484:C:N4	2.54	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:BY:62:GLU:HB3	57:BY:63:LYS:H	1.73	0.41
41:DF:110:LEU:HD11	41:DF:181:LEU:HD23	2.02	0.41
36:BA:1818:U:H2'	39:BD:157:ARG:CD	2.50	0.41
41:BF:39:TRP:O	41:BF:42:ALA:HB3	2.20	0.41
4:AD:62:GLN:O	4:AD:63:LYS:C	2.59	0.41
4:AD:62:GLN:NE2	4:AD:65:ARG:HH21	2.18	0.41
43:DH:64:LEU:HA	43:DH:67:LEU:CD2	2.50	0.41
43:DH:66:GLY:CA	43:DH:69:ARG:HB3	2.50	0.41
36:BA:2539:C:C2	36:BA:2540:C:C5	3.09	0.41
31:B5:4:HIS:O	36:BA:2056:G:C2	2.73	0.41
40:BE:1:MET:H2	40:BE:84:PHE:HB2	1.84	0.41
40:BE:8:LYS:O	40:BE:193:GLY:N	2.53	0.41
36:BA:1614:A:H61	55:BW:87:PRO:HA	1.86	0.41
13:AM:57:ARG:C	13:AM:59:TYR:H	2.24	0.41
56:DX:12:VAL:HG12	56:DX:27:THR:H	1.86	0.41
53:DU:57:PHE:O	53:DU:58:ARG:C	2.58	0.41
1:AA:59:A:H3'	1:AA:60:A:H5''	2.03	0.41
16:AP:5:ARG:HB2	16:AP:6:LEU:H	1.67	0.41
1:AA:234:C:O2'	1:AA:235:C:H5'	2.21	0.41
1:CA:1055:A:N6	1:CA:1206:G:C6	2.89	0.41
1:CA:993:G:C2	1:CA:1046:A:N3	2.89	0.41
4:CD:11:LEU:O	4:CD:13:ARG:O	2.38	0.41
8:AH:4:ASP:CG	8:AH:7:ALA:HB3	2.40	0.41
1:CA:668:G:C2	1:CA:739:C:C2	3.08	0.41
6:CF:37:VAL:C	6:CF:38:GLU:HG3	2.40	0.41
13:CM:75:ALA:O	13:CM:78:ILE:N	2.54	0.41
1:AA:1308:U:OP2	13:AM:99:ARG:HD2	2.21	0.41
13:AM:105:THR:O	13:AM:106:ASN:CB	2.67	0.41
47:BO:2:ILE:HG22	47:BO:3:GLN:N	2.35	0.41
52:BT:57:PHE:CD2	52:BT:57:PHE:C	2.92	0.41
52:BT:66:VAL:HG12	52:BT:70:VAL:O	2.20	0.41
40:DE:24:THR:N	40:DE:184:VAL:O	2.52	0.41
52:DT:15:VAL:CG2	52:DT:16:ARG:N	2.82	0.41
38:BC:192:PHE:O	38:BC:195:ALA:N	2.54	0.41
36:DA:327:G:N2	36:DA:336:C:N3	2.69	0.41
57:DY:67:LEU:CG	57:DY:68:HIS:H	2.34	0.41
1:CA:375:U:H2'	1:CA:376:G:C8	2.54	0.41
7:CG:72:ARG:N	7:CG:142:GLU:OE1	2.53	0.41
9:CI:76:ALA:O	9:CI:79:LEU:N	2.42	0.41
41:BF:72:ARG:NH1	41:BF:72:ARG:CA	2.76	0.41
36:DA:1070:A:N6	36:DA:1096:A:H2	2.19	0.41
42:BG:36:LYS:CG	42:BG:94:LEU:O	2.69	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2106:G:H2'	36:DA:2107:C:O4'	2.20	0.41
36:DA:2175:C:N3	36:DA:2176:A:N1	2.68	0.41
39:DD:239:ARG:O	39:DD:240:ALA:HB2	2.21	0.41
31:B5:52:TYR:CE2	36:BA:2884:U:O2	2.74	0.41
14:CN:57:ARG:NH1	14:CN:57:ARG:CB	2.64	0.41
27:B1:5:CYS:HG	27:B1:62:VAL:HA	1.86	0.41
1:CA:1001(A):G:O2'	1:CA:1002:G:H5'	2.21	0.41
20:CT:12:ALA:C	20:CT:14:LYS:N	2.73	0.41
36:BA:1838:C:C6	36:BA:1898:U:C5	3.09	0.41
49:DQ:19:GLY:HA2	58:DZ:79:ARG:HH22	1.86	0.41
58:DZ:28:MET:HA	58:DZ:88:PHE:CB	2.46	0.41
37:DB:104:U:O3'	58:DZ:72:ARG:NH1	2.53	0.41
1:AA:1523:G:H2'	1:AA:1524:C:C6	2.56	0.41
9:AI:4:TYR:O	9:AI:18:PHE:HA	2.20	0.41
46:BN:35:ARG:O	46:BN:37:LYS:N	2.53	0.41
36:BA:1317:A:C2	36:BA:1336:A:C2	3.09	0.41
36:DA:2712(A):A:H5''	36:DA:2713:A:OP2	2.21	0.41
36:DA:1228:G:N2	36:DA:1229:G:C4	2.89	0.41
48:DP:18:ARG:O	48:DP:20:GLY:N	2.54	0.41
1:CA:1327:C:OP1	21:CU:20:LYS:N	2.44	0.41
13:CM:44:ARG:C	13:CM:46:LYS:N	2.73	0.41
42:BG:45:GLU:O	42:BG:47:LYS:N	2.47	0.41
42:BG:54:GLU:C	42:BG:56:ALA:N	2.73	0.41
42:DG:121:ASN:HD21	42:DG:124:SER:HA	1.85	0.41
42:DG:39:ILE:HG22	42:DG:157:ILE:HG23	2.03	0.41
42:DG:39:ILE:HG22	42:DG:157:ILE:CG1	2.47	0.41
20:AT:19:SER:C	20:AT:21:LYS:H	2.23	0.41
40:BE:154:LYS:HA	40:BE:154:LYS:HD2	1.90	0.41
24:AY:44:A:H2'	24:AY:45:G:O4'	2.21	0.41
1:CA:381:C:O2'	1:CA:382:A:H5'	2.21	0.41
1:CA:761:G:O5'	1:CA:761:G:H8	2.04	0.41
8:CH:114:THR:HG22	8:CH:130:GLY:O	2.21	0.41
53:BU:34:LYS:O	53:BU:35:ALA:C	2.59	0.41
27:D1:25:LYS:CB	36:DA:388:G:H5'	2.51	0.41
20:AT:50:GLU:CB	20:AT:100:ILE:HD13	2.45	0.41
24:CY:65:C:H5''	25:CZ:341:GLN:HG2	2.03	0.41
1:AA:1339:A:C1'	22:AV:41:C:H1'	2.51	0.41
1:AA:662:G:O2'	1:AA:663:A:H5'	2.21	0.41
36:BA:179:G:C2	36:BA:180:G:C5	3.08	0.41
36:BA:780:G:C2	36:BA:782:A:C2	3.08	0.41
26:D0:46:LYS:O	26:D0:47:PRO:O	2.38	0.41
27:D1:7:ILE:HD12	27:D1:70:VAL:HG22	2.02	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2202:C:H2'	36:DA:2203:U:O4'	2.21	0.41
36:DA:2458:G:C4	36:DA:2490:G:C2	3.09	0.41
36:DA:179:G:C2	36:DA:180:G:C5	3.08	0.41
38:BC:222:VAL:O	38:BC:224:ILE:HG23	2.20	0.41
15:CO:11:VAL:O	15:CO:12:ILE:C	2.57	0.41
36:DA:1387:C:C4	36:DA:1401:G:N2	2.89	0.41
36:BA:2133:G:C8	36:BA:2133:G:C3'	3.03	0.41
20:AT:75:ASN:O	20:AT:79:ARG:N	2.50	0.41
29:D3:37:LEU:O	29:D3:38:GLU:O	2.38	0.41
36:BA:2379:G:H2'	36:BA:2380:C:H6	1.78	0.41
18:AR:48:GLY:O	18:AR:74:ARG:NH2	2.53	0.41
18:CR:71:LYS:O	18:CR:74:ARG:HB2	2.21	0.41
20:CT:36:LEU:CD1	20:CT:36:LEU:C	2.89	0.41
1:AA:928:G:H2'	1:AA:929:G:C5'	2.50	0.41
50:DR:85:PRO:O	50:DR:87:TYR:N	2.53	0.41
46:BN:21:LYS:O	46:BN:61:ARG:HB2	2.19	0.41
22:AW:68:C:H2'	22:AW:69:G:H8	1.80	0.41
36:BA:1142(A):A:H8	36:BA:1142(A):A:H5'	1.86	0.41
36:DA:1145:C:C2	36:DA:1146:C:H5	2.38	0.41
1:CA:328:C:O2	1:CA:328:C:C2'	2.68	0.41
36:BA:2572:A:P	40:BE:144:ARG:HB2	2.60	0.41
41:BF:78:ILE:HA	41:BF:83:PHE:CE1	2.56	0.41
1:CA:1495:U:OP1	13:CM:125:ARG:HD3	2.20	0.41
40:BE:176:ILE:CG2	40:BE:178:GLU:HB3	2.51	0.41
36:DA:1324:G:C2	36:DA:1328:G:N1	2.89	0.41
36:BA:1948:G:C6	36:BA:1949:G:C5	3.08	0.41
36:BA:271(B):C:N4	36:BA:271(W):G:H21	2.18	0.41
1:CA:106:C:H2'	1:CA:107:G:H5'	1.99	0.41
49:BQ:6:ARG:O	49:BQ:7:MET:CG	2.65	0.41
1:CA:127:G:H2'	1:CA:128:G:H8	1.84	0.41
36:BA:2078:C:O2'	36:BA:2079:U:H5'	2.20	0.41
26:B0:60:PHE:CE2	36:BA:2365:G:H4'	2.55	0.41
39:BD:210:GLY:C	39:BD:212:SER:H	2.24	0.41
36:DA:841:A:N1	36:DA:938:G:C6	2.88	0.41
17:CQ:29:HIS:CE1	17:CQ:32:TYR:H	2.33	0.41
36:DA:2517:C:C4	36:DA:2542:A:N1	2.89	0.41
36:BA:413:C:H2'	36:BA:414:C:C6	2.56	0.41
36:DA:1747:G:H2'	36:DA:1747(A):G:H8	1.86	0.41
38:DC:47:LEU:CD1	38:DC:47:LEU:N	2.82	0.41
58:BZ:150:LEU:HD23	58:BZ:150:LEU:C	2.41	0.41
36:BA:614(C):A:H4'	36:BA:615:G:OP1	2.20	0.41
26:D0:25:ARG:C	26:D0:26:TYR:CD1	2.94	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:DC:199:HIS:O	38:DC:201:PRO:N	2.53	0.41
36:DA:2299:G:O2'	36:DA:2300:G:H5'	2.21	0.41
1:CA:1148:U:O2'	1:CA:1149:C:H5'	2.19	0.41
36:DA:666:G:H2'	36:DA:667:U:C5	2.55	0.41
1:AA:342:C:C4	1:AA:343:U:N3	2.89	0.41
1:CA:849:C:O2'	1:CA:850:U:H5'	2.21	0.41
4:CD:155:LEU:HA	4:CD:155:LEU:HD23	1.88	0.41
36:DA:1561:G:O2'	36:DA:1562:A:H5'	2.21	0.41
33:B7:19:ARG:HD3	36:BA:125:G:OP2	2.20	0.41
36:BA:2584:U:O2	36:BA:2584:U:O4'	2.38	0.41
1:CA:297:G:H4'	1:CA:557:G:H4'	2.02	0.41
1:CA:1418:A:H2	36:DA:1948:G:N3	2.17	0.41
36:DA:1624:G:C5	36:DA:1625:C:C5	3.09	0.41
22:AV:70:G:C2'	22:AV:71:G:H5'	2.51	0.41
36:BA:1720:U:C2'	36:BA:1721:G:H5''	2.50	0.41
3:AC:162:GLN:O	3:AC:163:ALA:C	2.59	0.41
1:AA:297:G:H4'	1:AA:557:G:H4'	2.03	0.41
7:AG:50:ILE:C	7:AG:52:GLU:H	2.24	0.41
22:AV:47:U:O2'	22:AV:48:C:H5'	2.20	0.41
4:CD:106:TYR:HE1	4:CD:113:SER:HA	1.86	0.41
58:BZ:103:ARG:CZ	58:BZ:136:PHE:CE1	3.03	0.41
34:D8:58:ILE:HG22	34:D8:58:ILE:O	2.20	0.41
29:B3:20:LYS:NZ	36:BA:970:C:OP1	2.54	0.41
43:DH:106:THR:HG22	43:DH:112:PRO:HA	2.03	0.41
1:CA:906:G:H8	1:CA:906:G:O5'	2.03	0.41
56:BX:61:GLY:O	56:BX:62:LYS:O	2.38	0.41
32:B6:17:LYS:O	32:B6:18:ARG:HB3	2.20	0.41
32:B6:36:LEU:HD23	32:B6:37:ARG:N	2.35	0.41
34:B8:8:LYS:O	34:B8:12:LYS:HE3	2.20	0.41
36:BA:1192:G:O5'	36:BA:1192:G:C8	2.73	0.41
36:BA:2259:G:N2	36:BA:2282:G:C2	2.89	0.41
36:BA:2283:C:C5	36:BA:2389:G:C2'	3.03	0.41
31:D5:6:VAL:O	31:D5:6:VAL:CG1	2.69	0.41
48:DP:147:LEU:O	48:DP:148:LEU:CB	2.69	0.41
25:AZ:194:GLU:HB3	25:AZ:198:LYS:HZ1	1.85	0.41
28:D2:20:GLU:HG3	28:D2:21:LEU:N	2.36	0.41
28:D2:5:GLU:C	28:D2:9:GLN:OE1	2.59	0.41
36:DA:99:U:H4'	36:DA:102:G:H1'	2.01	0.41
36:DA:2476:A:N3	36:DA:2476:A:H2'	2.35	0.41
36:DA:2740:A:C6	36:DA:2764:A:C8	3.09	0.41
36:BA:1801:G:O2'	36:BA:1802:A:H5''	2.20	0.41
36:BA:1800:C:OP1	39:BD:264:LYS:HE2	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1163:C:N3	1:AA:1174:G:C2	2.88	0.41
10:CJ:12:ASP:C	10:CJ:14:LYS:N	2.73	0.41
1:CA:130:A:H1'	1:CA:263:A:O2'	2.21	0.41
42:DG:85:GLY:O	42:DG:87:PRO:CD	2.68	0.41
41:BF:117:ARG:CG	41:BF:192:LEU:HD13	2.47	0.41
36:BA:2754:U:H2'	36:BA:2756:U:P	2.61	0.41
36:BA:2481:G:O2'	36:BA:2482:G:P	2.78	0.41
41:BF:162:LEU:HD12	41:BF:162:LEU:N	2.33	0.41
36:BA:2050:C:C4	36:BA:2051:A:C6	3.08	0.41
36:BA:2870:C:H2'	36:BA:2871:C:C5'	2.50	0.41
50:BR:76:VAL:O	50:BR:79:LEU:HB3	2.20	0.41
42:BG:39:ILE:HG22	42:BG:157:ILE:HG12	2.01	0.41
36:DA:1192:G:O2'	36:DA:1193:G:H5'	2.21	0.41
36:DA:2625:G:H2'	36:DA:2626:C:O4'	2.21	0.41
36:DA:27:G:N2	36:DA:513:A:OP2	2.54	0.41
8:CH:9:MET:HE3	8:CH:36:LEU:HD21	2.03	0.41
9:CI:94:ALA:O	9:CI:95:LYS:HB3	2.20	0.41
1:AA:248:C:N3	1:AA:277:C:N3	2.68	0.41
1:CA:969:A:H2'	1:CA:970:C:O4'	2.21	0.41
4:CD:17:VAL:O	4:CD:18:LYS:C	2.59	0.41
37:BB:117:G:H5'	51:BS:55:ALA:HB1	2.01	0.41
1:CA:1308:U:O2'	1:CA:1309:G:C5'	2.68	0.41
1:AA:956:U:C2'	1:AA:957:U:H5'	2.50	0.41
1:AA:344:A:H3'	1:AA:346:G:O6	2.20	0.41
36:BA:1677:A:C2'	36:BA:1678:G:C8	2.94	0.41
36:BA:1678:G:H22	36:BA:1989:G:H1	1.67	0.41
40:BE:167:VAL:CG1	40:BE:189:PRO:HD2	2.50	0.41
40:DE:167:VAL:HG13	40:DE:170:LEU:CD1	2.30	0.41
58:BZ:7:ALA:HA	58:BZ:39:VAL:HG12	2.02	0.41
57:DY:8:LYS:HE2	57:DY:72:VAL:HG23	2.03	0.41
36:BA:2732:G:C2'	36:BA:2733:A:H5'	2.51	0.41
1:CA:1344:C:H2'	1:CA:1345:U:H5'	2.03	0.41
1:CA:1348:U:H6	1:CA:1348:U:H5'	1.86	0.41
39:DD:79:VAL:HG11	39:DD:113:VAL:HA	2.01	0.41
1:AA:1487:G:H2'	1:AA:1488:G:C5'	2.51	0.41
1:AA:924:C:O2'	1:AA:925:G:H5'	2.20	0.41
19:AS:43:GLU:O	19:AS:45:VAL:N	2.53	0.41
4:AD:102:ASP:HB3	4:AD:121:VAL:HG21	2.02	0.41
57:BY:12:THR:OG1	57:BY:26:LYS:HA	2.20	0.41
42:BG:166:ASP:O	42:BG:167:GLU:C	2.58	0.41
36:DA:2166:G:H2'	36:DA:2167:U:C6	2.55	0.41
36:DA:2106:G:C6	36:DA:2184:G:C6	3.08	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1422:G:N2	1:CA:1423:G:C4	2.89	0.41
1:CA:1334:G:H5'	1:CA:1335:C:OP2	2.21	0.41
1:CA:15:G:H2'	1:CA:16:A:H8	1.86	0.41
39:DD:244:ARG:HG2	39:DD:245:PRO:CB	2.50	0.41
55:DW:104:THR:C	55:DW:105:VAL:CG2	2.88	0.41
55:DW:72:LYS:CE	55:DW:108:GLY:HA3	2.48	0.41
31:B5:58:LEU:O	31:B5:59:GLU:HB3	2.20	0.41
36:BA:2166:G:O2'	36:BA:2167:U:H5'	2.21	0.41
36:BA:2115:G:H5'	36:BA:2167:U:O2'	2.21	0.41
3:CC:84:ILE:O	3:CC:84:ILE:HG12	2.21	0.41
4:CD:79:PHE:CA	4:CD:93:PHE:HE2	2.33	0.41
22:AV:20:U:C3'	22:AV:21:A:C5'	2.90	0.41
27:B1:62:VAL:HG21	27:B1:67:ILE:HA	2.03	0.41
36:BA:1829:A:N3	39:BD:15:PHE:HZ	2.17	0.41
39:BD:238:GLY:O	39:BD:239:ARG:HB3	2.20	0.41
55:DW:32:ALA:O	55:DW:36:LEU:HD23	2.20	0.41
37:DB:17:C:O2'	37:DB:18:G:H5'	2.20	0.41
49:DQ:129:THR:HB	49:DQ:130:LYS:H	1.74	0.41
58:DZ:33:LEU:HD11	58:DZ:35:ARG:HB2	2.02	0.41
58:DZ:86:VAL:C	58:DZ:87:ASP:OD1	2.59	0.41
36:BA:1005:C:H2'	36:BA:1006:C:C5	2.54	0.41
36:DA:693:C:N4	36:DA:769:G:H1	2.18	0.41
36:DA:2711:A:OP1	36:DA:2712(A):A:OP1	2.38	0.41
36:DA:1223:G:C5	36:DA:1225:G:OP2	2.74	0.41
36:DA:445:C:O2'	36:DA:446:G:O4'	2.38	0.41
41:DF:49:ALA:HB1	41:DF:92:PRO:CB	2.50	0.41
36:DA:1248:G:O5'	41:DF:92:PRO:HG3	2.20	0.41
36:DA:2579:C:C4'	40:DE:134:ILE:HG12	2.51	0.41
13:CM:40:ASN:HA	13:CM:41:PRO:HD3	1.79	0.41
42:BG:46:ALA:HA	42:BG:51:ARG:HB3	2.03	0.41
42:DG:15:VAL:HG12	42:DG:19:LEU:HD11	2.00	0.41
1:AA:90:U:O2'	1:AA:91:C:H5	2.03	0.41
1:AA:439:A:C8	1:AA:496:A:C2	3.08	0.41
36:DA:2634:G:O2'	36:DA:2635:C:H5'	2.21	0.41
24:AY:50:G:C6	24:AY:51:C:N4	2.88	0.41
25:CZ:284:ASP:OD1	25:CZ:284:ASP:N	2.54	0.41
15:CO:17:ARG:HH12	15:CO:77:ARG:NH2	2.19	0.41
1:AA:109:A:C4	1:AA:327:A:C2	3.08	0.41
1:AA:1467:G:H8	1:AA:1467:G:O5'	2.04	0.41
1:AA:1280:A:O2'	1:AA:1281:U:P	2.79	0.41
55:BW:14:PRO:O	55:BW:15:ARG:C	2.59	0.41
10:CJ:7:LYS:HG2	10:CJ:71:LEU:HB2	2.03	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:CJ:89:ASP:O	10:CJ:90:LEU:CB	2.60	0.41
1:AA:742:G:H5''	15:AO:58:MET:CE	2.42	0.41
29:B3:7:LYS:O	29:B3:54:VAL:CA	2.63	0.41
36:BA:149:A:C2	36:BA:150:C:N3	2.88	0.41
1:AA:119:A:H5''	1:AA:120:A:C5'	2.50	0.41
1:AA:597:G:C8	1:AA:598:U:C5	3.08	0.41
36:BA:272(J):C:H3'	36:BA:274:G:H5''	2.03	0.41
1:AA:55:A:C2'	25:AZ:232:THR:HG21	2.39	0.41
1:CA:295:C:C2	1:CA:296:U:C6	3.09	0.41
26:D0:48:GLY:CA	26:D0:51:VAL:HB	2.51	0.41
1:CA:1487:G:O2'	1:CA:1488:G:H5'	2.21	0.41
1:CA:488:C:O2'	1:CA:489:C:H5'	2.21	0.41
36:DA:179:G:N1	36:DA:180:G:C5	2.89	0.41
1:AA:404:U:H5'	4:AD:122:ARG:CD	2.49	0.41
1:CA:404:U:P	4:CD:122:ARG:HD3	2.61	0.41
36:DA:2361:A:H2'	36:DA:2362:G:C8	2.49	0.41
24:AY:75:C:C6	25:AZ:230:THR:O	2.73	0.41
38:BC:6:ARG:CZ	38:BC:34:THR:HB	2.51	0.41
1:AA:66:G:N2	1:AA:172:A:C2	2.89	0.41
1:AA:628:G:H2'	1:AA:629:G:C8	2.55	0.41
1:CA:357:G:OP1	1:CA:366:C:O2'	2.32	0.41
45:DK:73:UNK:C	45:DK:75:UNK:N	2.79	0.41
36:DA:2126:A:O2'	36:DA:2127:G:OP2	2.39	0.41
48:BP:85:LEU:HD11	48:BP:137:LYS:HD3	2.03	0.41
33:D7:15:THR:O	33:D7:16:HIS:CG	2.73	0.41
18:CR:59:SER:O	18:CR:62:GLU:N	2.53	0.41
36:DA:883:G:N2	36:DA:893:C:N3	2.68	0.41
48:DP:84:ASN:O	48:DP:86:LYS:N	2.54	0.41
39:DD:142:VAL:HG21	39:DD:191:ALA:HB1	2.00	0.41
25:CZ:316:PHE:CD2	25:CZ:400:VAL:HG13	2.55	0.41
47:DO:8:LEU:HD22	47:DO:19:ILE:CG1	2.51	0.41
46:DN:91:LEU:O	46:DN:95:PRO:HB3	2.21	0.41
51:BS:40:ILE:HG22	51:BS:47:THR:HA	2.03	0.41
36:BA:1051:G:H2'	36:BA:1052:C:C6	2.56	0.41
1:CA:734:G:H2'	1:CA:735:C:H6	1.84	0.41
39:DD:91:ARG:HG2	39:DD:91:ARG:NH1	2.27	0.41
22:AW:54:U:H2'	22:AW:55:U:H5'	2.03	0.41
36:DA:2435:A:C4	36:DA:2436:G:C8	3.08	0.41
46:DN:39:ARG:N	53:DU:67:ALA:HB1	2.35	0.41
49:DQ:77:LYS:HB3	49:DQ:81:VAL:HG11	2.02	0.41
36:BA:2371:G:N2	36:BA:2372:G:C4	2.88	0.41
1:AA:887:G:H2'	1:AA:887:G:N3	2.35	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:CZ:122:LEU:HA	25:CZ:125:GLN:HG3	2.02	0.41
12:AL:6:THR:HG1	12:AL:9:GLN:HG3	1.85	0.41
36:DA:2517:C:HO2'	36:DA:2519:U:H5	1.68	0.41
48:DP:71:VAL:H	48:DP:72:PRO:CD	2.33	0.41
30:B4:47:GLN:HB3	30:B4:47:GLN:HE21	1.73	0.41
36:DA:1431:U:C2'	36:DA:1432:C:C5'	2.98	0.41
15:CO:3:ILE:CD1	15:CO:34:LEU:HD21	2.50	0.41
8:AH:49:GLU:O	8:AH:50:ARG:C	2.59	0.41
15:AO:3:ILE:HD12	15:AO:34:LEU:HD21	2.03	0.41
39:BD:134:ARG:NE	39:BD:135:PHE:HE1	2.18	0.41
11:CK:48:ILE:HG22	11:CK:49:GLY:H	1.85	0.41
36:DA:1478:G:H2'	36:DA:1479:G:C8	2.55	0.41
48:DP:69:GLY:O	48:DP:70:GLN:C	2.58	0.41
36:BA:1558:A:H1'	36:BA:1559:G:OP2	2.21	0.41
6:CF:71:ARG:NH1	6:CF:71:ARG:HG3	2.36	0.41
36:BA:355:G:H2'	36:BA:356:G:H8	1.86	0.41
36:DA:889:C:O2'	36:DA:890:A:P	2.78	0.41
1:AA:529:G:O6	12:AL:49:ASN:CB	2.69	0.41
36:DA:355:G:H2'	36:DA:356:G:H8	1.86	0.41
58:BZ:158:PRO:HD2	58:BZ:161:VAL:HB	2.01	0.41
39:BD:110:GLY:O	39:BD:111:LEU:C	2.59	0.41
7:CG:152:ALA:O	7:CG:155:ARG:HG3	2.20	0.41
34:B8:32:LEU:HD22	36:BA:2392:A:OP1	2.21	0.41
36:BA:2261:C:C1'	36:BA:2388:A:H1'	2.51	0.41
36:BA:2415:G:H2'	36:BA:2416:C:C6	2.56	0.41
36:DA:2850:A:N6	36:DA:2869:G:H5'	2.36	0.41
50:DR:63:ARG:HG3	50:DR:63:ARG:HH11	1.86	0.41
19:AS:16:LEU:H	19:AS:16:LEU:CD1	2.18	0.41
36:DA:1818:U:H2'	39:DD:157:ARG:CD	2.51	0.41
39:DD:43:ARG:HB3	39:DD:54:ARG:HB3	2.03	0.41
57:BY:51:VAL:C	57:BY:53:PRO:HD3	2.41	0.41
36:BA:483:A:C1'	57:BY:60:PHE:HZ	2.34	0.41
32:D6:15:GLU:OE2	32:D6:18:ARG:NH2	2.53	0.41
34:D8:61:LEU:HG	34:D8:61:LEU:H	1.50	0.41
36:DA:84:A:N6	36:DA:102:G:O2'	2.53	0.41
36:BA:2086:U:H2'	36:BA:2087:G:C8	2.55	0.41
36:DA:1242:A:H3'	36:DA:1243:G:C8	2.51	0.41
41:DF:182:ASN:OD1	41:DF:185:ASP:CB	2.69	0.41
35:D9:1:MET:HA	35:D9:4:ARG:NH2	2.35	0.41
36:DA:271(M):G:O2'	36:DA:271(O):C:H5'	2.21	0.41
39:BD:276:LYS:HD3	39:BD:276:LYS:OXT	2.21	0.41
36:DA:2239:G:H2'	36:DA:2240:C:H6	1.86	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1065:U:O4	1:AA:1189:C:H2'	2.20	0.41
36:BA:621:A:H2'	36:BA:622:G:C4'	2.51	0.41
49:BQ:50:ALA:O	49:BQ:54:MET:HB2	2.20	0.41
49:BQ:63:LYS:HE3	49:BQ:65:PHE:CE1	2.55	0.41
36:BA:1206:G:C2	36:BA:1207:C:C6	3.09	0.41
36:BA:321:G:C4	41:BF:165:ARG:HD3	2.56	0.41
36:BA:2007:C:H6	36:BA:2007:C:O5'	2.02	0.41
30:B4:5:ILE:O	42:BG:67:LYS:HG3	2.20	0.41
42:BG:39:ILE:HG12	42:BG:92:VAL:CG1	2.51	0.41
27:D1:63:ALA:HB3	27:D1:66:HIS:HB3	2.02	0.41
46:DN:35:ARG:NH2	46:DN:42:TRP:CH2	2.87	0.41
53:DU:20:LEU:N	53:DU:20:LEU:CD2	2.76	0.41
53:DU:69:CYS:O	53:DU:74:LEU:HD12	2.21	0.41
54:DV:58:VAL:HB	54:DV:98:GLU:H	1.85	0.41
54:DV:58:VAL:CG1	54:DV:59:ALA:N	2.84	0.41
1:AA:115:G:O2'	1:AA:116:A:OP2	2.39	0.41
1:AA:246:A:O3'	1:AA:247:G:C4'	2.69	0.41
1:CA:505:G:H2'	1:CA:506:G:C8	2.55	0.41
1:CA:510:A:N3	1:CA:543:C:H1'	2.36	0.41
4:CD:59:ARG:CA	4:CD:59:ARG:HE	2.34	0.41
51:BS:13:ARG:O	51:BS:14:VAL:HB	2.20	0.41
51:BS:14:VAL:O	51:BS:16:ASN:N	2.54	0.41
51:BS:25:ARG:HD2	51:BS:88:ASP:OD1	2.21	0.41
51:BS:89:ARG:HB3	51:BS:92:TYR:HB3	2.03	0.41
8:AH:6:ILE:C	8:AH:8:ASP:N	2.74	0.41
8:AH:82:HIS:C	8:AH:83:ILE:HG22	2.40	0.41
41:DF:178:PRO:HB3	41:DF:201:VAL:HG11	2.00	0.41
1:CA:668:G:O4'	15:CO:49:ASP:HB2	2.21	0.41
36:BA:1637:A:H4'	36:BA:2711:A:O2'	2.21	0.41
36:BA:2698:U:C4	36:BA:2699:C:N4	2.88	0.41
52:BT:36:GLU:O	52:BT:38:ASN:N	2.54	0.41
58:BZ:94:GLU:HA	58:BZ:95:PRO:HD2	1.78	0.41
36:DA:294:A:C6	36:DA:345:A:N1	2.88	0.41
1:AA:1372:U:H2'	1:AA:1373:G:C5'	2.51	0.41
7:AG:71:PRO:HB3	7:AG:138:LYS:HG3	2.02	0.41
3:AC:30:ARG:HD3	14:AN:38:GLY:HA3	2.02	0.41
29:D3:50:VAL:C	29:D3:52:HIS:N	2.73	0.41
10:CJ:46:ARG:O	10:CJ:47:PHE:CD1	2.73	0.41
51:DS:88:ASP:CG	51:DS:89:ARG:N	2.75	0.41
36:BA:329:G:H4'	36:BA:330:A:OP2	2.21	0.41
42:BG:168:GLU:O	42:BG:170:ARG:N	2.53	0.41
31:D5:40:LYS:HB3	31:D5:46:CYS:SG	2.61	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2152:G:H2'	36:DA:2153:G:H8	1.84	0.41
46:BN:10:GLU:OE2	46:BN:11:PRO:HD2	2.20	0.41
14:AN:15:LYS:O	14:AN:16:PHE:O	2.38	0.41
39:DD:208:LYS:HB2	39:DD:209:ALA:H	1.74	0.41
39:DD:242:ARG:HB2	39:DD:243:GLY:H	1.62	0.41
36:BA:2152:G:N3	36:BA:2153:G:C8	2.89	0.41
2:CB:233:SER:O	2:CB:235:SER:N	2.53	0.41
19:CS:9:VAL:CG1	19:CS:39:THR:HB	2.50	0.41
3:AC:177:THR:HG22	3:AC:180:ALA:H	1.86	0.41
3:AC:84:ILE:O	3:AC:88:ARG:HG3	2.20	0.41
1:CA:81:U:N3	1:CA:83:U:H5	2.19	0.41
1:CA:156:G:H1'	1:CA:166:G:H22	1.85	0.41
48:BP:16:ARG:CG	48:BP:17:LYS:N	2.84	0.41
37:DB:105:A:C2	37:DB:106:G:H1'	2.56	0.41
49:DQ:34:LEU:HA	49:DQ:130:LYS:O	2.21	0.41
36:BA:18:C:O3'	53:BU:23:GLY:CA	2.68	0.41
1:CA:1217:C:P	14:CN:9:LYS:HZ1	2.43	0.41
36:BA:84:A:N6	36:BA:102:G:O2'	2.54	0.41
39:DD:39:LYS:HD3	39:DD:60:ARG:HB3	2.03	0.41
36:BA:1578:U:H2'	36:BA:1579:A:C5'	2.35	0.41
30:D4:33:VAL:HG13	30:D4:34:GLU:N	2.35	0.41
42:DG:172:LEU:O	42:DG:176:LEU:HD12	2.21	0.41
42:DG:64:THR:OG1	42:DG:94:LEU:HD21	2.21	0.41
1:CA:982:U:HO2'	1:CA:983:A:P	2.44	0.41
43:DH:85:LYS:NZ	43:DH:133:VAL:H	1.95	0.41
13:AM:23:TYR:HB3	13:AM:67:GLU:CB	2.50	0.41
9:AI:46:ALA:CB	9:AI:74:ILE:HG23	2.51	0.41
1:CA:583:A:H2'	1:CA:584:G:O4'	2.21	0.41
43:BH:94:TYR:CE1	43:BH:108:GLY:N	2.89	0.41
42:DG:42:GLY:O	42:DG:88:ILE:HG22	2.21	0.41
25:CZ:222:LEU:HA	25:CZ:304:LEU:O	2.21	0.41
43:DH:97:ARG:O	43:DH:103:LEU:HD12	2.21	0.41
49:BQ:42:ILE:O	49:BQ:42:ILE:HG23	2.21	0.41
6:AF:48:LEU:HA	6:AF:48:LEU:HD23	1.78	0.41
22:CV:41:C:C2'	22:CV:42:C:H5'	2.51	0.41
11:CK:30:VAL:HG23	11:CK:30:VAL:O	2.20	0.41
11:CK:30:VAL:HG21	11:CK:65:ALA:HA	2.03	0.41
10:CJ:8:LEU:N	10:CJ:8:LEU:HD12	2.36	0.41
49:DQ:43:THR:HG1	49:DQ:46:GLN:HG3	1.83	0.41
1:AA:45:U:H2'	1:AA:46:G:C8	2.56	0.41
27:B1:58:ILE:O	27:B1:59:THR:HG23	2.20	0.41
36:BA:179:G:N1	36:BA:180:G:C5	2.89	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:954:G:N3	36:DA:2274:A:C2	2.88	0.41
36:BA:784:A:N6	39:BD:229:VAL:HG11	2.35	0.41
1:AA:677:U:O2'	1:AA:678:U:H5'	2.21	0.41
13:AM:108:ARG:NH1	13:AM:108:ARG:CG	2.82	0.41
16:AP:50:LYS:C	16:AP:51:VAL:HG23	2.41	0.41
1:CA:409:G:OP1	4:CD:22:LYS:O	2.38	0.41
23:AX:22:A:C5	23:AX:23:C:C5	3.08	0.41
26:D0:58:THR:CG2	26:D0:59:LEU:N	2.84	0.41
33:B7:7:PRO:HA	36:BA:686:G:C8	2.55	0.41
1:AA:1386:G:N2	1:AA:1387:G:C5	2.88	0.41
7:CG:22:LEU:HD22	7:CG:62:PHE:HE2	1.85	0.41
25:CZ:271:GLU:CG	25:CZ:276:THR:HA	2.43	0.41
2:AB:36:ARG:CZ	2:AB:36:ARG:HA	2.50	0.41
1:AA:1220:G:C4	1:AA:1221:G:C8	3.09	0.41
31:B5:34:PRO:HG3	36:BA:2885:C:O2'	2.20	0.41
12:CL:83:VAL:CG1	12:CL:84:LEU:H	2.31	0.41
1:CA:322:C:C5	1:CA:323:U:C5	3.09	0.41
51:BS:40:ILE:HG22	51:BS:46:VAL:O	2.21	0.41
36:BA:2543:G:H2'	36:BA:2544:G:C8	2.56	0.41
37:DB:35:U:H2'	37:DB:36:C:C6	2.55	0.41
36:BA:1106:G:C6	36:BA:1107:G:N3	2.89	0.41
46:BN:67:LEU:O	46:BN:68:GLU:HG3	2.20	0.41
1:CA:1339:A:C2	22:CV:31:A:C4'	3.03	0.41
36:DA:2077:A:H1'	36:DA:2435:A:C1'	2.51	0.41
1:CA:1528:U:H4'	1:CA:1529:G:O5'	2.20	0.41
36:DA:1028:A:OP2	36:DA:1126:A:N6	2.52	0.41
1:CA:306:G:C2'	1:CA:307:C:H5'	2.51	0.41
6:AF:14:LEU:HD12	6:AF:19:LEU:HB2	2.02	0.41
1:CA:630:G:C3'	1:CA:631:G:H5'	2.51	0.41
36:BA:371:A:C6	36:BA:401:A:C8	3.08	0.41
48:DP:136:GLU:HA	48:DP:136:GLU:OE1	2.20	0.41
36:BA:1714:G:C5	36:BA:1746:G:C6	3.09	0.41
1:CA:1045:C:O2	1:CA:1045:C:C2'	2.64	0.41
1:AA:102:G:C6	1:AA:103:C:C5	3.09	0.41
36:BA:1701:A:H5''	36:BA:1701:A:H8	1.86	0.41
18:AR:85:LEU:HD12	18:AR:86:VAL:N	2.35	0.41
1:AA:728:A:C5	15:AO:54:ARG:HG3	2.56	0.41
1:AA:1148:U:H4'	9:AI:14:VAL:CG1	2.48	0.41
57:DY:16:ALA:HA	57:DY:21:LYS:HA	2.03	0.41
1:CA:728:A:C5	15:CO:54:ARG:HG3	2.55	0.41
36:BA:1934:C:O2'	36:BA:1974:C:H5''	2.21	0.41
1:CA:1484:C:H2'	1:CA:1485:U:O4'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2856:C:H2'	36:BA:2857:G:C5'	2.51	0.41
1:CA:71:C:H2'	1:CA:72:C:H6	1.86	0.41
36:DA:332:A:O2'	36:DA:333:G:P	2.79	0.41
36:DA:1632:A:H8	36:DA:1632:A:O5'	2.04	0.41
13:AM:75:ALA:O	13:AM:78:ILE:HB	2.21	0.41
43:BH:150:ALA:O	43:BH:151:ILE:C	2.58	0.41
1:AA:754:C:H3'	1:AA:754:C:O2	2.20	0.41
36:DA:831:G:O5'	36:DA:831:G:H8	2.04	0.41
36:DA:1839:G:H8	36:DA:1839:G:H5'	1.86	0.41
36:BA:2658:C:C5	36:BA:2659:G:N7	2.89	0.41
25:AZ:355:LEU:HD21	25:AZ:370:PHE:HD2	1.84	0.41
36:BA:2333:A:O4'	36:BA:2335:A:C4	2.74	0.41
32:B6:45:LYS:O	32:B6:46:HIS:CB	2.69	0.41
32:B6:53:LYS:O	32:B6:54:ILE:HG22	2.21	0.41
36:BA:244:A:O2'	48:BP:74:GLU:N	2.54	0.41
36:DA:2048:G:H5'	36:DA:2823:A:N1	2.36	0.41
40:DE:199:ARG:HH11	40:DE:199:ARG:HB3	1.85	0.41
36:DA:2838:G:H2'	36:DA:2839:G:C8	2.56	0.41
40:DE:7:VAL:CG1	40:DE:27:LEU:HB3	2.50	0.41
36:DA:2820:A:C4'	50:DR:5:LYS:HE2	2.51	0.41
39:DD:147:LEU:HD21	39:DD:183:ARG:HH12	1.85	0.41
39:DD:186:HIS:O	39:DD:189:CYS:SG	2.79	0.41
57:BY:50:ARG:HG2	57:BY:58:GLY:CA	2.51	0.41
36:DA:2330:G:O2'	36:DA:2331:G:H5'	2.21	0.41
48:DP:125:VAL:O	48:DP:125:VAL:HG13	2.21	0.41
48:DP:97:PRO:HD3	48:DP:126:VAL:O	2.21	0.41
32:D6:10:LEU:N	32:D6:10:LEU:CD2	2.81	0.41
25:AZ:201:GLU:O	25:AZ:205:ALA:CB	2.69	0.41
28:D2:53:LEU:O	28:D2:54:LYS:C	2.59	0.41
28:D2:53:LEU:C	28:D2:56:GLN:HB2	2.41	0.41
28:D2:66:GLU:HG3	28:D2:67:LYS:N	2.36	0.41
36:BA:1886:C:O2'	36:BA:1887:C:H5'	2.21	0.41
36:BA:377:C:C2	36:BA:398:G:N1	2.89	0.41
24:AY:28:A:O2'	24:AY:29:C:H5'	2.21	0.41
36:DA:1201:C:N4	36:DA:1244:G:H1	2.18	0.41
41:DF:31:HIS:O	41:DF:34:TRP:N	2.53	0.41
36:DA:603:A:H4'	36:DA:604:G:O5'	2.21	0.41
25:AZ:325:LYS:HG3	25:AZ:331:HIS:CB	2.51	0.41
1:CA:8:A:N6	4:CD:205:GLU:O	2.52	0.41
39:BD:247:ALA:HA	39:BD:254:THR:HG22	2.03	0.41
36:DA:1886:C:O2'	36:DA:1887:C:H5'	2.21	0.41
36:DA:775:G:C4	36:DA:794:G:C8	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1190:G:H5''	3:AC:3:ASN:ND2	2.36	0.41
41:BF:42:ALA:O	41:BF:45:ARG:HG3	2.21	0.41
43:BH:52:VAL:HG12	43:BH:65:HIS:ND1	2.36	0.41
43:BH:68:THR:HG22	43:BH:72:ILE:CG1	2.50	0.41
1:AA:510:A:N3	1:AA:543:C:H1'	2.36	0.41
4:AD:10:ARG:NH1	4:AD:40:PRO:HG3	2.36	0.41
4:AD:19:LEU:HD12	4:AD:19:LEU:N	2.35	0.41
4:AD:72:GLU:OE2	4:AD:72:GLU:HA	2.20	0.41
14:AN:5:ALA:O	14:AN:6:LEU:C	2.59	0.41
43:DH:49:VAL:C	43:DH:50:VAL:CG2	2.90	0.41
43:DH:67:LEU:HG	43:DH:71:LEU:CG	2.51	0.41
43:DH:67:LEU:O	43:DH:71:LEU:HG	2.21	0.41
36:BA:2468:G:C6	36:BA:2481:G:C4	3.09	0.41
49:BQ:48:GLU:HG3	49:BQ:51:ARG:CD	2.51	0.41
41:BF:170:LEU:O	41:BF:171:PRO:C	2.59	0.41
36:BA:1268:A:C4	36:BA:1269:A:C8	3.09	0.41
40:BE:7:VAL:HG23	40:BE:193:GLY:O	2.20	0.41
50:BR:42:LYS:O	50:BR:45:ARG:CB	2.69	0.41
50:BR:25:ALA:HB1	50:BR:51:LEU:CD2	2.51	0.41
50:BR:79:LEU:HD13	50:BR:80:PHE:N	2.36	0.41
42:BG:60:LEU:CD2	42:BG:63:ILE:HD11	2.45	0.41
42:BG:67:LYS:HA	42:BG:68:PRO:HD3	1.78	0.41
1:CA:796:C:O2'	1:CA:797:C:H5'	2.20	0.41
56:DX:17:ALA:O	56:DX:18:TYR:C	2.59	0.41
46:DN:30:ILE:O	46:DN:34:LEU:HD23	2.21	0.41
54:DV:58:VAL:HG12	54:DV:97:LYS:HG3	2.02	0.41
36:DA:1155:A:P	53:DU:55:ARG:HD2	2.61	0.41
36:DA:537:C:N4	36:DA:556:G:N1	2.58	0.41
46:DN:103:VAL:C	46:DN:105:GLY:N	2.74	0.41
53:DU:61:TRP:CZ3	53:DU:94:ASN:HA	2.56	0.41
54:DV:79:VAL:O	54:DV:79:VAL:HG12	2.21	0.41
2:AB:217:ARG:HA	2:AB:220:ASP:OD2	2.20	0.41
2:AB:224:GLN:O	2:AB:226:ARG:N	2.54	0.41
1:AA:316:G:OP2	1:AA:351:G:H2'	2.21	0.41
1:AA:52:G:C6	1:AA:53:A:C5	3.08	0.41
1:AA:309:G:H1'	1:AA:608:A:C2	2.55	0.41
1:AA:311:C:O2'	1:AA:312:C:H5'	2.21	0.41
8:CH:82:HIS:O	8:CH:83:ILE:HB	2.21	0.41
1:CA:1157:A:O2'	1:CA:1158:C:P	2.79	0.41
9:CI:94:ALA:O	9:CI:95:LYS:CB	2.68	0.41
17:AQ:16:GLN:HE21	17:AQ:16:GLN:HB2	1.66	0.41
1:CA:990:C:C2	1:CA:1216:G:C2	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:CN:8:GLU:O	14:CN:10:ALA:N	2.53	0.41
1:CA:544:G:C6	1:CA:545:C:C2	3.09	0.41
4:CD:62:GLN:NE2	4:CD:65:ARG:HH21	2.19	0.41
51:BS:73:LEU:O	51:BS:74:ALA:C	2.60	0.41
51:BS:77:ALA:HA	51:BS:80:LEU:CD1	2.49	0.41
2:CB:220:ASP:O	2:CB:221:LEU:C	2.59	0.41
2:CB:55:PHE:HA	2:CB:58:ILE:HD12	2.02	0.41
2:CB:230:VAL:HB	2:CB:231:GLU:H	1.66	0.41
6:CF:3:ARG:C	6:CF:93:SER:OG	2.59	0.41
1:CA:302:G:H2'	1:CA:303:A:C8	2.56	0.41
1:CA:954:G:O2'	13:CM:120:LYS:HD2	2.21	0.41
13:AM:109:THR:HG22	13:AM:110:ARG:N	2.35	0.41
1:AA:949:A:C2	1:AA:1233:G:N3	2.89	0.41
5:AE:31:LEU:HB2	5:AE:45:PHE:CD1	2.56	0.41
36:BA:1641:A:H2'	36:BA:1642:G:O4'	2.20	0.41
40:BE:24:THR:HB	40:BE:184:VAL:HG23	2.01	0.41
47:BO:2:ILE:HD13	47:BO:2:ILE:HA	1.75	0.41
52:BT:66:VAL:HG12	52:BT:71:GLY:HA2	2.02	0.41
52:BT:81:PRO:HD2	52:BT:82:LEU:HD12	2.03	0.41
47:BO:120:GLU:OE1	47:BO:122:LEU:HD11	2.20	0.41
40:DE:163:GLU:O	40:DE:165:VAL:HG23	2.21	0.41
47:DO:104:ARG:O	47:DO:105:GLU:C	2.57	0.41
47:DO:78:ARG:O	52:DT:73:GLU:N	2.53	0.41
38:BC:20:TYR:HD1	38:BC:20:TYR:H	1.62	0.41
37:BB:72:G:H1'	37:BB:106:G:N2	2.35	0.41
1:AA:1358:U:H5''	14:AN:33:VAL:O	2.21	0.41
7:AG:105:VAL:O	7:AG:108:ALA:N	2.54	0.41
36:BA:2675:A:H5'	47:BO:31:LYS:HZ2	1.83	0.41
1:CA:377:G:H5'	16:CP:5:ARG:NH1	2.36	0.41
9:CI:17:VAL:CG1	9:CI:81:ILE:HD13	2.48	0.41
7:CG:42:ILE:C	7:CG:44:TYR:N	2.73	0.41
9:CI:76:ALA:O	9:CI:77:ILE:C	2.59	0.41
19:AS:9:VAL:CG1	19:AS:39:THR:HB	2.51	0.41
51:DS:66:ALA:O	51:DS:67:ARG:C	2.59	0.41
51:DS:68:GLN:O	51:DS:70:GLY:N	2.54	0.41
36:DA:1070:A:N6	36:DA:1096:A:C2	2.88	0.41
57:BY:13:VAL:CG1	57:BY:14:LEU:N	2.69	0.41
36:DA:2152:G:C4	36:DA:2153:G:C8	3.08	0.41
35:B9:9:ARG:HH11	35:B9:9:ARG:HB2	1.85	0.41
55:BW:50:VAL:HG22	55:BW:105:VAL:HG21	2.03	0.41
36:DA:1789:A:H2'	36:DA:1790:C:H6	1.86	0.41
36:DA:1787:A:H4'	36:DA:2589:A:H4'	2.01	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:728:G:C2	36:DA:730:C:C2	3.08	0.41
39:DD:210:GLY:C	39:DD:212:SER:H	2.24	0.41
41:BF:126:VAL:HG11	41:BF:142:TRP:CH2	2.56	0.41
55:DW:6:ILE:HG12	55:DW:104:THR:CG2	2.47	0.41
2:AB:47:THR:HG22	2:AB:51:LEU:CD1	2.51	0.41
36:BA:2103:C:H2'	36:BA:2104:G:H5''	2.02	0.41
36:BA:2104:G:N1	36:BA:2105:C:N4	2.68	0.41
3:CC:182:ILE:O	3:CC:183:ASP:C	2.58	0.41
3:CC:113:ALA:N	3:CC:202:ILE:HD12	2.36	0.41
3:CC:43:LEU:HD21	3:CC:91:LEU:HD21	2.03	0.41
25:AZ:254:GLU:O	25:AZ:304:LEU:HA	2.20	0.41
19:CS:31:ILE:HG12	19:CS:31:ILE:O	2.21	0.41
19:CS:48:THR:HG23	19:CS:61:TYR:HA	2.03	0.41
3:AC:32:LEU:CD2	3:AC:59:ARG:CZ	2.99	0.41
3:AC:56:ASP:C	3:AC:57:ILE:HG13	2.40	0.41
3:AC:142:MET:O	3:AC:144:SER:N	2.54	0.41
27:B1:5:CYS:O	27:B1:9:GLY:HA2	2.21	0.41
22:CW:49:C:O2'	22:CW:50:U:H6	2.03	0.41
36:DA:1528:A:N6	36:DA:1544:A:N1	2.69	0.41
36:BA:1773:A:C8	36:BA:1829:A:C8	3.09	0.41
36:BA:1829:A:N3	39:BD:15:PHE:CZ	2.89	0.41
37:DB:16:G:O2'	37:DB:17:C:O5'	2.34	0.41
58:DZ:10:ARG:HB2	58:DZ:37:VAL:HA	2.03	0.41
58:DZ:10:ARG:NE	58:DZ:37:VAL:O	2.54	0.41
1:AA:1004:A:O5'	1:AA:1025:U:C4	2.74	0.41
46:BN:35:ARG:NH2	46:BN:42:TRP:CH2	2.88	0.41
46:BN:48:MET:CE	46:BN:49:GLY:H	2.34	0.41
53:BU:83:LEU:N	53:BU:83:LEU:CD1	2.83	0.41
46:BN:101:HIS:C	46:BN:103:VAL:H	2.25	0.41
46:BN:103:VAL:O	46:BN:105:GLY:N	2.53	0.41
46:BN:2:LYS:NZ	53:BU:95:LEU:HD21	2.35	0.41
39:BD:79:VAL:HB	39:BD:114:GLY:H	1.86	0.41
36:DA:769:G:O4'	36:DA:1379:A:C6	2.73	0.41
36:DA:1427:A:C1'	36:DA:1428:C:C5	3.04	0.41
3:AC:25:GLY:O	3:AC:26:LYS:C	2.58	0.41
36:DA:1301:A:HO2'	36:DA:1302:A:P	2.43	0.41
36:DA:1198:U:O2	36:DA:1249:U:H1'	2.21	0.41
36:BA:267:C:H2'	36:BA:268:C:C6	2.55	0.41
36:DA:1223:G:N2	36:DA:1226:A:OP2	2.40	0.41
36:DA:593:G:H1	36:DA:664:C:H42	1.67	0.41
36:BA:1422:G:O2'	36:BA:1423:G:H5'	2.21	0.41
13:CM:28:ALA:C	13:CM:30:ALA:N	2.74	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:44:ARG:O	13:CM:46:LYS:N	2.53	0.41
42:BG:43:LEU:HB3	42:BG:45:GLU:CG	2.38	0.41
36:BA:2305:A:O2'	42:BG:136:ARG:CG	2.69	0.41
21:AU:5:ASP:C	21:AU:7:ARG:N	2.72	0.41
42:DG:44:GLY:O	42:DG:47:LYS:CD	2.69	0.41
43:BH:24:VAL:CG1	43:BH:25:LYS:N	2.84	0.41
38:BC:100:ILE:H	38:BC:100:ILE:HG13	1.63	0.41
40:BE:132:HIS:CD2	40:BE:135:HIS:NE2	2.88	0.41
36:BA:460:A:H1'	36:BA:470:A:N6	2.36	0.41
40:DE:93:VAL:HG21	40:DE:180:ASN:HA	2.01	0.41
8:CH:100:ILE:HG23	8:CH:101:PRO:CD	2.50	0.41
40:DE:4:ILE:HG22	40:DE:96:PHE:HE2	1.86	0.41
43:BH:97:ARG:NH2	43:BH:99:VAL:HG21	2.33	0.41
51:DS:106:ARG:CB	51:DS:106:ARG:HH11	2.34	0.41
22:CV:54:U:C2'	22:CV:55:U:H5'	2.51	0.41
1:AA:1278:U:H5'	1:AA:1279:A:C8	2.56	0.41
25:CZ:67:HIS:CE1	25:CZ:80:VAL:HG22	2.56	0.41
15:CO:82:ILE:CG2	15:CO:83:GLU:N	2.75	0.41
1:CA:151:A:C2'	1:CA:152:A:H5'	2.51	0.41
36:DA:2588:G:O6	36:DA:2607:G:C6	2.74	0.41
36:BA:2485:G:C2'	36:BA:2486:G:H5'	2.51	0.41
1:AA:827:U:H2'	1:AA:859:A:N1	2.35	0.41
5:AE:79:GLU:H	5:AE:93:PRO:HD3	1.85	0.41
15:AO:17:ARG:HH12	15:AO:77:ARG:NH2	2.18	0.41
38:DC:100:ILE:HD13	38:DC:126:LYS:HB2	2.02	0.41
1:AA:1138:G:C6	1:AA:1140:C:C2	3.08	0.41
1:AA:1282:C:C2	1:AA:1283:G:N7	2.88	0.41
55:BW:12:ILE:HG23	55:BW:17:VAL:HG22	2.02	0.41
3:CC:95:THR:HG22	3:CC:95:THR:O	2.20	0.41
11:CK:93:GLN:O	11:CK:94:ALA:C	2.57	0.41
4:CD:103:ASN:OD1	4:CD:114:ARG:NH2	2.54	0.41
4:CD:101:LEU:HD21	4:CD:126:ILE:HG21	2.03	0.41
10:CJ:8:LEU:C	10:CJ:9:ARG:HG3	2.41	0.41
36:DA:2161:C:O2'	36:DA:2162:G:H5'	2.20	0.41
20:AT:50:GLU:C	20:AT:52:ALA:H	2.24	0.41
38:DC:70:LYS:NZ	38:DC:177:LYS:HZ3	2.19	0.41
1:AA:731:G:O2'	1:AA:732:C:H5'	2.20	0.41
1:AA:745:C:H5''	1:AA:851:G:H1'	2.03	0.41
1:AA:833:U:H3	1:AA:853:G:H1	1.67	0.41
4:AD:145:GLU:HG3	4:AD:184:LYS:HG2	2.03	0.41
1:CA:439:A:C8	1:CA:496:A:N1	2.89	0.41
36:DA:1804:C:H2'	36:DA:1805:U:H6	1.85	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1073:U:O2'	2:AB:104:ASN:ND2	2.54	0.41
1:AA:120:A:H2'	1:AA:122:G:N7	2.36	0.41
36:BA:2077:A:H1'	36:BA:2435:A:C1'	2.50	0.41
8:AH:120:THR:H	8:AH:123:GLU:HB2	1.86	0.41
8:AH:92:ARG:CB	8:AH:94:TYR:HE1	2.33	0.41
36:DA:2071:A:H2	36:DA:2441:C:C2	2.39	0.41
10:AJ:7:LYS:O	10:AJ:96:ILE:CA	2.63	0.41
11:AK:117:ASN:HD22	11:AK:117:ASN:HA	1.61	0.41
38:BC:151:GLU:O	38:BC:151:GLU:HG2	2.21	0.41
1:CA:782:A:H2'	1:CA:783:C:H5'	2.02	0.41
16:AP:49:LEU:HD12	16:AP:49:LEU:C	2.41	0.41
27:D1:84:GLY:O	27:D1:86:SER:N	2.54	0.41
25:CZ:322:VAL:N	25:CZ:366:ASP:O	2.52	0.41
1:AA:39:G:C2'	1:AA:40:C:H5'	2.51	0.41
1:AA:658:G:C6	1:AA:749:C:N4	2.89	0.41
38:BC:110:PHE:O	38:BC:111:ASP:CB	2.69	0.41
36:BA:2134:A:C2	36:BA:2135:A:N7	2.89	0.41
38:DC:61:THR:O	38:DC:62:VAL:HB	2.20	0.41
1:CA:59:A:H3'	1:CA:60:A:C5'	2.51	0.41
6:AF:37:VAL:O	6:AF:38:GLU:CG	2.69	0.41
24:CY:54:5MU:H73	24:CY:55:PSU:C2	2.56	0.41
1:CA:194:C:H5''	20:CT:65:LYS:CE	2.50	0.41
20:CT:65:LYS:O	20:CT:68:LYS:HB2	2.20	0.41
7:AG:153:HIS:N	7:AG:153:HIS:ND1	2.66	0.41
1:AA:1361:G:H2'	1:AA:1362:C:C6	2.56	0.41
36:BA:1309:G:H1	36:BA:1605:C:N4	2.07	0.41
20:CT:33:ILE:CG1	20:CT:62:LEU:HD22	2.48	0.41
49:BQ:116:GLU:O	49:BQ:117:ALA:C	2.60	0.41
1:AA:29:G:O2'	1:AA:295:C:H4'	2.20	0.41
56:DX:60:ARG:HG3	56:DX:75:ASP:CG	2.39	0.41
36:DA:733:G:O6	36:DA:761:A:C5	2.74	0.41
1:AA:1313:U:C4	1:AA:1314:C:C4	3.09	0.41
19:AS:4:SER:O	19:AS:5:LEU:C	2.60	0.41
46:DN:21:LYS:O	46:DN:61:ARG:HB2	2.18	0.41
36:BA:1809:A:H2'	36:BA:1810:A:H8	1.81	0.41
36:BA:1779:U:H2'	36:BA:1783:A:H62	1.85	0.41
39:DD:132:PRO:O	39:DD:136:ILE:HD13	2.20	0.41
25:CZ:401:THR:HG22	25:CZ:402:LYS:N	2.35	0.41
6:CF:22:GLU:O	6:CF:25:ILE:N	2.54	0.41
6:CF:29:ALA:C	6:CF:31:GLU:N	2.73	0.41
29:B3:18:ASP:HB2	36:BA:850:C:C4'	2.43	0.41
11:AK:69:ALA:O	11:AK:70:LYS:C	2.57	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:CK:57:THR:HG23	11:CK:60:ALA:N	2.32	0.41
25:AZ:382:GLU:HA	25:AZ:400:VAL:CG1	2.51	0.41
36:DA:806:C:H2'	36:DA:807:U:C6	2.56	0.41
12:CL:100:ILE:CG2	12:CL:101:VAL:N	2.82	0.41
12:CL:101:VAL:O	12:CL:104:VAL:HG23	2.20	0.41
1:CA:321:A:O2'	1:CA:322:C:C5'	2.63	0.41
1:CA:1431:C:C2	1:CA:1470:G:N2	2.88	0.41
1:CA:320:C:H2'	1:CA:321:A:C8	2.56	0.41
36:BA:184:C:H2'	36:BA:185:U:C6	2.55	0.41
1:AA:1456:G:N2	1:AA:1457:G:C8	2.88	0.41
41:BF:59:TYR:CD1	41:BF:78:ILE:HB	2.56	0.41
36:BA:1256:G:C2	36:BA:1257:C:C6	3.09	0.41
46:DN:71:ILE:CG2	46:DN:72:TYR:N	2.84	0.41
46:DN:91:LEU:CD2	46:DN:98:VAL:HG21	2.51	0.41
36:DA:1049:C:H2'	36:DA:1050:A:H8	1.85	0.41
1:CA:1311:G:C6	1:CA:1312:G:N7	2.89	0.41
1:CA:1312:G:O2'	1:CA:1313:U:H5'	2.20	0.41
1:AA:106:C:H2'	1:AA:107:G:H5'	2.02	0.41
12:CL:67:THR:HB	12:CL:96:VAL:HG13	2.02	0.41
55:BW:64:MET:CB	55:BW:69:LEU:HD21	2.51	0.41
25:AZ:348:ASP:O	25:AZ:348:ASP:CG	2.58	0.41
1:CA:688:G:H5'	11:CK:46:GLY:C	2.41	0.41
36:DA:271(W):G:C6	36:DA:271(X):G:N1	2.88	0.41
36:BA:271(U):G:C2'	36:BA:271(V):G:H5'	2.51	0.41
36:BA:1106:G:C2	36:BA:1107:G:H1'	2.55	0.41
36:DA:2495:G:P	49:DQ:82:ARG:HH21	2.44	0.41
22:AV:74:C:N3	36:BA:2252:G:N2	2.65	0.41
12:AL:70:ILE:HG12	12:AL:100:ILE:HD12	2.03	0.41
1:CA:127:G:H2'	1:CA:128:G:C8	2.56	0.41
1:CA:218:C:C4	1:CA:219:C:N4	2.89	0.41
25:AZ:338:TYR:CE2	25:AZ:340:PRO:HD3	2.56	0.41
49:BQ:39:PRO:O	49:BQ:40:ALA:HB2	2.21	0.41
36:DA:1435:G:H2'	36:DA:1436:G:C8	2.55	0.41
1:CA:1505:G:H5''	1:CA:1506:U:H5''	2.03	0.41
49:DQ:75:THR:HG21	49:DQ:87:LYS:HZ2	1.83	0.41
2:CB:11:LEU:C	2:CB:13:ALA:N	2.73	0.41
9:AI:82:ALA:O	9:AI:85:LEU:CD1	2.68	0.41
25:AZ:19:HIS:CG	25:AZ:113:MET:HB3	2.55	0.41
56:DX:63:LYS:HE3	56:DX:63:LYS:HB2	1.82	0.41
1:AA:642:A:H1'	8:AH:113:SER:HG	1.84	0.41
36:BA:1037:G:C2	36:BA:1119:C:O2	2.74	0.41
36:BA:1694:C:C1'	36:BA:1695:G:N2	2.82	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:AP:3:LYS:HB3	16:AP:65:GLN:O	2.21	0.41
1:AA:1086:U:H2'	1:AA:1087:G:O5'	2.20	0.41
1:CA:773:G:H2'	1:CA:774:G:H8	1.85	0.41
36:BA:65:C:O2'	36:BA:66:C:H5'	2.21	0.41
56:BX:68:ARG:HG3	56:BX:69:TYR:CE1	2.55	0.41
2:AB:93:VAL:O	2:AB:93:VAL:CG1	2.69	0.41
36:DA:2667:C:H2'	36:DA:2668:G:C8	2.55	0.41
36:BA:412:A:N3	36:BA:412:A:H2'	2.36	0.41
38:BC:124:GLY:CA	38:BC:128:GLY:HA3	2.46	0.41
58:BZ:118:GLN:O	58:BZ:172:ALA:HA	2.21	0.41
36:BA:615:G:C6	36:BA:616:G:C6	3.08	0.41
39:DD:17:THR:OG1	39:DD:205:VAL:N	2.43	0.41
2:AB:154:LEU:HD23	2:AB:156:LYS:HZ2	1.84	0.41
2:AB:194:PRO:CG	2:AB:195:ASP:H	2.32	0.41
36:BA:1186:G:H2'	36:BA:1187:G:C5'	2.50	0.41
36:DA:654(D):G:H2'	36:DA:654(E):G:C8	2.55	0.41
1:CA:1030(A):G:C1'	1:CA:1031:G:H22	2.34	0.41
36:DA:1909:C:C2'	36:DA:1910:G:H5'	2.50	0.41
36:DA:1186:G:H2'	36:DA:1187:G:C5'	2.51	0.41
36:BA:2606:C:O5'	36:BA:2606:C:H6	2.04	0.41
4:CD:155:LEU:HB2	4:CD:158:ILE:CG1	2.51	0.41
1:AA:1081:G:H2'	1:AA:1082:G:C8	2.51	0.41
41:DF:42:ALA:O	41:DF:45:ARG:HG3	2.21	0.41
36:DA:758:C:O2	36:DA:758:C:H2'	2.20	0.41
1:CA:347:G:O2'	1:CA:348:G:H8	2.03	0.41
55:DW:82:LEU:HD12	55:DW:82:LEU:N	2.36	0.41
36:DA:645:C:O2	36:DA:645:C:C3'	2.69	0.41
5:CE:67:VAL:CG2	5:CE:68:GLU:N	2.83	0.41
8:AH:40:ALA:CB	8:AH:45:ILE:HG13	2.50	0.41
7:CG:93:PRO:O	7:CG:94:ARG:C	2.59	0.41
8:CH:28:ALA:HB2	8:CH:58:TYR:C	2.42	0.41
36:BA:1643:G:C2	36:BA:1644:C:C6	3.09	0.41
36:DA:1625:C:H2'	36:DA:1626:G:C8	2.56	0.41
15:CO:3:ILE:H	15:CO:3:ILE:HG12	1.48	0.41
16:AP:60:LEU:HD23	16:AP:64:ALA:HB3	2.03	0.41
36:BA:752:A:H4'	36:BA:753:C:O5'	2.21	0.41
1:CA:722:A:O3'	1:CA:723:U:H2'	2.20	0.41
43:BH:98:LEU:O	43:BH:98:LEU:HG	2.21	0.41
36:BA:1227:G:O2'	36:BA:1228:G:H5'	2.21	0.41
22:AV:44:G:C2'	22:AV:45:U:H5'	2.51	0.41
1:AA:763:G:H2'	1:AA:764:C:C6	2.55	0.41
25:CZ:89:ILE:HA	25:CZ:92:MET:HB3	2.03	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1229:A:H2'	1:CA:1230:C:C6	2.56	0.41
1:AA:704:A:C2'	1:AA:705:U:H5'	2.50	0.41
1:AA:1274:G:O5'	1:AA:1274:G:H8	2.04	0.41
15:AO:15:PHE:O	15:AO:27:VAL:HG22	2.20	0.41
1:AA:32:A:H1'	1:AA:48:C:N4	2.36	0.41
36:DA:1477:A:C2	36:DA:1478:G:C4	3.09	0.41
36:BA:2057:A:H2'	36:BA:2058:A:C8	2.56	0.41
17:AQ:37:LYS:HB2	17:AQ:37:LYS:HE3	1.96	0.41
39:DD:96:HIS:CE1	39:DD:102:LYS:HZ3	2.39	0.41
36:DA:1044:G:N2	36:DA:1111:A:C2	2.89	0.41
4:AD:106:TYR:HE1	4:AD:113:SER:HA	1.85	0.41
37:DB:37:C:H2'	37:DB:38:C:O4'	2.21	0.41
24:CY:77:THR:HG22	25:CZ:239:THR:HB	2.03	0.41
12:AL:23:LYS:C	12:AL:24:VAL:CG2	2.89	0.41
36:DA:1755:A:C2'	36:DA:1756:G:H5'	2.50	0.41
30:B4:12:ALA:HB2	30:B4:29:PRO:HA	2.03	0.41
5:CE:40:ARG:NH1	5:CE:40:ARG:HG2	2.36	0.41
45:DK:24:UNK:C	45:DK:26:UNK:N	2.84	0.41
3:AC:44:GLU:O	3:AC:45:LYS:C	2.59	0.41
57:DY:54:LYS:O	57:DY:55:TYR:C	2.59	0.41
45:BK:10:UNK:O	45:BK:55:UNK:O	2.38	0.41
36:DA:734:A:H2'	36:DA:735:A:O4'	2.20	0.41
36:DA:405:U:O4'	36:DA:405:U:O2	2.39	0.41
40:BE:73:GLU:OE2	40:BE:73:GLU:N	2.54	0.41
46:DN:87:LEU:HD13	46:DN:87:LEU:C	2.41	0.41
1:CA:1290:G:H2'	1:CA:1290:G:N3	2.36	0.41
44:BJ:127:UNK:O	44:BJ:131:UNK:N	2.54	0.41
5:AE:84:PHE:C	5:AE:86:ALA:H	2.20	0.41
1:AA:1394:A:N1	1:AA:1501:C:H5'	2.36	0.41
8:CH:67:PRO:O	8:CH:76:PRO:HB3	2.21	0.41
36:DA:748:G:H3'	36:DA:750:A:OP2	2.20	0.41
44:BJ:55:UNK:O	44:BJ:84:UNK:N	2.54	0.41
46:DN:78:TYR:CD1	46:DN:78:TYR:N	2.88	0.41
36:DA:627:A:H8	36:DA:627:A:OP1	2.04	0.41
1:AA:596:C:H2'	1:AA:596:C:O2	2.20	0.41
32:B6:45:LYS:N	32:B6:45:LYS:HD2	2.18	0.41
32:B6:5:VAL:HG21	36:BA:2283:C:H5'	2.03	0.41
34:B8:6:THR:CG2	34:B8:63:PRO:HD3	2.51	0.41
36:BA:2282:G:C5'	36:BA:2283:C:O5'	2.69	0.41
36:BA:2394:C:OP1	48:BP:63:PRO:CD	2.69	0.41
50:DR:66:VAL:C	50:DR:68:ARG:N	2.74	0.41
39:DD:174:ILE:HA	39:DD:183:ARG:O	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:D6:36:LEU:HD23	32:D6:37:ARG:N	2.36	0.41
32:D6:12:GLU:OE1	32:D6:54:ILE:HG22	2.20	0.41
34:D8:22:VAL:C	34:D8:23:VAL:HG23	2.41	0.41
34:D8:8:LYS:HA	34:D8:11:LYS:HD3	2.02	0.41
48:DP:112:LEU:C	48:DP:112:LEU:HD13	2.40	0.41
25:AZ:136:ASN:OD1	25:AZ:174:SER:HA	2.21	0.41
25:AZ:108:ALA:H	25:AZ:137:LYS:HB2	1.86	0.41
25:AZ:137:LYS:O	25:AZ:140:MET:HB2	2.21	0.41
36:BA:2082:A:O2'	36:BA:2083:G:H5'	2.20	0.41
36:DA:603:A:C2	36:DA:655:A:C6	3.08	0.41
41:DF:32:LEU:CD2	41:DF:109:GLY:HA3	2.51	0.41
41:DF:31:HIS:C	41:DF:33:LEU:N	2.72	0.41
41:DF:32:LEU:HD22	41:DF:109:GLY:CA	2.50	0.41
24:AY:53:G:O2'	24:AY:54:5MU:H5''	2.21	0.41
56:BX:12:VAL:HG12	56:BX:27:THR:N	2.36	0.41
36:DA:1888:G:N3	36:DA:1888:G:H5'	2.36	0.41
3:AC:5:ILE:HG12	3:AC:10:PHE:HB2	2.03	0.41
58:DZ:110:GLY:O	58:DZ:115:GLY:HA3	2.20	0.41
42:DG:85:GLY:O	42:DG:86:MET:HB3	2.21	0.41
41:BF:42:ALA:C	41:BF:44:ARG:N	2.74	0.41
43:BH:65:HIS:CE1	43:BH:69:ARG:NH2	2.89	0.41
1:AA:1054:C:C2'	1:AA:1055:A:H5''	2.51	0.41
1:AA:507:C:H2'	1:AA:508:C:H5	1.86	0.41
1:AA:545:C:O2'	1:AA:546:G:H5'	2.20	0.41
49:BQ:52:VAL:C	49:BQ:54:MET:N	2.70	0.41
56:BX:8:ILE:CD1	56:BX:43:VAL:HG22	2.46	0.41
50:BR:37:THR:O	50:BR:41:ALA:HB2	2.20	0.41
30:B4:6:HIS:CA	42:BG:67:LYS:CE	2.98	0.41
36:BA:271(M):G:O2'	36:BA:271(O):C:H5'	2.21	0.41
36:DA:371:A:N3	36:DA:373:U:C4	2.89	0.41
36:DA:1154:G:H5''	53:DU:59:ARG:HH22	1.86	0.41
53:DU:65:ILE:H	53:DU:65:ILE:CD1	2.33	0.41
54:DV:21:ARG:HH11	54:DV:21:ARG:HG2	1.86	0.41
9:CI:4:TYR:O	9:CI:18:PHE:HA	2.20	0.41
5:AE:143:ARG:NH1	8:AH:77:GLU:OE1	2.53	0.41
2:CB:97:TRP:CZ3	2:CB:173:ALA:HA	2.55	0.41
41:DF:163:VAL:O	41:DF:164:ARG:C	2.59	0.41
36:DA:1437:C:O2'	36:DA:1516:C:H1'	2.21	0.41
1:CA:1226:C:OP2	13:CM:103:THR:HG21	2.20	0.41
13:CM:74:VAL:O	13:CM:75:ALA:C	2.60	0.41
1:AA:1231:G:C5	1:AA:1232:U:C5	3.09	0.41
36:BA:142(A):C:C2'	36:BA:143:G:H5'	2.51	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:127:LYS:HG3	58:BZ:162:GLU:CG	2.51	0.41
36:BA:2646:C:OP2	36:BA:2732:G:O2'	2.38	0.41
36:DA:916:G:H2'	36:DA:917:A:H5''	2.02	0.41
58:DZ:151:HIS:O	58:DZ:152:ALA:O	2.38	0.41
58:DZ:163:LEU:CD1	58:DZ:165:VAL:HG23	2.51	0.41
58:DZ:151:HIS:CB	58:DZ:170:THR:HA	2.51	0.41
1:CA:941:G:C2	1:CA:942:G:C8	3.09	0.41
22:CV:49:C:HO2'	22:CV:50:U:P	2.44	0.41
22:AV:66:U:O2'	22:AV:67:C:H5'	2.20	0.41
1:AA:1399:C:C4	1:AA:1502:A:N6	2.88	0.41
36:BA:1518:U:H2'	36:BA:1519:G:C4'	2.50	0.41
41:BF:65:TRP:CZ3	41:BF:72:ARG:HB3	2.56	0.41
4:AD:79:PHE:CD2	4:AD:207:TYR:HD1	2.39	0.41
57:BY:15:VAL:HG12	57:BY:17:SER:H	1.86	0.41
42:BG:174:GLU:CA	42:BG:180:PHE:HE1	2.29	0.41
42:BG:21:ARG:NH2	42:BG:22:ARG:CA	2.71	0.41
36:DA:2185:C:OP2	36:DA:2185:C:H6	2.03	0.41
5:AE:127:ASN:HA	5:AE:128:PRO:HD3	1.76	0.41
2:AB:200:ILE:HG22	2:AB:201:ILE:H	1.85	0.41
3:CC:181:ASN:HD21	3:CC:204:LEU:CD1	2.27	0.41
4:CD:107:ARG:NH2	4:CD:194:LEU:CD1	2.71	0.41
19:CS:40:ILE:CB	19:CS:67:VAL:HA	2.51	0.41
3:AC:120:VAL:O	3:AC:121:ALA:C	2.57	0.41
1:CA:547:A:O2'	1:CA:548:G:O4'	2.39	0.41
16:AP:35:LYS:HE2	16:AP:37:GLY:CA	2.51	0.41
1:CA:1003:G:N2	1:CA:1038:C:N3	2.68	0.41
36:BA:705:A:H2'	36:BA:706:A:C8	2.56	0.41
36:BA:764:A:C3'	36:BA:765:G:H5'	2.47	0.41
37:DB:71:C:C2	37:DB:72:G:C8	3.09	0.41
58:DZ:27:VAL:HG12	58:DZ:85:HIS:NE2	2.36	0.41
36:DA:716:A:H3'	36:DA:717:G:H5''	2.03	0.41
41:DF:11:VAL:C	41:DF:13:SER:N	2.73	0.41
1:CA:1015:A:H8	1:CA:1015:A:O5'	2.03	0.41
36:BA:1138:G:O5'	36:BA:1138:G:H8	2.03	0.41
46:BN:2:LYS:O	46:BN:4:TYR:CZ	2.74	0.41
46:BN:36:GLY:O	46:BN:42:TRP:HE3	2.04	0.41
54:BV:35:LEU:N	54:BV:35:LEU:CD2	2.81	0.41
36:DA:1360:A:C6	36:DA:1372:U:C4	3.09	0.41
36:BA:221:A:C4	36:BA:266:G:N7	2.89	0.41
36:DA:1197:G:H2'	36:DA:1198:U:H6	1.86	0.41
40:DE:134:ILE:C	40:DE:136:ARG:H	2.24	0.41
13:CM:52:GLU:CA	13:CM:55:ARG:HB3	2.38	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1551:C:O2'	36:BA:1552:G:H5'	2.21	0.41
14:AN:3:ARG:HB3	14:AN:3:ARG:HE	1.63	0.41
1:CA:960:U:O2	1:CA:960:U:C2'	2.69	0.41
36:BA:460:A:H3'	36:BA:461:C:C6	2.56	0.41
36:BA:472:A:O2'	36:BA:508:G:N2	2.51	0.41
1:CA:880:C:P	12:CL:12:ARG:HH11	2.43	0.41
5:CE:79:GLU:HB3	5:CE:93:PRO:HD3	2.03	0.41
1:CA:1073:U:H3	1:CA:1102:A:H61	1.69	0.41
2:AB:26:PRO:O	2:AB:28:PHE:N	2.50	0.41
29:D3:6:VAL:HA	29:D3:56:VAL:HA	2.02	0.41
1:CA:826:C:H5''	8:CH:12:ARG:NH1	2.35	0.41
1:CA:1280:A:O2'	1:CA:1281:U:OP1	2.31	0.41
10:CJ:38:ILE:HG13	10:CJ:38:ILE:O	2.21	0.41
24:CY:65:C:H4'	25:CZ:341:GLN:HG2	2.03	0.41
1:AA:833:U:H2'	1:AA:834:C:H6	1.85	0.41
36:DA:274:G:N3	36:DA:274:G:C2'	2.84	0.41
36:DA:2274:A:C5	36:DA:2276:G:C8	3.09	0.41
39:BD:223:GLY:O	39:BD:225:ALA:N	2.54	0.41
36:DA:2842:G:C2	36:DA:2876:G:C2	3.09	0.41
25:AZ:322:VAL:HB	25:AZ:366:ASP:O	2.21	0.41
1:AA:657:G:C2	1:AA:750:G:C5	3.08	0.41
24:CY:53:G:O2'	24:CY:54:5MU:H5''	2.21	0.41
1:AA:1492:A:C6	1:AA:1493:A:C6	3.09	0.41
7:AG:150:ALA:O	7:AG:153:HIS:HE1	2.04	0.41
11:AK:57:THR:HG23	11:AK:60:ALA:N	2.32	0.41
11:AK:57:THR:CG2	11:AK:60:ALA:HB3	2.51	0.41
36:DA:1314:C:O2'	36:DA:1315:C:H5'	2.21	0.41
53:BU:55:ARG:HG2	53:BU:58:ARG:NE	2.36	0.41
1:CA:1438:G:C4	1:CA:1439:C:C5	3.09	0.41
36:BA:1599:C:C2	36:BA:1600:C:C5	3.09	0.41
52:BT:106:SER:O	52:BT:107:ASP:OD1	2.38	0.41
39:DD:142:VAL:HA	39:DD:194:GLY:N	2.36	0.41
22:AW:38:A:H2'	22:AW:39:U:C4'	2.51	0.41
36:BA:679:C:H2'	36:BA:680:G:C8	2.56	0.41
36:BA:1358:G:N7	36:BA:1371:G:C6	2.89	0.41
36:DA:1051:G:H2'	36:DA:1052:C:C6	2.56	0.41
1:CA:1166:G:C2	1:CA:1171:G:N1	2.89	0.41
1:CA:1202:G:C4	14:CN:42:ILE:HG21	2.56	0.41
36:BA:1052:C:O2'	36:BA:1053:C:P	2.79	0.41
12:AL:32:PHE:O	12:AL:33:ARG:HB2	2.21	0.41
12:AL:83:VAL:CG1	12:AL:84:LEU:H	2.33	0.41
1:CA:471:G:O2'	1:CA:472:A:H5'	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:458:C:N4	1:CA:474:G:N1	2.69	0.41
55:BW:20:VAL:CG2	55:BW:47:VAL:HG21	2.46	0.41
12:AL:52:LEU:HD23	12:AL:52:LEU:N	2.36	0.41
36:BA:2352:A:C4	36:BA:2366:A:N1	2.89	0.41
56:DX:45:THR:OG1	56:DX:46:ALA:N	2.54	0.41
25:AZ:116:THR:HG22	25:AZ:120:ILE:CD1	2.50	0.41
36:DA:2350:C:O2'	36:DA:2351:G:H5'	2.21	0.41
36:BA:816:C:H2'	36:BA:817:C:C6	2.56	0.41
25:CZ:326:GLU:N	25:CZ:326:GLU:CD	2.74	0.41
25:CZ:186:PRO:O	25:CZ:187:LYS:CG	2.66	0.41
3:CC:164:ARG:NH2	3:CC:166:GLU:OE2	2.54	0.41
20:CT:38:LYS:O	20:CT:40:ALA:N	2.54	0.41
26:D0:70:GLN:HE21	26:D0:80:HIS:HE2	1.66	0.41
55:DW:25:ARG:NH2	55:DW:74:ALA:O	2.50	0.41
36:BA:2605:U:H2'	36:BA:2606:C:C5	2.55	0.41
36:BA:1924:C:H2'	36:BA:1925:C:C6	2.51	0.41
41:DF:97:TYR:N	41:DF:97:TYR:HD2	2.19	0.41
1:CA:286:G:H2'	1:CA:287:U:O4'	2.21	0.41
36:DA:2192:G:C2	36:DA:2193:G:C8	3.09	0.41
46:BN:16:ILE:HD11	46:BN:139:GLU:N	2.34	0.41
20:CT:96:GLY:O	20:CT:97:ALA:CB	2.69	0.41
54:BV:71:LEU:HD21	54:BV:84:LYS:HG2	2.01	0.41
9:AI:15:ALA:HA	9:AI:65:VAL:HA	2.03	0.41
36:BA:2746:U:H2'	36:BA:2747:G:C8	2.55	0.41
22:AV:3:C:C2	22:AV:71:G:N2	2.88	0.41
43:BH:98:LEU:CB	43:BH:125:VAL:CG2	2.99	0.41
36:BA:592:G:N3	36:BA:592:G:H2'	2.36	0.41
36:BA:1478:G:H2'	36:BA:1479:G:C8	2.55	0.41
1:AA:1129:C:H4'	1:AA:1130:A:H8	1.84	0.41
2:AB:140:HIS:HA	2:AB:143:GLU:OE1	2.21	0.41
2:CB:142:LEU:O	2:CB:142:LEU:HD23	2.21	0.41
19:AS:32:LYS:HG3	19:AS:32:LYS:H	1.59	0.41
1:CA:431:A:O2'	1:CA:432:A:H5'	2.19	0.41
36:DA:2896:C:O2	36:DA:2896:C:O4'	2.39	0.41
41:BF:105:VAL:O	41:BF:105:VAL:HG12	2.21	0.41
5:AE:131:ILE:HD13	5:AE:131:ILE:HA	1.93	0.41
36:DA:1786:A:O2'	36:DA:1938:A:N6	2.54	0.41
32:B6:18:ARG:HD2	32:B6:43:CYS:SG	2.61	0.40
36:BA:2330:G:C2'	36:BA:2331:G:H5'	2.51	0.40
36:BA:2358:G:H2'	36:BA:2359:C:H6	1.87	0.40
34:B8:12:LYS:NZ	36:BA:249:C:O2	2.42	0.40
36:BA:586:A:N1	36:BA:809:G:O2'	2.36	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BU:32:PHE:O	53:BU:36:ARG:CB	2.69	0.40
36:DA:2048:G:N2	36:DA:2621:A:N3	2.69	0.40
40:DE:199:ARG:CB	40:DE:199:ARG:CZ	2.99	0.40
50:DR:45:ARG:O	50:DR:48:VAL:N	2.54	0.40
36:DA:1800:C:OP1	39:DD:264:LYS:HE2	2.21	0.40
36:DA:244:A:H3'	36:DA:245:G:H5''	2.01	0.40
36:DA:246:C:O5'	36:DA:246:C:H6	2.05	0.40
48:DP:59:LEU:HA	48:DP:61:ARG:CZ	2.47	0.40
25:AZ:33:TYR:O	25:AZ:34:VAL:C	2.59	0.40
36:BA:2228:G:OP1	39:BD:263:ARG:NH1	2.54	0.40
36:DA:225:A:H2'	36:DA:226:G:H5'	2.02	0.40
36:DA:2740:A:H2'	36:DA:2741:A:C8	2.56	0.40
1:CA:266:G:O2'	1:CA:267:C:P	2.79	0.40
1:AA:1050:G:O2'	1:AA:1051:C:O5'	2.39	0.40
4:AD:29:PRO:O	4:AD:30:LYS:CB	2.69	0.40
36:BA:2540:C:C2'	36:BA:2541:A:H5'	2.52	0.40
49:BQ:48:GLU:O	49:BQ:50:ALA:N	2.54	0.40
56:BX:8:ILE:CD1	56:BX:8:ILE:N	2.84	0.40
36:BA:2055:C:H5'	36:BA:2056:G:O5'	2.21	0.40
13:AM:44:ARG:C	13:AM:46:LYS:N	2.72	0.40
36:DA:1233:C:N3	36:DA:1234:U:C5	2.89	0.40
36:DA:571:A:C8	36:DA:2030:A:C6	3.09	0.40
36:DA:2040:C:N3	36:DA:2041:U:C4	2.89	0.40
36:DA:17:G:H4'	53:DU:25:TRP:CZ2	2.56	0.40
26:D0:10:THR:CG2	26:D0:11:ARG:N	2.84	0.40
8:CH:34:GLU:OE2	8:CH:37:ARG:NH1	2.54	0.40
4:CD:10:ARG:NH1	4:CD:10:ARG:HG2	2.35	0.40
4:CD:11:LEU:C	4:CD:13:ARG:N	2.69	0.40
51:BS:68:GLN:O	51:BS:70:GLY:N	2.54	0.40
5:AE:136:MET:O	5:AE:137:GLU:C	2.59	0.40
8:AH:83:ILE:HG23	8:AH:83:ILE:O	2.21	0.40
2:CB:182:ILE:HG13	2:CB:182:ILE:H	1.75	0.40
36:BA:2346:A:C2	36:BA:2383:G:C2	3.09	0.40
1:CA:1308:U:H2'	1:CA:1309:G:H8	1.86	0.40
13:CM:74:VAL:O	13:CM:77:ASN:ND2	2.53	0.40
1:AA:947:G:H2'	1:AA:948:C:H6	1.83	0.40
25:CZ:145:GLU:HB3	25:CZ:146:LEU:H	1.67	0.40
40:BE:103:ASP:OD1	40:BE:201:THR:HA	2.20	0.40
36:DA:2679:A:C6	36:DA:2729:G:O6	2.73	0.40
40:DE:23:VAL:CA	40:DE:184:VAL:O	2.68	0.40
52:DT:8:LYS:C	52:DT:10:VAL:H	2.23	0.40
52:DT:78:LEU:HA	52:DT:82:LEU:CD2	2.51	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
58:BZ:7:ALA:H	58:BZ:59:LEU:HB3	1.85	0.40
57:DY:13:VAL:HG23	57:DY:73:ARG:O	2.21	0.40
57:DY:15:VAL:HG12	57:DY:17:SER:H	1.86	0.40
9:AI:76:ALA:O	9:AI:79:LEU:N	2.40	0.40
10:AJ:50:ILE:HG23	10:AJ:60:ARG:HD3	2.04	0.40
1:CA:1287:A:H2'	1:CA:1288:A:C8	2.56	0.40
1:CA:942:G:N2	1:CA:943:U:C2	2.89	0.40
7:CG:73:MET:HA	7:CG:90:GLU:HA	2.04	0.40
9:CI:10:ARG:O	9:CI:11:LYS:CB	2.63	0.40
19:AS:45:VAL:C	19:AS:47:HIS:H	2.23	0.40
1:AA:1526:G:O2'	1:AA:1527:C:C5'	2.69	0.40
1:AA:863:U:C3'	1:AA:864:A:H5''	2.51	0.40
1:CA:572:A:C2	1:CA:864:A:C2	3.09	0.40
55:DW:4:LYS:HG2	55:DW:5:ALA:N	2.36	0.40
36:BA:2121:G:N2	36:BA:2176:A:C2	2.86	0.40
4:CD:92:VAL:CG1	4:CD:96:LEU:HD13	2.51	0.40
25:AZ:219:LYS:O	25:AZ:220:PRO:O	2.39	0.40
3:AC:56:ASP:HB2	3:AC:67:THR:HB	2.03	0.40
16:AP:35:LYS:HG2	16:AP:36:ILE:N	2.36	0.40
1:CA:90:U:O2'	1:CA:91:C:H5	2.04	0.40
13:CM:66:LEU:C	13:CM:70:LEU:HB3	2.42	0.40
13:CM:70:LEU:HD22	13:CM:71:ARG:N	2.37	0.40
36:DA:1448:G:N2	36:DA:1464:C:H1'	2.36	0.40
41:BF:48:THR:O	41:BF:49:ALA:C	2.59	0.40
36:DA:142(A):C:C2'	36:DA:143:G:H5'	2.50	0.40
36:DA:715:G:C6	36:DA:716:A:C6	3.10	0.40
16:CP:20:VAL:HG13	16:CP:22:THR:HG22	2.04	0.40
1:AA:1001:A:N3	1:AA:1001(A):G:O6	2.54	0.40
43:BH:136:ILE:N	43:BH:136:ILE:CD1	2.83	0.40
53:BU:69:CYS:O	53:BU:74:LEU:HD12	2.20	0.40
53:BU:94:ASN:HD22	53:BU:95:LEU:HG	1.86	0.40
39:DD:65:ILE:HG22	39:DD:104:TYR:CB	2.50	0.40
36:DA:1569:A:O2'	39:DD:38:LYS:HG3	2.20	0.40
36:DA:1247:A:C2	36:DA:1249:U:C6	3.09	0.40
13:CM:19:LEU:CD2	13:CM:19:LEU:H	2.33	0.40
13:CM:40:ASN:OD1	13:CM:41:PRO:CD	2.68	0.40
42:BG:88:ILE:HG22	42:BG:89:GLY:N	2.35	0.40
36:DA:2307:G:N2	36:DA:2308:G:C5'	2.84	0.40
36:BA:1464:C:H2'	36:BA:1465:G:H8	1.85	0.40
20:AT:17:ARG:O	20:AT:19:SER:N	2.54	0.40
5:CE:145:LYS:HB2	8:CH:107:LEU:HD21	2.02	0.40
5:CE:150:ARG:HB2	5:CE:150:ARG:CZ	2.50	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BH:144:VAL:O	43:BH:148:ILE:HG12	2.20	0.40
43:BH:92:ILE:HG13	43:BH:92:ILE:H	1.58	0.40
51:DS:106:ARG:O	51:DS:107:GLU:HB3	2.21	0.40
24:AY:70:A:C2	24:AY:71:G:N7	2.89	0.40
1:AA:1255:G:H5'	1:AA:1256:A:OP1	2.21	0.40
2:CB:112:VAL:O	2:CB:113:HIS:C	2.60	0.40
1:AA:982:U:HO2'	1:AA:983:A:P	2.44	0.40
27:B1:86:SER:O	27:B1:87:PRO:C	2.57	0.40
1:AA:858:G:OP2	1:AA:858:G:H8	2.04	0.40
22:CV:30:G:N1	22:CV:41:C:C4	2.89	0.40
2:CB:178:ARG:NH2	8:CH:68:ARG:HH22	2.19	0.40
10:CJ:98:ILE:HA	10:CJ:98:ILE:HD12	1.94	0.40
29:B3:15:TYR:CE2	29:B3:52:HIS:ND1	2.89	0.40
16:AP:11:SER:HB2	16:AP:14:ASN:HB3	2.03	0.40
38:DC:30:LYS:HE2	38:DC:178:ALA:O	2.21	0.40
36:BA:2244:U:H1'	36:BA:2434:A:C5	2.56	0.40
20:CT:50:GLU:C	20:CT:52:ALA:H	2.24	0.40
55:DW:12:ILE:HG23	55:DW:17:VAL:HG22	2.03	0.40
7:CG:144:MET:HE1	22:CW:31:A:H1'	2.03	0.40
1:CA:1520:G:C2'	1:CA:1521:G:O5'	2.69	0.40
36:BA:903:C:H2'	36:BA:904:C:H6	1.78	0.40
1:CA:442:C:N4	1:CA:443:C:N4	2.70	0.40
27:D1:80:LEU:CD2	27:D1:81:LYS:N	2.83	0.40
1:AA:751:U:C2'	1:AA:752:G:H5'	2.52	0.40
39:BD:185:VAL:HG12	39:BD:186:HIS:N	2.36	0.40
54:BV:17:GLY:O	54:BV:18:LEU:HB3	2.21	0.40
54:BV:64:HIS:HA	54:BV:92:THR:HA	2.03	0.40
36:BA:2842:G:C2	36:BA:2876:G:C2	3.09	0.40
1:CA:51:A:C2	1:CA:353:A:N1	2.90	0.40
14:AN:48:ALA:H	14:AN:53:LEU:HD12	1.83	0.40
7:AG:150:ALA:HB2	11:AK:50:TYR:HE2	1.83	0.40
15:AO:11:VAL:O	15:AO:12:ILE:C	2.58	0.40
48:BP:115:LEU:HD23	48:BP:115:LEU:N	2.36	0.40
7:CG:123:GLU:O	7:CG:126:ASP:N	2.54	0.40
33:B7:43:THR:O	33:B7:44:PRO:C	2.59	0.40
18:CR:48:GLY:O	18:CR:74:ARG:NH2	2.54	0.40
36:BA:2776:A:C4'	36:BA:2778:A:H5''	2.51	0.40
36:BA:525:U:C2'	36:BA:526:A:H5'	2.51	0.40
56:BX:57:LEU:HD13	56:BX:57:LEU:N	2.35	0.40
1:CA:930:C:O2'	1:CA:931:C:H5'	2.21	0.40
1:AA:1110:A:C5	1:AA:1111:A:C5	3.09	0.40
52:DT:83:ILE:CG1	52:DT:84:GLN:N	2.71	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AG:79:ARG:HA	7:AG:83:ALA:O	2.22	0.40
1:AA:684:A:O2'	1:AA:685:G:H5'	2.21	0.40
52:DT:106:SER:O	52:DT:107:ASP:OD1	2.38	0.40
47:DO:8:LEU:O	47:DO:9:GLU:C	2.60	0.40
36:BA:1049:C:H2'	36:BA:1050:A:H8	1.87	0.40
1:CA:1092:A:C6	1:CA:1093:A:C6	3.09	0.40
1:CA:1106:G:C2'	1:CA:1107:C:H5'	2.51	0.40
1:CA:1381:U:C5	1:CA:1382:C:C5	3.09	0.40
1:CA:935:A:C2	1:CA:936:C:C4	3.09	0.40
5:CE:64:ARG:HH11	5:CE:64:ARG:CG	2.34	0.40
36:BA:1285:G:C5	36:BA:1329:U:C4	3.10	0.40
36:BA:1324:G:N1	36:BA:1328:G:N1	2.69	0.40
1:CA:636:U:OP1	17:CQ:2:PRO:HG3	2.21	0.40
3:CC:90:GLU:HA	3:CC:93:LYS:HD3	2.03	0.40
1:CA:926:G:C6	1:CA:1505:G:C5	3.09	0.40
49:DQ:39:PRO:O	49:DQ:40:ALA:HB2	2.21	0.40
49:DQ:74:TYR:CD1	49:DQ:75:THR:N	2.85	0.40
58:DZ:24:LEU:C	58:DZ:24:LEU:HD23	2.42	0.40
27:B1:34:THR:O	36:BA:2432:A:N1	2.53	0.40
6:CF:14:LEU:HD12	6:CF:19:LEU:HB2	2.03	0.40
1:CA:159:G:H2'	1:CA:161:A:OP2	2.21	0.40
33:B7:30:VAL:HA	33:B7:33:ARG:NH2	2.37	0.40
36:BA:614(B):G:H5''	36:BA:614(C):A:OP1	2.21	0.40
55:BW:68:ARG:O	55:BW:110:LYS:HB2	2.21	0.40
36:BA:2315:G:H2'	36:BA:2316:C:H6	1.84	0.40
22:AW:24:G:C5	22:AW:25:C:C4	3.09	0.40
25:CZ:71:GLU:HB2	25:CZ:75:ARG:O	2.21	0.40
1:CA:1005:A:H8	1:CA:1005:A:O5'	2.04	0.40
49:BQ:59:ARG:HD2	49:BQ:59:ARG:O	2.22	0.40
1:CA:1394:A:C5	1:CA:1501:C:H4'	2.56	0.40
54:BV:43:GLU:O	54:BV:44:LYS:CB	2.69	0.40
22:CV:1:G:N1	22:CV:73:A:C8	2.88	0.40
36:BA:1742:G:C6	36:BA:1743:C:N3	2.89	0.40
25:AZ:69:GLU:HB3	25:AZ:273:HIS:ND1	2.35	0.40
12:AL:79:GLU:O	12:AL:79:GLU:CG	2.69	0.40
1:AA:64:G:N2	1:AA:67:C:N4	2.69	0.40
39:DD:162:SER:O	39:DD:178:PRO:HG3	2.21	0.40
36:BA:1034:G:C6	36:BA:1035:U:N3	2.89	0.40
46:BN:87:LEU:C	46:BN:87:LEU:HD13	2.42	0.40
36:BA:2896:C:O4'	36:BA:2896:C:O2	2.39	0.40
7:AG:76:ARG:HH21	7:AG:156:TRP:HH2	1.67	0.40
32:B6:15:GLU:OE1	32:B6:18:ARG:CZ	2.68	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B6:54:ILE:OXT	32:B6:54:ILE:CG2	2.68	0.40
36:BA:2282:G:C5'	36:BA:2283:C:O4'	2.69	0.40
36:BA:2419:U:H2'	36:BA:2420:C:C6	2.55	0.40
36:BA:580:C:O2'	36:BA:581:C:H5'	2.21	0.40
36:BA:670:A:H5'	48:BP:43:GLY:O	2.21	0.40
48:BP:59:LEU:O	48:BP:61:ARG:N	2.55	0.40
50:DR:7:GLY:H	50:DR:8:ARG:NH2	2.19	0.40
39:DD:155:LEU:N	39:DD:155:LEU:HD12	2.35	0.40
36:DA:2333:A:O4'	36:DA:2335:A:C4	2.74	0.40
36:DA:2386:C:H2'	36:DA:2387:U:H6	1.86	0.40
36:BA:1888:G:H5'	36:BA:1888:G:N3	2.36	0.40
36:DA:606:U:H6	36:DA:606:U:H3'	1.86	0.40
41:DF:114:VAL:HG21	41:DF:181:LEU:HD21	2.03	0.40
35:D9:1:MET:HG2	35:D9:31:LYS:O	2.20	0.40
35:D9:6:SER:HB2	36:DA:2466:C:H5''	2.02	0.40
36:BA:659:C:O5'	36:BA:659:C:H6	2.04	0.40
41:BF:106:ARG:O	41:BF:107:LYS:HD3	2.21	0.40
1:AA:502:G:N1	1:AA:544:G:C6	2.90	0.40
14:AN:4:LYS:HB3	14:AN:5:ALA:H	1.68	0.40
36:BA:2743:C:N3	36:BA:2762:G:C2	2.89	0.40
49:BQ:60:ARG:C	58:BZ:177:PRO:HB2	2.42	0.40
41:BF:160:ASN:HB3	41:BF:163:VAL:CB	2.41	0.40
31:B5:2:ALA:N	36:BA:2015:A:N3	2.70	0.40
36:DA:1233:C:C2	36:DA:1234:U:C6	3.09	0.40
36:DA:2781:A:H5'	36:DA:2782:G:C5'	2.49	0.40
36:DA:19:C:H5'	36:DA:554:U:OP1	2.21	0.40
53:DU:83:LEU:CD1	53:DU:83:LEU:N	2.83	0.40
54:DV:17:GLY:O	54:DV:18:LEU:HD13	2.21	0.40
2:AB:8:LYS:CE	2:AB:217:ARG:NH2	2.83	0.40
1:AA:60:A:OP2	1:AA:387:U:H4'	2.21	0.40
1:AA:131:C:O2	1:AA:262:A:H2	2.04	0.40
1:AA:276:G:C2'	1:AA:277:C:H5'	2.51	0.40
4:CD:68:TYR:CD2	4:CD:97:LEU:HD22	2.56	0.40
24:CY:33:U:C3'	24:CY:34:G:H5''	2.51	0.40
51:BS:88:ASP:CG	51:BS:89:ARG:N	2.74	0.40
51:BS:89:ARG:CG	51:BS:92:TYR:HB3	2.52	0.40
2:CB:54:THR:O	2:CB:58:ILE:HG13	2.21	0.40
36:DA:320:A:O2'	36:DA:321:G:H3'	2.22	0.40
41:DF:158:THR:OG1	41:DF:195:ASP:OD2	2.33	0.40
1:CA:739:C:O2'	15:CO:42:HIS:ND1	2.54	0.40
34:B8:21:LYS:HD2	36:BA:651:G:OP2	2.21	0.40
36:DA:1469:A:O2'	36:DA:1470:G:H5'	2.21	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2809:A:N6	36:DA:2891:G:H2'	2.36	0.40
1:AA:1238:A:C8	1:AA:1303:C:H1'	2.56	0.40
5:AE:43:LEU:HD12	5:AE:44:GLY:N	2.36	0.40
25:CZ:201:GLU:O	25:CZ:205:ALA:CB	2.70	0.40
25:CZ:20:VAL:CG2	25:CZ:21:ASP:N	2.85	0.40
36:BA:1666:G:H3'	36:BA:1667:G:C8	2.56	0.40
36:BA:1762:A:H2'	36:BA:1762:A:N3	2.36	0.40
36:BA:2726:U:H6	47:BO:67:LYS:HZ3	1.69	0.40
47:DO:104:ARG:C	47:DO:106:LEU:N	2.73	0.40
58:BZ:129:SER:HA	58:BZ:130:PRO:HD3	1.73	0.40
1:AA:1365:G:O2'	1:AA:1366:C:H5'	2.21	0.40
14:AN:23:ARG:O	14:AN:24:CYS:C	2.59	0.40
26:B0:11:ARG:HB3	26:B0:14:ARG:HH22	1.87	0.40
36:BA:2648:C:C2	36:BA:2673:G:C2	3.10	0.40
1:CA:1291:G:OP1	7:CG:37:ASN:HB3	2.21	0.40
36:BA:1468:C:H2'	36:BA:1469:A:C8	2.57	0.40
19:AS:40:ILE:CB	19:AS:67:VAL:HA	2.52	0.40
57:BY:76:CYS:CB	57:BY:77:PRO:HD2	2.51	0.40
42:BG:36:LYS:HD2	42:BG:36:LYS:C	2.41	0.40
31:D5:58:LEU:O	31:D5:59:GLU:HB3	2.21	0.40
39:DD:224:ALA:CB	39:DD:233:HIS:HB3	2.29	0.40
36:DA:491:G:H2'	36:DA:492:A:C8	2.56	0.40
36:BA:2100:G:N3	36:BA:2100:G:H2'	2.35	0.40
1:CA:548:G:O2'	1:CA:549:C:H5'	2.20	0.40
1:CA:1004:A:H5''	1:CA:1025:U:C5	2.56	0.40
36:DA:1093:G:H4'	43:DH:170:ARG:HH12	1.85	0.40
13:CM:68:GLY:O	13:CM:72:ALA:CB	2.67	0.40
1:AA:149:A:H2'	1:AA:150:C:C6	2.56	0.40
1:AA:151:A:H2'	1:AA:152:A:C5'	2.50	0.40
49:DQ:32:TYR:OH	49:DQ:111:GLU:HB2	2.21	0.40
49:DQ:111:GLU:CD	49:DQ:133:ARG:HH22	2.23	0.40
49:DQ:22:LYS:CG	49:DQ:22:LYS:O	2.69	0.40
58:DZ:77:ASP:OD2	58:DZ:79:ARG:C	2.60	0.40
16:CP:21:VAL:CG1	16:CP:33:ILE:HB	2.42	0.40
41:DF:8:GLN:HE21	41:DF:9:ILE:HB	1.86	0.40
46:BN:101:HIS:O	46:BN:102:ALA:C	2.60	0.40
36:BA:84:A:H2	36:BA:98:G:N3	2.20	0.40
39:BD:117:VAL:HG23	39:BD:129:ASN:N	2.36	0.40
39:BD:176:ARG:HG2	39:BD:176:ARG:NH1	2.35	0.40
39:DD:62:TYR:CG	39:DD:63:ARG:N	2.89	0.40
36:DA:2698:U:H2'	36:DA:2699:C:C6	2.56	0.40
36:DA:940:G:C3'	36:DA:941:A:H5''	2.51	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:1576:U:H2'	36:BA:1577:C:H6	1.74	0.40
1:CA:1329:A:OP1	13:CM:28:ALA:HB3	2.22	0.40
13:CM:19:LEU:O	13:CM:22:ILE:CD1	2.66	0.40
36:DA:472:A:O2'	36:DA:508:G:N2	2.53	0.40
42:DG:133:LEU:CD1	42:DG:157:ILE:HD12	2.51	0.40
42:DG:77:ILE:C	42:DG:79:ASN:H	2.23	0.40
36:BA:1440:G:O5'	36:BA:1440:G:H8	2.04	0.40
36:BA:1528(A):A:H8	36:BA:1529:G:N9	2.20	0.40
36:DA:1173:G:H3'	36:DA:1174:A:C5'	2.51	0.40
24:CY:9:A:H62	24:CY:23:A:N6	2.17	0.40
43:DH:20:ALA:HB1	43:DH:21:PRO:HD2	2.02	0.40
36:DA:1785:A:C2	36:DA:2588:G:N2	2.88	0.40
2:AB:26:PRO:C	2:AB:28:PHE:N	2.74	0.40
29:D3:26:LEU:CB	29:D3:28:LEU:HD21	2.51	0.40
54:BV:88:ARG:O	54:BV:90:PRO:CD	2.64	0.40
4:CD:127:THR:HG23	4:CD:132:ARG:HA	2.02	0.40
36:DA:78:A:O2'	36:DA:79:G:H5'	2.22	0.40
49:DQ:54:MET:CG	49:DQ:64:ILE:HD13	2.50	0.40
1:CA:782:A:N6	1:CA:801:U:C6	2.89	0.40
36:BA:910:A:H2'	36:BA:911:A:C8	2.56	0.40
49:BQ:12:GLN:HE21	49:BQ:73:PRO:CD	2.24	0.40
36:DA:2359:C:H3'	36:DA:2360:A:H8	1.87	0.40
36:DA:2359:C:C5	36:DA:2360:A:N7	2.89	0.40
36:BA:2130:U:O2	36:BA:2159:G:C2	2.75	0.40
54:BV:95:LEU:HD22	54:BV:97:LYS:HG2	2.03	0.40
20:AT:30:LYS:O	20:AT:32:ALA:N	2.54	0.40
36:BA:270:A:N1	36:BA:366:C:O2'	2.43	0.40
36:DA:1844:C:O3'	39:DD:258:LYS:HE3	2.21	0.40
38:DC:6:ARG:CG	38:DC:6:ARG:NH1	2.81	0.40
36:BA:1606:G:H4'	36:BA:1608:A:C2	2.56	0.40
36:BA:771:G:O2'	36:BA:1355:G:C1'	2.69	0.40
36:DA:122:G:H2'	36:DA:123:G:H8	1.86	0.40
4:AD:3:ARG:HD3	4:AD:5:ILE:HG13	2.03	0.40
39:BD:202:LYS:HG3	39:BD:202:LYS:O	2.21	0.40
1:AA:1245:A:N1	1:AA:1293:G:C6	2.89	0.40
36:DA:1413:G:H2'	36:DA:1414:G:H8	1.85	0.40
25:CZ:306:LYS:O	25:CZ:309:SER:N	2.33	0.40
1:AA:684:A:H2'	1:AA:685:G:C8	2.57	0.40
25:AZ:383:GLY:H	25:AZ:400:VAL:HB	1.85	0.40
46:DN:67:LEU:O	46:DN:68:GLU:HG3	2.21	0.40
36:DA:1491:G:O2'	36:DA:1492:G:H5'	2.22	0.40
36:BA:681:G:H2'	36:BA:682:G:H8	1.86	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:63:ARG:HA	5:AE:66:MET:SD	2.61	0.40
39:DD:160:GLY:H	39:DD:196:VAL:HG12	1.86	0.40
11:CK:38:ASN:O	11:CK:39:PRO:O	2.39	0.40
26:D0:20:ARG:CG	26:D0:20:ARG:HH11	2.34	0.40
36:DA:271(V):G:O2'	36:DA:271(W):G:H5'	2.21	0.40
38:DC:59:ARG:CZ	38:DC:164:ARG:NH1	2.85	0.40
12:AL:70:ILE:HA	12:AL:71:PRO:HD3	1.84	0.40
12:AL:75:HIS:CD2	12:AL:77:LEU:HB2	2.56	0.40
1:CA:128:G:H4'	17:CQ:3:LYS:HG2	2.04	0.40
36:BA:2052:G:N1	36:BA:2053:G:C5	2.89	0.40
36:DA:2436:G:O2'	36:DA:2437:U:H5'	2.21	0.40
37:BB:14:U:O2'	37:BB:15:A:OP1	2.35	0.40
1:CA:924:C:O2'	1:CA:1502:A:N6	2.54	0.40
36:BA:1512:U:O2	36:BA:1512:U:C2'	2.62	0.40
10:AJ:80:LYS:O	10:AJ:83:GLU:HB3	2.20	0.40
36:DA:383:U:C6	36:DA:385:C:C5	3.09	0.40
25:CZ:326:GLU:O	63:CZ:502:KIR:H101	2.21	0.40
17:CQ:31:LEU:O	17:CQ:32:TYR:HD2	2.05	0.40
33:B7:24:THR:C	33:B7:28:ARG:NH2	2.75	0.40
1:CA:1148:U:H2'	1:CA:1149:C:C5'	2.51	0.40
38:BC:199:HIS:O	38:BC:201:PRO:HD3	2.21	0.40
1:CA:9:G:OP2	5:CE:121:LYS:NZ	2.35	0.40
36:BA:1907:G:C6	36:BA:1924:C:N3	2.89	0.40
36:DA:869:G:C2'	36:DA:870:A:H5'	2.51	0.40
11:AK:99:GLN:O	11:AK:101:SER:N	2.46	0.40
1:CA:102:G:C6	1:CA:103:C:C5	3.09	0.40
36:BA:645:C:C3'	36:BA:645:C:O2	2.69	0.40
37:DB:40:U:H3'	37:DB:41:U:C5'	2.52	0.40
36:BA:1197:G:H2'	36:BA:1198:U:H6	1.85	0.40
18:AR:31:LEU:H	18:AR:31:LEU:HD23	1.87	0.40
28:B2:39:ALA:HB2	28:B2:45:SER:HA	2.02	0.40
25:CZ:69:GLU:HB3	25:CZ:273:HIS:ND1	2.36	0.40
25:AZ:324:LYS:HG2	25:AZ:326:GLU:OE1	2.22	0.40
11:AK:48:ILE:HG22	11:AK:49:GLY:H	1.85	0.40
3:CC:140:ARG:NH1	3:CC:140:ARG:HG3	2.34	0.40
36:BA:2567:G:H2'	36:BA:2568:C:C6	2.55	0.40
4:AD:106:TYR:CD2	4:AD:106:TYR:C	2.94	0.40
1:CA:894:G:H2'	1:CA:895:G:C8	2.56	0.40
1:CA:588:G:C6	1:CA:589:C:C4	3.09	0.40
36:BA:271(S):G:C2	36:BA:271(T):C:C2	3.09	0.40
1:CA:1473:A:O2'	1:CA:1474:G:H5'	2.20	0.40
17:AQ:18:THR:O	17:AQ:19:VAL:HG13	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
55:DW:34:ASN:HD22	55:DW:34:ASN:HA	1.63	0.40
36:DA:614:U:O2	36:DA:614:U:O4'	2.39	0.40
14:AN:44:LEU:C	14:AN:44:LEU:HD12	2.42	0.40
8:CH:136:GLU:HG3	8:CH:136:GLU:O	2.22	0.40
17:CQ:18:THR:O	17:CQ:19:VAL:HG13	2.21	0.40
25:CZ:151:GLU:HG2	25:CZ:170:VAL:HG11	2.03	0.40
36:BA:1216:G:C2	36:BA:1234:U:H1'	2.56	0.40
34:B8:5:LYS:HB3	36:BA:254:G:O6	2.21	0.40
36:BA:583:G:C6	36:BA:584:C:N4	2.90	0.40
39:DD:46:GLN:N	39:DD:46:GLN:OE1	2.55	0.40
32:D6:53:LYS:HD3	32:D6:54:ILE:N	2.23	0.40
34:D8:4:MET:CE	34:D8:61:LEU:CD2	2.99	0.40
34:D8:8:LYS:HA	34:D8:11:LYS:CB	2.47	0.40
28:D2:31:GLU:O	28:D2:35:LEU:HB3	2.21	0.40
24:AY:42:U:H5'	24:AY:42:U:H6	1.86	0.40
36:DA:605:C:O2'	36:DA:606:U:H5'	2.22	0.40
36:BA:1427:A:C1'	36:BA:1428:C:C5	3.04	0.40
39:BD:147:LEU:HB2	39:BD:155:LEU:HD11	2.03	0.40
41:BF:39:TRP:CD1	41:BF:101:LEU:HB2	2.56	0.40
41:BF:120:GLU:HB3	41:BF:122:LYS:NZ	2.37	0.40
41:BF:97:TYR:HD2	41:BF:97:TYR:N	2.18	0.40
36:BA:2741:A:H2'	36:BA:2742:C:O4'	2.20	0.40
41:BF:167:ALA:HB1	41:BF:173:VAL:CG1	2.51	0.40
36:BA:1652:A:H2'	36:BA:1653:G:C5'	2.47	0.40
36:BA:2457:U:H2'	36:BA:2458:G:H5'	2.02	0.40
36:BA:2458:G:N3	36:BA:2490:G:N2	2.69	0.40
40:BE:7:VAL:CG1	40:BE:27:LEU:HB3	2.52	0.40
50:BR:33:ARG:O	50:BR:34:ILE:HD13	2.21	0.40
50:BR:77:ARG:C	50:BR:79:LEU:N	2.73	0.40
56:DX:23:GLU:O	56:DX:25:LYS:N	2.52	0.40
27:D1:3:LYS:CG	27:D1:4:VAL:HG12	2.45	0.40
36:DA:2646:C:OP2	36:DA:2732:G:O2'	2.39	0.40
36:DA:2657:A:C5	36:DA:2665:A:C5	3.09	0.40
36:DA:1131:G:OP1	46:DN:80:GLY:N	2.50	0.40
36:DA:14:A:H5''	36:DA:15:G:OP1	2.21	0.40
36:DA:996:A:N6	36:DA:1160:G:C5	2.89	0.40
36:DA:997:G:C2	36:DA:998:C:C4	3.09	0.40
54:DV:57:VAL:HG23	54:DV:98:GLU:O	2.21	0.40
2:AB:224:GLN:C	2:AB:226:ARG:N	2.73	0.40
2:AB:8:LYS:HZ3	2:AB:217:ARG:NH1	2.18	0.40
8:CH:81:HIS:HB2	8:CH:138:TRP:CE3	2.56	0.40
9:CI:88:TYR:O	9:CI:89:ASN:ND2	2.54	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:260:G:C2'	1:AA:261:U:H5'	2.51	0.40
1:AA:277:C:H5'	17:AQ:68:ARG:NH1	2.36	0.40
4:CD:29:PRO:O	4:CD:30:LYS:CB	2.68	0.40
2:CB:54:THR:O	2:CB:57:PHE:N	2.54	0.40
2:CB:92:TYR:HD1	2:CB:93:VAL:N	2.17	0.40
38:DC:15:ASP:O	38:DC:18:LYS:N	2.52	0.40
13:CM:105:THR:O	13:CM:106:ASN:CB	2.68	0.40
25:CZ:147:LEU:HD22	25:CZ:147:LEU:N	2.37	0.40
36:BA:139:G:H3'	36:BA:139(A):G:H5''	2.02	0.40
40:BE:101:ARG:CD	40:BE:171:GLU:HA	2.51	0.40
36:DA:1667:G:OP2	36:DA:1667:G:C8	2.64	0.40
58:BZ:132:ASN:C	58:BZ:134:PRO:CD	2.90	0.40
36:DA:307:G:H21	36:DA:330:A:H62	1.69	0.40
42:BG:27:ASN:ND2	42:BG:29:TRP:CB	2.83	0.40
36:DA:2177:C:H2'	36:DA:2178:C:O2	2.20	0.40
36:DA:2188:C:H2'	36:DA:2189:U:C2	2.56	0.40
36:DA:2189:U:C2'	36:DA:2190:G:C4'	2.98	0.40
1:AA:1508:G:H1	1:AA:1527:C:N4	2.14	0.40
1:CA:1332:A:O2'	1:CA:1333:A:H5'	2.22	0.40
31:B5:41:PRO:HA	31:B5:42:PRO:HD3	1.95	0.40
31:B5:41:PRO:CG	31:B5:44:THR:OG1	2.49	0.40
36:BA:2179:C:O4'	36:BA:2179:C:O2	2.40	0.40
3:AC:69:HIS:HE1	3:AC:104:GLN:OE1	2.05	0.40
1:CA:38:G:H4'	1:CA:547:A:N6	2.36	0.40
1:CA:448:A:C4	1:CA:487:A:C2	3.09	0.40
1:CA:547:A:H1'	1:CA:548:G:O4'	2.22	0.40
36:DA:1099:G:H2'	36:DA:1100:C:O4'	2.20	0.40
13:CM:66:LEU:O	13:CM:67:GLU:C	2.59	0.40
36:BA:1787:A:H4'	36:BA:2589:A:H4'	2.04	0.40
31:B5:17:ASP:O	31:B5:20:ARG:O	2.39	0.40
4:CD:165:MET:HE3	4:CD:176:LEU:CD2	2.50	0.40
46:BN:47:ALA:C	46:BN:49:GLY:N	2.74	0.40
36:DA:772:C:H5'	36:DA:1355:G:H4'	2.03	0.40
36:DA:1373:A:C2'	36:DA:1374:G:H5'	2.51	0.40
36:DA:693:C:H2'	36:DA:694:U:C6	2.56	0.40
36:BA:2307:G:N2	36:BA:2308:G:C5'	2.84	0.40
36:DA:458:G:HO2'	36:DA:469:G:H1	1.70	0.40
36:DA:472:A:H5'	36:DA:472:A:C8	2.52	0.40
42:DG:97:ASP:N	42:DG:97:ASP:OD1	2.55	0.40
1:CA:1278:U:C5'	1:CA:1279:A:C8	3.05	0.40
36:BA:1547:C:O2'	36:BA:1548:C:H5'	2.21	0.40
43:DH:141:VAL:O	43:DH:145:ALA:HB2	2.22	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AG:16:LEU:HD11	9:AI:42:ARG:HA	1.99	0.40
36:BA:723:G:C5	36:BA:724:U:C4	3.10	0.40
36:DA:2636:U:H1'	36:DA:2783:G:H22	1.85	0.40
36:BA:1091:G:N2	36:BA:1101:U:O2'	2.55	0.40
53:DU:106:PHE:C	53:DU:108:GLU:N	2.75	0.40
5:AE:110:LEU:HA	5:AE:110:LEU:HD23	1.90	0.40
21:AU:18:TYR:CD1	21:AU:24:ARG:HG3	2.56	0.40
1:AA:1281:U:H3'	1:AA:1282:C:C5	2.56	0.40
8:CH:77:GLU:CG	8:CH:78:GLN:N	2.84	0.40
49:DQ:42:ILE:HA	49:DQ:42:ILE:HD12	1.87	0.40
29:B3:52:HIS:CD2	29:B3:52:HIS:N	2.85	0.40
1:AA:35:G:C5	1:AA:36:C:C4	3.09	0.40
1:AA:37:U:O2'	1:AA:38:G:H5'	2.21	0.40
36:BA:2201:C:C4	36:BA:2202:C:N4	2.89	0.40
1:CA:187:C:N4	1:CA:191:G:C6	2.89	0.40
1:AA:1339:A:C2	22:AV:31:A:O4'	2.74	0.40
58:DZ:68:PRO:HB2	58:DZ:91:LEU:HD12	2.03	0.40
37:BB:21:G:O2'	37:BB:22:U:H5'	2.21	0.40
36:DA:272(H):C:C2'	36:DA:272(I):U:C5'	2.93	0.40
1:CA:1414:U:H2'	1:CA:1415:G:H8	1.85	0.40
1:CA:1499:A:O4'	1:CA:1520:G:C5'	2.70	0.40
36:DA:52:A:C2	36:DA:178:G:N3	2.89	0.40
36:BA:2133:G:C2	36:BA:2157:G:O6	2.75	0.40
54:BV:58:VAL:O	54:BV:59:ALA:HB2	2.20	0.40
36:DA:218:A:H2	36:DA:235:U:H4'	1.85	0.40
1:AA:193:C:H2'	1:AA:194:C:C6	2.56	0.40
12:CL:20:LYS:CD	12:CL:20:LYS:N	2.71	0.40
1:CA:59:A:H3'	1:CA:331:G:H22	1.85	0.40
25:CZ:325:LYS:HD2	25:CZ:331:HIS:HB2	2.02	0.40
36:BA:1355:G:O6	36:BA:1377:G:C2	2.75	0.40
1:CA:115:G:O2'	1:CA:116:A:OP2	2.40	0.40
40:BE:69:LYS:C	40:BE:71:GLY:H	2.19	0.40
18:CR:59:SER:O	18:CR:62:GLU:HB2	2.20	0.40
36:BA:222:A:N1	36:BA:233:A:H5''	2.37	0.40
41:BF:53:THR:CG2	41:BF:56:GLU:HG3	2.42	0.40
36:DA:1413:G:H2'	36:DA:1414:G:C8	2.56	0.40
18:AR:52:PRO:C	18:AR:54:ARG:N	2.72	0.40
36:BA:978:G:H2'	36:BA:979:G:O4'	2.21	0.40
58:BZ:109:ALA:O	58:BZ:145:GLU:OE2	2.40	0.40
36:DA:1492:G:C2	36:DA:1499:C:O2	2.75	0.40
11:CK:66:LEU:O	11:CK:69:ALA:N	2.54	0.40
39:DD:160:GLY:N	39:DD:197:GLY:O	2.55	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:2063:C:C2'	36:DA:2064:C:H5'	2.51	0.40
1:AA:806:C:H2'	1:AA:807:A:C8	2.57	0.40
3:AC:64:VAL:CG1	3:AC:66:VAL:CG2	2.98	0.40
36:BA:1330:C:H2'	36:BA:1330:C:O2	2.21	0.40
3:AC:150:LYS:O	3:AC:151:VAL:HG23	2.21	0.40
36:DA:2052:G:C6	36:DA:2053:G:N7	2.89	0.40
37:BB:15:A:H3'	37:BB:16:G:C5'	2.51	0.40
1:AA:186:C:O4'	20:AT:81:LYS:HE2	2.21	0.40
16:CP:3:LYS:CB	16:CP:65:GLN:O	2.70	0.40
36:BA:2371:G:N1	36:BA:2372:G:C5	2.90	0.40
39:BD:76:PRO:HB2	39:BD:116:GLN:HE21	1.86	0.40
52:BT:110:ILE:HG22	52:BT:111:ARG:N	2.36	0.40
1:CA:564:C:O2'	1:CA:565:U:H5'	2.21	0.40
47:BO:12:ASP:O	47:BO:14:THR:N	2.54	0.40
36:DA:1973:G:C6	36:DA:1974:C:N4	2.90	0.40
36:BA:2667:C:H2'	36:BA:2668:G:H8	1.87	0.40
4:CD:160:GLN:HG3	4:CD:160:GLN:H	1.47	0.40
36:DA:1701:A:H2'	36:DA:1702:G:H5'	2.02	0.40
57:DY:6:HIS:N	57:DY:6:HIS:HD2	2.18	0.40
7:CG:94:ARG:HB2	7:CG:95:ARG:H	1.75	0.40
36:BA:1930:G:O2'	36:BA:1931:U:P	2.79	0.40
36:BA:1307:A:C4	36:BA:1622:G:N2	2.89	0.40
54:BV:13:ARG:HH11	54:BV:13:ARG:CG	2.33	0.40
12:AL:34:ARG:O	12:AL:61:THR:HG23	2.22	0.40
22:CV:47:U:O2'	22:CV:48:C:H5'	2.21	0.40
33:D7:29:LYS:HE3	36:DA:210:C:P	2.62	0.40
36:DA:1560:G:H2'	36:DA:1560:G:N3	2.36	0.40
36:BA:2704:C:H2'	36:BA:2705:A:C8	2.56	0.40
36:BA:1434:A:H61	36:BA:1558:A:N6	2.19	0.40
36:DA:355:G:H2'	36:DA:356:G:C8	2.56	0.40
36:BA:541:C:H2'	36:BA:542:C:C6	2.56	0.40
36:DA:86:C:H4'	36:DA:104:U:O2	2.20	0.40
36:BA:2446:G:H8	36:BA:2446:G:O5'	2.03	0.40
26:D0:75:LEU:HD23	26:D0:75:LEU:HA	1.77	0.40
36:BA:1836:C:O5'	36:BA:1836:C:H6	2.04	0.40
55:BW:34:ASN:HD22	55:BW:34:ASN:HA	1.65	0.40
1:CA:204:U:O4'	1:CA:204:U:O2	2.39	0.40
36:BA:889:C:O2'	36:BA:890:A:P	2.79	0.40
37:DB:85:G:C4	37:DB:93:G:C2	3.09	0.40
24:CY:42:U:H5'	24:CY:42:U:H6	1.86	0.40
32:B6:22:ALA:CB	32:B6:39:TYR:CZ	3.04	0.40
36:BA:2358:G:C2	36:BA:2359:C:H1'	2.54	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BP:23:PRO:HA	48:BP:29:LYS:C	2.42	0.40
36:DA:1291:C:C3'	36:DA:1292:U:H5'	2.50	0.40
36:DA:2870:C:H2'	36:DA:2871:C:C5'	2.52	0.40
50:DR:32:GLY:HA3	50:DR:116:LEU:HG	1.99	0.40
36:DA:2011:U:OP2	55:DW:16:LYS:HE3	2.21	0.40
32:D6:19:ARG:CG	32:D6:20:ASN:N	2.70	0.40
32:D6:36:LEU:CD2	32:D6:36:LEU:C	2.89	0.40
34:D8:6:THR:HG21	34:D8:11:LYS:HZ3	1.87	0.40
34:D8:13:ARG:HB3	48:DP:63:PRO:CA	2.51	0.40
25:AZ:147:LEU:HD22	25:AZ:147:LEU:N	2.35	0.40
25:AZ:135:MET:HE1	25:AZ:150:VAL:HB	2.03	0.40
25:AZ:155:ARG:HB3	25:AZ:165:GLY:O	2.22	0.40
36:DA:240:G:O2'	36:DA:257:A:N6	2.55	0.40
38:DC:131:LEU:HD22	38:DC:136:LEU:HD13	2.03	0.40
39:BD:267:SER:HA	39:BD:270:ILE:HG13	2.02	0.40
36:BA:1240:U:HO2'	36:BA:1241:A:P	2.45	0.40
41:BF:25:PRO:HB3	41:BF:119:ARG:HB2	2.03	0.40
1:AA:514:C:O2	1:AA:538:G:C2	2.75	0.40
4:AD:26:CYS:O	4:AD:31:CYS:HB2	2.21	0.40
41:BF:198:ALA:HA	41:BF:201:VAL:CG1	2.51	0.40
36:BA:2881:C:C2	36:BA:2882:A:N7	2.90	0.40
13:AM:40:ASN:OD1	13:AM:41:PRO:CD	2.65	0.40
13:AM:44:ARG:O	13:AM:46:LYS:N	2.54	0.40
13:AM:45:VAL:HA	13:AM:48:LEU:CD1	2.39	0.40
30:B4:4:GLY:N	30:B4:6:HIS:CE1	2.90	0.40
1:CA:799:G:C6	1:CA:800:G:C4	3.10	0.40
56:DX:11:PRO:HG2	56:DX:13:LEU:CD2	2.51	0.40
27:D1:62:VAL:CG2	27:D1:63:ALA:N	2.83	0.40
36:DA:2043:C:H2'	36:DA:2044:C:H6	1.86	0.40
48:DP:32:THR:O	48:DP:33:ARG:C	2.60	0.40
53:DU:88:ILE:CB	53:DU:90:VAL:HG23	2.49	0.40
54:DV:38:LEU:O	54:DV:51:VAL:HG12	2.21	0.40
2:AB:213:LEU:C	2:AB:213:LEU:HD23	2.42	0.40
36:BA:1485:G:O2'	36:BA:1505:C:N4	2.54	0.40
1:AA:59:A:H3'	1:AA:60:A:C5'	2.52	0.40
1:CA:1163:C:N3	1:CA:1174:G:C2	2.90	0.40
51:BS:98:VAL:O	51:BS:99:LYS:HB2	2.21	0.40
2:CB:55:PHE:HE1	2:CB:218:ALA:HA	1.86	0.40
13:CM:99:ARG:O	13:CM:100:GLY:O	2.39	0.40
25:CZ:33:TYR:O	25:CZ:34:VAL:C	2.60	0.40
36:BA:1664:A:N6	36:BA:1996:C:H42	2.17	0.40
52:BT:22:PHE:O	52:BT:23:ARG:HB3	2.20	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2889:C:H2'	36:BA:2891:G:O4'	2.22	0.40
52:DT:91:ARG:O	52:DT:117:ASP:HB3	2.21	0.40
52:DT:19:LEU:HG	52:DT:19:LEU:H	1.74	0.40
38:BC:18:LYS:HE3	38:BC:20:TYR:CD2	2.56	0.40
58:BZ:88:PHE:N	58:BZ:88:PHE:CD1	2.90	0.40
7:AG:31:MET:SD	7:AG:36:LYS:CA	3.10	0.40
16:CP:5:ARG:HB2	16:CP:6:LEU:H	1.66	0.40
1:CA:1114:C:C2	1:CA:1115:C:C5	3.09	0.40
7:CG:69:VAL:CG1	7:CG:69:VAL:O	2.58	0.40
9:CI:15:ALA:HA	9:CI:65:VAL:HA	2.03	0.40
3:CC:30:ARG:HD3	14:CN:38:GLY:HA3	2.03	0.40
14:CN:45:ARG:HG3	14:CN:49:HIS:CE1	2.57	0.40
22:CV:68:C:H3'	22:CV:69:G:H5''	1.99	0.40
1:AA:1488:G:H2'	1:AA:1489:G:C8	2.55	0.40
19:AS:46:GLY:H	19:AS:62:ILE:HG23	1.85	0.40
51:DS:101:LEU:C	51:DS:101:LEU:HD12	2.42	0.40
42:BG:26:GLN:HG2	42:BG:27:ASN:H	1.87	0.40
42:BG:37:VAL:HG13	42:BG:159:VAL:HA	2.03	0.40
36:DA:2111:C:C4	36:DA:2145:C:C2	3.10	0.40
1:AA:1416:G:C5	1:AA:1417:G:C5	3.09	0.40
39:DD:8:PRO:HB3	39:DD:14:ARG:HB3	2.02	0.40
36:BA:2122:U:C2	36:BA:2123:G:N7	2.89	0.40
36:BA:2123:G:C4	36:BA:2124:G:C8	3.09	0.40
36:BA:2181:G:O2'	36:BA:2182:G:H5'	2.22	0.40
3:CC:112:SER:HA	3:CC:183:ASP:OD1	2.22	0.40
24:AY:1:G:N3	24:AY:1:G:C2'	2.82	0.40
25:AZ:98:GLN:CG	25:AZ:98:GLN:O	2.63	0.40
19:CS:10:PHE:CE1	19:CS:39:THR:OG1	2.74	0.40
16:AP:20:VAL:HG22	16:AP:21:VAL:N	2.37	0.40
37:DB:104:U:H1'	58:DZ:29:TYR:OH	2.21	0.40
37:DB:68:C:C2	37:DB:69:G:C8	3.09	0.40
49:DQ:134:ARG:O	49:DQ:137:TYR:HB2	2.22	0.40
58:DZ:125:LEU:HD12	58:DZ:126:VAL:N	2.36	0.40
36:BA:539:G:H2'	36:BA:540:C:C6	2.56	0.40
14:CN:12:ARG:HB3	14:CN:14:PRO:CD	2.51	0.40
46:BN:47:ALA:HB1	46:BN:119:ARG:NH1	2.37	0.40
10:AJ:23:ILE:HG23	10:AJ:85:LEU:HD22	2.04	0.40
57:DY:85:VAL:CG1	57:DY:86:ARG:N	2.83	0.40
36:DA:2710:C:H2'	36:DA:2711:A:O4'	2.21	0.40
36:DA:1226:A:N7	36:DA:1227:G:H1'	2.37	0.40
36:DA:426:C:C2'	36:DA:427:U:H5'	2.52	0.40
1:AA:156:G:H1'	1:AA:166:G:H22	1.85	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:864:G:OP2	49:BQ:22:LYS:HG3	2.21	0.40
36:DA:1494:A:HO2'	36:DA:1496:A:H2	1.70	0.40
51:DS:85:VAL:CG2	51:DS:86:ALA:N	2.84	0.40
25:CZ:215:ARG:O	25:CZ:216:ASP:C	2.59	0.40
54:BV:69:LYS:HB2	54:BV:88:ARG:CD	2.42	0.40
1:AA:1434:A:C2'	1:AA:1435:G:C8	3.00	0.40
36:BA:2037:G:O5'	36:BA:2037:G:H8	2.04	0.40
4:AD:108:LEU:O	4:AD:110:PHE:CD1	2.75	0.40
3:CC:57:ILE:O	3:CC:57:ILE:HG22	2.20	0.40
4:CD:103:ASN:O	4:CD:104:VAL:C	2.60	0.40
1:CA:495:A:C2	1:CA:496:A:C5	3.10	0.40
1:CA:438:G:H4'	4:CD:123:HIS:HD1	1.87	0.40
37:DB:29:A:C2	37:DB:56:G:C2	3.10	0.40
11:AK:21:ILE:CD1	11:AK:21:ILE:N	2.85	0.40
38:DC:206:GLY:CA	38:DC:210:ARG:HH22	2.19	0.40
2:CB:208:ILE:H	2:CB:208:ILE:HG13	1.75	0.40
36:BA:274:G:C2'	36:BA:274:G:N3	2.84	0.40
1:AA:1240:U:H3'	1:AA:1241:G:H5'	2.03	0.40
1:AA:418:C:C2'	1:AA:419:C:O5'	2.69	0.40
36:DA:195:A:OP1	48:DP:46:LYS:NZ	2.38	0.40
1:CA:892:A:C4	1:CA:893:C:C5	3.09	0.40
55:DW:14:PRO:HG2	55:DW:78:GLU:OE1	2.22	0.40
22:CW:31:A:N1	22:CW:40:C:C4	2.89	0.40
16:AP:51:VAL:O	16:AP:53:VAL:N	2.53	0.40
1:CA:446:G:O2'	1:CA:447:G:H5'	2.20	0.40
1:AA:405:U:H5''	1:AA:406:G:O4'	2.21	0.40
39:BD:187:GLY:C	39:BD:189:CYS:H	2.25	0.40
36:DA:1599:C:C2	36:DA:1600:C:C5	3.09	0.40
36:BA:1062:G:N1	36:BA:1063:G:H1'	2.36	0.40
54:BV:19:LYS:HZ3	54:BV:20:LEU:H	1.69	0.40
54:BV:58:VAL:HB	54:BV:97:LYS:HB2	2.04	0.40
1:AA:194:C:H5''	20:AT:65:LYS:CE	2.50	0.40
36:DA:1862:G:N2	36:DA:1881:C:O2	2.55	0.40
38:BC:152:ILE:O	38:BC:156:ILE:HG13	2.21	0.40
36:DA:9:U:O2'	36:DA:10:G:H8	2.05	0.40
33:B7:10:ARG:HD3	36:BA:771:G:OP1	2.22	0.40
1:CA:390:C:C4'	16:CP:28:ARG:NH1	2.83	0.40
56:DX:60:ARG:HA	56:DX:75:ASP:OD2	2.21	0.40
23:CX:22:A:C4	23:CX:23:C:C5	3.09	0.40
25:CZ:238:ALA:O	25:CZ:287:GLY:HA2	2.21	0.40
48:DP:115:LEU:CG	48:DP:116:GLY:N	2.82	0.40
36:DA:979:G:C2	36:DA:982:C:H5	2.40	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:DN:62:VAL:O	46:DN:63:THR:O	2.39	0.40
12:CL:33:ARG:O	12:CL:85:ILE:HB	2.22	0.40
25:CZ:323:LEU:HG	25:CZ:327:GLU:HB2	2.04	0.40
50:BR:110:PRO:C	50:BR:111:LEU:HD12	2.41	0.40
1:AA:219:C:H2'	1:AA:220:G:O5'	2.21	0.40
36:BA:271(F):C:C2'	36:BA:271(G):C:H5'	2.51	0.40
1:CA:734:G:H8	1:CA:734:G:O5'	2.04	0.40
49:BQ:98:LYS:O	49:BQ:99:PRO:C	2.60	0.40
1:CA:601:C:C2	1:CA:638:G:N2	2.90	0.40
1:CA:472:A:C8	1:CA:473:G:C8	3.10	0.40
36:DA:751:A:H5'	55:DW:90:ARG:CA	2.45	0.40
36:DA:2756:U:O2'	36:DA:2757:A:C5'	2.69	0.40
36:BA:2575:C:H5''	36:BA:2576:G:OP2	2.22	0.40
1:AA:652:U:O2'	1:AA:653:A:C5'	2.66	0.40
1:CA:1316:G:H3'	1:CA:1317:C:C5'	2.52	0.40
36:BA:940:G:C3'	36:BA:941:A:H5''	2.52	0.40
1:CA:161:A:H2'	1:CA:162:A:C8	2.57	0.40
1:AA:159:G:H2'	1:AA:161:A:OP2	2.21	0.40
11:CK:23:ALA:HB2	11:CK:28:THR:HG23	2.03	0.40
2:CB:194:PRO:HG2	2:CB:195:ASP:N	2.32	0.40
36:BA:479:A:H1'	36:BA:481:G:H5''	2.02	0.40
22:AW:8:U:O4	22:AW:15:G:O6	2.40	0.40
36:DA:2315:G:H2'	36:DA:2316:C:H6	1.86	0.40
1:AA:341:C:N3	1:AA:349:A:C2	2.89	0.40
17:AQ:27:PHE:O	17:AQ:27:PHE:CD1	2.75	0.40
11:AK:102:GLY:O	11:AK:103:LEU:HD22	2.22	0.40
36:DA:1836:C:O2'	36:DA:1837:C:H5'	2.22	0.40
49:DQ:59:ARG:HG3	49:DQ:59:ARG:HH11	1.86	0.40
1:CA:1056:U:OP1	3:CC:163:ALA:HB2	2.22	0.40
17:CQ:6:LEU:HB3	17:CQ:23:VAL:HG11	2.03	0.40
1:CA:681:C:H2'	1:CA:682:G:H8	1.86	0.40
49:BQ:118:LEU:CD1	49:BQ:131:ILE:HG23	2.51	0.40
36:DA:340:A:H2'	36:DA:341:G:O4'	2.22	0.40
1:AA:27:G:H2'	1:AA:28:G:H8	1.87	0.40
55:BW:80:PRO:HG2	55:BW:80:PRO:O	2.21	0.40
38:BC:61:THR:O	38:BC:163:PHE:HE2	2.03	0.40
41:DF:93:LYS:O	41:DF:94:PRO:C	2.59	0.40
4:CD:110:PHE:CD1	4:CD:110:PHE:N	2.89	0.40
36:BA:405:U:O4'	36:BA:405:U:O2	2.38	0.40
36:DA:1652:A:O2'	36:DA:1653:G:H5'	2.20	0.40
36:DA:1653:G:O2'	50:DR:3:HIS:HB2	2.22	0.40
50:DR:75:LEU:O	50:DR:79:LEU:HB2	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1452:A:H1'	50:DR:77:ARG:HH22	1.86	0.40
36:DA:1815:A:P	39:DD:54:ARG:HH22	2.44	0.40
32:D6:45:LYS:HD2	32:D6:45:LYS:N	2.17	0.40
34:D8:30:ARG:HE	34:D8:30:ARG:HA	1.83	0.40
34:D8:7:HIS:C	34:D8:9:GLY:N	2.73	0.40
48:DP:126:VAL:CG1	48:DP:145:PRO:HB2	2.45	0.40
36:BA:1889:A:H1'	36:BA:2087:G:O4'	2.21	0.40
41:DF:31:HIS:O	41:DF:33:LEU:N	2.54	0.40
1:CA:368:U:H5	25:CZ:234:ARG:CD	2.03	0.40
36:BA:693:C:C4	36:BA:694:U:C4	3.10	0.40
39:BD:147:LEU:CG	39:BD:183:ARG:HH12	2.29	0.40
36:DA:2234:G:O2'	36:DA:2235:G:H5'	2.22	0.40
1:CA:266:G:O2'	1:CA:267:C:OP2	2.32	0.40
17:CQ:60:ILE:HG12	17:CQ:61:GLU:N	2.37	0.40
41:BF:154:VAL:HG22	41:BF:191:ARG:O	2.22	0.40
1:AA:517:G:C5	1:AA:531:U:O4'	2.75	0.40
12:AL:117:ARG:O	12:AL:118:SER:C	2.59	0.40
36:BA:2468:G:H2'	36:BA:2476:A:N7	2.36	0.40
36:BA:2476:A:N3	36:BA:2476:A:H2'	2.35	0.40
36:BA:2740:A:C6	36:BA:2741:A:C6	3.09	0.40
49:BQ:54:MET:O	49:BQ:55:VAL:C	2.60	0.40
28:B2:38:GLN:HB3	28:B2:44:LEU:HD22	2.04	0.40
36:BA:296:C:N4	36:BA:343:C:N4	2.70	0.40
36:BA:2880:C:O2	50:BR:92:GLY:HA3	2.21	0.40
13:AM:15:VAL:O	13:AM:16:ASP:C	2.59	0.40
30:B4:35:VAL:CG1	30:B4:36:CYS:N	2.84	0.40
36:DA:374:A:C6	36:DA:375:C:C2	3.09	0.40
36:DA:2669:G:C2	36:DA:2670:A:C5	3.09	0.40
36:DA:555:U:O2	36:DA:556:G:N7	2.55	0.40
36:BA:1488:G:C6	36:BA:1489:U:C4	3.10	0.40
1:AA:292:G:H1	1:AA:308:C:N4	2.18	0.40
1:CA:973:G:O6	1:CA:974:A:N6	2.54	0.40
1:CA:991:U:H6	1:CA:991:U:OP2	2.03	0.40
5:AE:137:GLU:O	5:AE:140:ARG:HB3	2.21	0.40
8:AH:25:ASP:C	8:AH:26:VAL:HG12	2.42	0.40
2:CB:171:ALA:HA	2:CB:174:VAL:HB	2.02	0.40
48:BP:110:TYR:CE1	48:BP:111:ARG:CZ	3.05	0.40
5:AE:51:VAL:HB	5:AE:52:PRO:CD	2.51	0.40
56:BX:35:THR:O	56:BX:39:ILE:HB	2.21	0.40
36:BA:2640:G:H5"	46:BN:74:ARG:HD2	2.02	0.40
52:BT:32:TYR:O	52:BT:42:ILE:HA	2.22	0.40
52:BT:25:GLY:O	52:BT:48:ILE:HG22	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BA:2787:C:H1'	40:BE:61:ARG:CD	2.51	0.40
40:DE:165:VAL:CG1	40:DE:166:THR:N	2.79	0.40
52:DT:48:ILE:O	52:DT:63:VAL:HA	2.21	0.40
38:BC:171:ILE:HG12	38:BC:196:LEU:HD21	2.04	0.40
37:BB:73:A:C6	37:BB:74:U:C2	3.09	0.40
36:DA:1210:A:H4'	36:DA:1211:U:O5'	2.21	0.40
1:AA:940:C:H6	1:AA:940:C:O5'	2.04	0.40
47:BO:31:LYS:HB3	47:BO:32:TYR:CE1	2.56	0.40
7:CG:16:LEU:HD11	9:CI:42:ARG:HA	1.96	0.40
9:CI:37:PHE:CE2	9:CI:74:ILE:HD11	2.56	0.40
51:DS:30:ARG:NH1	51:DS:35:ILE:HB	2.35	0.40
36:BA:1209:G:O3'	36:BA:1212:G:H5'	2.22	0.40
36:DA:2146:C:H5'	36:DA:2147:G:C2	2.56	0.40
36:DA:2176:A:H8	36:DA:2176:A:H5''	1.87	0.40
1:AA:15:G:H1	1:AA:920:U:H3	1.70	0.40
2:AB:21:ARG:C	2:AB:22:LYS:HG2	2.41	0.40
39:DD:233:HIS:O	39:DD:234:GLY:O	2.40	0.40
1:CA:1219:U:H2'	1:CA:1220:G:H8	1.86	0.40
1:CA:1014:A:H4'	19:CS:14:HIS:CD2	2.56	0.40
3:AC:58:GLU:O	3:AC:65:ALA:HB2	2.22	0.40
27:B1:68:PRO:HG2	27:B1:69:LYS:H	1.86	0.40
12:CL:123:LYS:O	12:CL:125:PRO:HD3	2.21	0.40
1:CA:1004:A:O5'	1:CA:1025:U:C5	2.74	0.40
36:DA:1092:C:N4	36:DA:1093:G:C2	2.89	0.40
53:BU:5:LYS:HE2	53:BU:7:GLY:H	1.86	0.40
36:BA:1772:G:H2'	36:BA:1773:A:H4'	2.02	0.40
36:BA:1788:C:C2'	36:BA:1789:A:H5'	2.52	0.40
58:DZ:10:ARG:HG2	58:DZ:12:GLY:H	1.86	0.40
58:DZ:30:ASN:O	58:DZ:32:HIS:N	2.55	0.40
1:CA:1016:A:H2'	1:CA:1017:G:H5'	2.04	0.40
53:BU:92:ARG:NH2	54:BV:10:LYS:CA	2.83	0.40
54:BV:35:LEU:C	54:BV:37:VAL:N	2.75	0.40
36:BA:99:U:H4'	36:BA:102:G:H1'	2.03	0.40
57:BY:6:HIS:NE2	57:BY:30:VAL:HG11	2.37	0.40
39:BD:117:VAL:HG21	39:BD:128:GLY:C	2.41	0.40
39:BD:72:LYS:HB3	39:BD:75:ILE:HB	2.03	0.40
39:DD:88:ARG:HH11	39:DD:88:ARG:HG2	1.87	0.40
36:DA:993:G:C5	36:DA:994:C:H5	2.40	0.40
13:CM:49:THR:HB	13:CM:52:GLU:CG	2.43	0.40
20:AT:71:THR:CG2	20:AT:72:LEU:H	2.34	0.40
43:DH:149:ARG:O	43:DH:149:ARG:HG2	2.22	0.40
21:CU:18:TYR:CD1	21:CU:24:ARG:HG3	2.56	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BQ:129:THR:O	49:BQ:130:LYS:HB2	2.21	0.40
36:DA:1494:A:O2'	36:DA:1496:A:C2	2.74	0.40
49:BQ:43:THR:O	49:BQ:44:ALA:C	2.60	0.40
27:B1:86:SER:O	27:B1:89:GLU:N	2.43	0.40
2:CB:25:ASN:HA	2:CB:26:PRO:HD2	1.86	0.40
49:DQ:43:THR:O	49:DQ:44:ALA:C	2.58	0.40
20:AT:100:ILE:CD1	20:AT:100:ILE:N	2.84	0.40
38:DC:177:LYS:O	38:DC:180:PHE:HD1	2.05	0.40
20:CT:100:ILE:CD1	20:CT:100:ILE:N	2.85	0.40
10:CJ:76:ASN:HA	10:CJ:77:PRO:HD2	1.95	0.40
29:B3:54:VAL:HG12	29:B3:55:ARG:N	2.36	0.40
37:BB:19:G:H3'	37:BB:20:C:H6	1.87	0.40
36:DA:783:A:C2'	36:DA:784:A:O5'	2.70	0.40
1:AA:424:G:C2	1:AA:425:G:C5	3.09	0.40
16:AP:50:LYS:O	16:AP:51:VAL:HG22	2.21	0.40
36:DA:2455:G:C2	36:DA:2498:C:N4	2.90	0.40
1:CA:39:G:C2'	1:CA:40:C:H5'	2.52	0.40
36:DA:2358:G:C2	36:DA:2359:C:H1'	2.51	0.40
31:D5:16:ARG:HH11	31:D5:20:ARG:HH11	1.57	0.40
36:DA:1346:G:H2'	36:DA:1347:G:C8	2.55	0.40
38:DC:63:SER:OG	38:DC:160:ARG:HG3	2.21	0.40
54:DV:75:PHE:CD2	54:DV:82:ARG:HG3	2.56	0.40
9:CI:55:ALA:C	9:CI:57:GLY:N	2.75	0.40
36:DA:2132:U:O4	38:DC:5:LYS:HE3	2.22	0.40
36:DA:754:C:H2'	36:DA:755:C:C5	2.56	0.40
36:BA:687:C:C5	36:BA:688:U:C4	3.10	0.40
36:BA:1785:A:C2	36:BA:2588:G:N2	2.90	0.40
25:CZ:311:THR:HB	25:CZ:312:PRO:HD2	2.04	0.40
25:CZ:310:ILE:HG13	25:CZ:381:GLU:HB3	2.04	0.40
1:AA:1219:U:H2'	1:AA:1220:G:H8	1.87	0.40
1:AA:935:A:C2	1:AA:936:C:C4	3.10	0.40
36:BA:980:A:C5	36:BA:981:A:C2	3.10	0.40
1:CA:1133:G:N3	1:CA:1142:G:N2	2.70	0.40
36:DA:1065:U:H4'	36:DA:1065:U:OP2	2.21	0.40
1:CA:1110:A:H2'	1:CA:1111:A:O4'	2.22	0.40
36:BA:203:C:N4	36:BA:204:A:C6	2.89	0.40
40:BE:98:PRO:HD3	40:BE:175:VAL:CG1	2.51	0.40
4:CD:121:VAL:O	4:CD:134:ASP:CA	2.67	0.40
12:CL:55:VAL:CG2	12:CL:56:ALA:N	2.84	0.40
1:AA:218:C:C5'	1:AA:470:C:H42	2.33	0.40
1:CA:687:A:H4'	1:CA:688:G:O5'	2.21	0.40
1:AA:34:C:C1'	12:AL:32:PHE:HE2	2.35	0.40

*Continued on next page...*



Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DA:1435:G:H1	36:DA:1557:C:N4	2.12	0.40
22:AW:62:C:O2'	22:AW:63:G:H5'	2.22	0.40
58:DZ:8:TYR:O	58:DZ:9:TYR:O	2.40	0.40
11:AK:23:ALA:HA	11:AK:28:THR:HA	2.04	0.40
36:BA:383:U:C6	36:BA:385:C:C5	3.09	0.40
17:CQ:31:LEU:HG	17:CQ:32:TYR:CD2	2.57	0.40
2:AB:92:TYR:CD1	2:AB:93:VAL:N	2.89	0.40
36:BA:2313:C:C3'	36:BA:2313:C:C6	3.05	0.40
55:BW:29:LEU:HG	55:BW:33:ARG:CD	2.52	0.40
36:BA:966:G:C1'	36:BA:2267:A:N6	2.83	0.40
36:BA:952:G:C5'	49:BQ:16:ARG:HH22	2.35	0.40
35:D9:19:ARG:C	35:D9:21:GLY:N	2.70	0.40
36:DA:757:U:H2'	36:DA:758:C:H6	1.87	0.40
35:B9:19:ARG:C	35:B9:21:GLY:N	2.70	0.40
1:CA:697:U:C4'	1:CA:786:G:H4'	2.51	0.40
1:CA:242:C:C2'	1:CA:243:A:H5'	2.50	0.40
8:AH:1:MET:O	8:AH:2:LEU:O	2.40	0.40
48:BP:52:GLU:HG3	48:BP:53:GLY:H	1.87	0.40
36:BA:292:C:C2'	36:BA:293:U:H5'	2.51	0.40
36:BA:1930:G:HO2'	36:BA:1931:U:P	2.43	0.40
39:DD:252:TRP:CD1	39:DD:252:TRP:N	2.88	0.40
36:BA:2406:U:O4	48:BP:72:PRO:HD2	2.22	0.40
1:AA:1010:G:N2	1:AA:1020:U:H1'	2.36	0.40
36:DA:1632:A:C5	36:DA:1633:G:C6	3.10	0.40
27:D1:88:LYS:HD3	27:D1:88:LYS:C	2.41	0.40
11:CK:101:SER:OG	11:CK:103:LEU:HD23	2.20	0.40
36:BA:2521:C:H2'	36:BA:2521:C:O2	2.22	0.40
36:BA:1450:G:H2'	36:BA:1450(A):C:H6	1.87	0.40
48:BP:80:TYR:N	48:BP:80:TYR:HD2	2.19	0.40
55:BW:80:PRO:O	55:BW:100:THR:CG2	2.70	0.40
38:BC:191:ALA:HA	38:BC:194:ARG:NE	2.37	0.40
41:BF:21:ALA:C	41:BF:23:ASP:H	2.24	0.40
23:CX:27:A:OP2	23:CX:27:A:C8	2.74	0.40
5:AE:133:TYR:HD2	5:AE:133:TYR:HA	1.73	0.40
44:DJ:55:UNK:O	44:DJ:84:UNK:N	2.55	0.40

All (2) 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	Distance(Å)	Clash(Å)
2:AB:65:GLY:O	38:BC:27:ARG:NH2[2_445]	1.63	0.57
2:CB:65:GLY:O	38:DC:27:ARG:NH2[2_646]	1.66	0.54

## 5.3 Torsion angles

### 5.3.1 Protein backbone ⓘ

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	233/256 (91%)	116 (50%)	72 (31%)	45 (19%)	0	3
2	CB	233/256 (91%)	115 (49%)	74 (32%)	44 (19%)	0	3
3	AC	205/239 (86%)	117 (57%)	52 (25%)	36 (18%)	0	4
3	CC	205/239 (86%)	113 (55%)	57 (28%)	35 (17%)	0	5
4	AD	206/209 (99%)	123 (60%)	49 (24%)	34 (16%)	0	6
4	CD	206/209 (99%)	122 (59%)	48 (23%)	36 (18%)	0	4
5	AE	149/162 (92%)	101 (68%)	33 (22%)	15 (10%)	1	17
5	CE	149/162 (92%)	98 (66%)	37 (25%)	14 (9%)	1	20
6	AF	99/101 (98%)	70 (71%)	20 (20%)	9 (9%)	1	21
6	CF	99/101 (98%)	69 (70%)	21 (21%)	9 (9%)	1	21
7	AG	153/156 (98%)	86 (56%)	35 (23%)	32 (21%)	0	3
7	CG	153/156 (98%)	86 (56%)	37 (24%)	30 (20%)	0	3
8	AH	136/138 (99%)	88 (65%)	34 (25%)	14 (10%)	1	16
8	CH	136/138 (99%)	89 (65%)	35 (26%)	12 (9%)	1	22
9	AI	125/128 (98%)	80 (64%)	27 (22%)	18 (14%)	0	8
9	CI	125/128 (98%)	80 (64%)	27 (22%)	18 (14%)	0	8
10	AJ	97/105 (92%)	63 (65%)	20 (21%)	14 (14%)	0	8
10	CJ	97/105 (92%)	63 (65%)	20 (21%)	14 (14%)	0	8
11	AK	117/129 (91%)	80 (68%)	29 (25%)	8 (7%)	2	30
11	CK	117/129 (91%)	77 (66%)	32 (27%)	8 (7%)	2	30
12	AL	123/135 (91%)	71 (58%)	32 (26%)	20 (16%)	0	6
12	CL	123/135 (91%)	73 (59%)	31 (25%)	19 (15%)	0	6
13	AM	123/126 (98%)	58 (47%)	39 (32%)	26 (21%)	0	3
13	CM	123/126 (98%)	58 (47%)	39 (32%)	26 (21%)	0	3
14	AN	58/61 (95%)	28 (48%)	17 (29%)	13 (22%)	0	2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	CN	58/61 (95%)	29 (50%)	14 (24%)	15 (26%)	0	1
15	AO	86/89 (97%)	54 (63%)	16 (19%)	16 (19%)	0	4
15	CO	86/89 (97%)	55 (64%)	15 (17%)	16 (19%)	0	4
16	AP	82/88 (93%)	50 (61%)	18 (22%)	14 (17%)	0	5
16	CP	82/88 (93%)	50 (61%)	18 (22%)	14 (17%)	0	5
17	AQ	98/105 (93%)	70 (71%)	21 (21%)	7 (7%)	2	29
17	CQ	98/105 (93%)	69 (70%)	21 (21%)	8 (8%)	1	24
18	AR	68/88 (77%)	39 (57%)	17 (25%)	12 (18%)	0	4
18	CR	68/88 (77%)	39 (57%)	17 (25%)	12 (18%)	0	4
19	AS	77/93 (83%)	39 (51%)	27 (35%)	11 (14%)	0	8
19	CS	77/93 (83%)	39 (51%)	27 (35%)	11 (14%)	0	8
20	AT	97/106 (92%)	49 (50%)	30 (31%)	18 (19%)	0	4
20	CT	97/106 (92%)	50 (52%)	29 (30%)	18 (19%)	0	4
21	AU	23/27 (85%)	10 (44%)	7 (30%)	6 (26%)	0	1
21	CU	23/27 (85%)	10 (44%)	8 (35%)	5 (22%)	0	2
25	AZ	370/406 (91%)	254 (69%)	77 (21%)	39 (10%)	1	15
25	CZ	370/406 (91%)	252 (68%)	81 (22%)	37 (10%)	1	17
26	B0	82/85 (96%)	54 (66%)	20 (24%)	8 (10%)	1	18
26	D0	82/85 (96%)	54 (66%)	20 (24%)	8 (10%)	1	18
27	B1	92/98 (94%)	55 (60%)	22 (24%)	15 (16%)	0	6
27	D1	92/98 (94%)	54 (59%)	25 (27%)	13 (14%)	0	9
28	B2	69/72 (96%)	43 (62%)	10 (14%)	16 (23%)	0	2
28	D2	69/72 (96%)	44 (64%)	14 (20%)	11 (16%)	0	6
29	B3	58/60 (97%)	28 (48%)	15 (26%)	15 (26%)	0	1
29	D3	58/60 (97%)	28 (48%)	16 (28%)	14 (24%)	0	1
30	B4	43/71 (61%)	20 (46%)	15 (35%)	8 (19%)	0	4
30	D4	43/71 (61%)	20 (46%)	15 (35%)	8 (19%)	0	4
31	B5	57/60 (95%)	33 (58%)	13 (23%)	11 (19%)	0	3
31	D5	57/60 (95%)	32 (56%)	14 (25%)	11 (19%)	0	3
32	B6	48/54 (89%)	17 (35%)	14 (29%)	17 (35%)	0	0
32	D6	48/54 (89%)	18 (38%)	14 (29%)	16 (33%)	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
33	B7	47/49 (96%)	27 (57%)	12 (26%)	8 (17%)	0	5
33	D7	47/49 (96%)	27 (57%)	12 (26%)	8 (17%)	0	5
34	B8	62/65 (95%)	34 (55%)	16 (26%)	12 (19%)	0	3
34	D8	62/65 (95%)	34 (55%)	16 (26%)	12 (19%)	0	3
35	B9	35/37 (95%)	18 (51%)	9 (26%)	8 (23%)	0	2
35	D9	35/37 (95%)	18 (51%)	10 (29%)	7 (20%)	0	3
38	BC	226/229 (99%)	143 (63%)	53 (24%)	30 (13%)	0	10
38	DC	226/229 (99%)	141 (62%)	55 (24%)	30 (13%)	0	10
39	BD	273/276 (99%)	176 (64%)	63 (23%)	34 (12%)	1	12
39	DD	273/276 (99%)	172 (63%)	66 (24%)	35 (13%)	0	11
40	BE	203/206 (98%)	109 (54%)	45 (22%)	49 (24%)	0	1
40	DE	203/206 (98%)	108 (53%)	46 (23%)	49 (24%)	0	1
41	BF	206/210 (98%)	120 (58%)	47 (23%)	39 (19%)	0	3
41	DF	206/210 (98%)	121 (59%)	46 (22%)	39 (19%)	0	3
42	BG	179/182 (98%)	86 (48%)	52 (29%)	41 (23%)	0	2
42	DG	179/182 (98%)	96 (54%)	45 (25%)	38 (21%)	0	3
43	BH	158/180 (88%)	98 (62%)	36 (23%)	24 (15%)	0	7
43	DH	158/180 (88%)	99 (63%)	35 (22%)	24 (15%)	0	7
46	BN	137/140 (98%)	75 (55%)	39 (28%)	23 (17%)	0	5
46	DN	137/140 (98%)	74 (54%)	40 (29%)	23 (17%)	0	5
47	BO	120/122 (98%)	91 (76%)	17 (14%)	12 (10%)	1	17
47	DO	120/122 (98%)	93 (78%)	15 (12%)	12 (10%)	1	17
48	BP	144/150 (96%)	72 (50%)	35 (24%)	37 (26%)	0	1
48	DP	144/150 (96%)	71 (49%)	35 (24%)	38 (26%)	0	1
49	BQ	139/141 (99%)	77 (55%)	46 (33%)	16 (12%)	1	13
49	DQ	139/141 (99%)	81 (58%)	39 (28%)	19 (14%)	0	9
50	BR	115/118 (98%)	68 (59%)	25 (22%)	22 (19%)	0	3
50	DR	115/118 (98%)	70 (61%)	23 (20%)	22 (19%)	0	3
51	BS	97/112 (87%)	37 (38%)	35 (36%)	25 (26%)	0	1
51	DS	97/112 (87%)	36 (37%)	37 (38%)	24 (25%)	0	1
52	BT	136/146 (93%)	63 (46%)	40 (29%)	33 (24%)	0	1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
52	DT	136/146 (93%)	63 (46%)	40 (29%)	33 (24%)	0	1
53	BU	115/118 (98%)	69 (60%)	34 (30%)	12 (10%)	1	16
53	DU	115/118 (98%)	66 (57%)	37 (32%)	12 (10%)	1	16
54	BV	99/101 (98%)	61 (62%)	19 (19%)	19 (19%)	0	3
54	DV	99/101 (98%)	61 (62%)	18 (18%)	20 (20%)	0	3
55	BW	111/113 (98%)	73 (66%)	24 (22%)	14 (13%)	0	11
55	DW	111/113 (98%)	74 (67%)	23 (21%)	14 (13%)	0	11
56	BX	91/96 (95%)	55 (60%)	20 (22%)	16 (18%)	0	4
56	DX	91/96 (95%)	54 (59%)	22 (24%)	15 (16%)	0	6
57	BY	99/110 (90%)	37 (37%)	29 (29%)	33 (33%)	0	0
57	DY	99/110 (90%)	38 (38%)	28 (28%)	33 (33%)	0	0
58	BZ	174/206 (84%)	87 (50%)	47 (27%)	40 (23%)	0	2
58	DZ	174/206 (84%)	96 (55%)	41 (24%)	37 (21%)	0	2
All	All	12280/13108 (94%)	7151 (58%)	3059 (25%)	2070 (17%)	0	5

All (2070) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	19	HIS
2	AB	76	GLN
2	AB	77	ALA
2	AB	93	VAL
2	AB	98	LEU
2	AB	152	PHE
2	AB	190	THR
2	AB	195	ASP
2	AB	216	SER
2	AB	224	GLN
2	AB	229	VAL
2	AB	238	LEU
3	AC	14	ILE
3	AC	95	THR
3	AC	107	GLN
3	AC	154	SER
3	AC	207	VAL
4	AD	3	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	AD	18	LYS
4	AD	30	LYS
4	AD	35	ARG
4	AD	54	TYR
4	AD	55	ALA
4	AD	72	GLU
4	AD	91	SER
4	AD	92	VAL
4	AD	129	ASN
4	AD	159	ARG
4	AD	189	PRO
5	AE	21	ALA
5	AE	137	GLU
5	AE	153	LYS
6	AF	12	PRO
7	AG	6	ARG
7	AG	37	ASN
7	AG	80	VAL
7	AG	90	GLU
7	AG	105	VAL
7	AG	118	VAL
7	AG	121	ALA
7	AG	136	LYS
7	AG	153	HIS
8	AH	20	TYR
8	AH	26	VAL
8	AH	83	ILE
9	AI	23	ASN
9	AI	33	PHE
9	AI	46	ALA
9	AI	58	HIS
10	AJ	13	HIS
10	AJ	57	LYS
10	AJ	59	SER
10	AJ	89	ASP
10	AJ	90	LEU
11	AK	40	ILE
11	AK	95	ILE
12	AL	28	LYS
12	AL	46	LYS
12	AL	47	LYS
12	AL	91	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	AL	92	ASP
12	AL	94	PRO
12	AL	95	GLY
12	AL	116	SER
12	AL	120	TYR
12	AL	122	THR
13	AM	10	PRO
13	AM	11	ARG
13	AM	12	ASN
13	AM	67	GLU
13	AM	90	LEU
13	AM	107	ALA
13	AM	116	THR
13	AM	124	PRO
13	AM	125	ARG
14	AN	14	PRO
14	AN	15	LYS
14	AN	19	ARG
14	AN	20	ALA
14	AN	26	ARG
14	AN	56	VAL
14	AN	59	ALA
15	AO	81	LEU
15	AO	82	ILE
15	AO	85	LEU
16	AP	11	SER
16	AP	17	TYR
16	AP	24	ALA
17	AQ	4	LYS
18	AR	45	SER
18	AR	46	GLU
18	AR	50	ILE
18	AR	54	ARG
18	AR	60	ALA
19	AS	10	PHE
19	AS	27	GLU
19	AS	28	LYS
19	AS	53	ASN
20	AT	71	THR
20	AT	74	LYS
20	AT	82	SER
20	AT	95	ALA

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
20	AT	99	LEU
25	AZ	32	THR
25	AZ	33	TYR
25	AZ	141	VAL
25	AZ	145	GLU
25	AZ	146	LEU
25	AZ	190	ARG
25	AZ	194	GLU
25	AZ	220	PRO
25	AZ	260	PRO
25	AZ	274	ARG
25	AZ	300	ARG
25	AZ	301	GLY
25	AZ	382	GLU
26	B0	47	PRO
26	B0	55	ARG
26	B0	56	ASP
27	B1	27	GLU
27	B1	45	ASN
27	B1	52	ARG
27	B1	57	GLU
27	B1	84	GLY
27	B1	91	LYS
28	B2	16	LEU
28	B2	18	PRO
28	B2	33	MET
28	B2	34	GLU
28	B2	47	ASN
28	B2	68	ARG
28	B2	70	GLN
29	B3	3	ARG
29	B3	13	ILE
29	B3	30	ARG
29	B3	38	GLU
29	B3	43	ILE
30	B4	9	LEU
30	B4	43	TYR
31	B5	24	ALA
31	B5	35	GLU
31	B5	49	CYS
32	B6	16	CYS
32	B6	17	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
32	B6	18	ARG
32	B6	23	THR
32	B6	27	LYS
32	B6	28	ARG
32	B6	31	PRO
32	B6	46	HIS
32	B6	48	VAL
33	B7	11	LYS
33	B7	45	ALA
34	B8	31	HIS
34	B8	34	TRP
34	B8	35	GLN
34	B8	43	GLN
34	B8	46	ARG
35	B9	10	ILE
35	B9	11	CYS
35	B9	36	GLN
38	BC	78	ALA
38	BC	95	GLY
38	BC	105	ASP
38	BC	107	TRP
38	BC	109	ASP
38	BC	111	ASP
38	BC	135	GLY
38	BC	138	PRO
38	BC	198	ALA
38	BC	199	HIS
39	BD	24	ILE
39	BD	25	THR
39	BD	27	THR
39	BD	52	ARG
39	BD	153	ALA
39	BD	178	PRO
39	BD	225	ALA
39	BD	226	MET
39	BD	246	PRO
40	BE	4	ILE
40	BE	53	PRO
40	BE	54	GLN
40	BE	57	LYS
40	BE	77	ILE
40	BE	81	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	BE	84	PHE
40	BE	88	GLY
40	BE	90	THR
40	BE	127	ASP
40	BE	131	ALA
40	BE	155	LYS
40	BE	168	MET
40	BE	178	GLU
40	BE	189	PRO
41	BF	2	LYS
41	BF	3	GLU
41	BF	10	PRO
41	BF	14	PRO
41	BF	24	LEU
41	BF	64	ILE
41	BF	79	GLY
41	BF	81	PRO
41	BF	83	PHE
41	BF	84	VAL
41	BF	89	VAL
41	BF	127	GLU
41	BF	158	THR
41	BF	168	ARG
41	BF	169	ASN
41	BF	170	LEU
41	BF	172	TRP
42	BG	3	LEU
42	BG	19	LEU
42	BG	28	VAL
42	BG	47	LYS
42	BG	63	ILE
42	BG	73	ALA
42	BG	81	LYS
42	BG	84	LYS
42	BG	86	MET
42	BG	87	PRO
42	BG	96	ARG
42	BG	111	LEU
42	BG	118	ARG
42	BG	126	ASP
42	BG	129	GLY
42	BG	131	TYR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	BG	144	ILE
42	BG	163	ALA
43	BH	21	PRO
43	BH	24	VAL
43	BH	29	PRO
43	BH	41	MET
43	BH	84	SER
43	BH	137	ASP
43	BH	159	GLU
43	BH	164	TYR
43	BH	170	ARG
46	BN	5	VAL
46	BN	7	LYS
46	BN	8	GLN
46	BN	42	TRP
46	BN	57	ALA
46	BN	58	ASP
46	BN	63	THR
46	BN	130	HIS
46	BN	133	GLN
47	BO	5	GLN
47	BO	18	LYS
47	BO	48	PRO
47	BO	68	GLU
48	BP	9	ASN
48	BP	11	GLY
48	BP	19	VAL
48	BP	33	ARG
48	BP	35	HIS
48	BP	40	SER
48	BP	46	LYS
48	BP	47	ASP
48	BP	49	ARG
48	BP	52	GLU
48	BP	57	THR
48	BP	64	LYS
48	BP	65	ARG
48	BP	67	MET
48	BP	71	VAL
48	BP	76	LYS
48	BP	106	LEU
48	BP	110	TYR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	BP	122	PRO
49	BQ	25	ASP
49	BQ	52	VAL
49	BQ	54	MET
49	BQ	57	HIS
49	BQ	88	GLY
50	BR	4	LEU
50	BR	11	ASN
50	BR	30	THR
50	BR	45	ARG
50	BR	56	LYS
50	BR	57	ARG
50	BR	58	GLY
50	BR	60	LEU
50	BR	78	LYS
50	BR	103	ARG
50	BR	117	VAL
51	BS	13	ARG
51	BS	23	ARG
51	BS	36	TYR
51	BS	37	ALA
51	BS	59	LYS
51	BS	85	VAL
51	BS	95	HIS
51	BS	100	ALA
51	BS	105	ALA
52	BT	17	THR
52	BT	24	PRO
52	BT	32	TYR
52	BT	33	LYS
52	BT	69	GLY
52	BT	80	SER
52	BT	84	GLN
52	BT	103	ARG
52	BT	107	ASP
52	BT	112	ARG
52	BT	129	ARG
53	BU	5	LYS
53	BU	9	VAL
53	BU	87	GLY
53	BU	91	ASP
54	BV	16	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	BV	18	LEU
54	BV	24	LYS
54	BV	27	ALA
54	BV	46	VAL
54	BV	50	PRO
54	BV	53	GLU
54	BV	64	HIS
55	BW	6	ILE
55	BW	18	ARG
55	BW	63	ASP
55	BW	73	ALA
55	BW	99	ARG
56	BX	19	ALA
56	BX	49	VAL
56	BX	62	LYS
56	BX	66	LEU
56	BX	93	GLU
57	BY	5	MET
57	BY	17	SER
57	BY	38	ILE
57	BY	42	VAL
57	BY	46	LYS
57	BY	51	VAL
57	BY	53	PRO
57	BY	56	PRO
57	BY	57	GLN
57	BY	64	GLU
57	BY	66	PRO
57	BY	74	PRO
57	BY	76	CYS
57	BY	77	PRO
57	BY	78	ALA
58	BZ	7	ALA
58	BZ	23	LYS
58	BZ	27	VAL
58	BZ	28	MET
58	BZ	40	ASP
58	BZ	45	ASP
58	BZ	46	LYS
58	BZ	53	ILE
58	BZ	77	ASP
58	BZ	81	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
58	BZ	96	VAL
58	BZ	150	LEU
58	BZ	151	HIS
58	BZ	152	ALA
58	BZ	163	LEU
58	BZ	166	SER
58	BZ	177	PRO
2	CB	15	VAL
2	CB	19	HIS
2	CB	76	GLN
2	CB	77	ALA
2	CB	98	LEU
2	CB	152	PHE
2	CB	190	THR
2	CB	195	ASP
2	CB	224	GLN
2	CB	229	VAL
2	CB	238	LEU
3	CC	14	ILE
3	CC	95	THR
3	CC	107	GLN
3	CC	154	SER
3	CC	207	VAL
4	CD	3	ARG
4	CD	18	LYS
4	CD	30	LYS
4	CD	35	ARG
4	CD	55	ALA
4	CD	72	GLU
4	CD	91	SER
4	CD	92	VAL
4	CD	129	ASN
4	CD	159	ARG
4	CD	189	PRO
5	CE	21	ALA
5	CE	153	LYS
7	CG	6	ARG
7	CG	37	ASN
7	CG	90	GLU
7	CG	105	VAL
7	CG	118	VAL
7	CG	136	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
7	CG	153	HIS
8	CH	20	TYR
8	CH	26	VAL
8	CH	83	ILE
9	CI	23	ASN
9	CI	33	PHE
9	CI	46	ALA
9	CI	58	HIS
10	CJ	57	LYS
10	CJ	59	SER
10	CJ	89	ASP
10	CJ	90	LEU
11	CK	40	ILE
11	CK	95	ILE
12	CL	28	LYS
12	CL	46	LYS
12	CL	47	LYS
12	CL	91	LYS
12	CL	92	ASP
12	CL	94	PRO
12	CL	95	GLY
12	CL	120	TYR
12	CL	122	THR
13	CM	10	PRO
13	CM	11	ARG
13	CM	12	ASN
13	CM	67	GLU
13	CM	90	LEU
13	CM	107	ALA
13	CM	116	THR
13	CM	124	PRO
13	CM	125	ARG
14	CN	14	PRO
14	CN	15	LYS
14	CN	19	ARG
14	CN	20	ALA
14	CN	26	ARG
14	CN	56	VAL
14	CN	59	ALA
15	CO	81	LEU
15	CO	82	ILE
15	CO	85	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	CP	11	SER
16	CP	17	TYR
16	CP	24	ALA
17	CQ	4	LYS
18	CR	25	THR
18	CR	45	SER
18	CR	46	GLU
18	CR	50	ILE
18	CR	54	ARG
18	CR	60	ALA
19	CS	10	PHE
19	CS	27	GLU
19	CS	28	LYS
19	CS	53	ASN
20	CT	71	THR
20	CT	74	LYS
20	CT	82	SER
20	CT	95	ALA
20	CT	99	LEU
25	CZ	32	THR
25	CZ	33	TYR
25	CZ	141	VAL
25	CZ	145	GLU
25	CZ	146	LEU
25	CZ	190	ARG
25	CZ	194	GLU
25	CZ	220	PRO
25	CZ	260	PRO
25	CZ	274	ARG
25	CZ	300	ARG
25	CZ	301	GLY
25	CZ	357	PRO
25	CZ	382	GLU
26	D0	47	PRO
26	D0	55	ARG
26	D0	56	ASP
27	D1	30	VAL
27	D1	52	ARG
27	D1	56	GLN
27	D1	64	ALA
27	D1	73	LEU
27	D1	83	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
27	D1	91	LYS
28	D2	17	SER
28	D2	28	LYS
28	D2	33	MET
28	D2	34	GLU
28	D2	47	ASN
28	D2	68	ARG
28	D2	70	GLN
29	D3	3	ARG
29	D3	13	ILE
29	D3	29	ARG
29	D3	30	ARG
29	D3	38	GLU
29	D3	43	ILE
30	D4	9	LEU
30	D4	43	TYR
31	D5	24	ALA
31	D5	35	GLU
31	D5	49	CYS
32	D6	16	CYS
32	D6	17	LYS
32	D6	18	ARG
32	D6	20	ASN
32	D6	23	THR
32	D6	27	LYS
32	D6	28	ARG
32	D6	31	PRO
32	D6	46	HIS
32	D6	48	VAL
33	D7	11	LYS
33	D7	45	ALA
34	D8	31	HIS
34	D8	34	TRP
34	D8	35	GLN
34	D8	43	GLN
34	D8	46	ARG
35	D9	10	ILE
35	D9	11	CYS
35	D9	13	LYS
35	D9	25	VAL
35	D9	33	LYS
35	D9	36	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	DC	39	GLU
38	DC	78	ALA
38	DC	95	GLY
38	DC	105	ASP
38	DC	107	TRP
38	DC	109	ASP
38	DC	111	ASP
38	DC	135	GLY
38	DC	138	PRO
38	DC	198	ALA
38	DC	199	HIS
39	DD	3	VAL
39	DD	24	ILE
39	DD	25	THR
39	DD	27	THR
39	DD	52	ARG
39	DD	178	PRO
39	DD	225	ALA
39	DD	226	MET
39	DD	246	PRO
39	DD	267	SER
40	DE	4	ILE
40	DE	53	PRO
40	DE	54	GLN
40	DE	57	LYS
40	DE	77	ILE
40	DE	81	ILE
40	DE	84	PHE
40	DE	88	GLY
40	DE	90	THR
40	DE	131	ALA
40	DE	155	LYS
40	DE	168	MET
40	DE	178	GLU
40	DE	189	PRO
41	DF	2	LYS
41	DF	3	GLU
41	DF	10	PRO
41	DF	14	PRO
41	DF	24	LEU
41	DF	64	ILE
41	DF	79	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	DF	81	PRO
41	DF	84	VAL
41	DF	89	VAL
41	DF	127	GLU
41	DF	158	THR
41	DF	168	ARG
41	DF	169	ASN
41	DF	170	LEU
41	DF	172	TRP
42	DG	3	LEU
42	DG	70	VAL
42	DG	73	ALA
42	DG	75	LYS
42	DG	80	PHE
42	DG	82	LEU
42	DG	84	LYS
42	DG	86	MET
42	DG	87	PRO
42	DG	92	VAL
42	DG	96	ARG
42	DG	97	ASP
42	DG	101	ILE
42	DG	118	ARG
42	DG	126	ASP
42	DG	144	ILE
42	DG	155	MET
42	DG	163	ALA
43	DH	21	PRO
43	DH	24	VAL
43	DH	29	PRO
43	DH	41	MET
43	DH	84	SER
43	DH	137	ASP
43	DH	159	GLU
43	DH	164	TYR
43	DH	170	ARG
46	DN	5	VAL
46	DN	7	LYS
46	DN	8	GLN
46	DN	42	TRP
46	DN	57	ALA
46	DN	58	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	DN	59	LYS
46	DN	63	THR
46	DN	130	HIS
46	DN	133	GLN
47	DO	5	GLN
47	DO	18	LYS
47	DO	48	PRO
47	DO	68	GLU
48	DP	9	ASN
48	DP	11	GLY
48	DP	19	VAL
48	DP	35	HIS
48	DP	40	SER
48	DP	46	LYS
48	DP	47	ASP
48	DP	49	ARG
48	DP	52	GLU
48	DP	57	THR
48	DP	64	LYS
48	DP	65	ARG
48	DP	67	MET
48	DP	71	VAL
48	DP	106	LEU
48	DP	110	TYR
48	DP	122	PRO
49	DQ	25	ASP
49	DQ	52	VAL
49	DQ	54	MET
49	DQ	57	HIS
49	DQ	88	GLY
50	DR	4	LEU
50	DR	11	ASN
50	DR	30	THR
50	DR	45	ARG
50	DR	57	ARG
50	DR	58	GLY
50	DR	60	LEU
50	DR	103	ARG
50	DR	117	VAL
51	DS	13	ARG
51	DS	23	ARG
51	DS	36	TYR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	DS	37	ALA
51	DS	59	LYS
51	DS	85	VAL
51	DS	95	HIS
51	DS	100	ALA
51	DS	105	ALA
52	DT	17	THR
52	DT	24	PRO
52	DT	32	TYR
52	DT	33	LYS
52	DT	69	GLY
52	DT	80	SER
52	DT	84	GLN
52	DT	103	ARG
52	DT	104	ASN
52	DT	107	ASP
52	DT	129	ARG
53	DU	5	LYS
53	DU	9	VAL
53	DU	87	GLY
53	DU	91	ASP
54	DV	16	PRO
54	DV	18	LEU
54	DV	24	LYS
54	DV	27	ALA
54	DV	46	VAL
54	DV	50	PRO
54	DV	53	GLU
54	DV	64	HIS
55	DW	6	ILE
55	DW	63	ASP
55	DW	73	ALA
55	DW	99	ARG
56	DX	19	ALA
56	DX	49	VAL
56	DX	62	LYS
56	DX	66	LEU
56	DX	93	GLU
57	DY	5	MET
57	DY	13	VAL
57	DY	17	SER
57	DY	38	ILE

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
57	DY	42	VAL
57	DY	46	LYS
57	DY	51	VAL
57	DY	53	PRO
57	DY	56	PRO
57	DY	57	GLN
57	DY	64	GLU
57	DY	66	PRO
57	DY	74	PRO
57	DY	76	CYS
57	DY	77	PRO
57	DY	78	ALA
58	DZ	45	ASP
58	DZ	46	LYS
58	DZ	52	SER
58	DZ	53	ILE
58	DZ	80	ARG
58	DZ	128	VAL
58	DZ	151	HIS
58	DZ	152	ALA
58	DZ	165	VAL
58	DZ	168	GLU
2	AB	14	GLY
2	AB	18	GLY
2	AB	20	GLU
2	AB	24	TRP
2	AB	45	GLN
2	AB	83	MET
2	AB	97	TRP
2	AB	101	MET
2	AB	150	SER
2	AB	174	VAL
2	AB	180	LEU
2	AB	230	VAL
2	AB	236	TYR
3	AC	13	GLY
3	AC	47	LEU
3	AC	51	GLY
3	AC	73	PRO
3	AC	83	ARG
3	AC	96	GLY
3	AC	105	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	AC	129	ALA
3	AC	133	ALA
3	AC	146	ALA
4	AD	31	CYS
4	AD	40	PRO
4	AD	44	GLY
4	AD	47	ARG
4	AD	110	PHE
4	AD	125	HIS
4	AD	172	PRO
4	AD	181	MET
4	AD	183	GLY
4	AD	201	GLN
5	AE	65	ASN
5	AE	136	MET
5	AE	146	ALA
6	AF	13	ASN
6	AF	31	GLU
6	AF	34	GLY
6	AF	80	ARG
7	AG	17	VAL
7	AG	27	ILE
7	AG	100	ALA
7	AG	101	LEU
7	AG	107	ALA
7	AG	122	HIS
7	AG	145	ALA
8	AH	2	LEU
8	AH	71	GLY
8	AH	105	ARG
8	AH	135	CYS
9	AI	12	GLU
9	AI	44	VAL
9	AI	89	ASN
9	AI	95	LYS
9	AI	101	PHE
10	AJ	24	VAL
11	AK	39	PRO
11	AK	73	MET
12	AL	18	VAL
12	AL	31	PRO
12	AL	51	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	AL	63	GLY
12	AL	115	LYS
13	AM	5	ALA
13	AM	7	VAL
13	AM	31	LYS
13	AM	69	GLU
13	AM	74	VAL
13	AM	83	ASP
13	AM	100	GLY
14	AN	52	GLN
14	AN	60	SER
15	AO	10	LYS
15	AO	27	VAL
15	AO	28	GLN
16	AP	23	ASP
16	AP	28	ARG
16	AP	53	VAL
17	AQ	38	ARG
18	AR	25	THR
18	AR	41	LYS
18	AR	87	ARG
19	AS	11	VAL
19	AS	14	HIS
19	AS	25	LYS
19	AS	29	ARG
19	AS	51	VAL
20	AT	49	ALA
20	AT	102	GLY
21	AU	3	LYS
21	AU	6	ARG
25	AZ	119	HIS
25	AZ	216	ASP
25	AZ	280	GLY
25	AZ	310	ILE
25	AZ	361	MET
26	B0	43	THR
26	B0	64	ASP
26	B0	73	GLY
27	B1	14	VAL
27	B1	15	ALA
27	B1	31	GLY
27	B1	36	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
27	B1	53	VAL
27	B1	73	LEU
28	B2	26	ARG
28	B2	49	LYS
29	B3	16	PRO
29	B3	29	ARG
29	B3	57	GLU
30	B4	20	ASN
30	B4	44	THR
31	B5	3	LYS
31	B5	25	LEU
31	B5	45	VAL
31	B5	57	VAL
32	B6	19	ARG
32	B6	20	ASN
32	B6	52	VAL
33	B7	32	LYS
34	B8	3	LYS
34	B8	8	LYS
35	B9	13	LYS
35	B9	25	VAL
35	B9	33	LYS
38	BC	2	LYS
38	BC	39	GLU
38	BC	48	GLY
38	BC	62	VAL
38	BC	77	ILE
38	BC	99	ILE
38	BC	115	ALA
38	BC	149	ILE
38	BC	160	ARG
38	BC	179	SER
39	BD	3	VAL
39	BD	111	LEU
39	BD	234	GLY
39	BD	242	ARG
39	BD	267	SER
39	BD	273	ARG
40	BE	19	ARG
40	BE	29	GLY
40	BE	35	GLN
40	BE	64	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	BE	66	HIS
40	BE	69	LYS
40	BE	80	GLU
40	BE	117	MET
40	BE	124	GLY
40	BE	130	GLY
40	BE	145	LYS
40	BE	179	GLU
40	BE	199	ARG
40	BE	204	ALA
41	BF	11	VAL
41	BF	21	ALA
41	BF	43	LYS
41	BF	62	ARG
41	BF	85	GLY
41	BF	88	VAL
41	BF	100	THR
41	BF	119	ARG
41	BF	126	VAL
41	BF	132	VAL
41	BF	133	ASN
41	BF	134	GLY
41	BF	179	GLU
42	BG	10	LYS
42	BG	45	GLU
42	BG	80	PHE
42	BG	101	ILE
42	BG	132	ASN
42	BG	139	LEU
42	BG	167	GLU
42	BG	176	LEU
43	BH	30	LYS
43	BH	45	VAL
43	BH	46	GLU
43	BH	62	LYS
43	BH	108	GLY
43	BH	109	PHE
43	BH	138	LYS
46	BN	19	GLU
46	BN	36	GLY
46	BN	46	VAL
46	BN	50	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	BN	59	LYS
47	BO	9	GLU
47	BO	26	LYS
47	BO	35	VAL
47	BO	91	LEU
48	BP	15	ARG
48	BP	21	ARG
48	BP	34	GLY
48	BP	83	VAL
48	BP	108	LYS
48	BP	149	GLU
49	BQ	20	ALA
49	BQ	30	GLY
49	BQ	87	LYS
49	BQ	119	ARG
49	BQ	135	ASP
50	BR	29	LEU
50	BR	42	LYS
50	BR	43	GLU
50	BR	46	GLY
50	BR	86	ARG
51	BS	15	ARG
51	BS	17	ARG
51	BS	24	LEU
51	BS	28	VAL
51	BS	29	PHE
51	BS	94	TYR
51	BS	97	ARG
51	BS	104	GLY
52	BT	4	GLY
52	BT	28	VAL
52	BT	57	PHE
52	BT	91	ARG
52	BT	95	ARG
52	BT	100	TYR
52	BT	104	ASN
52	BT	135	ALA
53	BU	33	ARG
53	BU	90	VAL
53	BU	94	ASN
53	BU	95	LEU
54	BV	20	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	BV	44	LYS
54	BV	67	GLY
54	BV	79	VAL
54	BV	97	LYS
55	BW	65	LEU
56	BX	4	ALA
56	BX	12	VAL
57	BY	7	VAL
57	BY	8	LYS
57	BY	13	VAL
57	BY	37	VAL
57	BY	39	VAL
57	BY	61	ILE
58	BZ	52	SER
58	BZ	80	ARG
58	BZ	95	PRO
58	BZ	128	VAL
58	BZ	139	VAL
58	BZ	168	GLU
2	CB	14	GLY
2	CB	18	GLY
2	CB	20	GLU
2	CB	24	TRP
2	CB	26	PRO
2	CB	45	GLN
2	CB	83	MET
2	CB	93	VAL
2	CB	97	TRP
2	CB	101	MET
2	CB	150	SER
2	CB	174	VAL
2	CB	180	LEU
2	CB	216	SER
2	CB	230	VAL
2	CB	236	TYR
3	CC	47	LEU
3	CC	51	GLY
3	CC	73	PRO
3	CC	83	ARG
3	CC	96	GLY
3	CC	105	GLU
3	CC	129	ALA

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
3	CC	133	ALA
3	CC	146	ALA
4	CD	40	PRO
4	CD	44	GLY
4	CD	47	ARG
4	CD	54	TYR
4	CD	125	HIS
4	CD	172	PRO
4	CD	181	MET
4	CD	183	GLY
4	CD	201	GLN
5	CE	65	ASN
5	CE	136	MET
5	CE	137	GLU
5	CE	146	ALA
6	CF	12	PRO
6	CF	13	ASN
6	CF	31	GLU
6	CF	34	GLY
6	CF	80	ARG
7	CG	17	VAL
7	CG	27	ILE
7	CG	80	VAL
7	CG	100	ALA
7	CG	107	ALA
7	CG	121	ALA
7	CG	145	ALA
8	CH	2	LEU
8	CH	37	ARG
8	CH	71	GLY
8	CH	105	ARG
8	CH	135	CYS
9	CI	12	GLU
9	CI	44	VAL
9	CI	89	ASN
9	CI	95	LYS
9	CI	101	PHE
10	CJ	13	HIS
10	CJ	24	VAL
11	CK	39	PRO
11	CK	73	MET
12	CL	18	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	CL	31	PRO
12	CL	51	ALA
12	CL	63	GLY
12	CL	115	LYS
12	CL	116	SER
13	CM	5	ALA
13	CM	7	VAL
13	CM	69	GLU
13	CM	74	VAL
13	CM	83	ASP
13	CM	100	GLY
14	CN	16	PHE
14	CN	52	GLN
14	CN	60	SER
15	CO	27	VAL
15	CO	60	VAL
15	CO	65	ARG
16	CP	23	ASP
16	CP	28	ARG
16	CP	53	VAL
17	CQ	38	ARG
18	CR	41	LYS
18	CR	87	ARG
19	CS	11	VAL
19	CS	14	HIS
19	CS	25	LYS
19	CS	29	ARG
19	CS	51	VAL
20	CT	49	ALA
20	CT	102	GLY
21	CU	3	LYS
21	CU	6	ARG
25	CZ	119	HIS
25	CZ	216	ASP
25	CZ	280	GLY
25	CZ	310	ILE
25	CZ	361	MET
26	D0	43	THR
26	D0	64	ASP
26	D0	73	GLY
27	D1	42	GLN
27	D1	45	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	D2	18	PRO
29	D3	16	PRO
29	D3	57	GLU
30	D4	20	ASN
30	D4	44	THR
31	D5	3	LYS
31	D5	25	LEU
31	D5	45	VAL
31	D5	57	VAL
32	D6	52	VAL
33	D7	32	LYS
34	D8	8	LYS
38	DC	2	LYS
38	DC	48	GLY
38	DC	62	VAL
38	DC	77	ILE
38	DC	99	ILE
38	DC	115	ALA
38	DC	149	ILE
38	DC	160	ARG
38	DC	179	SER
39	DD	111	LEU
39	DD	153	ALA
39	DD	234	GLY
39	DD	242	ARG
39	DD	273	ARG
40	DE	19	ARG
40	DE	29	GLY
40	DE	35	GLN
40	DE	60	ASN
40	DE	64	LYS
40	DE	66	HIS
40	DE	69	LYS
40	DE	80	GLU
40	DE	117	MET
40	DE	124	GLY
40	DE	127	ASP
40	DE	130	GLY
40	DE	145	LYS
40	DE	179	GLU
40	DE	199	ARG
40	DE	204	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	DF	11	VAL
41	DF	21	ALA
41	DF	43	LYS
41	DF	62	ARG
41	DF	82	ILE
41	DF	83	PHE
41	DF	85	GLY
41	DF	88	VAL
41	DF	100	THR
41	DF	119	ARG
41	DF	126	VAL
41	DF	132	VAL
41	DF	133	ASN
41	DF	134	GLY
41	DF	179	GLU
42	DG	113	ARG
42	DG	114	ILE
42	DG	120	LEU
42	DG	129	GLY
42	DG	176	LEU
43	DH	30	LYS
43	DH	45	VAL
43	DH	46	GLU
43	DH	62	LYS
43	DH	108	GLY
43	DH	109	PHE
43	DH	138	LYS
46	DN	19	GLU
46	DN	36	GLY
46	DN	46	VAL
46	DN	50	ASP
47	DO	9	GLU
47	DO	26	LYS
47	DO	35	VAL
47	DO	91	LEU
48	DP	15	ARG
48	DP	21	ARG
48	DP	33	ARG
48	DP	34	GLY
48	DP	76	LYS
48	DP	83	VAL
48	DP	149	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	DQ	20	ALA
49	DQ	30	GLY
49	DQ	87	LYS
49	DQ	119	ARG
49	DQ	135	ASP
50	DR	29	LEU
50	DR	46	GLY
50	DR	56	LYS
50	DR	78	LYS
50	DR	86	ARG
50	DR	108	GLY
51	DS	15	ARG
51	DS	17	ARG
51	DS	24	LEU
51	DS	28	VAL
51	DS	29	PHE
51	DS	94	TYR
51	DS	97	ARG
51	DS	104	GLY
52	DT	4	GLY
52	DT	15	VAL
52	DT	28	VAL
52	DT	57	PHE
52	DT	91	ARG
52	DT	95	ARG
52	DT	100	TYR
52	DT	112	ARG
52	DT	135	ALA
53	DU	33	ARG
53	DU	90	VAL
53	DU	94	ASN
53	DU	95	LEU
54	DV	20	LEU
54	DV	44	LYS
54	DV	79	VAL
54	DV	97	LYS
55	DW	18	ARG
55	DW	65	LEU
56	DX	4	ALA
56	DX	12	VAL
56	DX	21	PHE
57	DY	7	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
57	DY	8	LYS
57	DY	37	VAL
57	DY	61	ILE
58	DZ	9	TYR
58	DZ	21	ALA
58	DZ	29	TYR
58	DZ	49	ARG
58	DZ	61	LEU
58	DZ	77	ASP
58	DZ	120	ILE
58	DZ	147	GLY
58	DZ	163	LEU
58	DZ	177	PRO
2	AB	26	PRO
2	AB	63	MET
2	AB	84	GLU
2	AB	88	ALA
2	AB	130	ARG
2	AB	155	LEU
2	AB	166	ASP
2	AB	173	ALA
2	AB	177	ALA
3	AC	3	ASN
3	AC	26	LYS
3	AC	27	LYS
3	AC	49	SER
3	AC	91	LEU
3	AC	123	GLN
3	AC	153	VAL
3	AC	180	ALA
3	AC	204	LEU
4	AD	41	GLY
4	AD	153	ARG
4	AD	187	ARG
5	AE	64	ARG
5	AE	126	ARG
6	AF	38	GLU
7	AG	4	ARG
7	AG	62	PHE
7	AG	78	ARG
7	AG	106	GLN
7	AG	112	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	AG	117	ALA
7	AG	119	ARG
7	AG	146	GLU
7	AG	147	ALA
8	AH	35	ILE
8	AH	37	ARG
9	AI	21	PRO
9	AI	24	GLY
9	AI	25	LYS
9	AI	47	LEU
9	AI	92	TYR
9	AI	98	PRO
10	AJ	15	THR
10	AJ	51	ARG
10	AJ	91	PRO
11	AK	62	GLN
12	AL	19	ARG
12	AL	86	ARG
13	AM	21	TYR
13	AM	108	ARG
14	AN	16	PHE
15	AO	5	LYS
15	AO	65	ARG
16	AP	26	ARG
16	AP	45	THR
16	AP	78	GLY
16	AP	83	GLU
18	AR	21	LYS
20	AT	31	SER
20	AT	39	LYS
20	AT	50	GLU
20	AT	51	GLU
21	AU	10	ARG
21	AU	25	LYS
25	AZ	258	LEU
25	AZ	345	ARG
25	AZ	390	GLU
26	B0	57	PHE
26	B0	83	PRO
27	B1	83	GLU
28	B2	30	ARG
28	B2	58	ALA

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
28	B2	64	LEU
29	B3	2	PRO
29	B3	42	ALA
30	B4	8	LYS
30	B4	26	SER
30	B4	28	LYS
31	B5	11	THR
31	B5	59	GLU
32	B6	33	LYS
32	B6	34	LEU
32	B6	49	HIS
34	B8	61	LEU
38	BC	49	ILE
38	BC	121	GLY
38	BC	141	LYS
38	BC	196	LEU
38	BC	197	GLU
38	BC	204	ALA
38	BC	217	THR
39	BD	32	SER
39	BD	127	VAL
39	BD	188	GLU
39	BD	236	GLY
39	BD	239	ARG
40	BE	2	LYS
40	BE	60	ASN
40	BE	135	HIS
40	BE	136	ARG
40	BE	172	VAL
40	BE	185	LYS
41	BF	42	ALA
41	BF	49	ALA
41	BF	146	ALA
41	BF	164	ARG
41	BF	171	PRO
42	BG	46	ALA
42	BG	64	THR
42	BG	82	LEU
42	BG	115	ARG
42	BG	130	ASN
42	BG	147	ASP
43	BH	20	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
43	BH	42	ARG
46	BN	45	ASN
46	BN	108	PRO
46	BN	127	ASP
46	BN	138	LEU
47	BO	73	ASP
48	BP	13	ASN
48	BP	23	PRO
48	BP	70	GLN
48	BP	81	GLN
48	BP	107	LYS
48	BP	125	VAL
49	BQ	21	THR
49	BQ	71	ASP
49	BQ	96	VAL
49	BQ	137	TYR
50	BR	14	SER
50	BR	63	ARG
50	BR	108	GLY
51	BS	78	LEU
51	BS	107	GLU
52	BT	12	SER
52	BT	36	GLU
52	BT	37	GLY
52	BT	41	ARG
53	BU	93	LYS
54	BV	59	ALA
55	BW	35	ILE
55	BW	74	ALA
55	BW	111	HIS
56	BX	9	LEU
56	BX	15	GLU
56	BX	21	PHE
57	BY	3	VAL
57	BY	14	LEU
57	BY	82	PRO
57	BY	99	CYS
58	BZ	29	TYR
58	BZ	51	ALA
58	BZ	73	GLN
58	BZ	113	ALA
58	BZ	134	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	CB	88	ALA
2	CB	130	ARG
2	CB	155	LEU
2	CB	173	ALA
2	CB	177	ALA
2	CB	239	VAL
3	CC	3	ASN
3	CC	26	LYS
3	CC	27	LYS
3	CC	49	SER
3	CC	153	VAL
3	CC	180	ALA
3	CC	204	LEU
4	CD	31	CYS
4	CD	41	GLY
4	CD	56	VAL
4	CD	110	PHE
4	CD	153	ARG
4	CD	187	ARG
5	CE	27	ARG
5	CE	64	ARG
5	CE	126	ARG
6	CF	38	GLU
7	CG	4	ARG
7	CG	62	PHE
7	CG	78	ARG
7	CG	101	LEU
7	CG	106	GLN
7	CG	112	PRO
7	CG	117	ALA
7	CG	119	ARG
7	CG	122	HIS
7	CG	147	ALA
8	CH	35	ILE
9	CI	21	PRO
9	CI	24	GLY
9	CI	25	LYS
9	CI	47	LEU
9	CI	92	TYR
9	CI	98	PRO
10	CJ	15	THR
10	CJ	91	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	CK	62	GLN
12	CL	19	ARG
12	CL	86	ARG
13	CM	21	TYR
13	CM	31	LYS
13	CM	108	ARG
14	CN	9	LYS
15	CO	5	LYS
15	CO	10	LYS
15	CO	24	SER
15	CO	28	GLN
16	CP	26	ARG
16	CP	45	THR
16	CP	78	GLY
16	CP	83	GLU
17	CQ	74	LEU
20	CT	31	SER
20	CT	50	GLU
21	CU	25	LYS
25	CZ	165	GLY
25	CZ	258	LEU
25	CZ	345	ARG
25	CZ	390	GLU
26	D0	57	PHE
26	D0	83	PRO
27	D1	85	LEU
28	D2	48	HIS
29	D3	2	PRO
29	D3	42	ALA
29	D3	51	ALA
30	D4	8	LYS
30	D4	26	SER
30	D4	28	LYS
31	D5	11	THR
31	D5	59	GLU
32	D6	19	ARG
32	D6	33	LYS
32	D6	34	LEU
32	D6	49	HIS
33	D7	16	HIS
34	D8	3	LYS
34	D8	61	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	DC	49	ILE
38	DC	141	LYS
38	DC	196	LEU
38	DC	197	GLU
38	DC	204	ALA
38	DC	217	THR
39	DD	127	VAL
39	DD	156	ALA
39	DD	188	GLU
39	DD	206	LEU
39	DD	236	GLY
39	DD	239	ARG
40	DE	2	LYS
40	DE	135	HIS
40	DE	136	ARG
40	DE	172	VAL
40	DE	185	LYS
41	DF	42	ALA
41	DF	49	ALA
41	DF	146	ALA
41	DF	164	ARG
41	DF	171	PRO
42	DG	6	ALA
42	DG	28	VAL
42	DG	100	TRP
42	DG	104	GLU
42	DG	105	LYS
42	DG	110	ALA
42	DG	111	LEU
43	DH	20	ALA
43	DH	42	ARG
46	DN	45	ASN
46	DN	108	PRO
46	DN	127	ASP
46	DN	138	LEU
47	DO	73	ASP
48	DP	12	ALA
48	DP	13	ASN
48	DP	23	PRO
48	DP	70	GLN
48	DP	81	GLN
48	DP	107	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	DP	108	LYS
48	DP	125	VAL
49	DQ	21	THR
49	DQ	71	ASP
49	DQ	96	VAL
49	DQ	137	TYR
50	DR	14	SER
50	DR	42	LYS
50	DR	43	GLU
50	DR	63	ARG
50	DR	75	LEU
51	DS	78	LEU
51	DS	107	GLU
52	DT	12	SER
52	DT	36	GLU
52	DT	37	GLY
52	DT	41	ARG
52	DT	46	GLU
54	DV	67	GLY
55	DW	59	VAL
55	DW	74	ALA
55	DW	111	HIS
56	DX	9	LEU
56	DX	15	GLU
57	DY	3	VAL
57	DY	14	LEU
57	DY	27	VAL
57	DY	39	VAL
57	DY	82	PRO
57	DY	99	CYS
58	DZ	31	ARG
58	DZ	76	LEU
58	DZ	148	ASP
58	DZ	166	SER
2	AB	37	ASN
2	AB	178	ARG
2	AB	209	ARG
2	AB	239	VAL
3	AC	36	ASP
3	AC	55	VAL
4	AD	14	ARG
4	AD	56	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	AE	27	ARG
6	AF	42	GLU
7	AG	36	LYS
7	AG	94	ARG
7	AG	102	ARG
8	AH	76	PRO
9	AI	34	ASN
11	AK	35	PRO
11	AK	100	ALA
12	AL	6	THR
12	AL	29	GLY
13	AM	4	ILE
13	AM	41	PRO
13	AM	55	ARG
13	AM	114	ARG
14	AN	9	LYS
14	AN	23	ARG
15	AO	24	SER
15	AO	54	ARG
15	AO	60	VAL
15	AO	88	ARG
17	AQ	68	ARG
17	AQ	69	LYS
17	AQ	74	LEU
20	AT	18	GLN
20	AT	97	ALA
25	AZ	144	PRO
25	AZ	165	GLY
25	AZ	189	ARG
25	AZ	307	PRO
25	AZ	318	ALA
25	AZ	357	PRO
27	B1	63	ALA
27	B1	64	ALA
29	B3	49	LYS
29	B3	51	ALA
32	B6	43	CYS
33	B7	2	LYS
33	B7	9	ARG
33	B7	44	PRO
34	B8	25	MET
34	B8	40	GLU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
35	B9	31	LYS
39	BD	74	GLY
39	BD	196	VAL
39	BD	260	ARG
40	BE	61	ARG
40	BE	121	ASN
40	BE	167	VAL
41	BF	82	ILE
41	BF	190	GLU
42	BG	43	LEU
42	BG	53	LEU
42	BG	75	LYS
42	BG	155	MET
43	BH	67	LEU
43	BH	154	PRO
46	BN	44	PRO
47	BO	13	ASN
47	BO	51	ALA
48	BP	12	ALA
48	BP	20	GLY
48	BP	25	SER
49	BQ	99	PRO
50	BR	68	ARG
50	BR	75	LEU
52	BT	15	VAL
52	BT	46	GLU
52	BT	97	ALA
54	BV	51	VAL
55	BW	41	LYS
55	BW	42	ARG
55	BW	59	VAL
56	BX	94	GLY
57	BY	27	VAL
57	BY	62	GLU
2	CB	37	ASN
2	CB	63	MET
2	CB	84	GLU
3	CC	13	GLY
3	CC	91	LEU
4	CD	14	ARG
4	CD	61	LYS
4	CD	73	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	164	ALA
6	CF	42	GLU
7	CG	36	LYS
7	CG	94	ARG
7	CG	146	GLU
8	CH	6	ILE
8	CH	76	PRO
9	CI	34	ASN
10	CJ	33	GLN
10	CJ	51	ARG
10	CJ	56	HIS
11	CK	35	PRO
13	CM	41	PRO
14	CN	23	ARG
15	CO	54	ARG
15	CO	88	ARG
17	CQ	68	ARG
17	CQ	69	LYS
20	CT	18	GLN
20	CT	39	LYS
20	CT	51	GLU
20	CT	97	ALA
21	CU	10	ARG
25	CZ	144	PRO
25	CZ	189	ARG
25	CZ	307	PRO
25	CZ	318	ALA
28	D2	58	ALA
31	D5	14	ALA
32	D6	43	CYS
33	D7	9	ARG
33	D7	44	PRO
34	D8	29	LYS
34	D8	40	GLU
38	DC	121	GLY
39	DD	12	SER
39	DD	32	SER
39	DD	272	ALA
40	DE	61	ARG
40	DE	112	GLY
40	DE	167	VAL
42	DG	10	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	DG	121	ASN
42	DG	128	ARG
43	DH	67	LEU
43	DH	154	PRO
46	DN	44	PRO
47	DO	13	ASN
47	DO	51	ALA
48	DP	20	GLY
48	DP	25	SER
48	DP	56	SER
49	DQ	49	ALA
49	DQ	99	PRO
50	DR	68	ARG
52	DT	131	ALA
53	DU	93	LYS
54	DV	59	ALA
55	DW	41	LYS
55	DW	42	ARG
55	DW	53	SER
56	DX	14	SER
56	DX	94	GLY
57	DY	62	GLU
58	DZ	27	VAL
58	DZ	75	ASN
58	DZ	83	PRO
58	DZ	170	THR
2	AB	165	VAL
3	AC	41	GLY
3	AC	143	GLU
3	AC	181	ASN
4	AD	4	TYR
4	AD	5	ILE
4	AD	160	GLN
4	AD	164	ALA
5	AE	149	GLU
6	AF	11	ASN
6	AF	33	TYR
7	AG	28	ASN
7	AG	120	ILE
8	AH	110	ALA
8	AH	121	ASP
10	AJ	16	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
10	AJ	33	GLN
10	AJ	56	HIS
13	AM	113	PRO
15	AO	18	PHE
15	AO	29	VAL
16	AP	13	HIS
16	AP	33	ILE
17	AQ	27	PHE
17	AQ	47	PRO
18	AR	51	LEU
18	AR	55	ARG
20	AT	20	LEU
25	AZ	169	PRO
25	AZ	222	LEU
28	B2	17	SER
29	B3	12	PRO
31	B5	4	HIS
31	B5	14	ALA
33	B7	16	HIS
34	B8	29	LYS
34	B8	33	ASN
38	BC	200	LYS
39	BD	12	SER
39	BD	28	GLU
39	BD	156	ALA
40	BE	27	LEU
40	BE	45	THR
40	BE	52	LEU
40	BE	86	PRO
41	BF	9	ILE
41	BF	25	PRO
42	BG	121	ASN
42	BG	138	GLN
43	BH	47	GLU
48	BP	31	ALA
49	BQ	49	ALA
50	BR	67	LEU
51	BS	14	VAL
51	BS	22	GLY
51	BS	75	GLU
52	BT	131	ALA
53	BU	92	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	BV	49	THR
54	BV	89	GLN
55	BW	53	SER
55	BW	91	GLY
56	BX	6	ASP
56	BX	14	SER
56	BX	17	ALA
56	BX	32	PRO
57	BY	26	LYS
57	BY	101	LYS
58	BZ	82	ARG
58	BZ	176	PRO
2	CB	178	ARG
2	CB	204	ASN
2	CB	209	ARG
3	CC	12	LEU
3	CC	55	VAL
3	CC	123	GLN
3	CC	143	GLU
3	CC	181	ASN
4	CD	4	TYR
4	CD	5	ILE
4	CD	50	ARG
5	CE	149	GLU
6	CF	33	TYR
7	CG	102	ARG
10	CJ	16	LEU
13	CM	4	ILE
13	CM	55	ARG
13	CM	113	PRO
13	CM	114	ARG
14	CN	22	THR
14	CN	55	GLY
15	CO	18	PHE
15	CO	25	THR
16	CP	13	HIS
16	CP	16	HIS
16	CP	33	ILE
17	CQ	27	PHE
18	CR	21	LYS
18	CR	55	ARG
19	CS	67	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
20	CT	20	LEU
20	CT	88	VAL
20	CT	98	PRO
25	CZ	169	PRO
27	D1	53	VAL
27	D1	95	LEU
28	D2	41	ILE
29	D3	12	PRO
29	D3	49	LYS
31	D5	4	HIS
33	D7	2	LYS
34	D8	25	MET
34	D8	33	ASN
38	DC	200	LYS
39	DD	28	GLU
39	DD	159	ALA
39	DD	260	ARG
40	DE	45	THR
40	DE	52	LEU
40	DE	86	PRO
40	DE	121	ASN
41	DF	9	ILE
41	DF	25	PRO
41	DF	190	GLU
42	DG	130	ASN
42	DG	138	GLN
46	DN	64	GLY
48	DP	31	ALA
49	DQ	53	ALA
51	DS	14	VAL
51	DS	22	GLY
52	DT	83	ILE
52	DT	97	ALA
53	DU	92	ARG
53	DU	100	VAL
54	DV	49	THR
54	DV	51	VAL
54	DV	89	GLN
56	DX	6	ASP
56	DX	32	PRO
57	DY	26	LYS
57	DY	101	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
58	DZ	12	GLY
58	DZ	24	LEU
58	DZ	129	SER
2	AB	82	ARG
2	AB	143	GLU
2	AB	234	PRO
3	AC	7	PRO
3	AC	12	LEU
4	AD	50	ARG
4	AD	61	LYS
5	AE	70	PRO
5	AE	72	GLN
7	AG	14	PRO
7	AG	96	GLN
10	AJ	27	ALA
10	AJ	29	ARG
12	AL	108	ALA
13	AM	106	ASN
15	AO	25	THR
16	AP	16	HIS
19	AS	67	VAL
20	AT	88	VAL
20	AT	98	PRO
21	AU	9	ARG
25	AZ	35	ALA
32	B6	9	LEU
33	B7	37	LYS
35	B9	20	HIS
38	BC	148	ASN
39	BD	33	LEU
39	BD	36	PRO
39	BD	159	ALA
40	BE	55	ASN
40	BE	72	VAL
40	BE	173	VAL
40	BE	196	VAL
42	BG	97	ASP
42	BG	117	PHE
43	BH	93	GLY
46	BN	40	PRO
46	BN	134	ARG
51	BS	73	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
52	BT	23	ARG
52	BT	83	ILE
53	BU	102	GLU
57	BY	22	GLY
57	BY	50	ARG
57	BY	92	ASN
2	CB	165	VAL
2	CB	211	ILE
2	CB	234	PRO
3	CC	7	PRO
3	CC	36	ASP
3	CC	41	GLY
4	CD	101	LEU
4	CD	151	LYS
6	CF	11	ASN
7	CG	120	ILE
8	CH	110	ALA
10	CJ	27	ALA
10	CJ	29	ARG
11	CK	96	ARG
12	CL	6	THR
15	CO	12	ILE
15	CO	29	VAL
17	CQ	47	PRO
18	CR	33	ASP
18	CR	51	LEU
20	CT	100	ILE
25	CZ	222	LEU
35	D9	20	HIS
38	DC	132	GLY
39	DD	36	PRO
39	DD	74	GLY
40	DE	55	ASN
40	DE	70	ALA
40	DE	72	VAL
40	DE	190	GLY
40	DE	196	VAL
42	DG	8	LYS
42	DG	112	PRO
43	DH	47	GLU
46	DN	134	ARG
49	DQ	67	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
50	DR	8	ARG
51	DS	73	LEU
52	DT	23	ARG
53	DU	102	GLU
54	DV	19	LYS
55	DW	35	ILE
57	DY	22	GLY
57	DY	50	ARG
57	DY	92	ASN
58	DZ	82	ARG
2	AB	211	ILE
3	AC	57	ILE
3	AC	66	VAL
5	AE	85	GLY
8	AH	6	ILE
9	AI	41	VAL
14	AN	55	GLY
15	AO	12	ILE
20	AT	100	ILE
21	AU	4	GLY
25	AZ	34	VAL
28	B2	42	GLY
38	BC	132	GLY
39	BD	42	GLY
40	BE	56	PRO
40	BE	190	GLY
43	BH	92	ILE
46	BN	64	GLY
47	BO	115	VAL
53	BU	100	VAL
54	BV	22	VAL
54	BV	48	GLY
57	BY	75	ILE
58	BZ	15	PRO
58	BZ	22	GLY
58	BZ	120	ILE
58	BZ	141	VAL
58	BZ	165	VAL
2	CB	166	ASP
5	CE	13	ILE
7	CG	14	PRO
9	CI	41	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	CL	29	GLY
13	CM	60	VAL
20	CT	101	GLY
21	CU	4	GLY
25	CZ	17	ILE
25	CZ	34	VAL
27	D1	86	SER
33	D7	38	GLY
43	DH	92	ILE
43	DH	93	GLY
46	DN	40	PRO
47	DO	115	VAL
48	DP	104	GLY
51	DS	90	GLY
54	DV	22	VAL
55	DW	91	GLY
57	DY	75	ILE
58	DZ	160	GLY
3	AC	99	VAL
4	AD	28	SER
5	AE	13	ILE
13	AM	60	VAL
19	AS	31	ILE
20	AT	101	GLY
25	AZ	17	ILE
25	AZ	173	GLY
25	AZ	186	PRO
25	AZ	223	MET
25	AZ	257	GLY
39	BD	41	GLY
39	BD	244	ARG
48	BP	104	GLY
51	BS	90	GLY
52	BT	30	VAL
58	BZ	90	VAL
58	BZ	133	ILE
58	BZ	158	PRO
3	CC	57	ILE
3	CC	66	VAL
3	CC	99	VAL
25	CZ	173	GLY
25	CZ	186	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	CZ	223	MET
25	CZ	257	GLY
39	DD	35	LYS
39	DD	42	GLY
39	DD	244	ARG
40	DE	56	PRO
40	DE	173	VAL
51	DS	49	VAL
52	DT	30	VAL
54	DV	48	GLY
58	DZ	15	PRO
58	DZ	159	PRO
16	AP	46	PRO
18	AR	22	VAL
25	AZ	128	VAL
28	B2	63	VAL
30	B4	19	GLY
39	BD	35	LYS
43	BH	128	PRO
46	BN	95	PRO
51	BS	49	VAL
52	BT	102	ILE
52	BT	110	ILE
58	BZ	61	LEU
58	BZ	74	VAL
2	CB	223	ILE
3	CC	114	PRO
5	CE	85	GLY
9	CI	100	GLY
16	CP	46	PRO
25	CZ	128	VAL
30	D4	19	GLY
39	DD	41	GLY
39	DD	196	VAL
43	DH	128	PRO
52	DT	110	ILE
58	DZ	22	GLY
2	AB	223	ILE
3	AC	116	VAL
5	AE	22	GLY
8	AH	72	PRO
9	AI	100	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	AK	58	PRO
25	AZ	211	PRO
25	AZ	340	PRO
28	B2	41	ILE
29	B3	11	SER
29	B3	50	VAL
42	BG	114	ILE
48	BP	146	VAL
52	BT	88	ILE
56	BX	8	ILE
4	CD	28	SER
5	CE	22	GLY
5	CE	70	PRO
11	CK	58	PRO
13	CM	45	VAL
13	CM	85	GLY
14	CN	18	VAL
17	CQ	90	ILE
19	CS	31	ILE
25	CZ	340	PRO
29	D3	50	VAL
38	DC	189	ILE
46	DN	95	PRO
48	DP	146	VAL
52	DT	88	ILE
56	DX	8	ILE
58	DZ	141	VAL
3	AC	114	PRO
13	AM	85	GLY
40	BE	112	GLY
42	DG	15	VAL
49	DQ	73	PRO
52	DT	102	ILE
39	BD	245	PRO
39	DD	245	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	202/220 (92%)	178 (88%)	24 (12%)	8	39
2	CB	202/220 (92%)	179 (89%)	23 (11%)	8	41
3	AC	160/188 (85%)	148 (92%)	12 (8%)	19	67
3	CC	160/188 (85%)	148 (92%)	12 (8%)	19	67
4	AD	180/181 (99%)	147 (82%)	33 (18%)	2	16
4	CD	180/181 (99%)	146 (81%)	34 (19%)	2	14
5	AE	115/123 (94%)	103 (90%)	12 (10%)	10	48
5	CE	115/123 (94%)	103 (90%)	12 (10%)	10	48
6	AF	90/90 (100%)	79 (88%)	11 (12%)	7	37
6	CF	90/90 (100%)	78 (87%)	12 (13%)	6	33
7	AG	126/127 (99%)	113 (90%)	13 (10%)	10	48
7	CG	126/127 (99%)	113 (90%)	13 (10%)	10	48
8	AH	119/119 (100%)	100 (84%)	19 (16%)	3	24
8	CH	119/119 (100%)	101 (85%)	18 (15%)	4	27
9	AI	98/99 (99%)	86 (88%)	12 (12%)	7	37
9	CI	98/99 (99%)	86 (88%)	12 (12%)	7	37
10	AJ	88/92 (96%)	71 (81%)	17 (19%)	2	13
10	CJ	88/92 (96%)	71 (81%)	17 (19%)	2	13
11	AK	90/99 (91%)	81 (90%)	9 (10%)	11	50
11	CK	90/99 (91%)	82 (91%)	8 (9%)	14	58
12	AL	104/111 (94%)	82 (79%)	22 (21%)	1	10
12	CL	104/111 (94%)	82 (79%)	22 (21%)	1	10
13	AM	99/101 (98%)	88 (89%)	11 (11%)	9	43
13	CM	99/101 (98%)	88 (89%)	11 (11%)	9	43
14	AN	49/50 (98%)	40 (82%)	9 (18%)	2	15
14	CN	49/50 (98%)	40 (82%)	9 (18%)	2	15
15	AO	79/80 (99%)	69 (87%)	10 (13%)	6	35
15	CO	79/80 (99%)	68 (86%)	11 (14%)	5	31
16	AP	72/74 (97%)	65 (90%)	7 (10%)	12	51
16	CP	72/74 (97%)	65 (90%)	7 (10%)	12	51
17	AQ	94/97 (97%)	88 (94%)	6 (6%)	25	73
17	CQ	94/97 (97%)	87 (93%)	7 (7%)	20	67

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	AR	61/77 (79%)	56 (92%)	5 (8%)	17	62
18	CR	61/77 (79%)	56 (92%)	5 (8%)	17	62
19	AS	69/80 (86%)	59 (86%)	10 (14%)	5	28
19	CS	69/80 (86%)	59 (86%)	10 (14%)	5	28
20	AT	76/82 (93%)	63 (83%)	13 (17%)	3	20
20	CT	76/82 (93%)	63 (83%)	13 (17%)	3	20
21	AU	19/22 (86%)	17 (90%)	2 (10%)	10	47
21	CU	19/22 (86%)	17 (90%)	2 (10%)	10	47
25	AZ	314/339 (93%)	272 (87%)	42 (13%)	6	32
25	CZ	314/339 (93%)	273 (87%)	41 (13%)	6	33
26	B0	66/67 (98%)	52 (79%)	14 (21%)	1	10
26	D0	66/67 (98%)	51 (77%)	15 (23%)	1	8
27	B1	78/83 (94%)	59 (76%)	19 (24%)	1	7
27	D1	78/83 (94%)	59 (76%)	19 (24%)	1	7
28	B2	66/67 (98%)	49 (74%)	17 (26%)	1	6
28	D2	66/67 (98%)	56 (85%)	10 (15%)	4	26
29	B3	51/52 (98%)	44 (86%)	7 (14%)	5	31
29	D3	51/52 (98%)	44 (86%)	7 (14%)	5	31
30	B4	39/63 (62%)	26 (67%)	13 (33%)	0	3
30	D4	39/63 (62%)	26 (67%)	13 (33%)	0	3
31	B5	51/52 (98%)	47 (92%)	4 (8%)	18	65
31	D5	51/52 (98%)	47 (92%)	4 (8%)	18	65
32	B6	49/52 (94%)	41 (84%)	8 (16%)	3	22
32	D6	49/52 (94%)	40 (82%)	9 (18%)	2	15
33	B7	41/42 (98%)	32 (78%)	9 (22%)	1	9
33	D7	41/42 (98%)	33 (80%)	8 (20%)	2	13
34	B8	53/55 (96%)	45 (85%)	8 (15%)	4	27
34	D8	53/55 (96%)	45 (85%)	8 (15%)	4	27
35	B9	34/34 (100%)	30 (88%)	4 (12%)	8	39
35	D9	34/34 (100%)	30 (88%)	4 (12%)	8	39
38	BC	180/181 (99%)	157 (87%)	23 (13%)	6	35

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
38	DC	180/181 (99%)	157 (87%)	23 (13%)	6	35
39	BD	217/218 (100%)	180 (83%)	37 (17%)	3	20
39	DD	217/218 (100%)	178 (82%)	39 (18%)	2	16
40	BE	165/166 (99%)	142 (86%)	23 (14%)	5	31
40	DE	165/166 (99%)	143 (87%)	22 (13%)	6	33
41	BF	165/166 (99%)	152 (92%)	13 (8%)	18	64
41	DF	165/166 (99%)	152 (92%)	13 (8%)	18	64
42	BG	155/156 (99%)	130 (84%)	25 (16%)	3	23
42	DG	155/156 (99%)	129 (83%)	26 (17%)	3	21
43	BH	132/148 (89%)	118 (89%)	14 (11%)	10	46
43	DH	132/148 (89%)	119 (90%)	13 (10%)	12	51
46	BN	117/119 (98%)	103 (88%)	14 (12%)	7	38
46	DN	117/119 (98%)	102 (87%)	15 (13%)	6	35
47	BO	100/100 (100%)	90 (90%)	10 (10%)	11	50
47	DO	100/100 (100%)	90 (90%)	10 (10%)	11	50
48	BP	112/116 (97%)	88 (79%)	24 (21%)	1	10
48	DP	112/116 (97%)	89 (80%)	23 (20%)	2	11
49	BQ	111/111 (100%)	91 (82%)	20 (18%)	2	16
49	DQ	111/111 (100%)	91 (82%)	20 (18%)	2	16
50	BR	100/101 (99%)	86 (86%)	14 (14%)	5	30
50	DR	100/101 (99%)	82 (82%)	18 (18%)	2	16
51	BS	77/88 (88%)	66 (86%)	11 (14%)	5	29
51	DS	77/88 (88%)	66 (86%)	11 (14%)	5	29
52	BT	120/127 (94%)	99 (82%)	21 (18%)	3	18
52	DT	120/127 (94%)	100 (83%)	20 (17%)	3	21
53	BU	92/94 (98%)	84 (91%)	8 (9%)	15	59
53	DU	92/94 (98%)	84 (91%)	8 (9%)	15	59
54	BV	82/82 (100%)	66 (80%)	16 (20%)	2	13
54	DV	82/82 (100%)	66 (80%)	16 (20%)	2	13
55	BW	91/92 (99%)	79 (87%)	12 (13%)	6	33
55	DW	91/92 (99%)	79 (87%)	12 (13%)	6	33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
56	BX	74/78 (95%)	67 (90%)	7 (10%)	12	52
56	DX	74/78 (95%)	67 (90%)	7 (10%)	12	52
57	BY	84/91 (92%)	68 (81%)	16 (19%)	2	14
57	DY	84/91 (92%)	68 (81%)	16 (19%)	2	14
58	BZ	155/179 (87%)	127 (82%)	28 (18%)	2	16
58	DZ	155/179 (87%)	131 (84%)	24 (16%)	4	25
All	All	10322/10862 (95%)	8852 (86%)	1470 (14%)	5	30

All (1470) 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	36	ARG
2	AB	44	LEU
2	AB	48	MET
2	AB	52	GLU
2	AB	56	ARG
2	AB	63	MET
2	AB	69	LEU
2	AB	79	ASP
2	AB	92	TYR
2	AB	93	VAL
2	AB	94	ASN
2	AB	130	ARG
2	AB	137	ARG
2	AB	145	LEU
2	AB	163	PHE
2	AB	172	ILE
2	AB	178	ARG
2	AB	187	LEU
2	AB	196	LEU
2	AB	204	ASN
2	AB	205	ASP
3	AC	5	ILE
3	AC	16	ARG
3	AC	18	TRP
3	AC	29	TYR
3	AC	37	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	AC	54	ARG
3	AC	62	ASP
3	AC	79	ARG
3	AC	107	GLN
3	AC	120	VAL
3	AC	164	ARG
3	AC	188	LEU
4	AD	3	ARG
4	AD	9	CYS
4	AD	13	ARG
4	AD	15	GLU
4	AD	20	TYR
4	AD	26	CYS
4	AD	27	TYR
4	AD	33	MET
4	AD	35	ARG
4	AD	36	ARG
4	AD	38	TYR
4	AD	49	ARG
4	AD	58	LEU
4	AD	60	GLU
4	AD	67	ILE
4	AD	86	LYS
4	AD	89	THR
4	AD	97	LEU
4	AD	98	GLU
4	AD	107	ARG
4	AD	122	ARG
4	AD	129	ASN
4	AD	131	ARG
4	AD	132	ARG
4	AD	135	LEU
4	AD	138	TYR
4	AD	145	GLU
4	AD	160	GLN
4	AD	163	GLU
4	AD	179	GLU
4	AD	187	ARG
4	AD	190	ASP
4	AD	192	GLU
5	AE	7	GLU
5	AE	10	MET

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	AE	12	LEU
5	AE	20	GLN
5	AE	26	PHE
5	AE	43	LEU
5	AE	53	LEU
5	AE	73	ASN
5	AE	82	VAL
5	AE	120	THR
5	AE	137	GLU
5	AE	144	THR
6	AF	10	LEU
6	AF	14	LEU
6	AF	25	ILE
6	AF	31	GLU
6	AF	43	LEU
6	AF	61	LEU
6	AF	69	GLU
6	AF	84	ASN
6	AF	86	ARG
6	AF	90	VAL
6	AF	98	LEU
7	AG	13	GLN
7	AG	20	ASP
7	AG	38	LEU
7	AG	41	ARG
7	AG	54	THR
7	AG	69	VAL
7	AG	72	ARG
7	AG	84	ASN
7	AG	89	MET
7	AG	91	VAL
7	AG	104	LEU
7	AG	112	PRO
7	AG	124	LEU
8	AH	1	MET
8	AH	2	LEU
8	AH	3	THR
8	AH	14	ARG
8	AH	23	SER
8	AH	45	ILE
8	AH	52	ASP
8	AH	54	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	AH	77	GLU
8	AH	81	HIS
8	AH	82	HIS
8	AH	85	ARG
8	AH	94	TYR
8	AH	102	ARG
8	AH	109	ILE
8	AH	115	SER
8	AH	119	LEU
8	AH	127	LEU
8	AH	136	GLU
9	AI	4	TYR
9	AI	10	ARG
9	AI	78	LYS
9	AI	85	LEU
9	AI	95	LYS
9	AI	99	LEU
9	AI	108	VAL
9	AI	112	LYS
9	AI	114	TYR
9	AI	121	ARG
9	AI	125	TYR
9	AI	128	ARG
10	AJ	16	LEU
10	AJ	22	LYS
10	AJ	25	GLU
10	AJ	40	LEU
10	AJ	45	ARG
10	AJ	48	THR
10	AJ	50	ILE
10	AJ	54	PHE
10	AJ	55	LYS
10	AJ	57	LYS
10	AJ	59	SER
10	AJ	62	HIS
10	AJ	63	PHE
10	AJ	71	LEU
10	AJ	73	ASP
10	AJ	80	LYS
10	AJ	96	ILE
11	AK	14	VAL
11	AK	28	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	AK	38	ASN
11	AK	67	ASP
11	AK	75	TYR
11	AK	82	VAL
11	AK	114	VAL
11	AK	115	PRO
11	AK	125	PHE
12	AL	6	THR
12	AL	20	LYS
12	AL	27	LEU
12	AL	36	VAL
12	AL	37	CYS
12	AL	38	THR
12	AL	41	ARG
12	AL	42	THR
12	AL	52	LEU
12	AL	53	ARG
12	AL	58	VAL
12	AL	67	THR
12	AL	79	GLU
12	AL	80	HIS
12	AL	84	LEU
12	AL	85	ILE
12	AL	89	ARG
12	AL	93	LEU
12	AL	98	TYR
12	AL	100	ILE
12	AL	104	VAL
12	AL	106	ASP
13	AM	47	ASP
13	AM	64	TRP
13	AM	67	GLU
13	AM	70	LEU
13	AM	71	ARG
13	AM	81	LEU
13	AM	93	ARG
13	AM	108	ARG
13	AM	111	LYS
13	AM	115	LYS
13	AM	120	LYS
14	AN	14	PRO
14	AN	18	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	AN	21	TYR
14	AN	29	ARG
14	AN	32	SER
14	AN	41	ARG
14	AN	42	ILE
14	AN	44	LEU
14	AN	57	ARG
15	AO	3	ILE
15	AO	10	LYS
15	AO	34	LEU
15	AO	38	ARG
15	AO	39	LEU
15	AO	54	ARG
15	AO	81	LEU
15	AO	82	ILE
15	AO	85	LEU
15	AO	88	ARG
16	AP	20	VAL
16	AP	22	THR
16	AP	27	LYS
16	AP	36	ILE
16	AP	58	TYR
16	AP	69	THR
16	AP	82	GLN
17	AQ	7	THR
17	AQ	35	VAL
17	AQ	49	GLU
17	AQ	52	LYS
17	AQ	55	ASP
17	AQ	74	LEU
18	AR	46	GLU
18	AR	55	ARG
18	AR	58	LEU
18	AR	65	ILE
18	AR	88	LYS
19	AS	6	LYS
19	AS	7	LYS
19	AS	10	PHE
19	AS	15	LEU
19	AS	22	LEU
19	AS	27	GLU
19	AS	29	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
19	AS	37	ARG
19	AS	44	MET
19	AS	77	THR
20	AT	22	ARG
20	AT	23	ARG
20	AT	24	LEU
20	AT	26	ASN
20	AT	36	LEU
20	AT	41	ILE
20	AT	42	GLN
20	AT	45	GLN
20	AT	53	LEU
20	AT	64	ASP
20	AT	74	LYS
20	AT	85	MET
20	AT	93	GLU
21	AU	5	ASP
21	AU	17	THR
25	AZ	13	ASN
25	AZ	21	ASP
25	AZ	27	LEU
25	AZ	70	TYR
25	AZ	74	LYS
25	AZ	87	ASP
25	AZ	91	ASN
25	AZ	113	MET
25	AZ	121	LEU
25	AZ	149	LEU
25	AZ	163	PHE
25	AZ	167	GLU
25	AZ	174	SER
25	AZ	203	LEU
25	AZ	218	ASP
25	AZ	223	MET
25	AZ	231	ILE
25	AZ	234	ARG
25	AZ	243	GLU
25	AZ	244	ARG
25	AZ	247	VAL
25	AZ	260	PRO
25	AZ	263	ARG
25	AZ	264	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	AZ	265	THR
25	AZ	268	THR
25	AZ	277	LEU
25	AZ	279	GLU
25	AZ	284	ASP
25	AZ	285	ASN
25	AZ	286	VAL
25	AZ	295	ARG
25	AZ	300	ARG
25	AZ	303	VAL
25	AZ	331	HIS
25	AZ	335	PHE
25	AZ	348	ASP
25	AZ	349	VAL
25	AZ	359	VAL
25	AZ	367	ASN
25	AZ	395	VAL
25	AZ	401	THR
26	B0	11	ARG
26	B0	12	ASN
26	B0	14	ARG
26	B0	20	ARG
26	B0	27	GLU
26	B0	31	VAL
26	B0	47	PRO
26	B0	56	ASP
26	B0	60	PHE
26	B0	62	LEU
26	B0	64	ASP
26	B0	71	ASP
26	B0	78	TYR
26	B0	84	LEU
27	B1	7	ILE
27	B1	11	ARG
27	B1	13	ILE
27	B1	30	VAL
27	B1	33	LYS
27	B1	37	ILE
27	B1	38	SER
27	B1	39	LYS
27	B1	45	ASN
27	B1	46	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
27	B1	49	VAL
27	B1	57	GLU
27	B1	69	LYS
27	B1	75	GLU
27	B1	80	LEU
27	B1	82	LEU
27	B1	83	GLU
27	B1	92	LYS
27	B1	95	LEU
28	B2	3	LEU
28	B2	7	ARG
28	B2	9	GLN
28	B2	10	LEU
28	B2	17	SER
28	B2	21	LEU
28	B2	33	MET
28	B2	34	GLU
28	B2	35	LEU
28	B2	38	GLN
28	B2	43	GLN
28	B2	44	LEU
28	B2	51	ARG
28	B2	57	ILE
28	B2	60	LEU
28	B2	64	LEU
28	B2	68	ARG
29	B3	28	LEU
29	B3	31	LEU
29	B3	35	ARG
29	B3	38	GLU
29	B3	40	THR
29	B3	46	ASN
29	B3	52	HIS
30	B4	5	ILE
30	B4	6	HIS
30	B4	8	LYS
30	B4	9	LEU
30	B4	10	VAL
30	B4	20	ASN
30	B4	22	ILE
30	B4	25	TYR
30	B4	27	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
30	B4	32	TYR
30	B4	34	GLU
30	B4	35	VAL
30	B4	47	GLN
31	B5	3	LYS
31	B5	51	TYR
31	B5	56	LYS
31	B5	57	VAL
32	B6	10	LEU
32	B6	31	PRO
32	B6	42	TRP
32	B6	43	CYS
32	B6	45	LYS
32	B6	49	HIS
32	B6	52	VAL
32	B6	53	LYS
33	B7	1	MET
33	B7	8	ASN
33	B7	14	LYS
33	B7	21	ARG
33	B7	24	THR
33	B7	41	ARG
33	B7	44	PRO
33	B7	47	ARG
33	B7	48	LYS
34	B8	30	ARG
34	B8	34	TRP
34	B8	44	LYS
34	B8	47	LYS
34	B8	48	PHE
34	B8	56	GLU
34	B8	61	LEU
34	B8	64	TYR
35	B9	1	MET
35	B9	14	CYS
35	B9	28	GLU
35	B9	29	ASN
38	BC	3	HIS
38	BC	6	ARG
38	BC	12	GLU
38	BC	14	VAL
38	BC	17	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	BC	30	LYS
38	BC	36	LYS
38	BC	40	THR
38	BC	52	ARG
38	BC	55	ASP
38	BC	70	LYS
38	BC	71	GLN
38	BC	72	VAL
38	BC	85	GLU
38	BC	108	MET
38	BC	111	ASP
38	BC	113	VAL
38	BC	139	ASN
38	BC	155	GLU
38	BC	168	THR
38	BC	183	GLU
38	BC	199	HIS
38	BC	227	HIS
39	BD	10	THR
39	BD	24	ILE
39	BD	28	GLU
39	BD	33	LEU
39	BD	35	LYS
39	BD	37	LEU
39	BD	43	ARG
39	BD	52	ARG
39	BD	59	LYS
39	BD	61	LEU
39	BD	63	ARG
39	BD	64	ILE
39	BD	65	ILE
39	BD	88	ARG
39	BD	92	ILE
39	BD	94	LEU
39	BD	95	LEU
39	BD	103	ARG
39	BD	106	ILE
39	BD	122	ASP
39	BD	131	LEU
39	BD	157	ARG
39	BD	166	GLN
39	BD	174	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	BD	183	ARG
39	BD	200	ASP
39	BD	212	SER
39	BD	221	VAL
39	BD	242	ARG
39	BD	246	PRO
39	BD	252	TRP
39	BD	257	LEU
39	BD	260	ARG
39	BD	267	SER
39	BD	271	ILE
39	BD	273	ARG
39	BD	275	LYS
40	BE	35	GLN
40	BE	36	ARG
40	BE	42	ASP
40	BE	51	PHE
40	BE	55	ASN
40	BE	57	LYS
40	BE	58	ARG
40	BE	61	ARG
40	BE	67	PHE
40	BE	69	LYS
40	BE	76	ARG
40	BE	79	ARG
40	BE	82	ARG
40	BE	95	ILE
40	BE	121	ASN
40	BE	127	ASP
40	BE	135	HIS
40	BE	169	ASN
40	BE	171	GLU
40	BE	181	LEU
40	BE	188	VAL
40	BE	192	ASN
40	BE	202	LYS
41	BF	17	ARG
41	BF	28	ILE
41	BF	44	ARG
41	BF	83	PHE
41	BF	88	VAL
41	BF	97	TYR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	BF	122	LYS
41	BF	138	GLU
41	BF	139	PHE
41	BF	149	ASP
41	BF	160	ASN
41	BF	164	ARG
41	BF	169	ASN
42	BG	12	TYR
42	BG	21	ARG
42	BG	29	TRP
42	BG	33	ARG
42	BG	34	LEU
42	BG	36	LYS
42	BG	45	GLU
42	BG	52	ILE
42	BG	58	GLN
42	BG	60	LEU
42	BG	67	LYS
42	BG	71	THR
42	BG	80	PHE
42	BG	82	LEU
42	BG	87	PRO
42	BG	103	LEU
42	BG	125	PHE
42	BG	133	LEU
42	BG	135	LEU
42	BG	139	LEU
42	BG	146	TYR
42	BG	153	ARG
42	BG	162	THR
42	BG	166	ASP
42	BG	176	LEU
43	BH	41	MET
43	BH	43	VAL
43	BH	53	GLU
43	BH	54	ARG
43	BH	65	HIS
43	BH	92	ILE
43	BH	104	GLU
43	BH	122	THR
43	BH	139	GLN
43	BH	143	GLN

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
43	BH	152	ARG
43	BH	153	LYS
43	BH	157	TYR
43	BH	163	TYR
46	BN	1	MET
46	BN	4	TYR
46	BN	19	GLU
46	BN	25	ARG
46	BN	26	LEU
46	BN	32	THR
46	BN	34	LEU
46	BN	45	ASN
46	BN	48	MET
46	BN	56	ASN
46	BN	63	THR
46	BN	65	LYS
46	BN	99	LEU
46	BN	127	ASP
47	BO	4	PRO
47	BO	8	LEU
47	BO	10	VAL
47	BO	23	ARG
47	BO	32	TYR
47	BO	48	PRO
47	BO	92	GLU
47	BO	99	PHE
47	BO	104	ARG
47	BO	105	GLU
48	BP	16	ARG
48	BP	18	ARG
48	BP	19	VAL
48	BP	27	HIS
48	BP	33	ARG
48	BP	35	HIS
48	BP	40	SER
48	BP	45	LEU
48	BP	52	GLU
48	BP	55	ARG
48	BP	56	SER
48	BP	59	LEU
48	BP	61	ARG
48	BP	62	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	BP	68	GLN
48	BP	70	GLN
48	BP	79	ARG
48	BP	85	LEU
48	BP	91	PHE
48	BP	100	LEU
48	BP	101	VAL
48	BP	108	LYS
48	BP	110	TYR
48	BP	130	PHE
49	BQ	1	MET
49	BQ	6	ARG
49	BQ	25	ASP
49	BQ	37	LEU
49	BQ	45	GLN
49	BQ	56	ARG
49	BQ	58	PHE
49	BQ	59	ARG
49	BQ	65	PHE
49	BQ	74	TYR
49	BQ	82	ARG
49	BQ	89	ASN
49	BQ	94	VAL
49	BQ	97	VAL
49	BQ	99	PRO
49	BQ	104	PHE
49	BQ	125	LEU
49	BQ	132	VAL
49	BQ	133	ARG
49	BQ	138	ASP
50	BR	2	ARG
50	BR	5	LYS
50	BR	8	ARG
50	BR	13	HIS
50	BR	18	LEU
50	BR	29	LEU
50	BR	36	THR
50	BR	44	LEU
50	BR	71	GLN
50	BR	77	ARG
50	BR	97	VAL
50	BR	99	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
50	BR	100	LEU
50	BR	113	LEU
51	BS	11	LYS
51	BS	12	PHE
51	BS	15	ARG
51	BS	18	ILE
51	BS	29	PHE
51	BS	36	TYR
51	BS	54	LEU
51	BS	57	LYS
51	BS	63	THR
51	BS	97	ARG
51	BS	106	ARG
52	BT	6	LEU
52	BT	24	PRO
52	BT	29	ARG
52	BT	32	TYR
52	BT	38	ASN
52	BT	39	ARG
52	BT	41	ARG
52	BT	48	ILE
52	BT	57	PHE
52	BT	58	ASN
52	BT	61	PHE
52	BT	65	LYS
52	BT	66	VAL
52	BT	72	VAL
52	BT	78	LEU
52	BT	82	LEU
52	BT	90	GLN
52	BT	99	LEU
52	BT	102	ILE
52	BT	124	ASP
52	BT	128	GLU
53	BU	8	VAL
53	BU	18	LEU
53	BU	20	LEU
53	BU	56	ASP
53	BU	66	ASN
53	BU	74	LEU
53	BU	108	GLU
53	BU	114	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	BV	13	ARG
54	BV	14	VAL
54	BV	16	PRO
54	BV	18	LEU
54	BV	19	LYS
54	BV	20	LEU
54	BV	21	ARG
54	BV	35	LEU
54	BV	39	LEU
54	BV	50	PRO
54	BV	61	VAL
54	BV	71	LEU
54	BV	75	PHE
54	BV	89	GLN
54	BV	95	LEU
54	BV	99	ILE
55	BW	11	ARG
55	BW	17	VAL
55	BW	34	ASN
55	BW	36	LEU
55	BW	51	LEU
55	BW	52	GLU
55	BW	71	VAL
55	BW	77	ASP
55	BW	88	ARG
55	BW	92	ARG
55	BW	102	HIS
55	BW	103	ILE
56	BX	28	PHE
56	BX	39	ILE
56	BX	48	LYS
56	BX	57	LEU
56	BX	66	LEU
56	BX	68	ARG
56	BX	76	ARG
57	BY	2	ARG
57	BY	6	HIS
57	BY	7	VAL
57	BY	32	PRO
57	BY	49	VAL
57	BY	50	ARG
57	BY	53	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
57	BY	55	TYR
57	BY	56	PRO
57	BY	62	GLU
57	BY	67	LEU
57	BY	73	ARG
57	BY	75	ILE
57	BY	76	CYS
57	BY	77	PRO
57	BY	83	THR
58	BZ	6	LYS
58	BZ	18	LEU
58	BZ	28	MET
58	BZ	31	ARG
58	BZ	41	LEU
58	BZ	42	VAL
58	BZ	43	GLU
58	BZ	44	PHE
58	BZ	61	LEU
58	BZ	65	GLN
58	BZ	69	THR
58	BZ	70	LEU
58	BZ	72	ARG
58	BZ	76	LEU
58	BZ	79	ARG
58	BZ	81	ARG
58	BZ	97	GLU
58	BZ	103	ARG
58	BZ	104	PHE
58	BZ	123	ASP
58	BZ	127	LYS
58	BZ	132	ASN
58	BZ	134	PRO
58	BZ	150	LEU
58	BZ	154	ASP
58	BZ	163	LEU
58	BZ	166	SER
58	BZ	171	ILE
2	CB	15	VAL
2	CB	16	HIS
2	CB	17	PHE
2	CB	36	ARG
2	CB	44	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	CB	48	MET
2	CB	52	GLU
2	CB	56	ARG
2	CB	63	MET
2	CB	69	LEU
2	CB	79	ASP
2	CB	92	TYR
2	CB	93	VAL
2	CB	130	ARG
2	CB	137	ARG
2	CB	145	LEU
2	CB	163	PHE
2	CB	172	ILE
2	CB	178	ARG
2	CB	187	LEU
2	CB	196	LEU
2	CB	204	ASN
2	CB	205	ASP
3	CC	5	ILE
3	CC	16	ARG
3	CC	18	TRP
3	CC	29	TYR
3	CC	37	GLN
3	CC	54	ARG
3	CC	62	ASP
3	CC	79	ARG
3	CC	107	GLN
3	CC	120	VAL
3	CC	164	ARG
3	CC	188	LEU
4	CD	3	ARG
4	CD	9	CYS
4	CD	13	ARG
4	CD	15	GLU
4	CD	20	TYR
4	CD	26	CYS
4	CD	27	TYR
4	CD	33	MET
4	CD	35	ARG
4	CD	36	ARG
4	CD	38	TYR
4	CD	49	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	58	LEU
4	CD	60	GLU
4	CD	67	ILE
4	CD	86	LYS
4	CD	89	THR
4	CD	97	LEU
4	CD	98	GLU
4	CD	99	SER
4	CD	107	ARG
4	CD	122	ARG
4	CD	129	ASN
4	CD	131	ARG
4	CD	132	ARG
4	CD	135	LEU
4	CD	138	TYR
4	CD	145	GLU
4	CD	160	GLN
4	CD	163	GLU
4	CD	179	GLU
4	CD	187	ARG
4	CD	190	ASP
4	CD	192	GLU
5	CE	7	GLU
5	CE	10	MET
5	CE	12	LEU
5	CE	20	GLN
5	CE	26	PHE
5	CE	43	LEU
5	CE	53	LEU
5	CE	73	ASN
5	CE	82	VAL
5	CE	120	THR
5	CE	137	GLU
5	CE	144	THR
6	CF	10	LEU
6	CF	14	LEU
6	CF	25	ILE
6	CF	31	GLU
6	CF	43	LEU
6	CF	61	LEU
6	CF	69	GLU
6	CF	83	ASP

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
6	CF	84	ASN
6	CF	86	ARG
6	CF	90	VAL
6	CF	98	LEU
7	CG	13	GLN
7	CG	20	ASP
7	CG	38	LEU
7	CG	41	ARG
7	CG	54	THR
7	CG	69	VAL
7	CG	72	ARG
7	CG	84	ASN
7	CG	89	MET
7	CG	91	VAL
7	CG	104	LEU
7	CG	112	PRO
7	CG	124	LEU
8	CH	1	MET
8	CH	2	LEU
8	CH	14	ARG
8	CH	23	SER
8	CH	45	ILE
8	CH	52	ASP
8	CH	54	ASP
8	CH	77	GLU
8	CH	81	HIS
8	CH	82	HIS
8	CH	85	ARG
8	CH	94	TYR
8	CH	102	ARG
8	CH	109	ILE
8	CH	115	SER
8	CH	119	LEU
8	CH	127	LEU
8	CH	136	GLU
9	CI	4	TYR
9	CI	10	ARG
9	CI	78	LYS
9	CI	85	LEU
9	CI	95	LYS
9	CI	99	LEU
9	CI	108	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	CI	112	LYS
9	CI	114	TYR
9	CI	121	ARG
9	CI	125	TYR
9	CI	128	ARG
10	CJ	16	LEU
10	CJ	22	LYS
10	CJ	25	GLU
10	CJ	40	LEU
10	CJ	45	ARG
10	CJ	48	THR
10	CJ	50	ILE
10	CJ	54	PHE
10	CJ	55	LYS
10	CJ	57	LYS
10	CJ	59	SER
10	CJ	62	HIS
10	CJ	63	PHE
10	CJ	71	LEU
10	CJ	73	ASP
10	CJ	80	LYS
10	CJ	96	ILE
11	CK	14	VAL
11	CK	28	THR
11	CK	38	ASN
11	CK	67	ASP
11	CK	75	TYR
11	CK	82	VAL
11	CK	114	VAL
11	CK	125	PHE
12	CL	6	THR
12	CL	20	LYS
12	CL	27	LEU
12	CL	36	VAL
12	CL	37	CYS
12	CL	38	THR
12	CL	41	ARG
12	CL	42	THR
12	CL	52	LEU
12	CL	53	ARG
12	CL	58	VAL
12	CL	67	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	CL	79	GLU
12	CL	84	LEU
12	CL	85	ILE
12	CL	89	ARG
12	CL	93	LEU
12	CL	98	TYR
12	CL	100	ILE
12	CL	104	VAL
12	CL	105	TYR
12	CL	106	ASP
13	CM	47	ASP
13	CM	64	TRP
13	CM	67	GLU
13	CM	70	LEU
13	CM	71	ARG
13	CM	81	LEU
13	CM	93	ARG
13	CM	108	ARG
13	CM	111	LYS
13	CM	115	LYS
13	CM	120	LYS
14	CN	14	PRO
14	CN	18	VAL
14	CN	21	TYR
14	CN	29	ARG
14	CN	32	SER
14	CN	41	ARG
14	CN	42	ILE
14	CN	44	LEU
14	CN	57	ARG
15	CO	3	ILE
15	CO	10	LYS
15	CO	34	LEU
15	CO	38	ARG
15	CO	39	LEU
15	CO	46	HIS
15	CO	54	ARG
15	CO	81	LEU
15	CO	82	ILE
15	CO	85	LEU
15	CO	88	ARG
16	CP	20	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	CP	22	THR
16	CP	27	LYS
16	CP	36	ILE
16	CP	58	TYR
16	CP	69	THR
16	CP	82	GLN
17	CQ	7	THR
17	CQ	35	VAL
17	CQ	41	LYS
17	CQ	49	GLU
17	CQ	52	LYS
17	CQ	55	ASP
17	CQ	74	LEU
18	CR	46	GLU
18	CR	55	ARG
18	CR	58	LEU
18	CR	65	ILE
18	CR	88	LYS
19	CS	6	LYS
19	CS	7	LYS
19	CS	10	PHE
19	CS	15	LEU
19	CS	22	LEU
19	CS	27	GLU
19	CS	29	ARG
19	CS	37	ARG
19	CS	44	MET
19	CS	77	THR
20	CT	22	ARG
20	CT	23	ARG
20	CT	24	LEU
20	CT	26	ASN
20	CT	36	LEU
20	CT	41	ILE
20	CT	42	GLN
20	CT	45	GLN
20	CT	53	LEU
20	CT	64	ASP
20	CT	74	LYS
20	CT	85	MET
20	CT	93	GLU
21	CU	5	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	CU	17	THR
25	CZ	13	ASN
25	CZ	21	ASP
25	CZ	27	LEU
25	CZ	70	TYR
25	CZ	74	LYS
25	CZ	87	ASP
25	CZ	91	ASN
25	CZ	113	MET
25	CZ	121	LEU
25	CZ	149	LEU
25	CZ	163	PHE
25	CZ	167	GLU
25	CZ	174	SER
25	CZ	195	TRP
25	CZ	203	LEU
25	CZ	218	ASP
25	CZ	223	MET
25	CZ	231	ILE
25	CZ	234	ARG
25	CZ	243	GLU
25	CZ	244	ARG
25	CZ	260	PRO
25	CZ	263	ARG
25	CZ	265	THR
25	CZ	268	THR
25	CZ	277	LEU
25	CZ	279	GLU
25	CZ	284	ASP
25	CZ	285	ASN
25	CZ	286	VAL
25	CZ	295	ARG
25	CZ	300	ARG
25	CZ	303	VAL
25	CZ	331	HIS
25	CZ	335	PHE
25	CZ	348	ASP
25	CZ	349	VAL
25	CZ	359	VAL
25	CZ	367	ASN
25	CZ	395	VAL
25	CZ	401	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	D0	11	ARG
26	D0	12	ASN
26	D0	14	ARG
26	D0	20	ARG
26	D0	27	GLU
26	D0	31	VAL
26	D0	41	ARG
26	D0	47	PRO
26	D0	56	ASP
26	D0	60	PHE
26	D0	62	LEU
26	D0	64	ASP
26	D0	71	ASP
26	D0	78	TYR
26	D0	84	LEU
27	D1	4	VAL
27	D1	7	ILE
27	D1	11	ARG
27	D1	13	ILE
27	D1	17	SER
27	D1	21	ARG
27	D1	26	ARG
27	D1	33	LYS
27	D1	37	ILE
27	D1	38	SER
27	D1	46	LEU
27	D1	57	GLU
27	D1	66	HIS
27	D1	73	LEU
27	D1	75	GLU
27	D1	80	LEU
27	D1	82	LEU
27	D1	83	GLU
27	D1	92	LYS
28	D2	3	LEU
28	D2	7	ARG
28	D2	9	GLN
28	D2	31	GLU
28	D2	38	GLN
28	D2	53	LEU
28	D2	56	GLN
28	D2	59	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	D2	60	LEU
28	D2	68	ARG
29	D3	28	LEU
29	D3	31	LEU
29	D3	35	ARG
29	D3	38	GLU
29	D3	40	THR
29	D3	46	ASN
29	D3	52	HIS
30	D4	5	ILE
30	D4	6	HIS
30	D4	8	LYS
30	D4	9	LEU
30	D4	10	VAL
30	D4	20	ASN
30	D4	22	ILE
30	D4	25	TYR
30	D4	27	THR
30	D4	32	TYR
30	D4	34	GLU
30	D4	35	VAL
30	D4	47	GLN
31	D5	3	LYS
31	D5	51	TYR
31	D5	56	LYS
31	D5	57	VAL
32	D6	10	LEU
32	D6	31	PRO
32	D6	36	LEU
32	D6	42	TRP
32	D6	43	CYS
32	D6	45	LYS
32	D6	49	HIS
32	D6	52	VAL
32	D6	53	LYS
33	D7	1	MET
33	D7	8	ASN
33	D7	14	LYS
33	D7	24	THR
33	D7	41	ARG
33	D7	44	PRO
33	D7	47	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
33	D7	48	LYS
34	D8	30	ARG
34	D8	34	TRP
34	D8	44	LYS
34	D8	47	LYS
34	D8	48	PHE
34	D8	56	GLU
34	D8	61	LEU
34	D8	64	TYR
35	D9	1	MET
35	D9	14	CYS
35	D9	28	GLU
35	D9	29	ASN
38	DC	3	HIS
38	DC	6	ARG
38	DC	12	GLU
38	DC	14	VAL
38	DC	17	ASN
38	DC	30	LYS
38	DC	36	LYS
38	DC	40	THR
38	DC	52	ARG
38	DC	55	ASP
38	DC	70	LYS
38	DC	71	GLN
38	DC	72	VAL
38	DC	85	GLU
38	DC	108	MET
38	DC	111	ASP
38	DC	113	VAL
38	DC	139	ASN
38	DC	168	THR
38	DC	183	GLU
38	DC	187	ASP
38	DC	199	HIS
38	DC	227	HIS
39	DD	10	THR
39	DD	14	ARG
39	DD	24	ILE
39	DD	26	LYS
39	DD	28	GLU
39	DD	33	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	DD	35	LYS
39	DD	37	LEU
39	DD	43	ARG
39	DD	44	ASN
39	DD	52	ARG
39	DD	59	LYS
39	DD	61	LEU
39	DD	63	ARG
39	DD	64	ILE
39	DD	65	ILE
39	DD	88	ARG
39	DD	92	ILE
39	DD	94	LEU
39	DD	95	LEU
39	DD	103	ARG
39	DD	106	ILE
39	DD	122	ASP
39	DD	131	LEU
39	DD	157	ARG
39	DD	166	GLN
39	DD	174	ILE
39	DD	183	ARG
39	DD	200	ASP
39	DD	212	SER
39	DD	221	VAL
39	DD	246	PRO
39	DD	252	TRP
39	DD	257	LEU
39	DD	260	ARG
39	DD	267	SER
39	DD	271	ILE
39	DD	273	ARG
39	DD	275	LYS
40	DE	35	GLN
40	DE	36	ARG
40	DE	42	ASP
40	DE	51	PHE
40	DE	55	ASN
40	DE	57	LYS
40	DE	61	ARG
40	DE	67	PHE
40	DE	69	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	DE	76	ARG
40	DE	79	ARG
40	DE	82	ARG
40	DE	95	ILE
40	DE	121	ASN
40	DE	127	ASP
40	DE	135	HIS
40	DE	169	ASN
40	DE	171	GLU
40	DE	181	LEU
40	DE	188	VAL
40	DE	192	ASN
40	DE	202	LYS
41	DF	17	ARG
41	DF	28	ILE
41	DF	44	ARG
41	DF	83	PHE
41	DF	88	VAL
41	DF	97	TYR
41	DF	122	LYS
41	DF	138	GLU
41	DF	139	PHE
41	DF	149	ASP
41	DF	160	ASN
41	DF	164	ARG
41	DF	169	ASN
42	DG	7	LEU
42	DG	12	TYR
42	DG	29	TRP
42	DG	33	ARG
42	DG	36	LYS
42	DG	45	GLU
42	DG	52	ILE
42	DG	60	LEU
42	DG	62	LEU
42	DG	66	GLN
42	DG	67	LYS
42	DG	71	THR
42	DG	72	ARG
42	DG	78	SER
42	DG	80	PHE
42	DG	82	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	DG	91	ARG
42	DG	97	ASP
42	DG	125	PHE
42	DG	139	LEU
42	DG	143	GLU
42	DG	146	TYR
42	DG	153	ARG
42	DG	164	GLU
42	DG	166	ASP
42	DG	176	LEU
43	DH	41	MET
43	DH	43	VAL
43	DH	53	GLU
43	DH	54	ARG
43	DH	65	HIS
43	DH	92	ILE
43	DH	104	GLU
43	DH	139	GLN
43	DH	143	GLN
43	DH	152	ARG
43	DH	153	LYS
43	DH	157	TYR
43	DH	163	TYR
46	DN	1	MET
46	DN	4	TYR
46	DN	19	GLU
46	DN	25	ARG
46	DN	26	LEU
46	DN	32	THR
46	DN	34	LEU
46	DN	45	ASN
46	DN	48	MET
46	DN	56	ASN
46	DN	63	THR
46	DN	65	LYS
46	DN	99	LEU
46	DN	127	ASP
46	DN	134	ARG
47	DO	4	PRO
47	DO	8	LEU
47	DO	10	VAL
47	DO	23	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	DO	32	TYR
47	DO	48	PRO
47	DO	92	GLU
47	DO	99	PHE
47	DO	104	ARG
47	DO	105	GLU
48	DP	16	ARG
48	DP	18	ARG
48	DP	19	VAL
48	DP	27	HIS
48	DP	33	ARG
48	DP	35	HIS
48	DP	40	SER
48	DP	45	LEU
48	DP	52	GLU
48	DP	55	ARG
48	DP	56	SER
48	DP	59	LEU
48	DP	61	ARG
48	DP	62	LEU
48	DP	68	GLN
48	DP	70	GLN
48	DP	79	ARG
48	DP	85	LEU
48	DP	91	PHE
48	DP	100	LEU
48	DP	108	LYS
48	DP	110	TYR
48	DP	130	PHE
49	DQ	1	MET
49	DQ	6	ARG
49	DQ	25	ASP
49	DQ	37	LEU
49	DQ	45	GLN
49	DQ	51	ARG
49	DQ	56	ARG
49	DQ	58	PHE
49	DQ	59	ARG
49	DQ	65	PHE
49	DQ	74	TYR
49	DQ	89	ASN
49	DQ	94	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	DQ	97	VAL
49	DQ	99	PRO
49	DQ	104	PHE
49	DQ	125	LEU
49	DQ	132	VAL
49	DQ	133	ARG
49	DQ	138	ASP
50	DR	2	ARG
50	DR	5	LYS
50	DR	8	ARG
50	DR	13	HIS
50	DR	18	LEU
50	DR	27	SER
50	DR	29	LEU
50	DR	36	THR
50	DR	37	THR
50	DR	44	LEU
50	DR	67	LEU
50	DR	71	GLN
50	DR	75	LEU
50	DR	77	ARG
50	DR	97	VAL
50	DR	99	LYS
50	DR	100	LEU
50	DR	113	LEU
51	DS	11	LYS
51	DS	12	PHE
51	DS	15	ARG
51	DS	18	ILE
51	DS	29	PHE
51	DS	36	TYR
51	DS	54	LEU
51	DS	57	LYS
51	DS	63	THR
51	DS	97	ARG
51	DS	106	ARG
52	DT	6	LEU
52	DT	24	PRO
52	DT	29	ARG
52	DT	32	TYR
52	DT	38	ASN
52	DT	39	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
52	DT	41	ARG
52	DT	48	ILE
52	DT	57	PHE
52	DT	58	ASN
52	DT	61	PHE
52	DT	65	LYS
52	DT	66	VAL
52	DT	72	VAL
52	DT	78	LEU
52	DT	82	LEU
52	DT	90	GLN
52	DT	102	ILE
52	DT	124	ASP
52	DT	128	GLU
53	DU	8	VAL
53	DU	18	LEU
53	DU	20	LEU
53	DU	56	ASP
53	DU	66	ASN
53	DU	74	LEU
53	DU	108	GLU
53	DU	114	LYS
54	DV	13	ARG
54	DV	14	VAL
54	DV	16	PRO
54	DV	18	LEU
54	DV	19	LYS
54	DV	20	LEU
54	DV	21	ARG
54	DV	35	LEU
54	DV	39	LEU
54	DV	50	PRO
54	DV	61	VAL
54	DV	71	LEU
54	DV	75	PHE
54	DV	89	GLN
54	DV	95	LEU
54	DV	99	ILE
55	DW	11	ARG
55	DW	17	VAL
55	DW	34	ASN
55	DW	36	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
55	DW	51	LEU
55	DW	52	GLU
55	DW	71	VAL
55	DW	77	ASP
55	DW	88	ARG
55	DW	92	ARG
55	DW	102	HIS
55	DW	103	ILE
56	DX	28	PHE
56	DX	39	ILE
56	DX	48	LYS
56	DX	57	LEU
56	DX	66	LEU
56	DX	68	ARG
56	DX	76	ARG
57	DY	2	ARG
57	DY	6	HIS
57	DY	7	VAL
57	DY	32	PRO
57	DY	49	VAL
57	DY	50	ARG
57	DY	53	PRO
57	DY	55	TYR
57	DY	56	PRO
57	DY	62	GLU
57	DY	67	LEU
57	DY	73	ARG
57	DY	75	ILE
57	DY	76	CYS
57	DY	77	PRO
57	DY	83	THR
58	DZ	6	LYS
58	DZ	11	GLU
58	DZ	14	LYS
58	DZ	18	LEU
58	DZ	31	ARG
58	DZ	59	LEU
58	DZ	61	LEU
58	DZ	66	SER
58	DZ	67	LEU
58	DZ	70	LEU
58	DZ	76	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
58	DZ	78	LYS
58	DZ	79	ARG
58	DZ	81	ARG
58	DZ	92	SER
58	DZ	97	GLU
58	DZ	103	ARG
58	DZ	119	GLU
58	DZ	123	ASP
58	DZ	127	LYS
58	DZ	150	LEU
58	DZ	163	LEU
58	DZ	166	SER
58	DZ	178	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (331) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	40	HIS
2	AB	45	GLN
2	AB	104	ASN
2	AB	110	GLN
2	AB	135	GLN
2	AB	146	GLN
2	AB	204	ASN
2	AB	212	GLN
3	AC	3	ASN
3	AC	28	GLN
3	AC	31	HIS
3	AC	107	GLN
3	AC	118	GLN
3	AC	170	GLN
3	AC	176	HIS
3	AC	181	ASN
4	AD	43	HIS
4	AD	62	GLN
4	AD	119	GLN
4	AD	129	ASN
5	AE	20	GLN
5	AE	73	ASN
6	AF	27	GLN
6	AF	32	ASN
6	AF	57	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	AF	84	ASN
6	AF	100	ASN
7	AG	11	GLN
7	AG	13	GLN
7	AG	68	ASN
7	AG	106	GLN
7	AG	148	ASN
8	AH	15	ASN
8	AH	82	HIS
9	AI	3	GLN
9	AI	31	GLN
9	AI	117	HIS
10	AJ	62	HIS
10	AJ	78	ASN
11	AK	38	ASN
11	AK	93	GLN
11	AK	117	ASN
12	AL	8	ASN
12	AL	75	HIS
12	AL	78	GLN
13	AM	12	ASN
13	AM	77	ASN
13	AM	101	GLN
13	AM	106	ASN
14	AN	52	GLN
15	AO	37	ASN
15	AO	53	HIS
15	AO	62	GLN
16	AP	76	GLN
17	AQ	16	GLN
17	AQ	94	ASN
20	AT	26	ASN
20	AT	42	GLN
20	AT	45	GLN
20	AT	75	ASN
25	AZ	39	ASN
25	AZ	67	HIS
25	AZ	79	HIS
25	AZ	85	HIS
25	AZ	115	GLN
25	AZ	119	HIS
25	AZ	185	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	AZ	331	HIS
25	AZ	341	GLN
25	AZ	354	GLN
25	AZ	367	ASN
26	B0	50	ASN
26	B0	70	GLN
27	B1	45	ASN
27	B1	66	HIS
28	B2	9	GLN
28	B2	43	GLN
29	B3	19	GLN
29	B3	46	ASN
30	B4	20	ASN
30	B4	40	HIS
30	B4	46	GLN
30	B4	47	GLN
31	B5	43	HIS
32	B6	20	ASN
32	B6	32	ASN
33	B7	8	ASN
34	B8	35	GLN
35	B9	29	ASN
35	B9	36	GLN
38	BC	57	ASN
38	BC	172	HIS
39	BD	96	HIS
39	BD	115	GLN
39	BD	116	GLN
39	BD	126	GLN
39	BD	166	GLN
39	BD	186	HIS
39	BD	201	HIS
40	BE	48	GLN
40	BE	54	GLN
40	BE	55	ASN
40	BE	121	ASN
40	BE	129	HIS
40	BE	132	HIS
40	BE	143	ASN
40	BE	169	ASN
40	BE	192	ASN
41	BF	8	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	BF	29	ASN
41	BF	31	HIS
41	BF	40	GLN
41	BF	69	HIS
41	BF	75	HIS
41	BF	133	ASN
41	BF	160	ASN
41	BF	169	ASN
41	BF	204	ASN
42	BG	27	ASN
42	BG	58	GLN
42	BG	66	GLN
42	BG	123	ASN
43	BH	147	ASN
46	BN	45	ASN
46	BN	56	ASN
46	BN	94	HIS
46	BN	130	HIS
46	BN	131	GLN
47	BO	5	GLN
48	BP	38	GLN
48	BP	81	GLN
48	BP	84	ASN
48	BP	128	HIS
49	BQ	12	GLN
49	BQ	45	GLN
50	BR	3	HIS
50	BR	13	HIS
50	BR	23	ASN
50	BR	61	HIS
51	BS	38	GLN
52	BT	38	ASN
52	BT	55	ASN
52	BT	58	ASN
52	BT	123	GLN
53	BU	49	HIS
53	BU	66	ASN
53	BU	81	HIS
53	BU	94	ASN
53	BU	117	GLN
54	BV	11	GLN
54	BV	80	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
55	BW	34	ASN
55	BW	40	ASN
55	BW	61	ASN
56	BX	41	ASN
56	BX	55	ASN
56	BX	82	GLN
56	BX	87	GLN
57	BY	6	HIS
58	BZ	30	ASN
58	BZ	54	HIS
58	BZ	85	HIS
58	BZ	118	GLN
2	CB	40	HIS
2	CB	45	GLN
2	CB	104	ASN
2	CB	110	GLN
2	CB	135	GLN
2	CB	146	GLN
2	CB	204	ASN
2	CB	212	GLN
3	CC	3	ASN
3	CC	28	GLN
3	CC	31	HIS
3	CC	107	GLN
3	CC	118	GLN
3	CC	170	GLN
3	CC	176	HIS
3	CC	181	ASN
4	CD	43	HIS
4	CD	62	GLN
4	CD	119	GLN
4	CD	129	ASN
5	CE	20	GLN
5	CE	65	ASN
5	CE	73	ASN
6	CF	27	GLN
6	CF	32	ASN
6	CF	57	GLN
6	CF	84	ASN
6	CF	100	ASN
7	CG	11	GLN
7	CG	13	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	CG	68	ASN
7	CG	106	GLN
7	CG	148	ASN
8	CH	15	ASN
8	CH	82	HIS
9	CI	3	GLN
9	CI	31	GLN
9	CI	117	HIS
10	CJ	62	HIS
10	CJ	78	ASN
11	CK	38	ASN
11	CK	93	GLN
11	CK	117	ASN
12	CL	8	ASN
12	CL	75	HIS
12	CL	78	GLN
13	CM	12	ASN
13	CM	77	ASN
13	CM	101	GLN
14	CN	52	GLN
15	CO	37	ASN
15	CO	62	GLN
16	CP	76	GLN
17	CQ	16	GLN
17	CQ	94	ASN
18	CR	36	ASN
19	CS	14	HIS
20	CT	26	ASN
20	CT	42	GLN
20	CT	45	GLN
20	CT	75	ASN
25	CZ	39	ASN
25	CZ	67	HIS
25	CZ	79	HIS
25	CZ	85	HIS
25	CZ	98	GLN
25	CZ	115	GLN
25	CZ	119	HIS
25	CZ	125	GLN
25	CZ	185	ASN
25	CZ	285	ASN
25	CZ	331	HIS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
25	CZ	341	GLN
25	CZ	367	ASN
26	D0	50	ASN
26	D0	70	GLN
27	D1	16	ASN
27	D1	42	GLN
27	D1	47	GLN
28	D2	43	GLN
28	D2	47	ASN
28	D2	71	ASN
29	D3	19	GLN
29	D3	46	ASN
30	D4	20	ASN
30	D4	40	HIS
30	D4	47	GLN
31	D5	43	HIS
32	D6	20	ASN
32	D6	32	ASN
33	D7	8	ASN
34	D8	35	GLN
35	D9	29	ASN
35	D9	32	HIS
35	D9	36	GLN
38	DC	57	ASN
38	DC	172	HIS
39	DD	96	HIS
39	DD	115	GLN
39	DD	116	GLN
39	DD	126	GLN
39	DD	166	GLN
39	DD	186	HIS
39	DD	201	HIS
40	DE	48	GLN
40	DE	54	GLN
40	DE	55	ASN
40	DE	121	ASN
40	DE	129	HIS
40	DE	132	HIS
40	DE	143	ASN
40	DE	169	ASN
40	DE	192	ASN
41	DF	8	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	DF	29	ASN
41	DF	31	HIS
41	DF	40	GLN
41	DF	69	HIS
41	DF	75	HIS
41	DF	133	ASN
41	DF	160	ASN
41	DF	169	ASN
41	DF	204	ASN
42	DG	40	ASN
42	DG	123	ASN
42	DG	132	ASN
43	DH	147	ASN
46	DN	45	ASN
46	DN	56	ASN
46	DN	69	GLN
46	DN	130	HIS
46	DN	131	GLN
47	DO	5	GLN
48	DP	38	GLN
48	DP	81	GLN
48	DP	84	ASN
48	DP	128	HIS
49	DQ	12	GLN
49	DQ	45	GLN
49	DQ	141	GLN
50	DR	3	HIS
50	DR	13	HIS
50	DR	23	ASN
50	DR	61	HIS
51	DS	38	GLN
52	DT	38	ASN
52	DT	55	ASN
52	DT	58	ASN
52	DT	79	HIS
52	DT	123	GLN
53	DU	49	HIS
53	DU	66	ASN
53	DU	81	HIS
53	DU	94	ASN
53	DU	117	GLN
54	DV	11	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
55	DW	34	ASN
55	DW	40	ASN
55	DW	61	ASN
56	DX	41	ASN
56	DX	55	ASN
56	DX	87	GLN
57	DY	6	HIS
58	DZ	54	HIS
58	DZ	55	HIS
58	DZ	65	GLN
58	DZ	85	HIS
58	DZ	118	GLN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1503/1522 (98%)	288 (19%)	59 (3%)
1	CA	1503/1522 (98%)	284 (18%)	59 (3%)
22	AV	75/76 (98%)	20 (26%)	0
22	AW	75/76 (98%)	21 (28%)	2 (2%)
22	CV	75/76 (98%)	20 (26%)	0
22	CW	75/76 (98%)	21 (28%)	2 (2%)
23	AX	12/27 (44%)	4 (33%)	0
23	CX	12/27 (44%)	4 (33%)	0
24	AY	75/77 (97%)	29 (38%)	0
24	CY	75/77 (97%)	28 (37%)	0
36	BA	2900/2915 (99%)	647 (22%)	55 (1%)
36	DA	2900/2915 (99%)	653 (22%)	55 (1%)
37	BB	118/122 (96%)	29 (24%)	1 (0%)
37	DB	118/122 (96%)	29 (24%)	1 (0%)
All	All	9516/9630 (98%)	2077 (21%)	234 (2%)

All (2077) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	8	A
1	AA	9	G
1	AA	31	G
1	AA	32	A
1	AA	39	G
1	AA	47	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	48	C
1	AA	51	A
1	AA	55	A
1	AA	61	G
1	AA	65	U
1	AA	66	G
1	AA	79	G
1	AA	80	G
1	AA	81	U
1	AA	82	U
1	AA	84	U
1	AA	89	C
1	AA	90	U
1	AA	101	A
1	AA	109	A
1	AA	110	C
1	AA	116	A
1	AA	120	A
1	AA	121	C
1	AA	122	G
1	AA	129(A)	G
1	AA	131	C
1	AA	137	C
1	AA	144	G
1	AA	151	A
1	AA	174	C
1	AA	189(G)	G
1	AA	189(H)	G
1	AA	189(I)	G
1	AA	195	A
1	AA	197	A
1	AA	198	G
1	AA	199	G
1	AA	201	C
1	AA	203	U
1	AA	220	G
1	AA	244	U
1	AA	246	A
1	AA	247	G
1	AA	251	G
1	AA	267	C
1	AA	272	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	275	G
1	AA	279	A
1	AA	281	G
1	AA	289	G
1	AA	328	C
1	AA	330	C
1	AA	332	G
1	AA	345	C
1	AA	346	G
1	AA	347	G
1	AA	348	G
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	367	U
1	AA	368	U
1	AA	370	C
1	AA	372	C
1	AA	373	A
1	AA	389	A
1	AA	397	A
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	422	C
1	AA	423	G
1	AA	424	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	439	A
1	AA	452	A
1	AA	453	A
1	AA	454	C
1	AA	484	G
1	AA	485	G
1	AA	495	A
1	AA	496	A
1	AA	498	U
1	AA	499	A
1	AA	508	C
1	AA	509	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	511	C
1	AA	512	U
1	AA	518	C
1	AA	527	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	548	G
1	AA	561	U
1	AA	562	C
1	AA	563	A
1	AA	564	C
1	AA	572	A
1	AA	573	A
1	AA	575	G
1	AA	576	G
1	AA	577	G
1	AA	607	A
1	AA	630	G
1	AA	631	G
1	AA	632	A
1	AA	633	G
1	AA	642	A
1	AA	653	A
1	AA	665	A
1	AA	688	G
1	AA	701	C
1	AA	702	A
1	AA	721	G
1	AA	722	A
1	AA	723	U
1	AA	734	G
1	AA	748	C
1	AA	749	C
1	AA	755	G
1	AA	771	G
1	AA	777	A
1	AA	793	U
1	AA	794	A
1	AA	816	A
1	AA	817	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	818	G
1	AA	828	A
1	AA	839	U
1	AA	841	U
1	AA	848	C
1	AA	858	G
1	AA	859	A
1	AA	864	A
1	AA	885	G
1	AA	889	A
1	AA	890	G
1	AA	902	G
1	AA	912	C
1	AA	914	A
1	AA	916	G
1	AA	926	G
1	AA	927	G
1	AA	934	C
1	AA	935	A
1	AA	960	U
1	AA	961	U
1	AA	962	C
1	AA	966	G
1	AA	967	C
1	AA	968	A
1	AA	969	A
1	AA	971	G
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	983	A
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	996	A
1	AA	1001(A)	G
1	AA	1004	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1026	G
1	AA	1027	C
1	AA	1050	G
1	AA	1051	C
1	AA	1054	C
1	AA	1064	G
1	AA	1066	C
1	AA	1085	U
1	AA	1086	U
1	AA	1087	G
1	AA	1094	G
1	AA	1101	A
1	AA	1102	A
1	AA	1117	G
1	AA	1124	G
1	AA	1125	U
1	AA	1126	U
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G
1	AA	1136	U
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1141	C
1	AA	1146	A
1	AA	1154	G
1	AA	1158	C
1	AA	1159	U
1	AA	1184	G
1	AA	1196	U
1	AA	1199	U
1	AA	1200	C
1	AA	1201	A
1	AA	1202	G
1	AA	1212	U
1	AA	1213	A
1	AA	1214	C
1	AA	1225	A
1	AA	1226	C
1	AA	1227	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1238	A
1	AA	1240	U
1	AA	1241	G
1	AA	1249	C
1	AA	1255	G
1	AA	1256	A
1	AA	1257	U
1	AA	1258	G
1	AA	1280	A
1	AA	1281	U
1	AA	1284	C
1	AA	1285	A
1	AA	1286	A
1	AA	1287	A
1	AA	1299	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1303	C
1	AA	1305	G
1	AA	1306	A
1	AA	1317	C
1	AA	1320	C
1	AA	1322	C
1	AA	1323	G
1	AA	1331	G
1	AA	1335	C
1	AA	1337	G
1	AA	1338	G
1	AA	1347	G
1	AA	1348	U
1	AA	1349	A
1	AA	1359	C
1	AA	1363(A)	A
1	AA	1364	U
1	AA	1365	G
1	AA	1373	G
1	AA	1381	U
1	AA	1397	C
1	AA	1398	A
1	AA	1399	C
1	AA	1400	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1406	U
1	AA	1419	G
1	AA	1420	C
1	AA	1422	G
1	AA	1428	A
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1442(B)	A
1	AA	1447	A
1	AA	1456	G
1	AA	1469	G
1	AA	1470	G
1	AA	1481	U
1	AA	1483	A
1	AA	1485	U
1	AA	1492	A
1	AA	1497	G
1	AA	1499	A
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1508	G
1	AA	1517	G
1	AA	1519	A
1	AA	1520	G
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A
22	AV	7	A
22	AV	8	U
22	AV	18	G
22	AV	20	U
22	AV	22	G
22	AV	41	C
22	AV	42	C
22	AV	46	G
22	AV	47	U
22	AV	48	C
22	AV	49	C
22	AV	50	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
22	AV	52	G
22	AV	59	U
22	AV	60	U
22	AV	61	C
22	AV	62	C
22	AV	69	G
22	AV	75	C
22	AV	76	A
22	AW	4	C
22	AW	8	U
22	AW	9	A
22	AW	10	G
22	AW	16	U
22	AW	17	C
22	AW	18	G
22	AW	19	G
22	AW	21	A
22	AW	39	U
22	AW	44	G
22	AW	45	U
22	AW	47	U
22	AW	49	C
22	AW	50	U
22	AW	59	U
22	AW	60	U
22	AW	61	C
22	AW	62	C
22	AW	70	G
22	AW	74	C
23	AX	16	A
23	AX	22	A
23	AX	26	A
23	AX	27	A
24	AY	2	C
24	AY	3	U
24	AY	9	A
24	AY	10	G
24	AY	12	U
24	AY	14	A
24	AY	16	H2U
24	AY	17	H2U
24	AY	18	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	AY	19	G
24	AY	20	H2U
24	AY	21	A
24	AY	22	G
24	AY	34	G
24	AY	41	G
24	AY	42	U
24	AY	43	G
24	AY	45	G
24	AY	48	C
24	AY	55	PSU
24	AY	56	C
24	AY	57	G
24	AY	59	A
24	AY	61	C
24	AY	62	U
24	AY	72	C
24	AY	73	A
24	AY	75	C
24	AY	76	A
36	BA	10	G
36	BA	15	G
36	BA	27	G
36	BA	32	C
36	BA	34	C
36	BA	45	C
36	BA	49	A
36	BA	50	U
36	BA	61	G
36	BA	63	U
36	BA	69	C
36	BA	71	A
36	BA	72	U
36	BA	74	A
36	BA	75	G
36	BA	76	C
36	BA	82	G
36	BA	84	A
36	BA	85	G
36	BA	88	G
36	BA	90	U
36	BA	92	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	94	C
36	BA	95	G
36	BA	96	G
36	BA	100	G
36	BA	102	G
36	BA	112	U
36	BA	118	A
36	BA	119	A
36	BA	120	U
36	BA	129	C
36	BA	139(A)	G
36	BA	141	A
36	BA	146	G
36	BA	153	C
36	BA	155	U
36	BA	174	C
36	BA	181	A
36	BA	182	A
36	BA	196	A
36	BA	197	A
36	BA	198	C
36	BA	199	A
36	BA	204	A
36	BA	205	G
36	BA	215	G
36	BA	221	A
36	BA	222	A
36	BA	229	A
36	BA	230	U
36	BA	233	A
36	BA	244	A
36	BA	245	G
36	BA	248	G
36	BA	266	G
36	BA	267	C
36	BA	271(K)	U
36	BA	271(L)	U
36	BA	271(M)	G
36	BA	271(N)	U
36	BA	271(O)	C
36	BA	271(P)	C
36	BA	271(R)	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	272(A)	U
36	BA	272(B)	G
36	BA	272(I)	U
36	BA	274	G
36	BA	276	A
36	BA	284	U
36	BA	288	C
36	BA	299	A
36	BA	310	A
36	BA	312	G
36	BA	323	G
36	BA	329	G
36	BA	330	A
36	BA	331	A
36	BA	332	A
36	BA	333	G
36	BA	338	G
36	BA	343	C
36	BA	344	G
36	BA	349	G
36	BA	352	G
36	BA	353	G
36	BA	356	G
36	BA	358	U
36	BA	362	U
36	BA	363	G
36	BA	363(F)	A
36	BA	364	C
36	BA	372	G
36	BA	386	G
36	BA	387	U
36	BA	388	G
36	BA	394	A
36	BA	396	G
36	BA	405	U
36	BA	406	G
36	BA	411	G
36	BA	412	A
36	BA	418	G
36	BA	428	A
36	BA	435	C
36	BA	444	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	448	U
36	BA	451	C
36	BA	456	C
36	BA	457	A
36	BA	467	G
36	BA	470	A
36	BA	472	A
36	BA	473	G
36	BA	480	A
36	BA	481	G
36	BA	482	A
36	BA	483	A
36	BA	485	C
36	BA	494	G
36	BA	505	A
36	BA	508	G
36	BA	509	C
36	BA	512	G
36	BA	525	U
36	BA	527	C
36	BA	528	A
36	BA	530	G
36	BA	531	C
36	BA	532	A
36	BA	533	G
36	BA	537	C
36	BA	556	G
36	BA	561	G
36	BA	562	U
36	BA	563	G
36	BA	572	A
36	BA	573	G
36	BA	575	A
36	BA	586	A
36	BA	588	U
36	BA	592	G
36	BA	599	G
36	BA	603	A
36	BA	604	G
36	BA	607	U
36	BA	613	G
36	BA	614(B)	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	614(C)	A
36	BA	615	G
36	BA	620	G
36	BA	627	A
36	BA	629	G
36	BA	637	A
36	BA	645	C
36	BA	646	A
36	BA	651	G
36	BA	653	A
36	BA	654	A
36	BA	654(J)	A
36	BA	654(K)	C
36	BA	656	G
36	BA	668	G
36	BA	669	G
36	BA	670	A
36	BA	673	C
36	BA	686	G
36	BA	695	G
36	BA	708	C
36	BA	717	G
36	BA	719	C
36	BA	722	A
36	BA	730	C
36	BA	748	G
36	BA	753	C
36	BA	765	G
36	BA	776	G
36	BA	782	A
36	BA	784	A
36	BA	785	G
36	BA	790	C
36	BA	791	C
36	BA	792	G
36	BA	805	G
36	BA	812	C
36	BA	819	A
36	BA	827	U
36	BA	828	U
36	BA	830	G
36	BA	846	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	848	G
36	BA	857	C
36	BA	859	G
36	BA	865	C
36	BA	866	A
36	BA	878	A
36	BA	889	C
36	BA	890	A
36	BA	896	A
36	BA	897	C
36	BA	904	C
36	BA	910	A
36	BA	917	A
36	BA	926	A
36	BA	932	G
36	BA	933	A
36	BA	935	C
36	BA	941	A
36	BA	945	A
36	BA	946	G
36	BA	958	U
36	BA	959	A
36	BA	961	C
36	BA	964	C
36	BA	965	C
36	BA	974	G
36	BA	975	C
36	BA	980	A
36	BA	983	A
36	BA	985	C
36	BA	991	C
36	BA	996	A
36	BA	1005	C
36	BA	1011	G
36	BA	1012	U
36	BA	1013	C
36	BA	1022	G
36	BA	1025	G
36	BA	1026	U
36	BA	1027	A
36	BA	1033	U
36	BA	1039	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	1045	A
36	BA	1047	G
36	BA	1048	A
36	BA	1051	G
36	BA	1053	C
36	BA	1059	G
36	BA	1061	U
36	BA	1062	G
36	BA	1065	U
36	BA	1067	A
36	BA	1068	G
36	BA	1069	A
36	BA	1070	A
36	BA	1071	G
36	BA	1072	C
36	BA	1073	A
36	BA	1079	C
36	BA	1087	G
36	BA	1088	A
36	BA	1091	G
36	BA	1098	A
36	BA	1103	A
36	BA	1107	G
36	BA	1108	U
36	BA	1111	A
36	BA	1112	G
36	BA	1114	G
36	BA	1129	A
36	BA	1130	U
36	BA	1135	C
36	BA	1136	G
36	BA	1142	U
36	BA	1143	A
36	BA	1152	C
36	BA	1154	G
36	BA	1155	A
36	BA	1157	G
36	BA	1167	U
36	BA	1170	G
36	BA	1171	G
36	BA	1174	A
36	BA	1175	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	1176	G
36	BA	1177	A
36	BA	1178	C
36	BA	1194	A
36	BA	1195	G
36	BA	1204	A
36	BA	1205	U
36	BA	1210	A
36	BA	1211	U
36	BA	1212	G
36	BA	1218	C
36	BA	1221	C
36	BA	1223	G
36	BA	1227	G
36	BA	1238	G
36	BA	1244	G
36	BA	1250	G
36	BA	1253	A
36	BA	1255	U
36	BA	1256	G
36	BA	1265	A
36	BA	1271	G
36	BA	1272	A
36	BA	1273	U
36	BA	1289	C
36	BA	1292	U
36	BA	1300	U
36	BA	1301	A
36	BA	1302	A
36	BA	1314	C
36	BA	1319	G
36	BA	1321	A
36	BA	1332	G
36	BA	1338	G
36	BA	1343	G
36	BA	1349	A
36	BA	1359	A
36	BA	1364	G
36	BA	1365	A
36	BA	1378	A
36	BA	1379	A
36	BA	1380	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	1384	A
36	BA	1385	G
36	BA	1386	C
36	BA	1396	U
36	BA	1398	C
36	BA	1404	C
36	BA	1407	C
36	BA	1416	G
36	BA	1419	A
36	BA	1420	U
36	BA	1421	G
36	BA	1427	A
36	BA	1428	C
36	BA	1433	U
36	BA	1437	C
36	BA	1445	A
36	BA	1449	A
36	BA	1453	U
36	BA	1455	G
36	BA	1459	G
36	BA	1460	A
36	BA	1461	G
36	BA	1467	C
36	BA	1471	A
36	BA	1475	G
36	BA	1478	G
36	BA	1482	G
36	BA	1485	G
36	BA	1488	G
36	BA	1490	A
36	BA	1493	C
36	BA	1494	A
36	BA	1495	A
36	BA	1497	U
36	BA	1499	C
36	BA	1502	C
36	BA	1505	C
36	BA	1509	C
36	BA	1509(A)	A
36	BA	1512	U
36	BA	1517	G
36	BA	1528(A)	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	BA	1541	G
36	BA	1542	A
36	BA	1544	A
36	BA	1554	A
36	BA	1558	A
36	BA	1559	G
36	BA	1569	A
36	BA	1575	C
36	BA	1578	U
36	BA	1579	A
36	BA	1580	A
36	BA	1584	C
36	BA	1586	A
36	BA	1587	A
36	BA	1591	G
36	BA	1598	C
36	BA	1603	A
36	BA	1608	A
36	BA	1614	A
36	BA	1615	C
36	BA	1616	A
36	BA	1617	C
36	BA	1618	A
36	BA	1634	A
36	BA	1640	C
36	BA	1648	C
36	BA	1653	G
36	BA	1654	A
36	BA	1666	G
36	BA	1674	G
36	BA	1688	U
36	BA	1694	C
36	BA	1695	G
36	BA	1698	A
36	BA	1699	G
36	BA	1700	A
36	BA	1703	G
36	BA	1717	G
36	BA	1718	G
36	BA	1721	G
36	BA	1722	A
36	BA	1739	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	1740	G
36	BA	1742	G
36	BA	1748	G
36	BA	1756	G
36	BA	1763	G
36	BA	1764	G
36	BA	1773	A
36	BA	1780	A
36	BA	1781	C
36	BA	1782	C
36	BA	1791	A
36	BA	1799	G
36	BA	1800	C
36	BA	1801	G
36	BA	1816	G
36	BA	1817	G
36	BA	1820	U
36	BA	1821	A
36	BA	1833	U
36	BA	1835	G
36	BA	1838	C
36	BA	1839	G
36	BA	1847	A
36	BA	1848	A
36	BA	1858	G
36	BA	1865	G
36	BA	1866	C
36	BA	1878	G
36	BA	1881	C
36	BA	1882	C
36	BA	1885	A
36	BA	1888	G
36	BA	1900	A
36	BA	1902	C
36	BA	1903	G
36	BA	1906	G
36	BA	1912	A
36	BA	1913	A
36	BA	1929	G
36	BA	1930	G
36	BA	1936	A
36	BA	1938	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	1944	U
36	BA	1948	G
36	BA	1955	U
36	BA	1956	U
36	BA	1962	C
36	BA	1963	U
36	BA	1967	C
36	BA	1969	A
36	BA	1970	A
36	BA	1971	A
36	BA	1972	A
36	BA	1987	G
36	BA	1992	G
36	BA	1993	U
36	BA	1997	G
36	BA	2023	G
36	BA	2029	G
36	BA	2031	A
36	BA	2034	U
36	BA	2036	C
36	BA	2041	U
36	BA	2043	C
36	BA	2055	C
36	BA	2056	G
36	BA	2060	A
36	BA	2061	G
36	BA	2062	A
36	BA	2069	G
36	BA	2093	G
36	BA	2096	U
36	BA	2100	G
36	BA	2102	U
36	BA	2103	C
36	BA	2104	G
36	BA	2107	C
36	BA	2108	C
36	BA	2109	U
36	BA	2111	C
36	BA	2116	G
36	BA	2117	A
36	BA	2118	U
36	BA	2127	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	BA	2128	C
36	BA	2129	C
36	BA	2131	G
36	BA	2132	U
36	BA	2133	G
36	BA	2145	C
36	BA	2146	C
36	BA	2147	G
36	BA	2156	G
36	BA	2160	G
36	BA	2165	G
36	BA	2172	U
36	BA	2173	A
36	BA	2174	C
36	BA	2179	C
36	BA	2180	U
36	BA	2183	C
36	BA	2185	C
36	BA	2186	G
36	BA	2187	G
36	BA	2189	U
36	BA	2190	G
36	BA	2192	G
36	BA	2193	G
36	BA	2198	A
36	BA	2200	C
36	BA	2203	U
36	BA	2207	G
36	BA	2208	A
36	BA	2218	U
36	BA	2219	G
36	BA	2225	A
36	BA	2238	G
36	BA	2269	A
36	BA	2275	C
36	BA	2283	C
36	BA	2287	A
36	BA	2305	A
36	BA	2307	G
36	BA	2308	G
36	BA	2311	A
36	BA	2312	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	2313	C
36	BA	2319	G
36	BA	2320	A
36	BA	2327	A
36	BA	2336	A
36	BA	2342	C
36	BA	2343	C
36	BA	2345	G
36	BA	2347	C
36	BA	2350	C
36	BA	2361	A
36	BA	2383	G
36	BA	2385	C
36	BA	2390	U
36	BA	2392	A
36	BA	2399	G
36	BA	2402	C
36	BA	2405	G
36	BA	2406	U
36	BA	2423	U
36	BA	2424	C
36	BA	2425	A
36	BA	2427	C
36	BA	2429	G
36	BA	2430	A
36	BA	2434	A
36	BA	2439	A
36	BA	2441	C
36	BA	2448	A
36	BA	2465	C
36	BA	2469	A
36	BA	2470	G
36	BA	2476	A
36	BA	2477	C
36	BA	2478	A
36	BA	2482	G
36	BA	2494	G
36	BA	2497	A
36	BA	2505	G
36	BA	2509	G
36	BA	2518	A
36	BA	2521	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	2524	G
36	BA	2529	G
36	BA	2543	G
36	BA	2554	U
36	BA	2566	A
36	BA	2567	G
36	BA	2572	A
36	BA	2573	C
36	BA	2578	G
36	BA	2582	G
36	BA	2586	C
36	BA	2593	U
36	BA	2602	A
36	BA	2609	U
36	BA	2610	C
36	BA	2611	U
36	BA	2612	C
36	BA	2615	U
36	BA	2630	G
36	BA	2639	A
36	BA	2641	G
36	BA	2646	C
36	BA	2653	U
36	BA	2654	A
36	BA	2655	G
36	BA	2657	A
36	BA	2670	A
36	BA	2673	G
36	BA	2675	A
36	BA	2682	U
36	BA	2690	C
36	BA	2691	C
36	BA	2703	C
36	BA	2712	U
36	BA	2712(A)	A
36	BA	2713	A
36	BA	2720	U
36	BA	2726	U
36	BA	2732	G
36	BA	2733	A
36	BA	2750	A
36	BA	2751	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	2752	C
36	BA	2757	A
36	BA	2759	G
36	BA	2761	G
36	BA	2762	G
36	BA	2763	G
36	BA	2765	A
36	BA	2766	G
36	BA	2777	G
36	BA	2778	A
36	BA	2779	U
36	BA	2780	G
36	BA	2781	A
36	BA	2787	C
36	BA	2789	C
36	BA	2790	A
36	BA	2791	C
36	BA	2794	C
36	BA	2801	A
36	BA	2801(A)	A
36	BA	2802	G
36	BA	2803	C
36	BA	2808	U
36	BA	2811	G
36	BA	2813	A
36	BA	2817	G
36	BA	2818	G
36	BA	2820	A
36	BA	2821	A
36	BA	2833	G
36	BA	2834	G
36	BA	2835	A
36	BA	2849	U
36	BA	2872	G
36	BA	2879	C
36	BA	2883	A
36	BA	2893	G
37	BB	2	C
37	BB	8	U
37	BB	12	C
37	BB	13	A
37	BB	15	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	BB	16	G
37	BB	17	C
37	BB	19	G
37	BB	21	G
37	BB	25	A
37	BB	26	A
37	BB	32	C
37	BB	35	U
37	BB	39	A
37	BB	40	U
37	BB	41	U
37	BB	42	C
37	BB	43	C
37	BB	45	A
37	BB	53	A
37	BB	57	A
37	BB	68	C
37	BB	73	A
37	BB	75	G
37	BB	81	G
37	BB	88	C
37	BB	101	G
37	BB	110	G
37	BB	113	G
1	CA	8	A
1	CA	9	G
1	CA	31	G
1	CA	32	A
1	CA	39	G
1	CA	47	C
1	CA	48	C
1	CA	51	A
1	CA	55	A
1	CA	61	G
1	CA	65	U
1	CA	66	G
1	CA	79	G
1	CA	80	G
1	CA	81	U
1	CA	82	U
1	CA	84	U
1	CA	89	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	90	U
1	CA	101	A
1	CA	109	A
1	CA	110	C
1	CA	116	A
1	CA	120	A
1	CA	121	C
1	CA	122	G
1	CA	129(A)	G
1	CA	131	C
1	CA	137	C
1	CA	144	G
1	CA	151	A
1	CA	174	C
1	CA	189(G)	G
1	CA	189(H)	G
1	CA	189(I)	G
1	CA	195	A
1	CA	197	A
1	CA	198	G
1	CA	199	G
1	CA	201	C
1	CA	203	U
1	CA	220	G
1	CA	244	U
1	CA	246	A
1	CA	247	G
1	CA	251	G
1	CA	267	C
1	CA	272	C
1	CA	275	G
1	CA	279	A
1	CA	281	G
1	CA	289	G
1	CA	328	C
1	CA	330	C
1	CA	332	G
1	CA	345	C
1	CA	346	G
1	CA	347	G
1	CA	348	G
1	CA	352	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	353	A
1	CA	354	G
1	CA	367	U
1	CA	368	U
1	CA	370	C
1	CA	372	C
1	CA	373	A
1	CA	389	A
1	CA	397	A
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	422	C
1	CA	423	G
1	CA	424	G
1	CA	428	G
1	CA	429	U
1	CA	430	A
1	CA	439	A
1	CA	452	A
1	CA	453	A
1	CA	454	C
1	CA	484	G
1	CA	485	G
1	CA	495	A
1	CA	496	A
1	CA	498	U
1	CA	499	A
1	CA	508	C
1	CA	509	A
1	CA	511	C
1	CA	512	U
1	CA	518	C
1	CA	527	G
1	CA	531	U
1	CA	532	A
1	CA	533	A
1	CA	534	U
1	CA	548	G
1	CA	561	U
1	CA	562	C
1	CA	563	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	564	C
1	CA	571	U
1	CA	572	A
1	CA	573	A
1	CA	575	G
1	CA	576	G
1	CA	577	G
1	CA	607	A
1	CA	630	G
1	CA	631	G
1	CA	632	A
1	CA	633	G
1	CA	642	A
1	CA	653	A
1	CA	665	A
1	CA	688	G
1	CA	701	C
1	CA	702	A
1	CA	721	G
1	CA	722	A
1	CA	723	U
1	CA	734	G
1	CA	748	C
1	CA	749	C
1	CA	755	G
1	CA	771	G
1	CA	777	A
1	CA	790	A
1	CA	793	U
1	CA	794	A
1	CA	816	A
1	CA	817	C
1	CA	818	G
1	CA	828	A
1	CA	839	U
1	CA	841	U
1	CA	848	C
1	CA	858	G
1	CA	859	A
1	CA	864	A
1	CA	885	G
1	CA	889	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	890	G
1	CA	902	G
1	CA	912	C
1	CA	914	A
1	CA	926	G
1	CA	927	G
1	CA	934	C
1	CA	935	A
1	CA	960	U
1	CA	961	U
1	CA	962	C
1	CA	966	G
1	CA	967	C
1	CA	968	A
1	CA	969	A
1	CA	971	G
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	981	U
1	CA	982	U
1	CA	983	A
1	CA	991	U
1	CA	992	U
1	CA	993	G
1	CA	996	A
1	CA	1001(A)	G
1	CA	1004	A
1	CA	1026	G
1	CA	1027	C
1	CA	1050	G
1	CA	1051	C
1	CA	1054	C
1	CA	1064	G
1	CA	1066	C
1	CA	1085	U
1	CA	1086	U
1	CA	1087	G
1	CA	1094	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1101	A
1	CA	1102	A
1	CA	1117	G
1	CA	1124	G
1	CA	1125	U
1	CA	1126	U
1	CA	1129	C
1	CA	1130	A
1	CA	1131	G
1	CA	1136	U
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1140	C
1	CA	1141	C
1	CA	1146	A
1	CA	1154	G
1	CA	1158	C
1	CA	1159	U
1	CA	1184	G
1	CA	1190	G
1	CA	1196	U
1	CA	1199	U
1	CA	1200	C
1	CA	1201	A
1	CA	1202	G
1	CA	1212	U
1	CA	1213	A
1	CA	1214	C
1	CA	1225	A
1	CA	1226	C
1	CA	1227	A
1	CA	1238	A
1	CA	1240	U
1	CA	1241	G
1	CA	1249	C
1	CA	1255	G
1	CA	1256	A
1	CA	1257	U
1	CA	1258	G
1	CA	1280	A
1	CA	1281	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1284	C
1	CA	1285	A
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	1303	C
1	CA	1305	G
1	CA	1306	A
1	CA	1317	C
1	CA	1320	C
1	CA	1322	C
1	CA	1323	G
1	CA	1331	G
1	CA	1335	C
1	CA	1337	G
1	CA	1338	G
1	CA	1347	G
1	CA	1348	U
1	CA	1349	A
1	CA	1359	C
1	CA	1363(A)	A
1	CA	1364	U
1	CA	1365	G
1	CA	1373	G
1	CA	1381	U
1	CA	1397	C
1	CA	1398	A
1	CA	1400	C
1	CA	1419	G
1	CA	1420	C
1	CA	1442	G
1	CA	1442(A)	G
1	CA	1442(B)	A
1	CA	1447	A
1	CA	1452	C
1	CA	1456	G
1	CA	1492	A
1	CA	1497	G
1	CA	1498	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	1508	G
1	CA	1517	G
1	CA	1519	A
1	CA	1520	G
1	CA	1529	G
1	CA	1530	G
1	CA	1531	A
22	CV	7	A
22	CV	8	U
22	CV	18	G
22	CV	20	U
22	CV	22	G
22	CV	41	C
22	CV	42	C
22	CV	46	G
22	CV	47	U
22	CV	48	C
22	CV	49	C
22	CV	50	U
22	CV	52	G
22	CV	59	U
22	CV	60	U
22	CV	61	C
22	CV	62	C
22	CV	69	G
22	CV	75	C
22	CV	76	A
22	CW	4	C
22	CW	8	U
22	CW	9	A
22	CW	10	G
22	CW	16	U
22	CW	17	C
22	CW	18	G
22	CW	19	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
22	CW	21	A
22	CW	39	U
22	CW	44	G
22	CW	45	U
22	CW	47	U
22	CW	49	C
22	CW	50	U
22	CW	59	U
22	CW	60	U
22	CW	61	C
22	CW	62	C
22	CW	70	G
22	CW	74	C
23	CX	16	A
23	CX	22	A
23	CX	26	A
23	CX	27	A
24	CY	2	C
24	CY	3	U
24	CY	9	A
24	CY	10	G
24	CY	12	U
24	CY	14	A
24	CY	16	H2U
24	CY	17	H2U
24	CY	18	G
24	CY	19	G
24	CY	20	H2U
24	CY	21	A
24	CY	22	G
24	CY	34	G
24	CY	41	G
24	CY	42	U
24	CY	43	G
24	CY	48	C
24	CY	55	PSU
24	CY	56	C
24	CY	57	G
24	CY	59	A
24	CY	61	C
24	CY	62	U
24	CY	72	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	CY	73	A
24	CY	75	C
24	CY	76	A
36	DA	10	G
36	DA	15	G
36	DA	27	G
36	DA	32	C
36	DA	34	C
36	DA	45	C
36	DA	49	A
36	DA	50	U
36	DA	61	G
36	DA	63	U
36	DA	69	C
36	DA	71	A
36	DA	72	U
36	DA	74	A
36	DA	75	G
36	DA	76	C
36	DA	82	G
36	DA	84	A
36	DA	85	G
36	DA	88	G
36	DA	90	U
36	DA	92	A
36	DA	94	C
36	DA	95	G
36	DA	96	G
36	DA	100	G
36	DA	102	G
36	DA	112	U
36	DA	118	A
36	DA	119	A
36	DA	120	U
36	DA	129	C
36	DA	139(A)	G
36	DA	141	A
36	DA	146	G
36	DA	153	C
36	DA	155	U
36	DA	174	C
36	DA	181	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	182	A
36	DA	196	A
36	DA	197	A
36	DA	198	C
36	DA	199	A
36	DA	204	A
36	DA	205	G
36	DA	215	G
36	DA	221	A
36	DA	222	A
36	DA	229	A
36	DA	230	U
36	DA	233	A
36	DA	244	A
36	DA	245	G
36	DA	248	G
36	DA	266	G
36	DA	267	C
36	DA	271(K)	U
36	DA	271(L)	U
36	DA	271(M)	G
36	DA	271(N)	U
36	DA	271(O)	C
36	DA	271(P)	C
36	DA	271(R)	G
36	DA	272(A)	U
36	DA	272(B)	G
36	DA	272(I)	U
36	DA	274	G
36	DA	276	A
36	DA	284	U
36	DA	288	C
36	DA	299	A
36	DA	300	A
36	DA	310	A
36	DA	312	G
36	DA	323	G
36	DA	329	G
36	DA	330	A
36	DA	331	A
36	DA	332	A
36	DA	333	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	338	G
36	DA	343	C
36	DA	344	G
36	DA	349	G
36	DA	352	G
36	DA	353	G
36	DA	356	G
36	DA	358	U
36	DA	362	U
36	DA	363	G
36	DA	363(F)	A
36	DA	364	C
36	DA	372	G
36	DA	386	G
36	DA	387	U
36	DA	388	G
36	DA	394	A
36	DA	396	G
36	DA	405	U
36	DA	406	G
36	DA	411	G
36	DA	412	A
36	DA	418	G
36	DA	428	A
36	DA	435	C
36	DA	444	C
36	DA	448	U
36	DA	451	C
36	DA	456	C
36	DA	457	A
36	DA	467	G
36	DA	470	A
36	DA	472	A
36	DA	473	G
36	DA	480	A
36	DA	481	G
36	DA	482	A
36	DA	483	A
36	DA	485	C
36	DA	494	G
36	DA	505	A
36	DA	508	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	509	C
36	DA	512	G
36	DA	525	U
36	DA	527	C
36	DA	528	A
36	DA	530	G
36	DA	531	C
36	DA	532	A
36	DA	533	G
36	DA	537	C
36	DA	556	G
36	DA	561	G
36	DA	562	U
36	DA	563	G
36	DA	572	A
36	DA	573	G
36	DA	575	A
36	DA	586	A
36	DA	588	U
36	DA	592	G
36	DA	599	G
36	DA	603	A
36	DA	604	G
36	DA	607	U
36	DA	613	G
36	DA	614(B)	G
36	DA	614(C)	A
36	DA	615	G
36	DA	620	G
36	DA	627	A
36	DA	629	G
36	DA	634	C
36	DA	637	A
36	DA	645	C
36	DA	646	A
36	DA	651	G
36	DA	653	A
36	DA	654	A
36	DA	654(J)	A
36	DA	654(K)	C
36	DA	656	G
36	DA	668	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	669	G
36	DA	670	A
36	DA	673	C
36	DA	686	G
36	DA	695	G
36	DA	708	C
36	DA	717	G
36	DA	719	C
36	DA	722	A
36	DA	730	C
36	DA	748	G
36	DA	753	C
36	DA	765	G
36	DA	776	G
36	DA	782	A
36	DA	784	A
36	DA	785	G
36	DA	790	C
36	DA	791	C
36	DA	792	G
36	DA	805	G
36	DA	812	C
36	DA	819	A
36	DA	827	U
36	DA	828	U
36	DA	830	G
36	DA	846	C
36	DA	848	G
36	DA	857	C
36	DA	859	G
36	DA	865	C
36	DA	866	A
36	DA	878	A
36	DA	889	C
36	DA	890	A
36	DA	896	A
36	DA	897	C
36	DA	904	C
36	DA	910	A
36	DA	917	A
36	DA	926	A
36	DA	932	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	933	A
36	DA	935	C
36	DA	941	A
36	DA	945	A
36	DA	946	G
36	DA	958	U
36	DA	959	A
36	DA	961	C
36	DA	964	C
36	DA	965	C
36	DA	973	A
36	DA	974	G
36	DA	975	C
36	DA	980	A
36	DA	983	A
36	DA	985	C
36	DA	991	C
36	DA	996	A
36	DA	1005	C
36	DA	1011	G
36	DA	1012	U
36	DA	1013	C
36	DA	1022	G
36	DA	1025	G
36	DA	1026	U
36	DA	1027	A
36	DA	1033	U
36	DA	1039	G
36	DA	1045	A
36	DA	1047	G
36	DA	1048	A
36	DA	1051	G
36	DA	1053	C
36	DA	1059	G
36	DA	1061	U
36	DA	1062	G
36	DA	1065	U
36	DA	1067	A
36	DA	1068	G
36	DA	1069	A
36	DA	1070	A
36	DA	1071	G

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	DA	1072	C
36	DA	1073	A
36	DA	1079	C
36	DA	1087	G
36	DA	1088	A
36	DA	1091	G
36	DA	1098	A
36	DA	1103	A
36	DA	1107	G
36	DA	1108	U
36	DA	1111	A
36	DA	1112	G
36	DA	1114	G
36	DA	1129	A
36	DA	1130	U
36	DA	1135	C
36	DA	1136	G
36	DA	1142	U
36	DA	1143	A
36	DA	1152	C
36	DA	1154	G
36	DA	1155	A
36	DA	1157	G
36	DA	1167	U
36	DA	1170	G
36	DA	1171	G
36	DA	1174	A
36	DA	1175	U
36	DA	1176	G
36	DA	1177	A
36	DA	1178	C
36	DA	1194	A
36	DA	1195	G
36	DA	1204	A
36	DA	1205	U
36	DA	1210	A
36	DA	1211	U
36	DA	1212	G
36	DA	1218	C
36	DA	1221	C
36	DA	1223	G
36	DA	1227	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	DA	1238	G
36	DA	1244	G
36	DA	1250	G
36	DA	1253	A
36	DA	1255	U
36	DA	1256	G
36	DA	1265	A
36	DA	1271	G
36	DA	1272	A
36	DA	1273	U
36	DA	1289	C
36	DA	1292	U
36	DA	1300	U
36	DA	1301	A
36	DA	1302	A
36	DA	1314	C
36	DA	1319	G
36	DA	1321	A
36	DA	1332	G
36	DA	1338	G
36	DA	1343	G
36	DA	1345	C
36	DA	1349	A
36	DA	1359	A
36	DA	1364	G
36	DA	1365	A
36	DA	1378	A
36	DA	1379	A
36	DA	1380	G
36	DA	1384	A
36	DA	1385	G
36	DA	1386	C
36	DA	1396	U
36	DA	1398	C
36	DA	1404	C
36	DA	1407	C
36	DA	1416	G
36	DA	1419	A
36	DA	1420	U
36	DA	1421	G
36	DA	1427	A
36	DA	1428	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	1433	U
36	DA	1437	C
36	DA	1445	A
36	DA	1449	A
36	DA	1453	U
36	DA	1455	G
36	DA	1459	G
36	DA	1460	A
36	DA	1461	G
36	DA	1467	C
36	DA	1471	A
36	DA	1475	G
36	DA	1478	G
36	DA	1482	G
36	DA	1485	G
36	DA	1488	G
36	DA	1490	A
36	DA	1493	C
36	DA	1494	A
36	DA	1495	A
36	DA	1497	U
36	DA	1499	C
36	DA	1502	C
36	DA	1505	C
36	DA	1509	C
36	DA	1509(A)	A
36	DA	1512	U
36	DA	1517	G
36	DA	1528(A)	A
36	DA	1541	G
36	DA	1542	A
36	DA	1544	A
36	DA	1554	A
36	DA	1558	A
36	DA	1559	G
36	DA	1567	A
36	DA	1569	A
36	DA	1575	C
36	DA	1578	U
36	DA	1579	A
36	DA	1580	A
36	DA	1584	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	1586	A
36	DA	1591	G
36	DA	1598	C
36	DA	1603	A
36	DA	1608	A
36	DA	1614	A
36	DA	1615	C
36	DA	1616	A
36	DA	1617	C
36	DA	1618	A
36	DA	1634	A
36	DA	1640	C
36	DA	1648	C
36	DA	1653	G
36	DA	1654	A
36	DA	1666	G
36	DA	1674	G
36	DA	1688	U
36	DA	1694	C
36	DA	1695	G
36	DA	1698	A
36	DA	1699	G
36	DA	1700	A
36	DA	1703	G
36	DA	1717	G
36	DA	1718	G
36	DA	1721	G
36	DA	1722	A
36	DA	1739	U
36	DA	1740	G
36	DA	1742	G
36	DA	1748	G
36	DA	1756	G
36	DA	1763	G
36	DA	1764	G
36	DA	1773	A
36	DA	1776	G
36	DA	1780	A
36	DA	1781	C
36	DA	1782	C
36	DA	1791	A
36	DA	1799	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	1800	C
36	DA	1801	G
36	DA	1816	G
36	DA	1817	G
36	DA	1820	U
36	DA	1821	A
36	DA	1835	G
36	DA	1838	C
36	DA	1839	G
36	DA	1847	A
36	DA	1848	A
36	DA	1858	G
36	DA	1865	G
36	DA	1866	C
36	DA	1878	G
36	DA	1881	C
36	DA	1882	C
36	DA	1885	A
36	DA	1888	G
36	DA	1900	A
36	DA	1902	C
36	DA	1903	G
36	DA	1906	G
36	DA	1912	A
36	DA	1913	A
36	DA	1929	G
36	DA	1930	G
36	DA	1936	A
36	DA	1938	A
36	DA	1944	U
36	DA	1948	G
36	DA	1955	U
36	DA	1956	U
36	DA	1962	C
36	DA	1963	U
36	DA	1967	C
36	DA	1969	A
36	DA	1970	A
36	DA	1971	A
36	DA	1972	A
36	DA	1987	G
36	DA	1992	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	DA	1993	U
36	DA	1997	G
36	DA	2023	G
36	DA	2029	G
36	DA	2031	A
36	DA	2032	G
36	DA	2034	U
36	DA	2036	C
36	DA	2041	U
36	DA	2043	C
36	DA	2055	C
36	DA	2056	G
36	DA	2060	A
36	DA	2061	G
36	DA	2062	A
36	DA	2069	G
36	DA	2093	G
36	DA	2096	U
36	DA	2100	G
36	DA	2102	U
36	DA	2103	C
36	DA	2104	G
36	DA	2107	C
36	DA	2108	C
36	DA	2109	U
36	DA	2111	C
36	DA	2116	G
36	DA	2117	A
36	DA	2118	U
36	DA	2127	G
36	DA	2128	C
36	DA	2129	C
36	DA	2131	G
36	DA	2132	U
36	DA	2133	G
36	DA	2145	C
36	DA	2146	C
36	DA	2147	G
36	DA	2156	G
36	DA	2160	G
36	DA	2165	G
36	DA	2172	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	2173	A
36	DA	2174	C
36	DA	2179	C
36	DA	2180	U
36	DA	2183	C
36	DA	2185	C
36	DA	2186	G
36	DA	2187	G
36	DA	2189	U
36	DA	2190	G
36	DA	2192	G
36	DA	2193	G
36	DA	2198	A
36	DA	2199	A
36	DA	2200	C
36	DA	2203	U
36	DA	2207	G
36	DA	2208	A
36	DA	2218	U
36	DA	2219	G
36	DA	2225	A
36	DA	2238	G
36	DA	2269	A
36	DA	2275	C
36	DA	2283	C
36	DA	2287	A
36	DA	2305	A
36	DA	2307	G
36	DA	2308	G
36	DA	2311	A
36	DA	2312	U
36	DA	2313	C
36	DA	2319	G
36	DA	2320	A
36	DA	2327	A
36	DA	2336	A
36	DA	2342	C
36	DA	2343	C
36	DA	2345	G
36	DA	2347	C
36	DA	2350	C
36	DA	2361	A

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	DA	2383	G
36	DA	2385	C
36	DA	2392	A
36	DA	2399	G
36	DA	2402	C
36	DA	2405	G
36	DA	2406	U
36	DA	2423	U
36	DA	2424	C
36	DA	2425	A
36	DA	2427	C
36	DA	2429	G
36	DA	2430	A
36	DA	2434	A
36	DA	2439	A
36	DA	2441	C
36	DA	2448	A
36	DA	2465	C
36	DA	2469	A
36	DA	2470	G
36	DA	2476	A
36	DA	2477	C
36	DA	2478	A
36	DA	2482	G
36	DA	2494	G
36	DA	2497	A
36	DA	2502	G
36	DA	2505	G
36	DA	2509	G
36	DA	2518	A
36	DA	2521	C
36	DA	2524	G
36	DA	2529	G
36	DA	2543	G
36	DA	2554	U
36	DA	2566	A
36	DA	2567	G
36	DA	2572	A
36	DA	2578	G
36	DA	2582	G
36	DA	2586	C
36	DA	2593	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	2602	A
36	DA	2609	U
36	DA	2610	C
36	DA	2611	U
36	DA	2612	C
36	DA	2615	U
36	DA	2630	G
36	DA	2639	A
36	DA	2641	G
36	DA	2646	C
36	DA	2653	U
36	DA	2654	A
36	DA	2655	G
36	DA	2657	A
36	DA	2670	A
36	DA	2673	G
36	DA	2675	A
36	DA	2682	U
36	DA	2690	C
36	DA	2691	C
36	DA	2703	C
36	DA	2712	U
36	DA	2712(A)	A
36	DA	2713	A
36	DA	2720	U
36	DA	2726	U
36	DA	2732	G
36	DA	2733	A
36	DA	2750	A
36	DA	2751	G
36	DA	2752	C
36	DA	2757	A
36	DA	2759	G
36	DA	2761	G
36	DA	2762	G
36	DA	2763	G
36	DA	2765	A
36	DA	2766	G
36	DA	2777	G
36	DA	2778	A
36	DA	2779	U
36	DA	2780	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	DA	2781	A
36	DA	2787	C
36	DA	2789	C
36	DA	2790	A
36	DA	2791	C
36	DA	2794	C
36	DA	2801	A
36	DA	2801(A)	A
36	DA	2802	G
36	DA	2803	C
36	DA	2808	U
36	DA	2811	G
36	DA	2813	A
36	DA	2817	G
36	DA	2818	G
36	DA	2820	A
36	DA	2821	A
36	DA	2833	G
36	DA	2834	G
36	DA	2835	A
36	DA	2849	U
36	DA	2872	G
36	DA	2879	C
36	DA	2880	C
36	DA	2883	A
36	DA	2893	G
37	DB	2	C
37	DB	8	U
37	DB	12	C
37	DB	13	A
37	DB	15	A
37	DB	16	G
37	DB	17	C
37	DB	19	G
37	DB	21	G
37	DB	25	A
37	DB	26	A
37	DB	32	C
37	DB	35	U
37	DB	39	A
37	DB	40	U
37	DB	41	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	DB	42	C
37	DB	43	C
37	DB	45	A
37	DB	53	A
37	DB	57	A
37	DB	68	C
37	DB	73	A
37	DB	75	G
37	DB	81	G
37	DB	88	C
37	DB	101	G
37	DB	110	G
37	DB	113	G

All (234) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	13	U
1	AA	30	U
1	AA	47	C
1	AA	60	A
1	AA	64	G
1	AA	79	G
1	AA	109	A
1	AA	115	G
1	AA	119	A
1	AA	197	A
1	AA	202	U
1	AA	243	A
1	AA	250	A
1	AA	266	G
1	AA	274	A
1	AA	344	A
1	AA	351	G
1	AA	388	G
1	AA	412	A
1	AA	428	G
1	AA	429	U
1	AA	484	G
1	AA	495	A
1	AA	508	C
1	AA	534	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	547	A
1	AA	560	U
1	AA	575	G
1	AA	641	U
1	AA	687	A
1	AA	748	C
1	AA	792	A
1	AA	817	C
1	AA	858	G
1	AA	889	A
1	AA	960	U
1	AA	961	U
1	AA	965	A
1	AA	968	A
1	AA	974	A
1	AA	982	U
1	AA	992	U
1	AA	1049	U
1	AA	1050	G
1	AA	1053	G
1	AA	1101	A
1	AA	1145	C
1	AA	1157	A
1	AA	1200	C
1	AA	1239	A
1	AA	1280	A
1	AA	1285	A
1	AA	1305	G
1	AA	1363(A)	A
1	AA	1380	U
1	AA	1399	C
1	AA	1498	U
1	AA	1504	G
1	AA	1529	G
22	AW	7	A
22	AW	44	G
36	BA	49	A
36	BA	71	A
36	BA	74	A
36	BA	83	G
36	BA	197	A
36	BA	199	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	214	G
36	BA	221	A
36	BA	265	A
36	BA	331	A
36	BA	332	A
36	BA	363(F)	A
36	BA	387	U
36	BA	481	G
36	BA	587	C
36	BA	603	A
36	BA	614(A)	U
36	BA	614(C)	A
36	BA	752	A
36	BA	764	A
36	BA	790	C
36	BA	856	C
36	BA	1052	C
36	BA	1060	U
36	BA	1068	G
36	BA	1069	A
36	BA	1210	A
36	BA	1300	U
36	BA	1301	A
36	BA	1378	A
36	BA	1427	A
36	BA	1541	G
36	BA	1558	A
36	BA	1603	A
36	BA	1653	G
36	BA	1693	U
36	BA	1799	G
36	BA	1819	A
36	BA	1820	U
36	BA	1966	A
36	BA	1970	A
36	BA	1992	G
36	BA	2033	A
36	BA	2110	G
36	BA	2126	A
36	BA	2131	G
36	BA	2179	C
36	BA	2282	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BA	2391	G
36	BA	2422	A
36	BA	2481	G
36	BA	2610	C
36	BA	2689	U
36	BA	2756	U
36	BA	2762	G
37	BB	56	G
1	CA	13	U
1	CA	30	U
1	CA	47	C
1	CA	60	A
1	CA	64	G
1	CA	79	G
1	CA	109	A
1	CA	115	G
1	CA	119	A
1	CA	197	A
1	CA	202	U
1	CA	243	A
1	CA	250	A
1	CA	266	G
1	CA	274	A
1	CA	344	A
1	CA	351	G
1	CA	388	G
1	CA	412	A
1	CA	428	G
1	CA	429	U
1	CA	484	G
1	CA	495	A
1	CA	508	C
1	CA	547	A
1	CA	560	U
1	CA	575	G
1	CA	641	U
1	CA	687	A
1	CA	748	C
1	CA	792	A
1	CA	817	C
1	CA	858	G
1	CA	889	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	960	U
1	CA	961	U
1	CA	965	A
1	CA	968	A
1	CA	974	A
1	CA	982	U
1	CA	992	U
1	CA	1049	U
1	CA	1050	G
1	CA	1053	G
1	CA	1101	A
1	CA	1145	C
1	CA	1157	A
1	CA	1200	C
1	CA	1239	A
1	CA	1280	A
1	CA	1285	A
1	CA	1305	G
1	CA	1363(A)	A
1	CA	1380	U
1	CA	1399	C
1	CA	1498	U
1	CA	1504	G
1	CA	1507	A
1	CA	1528	U
22	CW	7	A
22	CW	44	G
36	DA	49	A
36	DA	71	A
36	DA	74	A
36	DA	83	G
36	DA	197	A
36	DA	199	A
36	DA	214	G
36	DA	221	A
36	DA	265	A
36	DA	331	A
36	DA	332	A
36	DA	363(F)	A
36	DA	387	U
36	DA	481	G
36	DA	527	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	DA	587	C
36	DA	603	A
36	DA	614(A)	U
36	DA	614(C)	A
36	DA	752	A
36	DA	764	A
36	DA	790	C
36	DA	856	C
36	DA	1052	C
36	DA	1060	U
36	DA	1068	G
36	DA	1069	A
36	DA	1210	A
36	DA	1300	U
36	DA	1301	A
36	DA	1378	A
36	DA	1427	A
36	DA	1541	G
36	DA	1558	A
36	DA	1603	A
36	DA	1653	G
36	DA	1693	U
36	DA	1799	G
36	DA	1819	A
36	DA	1820	U
36	DA	1970	A
36	DA	1992	G
36	DA	2033	A
36	DA	2110	G
36	DA	2126	A
36	DA	2131	G
36	DA	2179	C
36	DA	2282	G
36	DA	2391	G
36	DA	2422	A
36	DA	2481	G
36	DA	2610	C
36	DA	2689	U
36	DA	2756	U
36	DA	2762	G
37	DB	56	G

## 5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

14 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 2$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z  > 2$	Counts	RMSZ	# $ Z  > 2$
24	H2U	AY	16	24	19,21,22	1.11	3 (15%)	27,30,33	1.82	6 (22%)
24	H2U	AY	17	24	19,21,22	1.03	1 (5%)	27,30,33	1.86	5 (18%)
24	H2U	AY	20	24	19,21,22	1.03	1 (5%)	27,30,33	1.69	4 (14%)
24	YG	AY	37	24	40,42,43	1.46	4 (10%)	50,62,65	4.13	14 (28%)
24	7MG	AY	46	24	24,26,27	2.29	4 (16%)	34,39,42	2.33	6 (17%)
24	5MU	AY	54	24	20,22,23	1.04	2 (10%)	25,32,35	1.33	2 (8%)
24	PSU	AY	55	24	19,21,22	1.49	3 (15%)	23,30,33	1.39	3 (13%)
24	H2U	CY	16	24	19,21,22	1.11	3 (15%)	27,30,33	1.83	6 (22%)
24	H2U	CY	17	24	19,21,22	1.10	1 (5%)	27,30,33	1.85	5 (18%)
24	H2U	CY	20	24	19,21,22	0.99	0	27,30,33	1.70	4 (14%)
24	YG	CY	37	24	40,42,43	1.45	5 (12%)	50,62,65	4.32	14 (28%)
24	7MG	CY	46	24	24,26,27	2.33	3 (12%)	34,39,42	2.31	6 (17%)
24	5MU	CY	54	24	20,22,23	1.07	2 (10%)	25,32,35	1.37	2 (8%)
24	PSU	CY	55	24	19,21,22	1.49	3 (15%)	23,30,33	1.41	3 (13%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	H2U	AY	16	24	-	0/8/38/39	0/2/2/2
24	H2U	AY	17	24	-	0/8/38/39	0/2/2/2
24	H2U	AY	20	24	-	0/8/38/39	0/2/2/2
24	YG	AY	37	24	-	0/25/42/43	0/4/4/4
24	7MG	AY	46	24	-	1/8/37/38	0/3/3/3
24	5MU	AY	54	24	-	0/6/25/26	0/2/2/2
24	PSU	AY	55	24	-	0/8/25/26	0/2/2/2

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	H2U	CY	16	24	-	0/8/38/39	0/2/2/2
24	H2U	CY	17	24	-	0/8/38/39	0/2/2/2
24	H2U	CY	20	24	-	0/8/38/39	0/2/2/2
24	YG	CY	37	24	-	0/25/42/43	0/4/4/4
24	7MG	CY	46	24	-	1/8/37/38	0/3/3/3
24	5MU	CY	54	24	-	0/6/25/26	0/2/2/2
24	PSU	CY	55	24	-	0/8/25/26	0/2/2/2

All (35) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	CY	46	7MG	C8-N9	-10.20	1.38	1.46
24	AY	46	7MG	C8-N9	-9.97	1.38	1.46
24	AY	37	YG	C2-N2	-5.09	1.29	1.36
24	CY	37	YG	C2-N2	-4.89	1.30	1.36
24	AY	37	YG	C12-N1	4.77	1.43	1.39
24	AY	55	PSU	C5-C1'	4.51	1.56	1.52
24	CY	37	YG	C12-N1	4.45	1.43	1.39
24	CY	55	PSU	C5-C1'	4.43	1.56	1.52
24	CY	55	PSU	C4-C5	2.93	1.47	1.40
24	CY	46	7MG	C8-N7	-2.92	1.30	1.44
24	AY	46	7MG	C8-N7	-2.90	1.31	1.44
24	AY	55	PSU	C4-C5	2.87	1.47	1.40
24	AY	37	YG	C8-N7	-2.86	1.29	1.34
24	CY	17	H2U	P-OP1	2.84	1.50	1.46
24	AY	16	H2U	C1'-N1	2.83	1.51	1.45
24	CY	37	YG	C5-N7	-2.72	1.34	1.38
24	AY	37	YG	C5-N7	-2.61	1.35	1.38
24	AY	55	PSU	C6-N1	2.59	1.39	1.35
24	CY	55	PSU	C6-N1	2.56	1.39	1.35
24	CY	16	H2U	P-OP1	2.55	1.49	1.46
24	CY	16	H2U	C1'-N1	2.51	1.51	1.45
24	CY	54	5MU	C6-N1	2.42	1.38	1.34
24	AY	54	5MU	C6-N1	2.34	1.38	1.34
24	CY	46	7MG	P-OP1	2.33	1.49	1.46
24	AY	54	5MU	C6-C5	-2.33	1.33	1.40
24	AY	17	H2U	P-OP1	2.33	1.49	1.46
24	AY	20	H2U	P-OP1	2.30	1.49	1.46
24	CY	37	YG	C8-N7	-2.25	1.30	1.34
24	CY	37	YG	P-OP1	2.22	1.49	1.46
24	AY	46	7MG	P-OP1	2.17	1.49	1.46
24	CY	54	5MU	C6-C5	-2.17	1.34	1.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	AY	16	H2U	C6-N1	2.15	1.50	1.47
24	AY	16	H2U	P-OP1	2.13	1.49	1.46
24	AY	46	7MG	C6-N1	2.10	1.39	1.36
24	CY	16	H2U	C6-N1	2.09	1.50	1.47

All (80) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	CY	37	YG	C6-C5-N7	-26.61	132.82	134.24
24	AY	37	YG	C6-C5-N7	-25.16	132.90	134.24
24	AY	46	7MG	C6-N1-C2	8.92	125.24	120.20
24	CY	46	7MG	C6-N1-C2	8.85	125.20	120.20
24	AY	46	7MG	N7-C8-N9	7.52	113.11	103.13
24	CY	46	7MG	N7-C8-N9	7.47	113.05	103.13
24	AY	37	YG	C13-C12-N1	6.86	130.97	123.02
24	CY	37	YG	C13-C12-N1	6.80	130.90	123.02
24	CY	17	H2U	C4-N3-C2	-5.54	121.29	125.74
24	AY	16	H2U	C4-N3-C2	-5.45	121.36	125.74
24	CY	16	H2U	C4-N3-C2	-5.45	121.36	125.74
24	AY	17	H2U	C4-N3-C2	-5.43	121.38	125.74
24	CY	37	YG	C24-O23-C21	5.20	122.04	115.64
24	CY	37	YG	C13-C12-C11	-5.16	123.77	131.05
24	CY	54	5MU	C6-N1-C2	-4.99	120.99	122.41
24	AY	37	YG	C13-C12-C11	-4.98	124.03	131.05
24	AY	37	YG	C24-O23-C21	4.96	121.74	115.64
24	AY	54	5MU	C6-N1-C2	-4.70	121.07	122.41
24	CY	20	H2U	C4-N3-C2	-4.63	122.02	125.74
24	AY	20	H2U	C4-N3-C2	-4.60	122.05	125.74
24	CY	20	H2U	N3-C2-N1	4.57	121.22	116.65
24	AY	20	H2U	N3-C2-N1	4.53	121.19	116.65
24	CY	17	H2U	N3-C2-N1	4.44	121.09	116.65
24	AY	17	H2U	N3-C2-N1	4.40	121.05	116.65
24	AY	37	YG	O23-C21-N20	4.38	119.06	110.72
24	CY	20	H2U	C5-C4-N3	4.31	120.89	116.76
24	AY	20	H2U	C5-C4-N3	4.27	120.84	116.76
24	CY	37	YG	O23-C21-N20	4.25	118.80	110.72
24	CY	16	H2U	N3-C2-N1	4.16	120.81	116.65
24	AY	17	H2U	C5-C4-N3	4.08	120.67	116.76
24	CY	17	H2U	C5-C4-N3	4.08	120.66	116.76
24	AY	16	H2U	N3-C2-N1	3.94	120.59	116.65
24	AY	16	H2U	C5-C4-N3	3.73	120.33	116.76
24	AY	37	YG	N2-C2-N1	-3.68	108.21	113.26

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	CY	37	YG	N2-C2-N1	-3.62	108.29	113.26
24	CY	55	PSU	O3'-C3'-C4'	3.61	121.70	111.07
24	AY	55	PSU	O3'-C3'-C4'	3.53	121.47	111.07
24	CY	55	PSU	O3'-C3'-C2'	3.47	123.05	111.83
24	AY	55	PSU	O3'-C3'-C2'	3.45	123.00	111.83
24	CY	16	H2U	C5-C4-N3	3.42	120.04	116.76
24	AY	46	7MG	C4-C5-N7	3.42	110.75	106.82
24	CY	46	7MG	C4-C5-N7	3.39	110.72	106.82
24	CY	37	YG	O18-C16-C15	3.19	120.27	111.57
24	AY	37	YG	O18-C16-C15	3.18	120.24	111.57
24	CY	37	YG	C11-N2-C2	3.02	110.96	107.23
24	AY	37	YG	C11-N2-C2	2.99	110.92	107.23
24	AY	37	YG	O23-C21-O22	-2.87	120.93	124.69
24	AY	37	YG	O22-C21-N20	-2.84	120.01	124.88
24	CY	37	YG	C11-C12-N1	2.82	105.33	104.24
24	CY	37	YG	O23-C21-O22	-2.79	121.04	124.69
24	CY	37	YG	O22-C21-N20	-2.75	120.16	124.88
24	AY	37	YG	C3-N3-C4	2.67	122.62	118.47
24	CY	37	YG	C3-N3-C4	2.61	122.53	118.47
24	AY	17	H2U	C1'-N1-C2	2.42	121.62	118.27
24	CY	16	H2U	C2'-C1'-N1	-2.39	109.13	114.61
24	CY	17	H2U	C1'-N1-C2	2.38	121.56	118.27
24	AY	46	7MG	C8-N9-C1'	2.34	127.53	121.06
24	CY	16	H2U	O2-C2-N1	-2.30	120.20	123.28
24	CY	37	YG	C19-O18-C16	2.29	121.45	116.00
24	CY	55	PSU	C4-N3-C2	-2.26	120.78	125.36
24	AY	16	H2U	C2'-C1'-N1	-2.25	109.43	114.61
24	CY	54	5MU	C5-C6-N1	2.24	124.03	122.02
24	CY	37	YG	O2'-C2'-C1'	-2.24	104.41	111.49
24	CY	46	7MG	C8-N9-C1'	2.23	127.22	121.06
24	AY	46	7MG	C8-N7-C5	-2.23	104.39	108.83
24	CY	46	7MG	C8-N7-C5	-2.21	104.43	108.83
24	AY	55	PSU	C4-N3-C2	-2.20	120.89	125.36
24	AY	37	YG	C19-O18-C16	2.20	121.25	116.00
24	AY	54	5MU	C5-C6-N1	2.19	123.99	122.02
24	AY	16	H2U	O2-C2-N1	-2.16	120.40	123.28
24	AY	37	YG	C4-C5-N7	-2.15	107.33	109.41
24	CY	20	H2U	O2-C2-N1	-2.14	120.41	123.28
24	AY	37	YG	O2'-C2'-C1'	-2.14	104.73	111.49
24	CY	16	H2U	C6-N1-C2	-2.12	119.07	122.29
24	AY	16	H2U	C6-N1-C2	-2.12	119.07	122.29
24	CY	17	H2U	O2-C2-N1	-2.08	120.50	123.28

*Continued on next page...*

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	CY	46	7MG	CM7-N7-C8	2.07	127.18	119.61
24	AY	17	H2U	O2-C2-N1	-2.07	120.52	123.28
24	AY	46	7MG	CM7-N7-C8	2.06	127.15	119.61
24	AY	20	H2U	O2-C2-N1	-2.03	120.57	123.28

There are no chirality outliers.

All (2) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	AY	46	7MG	OP2-P-O5'-C5'
24	CY	46	7MG	OP2-P-O5'-C5'

There are no ring outliers.

## 5.5 Carbohydrates

There are no carbohydrates in this entry.

## 5.6 Ligand geometry

Of 16 ligands modelled in this entry, 10 are monoatomic - leaving 6 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 2$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
59	PAR	AA	1601	-	45,45,45	1.37	5 (11%)	67,67,67	1.45	8 (11%)
62	GDP	AZ	501	-	30,30,30	1.39	5 (16%)	45,47,47	1.94	8 (17%)
63	KIR	AZ	502	-	59,59,59	3.59	22 (37%)	82,84,84	1.69	18 (21%)
59	PAR	CA	1601	-	45,45,45	1.35	4 (8%)	67,67,67	1.38	9 (13%)
62	GDP	CZ	501	-	30,30,30	1.42	5 (16%)	45,47,47	1.75	7 (15%)
63	KIR	CZ	502	-	59,59,59	3.62	27 (45%)	82,84,84	1.71	17 (20%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral



centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	PAR	AA	1601	-	-	0/18/94/94	0/4/4/4
62	GDP	AZ	501	-	-	0/16/32/32	0/3/3/3
63	KIR	AZ	502	-	-	0/54/98/98	0/3/3/3
59	PAR	CA	1601	-	-	0/18/94/94	0/4/4/4
62	GDP	CZ	501	-	-	0/16/32/32	0/3/3/3
63	KIR	CZ	502	-	-	0/54/98/98	0/3/3/3

All (68) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
63	AZ	502	KIR	O18-C17	-13.72	1.22	1.44
63	CZ	502	KIR	O18-C17	-13.62	1.22	1.44
63	CZ	502	KIR	O30-C30	-11.60	1.18	1.42
63	AZ	502	KIR	O30-C30	-11.52	1.18	1.42
63	AZ	502	KIR	O34-C33	-11.22	1.29	1.44
63	CZ	502	KIR	O34-C33	-11.10	1.29	1.44
63	CZ	502	KIR	C45-C28	7.24	1.63	1.54
63	AZ	502	KIR	C45-C28	6.85	1.62	1.54
63	CZ	502	KIR	C22-C21	6.40	1.39	1.34
63	AZ	502	KIR	C22-C21	5.90	1.38	1.34
63	CZ	502	KIR	C19-C20	4.92	1.62	1.53
63	CZ	502	KIR	C27-N26	4.92	1.44	1.33
63	AZ	502	KIR	C27-N26	4.52	1.43	1.33
63	AZ	502	KIR	C19-C20	4.51	1.61	1.53
63	AZ	502	KIR	C37-C38	4.15	1.39	1.32
63	AZ	502	KIR	C5-C4	4.01	1.47	1.39
63	AZ	502	KIR	C29-C28	3.93	1.63	1.54
59	AA	1601	PAR	C34-C24	3.93	1.58	1.53
63	CZ	502	KIR	C37-C38	3.89	1.39	1.32
63	CZ	502	KIR	O29-C29	3.71	1.48	1.40
63	CZ	502	KIR	C8-C7	3.71	1.57	1.47
63	CZ	502	KIR	C5-C4	3.61	1.46	1.39
63	AZ	502	KIR	O29-C29	3.61	1.47	1.40
63	CZ	502	KIR	C19-C17	3.60	1.64	1.54
63	AZ	502	KIR	C8-C7	3.43	1.57	1.47
62	AZ	501	GDP	C5-N7	-3.41	1.34	1.38
63	CZ	502	KIR	C29-C28	3.35	1.62	1.54
59	AA	1601	PAR	O54-C14	3.35	1.50	1.41
63	AZ	502	KIR	C19-C17	3.33	1.63	1.54
63	CZ	502	KIR	C42-C19	3.31	1.61	1.53

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
63	CZ	502	KIR	O34-C29	3.25	1.49	1.43
63	AZ	502	KIR	O34-C29	3.24	1.49	1.43
63	AZ	502	KIR	C42-C19	3.15	1.60	1.53
59	CA	1601	PAR	C52-C42	3.08	1.58	1.52
62	CZ	501	GDP	C4-N9	-3.03	1.33	1.37
62	CZ	501	GDP	C5-N7	-3.03	1.34	1.38
59	CA	1601	PAR	C31-C21	2.98	1.57	1.53
62	CZ	501	GDP	C6-N1	2.90	1.40	1.36
59	CA	1601	PAR	O54-C14	2.90	1.49	1.41
62	AZ	501	GDP	O4'-C1'	2.85	1.44	1.41
62	AZ	501	GDP	C2-N1	2.85	1.41	1.36
62	CZ	501	GDP	O4'-C1'	2.84	1.44	1.41
63	AZ	502	KIR	C3-C7	2.64	1.55	1.50
62	AZ	501	GDP	C8-N9	-2.50	1.32	1.36
62	AZ	501	GDP	C6-N1	2.44	1.40	1.36
63	CZ	502	KIR	C20-C21	2.43	1.55	1.51
59	AA	1601	PAR	C11-C21	2.34	1.57	1.52
63	CZ	502	KIR	C3-C7	2.32	1.54	1.50
63	AZ	502	KIR	C3-C4	2.32	1.48	1.41
63	CZ	502	KIR	C3-C4	2.29	1.48	1.41
63	CZ	502	KIR	O20-C20	2.29	1.47	1.42
63	AZ	502	KIR	C2-N1	2.28	1.40	1.36
63	CZ	502	KIR	C32-C31	2.27	1.59	1.55
62	CZ	501	GDP	C2-N1	2.25	1.40	1.36
59	AA	1601	PAR	C64-C54	2.22	1.57	1.51
63	CZ	502	KIR	C44-C21	2.22	1.55	1.50
63	AZ	502	KIR	C20-C21	2.19	1.55	1.51
63	AZ	502	KIR	C29-C30	2.18	1.57	1.53
63	AZ	502	KIR	C16-C17	2.16	1.58	1.53
63	CZ	502	KIR	C32-C33	2.16	1.58	1.55
59	CA	1601	PAR	C34-C24	2.15	1.56	1.53
59	AA	1601	PAR	C52-C42	2.13	1.56	1.52
63	CZ	502	KIR	C31-C30	2.12	1.58	1.53
63	AZ	502	KIR	C9-C8	2.12	1.41	1.34
63	CZ	502	KIR	C29-C30	2.11	1.57	1.53
63	CZ	502	KIR	C6-N1	2.06	1.39	1.35
63	CZ	502	KIR	C16-C17	2.04	1.57	1.53
63	CZ	502	KIR	C9-C8	2.02	1.41	1.34

All (67) bond angle outliers are listed below:

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
62	AZ	501	GDP	C6-C5-N7	-6.81	133.22	134.14
62	AZ	501	GDP	C2-N3-C4	5.00	121.30	115.30
63	CZ	502	KIR	C45-C28-C27	5.00	113.29	108.38
62	CZ	501	GDP	C2-N3-C4	4.91	121.19	115.30
62	CZ	501	GDP	C5-C4-N3	-4.90	120.42	126.07
63	AZ	502	KIR	C45-C28-C27	4.76	113.06	108.38
63	CZ	502	KIR	O29-C29-O34	-4.66	102.64	110.32
62	CZ	501	GDP	C4-C5-N7	-4.64	104.93	109.41
63	AZ	502	KIR	O29-C29-O34	-4.63	102.69	110.32
59	AA	1601	PAR	O52-C13-C23	4.60	115.71	107.50
59	AA	1601	PAR	C14-O54-C54	4.51	122.47	113.73
62	AZ	501	GDP	C5-C4-N3	-4.37	121.04	126.07
63	CZ	502	KIR	O34-C33-C32	4.35	116.03	112.09
59	AA	1601	PAR	O52-C13-O43	-4.16	107.55	111.57
63	AZ	502	KIR	O34-C33-C32	4.10	115.81	112.09
59	AA	1601	PAR	O33-C14-C24	3.92	115.83	108.08
63	CZ	502	KIR	C3-C2-N1	3.83	119.72	115.86
63	AZ	502	KIR	C3-C2-N1	3.82	119.71	115.86
63	CZ	502	KIR	C48-C32-C47	-3.82	101.40	107.74
59	CA	1601	PAR	O52-C13-C23	3.81	114.29	107.50
59	CA	1601	PAR	C14-O54-C54	3.80	121.08	113.73
63	CZ	502	KIR	C11-C10-C9	-3.77	115.15	123.45
63	AZ	502	KIR	C11-C10-C9	-3.73	115.22	123.45
59	CA	1601	PAR	O33-C14-C24	3.70	115.39	108.08
63	AZ	502	KIR	C48-C32-C47	-3.65	101.68	107.74
59	CA	1601	PAR	O54-C54-C64	3.58	112.79	105.97
59	CA	1601	PAR	O52-C13-O43	-3.56	108.12	111.57
62	AZ	501	GDP	O4'-C1'-C2'	-3.50	101.60	106.69
62	AZ	501	GDP	C4-C5-N7	-3.40	106.12	109.41
59	AA	1601	PAR	O54-C54-C64	3.36	112.37	105.97
63	AZ	502	KIR	C3-C7-C8	3.36	125.71	120.15
63	CZ	502	KIR	C3-C7-C8	3.26	125.55	120.15
62	CZ	501	GDP	O4'-C1'-C2'	-3.20	102.04	106.69
63	AZ	502	KIR	O34-C29-C28	3.17	113.73	104.46
63	CZ	502	KIR	O34-C29-C28	3.09	113.49	104.46
63	CZ	502	KIR	O20-C20-C21	-3.05	106.67	111.07
63	AZ	502	KIR	O20-C20-C21	-3.03	106.70	111.07
62	AZ	501	GDP	PA-O3A-PB	-2.87	123.99	131.93
63	AZ	502	KIR	O18-C17-C16	2.71	109.94	104.13
63	CZ	502	KIR	C45-C28-C29	-2.70	109.26	112.38
63	CZ	502	KIR	C23-C22-C21	-2.67	124.08	127.53

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
62	CZ	501	GDP	PA-O3A-PB	-2.61	124.71	131.93
59	AA	1601	PAR	O11-C11-C21	2.58	113.18	108.08
59	CA	1601	PAR	C11-O51-C51	2.57	118.71	113.73
63	CZ	502	KIR	O18-C17-C16	2.56	109.62	104.13
63	AZ	502	KIR	C45-C28-C29	-2.53	109.46	112.38
59	CA	1601	PAR	C22-C32-C42	2.51	115.57	109.37
59	AA	1601	PAR	C11-O51-C51	2.48	118.54	113.73
63	AZ	502	KIR	C29-C30-C31	-2.46	107.25	110.69
62	AZ	501	GDP	N2-C2-N1	2.46	120.46	117.82
59	AA	1601	PAR	C22-C32-C42	2.46	115.44	109.37
63	AZ	502	KIR	C23-C22-C21	-2.39	124.44	127.53
63	CZ	502	KIR	C29-C30-C31	-2.39	107.34	110.69
62	AZ	501	GDP	N3-C4-N9	2.31	130.30	126.91
63	AZ	502	KIR	C17-O18-C14	2.28	113.09	107.42
63	CZ	502	KIR	C17-O18-C14	2.24	113.00	107.42
63	CZ	502	KIR	C48-C32-C31	2.22	113.28	109.33
63	AZ	502	KIR	C29-O34-C33	2.22	119.48	114.35
62	CZ	501	GDP	O4'-C1'-N9	2.16	112.80	108.10
63	AZ	502	KIR	O31-C31-C32	-2.14	108.86	111.33
63	AZ	502	KIR	C48-C32-C31	2.11	113.08	109.33
59	CA	1601	PAR	C22-C12-C62	-2.10	106.93	110.13
63	CZ	502	KIR	C44-C21-C20	2.06	119.16	115.61
63	CZ	502	KIR	C29-O34-C33	2.05	119.10	114.35
62	CZ	501	GDP	C6-N1-C2	-2.05	119.04	120.20
59	CA	1601	PAR	O11-C11-C21	2.04	112.11	108.08
63	AZ	502	KIR	O4-C4-C3	-2.03	119.67	121.63

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

## 5.7 Other polymers ⓘ

There are no such residues in this entry.

## 5.8 Polymer linkage issues

There are no chain breaks in this entry.

## 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	1504/1522 (98%)	-0.06	10 (0%) 84 63	29, 82, 163, 200	0
1	CA	1504/1522 (98%)	-0.15	13 (0%) 81 57	28, 83, 163, 200	0
2	AB	235/256 (91%)	0.18	1 (0%) 90 76	63, 102, 151, 161	0
2	CB	235/256 (91%)	0.11	2 (0%) 81 57	63, 102, 151, 162	0
3	AC	207/239 (86%)	0.06	0 100 100	54, 91, 111, 117	0
3	CC	207/239 (86%)	0.08	2 (0%) 79 53	59, 91, 111, 117	0
4	AD	208/209 (99%)	0.05	1 (0%) 88 71	60, 91, 116, 122	0
4	CD	208/209 (99%)	0.12	0 100 100	61, 92, 117, 123	0
5	AE	151/162 (93%)	-0.02	0 100 100	44, 72, 90, 108	0
5	CE	151/162 (93%)	0.02	1 (0%) 84 63	43, 73, 91, 109	0
6	AF	101/101 (100%)	0.07	0 100 100	91, 102, 110, 118	0
6	CF	101/101 (100%)	0.21	1 (0%) 79 53	92, 103, 111, 118	0
7	AG	155/156 (99%)	0.17	2 (1%) 74 47	79, 104, 134, 141	0
7	CG	155/156 (99%)	0.13	4 (2%) 53 30	81, 104, 134, 141	0
8	AH	138/138 (100%)	0.20	1 (0%) 84 63	62, 80, 97, 116	0
8	CH	138/138 (100%)	0.12	0 100 100	61, 82, 97, 115	0
9	AI	127/128 (99%)	0.30	3 (2%) 56 32	73, 126, 153, 158	0
9	CI	127/128 (99%)	0.33	2 (1%) 68 41	74, 126, 154, 159	0
10	AJ	99/105 (94%)	0.53	5 (5%) 27 15	79, 121, 149, 154	0
10	CJ	99/105 (94%)	0.56	8 (8%) 12 8	80, 121, 148, 153	0
11	AK	119/129 (92%)	0.12	4 (3%) 43 24	63, 84, 125, 150	0
11	CK	119/129 (92%)	0.19	4 (3%) 43 24	65, 85, 126, 151	0
12	AL	125/135 (92%)	0.04	1 (0%) 83 60	47, 70, 100, 125	0
12	CL	125/135 (92%)	0.16	1 (0%) 83 60	52, 71, 101, 125	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	125/126 (99%)	0.33	5 (4%) 36 20	79, 119, 143, 159	0
13	CM	125/126 (99%)	0.32	4 (3%) 45 25	81, 118, 143, 159	0
14	AN	60/61 (98%)	0.06	0 100 100	60, 77, 96, 101	0
14	CN	60/61 (98%)	0.14	1 (1%) 67 40	61, 77, 95, 103	0
15	AO	88/89 (98%)	0.19	1 (1%) 77 50	69, 92, 109, 112	0
15	CO	88/89 (98%)	0.23	1 (1%) 77 50	72, 91, 109, 112	0
16	AP	84/88 (95%)	0.19	1 (1%) 75 49	76, 89, 119, 137	0
16	CP	84/88 (95%)	0.21	1 (1%) 75 49	74, 89, 118, 137	0
17	AQ	100/105 (95%)	0.19	0 100 100	65, 92, 115, 121	0
17	CQ	100/105 (95%)	0.25	2 (2%) 62 36	67, 93, 115, 121	0
18	AR	70/88 (79%)	0.08	0 100 100	55, 86, 114, 121	0
18	CR	70/88 (79%)	0.07	1 (1%) 72 45	57, 87, 115, 121	0
19	AS	79/93 (84%)	0.55	7 (8%) 10 7	82, 120, 143, 146	0
19	CS	79/93 (84%)	0.46	5 (6%) 19 11	83, 120, 144, 146	0
20	AT	99/106 (93%)	0.11	1 (1%) 79 53	94, 109, 129, 132	0
20	CT	99/106 (93%)	0.10	0 100 100	93, 109, 129, 132	0
21	AU	25/27 (92%)	0.83	3 (12%) 5 5	104, 116, 137, 139	0
21	CU	25/27 (92%)	0.52	1 (4%) 36 20	104, 116, 136, 138	0
22	AV	76/76 (100%)	-0.13	0 100 100	54, 120, 170, 179	0
22	AW	76/76 (100%)	-0.03	1 (1%) 74 47	82, 147, 186, 199	0
22	CV	76/76 (100%)	-0.17	0 100 100	54, 121, 170, 179	0
22	CW	76/76 (100%)	0.09	3 (3%) 37 21	84, 148, 185, 199	0
23	AX	13/27 (48%)	0.31	1 (7%) 13 8	45, 63, 136, 154	0
23	CX	13/27 (48%)	0.19	0 100 100	47, 63, 136, 154	0
24	AY	77/77 (100%)	0.27	3 (3%) 37 21	74, 156, 198, 200	0
24	CY	77/77 (100%)	0.50	6 (7%) 13 8	76, 156, 198, 200	0
25	AZ	374/406 (92%)	0.58	30 (8%) 12 8	97, 139, 158, 177	0
25	CZ	374/406 (92%)	0.79	46 (12%) 5 4	98, 139, 158, 176	0
26	B0	84/85 (98%)	0.36	0 100 100	104, 116, 128, 137	0
26	D0	84/85 (98%)	0.44	1 (1%) 75 49	104, 116, 129, 137	0
27	B1	94/98 (95%)	0.06	3 (3%) 45 25	41, 71, 107, 111	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
27	D1	94/98 (95%)	0.07	1 (1%) 77 50	63, 85, 115, 122	0
28	B2	71/72 (98%)	0.04	0 100 100	84, 115, 128, 130	0
28	D2	71/72 (98%)	0.34	3 (4%) 35 19	104, 125, 144, 163	0
29	B3	60/60 (100%)	0.87	4 (6%) 17 10	106, 122, 132, 148	0
29	D3	60/60 (100%)	0.59	4 (6%) 17 10	107, 122, 132, 148	0
30	B4	45/71 (63%)	0.81	7 (15%) 3 3	107, 169, 196, 198	0
30	D4	45/71 (63%)	0.71	5 (11%) 6 6	107, 170, 195, 197	0
31	B5	59/60 (98%)	0.70	5 (8%) 11 7	89, 116, 175, 187	0
31	D5	59/60 (98%)	0.56	4 (6%) 17 10	90, 115, 175, 186	0
32	B6	50/54 (92%)	0.59	6 (12%) 5 5	78, 119, 146, 152	0
32	D6	50/54 (92%)	0.60	5 (10%) 8 6	79, 119, 147, 152	0
33	B7	49/49 (100%)	0.09	0 100 100	59, 77, 144, 152	0
33	D7	49/49 (100%)	-0.09	0 100 100	60, 78, 145, 152	0
34	B8	64/65 (98%)	0.36	2 (3%) 47 26	80, 104, 124, 138	0
34	D8	64/65 (98%)	0.43	4 (6%) 19 11	83, 104, 125, 138	0
35	B9	37/37 (100%)	0.43	2 (5%) 25 13	104, 117, 124, 128	0
35	D9	37/37 (100%)	0.80	2 (5%) 25 13	103, 118, 125, 126	0
36	BA	2901/2915 (99%)	-0.03	47 (1%) 68 41	31, 100, 192, 200	0
36	DA	2901/2915 (99%)	-0.04	57 (1%) 62 36	31, 101, 192, 200	0
37	BB	119/122 (97%)	0.05	2 (1%) 67 40	103, 142, 169, 175	0
37	DB	119/122 (97%)	-0.11	0 100 100	102, 142, 168, 174	0
38	BC	228/229 (99%)	0.50	14 (6%) 21 11	92, 122, 168, 178	0
38	DC	228/229 (99%)	0.62	19 (8%) 11 8	92, 122, 167, 179	0
39	BD	275/276 (99%)	0.12	1 (0%) 90 76	30, 67, 96, 110	0
39	DD	275/276 (99%)	0.09	2 (0%) 84 63	38, 68, 96, 109	0
40	BE	205/206 (99%)	0.36	7 (3%) 43 24	67, 106, 143, 154	0
40	DE	205/206 (99%)	0.31	3 (1%) 70 43	67, 106, 143, 153	0
41	BF	208/210 (99%)	0.33	5 (2%) 56 32	61, 123, 160, 167	0
41	DF	208/210 (99%)	0.47	11 (5%) 25 14	62, 123, 160, 166	0
42	BG	181/182 (99%)	0.29	8 (4%) 33 18	103, 128, 146, 163	0
42	DG	181/182 (99%)	0.51	13 (7%) 15 9	111, 133, 151, 159	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
43	BH	160/180 (88%)	0.74	20 (12%) 5 4	131, 155, 174, 176	0
43	DH	160/180 (88%)	0.94	23 (14%) 3 3	131, 155, 174, 176	0
44	BJ	0/173	-	-	-	-
44	DJ	0/173	-	-	-	-
45	BK	0/147	-	-	-	-
45	DK	0/147	-	-	-	-
46	BN	139/140 (99%)	0.39	6 (4%) 34 19	103, 123, 148, 155	0
46	DN	139/140 (99%)	0.41	8 (5%) 22 12	103, 123, 148, 155	0
47	BO	122/122 (100%)	0.11	0 100 100	60, 80, 96, 105	0
47	DO	122/122 (100%)	0.17	0 100 100	61, 80, 96, 106	0
48	BP	146/150 (97%)	0.25	4 (2%) 52 29	71, 113, 133, 140	0
48	DP	146/150 (97%)	0.49	10 (6%) 17 10	70, 114, 133, 139	0
49	BQ	141/141 (100%)	0.30	4 (2%) 50 29	73, 106, 130, 159	0
49	DQ	141/141 (100%)	0.36	3 (2%) 60 35	73, 105, 129, 159	0
50	BR	117/118 (99%)	0.33	4 (3%) 43 24	81, 105, 123, 143	0
50	DR	117/118 (99%)	0.38	5 (4%) 34 19	82, 105, 124, 143	0
51	BS	99/112 (88%)	0.40	2 (2%) 62 36	96, 133, 155, 162	0
51	DS	99/112 (88%)	0.49	6 (6%) 21 11	97, 133, 156, 162	0
52	BT	138/146 (94%)	0.31	4 (2%) 49 28	72, 112, 166, 181	0
52	DT	138/146 (94%)	0.39	9 (6%) 18 11	73, 111, 166, 181	0
53	BU	117/118 (99%)	0.35	3 (2%) 53 30	87, 120, 141, 147	0
53	DU	117/118 (99%)	0.18	3 (2%) 53 30	88, 119, 141, 148	0
54	BV	101/101 (100%)	0.83	16 (15%) 3 3	105, 144, 159, 164	0
54	DV	101/101 (100%)	0.83	18 (17%) 2 2	106, 145, 159, 165	0
55	BW	113/113 (100%)	0.34	6 (5%) 25 14	81, 109, 132, 136	0
55	DW	113/113 (100%)	0.35	1 (0%) 81 57	81, 109, 131, 136	0
56	BX	93/96 (96%)	0.26	1 (1%) 77 50	96, 108, 124, 128	0
56	DX	93/96 (96%)	0.35	4 (4%) 34 19	97, 109, 125, 130	0
57	BY	101/110 (91%)	0.73	10 (9%) 8 6	124, 145, 165, 170	0
57	DY	101/110 (91%)	1.14	18 (17%) 2 2	123, 145, 163, 170	0
58	BZ	176/206 (85%)	0.77	23 (13%) 4 4	107, 133, 161, 164	0
58	DZ	176/206 (85%)	0.98	35 (19%) 2 2	109, 139, 168, 171	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å <sup>2</sup> )	Q<0.9
All	All	22016/23378 (94%)	0.18	683 (3%)	47	26	28, 105, 164, 200	0

All (683) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
49	DQ	140	ALA	13.2
31	B5	60	VAL	10.8
1	AA	89	C	10.5
36	DA	654(I)	C	10.1
36	DA	654(G)	C	9.7
36	BA	654(J)	A	9.6
36	BA	654(I)	C	9.3
36	DA	2799	C	9.1
36	DA	654(C)	G	9.0
49	DQ	141	GLN	8.8
36	BA	2897	U	8.6
43	DH	171	LEU	7.4
29	B3	1	MET	7.2
36	DA	654(F)	C	7.2
31	B5	59	GLU	7.1
49	BQ	141	GLN	7.0
36	DA	654(D)	G	7.0
38	BC	105	ASP	6.8
58	DZ	118	GLN	6.7
57	DY	79	CYS	6.6
38	DC	95	GLY	6.6
36	DA	275	G	6.5
1	CA	80	G	6.4
36	DA	1066	U	6.4
31	D5	60	VAL	6.3
57	DY	52	SER	6.3
34	D8	65	GLU	6.3
36	BA	654(G)	C	6.3
36	BA	654(H)	G	6.1
52	BT	39	ARG	6.1
36	BA	654(N)	G	6.1
48	DP	117	GLU	6.1
25	CZ	108	ALA	6.0
57	DY	51	VAL	5.9
42	BG	50	ALA	5.9
36	DA	654(E)	G	5.9
43	DH	45	VAL	5.8

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	AA	88	A	5.8
38	DC	77	ILE	5.7
25	AZ	42	VAL	5.7
36	BA	2799	C	5.6
16	AP	84	ALA	5.6
25	CZ	190	ARG	5.6
52	BT	1	MET	5.5
1	CA	82	U	5.5
42	DG	25	TYR	5.5
36	BA	654(K)	C	5.5
57	BY	52	SER	5.4
42	DG	48	GLU	5.4
36	DA	654(S)	G	5.4
36	DA	654(H)	G	5.3
38	DC	76	ALA	5.3
1	CA	88	A	5.3
30	B4	25	TYR	5.3
38	BC	95	GLY	5.1
43	DH	96	ALA	5.1
1	AA	84	U	5.1
40	DE	68	ALA	5.1
36	DA	2897	U	5.0
38	DC	94	VAL	5.0
1	CA	1030(B)	C	5.0
54	DV	13	ARG	5.0
13	CM	123	ALA	4.9
28	D2	72	ALA	4.9
50	BR	118	GLU	4.9
36	BA	654(E)	G	4.9
22	CW	34	G	4.9
36	DA	2796	U	4.8
36	DA	888	C	4.8
36	BA	654(O)	G	4.8
42	DG	26	GLN	4.8
36	DA	277	C	4.8
14	CN	2	ALA	4.8
25	CZ	109	ALA	4.8
25	AZ	37	ALA	4.8
31	D5	59	GLU	4.7
13	AM	122	LYS	4.7
43	BH	40	GLU	4.5
25	CZ	120	ILE	4.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
41	DF	8	GLN	4.4
58	DZ	115	GLY	4.4
25	CZ	117	ARG	4.4
36	DA	2795	G	4.4
57	BY	51	VAL	4.4
25	AZ	131	ILE	4.4
58	DZ	143	GLY	4.4
38	BC	1	PRO	4.3
48	DP	118	GLY	4.3
49	BQ	140	ALA	4.3
36	BA	654(C)	G	4.3
13	CM	84	ILE	4.3
36	DA	2801(A)	A	4.2
25	AZ	372	VAL	4.2
30	B4	38	LYS	4.2
1	CA	84	U	4.2
19	CS	81	ARG	4.2
54	BV	84	LYS	4.2
25	CZ	133	VAL	4.2
52	DT	1	MET	4.2
54	BV	6	LYS	4.1
1	CA	81	U	4.1
22	AW	47	U	4.1
38	DC	126	LYS	4.1
42	DG	34	LEU	4.1
30	D4	38	LYS	4.1
25	CZ	31	LEU	4.0
42	BG	25	TYR	4.0
36	DA	654(J)	A	4.0
36	BA	654(D)	G	4.0
36	BA	654(L)	G	4.0
30	D4	34	GLU	4.0
43	BH	59	ARG	4.0
36	DA	654(L)	G	4.0
25	CZ	77	TYR	4.0
42	DG	50	ALA	3.9
22	CW	35	A	3.9
36	DA	896	A	3.9
25	AZ	199	ILE	3.9
38	BC	112	ALA	3.9
42	DG	49	ASP	3.8
38	DC	93	TYR	3.8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
35	D9	1	MET	3.8
38	DC	89	ALA	3.8
42	DG	86	MET	3.8
38	BC	36	LYS	3.8
25	CZ	102	ALA	3.8
43	DH	81	GLU	3.8
54	BV	93	GLU	3.8
36	BA	654(A)	G	3.8
11	AK	13	GLN	3.8
38	DC	110	PHE	3.8
38	BC	106	GLY	3.7
42	DG	146	TYR	3.7
43	BH	41	MET	3.7
25	CZ	101	GLY	3.7
25	AZ	102	ALA	3.7
42	DG	113	ARG	3.7
52	DT	137	LYS	3.7
58	DZ	95	PRO	3.7
41	DF	23	ASP	3.7
36	BA	2310	A	3.7
43	DH	26	VAL	3.7
35	D9	15	LYS	3.7
58	DZ	114	GLY	3.7
36	BA	1053	C	3.7
58	DZ	140	ASP	3.7
10	CJ	85	LEU	3.7
54	BV	5	VAL	3.6
1	AA	90	U	3.6
52	DT	135	ALA	3.6
36	DA	654(P)	C	3.6
58	DZ	78	LYS	3.6
36	DA	1077	A	3.6
43	DH	83	TYR	3.6
36	DA	157	U	3.6
29	D3	1	MET	3.6
42	DG	81	LYS	3.5
41	DF	101	LEU	3.5
36	DA	654(Q)	C	3.5
36	DA	885	C	3.5
43	BH	30	LYS	3.5
36	BA	2795	G	3.5
36	DA	1062	G	3.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
50	DR	116	LEU	3.5
36	DA	158	U	3.5
25	CZ	326	GLU	3.5
36	DA	2802	G	3.4
7	AG	78	ARG	3.4
1	CA	83	U	3.4
58	BZ	144	LEU	3.4
43	BH	52	VAL	3.4
56	DX	70	LEU	3.4
7	CG	2	ALA	3.4
57	BY	86	ARG	3.4
36	BA	654(B)	C	3.4
40	BE	48	GLN	3.4
58	BZ	4	ARG	3.4
36	DA	654(K)	C	3.4
10	AJ	101	VAL	3.4
55	BW	6	ILE	3.4
58	BZ	112	ARG	3.4
13	AM	123	ALA	3.4
30	B4	13	ARG	3.4
25	CZ	130	TYR	3.4
57	DY	30	VAL	3.4
36	BA	2796	U	3.4
36	DA	156	U	3.4
58	DZ	98	MET	3.4
12	AL	28	LYS	3.4
36	DA	2803	C	3.3
36	DA	654(B)	C	3.3
19	CS	28	LYS	3.3
40	DE	69	LYS	3.3
30	D4	17	GLY	3.3
36	BA	1066	U	3.3
43	DH	170	ARG	3.3
9	AI	96	LEU	3.3
11	CK	11	LYS	3.3
48	DP	150	ALA	3.3
58	DZ	146	ILE	3.3
58	DZ	144	LEU	3.3
58	BZ	97	GLU	3.3
13	AM	84	ILE	3.3
43	DH	40	GLU	3.3
25	AZ	319	SER	3.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
36	BA	654(M)	C	3.3
43	BH	18	GLU	3.3
30	D4	14	ILE	3.3
38	DC	90	GLY	3.3
54	BV	74	LYS	3.3
9	AI	95	LYS	3.3
25	AZ	124	ARG	3.3
10	AJ	32	ALA	3.3
13	AM	124	PRO	3.3
29	B3	2	PRO	3.3
21	AU	26	LYS	3.2
24	CY	72	C	3.2
36	DA	884	C	3.2
42	BG	30	GLU	3.2
51	DS	40	ILE	3.2
32	B6	23	THR	3.2
28	D2	71	ASN	3.2
25	AZ	161	TYR	3.2
58	BZ	158	PRO	3.2
25	AZ	376	LYS	3.2
43	BH	171	LEU	3.2
31	D5	37	LYS	3.2
43	DH	46	GLU	3.2
52	DT	39	ARG	3.2
54	DV	63	GLY	3.2
25	CZ	11	HIS	3.2
24	CY	75	C	3.2
34	B8	46	ARG	3.2
9	AI	66	ARG	3.2
41	DF	191	ARG	3.1
24	AY	16	H2U	3.1
1	CA	89	C	3.1
36	DA	2310	A	3.1
43	DH	97	ARG	3.1
34	D8	13	ARG	3.1
30	D4	32	TYR	3.1
35	B9	1	MET	3.1
43	DH	47	GLU	3.1
50	DR	115	GLU	3.1
43	DH	89	ILE	3.1
36	BA	654(F)	C	3.1
52	BT	135	ALA	3.1

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
43	DH	32	GLU	3.1
17	CQ	80	GLY	3.1
24	AY	15	G	3.1
48	DP	122	PRO	3.1
58	DZ	112	ARG	3.1
36	DA	1046	A	3.0
54	BV	13	ARG	3.0
25	CZ	100	ASP	3.0
38	DC	127	LEU	3.0
25	AZ	17	ILE	3.0
58	DZ	68	PRO	3.0
57	BY	36	ALA	3.0
55	BW	92	ARG	3.0
57	DY	75	ILE	3.0
22	CW	36	A	3.0
58	DZ	106	GLY	3.0
36	DA	1065	U	3.0
43	DH	39	PRO	3.0
52	DT	138	ALA	3.0
57	BY	61	ILE	3.0
25	CZ	42	VAL	2.9
42	BG	109	VAL	2.9
10	CJ	5	ARG	2.9
27	B1	23	LYS	2.9
40	BE	87	GLU	2.9
25	AZ	120	ILE	2.9
25	CZ	132	VAL	2.9
36	DA	1174	A	2.9
1	CA	90	U	2.9
46	DN	119	ARG	2.9
58	BZ	15	PRO	2.9
58	DZ	119	GLU	2.9
25	AZ	98	GLN	2.9
25	CZ	141	VAL	2.9
58	BZ	174	VAL	2.9
54	BV	97	LYS	2.9
57	DY	86	ARG	2.9
7	CG	85	TYR	2.9
36	BA	654(R)	C	2.9
58	BZ	159	PRO	2.9
38	BC	126	LYS	2.9
53	BU	79	PHE	2.9

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
7	CG	154	TYR	2.9
41	BF	52	LYS	2.9
57	DY	2	ARG	2.9
41	BF	40	GLN	2.9
10	CJ	79	ARG	2.9
38	BC	94	VAL	2.9
25	CZ	229	PHE	2.9
38	DC	67	GLY	2.9
36	DA	2794	C	2.9
41	DF	190	GLU	2.9
58	DZ	141	VAL	2.9
36	DA	1115	G	2.8
7	CG	115	ARG	2.8
50	DR	33	ARG	2.8
43	BH	85	LYS	2.8
43	BH	61	HIS	2.8
25	AZ	99	MET	2.8
43	BH	89	ILE	2.8
10	AJ	37	PRO	2.8
40	BE	90	THR	2.8
43	DH	82	GLY	2.8
58	BZ	161	VAL	2.8
21	CU	23	PRO	2.8
36	BA	1077	A	2.8
25	CZ	201	GLU	2.8
52	BT	132	LYS	2.8
48	DP	15	ARG	2.8
36	BA	654(P)	C	2.8
36	BA	1509	C	2.8
36	DA	2804	C	2.8
46	BN	72	TYR	2.8
42	DG	35	GLU	2.8
58	DZ	4	ARG	2.8
32	D6	23	THR	2.8
16	CP	84	ALA	2.8
52	DT	136	GLN	2.8
43	BH	51	ARG	2.8
54	DV	94	LEU	2.7
29	D3	12	PRO	2.7
48	BP	65	ARG	2.7
36	DA	1068	G	2.7
25	CZ	362	VAL	2.7

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
17	CQ	50	LYS	2.7
36	BA	2794	C	2.7
25	CZ	98	GLN	2.7
57	DY	80	GLY	2.7
58	BZ	117	LEU	2.7
42	DG	2	PRO	2.7
25	AZ	104	LEU	2.7
54	DV	97	LYS	2.7
31	B5	47	PRO	2.7
1	CA	1029	C	2.7
25	CZ	325	LYS	2.7
46	BN	139	GLU	2.7
19	CS	29	ARG	2.7
54	BV	66	ARG	2.7
54	DV	62	LEU	2.7
11	CK	13	GLN	2.7
43	DH	132	ARG	2.7
38	DC	112	ALA	2.7
57	DY	28	LYS	2.7
41	DF	1	MET	2.7
57	DY	72	VAL	2.7
25	CZ	28	THR	2.7
38	DC	109	ASP	2.7
54	BV	7	THR	2.7
48	BP	74	GLU	2.7
58	DZ	147	GLY	2.7
58	BZ	127	LYS	2.7
13	CM	124	PRO	2.7
43	DH	85	LYS	2.7
57	BY	19	LYS	2.6
56	BX	79	ALA	2.6
36	DA	1509	C	2.6
38	DC	1	PRO	2.6
46	BN	43	THR	2.6
49	DQ	63	LYS	2.6
41	BF	181	LEU	2.6
48	DP	79	ARG	2.6
43	BH	38	SER	2.6
54	BV	73	SER	2.6
41	DF	12	LEU	2.6
57	DY	8	LYS	2.6
38	DC	122	ALA	2.6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
39	BD	262	ARG	2.6
54	BV	40	LEU	2.6
36	BA	1104	C	2.6
2	CB	96	ARG	2.6
32	D6	46	HIS	2.6
58	BZ	116	VAL	2.6
32	B6	26	ASN	2.6
1	AA	1137	C	2.6
43	DH	20	ALA	2.6
43	DH	124	GLU	2.6
36	BA	1534	U	2.6
25	AZ	41	ASN	2.6
46	DN	44	PRO	2.6
58	DZ	172	ALA	2.6
10	CJ	9	ARG	2.6
51	BS	44	LYS	2.6
4	AD	44	GLY	2.6
19	AS	61	TYR	2.6
21	AU	24	ARG	2.6
32	D6	54	ILE	2.5
57	BY	93	GLY	2.5
24	AY	72	C	2.5
25	AZ	371	THR	2.5
25	CZ	76	HIS	2.5
58	DZ	104	PHE	2.5
11	CK	128	ALA	2.5
43	BH	33	LEU	2.5
53	DU	118	GLY	2.5
54	DV	64	HIS	2.5
7	AG	85	TYR	2.5
40	DE	76	ARG	2.5
12	CL	128	ALA	2.5
53	BU	68	ALA	2.5
25	CZ	27	LEU	2.5
38	DC	75	LEU	2.5
54	BV	12	TYR	2.5
24	CY	58	A	2.5
34	D8	14	VAL	2.5
36	BA	2802	G	2.5
58	DZ	117	LEU	2.5
10	CJ	86	MET	2.5
25	AZ	237	VAL	2.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
25	CZ	104	LEU	2.5
58	DZ	5	LEU	2.5
32	B6	22	ALA	2.5
36	BA	2207	G	2.5
29	B3	13	ILE	2.5
36	DA	895	U	2.5
54	BV	71	LEU	2.5
58	BZ	67	LEU	2.5
58	DZ	148	ASP	2.5
43	DH	21	PRO	2.5
51	DS	60	GLY	2.5
57	DY	6	HIS	2.5
25	CZ	121	LEU	2.5
30	B4	31	ILE	2.5
32	B6	54	ILE	2.5
40	BE	106	GLY	2.5
42	BG	2	PRO	2.5
36	BA	275	G	2.5
57	BY	95	LYS	2.5
42	DG	118	ARG	2.5
29	D3	2	PRO	2.5
8	AH	1	MET	2.5
58	BZ	172	ALA	2.5
54	BV	17	GLY	2.5
54	DV	70	ILE	2.5
58	DZ	120	ILE	2.5
1	CA	79	G	2.5
1	CA	146	G	2.5
25	CZ	80	VAL	2.5
48	DP	80	TYR	2.5
40	BE	107	THR	2.4
15	AO	69	TYR	2.4
51	DS	23	ARG	2.4
36	BA	1073	A	2.4
43	BH	88	LEU	2.4
36	BA	1065	U	2.4
49	BQ	62	GLY	2.4
48	DP	124	LYS	2.4
11	AK	129	SER	2.4
31	B5	26	THR	2.4
58	DZ	159	PRO	2.4
24	CY	45	G	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
19	CS	82	GLY	2.4
38	BC	90	GLY	2.4
54	DV	19	LYS	2.4
31	D5	55	ARG	2.4
58	BZ	14	LYS	2.4
25	CZ	129	PRO	2.4
50	BR	116	LEU	2.4
19	AS	81	ARG	2.4
19	AS	10	PHE	2.4
55	BW	97	LYS	2.4
37	BB	6	C	2.4
48	BP	92	GLU	2.4
58	DZ	43	GLU	2.4
36	BA	2801	A	2.4
55	DW	102	HIS	2.4
19	AS	22	LEU	2.4
25	CZ	79	HIS	2.4
32	B6	37	ARG	2.4
46	BN	15	LEU	2.4
30	B4	42	PHE	2.4
46	DN	72	TYR	2.4
25	CZ	125	GLN	2.4
36	DA	2402	C	2.4
58	BZ	173	ALA	2.4
38	BC	104	LEU	2.4
53	DU	74	LEU	2.4
54	DV	20	LEU	2.4
25	CZ	134	PHE	2.4
54	DV	12	TYR	2.4
36	BA	2804	C	2.4
42	BG	48	GLU	2.4
57	DY	73	ARG	2.4
25	AZ	350	THR	2.3
37	BB	29	A	2.4
41	BF	24	LEU	2.3
36	DA	654(T)	C	2.3
39	DD	26	LYS	2.3
21	AU	25	LYS	2.3
46	DN	37	LYS	2.3
58	DZ	139	VAL	2.3
26	D0	40	GLN	2.3
29	B3	12	PRO	2.3

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
25	CZ	17	ILE	2.3
58	DZ	113	ALA	2.3
58	DZ	142	SER	2.3
25	CZ	345	ARG	2.3
25	AZ	142	ASP	2.3
43	DH	41	MET	2.3
25	AZ	101	GLY	2.3
15	CO	72	ARG	2.3
2	AB	139	LYS	2.3
36	DA	654(R)	C	2.3
41	DF	199	TRP	2.3
56	DX	90	GLU	2.3
42	BG	26	GLN	2.3
25	AZ	90	LYS	2.3
32	D6	39	TYR	2.3
38	DC	153	ILE	2.3
57	DY	95	LYS	2.3
36	BA	654(S)	G	2.3
43	BH	35	VAL	2.3
13	CM	102	ARG	2.3
25	CZ	75	ARG	2.3
27	B1	48	LYS	2.3
46	BN	23	LEU	2.3
57	DY	31	LEU	2.3
58	DZ	137	ILE	2.3
3	CC	174	PRO	2.3
51	DS	87	PHE	2.3
48	BP	33	ARG	2.3
27	D1	23	LYS	2.3
54	BV	65	GLY	2.3
25	CZ	212	THR	2.3
36	BA	882	G	2.3
52	DT	132	LYS	2.3
25	AZ	109	ALA	2.3
46	BN	21	LYS	2.3
32	D6	42	TRP	2.3
55	BW	112	GLY	2.3
20	AT	72	LEU	2.3
23	AX	27	A	2.3
36	BA	2628	C	2.3
41	DF	24	LEU	2.3
41	DF	16	GLY	2.3

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
34	B8	65	GLU	2.3
36	BA	352	G	2.2
28	D2	8	LYS	2.2
38	DC	125	SER	2.2
36	BA	645	C	2.2
10	CJ	73	ASP	2.2
9	CI	70	LYS	2.2
36	BA	1074	G	2.2
19	AS	82	GLY	2.2
36	BA	1174	A	2.2
40	BE	76	ARG	2.2
9	CI	96	LEU	2.2
38	DC	129	ARG	2.2
25	AZ	241	ARG	2.2
39	DD	175	LEU	2.2
43	BH	60	ARG	2.2
36	DA	654(M)	C	2.2
58	DZ	99	TYR	2.2
11	AK	12	ARG	2.2
36	DA	1740	G	2.2
41	BF	35	GLU	2.2
36	BA	271(N)	U	2.2
36	BA	1041	C	2.2
3	CC	204	LEU	2.2
10	AJ	72	VAL	2.2
57	DY	37	VAL	2.2
25	CZ	74	LYS	2.2
38	BC	127	LEU	2.2
40	BE	182	LEU	2.2
54	DV	40	LEU	2.2
13	AM	62	ASN	2.2
58	BZ	160	GLY	2.2
58	DZ	165	VAL	2.2
36	DA	883	G	2.2
25	CZ	33	TYR	2.2
38	BC	76	ALA	2.2
6	CF	8	ILE	2.2
19	AS	37	ARG	2.2
25	AZ	139	ASP	2.2
58	DZ	174	VAL	2.2
1	AA	82	U	2.2
54	DV	1	MET	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
2	CB	40	HIS	2.2
55	BW	89	ALA	2.2
19	AS	39	THR	2.2
19	CS	30	LEU	2.2
31	B5	25	LEU	2.2
57	DY	3	VAL	2.2
1	AA	83	U	2.2
25	CZ	173	GLY	2.2
46	DN	33	LEU	2.2
11	AK	128	ALA	2.1
36	DA	889	C	2.1
27	B1	22	GLY	2.1
54	DV	98	GLU	2.1
36	BA	157	U	2.1
43	BH	45	VAL	2.1
35	B9	18	ARG	2.1
36	DA	2896	C	2.1
43	BH	114	VAL	2.1
29	D3	13	ILE	2.1
55	BW	88	ARG	2.1
25	CZ	131	ILE	2.1
18	CR	88	LYS	2.1
50	BR	51	LEU	2.1
57	BY	2	ARG	2.1
51	DS	34	HIS	2.1
1	AA	80	G	2.1
58	DZ	19	ARG	2.1
49	BQ	104	PHE	2.1
54	DV	93	GLU	2.1
36	DA	1033	U	2.1
58	BZ	118	GLN	2.1
56	DX	5	TYR	2.1
25	AZ	318	ALA	2.1
25	CZ	172	ARG	2.1
50	BR	8	ARG	2.1
42	BG	49	ASP	2.1
36	BA	155	U	2.1
36	DA	1494	A	2.1
54	DV	6	LYS	2.1
30	B4	5	ILE	2.1
54	DV	71	LEU	2.1
57	DY	67	LEU	2.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
58	BZ	121	HIS	2.1
1	AA	204	U	2.1
10	AJ	5	ARG	2.1
34	D8	64	TYR	2.1
41	DF	208	GLY	2.1
56	DX	78	LYS	2.1
1	CA	1257	U	2.1
10	CJ	98	ILE	2.1
25	AZ	135	MET	2.1
54	DV	25	LEU	2.1
36	DA	6	A	2.1
46	DN	51	PHE	2.1
48	DP	123	LEU	2.1
54	BV	62	LEU	2.1
25	AZ	128	VAL	2.1
38	BC	58	VAL	2.1
58	BZ	128	VAL	2.1
25	CZ	68	VAL	2.1
46	DN	101	HIS	2.1
36	DA	2628	C	2.1
25	CZ	203	LEU	2.1
46	DN	79	PRO	2.1
54	DV	30	GLY	2.1
38	BC	108	MET	2.0
43	DH	84	SER	2.0
58	DZ	26	GLY	2.0
36	DA	892	G	2.0
52	DT	2	ASN	2.0
43	BH	102	ALA	2.0
48	DP	132	LYS	2.0
57	BY	37	VAL	2.0
51	DS	25	ARG	2.0
52	DT	3	ARG	2.0
25	AZ	141	VAL	2.0
25	CZ	135	MET	2.0
50	DR	34	ILE	2.0
25	CZ	24	LYS	2.0
25	CZ	402	LYS	2.0
32	B6	35	GLU	2.0
58	DZ	145	GLU	2.0
24	CY	59	A	2.0
58	BZ	57	ILE	2.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
50	DR	51	LEU	2.0
1	AA	470	C	2.0
36	DA	271(G)	C	2.0
51	BS	40	ILE	2.0
58	BZ	169	GLU	2.0
43	BH	17	VAL	2.0
53	DU	117	GLN	2.0
11	CK	129	SER	2.0
25	AZ	360	GLU	2.0
58	BZ	106	GLY	2.0
24	CY	27	C	2.0
53	BU	80	ILE	2.0
5	CE	154	GLY	2.0
10	CJ	39	PRO	2.0
30	B4	4	GLY	2.0
43	DH	42	ARG	2.0

## 6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

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. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. 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	RSR	LLDF	B-factors(Å <sup>2</sup> )	Q<0.9
24	PSU	AY	55	20/21	0.19	-	171,180,181,182	0
24	H2U	AY	17	20/21	0.39	-	195,199,199,200	0
24	7MG	AY	46	24/25	0.23	-	186,189,190,190	0
24	H2U	AY	20	20/21	0.21	-	196,198,200,200	0
24	H2U	AY	16	20/21	0.66	-	198,199,200,200	0
24	7MG	CY	46	24/25	0.24	-	186,189,190,190	0
24	YG	CY	37	39/40	0.27	-	77,108,122,122	0
24	H2U	CY	16	20/21	0.47	-	199,199,200,200	0
24	5MU	AY	54	21/22	0.23	-	164,166,168,171	0
24	YG	AY	37	39/40	0.30	-	77,108,121,122	0
24	PSU	CY	55	20/21	0.31	-	172,180,180,180	0
24	H2U	CY	20	20/21	0.18	-	195,198,200,200	0
24	H2U	CY	17	20/21	0.50	-	196,199,200,200	0
24	5MU	CY	54	21/22	0.36	-	165,167,168,171	0

### 6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

### 6.4 Ligands ⓘ

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. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. 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	RSR	LLDF	B-factors(Å <sup>2</sup> )	Q<0.9
60	ZN	D4	101	1/1	0.12	-	133,133,133,133	0
60	ZN	D9	101	1/1	0.08	-	126,126,126,126	0
61	MG	AY	101	1/1	0.24	-	109,109,109,109	0
60	ZN	CD	301	1/1	0.28	-	56,56,56,56	0
63	KIR	CZ	502	57/57	0.43	-	99,106,116,117	0
63	KIR	AZ	502	57/57	0.46	-	98,106,116,117	0
59	PAR	CA	1601	42/42	0.20	-	41,46,64,65	0
61	MG	CY	101	1/1	1.91	-	181,181,181,181	0
60	ZN	AN	101	1/1	0.16	-	45,45,45,45	0
60	ZN	B4	101	1/1	0.15	-	97,97,97,97	0
60	ZN	CN	101	1/1	0.19	-	100,100,100,100	0
62	GDP	CZ	501	28/28	0.18	-	117,126,128,128	0
62	GDP	AZ	501	28/28	0.20	-	117,124,126,126	0
60	ZN	AD	301	1/1	0.27	-	52,52,52,52	0
60	ZN	B9	101	1/1	0.18	-	113,113,113,113	0
59	PAR	AA	1601	42/42	0.20	-	40,44,48,49	0

### 6.5 Other polymers ⓘ

There are no such residues in this entry.